CITY OF ONTARIO

Regular City Council/Housing Authority Meeting
MARCH 18, 2025

City Hall
303 East B Street, Ontario, CA 91764

MAYOR PAUL S. LEON • MAYOR PRO TEM ALAN D. WAPNER
COUNCIL MEMBERS JIM W. BOWMAN, DEBRA PORADA AND DAISY MACIAS

CITY CLERK SHEILA MAUTZ • TREASURER JAMES R. MILHISER
CITY MANAGER SCOTT OCHOA • CITY ATTORNEY RUBEN DURAN

WELCOME TO A MEETING OF THE ONTARIO CITY COUNCIL

All documents for public review are on file with the Records Management/City Clerk's Department located at 303 East B Street, Ontario, CA 91764.

Anyone wishing to speak in person during public comment or on a particular item will be required to fill out a blue slip. Blue slips must be turned in prior to public comment beginning or before an agenda item is taken up. The Clerk will not accept blue slips after that time. To comment by email, submit your comments no later than 4:00 p.m. on the day of the meeting by emailing your name, agenda item you are commenting on and your comments to publiccomments@ontarioca.gov. All comments received by the deadline will be forwarded to the City Council for consideration before action is taken on the matter and will be entered into the record.

Speakers will be alerted when they have 1 minute remaining and when their time is up. Speakers are then to return to their seats and no further comments will be permitted.

In accordance with State Law, remarks during public comment are to be limited to subjects within Council's jurisdiction. Remarks on other agenda items will be limited to those items.

Remarks from those seated or standing in the back of the chamber will not permitted. All those wishing to speak including Council and Staff need to be recognized by the Chair before speaking.

ACCOMMODATIONS

If you need special assistance or accommodations to participate in this meeting, please contact the City Clerk's office at 909-395-2009. Notification of 48 hours prior to the meeting will help the City make reasonable arrangements. Equipment for the hearing impaired is available in the Records Management Office.

ORDER OF BUSINESS

The regular City Council and Housing Authority meeting begins with Closed Session and Closed Session Comment at 6:00 p.m., Public Comment at 6:30 p.m. immediately followed by the Regular Meeting and Public Hearings. No agenda item will be introduced for consideration after 10:00 p.m. except by majority vote of the City Council.

CALL TO ORDER *(OPEN SESSION)*

ROLL CALL

Wapner, Bowman, Porada, Macias, Mayor/Chairman Leon

CLOSED SESSION PUBLIC COMMENT

The Closed Session Public Comment portion of the Council/Housing Authority meeting is limited to matters appearing on the Closed Session. Additional opportunities for further Public Comment will be given during and at the end of the meeting.

CLOSED SESSION

GC 54956.9(d)(1), CONFERENCE WITH LEGAL COUNSEL - EXISTING LITIGATION
City of Ontario, et al. v. Inland Empire Utilities Agency, Orange County Superior Court Case No. 30-2023-01344236-CU-WM-CJC

GC 54956.9(d)(1), CONFERENCE WITH LEGAL COUNSEL - EXISTING LITIGATION
City of Ontario, et al. v. Inland Empire Utilities Agency, Los Angeles Superior Court Case No. 24STCP02321

ATTACHMENT: 20250318 Closed Session

PLEDGE OF ALLEGIANCE

Council Member Porada

INVOCATION

Pastor Richard Hernandez, The Church of God

REPORT ON CLOSED SESSION

City Attorney

PUBLIC COMMENTS 6:30 P.M.

The Public Comment portion of the Council/Housing Authority meeting is limited to 30 minutes. An opportunity for further Public Comment may be given at the end of the meeting. Under provisions of the Brown Act, Council is prohibited from taking action on oral requests.

To comment by email, submit your comments by email no later than 4:00 p.m. on the day of the meeting by emailing your name, agenda item you are commenting on and your comment to publiccomments@ontarioca.gov. All Comments received by the deadline will be forwarded to the City Council for consideration before action is taken on the matter and entered into the record. As previously noted -- if you wish to address the Council, fill out one of the blue slips at the rear of the chambers and give it to the City Clerk.

AGENDA REVIEW/ANNOUNCEMENTS

The City Manager will go over all updated materials and correspondence received after the Agenda was distributed to ensure Council Members have received them. He will also make any necessary recommendations regarding Agenda modifications or announcements regarding Agenda items to be considered.

INFORMATION RELATIVE TO POSSIBLE CONFLICT OF INTEREST

Agenda item contractors, subcontractors and agents may require member abstentions due to conflict of interests and financial interests. Council Member abstentions shall be stated under this item for recordation on the appropriate item.

CONSENT CALENDAR

All matters listed under CONSENT CALENDAR will be enacted by one motion in the form listed below – there will be no separate discussion on these items prior to the time Council votes on them, unless a member of the Council requests a specific item be removed from the Consent Calendar for a separate vote.

1. **APPROVAL OF MINUTES**

Minutes for the regular meetings of the City Council and Housing Authority of February 18, 2025, and cancelled special meeting/study session of February 20, 2025, and approving same as on file in the Records Management Department.

ATTACHMENT: 20250218 Meeting Minutes (Not Official Until Approved)
ATTACHMENT: 20250220 C Minutes (Not Official Until Approved).docx

2. **BILLS & PAYROLL**

Bills February 14, 2025 through February 27, 2025, and Payroll January 26, 2025 through February 8, 2025.

3. **A DEVELOPMENT IMPACT FEE CREDIT AGREEMENT (FILE NO. PDIF24-001) BETWEEN THE CITY OF ONTARIO AND AG EHC II (LEN) CA 3, L.P. FOR FACILITY CONSTRUCTION ASSOCIATED WITH TRACT MAP 20536 (FILE NO. PMTT22-021), LOCATED 875 FEET SOUTH OF THE INTERSECTION OF RIVERSIDE DRIVE AND ARCHIBALD AVENUE, WITHIN THE COUNTRYSIDE SPECIFIC PLAN**

That the City Council authorize the City Manager to execute the Development Impact Fee Credit Agreement (File No. PDIF24-001) between the City of Ontario and AG EHC II (LEN) CA 3, L.P., for facility construction associated with Tract Map 20536 (File No. PMTT22-021), located 875 feet south of the intersection of Riverside Drive and Archibald Avenue, within the Countryside Specific Plan, and authorize the City Manager to execute the Agreement.

ATTACHMENT: 20250318 PDIF24-001 AG EHC II (LEN) CA 3, L.P.

4. **FY 2024-25 MID-YEAR BUDGET UPDATE**

That the City Council take the following actions:

A. Approve the budget adjustments and recommendations as presented in the Fiscal Year 2024-25 Mid-Year Budget Update Report (Exhibit A);
B. Consider and adopt a Resolution making a declaration of intent to issue tax-exempt obligations; and
C. Approve the updated Purchasing Policies and Procedures Manual

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, REGARDING ITS INTENTION TO ISSUE TAX-EXEMPT OBLIGATIONS.

ATTACHMENT: Reimbursement Resolution Declaring Intention to Issue Bonds 02^RESO^RM
ATTACHMENT: Purchasing Policy_FSA-002_March 2025 (002).pdf
ATTACHMENT: FY 2024-25 Mid Year Budget Update Report_EXHIBIT A.pdf

5. **A CONSTRUCTION CONTRACT WITH C.I. SERVICES, INC. FOR THE ARMSTRONG COMMUNITY CENTER ROOF REPLACEMENT PROJECT**

That the City Council take the following actions:

A. Authorize the City Manager, or his designee, to execute Construction Contract No. D&C22-014 with C.I. Services, Inc., of Mission Viejo, California, for the Armstrong Community Center Roof Replacement Project in the amount of $681,200 and authorize a 10% contingency of $68,120 for a total not-to-exceed contract amount of $749,320; and
B. Authorize the City Manager, or his designee, to execute all documents required for the completion of the project including, but not limited to, contracts, agreements, assessments, easements, reduction of retention accounts, and filing a notice of completion at the conclusion of all construction related activities.

ATTACHMENT: CI Services Inc Contract rev 2.25.25.pdf

6. AN AMENDMENT TO A MAINTENANCE SERVICES AGREEMENT WITH BAY ALARM COMPANY FOR BURGLARY ALARM SERVICES

That the City Council approve and authorize the City Manager, or his designee, to execute Amendment No. 11 to the Maintenance Services Agreement with Bay Alarm Company, of Concord, California, for a total not-to-exceed amount of $1,530,547, for the alarm system upgrade, and a term to June 30, 2025.

ATTACHMENT: Bay Alarm Co Amendment No. 11.pdf

7. AMENDMENTS TO THE DESIGN SERVICES AGREEMENT WITH HMC ARCHITECTS FOR THE ONTARIO WELLNESS CAMPUS PROJECT AND THE ONTARIO ARENA PLAZA PROJECT

That the City Council take the following actions:

A. Authorize the City Manager, or his designee, to execute Amendment No. 1 to the Design Services Agreement with HMC Architects, of Ontario, California, to provide On-Call Architectural, Space Planning, and Engineering Design Services for the D&C24-017 Ontario Wellness Campus Project in the amount of $5,377,587 for a total not-to-exceed contract amount of $5,577,587, and
B. Authorize the City Manager, or his designee, to execute Amendment No. 2 to the Design Services Agreement with HMC Architects, of Ontario, California, to provide On-Call Architectural, Space Planning, and Engineering Design Services for the Ontario Arena Plaza Project in the amount of $1,098,740 for a total not-to-exceed contract amount of $6,676,327; and
C. Authorize the City Manager or his designee, to execute all documents required for the completion of the project including, but not limited to, contracts, agreements, assessments, easements, reduction of retention accounts and filing a notice of completion at the conclusion of all construction related activities.

ATTACHMENT: HMC Architects- Amendment No. 1.pdf
ATTACHMENT: HMC Architects- Amendment No. 2.pdf

8. AUTHORIZE THE PURCHASE AND INSTALLATION OF CHARGEPOINT ELECTRIC VEHICLE CHARGERS WITH BODEV, INC. FOR THE PROFESSIONAL BASEBALL STADIUM, PROFESSIONAL BASEBALL STADIUM PARKING STRUCTURE, AND THE ONTARIO SPORTS EMPIRE

That the City Council take the following actions:

A. Authorize a cooperative purchase agreement for D&C23-011 Professional Baseball Stadium with BodEV, Inc., of La Habra, California, for the purchase and installation of ChargePoint electric vehicle (EV) chargers for the Professional Baseball Stadium, Professional Stadium Parking Structure, and the Ontario Sports Empire in the amount of $1,189,758 plus a contingency amount of $119,000 for a total contract amount not-to-exceed $1,308,758 consistent with the terms and conditions of the Sourcewell Contract Number 042221-CPI; and
B. Authorize the City Manager or his designee to execute all documents required for the completion of the project including, but not limited to agreements, assessments, easements, reduction of retention accounts, contracts amendments within the authorization limits, and filing a notice of completion at the conclusion of all construction related activities.

ATTACHMENT: ChargePoint- Sourcewell Contract.pdf
ATTACHMENT: BodEV Inc.- Goods and Services Agreement

9. A CONSTRUCTION CONTRACT WITH TFN ARCHITECTURAL SIGNAGE, INC. FOR SIGNAGE AT THE ONTARIO PROFESSIONAL BASEBALL STADIUM

That the City Council take the following actions:

A. Authorize the City Manager, or his designee, to execute a Construction Contract with TFN Architectural Signage, Inc., of Placentia, California, to provide signage for Bid No. 1878 - D&C23-011 – Professional Baseball Stadium (Rebid of BC20) in the amount of $1,816,695 and authorize a contingency of $363,339 for a total not-to-exceed contract amount of $2,180,034; and
B. Authorize the City Manager or his designee to execute all documents required for the completion of the project including, but not limited to, contracts, agreements, assessments, easements, reduction of retention accounts, and filing a notice of completion at the conclusion of all construction related activities.

ATTACHMENT: TFN Architectural Signage Inc.- Construction Contract.pdf

10. AWARD A CONSTRUCTION CONTRACT TO MCCARTHY BUILDING COMPANIES, INC. FOR DESIGN-BUILD CONSTRUCTION SERVICES FOR THE VINEYARD PARKING STRUCTURE PROJECT

That the City Council take the following actions:

A. Authorize the City Manager, or his designee, to execute a Construction Contract with McCarthy Building Companies, Inc., of Newport Beach, California, to provide design-build construction services for the Vineyard Parking Structure in the amount of $24,990,042 and authorize a contingency of $3,748,506 for a total not-to-exceed contract amount of $28,738,548;
B. Authorize the City Manager, or his designee, to execute all documents required for the completion of the project including, but not limited to agreements, assessments,

easements, lot line adjustments, reduction of retention accounts, contracts and contract amendments within the authorization limits, and filing a notice of completion at the conclusion of all construction related activities.

ATTACHMENT: Vineyard Parking Structure Contract- McCarthy rev 2.25.25.pdf

11. AUTHORIZE A SOLE SOURCE PURCHASE WITH FIRE APPARATUS SOLUTIONS FOR TWO (2) NEW KME FIRE PUMPERS

That the City Council authorize the sole source purchase and delivery of two (2) new KME K180 Fire Pumpers from Fire Apparatus Solutions of Rialto, California, in the amount of $1,996,979 plus a 5% contingency in the amount of $99,849 for a total not-to-exceed amount of $2,096,828.

ATTACHMENT: Agreement- FAS.pdf

12. A MAINTENANCE SERVICES AGREEMENT WITH HYDROLOGICS, INC. FOR ON-CALL ZERO DISCHARGE FLUSHING SERVICES

That the City Council approve and authorize the City Manager, or designee, to execute a one-year Maintenance Services Agreement with Hydrologics, Inc., of Bosque Farms, New Mexico, for On-Call Zero Discharge Flushing Services in the amount of $600,000 from March 18, 2025 to March 17, 2026, with the option to extend the Agreement for up to four successive one-year periods for a total not-to-exceed amount of $3,000,000.

ATTACHMENT: 20250318 MSA with Hydrologics^04 AGTM.pdf

13. A DESIGN SERVICES AGREEMENT WITH TRIAD CONSULTING AND SYSTEM DESIGN GROUP LLC FOR SITE SECURITY IMPROVEMENTS

That the City Council approve and authorize the City Manager, or designee, to execute a Design Services Agreement with Triad Consulting & Systems Design Group LLC, of Corona, California for design and bid support services for Site Security Improvements for a total amount of $935,904, plus a 15% contingency of $140,386, for a total not-to-exceed amount of $1,076,290, and a term from March 18, 2025 to September 18, 2028.

ATTACHMENT: 20240318 DSA^03 AGMT.pdf

14. AN ORDINANCE AMENDING CHAPTERS 8B AND 8C OF TITLE 6 OF THE ONTARIO MUNICIPAL CODE RELATED TO WATER SERVICES AND RECYCLED WATER, AND ESTABLISHING CHAPTERS 8D AND 8E TO TITLE 6 OF THE ONTARIO MUNICIPAL CODE RELATED TO POTABLE WATER FACILITIES AND CROSS-CONNECTION CONTROL

That the City Council adopt an Ordinance amending Chapters 8B and 8C of Title 6 of the Ontario Municipal Code related to water services and recycled water, and establishing Chapters 8D and 8E to Title 6 of the Ontario Municipal Code related to potable water facilities and cross-connection control.

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, AMENDING, REORGANIZING, AND RECODIFYING CHAPTER 8B OF TITLE 6 OF THE ONTARIO MUNICIPAL CODE PERTAINING TO WATER SERVICES, AMENDING AND RECODIFYING CHAPTER 8C OF TITLE

6 OF THE ONTARIO MUNICIPAL CODE PERTAINING TO RECYCLED WATER USE, ENACTING CHAPTER 8D OF TITLE 6 OF THE ONTARIO MUNICIPAL CODE PERTAINING TO POTABLE WATER FACILITIES, AND ENACTING CHAPTER 8E OF TITLE 6 OF THE ONTARIO MUNICIPAL CODE PERTAINING TO CROSS-CONNECTION CONTROL AND FINDING THE ACTION EXEMPT FROM CEQA.

ATTACHMENT: Ordinance FINAL 01^ORD^RM
ATTACHMENT: 20250304 Exhibit A Chapter 8B FINAL.pdf
ATTACHMENT: 20250304 Exhibit B Chapter 8C FINAL.pdf
ATTACHMENT: 20250304 Exhibit C Chapter 8D FINAL.pdf
ATTACHMENT: 20250304 Exhibit D Chapter 8E FINAL.pdf

15. AN AMENDMENT TO THE PROFESSIONAL SERVICES AGREEMENT WITH WINDSONG PRODUCTIONS, LLC. FOR VIDEO PRODUCTION SERVICES

That the City Council authorize the City Manager, or his designee, to execute Amendment No. 4 to the Professional Services Agreement with Windsong Productions, LLC., of Fresno, California, for video production services in the amount of $619,544 for a total not-to-exceed amount of $1,727,380 and to extend the term of the agreement to June 30, 2026.

ATTACHMENT: Windsong_-_Amendment_No._4.pdf

16. A RESOLUTION OF INTENTION TO RENEW THE GREATER ONTARIO TOURISM MARKETING DISTRICT

That the City Council adopt a Resolution of Intention to renew the existing Greater Ontario Tourism Marketing Plan.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, DECLARING ITS INTENTION TO RENEW THE GREATER ONTARIO TOURISM MARKETING DISTRICT (GOTMD) AND FIXING THE TIME AND PLACE OF A PUBLIC MEETING AND A PUBLIC HEARING THEREON AND GIVING NOTICE THEREOF.

ATTACHMENT: Renewal MDP GOTMD Attachment 1
ATTACHMENT: ROI GOTMD 02^RESO^RM

PUBLIC HEARINGS

Pursuant to Government Code Section 65009, if you challenge the City's zoning, planning or any other decision in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice, or in written correspondence delivered to the City Council at, or prior to the public hearing. Affidavits of posting compliance, for all items below, are on file with the Records Management Department.

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17. A PUBLIC HEARING TO CONSIDER AN ORDINANCE APPROVING A DEVELOPMENT CODE AMENDMENT, FILE NO. PDCA24-001, TO IMPLEMENT OBJECTIVE DEVELOPMENT AND DESIGN STANDARDS

That the City Council introduce and waive further reading of the Ordinance Approving File No. PDCA24-001, a Development Code Amendment, amending the Reference document section of the City's Development Code, to implement Objective Development and Design Standards for multiple-family and mixed-use residential development.

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING FILE NO PDCA24-001, A DEVELOPMENT CODE AMENDMENT AMENDING THE REFERENCE DOCUMENT SECTION OF THE CITY'S DEVELOPMENT CODE, TO IMPLEMENT OBJECTIVE DEVELOPMENT AND DESIGN STANDARDS FOR MULTIPLE-FAMILY AND MIXED-USE RESIDENTIAL DEVELOPMENT AND MAKING FINDINGS IN SUPPORT THEREOF.

ATTACHMENT: 20250318 File No. PDCA24-001 PC Back-up.pdf
ATTACHMENT: 20250318 PDCA24-001 ODDS DCA 02^ORD^RM
ATTACHMENT: 20250318 PDCA24-001 ODDS DCA^03 ATTACH A ODDS & Checklist.pdf

18. A PUBLIC HEARING TO CONSIDER AN ORDINANCE APPROVING A DEVELOPMENT CODE AMENDMENT, FILE NO. PDCA24-004, REGARDING ACCESSORY DWELLING UNITS AND JUNIOR ACCESSORY DWELLING UNITS

That the City Council open the public hearing, receive public testimony, close the public hearing, and by motion:

A. Find that the adoption of the proposed Ordinance is statutorily exempt from review under the California Environmental Quality Act ("CEQA") under Public Resources Code section 21080.17; and
B. Consider and adopt an Ordinance upholding the recommendation of the Planning Commission approving the Development Code Amendment (File No. PDCA24-004), pursuant to the facts and reasons contained in the staff report and Ordinance.

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING A DEVELOPMENT CODE AMENDMENT, FILE NO. PDCA24-004, AMENDING DIVISION 5.03 & SUPPLEMENTAL LAND USE REGULATIONS, SECTION 5.03.010 OF THE CITY'S DEVELOPMENT CODE RELATING TO ACCESSORY DWELLING UNITS AND JUNIOR ACCESSORY DWELLING UNITS IN THE CITY, AND FINDING THE ACTION TO BE STATUTORILY EXEMPT FROM CEQA UNDER PUBLIC RESOURCES CODE § 21080.17, AND MAKING FINDINGS IN SUPPORT THEREOF.

ATTACHMENT: 20250318 File No PDCA24-004 PC Back-up.pdf
ATTACHMENT: 20250318 File No PDCA24-004 ADU Update 02^ORD^RM
ATTACHMENT: 20250318 File No PDCA24-004 ADU Update ^03 ORD-Attachment A.docx
ATTACHMENT: 20250318 File No PDCA24-004 ADU Update ^04 Dev Code Text 5.03.010 - rev.pdf

19. A PUBLIC HEARING TO CONSIDER THE ADOPTION OF AN ORDINANCE APPROVING A DEVELOPMENT AGREEMENT (FILE NO. PDA22-004) BETWEEN THE CITY OF ONTARIO AND

ROSEVILLE INVESTMENTS, LLC AND AMERICAN SUPERIOR LAND, LLC.

That the City Council introduce and waive further reading of an Ordinance Approving a Development Agreement (File No. PDA22-004) between the City of Ontario and Roseville Investments, LLC and American Superior Land, LLC.

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, FILE NO. PDA22-004, A DEVELOPMENT AGREEMENT BETWEEN THE CITY OF ONTARIO AND, ROSEVILLE INVESTMENTS, LLC AND AMERICAN SUPERIOR LAND, LLC, TO ESTABLISH THE TERMS AND CONDITIONS ASSOCIATED WITH TENTATIVE TRACT MAP 20526 (FILE NO. PMTT22-012), LOCATED AT THE SOUTHEAST CORNER OF HAVEN AVENUE AND RIVERSIDE DRIVE, WITHIN PLANNING AREAS 1A, 1B, AND 1C OF THE RICH-HAVEN SPECIFIC PLAN (FILE NO. PSP05-004). (APNS: 0218-161-11, 0218-161-04, 0218-161-05, AND 0218-161-10).

ATTACHMENT: File No. PDA22-004_Richland Developers Inc.^01 EXH A&B.pdf
ATTACHMENT: File No. PDA22-004 Richland Developers Inc. 02^ORD^RM
ATTACHMENT: File No. PDA22-004_ Richland Developers Inc.^03^DEV_AGR.docx
ATTACHMENT: 20250318 File No. PDA22-004 PC Back-up.pdf

20. A PUBLIC HEARING TO CONSIDER AN AMENDMENT TO THE AVENUE SPECIFIC PLAN, FILE NO. PSPA22-005

That the City Council consider and adopt:

A. Resolution approving the use of an Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report (TOP 2050 SEIR);
B. Resolution approving File No. PSPA22-005, an Amendment to the Avenue Specific Plan to: 1) modify the land use designation of Planning Area 4 and apply density modifications to Planning Areas 1B, 2A, 3B, and 5 for consistency with the Ontario Plan 2050 land use plan; 2) apply general modifications throughout the document for clarity; and 3) make exhibit and text updates throughout the document to support the project, for land located at the northwest corner of Archibald Avenue and Ontario Ranch Road.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING AN ADDENDUM TO THE ONTARIO PLAN 2050 SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT, PURSUANT TO THE REQUIREMENTS OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT, AS AMENDED, FOR FILE NO. PSPA22-005.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING FILE NO. PSPA22-005, AN AMENDMENT TO THE AVENUE SPECIFIC PLAN TO: 1) MODIFY THE LAND USE DESIGNATION OF PLANNING AREA 4 AND APPLY DENSITY MODIFICATIONS TO PLANNING AREAS 1B, 2A, 3B, AND 5 FOR CONISTENCY WITH THE ONTARIO PLAN 2050 LAND USE PLAN; 2) APPLY GENERAL MODIFICATIONS THROUGHOUT THE DOCUMENT FOR CLARITY; AND, 3) MAKE EXHIBIT AND TEXT UPDATES THROUGHOUT THE DOCUMENT TO SUPPORT THE PROJECT, FOR LAND LOCATED AT THE NORTHWEST CORNER OF ARCHIBALD AVENUE AND ONTARIO RANCH ROAD, AND MAKING FINDINGS IN SUPPORT THEREOF—APNS: 0218-191-04; 0218-191-14; 0218-191-15; 0218-191-16; 0218-191-05; 0218-191-22; 0218-191-20.

ATTACHMENT: File No. PSPA22-005 The Avenue CC^02 Attach A - AR Exhibits.docx
ATTACHMENT: File No. PSPA22-005 The Avenue CC^01 PC Back-up.pdf
ATTACHMENT: File No. PSPA22-005 The Avenue CC Attach B Addend 03^RESO^RM
ATTACHMENT: File No. PSPA22-005 The Avenue CC^04 Attach B - Addend Reso - Attach A - Addend Doc.pdf
ATTACHMENT: File No. PSPA22-005 The Avenue CC Attach C PSPA22-005 05^RESO^RM
ATTACHMENT: File No. PSPA22-005 The Avenue CC^06 Attach C - PSPA22-005 Reso - Attach A - SPA.pdf
ATTACHMENT: File No. PSPA22-005 The Avenue CC^07 Attach C - PSPA22-005 Reso - Attach B - COAs.docx

21. A PUBLIC HEARING TO CONSIDER AN ADDENDUM TO THE ONTARIO PLAN 2050 SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT; TWO ORDINANCES APPROVING A DEVELOPMENT AGREEMENT (FILE NO. PDA23-005) BETWEEN THE CITY OF ONTARIO AND DIVERSIFIED PACIFIC DEVELOPMENT GROUP, LLC IN CONJUNCTION WITH THE EMPIRE GROVES SPECIFIC PLAN (FILE NO. PSP23-001); AND A RESOLUTION FOR A DEVELOPMENT PLAN (FILE NO. PDEV23-039)

That the City Council consider and waive further reading of:

A. A Resolution approving the use of an Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364, certified by the City Council on August 16, 2022);
B. An Ordinance for a Development Agreement (File No. PDA23-005) between the City of Ontario and Diversified Pacific Development Group, LLC and the Empire Groves Specific Plan (File No. PSP23-001) to establish terms and conditions for the associated Development Plan (File No. PDEV23-039);
C. An Ordinance for the Empire Grove Specific Plan (File No. PSP23-001 to establish the Land Use District, development standards, guidelines, and infrastructure improvements); and
D. A Resolution approving Development Plan (File No. PDEV23-039) to construct 600,000 SF hotel and commercial building consisting of 600 rooms.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING AN ADDENDUM TO THE ONTARIO PLAN 2050 SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT, PURSUANT TO THE REQUIREMENTS OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT, AS AMENDED, FOR FILE NO. PSP23-001.

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING FILE NO. PDA23-005, A DEVELOPMENT AGREEMENT BETWEEN THE CITY OF ONTARIO AND DIVERSIFIED PACIFIC DEVELOPMENT GROUP, LLC, TO ESTABLISH THE TERMS AND CONDITIONS ASSOCIATED WITH A DEVELOPMENT PLAN (FILE NO. PDEV23-039), FOR A 10.43 ACRE PROPERTY LOCATED ON THE SOUTHEAST CORNER OF GUASTI ROAD AND HOLT BOULEVARD WITHIN THE PROPOSED PA1 (HOSPITALITY MIXED-USE) DISTRICT OF THE EMPIRE GROVES SPECIFIC PLAN, AND MAKING FINDINGS IN SUPPORT THEREOF—APN: 110-322-33.

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING

FILE NO. PSP23-001, A SPECIFIC PLAN (EMPIRE GROVES) TO ESTABLISH THE LAND USE DISTRICT, DEVELOPMENT STANDARDS, GUIDELINES, AND INFRASTRUCTURE IMPROVEMENTS FOR THE DEVELOPMENT OF UP TO 600,000 SQUARE FEET OF HOSPITALITY AND COMMERCIAL LAND USES ON 10.43-ACRES OF LAND LOCATED ON THE SOUTHEAST CORNER OF GUASTI ROAD AND HOLT BOULEVARD AND MAKING FINDINGS IN SUPPORT THEREOF—APN: 110-322-33.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING FILE NO. PDEV23-039, A DEVELOPMENT PLAN TO CONSTRUCT A 600,000 SQUARE FOOT HOTEL AND COMMERCIAL BUILDING CONSISTING OF 600 ROOMS ON 10.43-ACRES OF LAND LOCATED ON THE SOUTHEAST CORNER OF GUASTI ROAD AND HOLT BOULEVARD WITHIN THE PROPOSED PA1 (HOSPITALITY MIXED-USE) DISTRICT OF THE EMPIRE GROVES SPECIFIC PLAN, AND MAKING FINDINGS IN SUPPORT THEREOF—APN: 110-322-33.

ATTACHMENT: 20250318 File No. PDA23-005_PSP23-001_PDEV23-039 PC Back-up.pdf
ATTACHMENT: File No. PDA23-005 PSP23-001 EmpireGrovesSP Addendum 01^RESO^RM
ATTACHMENT: 20250318 File No. PDA23-005_PSP23-001_EmpireGrovesSP ^02 Attach A Addendum.pdf
ATTACHMENT: 20250318 File No. PDA23-005 PSP23-001 EmpireGrovesSP DA 03^ORD^RM
ATTACHMENT: 20250318 File No. PDA23-005_PSP23-001_EmpireGrovesSP ^04 Attach A DA.doc
ATTACHMENT: 20250318 File No. PDA23-005 PSP23-001 EmpireGrovesSP 05^ORD^RM
ATTACHMENT: 20250318 File No. PDA23-005_PSP23-001_EmpireGrovesSP ^06 Attach A SP.pdf
ATTACHMENT: 20250318 File No. PDA23-005 PSP23-001 EmpireGrovesSP PDEV 07^RESO^RM
ATTACHMENT: 20250318 File No. PDA23-005_PSP23-001_EmpireGrovesSP ^08 PDEV COAs.pdf

22. A CONSOLIDATED PUBLIC HEARING TO CONSIDER ADOPTION OF A RESOLUTION APPROVING THE DIF NEXUS REPORT UPDATE AND MODIFY DEVELOPMENT IMPACT FEES

That the City Council consider and adopt a Resolution to approve the City's Development Impact Fees (DIF) 2024 Nexus Report Update and modify the DIF fees.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, ADOPTING THE DEVELOPMENT IMPACT FEE CALCULATION AND NEXUS UPDATE REPORT AND ADOPTING AN UPDATED AND MODIFIED DEVELOPMENT IMPACT FEE SCHEDULE.

ATTACHMENT: Development Impact Fee (DIF) Update^01^2024 DIF Update
ATTACHMENT: Development Impact Fee DIF Update 02^RESO^RM
ATTACHMENT: Development Impact Fee (DIF)^03 General City DIF Breakdown (Effective 07.01.25) 50%.pdf

ATTACHMENT: Development Impact Fee (DIF)^04 General City DIF Breakdown (Effective 07.01.26) 100%.pdf
ATTACHMENT: Development Impact Fee (DIF)^05 Ontario Ranch DIF Breakdown (Effective 07.01.25) 50%.pdf
ATTACHMENT: Development Impact Fee^06 Ontario Ranch DIF Breakdown (Effective 07.01.26) 100%.pdf
ATTACHMENT: Development Impact Fee (DIF)^07 Calculation Nexus Update Report (Adopted 07.15.22).pdf
ATTACHMENT: Development Impact Fee (DIF)^08 Letter of Support
ATTACHMENT: Development Impact Fee (DIF) Update^10 PROPOSED CONSOLIDATED DIF SCHEDULE.pdf
ATTACHMENT: Affidavit for Proof of Publication for DIF Update.pdf

STAFF MATTERS

City Manager Ochoa

COUNCIL MATTERS

Mayor Leon
Mayor pro Tem Wapner
Council Member Bowman
Council Member Porada
Council Member Macias

ADJOURNMENT

CITY OF ONTARIO
CLOSED SESSION REPORT
City Council // Housing Authority // Other // *(GC 54957.1)*
March 18, 2025

ROLL CALL: Wapner _, Bowman _, Porada _, Macias _, Mayor / Chairman Leon _.

STAFF: City Manager / Executive Director __, City Attorney __

In attendance: Wapner _, Bowman _, Porada _, Macias _, Mayor / Chairman Leon _.

- GC 54956.9 (d)(1), CONFERENCE WITH LEGAL COUNSEL, EXISTING LITIGATION:
  City of Ontario, et al. v. Inland Empire Utilities Agency, Orange County Superior Court Case No. 30-2023-01344236-CU-WM-CJC

No Reportable Action	Continue	Approved
/ /	/ /	/ /

Disposition: _____

In attendance: Wapner _, Bowman _, Porada _, Macias _, Mayor / Chairman Leon _.

- GC 54956.9 (d)(1), CONFERENCE WITH LEGAL COUNSEL, EXISTING LITIGATION:
  City of Ontario, et al. v. Inland Empire Utilities Agency, Los Angeles Superior Court Case No. 24STCP02321

No Reportable Action	Continue	Approved
/ /	/ /	/ /

Disposition: _____

Reported by:

_____
City Attorney / City Manager / Executive Director

ONTARIO CITY COUNCIL/
ONTARIO HOUSING AUTHORITY
MINUTES
FEBRUARY 18, 2025
(Not official Until Approved)

JOINT MEETINGS

The regular meetings of the Ontario City Council and Housing Authority were held on Tuesday, February 18, 2025 at Ontario City Hall, 303 E. B Street Ontario, California.

OPEN MEETING CALLED TO ORDER

Mayor Leon called the joint meetings to order at 6:32 p.m.

ROLL CALL

PRESENT:	Mayor/Chairman:	Paul S. Leon
	Mayor pro Tem/Vice Chair:	Alan D. Wapner
	Council/Authority Members:	Jim W. Bowman, Debra Porada, and Daisy Macias
ABSENT:	Council/Authority Members:	None

Also present were City Manager / Executive Director Scott Ochoa, City Attorney/Legal Counsel Ruben Duran, and City Clerk / Secretary Sheila Mautz.

INFORMATION RELATIVE TO POSSIBLE CONFLICTS OF INTEREST

There were no conflicts of interest announced.

PLEDGE OF ALLEGIANCE

The Pledge of Allegiance was led by Council Member Macias.

INVOCATION

Invocation was led by Pastor Hernandez with The Church of God Ontario.

PUBLIC COMMENT

Assistant City Clerk Isbell announced that there was one written comment:
Brad Neumann, regarding renaming the City of Ontario.

Mayor Leon called upon the first speaker:
Kristina Cotran, announced upcoming events with Toastmasters.
Brad Neumann, spoke on renaming the City of Ontario.

Stephanie, spoke on the use of electric vehicle chargers.
Tommy Mushegain, spoke on the need of universally accessible playgrounds.

AGENDA REVIEW/ANNOUNCEMENTS

City Manager Ochoa announced the need to move public hearing Item No. 13 to the regular meeting of March 4, 2025.

CONSENT CALENDAR

MOTION: Moved by Council Member Porada, seconded by Council Member Macias and carried by a unanimous vote 5-0, to approve the Consent Calendar as presented.

1. APPROVAL OF MINUTES

Minutes for the regular meetings of the City Council and Housing Authority of January 21, 2025, and approving same as on file in the Records Management Department.

2. BILLS & PAYROLL

Approved bills January 17, 2025 through January 30, 2025, in the amount of $40,964,945.93, and Payroll December 29, 2024 through January 11, 2025 in the amount of $5,722,436.49.

3. AN AMENDMENT TO THE MAINTENANCE SERVICES AGREEMENT WITH BRIGHTVIEW LANDSCAPE SERVICES, INC. FOR WEED ABATEMENT

The City Council authorized the City Manager, or his designee, to execute Amendment No. 2 to the Maintenance Services Agreement No. PM 2122-1 with BrightView Landscape Services, Inc., of Upland, California, for Weed Abatement in the amount of $20,496 for a total not-to-exceed contract amount of $321,764.

4. ACCEPT WRITTEN PETITIONS TO CREATE A COMMUNITY FACILITIES DISTRICT; ADOPT A RESOLUTION OF INTENTION TO ESTABLISH CITY OF ONTARIO COMMUNITY FACILITIES DISTRICT NO. 73 (WILDFLOWER ACRES) AND TO AUTHORIZE THE LEVY OF SPECIAL TAXES; AND ADOPT A RESOLUTION DECLARING IT NECESSARY TO INCUR BONDED INDEBTEDNESS

The City Council considered and:

A. Accepted written petitions from Pulte Home Company, LLC and AG EHC II (PHM) CA 2, L.P. ("Landowners"), to create a Community Facilities District ("CFD") and to waive certain procedural matters, under the Mello-Roos Community Facilities Act of 1982;

B. Adopted a Resolution of Intention to establish City of Ontario Community Facilities District No. 73 (Wildflower Acres), authorize the associated levy of special taxes therein; and set a public hearing for the formation of the CFD as part of the regularly scheduled City Council meeting on Tuesday, April 1, 2025; and
C. Adopted a Resolution Declaring it Necessary for the City of Ontario Facilities District No. 73 (Wildflower Acres) to Incur Bonded Indebtedness.

RESOLUTION NO. 2025-002 A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, OF INTENTION TO ESTABLISH A COMMUNITY FACILITIES DISTRICT PROPOSED TO BE NAMED CITY OF ONTARIO COMMUNITY FACILITIES DISTRICT NO. 73 (WILDFLOWER ACRES) AND TO AUTHORIZE THE LEVY OF A SPECIAL TAX THEREIN.

RESOLUTION NO. 2025-003 A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, DECLARING IT NECESSARY FOR CITY OF ONTARIO COMMUNITY FACILITIES DISTRICT NO. 73 (WILDFLOWER ACRES) TO INCUR BONDED INDEBTEDNESS.

5. A CHANGE ORDER TO THE CONSTRUCTION CONTRACT WITH GRBCON, INC. FOR EASEMENT AND STORM DRAIN PIPE REPLACEMENT PROJECT

The City Council authorized the City Manager, or his designee, to approve Change Order No. 3 to the Construction Contract with GRBCON, Inc., of Baldwin Park, California, for the Easement and Storm Drain Pipe Replacement Project in the amount of $163,576 for a total not-to-exceed contract amount of $1,408,677.

6. INCREASE NOT-TO-EXCEED AMOUNT OF CO-OPERATIVE PURCHASES & PRE-AUTHORIZED VENDORS FOR FLEET EQUIPMENT SERVICES AND PARTS

The City Council took the following actions:

A. Authorized the purchasing threshold increase for the co-operative purchase and delivery of fleet parts in the amount of $350,000 for a not-to-exceed amount of $475,000 from Factory Motor Parts, of Pomona, California, consistent with the terms and conditions of the CA-State Contract DGS-7-21-99-41-01, and
B. Authorized the purchasing threshold increase for the co-operative purchase and delivery of fleet parts in the amount of $300,000 for a not-to-exceed amount of $455,000 from Parts Authority, of Rancho Cucamonga, California, consistent with the terms and conditions of the CA-State Contract DGS-7-21-99-41-03; and
C. Authorized the purchasing threshold increase for the pre-authorized purchase and delivery of fleet parts and services in the amount of $450,000 for a not-to-exceed amount of $799,000 from Rush Truck Center, of Fontana, California.

7. ACCEPTANCE OF BROADBAND PROGRAM BENEFICIARIES FROM SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS (SCAG)

The City Council approved a Memorandum of Understanding with Southern California Association of Governments (SCAG) of Los Angeles, California, for broadband program beneficiaries relating to the Local Agency Technical Assistance Program.

8. PURCHASE ADDITIONAL MICROSOFT 365 SUBSCRIPTIONS WITH SOFTWAREONE INC.

The City Council authorized the City Manager, or his designee, to execute the purchase of additional Microsoft 365 subscriptions with SoftwareONE Inc., of Milwaukee, Wisconsin, for $65,805 plus $100,000 in contingency, revising not-to-exceed amount on the agreement to $1,774,456.

9. AN AMENDMENT TO THE PROFESSIONAL SERVICES AGREEMENT WITH CALTEK TECHNOLOGIES, INC., FOR LOW-VOLTAGE CABLING AND EQUIPMENT INSTALLATION

The City Council took the following actions:

A. Authorized the City Manager, or designee, to execute Amendment No. 7 to the Professional Services with Caltek Technologies, Inc., of Ontario, CA, for low-voltage cabling, extending the terms for three years and increase the authorized amount by $300,000 for a total contract not-to-exceed amount of $475,957.
B. Authorized the City Manager, or designee, to execute Amendment No. 7 to the Professional Services with Caltek Technologies, Inc., of Ontario, CA, for low-voltage cabling for the Animal Resource Center of the Inland Empire's (ARC) temporary animal shelter, increasing the authorized amount by $71,276 for a total contract not-to-exceed amount of $547,233.

10. AN AMENDMENT TO THE PROFESSIONAL SERVICES AGREEMENT WITH AXON ENTERPRISE, INC. FOR THE ACQUISITION OF POLICE DEPARTMENT FRONTLINE EQUIPMENT

The City Council authorized the City Manager, or his designee, to execute Amendment No. 6 to the Professional Services Agreement with Axon Enterprise, Inc. of Scottsdale, Arizona, for the purchase of twelve (12) Axon Skydio police unmanned aircraft systems (drones) in the amount of $1,812,703 and Axon Standards, an Early Intervention System (EIS), in the amount of $65,000 for a new total not-to-exceed contract amount of $11,658,373.

PUBLIC HEARING

11. A PUBLIC HEARING TO CONSIDER AN URGENCY ORDINANCE APPROVING A DEVELOPMENT CODE AMENDMENT, FILE NO. PDCA24-004, REGARDING ACCESSORY DWELLING UNITS AND JUNIOR ACCESSORY DWELLING UNITS

The City Council considered and waived further reading, and adopted an Urgency Ordinance approving File No. PDCA24-004, to amend Division 5.03 - Supplemental Land Use Regulations, Section 5.03.010 (Accessory Dwelling Units) of the City's Development Code to comply with recent changes to state law that impose new limits on local authority to regulate Accessory Dwelling Units ("ADUs") and Junior Accessory Dwelling Units ("JADUs"), which took e□ect on January 1, 2025.

URGENCY ORDINANCE NO. 3296 AN URGENCY ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING A DEVELOPMENT CODE AMENDMENT, FILE NO. PDCA24-004, AMENDING DIVISION 5.03 & SUPPLEMENTAL LAND USE REGULATIONS, SECTION 5.03.010 OF THE CITY'S DEVELOPMENT CODE RELATING TO ACCESSORY DWELLING UNITS AND JUNIOR ACCESSORY DWELLING UNITS AND FINDING THE ACTION TO BE STATUTORILY EXEMPT FROM CEQA UNDER PUBLIC RESOURCES CODE SECTION 21080.17.

Notice of public hearing was duly given. Affidavits of compliance are on file. There were no written communications.

Mayor Leon opened the public hearing and inquired if anyone was interested in speaking to the item. Hearing no one, Mayor Leon closed the public hearing and opened the item for Council discussion.

MOTION: Moved by Council Member Porada, seconded by Council Member Bowman and carried by a unanimous vote 5-0, to adopt Urgency Ordinance No. 3296.

12. A PUBLIC HEARING TO CONSIDER APPROVAL OF A DISPOSITION AND DEVELOPMENT AGREEMENT BETWEEN THE CITY OF ONTARIO AND ONTARIO RANCH HOTELS, LLC. FOR THE DEVELOPMENT OF A HOTEL FEATURING 227-GUEST ROOMS AT THE SOUTHEAST CORNER OF EAST RIVERSIDE DRIVE AND ONTARIO AVENUE; MAKING CERTAIN CEQA FINDINGS IN CONNECTION THEREWITH

The City Council ("City") considered and:

A. Adopted a Resolution approving pursuant to the Certified Final Environmental Impact Report for the Ontario Regional Sports Complex (SCH No. 2023110328) the Disposition and Development Agreement ("Agreement") between the City of Ontario and Ontario Ranch Hotels, LLC. ("Developer") (on file with the Records Management Department) and approving the acquisition of real property for road improvements needed at the corner of East Riverside Drive and Vineyard Avenue.

B. Authorized the City Manager, or his designee, to sign all documents necessary to implement the Agreement.

RESOLUTION NO. 2025-004 A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING, PURSUANT TO THE CERTIFIED FINAL ENVIRONMENTAL IMPACT REPORT FOR THE ONTARIO REGIONAL SPORTS COMPLEX (SCH NO. 2023110328), A DISPOSITION AND DEVELOPMENT AGREEMENT BETWEEN THE CITY AND ONTARIO RANCH HOTELS, LLC FOR THE DEVELOPMENT OF CERTAIN REAL PROPERTY LOCATED ON THE SOUTHEAST CORNER OF EAST RIVERSIDE DRIVE AND ONTARIO AVENUE, ONTARIO, CALIFORNIA (PORTION OF APN 0218-111-12-0000); MAKING CERTAIN CEQA FINDINGS IN CONNECTION THEREWITH.

Notice of public hearing was duly given. Affidavits of compliance are on file. There was one written communication from the Law Office of Jordan R. Sisson in opposition.

Mayor Leon opened the public hearing and called upon the Executive Director of Economic Development to provide background information regarding the item.

Tina Silva, spoke in opposition.
Jorge Zavala, spoke in opposition.
Jordan Sissan, spoke in opposition.
Chris Robles, spoke in opposition.
Karen May, spoke in opposition.
Tommy Mushegain, spoke in opposition.
Robert Ramos, spoke in opposition.

Mayor Leon closed the public hearing and City Council discussed the item before coming to a consensus.

MOTION: Moved by Mayor pro Tem Wapner, seconded by Council Member Porada and carried by a unanimous vote 5-0, to adopt Resolution No. 2025-004.

13. A PUBLIC HEARING TO CONSIDER ADOPTING A RESOLUTION OF NECESSITY FOR THE ACQUISITION BY EMINENT DOMAIN OF A FEE SIMPLE INTEREST IN CERTAIN REAL PROPERTY LOCATED AT 434 NORTH EUCLID AVENUE

The City Council continued this Item to the March 4th meeting.

MOTION: Moved by Mayor Leon, seconded by Council Member Macias and carried by a unanimous vote 5-0, to continue the item to regular meeting on March 4, 2025.

STAFF MATTERS

City Manager Ochoa made no announcements.

COUNCIL MATTERS

Council Member Macias made no comments.

Council Member Bowman welcomed his son back to Ontario.

Mayor pro Tem Wapner made no comments.

Council Member Porada announced the Ontario Heritage Golf Tournament Fundraiser.

Mayor Leon made no comments.

ADJOURNMENT

Mayor Leon adjourned the meetings of the Joint Agencies at 7:31 p.m., in memory of Planning Commissioner Randy Del Turco and announced the next regular meeting was scheduled for March 4, 2025.

Respectfully submitted,

_____
SHEILA MAUTZ, CITY CLERK/SECRETARY

APPROVED:

_____
PAUL S. LEON, MAYOR/CHAIRMAN

ONTARIO CITY COUNCIL/
ONTARIO HOUSING AUTHORITY
MINUTES
FEBRUARY 20, 2025
(Not Official Until Approved)

JOINT MEETINGS

The Special Meeting / Study Session of the Ontario City Council and the Ontario Housing Authority scheduled for February 20, 2025, were cancelled due to lack of quorum.

Respectfully submitted,

_____
SHEILA MAUTZ, CITY CLERK/SECRETARY

APPROVED:

_____
PAUL S. LEON, MAYOR/CHAIRMAN

CITY OF ONTARIO *Agenda Report* **March 18, 2025**	**SECTION:** **CONSENT CALENDAR**
Department: Financial Services Prepared By: Jessica Ban Staff Member Presenting: Armen Harkalyan, Executive Director of Finance Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 3

SUBJECT: **A DEVELOPMENT IMPACT FEE CREDIT AGREEMENT (FILE NO. PDIF24-001) BETWEEN THE CITY OF ONTARIO AND AG EHC II (LEN) CA 3, L.P. FOR FACILITY CONSTRUCTION ASSOCIATED WITH TRACT MAP 20536 (FILE NO. PMTT22-021), LOCATED 875 FEET SOUTH OF THE INTERSECTION OF RIVERSIDE DRIVE AND ARCHIBALD AVENUE, WITHIN THE COUNTRYSIDE SPECIFIC PLAN**

RECOMMENDATION: That the City Council authorize the City Manager to execute the Development Impact Fee Credit Agreement (File No. PDIF24-001) between the City of Ontario and AG EHC II (LEN) CA 3, L.P., for facility construction associated with Tract Map 20536 (File No. PMTT22-021), located 875 feet south of the intersection of Riverside Drive and Archibald Avenue, within the Countryside Specific Plan, and authorize the City Manager to execute the Agreement.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Invest in the Growth and Evolution of the City's Economy
Operate in a Businesslike Manner
Invest in the City's Infrastructure (Water, Streets, Sewers, Parks, Storm Drains and Public Facilities)
Ensure the Development of a Well Planned, Balanced, and Self-Sustaining Community in Ontario Ranch

FISCAL IMPACT: Approval of the proposed Development Impact Fee (DIF) Credit Agreement (File No. PDIF24-001) will not result in any fiscal impact to the City's General Fund. The project's Development Agreement (File No. PDA22-005) and related conditions require AG EHC II (LEN) CA 3, L.P. (hereinafter referred to as "Developer") to construct DIF program infrastructure with estimated costs of $396,828. The proposed DIF Credit Agreement defines the amount of DIF credit that the Developer may be eligible to receive for construction of the improvements. The DIF credit that the Developer will receive upon completion of the improvements may be exchanged for a refund of the DIF fees paid by the Developer (up to the Developer's maximum DIF obligation) in the respective DIF category.

BACKGROUND & ANALYSIS: On March 7, 2024, the City Council approved the Development Agreement (File No. PDA22-005) between the City of Ontario and AG EHC II (LEN) CA 3, L.P., for Tract Map 20536.

In accordance with the Development Agreement and related conditions, the Developer is required to construct DIF Program infrastructure to serve TM 20536. Improvements include the installation of streets and fiber optics facilities on Archibald Avenue and a quarter-mile signal at Archibald Avenue and Maplewood Privado.

Pursuant to the City's adopted DIF Credit and/or Reimbursement policies, construction of DIF Program facilities requires the Developer and the City to enter into a DIF Credit and/or Reimbursement Agreement, which specifies the infrastructure to be constructed by the Developer and includes an estimate of the maximum DIF credit that may be applied in the applicable Regional/Local DIF categories. These infrastructure improvements are within the Ontario Ranch streets and fiber optics system categories. Since the maximum eligible costs in the Agreement for the required infrastructure exceeds the Developer's DIF obligation, the Developer is eligible to receive DIF Credit under the proposed Agreement.

The proposed Agreement complies with the City's DIF policies and conforms with the approved Development Plan and associated COA. Under the provisions of the City's DIF Program, the City Manager is authorized to execute this Agreement upon approval by the City Council.

RECORDING REQUESTED BY AND WHEN RECORDED RETURN TO:

CITY OF ONTARIO
CITY CLERK/RECORDS MANAGEMENT
303 EAST "B" STREET
ONTARIO, CA 91764-4196

Space above this line for Recorder's Use
Exempt from Fees Per Gov. Code § 6103

File No. PDIF24-001

DEVELOPMENT IMPACT FEE CREDIT AGREEMENT

FOR FACILITY CONSTRUCTION

By and Between

City of Ontario
a California municipal corporation

and

AG EHC II (LEN) CA 3, L.P.,
A Delaware limited partnership

March 18, 2025

San Bernardino County, California

DEVELOPMENT IMPACT FEE CREDIT AGREEMENT FOR FACILITY CONSTRUCTION BY AND BETWEEN THE CITY OF ONTARIO AND FILE NO. PDIF24-001

This DEVELOPMENT IMPACT FEE CREDIT AGREEMENT ("Agreement"), entered into this _____ day of _____, 2025, between the CITY OF ONTARIO, a California municipal corporation, hereinafter referred to as the "City," and AG EHC II (LEN) CA 3, L.P., a Delaware limited partnership, hereinafter referred to as the "Developer."

RECITALS

A. Developer is the owner and developer of property located within the City, which property has received development approvals from the City, including the Countryside Specific Plan ("Specific Plan") and Tract Map No. 20536 (the "Tract Map"). A legal description of the property is attached hereto as Exhibit 1 and incorporated herein by reference (the "Property"). A map of the Property is attached hereto as Exhibit 2 and incorporated herein by reference.

B. As a condition of the development approvals for the Property, including the Specific Plan and Tract Map approvals, the Developer is required to construct those public improvements identified on Exhibit 3, consisting of certain master planned public infrastructure and improvements, (hereinafter referred to collectively as the "Improvements") The estimated costs for the design and construction of the Improvements are set forth in Exhibit 4. Both Exhibits 3 and 4 are attached hereto and incorporated herein by reference.

C. On July 1, 2003, City Ordinance No. 2779 was adopted establishing certain development impact fees ("DIF Fees") to be paid as a condition to the issuance of certain entitlements within the City. Section 7 of Ordinance 2779 authorizes the City Manager, when he or she determines that the public interest would be served by such an agreement, to execute agreements on behalf of the City with applicants in order to provide a credit to the applicant against certain DIF Fees in exchange for the applicant's construction and dedication of public improvements, upon reasonable terms and conditions as may be determined on a case by case basis and subject to City Council approval.

D. City and the previous owner of the Property have previously entered into a statutory development agreement (File No. PDA22-005), pursuant to Section 65864, et seq., of the Government Code, ("Development Agreement") and such Development Agreement has been assigned to Developer and Developer has assumed all rights, responsibilities and obligations of the Development Agreement, including the design and construction of the Improvements identified in Exhibit 3 and such Improvements are included in the City's Development Impact Fee (DIF) Program as a project, or a portion of a project and eligible for credit against DIF Fees.

E. City and Developer have agreed that the costs to design and construct the Improvements shall be eligible for DIF Credit in accordance with the City's Ontario Ranch DIF Credit policies as contained in the City's DIF Program and Ordinance Nos. 2779 and 2780, and Resolution Nos. 2003-39, 2003-070, 2005-005, 2005-099, 2007-023, 2007-150, 2008-036, 2011-011, 2012-092, 2015-008, 2017-102, 2019-135, and 2022-133.

AGREEMENT

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, and the mutual promises contained herein, it is agreed as follows:

1. Definitions. For purposes of this Agreement, the terms below shall be defined as follows:

"Acceptable Title" means title to land or an interest therein required for the operation of an Improvement, in form acceptable to the City Manager, free and clear of all liens, taxes, assessments, leases, easements and encumbrances, whether or not recorded, but subject to any exceptions determined by the City Manager as not materially interfering with the actual or intended use of the land or interest therein required for the operation of an Improvement. Notwithstanding the foregoing, an irrevocable offer of dedication may constitute "Acceptable Title."

"Acceptance Date" means the earlier of (i) the date the City Manager or his or her designee takes final action, in writing, to accept dedication or transfer of an Improvement or (ii) the date determined pursuant to Section 3 below.

"Bid Documents" means all designs, bid documents, construction plans and specifications, system layout drawings and other construction documents and permits relating to an Improvement.

"Certificate of DIF Credit" means a City certificate for the issuance of DIF Credit to Developer in the form attached hereto as Exhibit 5.

"City DIF Program and Policies" means Ordinance Nos. 2779 and 2780 and Resolution Nos. 2003-39, 2003-070, and 2019-135, as may be amended from time to time.

"City Manager" means the City Manager of the City or his or her designee.

"City Engineer" means the City's City Engineer or his or her designee.

"Completed", "Complete" and "Completion" with respect to an Improvement means that such Improvement has been completed in accordance with its Bid Documents, including any final "punch list" items, as approved in writing by the City Engineer, which approval shall not be unreasonably withheld, and that such Improvement is Usable. Notwithstanding the foregoing, if an Improvement which Developer is obligated to construct pursuant to the applicable conditions of approval for a portion of the Property is only a portion of a larger work of improvement, then a determination of "Completed" or

"Completion" with respect to that Improvement shall be made only as to that Improvement and not with respect to the larger work of improvement of which it is a portion.

"Credit Request" means a document, substantially in the form of Exhibit 6, to be used by Developer in requesting DIF Credits with respect to one or more Improvements.

"Days" shall mean business days unless otherwise stated.

"Developer Contract" means a contract between the Developer and a qualified contractor awarded for the construction of the Improvements at the direction of Developer.

"Development Agreement" has the meaning set forth in Recital D above.

"DIF" or "Development Impact Fees" or "DIF Fees" means the development impact fees imposed within the New Model Colony area pursuant to City Ordinance Nos. 2779 and 2780 and City Resolution Nos. 2003-39, 2003-070, 2005-005, 2005-099, 2007-023, 2007-150, 2008-036, 2011-011, 2012-092, 2015-008, 2017-102, 2019-135, and 2022-133, and any subsequent City ordinances and resolutions lawfully adopted by the City Council to update or modify such development impact fees.

"DIF Credit" means credits earned against the payment of DIFs pursuant to this Agreement.

"DIF Obligation" means the amount of Developer's total obligation for Development Impact Fees in either the Regional or Local Adjacent portion of a DIF category for the Property. Developer's DIF Obligation amounts for each DIF Category shall be as provided in Exhibit 4.

"DIF Program" means the Development Impact Fee Program and the capital improvement projects and public infrastructure identified in the Development Impact Fee Program, adopted and amended by the City from time to time.

"Effective Date" means the date set forth in the first paragraph of this Agreement.

"Eligible Cost" means the substantiated cost of an Improvement to be used in calculating DIF Credit amounts, which costs may include: (i) the costs for the construction (including grading) of such Improvement, (ii) costs directly related to the construction and/or acquisition of the Improvement, such as costs of payment, performance and/or maintenance bonds, the professional costs of material testing, and insurance costs (including costs of any title insurance required); (iii) the cost of acquiring any real property or interest therein in order to construct or operate the Improvement, (iv) the fees paid to the City and any other governmental agencies for, and all other costs incurred in connection with, obtaining permits, licenses or other governmental approvals for such Improvement, (v) the costs incurred in preparing Bid Documents and the related costs of geotechnical and environmental evaluations of the Improvement, (vi) costs of

construction and project management, administration and supervision (but only up to five percent (5%) of the costs described in clause (i) above) incurred for the construction of such Improvement, (vii) professional costs associated with such Improvement, such as design, engineering, accounting, inspection, construction staking, and similar professional services including legal services related to the review of construction contracts. The maximum amount of Eligible Costs described in clauses (v) through (vii) shall be limited to a total of fifteen percent (15%) of the costs described in clause (i).

"Improvement" or "Improvements" means the public improvements required to support the development of the Property as described in Exhibit 3 to the extent required by the applicable conditions of approval.

"Program Cost" or "DIF Program Cost" means the estimated cost of an Improvement identified in the "Nexus Study" referenced in City Resolution No. 2003-039 as it may be modified, supplemented or superseded from time to time. The Program Cost to be applied shall be the Program Cost in effect at the time the Improvement is Completed.

"Usable" shall mean that, with respect to any particular Improvement, the Improvement is actually usable for its intended purposes, and includes, for water Improvements connection to the applicable water supply, for sewer Improvements connection to an applicable disposal system, and for recycled water Improvements connection to a treated water supply and distribution system. Notwithstanding the foregoing, if an Improvement which Developer is obligated to construct pursuant to the applicable conditions of approval for a portion of the Property is only a portion of a larger work of improvement, then a determination of whether that Improvement is "Usable" shall be made only with respect to that Improvement and not with respect to the larger work of improvement of which it is a portion.

2. Construction and Funding of Improvements by Developer. Developer shall commence the Improvements in accordance with the terms of the Development Agreement and individual Tract Maps, including any extension thereof. Upon commencement of the Improvement(s), Developer agrees to proceed expeditiously with the construction of the Improvement(s) under the terms herein. For the purposes of this Agreement, commencement of the Improvements shall mean when Developer receives the first permit from City for grading of the Property. If Developer is unable or unwilling to proceed with, and Complete, the construction of the Improvement(s) for any reason, and subject to the provisions in Section 17 below, Developer shall be considered to be in default of this Agreement. City and Developer agree that Developer shall award, or cause to be awarded, all contracts for the construction of the Improvements and that this Agreement as necessary to assure the timely and satisfactory Completion of such Improvements. The Developer shall perform all of its obligations hereunder and shall conduct all operations with respect to the construction of the Improvements in a good, workmanlike and commercially reasonable manner, with the standard of diligence and care normally employed by duly qualified persons utilizing commercially reasonable efforts in the performance of comparable work and in accordance with generally accepted practices appropriate to the activities undertaken. The Developer shall not be relieved of

its obligation to construct the Improvements and cause title to the Improvements to be conveyed to the City even if the DIF Credit Amount is less than the actual cost of the Improvements.

3. Inspection and Acceptance of Completed Improvement by City. City shall make or shall cause to be made periodic site inspections of Developer's construction work. The Acceptance Date for each Improvement constructed by Developer shall occur not later than twenty (20) Days following the last to occur of the following:

(a) the City Engineer's determination that the Improvement is Complete;

(b) the City Manager's determination that Acceptable Title with respect to the Improvement is available for acceptance;

(c) Developer's provision of one (1) set of "as-built" or record drawings or plans for the Improvement, certified and reflecting the condition of the Improvement as constructed; and

(d) Developer's provision of such evidence or proof as the City Manager shall require that all persons, firms and corporations supplying work, labor, materials, supplies and equipment to the construction of the Improvement have been paid and that no claims of liens have been recorded by or on behalf of any such person, firm or corporation. Alternatively, rather than await the expiration of the time for the recording of claims of liens, Developer may elect to provide a title insurance policy or other security acceptable to the City Manager guaranteeing that no such claims of liens will be recorded or become a lien upon any of the real property required for the Improvement.

4. Conveyance of Acceptable Title to City. Acceptable Title to all property on, in or over which, the Improvement will be located, shall, prior to and as a condition precedent to the City's acceptance of any Improvement, be conveyed to City by way of an irrevocable offer of dedication of such property on the Tract Map or by a separate recorded instrument, and such conveyance of interest has been approved by the City as being a sufficient interest therein to permit the City to properly own, operate and maintain such Improvement. Developer agrees to assist the City in obtaining such documents as are required to obtain Acceptable Title. Completion of the transfer of Acceptable Title shall be evidenced by recordation of the acceptance thereof by the City Manager or his designee.

5. Maintenance and Warranties to be provided to City. Developer shall maintain the Improvement in good and safe condition until the Acceptance Date of the Improvement. Prior to the Acceptance Date, Developer shall, at its sole cost and expense, be responsible for performing any required maintenance on the Improvement. On or before the Acceptance Date of the Improvement, Developer shall assign to the City all of Developer's rights in any warranties, guarantees, maintenance obligations or other evidence of contingent obligations of third persons with respect to such Improvement. After the Acceptance Date, City shall be solely responsible for maintenance of the Improvement. With respect to the Improvement, Developer shall warrant that the

Improvement is free from defects in materials and construction defects (and shall correct or cause to be corrected any such defects at Developer's expense) for a period of one year from the Acceptance Date thereof (the "Warranty Period") and Developer shall provide a bond reasonably acceptable in form and substance to the City for such period and such purpose to insure that such defects that appear within said period will be repaired, replaced or corrected by Developer, at its own cost and expense, to the reasonable satisfaction of the City Manager. During the Warranty Period, Developer shall continue to repair, replace or correct any such defects within thirty (30) Days after written notice thereof by the City Manager to Developer, and shall complete such repairs, replacement or correction as soon as practicable. Any warranties, guarantees or other evidences of contingent obligations of third persons with respect to the Improvement shall be delivered to the City Manager, in writing, as part of the transfer of title.

6. Issuance of DIF Credit to Developer. Developer shall receive DIF Credits based upon the verified Eligible Costs of the Improvement (or accepted portion of the Improvement). Issued DIF Credits shall specify the DIF Credit infrastructure category and whether the DIF Credit is for construction of a Regional or Local Adjacent DIF Program Improvement.

7. Limitations on the Issuance of DIF Credit to Developer upon Completion of an Improvement. The amount of DIF Credit to be issued by City shall be limited to the amount of the DIF Program Costs for the Improvement (or accepted portion of the Improvement). The DIF Program Costs identified in the City's DIF Program shall be subject to change, from time to time, as part of the continuing update of the City's DIF Program. The DIF Program Costs for the Improvement (or accepted portion of the Improvement) shall be those in effect at the time the DIF Credit Request is submitted to the City.

(a) To the extent that NMC Builders LLC incurred the costs for the design of the Improvements, Developer agrees that the DIF Credit, up to ten (10%) of the DIF Program Costs, for such design cost portion of the Improvements shall be issued to NMC Builders LLC.

(b) The DIF Credit that the Developer will receive upon Completion of the Improvements may be exchanged for a refund of DIF that was paid by the Developer (up to the Developer's maximum DIF obligation) in the respective DIF category.

8. Issuance of a DIF Credit Certificate. When an Improvement is Complete, Developer shall submit a DIF Credit Request to City with all supporting documentation evidencing the total actual Eligible Costs of the Improvement at the time of submittal. The City Manager or designee shall determine the completeness of the DIF Credit Request and notify Developer of whether the DIF Credit Request is considered complete or if additional information is needed from Developer. Once the DIF Credit Request is considered complete, the City Manager or designee shall use his or her best efforts to determine the total actual Eligible Costs of the Improvements and provide Developer with a Certificate of DIF Credit within twenty (20) Days following receipt of the completed DIF Credit Request.

9. DIF Program Modifications. The estimated cost in the City's DIF Program for DIF Improvements (or defined portions of DIF Improvements) as listed in Exhibit 4 and Developer's total DIF Obligation amount may be modified from time to time based on modifications to the City's DIF Program.

10. Assignment of DIF Credits. Developer shall have the right to transfer or assign DIF Credits provided for herein, to any person, partnership, limited liability company, joint venture, firm or corporation; provided, however, that any such sale, transfer or assignment shall only be made in strict compliance with the following:

(a) Concurrent with any such sale, transfer or assignment, or within fifteen (15) business days thereafter, Developer (i) shall notify the City Manager, in writing, of such sale, transfer or assignment and (ii) shall provide the City with an executed agreement, by purchaser, transferee or assignee that identifies the amount of DIF Credits transferred.

(b) Except for the limited assignment above of DIF Credits, any assignment by Developer of any of the obligations of Developer under this Agreement (a "DIF Improvement Assignment") with regards to the Improvements listed in Exhibit 4, shall identify the Improvements that are the subject of the Assignment Agreement and require the written approval of the City Manager, which approval shall not be unreasonably withheld so long as adequate security as determined by City in its sole discretion, is in place to secure the Completion of the subject Improvements and any DIF Improvement Assignment not made in strict compliance with the foregoing conditions (other than a transfer under Section 23 below) shall, unless such obligations are performed by Developer when required by this Agreement notwithstanding such assignment, constitute a default by Developer and City shall have no further obligations with regard to acceptance of Certificates of DIF Credit issued to Developer, including any DIF Credit assigned or transferred by Developer.

(c) If Developer enters into a DIF Improvement Assignment with a successor in interest with respect to all or a part of the Property (a "Successor Developer") in accordance with Section 10(b) and the Successor Developer obtains DIF Credit pursuant to this Agreement upon its completion of the Improvements identified in the DIF Improvement Assignment, then

(i) such Successor Developer shall have the right to sell, transfer or assign to Developer, and Developer shall have the right to acquire from such Successor Developer, all or a portion of such DIF Credit by complying only with Section 10(b) above, and

(ii) Developer shall have the right to sell, transfer or assign all or a portion of such DIF Credit to other Successor Developers who acquire other portions of the Property by complying only with Section 10(b) above, if the sale, transfer or assignment of such DIF Credit occurs concurrently with the conveyance of another portion of the Property to the other Successor Developer.

11. Additional Documents/Actions. The City Manager is authorized to approve and execute any documents and to take any actions necessary to effectuate the purposes of this Agreement.

12. Integration. This Agreement reflects the complete understanding of the parties with respect to the subject matter hereof. In all other respects, the parties hereto re-affirm and ratify all other provisions of the Development Agreement.

13. Prevailing Wages. Developer is aware of the requirements of California Labor Code Section 1720, et seq. (as amended by Stats 2001 ch. 938 § 2 (S.B. 975)), and 1770, et seq., as well as California Code of Regulations, Title 8, Section 1600, et seq. (collectively, the "Prevailing Wage Laws"), which require the payment of prevailing wage rates and the performance of other requirements on "public works" and "maintenance" projects. The Bid Documents and each Developer's Contract shall require all contractors for the construction of Improvements to pay prevailing wages in accordance with the applicable provisions of the Labor Code. Developer shall make copies of the prevailing rates of per diem wages for each craft, classification or type of worker needed to execute the services available to interested parties upon request, and shall post copies at the Developer's principal place of business and at the project site. Developer shall defend, indemnify and hold the City, its officials, officers, employees, agents, contractors and volunteers free and harmless from any claim or liability arising out of any failure or alleged failure to comply with the Prevailing Wage Laws.

14. Default and Force Majeure.

(a) Default. Failure or delay by Developer or City to perform any of its obligations under this Agreement constitutes a default by such party under this Agreement. The party alleged to be in default shall have thirty (30) days after the date of the written notice by the other party to commence to cure such default. The party alleged to be in default shall diligently pursue such cure to completion within thirty (30) days or a reasonable timeframe if such default cannot be reasonably cured within thirty (30) days, as established in the written notice provided by the party asserting the default. If the party alleged to be in default has not cured its default within the cure period set forth therein, the defaulting party shall be deemed in breach. Any failure or delay in giving such notice or in asserting any rights and remedies as to any default shall not constitute a waiver of any default, nor shall it change the time of default, nor shall it deprive the party not in default of its rights to institute and maintain any actions or proceedings which it may deem necessary to protect, assert or enforce any of its rights or remedies. If any default by Developer is not cured within the time period provided by the City, City shall be entitled to terminate this Agreement in its entirety and thereafter, the City shall be under no obligation to perform any of City's obligations hereunder, including, but not limited to, the issuance of DIF Credits that Developer may claim.

(b) Force Majeure. Notwithstanding the provisions contained in the foregoing paragraph, performance by either party hereunder shall not be deemed to be in default where delay or defaults are due to war, insurrection, strikes, lock-outs, riots, floods, earthquakes, fires, casualties, acts of God, epidemics, quarantine restrictions,

freight embargoes, public transportation stoppage, governmental restrictions or priority, litigation brought by a third party, unusually severe weather, reasonably unforeseeable property conditions, acts of the other party, acts or failure to act of the other party or any other public or governmental agency or entity, or any causes beyond the control or without the failure of the party claiming an extension of time to perform (a "Force Majeure Event"). An extension of time for any such cause (an "Excusable Delay") shall be for the time period of the delay and shall commence to run from the time of the commencement of the cause, if notice by the party claiming such extension is sent to the other party within thirty (30) days of knowledge of the commencement of the cause or from the date of the notice if provided after such thirty-day period. Notwithstanding the foregoing, none of the foregoing events shall constitute an Excusable Delay unless and until the party claiming such delay and interference delivers to the other party written notice describing the event, its cause, when and how such party obtained knowledge, the date the event commenced, and the estimated delay resulting therefrom. Any party claiming an Excusable Delay shall make a good faith effort to deliver such written notice within thirty (30) days after it obtains actual knowledge of the event. Times of performance under this Agreement may also be extended in writing by City and Developer. The Parties hereto expressly acknowledge and agree that changes in either general economic conditions or changes in the economic assumptions of any of them (unless such conditions were caused by a Force Majeure Event) that may have provided a basis for entering into this Agreement and that occur at any time after the execution of this Agreement are not Force Majeure Events and do not provide any Party with grounds for asserting the existence of a delay in the performance of any covenant or undertaking that may arise under this Agreement. Each Party expressly assumes the risk that changes in general economic conditions or changes in such economic assumptions relating to the terms and covenants of this Agreement could impose an inconvenience or hardship on the continued performance of such Party under this Agreement, but that such inconvenience or hardship is not a Force Majeure Event and does not excuse the performance by such Party of its obligations under this Agreement. Without limiting the nature of the foregoing, the parties agree that the inability of Developer to obtain a satisfactory commitment from a construction lender for the improvement of the Property or to satisfy any other condition of this Agreement relating to the development of the Property shall not be deemed to be a Force Majeure Event or otherwise provide grounds for the assertion of the existence of a delay under this Section 14.

15. Licenses and Permits. The Developer shall secure (or shall cause to be secured) any and all permits that may be required by the City or any other governmental agency affected by the construction of the Improvements. The Developer shall be responsible for paying all applicable fees and charges to the City to obtain any land use entitlements and permits that are necessary to construct the Improvements.

16. Indemnification. The Developer agrees to protect, indemnify, defend and hold the City, and its respective officers, employees and agents, and each of them, harmless from and against any and all claims, losses, expenses, suits, actions, decrees, judgments, awards, attorney's fees, and court costs (collectively "Damages") that the City, or its respective officers, employees and agents, or any combination thereof, may suffer or that may be sought against or recovered or obtained from the City, or its respective

officers, employees or agents, or any combination thereof, as a result of or by reason of or arising out of or in consequence of (a) the acquisition, construction, or installation of the Improvements; (b) the untruth or inaccuracy of any representation or warranty made by the Developer in this Agreement or in any certifications delivered by the Developer hereunder; or (c) any act or omission of the Developer or any of its subcontractors, or their respective officers, employees or agents, in connection with the Improvements. If the Developer fails to do so, the City shall have the right, but not the obligation, to defend the same and charge all of the direct or incidental costs of such defense, including any reasonable attorneys' fees or court costs, to and recover the same from the Developer. Notwithstanding the foregoing, neither the City nor its respective officers, employees, or agents shall be indemnified, defended or held harmless against such Damages to the extent that such Damages have been caused by their sole active negligence or sole willful misconduct. The parties acknowledge and agree that the Developer shall be released from the indemnity, defense and hold harmless obligations set forth herein upon the acceptance of the Improvements by the City and completion of the Warranty Period for such Improvements.

17. Developer as a Private Developer. In performing under this Agreement, it is mutually understood that the Developer is acting as a private developer, and not as an agent of the City. The City shall have no responsibility for payment to any contractor, subcontractor or supplier of the Developer. Accordingly, this Agreement does not constitute a debt or liability of the City. The City shall not be obligated to advance any of its own funds or any other costs incurred in connection with the Project. No member, official or employee of the City shall be personally liable to the Developer, or any successor in interest, in the event of any default or breach by the City or for any amount that may become due to the Developer or its successors, or on any obligations under the terms of this Agreement.

18. Other Obligations. Nothing contained herein shall be construed as affecting the Developer's respective duty to perform its respective obligations under other agreements, land use regulations or subdivision requirements relating to the development of the Property, which obligations are and shall remain independent of the Developer's rights and obligations, and the City's rights and obligations, under this Agreement; provided, however, that the Developer shall use its reasonable and diligent efforts to perform each and every covenant to be performed by it under any lien or encumbrance, instrument, declaration, covenant, condition, restriction, license, order, or other agreement, the nonperformance of which could reasonably be expected to materially and adversely affect the design, acquisition, construction and installation of the Improvements. This Agreement is not, and shall not be construed as, a statutory development agreement as authorized by Government Code sections 65864 et seq., and this Agreement shall not be interpreted as limiting the authority of the City to adopt and amend regulations concerning permitted uses of property, the density or intensity of use, the maximum height and size of proposed buildings, provisions for the reservation or dedication of land or the payment of impact fees for public purposes.

19. Binding on Successors and Assigns. Except as set forth in Section 10 or Section 23 hereof, neither this Agreement nor the duties and obligations of the Developer

hereunder may be assigned to any person or legal entity other than an affiliate of the Developer without the written consent of the City, which consent shall not be unreasonably withheld or delayed. Neither this Agreement nor the duties and obligations of the City hereunder may be assigned to any person or legal entity, without the written consent of the Developer, which consent shall not be unreasonably withheld or delayed. The agreements and covenants included herein shall be binding on and inure to the benefit of any partners, permitted and accepted assigns, and successors-in-interest of the parties hereto.

20. Amendments. This Agreement can only be amended by an instrument in writing executed and delivered by the City and the Developer.

21. Waivers. No waiver of, or consent with respect to, any provision of this Agreement by a party hereto shall in any event be effective unless the same shall be in writing and signed by such party, and then such waiver or consent shall be effective only in the specific instance and for the specific purpose for which it was given.

22. No Third Party Beneficiaries. No person or entity, other than the City, shall be deemed to be a third party beneficiary hereof, and nothing in this Agreement (either express or implied) is intended to confer upon any person or entity, other than the City and the Developer (and their respective successors and assigns), any rights, remedies, obligations or liabilities under or by reason of this Agreement.

23. Mortgagee Protection. The parties hereto agree that this Agreement shall not prevent or limit Developer, at Developer's sole discretion, from encumbering the Property or any portion thereof or any improvement thereon by any mortgage, deed of trust or other security device securing financing with respect to the Property. Developer shall have the right to encumber and assign its rights and interests hereunder to the lenders providing such financing as security for such financing without the consent of the City and without complying with Section 10 hereof. City acknowledges that the lenders providing such financing may require certain Agreement interpretations and modifications and agrees upon request, from time to time, to meet with Developer and representatives of such lenders to negotiate in good faith any such request for interpretation or modification. City will not unreasonably withhold its consent to any such requested interpretation or modification provided such interpretation or modification is consistent with the intent and purposes of this Agreement. A mortgagee of the Property shall be entitled to the following rights and privileges:

(a) Neither entering into this Agreement nor a breach of this Agreement shall defeat, render invalid, diminish or impair the lien of any mortgage or deed of trust on the Property made in good faith and for value, unless otherwise required by law.

(b) The mortgagee of any mortgage or deed of trust encumbering the Property, or any part thereof, which mortgagee has submitted a request in writing to the City in the manner specified herein for giving notices, shall be entitled to receive written notification from City of any default by Developer in the performance of Developer's obligations under this Agreement.

(c) If City timely receives a request from a mortgagee requesting a copy of any notice of default given to Developer under the terms of this Agreement, City shall provide a copy of that notice to the mortgagee within ten (10) days following the sending of the notice of default to Developer. The mortgagee shall have the right, but not the obligation, to cure the default during the remaining cure period allowed such party under this Agreement.

(d) Any mortgagee who comes into possession of the Property, or any part thereof, pursuant to foreclosure of the mortgage or deed of trust, or deed in lieu of such foreclosure, shall take the Property, or part thereof, subject to the terms of this Agreement. Notwithstanding any other provision of this Agreement to the contrary, no mortgagee shall have an obligation or duty under this Agreement to perform any of Developer's obligations or other affirmative covenants of Developer hereunder, or to guarantee such performance; provided, however, that to the extent that any covenant to be performed by Developer is a condition precedent to the performance of a covenant by City, the performance thereof shall continue to be a condition precedent to City's performance hereunder, and further provided that any sale, transfer or assignment by any mortgagee in possession shall be subject to the provisions of Section 10 of this Agreement.

24. Notices. Any written notice, statement, demand, consent approval, authorization, offer, designation, request or other communication to be given hereunder shall be given to the party entitled thereto at its address set forth below, or at such other address as such party may provide to the other party in writing from time to time, namely:

If to CITY:
Scott Ochoa, City Manager
City of Ontario
303 East "B" Street
Ontario, CA 91764

with a copy to:
Ruben Duran, City Attorney
Best Best & Krieger, LLP
2855 E Guasti Road
Ontario, CA 91761

If to DEVELOPER:

AG EHC II (LEN) CA 3, L.P.
Steven Benson, Manager
8585 East Hartford Drive, Suite 118
Scottsdale, AZ 85255

With a copy to Builder:

Lennar Homes of California
Geoff Smith, Vice President of Forward Planning
4140 Temescal Canyon Rd., Suite 410
Corona, CA 92883

Each such notice, statement, demand, consent, approval, authorization, offer, designation, request or other communication hereunder shall be deemed delivered to the party to whom it is addressed (a) if personally served or delivered, upon delivery, (b) if given by electronic communication, whether by telex, or telecopy, upon the sender's receipt of an appropriate answerback or other written acknowledgment, (c) if given by registered or certified mail, return receipt requested, deposited with the United States mail postage prepaid, 72 hours after such notice is deposited with the United States mail, (d) if given by overnight courier, with courier charges prepaid, 24 hours after delivery to said

overnight courier, or (e) if given by any other means, upon delivery at the address specified in this Section.

25. Jurisdiction and Venue. City and the Developer (a) agree that any suit action or other legal proceeding arising out of or relating to this Agreement shall be brought in state or local court in the County of San Bernardino or in the Courts of the United States of America in the district in which the City is located, (b) consent to the jurisdiction of each such court in any suit, action or proceeding, and (c) waive any objection that it may have to the laying of venue or any suit, action or proceeding in any of such courts and any claim that any such suit, action or proceeding has been brought in an inconvenient forum. Each of the City and the Developer agrees that a final and non-appealable judgment in any such action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law.

26. Attorneys' Fees. If any action is instituted to interpret or enforce any of the provisions of this Agreement, the prevailing party in such action shall be entitled to recover from the other party thereto reasonable attorney's fees and costs of such suit (including both prejudgment and post judgment fees and costs) as determined by the court as part of the judgment.

27. Governing Law. This Agreement and any dispute arising hereunder shall be governed by and interpreted in accordance with the laws of the State of California.

28. Usage of Words. As used herein, the singular of any word includes the plural, and terms in the masculine gender shall include the feminine.

29. Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original.

30. Incorporation by Reference. The following Exhibits attached hereto and the Recitals of this Agreement are hereby incorporated by reference as though fully set forth herein:

Exhibit 1 – Legal Description of Property
Exhibit 2 – Map of Property
Exhibit 3 – Description of Improvements
Exhibit 4 – Estimated Costs of Improvements
Exhibit 5 – Certificate of DIF Credit
Exhibit 6 – DIF Credit Request
Exhibit 7 – none referenced
Exhibit 8 – DIF Improvement Assignment

[*Signatures On Next Page*]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the respective dates set forth below.

"CITY"

CITY OF ONTARIO, a California municipal corporation

Dated: _____ By: _____
Scott Ochoa, City Manager

ATTEST:

By: _____
City Clerk

APPROVED AS TO FORM:
BEST BEST & KRIEGER, LLP

By: _____
City Attorney

AG EHC II (LEN) CA 3, L.P.

a Delaware limited partnership

Dated: 2/26/25

By: _____

Name: Steven S. Benson

Its: Manager of Essential Housing Asset Management, LLC, an Arizona limited liability company, Authorized Agent of AG EHC II (LEN) CA 3, L.P. a Delaware limited partnership

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF ARIZONA
COUNTY OF Maricopa

On this 26 day of February, 2025 before me, Jaime Marie Adams, Notary Public, personally appeared Steven S. Benson, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of Arizona that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature: _____ (Seal)

Jaime Marie Adams
Notary Public
Maricopa County, Arizona
My Comm. Expires 07-01-25
Commission No. 607030

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A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF _____

On this ___ day of _____, 2025 before me, _____, Notary Public, personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature:_____ (Seal)

Exhibit 1

Legal Description of Property

Real Property in the City of Ontario, County of San Bernardino, State of California, described as follows:

TRACT 1:

PARCEL 1 OF PARCEL MAP NO. 9486, IN THE CITY OF ONTARIO, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 107 OF PARCEL MAPS, PAGES 98 AND 99, RECORDS OF SAID COUNTY.

APN: 0218-111-60-0-000

PARCEL NO. A:

AN EASEMENT FOR A WELLSITE TOGETHER WITH THE CONSTRUCTION AND MAINTENANCE OF WATER PIPELINES ALONG WITH SUCH RIGHTS APPURTENANT TO THE REPAIR AND MAINTENANCE OF PUMPING PLANT EQUIPMENT TOGETHER WITH ALL NECESSARY RIGHTS OF INGRESS AND EGRESS.

SAID EASEMENT LYING WITHIN PARCEL 2, PARCEL MAP NO. 9486, IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS PER PLAT RECORDED IN BOOK 107 OF PARCEL MAPS, PAGES 98 AND 99, RECORDS OF SAID COUNTY, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

PARCEL NO. A1:

COMMENCING AT THE SOUTHWEST CORNER OF SAID PARCEL 2; THENCE SOUTH 89 DEG. 45' 04" EAST ALONG THE SOUTH LINE OF SAID PARCEL 2, A DISTANCE OF 360.00 FET TO THE TRUE POINT OF BEGINNING; THENCE NORTH 0 DEG. 14' 56" EAST A DISTANCE OF 40.00 FEET; THENCE SOUTH 89 DEG. 45' 04" EAST A DISTANCE OF 40.00 FEET; THENCE SOUTH 0 DEG. 14' 56" WEST, A DISTANCE OF 40.00 FEET TO A POINT ON THE SOUTH LINE PARCEL 2; THENCE NORTH 89 DEG. 45' 04" WEST 40.00 FEET TO THE TRUE POINT OF BEGINNING.

PARCEL NO. A2:

A 20 FOOT EASEMENT LYING 10 FEET EITHER SIDE OF THE FOLLOWING DESCRIBED CENTERLINE:
COMMENCING AT THE SOUTHWEST CORNER OF SAID PARCEL 2; THENCE SOUTH 89 DEG. 45' 04" EAST ALONG THE SOUTH LINE OF SAID PARCEL 2, A DISTANCE OF 360.00 FEET; THENCE NORTH 0 DEG. 14' 56" EAST A DISTANCE OF 10.00 FEET TO THE TRUE POINT OF BEGINNING; THENCE NORTH 89 DEG. 45' 04" WEST PARALLEL WITH THE SOUTH LINE OF SAID PARCEL 2, A DISTANCE OF 330.00 FEET; THENCE NORTH 0 DEG. 02' 14" WEST A DISTANCE OF 305.00 FEET, MORE OR LESS, TO THE POINT OF TERMINUS ON THE NORTH LINE OF SAID PARCEL 2.

TRACT 2:

PARCEL 2 OF PARCEL MAP NO. 9486, IN THE CITY OF ONTARIO, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 107 OF PARCEL MAPS, PAGES 98 AND 99, RECORDS OF SAID COUNTY.

APN: 0218-111-61-0-000

Exhibit 1

Exhibit 2

Map of Property

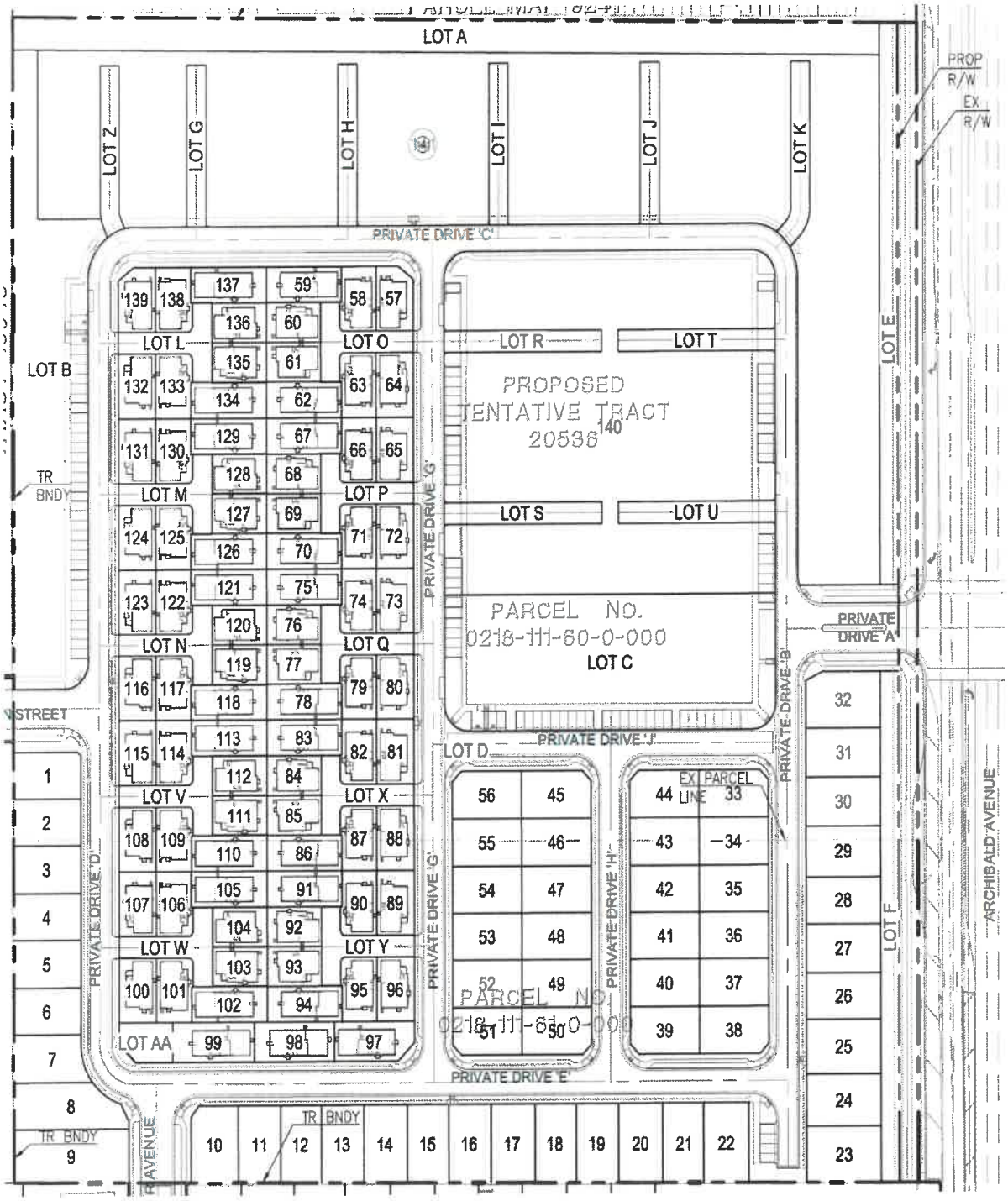


Exhibit 2

46700.10300\34006733.2

Exhibit 3

Description of Improvements

DIF Eligible Facilities: The DIF Eligible Facilities consist of the following Components and Segments; provided, however, that each such Segment described below shall constitute a Segment for purposes of this Agreement only if such Segment was constructed by or on behalf of the Developer.

Regional or Local Adjacent Streets and Bridges Facilities					
Project (TM)	DIF Category	DIF Project No.	DIF Project Description	Segment Description	Project Scope/Length
20536	Local Streets, Signals and Bridges	ST-001	Archibald Avenue from Riverside to Edison (P)	Additional lanes beyond the curb adjacent lane on the west side of Archibald Avenue from northerly property line to southerly property line, including raised landscape median	1,100
20536	Local Streets, Signals and Bridges	ST-024	Ontario Ranch Traffic Control System (P)	Signalized intersection improvements at Archibald Avenue and Maplewood Privado (Quarter-mile between Riverside Drive and Chino Avenue)	N/A

Regional or Local Fiber Optic Communications Facilities					
Project (TM)	DIF Category	DIF Project No.	DIF Project Description	Segment Description	Project Scope/Length
20536	Local Adjacent Fiber	FO-004	Distribution Network - Major Streets Conduit System	Fiber optic conduit in Archibald Ave Northern PL to Southern PL	1,110

Exhibit 4

Estimated Costs of Improvements

Regional or Local Adjacent Streets and Bridges Facilities

Project (TM)	DIF Category	DIF Project No.	DIF Project Description	Segment Description	Project Scope/Length	Total DIF Project Costs	Segment Cost Percentage	Estimated Eligible Costs*
20536	Local Streets, Signals and Bridges	ST-001	Archibald Avenue from Riverside to Edison (P)	Additional lanes beyond the curb adjacent lane on the west side of Archibald Avenue from northerly property line to southerly property line, including raised landscape median	1,100	$ 276,976	7.05%	$ 19,530
20536	Local Streets, Signals and Bridges	ST-024	Ontario Ranch Traffic Control System (P)	Signalized intersection improvements at Archibald Avenue and Maplewood Privado (Quarter-mile between Riverside Drive and Chino Avenue)	N/A	$ 25,812,097	1.28%	$ 331,355
							Subtotal Local Adjacent Streets and Bridges	$ 350,885

*ST-024 is based on the total actual cost allocation from Traffic Engineering.

Regional or Local Fiber Optic Communications Facilities

Project (TM)	DIF Category	DIF Project No.	DIF Project Description	Segment Description	Project Scope/Length	Total DIF Project Costs	Segment Cost Percentage	Estimated Eligible Costs
20536	Local Adjacent Fiber	FO-004	Distribution Network - Major Streets Conduit System	Fiber optic conduit in Archibald Ave Northern PL to Southern PL	1,110	$ 11,602,083	0.396%	$ 45,943
							Subtotal Local Fiber Optics	$ 45,943

Total DIF Eligible Facilities - AG EHC II (LEN) CA 3, L.P. - T 20536 Countryside

139 Detached Units 126 Attached Units	DIF Eligible Improvements to be Constructed		
Infrastructure Category	Estimated DIF Eligible Costs	Estimated DIF Obligations	Estimated Excess DIF Credits
Local Adjacent Streets Facilities	$ 350,885	$ 611,879	$ -
Local Adjacent Fiber Optic Facilities	$ 45,943	$ 436,084	$ -
Totals	$ 396,828	$ 1,047,963	$ -

Exhibit 5

FORM OF CERTIFICATE OF REGIONAL OR LOCAL ADJACENT DIF CREDIT

Pursuant to Section 6 of the Development Impact Fee Credit Agreement for Facility Construction by and between the City of Ontario and _____ dated _____, 2024, the terms and definitions of which are hereby incorporated herein by this reference and hereinafter called the "Fee Credit Agreement" , the City of Ontario hereby certifies that Developer is entitled to the following amount and nature of DIF Credits:

Amount of Credit: $_____
Infrastructure Category of DIF: _____
Local Adjacent or Regional Category of DIF: _____

_____
Scott Ochoa, City Manager

Dated: _____

Exhibit 6

FORM OF DIF CREDIT REQUEST

The undersigned (the "Developer"), hereby requests DIF Credits in the DIF categories and amounts specified in Attachment 1 hereto. In connection with this Credit Request, the undersigned hereby represents and warrants to the City as follows:

1. He (she) is a duly authorized officer or representative of the Developer, qualified to execute this Credit Request on behalf of the Developer and is knowledgeable as to the matters set forth herein.

2. All costs of the Improvements for which credit is requested hereby are Eligible Costs (as defined in the Fee Credit Agreement) and have not been inflated in any respect. The Eligible Costs for which credit is requested have not been the subject of any prior credit request submitted to the City.

3. Supporting documentation (such as the applicable Developer Contract, third party invoices, lien releases and cancelled checks or other evidence of payment) is attached with respect to each cost for which credit is requested.

4. The Improvement for which credit is requested was constructed in accordance with the requirements of the Fee Credit Agreement.

5. Please issue a Certificate of DIF Credit to the Developer in the amount requested.

I declare under penalty of perjury that the above representations and warranties are true and connect.

DEVELOPER	CITY
[INSERT ENTITY]	Credit Request Approved
By: _____ Authorized Representative of Developer	By: _____ Scott Ochoa, City Manager
Date: _____	Date: _____

ATTACHMENT 1

SUMMARY OF IMPROVEMENTS AND REQUESTED DIF CREDITS

Improvement	Eligible Costs/Contract Amount	DIF Credit Requested

[List here all Improvements for
which credit is requested, and attach support documentation]

Exhibit 6

Exhibit 8

FORM OF ASSIGNMENT, SALE, OR TRANSFER OF DIF CREDIT

FROM _____ to _____

This Sale or Transfer of DIF Credit ("DIF Credit Transfer") is entered into as of _____, 20__, between _____, a _____ _____"Transferor") and_____ ("Transferee").

A. NMC Builders, LLC is a limited liability company formed under the laws of the state of California, the business affairs of which are governed by that certain Amended and Restated Limited Liability Company Agreement of NMC Builders, LLC dated as of March 31, 2005, as amended ("NMC Agreement").

B. Transferor is a Member of the NMC Builders, LLC.

C. Pursuant to that certain Certificate of DIF Credit (the "Certificate") issued by the City of Ontario to NMC Builders, LLC, dated _____, an amount of DIF Credit was made available to the Transferor for use in the eastern portion of the New Model Colony. A copy of the Certificate is DIF Credit issued to NMC Builders, LLC by CITY is attached hereto and incorporated herein as Exhibit "C-2".

D. Transferee is owner of real property within the eastern portion of the New Model Colony of the City of Ontario and further described as Tract Map No. _____ . (or other description of the property).

E. Pursuant to the terms of this DIF Credit Assignment, Transferee desires to receive from the Transferor, a share of the DIF Credit issued to Transferor by NMC Builders LLC.

For good, valuable and sufficient consideration received, the receipt of which is hereby acknowledged, the Transferor and Transferee hereby agree as follows:

1. TRANSFER

The Transferor hereby assigns, transfers and conveys to Transferee the DIF Credit of:

DIF Credit Category	DIF Credit Amount
_____	_____

2. ACCEPTANCE

Transferee hereby accepts and assumes DIF Credit as listed above. Transferee and CITY shall track DIF Credit as it is redeemed, and the remaining balance to be used, by completing, dating and initialing Exhibit "D-3" attached hereto and incorporated herein. The original Exhibit "C-2" shall not be removed from this Transfer Agreement.

3. EFFECTIVE DATE.

This Transfer Agreement shall become effective as of the date first above written.

4. TRANSFEROR'S REPRESENTATIONS AND WARRANTIES.

The Transferor makes the following representations and warranties, which representations and warranties shall survive this DIF Credit Transfer:

The Transferor has the full power and authority to enter into this DIF Credit Transfer.

The execution, delivery and performance of this DIF Credit Transfer will not result in any violation or default under its organizational documents or any instruments to which the Transferor is a party.

From and after the date of this DIF Credit Transfer, the Transferor shall have no further rights, title or interest in or to the DIF Credit.

5. TRANSFEREE'S REPRESENTATION AND WARRANTIES.

Transferee makes the following representations and warranties, which representations and warranties shall survive this Transfer:

Transferee is the owner of Tract No. _____ (or other property description) in the eastern portion of the New Model Colony, City of Ontario.

Transferee has the full power and authority to enter into this DIF Credit Transfer.

This DIF Credit Transfer, when executed, shall constitute a valid and legal obligation binding as to Transferee.

6. NOTICES.

All notices, consents, waivers and other communications under this DIF Credit Transfer must be in writing and will be deemed to have been duly given when (a) delivered by hand (with written confirmation of receipt), (b) when received by the addressee, if sent by a nationally recognized overnight delivery service (receipt requested), in each case to the appropriate addresses set forth below (or to such other addresses as a party may designate by notice to the other parties); (c) when received by the addresses as confirmed by a confirmation receipt, if sent by facsimile to the appropriate facsimile number

designated below (or to such other facsimile number as the parties may designate by notice to the other parties).

If to the Transferor:
Entity Name: _____
Address: _____
_____
Attention: _____
Phone: _____
Email: _____

If to Transferee:
Entity Name: _____
Address: _____
_____
Attention: _____
Phone: (___) _____
Email: _____

7. GENERAL PROVISIONS.

Severability. In the event that the application of any of the provisions of this DIF Credit Transfer are held to be unenforceable or invalid, the validity and enforceability of other applications of that provision and of the remaining provisions shall not be affected.

Counterparts. This DIF Credit Transfer may be executed in counterparts.

Entire Agreement. This DIF Credit Transfer contains the entire final understanding of and between the parties and supersedes any prior written or oral agreements between them respecting the subject matter of this DIF Credit Transfer. There are no representations, agreements, arrangements or understandings, oral or written, between the parties that are not fully set forth herein.

Construction. Every covenant, term and provision of this DIF Credit Transfer shall be construed simply according to its fair meaning and not strictly for or against any party.

No Modifications. No supplement, modifications or amendment to this DIF Credit Transfer shall be binding unless executed in writing by both parties.

Further Assurances. The Transferor and Transferee each agree to execute such other documents and perform such other acts as may be necessary or desirable to effectuate this DIF Credit Transfer.

Effect of NMC Agreement and Certificate. This DIF Credit Transfer Agreement is, and shall remain, subject to the terms and conditions of the DIF Credit Certificate and the NMC Agreement, as may be amended by the parties thereto from time to time.

No Third Party Beneficiaries. This DIF Credit Transfer Agreement is made and entered into for the sole protection and benefit of the parties hereto, the City of Ontario,

and their respective successors and assigns. No other person or entity shall have any right of action based upon any provision of this DIF Credit Transfer Agreement.

IN WITNESS WHEREOF, the Transferor and Transferee have duly executed this DIF Credit Transfer as of the date first written above.

TRANSFEROR:

Entity Name (NMC Builders Member) a _____

By: _____

By: _____

TRANSFEREE:

Entity Name _____ a _____

By: _____

By: _____

(All Signatures must be notarized)

EXHIBIT "C-2" to Transfer of DIF Credit

(Certificate of DIF Credit)

(Original DIF Credit Certificate issued by City must be attached).

EXHIBIT "D-3" to Transfer of DIF Credit

Available DIF Credit Reconciliation

DIF Credit Category _____

Assigned to: _____**(NMC Member)**

Date Assigned to NMC Member: _____

Transferee: _____

Date Transferred: _____

Starting DIF Credit Balance	Amount Redeemed	Date	Remaining DIF Credit Balance	City's Initials	Transferee's Initials

CITY OF ONTARIO *Agenda Report* **March 18, 2025**	**SECTION:** **CONSENT CALENDAR**
Department: Budget Prepared By: Evan Erickson Staff Member Presenting: Armen Harkalyan, Executive Director of Finance Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 4

SUBJECT: FY 2024-25 MID-YEAR BUDGET UPDATE

RECOMMENDATION: That the City Council take the following actions:

A. Approve the budget adjustments and recommendations as presented in the Fiscal Year 2024-25 Mid-Year Budget Update Report (Exhibit A);
B. Consider and adopt a Resolution making a declaration of intent to issue tax-exempt obligations; and
C. Approve the updated Purchasing Policies and Procedures Manual

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Operate in a Businesslike Manner

FISCAL IMPACT: The recommended actions will affect several fund budgets as outlined in the Fiscal Year 2024-25 Mid-Year Budget Update Report.

BACKGROUND & ANALYSIS: The Mid-Year Budget Update Report for Fiscal Year 2024-25 reflects the Financial Services Agency's continued efforts to provide timely, accurate, and understandable financial information to assist the City Council with decision making and achievement of core goals. All Funds have been reviewed in preparing this report. The emphasis of this report is on the General Fund, which funds the majority of government services including public safety, recreation, library, museum, parks, building and planning.

The primary purposes of this report are to:

- Revise the City's budget to reflect the City Council's actions taken since the beginning of the current fiscal year;
- Recommend personnel changes to enhance program operations and efficiencies;
- Recommend budget adjustments that are consistent with City Council goals and objectives; and
- Comment on significant budget and economic trends which may impact fiscal year's budget development.

Fiscal Year 2024-25 Mid-Year Budget Update Recommendations

Fiscal Year 2024-25 Mid-Year Budget Update are routine in nature and comprised predominately by City Council actions taken since the First Quarter Budget Update. Mid-Year Budget Update includes proposed new expenditure budget requests, as well as revised revenue estimates for FY 2024-25. For the General Fund, the net result of these actions will bring the General Fund estimated available and unencumbered ending fund balance to $81.8 million or 21.2% of total appropriations. This amount achieves the goal set by City Council as a reserve for specific and defined emergency events (such as an earthquake or pandemic) and to address immediate needs in resources without impacting City services. This goal was temporarily decreased to 15% during the COVID pandemic but has since been brought back up to the previous set goal of 20%, effective July 1, 2023, with the goal of increasing the reserves up to 25% in future fiscal years.

General Fund Highlights

- $2.8 million increase in Sales Tax revenue
- $450 thousand increase in Parking Tax revenue
- $2.0 million appropriations for the City Share of the Animal Resource Center (ARC) of the Inland Empire Agreement
- $1.6 million appropriations for the roof repair and suite remodel of the Toyota Arena (offset by increase in the City's share of revenues from the arena)

Other Funds (non-General Fund) Highlights

- $9.3 million appropriations for previously approved vehicle purchases both received and anticipated to be received by the end of the fiscal year
- $5.9 million appropriations for the Ontario Sports Empire: debt service related to the property acquisition for Ontario WF Farms (10 acres) and Dairy River (15 acres)
- $5.0 million appropriations for Grove & Holt Intersection widening project
- $3.6 million appropriations and revenues for the United States Environmental Protection Agency (EPA) Solid Waste Infrastructure for Recycling (SWIFR) Grant
- $2.3 million appropriations for additional funding for the Grove and I-10 Interchange Corridor project

Interim budget updates also present recommendations for personnel and organizational changes necessary to enhance program operations and efficiencies. Current recommendations for this Mid-Year report include reclassification changes, adds/deletes, and other modifications to the authorized full-time positions resulting in a zero net increase citywide. More detail is presented in the attached Exhibit A under Recommended Personnel Changes section, pages 10 through 13, of the Fiscal Year 2024-25 Mid-Year Budget Update Report.

Reimbursement Resolution Declaring Intent to Issue Bonds

The City intends to finance the acquisition, construction, and installation of certain public capital improvements with the proceeds of the sale of tax-exempt obligations. Staff recommends approval of a Reimbursement Resolution, which permits the City to reimburse itself for certain costs incurred prior to the issuance of bonds, as allowed under the Internal Revenue Code.

Purchasing Policy Update

As required by Public Contract Code, the City has added additional supplier preferences in our Purchasing Policies and Procedures to allow for fair access to the procurement process and opportunities within the City to include veteran, minority, and women-owned suppliers.

Economic Outlook

The following economic indicators are the most recent measures of economic activity.

Gross Domestic Product (GDP): The broadest measure of economic output, increased at an annual rate of 2.3% in the fourth quarter of 2024, according to the most recent released as a result of increased consumer spending and increased government spending. This was a minor decrease compared to the third quarter of 2024, in which the real GDP increased by 3.1%. The increase in the fourth quarter primarily reflected increases in consumer spending and government spending, with decreases in imports. (Source: Bureau of Economic Analysis)

Unemployment Rate: The national unemployment rate slightly declined to 4.1% in December 2024 compared to the 4.2% reported for November 2024. Comparing the current national rate to the previous year rate of 3.8%, it is an increase of 0.3%. California's unemployment rate remains unchanged in December 2024 with a slight increase compared to the prior year's rate of 5.1%. Locally, the Inland Empire's unemployment rate decreased to 4.9% compared to 5.3% in November 2024. The Inland Empire's labor market has recovered from the COVID-19 pandemic and is still strong. Since April 2020, the region has added over 356,000 jobs, which is more than the 228,700 jobs lost during the national lockdown. (Source: US Bureau of Labor Statistics)

Consumer Price Index (CPI): This rate is utilized to track changes in the prices of goods and services and is a useful tool for tracking inflation or the cost of living. For January 2025, the Riverside-San Bernardino-Ontario metropolitan area's CPI rate increased by 2.9% over the last 12-month period. This small increase in CPI indicates a cooling of the economy due to the various tools the federal government has implemented to hamper the exponential economic growth occurring as a result of the COVID-19 pandemic. (Source: US Bureau of Labor Statistics)

Housing Market: A continued shortage of homes for sale and high costs of borrowing continues to have a negative impact on the housing inventory and demand. With the recent declining of mortgage rates and the expectation that the rates will continue to decrease in 2025, it is anticipated that home sales will bounce back as buyers and sellers return to a more favorable housing market. Statewide sales for existing single-family homes in December 2024 were 19.8% higher than they were for the same time period in the previous year. Overall, home sales in the Inland Empire for

December 2024 increased 10.1% compared to the previous month, and a 7.3% increase compared to the same time period in the previous year. (Source: HdL Coren and Cone)

Conclusion

As the City recovers from the last four years of economic disruption from the COVID pandemic, other challenges still exist with the continued war in Ukraine; rising consumer good prices; continued high interest rates even with recent rate cuts by the Federal Reserve; the possibility of a recession due to accelerated inflation levels not seen since the early 1980's; the unknown fiscal impacts from proposed tariffs by the new federal administration; and the ongoing conflict in the middle east. Even with the anticipated additional resources, the City will need to continue to practice fiscal discipline and establish proactive measures to safely navigate the current and upcoming fiscal challenges, as well as deliver an unparalleled level of service and commitment to our community.

The Adopted Operating Budget for Fiscal Year 2024-25, as modified through this Mid-Year Budget Update, reflects the City Council's continued commitment to support high quality public safety and municipal services, provides for the maintenance and expansion needs of the City's infrastructure and facilities, profiles an aggressive economic development strategy, and assures the investment and reinvestment of City resources into the community - all in the name of affording Ontario residents and businesses an exceptional quality of life. With the City Council's leadership and their prudent fiscal policies, the City's long-term financial health will further solidify its standing as the economic leader in the Inland Empire, and a formidable player in California and the nation.

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, REGARDING ITS INTENTION TO ISSUE TAX-EXEMPT OBLIGATIONS.

WHEREAS, the City Council of the City of Ontario (the "Issuer") desires to finance the costs of constructing or acquiring certain public facilities and improvements, as provided in Exhibit A attached hereto and incorporated herein (the "Project");

WHEREAS, the Issuer intends to finance the acquisition of the Project or portions of the Project with the proceeds of the sale of obligations the interest upon which is excluded from gross income for federal income tax purposes (the "Obligations"); and

WHEREAS, prior to the issuance of the Obligations the Issuer desires to incur certain expenditures with respect to the Project from available monies of the Issuer which expenditures are desired to be reimbursed by the Issuer from a portion of the proceeds of the sale of the Obligations;

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF ONTARIO DOES HEREBY RESOLVE, ORDER AND DETERMINE AS FOLLOWS:

SECTION 1. The Issuer hereby states its intention and reasonably expects to reimburse Project costs incurred prior to the issuance of the Obligations with proceeds of the Obligations. Exhibit A describes either the general character, type, purpose, and function of the Project, or the fund or account from which Project costs are to be paid and the general functional purpose of the fund or account.

SECTION 2. The reasonably expected maximum principal amount of the Obligations is $290,000,000 to be issued in one or more series.

SECTION 3. This resolution is being adopted not later than 60 days after the date (the "Expenditures Date or Dates") that the Issuer will expend monies for the portion of the Project costs to be reimbursed from proceeds of the Obligations.

SECTION 4. Except as described below, the expected date of issue of the Obligations will be within eighteen months of the later of the Expenditure Date or Dates and the date the Project is placed in service; provided, the reimbursement may not be made more than three years after the original expenditure is paid. For Obligations subject to the small issuer exception of Section 148(f)(4)(D) of the Internal Revenue Code, the "eighteen-month limit" of the previous sentence is changed to "three years" and the limitation of the previous sentence beginning with "; provided, ..." is not applicable.

SECTION 5. Proceeds of the Obligations to be used to reimburse for Project costs are not expected to be used, within one year of reimbursement, directly or indirectly to pay debt service with respect to any obligation (other than to pay current debt service

coming due within the next succeeding one year period on any tax-exempt obligation of the Issuer (other than the Obligations)) or to be held as a reasonably required reserve or replacement fund with respect to an obligation of the Issuer or any entity related in any manner to the Issuer, or to reimburse any expenditure that was originally paid with the proceeds of any obligation, or to replace funds that are or will be used in such manner.

SECTION 6. This resolution is consistent with the budgetary and financial circumstances of the Issuer, as of the date hereof. No monies from sources other than the Obligation issue are, or are reasonably expected to be reserved, allocated on a long-term basis, or otherwise set aside by the Issuer (or any related party) pursuant to their budget or financial policies with respect to the Project costs. To the best of our knowledge, this City Council is not aware of the previous adoption of official intents by the Issuer that have been made as a matter of course for the purpose of reimbursing expenditures and for which tax-exempt obligations have not been issued.

SECTION 7. The limitations described in Section 3 and Section 4 do not apply to (a) costs of issuance of the Obligations, (b) an amount not in excess of the lesser of $100,000 or five percent (5%) of the proceeds of the Obligations, or (c) any preliminary expenditures, such as architectural, engineering, surveying, soil testing, and similar costs other than land acquisition, site preparation, and similar costs incident to commencement of construction, not in excess of twenty percent (20%) of the aggregate issue price of the Obligations that finances the Project for which the preliminary expenditures were incurred.

SECTION 8. This resolution is adopted as official action of the Issuer in order to comply with Treasury Regulation § 1.150-2 and any other regulations of the Internal Revenue Service relating to the qualification for reimbursement of Issuer expenditures incurred prior to the date of issue of the Obligations, is part of the Issuer's official proceedings, and will be available for inspection by the general public at the main administrative office of the Issuer.

SECTION 9. All the recitals in this Resolution are true and correct and this City Council so finds, determines and represents.

The City Clerk of the City of Ontario shall certify as to the adoption of this Resolution.

PASSED, APPROVED, AND ADOPTED this 18th day of March, 2025.

_____
PAUL S. LEON, MAYOR

ATTEST:

_____
SHEILA MAUTZ, CITY CLERK

APPROVED AS TO FORM:

_____
BEST BEST & KRIEGER LLP
CITY ATTORNEY

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO)
CITY OF ONTARIO)

I, SHEILA MAUTZ, City Clerk of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. 2025- was duly passed and adopted by the City Council of the City of Ontario at their regular meeting held March 18, 2025 by the following roll call vote, to wit:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

The foregoing is the original of Resolution No. 2025- duly passed and adopted by the Ontario City Council at their regular meeting held March 18, 2025.

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

EXHIBIT A

DESCRIPTION OF PROJECT

Projects as part of the Capital Improvement Project (CIP) budget of the City of Ontario for Fiscal Year 2024-2025 through Fiscal Year 2028-2029, including, but not limited to civic center infrastructure, sports complex, street repairs, animal services, theatre, parking, storm drains, park and recreation, museum, roofing, entertainment and downtown revitalization, sidewalks, bollards, information networks, street lights, golf courses, trails, library, lighting, police, public safety, and community center, among other public infrastructure.

CITY OF ONTARIO
ADMINISTRATIVE POLICY

SUBJECT	Number: FSA-002
PURCHASING POLICIES AND PROCEDURES MANUAL	**Effective Date:** March 18, 2025
	Revision Date: March 18, 2025
	Policy Owner(s): Financial Services Agency

PURPOSE

The primary goals and objectives of this Purchasing Policies and Procedures Manual ("Manual") are:

a. To facilitate best-value purchasing transactions.

b. To help employees of the City of Ontario ("City") facilitate the timely procurement of goods and services ("Purchasing System") needed to meet the City's operational needs while adhering to the regulations set forth in the City's Municipal Code (Volume 1, Title 2, Chapter 6), Generally Accepted Accounting Practices ("GAAP"), and all applicable Federal and State of California regulations and requirements.

c. To complement and reinforce fiscal control measures.

d. To communicate Citywide and promote a common understanding of the City's procurement policies and established business practices;

e. To define procurement roles and responsibilities of the Purchasing Division and staff, and serve as a tool for employee training and development.

The policy statements contained in this Manual represent the foundation upon which the City operates in its Purchasing System. This Manual will be revised and supplemented, as required, to meet City requirements.

SCOPE

The Purchasing Division, part of the Financial Services Department, is focused on strengthening the economic well-being and quality of life of the City's community through oversight of the timely procurement of City services and infrastructure. It defines success as providing superior service to all City Departments and thereby to the community, and it strives to maintain:

a. A strong commitment and genuine desire to provide supportive customer service in the spirit of teamwork, to take the extra step to be helpful, and to obtain the best quality of life for our community as the highest priority.

b. An attitude that fosters cooperation, creativity, and innovation in problem-solving while aiming to make the most economically prudent use of the City's limited resources.

c. The highest level of integrity and ethical standards while discharging its duties in accordance with the City's policies and procedures, and all applicable laws and regulations.

DEFINITIONS

a. **Annual Purchase Order:** A purchasing method used to purchase designated goods and/or services on a repetitive basis for the City's Agencies or Departments. Annual Purchase Orders shall be issued to a specific supplier on a per fiscal year basis and shall close at the end of the fiscal year.

b. **Best Value:** A value determined by evaluation of objective criteria that may include, but not be limited to price, features, functions life-cycle costs, technical experience, and past performance. A best value determination may involve the lowest cost proposal meeting the interests of the City and the needs of the project, or a tradeoff between price and other specified factors.

c. **City:** Refers to any entity affiliated with the City, including the Ontario Housing Authority (to the extent such entity adopts a resolution subjecting itself to the Uniform Public Construction Cost Accounting Act, and these purchasing policies and procedures).

d. **Cooperative Purchasing:** A competitive procurement method whereby the procurement requirements of two or more governmental entities are combined to obtain the benefits of volume pricing, reduction in administrative costs, or both.

e. **Emergency:** A sudden unexpected occurrence that poses a clear and imminent danger requiring immediate action to prevent or mitigate the loss or impairment of life, health property, or essential public services.

f. **Formal Bid:** A bid (subject to Section 2-6.07 of the Municipal Code) advertised in a local newspaper; submitted in a sealed envelope and in conformance with a prescribed format; and publicly opened at a specified place, date, and time.

g. **Goods:** Supplies, materials, equipment, and other commodities (other than services and real property) included in California Commercial Code Section 2105.

h. **Non-competitive:** A non-competitive procurement whereby an acceptable justification exists to support goods, services, or public works related purchases provided by a particular supplier without a competitive process.

i. **Prevailing Wage:** California Labor Code Sections 1720 *et seq.* and 1770 *et seq.*, as well as California Code of Regulations Title 8, Section 16000, *et seq*. ("Prevailing Wage Laws) require the payment of prevailing wage rates and the performance of other requirements on certain "public works" and "maintenance" projects. If the work is being performed as part of an applicable "public works" or "maintenance" project as defined by the Prevailing Wage Laws and if the total compensation is $1,000 or more, the City must make suppliers aware of these requirements and suppliers must fully comply with such Prevailing Wage Laws. For more information and threshold levels, visit the Department of Industrial Relations website at dir.ca.gov.

j. **Procurement:** The purchasing, leasing, or otherwise acquiring of any goods, services, or public project construction (including all of the functions that pertain to the acquisition).

k. **Professional Services:** Advisory, consulting, architectural, engineering, computer, legal, financial, telecommunications, financial, surveying or any service which involves the exercise of professional discretion or independent judgment (based on an advanced or specialized knowledge, expertise, or training gained by formal studies or experience).

l. **Purchase Order:** The written document provided to the supplier formalizing the terms and conditions associated with the ordering of the goods, services, or public project required by the City. It is the payment document and also serves as a low value threshold contractual document.

m. **Purchasing Officer:** The position defined by the City's organizational structure that is responsible for overseeing the Purchasing Division. The person occupying such a position may delegate to such other person or entity as he/she deems advisable such duties and responsibilities as have been provided. In the absence of the Purchasing Officer, or designee, the Assistant Finance Director or the Executive Director of Financial Services has the authority to sign purchase orders.

n. **Requisition:** A written request submitted to the Purchasing Division by a City Agency or Department to initiate the procurement process for specified goods, services, or a public project.

o. **Responsive Bid:** A bid which meets all of the specifications set forth in the request for bid proposal.

p. **Responsible Bidder:** A bidder who has demonstrated the attribute of trustworthiness as well as quality, fitness, capacity, and experience to satisfactorily perform the public works contract.

q. **Services:** The furnishing of labor, time, or effort by a contractor or supplier (which may involve to a lesser degree the delivery or supply of products). The term does not include services rendered by City officers and employees, nor private firms offering professional services.

r. **Sole Source:** A non-competitive procurement whereby an acceptable justification exists to support goods, services, or public works related purchases provided by a single source supplier. A sole source is, by definition, only available from one source.

s. **Standardized suppliers:** A non-competitive procurement whereby pre-authorized suppliers, approved by City Council, are selected for procuring products or services determined to be in the City's best interest to buy directly from specified suppliers.

t. **Virgin Materials:** Items that in their raw or unprocessed form tend to use more energy during processing phase. Therefore, recycled materials are preferred.

POLICY

1.0 PROCUREMENT OVERVIEW

1.1 Policy Statement

a. The City's goal for every purchasing transaction is to obtain the best value possible. Best value is determined by evaluating many factors (such as price, delivery capabilities, quality, past performance, training, financial stability, service capabilities, ease of ordering, payment terms, functions, features, life-cycle costs, etc.) and selecting a supplier that offers the best combination of those factors.

1.2 Policy Amplification

a. The Financial Services Department of the Financial Services Agency supports sustaining and promoting a procurement environment to best support the operational needs of the City's Agencies and Departments. These purchasing policies and procedures are meant to foster an environment that puts its City's Agencies and/or Departments in the best possible position to procure the products and services needed in a timely and cost-effective manner to effectively operate (while also making sure appropriate procurement processes are followed).

b. It is the responsibility of all employees involved in the procurement process to exercise due diligence in an effort to mitigate any avoidable risks, obtain maximum value for each dollar expended, and protect the City's rights in carrying out procurement transactions and in administering contracts.

2.0 PROCUREMENT CODE OF ETHICS

2.1 Policy Statement

a. The City desires to maintain a reputation that embodies the very highest standards of ethical conduct, and advocate a code of conduct that prohibits breach of public trust by any attempt to realize personal gain by a public employee through conduct inconsistent with the proper discharge of the employee's duties.

b. Employees are expected to demonstrate loyalty to the City by diligently following lawful instructions, using reasonable care, and using only the authority granted. City employees shall know and obey the letter and spirit of laws governing the purchasing function, and remain alert to the legal ramifications of purchasing decisions.

c. It is the responsibility of all City employees to endeavor to maintain the good name of the City, to develop and maintain good relations between the City and its suppliers, and to keep in mind that personal contacts form much of the basis for public opinion.

City employees must place the interests of the City first in all transactions (and expose questionable practices wherever discovered).

2.2 Supplier Relations

a. Negotiations with suppliers should be based on sound business judgment. The City expects its employees to be fair and neither perform nor accept favors. It is prohibited for City employees to accept personal advantages. Entertainment, gifts, free services, discounts on personal purchases (whether for the City employee or anyone else in his/her family or household) is forbidden. Favors must be declined and gifts must be returned pleasantly, diplomatically, and firmly. Relations with suppliers should be friendly, objective, and strictly for business.

2.3 Conflicts of Interest

a. The City expects its employees will not permit any conflict of interest between their personal affairs and City business. One may not have a financial interest, position, or relationship with any person, firm, or corporation that does business with the City that would influence (or could be regarded as influencing) their actions for the City. Family or relative financial interests can become a conflict for the employee. Any situation which is unclear should be reviewed with management.

2.4 Confidential Information

a. Suppliers may divulge to a City employee or employees confidential or proprietary information. Employees must handle confidential or proprietary information belonging to the City or suppliers with due care and diligence, and with proper consideration of ethical and legal ramifications and governmental regulations. City employees are expected to refer requests from the public for supplier or bidder information to the Records Management Department.

3.0 PROCUREMENT OF GOODS AND SERVICES

3.1 Policy Statement

a. The City strives to make fiscally responsible purchases of goods and services that reduce resource consumption and waste, perform as required, and promote human health and well-being.

3.2 Policy Amplification

a. All procurement of goods and services shall be made in accordance with City Council approved policies and procedures (including without limitation the City's Municipal Code). The City utilizes a combination of formal bids, informal bids, and alternative bid procedures for the procurement of goods, professional services, and public projects

based on need and threshold.

3.3 Formal Bid Procedures

a. Formal bid procedures are used for public projects exceeding two hundred thousand dollars ($200,000) or large dollar value procurements requiring a more formal procurement process. Types of procurement vehicles include:

    i. Notice Inviting Bids
    ii. Request for Qualifications

3.4 Informal Bid Procedures

a. Informal bid procedures are used for small to medium-sized public projects as defined in Municipal Code Section 2-6.13, and procurements for goods, services, and professional services with a defined list of attributes. Types of procurement vehicles include:

    i. Invitation for Bids

3.5 Alternative Bid Procedures

a. Alternative bid procedures are used when formal or informal bidding procedures are not required for goods, services, or professional services due to low dollar value; or when the procurement is for an intended outcome versus a defined list of attributes, etc. Types of procurement vehicles include:

    i. Informal Quotation
    ii. Request for Quote
    iii. Request for Proposal

3.6 Design Build

a. The City may utilize a design-build method of procurement for public projects in accordance with California Public Contracting Code Section 22160 *et seq*.

3.7 Supplier Preference

a. The City has established a local, veteran, minority, and women-owned preference to promote the community's economic health, encourage participation in the procurement process, and receive fair access to contracting and procurement opportunities within our projects.
    i. For the purchase of goods (except for materials for public works projects) the City may grant suppliers located within the City limits a 1¾% advantage in the City's determination of low bid due to the ultimate receipt by the City and

County of a proportionate amount of the sales tax associated with the purchase of the goods solicited.

ii. A supplier whose sales tax is reportable outside of the City (but within the County of San Bernardino) will receive a ¾% advantage in low bid determination. This section shall not apply to procurements subject to Federal funding requirements.

3.8 Standardization

a. Every effort shall be made to standardize commonly used items, vehicles, equipment, and services. Once a standard item has been determined, approval shall be obtained from City Council for repeated purchases expected to exceed $150,000 within a period of up to five (5) years. This will eliminate repetitive approvals by City Council for the same item.

3.9 Cooperative Purchases

a. The City may engage in cooperative purchasing for goods or services as a third-party agency "piggybacking" on another agency's competitively bid agreement so long as the goods or services were procured in accordance with minimum requirements of the Purchasing System. Cooperative purchasing reduces administrative expenses, secures prices, and offers other benefits of a large volume purchase. Caution must be exercised to ensure that the City complies with all applicable Federal, state, and local laws as well as the City's Purchasing System. The Purchasing Division must be consulted prior to any City Agency or Department engaging in cooperative purchasing.

The City's Municipal Code Section 2-6.23 allows for the following exceptions to the procurement methods set forth in the City's Purchasing System:

I. Emergency – When in an emergency as defined in the Purchasing System, provided the procedures set forth in Section 2-6.24 of City's Municipal Code are followed.

II. Sole-Source—When a City Agency or Department determines that the goods, services, or public project can only be obtained from a sole source, the Agency or Department will submit a request for non-competitive procurement to the Purchasing Division. A sole source justification shall be valid for up to one year from the date of approval by the Purchasing Division.

III. Cooperative Purchasing – When the City Council has by resolution transferred the authority to make the purchase of goods to another governmental agency through cooperative purchasing and the agency generally follows the provisions of California Government Code Sections 54201 through 54204.

4.0 PUBLIC PROJECTS

4.1 Policy Statement

a. The City is subject to the California Uniform Public Construction Cost Accounting Act ("Act") in awarding all public projects for construction work.

4.0 Policy Amplification

a. The Act permits the City to:

i. Simplify the bidding process for public projects valued up to $200,000; and
ii. Minimize limits on using City employees for public works.

b. Every five years, the California Uniform Construction Cost Accounting Commission reviews the bid limits for inflation and other factors to determine whether adjustments should be made to the Act. If an adjustment is made to the current thresholds represented in this Manual, the State Controller will notify the affected public agencies. The adjustment may become effective before it appears as a formal change in the Public Contract Code ("PCC").

c. Public projects (as defined by the Act) may be let to contract as set forth in the Purchasing System and PCC sections 22000 through 22045 in accordance with the current dollar limits as follows:

i. Public projects of $60,000 or less may be performed by the employees of the City by force account, negotiated contract, or purchase order;

ii. Public projects of $200,000 or less may be let to contract by informal bid procedures as set forth in the Purchasing System and Act; and

iii. Public projects of more than $200,000 shall, except as otherwise provided in the Act, be let to contract by formal bid procedure as set forth in the Purchasing System.

5.0 FEDERAL FUNDING REQUIREMENTS

5.1 Policy Statement

a. Federal procurement standards are set forth in Title 2 of the Code of Federal Regulations Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards ("Uniform Guidance"). The Uniform Guidance requires the City to have and use documented procurement procedures consistent with state, local, and tribal laws; and regulations and the standards of the procurement standards identified in Sections 200.317 through 200.327 of the Uniform Guidance when using certain Federal funds. This includes procurements made (i) in preparation of, during, and after an emergency declared by the President of the United States and that may be subject to Federal funding or reimbursement; and (ii) when using Federal grant funds subject to the Uniform Guidance. When procurement is subject to the Uniform Guidance, the City shall follow its document procurement procedures along with the procurement standards of the Uniform Guidance.

6.0 AGREEMENTS AND/OR CONTRACT STANDARDS

6.0 Policy Statement

a. The City's policy is the City Council has sole authority to approve agreements or contracts exceeding $150,000; and the City Manager or designee signs such contracts on behalf of the City Council, unless otherwise directed by City Council or provided for by law.

b. The Purchasing Officer or his/her authorized representative has sole authority to approve and sign purchase orders on behalf of the City, unless otherwise directed by the City Council or provided for by law.

c. Electronic and/or digital signatures on agreements or contracts are acceptable when in accordance with City policy and Secretary of State (Government Code Section 16.5) procedures established for digital and electronic signatures. The Purchasing Division, Records Management, and the City Attorney reserve the right to require original wet signatures on agreements or contracts when deemed to be in the best interest of the City.

d. It is the policy of the City that it remits payment for supplier invoices via electronic fund transfers through the Automated Clearing House ("ACH") network. All payments related to agreements of $25,000 and over shall be made through electronic ACH transfers.

e. Furthermore, it is the policy of City Council to establish and require the use of contract standards to assure that the interests of the City will be protected in all agreements or contracts.

6.1 Policy Amplification

a. To preclude claims against the City, all employees shall refrain from oral or written commitments that may be construed as binding by the other party.
    i. All employees shall emphasize to the other party that there is no commitment or contract until an agreement or contract is signed by the City Manager or designee.
    ii. Any employee that enters into an agreement or contract without the approval of City Council and/or City Manager as appropriate, or takes actions that are interpreted as commitments by a third party or leads to claims against the City, may be personally liable for any costs associated with the agreement or contract.

b. This policy will be accomplished primarily through the use of standard contracting procedures established and promulgated by the Purchasing Department of the Financial Services Agency.

c. It is the responsibility of each Agency or Department Head to assure that:
   i. Standard contracting procedures are followed in the preparation and processing of all agreements or contracts with the City Agency or Department.
   ii. All applicable standard contract terms and conditions are included in all agreements or contracts.
   iii. All agreements and contracts are reviewed by affected City Agencies or Departments (including the Purchasing Division) before being presented to the Office of the City Manager for approval by the City Manager or placement on the agenda for approval of City Council.
   iv. All revisions and updates to this policy and applicable procedures are promptly disseminated to personnel engaged in contract preparation and administration.

7.0 ANNUAL PURCHASE ORDERS

a. Annual Purchase Orders allow the City to purchase designated goods or services on a repetitive basis for City Agencies or Departments. Annual Purchase Orders shall be issued to a specific supplier on a per fiscal year basis and shall close at the end of the fiscal year. As the cost of the goods, services, and professional services approach the $150,000 threshold, an Agenda Report seeking approval will be submitted by the City Agency or Department to City Council.

b. The Annual Purchase Order system is for goods, services, and professional services that are purchased frequently or in large quantities by the City (provided on an "as-needed" basis). Annual Purchase Orders expedite delivery because separate requisitions are not required for each transaction. In the case of goods and certain services, the supplier agrees to supply the City's requirements at either a fixed price or at a fixed discount from the list market price. The Purchasing Officer will determine the goods, services, and professional services allowed by the Annual Purchase Order system.

c. Purchases by the Annual Purchase Order system include, but are not limited to, any expenditure that is recurring and is a reasonably predictable operating expense.

d. Only those items specified within the Annual Purchase Orders may be ordered using the Annual Purchase Order. Items not allowed under the Annual Purchase Order system shall be ordered in accordance with the City's purchasing policies and procedures:

    i. Using Agency or Department shall contact the supplier for a Quote or estimate, referencing the Annual Purchase Order, to confirm pricing matches negotiated pricing.
    ii. Using Agency or Department must review the quoted price and ensure compliance with the terms of the Annual Purchase Order.
    iii. Using Agency or Department shall ensure it has adequate budget funds for the proposed expenditure.
    iv. Using Agency or Department shall submit a requisition, which includes the quote or estimate, to the Purchasing Division noting the Annual Purchase Order it plans to utilize.
    v. Once the good is received or service accomplished, the invoice from the supplier shall be submitted to the Accounts Payable Division following the normal payment process for invoices.

8.0 RECYCLED PRODUCT PROCUREMENT

8.1 Policy Statement

a. In the procurement of goods for the City, a preference shall be given for the purchase of recycled goods whenever equal in fitness and quality and available at no more than the total cost of non-recycled products in accordance with Sections 2-6.30 and 6-3.701 of the City's Municipal Code.

8.2 Policy Amplification

a. It is the purpose of this policy to encourage purchasing decisions that (1) increase the recycled content of goods purchased and used by the City, (2) reduce waste in the manufacture and use of goods and packaging purchased by the City, (3) and to provide guidance to City staff in evaluating the purchase of goods for City use.

b. The objective is to ensure that no good manufactured with recycled or secondary material is treated differently other than based on function. A secondary objective is to prefer recycled goods over goods made strictly with virgin materials when recycled goods can meet the necessary performance standards.

9.0 SURPLUS PERSONAL PROPERTY

9.1 Policy Statement

a. The City's policy regarding disposition of City-owned surplus personal property is outlined in Section 2-6.31 of the City's Municipal Code. The Purchasing Officer is authorized to dispose of surplus goods which are not used or needed by any Using Agency or which have become unsuitable for City use. The City prohibits employees from acquiring surplus items sold through auction.

9.2 Policy Amplification

a. Timely identification of surplus and obsolete goods is essential to an effective disposition program. Higher maintenance and storage costs and further deterioration of the goods are the result of delayed identification of surplus.

i. Declaration of Surplus Goods. Using Agencies that determine certain goods to be of no use to their Agency must complete a "surplus property transaction request" and forward it to the Purchasing Officer for review and subsequent declaration as being surplus.

ii. Custody of Surplus Goods. Each Using Agency shall retain custody of its surplus goods until their transfer or final disposition has been determined. No Using Agency shall (in any event) permit any surplus goods held by it to be loaned or donated without prior City Council approval, or destroyed or otherwise removed from the City's custody without the prior written approval of the Purchasing Officer.

iii. Transfer. Before disposing of surplus goods, the Using Agency shall canvass all other Using Agencies to determine whether another City Agency can use the surplus goods. If another Agency desires to use the goods, the Purchasing Division shall assist in transferring the goods to that Agency.

iv. Disposition. The Purchasing Officer is hereby authorized to dispose of surplus goods which are not used or needed by any Using Agency or which have become unsuitable for City use. Such goods may be disposed of by any of the following procedures:

- Exchanged or traded in on new goods;
- Sold utilizing competitive procedures similar to those prescribed herein for open market procurement;

- Sold at public auction conducted by a professional auctioneer;
- Sold utilizing a negotiation process when the Purchasing Officer deems that such process is in the best interests of the City;
- Disposed of as scrap material or destroyed if no resale value exists; or
- Donated to a non-profit organization or other public entity following a City Council determination that such donation would serve a public purpose.

v. Once a good has been identified for surplus disposal, the Using Agency submits a request to the Purchasing Officer identifying the disposing procedure with approval from the Head of the Using Agency.

vi. If there is an asset number associated with the surplus goods, the asset number needs to be identified to alert the Accounting Division to have the asset removed from the asset list.

vii. Once all approvals are obtained, a notification of the approved surplus request is routed to the requestor for filing and/or further action.

10.0 PROCEDURES

10.1 PROCUREMENT AND PURCHASING AUTHORITY

10.2 Purchasing Division

a. The Purchasing Division is charged with interpreting and enforcing the City's purchasing policies and procedures. The Purchasing Division is authorized to issue purchase orders, contracts or agreements, and change orders; and is directed to oversee their implementation and its operations in accordance with the rules and regulations prescribed by City Council and the administrative procedures approved by the City Manager.

10.3 City Manager

a. The City Manager is authorized to execute written agreements or contracts (along with amendments or change orders) for all goods, services, professional services, and public projects with a cumulative term of up to five (5) years for which the cumulative value of the agreement or contract (inclusive of all amendments and/or change orders) does not exceed the City Manager's purchasing authority limit as may be established from time to time by resolution or other order of City Council.

b. If an amendment or extension to an agreement results in a financial commitment that exceeds the City Manager's purchasing authority or the five (5) year term limit, City Council authorization is required. The Agenda Report to the City Council shall include an identification of the annual and/or total expected cost and term of the agreement.

c. Amendments or extensions to agreements or contracts that exceed the City Manager's purchasing authority or the maximum term limitation (and City Council authorization is not obtained) require a new procurement process. A non-competitive justification does not preclude City Council authorization requirement.

d. The City Manager is authorized to execute written public project agreements or contracts within his or her purchasing authority limit. Change orders to public project agreements or contracts that exceed 75 percent of the approved contingency shall be signed by the City Manager.

e. The City Manager may delegate authorities granted by the City's Municipal Code Section 2-6.26 to subordinates provided that such delegation be made in writing and signed by the City Manager.

10.4 City Departments

a. Agency Heads and Department Heads, or their designees, consistent with the City's designated purchasing approval limits are authorized to approve and submit all purchase requisitions.

11.0 COMPETITIVE PROCUREMENT

a. Competition in purchasing provides equal opportunity for qualified suppliers to compete for City business and for City personnel to secure the best price, quality, and service. When bids are required, they are to be conducted on an open and competitive basis and without favoritism or bias in order to maximize the best value to the City and the procuring City Agency and/or Department. The bids of interested suppliers shall receive fair and impartial consideration.

b. The rules and regulations established by the City are intended to secure sound value, to guard against favoritism and profiteering at public expense, and to promote the interest of private enterprise and the health of the local economy. To further this objective, the City has elected to utilize an electronic bid management system as provided by Municipal Code Section 2-6.07 to (1) enhance the efficient procurement of goods, services, professional services, maintenance work and public projects, (2) encourage competition for public contracts, and (3) to purchase at the lowest competitive market price without favoritism or prejudice.

c. The estimated cost of each purchase is considered when determining the level of competition necessary. This ensures that the benefit derived from the competitive process justifies the cost of administering the process and that all legal requirements are met. Procurements shall not be split to circumvent dollar limits associated with procurement procedures.

d. Encouraging competition is a means by which the City can mitigate the potential for antitrust activity. A Non-Collusion Declaration is mandated by Public Contract Code Section 7106 and shall be completed in the procurement of all public projects. The Non-Collusion Declaration can be found on the City's Intranet.

12.0 NON-COMPETITIVE PROCUREMENT

a. Full and open competition should be the objective in public procurement; but it is not always possible or practicable. When procuring goods or services, City staff may determine the best value to the City may be achieved by pursuing a non-competitive procurement with a specific supplier due to technological, specialized, or other unique characteristics. Otherwise, as long as there is more than one potential supplier available to satisfy a given need, there exists insufficient justification for a non-competitive procurement.

12.1 Non-Competitive Purchases

a. A non-competitive purchase must be supported by written justification that thoroughly explains the need and reason for the requested course of action. A Non-Competitive Justification Form validates to the Purchasing Division of only one viable supplier for the procurement of the goods and/or services. It must be signed by the Agency or Department Head and submitted with the requisition or agreement or contract packet for the approval of the Purchasing Officer. With its submission of the Non-Competitive Justification form, the Department shall attach a detailed written rationale for the use of only one supplier and not competitively bidding the needed goods or services.

b. The following factors are among those that constitute justification for non-competitive purchases:

    i. The supplier is determined to be the only known source of the goods or services after solicitation of several suppliers, or seeking competitive bids and competition is determined to be inadequate.
    ii. The goods can only be procured directly from the original manufacturer or sole representative of the item in the City's geographical region.
    iii. There is a reasonable basis to conclude the City's minimum needs can only be satisfied by unique goods or services and the supplier demonstrates a unique qualification due to:
        - An innovative concept or a unique capability to provide the particular services proposed;
        - Proven expertise or specialized knowledge in a field of few known experts;
        - Previous experience providing like services to the City resulting in an understanding of City's immediate needs and practices increasing the likelihood of greater efficiency and success;

c. The use of a piece of equipment or commodity would require modifications to existing equipment, necessitate engineering re-design, or require voiding of a warranty.

d. Goods may be deemed available only from the original source in the case of a follow-on contract for the continued development or production of a major system or highly specialized equipment, including major components thereof, when it is likely that award to any other source would result in:

    i. Substantial duplication of cost to the City that is not expected to be recovered through competition.

e. City property is released to a proven supplier who must dismantle equipment in order to assess repair needs and it is not practical or feasible to obtain competitive pricing for repair.

f. The existence of limited rights in data, patent rights, copyrights, or secret processes for the goods.

g. When only specified makes and models of technical equipment and parts will satisfy the City's needs for additional units or replacement items and only one source is available in accordance with the City's standardization program.

h. The item is one with which staff members who will use the item have specialized training and/or expertise and retraining would incur substantial cost in time and/or money.

i. Purchase of property for which it is determined there is no functional equivalent.

j. Existence of an unusual and compelling urgency (emergency purchase) with serious potential repercussions for the City resulting in the impracticality of a competitive purchase.

k. When the City determines (with the advice of legal counsel) that seeking competition would not produce an advantage, competitive bidding requirements may be waived.

12.2 Emergency Purchases

a. Emergency – When in an emergency, as defined in the Purchasing System, provided the procedures set forth in Section 2-6.24 of City's Municipal Code are followed.

Municipal Code Section 2-6.24, Emergency Procurements:

i. In cases of emergency when repair or replacements are necessary, the City Council (pursuant to a four-fifths vote of the City Council) may proceed at once to replace or repair any public facility without adopting plans, specifications, strain sheets, or working details or giving notice for bids to let contracts in accordance with California Public Contract Code Sections 22050 *et seq*. Before the City Council takes any action pursuant to this subdivision (a), it shall make a finding that the emergency will not permit a delay resulting from a competitive solicitation for bids and that the action is

necessary to respond to the emergency based on substantial evidence set forth in the minutes of its meeting.

ii. Pursuant to California Public Contract Code Section 22050, Subdivision (b)(1), the City Council hereby delegates to the City Manager or designee the authority to repair or replace a public facility, take any directly related and immediate action required by that emergency; and procure the necessary equipment, services, and supplies for those purposes without giving notice for bids to let contracts.

iii. If the City Manager or designee orders any action specified in subdivision (a), that person shall report to the City Council (at its next meeting required pursuant to this section) the reasons justifying why the emergency will not permit a delay resulting from a competitive solicitation for bids and why the action is necessary to respond to the emergency.

iv. (1) If the City Council orders any action specified in subdivision (a), the City Council shall review the emergency action at its next regularly scheduled meeting; and, except as specified below, at every regularly scheduled meeting thereafter until the action is terminated to determine (by a four-fifths vote) that there is a need to continue the action

(2) If the City Manager or designee orders any action specified in subdivision (a), the City Council shall initially review the emergency action not later than seven (7) days after the action, or at its next regularly scheduled meeting if that meeting will occur not later than fourteen (14) days after the action; and at least at every regularly scheduled meeting thereafter until the action is terminated to determine (by a four-fifths vote) that there is a need to continue the action (unless the City Manager or designee has terminated that action prior to the City Council reviewing the emergency action and making a determination pursuant to this subdivision).

(3) When the City Council reviews the emergency action pursuant to subdivision (1) or (2), it shall terminate the action at the earliest possible date that conditions warrant so that the remainder of the emergency action may be completed by giving notice for bids to let contracts.

b. Pursuant to Municipal Code Section 4-3.06(a), the Director of Emergency Services is hereby empowered to:

i. Request the City Council to proclaim the existence or threatened existence of a "local emergency" if the City Council is in session, or to issue such proclamation if the City Council is not in session. Whenever a local emergency is proclaimed by the Director of Emergency Services, the City Council shall take action to ratify the proclamation within seven (7) days thereafter or the proclamation shall have no further force or effect; and obtain vital supplies, equipment, and such other properties found lacking and needed for the protection of life and property and to bind the City for the fair value thereof (and, if required immediately, to commandeer the same for public use).

ii. In the absence of the Director of Emergency Services, the Assistant Director of Emergency Services is empowered to take on the powers of the

Director of Emergency Services under Section 4-3.06(a) of the City's Municipal Code. In the absence of both the Director of Emergency Services and the Assistant Director of Emergency Services, the Emergency Manager is empowered to take on the powers of the Director of Emergency Services under Section 4-3.06(a) of the City's Municipal Code. The Director of Emergency Services shall be deemed absent where he or she is unavailable to participate in meetings or otherwise is unable to perform his or her duties during an emergency.

13.0 PROCUREMENT CARDS

13.1 Procurement Card Purchases

a. This policy and procedures document aims to provide clear direction for City departments to request and oversee the use of procurement cards ("Procurement Card") assigned and utilized by authorized City employees. The Procurement Card program has been established to provide a convenient means to make purchases and reduce the costs associated with initiating and paying for those purchases. It will assist in reducing the cost of processing small dollar purchases, expedite delivery of required merchandise, and simplify the payment process. This policy establishes the minimum standards for departments administering the Procurement Card program. Departments may establish additional controls beyond those established by these procedures.

b. The Procurement Card represents the use of public funds; therefore, cardholders must know that their purchases represent the City's interests and reputation for ethical and prudent business dealings.

13.2 Procurement Card Issuance

a. To request a Procurement Card to a City employee, the City Agency or Department Head must complete a Procurement Card Request form and submit the form to the Purchasing Division. The form includes the respective employee's information, the expected types of purchases to be made and the requested card limit. The form is signed by the employee signifying the employee's understanding of the rules governing use of the Procurement Card.

b. Upon receipt of the Procurement Card Request Form, the Purchasing Division will coordinate the issuance of the Procurement Card through the issuing bank, or the bank serving the City as applicable. When the Purchasing Division receives the Procurement Card, the cardholder will be notified to make arrangements to pick up the card and sign that he/she has accepted the Procurement Card.

c. Each Procurement Card holder must activate his/her own Procurement Card. Activation instructions are enclosed with the cardholder's Procurement Card, and activation should be done immediately so the Procurement Card's initial activation instructions do not expire.

d. It is MANDATORY that all Procurement Card holders review the Procurement Card policies and procedures prior to use. Additionally, the Purchasing Division will conduct training for all cardholders. Each cardholder will be required to sign a form that he/she acknowledges these Procurement Card policy and procedures.

e. The Procurement Card is for the exclusive use of the cardholder. The unique Procurement Card that the cardholder receives has both the City and the cardholder's name embossed on the Procurement Card. No member of the cardholder's respective

Department, his/her family, or anyone else may use the Procurement Card. The Procurement Card has been labeled to avoid confusing it with the cardholder's personal credit cards, with the words "Cal-Card" or "State of California" on the top of the card. In all other respects, this is a regular credit card. THE CITY'S PROCUREMENT CARD SHALL NOT BE USED FOR PERSONAL PURCHASES. Although the Procurement Card is issued to a cardholder, it remains City property and may be rescinded at any time.

13.3 Procurement Card Use

a. Use of the Procurement Card requires the cardholder adhere to all City policies and procedures on procurement, including competitive bidding and the benefit of volume discounts or volume arrangements that the City has negotiated with selected suppliers over time.

b. This Manual limits single purchases (inclusive of sales tax and shipping charges) to $5,000, or the amount established by the cardholder's Department for that cardholder.

c. In addition, each Procurement Card has a monthly dollar purchasing limit. Each single purchase may be comprised of multiple items, but the total cannot exceed the single purchase dollar limit on the Procurement Card as established by the cardholder's department. Cardholders shall follow the City's procedures to ensure that sufficient funds are available in the budget line item, prior to making a purchase. Purchases shall not be split to circumvent purchasing regulations.

d. The cardholder may use the Procurement Card at any merchant that accepts VISA Procurement cards. If a supplier does not accept Procurement Cards, the cardholder may contact the Purchasing Division with the supplier's contact information so efforts can be made to set up that supplier for Procurement Card acceptance. Before signing the draft, the cardholder shall verify that the dollar amount is correct, and that sales tax has been included. The cardholder will be provided one copy of the signed sales draft, which he/she shall keep for reconciling the monthly Cardholder Statement of Account.

e. Any changes to the cardholder's information shall be immediately reported to the Purchasing Division. The Purchasing Division will notify the issuing bank of the changes and request a new card. If a replacement card is requested, the Procurement Card cardholder will be notified when the new card is available.

f. Contact the Purchasing Division to request a current Procurement Card be changed or cancelled via email or memorandum. Upon notification to the Purchasing Division, cut the Procurement Card in half or return it to the Purchasing Division in person.

g. Report lost or stolen cards immediately to the Purchasing Division.

13.4 Procurement Card Restrictions

a. The Procurement Card must not be used to purchase the following items:

   i. Alcoholic beverages

   ii. Weapons

   iii. Cash advances through bank tellers or teller machines, or money orders

   iv. Legal fees, court costs, fines, bails, or bonds

   v. Fixed asset purchases (an item or equipment with a cost of $15,000 or more)

   vi. Any personal items and personal services, even if the intent is to repay the City at a later date

   vii. Rental or lease payments

   viii. Purchase of telephone services including pagers and calling cards, except for business telephone calls charged to a hotel/motel room while traveling on City business

   ix. Fees for Upgrades of Air, Hotel (including early check-in), or Auto; unless pre-approved by the City Manager or designee

   x. Using the Procurement Card to circumvent normal purchasing steps in order to buy a product from a relative or close friend

13.5 Unauthorized Use of Procurement Card

a. Unauthorized use of the Procurement Card, including personal use of the Procurement Card or failure to adhere to the Procurement Card Program guidelines, shall result in the cancellation of the cardholder's use of the Procurement Card.

b. Upon an unauthorized use of the Procurement Card, the cardholder and their respective Agency or Department head will have three (3) working days to submit a written justification (email or memorandum) to the Purchasing Officer.

c. If a justification is not received or the offense is deemed a violation, the Procurement Card may be suspended. If a second unauthorized use occurs within a six (6) month period, and a written justification is not received or the use is deemed a violation, the cardholder's use of the Procurement Card system shall be suspended for three (3) months.

d. Repeated or flagrant violation of the authorized use of the Procurement Card by the

cardholder may result in disciplinary action. Fraudulent use of the Procurement Card may be referred to a law enforcement agency.

13.6 Procedures After Purchase

a. All receipts must be turned in monthly with the Procurement Card statement so they can be reconciled. At the close of each billing cycle, the cardholder will receive a Cardholder Statement of Account. The statement itemizes each transaction that was charged to the Procurement Card. Upon receipt of the statement, the cardholder must complete each of the following actions:

   i. Review the statement to verify that the cardholder purchased all items listed, and the amounts charged are correct;

   ii. Indicate the account string to be charged for each transaction;

   iii. Provide a brief description of the item(s) purchased for each transaction. For meals, receipts must itemize the meals ordered and document the meeting type and attendees;

   iv. Attach detailed sales receipts reflecting each item purchased;

   v. If an item purchased is returned, attach the credit voucher to the Statement of Account on which the credit appears;

   vi. If charged for an item incorrectly, try to resolve the problem with the merchant first. Provide a complete explanation of the error and attach it to the Statement of Account; and

   vii. After completing the above, sign and date the Cardholder Statement of Account. Thereafter, route the entire documentation to the respective Department Head for signature approval and then route the packet to the Accounts Payable Division for payment processing.

b. Please note that banks issuing Procurement Cards have operating regulations with specific timeframes established in which reversals of charges may be processed.

c. Upon separation from the City, it is the responsibility of the cardholder to notify the Purchasing Division of the separation and to surrender the Procurement Card to his/her authorizing manager for return to the Purchasing Division. Procurement Cards are to be returned to the Purchasing Division in person.

DO NOT SEND PROCUREMENT CARDS THROUGH THE INTEROFFICE MAIL.

14.0 PROCUREMENT SELECTION METHODS

14.1 Debarment

a. Public Contract Code 6109 prohibits contractors or subcontractors to bid on, be awarded, or perform work on a public works project if they are debarred pursuant to Sections 1771.1 or 1777.7. Before awarding a contract to a contractor, the Department shall check with the California Department of Industrial Relations (dir.ca.gov), the Department of Consumer Affairs Contractors State License Board (cslb.ca.gov), and the System for Award Management (sam.gov) database to ensure the contractor is currently registered with the State of California to perform the work required and is not debarred from participating in solicitations.

14.2 Electronic Bidding

a. The City's electronic bid management system shall be utilized to issue City solicitations, unless allowed by Appendix A or the Purchasing Officer deems the solicitation can be procured differently.

14.3 Solicitation Types

FORMAL BID PROCEDURE: The formal bid procedure shall be for all public projects exceeding two hundred thousand dollars ($200,000), or large dollar value procurements for goods or services. Types of procurement vehicles include:

a. **Notice Inviting Bids ("NIB"):** NIB is a formal procurement process released through the electronic bid management system and award may require a negotiated agreement or contract.
    i. Shall state the time and place for the receiving and opening of sealed bids and distinctly describe the project.
    ii. Shall be published at least fourteen (14) calendar days before the date of opening the bids in a newspaper of general circulation, printed and published in the jurisdiction of the City.
    iii. Shall be sent electronically, if available, by either facsimile or electronic mail and mailed at least fifteen (15) calendar days before the date of opening the bids to all construction trade journals specified in California Public Contract Code Section 22036.
    iv. Shall include a general description of the items to be purchased and shall state where bid forms may be obtained and the date, time, and place of bid opening.
    v. Bidders list shall be made available to all responsible, prospective suppliers known to City staff and others requesting, in writing, to participate in the bid process.

vi. If awarded, the bid will be awarded to the responsible bidder who submits the lowest responsive bid. Unless provided otherwise by law, the City shall have the right to waive any defect or informality in the bidding or in the procedures set forth in this section. Unless provided otherwise by law, no defect of informality shall void any contract entered into.

b. Request for Proposal ("RFP"): RFP may be used for non-public works projects or procurements whenever the City has identified a desired outcome, and the supplier is asked to propose a solution in response to the City's provided statement of work or specifications. The City may ask the suppliers to quote on the original specifications and to indicate how the quotation would be changed if the supplier's suggestion is followed. RFP procurement is released through the electronic bid management system.

i. This solicitation type will include a combination of the following elements:
- Statement of Work or Specifications
- Schedule or Timelines
- Deliverables
- Sample Contract
- Terms and Conditions
- Special Contractual Requirements
- Submittal Instructions
- Evaluation Criteria

ii. RFPs are not typically appropriate for award to the lowest responsible proposer submitting a responsive proposal.

iii. Award of an agreement or contract may be made to the most technically responsible proposer whose proposal provides the highest rated solution to the City based on the proposal and evaluation criteria and will require a negotiated agreement or contract.

c. Request for Qualifications ("RFQ"): City Council Resolution 2003-011 adopted bidder pre-qualification procedures and documents for public projects to streamline the bidding process by focusing staff efforts on the review and evaluation of only those bid responses submitted by pre-qualified bidders. It is highly recommended that this process be used for high dollar public projects.

INFORMAL BID PROCEDURES: Small to medium sized public projects as defined in Municipal Code Section 2-6.13 and procurements for goods, services and professional services with a defined list of attributes. Informal bid processes are released through the electronic bid management system and award may require a negotiated agreement or contract. Types of procurement vehicles include:

a. Invitation for Bid ("IFB"):

i. All procurements for small or medium public projects shall follow the procurement procedures found under Municipal Code Section 2-6-18 Informal Bid Procedure.
ii. All plan holders shall receive an invitation to bid.
iii. Informal bid contracts shall, whenever possible, be based on at least three (3) responsive bids.
iv. Shall be awarded to the lowest responsible bidder, consistent with quality and delivery requirements.
v. The City's standard term for an agreement is three (3) years with two (2) one-year options.

ALTERNATIVE BID PROCEDURES: When formal or informal bidding procedures are not required for goods, services, or professional services due to low dollar value, when the procurement is for an intended outcome versus a defined list of attributes, etc. Types of procurement vehicles include:

a. Informal Quotation ("quote"):

i. The quote procedure may be utilized for the procurement of goods, services, and professional services when the total value (inclusive of all taxes, delivery charges and fees) does not exceed $10,000 (per supplier, project, scope, or type of goods per Agency or Department).
ii. A Purchase Order may be issued for goods and for services with approved documentation.
iii. The City's standard term for an agreement is three (3) years with two (2) one-year options.
iv. Award is based on best value.

b. Request for Quote ("RFQ"):

i. The RFQ procedure may be used for the procurement of goods, services, and professional services when the total value (inclusive of all taxes, delivery charges and fees) does not exceed $25,000 (per supplier, project, scope, or type of goods or services per Agency or Department).
ii. The City's standard term for an agreement is three (3) years with two (2) one-year options.
iii. Award is based on best value.

c. Request for Proposal ("RFP"):

RFP may be used for non-public works projects or procurements whenever the City has identified a desired outcome, and the supplier is asked to propose a solution in response to the City's provided statement of work or specifications. The City may ask the suppliers to quote on the original specifications and to indicate how the quotation would be changed if the supplier's suggestion is followed. RFP procurement is released through the electronic bid management system.

i. This solicitation type will include a combination of the following elements:
   - Statement of Work or Specifications
   - Schedule or Timelines
   - Deliverables
   - Sample Contract
   - Terms and Conditions
   - Special Contractual Requirements
   - Submittal Instructions
   - Evaluation Criteria

ii. RFPs are not typically appropriate for award to the lowest responsible proposer submitting a responsive proposal.

iii. Award of an agreement or contract may be made to the most technically responsible proposer whose proposal provides the highest rated solution to the City based on the proposal and evaluation criteria and will require a negotiated agreement or contract.

DESIGN BUILD

a. The City may utilize a design-build method of procurement for public projects in accordance with California Public Contracting Code Section 22160 *et seq*.

15.0 AGREEMENTS AND/OR CONTRACTS

a. The City utilizes written contracts to document each party's obligation and to minimize the City's risks during the performance of work. The written contract often incorporates much more detail than a purchase order alone can provide, especially related to the operating terms and conditions and the details of the transaction itself. Contracts include standard terms and conditions that serve as the framework and a statement of work that serves as the substance of the contract. During the course of the relationship between the parties, the contract serves as a point of reference which may quickly resolve any misunderstanding.

b. When a Purchase Order and/or agreement or contract reaches or exceeds $150,000, an Agenda Report documenting City Council approval needs to be submitted to Purchasing authorizing the expenditure. If the contract is over multiple years (with set dollar values per year), the original Agenda Report submitted to Purchasing is generally sufficient to cover the period of performance of the Purchase Order and/or agreement or contract (inclusive of optional years) if so stated in the original Agenda Report with delegated signature authority to the City Manager.

c. Generally, the following situations are among those requiring written agreements in addition to a Purchase Order:

   i. Professional and consulting services
   ii. Construction services
   iii. Design services
   iv. Maintenance services
   v. Removal of hazardous materials
   vi. Major software license agreements
   vii. Work that takes longer than one year to complete
   viii. Goods purchased that need to be serviced by the same Supplier

d. The City's contract templates can be found on the City's Intranet. The City Agency and/or Department shall be responsible for ensuring that the most current contract template is used. Purchasing is responsible for updating the contract templates on the City's Intranet.

15.1 Terms

a. The City's standard agreement or contract term for ongoing services is three (3) years with two (2) one-year options, to be exercised at the City's discretion. The City requires all agreements and/or contracts to have defined effective dates. Auto-renewal language is NOT acceptable for agreements or contracts executed by the City.

15.2 Contingency

a. In order to mitigate delays due to unforeseen occurrences and minimize administrative costs associated with completion of procurements, all Departments have authority to exercise a standard contingency of up to 10 percent for any type of service contract or agreement. Exercising a contingency of 10 percent or less will not require City Manager or City Council action; however, any contingency amount in excess of 10 percent will require an amendment or change order with City Manager approval if the dollar commitment is within his signature authorization limit (or Council action if in excess of the City Manager's authority).

b. Construction change orders up to 75 percent of the City Council approved contingency amount may be approved by the Agency Head, contingency in excess of 75 percent City Council approved contingency amount shall require City Manager's signature.

15.3 Department Concurrence

a. **Business License:**

i. City Agencies and/or Departments submitting agreements and/or contracts must confer with the City's Business License Department to determine if a business license is required for the work. If the Business License Department indicates that a business license is not required for the proposed work, then documentation needs to be included in the submission to Purchasing.

ii. "Business" includes any business, commercial enterprise, trade, calling, vocation, profession, occupation, or means of livelihood (whether or not carried on for gain or profit). "Evidence of doing business" shall include but not be limited to a person's use of signs, circulars, cards, telephone books, newspapers, or trade publications to advertise, hold out, or represent that such person is doing business within the City; when any person gives other evidence of transacting and carrying on business within the City; or when such person fails to deny in a sworn statement given to the License Official that such person is not engaged in business within the City after being requested to do so by the License Official. An example of a potential exemption is a nonprofit business exempt from paying Federal income tax by virtue of nonprofit status.

b. **City Attorney:** When negotiations between a City Agency and/or Department and a supplier require changes to a contract template (or the supplier 's contract may be substituted for a City contract), documentation that the City Attorney's Office approved such changes need to be included in the submission to Purchasing.

c. **Communications and Community Relations Department:** Authorization by the Communications and Community Relations Department is required for procurement of all graphic and/or printing services by outside suppliers for:

i. Graphic Design;
ii. Print Services (all outsourced printing); and
iii. Promotional/Advertising Items using the City logo/marketing mark (including promotional items, apparel, etc.).

- The Communications and Community Relations Department will review the request for said services to determine if in-house services can be provided in-lieu of outsourcing or if it is in the best financial and uniformity interest to outsource the work. If the decision is made to outsource the work, the Communications Department will liaison with contracted suppliers. City Agencies and/or Departments must email the following to initiate this request: Communications@ontarioca.gov.

- For all promotional and/or advertising items, requests with mock proofs must be sent to Communications@ontarioca.gov for approval on use of the City logo/marketing mark to ensure uniformity of standards on use are being met prior to the purchase of items.

d. **Human Resources:** Authorization by the Human Resources Department ("HR") is required for procurement of all staffing services by outside suppliers for temporary, part-time, interim, or related personnel services (include documentation in the submission to Purchasing that HR has approved the request).

e. **Information Technology Services:** If the proposed statement of work will impact the City's Information Technology ("IT") hardware or software infrastructure, include documentation in the submission to the Purchasing Division that IT has approved the services.

f. **Risk Management:** Subject to Risk Management Department approval, insurance requirements may be waived in contract when there is low risk to the City. If an insurance provision is waived by the Risk Management Department, include documentation from the Risk Management Department of such waiver.

16.0 PURCHASE ORDER EXCEPTIONS

a. Invoices may not be utilized as backup documentation with a requisition to request generation of a Purchase Order ("PO"). Invoices must be approved utilizing the Accounts Payable approval process and submitted directly to the Accounts Payable Department.
b. Some purchases are not readily adaptable to the PO process. These purchases are usually for items where the competitive process is not applicable. These purchase exceptions are submitted to the Accounts Payable Division for payment processing. The following are allowable exceptions*:
    - Asset seizure payments/evidence reimbursements
    - City, County, State, Federal, or other municipality's services
    - City Procurement Cards
    - Collection services
    - Office and Janitorial supplies approved via Staples, Grainger, Waxie, Amazon
    - Dues, Memberships, and Digital Subscriptions (Ex. Newsletters, Grammarly, Snagit) (Digital Subscriptions Exclude IT Software Renewals and Maintenance Agreements)
    - Escrow fees and closing and rehabilitation loans (wire transfers)
    - Federal Express service & United Parcel Service (Delivery Services)
    - Fiscal agent trustee fee
    - Instructors and sports officials
    - Leases and rentals
    - Legal services
    - Display and recruitment advertising
    - Mail sorting services
    - Payroll deductions
    - Physical exams and medical treatments
    - Post Office fees and permits
    - Property acquisition costs
    - Property profile (lot book reports)
    - Refunds, rebates, and reimbursements (including petty cash)
    - Relocation payments
    - School Tuition
    - Temporary agency employees
    - Travel, conferences, meeting, and training expenses
    - Utility deposits and services

*Purchasing reserves the right to require an agreement and/or Purchase Order be issued for any of the above listed items, if deemed necessary or in the best interests of the City.

SUPPLEMENTAL

REFERENCES

ATTACHMENTS

- Appendix A – Purchasing Thresholds
- Appendix B – Authorization Recap
- Appendix C – Contract Matrix

REVISIONS

Review Date	Revision
June 30, 2023	
June 30, 2024	
March 18, 2025	

APPENDIX A

PURCHASING THRESHOLDS

All values below include all taxes, fees, and shipping/freight charges.

a. $0 - $25,000 (Goods, Services and Professional Services):
   i. Although the use of the electronic bid management system is not required, the requisition requires the submittal of a minimum of one (1) Quote.
   ii. For services and professional services, including all applicable documents (e.g., a valid Business License, Risk Management approved insurance, etc.).
   iii. The award for goods is based on the lowest responsive and responsible bidder and the best value for professional services.
   iv. A purchase order for goods, services, or professional services may be issued.

b. $25,001 - $60,000 (Goods, Services and Professional Services):
   i. Use of the electronic bid management system is not required.
   ii. Whenever possible, shall be based on three (3) or more responses of an RFQ or an RFP process. To be considered competitive, you should obtain at least two (2) responses and submit them with the requisition.
   iii. The award for goods is based on the lowest responsive and responsible bidder and the best value for professional services.
   iv. For services, a negotiated agreement or contract is required.

c. $60,001 - $150,000 (Goods, Services and Professional Services):
   i. Use of the electronic bid management system to issue a NIB or an RFP.
   ii. Newspaper advertisement is not required.
   iii. Award based on best value, department required to justify selection.
   iv. For services, an agreement or contract is required.

d. $150,001 and above (Goods, Services and Professional Services):
   i. Use of the electronic bid management system to issue NIB or RFP.
   ii. Bid awarded based on best value. Department required to justify selection.
   iii. Professional services solicitation requires procurement by RFP procurement and evaluation based on the professional qualifications necessary for the satisfactory performance of the services needed.
   iv. RFP evaluation factors and their relative importance must be identified in the RFP. The City must have a written method for conducting the evaluation and selection of the supplier.
   v. City Council action is required.

PUBLIC PROJECTS:
With reference to Public Contract Code sections 22030 through 22045: Article 3. Public Projects: Alternative Procedure

a. Up to $60,000 (IFB)
May be performed {1} with City employees, or {2} with a qualified, properly licensed contractor using a negotiated Purchase Order and agreement or contract.

i. If City staff {1} is used, proper codes for Accounting and charging time and material is required.
ii. If a contractor {2} is used and project exceeds $1,000, prevailing wages are required.
iii. Payment bond equal to 100% of the contract required when >$25,000. A performance bond is recommended.
iv. A negotiated contract is required.

b. $60,001 - $200,000 (IFB):

i. Staff must follow the Act and the Informal Bid Procedure (see Purchasing Policies and Procedures and Purchasing System).
ii. Prevailing Wages are required.
iii. Bid bond equal to 10% of the bid price and payment bond equal to the contract price are required. Performance bond is strongly recommended.
iv. A negotiated contract is required.

c. $200,001 and above (NIB):

i. Staff must follow the Act and the Formal Bid Procedure (see Purchasing Policies and Procedures and Purchasing System).
ii. Prevailing Wages are required.
iii. Bid bond equal to 10% of the bid price and payment bond equal to the contract price are required. Performance bond is strongly recommended.
iv. A negotiated contract is required.

d. City Council action required for any procurement exceeding $150,000.

i. Once a Purchase Order and/or agreement or contract exceeds the $150,000, City Council approval is required for each future dollar amendment.
    - This includes each optional year unless the **total dollar value approved** by City Council for authority delegated to City Manager is inclusive of the dollar values of all optional years. Once that dollar value threshold has been exceeded the agreement is required to go back to City Council for approval.
    - The $150,000 threshold is **not limited to a fiscal year and it does not reset to zero** at the beginning of the new fiscal year.

APPENDIX B

AUTHORIZATION RECAP

Dollar Threshold	Purchase Type*	Agreement Type*	Authorization Requirement
$0 - $25,000	Goods, Services and Professional Services	Purchase Order	Agency or Department Head, City Manager or Designee
$25,001 - $60,000	Goods	Purchase Order	Agency or Department Head, City Manager or Designee
	Goods, Services, Public Projects, and Professional Services	Agreement and Purchase Order	City Manager or Designee
$60,001 - $150,000	Goods	Purchase Order	Agency or Department Head, City Manager or Designee
	Goods, Services, Public Projects, and Professional Services	Agreement and Purchase Order	City Manager or Designee
$150,001 +	Goods, Services, Public Projects, and Professional Services	Agreement and Purchase Order	City Council (Approval) City Manager or Designee (Executes Agreement)

For examples and thresholds for Purchasing and Agreement Types, see Appendix A, Purchasing Thresholds

i. Executive Director Community Life & Culture is authorized to execute Entertainment Agreements or Contracts up to $10,000.
ii. Executive Director of Public Works is authorized to execute Public Works Agency operations related purchase agreements and contracts up to $50,000.
iii. Utilities General Manager is authorized to execute Water & Sewer operations related Agreements or Contracts up to $50,000.

APPENDIX C

CITY OF ONTARIO - CONTRACT MATRIX - JULY 2024

TYPE OF CONTRACT	TYPE OF PROJECT	COUNCIL ACTION	CONTRACT VALUE	BIDDING REQUIREMENT	BONDS	ADDITIONAL COMMENTS
Model Construction Contract Documents *Model Document No. 29437851*	"Public project" means any of the following: (1) Construction, reconstruction, erection, alteration, renovation, improvement, demolition, and repair work involving any publicly owned, leased, or operated facility (2) Painting or repainting of any publicly owned, leased, or operated facility (3) In the case of a publicly owned utility system, "public project" shall include only the construction, erection, improvement, or repair of dams, reservoirs, powerplants, and electrical transmission lines of 230,000 volts and higher (Pub. Con. Code § 22000)	Required for contracts more than $150,000 (OMC § 2-6.18(h))	$5,000 and over	Formal bidding over $200,000 (OMC § 2-6.17) Informal bidding $60,000 - $200,000 (OMC § 2-6.18)	Payment Bond required for contracts of $25,000 or more (Civ. Code § 9550) Performance Bond for the full value of the contract is strongly recommended but not required	• City issues Notice to Proceed to commence contract time • Use on Informal/Formal bid projects
Model Short Form Construction Contract *Model Document No. 33225207*	Intended for low risk public projects or maintenance projects ($200,000 or less) such as: • Maintenance or repair of streets or sewers • Construction, maintenance, or repair of water facilities or water works • All public projects, defined above, which do not require formal bidding ($200,000 or less)	Required for contracts more than $150,000 (OMC § 2-6.18(h))	Up to $200,000	Informal bidding over $200,000 (OMC § 2-6.18) Alternative Bid Procedure for $60,000 or less (OMC § 2-6.19)	Payment Bond required for contracts of $25,000 or more (Civ. Code § 9550) Performance Bond for the full value of the contract is strongly recommended but not required	• City issues Notice to Proceed to commence contract time • Can be used for "emergency" contracts if project is low cost and straightforward (Pub. Con. Code § 22050)
Model Engineering Department Construction Contract Documents - Caltrans Standard Specification *Model Document No. 29440147*	"Public project" means any of the following: (1) Construction, reconstruction, erection, alteration, renovation, improvement, demolition, and repair work involving any publicly owned, leased, or operated facility (2) Painting or repainting of any publicly owned, leased, or operated facility (3) In the case of a publicly owned utility system, "public project" shall include only the construction, erection, improvement, or repair of dams, reservoirs, powerplants, and electrical transmission lines of 230,000 volts and higher (Pub. Con. Code § 22000) *Specially drafted for projects built pursuant to 2010 Caltrans Standard Specifications*	Required for contracts more than $150,000 (OMC § 2-6.18(h))	$5,000 and over	Formal bidding over $200,000 (OMC § 2-6.17) Informal bidding $60,000 - $200,000 (OMC § 2-6.18)	Payment Bond required for contracts of $25,000 or more (Civ. Code § 9550) Performance Bond for the full value of the contract is strongly recommended but not required	• City issues Notice to Proceed to commence contract time • Use on Informal/Formal bid projects built pursuant to 2010 Caltrans Standard Specifications
Model Engineering Department Construction Contract Documents - Greenbook *Model Document No. 33484528*	"Public project" means any of the following: (1) Construction, reconstruction, erection, alteration, renovation, improvement, demolition, and repair work involving any publicly owned, leased, or operated facility (2) Painting or repainting of any publicly owned, leased, or operated facility (3) In the case of a publicly owned utility system, "public project" shall include only the construction, erection, improvement, or repair of dams, reservoirs, powerplants, and electrical transmission lines of 230,000 volts and higher (Pub. Con. Code § 22000) *Specially drafted for projects built pursuant to Greenbook*	Required for contracts more than $150,000 (OMC § 2-6.18(h))	$5,000 and over	Formal bidding over $200,000 (OMC § 2-6.17) Informal bidding $60,000 - $200,000 (OMC § 2-6.18)	Payment Bond required for contracts of $25,000 or more (Civ. Code § 9550) Performance Bond for the full value of the contract is strongly recommended but not required	• City issues Notice to Proceed to commence contract time • Use on Informal/Formal bid projects built pursuant to Greenbook

TYPE OF CONTRACT	TYPE OF PROJECT	COUNCIL ACTION	CONTRACT VALUE	BIDDING REQUIREMENT	BONDS	ADDITIONAL COMMENTS
Model OMUC Construction Contract Documents *Model Document No. 33349674*	"Public project" means any of the following: (1) Construction, reconstruction, erection, alteration, renovation, improvement, demolition, and repair work involving any publicly owned, leased, or operated facility (2) Painting or repainting of any publicly owned, leased, or operated facility (3) In the case of a publicly owned utility system, "public project" shall include only the construction, erection, improvement, or repair of dams, reservoirs, powerplants, and electrical transmission lines of 230,000 volts and higher (Pub. Con. Code § 22000) *Specially drafted for OMUC projects*	Required for contracts more than $150,000 (OMC § 2-6.18(h))	$5,000 and over	Formal bidding over $200,000 (OMC § 2-6.17) Informal bidding $60,000 - $200,000 (OMC § 2-6.18)	Payment Bond required for contracts of $25,000 or more (Civ. Code § 9550) Performance Bond for the full value of the contract is strongly recommended but not required	• City issues Notice to Proceed to commence contract time • Always use on formally bid projects
Model Design Services Agreement *Model Document No. 33241256*	Engineering or architectural design services for a public facility or structure. Note: Formerly "Model Architect Services Agreement"	Required for all contracts over $150,000	Unlimited	Qualifications-based selection (OMC § 2-6.15)	Not usually required, but can be if the project dictates	• Will usually involve negotiation with architect on terms and scope • Contract awarded based on demonstrated competence and qualifications to satisfactorily perform the work (Gov. Code §§ 4526-4529)
Model Professional Services Agreement *Model Document No. 33225203*	Professional consultant (independent contractor) work, such as: • Financial • Economic • Accounting • Legal • Engineering (non-design) • Administrative	Required for all contracts over $150,000	Unlimited	Formal, informal, or alternative procedure (OMC §§ 2-6.14); Qualifications based selection (OMC § 2-6.15)	Not usually required, but can be if the project dictates	
Model Maintenance Services Agreement *Model Document No. 33225206*	"Maintenance work" includes all of the following: (1) Routine, recurring, and usual work for the preservation or protection of any publicly owned or publicly operated facility for its intended purposes (2) Minor repainting (3) Resurfacing of streets and highways at less than one inch (4) Landscape maintenance, including mowing, watering, trimming, pruning, planting, replacement of plants, and servicing of irrigation and sprinkler systems (5) Work performed to keep, operate, and maintain publicly owned water, power, or waste disposal systems, including, but not limited to, dams, reservoirs, powerplants, and electrical transmission lines of 230,000 volts and higher (Pub. Con. Code § 22000)	Required for contracts more than $150,000	Unlimited	Formal, informal, or alternative procedure (OMC §§ 2-6.14)	Payment Bond required for contracts of $25,000 or more (Civ. Code § 9550) Performance Bond for the full value of the contract is strongly recommended but not required	• Prevailing wages must be paid on most maintenance projects. Some **exceptions** include: – Janitorial/Custodian services – Security/Watchman services

TYPE OF CONTRACT	TYPE OF PROJECT	COUNCIL ACTION	CONTRACT VALUE	BIDDING REQUIREMENT	BONDS	ADDITIONAL COMMENTS
Model General Services Agreement ***Model Document No. 40935197.1***	"General Services" are those which are not considered Professional Services or Maintenance work. Some examples of situations for which a General Services Agreement would be appropriate are: • Party rentals (i.e., tables and chairs) • Basic computer services (i.e., off the shelf software) Alarm monitoring Services	Required for contracts more than $150,000	Unlimited	Formal, informal, or alternative procedure (OMC §§ 2-6.14)	Not usually required, but can be if the project dictates	• If the services contracted for are not Professional Services or Maintenance Services, then it will most likely fall under a General Services Agreement (if there is any question, consult with the City Attorney's office)
Model IFB Maintenance Services Agreement *Model Document No. 33437079*	"Maintenance work" (as defined by Pub. Con. Code § 22000, above) when informal or formal bidding is desired	Required for contracts more than $150,000	Unlimited	Formal, informal, or alternative procedure (OMC §§ 2-6.14)	Payment Bond required for contracts of $25,000 or more (Civ. Code § 9550) Performance Bond for the full value of the contract is strongly recommended but not required	• Prevailing wages must be paid on most maintenance projects. Some **exceptions** include: – Janitorial/Custodian services – Security/Watchman services • Use on Informal/Formal bid projects
Model Letter Agreement *Model Document No. 33241407*	For use on small projects (not included in definition of "public project" under Pub. Con. Code § 22000) such as professional and non-professional services involving little money, complexity, and risk to the City.	N/A	For services under $25,000 only	Formal, informal, or alternative procedure (OMC §§ 2-6.14); Qualifications based selection (OMC § 2-6.15)	Not required	Check with Risk Management for insurance/bond requirements
Model Equipment Purchase Agreement *Model Document No. 29443677*	Equipment purchases only	Required for contracts more than $150,000	Unlimited	Any formal, informal, or alternative procedure (OMC §§ 2-6.16)	Not required	Check with Risk Management for insurance/bond requirements
Model Amendment to Non-Construction Agreements *Model Document No. 9423414*	To be used to amend all non-construction agreements	Required when total value of contract or amendment is $150,000 or more	Unlimited	N/A	N/A	Check with Risk Management for insurance/bond requirements that may be triggered by new work added by amendment
Model Goods & Services Agreement *Model Document No. 31872872*	To be used when the City desires vendor to sell the materials and/or equipment to the City, and render services related to those goods	Required for contracts more than $150,000	Unlimited	Any formal, informal, or alternative procedure (OMC §§ 2-6.16)	Not required	Check with Risk Management for insurance/bond requirements
Model Construction Contract Documents w/ CDBG *Model Document No. 31389538*	"Public project" means any of the following: (1) Construction, reconstruction, erection, alteration, renovation, improvement, demolition, and repair work involving any publicly owned, leased, or operated facility (2) Painting or repainting of any publicly owned, leased, or operated facility (3) In the case of a publicly owned utility system, "public project" shall include only the construction, erection, improvement, or repair of dams, reservoirs, powerplants, and electrical transmission lines of 230,000 volts and higher (Pub. Con. Code § 22000) *Specially drafted for projects built pursuant to CDBG Specifications*	Required for contracts more than $150,000 (OMC § 2-6.18(h))	$5,000 and over	Formal bidding over $200,000 (OMC § 2-6.17) Informal bidding $60,000 - $200,000 (OMC § 2-6.18)	Payment Bond required for contracts of $25,000 or more (Civ. Code § 9550) Performance Bond for the full value of the contract is strongly recommended but not required	• City issues Notice to Proceed to commence contract time • Use on Informal/Formal bid projects

NOTES:

1. Prevailing Wages must be paid on any "public works" or "maintenance" contract in excess of $1,000. **Note:** This is a broader definition than "public project" for public bidding purposes (See Labor Code §§ 1720, *et seq*. and 1771; 8 CCR §§ 16000 and 16001(f); and Department of Industrial Relations ("DIR") Precedential Decision List effective January 8, 2001 at www.dir.ca.gov). Please note DIR has set wage rates for some "professional" services performed on public works and maintenance projects.
2. Performance Bonds are generally not required by state law; however, they are strongly recommended to secure performance by the contractor and full and adequate completion of the project.
3. Risk Management **must approve** all insurance/bond waivers.
4. Payment Bonds are required by law for projects involving: (1) construction, alterations, additions, or repairs; (2) seeding, sodding, or planting for landscaping purposes; (3) filling, leveling, or grading work; and (4) demolition or building removal work (See Civil Code Sections 8038 and 9550).

REVISED July 2024



Fiscal Year 2024-25
Mid-Year Budget Update

March 18, 2025

City of Ontario
Fiscal Year 2024-25
Mid-Year Budget Update

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City of Ontario
General Fund Revenue by Category
Fiscal Year 2024-25
Mid-Year Budget Update

	FY 2024-25 Adopted Budget	First Quarter Budget Update	Mid-Year Budget Update	FY 2024-25 Current Budget	Actuals as of 12/31/2024	% Received
Sales & Use Tax	$ 194,375,000 [1]	$ -	$ 2,775,000 [2]	$ 197,150,000	$ 63,191,289	32.1%
Property Tax	106,025,000	-	$ 250,000 [3]	106,275,000	41,148,241	38.7%
Transient Occupancy Tax	17,000,000	-	$ -	17,000,000	5,680,261	33.4%
Business License Tax	10,150,000	-	$ -	10,150,000	4,243,112	41.8%
Parking Tax	4,000,000	-	$ 450,000 [4]	4,450,000	1,582,023	35.6%
Other Taxes [5]	5,975,000	-	$ -	5,975,000	300,018	5.0%
Licenses and Permits	7,057,000	-	$ -	7,057,000	3,925,717	55.6%
Intergovernmental [6]	11,010,721	-	$ -	11,010,721	5,719,295	51.9%
Intergovernmental - ARPA [7]	7,250,000	(712,132)	$ -	6,537,868	2,364,748	36.2%
Charges for Services [8]	30,494,370	66,925	$ -	30,561,295	8,218,291	26.9%
Charges for Services - OIAA [9]	24,500,591	(634,012)	$ -	23,866,579	10,208,917	42.8%
Use of Money & Property	1,480,000	-	$ -	1,480,000	237,596	16.1%
Fines and Forfeitures	901,000	-	$ -	901,000	606,538	67.3%
Miscellaneous	5,647,747	5,516,612	$ 3,667,539 [10]	14,831,898	9,524,486	64.2%
Total General Fund Revenues	**$ 425,866,429**	**$ 4,237,393**	**$ 7,142,539**	**$ 437,246,361**	**$ 156,950,532**	**35.9%**
Transfers-In	3,000,000	459,374	-	3,459,374	3,459,374	100.0%
TOTAL RESOURCES	**$ 428,866,429**	**$ 4,696,767**	**$ 7,142,539**	**$ 440,705,735**	**$ 160,409,906**	**36.4%**

[1] Sales & Use Tax includes Bradley Burns $125.0M, Public Safety Tax Prop 72 $3.4M, and Measure Q $66.0M.
[2] Sales Tax includes $4.7M increase to Bradley Burns for increase in point of sale revenue, ($3.0M) reduction to Measure Q due to lower trending revenues.
[3] Property Tax increase due to Utility/Unitary revenue increases.
[4] Parking Tax increase due to higher trending revenues.
[5] Other Taxes includes Franchise Tax $3.5M and Property Transfer Tax $1.5M.
[6] Intergovernmental includes Cost Allocation Plan Revenue.
[7] Funding from American Rescue Plan Act (ARPA).
[8] Charges for Services includes Special Districts Service Charges $12.2M.
[9] City Services including Police & Fire to Ontario International Airport Authority (OIAA).
[10] Miscellaneous includes $5.5M for FY 2023-24 Toyota Arena City Share of Revenues, $1.6M for FY 2024-25 increased SMG/Toyota Arena Revenues(offset by expenditures), and ($3.3M) reduction to deferred Ambulance program.

City of Ontario
General Fund Expenditures by Category
Fiscal Year 2024-25
Mid-Year Budget Update

	FY 2024-25 Adopted Budget	CIP/Grants/POs Carryforward	First Quarter Budget Update	Mid-Year Budget Update	FY2024-25 Current Budget	Actuals as of 12/31/2024[1]	% Expended
Personnel Costs	$ 253,011,211	$ -	$ 689,391	$ (2,382,164)[2]	$ 251,318,438	$ 131,186,338	52.2%
Operating Expenditures	42,749,833	283,874	2,006,052	$ 1,231,441[3]	46,271,200	24,064,850	52.0%
Contractual Services	23,139,834	917,174	1,060,250	$ 1,940,000[4]	27,057,258	11,117,114	41.1%
Internal Service Allocations	50,843,137	-	(4,585)	$ (251,649)[5]	50,586,903	24,135,382	47.7%
Reimbursement Agreements	10,519,656	-	-	$ 150,000[6]	10,669,656	3,032,112	28.4%
Contribution Expense	20,000	-	-	$ -	20,000	-	0.0%
Capital Expenditures	-	487,570	-	$ 116,659[7]	604,229	604,016	100.0%
Transfers-Out	47,146,250[5]	-	992,332	$ -	48,138,582	24,423,896	50.7%
Total General Fund Appropriations	**$ 427,429,921**	**$ 1,688,618**	**$ 4,743,440**	**$ 804,287**	**$ 434,666,266**	**$ 218,563,708**	**50.3%**
FTE General Fund	1,055.13	-	-	-	1,055.13		
FTE Other Funds	461.87	-	-	-	461.87		
Total FTE All Funds	1,517.00	-	-	-	1,517.00		

[1] Excludes obligations/PO's.

[2] Personnel Costs includes ($2.4M) reduction for deferred Ambulance Program.

[3] Operating Expenditures includes $1.6M for Toyota Arena Capital Reimbursement - Roof Repair and Suite remodel (revenue offset), ($300K) reduction for the deferred Ambulance Program.

[4] Contractual Services includes $2.0M for the City Share of the Animal Resource Center (ARC) Agreement.

[5] Internal Service Allocations includes a ($250K) reduction for the deferred Ambulance Program.

[6] Reimbursement Agreements includes $150K for Whispering Lakes golf cart lease agreement.

[7] Capital Expenditures includes a $98K budget adjustment from Operating Expenditures for capital equipment purchases and $19K for Fire Operational Support Services.

City of Ontario
General Fund Expenditures by Agency
Fiscal Year 2024-25
Mid-Year Budget Update

	FY 2024-25 Adopted Budget	CIP/Grants/POs Carryforward	First Quarter Budget Update	Mid-Year Budget Update	FY2024-25 Current Budget	Actuals as of 12/31/2024[1]	% Expended
Community Development	$ 33,889,520	$ -	$ 1,006,604	$ 2,000,000[2]	$ 36,896,124	$ 14,945,897	40.5%
Community Life & Culture	30,435,855	-	15,926	$ 229,881[3]	30,681,662	14,634,724	47.7%
Economic Development	17,376,851	464,387	1,954,180	$ 1,571,183[4]	21,366,601	9,740,753	45.6%
Financial Services	25,798,621	-	93,274	$ -	25,891,895	14,132,800	54.6%
Human Resources/Risk Management	6,432,579	-	100,059	$ -	6,532,638	3,198,237	49.0%
Management Services	10,137,836	-	49,509	$ -	10,187,345	6,218,025	61.0%
Ontario Fire Department	102,590,549	487,570	323,007	$ (2,996,777)[5]	100,404,349	51,784,562	51.6%
Ontario Police Department	132,629,021	277,287	(168,349)	$ -	132,737,959	69,076,429	52.0%
Public Works	20,992,839	459,374	376,898	$ -	21,829,111	10,408,385	47.7%
Transfers-Out	47,146,250	-	992,332	$ -	48,138,582	24,423,896	50.7%
Total Appropriations & Transfers-Out	**$ 427,429,921**	**$ 1,688,618**	**$ 4,743,440**	**$ 804,287**	**$ 434,666,266**	**$ 218,563,708**	**50.3%**
FTE General Fund	1,055.13	-	-	-	1,055.13		
FTE Other Funds	461.87	-	-	-	461.87		
Total FTE All Funds	1,517.00	-	-	-	1,517.00		

[1] Excludes obligations/PO's.

[2] Community Development includes $2.0M for City Share for the Animal Resource Center (ARC) Agreement.

[3] Community Life & Culture includes $150K for Reimbursement for Whispering Lakes golf cart lease agreement, $80K for Profit Sharing Expense from $5K Proceeds to Ontario-Montclair Schools Foundation.

[4] Economic Development includes $1.6M for Toyota Arena Capital Reimbursement - Roof Repair and Suite Remodel (revenue offset).

[5] Fire Department includes ($2.9M) reduction for the deferred Ambulance Program.

City of Ontario General Fund Budget Summary Fiscal Year 2024-25 Mid-Year Budget Update		
Fiscal Year 2024-25 Current Budget:		
Estimated Beginning Fund Balance [1]		**$ 75,722,444**
Fiscal Year 2024-25 Adopted Budget:		
Resources & Transfers-In	$ 428,866,429	
Appropriations & Transfers-Out	(427,429,921)	
First Quarter Budget Recommendations		
Resources & Transfers-In	4,696,767	
Appropriations & Transfers-Out	(4,743,440)	
Fiscal Year 2023-24 Carryforward Obligations	(1,688,618)	
Mid-Year Budget Recommendations		
Resources & Transfers-In	7,142,539	-
Appropriations & Transfers-Out	$ (804,287)	-
Budget Surplus/(Deficit)		***$ 6,039,469***
Estimated Ending Fund Balance		**$ 81,761,913**
Estimated General Fund Reserve 20% [2]		**21.15%**

[1] Estimated Beginning Fund Balance for 07/01/2024 is unaudited.

[2] For FY 2024-25, the Council approved reserve level is 20% with the goal of increasing the reserves up to 25% in future fiscal years.

City of Ontario
Citywide Expenditures by Category
Fiscal Year 2024-25
Mid-Year Budget Update

	FY 2024-25 Adopted Budget	CIP/Grants/POs Carryforward	First Quarter Budget Update	Mid-Year Budget Update	FY2024-25 Current Budget	Actuals as of 12/31/2024[1]	% Expended
Personnel Costs	$ 329,697,821	$ 2,594,665	$ 2,184,358	$ (308,558)[2]	$ 334,168,286	$ 172,118,829	51.5%
Operating Expenditures	235,838,586	26,151,174	9,976,889	(12,820,535)[3]	259,146,114	104,412,073	40.3%
Contractual Services	342,008,603	249,843,829	6,566,276	11,109,704[4]	609,528,412	120,421,737	19.8%
Internal Service Allocations	84,288,353	2,879	(4,585)	(252,090)[5]	84,034,557	40,680,420	48.4%
Reimbursement Agreements	12,534,650	13,804,854	1,612,056	150,000[6]	28,101,560	7,382,474	26.3%
Debt Service	49,809,379	13,744,612	-	6,864,507[7]	70,418,498	13,759,792	19.5%
Contribution Expense	12,600,232	-	385,435	-	12,985,667	-	0.0%
Capital Expenditures	23,854,502	31,839,525	606,787	10,080,291[8]	66,381,105	15,642,776	23.6%
Transfers-Out	70,798,042	-	1,451,706	-	72,249,748	47,249,792	65.4%
Total Citywide Appropriations	**$ 1,161,430,168**	**$ 337,981,538**	**$ 22,778,922**	**$ 14,823,319**	**$ 1,537,013,947**	**$ 521,667,893**	**33.9%**
FTE General Fund	1,055.13	-	-	-	1,055.13		
FTE Other Funds	461.87	-	-	-	461.87		
Total FTE All Funds	1,517.00	-	-	-	1,517.00		

[1] Includes expenses and obligations/PO's.

[2] Personnel Costs includes $650K for Office of Traffic Safety (STEP) Grant FY25 GR2509, $525K for US EPA Solid Waste Infrastructure for Recycling (SWIFR) Grant GR2518, $525K for Increase in Appropriations for Fire Mutual Aid, $350K for Americorps State Continuation Grant FY25 (CC Approved 9/03/24), and ($2.4M) reduction for the deferred Ambulance Program.

[3] Operating Expenditures includes $1.6M for Toyota Arena Capital Reimbursement - Roof Repair and Suite Remodel, ($4.6M) reduction for Grant Closeout - Emporia Multifamily Housing Project GR_MS1802, and ($10.5M) reduction for Grant Closeout - Emporia Phase II GR2120.

[4] Contractual Services includes $5.0M for for Grove & Holt Intersection Widening Project (funding from Measure I Valley and OMC Regional DIF), $1.8M for Fallis House Mobility Hub Ins MS2211 construction (offset by insurance reimbursement), $1.7M for De Anza Park Improvements - Splash Pad project, $1.4M for D-Block Parking Structure PF2505 design/build, $1.3M for Additional appropriations for future utilities legal expenses (CC Approved 3/4/2025).

[5] Internal Service Allocations includes ($250K) reduction for the deferred Ambulance Program.

[6] Reimbursement Agreements includes $150K for Reimbursement for Whispering Lakes golf cart lease agreement.

[7] Debt Service includes $5.9M for Ontario Sports Empire - Property Acquisition PA2302 Ontario WF Farms (10 acres) and Dairy River (15 acres), and $1.0M for 2024 Water Revenue Refunding Bonds.

[8] Capital Expenditures includes $9.3M for previously approved vehicle purchases both received and anticipated to receive by the end of the fiscal year, $1.5M for US EPA Solid Waste Infrastructure for Recycling (SWIFR) Grant GR2518, and ($900K) reduction for Budget Adjustment - Airport EDA Project Area MS2101.

City of Ontario
Citywide Expenditures by Fund Type
Fiscal Year 2024-25
Mid-Year Budget Update

	FY 2024-25 Adopted Budget	CIP/Grants/POs Carryforward	First Quarter Budget Update	Mid-Year Budget Update	FY2024-25 Current Budget	Actuals as of 12/31/2024[1]	% Expended
General Fund	$ 427,429,921	$ 1,688,618	$ 4,743,440	$ 804,287[2]	$ 434,666,266	$ 218,563,708	50.3%
Special Revenue Fund	107,422,499	82,047,684	5,205,766	$ (9,770,863)[3]	184,905,086	32,205,136	17.4%
Capital Projects Fund	245,897,110	213,085,453	426,726	$ 12,933,679[4]	472,342,968	109,580,311	23.2%
Enterprise Funds	251,609,889	24,784,873	9,960,222	$ 5,347,842[5]	291,702,826	105,501,997	36.2%
Internal Service Funds	127,503,074	6,003,351	2,452,763	$ 10,505,792[6]	146,464,980	55,066,894	37.6%
Total City Funds	**$ 1,159,862,493**	**$ 327,609,979**	**$ 22,788,917**	**$ 19,820,737**	**$ 1,530,082,126**	**$ 520,918,046**	**34.0%**
Ontario Housing Authority	1,567,675	10,371,559	(9,995)	$ (4,997,418)[7]	6,931,821	749,847	10.8%
Total All Funds	**$ 1,161,430,168**	**$ 337,981,538**	**$ 22,778,922**	**$ 14,823,319**	**$ 1,537,013,947**	**$ 521,667,893**	**33.9%**
FTE General Fund	1,055.13	-	-	-	1,055.13		
FTE Other Funds	461.87	-	-	-	461.87		
Total FTE All Funds	1,517.00	-	-	-	1,517.00		

[1] Includes expenses and encumbrances/PO's.

[2] General Fund includes $2.0M for City Share for the Animal Resource Center (ARC) Agreement, $1.6M for Toyota Arena Capital Reimbursement - Roof Repair and Suite remodel (revenue offset), $150K for Reimbursement for Whispering Lakes golf cart lease agreement, and ($3.0M) reduction for the deferred Ambulance Program.

[3] Special Revenue Funds includes $2.8M for Grove & Holt Intersection Widening Project (funding from Measure I Valley and OMC Regional DIF), ($1.7M) reduction for Grant Closeout - ATP Cycle 4 Pedestrians Improvement GR_ST1914, and ($10.5M) reduction for Grant Closeout - Emporia Phase II GR2120.

[4] Capital Projects Funds includes $5.9M for Ontario Sports Empire - Property Acquisition PA2302 Ontario WF Farms (10 acres) and Dairy River (15 acres), $2.2M for Grove & Holt Intersection Widening Project, $1.8M for Fallis House Mobility Hub Ins MS2211 construction costs (offset by insurance reimbursement), $1.7M for De Anza Park Improvements - Splash Pad project, and $1.4M for D-Block Parking Structure PF2505 design/build.

[5] Enterprise Funds includes $3.6M for US EPA Solid Waste Infrastructure for Recycling (SWIFR) Grant GR2518, $1.3M for Additional appropriations for future utilities legal expenses (CC Approved 3/4/2025), $1.0M for 2024 Water Revenue Refunding Bonds, and ($500K) reduction for Budget Adjustment - OMUC Customer Information System (CIS) Replacement MS2502.

[6] Internal Service Funds includes $9.3M for Previously-approved vehicle purchases both received and anticipated to receive by the end of the fiscal year, $400K for Police Report Management System Replacement MS2501 full data conversion to new RMS system, $300K for Guardrail at Mountain Avenue and Philadelphia Street MS2506 construction (funded from General Liability).

[7] Ontario Housing Authorty includes ($5.0M) reduction for Grant Closeout - Emporia Multifamily Housing Project GR_MS1802.

City of Ontario
General Fund Five-Year Financial Forecast
Fiscal Year 2024-25
Mid-Year Budget Update

	FY 2023-24 Year-End	FY 2024-25 Current Budget	FY 2025-26 Projected	FY 2026-27 Projected	FY 2027-28 Projected	FY 2028-29 Projected	FY 2029-30 Projected
Resources [1]	$ 377,225,909	$ 377,705,735	$ 379,929,128	$ 398,805,820	$ 412,987,536	$ 430,823,227	$ 446,545,927
Measure Q Sales Tax	60,766,143	63,000,000	64,250,000	65,545,200	66,856,104	68,193,226	69,557,091
Appropriations [2]	(318,306,845)	(335,940,781)	(363,384,754)	(370,462,652)	(377,403,356)	(384,484,798)	(396,735,519)
Internal Service Funds (ISF) Allocations	(49,324,509)	(50,586,903)	(51,984,114)	(53,164,131)	(54,420,923)	(55,761,734)	(49,037,032)
CIP Transfers	(48,111,578)	(40,210,000) [3]	(34,360,000)	(41,986,936)	(43,188,381)	(44,419,530)	(45,681,206)
Other Transfers	(12,200,205)	(7,928,582) [4]	(7,829,948)	(9,176,304)	(9,546,905)	(9,943,449)	(9,867,750)
Budget Surplus/(Deficit)	**$ 10,048,915**	**$ 6,039,469**	**$ (13,379,688)**	**$ (10,439,003)**	**$ (4,715,925)**	**$ 4,406,942**	**$ 14,781,511**
Estimated Beginning Fund Balance	$ 65,673,529	$ 75,722,444	$ 81,761,913	$ 68,382,225	$ 57,943,222	$ 53,227,297	$ 57,634,239
Estimated Ending Fund Balance	$ 75,722,444	$ 81,761,913	$ 68,382,225	$ 57,943,222	$ 53,227,297	$ 57,634,239	$ 72,415,750
Projected Percent of GF Reserve level	**20.6%**	**21.2%**	**16.5%**	**13.7%**	**12.3%**	**13.1%**	**16.2%**

[1] Resources include Revenues & Transfers-In.
[2] Appropriations excludes Transfers-Out and ISF Allocations.
[3] CIP Transfers includes $35.2M of Measure Q Revenues and $5.0M of Bradley Burns Revenues.
[4] Other Transfers includes $4.6M for Retiree Medical Contribution, $1.5M for Police Helicopter Reserve, $500K for Fire Safety Equipment Reserve, and $300K for Parkway Maintenance.

City of Ontario Authorized Full-Time Positions Fiscal Year 2024-25 Mid-Year Budget Update				
Agency	**FY 2024-25 Adopted Budget**	**Recommended First Quarter Budget Update**	**Recommended Mid-Year Budget Update**	**Total Authorized Full-Time Positions**
Community Development [1]	125.00	(41.00)	-	84.00
Community Life & Culture	102.00	-	-	102.00
Economic Development	9.00	-	-	9.00
Financial Services	56.00	-	-	56.00
Human Resources	31.00	-	-	31.00
Information Technology	53.00	-	-	53.00
Management Services	42.00	-	-	42.00
Ontario Fire Department [2]	265.00	-	-	265.00
Ontario Municipal Utilities Company	139.00	-	-	139.00
Ontario Police Department [3]	429.00	-	-	429.00
Public Works [1]	266.00	41.00	-	307.00
Total Authorized Full-Time Positions	**1,517.00**	**-**	**0.00**	**1,517.00**
General Fund	1,055.13	-	-	1,055.13
Other Funds	461.87	-	-	461.87
Total FTE All Funds	**1,517.00**	**-**	**-**	**1,517.00**
[1] Transfer of Engineering Department from CDA to PW				
[2] OFD positions includes the following sworn positions	213.00	-	-	213.00
[3] OPD positions includes the following sworn positions	312.00	-	-	312.00

City of Ontario
Recommended Personnel Changes
Fiscal Year 2024-25
Mid-Year Budget Update

Agency	Department	Proposed Change			Position	Action	Salary Range	
		General Fund	Other Fund	Total				
Community Development								
	Building	(2.00)	-	(2.00)	Combination Building Inspector	Delete	$ 7,455 -	$ 9,060
	Building	2.00	-	2.00	Senior Combination Building Inspector	Add	$ 8,321 -	$ 10,115
	Planning	(1.00)	-	(1.00)	Sustainability Program Manager	Delete	$ 13,009 -	$ 15,807
	Planning	1.00	-	1.00	Principal Planner	Add	$ 13,009 -	$ 15,807
		-	-	-				
							General Fund	**General Fund FTE**
							$ 4,907	**-**
Community Life & Culture								
	Library	(1.00)	-	(1.00)	Office Specialist	Delete	$ 4,538 -	$ 5,512
	Library	1.00	-	1.00	Senior Librarian	Add	$ 6,902 -	$ 8,476
	Housing	(1.00)	-	(1.00)	Senior Management Anlyst	Delete	$ 8,982 -	$ 10,913
	Housing	1.00	-	1.00	Management Analyst	Add	$ 7,245 -	$ 8,807
	Recreation	(1.00)	-	(1.00)	Recreation / Community Services Director	Salary Adjustment	$ 11,939 -	$ 15,888
	Recreation	1.00	-	1.00	Recreation / Community Services Director	Salary Adjustment	$ 12,537 -	$ 16,680
		-	-	-				
							General Fund	**General Fund FTE**
							$ 138	**-**
Economic Development								
	Economic Development	(1.00)	-	(1.00)	Senior Management Analyst	Delete	$ 8,982 -	$ 10,913
	Economic Development	1.00	-	1.00	Administrative Officer	Add	$ 10,906 -	$ 13,260
	Economic Development	(1.00)	-	(1.00)	Economic Development Coordinator	Delete	$ 8,982 -	$ 10,913
	Economic Development	1.00	-	1.00	Senior Economic Development Coordinator	Add	$ 9,883 -	$ 12,007
	Economic Development	(1.00)	-	(1.00)	Economic Development Coordinator	Delete	$ 8,982 -	$ 10,913
	Economic Development	1.00	-	1.00	Project Manager	Add	$ 9,883 -	$ 12,007
		-	-	-				
							General Fund	**General Fund FTE**
							$ 9,826	**-**
Financial Services								
	Purchasing	(1.00)	-	(1.00)	Purchasing Manager	Delete	$ 10,052 -	$ 12,217
	Purchasing	0.70	-	0.70	Administrative Officer	Add	$ 10,906 -	$ 13,260
	Financial Systems Support	0.30	-	0.30	Administrative Officer	Add	$ 10,906 -	$ 13,260
	Financial Systems Support	(1.00)	-	(1.00)	Administrative Specialist	Delete	$ 5,938 -	$ 7,218
	Financial Systems Support	1.00	-	1.00	Management Analyst	Add	$ 7,245 -	$ 8,807
	Budget	(1.00)	-	(1.00)	Departmental Administrator	Delete	$ 11,939 -	$ 15,888
	Budget	1.00	-	1.00	Financial Analyst	Add	$ 9,072 -	$ 11,021
	Business License	(3.00)	-	(3.00)	Customer Service Representative	Retitle	$ 4,538 -	$ 5,512
	Business License	3.00	-	3.00	Customer Service Representative II	Retitle	$ 4,538 -	$ 5,512
	Purchasing	(1.00)	-	(1.00)	Buyer	Delete	$ 7,245 -	$ 8,807
	Purchasing	1.00	-	1.00	Purchasing Supervisor	Add	$ 10,052 -	$ 12,217
		-	-	-				
							General Fund	**General Fund FTE**
							$ 5,519	**-**

City of Ontario
Recommended Personnel Changes
Fiscal Year 2024-25
Mid-Year Budget Update

Agency	Department	Proposed Change			Position	Action	Salary Range	
		General Fund	Other Fund	Total				
Human Resources/Risk Management								
	Human Resources	(1.00)	-	(1.00)	Senior Human Resources Analyst	Delete	$ 8,982 -	$ 10,913
	Human Resources	1.00	-	1.00	Human Resources Analyst	Add	$ 7,989 -	$ 9,705
	Human Resources	(1.00)	-	(1.00)	Principal Human Resources Agency Partner	Delete	$ 10,906 -	$ 13,260
	Human Resources	1.00	-	1.00	Departmental Administrator	Add	$ 11,939 -	$ 15,888
	Human Resources	(1.00)	-	(1.00)	Principal Human Resources Agency Partner	Delete	$ 10,906 -	$ 13,260
	Human Resources	1.00	-	1.00	Departmental Administrator	Add	$ 11,939 -	$ 15,888
	Human Resources	(1.00)	-	(1.00)	Human Resources Specialist	Delete	$ 5,938 -	$ 7,218
	Human Resources	1.00	-	1.00	Human Resources Technician	Add	$ 6,367 -	$ 7,739
	Human Resources	-	(1.00)	(1.00)	Human Resources Analyst	Delete	$ 7,989 -	$ 9,705
	Human Resources	-	1.00	1.00	Safety Officer	Add	$ 8,982 -	$ 10,913
	Human Resources	-	(1.00)	(1.00)	Human Resources Analyst	Delete	$ 7,989 -	$ 9,705
	Human Resources	-	1.00	1.00	Risk Management Adjuster	Add	$ 7,609 -	$ 9,243
	Human Resources	(0.50)	(0.50)	(1.00)	Office Specialist	Delete	$ 4,538 -	$ 5,512
	Human Resources	0.50	0.50	1.00	Human Resources Technician	Add	$ 6,367 -	$ 7,739
		-	-	-				
							General Fund	**General Fund FTE**
							$ 1,901	**-**
Management Services								
	Innovation Performance & Audit	(1.00)	-	(1.00)	Internal Auditor	Delete	$ 8,046 -	$ 9,778
	Innovation Performance & Audit	1.00	-	1.00	Senior Internal Auditor	Add	$ 9,072 -	$ 11,021
	Innovation Performance & Audit	(1.00)	-	(1.00)	Senior Performance and Optimization Analyst	Delete	$ 9,923 -	$ 12,062
	Communications & Community Relations	1.00	-	1.00	Legislative Analyst	Add	$ 7,245 -	$ 8,807
		-	-	-				
							General Fund	**General Fund FTE**
							$ (9,985)	**-**
Ontario Municipal Utilities								
	Utilities	-	(17.00)	(17.00)	Customer Service Representative	Retitle	$ 4,538 -	$ 5,512
	Utilities	-	17.00	17.00	Customer Service Representative II	Retitle	$ 4,538 -	$ 5,512
		-	-	-				
							General Fund	**General Fund FTE**
							$ -	**-**
Ontario Police Department								
	Office of Police Chief	(1.00)	-	(1.00)	Police Sergeant	Delete	$ 12,035 -	$ 14,624
	Office of Police Chief	1.00	-	1.00	Police Lietenant	Add	$ 13,634 -	$ 16,562
	Communications	(1.00)	-	(1.00)	Community Relations Supervisor	Retitle / Salary Adjustment	$ 11,757 -	$ 14,291
	Communications	1.00	-	1.00	Community Information Supervisor	Retitle / Salary Adjustment	$ 8,109 -	$ 9,859
	Airport Operations	(1.00)	-	(1.00)	Senior Police Dispatcher	Delete	$ 5,968 -	$ 7,325
	Airport Operations	1.00	-	1.00	Senior Real Time Information Center Operator	Add	$ 5,968 -	$ 7,325
	Dective Division	(1.00)	-	(1.00)	Community Service Officer	Delete	$ 4,938	$ 6,001
	Dective Division	1.00	-	1.00	Senior Real Time Information Center Operator	Add	$ 5,968	$ 7,325
		-	-	-				
							General Fund	**General Fund FTE**
							$ 14,475	**-**

City of Ontario
Recommended Personnel Changes
Fiscal Year 2024-25
Mid-Year Budget Update

Agency	Department	Proposed Change			Position	Action	Salary Range	
		General Fund	Other Fund	Total				
Public Works								
	Integrated Waste	-	(1.00)	(1.00)	Integrated Waste Collector	Delete	$ 4,424 -	$ 5,377
	Integrated Waste	-	1.00	1.00	Senior Integrated Waste Collector	Add	$ 4,887 -	$ 5,937
	Integrated Waste	-	(1.00)	(1.00)	Integrated Waste Collector	Delete	$ 4,424 -	$ 5,377
	Integrated Waste	-	1.00	1.00	Senior Integrated Waste Collector	Add	$ 4,887 -	$ 5,937
	Integrated Waste	-	(1.00)	(1.00)	Integrated Waste Collector	Delete	$ 4,424 -	$ 5,377
	Integrated Waste	-	1.00	1.00	Senior Integrated Waste Collector	Add	$ 4,887 -	$ 5,937
	Integrated Waste	-	(1.00)	(1.00)	Integrated Waste Maintenance Worker	Delete	$ 4,252 -	$ 5,162
	Integrated Waste	-	1.00	1.00	Integrated Waste Collector	Add	$ 4,424 -	$ 5,377
	Parks & Street Maintenance	(1.00)	-	(1.00)	Park Maintenance Technician	Delete	$ 5,181 -	$ 6,299
	Parks & Street Maintenance	1.00	-	1.00	Senior Park Maintenance Worker	Add	$ 4,697 -	$ 5,704
	Parks & Street Maintenance	(1.00)	-	(1.00)	Parks & Street Maintenance Superintendent	Delete	$ 9,305 -	$ 11,305
	Parks & Street Maintenance	1.00	-	1.00	Parks & Street Maintenance Manager	Add	$ 11,022 -	$ 13,400
	Design and Construction	-	(1.00)	(1.00)	Principal Construction Project Manager	Delete	$ 12,457 -	$ 15,135
	Design and Construction	-	1.00	1.00	Design & Construction Director	Add	$ 12,535 -	$ 16,679
	Parks & Street Maintenance	(1.00)	-	(1.00)	Urban Forestry Superintendent	Delete	$ 9,305 -	$ 11,305
	Parks & Street Maintenance	1.00	-	1.00	Parks & Street Maintenance Superintendent	Add	$ 9,305 -	$ 11,305
	Engineering	(1.00)	-	(1.00)	Public Works Assistant Director	Retitle	$ 16,799 -	$ 22,353
	Engineering	1.00	-	1.00	Assistant Public Works Director	Retitle	$ 16,799 -	$ 22,353
		-	-	-				
							General Fund	**General Fund FTE**
							$ 3,227	**-**
Total Additions/(Deletions)		**-**	**-**	**-**				

Net Change By Fund	Mid-Year Personnel Cost Impact	Net FTE Change
1000 General Fund	$ 30,008	-
5010 Water Operating	$ (2,587)	-
5110 Sewer Operating	$ (2,587)	-
5210 Integrated Waste	$ 14,546	-
6010 Equipment Services	$ (2,587)	-
6030 Facility Maintenance	$ 16,464	-
6110 Workers Compensation	$ 934	-
6111 General Liability	$ 483	-
Grand Total	**$ 54,674**	**-**

City of Ontario
Budget Adjustment Highlights
Fiscal Year 2024-25
Mid-Year Budget Update

Agency	Description	Appropriation Adjustment	General Fund	Other Funds
Community Development				
	City Share for the Animal Resource Center (ARC) Agreement	2,000,000	2,000,000	-
		2,000,000	**2,000,000**	**-**
Community Life & Culture				
	Reimbursement for Whispering Lakes golf cart lease agreement	150,000	150,000	-
	Profit Sharing Expense from 5K Proceeds to Ontario-Montclair Schools Foundation	79,881	79,881	-
	Americorps State Continuation Grant FY25 (CC Approved 9/03/24)	368,000	-	368,000
	Transformative Climate Communities ATP - Missions Blvd Bike & Pedestrian Imprlvement GR_MS_TCAT12	25,938	-	25,938
	Kaiser Permanente - Ontario Access Center Grant GR2513	10,000	-	10,000
	COVES Art Bridges Project GR2515	5,000	-	5,000
	Grant Closeout - CDBG Shared Vision Bringing Library to You GR1924	(2,478)	-	(2,478)
	Grant Closeout - CDBG Mercy House GR0502	(3,454)	-	(3,454)
	Grant Closeout - CDBG Assisi House Renovations GR1701	(3,523)	-	(3,523)
	Grant Closeout - Community Development Block Grant Slurry Seal Projects GR_ST1714	(4,152)	-	(4,152)
	Budget Adjustment - Lightspeed at Ontario City Library GR1809	(6,949)	-	(6,949)
	Grant Closeout - CDBG HOGI Vesta Property GR1418	(21,934)	-	(21,934)
	Grant Closeout - Hotel Voucher Program GR2303	(23,882)	-	(23,882)
	Grant Closeout - CDBG Assisi House Transitional Program GR2451	(26,250)	-	(26,250)
	Grant Closeout - Community Development Block Grant LED Streetlight Conversion Project GR_TR1701	(48,106)	-	(48,106)
	Grant Closeout - CDBG Emergency Motel Voucher Program GR2453	(54,934)	-	(54,934)
	Grant Closeout - CDBG Downtown Storefront Facade Imp GR1905	(61,210)	-	(61,210)
	Grant Closeout - Community Development Block Grant 411 N Parkside GR_MS1709	(98,400)	-	(98,400)
	Grant Closeout - CDBG Community Improvement Team - CIT GR2490	(100,000)	-	(100,000)
	Grant Closeout - CDBG Mission-Mountain Storefront Facade GR2114	(125,000)	-	(125,000)
	Grant Closeout - CDBG Weatherization Home Improvement GR1902	(355,261)	-	(355,261)
	Grant Closeout - Emporia Multifamily Housing Project GR_MS1802	(4,997,418)	-	(4,997,418)
	Grant Closeout - Emporia Phase II GR2120	(10,525,657)	-	(10,525,657)
		(15,819,789)	**229,881**	**(16,049,670)**
Economic Development				
	Toyota Arena Capital Reimbursement - Suite Remodel (revenue offset)	1,021,183	1,021,183	-
	Toyota Arena Capital Reimbursement - Roof Repair (revenue offset)	550,000	550,000	-
	Ontario Sports Empire - Property Acquisition PA2302 Promissory Note (WF Farms and Dairy River)	5,887,729	-	5,887,729
	Budget Adjustment - Airport EDA Project Area MS2101	(993,391)	-	(993,391)
		6,465,521	**1,571,183**	**4,894,338**

City of Ontario
Budget Adjustment Highlights
Fiscal Year 2024-25
Mid-Year Budget Update

Agency	Description	Appropriation Adjustment	General Fund	Other Funds
Information Technology				
	Transfer from Modernize Desktop and Device Management Deployment MS2504 and Multicarrier Distributed Antennae System PF2404 to Police Report Management System Replacment MS2501	575,722	-	575,722
	Police Report Management System Replacment MS2501 full data conversion to new RMS system	400,000	-	400,000
	Additional digital licenses citywide	65,804	-	65,804
	Increased maintenance & repairs due to increased utilization the Accela Land Management system	50,376	-	50,376
	Transfer from Multicarrier Distributed Antennae System PF2404 to Police Report Management System Replacment MS2501	(275,722)	-	(275,722)
	Transfer from Modernize Desktop and Device Management Deployment MS2504 to Police Report Management System Replacment MS2501	(300,000)	-	(300,000)
	Budget Adjustment - OMUC Customer Information System (CIS) Replacement MS2502	(500,000)	-	(500,000)
		16,180	**-**	**16,180**
Management Services				
	Digital Equity Leadership Grant GR2521	20,000	-	20,000
		20,000	**-**	**20,000**
OMUC				
	Additional appropriations for future Utilities legal expenses (CC Approved 3/4/2025)	1,300,000	-	1,300,000
	2024 Water Revenue Refunding Bonds Debt Service	976,778	-	976,778
		2,276,778	**-**	**2,276,778**
Ontario Fire Department				
	Budget Adjustment - deferred Ambulance Program	(2,996,777)	(2,996,777)	-
	Increase in Appropriations for Fire Mutual Aid Fund (offset by revenue)	753,000	-	753,000
	Emergency Management Performance Grant GR2512	25,843	-	25,843
	Grant Closeout - Riverside UASI FY20-FD Grant GR2211	(3,115)	-	(3,115)
		(2,221,049)	**(2,996,777)**	**775,728**
Ontario Police Department				
	Office of Traffic Safety (STEP) Grant FY25 GR2509	705,000	-	705,000
	Real Time Information Center PF2422 Axon amendment for drone as a first responder (CC Approved 2/28/25)	306,570	-	306,570
	COPS ELEAS Award FY25 GR2511	279,859	-	279,859
	Justice Assistance Grant (JAG) FY24 GR2519	43,060	-	43,060
	Firehouse Subs Public Safety Foundation Grant GR2516	23,622	-	23,622
	Grant Closeout - Ride to Live GR2313	(11,351)	-	(11,351)
		1,346,760	**-**	**1,346,760**

City of Ontario
Budget Adjustment Highlights
Fiscal Year 2024-25
Mid-Year Budget Update

Agency	Description	Appropriation Adjustment	General Fund	Other Funds
Public Works				
	Previously-approved vehicle purchases both received and anticipated to receive by the end of the fiscal year	9,335,138	-	9,335,138
	Additional Funds for Grove & Holt Intersection Widening Project (Funded from Measure I Valley and OMC Regional DIF)	5,000,000	-	5,000,000
	US EPA Solid Waste Infrastructure for Recycling (SWIFR) Grant GR2518	3,571,064	-	3,571,064
	Fallis House Mobility Hub Ins MS2211 construction costs (offset by insurance reimbursement)	1,829,150	-	1,829,150
	De Anza Park Improvements - Splash Pad project	1,700,000	-	1,700,000
	D-Block Parking Structure PF2505 funding to design/build the structure. (CC Approved 12/17/24)	1,361,750	-	1,361,750
	Guardrail at Mountain Avenue and Philadelphia Street MS2506 construction costs (funded from General Liability)	300,000	-	300,000
	Energy Efficiency and Conservation Block Grant(EECBG) GR2520	218,330	-	218,330
	Additional funds for the FY 2024-25 Alley Rehabilitation Program	139,700	-	139,700
	Parks Pole Replacement Project PA2201 outfield netting replacement (CC date 3/4/2025)	77,944	-	77,944
	Consulting for solar PV sytems at Police Department and Ontario Convention Center	58,200	-	58,200
	San Antonio Storm Drain SM2101 additional DIF funding	40,490	-	40,490
	Budget Adjustment - ATP-Mission Blvd Bike and Ped Improvemtns MS_TCAT12	(25,938)	-	(25,938)
	Grant Closeout - ATP Cycle 4 Pedestrians Improvement GR_ST1914	(110,353)	-	(110,353)
	Grant Closeout - Highway Bridge Program GR_ST1610	(412,010)	-	(412,010)
	Budget Adjustment - De Anza Park Lighting Improvements GR_PF2412	(665,000)	-	(665,000)
	Grant Closeout - ATP Cycle 4 Pedestrians Improvement GR_ST1914	(1,679,547)	-	(1,679,547)
		20,738,918	**-**	**20,738,918**
	Total Expenditures	14,823,319	804,287	14,019,032
	Transfers-Out	-	-	-
	Grand Total	**$ 14,823,319**	**$ 804,287**	**$ 14,019,032**

City of Ontario
Detail of Recommended Budget Adjustments by Fund
Fiscal Year 2024-25
Mid-Year Budget Update

Description	Appropriation Adjustments	Revenue Adjustments	Operating Transfers-In	Operating Transfers-Out	Fund Balance Impact
GENERAL FUND					
Fund 1000 - General Fund					
FY 2023-24 Toyota Arena City Share of Revenues	-	5,474,103	-	-	5,474,103
Reimbursement for Donovan Bros golf cart lease agreement	150,000	-	-	-	(150,000)
Toyota Arena Capital Reimbursement - Roof Repair and Offsetting Revenue	550,000	550,000	-	-	-
Toyota Arena Capital Reimbursement - Suite Remodel and Offsetting Revenues	1,021,183	1,021,183	-	-	-
Profit Sharing Expense from 5K Proceeds to Ontario-Montclair Schools Foundation	79,881	-	-	-	(79,881)
Deferred Ambulance Program	(2,996,777)	(3,377,747)	-	-	(380,970)
Fire Operational Support Services moving funds from Operating to Capital Expenditures to cover expenses already incurred	(18,750)				18,750
Fire Operational Support Services moving funds from Operating to Capital Expenditures to cover expenses already incurred	18,750				(18,750)
City Share for the Animal Resource Center (ARC) Agreement	2,000,000	-	-	-	(2,000,000)
Sales Tax - Bradley Burns increase in point of sale revenue	-	6,200,000	-	-	6,200,000
Sales Tax Prop 172 reduction based on actuals	-	(425,000)	-	-	(425,000)
Sales Tax - Measure Q reduction based on lower trending revenues	-	(3,000,000)	-	-	(3,000,000)
Property Tax increase due to Utility/Unitary revenue increasess	-	250,000	-	-	250,000
Parking Tax increase due to higher trending revenues	-	450,000	-	-	450,000
GENERAL FUND TOTAL	**804,287**	**7,142,539**	**-**	**-**	**6,338,252**
SPECIAL REVENUE FUNDS					
Fund 2010 - Community Development Block Grant					
Grant Closeout - Community Development Block Grant 411 N Parkside GR_MS1709	(98,400)	(98,400)	-	-	-
Grant Closeout - Community Development Block Grant Slurry Seal Projects GR_ST1714	(4,152)	(4,152)	-	-	-
Grant Closeout - Community Development Block Grant LED Streetlight Conversion Project GR_TR1701	(48,106)	(48,106)	-	-	-
Grant Closeout - CDBG Mercy House GR0502	(3,454)	(3,454)	-	-	-
Grant Closeout - CDBG HOGI Vesta Property GR1418	(21,934)	(21,934)	-	-	-
Grant Closeout - CDBG Assisi House Renovations GR1701	(3,523)	(3,523)	-	-	-
Grant Closeout - CDBG Weatherization Home Improvement GR1902	(355,261)	(355,261)	-	-	-
Grant Closeout - CDBG Downtown Storefront Facade Imp GR1905	(61,210)	(61,210)	-	-	-
Grant Closeout - CDBG Mission-Mountain Storefront Facade GR2114	(125,000)	(125,000)	-	-	-
Grant Closeout - Hotel Voucher Program GR2303	(23,882)	(23,882)	-	-	-
Grant Closeout - CDBG Assisi House Transitional Program GR2451	(26,250)	(26,250)	-	-	-
Grant Closeout - CDBG Emergency Motel Voucher Program GR2453	(54,934)	(54,934)	-	-	-
Grant Closeout - CDBG Community Improvement Team - CIT GR2490	(100,000)	(100,000)	-	-	-
	(926,106)	(926,106)	-	-	-
Fund 2021 - Housing Grants					
Grant Closeout - Emporia Phase II GR2120	(10,525,657)	(10,525,657)	-	-	-
	(10,525,657)	(10,525,657)	-	-	-
Fund 2220 - Measure I Valley Major Project					
Additional Appropriations for Grove & Holt Intersection Widening Project	2,780,000	2,780,000	-	-	(2,780,000)
	2,780,000	2,780,000	-	-	(2,780,000)

City of Ontario
Detail of Recommended Budget Adjustments by Fund
Fiscal Year 2024-25
Mid-Year Budget Update

Description	Appropriation Adjustments	Revenue Adjustments	Operating Transfers-In	Operating Transfers-Out	Fund Balance Impact
Fund 2400 - General Fund Grants					
Budget Adjustment - De Anza Park Lighting Improvements GR_PF2412	(665,000)	(665,000)	-	-	-
Transformative Climate Communities ATP - Missions Blvd Bike & Pedestrian Imprlvement GR_MS_TCAT12	25,938	25,938	-	-	-
Office of Traffic Safety (STEP) Grant FY25 GR2509	705,000	705,000	-	-	-
COPS ELEAS Award FY25 GR2511	279,859	279,859	-	-	-
Kaiser Permanente - Ontario Access Center Grant GR2513	10,000	10,000	-	-	-
Emergency Management Performance Grant GR2512	25,843	25,843	-	-	-
Firehouse Subs Public Safety Foundation Grant GR2516	23,622	23,622	-	-	-
Americorps State Continuation Grant FY25 (CC Approved 9/03/24)	368,000	368,000	-	-	-
Grant Closeout - ATP Cycle 4 Pedestrians Improvement GR_ST1914	(1,679,547)	(1,679,547)	-	-	-
Budget Adjustment - Lightspeed at Ontario City Library GR1809	(6,949)	(6,949)	-	-	-
Grant Closeout - Riverside UASI FY20-FD Grant GR2211	(3,115)	(3,115)	-	-	-
Grant Closeout - CDBG Shared Vision Bringing Library to You GR1924	(2,478)	(2,478)	-	-	-
COVES Art Bridges Project GR2515	5,000	5,000	-	-	-
Grant Closeout - Ride to Live GR2313	(11,351)	(11,351)	-	-	-
Justice Assistance Grant (JAG) FY24 GR2519	43,060	43,060	-	-	-
	(882,118)	(882,118)	-	-	-
Fund 2513 - Fire Mutual Aid					
Increase in Appropriations for Fire Mutual Aid Fund (offset by revenue)	753,000	-	-	-	(753,000)
Increasing Strike Team Reimbursement - Federal revenue based on YTD reimbursements	-	1,500,000	-	-	1,500,000
Increasing Strike Team Reimbursement - State revenue based on YTD reimbursements	-	500,000	-	-	500,000
	753,000	2,000,000	-	-	1,247,000
Fund 2521 - Broadband / Fiber					
Digital Equity Leadership Grant GR2521	20,000	20,000	-	-	-
	20,000	20,000	-	-	-
Fund 2522 - Opioid Settlement					
Updating Opioid Settlement Revenues to match expenditures	-	93,886	-	-	93,886
	-	93,886	-	-	93,886
Fund 2530 - Gas Tax					
Budget Adjustment - ATP-Mission Blvd Bike and Ped Improvemtns MS_TCAT12	(25,938)	-	-	-	25,938
	(25,938)	-	-	-	25,938
Fund 2531 - Road Maint & Rehab Acct (SB1)					
Additional funds for the FY 2024-25 Alley Rehabilitation Program	139,700	-	-	-	(139,700)
Grant Closeout - ATP Cycle 4 Pedestrians Improvement GR_ST1914	(110,353)	(110,353)	-	-	-
	29,347	(110,353)	-	-	(139,700)
Fund 2570 - Economic Development Activities Fund					
Budget Adjustment - Airport EDA Project Area MS2101	(90,000)	-	-	-	90,000
Budget Adjustment - Airport EDA Project Area MS2101	(903,391)	-	-	-	903,391
	(993,391)	-	-	-	993,391
SPECIAL REVENUE FUNDS TOTAL	**(9,770,863)**	**(7,550,348)**	**-**	**-**	**(559,485)**

City of Ontario
Detail of Recommended Budget Adjustments by Fund
Fiscal Year 2024-25
Mid-Year Budget Update

Description	Appropriation Adjustments	Revenue Adjustments	Operating Transfers-In	Operating Transfers-Out	Fund Balance Impact
CAPITAL PROJECT FUNDS					
Fund 4010 - Capital Projects					
Transfer funds from Celebration Park North Improvements PA2405 to James Bryant Park Improvements PA2503	(27,122)	-	-	-	27,122
Transfer funds from Celebration Park North Improvements PA2405 to James Bryant Park Improvements PA2503	27,122	-	-	-	(27,122)
De Anza Park Improvements - Splash Pad project	1,700,000	-	-	-	(1,700,000)
D-Block Parking Structure PF2505 funding to design/build the structure. (CC Approved 12/17/24)	1,361,750	-	-	-	(1,361,750)
Real Time Information Center PF2422 Axon amendment for drone as a first responder (CC date 2/28/25)	306,570	-	-	-	(306,570)
Ontario Sports Empire - Property Acquisition PA2302 Ontario WF Farms(10 acres) and Dairy River (15 acres)	929,735	-	-	-	(929,735)
Ontario Sports Empire - Property Acquisition PA2302 Ontario WF Farms(10 acres) and Dairy River (15 acres)	4,957,994	-	-	-	(4,957,994)
National Ballistic Infomration Network PF2419 transfer from Capital Projects to Capital Projects - Measure Q	(369,133)	-	-	-	369,133
National Ballistic Infomration Network PF2419 transfer from Capital Projects to Capital Projects - Measure Q	369,133	-	-	-	(369,133)
Fallis House Mobility Hub Ins MS2211 construction costs (offset by insurance reimbursement)	1,829,150	1,175,340	-	-	(653,810)
	11,085,199	1,175,340	-	-	(9,909,859)
Fund 4020 - Ground Access					
Grant Closeout - Highway Bridge Program GR_ST1610	(412,010)	(412,010)	-	-	-
	(412,010)	(412,010)	-	-	-
Fund 4312 - OMC - Local Adjacent Streets					
Additional Appropriations for Grove & Holt Intersection Widening Project	2,220,000	-	-	-	(2,220,000)
	2,220,000	-	-	-	(2,220,000)
Fund 4313 - OMC - Local Adjacent Storm Drain					
San Antonio Storm Drain SM2101 additional DIF funding	40,490	-	-	-	(40,490)
	40,490	-	-	-	(40,490)
CAPITAL PROJECT FUNDS TOTAL	**12,933,679**	**763,330**	**-**	**-**	**(12,170,349)**

City of Ontario
Detail of Recommended Budget Adjustments by Fund
Fiscal Year 2024-25
Mid-Year Budget Update

Description	Appropriation Adjustments	Revenue Adjustments	Operating Transfers-In	Operating Transfers-Out	Fund Balance Impact
ENTERPRISE FUNDS					
Fund 5010 - Water Operating					
Additional appropriations for future Utilities legal expenses (CC Approved 3/4/2025)	800,000	-	-	-	(800,000)
	800,000	-	-	-	(800,000)
Fund 5011 - Water Capital					
2024 Water Revenue Refunding Bonds	976,778	43,955,000	-	-	42,978,222
Budget Adjustment - OMUC Customer Information System (CIS) Replacement MS2502	(225,000)	-	-	-	225,000
	751,778	43,955,000	-	-	43,203,222
Fund 5110 - Sewer Operating					
Additional appropriations for future Utilities legal expenses (CCApproved 3/4/2025)	500,000	-	-	-	(500,000)
	500,000	-	-	-	(500,000)
Fund 5111 - Sewer Capital					
Budget Adjustment - OMUC Customer Information System (CIS) Replacement MS2502	(115,000)	-	-	-	115,000
	(115,000)	-	-	-	115,000
Fund 5210 - Integrated Waste					
Budget Adjustment - OMUC Customer Information System (CIS) Replacement MS2502	(160,000)	-	-	-	160,000
US EPA Solid Waste Infrastructure for Recycling (SWIFR) Grant GR2518	3,571,064	3,571,064	-	-	-
ENTERPRISE FUNDS TOTAL	**5,347,842**	**47,526,064**	**-**	**-**	**42,178,222**

City of Ontario
Detail of Recommended Budget Adjustments by Fund
Fiscal Year 2024-25
Mid-Year Budget Update

Description	Appropriation Adjustments	Revenue Adjustments	Operating Transfers-In	Operating Transfers-Out	Fund Balance Impact
INTERNAL SERVICE FUNDS					
Fund 6010 - Equipment Services					
Previously-approved vehicle purchases both received and anticipated to receive by the end of the fiscal year	9,335,138	-	-	-	(9,335,138)
	9,335,138	-	-	-	(9,335,138)
Fund 6020 - Information Technology					
Increased maintenance & repairs due to increased utilization the Accela Land Management system	50,376	-	-	-	(50,376)
Additional digital licenses citywide	65,804	-	-	-	(65,804)
Transfer from Modernize Desktop and Device Management Deployment MS2504 to Police Report Management System Replacment MS2501	(300,000)	-	-	-	300,000
Transfer from Multicarrier Distributed Antennae System PF2404 to Police Report Management System Replacment MS2501	(162,917)	-	-	-	162,917
Transfer from Multicarrier Distributed Antennae System PF2404 to Police Report Management System Replacment MS2501	(112,805)	-	-	-	112,805
Transfer from Modernize Desktop and Device Management Deployment MS2504 and Multicarrier Distributed Antennae System PF2404 to Police Report Management System Replacement MS2501	575,722	-	-	-	(575,722)
Police Report Management System Replacement MS2501 full data conversion to new RMS system	400,000	-	-	-	(400,000)
	516,180	-	-	-	(516,180)
Fund 6030 - Facilities & Parks Maintenance					
Consulting for solar PV sytems at Police Department and Ontario Convention Center	58,200	-	-	-	(58,200)
Parks Pole Replacement Project PA2201 outfield netting replacement (CC date 3/4/2025)	77,944	-	-	-	(77,944)
Energy Efficiency and Conservation Block Grant (EECBG) GR2520	218,330	218,330	-	-	-
	354,474	218,330	-	-	(136,144)
Fund 6111 - General Liability					
Guardrail at Mountain Avenue and Philadelphia Street MS2506 construction costs	300,000	-	-	-	(300,000)
	300,000	-	-	-	(300,000)
INTERNAL SERVICE FUNDS TOTAL	**10,505,792**	**218,330**	**-**	**-**	**(10,287,462)**
TOTAL CITY FUNDS BUDGET ADJUSTMENTS	**19,820,737**	**48,099,915**	**-**	**-**	**25,499,178**
Fund 2310 - Ontario Housing Authority					
Grant Closeout - Emporia Multifamily Housing Project GR_MS1802	(4,997,418)	(4,997,418)	-	-	-
	(4,997,418)	(4,997,418)	-	-	-
AGENCY FUNDS TOTAL	**(4,997,418)**	**(4,997,418)**	**-**	**-**	**-**
					-
TOTAL ALL FUNDS BUDGET ADJUSTMENTS	**14,823,319**	**43,102,497**	**-**	**-**	**25,499,178**

CITY OF ONTARIO *Agenda Report* **March 18, 2025**	**SECTION:** **CONSENT CALENDAR**
Department: Public Works Prepared By: Adrian Escamilla Staff Member Presenting: Tito Haes, Executive Director Public Works Reviewed By: Andrea Ampig, Bonnie Tam Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 5

SUBJECT: A CONSTRUCTION CONTRACT WITH C.I. SERVICES, INC. FOR THE ARMSTRONG COMMUNITY CENTER ROOF REPLACEMENT PROJECT

RECOMMENDATION: That the City Council take the following actions:

A. Authorize the City Manager, or his designee, to execute Construction Contract No. D&C22-014 with C.I. Services, Inc., of Mission Viejo, California, for the Armstrong Community Center Roof Replacement Project in the amount of $681,200 and authorize a 10% contingency of $68,120 for a total not-to-exceed contract amount of $749,320; and
B. Authorize the City Manager, or his designee, to execute all documents required for the completion of the project including, but not limited to, contracts, agreements, assessments, easements, reduction of retention accounts, and filing a notice of completion at the conclusion of all construction related activities.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Invest in the City's Infrastructure (Water, Streets, Sewers, Parks, Storm Drains and Public Facilities)

FISCAL IMPACT: The recommended Construction Contract with C.I. Services, Inc. is $681,200 plus a 10% contingency of $68,120 for a total not-to-exceed contract amount of $749,320. The Fiscal Year 2024-25 Adopted Budget includes appropriations in the Capital Projects Fund for the Armstrong Community Center Roof Replacement Project.

BACKGROUND & ANALYSIS: The roof at the Armstrong Community Center has outlived its lifespan and has required increased maintenance over time due to deterioration. Staff recommends re-roofing the Community Center with metal roof panels, which will provide faster evaporation and lower roof-top temperatures to reduce interior building temperatures and increase product life cycle.

On January 16, 2025, six (6) bids were received for Bid No. 1854 D&C22-014 Armstrong Community Center Roof Replacement. The bid results are listed below:

VENDOR	LOCATION	AMOUNT
C.I Services, Inc.	Mission Viejo, CA	$681,200
Southland Roofing, Inc.	Los Angeles, CA	$787,300
AME Builders, Inc.	Upland, CA	$938,300
Danny Letner, Inc.	Orange, CA	$940,604
Rite-Way Roof Corporation	Fontana, CA	$943,995
Best Contracting Services, Inc.	Gardena, CA	$983,035

C.I. Services, Inc., of Mission Viejo, California, was the apparent lowest responsible bidder. On January 17, 2025, the City received a protest letter from AME Builders, Inc. stating that C.I. Services, Inc. submitted a non-responsive bid because they failed to provide a required B License. The City responded to AME Builders, Inc. in a letter dated February 11, 2025, stating that the bid protest is meritless because it is the low bidder's responsibility to provide the required licensing for bidding on public works projects to satisfactorily perform the duties stated in the Construction Contract. City Staff is of the opinion that the low bidder has offered such a showing, and all irregularities are waived.

C.I. Services, Inc., of Mission Viejo, California, was the lowest responsive bidder that met all the required specifications with a cost of $681,200. Based on credentials and pricing, Staff recommends awarding Construction Contract No. D&C22-014 Armstrong Community Center Roof Replacement Project to C.I. Services, Inc. The project is estimated to be completed in June 2025.

CITY OF ONTARIO
303 EAST B STREET | ONTARIO, CALIFORNIA 91764
(909) 395-2000 FAX (909) 395-2070 OntarioCA.gov

PAUL S. LEON
MAYOR

ALAN D. WAPNER
MAYOR PRO TEM

JIM W. BOWMAN
DEBRA PORADA
DAISY MACIAS
COUNCIL MEMBERS

SHEILA MAUTZ
CITY CLERK

JAMES R. MILHISER
CITY TREASURER

SCOTT OCHOA
CITY MANAGER

SECTION 00500 – CONTRACT FOR CONSTRUCTION

This Contract for Construction ("Contract"), No. D&C22-014 is made and entered as of _____, by and between City of Ontario, with its principal place of business at 303 East "B" Street, Ontario, CA 91764, sometimes hereinafter called the "City" and **C.I. Services, Inc.**, sometimes hereinafter called "Contractor."

WITNESSETH: That the parties hereto have mutually covenanted and agreed, and by these presents do covenant and agree with each other as follows:

ARTICLE 1. SCOPE OF WORK.

The Contractor shall perform all Work within the time stipulated in the Contract, and shall provide all labor, materials, equipment, tools, utility services, and transportation to complete all of the Work required in strict compliance with the Contract Documents as specified in Article 5, below, for the following Project:

Re-roof the Armstrong Community Center. Demo existing asphalt shingle roof and replace with new standing seam metal roof and new TMP membrane over existing flat mechanical areas & exterior roof gutters with new roof drain grates.

Contractor is an independent contractor and not an agent of the City. The Contractor and its surety shall be liable to the City for any damages arising as a result of the Contractor's failure to comply with this obligation.

ARTICLE 2. TIME FOR COMPLETION.

Time is of the essence in the performance of the Work. The Work shall be commenced on the date stated in the City's Notice to Proceed. The Contractor shall complete all Work required by the Contract Documents within **60 calendar days** from the commencement date stated in the Notice to Proceed. By its signature hereunder, Contractor agrees the time for completion set forth above is adequate and reasonable to complete the Work.

ARTICLE 3. CONTRACT PRICE.

The City shall pay to the Contractor as full compensation for the performance of the Contract, subject to any additions or deductions as provided in the Contract Documents, and including all

applicable taxes and costs, the sum of **Six Hundred Eighty-One Thousand Two Hundred Dollars ($681,200)**. Payment shall be made as set forth in the General Conditions. The City will pay to Contractor compensation based upon the prices set forth in the Bid Schedule.

ARTICLE 4. LIQUIDATED DAMAGES.

Contractor acknowledges that the City will sustain actual damages for each and every Day completion of the Project is delayed beyond the Contract Time. Because of the nature of the Project, it would be impracticable or extremely difficult to determine the City's actual damages. Accordingly, in accordance with Government Code section 53069.85, it is agreed that the Contractor will pay the City the sum of $250.00 (Two Hundred Fifty Dollars) for each and every calendar day of delay beyond the time prescribed in the Contract Documents for finishing the Work, as Liquidated Damages and not as a penalty or forfeiture. In the event this is not paid, the Contractor agrees the City may deduct that amount from any money due or that may become due the Contractor under the Contract. This Section does not exclude recovery of other damages specified in the Contract Documents. Liquidated damages may be deducted from progress payments due Contractor, Project retention or may be collected directly from Contractor, or from Contractor's surety. These provisions for liquidated damages shall not prevent the City, in case of Contractor's default, from terminating the Contractor.

Consistent with Public Contract Code Section 7102, Contractor will be compensated for damages incurred due to delays for which the City is responsible. The parties agree that determining Contractor's exact delay damages is and will continue to be impracticable and extremely difficult. As such, for each calendar day in excess of the Contract Time, the City shall pay to the Contractor $250.00 per day as Reverse Liquidated Damages and not as a penalty or forfeiture. Such amount shall constitute the only payment allowed for any City caused delays and shall necessarily include all overhead, all profits, all administrative costs, all bond costs, all labor, materials, equipment and rental costs and any other costs, expenses and fees incurred or sustained as a result of such delays. Notice of requests for delay damages and additional days shall be provided to the City within five (5) Days from the discovery of the circumstances giving rise to any delay or three (3) Days from the discovery of any latent or subsurface conditions giving rise to a delay.

ARTICLE 5. COMPONENT PARTS OF THE CONTRACT.

The "Contract Documents" include the following:

Notice Inviting Bids
Instructions to Bidders
Bid Forms
Bid Acknowledgement
Bid Schedule
Bid Guarantee
Designation of Subcontractors
Information Required of Bidders
Non-Collusion Declaration Form
Iran Contracting Act Certification
Public Works Contractor DIR Registration Certification
Performance Bond
Payment (Labor and Materials) Bond
Contract for Construction

General Conditions
Special Conditions
Specifications
Addenda
Construction Plans and Drawings
Standard Specifications for Public Works Construction “Greenbook”, latest edition, Except Sections 1-9
Applicable Local Agency Standards and Specifications, as last revised
Reference Specifications
Approved and fully executed Change Orders
Permits
Any other documents contained in or incorporated into the Contract

The Contractor shall complete the Work in strict accordance with all of the Contract Documents.

All of the Contract Documents are intended to be complementary. Work required by one of the Contract Documents and not by others shall be done as if required by all. In the event of conflict, the various Contract Documents will be given effect in the order set forth in the General Conditions. This Contract shall supersede any prior agreement of the parties.

ARTICLE 6. PROVISIONS REQUIRED BY LAW AND CONTRACTOR COMPLIANCE.

Each and every provision of law required to be included in these Contract Documents shall be deemed to be included in these Contract Documents. The Contractor shall comply with all requirements of applicable federal, state and local laws, rules and regulations, including, but not limited to, the provisions of the California Labor Code and California Public Contract Code which are applicable to this Work.

ARTICLE 7. INDEMNIFICATION.

Contractor shall provide indemnification and defense as set forth in the General Conditions.

ARTICLE 8. PREVAILING WAGES.

Contractor shall be required to pay the prevailing rate of wages in accordance with the Labor Code which such rates shall be made available at the City’s Office or may be obtained online at http://www.dir.ca.gov and which must be posted at the job site.

ARTICLE 9. FALSE CLAIMS.

Contractor acknowledges that if a false claim is submitted to the City, it may be considered fraud and Contractor may be subject to criminal prosecution. Contractor acknowledges that the False Claims Act, California Government Code sections 12650, et seq., provides for civil penalties where a person knowingly submits a false claim to a public entity. These provisions include within their scope false claims made with deliberate ignorance of the false information or in reckless disregard of the truth or falsity of the information. In the event the City seeks to recover penalties pursuant to the False Claims Act, it is entitled to recover its litigation costs, including attorneys’ fees. Contractor hereby acknowledges that the filing of a false claim may the Contractor to an administrative debarment proceeding wherein Contractor may be prevented from further bidding on public contracts for a period of up to five (5) years.

[REMAINDER OF PAGE LEFT INTENTIONALLY BLANK]

IN WITNESS WHEREOF, this Contract has been duly executed by the above-named parties, on the day and year above written.

CITY OF ONTARIO

By: _____
Scott Ochoa
City Manager

ATTEST:

By: _____
Sheila Mautz, City Clerk

APPROVED AS TO FORM:

By: _____
Best Best & Krieger LLP
City Attorney

C.I. Services, Inc.

By: _____

Its: _____

Printed Name: _____

[DELETE THE FOLLOWING SIGNATURE LINE IF NOT **REQUIRED**]

By: _____

Its: _____

Printed Name: _____

_____
Contractor's License Number and Classification

_____
DIR Registration Number

[IF CORPORATION, TWO SIGNATURES, PRESIDENT **OR** VICE PRESIDENT **AND** SECRETARY **OR** TREASURER **REQUIRED**]

END OF CONTRACT

Notary Acknowledgment

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF _____

On _____, 20___, before me, _____, Notary Public, personally

appeared _____, who proved to me on the basis of satisfactory

evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____
Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

☐ Individual
☐ Corporate Officer

_____
Title(s)

☐ Partner(s) ☐ Limited ☐ General
☐ Attorney-In-Fact
☐ Trustee(s)
☐ Guardian/Conservator
☐ Other:

Signer is representing:
Name Of Person(s) Or Entity(ies)

_____

_____

DESCRIPTION OF ATTACHED DOCUMENT

_____
Title or Type of Document

_____
Number of Pages

_____
Date of Document

_____
Signer(s) Other Than Named Above

SECTION 00610 – BOND FORMS

Performance Bond

KNOW ALL PERSONS BY THESE PRESENTS:

THAT WHEREAS, the City of Ontario, with its principal place of business at 303 East "B" Street, Ontario, CA 91764, (hereinafter referred to as the "City") has awarded to _____, (hereinafter referred to as the "Contractor") an agreement for **Contract No.D&C22-014 Armstrong Community Center Roof replacement**, (hereinafter referred to as the "Project").

WHEREAS, the work to be performed by the Contractor is more particularly set forth in the Contract Documents for the Project dated _____, (hereinafter referred to as "Contract Documents"), the terms and conditions of which are expressly incorporated herein by reference; and

WHEREAS, the Contractor is required by said Contract Documents to perform the terms thereof and to furnish a bond for the faithful performance of said Contract Documents.

NOW, THEREFORE, we, _____, the undersigned Contractor and _____ as Surety, a corporation organized and duly authorized to transact business under the laws of the State of California, are held and firmly bound unto the City in the sum of _____ DOLLARS, ($_____), said sum being not less than one hundred percent (100%) of the total amount of the Contract, for which amount well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that, if the Contractor, his or its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements in the Contract Documents and any alteration thereof made as therein provided, on its part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their intent and meaning; and shall faithfully fulfill all obligations including the one (1) year guarantee of all materials and workmanship; and shall indemnify and save harmless the City, its officials, officers, employees, and authorized volunteers, as stipulated in said Contract Documents, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

As a part of the obligation secured hereby and in addition to the face amount specified therefore, there shall be included costs and reasonable expenses and fees including reasonable attorney's fees, incurred by the City in enforcing such obligation.

As a condition precedent to the satisfactory completion of the Contract Documents, unless otherwise provided for in the Contract Documents, the above obligation shall hold good for a period of one (1) year after the acceptance of the work by the City, during which time if Contractor shall fail to make full, complete, and satisfactory repair and replacements and totally protect the City from loss or damage resulting from or caused by defective materials or faulty workmanship. The obligations of Surety hereunder shall continue so long as any obligation of Contractor remains. Nothing herein shall limit the City's rights or the Contractor or Surety's obligations under

the Contract, law or equity, including, but not limited to, California Code of Civil Procedure Section 337.15.

Whenever Contractor shall be, and is declared by the City to be, in default under the Contract Documents, the Surety shall remedy the default pursuant to the Contract Documents, or shall promptly, at the City's option:

i. Take over and complete the Project in accordance with all terms and conditions in the Contract Documents; or

ii. Obtain a bid or bids for completing the Project in accordance with all terms and conditions in the Contract Documents and upon determination by Surety of the lowest responsive and responsible bidder, arrange for a Contract between such bidder, the Surety and the City, and make available as work progresses sufficient funds to pay the cost of completion of the Project, less the balance of the contract price, including other costs and damages for which Surety may be liable. The term "balance of the contract price" as used in this paragraph shall mean the total amount payable to Contractor by the City under the Contract and any modification thereto, less any amount previously paid by the City to the Contractor and any other set offs pursuant to the Contract Documents.

iii. Permit the City to complete the Project in any manner consistent with California law and make available as work progresses sufficient funds to pay the cost of completion of the Project, less the balance of the contract price, including other costs and damages for which Surety may be liable. The term "balance of the contract price" as used in this paragraph shall mean the total amount payable to Contractor by the City under the Contract and any modification thereto, less any amount previously paid by the City to the Contractor and any other set offs pursuant to the Contract Documents.

Surety expressly agrees that the City may reject any contractor or subcontractor which may be proposed by Surety in fulfillment of its obligations in the event of default by the Contractor.

Surety shall not utilize Contractor in completing the Project nor shall Surety accept a bid from Contractor for completion of the Project if the City, when declaring the Contractor in default, notifies Surety of the City's objection to Contractor's further participation in the completion of the Project.

The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract Documents or to the Project to be performed thereunder shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract Documents or to the Project.

[REMAINDER OF PAGE LEFT INTENTIONALLY BLANK]

IN WITNESS WHEREOF, we have hereunto set our hands and seals this _____ day of _____, 20___.

(Corporate Seal)

_____
Contractor/ Principal

By_____

Title_____

(Corporate Seal)

_____
Surety

By _____
Attorney-in-Fact

(Attach Attorney-in-Fact Certificate)

Title_____

The rate of premium on this bond is _____ per thousand. The total amount of premium charges is $_____.
(The above must be filled in by corporate attorney.)

THIS IS A REQUIRED FORM

Any claims under this bond may be addressed to:

(Name and Address of Surety) _____
_____
_____

(Name and Address of Agent or Representative for service of process in California, if different from above) _____
_____
_____

(Telephone number of Surety and Agent or Representative for service of process in California) _____

Notary Acknowledgment

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF _____

On _____, 20___, before me, _____, Notary Public, personally

appeared _____, who proved to me on the basis of satisfactory

evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____
Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

☐ Individual
☐ Corporate Officer

_____
Title(s)

☐ Partner(s) ☐ Limited ☐ General
☐ Attorney-In-Fact
☐ Trustee(s)
☐ Guardian/Conservator
☐ Other:

Signer is representing:
Name Of Person(s) Or Entity(ies)

_____
_____

DESCRIPTION OF ATTACHED DOCUMENT

_____
Title or Type of Document

_____
Number of Pages

_____
Date of Document

_____
Signer(s) Other Than Named Above

NOTE: This acknowledgment is to be completed for Contractor/Principal.

Notary Acknowledgment

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF _____

On _____, 20___, before me, _____, Notary Public, personally

appeared _____, who proved to me on the basis of satisfactory

evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____
Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

☐ Individual
☐ Corporate Officer

_____
Title(s)

☐ Partner(s) ☐ Limited ☐ General
☐ Attorney-In-Fact
☐ Trustee(s)
☐ Guardian/Conservator
☐ Other:

Signer is representing:
Name Of Person(s) Or Entity(ies)

_____
_____

DESCRIPTION OF ATTACHED DOCUMENT

_____
Title or Type of Document

_____
Number of Pages

_____
Date of Document

_____
Signer(s) Other Than Named Above

NOTE: This acknowledgment is to be completed for the Attorney-in-Fact. The Power-of Attorney to local representatives of the bonding company must also be attached.

END OF PERFORMANCE BOND

Payment Bond (Labor and Materials).

KNOW ALL MEN BY THESE PRESENTS That

WHEREAS, the City of Ontario , with its principal place of business at 303 East "B" Street, Ontario, CA 91764 (hereinafter designated as the "City"), by action taken or a resolution passed _____ , 20_____, has awarded to _____ hereinafter designated as the "Principal," a contract for the work described as follows: **Contract No. D&C22-014 Armstrong Community Center Roof replacement** (the "Project"); and

WHEREAS, the work to be performed by the Contractor is more particularly set forth in the Contract Documents for the Project dated _____, (hereinafter referred to as "Contract Documents"), the terms and conditions of which are expressly incorporated herein by reference; and

WHEREAS, said Principal is required to furnish a bond in connection with said contract; providing that if said Principal or any of its Subcontractors shall fail to pay for any materials, provisions, provender, equipment, or other supplies used in, upon, for or about the performance of the work contracted to be done, or for any work or labor done thereon of any kind, or for amounts due under the Unemployment Insurance Code or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of said Principal and its Subcontractors with respect to such work or labor the Surety on this bond will pay for the same to the extent hereinafter set forth.

NOW THEREFORE, we, the Principal and _____ as Surety, are held and firmly bound unto the City in the penal sum of _____ Dollars ($_____) lawful money of the United States of America, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if said Principal, his or its subcontractors, heirs, executors, administrators, successors or assigns, shall fail to pay any of the persons named in Civil Code Section 9100, fail to pay for any materials, provisions or other supplies, used in, upon, for or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or amounts due under the Unemployment Insurance Code with respect to work or labor performed under the contract, or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department or Franchise Tax Board from the wages of employees of the contractor and his subcontractors pursuant to Revenue and Taxation Code Section 18663, with respect to such work and labor the Surety or Sureties will pay for the same, in an amount not exceeding the sum herein above specified, and also, in case suit is brought upon this bond, all litigation expenses incurred by the City in such suit, including reasonable attorneys' fees, court costs, expert witness fees and investigation expenses.

This bond shall inure to the benefit of any of the persons named in Civil Code Section 9100 so as to give a right of action to such persons or their assigns in any suit brought upon this bond.

It is further stipulated and agreed that the Surety on this bond shall not be exonerated or released from the obligation of this bond by any change, extension of time for performance, addition, alteration or modification in, to, or of any contract, plans, specifications, or agreement pertaining or relating to any scheme or work of improvement herein above described, or pertaining or relating

to the furnishing of labor, materials, or equipment therefore, nor by any change or modification of any terms of payment or extension of the time for any payment pertaining or relating to any scheme or work of improvement herein above described, nor by any rescission or attempted rescission or attempted rescission of the contract, agreement or bond, nor by any conditions precedent or subsequent in the bond attempting to limit the right of recovery of claimants otherwise entitled to recover under any such contract or agreement or under the bond, nor by any fraud practiced by any person other than the claimant seeking to recover on the bond and that this bond be construed most strongly against the Surety and in favor of all persons for whose benefit such bond is given, and under no circumstances shall Surety be released from liability to those for whose benefit such bond has been given, by reason of any breach of contract between the owner or the City and original contractor or on the part of any obligee named in such bond, but the sole conditions of recovery shall be that claimant is a person described in Civil Code Section 9100, and has not been paid the full amount of his claim.

The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract to be performed thereunder, shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of Contract, including but not limited to, the provisions of Sections 2819 and 2845 of the California Civil Code.

IN WITNESS WHEREOF, we have hereunto set our hands and seals this _____ day of _____, 20__.

(Corporate Seal)

_____
Contractor/ Principal

By_____

Title_____

(Corporate Seal)

_____
Surety

By _____
Attorney-in-Fact

(Attach Attorney-in-Fact Certificate)

Title_____

Notary Acknowledgment

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF _____

On _____, 20___, before me, _____, Notary Public, personally

appeared _____, who proved to me on the basis of satisfactory

evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____
Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

☐ Individual
☐ Corporate Officer

_____
Title(s)

☐ Partner(s) ☐ Limited ☐ General
☐ Attorney-In-Fact
☐ Trustee(s)
☐ Guardian/Conservator
☐ Other:

Signer is representing:
Name Of Person(s) Or Entity(ies)

_____

_____

DESCRIPTION OF ATTACHED DOCUMENT

_____
Title or Type of Document

_____
Number of Pages

_____
Date of Document

_____
Signer(s) Other Than Named Above

NOTE: This acknowledgment is to be completed for Contractor/Principal.

Notary Acknowledgment

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF _____

On _____, 20___, before me, _____, Notary Public, personally

appeared _____, who proved to me on the basis of satisfactory

evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____
Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

☐ Individual
☐ Corporate Officer

_____
Title(s)

☐ Partner(s) ☐ Limited ☐ General
☐ Attorney-In-Fact
☐ Trustee(s)
☐ Guardian/Conservator
☐ Other:

Signer is representing:
Name Of Person(s) Or Entity(ies)

_____
_____

DESCRIPTION OF ATTACHED DOCUMENT

_____
Title or Type of Document

_____
Number of Pages

_____
Date of Document

_____
Signer(s) Other Than Named Above

NOTE: This acknowledgment is to be completed for the Attorney-in-Fact. The Power-of-Attorney to local representatives of the bonding company must also be attached.

END OF PAYMENT BOND

SECTION 00700 – GENERAL CONDITIONS

ARTICLE 1 -TERMS; DEFINITIONS

1.1 Defined Terms

A. Whenever used in the Contract Documents and printed with initial capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof. In addition to terms specifically defined below, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.

1. Act of God – An earthquake of magnitude of 3.5 or higher on the Richter scale or a tidal wave.

2. Addenda -- Written or graphic instruments issued prior to the submission of Bids which clarify, correct, or change the Contract Documents.

3. Additional Work -- New or unforeseen work will be classified as "Additional Work" when the Engineer determines that it is not covered by the Contract.

4. Applicable Laws -- The laws, statutes, ordinances, rules, codes, regulations, permits, and licenses of any kind, issued by local, state or federal governmental authorities or private authorities with jurisdiction (including utilities), to the extent they apply to the Work.

5. Bid -- The offer or proposal of a Bidder submitted on the prescribed form setting forth the prices and other terms for the Work to be performed.

6. Bid Guarantee -- The Bid Bond, cashier's check, or certified check to be made by the Bidder, which is to accompany the Bid as a guaranty of good faith to enter into a written contract.

7. Bidder -- The individual or entity who submits a Bid directly to the City.

8. Change Order ("CO") -- A document that authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Contract, in accordance with the Contract Documents and in the form contained in the Contract Documents.

9. Change Order Request ("COR") -- A request made by the Contractor for an adjustment in the Contract Price and/or Contract Times as the result of a Contractor-claimed change to the Work.

10. City's Representative – The City of Ontario, and acting through properly authorized agents, such as the Engineer or such other agents acting within the scope of the particular duties entrusted to them. Also sometimes referred to as the "City's Representative" or "Representative" in the Contract Documents. The terms the City and Owner may be used interchangeably

11. Claim -- A demand or assertion by the City or Contractor seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.

12. Contract -- The entire integrated written agreement between the City and Contractor concerning the Work. "Contract" may be used interchangeably with "Agreement" in the Contract Documents. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral, and includes all Contract Documents.

13. Contract Documents -- The documents listed in Section 00 52 13, Article 5 of the Contract for Construction. Some documents provided by the City to the Bidders and Contractor, including but not limited to reports and drawings of subsurface and physical conditions are not Contract Documents.

14. Contract Price -- Amount to be paid by the City to the Contractor as full compensation for the performance of the Contract and completion of the Work, subject to any additions or deductions as provided in the Contract Documents, and including all applicable taxes and costs.

15. Contract Time -- The number of days or the dates stated in the Contract Documents to: achieve defined milestones, if any; and to complete the Work so that it is ready for final payment.

16. Contractor -- The individual or entity with which the City has contracted for performance of the Work.

1. Contractor's Designated On-Site Representative -- The Contractor's Designated On-Site Representative will be identified by the Contractor and shall not be changed without prior written consent of the City.

2. Critical Supply Shortage -- An unusual shortage in materials that is (a) supported by documented proof that Contractor made every effort to obtain such materials from all available sources; (b) such shortage is due to the fact that such materials are not physically available from single or multiple sources or could have been obtained only at exorbitant prices entirely inconsistent with current and standard rates taking into account the quantities involved and the usual industry practices in obtaining such quantities; and (c) such shortages and the difficulties in obtaining alternate sources of materials could not have been known or anticipated by Contractor at the time it submitted its bid or entered the Contract. Market fluctuations in prices of materials, whether or not resulting from a Force Majeure Event, does not constitute a Critical Supply Shortage.

3. Day -- A calendar day of 24 hours measured from midnight to the next midnight.

4. Defective Work -- Work that is unsatisfactory, faulty, or deficient; or that does not conform to the Contract Documents; or that does not meet the requirements of any inspection, reference standard, test, or approval referenced in the Contract Documents.

5. Demobilization -- The complete dismantling and removal by the Contractor of all of the Contractor's temporary facilities, equipment, and personnel at the Site.

6. Drawings -- That part of the Contract Documents prepared by of the Engineer of Record which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings and other Contractor Submittals are not Drawings as so defined.

7. Effective Date of the Contract -- The date indicated in the Contract on which it becomes effective, but if no such date is indicated, it means the date on which the Contract is signed and delivered by the last of the two parties to sign and deliver.

8. Engineer -- Whenever not qualified, shall mean the City Engineer or the Engineer authorized to act for and in behalf of the City, acting either directly or through properly authorized agents, such agents acting severally within the scope of the particular duties entrusted to them.

9. Force Majeure Event -- An event that materially affects a party's performance and is one or more of the following: (1) Acts of God or other natural disasters occurring at the Site; (2) terrorism or other acts of a public enemy; (3) orders of governmental authorities (including, without limitation, unreasonable and unforeseeable delay in the issuance of permits or approvals by governmental authorities that are required for the Work); (4) pandemics, epidemics or quarantine restrictions; (5) strikes and other organized labor action occurring at the Site and the effects thereof on the Work, only to the extent such strikes and other organized labor action are beyond the control of Contractor and its Subcontractors, of every Tier, and to the extent the effects thereof cannot be avoided by use of replacement workers; and (6) a Critical Supply Shortage. For purposes of this section, "orders of governmental authorities," includes ordinances, emergency proclamations and orders, rules to protect the public health, welfare and safety, and other actions of the City in its capacity as a municipal authority.

10. Hazardous Waste -- The term "Hazardous Waste" shall have the meaning provided in Section 104 of the Solid Waste Disposal Act (42 U.S.C. § 6903) as amended from time to time, or any substance or material identified as hazardous under any state or federal statute governing handling, disposal and/or cleanup of any such substance or material, whichever is more restrictive.

11. Holiday – Holidays occur on:

    New Year's Day - January 1
    President's Day – Third Monday in February
    Memorial Day - Last Monday in May
    Independence Day - July 4
    Labor Day - First Monday in September
    Veteran's Day - November 11
    Thanksgiving Day - Fourth Thursday in November
    Friday after Thanksgiving
    Christmas Eve – December 24
    Christmas Day - December 25

Day After Christmas – December 26
New Year's Eve – December 31

If any Holiday listed above falls on a Saturday, Saturday and the preceding Friday are both Holidays. If the Holiday should fall on a Sunday, Sunday and the following Monday are both Holidays.

12. Notice of Award -- The written notice by the City to the Successful Bidder stating that upon timely compliance by the Successful Bidder with the conditions precedent listed therein, the City will sign and deliver the Contract.

13. Notice of Completion -- The form which may be executed by the City constituting final acceptance of the Project.

14. Notice to Proceed -- A written notice given by the City to Contractor fixing the date on which the Contractor may proceed with the Work and when Contract Times will commence to run.

15. Project -- The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.

16. Record Drawings – The record set of as-builts prepared by the Contractor during the Work in accordance with the requirements of the General Conditions.

17. Recyclable Waste Materials -- Materials removed from the Site which are required to be diverted to a recycling center rather than an area landfill. Recyclable Waste Materials include, but are not limited to, asphalt, concrete, brick, concrete block, and rock.

18. Sample -- A physical example furnished by the Contractor to illustrate materials, equipment or workmanship; to establish standards by which the Work will be judged.

19. Schedule of Submittals -- A schedule, prepared and maintained by Contractor, of required submittals and the time requirements to facilitate scheduled performance of related construction activities.

20. Shop Drawings -- All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work.

21. Site -- Lands or areas indicated in the Contract Documents as being furnished by the City upon which the Work is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by the City which are designated for the use of Contractor.

22. Specifications -- That part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable thereto.

23. Stop Payment Notice -- A written notice as defined in Civil Code section 8044.

24. Subcontractor -- An individual or entity other than a Contractor having a contract with any other entity than the City for performance of any portion of the Work at the Site.

25. Submittal -- Written and graphic information and physical samples prepared and supplied by the Contractor demonstrating various portions of the Work.

26. Successful Bidder -- The responsible Bidder submitting a responsive Bid to whom the City makes an award.

27. Supplier -- A manufacturer, fabricator, supplier, distributor, material man, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment used in the performance of the Work or to be incorporated in the Work.

28. Underground Facilities -- All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.

29. Unit Price Work -- Work to be paid for on the basis of unit prices as provided by the Contractor in its Bid or as adjusted in accordance with the Contract Documents.

30. Warranty -- A guarantee provided to the City by the Contractor that the Work will remain free of defects and suitable for its intended use for the period required by the Contract Documents or the longest period permitted by the law of this state, whichever is longer.

31. Work -- The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.

1.2 Terminology.

A. The words and terms below are not defined but, when used in the Contract Documents, have the indicated meaning.

1. The word “furnish,” when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.

2. The word “install,” when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.

3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.

4. Regardless of whether “furnish,” “install,” “perform,” or “provide” is used in connection with services, materials, or equipment, an obligation of Contractor is implied.

B. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2 -PRELIMINARY MATTERS

2.1 Delivery of Contract Documents

A. Within ten (10) Days after receipt of the Notice of Award and before the City will execute the Contract, the Contractor shall furnish and file with the City a signed Contract and the necessary Performance Bond, Payment Bond, and Certificates of Insurance and Endorsements, as well as any other documents specified in the Contract Documents.

2.2 Bonds

A. Contractor shall submit the bonds on the forms provided with the Contract Documents, duly executed by a responsible corporate surety admitted to transact surety business in the State of California, as defined in Code of Civil Procedure section 995.120, and listed in the United States Department of the Treasury circular entitled "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies," authorized to do business in the State of California and acceptable to the City conditioned upon the faithful performance by the Contractor of all requirements of the Contract Documents. Each of the bonds shall be in a sum no less than one hundred percent (100%) of the Contract Price. Bonds shall be delivered to the City within ten (10) Days after receipt of the Notice of Award and before execution of the Contract by the City.

2.3 Evidence of Insurance

A. Prior to commencing any Work but no later than ten (10) Days after receipt of the Notice of Award, the Contractor shall submit or cause to be submitted any and all Certificates of Insurance and Endorsements, showing that the Contractor has the required insurance, to the attention of the City. Such insurance is to be provided at the sole cost and expense of the Contractor. No Work shall be performed until all of the required insurance has been received and approved.

2.4 Execution of the Contract

A. Upon receipt of the required Contract Documents, the City will execute the Contract, establishing the Effective Date of the Contract.

2.5 Contractor's Failure to Perform

A. Should Contractor fail to comply with timelines provided above, the City shall retain the right to enforce and collect on the Contractor's Bid Guarantee, rescind award to the Contractor and award the Contract to the next lowest responsive, responsible bidder as determined by the City. If the City elects to accept bonds and insurance submitted late, the Contract Times will begin to run as of the date stated in the Notice to Proceed. However, the number of days beyond the original ten (10) Days it took to receive the properly executed Contract and related items may be deducted from the Contract Times.

2.6 Commencement of Contract Times; Notice to Proceed

A. The City will not issue a Notice to Proceed until after the Effective Date of the Contract. Work shall commence within ten (10) Days of the date stated in the Notice to Proceed. The Contract Times begin to run on the date specified in the Notice to Proceed. No Work shall be done at the Site prior to the issuance of the Notice to Proceed.

2.7 Copies of Documents

A. Contractor will be furnished, free of charge, five (5) copies of the Contract Documents. Additional copies may be obtained at cost of reproduction. Contractor shall maintain a clean, undamaged set of Contract Documents, including Submittals, at the Project site.

2.8 Substitution Requests, Schedule of Submittals, and Schedule

A. Substitution Requests. Within thirty-five (35) days of Contract award (unless otherwise specified in the Contract Documents), Contractor shall provide all substitution requests as further described in the General Conditions.

B. Schedule of Submittals. Within five (5) Days after the issuance of the Notice of Proceed (unless otherwise specified in the Contract Documents), Contractor shall submit to the City a Schedule of Submittals that conforms with the requirements of Section 00 72 00, Article 5.21.

C. Schedule. Within ten (10) days after the issuance of the Notice of Proceed (unless otherwise specified in the Contract Documents), the Contractor shall submit a construction schedule that conforms with the requirements of Section 00 72 00, Article 8.2.

2.9 Preconstruction Conference; Designation of Authorized Representatives.

A. Before any Work at the Site is started, a conference attended by the City, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules

referred to herein, procedures for handling Submittals and Shop Drawings, processing applications for payment, and maintaining required records.

B. At this conference the City and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit instructions, receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

2.10 Subcontractor Mobilization Meeting.

A. Prior to the start of each major Subcontractor's Site Work, the Contractor, the involved Subcontractor, and Engineer shall attend a pre-start meeting to discuss the schedule, coordination, procedures, and other administrative issues.

2.11 Authority of Council; Engineer

A. The City Council has the final authority in all matters affecting the Work. Within the scope of the Contract, the Engineer has the authority to enforce compliance with the Contract Documents. The Contractor shall promptly comply with instructions from the Engineer.

B. The decision of the Engineer is final and binding on all questions relating to:

1. quantities;

2. acceptability of material, equipment, or work;

3. execution, progress or sequence of work;

4. interpretation of the Plans, Specifications, or other Contract Documents; and

5. Any other areas specifically identified in the Contract Documents or under the law.

C. Compliance with instructions from the Engineer shall be a condition precedent to any payment under the Contract, unless otherwise ordered by the City Council.

2.12 Mobilization

A. When a Bid item is included in the Bid Schedule for mobilization, the costs of Work in advance of construction operations and not directly attributable to any specific bid item will be included in the progress estimate. When no bid item is provided for mobilization payment for such costs will be deemed to be included in the other items of the Work.

B. Payment for mobilization based on the lump sum provided in the Bid Schedule, shall constitute full compensation for all such Work. No payment for mobilization will be made until all of the listed items have been completed to the satisfaction of the Engineer. The scope of the Work included under mobilization shall include, but shall not be limited to, the following principal items:

1. Obtaining and paying for all bonds, insurance, and permits.

2. Moving on to the Project Site of all Contractor's plant and equipment required for the first month's operations.

3. Installing temporary construction power, wiring, and lighting facilities, as applicable.

4. Establishing fire protection system, as applicable.

5. Developing and installing a construction water supply, as applicable.

6. Providing and maintaining the field office trailers for the Contractor, if necessary, and the Engineer (if specified), complete, with all specified furnishings and utility services.

7. Providing on-site sanitary facilities and potable water facilities as specified per Cal-OSHA and these Contract Documents.

8. Furnishing, installing, and maintaining all storage buildings or sheds required for temporary storage of products, equipment, or materials that have not yet been installed in the Work. All such storage shall meet manufacturer's specified storage requirements, and the specific provisions of the specifications, including temperature and humidity control, if recommended by the manufacturer, and for all security.

9. Arranging for and erection of Contractor's work and storage yard.

10. Posting all OSHA required notices and establishment of safety programs per Cal-OSHA.

11. Full-time presence of Contractor's superintendent at the job Site as required herein.

12. Submittal of construction schedule as required by the Contract Documents.

ARTICLE 3 -CONTRACT DOCUMENTS; INTENT

3.1 Examination of Drawings, Specifications, and Site of Work

A. Examination of Contract Documents; Site. Before commencing any portion of the Work, Contractor shall again carefully examine all applicable Contract Documents, the Project Site, and other information given to Contractor as to materials and methods of construction and other Project requirements. Contractor shall immediately notify the Engineer of any potential error, inconsistency, ambiguity, conflict, or lack of detail or explanation. If Contractor performs, permits, or causes the performance of any Work which is in error, inconsistent or ambiguous, or not sufficiently detailed or explained, Contractor shall bear any and all resulting costs, including, without limitation, the cost of correction. In no case shall the Contractor or any Subcontractor proceed with Work if uncertain as to the applicable requirements.

B. Additional Instructions. After notification of any error, inconsistency, ambiguity, conflict, or lack of detail or explanation, the Engineer will provide any required additional instructions, by means of drawings or other written direction, necessary for proper execution of Work.

C. Quality of Parts, Construction and Finish. All parts of the Work shall be of the best quality of their respective kinds and the Contractor must use all diligence to inform itself fully as to the required construction and finish.

D. Contractor's Variation from Contract Document Requirements. If it is found that the Contractor has varied from the requirements of the Contract Documents including the requirement to comply with all Applicable Laws, the Engineer may at any time, before or after completion of the Work, order the improper Work removed, remade or replaced by the Contractor at the Contractor's expense.

3.2 Intent of Contract Documents

A. The Contract Documents are complementary; what is required by any one will be binding as if required by all. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that reasonably may be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the indicated result will be provided whether or not specifically called for, at no additional cost to the City.

B. The Contractor shall furnish, unless otherwise provided in the Contract Documents, all materials, implements, machinery, equipment, tools, supplies and labor necessary to the prosecution and completion of the Project.

C. Clarifications and interpretations of the Contract Documents shall be issued by the Engineer as provided in these General Conditions.

D. If utilities to equipment/fixtures are not shown but are necessary to operate the equipment/fixtures, the utilities service installation is considered to be part of the Work. The implied Work will conform to the appropriate sections of the Contract Documents.

E. Organization of the Contract Documents into divisions, sections, and articles, and arrangement of drawings shall not control the Contractor in dividing Work among Subcontractors or in establishing the extent of Work to be performed by any trade.

3.3 Reference Standards.

A. Standards, Specifications, Codes, Laws, and Regulations.

1. Reference to federal specifications, federal standards, other standards, specifications, manuals, or codes of any technical society, organization, or association, or to Applicable Laws, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Applicable Laws in effect at the time of opening of Bids (or on the Effective Date of the

Contract if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.

2. No provision of any such standard, specification, manual, or code, or any instruction of a Supplier, shall be effective to change the duties or responsibilities of the City, Contractor, or any of their Subcontractors, consultants, agents, or employees, from those set forth in the Contract Documents. No such provision or instruction shall be effective to assign to the City, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

3.4 Reporting and Resolving Discrepancies; Order of Precedence.

A. Reporting Discrepancies.

1. The Contract Documents are intended to be fully cooperative and complementary. Before undertaking each part of the Work, Contractor shall carefully study and compare the Contract Documents and check and verify pertinent figures therein and all applicable field measurements. Contractor shall promptly report in writing to the City any conflict, error, ambiguity, or discrepancy which Contractor discovers, should have discovered, or has actual knowledge of, and shall obtain a written interpretation or clarification from the City before proceeding with any Work affected thereby. If, during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (i) any Applicable Law, (ii) any standard, specification, manual, or code, or (iii) any instruction of any Supplier, then Contractor shall promptly submit a written Request for Information (RFI) to the City. Contractor shall not proceed with the Work affected thereby (except in an emergency) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in the Contract Documents, and any Work performed by Contractor before receipt of an amendment or supplement shall be at Contractor's own risk.

B. Order of Precedence.

1. In case of conflicts between the Contract Documents, the order of precedence shall be as follows:

   a. Permits from other agencies as may be required by law

   b. Change Orders, most recent first

   c. Contract

   d. Addenda, most recent first

   e. Special Conditions

   f. Specifications

g. Construction Plans and Drawings(Contract Drawings)

h. General Conditions

i. Instructions to Bidders

j. Notice Inviting Bids

k. Contractor's Bid (Bid Forms)

l. Standard Specifications for Public Works Construction "Greenbook" latest edition (Sections 1-9 Excluded)

m. Applicable Local Agency Standards and Specifications

n. Standard Drawings

o. Reference Documents

2. With reference to the Drawings the order of precedence shall be as follows:

a. Figures govern over scaled dimensions

b. Detail drawings govern over general drawings

c. Addenda/Change Order drawings govern over Drawings

d. Contract Drawings govern over Standard Drawings

e. Contract Drawings govern over Shop Drawings

3. Notwithstanding the orders of precedence established above, in the event of conflicts, the higher standard, higher quality and most expensive shall always apply.

3.5 Amending and Supplementing Contract Documents.

A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof only by Change Order or written amendment to the Contract duly executed by the parties.

B. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized at no cost to the City, by one or more of the following ways:

1. The City's review of a Submittal, Shop Drawing, Sample or substitution request without exception (subject to the provisions of the Contract Documents); or

2. The City's issuance of a response to an RFI.

C. However, no review or RFI response will reduce or modify the Contractor's obligation to fully satisfy and comply with the requirements of the Contract Documents.

3.6 Reuse of Documents.

A. Contractor and any Subcontractor or Supplier shall not:

1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer of Record or its consultants, including electronic media editions; or

2. reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of the City and Engineer of Record and specific written verification or adaptation by Engineer of Record.

B. The prohibitions of this Article will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

ARTICLE 4 -INDEMNIFICATION; INSURANCE

4.1 Indemnification

A. To the fullest extent permitted by law, Contractor shall immediately defend (with counsel of the City's choosing), indemnify and hold harmless the City, its officials, officers, agents, employees, and representatives, and each of them from and against:

1. Any and all claims, demands, causes of action, costs, expenses, injuries, losses or liabilities, in law or in equity, of every kind or nature whatsoever, but not limited to, injury to or death, including wrongful death, of any person, and damages to or destruction of property of any person, arising out of, related to, or in any manner directly or indirectly connected with the Work or this Contract, including claims made by subcontractors for nonpayment, including without limitation the payment of all consequential damages and attorney's fees and other related costs and expenses, however caused, regardless of whether the allegations are false, fraudulent, or groundless, and regardless of any negligence of the City or its officers, employees, or authorized volunteers (including passive negligence), except the sole negligence or willful misconduct or active negligence of the City or its officials, officers, employees, or authorized volunteers.

2. Contractor's defense and indemnity obligation herein includes, but is not limited to damages, fines, penalties, attorney's fees and costs arising from claims under the Americans with Disabilities Act (ADA) or other federal or state disability access or discrimination laws arising from Contractor's Work during the course of construction of the improvements or after the Work is complete, as the result of defects or negligence in Contractor's construction of the improvements.

3. Any and all actions, proceedings, damages, costs, expenses, fines, penalties or liabilities, in law or equity, of every kind or nature whatsoever, arising out of, resulting from, or on account of the violation of any governmental law or regulation, compliance with which is the responsibility of Contractor;

4. Any and all losses, expenses, damages (including damages to the Work itself), attorney's fees, and other costs, including all costs of defense which any of them may incur with respect to the failure, neglect, or refusal of Contractor to faithfully perform the Work and all of Contractor's obligations under Contract. Such costs, expenses, and damages shall include all costs, including attorney's fees, incurred by the indemnified parties in any lawsuit to which they are a party.

B. Contractor shall immediately defend, at Contractor's own cost, expense and risk, with the counsel of the City choosing, any and all such aforesaid suits, actions or other legal proceedings of every kind that may be brought or instituted against the City, its officials, officers, agents, employees and representatives. Contractor shall pay and satisfy any judgment, award or decree that may be rendered against the City, its officials, officers, employees, agents, employees and representatives, in any such suit, action or other legal proceeding. Contractor shall reimburse the City, its officials, officers, agents, employees and representatives for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided. The only limitations on this provision shall be those imposed by Civil Code section 2782.

C. The provisions of this Article shall survive the termination of this Contract howsoever caused, and no payment, partial payment, or acceptance of occupancy in whole or part of the Work shall waive or release any of the provisions of this Article.

4.2 Insurance

The Contractor shall obtain, and at all times during performance of the Work of Contract, maintain all of the insurance described in this Article. Contractor shall not commence Work under this Contract until it has provided evidence satisfactory to the City that it has secured all insurance required hereunder. Contractor shall not allow any Subcontractor to commence work on any subcontract until it has provided evidence satisfactory to the City that the subcontractor has secured all insurance required under this Article. Failure to provide and maintain all required insurance shall be grounds for the City to terminate this Contract for cause. Contractor shall furnish the City with original certificates of insurance and endorsements effective coverage required by this Contract on forms satisfactory to the City. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf, and shall be on forms acceptable to the City. All certificates and endorsements must be received and approved by the City before Work commences.

A. **Additional Insureds; Waiver of Subrogation**. The City, its officials, officers, employees, agents and authorized volunteers shall be named as Additional Insureds on Contractor's All Risk policy and on Contractor's and its subcontractors' policies of Commercial General Liability and Automobile Liability insurance using, for Contractor's policy/ies of Commercial General Liability insurance, ISO CG forms 20 10 and 20 37 (or endorsements providing the exact same coverage, including completed operations), and, for subcontractors' policies of Commercial General Liability insurance, ISO CG form 20 38 (or endorsements providing the exact same coverage). Notwithstanding the minimum limits set forth in this Contract for any type of insurance coverage, all available insurance proceeds in excess of the specified minimum limits of coverage shall be available to the parties required to be named as Additional Insureds hereunder. All insurance coverage maintained or procured

pursuant to this Contract shall be endorsed to waive subrogation against the City, its officers, officials**,** agents, employees or volunteers or shall specifically allow Contractor - or others providing insurance evidence in compliance with these specifications - to waive their right of recovery prior to a loss. Contractor hereby waives its own right of recovery against the City, and shall require similar written express waivers and insurance clauses from each of its subcontractors. Copies of these waivers shall be submitted to the City prior to commencement of work.

B. **Workers' Compensation Insurance**. The Contractor shall provide workers' compensation insurance for all of the employees engaged in Work under this Contract, on or at the Site, and, in case of any sublet Work, the Contractor shall require the subcontractor similarly to provide workers' compensation insurance for all the latter's employees as prescribed by State law. Any class of employee or employees not covered by a subcontractor's insurance shall be covered by the Contractor's insurance. In case any class of employees engaged in work under this Contract, on or at the Site, is not protected under the Workers' Compensation Statutes, the Contractor shall provide or shall cause a subcontractor to provide, adequate insurance coverage for the protection of such employees not otherwise protected. The Contractor is required to secure payment of compensation to his employees in accordance with the provisions of section 3700 of the Labor Code. The Contractor shall file with the City certificates of his insurance protecting workers. Company or companies providing insurance coverage shall be acceptable to the City, if in the form and coverage as set forth in the Contract Documents.

C. **Employer's Liability Insurance**. Contractor shall provide Employer's Liability Insurance, including Occupational Disease, in the amount of at least one million dollars ($1,000,000.00) per person per accident. Contractor shall provide the City with a certificate of Employer's Liability Insurance. Such insurance shall comply with the provisions of the Contract Documents. The policy shall be endorsed, if applicable, to provide a Borrowed Servant/Alternate Employer Endorsement and contain a Waiver of Subrogation in favor of the City.

D. **Commercial General Liability Insurance**. Contractor shall provide "occurrence" form Commercial General Liability insurance coverage at least as broad as the most current ISO CGL Form 00 01, including but not limited to, premises liability, contractual liability, products/completed operations, personal and advertising injury which may arise from or out of Contractor's operations, use, and management of the Site, or the performance of its obligations hereunder. The policy shall not contain any exclusion contrary to this Contract including but not limited to endorsements or provisions limiting coverage for (1) contractual liability (including but not limited to ISO CG 24 26 or 21 39); or (2) cross-liability for claims or suits against one insured against another. Policy limits shall not be less than $5,000,000 per occurrence for bodily injury, personal injury and property damage If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit. Defense costs shall be paid in addition to the limits.

1. Such policy shall comply with all the requirements of this Article. The limits set forth herein shall apply separately to each insured against whom claims are made or

suits are brought, except with respect to the limits of liability. Further the limits set forth herein shall not be construed to relieve the Contractor from liability in excess of such coverage, nor shall it limit Contractor's indemnification obligations to the City, and shall not preclude the City from taking such other actions available to the City under other provisions of the Contract Documents or law.

2. All general liability policies provided pursuant to the provisions of this Article shall comply with the provisions of the Contract Documents.

3. All general liability policies shall be written to apply to all bodily injury, including death, property damage, personal injury, owned and non-owned equipment, blanket contractual liability, completed operations liability, explosion, collapse, under-ground excavation, removal of lateral support, and other covered loss, however occasioned, occurring during the policy term, and shall specifically insure the performance by Contractor of that part of the indemnification contained in these General Conditions relating to liability for injury to or death of persons and damage to property.

4. If the coverage contains one or more aggregate limits, a minimum of 50% of any such aggregate limit must remain available at all times; if over 50% of any aggregate limit has been paid or reserved, the City may require additional coverage to be purchased by Contractor to restore the required limits. Contractor may combine primary, umbrella, and as broad as possible excess liability coverage to achieve the total limits indicated above. Any umbrella or excess liability policy shall include the additional insured endorsement described in the Contract Documents.

5. All policies of general liability insurance shall permit and Contractor does hereby waive any right of subrogation which any insurer of Contractor may acquire from Contractor by virtue of the payment of any loss.

E. **Automobile Liability Insurance**. Contractor shall provide Automobile Liability Insurance at least as broad as ISO CA 00 01 (Any Auto) in the amount of, at least, two million dollars ($2,000,000) per accident for bodily injury and property damage. Such insurance shall provide coverage with respect to the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by Contractor or for which Contractor is responsible, in a form and with insurance companies acceptable to the City. All policies of automobile insurance shall permit and Contractor does hereby waive any right of subrogation which any insurer of Contractor may acquire from Contractor by virtue of the payment of any loss.

F. **Builder's Risk ["All Risk"]**

1. It is the Contractor's responsibility to maintain or cause to be maintained Builder's Risk ["All Risk"] extended coverage insurance on all work, material, equipment, appliances, tools, and structures that are or will become part of the Work and subject to loss or damage by fire, and vandalism and malicious mischief, in an amount to cover 100% of the replacement cost. The City accepts no responsibility for the Work until the Work is formally accepted by the City. The Contractor shall

provide a certificate evidencing this coverage before commencing performance of the Work.

2. The named insureds shall be Contractor, all Subcontractors of any tier (excluding those solely responsible for design work), suppliers, and the City, its elected officials, officers, employees, agents and authorized volunteers, as their interests may appear. Contractor shall not be required to maintain property insurance for any portion of the Work following acceptance by the City.

3. Policy shall be provided for replacement value on an "all risk" basis. There shall be no coinsurance penalty provision in any such policy. Policy must include: (1) coverage for any ensuing loss from faulty workmanship, nonconforming work, omission or deficiency in design or specifications; (2) coverage against machinery accidents and operational testing; (3) coverage for removal of debris, and insuring the buildings, structures, machinery, equipment, materials, facilities, fixtures and all other properties constituting a part of the Project; (4) transit coverage, including ocean marine coverage (unless insured by the supplier), with sub-limits sufficient to insure the full replacement value of any key equipment item; and (5) coverage with sub-limits sufficient to insure the full replacement value of any property or equipment stored either on or off the Site. Such insurance shall be on a form acceptable to the City to ensure adequacy and sublimit.

4. In addition, the policy shall meet the following requirements:

a. Insurance policies shall be so conditioned as to cover the performance of any extra work performed under the Contract.

b. Coverage shall include all materials stored on site and in transit.

c. Coverage shall include Contractor's tools and equipment.

d. Insurance shall include boiler, machinery and material hoist coverage.

G. **Form and Proof of Carriage of Insurance**

1. Any insurance carrier providing insurance coverage required by the Contract Documents shall be admitted to and authorized to do business in the State of California unless waived, in writing, by the City's Risk Manager. Carrier(s) shall have an A.M. Best rating of not less than an A:VII. Insurance deductibles or self-insured retentions must be declared by the Contractor. At the election of the City the Contractor shall either 1) reduce or eliminate such deductibles or self-insured retentions, or 2) procure a bond which guarantees payment of losses and related investigations, claims administration, and defense costs and expenses. If umbrella or excess liability coverage is used to meet any required limit(s) specified herein, the Contractor shall provide a "follow form" endorsement satisfactory to the City indicating that such coverage is subject to the same terms and conditions as the underlying liability policy.

2. Each insurance policy required by this Contract shall be endorsed to state that: (1) coverage shall not be suspended, voided, reduced or cancelled except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the City; and (2) any failure to comply with reporting or other provisions of the policies, including breaches of warranties, shall not affect coverage provided to the City, its officials, officers, agents, employees, and volunteers.

3. The Certificates(s) and policies of insurance shall contain or shall be endorsed to contain the covenant of the insurance carrier(s) that it shall provide no less than thirty (30) days written notice be given to the City prior to any material modification or cancellation of such insurance. In the event of a material modification or cancellation of coverage, the City may terminate the Contract or stop the Work in accordance with the Contract Documents, unless the City receives, prior to such effective date, another properly executed original Certificate of Insurance and original copies of endorsements or certified original policies, including all endorsements and attachments thereto evidencing coverage's set forth herein and the insurance required herein is in full force and effect. Contractor shall not take possession, or use the Site, or commence operations under this Contract until the City has been furnished original Certificate(s) of Insurance and certified original copies of endorsements or policies of insurance including all endorsements and any and all other attachments as required in this Article. The original endorsements for each policy and the Certificate of Insurance shall be signed by an individual authorized by the insurance carrier to do so on its behalf.

4. The Certificate(s) of Insurance, policies and endorsements shall so covenant and shall be construed as primary, and the City's insurance and/or deductibles and/or self-insured retentions or self-insured programs shall not be construed as contributory.

5. The City reserves the right to adjust the monetary limits and types of insurance coverages during the term of this Contract including any extension thereof if, in the City's reasonable judgment, the amount or type of insurance carried by the Contractor becomes inadequate.

6. Contractor shall report to the City, in addition to the Contractor's insurer, any and all insurance claims submitted by the Contractor in connection with the Work under this Contract.

7. Products/completed operations coverage shall extend a minimum of three years after the project completion. Coverage shall be included on behalf of the insured for covered claims arising out of the actions of independent contractors. If the insured is using subcontractors, the policy must include work performed "by or on behalf" of the insured. Policy shall contain no language that would invalidate or remove the insurer's duty to defend or indemnify for claims or suits expressly excluded from coverage. Policy shall specifically provide for a duty to defend on the part of the insurer. The City, its officers, officials, agents employees, and volunteers shall be included as insureds under the policy.

ARTICLE 5 -CONTRACTOR RESPONSIBILITIES; REGULATORY REQUIREMENTS

5.1 Applicable Laws

A. Contractor shall give all notices required by and shall comply with all Applicable Laws applicable to the performance of the Work. Except where otherwise expressly required by Applicable Laws, neither the City nor the City's Representative shall be responsible for monitoring Contractor's compliance with any Applicable Laws. If Contractor performs any Work knowing or having reason to know that it is contrary to Applicable Laws, Contractor shall bear all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work.

5.2 Permits and Licenses

A. Permits and licenses necessary for prosecution of the Work shall be secured and paid for by Contractor, including, but not limited to, excavation permit, for plumbing, mechanical and electrical work and for operations in or over public streets or right of way under jurisdiction of public agencies other than the City, unless otherwise specified in the Contract Documents.

B. The Contractor shall arrange and pay for all off-site inspection of the Work related to permits and licenses, including certification, required by the specifications, drawings, or by governing authorities, except for such off-site inspections delineated as the City's responsibility pursuant to the Contract Documents.

C. Before acceptance of the Work, the Contractor shall submit all licenses, permits, certificates of inspection and required approvals to the City.

5.3 Taxes

A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid in accordance with the Applicable Laws of the place of the Project which are applicable during the performance of the Work. In accordance with Revenue and Taxation Code section 107.6, the Contract Documents may create a possessory interest subject to personal property taxation for which Contractor will be responsible.

5.4 Traffic Control

A. Traffic control plans, if required, shall be prepared at Contractor's expense. Traffic control shall be performed at Contractor's expense in accordance with the requirements of the City and/or the local agency with jurisdiction. Costs for traffic control plans, implementation of traffic control, or traffic signal services required by the City shall be included in the Contractor's Bid.

B. All warning signs and safety devices used by the Contractor to perform the Work shall conform to the requirements contained in the State of California, Department of Transportation's current edition of "Manual of Traffic Controls for Construction and Maintenance Work Zones" or to the requirements of the local agency. The Contractor

shall also be responsible for all traffic control required by the agency having jurisdiction over the Project on the intersecting streets. Contractor must submit a traffic control plan to the agency having jurisdiction over the Project for approval prior to starting Work.

C. The Contractor's representative on the site responsible for traffic control shall produce evidence that he/she has completed training acceptable to the California Department of Transportation for safety through construction zones. All of the streets in which the Work will occur shall remain open to traffic and one lane of traffic maintained at all times unless otherwise directed by the agency of jurisdiction. Businesses and residences adjacent to the Work shall be notified forty-eight (48) hours in advance of closing of driveways. The Contractor shall make every effort to minimize the amount of public parking temporarily eliminated due to construction in areas fronting businesses. No stockpiles of pipe or other material will be allowed in traveled right-of-ways after working hours unless otherwise approved by the Engineer.

5.5 Safety

A. Contractor shall be solely responsible for all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety laws. Contractor shall comply with all Applicable Laws relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property.

B. The Contractor shall maintain emergency first aid treatment for his employees which complies with the Federal Occupational Safety and Health Act of 1970 (29 U.S.C. § 651 *et seq*.), and California Code of Regulations, Title 8, Industrial Relations Division 1, Department of Industrial Relations, Chapter 4. The Contractor shall ensure the availability of emergency medical services for its employees in accordance with California Code of Regulations, Title 8, Section 1512. The Contractor shall submit an Illness and Injury Prevention Program and a Project Site specific safety program to the City prior to beginning Work. Contractor shall maintain a confined space program that meets or exceeds the City's standards. Contractor needs to make themselves aware of the City's safety policies and procedures, and shall meet or exceed all City standards in areas where the City must enter to perform inspections.

C. Hazard Communication Programs. Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Applicable Laws.

5.6 Hazardous Materials

A. The City shall not be responsible for any Hazardous Waste brought to the site by the Contractor. If the Contractor: (i) introduces and/or discharges a Hazardous Waste onto the site in a manner not specified by the Contract Documents; and/or (ii) disturbs a Hazardous Material identified in the Contract Documents, the Contractor shall hire a qualified remediation contractor at Contractor's sole cost to eliminate the condition as soon as possible. Under no circumstance shall the Contractor perform Work for which it is not qualified. The City, in its sole discretion, may require the Contractor to retain at Contractor's cost an independent testing laboratory.

B. If the Contractor encounters a Hazardous Waste which may cause foreseeable injury or damage, Contractor shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such material or substance (except in an emergency situation); and (iii) notify the City (and promptly thereafter confirm such notice in writing).

C. Subject to Contractor's compliance with this Article 5.6(B), the City shall verify the presence or absence of the Hazardous Waste reported by the Contractor, except as qualified under Article 5.6(A) and Article 5.6(B) in the event such material or substance is found to be present, verify that the levels of the hazardous material are below OSHA Permissible Exposure Levels and below levels which would classify the material as a state of California or federal hazardous waste. When the material falls below such levels, Work in the affected area shall resume upon direction by the City.

D. Contractor shall indemnify and hold harmless the City from and against claims, damages, losses and expenses, arising from a Hazardous Waste on the Project Site, if such Hazardous Waste exceeded OSHA Permissible Exposure Levels or levels which would classify the material as a state of California or federal hazardous waste, and was either i) shown on the Contract Documents or information available to bidders; or (ii) brought to the site by Contractor. Nothing in this paragraph shall obligate the Contractor to indemnify the City in the event of the sole or active negligence or willful misconduct of the City, its officers, agents, or employees.

5.7 Sanitary Facilities.

A. Contractor shall provide sanitary temporary toilet buildings and hand washing facilities for the use of all workers. All toilets and hand washing facilities shall comply with local codes and ordinances. Toilets shall be placed inside sealed secondary containment devices installed on a flat, level surface. Accumulated liquids in the secondary containment devices shall be properly removed and legally disposed without spillage onto the ground. Toilets shall be kept supplied with toilet paper and shall have workable door fasteners. Toilets and hand washing facilities shall be serviced no less than once weekly and shall be present in a quantity of not less than 1 per 20 workers as required by Cal/OSHA regulations. The toilets and hand washing facilities shall be maintained in a sanitary condition at all times. Use of toilet and hand washing facilities in the Work under construction shall not be permitted. Any other sanitary facilities required by Cal/OSHA shall be the responsibility of the Contractor.

5.8 Dust Control

A. Contractor, at its expense, shall maintain all excavations, embankments, haul roads, permanent access roads, plant sites, waste disposal areas, borrow areas, and all other work areas free from dust. Industry accepted methods of dust control suitable for the area involved, such as sprinkling, chemical treatment, light bituminous treatment or similar methods, will be permitted.

5.9 Air Pollution Control

A. Contractor shall comply with all air pollution control rules, regulations, ordinances and statutes. All containers of paint, thinner, curing compound, solvent or liquid asphalt shall be labeled to indicate that the contents fully comply with the applicable material requirements.

B. Without limiting the foregoing, Contractor must fully comply with all applicable laws, rules and regulations in furnishing or using equipment and/or providing services, including, but not limited to, emissions limits and permitting requirements imposed by the Air Quality Management District with jurisdiction over the Project and/or California Air Resources Board (CARB). Contractor shall specifically be aware of the application of these limits and requirements to "portable equipment", which definition includes any item of equipment with a fuel-powered engine. Contractor shall indemnify the City against any fines or penalties imposed by the air quality management district, CARB, or any other governmental or regulatory agency for its violations of Applicable Laws as well as those of its subcontractors or others for whom Contractor is responsible under its indemnity obligations provided for in the Contract Documents.

5.10 Water Quality Management and Compliance

A. Storm, surface, ground, nuisance, or other waters may be encountered at various times during construction of the Work. The Contractor hereby acknowledges that it has investigated the risk arising from such waters, has prepared its Bid accordingly, and assumes any and all risks and liabilities arising therefrom.

B. Contractor shall keep itself and all subcontractors, staff, and employees fully informed of and in compliance with all local, state and federal laws, rules and regulations that may impact, or be implicated by the performance of the Work including, without limitation, all applicable provisions regulating discharges of storm water; the Federal Water Pollution Control Act (33 U.S.C. § 13000 et seq.); the California Porter-Cologne Water Quality Control Act (Cal Water Code §§ 13000-14950); and any and all regulations, policies, or permits issued pursuant to any such authority. These include, but are not limited to California State Water Resources Control Board Order Number 2009-0009-DWQ (NPDES Permit No. CAS000002), as amended by Order Numbers 2010-0014-DWQ, 2012-0006-DWQ, and any subsequent amendment to or renewal thereof, State Water Resources Control Board Order No. 2013-0001-DWQ (NPDES Order No. CAS000004), Santa Ana Regional Water Quality Control Board No. R8-2010-0036 (NPDES No. CAS618036), and any amendment or renewal thereof.

C. Contractor shall comply with all conditions of the State Water Resources Control Board ("State Water Board") National Pollutant Discharge Elimination System General Permit for Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction Activity ("Construction General Permit") for all construction activity which results in the disturbance of in excess of one acre of total land area or which is part of a larger common area of development or sale. Contractor shall comply with the lawful requirements of the City, and any other applicable municipality, drainage district, or other local agency with jurisdiction over the location where the Work is to be conducted, regarding discharges of storm water to separate storm drain systems or other watercourses under their jurisdiction, including applicable requirements in municipal storm water management programs.

D. Unless otherwise specified in the Special Conditions or other portion of the Contract Documents, the City has not prepared a Storm Water Pollution Prevention Plan ("SWPPP") or other storm water compliance plan for the Project Site. Contractor shall be responsible for filing the Notice of Intent ("NOI") and for obtaining coverage under the Construction General Permit. This includes filing all necessary documentation including the Permit Registration Documents ("PRDs") through the Stormwater Multiple Applications and Report Tracking System ("SMARTS"); preparing and implementing a SWPPP for the Work site; implementing all other provisions, and monitoring and reporting requirements required by the Construction General Permit; and providing a Qualified SWPPP Developer ("QSD") and Qualified SWPPP Practitioner ("QSP"), as necessary for all Work site activities, including but not limited to preparation and submittal of all reports, plans, inspections, and monitoring information in compliance with the Construction General Permit. All submittals shall be coordinated with the City's Legally Responsible Person and Authorized Signatory as those terms are defined in the Construction General Permit. Before any NOI, PRD, SWPPP, or other Construction General Permit-related document may be submitted to the State Water Board or implemented on the Project site, it must first be reviewed and approved by the City and/or City's designee. Contractor shall include all costs of compliance with specified requirements in the Contract Price.

E. The City retains the right to develop its own documentation for the Project site, including but not limited to the SWPPP, and in the alternative may require Contractor to adopt and implement portions of the City developed SWPPP. The City expressly reserves the right to procure coverage under the Construction General Permit for the Work site if Contractor fails to draft satisfactory PRDs or SWPPP or otherwise fails to proceed in a manner that complies with the requirements of the Construction General Permit. The City additionally reserves the right to hire additional contractors to maintain compliance at the Work site. Whether Contractor has adequately maintained compliance with the Construction General Permit shall be the City's sole determination. Any costs incurred by the City in procuring coverage under the Construction General Permit, or drafting and/or implementing a SWPPP for the Work site shall be paid by Contractor.

F. Notwithstanding the above, for those Work sites where construction activity results in the disturbance of less than one acre of total land area and/or do not need coverage under the Construction General Permit, the Contractor shall be responsible for preparing and implementing an Erosion and Sediment Control Plan

in accordance with State Water Resources Control Board Order No. 2013-0001-DWQ (NPDES Order No. CAS000004) and any amendment to or renewal thereof.

G. Failure to comply with the Construction General Permit, laws, regulations, and ordinances listed in this Article is a violation of federal and state law. Notwithstanding any other indemnity contained in these Contract Documents, Contractor agrees to indemnify and hold harmless the City, its officials, officers, agents, employees and authorized volunteers from and against any and all claims, demands, fees, costs, expenses, or losses or liabilities of any kind or nature which the City, its officials, officers, agents, employees and authorized volunteers may sustain or incur for noncompliance with the Permit, laws, regulations, and ordinances listed above, arising out of or in connection with the Work, except for liability resulting from the sole established negligence, willful misconduct or active negligence of the City, its officials, officers, agents, employees or authorized volunteers.

H. The City reserves the right to defend any enforcement action or civil action brought against the City for Contractor's failure to comply with any applicable water quality law, regulation, or policy. Contractor hereby agrees to be bound by, and to reimburse the City for the costs associated with, any settlement reached between the City and any relevant enforcement entity.

5.11 Environmental Quality Protection

A. The Contractor shall comply with all requirements of applicable federal, state, and local environmental rules and regulations. Any infractions of said rules and regulations by the Contractor during the term of the Contract, which result in penalties, will be the responsibility of the Contractor. The City operates under a number of environmental permits issued by various agencies. If due to an action, inaction, or negligence by the Contractor, the City becomes subject to non-compliance penalties, the cost of such penalties shall be borne by the Contractor.

B. The Contractor shall exercise care to preserve the natural landscape and vegetation, and shall conduct operations so as to prevent unnecessary destruction, scarring, or defacing of the natural surroundings in the vicinity of the Work. Movement of crews and equipment within the rights-of-way and over routes provided for access to the Work shall be performed in a manner to prevent damage to property. When no longer required, construction roads shall be restored to original contours. Upon completion of the Work, and following removal of construction facilities and required cleanup, land used for construction purposes and not required for the completed installation shall be scarified and regraded, as required, so that all surfaces are left in a condition that will facilitate natural revegetation, provide for proper drainage, and prevent erosion.

C. If, in the performance of the Work, evidence of the possible occurrence of any Federally listed threatened or endangered plant or animal is discovered, the Contractor shall notify the City Representative immediately, giving the location and nature of the findings. Written confirmation of the evidence, location and nature of the findings shall be forwarded to City within two (2) Days. The Contractor shall immediately cease all construction activities in the immediate area of the discovery to the extent necessary to protect the endangered plant or animal. If directed by the

City Representative, Contractor will refrain from working in the immediate area, suspend the Work in its entirety, or alter its performance to ensure full compliance with all applicable permits, laws and regulations. Any City directed changes to the Work as a result of a siting will be pursuant to the Contract Documents. Any costs or delays incurred by City or the Contractor due to unreasonable or false notification of an endangered plant or animal will be borne by the Contractor.

D. If, in the performance of the Work, Contractor should unearth cultural resources (for example, human remains, animal bones, stone tools, artifacts and/or midden deposits) through excavation, grading, watering or other means, the Contractor shall notify the construction/archeological monitor and/or the City Representative immediately, giving the location and nature of the findings. Written confirmation of the evidence, location and nature of the findings shall be forwarded to the construction/archeological monitor and/or City within two (2) Days. The Contractor shall immediately cease all construction activities in the immediate area of the discovery to the extent necessary to protect the cultural resource. If directed by the City Representative, Contractor will refrain from working in the immediate area, suspend the Work in its entirety, or re-sequence and/or alter its performance to ensure full compliance with all applicable permits, laws and regulations. Should the presence of cultural resources be confirmed, the Contractor will assist the City Representative and the construction/archeological monitor in the preparation and implementation of a data recovery plan. The Contractor shall provide such cooperation and assistance as may be necessary to preserve the cultural resources for removal or other disposition. Any City directed changes to the Work as a result of the cultural resource will be pursuant to the Contract Documents. Should Contractor, without permission, injure, destroy, excavate, appropriate, or remove any cultural resource on or adjacent to the Site, it will be subject to disciplinary action, arrest and penalty under applicable law. The Contractor shall be principally responsible for all costs of mitigation and/or restoration of cultural resources related to the unauthorized actions identified above. Contractor shall be required to pay for unauthorized damage and mitigation costs to cultural resources (historical and archeological resources) as a result of unauthorized activities that damage cultural resources and shall indemnify City pursuant to the Contract Documents.

5.12 Excessive Noise

A. Contractor shall use only such equipment on the Work and in such state of repair so that the emission of sound therefrom is within the noise tolerance level of that equipment as established by Cal/OSHA. Contractor shall comply with the most restrictive of the following: (1) local sound control and noise level rules, regulations and ordinances and (2) the requirements contained in these Contract Documents, including hours of operation requirements.

B. No internal combustion engine shall be operated on the Project without a muffler of the type recommended by the manufacturer. Should any muffler or other control device sustain damage or be determined to be ineffective or defective, the Contractor shall promptly remove the equipment and shall not return said equipment to the job until the device is repaired or replaced. Said noise and vibration level requirements shall apply to all equipment on the job or related to the job, including

but not limited to, trucks, transit mixers or transit equipment that may or may not be owned by the Contractor.

5.13 Diversion of Recyclable Waste Material

A. In compliance with the applicable City's waste reduction and recycling efforts, Contractor shall divert all Recyclable Waste Materials to appropriate recycling centers as required for compliance with the local jurisdiction's waste diversion ordinances. Contractor will be required to submit weight tickets and written proof of diversion with its monthly progress payment requests. Contractor shall complete and execute any certification forms required by the City or other applicable agencies to document Contractor's compliance with these diversion requirements. All costs incurred for these waste diversion efforts shall be the responsibility of the Contractor.

5.14 Inspector's Field Office.

A. If required by the City, the Contractor shall be responsible for providing the inspector's field office. The office shall be a substantial waterproof construction with adequate natural light and ventilation by means of stock design windows. Door shall have a key type lock or padlock clasp. The office shall have heating and air conditioning and shall be equipped with a telephone, a telephone answering machine, an ability to connect to the internet, and a fax machine at Contractor's expense. The field office shall be provided within 20 Days of the Notice to Proceed.

B. A table satisfactory for the study of plans and two chairs shall be provided by Contractor. Contractor shall provide and pay for adequate electric lights, local telephone service, and adequate heat and air conditioning for the field office until authorized removal.

5.15 Contractor's Supervision.

A. Contractor shall continuously keep at the Project site, a competent and experienced full-time Project superintendent acceptable to the City. Superintendent must be able to proficiently speak, read and write in English and shall have the authority to make decisions on behalf of the Contractor. Contractor shall continuously provide efficient supervision of the Project.

5.16 Workers.

A. Contractor shall at all times enforce strict discipline and good order among its employees. Contractor shall not employ on the Project any unfit person or any one not skilled in the Work assigned to him or her.

B. Any person in the employ of the Contractor whom the City may deem incompetent or unfit shall be dismissed from the Work and shall not be employed on this Project.

5.17 Independent Contractors.

A. Contractor shall be an independent contractor for the City and not an employee. Contractor understands and agrees that it and all of its employees shall not be considered officers, employees, or agents of the City and are not entitled to benefits

of any kind normally provided employees of the City, including but not limited to, state unemployment compensation or workers' compensation. Contractor assumes full responsibility for the acts and omissions of its employees or agents related to the Work.

5.18 Verification of Employment Eligibility.

A. By executing the Contract, Contractor verifies that it fully complies with all requirements and restrictions of state and federal law respecting the employment of undocumented aliens, including, but not limited to, the Immigration Reform and Control Act of 1986, as may be amended from time to time, and shall require all subcontractors, sub-subcontractors and consultants to comply with the same. Each person executing this Contract on behalf of Contractor verifies that he or she is a duly authorized officer of Contractor and that any of the following shall be grounds for the City to terminate the Contract for cause: (1) failure of the Contractor or its Subcontractors, sub-subcontractors or consultants to meet any of the requirements provided for in this Article; (2) any misrepresentation or material omission concerning compliance with such requirements; or (3) failure to immediately remove from the Work any person found not to be in compliance with such requirements.

5.19 Labor.

A. Hours of Work

1. As provided in Article 3 (commencing at section 1810), Chapter 1, Part 7, Division 2 of the Labor Code, Contractor stipulates that eight (8) hours of labor shall constitute a legal day's work. The time of service of any worker employed at any time by the Contractor or by any subcontractor on any subcontract under this Contract upon the Work or upon any part of the Work contemplated by this Contract is limited and restricted to eight (8) hours during any one calendar day and 40 hours during any one calendar week, except as hereinafter provided. Notwithstanding the provisions herein above set forth, work performed by employees of Contractor in excess of eight (8) hours per day, and 40 hours during any one week, shall be permitted upon this public work upon compensation for all hours worked in excess of eight (8) hours per day at not less than one and one-half times the basic rate of pay.

2. The Contractor and every Subcontractor shall keep an accurate record showing the name of and actual hours worked each calendar day and each calendar week by each worker employed in connection with the Work or any part of the Work contemplated by this Contract. The record shall be kept open at all reasonable hours to the inspection of the City and to the Division of Labor Law Enforcement, Department of Industrial Relations of the State of California.

3. The Contractor shall pay to the City a penalty of twenty-five dollars ($25.00) for each worker employed in the execution of this Contract by the Contractor or by any subcontractor for each calendar day during which such worker is required or permitted to work more than eight (8) hours in any calendar day and 40 hours in any one calendar week in violation of the provisions of Article 3 (commencing at section 1810), Chapter 1, Part 7, Division 2 of the Labor Code.

4. Any work necessary to be performed after regular working hours, or on Saturdays and Sundays or other holidays, shall be performed without additional expense to the City.

5. If Contractor gives notice of an inspection pursuant to the Contract Documents, the City will provide inspection during normal working hours from 7:00 a.m. to 3:30 p.m. Monday through Friday. Requested inspections before or after this time will be charged to the Contractor as reimbursable inspection time. Inspections on weekends requires two (2) Days' notice for review and approval. Upon written request and approval the 8.5 hour working day may be changed to other limits subject to city/county ordinance.

6. It shall be unlawful for any person to operate, permit, use, or cause to operate any of the following at the Project Site, other than between the hours of 7:00 a.m. to 5:00 p.m., Monday through Friday, with no Work allowed on City-observed Holidays, unless otherwise approved by the City:

a. Powered Vehicles

b. Construction Equipment

c. Loading and Unloading Vehicles

d. Domestic Power Tools

B. Payroll Records; Labor Compliance

1. Pursuant to Labor Code section 1776, Contractor and all subcontractors shall maintain weekly certified payroll records, showing the names, addresses, Social Security numbers, work classifications, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by them in connection with the Work under this Contract. Contractor shall certify under penalty of perjury that records maintained and submitted by Contractor are true and accurate. Contractor shall also require Subcontractor(s) to certify weekly payroll records under penalty of perjury.

2. In accordance with Labor Code section 1771.4, the Contractor and each Subcontractor shall furnish the certified payroll records directly to the Department of Industrial Relations ("DIR") on the specified interval and format prescribed by the DIR, which may include electronic submission. Contractor shall comply with all requirements and regulations from the DIR relating to labor compliance monitoring and enforcement. The requirement to submit certified payroll records directly to the Labor Commissioner under Labor Code section 1771.4 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Section 1771.4.

3. Any stop orders issued by the DIR against Contractor or any Subcontractor that affect Contractor's performance of Work, including any delay, shall be Contractor's sole responsibility. Any delay arising out of or resulting from such stop orders shall be considered Contractor caused delay subject to any applicable liquidated

damages and shall not be compensable by the City. Contractor shall defend, indemnify and hold the City, its officials, officers, employees and agents free and harmless from any claim or liability arising out of stop orders issued by the DIR against Contractor or any Subcontractor.

4. The payroll records described herein shall be certified and submitted by the Contractor at a time designated by the City. The Contractor shall also provide the following:

a. A certified copy of the employee's payroll records shall be made available for inspection or furnished to such employee or his or her authorized representative on request.

b. A certified copy of all payroll records described herein shall be made available for inspection or furnished upon request of the DIR.

5. Unless submitted electronically, the certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement ("DLSE") of the DIR or shall contain the same information as the forms provided by the DLSE.

6. Any copy of records made available for inspection as copies and furnished upon request to the public or any public agency, the City, the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement shall be marked or obliterated in such a manner as to prevent disclosure of an individual's name, address and social security number. The name and address of the Contractor awarded the Contract or performing the Contract shall not be marked or obliterated.

7. In the event of noncompliance with the requirements of this Article, the Contractor shall have ten (10) Days in which to comply subsequent to receipt of written notice specifying in what respects the Contractor must comply with this Article. Should noncompliance still be evident after such 10-day period, the Contractor shall pay a penalty of one hundred dollars ($100.00) to the City for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, such penalties shall be withheld from progress payment then due.

8. The responsibility for compliance with this Article shall rest upon the Contractor.

C. Prevailing Rates of Wages

1. The Contractor is aware of the requirements of Labor Code sections 1720 *et seq.* and 1770 *et seq.*, as well as California Code of Regulations, Title 8, Section 16000 *et seq.* ("Prevailing Wage Laws"), which require the payment of prevailing wage rates and the performance of other requirements on certain "public works" and "maintenance" projects. Since this Project involves an applicable "public works" or "maintenance" project, as defined by the Prevailing Wage Laws, and since the total compensation is $1,000 or more, Contractor agrees to fully comply with such Prevailing Wage Laws. The Contractor shall obtain a copy of the prevailing rates of per diem wages at the commencement of this Contract from the website of the

Division of Labor Statistics and Research of the Department of Industrial Relations located at www.dir.ca.gov. In the alternative, the Contractor may view a copy of the prevailing rate of per diem wages which are on file at the City's Administration Office and shall be made available to interested parties upon request. Contractor shall make copies of the prevailing rates of per diem wages for each craft, classification, or type of worker needed to perform work on the Project available to interested parties upon request, and shall post copies at the Contractor's principal place of business and at the Project site. Contractor shall defend, indemnify and hold the City, its officials, officers, employees and authorized volunteers free and harmless from any claims, liabilities, costs, penalties or interest arising out of any failure or allege failure to comply with the Prevailing Wage Laws.

2. The Contractor shall forfeit as a penalty to the City not more than Two Hundred Dollars ($200.00), pursuant to Labor Code section 1775, for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rate as determined by the Director of the DIR for such work or craft in which such worker is employed for any public work done under the Contract by it or by any Subcontractor under it. The difference between such prevailing wage rate and the amount paid to each worker for each calendar day or portion thereof, for which each worker was paid less than the prevailing wage rate, shall be paid to each worker by the Contractor.

3. Contractor shall post, at appropriate conspicuous points on the Project Site, a schedule showing all determined general prevailing wage rates and all authorized deductions, if any, from unpaid wages actually earned.

D. Public Works Contractor Registration

1. Pursuant to Labor Code sections 1725.5 and 1771.1, the Contractor and its Subcontractors must be registered with the DIR prior to the execution of a contract to perform public works. By entering into this Contract, Contractor represents that it is aware of the registration requirement and is currently registered with the DIR. Contractor shall maintain a current registration for the duration of the Project. Contractor shall further include the requirements of Labor Code sections 1725.5 and 1771.1 in any subcontract and ensure that all Subcontractors are registered at the time this Contract is entered into and maintain registration for the duration of the Project. Notwithstanding the foregoing, the contractor registration requirements mandated by Labor Code Sections 1725.5 and 1771.1 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Sections 1725.5 and 1771.1.

E. Employment of Apprentices

1. Contractor and all Subcontractors shall comply with the requirements of Labor Code sections 1777.5 and 1777.6 in the employment of apprentices.

2. Information relative to apprenticeship standards, wage schedules, and other requirements may be obtained from the Director of Industrial Relations, ex officio the Administrator of Apprenticeship, San Francisco, California, or from the Division of Apprenticeship Standards and its branch offices.

3. Knowing violations of Labor Code section 1777.5 will result in forfeiture not to exceed one hundred dollars ($100.00) for each calendar day of non-compliance pursuant to Labor Code section 1777.7.

F. Nondiscrimination/Equal Employment Opportunity

1. Pursuant to Labor Code section 1735 and other applicable provisions of law, the Contractor and its Subcontractors shall not discriminate against any employee or applicant for employment because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, sexual orientation, or any other classifications protected by law on this Project. The Contractor will take affirmative action to insure that employees are treated during employment or training without regard to their race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, sexual orientation, or any other classifications protected by law.

G. Debarment of Contractors and Subcontractors

1. Contractors or Subcontractors may not perform work on a public works project with a subcontractor who is ineligible to perform work on a public project pursuant to Labor Code section 1777.1 or 1777.7. Any contract on a public works project entered into between a contractor and a debarred subcontractor is void as a matter of law. A debarred subcontractor may not receive any public money for performing work as a subcontractor on a public works contract. Any public money that is paid, or may have been paid to a debarred subcontractor by a contractor on the project shall be returned to the City. The Contractor shall be responsible for the payment of wages to workers of a debarred subcontractor who has been allowed to work on the Project.

5.20 Subcontracts.

A. Contractor agrees to bind every Subcontractor to the terms of the Contract Documents as far as such terms are applicable to Subcontractor's portion of the Work. Contractor shall be as fully responsible to the City for the acts and omissions of its subcontractors and of persons either directly or indirectly employed by its subcontractors, as Contractor is for acts and omissions of persons directly employed by Contractor. Nothing contained in these Contract Documents shall create any contractual relationship between any subcontractor and the City.

B. The City reserves the right to accept all subcontractors. The City's acceptance of any Subcontractor under this Contract shall not in any way relieve Contractor of its obligations in the Contract Documents.

C. Prior to substituting any Subcontractor listed in the Bid Forms, Contractor must comply with the requirements of the Subletting and Subcontracting Fair Practices Act pursuant to California Public Contract Code section 4100 et seq.

5.21 Progress Meetings

A. The Contractor shall schedule and hold regular progress meetings at least weekly and at other times as requested by Engineer or as required by progress of the Work. The Contractor, City, and all Subcontractors active on the Site shall attend each meeting. Contractor may at its discretion request attendance by representatives of its Suppliers, manufacturers, and other Subcontractors. The City will preside at the progress meetings and will arrange for keeping and distributing the minutes. The purpose of the meetings is to review the progress of the Work, maintain coordination of efforts, discuss changes in scheduling, and resolve other problems which may develop. During each meeting, the Contractor shall present any issues which may impact its progress with a view to resolve these issues expeditiously.

5.22 Submittals

A. Schedule of Submittals. Within five (5) Days after the Notice to Proceed (unless otherwise specified in the Contract Documents), Contractor will prepare and deliver a Schedule of Submittals to the City that has been fully integrated with the progress schedule and identifies each Submittal required by the Contract Documents as well as the date on which Contractor will deliver each Submittal to the City. Each Submittal must be delivered to the City at least thirty (30) Days prior to the date the material or equipment is scheduled to be incorporated into the Work. The Contractor is responsible for any schedule delays resulting from the Submittal process.

B. Submittal Procedures.

1. Contractor will follow the following procedures for each Submittal, Shop Drawing and Sample required by the Contract Documents:

   a. Submittals must be transmitted electronically.

   b. Transmittals will be sequentially numbered. Contractor to mark revised Submittals with original number and sequential alphabetic suffix.

   c. Each Submittal will identify the Project, Contractor, Subcontractor and Supplier, pertinent Drawing and detail number, and Specification Section number appropriate to Submittal.

   d. By transmitting a Submittal, Contractor certifies it has reviewed and approved each Submittal, verified products required, field dimensions, adjacent construction Work, and that coordination of information is according to requirements of the Work and Contract Documents.

   e. Identify variations in Contract Documents and product or system limitations that may differ and/or be detrimental to successful performance of completed Work.

   f. When Submittal is revised for resubmission, Contractor shall promptly address the City's comments and resubmit. Contractor shall identify changes made since previous submission.

g. The City's review of Shop Drawings shall not relieve Contractor from responsibility for deviations from the Contract Documents unless Contractor has, in writing, called the City's attention to such deviations at time of submission and the City has taken no exception to the deviation. The City's review of Shop Drawings shall not relieve Contractor from responsibility for errors in Shop Drawings.

h. Submittals not required by the Contract Documents or requested by the City will not be acknowledged or processed.

i. Incomplete Submittals will not be reviewed by the City. Delays resulting from incomplete Submittals are not the responsibility of the City.

j. Contractor shall not be entitled to any extension of the Contract Times as a result of the Submittal process.

k. Contractor shall allow a minimum of 20 working days for review of Submittals unless otherwise specified in the Contract Documents.

2. Where a Submittal, Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to the City review and approval of the pertinent submittal will be performed at the sole risk and expense and responsibility of Contractor.

C. Schedule Milestone for Submittals. Contractor must submit all Submittals required by the Contract Documents in accordance with the Schedule of Submittals. If Contractor fails to submit the Submittals in accordance with the Schedule of Submittals, Contractor will be solely liable for any delays or impacts caused by the delayed Submittal, whether direct or indirect. Contractor will be liable for the time calculated from the date the Submittal is due until the date a compliant Submittal is made. A compliant Submittal will be one that is complete and satisfies the requirements of the Contract Documents.

5.23 Shop Drawings and Sample Submittal Procedures.

A. Before submitting each Shop Drawing or Sample, Contractor shall have:

1. Reviewed and coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;

2. Determined and verified all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;

3. Determined and verified the suitability of all materials offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and

4. Determined and verified all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto.

B. With each Submittal, Contractor shall give the City specific written notice of any variations that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be both a written communication separate from the Shop Drawings or Sample Submittal and, in addition, a specific notation made on each Shop Drawing or Sample submitted to the City for review and approval of each such variation.

C. Shop Drawings.

1. Data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show the City the services, materials, and equipment Contractor proposes to provide and to enable the City to review the information for assessing conformance with information given and design concept expressed in Contract Documents.

2. When required by individual Specification sections, provide Shop Drawings signed and sealed by a professional engineer responsible for designing components shown on Shop Drawings. Shop Drawings must include signed and sealed calculations to support design in a form suitable for submission to and approval by authorities having jurisdiction.

3. Shop Drawings for steel structures shall consist of shop details, erection and other working Drawings showing details, dimensions, sizes of members and other information necessary for the complete fabrication and erection of the metal work.

4. Shop Drawings of concrete structures shall consist of such detailed drawings as may reasonably be required for the successful prosecution of the Work and which are not included in the Drawings furnished by the Engineer. These may include drawings for false work, bracing, centering and form work, masonry layout diagrams, and diagrams for bent reinforcement.

5. Contractor shall make revisions and provide additional information when required by authorities having jurisdiction.

D. Samples. Clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as required to enable the City to review the submittal for assessing conformance with information given and design concept expressed in Contract Documents. Samples should be of appropriate size and detail to assess functional, aesthetic, color, texture, patterns and finish selection.

E. City's Review.

1. The City will review Shop Drawings and Samples in accordance with the Schedule of Submittals. The City's review and acceptance will be only to determine if the items covered by the Submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible

with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.

2. The City review and approval will not extend to means, methods, techniques, sequences, or procedures of construction (except where a particular means, method, technique, sequence, or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.

3. The City's review and acceptance shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless the City has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample.

F. Resubmittal Procedures. Contractor shall make corrections required by the City and shall return corrected Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by the City on previous Submittals.

5.24 Record ("As-Built") Drawings.

A. The Contractor shall maintain one record set of Contract Documents at the Site or digitally in an acceptable format. On these, it shall mark all Project conditions, locations, configurations, and any other changes or deviations which may vary from the information represented in the original Contract Documents, including buried or concealed construction and utility features which are revealed during the course of construction. Special attention shall be given to recording the horizontal and vertical location of all buried utilities that differ from the locations indicated, or which were not indicated on the Drawings. For all Projects involving the installation of any pipeline, Contractor shall survey and record the top of the pipe at a minimum of every 100 linear feet, and at each bend, recording both the horizontal and vertical locations. Said Drawings shall be supplemented by any detailed sketches as necessary or directed to fully indicate the Work as actually constructed. Any required as-built drawings of civil engineering elements of the Work shall be prepared by a registered civil engineer.

B. These master Record Drawings of the as-built conditions, including all revisions made necessary by Addenda and Change Orders, shall be maintained up-to-date during the progress of the Project. Red ink shall be used for alterations and notes. Notes shall identify relevant Change Orders by number and date. Record Drawings shall be accessible to the Engineer at all times during the construction period. Failure on the Contractor's part to keep Record Drawings current could result in withholding partial payment.

C. Upon completion of the Project and as a condition of final acceptance, the Contractor shall finalize and deliver a complete set of Record Drawings to the Engineers. The information submitted by the Contractor will be assumed to be correct, and the Contractor shall be responsible for, and liable to the City, for the accuracy of such information, and for any errors or omissions which may or may not appear on the Record Drawings.

D. Unless otherwise called for by the Contract Documents, the cost of all material, equipment, and labor required to complete the Record Drawings shall be included in Contractor's bid and distributed in the Bid Schedule. No additional compensation shall be made to the Contractor for this Work.

5.25 Layout and Field Engineering.

A. The Contractor shall utilize a properly licensed surveyor to perform all layout surveys required for the control and completion of the Work, and all necessary surveys to compute quantities of Work performed.

5.26 Separate Contracts and Cooperation.

A. Separate Contracts. The City reserves the right to let other contracts in connection with this Work or on the Project site. Contractor shall permit other contractors reasonable access and storage of their materials and execution of their work and shall properly connect and coordinate its Work with theirs. To ensure proper execution of its subsequent Work, Contractor shall immediately inspect work already in place and shall at once report to the Engineer any problems with the Work in place or discrepancies with the Contract Documents.

B. Cooperation. Contractor shall ascertain to its own satisfaction the scope of the Project and nature of any other contracts that have been or may be awarded by the City in prosecution of the Project to the end that Contractor may perform this Contract in the light of such other contracts, if any. Nothing herein contained shall be interpreted as granting to Contractor exclusive occupancy at site of the Project. Contractor shall not cause any unnecessary hindrance or delay to any other contractor working on the Project. If simultaneous execution of any contract for the Project is likely to cause interference with performance of some other contract or contracts, the Engineer shall decide which Contractor shall cease Work temporarily and which contractor shall continue or whether work can be coordinated so that contractors may proceed simultaneously. The City shall not be responsible for any damages suffered or for extra costs incurred by Contractor resulting directly or indirectly from award, performance, or attempted performance of any other contract or contracts on the Project Site.

5.27 Work Site.

A. Limitation of Use of Site and Other Areas. Rights-of-way, easements, or rights-of-entry for the Work will be provided by the City. Unless otherwise specified in the Special Provisions, the Contractor shall make arrangements, pay for, and assume all responsibility for acquiring, using, and disposing of additional work areas and facilities temporarily required. The Contractor shall indemnify and hold the City harmless from all claims for damages caused by such actions. Contractor shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the Site and other areas permitted by Applicable Laws, and shall not unreasonably encumber the Site and other areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for any damage to any such land or area, or to City or occupant thereof, or of any adjacent land or areas resulting from the performance of the Work.

B. Site Maintenance. During the progress of the Work, Contractor shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to Applicable Laws. The Contractor shall furnish trash bins for all debris from construction. All debris shall be placed in trash bins daily. Forms and false-work that are to be re-used shall be stacked neatly concurrently with their removal. Forms and false-work that are not to be re-used shall be disposed of concurrently with their removal.

C. Cleaning. Prior to Completion of the Work, Contractor shall clean the Site and make it ready for utilization by the City. At the completion of the Work Contractor shall remove from the Site all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

5.28 Utility Usage.

A. All temporary utilities, including but not limited to electricity, water, gas, and telephone, used on the Work shall be furnished and paid for by Contractor. Contractor shall provide necessary temporary distribution systems, including meters, if necessary, from distribution points to points on the Work where the utility is needed. Upon completion of the Work, Contractor shall remove all temporary distribution systems. Contractor shall provide necessary and adequate utilities and pay all costs for water, electricity, gas, oil, and sewer charges required for completion of the Work, including but not limited to startup and testing required in the Contract Documents. All permanent meters installed shall be listed in the Contractor's name until the Work is accepted. For Work to be performed in existing City facilities, Contractor may use the City's existing utilities, provided such use is reasonable under the circumstances. If Contractor uses the City utilities, it will not need to compensate the City for reasonably consumption of utilities, but Contractor will be responsible for any excessive, unreasonable or wasteful utility usage. Amounts due the City under this section may be deducted from progress payments.

5.29 Protection of Work and Property.

A. The Contractor shall digitally record video and take photographs of the Project site and adjacent improvements in a manner and quality that clearly depicts the existing condition of the Project Site and adjacent improvements immediately prior to the start of Work (minimum 1080p video and 4MP photo). All videos and photographs shall be date and time stamped. The Contractor shall submit the video and photos in digital format on a memory stick before the commencement of Work, along with a map outlining the route and locations of the videos and/or photographs. The Contractor shall be responsible for all damages to persons or property that occur as a result of the Work. Contractor shall be responsible for the proper care and protection of all materials delivered and Work performed until completion and final acceptance by the City. All Work shall be solely at the Contractor's risk.

B. Contractor shall adequately protect adjacent property from settlement or loss of lateral support as necessary. Contractor shall comply with all applicable safety laws and building codes to prevent accidents or injury to persons on, about, or adjacent

to the Project site where Work is being performed. Contractor shall erect and properly maintain at all times, as required by field conditions and progress of work, all necessary safeguards, signs, barriers, lights, and watchmen for protection of workers and the public, and shall post danger signs warning against hazards created in the course of construction.

C. Contractor shall provide such heat, covering, and enclosures as are necessary to protect all Work, materials, equipment, appliances, and tools against damage by weather conditions.

D. Contractor shall take adequate precautions to protect existing sidewalks, curbs, pavements, utilities, and other adjoining property and structures, and to avoid damage thereto, and Contractor shall repair any damage thereto caused by the Work operations. Contractor shall:

1. Enclose the working area with a substantial barricade, and arrange work to cause minimum amount of inconvenience and danger to the public.

2. Provide substantial barricades around any shrubs or trees indicated to be preserved.

3. Deliver materials to the Site over a route designated by the City.

4. Provide any and all dust control required and follow the applicable air quality regulations as appropriate. If the Contractor does not comply immediately with a notice from the City or a public agency responsible for air quality, the City shall have the authority to provide dust control and deduct the cost from payments to the Contractor.

5. Confine Contractor's apparatus, the storage of materials, and the operations of its workers to limits required by law, ordinances, permits, or directions of the City. Contractor shall not unreasonably encumber the Site with its materials.

6. Take care to prevent disturbing or covering any survey markers, monuments, or other devices marking property boundaries or corners. If such markers are disturbed by accident, they shall be replaced by a civil engineer or land surveyor acceptable to the City, at no cost to the City.

7. Ensure that existing facilities, fences and other structures are all adequately protected and that, upon completion of all Work, all facilities that may have been damaged are restored to a condition acceptable to the City.

8. Preserve and protect from injury all buildings, pole lines and all directional, warning and mileage signs that have been placed within the right-of-way.

9. At the completion of work each day, leave the Work and the Site in a clean, safe condition.

10. Comply with any stage construction and/or traffic handling plans. Access to residences and businesses shall be maintained at all times, except with the City's written approval. Any request for approval to reduce or restrict access to

residences and business must be submitted to the City at least seven (7) Days in advance, and the City may issue or withhold approval in its sole discretion.

E. These precautionary measures will apply continuously and not be limited to normal working hours. Full compensation for the work involved in the protection and preservation of life, safety and property as above specified shall be considered as included in the prices paid for the various contract items of Work, and no additional allowance will be made therefor.

F. Should damage to persons or property occur as a result of the Work, Contractor shall promptly notify the City, in writing. Contractor shall be responsible for proper investigation, documentation, including video or photography, to adequately memorialize and make a record of what transpired. The City shall be entitled to inspect and copy any such documentation, video, or photographs.

G. Contractor shall maintain all investigation documentation including video and/or photographs for a minimum of four (4) years following completion of the Project.

5.30 Emergencies.

A. In emergencies affecting the safety or protection of persons or the Work or Property at the Site or adjacent thereto, the Contractor, without special instruction or authorization from the City or the Engineer, is obligated to act to prevent threatened damage, injury or loss. The Contractor shall give the Engineer prompt written notice if the Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby.

ARTICLE 6 -MATERIALS; INSPECTION

6.1 Access to Work.

A. The City, Engineer, their consultants and other representatives and personnel, independent testing laboratories, and governmental agencies with jurisdictional interests will have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs.

6.2 Materials.

A. Except as otherwise specifically stated in the Contract Documents, Contractor shall provide and pay for all materials, labor, tools, equipment, water, lights, power, transportation, superintendence, temporary constructions of every nature, and all other services and facilities whatsoever necessary to execute and complete this Contract within the Contract Time. Unless otherwise specified, all materials, parts, and equipment furnished by the Contractor in the Work shall be new, the best of their respective kinds and grades as noted and/or specified, and workmanship shall be of good quality.

B. No materials, supplies, or equipment for Work under this Contract shall be purchased subject to any chattel mortgage or under a conditional sale or other

agreement by which an interest therein or in any part thereof is retained by the seller or supplier. Contractor warrants good title to all material, supplies, and equipment installed or incorporated in the Work and agrees upon completion of all work to deliver the Project, to the City free from any claims, liens, or charges.

C. Materials shall be furnished in ample quantities and at such times as to ensure uninterrupted progress of the Work and shall be stored properly and protected as required by the Contract Documents. Contractor shall be entirely responsible for damage or loss by weather or other causes to materials or Work. Materials shall be stored on the Project Site in such manner so as not to interfere with any operations of the City or any independent contractor.

D. Contractor shall verify all measurements, dimensions, elevations, and quantities before ordering any materials or performing any Work, and the City shall not be liable for Contractor's failure to so. Except for an adjustment to Unit Price Work for item overruns and underruns in accordance with the Contract Documents, no additional compensation, over and above payment for the actual quantities at the prices set out in the Bid Schedule, will be allowed because of differences between actual measurements, dimension, elevations and quantities and those indicated on the Plans and in the Specifications. Any difference therein shall be submitted to the Engineer for consideration before proceeding with the Work.

6.3 Test and Inspections.

A. Inspection and Testing of Work and Materials

1. If the Contract Documents, the Engineer, or any instructions, laws, ordinances, or public authority requires any part of the Work to be tested or approved, Contractor shall provide the Engineer at least two (2) working days' notice of its readiness for observation or inspection. If inspection is by a public authority other than the City, Contractor shall promptly inform the City of the date fixed for such inspection. Required certificates of inspection (or similar) shall be secured by Contractor. Costs for City testing and inspection shall be paid by the City. Costs of tests for Work found not to be in compliance shall be paid by the Contractor.

2. The Contractor shall pay for the cost of any minimum "show up" costs of a materials testing technician that was called for by the Contractor but ultimately the Contractor work was not ready for the inspection. Any such costs shall be deducted from any amounts due to the Contractor.

3. If any Work is done or covered up without the required testing or approval, the Contractor shall uncover or deconstruct the Work, and the Work shall be redone after completion of the testing at the Contractor's cost in compliance with the Contract Documents.

4. Where inspection and testing are to be conducted by an independent laboratory or agency, materials or samples of materials to be inspected or tested shall be selected by such laboratory or agency, or by the City, and not by Contractor. Unless otherwise stated and as provided by the Contract Documents, the City shall employ and pay for the services of an independent testing laboratory to perform

all inspections, tests, or approvals required by the Contract Documents. All tests or inspections of materials shall be made in accordance with the commonly recognized standards of national organizations.

5. Reexamination of Work may be ordered by the City. If so ordered, Work must be uncovered or deconstructed by Contractor. If Work is found to be in accordance with the Contract Documents, the City shall pay the costs of reexamination and reconstruction. If such work is found not to be in accordance with the Contract Documents, Contractor shall pay all costs.

B. Testing of Materials

1. In advance of manufacture of materials to be supplied by Contractor which must be tested or inspected, Contractor shall notify the City so that the City may arrange for testing at the source of supply. Any materials which have not satisfactorily passed such testing and inspection shall not be incorporated into the Work.

2. If the manufacture of materials to be inspected or tested will occur in a plant or location greater than sixty (60) miles from the City, the Contractor shall pay for any excessive or unusual costs associated with such testing or inspection, including but not limited to excessive travel time, standby time and required lodging.

3. Unless otherwise specified in the Special Provisions, all initial testing and a reasonable amount of retesting will be performed under the direction of the Engineer, and at no expense to the Contractor. The Contractor shall notify the Engineer in writing, at least 15 days in advance, of its intention to use materials for which tests are specified, to allow sufficient time to perform the tests. The notice shall name the proposed supplier and source of material. If the notice of intent to use is sent before the materials are available for testing or inspection, or is sent so far in advance that the materials on hand at the time will not last but will be replaced by a new lot prior to use on the Work, it will be the Contractor's responsibility to re-notify the Engineer when samples which are representative may be obtained.

4. A Certificate of Compliance shall be furnished to the Engineer prior to the use of any material or assembled material for which these Specifications so require or if so required by the Engineer. The Engineer may waive the materials testing requirements and accept a Certificate of Compliance. Material test data may be required by the Engineer to be included with the submittal. Materials used on the basis of a Certificate of Compliance may be sampled and tested at any time. The submission of a Certificate of Compliance shall not relieve the Contractor of responsibility for incorporating material into the Work which conforms to the requirements of the Contract Documents, and any material not conforming to the requirements will be subject to rejection by the Engineer whether in place or not.

5. Copies of mill certificates of composition and quality of all component materials (reinforcing steel, structural steel, lumber, etc.) incorporated in the construction of the Work shall be provided to the City at the time of delivery. City shall retain the right to reject any raw material not provided with a mill certificate at the time of delivery.

6. If, after incorporating such materials into the Work, it is found that sources of supply that have been approved do not furnish a uniform product, or if the product from any source proves unacceptable at any time, the Contractor shall furnish approved material from other approved sources. If any product proves unacceptable after improper storage, handling or for any other reason it shall be rejected, not incorporated into the Work, and shall be removed from the Project Site all at the Contractor's expense.

6.4 Requests for Substitutions.

A. For the purposes of this provision, the term "substitution" shall mean the substitution of any material, method or service substantially equal to or better in every respect to that indicated in the Standard Specifications or otherwise referenced herein.

B. Pursuant to Public Contract Code section 3400(b), the City may make a finding that is described in the Notice Inviting Bids that designates certain products, things, or services by specific brand or trade name.

C. Unless specifically designated in the Special Conditions, whenever any material, process, or article is indicated or specified by grade, patent, or proprietary name or by name of manufacturer, such specifications shall be deemed to be used for the purpose of facilitating the description of the material, process, or article desired and shall be deemed to be followed by the words "or equal." Contractor may, unless otherwise stated, offer for substitution any material, process, or article which may be substantially equal to or better in every respect to that so indicated or specified in the Contract Documents. However, the City has adopted uniform standards for certain materials, processes, and articles.

D. The Contractor shall submit substitution requests, together with substantiating data, for substitution of any "or equal" material, process, or article no later than thirty-five (35) calendar days after award of Contract. Provisions regarding submission of substitution requests shall not in any way authorize an extension of time for the performance of this Contract. If a substitution request is rejected by the City, the Contractor shall provide the material, method or service specified herein. The City shall not be responsible for any costs incurred by the Contractor associated with substitution requests. The burden of proof as to the equality of any material, process, or article shall rest with the Contractor. The Engineer has the complete and sole discretion to determine if a material, process, or article is substantially equal to or better than that specified and to approve or reject all substitution requests.

E. Substantiating data as described above shall include, at a minimum, the following information:

1. A signed affidavit from the Contractor stating that the material, process, or article proposed as a substitution is substantially equal to or better than that specified in every way except as may be listed on the affidavit.

2. Illustrations, specifications, catalog cut sheets, and any other relevant data required to prove that the material, process, or article is substantially equal to or better than that specified.

3. A statement of the cost implications of the substitution being requested, indicating whether and why the proposed substitution will reduce or increase the amount of the contract.

4. Information detailing the durability and lifecycle costs of the proposed substitution.

F. Failure to submit all the required substantiating data detailed above in a timely manner so that the substitution request can be adequately reviewed may result in rejection of the substitution request. The Engineer is not obligated to review multiple submittals related the same substitution request resulting from the Contractor's failure to initially submit a complete package.

G. Time limitations within this Article shall be strictly complied with and in no case will an extension of time for completion of the contract be granted because of Contractor's failure to provide substitution requests at the time and in the manner described herein.

H. The Contractor shall bear the costs of all the City work associated with the review of substitution requests.

I. If substitution requests approved by the Engineer require that Contractor furnish materials, methods or services more expensive than that specified, the increased costs shall be borne by Contractor.

ARTICLE 7 -SUBSURFACE AND PHYSICAL CONDITIONS; UTILITIES

7.1 Soils Investigations.

A. When a soils investigation report for the Site is available, such report is provided for informational purposes only. Any information obtained from such report as to subsurface soil condition, or to elevations of existing grades or elevations of underlying rock, is approximate only and is not guaranteed. Contractor acknowledges that any soils investigation report (including any borings) was prepared for purposes of design only and Contractor is required to examine the Site before submitting its Bid and must make whatever tests it deems appropriate to determine the condition of the so

7.2 Ownership of Site Materials Found.

A. The title to water, soil, rock, gravel, sand, minerals, timber and any other materials developed or obtained in the excavation or other operations of Contractor or any of its Subcontractors in the performance of the Contract, and the right to use said items in carrying out the Contract, or to dispose of same, is hereby expressly reserved by the City. Neither Contractor nor any of its Subcontractors nor any of their representatives or employees shall have any right, title, or interest in said materials, nor shall they assert or make any claim thereto. Contractor will, as determined by the City's Representative, be permitted to use in the Work without charge, any such materials which meet the requirements of the Contract Documents, provided the City shall have the right to use or consume these materials without payment to a third party.

7.3 Existence of Utilities at the Work Site.

A. Existing Utilities

1. The location of known existing utilities and pipelines are shown on the Plans in their approximate locations. However, nothing herein shall be deemed to require the City to indicate the presence of existing service laterals or appurtenances whenever the presence of such utilities on the site of the project can be inferred from the presence of other visible facilities, such as buildings, cleanouts, meter and junction boxes, on or adjacent to the Site of the Project.

2. The City will assume the responsibility for the timely removal, relocation, or protection of existing main or trunk line utility facilities located on the Project site if such utilities are not identified by the City in the Contract Documents or which cannot reasonably be inferred from the presence of other visible facilities.

B. Utility Location

1. It shall be the Contractor's responsibility to determine the exact location and depth of all utilities, including service connections, which have been marked by the respective utility owners and which the Contractor believes may affect or be affected by the Contractor's operations. The Contractor shall not be entitled to additional compensation nor time extensions for work necessary to avoid interferences nor for repair to damaged utilities if the Contractor does not expose all such existing utilities as required by this Article.

2. The locating of utilities shall be in conformance with Government Code Section 4216 et seq. except for the City's utilities located on the City's property and not on public right-of-way.

3. A "High Priority Subsurface Installation" is defined in Government Code Section 4216 (j) as "high-pressure natural gas pipelines with normal operating pressures greater than 415kPA gauge (60psig) or greater than six inches nominal pipe diameter, petroleum pipelines, pressurized sewage pipelines, high-voltage electric supply lines, conductors, or cables that have a potential to ground of greater than or equal to 60kv, or hazardous materials pipelines that are potentially hazardous to workers or the public if damaged."

4. A "Subsurface Installation" is defined in Government Code Section 4216 (s) as "any underground pipeline, conduit, duct, wire, or other structure, except nonpressurized sewer lines, nonpressurized storm drains, or other nonpressurized drain lines."

5. Pursuant to Government Code Section 4216.2 the Contractor shall contact the appropriate regional notification center at least two (2) working days but not more than 14 Days before performing any excavation. The date of the notification shall not count as part of the two-working-day notice. Before notifying the appropriate regional notification center, the Contractor shall delineate the area to be excavated. The Contractor shall request that the utility owners conduct a utility survey and mark or otherwise indicate the location of their service. The Contractor

shall furnish to the Engineer written documentation of its contact(s) with the regional notification center prior to commencing excavation at such locations.

6. After the utility survey is completed, the Contractor shall commence “potholing” or hand digging to determine the actual location of the pipe, duct, or conduit and in accordance with Government Code Section 4216.4 if the excavation within the “tolerance zone” of a subsurface installation. The Engineer shall be given notice prior to commencing potholing operations. The Contractor shall uncover all piping and conduits, to a point one (1) foot below the pipe, where crossings, interferences, or connections are shown on the Drawings, prior to trenching or excavating for any pipe or structures, to determine actual elevations. New pipelines shall be laid to such grade as to clear all existing facilities, which are to remain in service for any period subsequent to the construction of the run of pipe involved.

7. The Contractor's attention is directed to the requirements of Government Code Section 4216.2 (c) which provides: “When the excavation is proposed within 10 feet of a high priority subsurface installation, the operator of the high priority subsurface installation shall notify the excavator of the existence of the high priority subsurface installation to set up an onsite meeting prior to the legal excavation start date and time or at a mutually agreed upon time to determine actions or activities required to verify the location and prevent damage to the high priority subsurface installation. As part of the meeting, the excavator shall discuss with the operator the method and tools that will be used during the excavation and the information the operator will provide to assist in verifying the location of the subsurface installation. The excavator shall not begin excavating until after the completion of the onsite meeting.” The Contractor shall notify the Engineer in advance of this meeting.

C. Utility Relocation and Repair

1. If interferences occur at locations other than those indicated in the Contract Documents with reasonable accuracy, the Contractor shall notify the Engineer in writing. The Engineer will supply a method for correcting said interferences in accordance with the responsibilities of this section and Government Code Section 4215. To the extent any delay is caused thereby, Contractor shall submit a notice of delay within five (5) Days of discovery of the circumstances giving rise to the delay in accordance with Article 9.1 Change Orders and Time Extensions.

2. Care shall be exercised by the Contractor to prevent damage to adjacent existing facilities and public or private works; where equipment will pass over these obstructions, suitable planking shall be placed. If high priority subsurface installations are damaged and the operator cannot be contacted, the Contractor shall call 911 emergency services.

3. The City will compensate the Contractor for the costs of locating and repairing damage not due to the failure of the Contractor to exercise reasonable care, and for removing or relocating such main or trunk line utility facilities not indicated in the Contract Documents with reasonable accuracy, and for the cost of equipment on the Project necessarily idled during such work. The payment for such costs will be made as provided in Article 9.1 Change Orders and Time Extensions. The

Contractor shall not be assessed liquidated damages for delay in completion of the Project, when such delay is caused by the failure of the City or utility company to provide for removal or relocation of such utility facilities. Requests for extensions of time arising out of utility relocation or repair delays shall be filed in accordance with Article 9.1 Change Orders and Time Extensions and Article 9.3 Time for Completion and Liquidated Damages.

4. The public utility, where it is the owner of the affected utility, shall have the sole discretion to perform repairs or relocation work or permit the Contractor to do such repairs or relocation work at a reasonable price. The right is reserved to the City and the owners of utilities or their authorized agents to enter upon the Work area for the purpose of making such changes as are necessary for the rearrangement of their facilities or for making necessary connections or repairs to their properties. The Contractor shall cooperate with forces engaged in such work and shall conduct its operations in such a manner as to avoid any unnecessary delay or hindrance to the work being performed by such forces and shall allow the respective utilities time to relocate their facility.

5. When the Contract Documents indicate that a utility is to be relocated, altered or constructed by others, the City will conduct all negotiations with the utility company and the work will be done at no cost to the Contractor, unless otherwise stipulated in the Contract Documents.

6. Temporary or permanent relocation or alteration of utilities desired by the Contractor for its own convenience shall be the Contractor's responsibility and it shall make arrangements and bear all costs for such work.

D. Construction at Existing Utilities

1. Where the Work to be performed crosses or otherwise interferes with water, sewer, gas, or oil pipelines; buried cable; or other public or private utilities, the Contractor shall perform construction in such a manner so that no damage will result to either public or private utilities. It shall be the responsibility of the Contractor to determine the actual locations of, and make accommodates to maintain, all utilities.

2. Before any utility is taken out of service, permission shall be obtained by the Contractor from the owner. The owner, any impacted resident or business owner and the City Representative will be advised of the nature and duration of the utility outage as well as the Contractor's plan for providing temporary utilities if required by the owner. The Contractor shall be liable for all damage which may result from its failure to maintain utilities during the progress of the Work, and the Contractor shall indemnify City as required by the Contract Documents from all claims arising out of or connected with damage to utilities encountered during construction; damages resulting from disruption of service; and injury to persons or damage to property resulting from the negligent, accidental, or intentional breaching of utilities.

3. Unless otherwise called for by the Contract Documents, the cost of all material, equipment, and labor required to complete this work, shall be included in

Contractor's bid and distributed in the schedule of pay Items. No additional compensation shall be made to the Contractor for this work.

7.4 Trenches

A. Trenches Five Feet or More in Depth.

1. Contractor shall submit to the Engineer at the preconstruction meeting, a detailed plan showing the design of shoring, bracing, sloping or other provisions to be made for worker protection from hazards of caving ground during the excavation of any trench or trenches five feet or more in depth. If such plan varies from shoring system standards established by the Construction Safety Orders of the California Code of Regulations, Department of Industrial Relations, the plan shall be prepared by a California registered civil or structural engineer. The plan shall not be less effective than the shoring, bracing, sloping, or other provisions of the Construction Safety Orders, as defined in the California Code of Regulations. The Contractor shall designate in writing the "competent person" as defined in Title 8, California Code of Regulations, who shall be present at the Work Site each day that trenching/excavation is in progress. The "competent person" shall prepare and provide daily trenching/excavation inspection reports to the Engineer. Contractor shall also submit a copy of its annual California Occupational Safety and Health Administration (Cal/OSHA) trench/excavation permit.

B. Excavations Deeper than Four Feet.

1. If the Work involves excavating trenches or other excavations that extend deeper than four (4) feet below the surface, Contractor shall promptly within three (3) Days, and before the excavation is further disturbed, notify the City in writing of any of the following conditions:

a. Material that the Contractor believes may be material that is hazardous waste, as defined in section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law.

b. Subsurface or latent physical conditions at the site differing from those indicated.

c. Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract

2. The City shall promptly investigate the conditions, and if it finds that the conditions do so materially differ, or do involve hazardous waste, and cause a decrease or increase in Contractor's cost of, or the time required for, performance of any part of the Work, shall issue a Change Order under the procedures described in Article 9.1 Change Orders and Time Extensions.

3. In the event that a dispute arises between the City and the Contractor as to whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the Contractor's cost of, or time required for, performance of any part of the Work, the Contractor shall not be excused from any scheduled completion date provided for by the Contract, but shall proceed with all Work to be

performed under the Contract. Contractor shall retain any and all rights provided either by contract or by law which pertain to the resolution of disputes and protests between the parties.

ARTICLE 8 -PROSECUTION OF THE WORK

8.1 Contractor's Means and Methods.

A. Contractor is solely responsible for the means and methods utilized to perform the Work. In no case shall the Contractor's means and methods deviate from commonly used industry standards.

8.2 Construction Schedule.

A. General Requirements. The schedule shall be prepared in a Critical Path Method ("CPM") format and in an electronic scheduling program acceptable to the City and as specified in the Contract Documents. Contractor shall deliver the schedule and all updates to the City in both paper and electronic form. The electronic versions shall be in the format and include all data used to prepare the schedule. Copies are not acceptable.

B. Schedule. The receipt or approval of any schedules by the City shall not in any way relieve the Contractor of its obligations under the Contract Documents. The Contractor is fully responsible to determine and provide for any and all staffing and resources at levels which allow for good quality and timely completion of the Project. Contractor's failure to incorporate all elements of Work required for the performance of the Contract or any inaccuracy in the schedule shall not excuse the Contractor from performing all Work required for a completed Project within the specified Contract Time. If the required schedule is not received by the time the first payment under the Contract is due, Contractor shall not be paid until the schedule is received, reviewed and accepted by the City.

C. Schedule Contents. The schedule shall allow enough time for inclement weather. The schedule shall indicate the beginning and completion dates of all phases of construction; critical path for all critical, sequential time related activities; and "float time" for all "slack" or "gaps" in the non-critical activities. The schedule shall include appropriate time allowances and constraints for submittals, items of interface with Work performed by others, and specified construction, start-up and performance tests. All float shall be owned by the Project. Schedules indicating early or late completion shall not modify or have any effect on the Contract Time, regardless of whether the schedules are reviewed and/or accepted by the City. For purposes of determining Liquidated Damages, the Contract Time shall control and may only be altered by a duly authorized Change Order.

D. Schedule Updates. Contractor shall continuously update its construction schedule. Contractor shall submit an updated and accurate construction schedule to the City: (1) prior to the start of construction, if there are any changes to the initial schedule; (2) with each progress payment request; and (3) whenever requested to do so by the City. The City may withhold progress payments or other amounts due under the Contract Documents if Contractor fails to submit an updated and accurate

construction schedule. Upon the City's request, Contractor shall submit any schedules or updates to the City in the native electronic format of the software used to create the schedule. Contractor shall also submit schedules showing a two-week detailed look-ahead at weekly meetings conducted with the City. The two-week look-ahead schedule shall clearly identify all staffing and other resources which in the Contractor's judgment are needed to complete the Work within the Contract Time, and it shall clearly state the number of staff to be used on each daily segment of the Work.

E. Acceptance. Acceptance of the schedules by the City will not impose on responsibility for accuracy, for sequencing, scheduling, or progress of the Work, or compliance with the Contract Documents. Acceptance will not interfere with or relieve Contractor from Contractor's full responsibility therefor.

F. Recovery Schedule.

1. Should any of the following conditions exist, City may require Contractor to prepare, at no extra cost to City, a plan of action and a recovery schedule for completing the Work and achieving all contractual milestones within the allotted Contract Time:

a. The Contractor's monthly progress report indicates delays that are, in the opinion of City, of sufficient magnitude that City questions the Contractor's ability to complete the Work;

b. The schedule shows the Contractor to be thirty (30) or more days behind the critical path at any time during construction;

c. The Contractor desires to make changes in the logic or the planned duration of future activities of the schedule which, in the opinion of City, are major in nature.

2. The recovery schedule shall include proposed revisions to the Construction Schedule, demonstrating how Contractor intends to achieve all contractual milestones including Contract completion within the allotted Contract Time. The submittal shall include a narrative describing the actions planned by the Contractor to recover the schedule.

3. Contractor shall submit the Recovery Schedule within seven (7) Days of City's request. If Contractor asserts that City is responsible for the delay, failure to submit the recovery schedule within seven (7) Days of City's request, will be considered a concurrent delay event attributable to Contractor, and Contractor shall only be entitled to non-compensable adjustments to Contract Times. If Contractor is responsible for the delay, this provision will not limit or affect Contractor's liability and failure to submit the recovery schedule with seven (7) Days of City's request may result in City withholding progress payments or other amounts due under the Contract Documents.

4. Contractor is responsible for all costs associated with the preparation and execution of the recovery schedule, including any necessary recovery actions, which may include, but are not limited to, assignment of additional labor, and/or equipment, shift or overtime work, expediting of submittals or deliveries,

overlapping of activities or sequencing changes to increase activity concurrence. Regardless of whether City directs Contractor to prepare a recovery schedule pursuant to this Section, Contractor shall promptly undertake appropriate action at no additional cost to City to recover the schedule whenever the current construction schedule shows that the Contractor will not achieve a milestone and/or complete the Work within the allotted Contract Time.

8.3 Time for Completion and Liquidated Damages

A. Time for Completion. The time for completion set forth in Article 2 of the Contract for Construction shall commence: (1) on the date stated in the Notice to Proceed, or (2) if the Notice to Proceed does not specify a commencement date, then on the date of the Notice to Proceed and shall be completed by Contractor in the time specified in the Contract Documents. The City is under no obligation to consider early completion of the Project; and the Contract completion date shall not be amended by the City's receipt or acceptance of the Contractor's proposed earlier completion date. Any difference in time between the Contractor's early completion and the Contract Time shall be considered a part of the Project float. Contractor shall not be entitled to compensation, and the City will not compensate Contractor, for delays which impact early completion. Contractor shall not, under any circumstances, receive additional compensation from the City (including but not limited to indirect, general, administrative or other forms of overhead costs) for the period between the time of earlier completion proposed by the Contractor and the Contract completion date.

B. Liquidated Damages. If the Work is not completed within the Contract Time(s), it is understood that the City will suffer damage. In accordance with Government Code section 53069.85 and Public Contract Code section 7102, being impractical and infeasible to determine the amount of actual damage, it is agreed that Contractor shall pay to the City as fixed and liquidated damages, and not as a penalty, the sum stipulated in the Contract for each calendar day of delay until the Work is fully completed. Contractor and its surety shall be liable for any liquidated damages. Any money due or to become due the Contractor may be retained to cover liquidated damages.

C. Inclement Weather. Contractor shall abide by the City's determination of what constitutes inclement weather. Time extensions for inclement weather shall only be granted when the Work stopped during inclement weather is on the critical path of the Project schedule. Contractor shall not be entitled to reverse liquidated damages for time extensions resulting from inclement weather.

D. Extension of Time. Contractor's entitlement to an extension of the Contract Time is limited to a City-caused extension of the critical path, reduced by the Contractor's concurrent delays, and established by a proper time impact analysis. Contractor shall not be charged liquidated damages because of any delays in completion of the Work due to unforeseeable causes beyond the control and without the fault or negligence of Contractor (or its Subcontractors or Suppliers). The City shall ascertain the facts and extent of delay and grant extension of time for completing the Work when, in its judgment, the facts justify such an extension. Contractor shall not be entitled to an adjustment in the Contract Times for delays within the control

of Contractor. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of Contractor.

E. Reverse Liquidated Damages. Consistent with Public Contract Code Section 7102, Contractor will be compensated for damages incurred due to unreasonable delays to the critical path for which the City is responsible. The parties agree that determining Contractor's exact delay damages are and will continue to be impracticable and extremely difficult. As such, for each calendar day in excess of the time for completion set forth in Article 2 of the Contract for Construction, the City shall pay to the Contractor the sum stipulated in the Contract per day. Such amount shall constitute the only payment allowed for any City-caused delays and shall necessarily include all overhead, all profits, all administrative costs, all bond costs, all labor, materials, equipment and rental costs and any other costs, expenses and fees incurred or sustained as a result of such delays. Contractor shall not be entitled to reverse liquidated damages for any change in the Work in which Contractor is compensated for overhead and profit through a change in Unit Price Work or a Change Order resulting in a lump sum or allowed mark-up for the additional Work. The amount of reverse liquidated damages shall be reduced by Contractor's concurrent delays.

F. Force Majeure. In accordance with subparagraphs "D" and "E" above, the Contractor shall not be charged liquidated damages, and the City shall not be responsible, for any delays resulting from a Force Majeure Event. If a delay to the critical path results from a Force Majeure Event, the Contractor will be entitled to a time extension but will not receive an adjustment to the Contract Price or any other compensation. Such a non-compensable adjustment shall be Contractor's sole and exclusive remedy for such delays.

G. No Damages for Reasonable Delay. The City's liability to Contractor for delays for which the City is responsible shall be limited to only an extension of time unless such delays were unreasonable under the circumstances. In no case shall the City be liable for any costs which are borne by the Contractor in the regular course of business, including, but not limited to, home office overhead and other ongoing costs. Damages caused by unreasonable City delay shall be based on actual costs only, no proportions or formulas shall be used to calculate any delay damages.

H. Procedure for Time Extensions and Delay Damages. Contractor shall not be entitled to any extension of time or any reverse liquidated damages unless Contractor properly notices the delay and adjustment to compensation and requests a Change Order in accordance with Article 9.1 Change Orders and Time Extensions. Contractor's failure to timely and fully comply with the Change Order procedures in the Contract Documents shall constitute a waiver of Contractor's right to a time extension or reverse liquidated damages.

8.4 Contractor's Responsibility for Work.

A. Until the acceptance of the Work by the Engineer as evidenced in writing, it shall be under the charge and care of the Contractor. The Contractor shall take every necessary precaution against injury or damage to any part thereof by the action of the elements or from any cause whether arising from the execution or non-execution

of the Work. The Contractor shall rebuild, repair, restore and make good at its own expense all injuries or damages to any portion of the Work before its completion and acceptance. In the event of damage proximately caused by an Act of God, as defined by Section 7105 of the Public Contract Code, the City will pay for repair or restoration to damaged Work in excess of 5% of the total Bid.

8.5 Occupancy.

A. The City reserves the right to occupy or utilize any portion of the Work at any time before completion, and such occupancy or use shall not constitute acceptance of any part of Work covered by this Contract. This use shall not relieve the Contractor of its responsibilities under the Contract.

8.6 Securities for Money Withheld

A. Pursuant to section 22300 of the Public Contract Code of the State of California, Contractor may request the City to make retention payments directly to an escrow agent or may substitute securities for any money withheld by the City to ensure performance under the contract. At the request and expense of Contractor, securities equivalent to the amount withheld shall be deposited with the City or with a state or federally chartered bank as the escrow agent who shall return such securities to Contractor upon satisfactory completion of the contract. Deposit of securities with an escrow agent shall be subject to a written agreement substantially in the form provided in section 22300 of the Public Contract Code.

8.7 The City's Right to Suspend/Terminate the Contract

A. Suspension of Work by the City

1. The City may, at its sole option, decide to suspend at any time the performance of all or any portion of the Work by notice in writing to Contractor. Such notice of suspension of Work will designate the amount and type of plant, labor, and equipment to be committed to the Project during the period of suspension. Contractor shall use its best efforts to utilize its plant, labor, and equipment in such a manner as to minimize costs associated with suspension.

2. Upon receipt of any such notice, Contractor shall, unless the notice requires otherwise:

a. Immediately discontinue Work on the date and to the extent specified in the notice;

b. Place no further orders or subcontracts for material, services, or facilities with respect to suspended Work other than to the extent required in the notice;

c. Promptly make every reasonable effort to obtain suspension upon terms satisfactory to the City's Representative of all orders, subcontracts, and rental agreements to the extent they relate to performance of Work suspended; and

d. Continue to protect and maintain the Work including those portions on which Work has been suspended.

3. Except as provided by this Article, as full and complete compensation for such suspension, Contractor shall be granted an adjustment in the Contract Price based on a negotiated daily rate that reflects the Contractor's actual costs associated with the demobilized condition of the Site and an extension of the Contract Times equal to the number of days performance of Work is suspended; provided, however, that no adjustment of Contract Price or extension of Contract Times shall be granted if the suspension results from Contractor's non-compliance with the requirements of the Contract.

B. Termination for Cause by the City:

1. In the sole estimation of the City, if the Contractor refuses or fails to prosecute the Work or any separable part thereof with such diligence as will insure its completion within the time specified by the Contract Documents, or any extension thereof, or fails to complete such Work within such time, or if the Contractor should be adjudged a bankrupt, or if it should make a general assignment for the benefit of its creditors, or if a receiver should be appointed on account of its insolvency, or the Contractor or any of its subcontractors should violate any of the provisions of this Contract, the City may serve written notice upon the Contractor and its surety of the City's intention to terminate this Contract. This notice of intent to terminate shall contain the reasons for such intention to terminate this Contract, and a statement to the effect that the Contractor's right to perform this Contract shall cease and terminate upon the expiration of ten (10) Days unless such violations have ceased and arrangements satisfactory to the City have been made for correction of said violations.

2. After expiration of the ten (10) Day period, the City may terminate the Contract by providing a Notice of Termination to the Contractor. The City may take over and complete the Work by any method it may deem appropriate, including enforcement of the Project performance bond. Contractor and its surety shall be liable to the City for any excess costs or other damages incurred by the City to complete the Work. If the City takes over the Work, the City may, without liability for so doing, take possession of and utilize in completing the Work such materials, appliances, plant, and other property belonging to the Contractor as may be on the Site.

3. Upon termination, Contractor shall not be entitled to receive any further payment from the City, except for Work which was duly performed prior to the effective date of the Notice of Termination. Contractor shall submit an invoice for final payment within thirty (30) Days of the effective date of the Notice of Termination. The City may withhold from final payment up to 150% of any disputed amounts, including any amounts which may be necessary to repair defective Work, complete unfinished Work, or are otherwise occasioned by Contractor's failure to perform its duties under the Contract.

C. Termination for Convenience by the City:

1. The City may terminate performance of the Work called for by the Contract Documents in whole or, from time to time, in part, upon ten (10) Days written notice if the City determines that a termination is in the City's interest.

2. The Contractor shall terminate all or any part of the Work upon delivery to the Contractor of a Notice of Termination specifying that the termination is for the convenience of the City, the extent of termination, and the effective date of such termination.

3. After receipt of Notice of Termination, and except as directed by the City's Representative, the Contractor shall, regardless of any delay in determining or adjusting any amounts due under this termination for convenience clause, immediately proceed with the following obligations:

a. Stop Work as specified in the Notice.

b. Complete any Work specified in the Notice of Termination in a least cost/shortest time manner while still maintaining the quality called for under the Contract Documents.

c. Leave the property upon which the Contractor was working and upon which the facility (or facilities) forming the basis of the Contract Document is situated in a safe and sanitary manner such that it does not pose any threat to the public health or safety.

d. Terminate all subcontracts to the extent that they relate to the portions of the Work terminated.

e. Place no further subcontracts or orders, except as necessary to complete the continued portion of the Contract.

f. Submit to the City's Representative, within ten (10) Days from the effective date of the Notice of Termination, all of the usual documentation called for by the Contract Documents to substantiate all costs incurred by the Contractor for labor, materials and equipment through the effective date of the Notice of Termination. Any documentation substantiating costs incurred by the Contractor solely as a result of the City's exercise of its right to terminate this Contract pursuant to this clause, which costs the contractor is authorized under the Contract documents to incur, shall: (1) be submitted to and received by the Engineer no later than 30 Days after the effective date of the Notice of Termination; (2) describe the costs incurred with particularity; and (3) be conspicuously identified as “Termination Costs occasioned by the City's Termination for Convenience.” If the City rejects any costs, Contractor shall be deemed to waive the rejected costs unless Contractor files a Claim within thirty (30) Days of the rejection pursuant to Article 9.2.

g. Contractor shall be entitled to receive only the amounts payable under this Article, and Contractor specifically waives any claim for any other amounts or damages, including, but not limited to, any claim for consequential damages or lost profits. The provisions in this Article are in addition to and not in limitation of any other rights or remedies available to the City.

4. Termination of the Contract shall not relieve surety of its obligation for any just claims arising out of or relating to the Work performed.

5. Notwithstanding any other provision of this Article, when immediate action is necessary to protect life and safety or to reduce significant exposure or liability, the City may immediately order Contractor to cease Work on the Project until such

safety or liability issues are addressed to the satisfaction of the City or the Contract is terminated.

6. If the City terminates Contractor for cause, and if it is later determined that the termination was wrongful, such default termination shall automatically be converted to and treated as a termination for convenience. In such event, Contractor shall be entitled to receive only the amounts payable under this section, and Contractor specifically waives any claim for any other amounts or damages, including, but not limited to, any claim for consequential damages or lost profits.

8.8 Completion and Acceptance of Work

A. Final Inspection. Upon written notice from Contractor that the entire Work is complete, the Engineer will promptly make a final inspection with the City and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

B. Final Acceptance. The acceptance of the Work on behalf of the City will be made by the Engineer. Such acceptance by the City shall not constitute a waiver of defects. After Contractor has, in the opinion of the Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, Record Documents, and other documents required by the Contract Documents, the City shall execute a Notice of Completion, constituting final acceptance and completion of the Project, except as may be expressly noted.

8.9 Warranty and Guaranty of Work.

A. Contractor hereby warrants that materials and Work shall be completed in conformance with the Contract Documents and that the materials and Work provided will fulfill the requirements of this Warranty. Contractor hereby agrees to repair or replace, at the discretion of the City, any or all Work that may prove to be defective in its workmanship, materials furnished, methods of installation or fail to conform to the Contract Document requirements together with any other Work which may be damaged or displaced by such defect(s) within a period of one (1) year (or as otherwise indicated in the Contract Documents or in any guarantee or warranty provided by any manufacturer or supplier of equipment or materials incorporated into the Work, whichever is later) from the date of the Notice of Completion of the Project without any expense whatever to the City, ordinary wear and tear and unusual abuse and neglect excepted. Contractor shall be required to promptly repair or replace defective equipment or materials, at Contractor's option. All costs associated with such corrective actions and testing, including the removal, replacement, and reinstitution of equipment and materials necessary to gain access, shall be the sole responsibility of the Contractor.

B. For any Work so corrected, Contractor's obligation hereunder to correct defective Work shall be reinstated for an additional one (1) year period, commencing with the

date of acceptance of such corrected Work. The reinstatement of the one (1) year warranty shall apply only to that portion of work that was corrected. Contractor shall perform such tests as the City may require to verify that any corrective actions, including, without limitation, redesign, repairs, and replacements comply with the requirements of the Contract. In the event of Contractor's failure to comply with the above-mentioned conditions within ten (10) Days after being notified in writing of required repairs, to the reasonable satisfaction of the City, the City shall have the right to correct and replace any defective or non-conforming Work and any work damaged by such work or the replacement or correction thereof at Contractor's sole expense. Contractor shall be obligated to fully reimburse the City for any expenses incurred hereunder immediately upon demand.

C. In addition to the warranty set forth in this Article, Contractor shall obtain for the City all warranties that would be given in normal commercial practice and assign to the City any and all manufacturer's or installer's warranties for equipment or materials not manufactured by Contractor and provided as part of the Work, to the extent that such third-party warranties are assignable and extend beyond the warranty period set forth in this Article. Contractor shall furnish the City with all warranty and guarantee documents prior to final acceptance of the Project by the City as required.

D. When specifically indicated in the Contract Documents or when directed by the Engineer, the City may furnish materials or products to the Contractor for installation. In the event any act or failure to act by Contractor shall cause a warranty applicable to any materials or products purchased by the City for installation by the Contractor to be voided or reduced, Contractor shall indemnify the City from and against any cost, expense, or other liability arising therefrom, and shall be responsible to the City for the cost of any repairs, replacement or other costs that would have been covered by the warranty but for such act or failure to act by Contractor.

E. The Contractor shall remedy at its expense any damage to City-owned or controlled real or personal property.

F. The City shall notify the Contractor, in writing, within a reasonable time after the discovery of any failure, defect, or damage. The Contractor shall within ten (10) Days after being notified commence and perform with due diligence all necessary Work. If the Contractor fails to promptly remedy any defect or damage, the City shall have the right to replace, repair or otherwise remedy the defect, or damage at the Contractor's expense.

G. In the event of any emergency constituting an immediate hazard to health, safety, property, or licensees, when caused by Work of the Contractor not in accordance with the Contract requirements, the City may undertake at Contractor's expense, and without prior notice, all Work necessary to correct such condition.

H. Acceptance of Defective Work.

1. If, instead of requiring correction or removal and replacement of defective Work, the City prefers to accept it, the City may do so. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration

or other dispute resolution costs) attributable to the City's evaluation of and determination to accept such defective Work and for the diminished value of the Work. If any acceptance of Defective Work occurs prior to release of the Project retention, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and the City shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work and all costs incurred by the City. If the acceptance of defective occurs after release of the Project retention, an appropriate amount will be paid by Contractor to the City.

I. The City May Correct Defective Work

1. If Contractor fails within a reasonable time after written notice from the City to correct Defective Work, or to remove and replace rejected Work as required by the City, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, the City may, after seven (7) Days written notice to Contractor, correct, or remedy any such deficiency.

2. In connection with such corrective or remedial action, the City may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, take possession of Contractor's tools, appliances, construction equipment and machinery at the Site, and incorporate in the Work all materials and equipment stored at the Site or for which the City has paid Contractor but which are stored elsewhere. Contractor shall allow the City, and the agents, employees, other contractors, and consultants of each of them, access to the Site to enable the City to exercise the rights and remedies to correct the Defective Work.

3. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred or sustained by the City correcting the Defective Work will be charged against Contractor, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and the City shall be entitled to an appropriate decrease in the Contract Price. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of defective Work.

4. If the Change Order is executed after all payments under the Contract have been paid by the City and the Project Retention is held in an escrow account as permitted by the Contract Documents, Contractor will promptly alert the escrow holder, in writing, of the amount of Retention to be paid to the City. If the Change Order is executed after release of the Project retention, an appropriate amount will be paid by Contractor to the City. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the City correcting Defective Work.

J. Nothing in the warranty or in the Contract Documents shall be construed to limit the rights and remedies available to the City at law or in equity, including, but not limited to, Code of Civil Procedure section 337.15.

ARTICLE 9 -CHANGE ORDERS; DISPUTE RESOLUTION

9.1 Change Orders and Time Extensions

All changes to the Contract, including compensation increases and time extensions, shall be through a written Change Order in accordance with this Article. The City, without invalidating the Contract, may order changes in the Work consisting of additions, deletions or other revisions, and Contractor's compensation and the time for completion shall be adjusted accordingly. Whenever any change is made as provided for herein, such change shall be considered and treated as though originally included in the Contract, and shall be subject to all terms, conditions, and provisions of the original Contract. Contractor shall not be entitled to claim or bring suit for damages, whether for loss of profits or otherwise, on account of any decrease or omission of any item or portion of Work to be done. No dispute, disagreement, or failure of the parties to reach agreement on the terms of the Change Order shall relieve the Contractor from the obligation to proceed with performance of the Work, including Additional Work, promptly and expeditiously. Any alterations, extensions of time, Additional Work, or any other changes may be made without securing consent of the Contractor's surety or sureties.

A. Change in Contract Procedures

1. City Directive. The City may direct changes in the Work by delivering a written directive. To the extent the work directive results in a change to compensation or time, Contractor must timely request a Change Order and comply with all Change Order procedures in accordance with this Article. Notwithstanding issuance of a work directive, Contractor's failure to timely request a Change Order shall constitute a waiver by Contractor of any adjustment to compensation or time extension for Work performed under the directive. The City shall not be liable to Contractor for Work performed or omitted by Contractor in reliance on verbal orders.

2. Contractor's Notice of Change/Delay. If Contractor intends to initiate a Change Order Request, then Contractor shall provide the City with written notice of the underlying facts and circumstances that gave rise to the proposed change within the following times:

a. If due to unknown subsurface or latent physical conditions, within three (3) Days from the discovery date or prior to the alterations of the conditions, whichever is earlier.

b. If due to a Force Majeure Event, as soon as reasonably practicable under the conditions, which shall be no longer than three (3) Days from the date the Contractor discovers that the Force Majeure Event gives rise to a change, unless that the conditions are such that notice within three (3) Days is not possible or practicable.

c. If due to any other matter that may involve an adjustment to the Contract Time or the Contract Price, within seven (7) days from the discovery date.

To be considered valid and complete, the notice of change/delay shall include a general statement of the circumstances giving rise to the notice of change/delay and a reasonable order of magnitude estimate of the additional costs and/or time. If the circumstances give rise to both a cost adjustment and time extension, Contractor shall submit the notice of change and notice of delay concurrently.

3. Request for Change in Compensation and/or Extension of Time. Contractor shall submit a Change Order Request for any adjustment to Contractor's compensation and/or any extension of time. The Change Order Request shall be made prior to incurring any expense and within fourteen (14) Days from either Contractor's notice of change/delay or the City's directive ordering the change. The Change Order Request shall include all of the following information (unless inapplicable to the change):

a. A detailed description of the circumstances giving rise to the request;

b. A complete itemized cost proposal, including itemized pricing for first tier Subcontractors;

c. Supporting documentation for all costs;

d. A time impact analysis showing the impact of the delay to the critical path to completion;

e. If any added costs or information cannot be determined at the time of the Change Order Request, the reason the costs or information cannot be determined at the time; and

f. Certification to the accuracy of the Change Order Request under penalty of perjury.

The time impact analysis shall be in the critical path method format and shall show the sequencing of all critical and non-critical new activities and/or activity revisions affected by the delay, with logic ties to all affected existing activities noted on the schedule.

The City may demand, and Contractor shall provide, any additional information supporting the Change Order Request, including but not limited to native electronic format version of schedules and time impact analyses. Contractor shall provide the requested additional information within five (5) Days of the request.

For any costs or information that cannot be determined at the time Contractor submits the Change Order Request, Contractor shall submit to the City notice of the costs or information and all supporting documentation within five (5) Days of when the costs or other information become subject to determination.

4. City's Final Decision on Change Order; Ordered Changes. If the City denies the Change Order Request or disagrees with the proposal submitted by Contractor, it will notify the Contractor, and the City will provide its opinion of the appropriate price and/or time extension. If no agreement can be reached, the City shall have the right to order the Work performed on a time and materials basis or to issue a unilateral Change Order setting forth the City's determination of the reasonable additions or savings in costs and time attributable to the extra or deleted work. The City shall also have the right to order changes in the Work to be performed

promptly by the Contractor on a time and materials basis or to issue a unilateral Change Order setting forth the City's determination of the reasonable additions or savings in costs and time attributable to the extra or deleted work. The City's determination shall become final and binding if the Contractor fails to submit a Claim in writing to the City within fourteen (14) Days of the issuance of the unilateral Change Order, disputing the terms of the unilateral Change Order and providing such supporting documentation for its position as the City may reasonably require.

5. Contractor's Waiver of Further Relief. **CONTRACTOR'S FAILURE TO PROVIDE A COMPLETE AND TIMELY NOTICE OF CHANGE/DELAY AND/OR CHANGE ORDER REQUEST, OR TO COMPLY WITH ANY OTHER REQUIREMENT OF THIS ARTICLE, SHALL CONSTITUTE A WAIVER BY CONTRACTOR OF THE RIGHT TO A CONTRACT ADJUSTMENT ON ACCOUNT OF SUCH CIRCUMSTANCES AND A WAIVER OF ANY RIGHT TO FURTHER RECOURSE OR RECOVERY BY REASON OF OR RELATED TO SUCH CHANGE BY MEANS OF THE CLAIMS DISPUTE RESOLUTION PROCESS OR BY ANY OTHER LEGAL PROCESS OTHERWISE PROVIDED FOR UNDER APPLICABLE LAWS.**

   Contractor recognizes and acknowledges that timely submission of a formal written notice of change/delay and Change Order Request, whether or not the circumstances of the change may be known to the City or available to the City through other means, is not a mere formality but is of crucial importance to the ability of the City to promptly identify, prioritize, evaluate and mitigate the potential effects of changes. Any form of informal notice, whether verbal or written (including, without limitation, statements in requests for information, statements in Submittals, statements at any job meeting or entries on monthly reports, daily logs or job meeting minutes), that does not strictly comply with the formal requirements of this Article, shall accordingly be insufficient.

6. Change Order Format

a. A Change Order signed by the Contractor indicates the Contractor's agreement therewith, including any adjustment in compensation or extension of time, and the full and final settlement of all costs (direct, indirect and overhead) related to the Work authorized by the Change Order.

b. The City may designate the forms to be used for notices, requests, and Change Orders. If so designated, Contractor may only use such forms. Contractor shall not reserve a right to assert impact costs, extended job site costs, extended overhead, constructive acceleration and/or actual acceleration beyond what is stated in the Change Order. No Claims shall be allowed for impact, extended overhead costs, constructive acceleration and/or actual acceleration due to a multiplicity of changes and/or clarifications. The Contractor may not change or modify the City's Change Order form in an attempt to reserve additional rights.

B. Determining Adjustments to Compensation.

1. Limitation on Costs. Contractor shall not be entitled to any compensation for Work subject to a Change Order except as expressly set forth in this Article. The mark-up added in instances of Additional Work shall constitute the entire amount of profit, any mark-ups, any field or home office overhead costs, including personnel, equipment or office space, any materials, or any costs of equipment idle time for such Work.

2. Unit Price Change Orders. When the actual quantity of a Unit Price Work item varies from the Bid Schedule, compensation for the change in quantity will be calculated by multiplying the actual quantity by the unit price. This calculation may result in either an additive or deductive Change Order. Bid items included on the Bid Schedule may be deducted from the Work in their entirety without any negotiated extra costs. Because Unit Price Work includes overhead and profit as determined by Contractor at the time of its Bid submission, no mark up or deduction for overhead and profit will be allowed.

3. Lump Sum Change Orders. Whenever possible, any changes affecting compensation shall be in a lump sum mutually agreed by the Contractor and the City.

4. Time and Materials Change Orders. The City may direct the Contractor to proceed with the Additional Work with payment to be made on the basis of actual cost of the labor and materials required to complete the Additional Work. If the Project is federally funded, a time and materials Change Order shall only be issued after a determination that no other Change Order is suitable and the Change Order shall include a ceiling price that the Contractor exceeds at its own risk.

5. Federally Funded Projects. For any change in price to the Contract, general and administrative expenses shall be negotiated and must conform to the cost principles set forth under at 2 C.F.R. Part 200, subpart E, and profit shall be negotiated as a separate element of the cost. To establish a fair and reasonable profit, consideration must be given to the complexity of the Additional Work to be performed, the risk borne by the Contractor, the Contractor's investment, the amount of subcontracting, the quality of its record of past performance, and industry profit rates in the surrounding geographical area for similar work.

6. Allowed Costs. Estimates for lump sum quotations and accounting for time-and-material work shall be limited to direct expenditures necessitated specifically by the change and shall be segregated as follows:

a. Labor. The costs of labor will be the actual cost for wages prevailing locally for each craft or type of worker at the time the Additional Work is done, plus employer payments of payroll taxes and insurance, health and welfare, pension, vacation, apprenticeship funds, and other direct costs resulting from federal, state or local laws, as well as assessment or benefits required by lawful collective bargaining agreements. The use of a labor classification which would increase the Additional Work cost will not be permitted unless the Contractor establishes the necessity for such additional costs. Labor costs for equipment operators and helpers shall be reported only when such costs are not included in the invoice for equipment rental.

b. Materials. The cost of materials reported shall be at the lowest current price at which such materials are locally available in the quantities involved, plus sales tax, freight and delivery. Materials costs shall be based upon supplier or manufacturer's invoice.

c. Tool and Equipment Use. Regardless of ownership, the rates to be used in determining equipment use shall not exceed listed rates prevailing locally at equipment rental agencies, or distributors, at the time the work is performed. The Contractor shall furnish cost data supporting the establishment of the rental rate. The rental rate to be applied for use of each items of equipment shall be the rate resulting in the least total cost to the City for the total period of use. The City shall the make the final determination as to an equitable rental rate for the equipment. No payment will be made for the use of small tools, which have a replacement value of $1,000 or less.

(i) The rental time to be paid for equipment shall be the time the equipment is in productive operation on the Additional Work being performed. Rental time will not be allowed while equipment is inoperative due to breakdowns.

(ii) All equipment shall, in the opinion of the City, be in good working condition and suitable for the purpose for which the equipment is to be used. Equipment with no direct power unit shall be powered by a unit of at least the minimum rating recommended by the manufacturer.

(iii) Before construction equipment is used on any Additional Work, the Contractor shall plainly stencil or stamp an identifying number thereon at a conspicuous location, and shall furnish to the City, in duplicate, a description of the equipment and its identifying number.

(iv) When hourly rates are listed, any part of an hour less than 30 minutes of operation shall be considered to be 1/2-hour of operation, and any part of an hour greater than 30 minutes will be considered one hour of operation. When daily rates are listed, any part of a day less than 4 hours operation shall be considered to be 1/2-day of operation.

d. Allowed Mark-up. The allowed mark-up for any and all overhead (including supervision and home and field office costs) and profit on work added to the Contract shall be determined in accordance with the following provisions:

(i) "Net Cost" is defined as the actual costs of labor, materials and tools and equipment only, excluding overhead and profit. The costs of applicable insurance and bond premium will be reimbursed to the Contractor and Subcontractors at cost only, without mark-up. Contractor shall provide the City with documentation of the costs, including but not limited to payroll records, invoices, and such other information as the City may reasonably request.

(ii) For Work performed by the Contractor's forces the allowed mark-up shall not exceed fifteen (15%) percent of labor costs, ten percent (10%) of material costs, and ten percent (10%) of the cost of tools and equipment use.

(iii) For Work performed by a Subcontractor, the added cost for overhead and profit shall not exceed fifteen percent (15%) of the Subcontractor's Net Cost of the Work

to which the Contractor may add up to five percent (5%) of the Subcontractor's Net Cost.

(iv) For Work performed by a sub-subcontractor, the added cost for overhead and profit shall not exceed fifteen percent (15%) of the sub-subcontractor's Net Cost for Work to which the Subcontractor and Contractor may each add up to an additional five percent (5%) of the Net Cost of the lower tier subcontractor.

(v) No additional mark-up will be allowed for lower tier subcontractors, and in no case shall the added cost for overhead and profit payable by the City exceed twenty-five percent (25%) of the Net Cost as defined herein, of the party that performs the Work.

(vi) Calculation of the mark-up will be subject to the limitations above and to calculation as further detailed in (b)(B)(5) above.

e. Documentation of Time-and-Material Costs.

(i) T&M Daily Sheets. Contractor must submit timesheets, materials invoices, records of equipment hours, and records of rental equipment hours to the City's for an approval signature each day that Work is performed on a time-and-material basis. The Engineer's signature on time sheets only serves as verification that the Work was performed and is not indicative of the City's agreement to Contractor's entitlement to the cost.

(ii) T&M Summary Sheet. Contractor shall submit a T&M Summary Sheet, which shall include total actual costs, within five (5) Days following completion of Additional Work on a time-and-material basis. Contractor's total actual cost shall be presented in a summary table in an electronic spreadsheet file by labor, material, equipment, and any other costs, along with documentation supporting the costs. Contractor's failure to submit the T&M Summary Sheet within five (5) Days of completion of the Additional Work will result in Contractor's waiver for any reimbursement of any costs associated with the Additional Work.

f. Excluded Costs. The following costs or any other home or field office overhead costs, all of which are to be considered administrative costs covered by the Contractor's mark-up, shall not be allowed costs and shall not be included in any lump sum proposals or time-and-materials invoices:

(i) Overhead Cost. Payroll costs and other compensation of Contractor's officers, executives, principals, general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, timekeepers, clerks, and other personnel employed by Contractor whether at the Site or in Contractor's principal office or any branch office, material yard, or shop for general administration of the Work;

(ii) Office Expenses. Expenses of Contractor's principal and branch offices;

(iii) Capital Expenses. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Additional Work and charges against Contractor for delinquent payments;

(iv) Negligence. Costs due to the negligence of Contractor or any Subcontractor or Supplier, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including without limitation the correction of Defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property;

(v) Small Tools. Cost of small tools valued at less than $1,000 and that remain the property of Contractor;

(vi) Administrative Costs. Costs associated with the preparation of Change Orders (whether or not ultimately authorized), cost estimates, or the preparation or filing of Claims;

(vii) Anticipated Lost Profits. Expenses of Contractor associated with anticipated lost profits or lost revenues, lost income or earnings, lost interest on earnings, or unpaid retention;

(viii) Home Office Overhead. Costs derived from the computation of a "home office overhead" rate by application of the *Eichleay, Allegheny*, burden fluctuation, or other similar methods;

(ix) Special Consultants and Attorneys. Costs of special consultants or attorneys, whether or not in the direct employ of Contractor, employed for services specifically related to the resolution of a Claim, dispute, or other matter arising out of or relating to the performance of the Additional Work.

(x) Other. Other overhead or general expense costs of any kind and the cost of any item not specifically and expressly included in the Contract Documents; including but not limited to: submittals, drawings, field drawings, shop drawings, including submissions of drawings; field inspection; general superintendence; computer services; reproduction services; salaries of project engineer, superintendent, timekeeper, storekeeper, and secretaries; janitorial services; small tools, incidentals and consumables; temporary on-site facilities (offices, telephones, high speed internet access, plumbing, electrical power, lighting; platforms, fencing, water); surveying; estimating; protection of work; handling and disposal fees; final cleanup; other incidental work; related warranties; insurance and bond premiums.

(xi) Compliance with Federal Cost Principles. If the Project is federally funded, any costs that are not allowable, reasonable and allocable to the Project, under generally accepted accounting principles and the applicable federal requirements.

9.2 Procedure for Resolving Claims.

Contractor shall timely comply with any and all requirement of the Contract Documents pertaining to notices and requests for changes to the Contract Time or Contract Price, including but not limited to all requirements of Article 9.1, as a prerequisite to filing any claim governed by this Article. The failure to timely submit a notice of delay or notice of change, or to timely request a change to the time for completion or Contractor's compensation, or to timely provide any other notice or request required herein shall constitute a waiver of the right to further pursue the claim under the Contract or at law.

A. Intent. Effective January 1, 1991, Section 20104 et seq., of the California Public Contract Code prescribes a process utilizing informal conferences, non-binding judicial supervised mediation, and judicial arbitration to resolve disputes on construction claims of $375,000 or less. Effective January 1, 2017, Section 9204 of the Public Contract Code prescribes a process for negotiation and mediation to resolve disputes on construction claims. The intent of this Article is to implement Sections 20104 et seq. and Section 9204 of the California Public Contract Code. This Article shall be construed to be consistent with all applicable law, including but not limited to these statutes.

B. Claims. For purposes of this Article, "Claim" means a separate demand by the Contractor for:

1. An adjustment to the time for completion including, without limitation, for relief from damages or penalties for delay assessed by the City;

2. Payment by the City of money or damages arising from Work done by or on behalf of the Contractor pursuant to the Contract, payment for which is not otherwise expressly provided or to which the Contractor is not otherwise entitled; or

3. An amount the payment of which is disputed by the City.

A "Claim" does not include any demand for payment for which the Contractor has failed to provide notice, request a Change Order, or otherwise failed to follow any procedures contained in the Contract Documents.

C. Filing Claims. Claims governed by this Article may not be filed unless and until the Contractor completes any and all requirements of the Contract Documents pertaining to notices and requests for changes to the Contract Time or Contract Price, and Contractor's request for a change has been denied in whole or in part. Claims governed by this Article must be filed no later than thirty (30) Days after a request for change has been denied in whole or in part or after any other event giving rise to the Claim. The Claim shall be submitted in writing to the City and shall include on its first page the following words in 16 point capital font: "THIS IS A CLAIM." The Claim shall include the all information and documents necessary to substantiate the Claim, including but not limited to those identified below. Nothing in this Article is intended to extend the time limit or supersede notice requirements otherwise provided by Contract Documents. Failure to follow such contractual requirements shall bar any Claims or subsequent proceedings for compensation or payment thereon.

D. **Documentation.** The Contractor shall submit all Claims in the following format:

1. Summary description of Claim including basis of entitlement, merit and amount of time or money requested, with specific reference to the Contract Document provisions pursuant to which the Claim is made

2. List of documents relating to Claim:

a. Specifications

b. Drawings

c. Clarifications (Requests for Information)

d. Schedules

e. Other

3. Chronology of events and correspondence

4. Narrative analysis of Claim merit

5. Analysis of Claim cost, including calculations and supporting documents

6. Time impact analysis in the form required by the Contract Documents or, if the Contract Documents do not require a particular format, CPM format, if an adjustment of the Contract Time is requested

E. City's Response. Upon receipt of a Claim pursuant to this Article, the City shall conduct a reasonable review of the Claim and, within a period not to exceed 45 Days, shall provide the Contractor a written statement identifying what portion of the Claim is disputed and what portion is undisputed. Any payment due on an undisputed portion of the Claim will be processed and made within 60 Days after the City issues its written statement.

1. If the City needs approval from its governing body to provide the Contractor a written statement identifying the disputed portion and the undisputed portion of the Claim, and the City's governing body does not meet within the 45 Days or within the mutually agreed to extension of time following receipt of a Claim sent by registered mail or certified mail, return receipt requested, the City shall have up to three (3) Days following the next duly publicly noticed meeting of the City's governing body after the 45-Day period, or extension, expires to provide the Contractor a written statement identifying the disputed portion and the undisputed portion.

2. Within 30 Days of receipt of a Claim, the City may request in writing additional documentation supporting the Claim or relating to defenses or Claims the City may have against the Contractor. If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the City and the Contractor. The City's written response to the Claim, as further documented, shall be submitted to the Contractor within 30 Days (if the Claim is less than $50,000, within 15 Days) after receipt of the further documentation, or within a period of time no greater than that taken by the Contractor in producing the additional information or requested documentation, whichever is greater.

F. Meet and Confer. If the Contractor disputes the City's written response, or the City fails to respond within the time prescribed, the Contractor may so notify the City, in writing, either within 15 Days of receipt of the City's response or within 15 Days of the City's failure to respond within the time prescribed, respectively, and demand in writing an informal conference to meet and confer for settlement of the issues in

dispute. Upon receipt of a demand, the City shall schedule a meet and confer conference within 30 Days for settlement of the dispute.

G. Mediation. Within 10 business days following the conclusion of the meet and confer conference, if the Claim or any portion of the Claim remains in dispute, the City shall provide the Contractor a written statement identifying the portion of the Claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the Claim shall be processed and made within 60 Days after the City issues its written statement. Any disputed portion of the Claim, as identified by the Contractor in writing, shall be submitted to nonbinding mediation, with the City and the Contractor sharing the associated costs equally. The public entity and Contractor shall mutually agree to a mediator within 10 business days after the disputed portion of the Claim has been identified in writing, unless the parties agree to select a mediator at a later time.

1. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the Claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator.

2. For purposes of this Article, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this Article.

3. Unless otherwise agreed to by the City and the Contractor in writing, the mediation conducted pursuant to this section shall excuse any further obligation under Section 20104.4 to mediate after litigation has been commenced.

4. The mediation shall be held no earlier than the date the Contractor completes the Work or the date that the Contractor last performs Work, whichever is earlier. All unresolved Claims shall be considered jointly in a single mediation, unless a new unrelated Claim arises after mediation is completed.

H. Procedures After Mediation. If following the mediation, the Claim or any portion remains in dispute, the Contractor must file a Claim pursuant to Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code prior to initiating litigation. For purposes of those provisions, the running of the period of time within which a Claim must be filed shall be tolled from the time the Contractor submits his or her written Claim pursuant to subdivision (a) until the time the Claim is denied, including any period of time utilized by the meet and confer conference.

I. Civil Actions. The following procedures are established for all civil actions filed to resolve Claims of $375,000 or less:

1. Within 60 Days, but no earlier than 30 Days, following the filing or responsive pleadings, the court shall submit the matter to non-binding mediation unless

waived by mutual stipulation of both parties or unless mediation was held prior to commencement of the action in accordance with Public Contract Code section 9204 and the terms of this Contract. The mediation process shall provide for the selection within 15 Days by both parties of a disinterested third person as mediator, shall be commenced within 30 Days of the submittal, and shall be concluded within 15 Days from the commencement of the mediation unless a time requirement is extended upon a good cause showing to the court.

2. If the matter remains in dispute, the case shall be submitted to judicial arbitration pursuant to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, notwithstanding Section 1114.11 of that code. The Civil Discovery Act of 1986 (Article 3 (commencing with Section 2016) of Chapter 3 of Title 3 of Part 4 of the Code of Civil Procedure) shall apply to any proceeding brought under this subdivision consistent with the rules pertaining to judicial arbitration. In addition to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, (A) arbitrators shall, when possible, be experienced in construction law, and (B) any party appealing an arbitration award who does not obtain a more favorable judgment shall, in addition to payment of costs and fees under that chapter, also pay the attorney's fees on appeal of the other party.

J. Government Code Claim Procedures.

1. This Article does not apply to tort claims and nothing in this Article is intended nor shall be construed to change the time periods for filing tort claims or actions specified by Chapter 1 (commending with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.5 of Title 1 of the Government Code.

2. In addition to any and all requirements of the Contract Documents pertaining to notices of and requests for adjustment to the Contract Time, Contract Price, or compensation or payment for Additional Work, disputed Work, construction claims and/or changed conditions, the Contractor must comply with the claim procedures set forth in Government Code Section 900, et seq. prior to filing any lawsuit against the City.

3. Such Government Code claims and any subsequent lawsuit based upon the Government Code claims shall be limited to those matters that remain unresolved after all procedures pertaining to adjustment of the Contract Time or Contract Price for Additional Work, disputed Work, construction claims, and/or changed conditions have been followed by Contractor. If Contractor does not comply with the Government Code claim procedure or the prerequisite contractual requirements, Contractor may not file any action against the City.

4. **A Government Code claim must be filed no earlier than the date the Work is completed or the date the Contractor last performs Work on the Project, whichever occurs first. A Government Code claim shall be inclusive of all unresolved Claims known to Contractor or that should reasonably by known to Contractor excepting only new unrelated Claims that arise after the Government Code claim is submitted.**

K. Non-Waiver. The City's failure to respond to a Claim from the Contractor within the time periods described in this Article or to otherwise meet the time requirements of this Article shall result in the Claim being deemed rejected in its entirety, and shall not constitute a waiver of any rights under this Article.

ARTICLE 10 - MEASUREMENT; PAYMENT

10.1 Cost Breakdown.

A. Lump Sum Work.

1. Contractor shall furnish on forms approved by the City within ten (10) Days of the Notice to Proceed, a schedule of values allocating the entire Contract Price to the various portions of the Work and prepared in such a form and supported by such data to substantiate its accuracy as the Engineer may require. This schedule of values, unless objected to by the Engineer, shall be used as a basis for reviewing the Contractor's applications for payment. Contractor shall submit the schedule of values prior to submitting its first application for payment, and the City will not issue any payment until it receives and approves the schedule of values.

B. Unit Price Work.

1. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work multiplied by the estimated quantity of each item as indicated in the Contract. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and or profit for each separately identified item.

2. Unless otherwise specified, payment will be based on the actual quantities of Work as verified and approved by the Engineer, based on the price per unit as set forth in the Bid.

3. The City or Contractor may initiate a Change Order or Change Order Request to adjust the Contract Price in accordance with Contractor Documents based on actual quantities of Unit Price Work. The City or Contractor may make a claim for an adjustment in the Unit Price in accordance with the Contract Documents if:

a. the quantity of any item of Unit Price Work performed by Contractor differs by twenty-five percent (25%) or more from the estimated quantity of such item indicated in the Contract; and

b. there is no corresponding adjustment with respect to any other item of Work; and

c. Contractor believes that Contractor is entitled to an increase in unit price as a result of having incurred additional expense or the City believes that the City is entitled to a decrease in unit price and the parties are unable to agree as to the amount of any such increase or decrease.

10.2 Progress Estimates and Payment.

A. By the tenth (10th) Day of the following calendar month, Contractor shall submit to Engineer a payment request which shall set forth in detail the value of the Work done for the period beginning with the date Work was first commenced and ending on the end of the calendar month for which the payment request is prepared. Contractor shall include an adjusted list of actual quantities, verified by the Engineer, for unit price items listed, if any, in the Bid. Contractor shall include any amount earned for authorized Additional Work. Contractor shall certify under penalty of perjury, that all cost breakdowns and periodic estimates accurately reflect the Work on the Project.

B. From the total thus computed, a deduction shall be made in the amount of five percent (5%) for retention, except where the City has adopted a finding that the Work done under the Contract is substantially complex, and then the amount withheld as retention shall be the percentage specified in the Notice Inviting Bids. From the remainder a further deduction may be made in accordance with Section C below. The amount computed, less the amount withheld for retention and any amounts withheld as set forth below, shall be the amount of the Contractor's payment request.

C. The City may withhold a sufficient amount or amounts of any payment or payments otherwise due to Contractor, as in its judgment may be necessary to cover:

1. Payments which may be past due and payable for just claims against Contractor or any Subcontractors for labor or materials furnished in and about the performance of work on the Project under this Contract.

2. Defective work not remedied.

3. Failure of Contractor to make proper payments to his Subcontractor or for material or labor.

4. Completion of the Contract if there is a reasonable doubt that the Work can be completed for balance then unpaid.

5. Damage to another contractor or a third party.

6. Amounts which may be due the Count for claims against Contractor.

7. Failure of Contractor to keep the Record Drawings up to date.

8. Failure to provide update on construction schedule as required herein.

9. Site cleanup.

10. Failure to comply with Contract Documents.

11. Liquidated damages.

12. Legally permitted penalties.

D. The City may apply such withheld amount or amounts to payment of such claims or obligations at its discretion with the exception of subsections (C)(1), (3), and (5) of this Article, which must be retained or applied in accordance with applicable law. In so doing, the City shall be deemed the agent of Contractor and any payment so made by the City shall be considered as a payment made under contract by the City to Contractor and the City shall not be liable to Contractor for such payments made in good faith. Such payments may be made without prior judicial determination of claim or obligations. The City will render Contractor a proper accounting of such funds disbursed on behalf of Contractor.

E. Upon receipt, the Engineer shall review the payment request to determine whether it is undisputed and suitable for payment. If the payment request is determined to be unsuitable for payment, it shall be returned to Contractor as soon as practicable but not later than seven (7) Days after receipt, accompanied by a document setting forth in writing the reasons why the payment request is not proper. The City shall make the progress payment within 30 Days after the receipt of an undisputed and properly submitted payment request from Contractor, provided that a release of liens and claims has been received from the Contractor pursuant to Civil Code section 8132. The number of days available to the City to make a payment without incurring interest pursuant to this paragraph shall be reduced by the number of Days by which the Engineer exceeds the seven (7) Day requirement.

F. A payment request shall be considered properly executed if funds are available for payment of the payment request and payment is not delayed due to an audit inquiry by the financial officer of the City.

G. The City shall have the right to adjust any estimate of quantity and to subsequently correct any error made in any estimate for payment.

10.3 Final Acceptance and Payment

A. Following the City's acceptance of the Work, the Contractor shall submit to the City a written statement of the final quantities of unit price items for inclusion in the final payment request. The City shall have the right to adjust any estimate of quantity and to correct any error made in any estimate for payment.

B. When the Work has been accepted there shall be paid to Contractor a sum equal to the Contract Price less any amounts previously paid Contractor and less any amounts withheld by the City from Contractor under the terms of the Contract. The final five percent (5%), or the percentage specified in the Notice Inviting Bids where the City has adopted a finding of substantially complete, shall not become due and payable until as required by Public Contract Code section 7107. If the Contractor has placed securities with the City as described herein, the Contractor shall be paid a sum equal to one hundred percent (100%) of the Contract Price less any amounts due the City under the terms of the Contract.

C. Unless Contractor advises the City in writing prior to acceptance of the final five percent (5%) or the percentage specified in the Notice Inviting Bids where the City has adopted a finding of completion, or the return of securities held as described herein, said acceptance shall operate as a release to the City of all claims and all

liability to Contractor for all things done or furnished in connection with this Work and for every act of negligence of the City and for all other claims relating to or arising out of this Work. If Contractor advises the City in writing prior to acceptance of final payment or return of the securities that there is a dispute regarding the amount due the Contractor, the City may pay the undisputed amount contingent upon the Contractor furnishing a release of all undisputed claims against the City with the disputed claims in stated amounts being specifically excluded by Contractor from the operation of the release. No payments, however, final or otherwise, shall operate to release Contractor or its sureties from the Faithful Performance Bond, Labor and Material Payment Bond, or from any other obligation under this Contract.

D. In case of suspension of the Contract any unpaid balance shall be and become the sole and absolute property of the City to the extent necessary to repay the City any excess in the cost of the Work above the Contract Price.

E. Final payment shall be made no later than 60 Days after the date of acceptance of the Work by the City or the date of occupation, beneficial use and enjoyment of the Work by the City including any operation only for testing, start-up or commissioning accompanied by cessation of labor on the Work, provided that a release of liens and claims has been received from the Contractor pursuant to Civil Code section 8136. In the event of a dispute between the City and the Contractor, the City may withhold from the final payment an amount not to exceed 150% of the disputed amount.

F. Within ten (10) Days from the time that all or any portion of the retention proceeds are received by Contractor, Contractor shall pay each of its Subcontractors from whom retention has been withheld each Subcontractor's share of the retention received. However, if a retention payment received by Contractor is specifically designated for a particular Subcontractor, payment of the retention shall be made to the designated Subcontractor if the payment is consistent with the terms of the subcontract.

ARTICLE 11 -MISCELLANEOUS

11.1 Patents.

A. Contractor shall hold and save the City, officials, officers, employees, and authorized volunteers harmless from liability of any nature or kind of claim therefrom including costs and expenses for or on account of any patented or unpatented invention, article or appliance manufactured, furnished or used by Contractor in the performance of this Contract.

11.2 Document Retention & Examination

A. In accordance with Government Code section 8546.7, records of both the City and the Contractor shall be subject to examination and audit by the State Auditor General for a period of three (3) years after final payment.

B. Contractor shall make available to the City any of the Contractor's other documents related to the Project immediately upon request of the City.

C. In addition to the State Auditor rights above, the City shall have the right to examine and audit all books, estimates, records, contracts, documents, bid documents, subcontracts, and other data of the Contractor (including computations and projections) related to negotiating, pricing, or performing the modification in order to evaluate the accuracy and completeness of the cost or pricing data at no additional cost to the City, for a period of four (4) years after final payment.

11.3 Notice.

A. All notices shall be in writing and either served by personal delivery or mailed to the other party. Written notice to the Contractor shall be addressed to Contractor's principal place of business unless Contractor designates another address in writing for service of notice. Notice to the City shall be addressed to the City as designated in the Notice Inviting Bids unless the City designates another address in writing for service of notice. Notice shall be effective upon receipt or five (5) Days after being sent by first class mail, whichever is earlier. Notice given by facsimile shall not be effective unless acknowledged in writing by the receiving party.

11.4 Notice of Third Party Claims

A. Pursuant to Public Contract Code section 9201, the City shall provide the Contractor with timely notification of the receipt of any third-party claims relating to the Contract. The City is entitled to recover reasonable costs incurred in providing such notification.

11.5 State License Board Notice

A. Contractors are required by law to be licensed and regulated by the Contractors' State License Board which has jurisdiction to investigate complaints against contractors if a complaint regarding a patent act or omission is filed within four (4) years of the date of the alleged violation. A complaint regarding a latent act or omission pertaining to structural defects must be filed within ten (10) years of the date of the alleged violation. Any questions concerning a contractor may be referred to the Registrar, Contractors' State License Board, P.O. Box 26000, Sacramento, California 95826.

11.6 Assignment of Contract

A. Contractor shall not assign, transfer, convey, sublet or otherwise dispose of the rights or title of interest of any or all of this contract without the prior written consent of the City. Any assignment or change of Contractor's name of legal entity without the written consent of the City shall be void. Any assignment of money due or to become due under this Contract shall be subject to a prior lien for services rendered or material supplied for performance of Work called for under the Contract Documents in favor of all persons, firms, or corporations rendering such services or supplying such materials to the extent that claims are filed pursuant to the Civil Code, the Code of Civil Procedure or the Government Code.

11.7 Change In Name And Nature Of Contractor's Legal Entity.

A. Should a change be contemplated in the name or nature of the Contractor's legal entity, the Contractor shall first notify the City in order that proper steps may be taken to have the change reflected on the Contract and all related documents. No change of Contractor's name or nature will affect the City's rights under the Contract, including but not limited to the bonds.

11.8 Prohibited Interests

A. No City official or representative who is authorized in such capacity and on behalf of City to negotiate, supervise, make, accept, or approve, or to take part in negotiating, supervising, making, accepting or approving any engineering, inspection, construction or material supply contract or any subcontract in connection with construction of the project, shall be or become directly or indirectly interested financially in the Contract.

11.9 Controlling Law

A. Notwithstanding any subcontract or other contract with any subcontractor, supplier, or other person or organization performing any part of the Work, this Contract shall be governed by the law of the State of California excluding any choice of law provisions.

11.10 Jurisdiction; Venue

A. Contractor and any subcontractor, supplier, or other person or organization performing any part of the Work agrees that any action or suits at law or in equity arising out of or related to the bidding, award, or performance of the Work shall be maintained in the Superior Court of San Bernardino County, California, and expressly consent to the jurisdiction of said court, regardless of residence or domicile, and agree that said court shall be a proper venue for any such action.

11.11 Cumulative Remedies.

A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Applicable Laws, by special warranty or guarantee, or by other provisions of the Contract Documents. The provisions of this Article will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

11.12 Survival of Obligations.

A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

11.13 Headings.

A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

11.14 Assignment of Antitrust Actions

A. In accordance with §7103.5(b) of the California Public Contract Code, Contractor and Subcontractors must conform to the following requirements:

1. In entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, Contractor or Subcontractor offer and agree to assign to the awarding body all rights, title, and interest in and to all causes of action it may have under §4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 (commencing with §16700) of Part 2 of Division 7 of the Business and Professions Code) arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract.

2. This assignment must be made and become effective at the time the awarding body tenders to Contractor, without further acknowledgment by the parties.

11.15 All Legal Provisions Included

A. Contractor shall give all notices and comply with all federal, state and local laws, ordinances, rules and regulations bearing on conduct of work as indicated and specified by their terms. References to specific laws, rules or regulations in this Contract are for reference purposes only, and shall not limit or affect the applicability of provisions not specifically mentioned. If Contractor observes that drawings and specifications are at variance therewith, he shall promptly notify City in writing and any necessary changes shall be adjusted as provided for in this Contract for changes in Work. If Contractor performs any Work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to City, he shall bear all costs arising therefrom.

B. Contractor shall be responsible for familiarity with the Americans with Disabilities Act (“ADA”) (42 U.S.C. § 12101 et seq.). The Work will be performed in compliance with ADA laws, rules and regulations. Contractor shall comply with the Historic Building Code, including, but not limited to, as it relates to the ADA, whenever applicable.

C. Contractor acknowledges and understands that, pursuant to Public Contract Code section 20676, sellers of "mined material" must be on an approved list of sellers published pursuant to Public Resources Code section 2717(b) in order to supply mined material for this Contract.

D. No City official or representative who is authorized in such capacity and on behalf of City to negotiate, supervise, make, accept, or approve, or to take part in negotiating, supervising, making, accepting or approving any engineering, inspection, construction or material supply contract or any subcontract in connection with construction of the Work, shall be or become directly or indirectly interested financially in the Contract.

E. All provisions of law required to be inserted in the Contract or Contract Documents pursuant to any Applicable Laws shall be and are inserted herein. If through mistake, neglect, oversight, or otherwise, any such provision is not herein inserted or inserted in improper form, upon the application of either party, the Contract or Contract Documents shall be changed by City, at no increase in Contract Price or extension in Contract Times, so as to strictly comply with the Applicable Laws and without prejudice to the rights of either party hereunder.

SECTION 00750 – SPECIAL CONDITIONS

ARTICLE 1 -SCOPE OF WORK

1.1 Location of the Project.

A. Armstrong Community Center 1265 S Palmetto Avenue Ontario Ca 91762

1.2 Scope of Work.

Re-roof the Armstrong Community Center. Demo existing asphalt shingle roof and replace with new standing seam metal roof and new TMP membrane over existing flat mechanical areas & exterior roof gutters with new roof drain grates.

1.3 Approved set of plans (Permit # B20240378) uploaded on Planetbids

END OF SPECIAL CONDITIONS

TECHNICAL SPECIFICATIONS

"THE FOLLOWING SPECIFICATIONS ARE INCORPORATED HEREIN BY REFERENCE AS IF SET FORTH IN THEIR ENTIRETY:

DIVISION 07 - THERMAL AND MOISTURE PROTECTION

074113.04 Metal Roof Panels, Standing Seam (T-238)

SECTION 074113.04 - METAL ROOF PANELS, STANDING SEAM

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Architectural Standing-seam metal roof panels.

2. Metal roof accessories.

3. Substrate boards.

4. Underlayments.

1.2 DEFINITIONS

A. Roofing Terminology: Refer to ASTM D1079 "Standard Terminology Relating to Roofing and Waterproofing" and glossary in applicable edition of NRCA's "The NRCA Roofing Manual: Metal Panel and SPF Roof Systems" for definition of terms related to roofing work in this Section.

B. Metal Roof Panel Assembly: Metal roof panels, attachment system components, miscellaneous metal framing, thermal insulation, and accessories necessary for a complete weathertight roofing system.

1.3 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1. Meet with Owner, Architect, Owner's insurer if applicable, testing and inspecting agency representative, metal roof panel Installer, metal roof panel manufacturer's representative, substrate Installer, and installers whose work interfaces with or affects metal roof panels including installers of roof accessories and roof-mounted equipment.

2. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.

3. Review methods and procedures related to metal roof panel installation, including manufacturer's written instructions.

4. Examine substrate conditions for compliance with requirements, including flatness and attachment to structural members.

5. Review structural loading limitations of deck during and after roofing.

6. Review flashings, special roof details, roof drainage, roof penetrations, equipment curbs, and condition of other construction that will affect metal roof panels.

7. Review governing regulations and requirements for insurance, certificates, and testing and inspecting if applicable.

8. Review temporary protection requirements for metal roof panel assembly during and after installation.

9. Review roof observation and repair procedures after metal roof panel installation.

10. Document proceedings, including corrective measures and actions required, and furnish copy of record to each participant.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of product indicated.

1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each type of panel and accessory.

B. Shop Drawings: Show fabrication and installation layouts of metal roof panels; details of edge conditions, side-seam and endlap joints, panel profiles, corners, anchorages, trim, flashings, closures, and accessories; and special details. Indicate point of fixity of metal panels. Distinguish between factory- and field-assembled work.

1. Accessories: Include details of the flashing, trim, and anchorage systems, at a scale of not less than 1-1/2 inches per 12 inches (1:10); Include details of the following items:

a. Flashing and trim.

b. Pipe penetration flashings.

c. Roof curbs.

d. Gutters.

e. Downspouts.

2. Shop Drawings for Snow Guards: By snow guard manufacturer. Show fabrication and installation layouts and attachment to other construction.

C. Delegated-Design Submittal: For metal roof panel assembly indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by a qualified professional engineer responsible for their preparation. Include the following:

1. Structural analysis data indicating compliance with Performance Requirements Article.

2. Include miscellaneous metal framing components, layout, and fastening.

D. Samples for Initial Selection: For each type of metal roof panel indicated with factory-applied color finishes.

1. Include similar Samples of trim and accessories involving color selection.

E. Samples for Verification: For each type of exposed finish required, prepared on Samples of size indicated below:

1. Metal Roof Panels: 12 inches (300 mm) long by actual panel width. Include fasteners, clips, trim, closures, and other metal roof panel accessories.

1.5 INFORMATIONAL SUBMITTALS

A. Qualification Data: For Installer.

1. Submit Installer qualifications in the form of an original letter on manufacturer's letterhead signed by authorized manufacturer representative.

B. Material Certificates: For thermal insulation, from manufacturer.

C. Compliance Certificate: For State of Florida product approval.

D. Notice of Acceptance: For Miami Dade County product approval.

E. Field Quality Control Reports.

1.6 CLOSEOUT SUBMITTALS

A. Maintenance Data: For metal roof panels to include in maintenance manuals.

B. Warranties: Executed copies of warranties.

1.7 QUALITY ASSURANCE

A. Manufacturer Qualifications: A manufacturer of plant-fabricated metal roof panel systems listed in this Section and meeting performance requirements, with a minimum of five years' experience providing metal roof panel systems for projects of similar type and scope, offering warranty, technical inspection, and maintenance inspection services specified.

B. Installer Qualifications: An employer of workers trained and certified by manufacturer, including a full-time on-site supervisor with a minimum of five years' experience installing similar work, able to communicate verbally with Contractor, Architect, and employees, and qualified by the manufacturer to furnish warranty of type specified.

C. UL-Certified, Portable Roll-Forming Equipment: UL-certified, portable roll-forming equipment capable of producing metal panels warranted by manufacturer to be the same as factory-formed products. Maintain UL certification of portable roll-forming equipment for duration of work.

1. Manufacturer's On-Site Roll Former Operators: Experienced full-time employees of metal roof panel manufacturer.

D. Manufacturer's Technical Representative Qualifications: An authorized full-time employee representative of manufacturer, certified as a Registered Roof Observer (RRO) by the International Institute of Building Envelope Consultants (IIBEC) formerly the Roof Consultants Institute (RCI), and experienced in the installation and maintenance of the specified roof panel system and qualified to determine Installer's compliance with the requirements of this Project.

1.8 DELIVERY, STORAGE, AND HANDLING

A. Deliver components, sheets, metal roof panels, and other manufactured items so as not to be damaged or deformed. Package metal roof panels for protection during transportation and handling.

B. Unload, store, and erect metal roof panels in a manner to prevent bending, warping, twisting, and surface damage.

C. Stack metal roof panels on platforms or pallets, covered with suitable weathertight and ventilated covering. Store metal roof panels to ensure dryness. Do not store metal roof panels in contact with other materials that might cause staining, denting, or other surface damage.

D. Protect strippable protective covering on metal roof panels from exposure to sunlight and high humidity, except to extent necessary for period of metal roof panel installation.

1.9 PROJECT / FIELD CONDITIONS

A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit metal roof panel work to be performed according to manufacturer's written instructions and warranty requirements.

B. Field Measurements: Verify actual dimensions of construction contiguous with metal roof panels by field measurements before fabrication.

1.10 COORDINATION

A. Coordinate sizes and locations of roof curbs, equipment supports, and roof penetrations with actual equipment provided.

B. Coordinate metal roof panels with rain drainage work, flashing, trim, and construction of substrate, parapets, walls, and other adjoining work to provide a leakproof, secure, and noncorrosive installation.

1.11 WARRANTY

A. Manufacturer's Warranty: Roof System Manufacturer's standard form in which Manufacturer agrees to repair or replace components of roofing system that fail in materials or workmanship within warranty period, as follows.

1. Form of Warranty: Manufacturer's standard warranty form.

2. Scope of Warranty: Work of this Section and including sheet metal details and termination details installed by the roof system Installer and approved by the Roof System Manufacturer.

3. Warranty Period: 20 years from date of completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Basis of Design: The roof system specified in this Section is based upon products of Tremco CPG Inc, Beachwood, OH, (800) 562-2728, www.tremcoroofing.com that are named in other Part 2 articles. Provide specified products.

B. Source Limitations: Obtain components for roofing system from same manufacturer as membrane roofing or manufacturer approved by membrane roofing manufacturer.

2.2 PERFORMANCE REQUIREMENTS

A. General Performance: Metal roof panels shall comply with performance requirements without failure due to defective manufacture, fabrication, installation, or other defects in construction.

B. Roofing System Design: Provide metal roof panel assembly that is identical to systems that have been successfully tested by a qualified testing and inspecting agency in accordance with ANSI/FM 4471, UL 580, or UL 1897, and to resist uplift pressures calculated in accordance with ASCE-7 and applicable code.

C. Hail Resistance: Provide metal roof panel assemblies listed with UL as Class 4 hail resistant panels.

D. Hydrostatic-Head Resistance: No water penetration when tested according to ASTM E2140.

1. Test-Pressure Difference: 12.00 lbf/sq. ft. (575 Pa).

E. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes by preventing buckling, opening of joints, overstressing of components, failure of joint sealants, failure of connections, and other detrimental effects. Base calculations on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.

1. Temperature Change (Range): 120 deg F (67 deg C), ambient; 180 deg F (100 deg C), material surfaces.

F. Exterior Fire-Test Exposure: UL 790/ASTM E108, Class A; for application and roof slopes indicated, as determined by testing identical membrane roofing materials by a qualified testing agency. Materials shall be identified with appropriate markings of applicable testing agency.

2.3 STANDING-SEAM METAL ROOF PANELS

A. Provide factory-formed metal roof panels designed to be installed by lapping and interconnecting raised side edges of adjacent panels with joint type indicated and mechanically attaching panels to supports using concealed clips in side laps. Include clips, cleats, pressure plates, and accessories required for weathertight installation.

1. Steel Panel Systems: Unless more stringent requirements are indicated, comply with ASTM E1514.

B. Vertical-Rib, Seamed-Joint, Standing-Seam Metal Roof Panels: Factory-formed symmetrical panels with vertical ribs at panel edges and flat pan between ribs; designed for sequential

installation in either direction by mechanically attaching panels to supports using concealed clips located under one side of panels and engaging opposite edge of adjacent panels, and mechanically seaming panels together utilizing a seam cap, and configured to enable future replacement of individual panels without disturbing adjacent panels.

1. Basis-of-Design Product: Tremco, TremLock T-238.

2. Aluminum-Zinc Alloy-Coated Steel Sheet: ASTM A792/A792M, Class AZ50 coating designation, Grade 50 (Class AZM150 coating designation, Grade 340), prepainted by the coil-coating process to comply with ASTM A755/A755M; structural quality.

    a. Thickness: 0.0236-inch/24 ga. (0.71-mm) minimum thickness.

    b. Surface: Smooth, flat finish.

    c. Exposed Coil-Coated Finish: High-performance organic coating.

        1) Color: As selected from manufacturer's full range.

    d. Exposed Finish: Exposed metallic coating.

3. Joint Type: Field mechanically seamed, with continuous factory-applied sealant.

4. Seam Cap: Match panel material and finish; provide with two rows of integral factory hot-applied sealant.

5. Panel Shape: Flat.

6. Panel Pan Configuration: Plank and Pencil Ribbed.

7. Panel Seam Height: Not less than 2-3/8 inch (60.3 mm).

8. Panel Coverage: 16 inches (406 mm).

9. Eave Notch: Factory-formed.

10. Clips: Fixed Clips that accommodate thermal movement. Continuous clips where required to meet performance requirements. Bearing plates where required.

    a. Material: zinc-coated (galvanized) or aluminum-zinc alloy-coated steel sheet. 0.064-inch/16 ga. (1.63-mm) nominal thickness for individual clips, or 0.0236-inch/24 ga. (0.71-mm) nominal thickness for continuous clips.

2.4 METAL ROOF ACCESSORIES

A. Metal Roof Accessories, General: Provide components approved by roof panel manufacturer and as required for a complete metal roof panel assembly including trim, copings, fasciae, corner units, ridge closures, clips, flashings, sealants, gaskets, fillers, closure strips, and similar items. Match material and finish of metal roof panels unless otherwise indicated.

    1. Closures: Provide closures at eaves and ridges, fabricated of same metal as metal roof panels.

2. Closure Strips: Closed-cell, expanded, cellular, rubber or crosslinked, polyolefin-foam or closed-cell laminated polyethylene; minimum 1-inch- (25-mm-) thick, flexible closure strips; cut or premolded to match metal panel profile. Provide closure strips where indicated or necessary to ensure weathertight construction.

B. Panel Sealants: Provide one of the following identical to that used in test panels meeting performance requirements:

1. Sealant Tape: Pressure-sensitive, 99 percent solids, gray polyisobutylene or butyl rubber compound sealant tape with release-paper backing. Provide permanently elastic, nonsag, nontoxic, nonstaining tape 1 inch (25 mm) wide and 1/8 inch (3 mm) thick, with nylon spacer beads to prevent overcompression of the sealant tape.

2. Butyl-Rubber-Based, Solvent-Release Sealant: ASTM C1311, with nylon spacer beads to prevent overcompression of the sealant tape.

C. Flashing and Trim: Provide flashing and trim formed from same material as metal panels, and as required to seal against weather and to provide finished appearance. Locations include, but are not limited to, eaves, rakes, corners, bases, framed openings, ridges, fasciae, and fillers. Finish flashing and trim with same finish system as adjacent metal panels.

1. Basis of Design Product: Tremco, TremLock Sheet.

D. Gutters: Formed from same material roof panels. Match profile of gable trim, complete with end pieces, outlet tubes, and other special pieces as required. Fabricate in minimum 96-inch- (2400-mm-) long sections, of size and metal thickness according to SMACNA's "Architectural Sheet Metal Manual." Furnish gutter supports spaced a maximum of 36 inches (900 mm) o.c., fabricated from same metal as gutters. Provide wire ball strainers of compatible metal at outlets. Finish gutters to match metal roof panels.

E. Downspouts: Formed from same material as roof panels. Fabricate in 10-foot- (3-m-) long sections, complete with formed elbows and offsets, of size and metal thickness according to SMACNA's "Architectural Sheet Metal Manual." Finish downspouts to match gutters.

F. Pipe Penetration Flashings: Flexible boot type, with stainless-steel compression ring, and stainless-steel pipe strap. Use silicone-type boot at hot pipes.

G. Roof Curbs: Fabricated from aluminum sheet, minimum 0.080-inch- (1.2-mm-) thick; with bottom of skirt profiled to match roof panel profiles, and welded top box, integral internal fastener flange, and water diverter. Fabricate curb subframing of minimum 0.0598-inch- (1.5-mm-) thick, angle-, C-, or Z-shaped galvanized steel sheet. Fabricate curb and subframing to withstand indicated loads, of size and height indicated. Finish roof curbs to match metal roof panels.

1. Insulate roof curb with 1-inch- (25-mm-) thick, rigid insulation.

2.5 SUBSTRATE BOARDS

A. Gypsum panel, glass-mat-faced, primed, ASTM C1177/C1177M.

1. Basis of design product: Tremco/GP Gypsum DensDeck Prime.

2. Thickness: 1/2 inch (12 mm).

B. Substrate-Board Fasteners: Factory-coated steel fasteners and metal or plastic plates complying with corrosion-resistance provisions in FMG 4470, designed for fastening substrate board to substrate.

2.6 UNDERLAYMENT MATERIALS

A. Self-Adhering, High-Temperature Underlayment: Self-adhering, cold-applied, sheet underlayment, consisting of slip-resistant, woven polymer surface laminated to a modified bitumen adhesive compound, with silicon coated split-release film backing. Provide primer when recommended by underlayment manufacturer.

1. Basis of design product: Self-Adhering High-Temperature Underlayment (Tremco SA).

2. Basis of Design Product: Tremco, SA.

3. Nominal Thickness: 40 mils (1.0 mm).

4. Tensile Strength, ASTM D1970: MD- 80 lbs/in. (14 kN/m); XMD - 30 lbs/in. (10.5 kN/m).

5. Tear Resistance, ASTM D1970: MD - 60 lbf (267 kN/m); XMD - 40 lbf (178 kN/m).

6. Elongation, ASTM D1970: MD - 70 percent; XMD 60 percent.

7. Nail Sealability, ASTM D1970: Pass.

8. Thermal Stability, ASTM D1970: Pass; Stable after testing at 225 deg F (107 deg C).

9. Low Temperature Flexibility, ICC AC 48: Pass.

10. Permeance, maximum, ASTM E96: 0.03 perms; (1.72 ng/Pa x s x sq m).

11. Adhesion to Plywood, ASTM D903: 5 lbf at 40 deg F (0.04 kN/m at 4.4 deg C) , 12 lbf at 75 deg F (0.08 kN/m at 23.9 deg C).

2.7 MISCELLANEOUS MATERIALS

A. Panel Fasteners: Self-tapping screws, bolts, nuts, self-locking rivets and bolts, end-welded studs, and other suitable fasteners designed to withstand design loads. Provide exposed fasteners with heads matching color of metal roof panels by means of plastic caps or factory-applied coating. Provide EPDM, PVC, or neoprene sealing washers.

2.8 FABRICATION

A. Fabricate and finish metal roof panels and accessories at the factory to greatest extent possible, by manufacturer's standard procedures and processes and as necessary to fulfill indicated performance requirements. Comply with indicated profiles and with dimensional and structural requirements.

1. Site-rolled fabrication of panels or shop-rolling of panels using fixed equipment designed for site-rolling applications does not meet the requirements of this Section.

B. Fabricate metal panels with joints between panels designed to form weathertight seals.

C. Provide panel profile, including major ribs and intermediate stiffening ribs, if any, for full length of panel.

D. Sheet Metal Flashing and Trim: Fabricate flashing and trim to comply with manufacturer's recommendations and recommendations in SMACNA's "Architectural Sheet Metal Manual" that apply to design, dimensions, metal, and other characteristics of item indicated.

1. Form exposed sheet metal accessories that are without excessive oil canning, buckling, and tool marks and that are true to line and levels indicated, with exposed edges folded back to form hems.

2. Seams and Sealed Joints for Sheet Metal Accessories:

a. Seams for Steel: Fabricate nonmoving seams in accessories with flat-lock seams. Tin edges to be seamed, form seams, and solder.

b. Sealed Joints: Form nonexpansion, but movable, joints in metal to accommodate sealant and to comply with SMACNA standards.

3. Conceal fasteners and expansion provisions where possible. Exposed fasteners are not allowed on faces of accessories exposed to view.

4. Fabricate cleats and attachment devices from same material as accessory being anchored or from compatible, noncorrosive metal recommended in writing by metal panel manufacturer.

a. Size: As recommended by SMACNA's "Architectural Sheet Metal Manual" or metal panel manufacturer for application, but not less than thickness of metal being secured.

2.9 FINISHES

A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.

B. Protect mechanical and painted finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

C. Appearance of Finished Work: Noticeable variations in same piece are not acceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

D. High-Performance Organic Coating for Steel Panels and Accessories:

1. Two-Coat Fluoropolymer: AAMA 621 (steel) / AAMA 2605 (aluminum). Fluoropolymer finish containing not less than 70 percent PVDF resin by weight in color coat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances, metal roof panel supports, and other conditions affecting performance of the Work.

1. Examine solid roof substrate to verify that substrate joints are supported by framing or blocking and that installation is within flatness tolerances required by metal roof panel manufacturer.

a. Verify that air- or water-resistive barriers have been installed over sheathing or backing substrate to prevent air infiltration or water penetration.

2. Examine roughing-in for components and systems penetrating metal roof panels to verify actual locations of penetrations relative to seam locations of metal roof panels before metal roof panel installation.

3. For the record, prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.

4. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Clean substrates of substances harmful to insulation, including removing projections capable of interfering with insulation attachment.

3.3 SUBSTRATE BOARD INSTALLATION

A. Substrate Board: Install substrate boards over roof substrate on entire roof surface. Attach with substrate-board fasteners.

1. Install substrate board with long joints in continuous straight lines, perpendicular to roof slopes with end joints staggered between rows. Tightly butt substrate boards together.

2. Comply with requirements for fire-rated construction.

3.4 UNDERLAYMENT INSTALLATION

A. Self-Adhering Sheet Underlayment: Apply primer if required by manufacturer. Comply with temperature restrictions of underlayment manufacturer for installation. Apply at locations indicated below, wrinkle free, in shingle fashion to shed water, and with end laps of not less than 6 inches (150 mm), staggered 24 inches (600 mm) between courses. Overlap side edges not less than 3-1/2 inches (90 mm). Extend underlayment into built-in gutter trough. Roll laps with roller. Cover underlayment within 14 days.

1. Apply over entire roof surface.

B. Install flashings to cover underlayment.

3.5 METAL ROOF PANEL INSTALLATION, GENERAL

A. Install metal roof panels according to manufacturer's written instructions in orientation, sizes, and locations indicated on Drawings.

B. Provide metal roof panels of full length from eave to ridge.

C. Thermal Movement. Rigidly fasten metal roof panels to structure at one and only one location for each panel. Allow remainder of panel to move freely for thermal expansion and contraction. Predrill panels for fasteners.

1. Point of Fixity: Fasten each panel along a single line of fixing located at eave.

2. Avoid attaching accessories through roof panels in a manner that will inhibit thermal movement.

D. Install metal roof panels as follows:

1. Commence metal roof panel installation in presence of factory-authorized representative.

2. Field cutting of metal panels by torch or abrasive saw is not permitted.

3. Install panels perpendicular to supporting purlins.

4. Locate and space fastenings in uniform vertical and horizontal alignment.

5. Provide metal closures at rake edges, rake walls, and each side of ridge and hip caps.

6. Flash and seal metal roof panels with weather closures at eaves, rakes, and perimeter of all openings.

7. Install ridge and hip caps as metal roof panel work proceeds.

8. Install metal flashing to allow moisture to run over and off metal roof panels.

E. Fasteners: Use long-life fasteners, as recommend by panel manufacturer, for surfaces exposed to the exterior and galvanized steel fasteners for surfaces exposed to the interior.

F. Anchor Clips: Anchor metal roof panels and other components of the Work securely in place, using manufacturer's approved fasteners according to manufacturers' written instructions.

G. Metal Protection: Where dissimilar metals will contact each other or corrosive substrates, protect against galvanic action by painting contact surfaces with bituminous coating, by applying rubberized-asphalt underlayment to each contact surface, or by other permanent separation as recommended by metal roof panel manufacturer.

1. Use underlayment where roof panels will contact wood, ferrous metal, or cementitious construction.

H. Joint Sealers: Install gaskets, joint fillers, and sealants where indicated and where required for weatherproof performance of metal roof panel assemblies. Provide types of gaskets, fillers, and sealants indicated or, if not indicated, types recommended by metal roof panel manufacturer.

1. Prepare joints and apply sealants to comply with ASTM C1193.

3.6 METAL ROOF PANEL INSTALLATION

A. Standing-Seam Metal Roof Panels: Fasten metal roof panels to substrate with concealed clips at each standing-seam joint at location, spacing, and with fasteners recommended by manufacturer.

1. Install clips to supports with self-tapping fasteners.

2. Install pressure plates at locations indicated in manufacturer's written installation instructions.

3. Seamed Joint: Crimp standing seams with manufacturer-approved, motorized seamer tool so clip, metal roof panel, and factory-applied sealant are completely engaged.

4. Watertight Installation:

a. Apply a continuous ribbon of sealant or tape to seal joints of metal panels, using sealant or tape as recommend in writing by manufacturer as needed to make panels watertight.

b. Provide sealant or tape between panels and protruding equipment, vents, and accessories.

3.7 ACCESSORY INSTALLATION

A. General: Install accessories with positive anchorage to building and weathertight mounting and provide for thermal expansion. Coordinate installation with flashings and other components.

1. Install components required for a complete metal roof panel assembly including trim, copings, ridge closures, seam covers, flashings, sealants, gaskets, fillers, closure strips, and similar items.

B. Flashing and Trim: Comply with performance requirements and manufacturer's written installation instructions. Provide concealed fasteners where possible, and set units true to line and level as indicated. Install work with laps, joints, and seams that will be permanently watertight and weather resistant.

1. Form trim and transition joints using compressed joints with captive butyl sealant capable of resisting static water pressure. Cleated joints and exposed joint sealants do not meet this requirement.

2. Install exposed flashing and trim that is without excessive oil canning, buckling, and tool marks and that is true to line and levels indicated, with exposed edges folded back to form hems. Install sheet metal flashing and trim to fit substrates and to result in waterproof and weather-resistant performance.

3. Expansion Provisions: Provide for thermal expansion of exposed flashing and trim. Space movement joints at a maximum of 10 feet (3 m) with no joints allowed within 24 inches (600 mm) of corner or intersection. Where lapped expansion provisions cannot be used or would not be sufficiently weather resistant and waterproof, form expansion joints of

intermeshing hooked flanges, not less than 1 inch (25 mm) deep, filled with mastic sealant (concealed within joints).

C. Gutters: Join sections with riveted and soldered or lapped, riveted, and sealed joints. Attach gutters to eave with gutter hangers spaced not more than 36 inches (914 mm) o.c. using manufacturer's standard fasteners. Provide end closures and seal watertight with sealant. Provide for thermal expansion.

D. Downspouts: Join sections with telescoping joints. Provide fasteners designed to hold downspouts securely 1 inch (25 mm) away from walls; locate fasteners at top and bottom and at approximately 60 inches (1500 mm) o.c. in between.

1. Provide elbows at base of downspouts to direct water away from building.

2. Connect downspouts to underground drainage system indicated.

E. Roof Curbs: Install curbs at locations indicated on Drawings. Install flashing around bases where they meet metal roof panels.

F. Pipe Flashing: Form flashing around pipe penetration and metal roof panels. Fasten and seal to metal roof panels as recommended by manufacturer.

3.8 FIELD QUALITY CONTROL

A. Manufacturer’s Technical Representative: Engage a qualified manufacturer’s technical representative acceptable to Owner for a minimum of 15 full-time days on site to perform substrate examination, interim observations, and final roof inspections, and to prepare reports.

B. Remove and replace applications of metal roof panels where inspections indicate that they do not comply with specified requirements.

C. Additional inspections, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.

3.9 CLEANING

A. Remove temporary protective coverings and strippable films, if any, as metal roof panels are installed unless otherwise indicated in manufacturer's written installation instructions. On completion of metal roof panel installation, clean finished surfaces as recommended by metal roof panel manufacturer. Maintain in a clean condition during construction.

B. After metal roof panel installation, clear drainage channels of obstructions, dirt, and sealant.

C. Replace metal roof panels that have been damaged or have deteriorated beyond successful repair by finish touchup or similar minor repair procedures.

END OF SECTION 074113.04

CITY OF ONTARIO *Agenda Report* **March 18, 2025**	**SECTION:** **CONSENT CALENDAR**
Department: Community Life and Culture Prepared By: Danielle Guevara Department: Prepared By: Danielle Guevara Staff Member Presenting: Helen McAlary, Executive Director Community Life and Culture Reviewed By: Lacey A Rightmer Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 6

SUBJECT: AN AMENDMENT TO A MAINTENANCE SERVICES AGREEMENT WITH BAY ALARM COMPANY FOR BURGLARY ALARM SERVICES

RECOMMENDATION: That the City Council approve and authorize the City Manager, or his designee, to execute Amendment No. 11 to the Maintenance Services Agreement with Bay Alarm Company, of Concord, California, for a total not-to-exceed amount of $1,530,547, for the alarm system upgrade, and a term to June 30, 2025.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Invest in the City's Infrastructure (Water, Streets, Sewers, Parks, Storm Drains and Public Facilities)
Maintain the Current High Level of Public Safety

FISCAL IMPACT: The proposed Amendment No. 11 to Bay Alarm Company increases the existing agreement by $17,000 for a revised total Agreement amount of $1,530,547. The Fiscal Year 2024-25 Adopted Budget includes appropriations from the General Fund to cover the cost of these services.

BACKGROUND & ANALYSIS: The City awarded Mijac Alarm, which later changed its name to Bay Alarm, a five-year contract for Security and Fire Alarm Monitoring Services in July 2020. A number of amendments have followed to address the needs at citywide facilities.

To enhance safety measures for the public and employees, Staff recommend the installation of panic buttons at Dorothy A. Quesada pool, Westwind Community Center pool, and Ovitt Family Community Library. These strategically placed devices will provide immediate access to emergency assistance ensuring a quick response during an emergency. Bay Alarm will install panic buttons and provide ongoing alarm services at these added locations to ensure the safety of the buildings, City staff, and the general public.

Staff recommends approving Amendment No. 11 to the Maintenance Services Agreement with Bay Alarm Company in the amount of $17,000 for a new total not-to-exceed contract amount of $1,530,547.

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CITY MANAGER

AMENDMENT NO. 11 TO THE MAINTENANCE SERVICE AGREEMENT BETWEEN THE CITY OF ONTARIO AND BAY ALARM COMPANY

1. Parties and Date.

This Amendment No. 11 to the Agreement (as defined herein) is made and entered as of _____, by and between the City of Ontario ("City") and Bay Alarm Company, a Corporation "Contractor". City and Contractor are sometimes individually referred to as "Party" and collectively as "Parties."

2. Recitals.

2.1 Agreement. The City and Contractor have entered into an agreement entitled "Maintenance Service Agreement" dated July 1, 2020 ("Agreement").

2.2 Amendment Purpose. The City and Contractor desire to amend the Agreement to include the following work in the locations listed on Attachment "A". The scope of work will supply and install panic alarms as well as provide ongoing monthly monitoring services at these locations. The City and Contractor agree to increase the Agreement's compensation by Seventeen Thousand dollars ($17,000) for a total revised not-to-exceed amount of One Million Five Hundred Thirty Thousand Five Hundred Forty-Seven ($1,530,547). The Parties have heretofore entered into the Amendment No. 1 dated April 6, 2021, Amendment No. 2 dated November 15, 2021, Amendment No. 3 dated June 20, 2022, Amendment No. 4 dated November 15, 2022, Amendment No. 5 dated February 21, 2023, and Consent to Assignment Agreement dated June 20, 2022, Amendment No. 6 dated July 1, 2023, Amendment No. 7 dated October 17, 2023, Amendment No. 8 dated July 26, 2024, Amendment No. 9 dated August 20, 2024, and Amendment No. 10 dated October 1, 2024.

2.3 Amendment Authority. This Amendment No.11 is authorized pursuant to Section 3 of the Agreement.

3. Terms.

3.1 Amendment. Section 3.1.1 of the Agreement is hereby amended in its entirety to read

3.1 Amendment. Section 3.1.1 of the Agreement is hereby amended in its entirety to read as follows:

> 3.1.1 General Scope of Service. Contractor promises and agrees to furnish to the City all labor, materials, tools, equipment, services, and incidental and customary work necessary to fully and adequately supply the professional Security and Fire Alarm Monitoring services necessary for the Project ("Services"). The Services are more particularly described in Exhibit "A" attached hereto and Incorporated herein by reference. All Services shall be subject to and performed in accordance with this Agreement, the exhibits attached hereto and incorporated herein by reference, and all applicable local, state, and federal laws, rules, and regulations.

Exhibit "A" is hereby revised adding Attachment A and incorporated herein by reference.

3.2 Continuing Effect of Agreement. Except as amended by this Amendment No. 11, all other provisions of the Agreement remain in full force and effect and shall govern the actions of the parties under this Amendment No. 11. From and after the date of this Amendment No. 11, whenever the term "Agreement" appears in the Agreement, it shall mean the Agreement as amended by this Amendment No. 11.

3.3 Adequate Consideration. The Parties hereto irrevocably stipulate and agree that they have each received adequate and independent consideration for the performance of the obligations they have undertaken pursuant to this Amendment No. 11.

3.4 Severability. If any portion of this Amendment No. 11 is declared invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.

3.5 Integration. This Amendment represents the entirety of the Parties' understanding relating to the subject of this Amendment, including written or verbal communications between the Parties, which shall have no relevance unless expressly incorporated herein. This is an integrated amendment.

[SIGNATURES ON FOLLOWING PAGE]

SIGNATURE PAGE FOR AMENDMENT NO. 11 TO MAINTENANCE SERVICES AGREEMENT BETWEEN THE CITY OF ONTARIO AND BAY ALARM COMPANY

IN WITNESS WHEREOF, the Parties have entered into this Amendment No.11 as of the day and year first above written.

CITY OF ONTARIO

Approved By:

_____
Scott Ochoa
City Manager

Approved as to Form:

_____
Best Best & Krieger LLP
City Attorney

Attested By:

_____
City Clerk

BAY ALARM COMPANY

By:_____

Its:_____

Printed Name:_____

By:_____

Its:_____

Printed Name:_____

ATTACHMENT "A"
SCOPE OF SERVICES & COMPENSATION

See Attached

ONTARIO OFFICE
740 S. ROCHESTER AVENUE, SUITE D
ONTARIO, CA 91761
Direct: 909-509-7100

WWW.BAYALARM.COM
Sales: 1-800-610-1000
Service: 1-800-470-1000

BURGLAR ALARM SYSTEM

ADDITIONAL DEVICES PROPOSAL

PREPARED BY: JACQUELINE DONAHUE- 02/11/2025

GOV CITY OF ONTARIO - LIBRARY

215 E C STREET, ONTARIO CA 91764
ACCOUNT #4128570

Bay Alarm to Install and Full Service the following additional User Owned equipment:

(5) HONEYWELL MOUNTED PANIC BUTTONS
1) LIGHT SPEED AREA, 2) INFO DESK, 1) COLONY ROOM, 1) CHILDREN'S DESK

(5) DSC WIRELESS DOOR CONTACTS (FOR PANICS)
1)LIGHT SPEED AREA, 2) INFO DESK, 1) COLONY ROOM, 1) CHILDREN'S DESK

(4) BLUE LIGHT STROBES
1) 2ND FLOOR ADMIN AREA HALL, 1) DOWNSTAIRS ADULT OFFICE,
1) MODEL COLONY ROOM, 1) DOWNSTAIRS ADMIN HALLWAY

(7) DSC WIRELESS PENDANT PANIC BUTTONS
1)WORK FORCE, 1) MEETING ROOM, 1) STORY ROOM,
1)TEEN SECTION, 1) LITERACY AREA, 2) PAGING

(1) POWER SUPPLY KIT - AT PANEL
(1) TRANSFORMER - AT PANEL
(1) BATTERY - AT PANEL

Bay Alarm to relocate the following:
(1) STORY TIME ROOM MOTION TO OPPOSITE CORNER OF ROOM
(1) CIRCULATION ROOM HUB TO LOWER DESK AREA

*Priced at a prevailing wage rate.

Total Install Cost: $12,000.00

Additional Monthly Cost: $100.00

- **This is an Alt Add and there is no additional term associated to this agreement.**

If you have any questions or would like to discuss any aspect of the proposal further, please do not hesitate to reach out to me directly. Thank you for considering Bay Alarm for your security equipment needs. I look forward to working with you.

Alarm Agreement Amendment

Alarm Operator's ACO License #28 California Contractor's License #880138
Arizona License #ROC 326152 CR-67 #ROC 326153 CR-16 Arizona Alarm Business Certificate #20243
WA Energy Electrical Contractor License BAYALAC876KF
WA Construction Contractor License BAYALAC878KH WA UBI Number 603273521

Bay Alarm Company
1-800-610-1000
www.bayalarm.com

This Amendment is made as of the date set forth below by and between Bay Alarm Company, a California Corporation (herein "Bay") and the customer identified below ("User"). This Amendment modifies the terms of the **CA: Commercial Purchase and/or Services Agreement - Sub Owned SA842C**

Dated [ORIGINAL AGREEMENT DATE] **7/01/20** .(the "Agreement").

Account #: **4197432**

User Name: **Gov City of Ontario - Dorothy Quesada Community Center**

Address: **1010 S. Bon View Avenue** City: **ONTARIO** Zip: **91761**

Email Address: **Vivian R. Quintana <VQuintana@ontarioca.gov>**

Bay agrees to provide the changes indicated herein for the system(s) described in the Agreement:

Service Activation/Installation Fee and Payments

Total Activation and/or Installation Charge Fee: $ **2,500.00**
(Plus applicable sales taxes, to be billed separately)

Deposit Due at Signing: $ **1,250.00**

Due upon Completion: $ **1,250.00**

Additional Monthly Service Fee: $ **25.00**
(Additional is in addition to what you are currently paying)

Type of Service:

- ☐ Add CS Supervised (MS-CSSUP)
- ☐ Add TC2 (MS-TC2BURG)
- ☐ Add Keypad Supervised (MS-SUPBASE)
- ☐ Add DMP APP (MS-DMPAPP)
- ☐ Add Duress (MS-DURESS)
- ☐ Add Catchview (MS-CATCHVIEW)
- ☐ Add Allview (MS-ALLVIEW)
- ☐ Add SIS – Quarterly Sprinkler Inspections (MS-SIS4)

Other: _____

Scope of Work:

BAY ALARM TO INSTALL THE FOLLOWING:
(1) PANIC BUTTON - POOL AREA
(1) WIRELESS REPEATER - AT PANEL

BAY ALARM TO PROVIDE:
MATERIAL

PRICING IS AT A PREVAILING WAGE RATE

This Amendment will not be binding upon Bay until either (I) signed by a Manager of Bay or (II) Bay provides the equipment or service described above.

*******ONLY COMPLETE THIS SECTION IF ADDING ALLVIEW OR CATCHVIEW SERVICE*******

If adding BayGuard CATCH VIEW: User will receive an email with a video clip only in the event that an actual human intruder is observed by Bay via User's system(s). This service includes up to two (2) email addresses to which Bay will email the video clips. Bay will only transmit the video clips via email if Bay observes an actual person.

Email Address #1:_____

Email Address #2:_____

If adding BayGuard ALL VIEW: User will receive an email video clip of all alarm activations from User's system(s) that trigger a video clip. This service includes up to four (4) email addresses to which Bay will email the video clips to.

Email Address #1:_____

Email Address #2: _____

Email Address #3: _____

Email Address #4: _____

If Duress Bay to program for Duress. User understands some jurisdictions will not accept or respond to a request notification.

If Adding SIS Inspections: Bay agrees to provide the changes indicated herein for the fire system(s) described on the previous agreements of Bay Alarm Company, for User:

- **Bay Alarm will inspect _____ risers per quarter.**
- Bay Alarm to provide quarterly sprinkler system inspections.
- Bay will conduct the inspections in accordance with Title 19, California Code of Regulations, Chapter 5, and Article 4.
- Bay is not providing or will not provide design analysis of the premise sprinkler system through the Sprinkler Inspection Service inspection. If a design analysis is desired the User should contact a Registered Fire Protection Engineer.

If a Cancels Former:

☐ If box is checked, this Amendment affects the termination date of the Agreement. The revised term of the Agreement shall expire [ ] months after the installation of equipment and/or commencement of services covered by this Amendment.

All of the terms, covenants and conditions of the Agreement by and between Bay and User shall remain in full force and effect, except as expressly modified by this Amendment. User acknowledges and agrees that this Amendment and the equipment provided and/or services performed hereunder are subject to and provided pursuant to the terms and conditions of the Agreement, and particularly those sections which set forth Bay's maximum liability and right to indemnification in the event of any loss or damage to User or anyone else.

BAY ALARM COMPANY: **USER:** Date:_____

JACQUELINE DONAHUE ACE#546776 _____

Bay Representative: Authorized User Print Name:

_____ _____

Bay Alarm Manager's Signature: Authorized User's Signature:

This Amendment will not be binding upon Bay until either (I) signed by a Manager of Bay or (II) Bay provides the equipment or service described above.

Alarm Agreement Amendment

Alarm Operator's ACO License #28 California Contractor's License #880138
Arizona License #ROC 326152 CR-67 #ROC 326153 CR-16 Arizona Alarm Business Certificate #20243
WA Energy Electrical Contractor License BAYALAC876KF
WA Construction Contractor License BAYALAC878KH WA UBI Number 603273521

Bay Alarm Company
1-800-610-1000
www.bayalarm.com

This Amendment is made as of the date set forth below by and between Bay Alarm Company, a California Corporation (herein "Bay") and the customer identified below ("User"). This Amendment modifies the terms of the **CA: Commercial Purchase and/or Services Agreement - Sub Owned SA842C**

Dated [ORIGINAL AGREEMENT DATE] **7/01/20** .(the "Agreement").

Account #: **4162532**

User Name: **GOV CITY OF ONTARIO - WESTWIND SPORT CENTER**

Address: **2455 E RIVERSIDE DR** City: **ONTARIO** Zip: **91761**

Email Address: **Vivian R. Quintana <VQuintana@ontarioca.gov>**

Bay agrees to provide the changes indicated herein for the system(s) described in the Agreement:

Service Activation/Installation Fee and Payments

Total Activation and/or Installation Charge Fee: $ **2,500.00**
(Plus applicable sales taxes, to be billed separately)

Deposit Due at Signing: $ **1,250.00**

Due upon Completion: $ **1,250.00**

Additional Monthly Service Fee: $ **25.00**
(Additional is in addition to what you are currently paying)

Type of Service:

- ☐ Add CS Supervised (MS-CSSUP)
- ☐ Add TC2 (MS-TC2BURG)
- ☐ Add Keypad Supervised (MS-SUPBASE)
- ☐ Add DMP APP (MS-DMPAPP)
- ☐ Add Duress (MS-DURESS)
- ☐ Add Catchview (MS-CATCHVIEW)
- ☐ Add Allview (MS-ALLVIEW)
- ☐ Add SIS – Quarterly Sprinkler Inspections (MS-SIS4)

Other: _____

Scope of Work:

BAY ALARM TO INSTALL THE FOLLOWING:
(1) PANIC BUTTON - POOL AREA
(1) WIRELESS REPEATER - AT PANEL

BAY ALARM TO PROVIDE:
MATERIAL

PRICING IS AT A PREVAILING WAGE RATE

This Amendment will not be binding upon Bay until either (I) signed by a Manager of Bay or (II) Bay provides the equipment or service described above.

*******ONLY COMPLETE THIS SECTION IF ADDING ALLVIEW OR CATCHVIEW SERVICE*******

If adding BayGuard CATCH VIEW: User will receive an email with a video clip only in the event that an actual human intruder is observed by Bay via User's system(s). This service includes up to two (2) email addresses to which Bay will email the video clips. Bay will only transmit the video clips via email if Bay observes an actual person.

Email Address #1:_____

Email Address #2:_____

If adding BayGuard ALL VIEW: User will receive an email video clip of all alarm activations from User's system(s) that trigger a video clip. This service includes up to four (4) email addresses to which Bay will email the video clips to.

Email Address #1:_____

Email Address #2: _____

Email Address #3: _____

Email Address #4: _____

If Duress Bay to program for Duress. User understands some jurisdictions will not accept or respond to a request notification.

If Adding SIS Inspections: Bay agrees to provide the changes indicated herein for the fire system(s) described on the previous agreements of Bay Alarm Company, for User:

- **Bay Alarm will inspect _____ risers per quarter.**
- Bay Alarm to provide quarterly sprinkler system inspections.
- Bay will conduct the inspections in accordance with Title 19, California Code of Regulations, Chapter 5, and Article 4.
- Bay is not providing or will not provide design analysis of the premise sprinkler system through the Sprinkler Inspection Service inspection. If a design analysis is desired the User should contact a Registered Fire Protection Engineer.

If a Cancels Former:

☐ If box is checked, this Amendment affects the termination date of the Agreement. The revised term of the Agreement shall expire [ ] months after the installation of equipment and/or commencement of services covered by this Amendment.

All of the terms, covenants and conditions of the Agreement by and between Bay and User shall remain in full force and effect, except as expressly modified by this Amendment. User acknowledges and agrees that this Amendment and the equipment provided and/or services performed hereunder are subject to and provided pursuant to the terms and conditions of the Agreement, and particularly those sections which set forth Bay's maximum liability and right to indemnification in the event of any loss or damage to User or anyone else.

BAY ALARM COMPANY: **USER:** Date:_____

JACQUELINE DONAHUE ACE#546776 _____

Bay Representative: Authorized User Print Name:

_____ _____

Bay Alarm Manager's Signature: Authorized User's Signature:

This Amendment will not be binding upon Bay until either (I) signed by a Manager of Bay or (II) Bay provides the equipment or service described above.

CITY OF ONTARIO *Agenda Report* **March 18, 2025**	**SECTION:** **CONSENT CALENDAR**
Department: Public Works Prepared By: Cynthia Heredia-Torres Staff Member Presenting: Tito Haes, Executive Director Public Works Reviewed By: Andrea Ampig, Bonnie Tam Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 7

SUBJECT: **AMENDMENTS TO THE DESIGN SERVICES AGREEMENT WITH HMC ARCHITECTS FOR THE ONTARIO WELLNESS CAMPUS PROJECT AND THE ONTARIO ARENA PLAZA PROJECT**

RECOMMENDATION: That the City Council take the following actions:

A. Authorize the City Manager, or his designee, to execute Amendment No. 1 to the Design Services Agreement with HMC Architects, of Ontario, California, to provide On-Call Architectural, Space Planning, and Engineering Design Services for the D&C24-017 Ontario Wellness Campus Project in the amount of $5,377,587 for a total not-to-exceed contract amount of $5,577,587, and
B. Authorize the City Manager, or his designee, to execute Amendment No. 2 to the Design Services Agreement with HMC Architects, of Ontario, California, to provide On-Call Architectural, Space Planning, and Engineering Design Services for the Ontario Arena Plaza Project in the amount of $1,098,740 for a total not-to-exceed contract amount of $6,676,327; and
C. Authorize the City Manager or his designee, to execute all documents required for the completion of the project including, but not limited to, contracts, agreements, assessments, easements, reduction of retention accounts and filing a notice of completion at the conclusion of all construction related activities.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Invest in the City's Infrastructure (Water, Streets, Sewers, Parks, Storm Drains and Public Facilities)

FISCAL IMPACT: The proposed Amendment No. 1 to the Design Services Agreement with HMC Architects is in the amount of $5,377,587 for a total not-to-exceed contract amount of $5,577,587. The Fiscal Year 2024-25 Adopted Budget includes appropriations in the Capital Projects - Measure Q Fund for the Ontario Wellness Center Project.

The proposed Amendment No. 2 to the Design Services Agreement with HMC Architects is in the

amount of $1,098,740 for a total not-to-exceed contract amount of $6,676,327. The Fiscal Year 2024-25 Adopted Budget includes partial appropriations in the Capital Projects Fund for the Ontario Arena Plaza project. If approved, appropriations in the Capital Projects Fund will be included in future quarterly budget updates to the City Council for approval as needed.

BACKGROUND & ANALYSIS: On November 19, 2024, the City Council approved Design Services Agreements to five (5) firms, including HMC Architects, for Invitation No. 1832 On-Call Architectural, Space Planning, and Engineering Design Services.

Ontario Wellness Campus Project

The Wellness Campus will serve as the access point to vital services, resources, shelter, and emergency needs in the City. With the intention of expanding the services the Wellness Campus provides, the City is in the process of acquiring two (2) additional motels on either side of the existing 12,250 square foot Access Center. Acquiring these motels will require demolition, renovation, modernization, and new construction to accommodate offices, and emergency and temporary housing units. On October 15, 2024, the City Council approved an amendment to the previous Design Services Agreement with HMC Architects for Design Development Services including conceptual design development and preparation of plans and specifications for the Ontario Wellness Campus Project.

Staff is recommending executing Amendment No. 1 to the Design Services Agreement with HMC to begin design work on the conceptual plans they had previously developed for the Ontario Wellness Campus Project.

Ontario Arena Plaza Project

On June 20, 2022, the Development Advisory Board approved a Development Plan to construct four mixed-use buildings totaling 63,655 commercial square feet and 694 dwelling units on 13.3 acres of land located at 4000 East Ontario Center Parkway within the mixed-use land use district of Piemonte Overlay of the Ontario Center Specific Plan. The overall concept for the approved project is to construct a mixed-use development that encourages entertainment, dining and pedestrian activities by creating spaces for a variety of uses in proximity to each other. The focal feature of this mixed-use development is a 2-acre public Ontario Arena Plaza between the Toyota Arena on the west and the 5-story mixed-use buildings to the east and southeast.

The vision for the Ontario Arena Plaza is to create an engaging space for activities and leisure. The Ontario Arena Plaza should serve as the epicenter for the entertainment district, where people can gather for special events, entertainment and social interaction. If approved, HMC Architects will prepare construction documents for the two wine bars to be constructed within the Ontario Arena Plaza in collaboration with ASM Global (Toyota Arena), Adept (the developer for the mixed-use development), and SWA Group (the designer for the Ontario Arena Plaza conceptual design).

CITY OF ONTARIO
303 EAST B STREET | ONTARIO, CALIFORNIA 91764
(909) 395-2000 FAX (909) 395-2070 OntarioCA.gov

PAUL S. LEON
MAYOR

ALAN D. WAPNER
MAYOR PRO TEM

JIM W. BOWMAN
DEBRA PORADA
DAISY MACIAS
COUNCIL MEMBERS

SHEILA MAUTZ
CITY CLERK

JAMES R. MILHISER
CITY TREASURER

SCOTT OCHOA
CITY MANAGER

AMENDMENT NO. 1 TO THE DESIGN SERVICES AGREEMENT BETWEEN THE CITY OF ONTARIO AND HMC GROUP DBA HMC ARCHITECTS

1. Parties and Date.

This Amendment No. 1 to the Agreement (as defined herein) is made and entered as of _____, by and between the City of Ontario ("City") and **HMC Group dba HMC Architects**, a CORPORATION, "Consultant". City and Consultant are sometimes individually referred to as "Party" and collectively as "Parties."

2. Recitals.

2.1 Agreement. The City and Consultant have entered into an agreement entitled "**D&C 24-012 On-Call Architectural, Space Planning And Engineering Design Services Agreement"** dated 01/28/25 ("Agreement").

2.2 Amendment Purpose. The City and Consultant desire to amend the Agreement to revise the scope of services for D&C24-017 Wellness Campus Site and the not-to-exceed compensation amount by Five Million Three Hundred Seventy-Seven Thousand Five Hundred Eighty-Seven Dollars ($5,377,587) for a total not-to-exceed agreement amount of Five Million Five Hundred Seventy-Seven Thousand Five Hundred Eighty-Seven Dollars ($5,577,587).

2.3 Amendment Authority. This Amendment No. 1 is authorized pursuant to Section 3.37 of the Agreement.

3. Terms.

3.1 Amendment. Section 3.1.1 and 3.10.1 of the Agreement is hereby amended in its entirety to read as follows:

> "3.1.1 Scope of Services. Consultant promises and agrees to furnish to City all labor, materials, tools, equipment, services, and incidental and customary work necessary to fully and adequately supply the professional architectural and related services necessary for the full and adequate completion of the Project consistent with the provisions of this Agreement (hereinafter referred to as "Services"). The Services are more particularly described throughout this

Agreement, including Exhibit "A" attached hereto and incorporated herein by reference. All Services shall be subject to, and performed in accordance with, this Agreement, any exhibits attached hereto and incorporated herein by reference, and all applicable local, state, and federal laws, rules and regulations. All Services performed by Consultant shall be subject to the sole and discretionary approval of the City, which approval shall not be unreasonably withheld. Additionally, Consultant shall comply with all Federal requirements applicable to the Services as set forth in Exhibit A."

3.10.1 Consultant's Compensation for Basic Services. City shall pay to Consultant, for the performance of all Services rendered under this Agreement, the total not to exceed amount of **Five Million Five Hundred Seventy-Seven Thousand Five Hundred Eighty-Seven Dollars ($5,577,587)** ("Total Compensation"). This Total Compensation amount shall be based upon, and may be adjusted according to, the fee schedule and related terms and conditions attached hereto as Exhibit "B" and incorporated herein by reference. The Total Compensation, as may be adjusted upon mutual agreement, shall constitute complete and adequate payment for Services under this Agreement.

Exhibit A and B is hereby revised in its entirety and added Attachment A attached hereto and incorporated herein by reference.

3.2 Continuing Effect of Agreement. Except as amended by this Amendment No. 1, all other provisions of the Agreement remain in full force and effect and shall govern the actions of the parties under this Amendment No. 1. From and after the date of this Amendment No. 1, whenever the term "Agreement" appears in the Agreement, it shall mean the Agreement as amended by this Amendment No. 1.

3.3 Adequate Consideration. The Parties hereto irrevocably stipulate and agree that they have each received adequate and independent consideration for the performance of the obligations they have undertaken pursuant to this Amendment No. 1.

3.4 Severability. If any portion of this Amendment No. 1 is declared invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.

3.5 Integration. This Amendment represents the entirety of the Parties' understanding relating to the subject of this Amendment, including written or verbal communications between the Parties, which shall have no relevance unless expressly incorporated herein. This is an integrated amendment.

[SIGNATURES ON FOLLOWING PAGE]

SIGNATURE PAGE FOR AMENDMENT NO. 1 TO DESIGN SERVICES AGREEMENT BETWEEN THE CITY OF ONTARIO AND HMC GROUP DBA HMC ARCHITECTS

IN WITNESS WHEREOF, the Parties have entered into this Amendment No. 1 as of the day and year first above written.

CITY OF ONTARIO

Approved By:

_____
Scott Ochoa
City Manager

Approved as to Form:

_____
Best Best & Krieger LLP
City Attorney

Attested By:

_____
City Clerk

HMC GROUP dba HMC ARCHITECTS

By: _____

Its: _____

Printed Name: _____

By: _____

Its: _____

Printed Name: _____

[If Corporation, TWO SIGNATURES, President OR Vice President AND Secretary OR Treasurer REQUIRED]

HMC DESIGN FOR GOOD Architects

Amendment No. 1

Date: November 21, 2024

Project Name: Ontario Access Center (CO AC)
HMC #2518004-300

AMENDMENT NO. 1 TO OWNER/ARCHITECT AGREEMENT

That certain Owner/Architect Agreement (Agreement) dated July 24, 2024, by and between City of Ontario (Owner) and HMC Group (Architect), with respect to providing Architectural & Engineering Services is hereby amended, modified, and revised as follows:

Per the Agreement dated July 24, 2024, the Scope of Services will be divided into Tasks:

- Task 1 shall be Programming and Conceptual Design of Holt Site Campus
- Task 2 shall be Existing Building Modernization of Motor Inn
- Task 3 shall be New Buildings and Site (Schematic Design through Construction)

F. Compensation

HMC will provide the services outlined in the Scope of Work for Task 3 per the Agreement dated July 24, 2024, for a fixed fee of **Five Million, Three Hundred Seventy-Seven Thousand, Five Hundred Eighty-Seven Dollars ($5,377,587)**.

The fixed fee shall be 11.7% of the estimated construction cost, based on the current budget of approximately Forty-Six Million Dollars ($46,000,000).

Phase	Fee %		Fee
Schematic Design (SD)	15%	$	806,638
Design Development (DD)	25%	$	1,344,397
Construction Documents (CD)	35%	$	1,882,155
Agency Review & Approval (AG)	3%	$	161,328
Bidding & Negotiations (BD)	2%	$	107,552
Contract Administration (CA)	20%	$	1,075,517
Total	**100%**	**$**	**5,377,587**

Please review this Proposal and if it meets with your approval, please send HMC your Standard Form of Agreement for signature.

If you have any questions or need additional information, please contact me at (626) 826-9108.

Sincerely,



Brandon Gullotti AIA, NCARB
Principal In Charge
HMC Architects

cc: S. Gradillas, File-CN-AOA

Encls.:

Amend No. 1 SD-CA Fee_20241121

CITY OF ONTARIO
303 EAST B STREET | ONTARIO, CALIFORNIA 91764
(909) 395-2000 FAX (909) 395-2070 OntarioCA.gov

PAUL S. LEON
MAYOR

ALAN D. WAPNER
MAYOR PRO TEM

JIM W. BOWMAN
DEBRA PORADA
DAISY MACIAS
COUNCIL MEMBERS

SHEILA MAUTZ
CITY CLERK

JAMES R. MILHISER
CITY TREASURER

SCOTT OCHOA
CITY MANAGER

AMENDMENT NO. 2 TO THE DESIGN SERVICES AGREEMENT BETWEEN THE CITY OF ONTARIO AND HMC GROUP DBA HMC ARCHITECTS

1. Parties and Date.

This Amendment No. 2 to the Agreement (as defined herein) is made and entered as of _____, by and between the City of Ontario ("City") and **HMC Group dba HMC Architects**, a Corporation "Consultant". City and Consultant are sometimes individually referred to as "Party" and collectively as "Parties."

2. Recitals.

2.1 Agreement. The City and Consultant have entered into an agreement entitled **"D&C 24-012 On-Call Architectural, Space Planning and Engineering Design Services Agreement"** dated January 28, 2025 ("Agreement").

2.2 Amendment Purpose. The City and Consultant desire to amend the Agreement and add the design scope for D&C24-009 Ontario Arena Plaza and increase the not to exceed amount by One Million Ninety-Eight Thousand Seven Hundred Forty Dollars ($1,098,740) for a new total contract amount not-to-exceed Six Million Six Hundred Seventy-Six Thousand Three Hundred Twenty-Seven Dollars ($6,676,327). The parties have heretofore entered into Amendment No. 1 dated March 18, 2025.

2.3 Amendment Authority. This Amendment No. 2 is authorized pursuant to Section 3.37 of the Agreement.

3. Terms.

3.1 Amendment. Section 3.1.1, and 3.10.1 of the Agreement is hereby amended in its entirety to read as follows:

> 3.1.1 Scope of Services. Consultant promises and agrees to furnish to City all labor, materials, tools, equipment, services, and incidental and customary work necessary to fully and adequately supply the professional architectural and related services necessary for the full and adequate completion of the Project consistent with the provisions of this Agreement (hereinafter referred to as "Services"). The Services

are more particularly described throughout this Agreement, including Exhibit "A" attached hereto and incorporated herein by reference. All Services shall be subject to, and performed in accordance with, this Agreement, any exhibits attached hereto and incorporated herein by reference, and all applicable local, state and federal laws, rules and regulations. All Services performed by Consultant shall be subject to the sole and discretionary approval of the City, which approval shall not be unreasonably withheld. Additionally, Consultant shall comply with all Federal requirements applicable to the Services as set forth in Exhibit "A-I."

"3.10.1 Consultant's Compensation for Basic Services. City shall pay to consultant, for the performance of all Services rendered under this Agreement, with the total not to exceed amount of **Six Million Six Hundred Seventy-Six Thousand Three Hundred Twenty-Seven Dollars ($6,676,327)** ("Total Compensation"). This Total Compensation amount shall be based upon proposals and incorporated herein by reference. The total compensation, as may be adjusted upon mutual agreement, shall constitute complete and adequate payment for Services under this Agreement."

Exhibit A is hereby amendment with Attachment A attached hereto and incorporated herein by reference.

3.2 Continuing Effect of Agreement. Except as amended by this Amendment No. 2, all other provisions of the Agreement remain in full force and effect and shall govern the actions of the parties under this Amendment No. 2. From and after the date of this Amendment No. 2, whenever the term "Agreement" appears in the Agreement, it shall mean the Agreement as amended by this Amendment No. 2.

3.3 Adequate Consideration. The Parties hereto irrevocably stipulate and agree that they have each received adequate and independent consideration for the performance of the obligations they have undertaken pursuant to this Amendment No. 2.

3.4 Severability. If any portion of this Amendment No. 2 is declared invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.

3.5 Integration. This Amendment represents the entirety of the Parties' understanding relating to the subject of this Amendment, including written or verbal communications between the Parties, which shall have no relevance unless expressly incorporated herein. This is an integrated amendment.

[SIGNATURES ON FOLLOWING PAGE]

SIGNATURE PAGE FOR AMENDMENT NO. 2 TO THE DESIGN SERVICES AGREEMENT BETWEEN THE CITY OF ONTARIO AND HMC GROUP DBA HMC ARCHITECTS

IN WITNESS WHEREOF, the Parties have entered into this Amendment No. 2 as of the day and year first above written.

CITY OF ONTARIO

Approved By:

_____
Scott Ochoa
City Manager

Approved as to Form:

_____
Best Best & Krieger LLP
City Attorney

Attested By:

_____
City Clerk

HMC GROUP dba HMC ARCHITECTS

By: _____

Its: _____

Printed Name: _____

By: _____

Its: _____

Printed Name: _____

[If Corporation, TWO SIGNATURES, President OR Vice President AND Secretary OR Treasurer REQUIRED]

HMC Architects

February 05, 2025

Mr. Tito Haes
Executive Director Public Works
City of Ontario
1333 S. Bon View Ave.
Ontario, CA 91761
thaes@ontarioca.gov

Regarding: Proposal for Architectural & Engineering Services
City of Ontario
Arena Restaurant and Bar (ARB)
HMC #2518010-000

Dear Mr. Haes:

HMC Group (HMC) is pleased to submit the following Proposal to provide Architectural, Engineering, and Specialty Consultant Services for the above-mentioned Projects.

A. Proposed Project:

A new two-story Round Bar/Kitchen, approximately 3,200 sq ft across the upper and lower levels. This includes food storage, preparation space, a commercial bar, and utility/support spaces.
A new one-story Wine Bar/Kitchen, approximately 2,800 sq ft. This includes food storage, preparation space, a commercial bar, and utility/support spaces.

B. Site Description:

The new Round Bar and Wine Bar is to be located at East side of Arena, 4000 Ontario Center, Ontario, CA 91764, approximately 40’ away from the Arena Building.

C. Scope of Services:

1. At each phase of design, HMC shall facilitate all-day Milestone Page Turn meeting with the Owner to review milestone deliverables and gather feedback. At the conclusion of each meeting, Owner to provide Notice to Proceed into next phase, which represents an understanding and approval of Scope and Schedule as indicated in the Submittal.
   a. HMC to provide 100% Schematic Design Submittal, which includes design drawings and Architecture/Engineering (A/E) basis of design narratives. Refer to Attachment “D” HMC Production Document Deliverables for additional information.
   b. HMC to provide 100% Design Development Submittal, which includes design development drawings. Refer to Attachment “D” HMC Production Document Deliverables for additional information.
   c. HMC to provide 100% Construction Document Submittal, which includes design construction drawings and specifications. Refer to Attachment “D” HMC Production Document Deliverables for additional information.
2. Obtain City of Ontario Planning, Building Department approval and San Bernadino County Environmental Health Department approval for the Project.

3. Assist with Bidding, which include answering pre-bid RFIs, providing addenda as required, and evaluation of contractor bids.
4. Provide Contract Administration services, HMC anticipates the following:
   a. Attending one (1) preconstruction meeting with City & General Contractor.
   b. Attending approximately twenty (20) weekly Owner, Architect, Contractor (OAC) meetings.
   c. Attending approximately eight (8) Construction Observation visits from the A/E team (if attending OACs in-person, construction observation visits will coincide with OACs).
   d. Responding to approximately one hundred twenty (120) Submittals (shop drawings, product data, etc.).
   e. Responding to approximately sixty (60) Requests for Information (RFI).
   f. Reviewing and approving monthly contractor Pay Applications.
   g. Preparing one (1) A/E Punch List of the construction prior to Owner occupancy.
   h. Reviewing contractor-prepared Closeout Documents (subcontractor and material provider warranties, operations & maintenance manuals, contractor's as-built drawings).

D. Preliminary Schedule:

Refer to Attachment "E" for the Preliminary Project Schedule. This is intended to provide a rough timeline of the project based on known information at this time but is subject to change as additional information is discovered as the project moves forward through the subsequent phases.

Note: The Owner and Architect agree and acknowledge that the performance of the Architect's services may depend upon other parties and circumstances which the Architect cannot control. The schedule and fee, therefore, may be extended by agreement between the Owner and Architect, except where the Architect is solely responsible for Project delays.

E. Assumptions / Exclusions:

a. Services
   a. Basic Services include:
      - Architectural
      - Structural Engineering
      - Mechanical, Plumbing, and Electrical Engineering
   b. Supplemental Services include:
      - Fire Sprinkler and Alarm Engineering
      - Data/Telecom/Low Voltage Engineering
      - Security (Intrusion/CCTV) Engineering
      - Audio-Visual
      - Lighting Design
      - Foodservice Design
      - Water Features/Fountains
      - Commissioning
   c. Specialty consultants other than those listed in this Proposal are excluded.

b. Energy and Sustainability
    a. LEED, WELL, Zero Energy Building, or other sustainable certification(s) of any type related to this Project are excluded.
    b. Detailed on-site renewable energy and/or IAQ management plans are excluded.
    c. QSP monitoring services; horizontal control plans; Standard Urban Stormwater Mitigation Plan (SUSMP), and off-site work is excluded.
    d. QSD services for development of Storm Water Pollution Prevention Plan (SWPPP) is excluded. Fees for submission of SWPPP shall be paid for by Owner.
c. Construction
    a. It is assumed that project delivery method is Design-Bid-Build (DBB).
    b. Construction duration is preliminarily estimated at a maximum of ten (10) calendar months. Should the construction schedule be extended through no fault of the architect, additional services for extended Contract Administration services shall apply.
    c. Construction staking during construction is excluded and shall be provided by General Contractor.
d. Fees
    a. Agency and permit fees are excluded.
    b. Testing and inspection fees are excluded.
e. Deliverables
    a. Development of Record Drawings from Contractor's As-Builts is excluded.
    b. Hard copy prints of Construction Documents and Specifications are excluded.

F. Compensation:

HMC will provide the services listed in the Scope of Services above for a fixed fee of **One Million, Eighty-Eight Thousand, Seven Hundred Forty Dollars ($1,088,740),** based on an estimated construction cost of $7,200,000 consists of Round Bar/Kitchen: $4,800,000 and Wine Bar/Kitchen: $2,400,000.

Architectural and Engineering Fee Structure

Architectural	$557,595
Structural	$48,300
Mechanical / T24 Energy Modeling	$70,380
Plumbing	$74,175
Electrical	$75,900
Total Basic Services	**$826,350**
Fire Sprinkler and Alarm Engineering	$14,835
Data/Telecom/Low Voltage/Security Engineering/ AV	$69,805
Lighting Design	$27,600
Foodservice Design	$74,750
Water Features/Fountains	$42,400
Commissioning	$33,000
Total Supplemental Services	**$262,390**
Total Fee	**$1,088,740**

Compensation Phase Breakdown

Phase	Fee %	Fee
Schematic Design	15%	$163,311
Design Development	20%	$217,748
Construction Documents	35%	$381,059
Agency Review & Approval	5%	$54,437
Bidding & Negotiations	5%	$54,437
Contract Administration	20%	$217,748
Total	**100%**	**$1,088,740**

G. Additional Services:

If Additional Services are required beyond the original Scope of Services, such services described in Attachment "B", HMC will bill on an hourly basis per Attachment "A", HMC Standard Hourly Rate Schedule.

H. Reimbursable Expenses:

Reimbursable expenses are preliminarily estimated not to exceed **Ten Thousand Dollars ($10,000)**. Reimbursable expenses are in addition to compensation for Consulting Services, including printing, plotting, delivery, and other expenses related to Agency review, Bidding, Construction or other Owner requested costs. Expense of fees paid for securing approval of authorities having jurisdiction over the Project. The Architect's compensation shall be computed based on one and one fifteenth (1.15) times the amounts invoiced to the Architect.

Please review this Proposal and if it meets with your approval, please send HMC your Standard Form of Agreement for signature.

If you have any questions or need additional information, please contact me at (626) 826-9108.

Sincerely,

Brandon Gullotti AIA, NCARB
Principal In Charge
HMC Architects

Encl.: Attachment "A" – Standard Rate Schedule
Attachment "B" – Additional Services List
Attachment "D" – HMC Production Deliverables
Attachment "E" – Preliminary Project Schedule

cc: Sarah Gradillas, File-02 Contracts Information-03 AOA\PROPOSALS

HMC Architects DESIGN FOR GOOD

ATTACHMENT "A"

HMC Rate Schedule
Hourly Rate by Professional Category
(Not all categories need apply to this contract)

Description		Rates
Principal in Charge	$	370
Sr Project Manager/Sr Project Architect/Sr Technical Manager	$	270
Project Manager/Project Architect/Technical Manager	$	255
Job Captain/Technical Leader	$	215
Project Coordinator	$	185
Senior Construction Administrator	$	275
Construction Administrator	$	255
Project Administration Support	$	150
Design Principal	$	370
Senior Project Designer	$	270
Project Designer	$	255
Design Leader	$	215
Designer II	$	165
Designer	$	150
Sustainability Director	$	305
Specifications Writer	$	235
Visualization Arts	$	215

These are the current hourly rates effective July 1, 2024, through June 30, 2025 and are subject to change one time annually effective July 1st

Attachment "B"

ADDITIONAL SERVICES

The Additional Services described in this Attachment are not included in Basic Services and they shall be paid for by the Owner as provided in this Agreement, in addition to the compensation for Basic Services. Additional Services may only be provided if authorized or confirmed in writing by the Owner and Architect.

Project Representation Beyond Basic Services:

1. ***Revisions:*** Making revisions in Drawings, Specifications, Project Manual or other documents when such revisions are:

   a. Inconsistent with approvals or instructions previously given by the Owner;

   b. Required by the enactment, revised interpretation, jurisdictional differences in interpretation, or revision of codes, laws or regulations subsequent to the preparation of such documents, or additional costs caused by delays resulting from such.

2. ***Project Changes:*** Providing services required because of changes in the Project including, but not limited to, size, quality, scope, complexity, the Owner's schedule, or the method of bidding or negotiating and contracting for construction including project phasing or bid packages.

3. ***Change Orders:*** Preparing Drawings, Specifications and other documentation, analysis and supporting data, evaluating Contractor's proposals, and providing other services in connection with Change Orders and directives.

4. ***Default:*** Providing services made necessary by the default or termination of the Contractor, by defects or deficiencies in the Work of the Contractor, or by failure of performance of either the Owner, Contractor or others performing services or providing work on the Project.

5. ***Contractor's Submittals:*** Reviewing a Contractor's submittal out of sequence from the submittal schedule agreed to by the Architect, or multiple reviews of submittals beyond the number of reviews included as Basic Services.

6. ***Contractor's RFI:*** Responding to the Contractor's requests for information where such information is available to the Contractor from a careful study and comparison of the Contract Documents, field conditions, Contractor-prepared coordination drawings, or prior Project correspondence or documentation.

7. ***Claims:*** Providing services in connection with claims submitted by Contractor or others.

8. ***Hearings, Proceedings:*** Providing services in connection with the preparation for, or attendance at, public hearings or other meetings, or legal proceedings, except where the Architect is a party thereto.

Contingent Additional Services

1. ***Existing or Other Facilities:*** Providing services to investigate facilities or existing conditions or to make measured drawings thereof.

2. ***Detailed Estimates:*** Providing detailed estimates of Construction Cost.

3. ***Providing Other Consultants:*** Providing services of consultants, if any, other than those specified as Basic Services under this Agreement.

4. ***Client-Provided Front-End Specifications:*** Providing services made necessary due to process or scope changes resulting from the inclusion of Client-provided front end specifications section.

5. ***Post Completion/Extended Construction:*** Providing services after the original completion date not due to the fault of the Architect or after issuance to the Owner of the final Certificate for Payment, or thirty (30) days after the date of Substantial Completion of the Work, whichever is earlier.

6. ***Project Hold/Resumption:*** If the Project is placed on hold by the Owner for more than 90 days due to circumstances beyond the direct control of the Architect, the schedule shall be adjusted and the Architect's compensation shall be equitably adjusted to provide for expenses incurred in the interruption and resumption of the Architect's services.

7. ***Other Additional Services:*** Providing any other services not otherwise included in this Agreement.

ATTACHMENT "D"

HMC PRODUCTION DELIVERABLES

100% Schematic Design Submittal

- **Project Schedule**
- **Design, Energy Conservation, Code Analysis**
- **Architectural Requirements**

  Floor Plans

  - Room names with cross reference to sizes required by project program.
  - Overall dimensions, grid, partition, and column layouts with door & window openings.
  - Demolition plan if required by the project.

  Elevations and Sections

  - Exterior elevations depicting height and relationship to natural and graded ground contours.
  - Sections as needed to explain the structure or its design features.

  Code Analysis

  - Allowable building area calculations in accordance with construction type, side yards, setbacks, fire sprinkler increases, zoning code floor area ratios if applicable and building height compliance.
  - Floor plans depicting exit system, occupancy and area separations.
  - Mixed occupancy ratios if applicable.
  - Calculated plumbing fixture counts.

  Architectural Narrative

  - General description of architectural materials and building systems

- **Structural Requirements**
  - Written description of the recommended structural system and the basis of recommendation over other approaches.
  - Conceptual foundation and framing plans.

- **Plumbing Requirements**
  - Written analysis of the calculated load demands and capacity of existing systems and available utility services – including fire service, sanitary systems, natural gas, domestic water, storm retention and release.
  - Plumbing plans with diagrammatic water service, storage, roof drainage, fire risers if applicable and invert elevations at points of connection with site utilities.

- **HVAC Requirements**
  - Written analysis of the calculated loads of systems. Description of recommended system and the basis of recommendation over other approaches.
  - Conceptual single-line mechanical diagram showing major ducts and equipment. Identification and sizes of primary service ducts, locations and weights of major equipment items including cooling towers, chillers, pumps, fans, air-handling units, compressors and related items.
  - Capacity of existing systems if applicable based on record drawings, field inspections and/or test reports.
  - Description of hoods and ducting with relationship between exhaust and fresh air supply.

- **Electrical & Telecommunications Requirements**
  - Site electrical plan, indicating method of service for electrical power, telecommunications, and fire alarm systems.
  - Single line diagram showing:
    1. Method of service.
    2. Major transformers and transformer substations.
    3. Major switchboards, motor control centers, panels and distribution boards.
    4. Major components of emergency power.

5. Major components of telecommunications systems – BDF, IDF, point of connection to existing backbone if applicable.
- Basis of design narrative report for lighting approach and other applicable systems such as public address, fire alarm, security, call systems and pneumatic tube.

100% Design Development Submittal

- **Updated Project Schedule**
- **Updated Design, Energy Conservation, Code Analysis**
- **Expanded Architectural Requirements**

Floor Plans

- Room names with cross reference to sizes required by project program with defined corridors, lobbies, stairs, elevators, toilet rooms, janitors' closets, and mechanical/electrical equipment rooms.
- Overall dimensions, grid, partition, and column layouts with door & window openings with provisions for making facilities accessible to and usable by the disabled.
- Location of plumbing fixtures such as floor drains, drinking fountains, showers, fire-hose cabinets, fire extinguisher cabinets, fume & exhaust hoods.
- Major built-in features such as fixed seating, food service equipment, display cases, counters, shelves, lockers, laboratory workspaces, and casework.
- Contract or movable furniture systems layouts indicating differences between fixed and movable furniture systems and equipment.
- Floor and wall finish patterns and accents.
- Demolition plan if required by the project.

Reflected Ceiling Plans

- Lighting layouts, ceiling systems and design elements such soffits, troughs, vaults, and coffers.

Roof Plans

- Indicating roof mounted equipment, slopes, ridges, drains, roof screens, parapet heights, roofing material, roof hatches and other associated equipment.

Elevations and Sections

- Exterior elevations depicting height and relationship to natural and graded ground contours.
- Depict all building elements including penthouses, entrances, canopies, windows, doors, stairs, platforms, louvers, stacks, and similar items with indicated finish of materials.
- Sections as needed to explain the structure or its design features. Including longitudinal and traverse sections for each major area, indicating floor elevations, ceiling heights, tunnels and unexcavated areas, basements, rooflines, and parapets, passages between buildings if applicable – sections cross referenced to floor plans.
- Coordinate and indicate HVAC distribution and hood venting.

Interior Elevations

- Elevations of all major rooms and design features with details to explain concept and design.

Schedules

- Door Schedule denoting size, type, frame, rating assembly, material and special comments.
- Window Schedule denoting size, type, frame, glazing, window covering if applicable and special comments.
- Finish Schedule denoting material finish of floor, floor base, wall & ceiling.

Updated Code Analysis

- Allowable building area calculations in accordance with construction type, side yards, setbacks, fire sprinkler increases, zoning code floor area ratios if applicable and building height compliance.
- Floor plans depicting exit system, occupancy and area separations.
- Mixed occupancy ratios if applicable.
- Calculated plumbing fixture counts.
- Illustrate code implications from preliminary review and interpretations of agencies.

Enlarged Room Plans

- Equipment rooms indicating layout of equipment to ensure sufficient space has been allocated.
- Toilet Rooms and support services rooms.
- Special design feature rooms.

Outline Specifications

- Updated and more detailed description for all finishes and materials, building components and systems as compared with the schematic design documents submittal - including specifications for structural, mechanical, plumbing, electrical/telecommunications and building support systems.
- Division 01- General Requirements.

- **Structural Requirements**
  - Updated written description of the recommended structural system and the basis of recommendation over other approaches.
  - Foundation and framing plans based on load calculations and seismic analysis.

- **Plumbing Requirements**
  - Updated written analysis of the calculated load demands and capacity of existing systems and available utility services – including fire service, sanitary systems, natural gas, domestic water, storm retention and release.
  - Plumbing plans with diagrammatic water service, storage, roof drainage, fire risers if applicable and invert elevations at points of connection with site utilities, including sizes based on calculations.
  - Riser diagrams if applicable.

- **HVAC Requirements**
  - Updated written analysis of the calculated loads of systems. Description of recommended system and the basis of recommendation over other approaches.
  - Double line mechanical plan showing primary duct layout and single line secondary supply and return distribution. Identification of sizes and bottom of duct elevations of primary service ducts, locations and weights of major equipment items including cooling towers, chillers, pumps, fans, air-handling units, compressors and related items.
  - Supply and return zones for each occupancy.
  - Capacity of existing systems if applicable based on record drawings, field inspections and/or test reports.
  - Hoods, exhaust fans and ducting with destination points of exhaust.
  - Equipment schedules.
  - Mechanical rooms depicting equipment demonstrating that sufficient space has been allocated.

- **Electrical & Telecommunications Requirements**
  - Site electrical plan, indicating method of service for electrical power, telecommunications, and fire alarm systems.
  - Updated Single line diagram showing:
    1. Method of service.
    2. Major transformers and transformer substations.
    3. Major switchboards, motor control centers, panels and distribution boards.
    4. Major components of emergency power.
    5. Major components of telecommunications systems – BDF, IDF, point of connection to existing backbone if applicable.
  - Electrical floor plan indicating distribution layout of electrical power, signal and telecommunications.
  - Lighting plan and fixture schedule.
  - Updated basis of design narrative report for lighting approach and other applicable systems such as public address, fire alarm, security, call systems and pneumatic tube.

100% Construction Documents Submittal

Production

The following outline of documents represent the minimum construction document phase submittals which shall include working drawings and specifications from all disciplines.

Architectural Drawings

- Title Sheet
- Site & building demolition plan where project applicable
- Site Plan
- Phasing site and floor plans where project applicable
- Life/Safety plans including applicable code analysis and tabulations
- Key, reference and enlarged floor plans
- Reflected ceiling plans

- Roof Plans
- Exterior elevations and building sections
- Furniture and equipment plans where project applicable
- Wayfinding, signage plans where project applicable
- Interior and casework elevations
- Partition, ceiling, and design feature details
- Door, window and interior finish schedules
- Enlarged wall sections
- Stair and elevator plans, sections and details where project applicable
- Materials board – updated from design development phase.
- Finish and Furniture Sample Binders
- Detail of anchorage for all fixed equipment in accordance with building code requirements.
- Stamp all drawings and specifications as required by law by architect of record.

Structural Drawings

- Foundation plans.
- Framing plans.
- Building sections.
- Framing and column schedules.
- Details of connections, special assemblies and expansion, drift and seismic joints.
- Details of structural framing systems for support of nonstructural components and equipment.
- Structural drawings accompanied with computations, stress diagrams, and other pertinent data.

Plumbing Drawings

- Site utility sewer lines sized with invert elevations at points of connection.
- Building waste line layouts, sized with vent stacks and connections to drains, fixtures and equipment.
- Building hot & cold water supply layouts, sized with circulation mains, tanks, branches, risers and connections to fixtures and equipment.
- Riser diagrams for supply and waste systems.
- Fire extinguishing equipment, risers and standpipes where project applicable.
- Plumbing fixtures, tanks, and pumps with drainage and supply connections.
- Layout and size of natural gas, vacuums and medical gas systems where project applicable.
- Detail sections demonstrating coordination of structural, HVAC and piping systems.
- Plumbing drawings indicating complete plumbing system in detail and shall include methods for fastening equipment to the structure to resist seismic forces.

HVAC Drawings

- Schedules and legends
- Floor plans, sections indicating air and piping systems including all branch distribution.
- Sections, details and enlarged floor plans depicting layouts of mechanical equipment rooms.
- Air balance schedule for outside, supply, return, and exhaust air and sections demonstrating sufficient clearances and volumes for air flows and access of equipment where project applicable.
- Flow diagrams for chilled water, condenser water, and boilers where project applicable.
- Air riser diagrams where project applicable.
- Plans and detail sections depicting HVAC systems and branches with duct and pipe sizes for heating, steam, refrigeration, exhaust and ventilation where project applicable.
- Auxiliary HVAC required for 24/7 operating equipment service systems where project applicable.
- Energy calculations.
- HVAC drawings shall indicate the complete heating, ventilating, and air-conditioning systems in detail and shall include methods for fastening equipment to the structure to resist seismic forces.

Electrical and Telecommunication Drawings

- Electrical service to building from public utility, with size of feeders
- Site and building transformers locations
- Main switchboard power panels, light panels and associated equipment.
- Feeder and conduit sizes.
- Site and building light fixtures, receptacles, switches and power outlets.
- Telecommunication system, routing, distribution, terminal cabinets, backboards and coordinated mechanical requirements.
- Fire alarm system and connection to existing system where project applicable.
- Emergency power, generator, transfer switches, fuel tanks and auxiliary service where project applicable.
- Electrical drawings shall indicate sufficient level of detail to illustrate connections, routings, and other items in complex areas. All wiring shall be final sized. Detailed methods for fastening

equipment to the structure to resist seismic forces shall be indicated – drawings shall indicate feeder and conduit sizes, schedule of feeder breakers or switches, light fixtures, receptacles, switches, and power outlets, BDF & IDF terminal racks/cabinets and/or backboards, cabling/wiring risers and routing.

Specifications

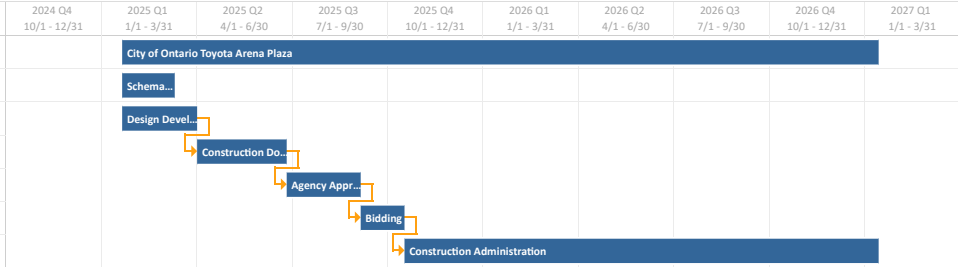
- CSI format specifications from each respective discipline including Division- 01, General Conditions and Supplementary Conditions. Specifications shall demonstrate adherence with client's standards and contracted vendors and suppliers where project applicable.
- Bidding Requirements, Notice to Bidders and Bid Forms.

PROJECT SCHEDULE

rev. 01/17/2025

Attachment "E"

	LEVEL	PLAN START	PLAN END	DURATION (WORKING DAYS)	PREDECESSOR
1	City of Ontario Toyota Arena Plaza	1/20/2025	1/13/2027	510	
1.1	Schematic Design	1/20/2025	3/10/2025	35	
1.2	Design Development	1/20/2025	3/31/2025	50	
1.3	Construction Documents	4/1/2025	6/24/2025	60	1.2
1.4	Agency Approval	6/25/2025	9/4/2025	50	1.3
1.5	Bidding	9/5/2025	10/16/2025	30	1.4
1.6	Construction Administration	10/17/2025	1/13/2027	320	1.5



CITY OF ONTARIO *Agenda Report* **March 18, 2025**	**SECTION:** **CONSENT CALENDAR**
Department: Public Works Prepared By: Daniel P Beers Staff Member Presenting: Tito Haes, Executive Director Public Works Reviewed By: Andrea Ampig, Bonnie Tam Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 8

SUBJECT: **AUTHORIZE THE PURCHASE AND INSTALLATION OF CHARGEPOINT ELECTRIC VEHICLE CHARGERS WITH BODEV, INC. FOR THE PROFESSIONAL BASEBALL STADIUM, PROFESSIONAL BASEBALL STADIUM PARKING STRUCTURE, AND THE ONTARIO SPORTS EMPIRE**

RECOMMENDATION: That the City Council take the following actions:

A. Authorize a cooperative purchase agreement for D&C23-011 Professional Baseball Stadium with BodEV, Inc., of La Habra, California, for the purchase and installation of ChargePoint electric vehicle (EV) chargers for the Professional Baseball Stadium, Professional Stadium Parking Structure, and the Ontario Sports Empire in the amount of $1,189,758 plus a contingency amount of $119,000 for a total contract amount not-to-exceed $1,308,758 consistent with the terms and conditions of the Sourcewell Contract Number 042221-CPI; and
B. Authorize the City Manager or his designee to execute all documents required for the completion of the project including, but not limited to agreements, assessments, easements, reduction of retention accounts, contracts amendments within the authorization limits, and filing a notice of completion at the conclusion of all construction related activities.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Invest in the City's Infrastructure (Water, Streets, Sewers, Parks, Storm Drains and Public Facilities)

FISCAL IMPACT: The proposed contract with BodEV, Inc. is in the amount of $1,189,758 plus a contingency amount of $119,000 for a total not-to-exceed contract amount of $1,308,758. The Fiscal Year 2024-25 Adopted Budget includes appropriations in the Capital Projects-Measure Q Fund for the purchase and installation of ChargePoint EV chargers for the Regional Sports Complex-Professional Baseball Stadium project.

BACKGROUND & ANALYSIS: On August 6, 2024, the City Council approved the Environmental Impact Report for the Ontario Sports Empire. The Ontario Sports Empire includes a new Professional Baseball Stadium located at the Northwest corner of Riverside Drive and Hellman

Avenue. On October 15, 2024, the City Council awarded 24 Construction Contracts for the Professional Baseball Stadium, including a Construction Contract for Bid No. 1829 Professional Baseball Stadium Parking Structure. The construction of the Professional Baseball Stadium, Professional Stadium Parking Structure, and the Ontario Sports Empire is underway with the Professional Baseball Stadium opening in March 2026.

Per the California Green Building Code, new non-residential facilities with over 201 parking spaces must make 20% of the total number of parking spaces EV capable and 25% of those parking spaces ready for use on day one. If approved, BodEV, Inc. will supply 81 EV chargers that will be ready and operable for use as of day one for the Ontario Sports Empire

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Sourcewell

Solicitation Number: RFP #042221

CONTRACT

This Contract is between Sourcewell, 202 12th Street Northeast, P.O. Box 219, Staples, MN 56479 (Sourcewell) and ChargePoint, Inc., 254 E. Hacienda Ave., Campbell, CA 95008-6617 (Vendor).

Sourcewell is a State of Minnesota local government agency and service cooperative created under the laws of the State of Minnesota (Minnesota Statutes Section 123A.21) that offers cooperative procurement solutions to government entities. Participation is open to federal, state/province, and municipal governmental entities, higher education, K-12 education, nonprofit, tribal government, and other public entities located in the United States and Canada. Sourcewell issued a public solicitation for Electric Vehicle Supply Equipment and Related Services from which Vendor was awarded a contract.

Vendor desires to contract with Sourcewell to provide equipment, products, or services to Sourcewell and the entities that access Sourcewell's cooperative purchasing contracts (Participating Entities).

1. TERM OF CONTRACT

A. EFFECTIVE DATE. This Contract is effective upon the date of the final signature below.

B. EXPIRATION DATE AND EXTENSION. This Contract expires July 20, 2025, unless it is cancelled sooner pursuant to Article 22. This Contract may be extended up to one additional one-year period upon request of Sourcewell and with written agreement by Vendor.

C. SURVIVAL OF TERMS. Articles 11 through 14 survive the expiration or cancellation of this Contract.

2. EQUIPMENT, PRODUCTS, OR SERVICES

A. EQUIPMENT, PRODUCTS, OR SERVICES. Vendor will provide the Equipment, Products, or Services as stated in its Proposal submitted under the Solicitation Number listed above. Vendor's Equipment, Products, or Services Proposal (Proposal) is attached and incorporated into this Contract.

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All Equipment and Products provided under this Contract must be new/current model. Vendor may offer close-out or refurbished Equipment or Products if they are clearly indicated in Vendor's product and pricing list. Unless agreed to by the Participating Entities in advance, Equipment or Products must be delivered as operational to the Participating Entity's site.

This Contract offers an indefinite quantity of sales, and while substantial volume is anticipated, sales and sales volume are not guaranteed.

B. WARRANTY. Vendor warrants that all Equipment, Products, and Services furnished are free from liens and encumbrances, and are free from defects in design, materials, and workmanship. In addition, Vendor warrants the Equipment, Products, and Services are suitable for and will perform in accordance with the ordinary use for which they are intended. Vendor's dealers and distributors must agree to assist the Participating Entity in reaching a resolution in any dispute over warranty terms with the manufacturer. Any manufacturer's warranty that is effective past the expiration of the Vendor's warranty will be passed on to the Participating Entity.

C. DEALERS, DISTRIBUTORS, AND/OR RESELLERS. Upon Contract execution, Vendor will make available to Sourcewell a means to validate or authenticate Vendor's authorized dealers, distributors, and/or resellers relative to the Equipment, Products, and Services related to this Contract. This list may be updated from time-to-time and is incorporated into this Contract by reference. It is the Vendor's responsibility to ensure Sourcewell receives the most current version of this list.

3. PRICING

All Equipment, Products, or Services under this Contract will be priced as stated in Vendor's Proposal.

When providing pricing quotes to Participating Entities, all pricing quoted must reflect a Participating Entity's total cost of acquisition. This means that the quoted cost is for delivered Equipment, Products, and Services that are operational for their intended purpose, and includes all costs to the Participating Entity's requested delivery location.

Regardless of the payment method chosen by the Participating Entity, the total cost associated with any purchase option of the Equipment, Products, or Services must always be disclosed in the pricing quote to the applicable Participating Entity at the time of purchase.

A. SHIPPING AND SHIPPING COSTS. All delivered Equipment and Products must be properly packaged. Damaged Equipment and Products may be rejected. If the damage is not readily apparent at the time of delivery, Vendor must permit the Equipment and Products to be returned within a reasonable time at no cost to Sourcewell or its Participating Entities. Participating Entities reserve the right to inspect the Equipment and Products at a reasonable

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time after delivery where circumstances or conditions prevent effective inspection of the Equipment and Products at the time of delivery.

Vendor must arrange for and pay for the return shipment on Equipment and Products that arrive in a defective or inoperable condition.

Sourcewell may declare the Vendor in breach of this Contract if the Vendor intentionally delivers substandard or inferior Equipment or Products. In the event of the delivery of nonconforming Equipment and Products, the Participating Entity will notify the Vendor as soon as possible and the Vendor will replace nonconforming Equipment and Products with conforming Equipment and Products that are acceptable to the Participating Entity.

B. SALES TAX. Each Participating Entity is responsible for supplying the Vendor with valid tax-exemption certification(s). When ordering, a Participating Entity must indicate if it is a tax-exempt entity.

C. HOT LIST PRICING. At any time during this Contract, Vendor may offer a specific selection of Equipment, Products, or Services at discounts greater than those listed in the Contract. When Vendor determines it will offer Hot List Pricing, it must be submitted electronically to Sourcewell in a line-item format. Equipment, Products, or Services may be added or removed from the Hot List at any time through a Sourcewell Price and Product Change Form as defined in Article 4 below.

Hot List program and pricing may also be used to discount and liquidate close-out and discontinued Equipment and Products as long as those close-out and discontinued items are clearly identified as such. Current ordering process and administrative fees apply. Hot List Pricing must be published and made available to all Participating Entities.

4. PRODUCT AND PRICING CHANGE REQUESTS

Vendor may request Equipment, Product, or Service changes, additions, or deletions at any time. All requests must be made in writing by submitting a signed Sourcewell Price and Product Change Request Form to the assigned Sourcewell Contract Administrator. This form is available from the assigned Sourcewell Contract Administrator. At a minimum, the request must:

- Identify the applicable Sourcewell contract number;
- Clearly specify the requested change;
- Provide sufficient detail to justify the requested change;
- Individually list all Equipment, Products, or Services affected by the requested change, along with the requested change (e.g., addition, deletion, price change); and
- Include a complete restatement of pricing documentation in Microsoft Excel with the effective date of the modified pricing, or product addition or deletion. The new pricing

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restatement must include all Equipment, Products, and Services offered, even for those items where pricing remains unchanged.

A fully executed Sourcewell Price and Product Request Form will become an amendment to this Contract and be incorporated by reference.

5. PARTICIPATION, CONTRACT ACCESS, AND PARTICIPATING ENTITY REQUIREMENTS

A. PARTICIPATION. Sourcewell's cooperative contracts are available and open to public and nonprofit entities across the United States and Canada; such as federal, state/province, municipal, K-12 and higher education, tribal government, and other public entities.

The benefits of this Contract should be available to all Participating Entities that can legally access the Equipment, Products, or Services under this Contract. A Participating Entity's authority to access this Contract is determined through its cooperative purchasing, interlocal, or joint powers laws. Any entity accessing benefits of this Contract will be considered a Service Member of Sourcewell during such time of access. Vendor understands that a Participating Entity's use of this Contract is at the Participating Entity's sole convenience and Participating Entities reserve the right to obtain like Equipment, Products, or Services from any other source.

Vendor is responsible for familiarizing its sales and service forces with Sourcewell contract use eligibility requirements and documentation and will encourage potential participating entities to join Sourcewell. Sourcewell reserves the right to add and remove Participating Entities to its roster during the term of this Contract.

B. PUBLIC FACILITIES. Vendor's employees may be required to perform work at government-owned facilities, including schools. Vendor's employees and agents must conduct themselves in a professional manner while on the premises, and in accordance with Participating Entity policies and procedures, and all applicable laws.

6. PARTICIPATING ENTITY USE AND PURCHASING

A. ORDERS AND PAYMENT. To access the contracted Equipment, Products, or Services under this Contract, a Participating Entity must clearly indicate to Vendor that it intends to access this Contract; however, order flow and procedure will be developed jointly between Sourcewell and Vendor. Typically, a Participating Entity will issue an order directly to Vendor. If a Participating Entity issues a purchase order, it may use its own forms, but the purchase order should clearly note the applicable Sourcewell contract number. All Participating Entity orders under this Contract must be issued prior to expiration of this Contract; however, Vendor performance, Participating Entity payment, and any applicable warranty periods or other Vendor or Participating Entity obligations may extend beyond the term of this Contract.

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Vendor's acceptable forms of payment are included in Attachment A. Participating Entities will be solely responsible for payment and Sourcewell will have no liability for any unpaid invoice of any Participating Entity.

B. ADDITIONAL TERMS AND CONDITIONS/PARTICIPATING ADDENDUM. Additional terms and conditions to a purchase order, or other required transaction documentation, may be negotiated between a Participating Entity and Vendor, such as job or industry-specific requirements, legal requirements (e.g., affirmative action or immigration status requirements), or specific local policy requirements. Some Participating Entitles may require the use of a Participating Addendum; the terms of which will be worked out directly between the Participating Entity and the Vendor. Any negotiated additional terms and conditions must never be less favorable to the Participating Entity than what is contained in this Contract.

C. SPECIALIZED SERVICE REQUIREMENTS. In the event that the Participating Entity requires service or specialized performance requirements (such as e-commerce specifications, specialized delivery requirements, or other specifications and requirements) not addressed in this Contract, the Participating Entity and the Vendor may enter into a separate, standalone agreement, apart from this Contract. Sourcewell, including its agents and employees, will not be made a party to a claim for breach of such agreement.

D. TERMINATION OF ORDERS. Participating Entities may terminate an order, in whole or in part, immediately upon notice to Vendor in the event of any of the following events:

1. The Participating Entity fails to receive funding or appropriation from its governing body at levels sufficient to pay for the goods to be purchased;
2. Federal, state, or provincial laws or regulations prohibit the purchase or change the Participating Entity's requirements; or
3. Vendor commits any material breach of this Contract or the additional terms agreed to between the Vendor and a Participating Entity.

E. GOVERNING LAW AND VENUE. The governing law and venue for any action related to a Participating Entity's order will be determined by the Participating Entity making the purchase.

7. CUSTOMER SERVICE

A. PRIMARY ACCOUNT REPRESENTATIVE. Vendor will assign an Account Representative to Sourcewell for this Contract and must provide prompt notice to Sourcewell if that person is changed. The Account Representative will be responsible for:

- Maintenance and management of this Contract;
- Timely response to all Sourcewell and Participating Entity inquiries; and
- Business reviews to Sourcewell and Participating Entities, if applicable.

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B. BUSINESS REVIEWS. Vendor must perform a minimum of one business review with Sourcewell per contract year. The business review will cover sales to Participating Entities, pricing and contract terms, administrative fees, supply issues, customer issues, and any other necessary information.

8. REPORT ON CONTRACT SALES ACTIVITY AND ADMINISTRATIVE FEE PAYMENT

A. CONTRACT SALES ACTIVITY REPORT. Each calendar quarter, Vendor must provide a contract sales activity report (Report) to the Sourcewell Contract Administrator assigned to this Contract. A Report must be provided regardless of the number or amount of sales during that quarter (i.e., if there are no sales, Vendor must submit a report indicating no sales were made).

The Report must contain the following fields:

- Customer Name (e.g., City of Staples Highway Department);
- Customer Physical Street Address;
- Customer City;
- Customer State/Province;
- Customer Zip Code;
- Customer Contact Name;
- Customer Contact Email Address;
- Customer Contact Telephone Number;
- Sourcewell Assigned Entity/Participating Entity Number;
- Item Purchased Description;
- Item Purchased Price;
- Sourcewell Administrative Fee Applied; and
- Date Purchase was invoiced/sale was recognized as revenue by Vendor.

B. ADMINISTRATIVE FEE. In consideration for the support and services provided by Sourcewell, the Vendor will pay an administrative fee to Sourcewell on all Equipment, Products, and Services provided to Participating Entities. The Administrative Fee must be included in, and not added to, the pricing. Vendor may not charge Participating Entities more than the contracted price to offset the Administrative Fee.

The Vendor will submit payment to Sourcewell for two percent (2%) multiplied by the total sales of all Equipment, Products, and Services purchased by Participating Entities under this Contract during each calendar quarter. Payments should note the Vendor's name and Sourcewell-assigned contract number in the memo; and must be mailed to the address above "Attn: Accounts Receivable" or remitted electronically to Sourcewell's banking institution per Sourcewell's Finance department instructions. Payments must be received no later than 45 calendar days after the end of each calendar quarter.

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Vendor agrees to cooperate with Sourcewell in auditing transactions under this Contract to ensure that the administrative fee is paid on all items purchased under this Contract.

In the event the Vendor is delinquent in any undisputed administrative fees, Sourcewell reserves the right to cancel this Contract and reject any proposal submitted by the Vendor in any subsequent solicitation. In the event this Contract is cancelled by either party prior to the Contract's expiration date, the administrative fee payment will be due no more than 30 days from the cancellation date.

9. AUTHORIZED REPRESENTATIVE

Sourcewell's Authorized Representative is its Chief Procurement Officer.

Vendor's Authorized Representative is the person named in the Vendor's Proposal. If Vendor's Authorized Representative changes at any time during this Contract, Vendor must promptly notify Sourcewell in writing.

10. AUDIT, ASSIGNMENT, AMENDMENTS, WAIVER, AND CONTRACT COMPLETE

A. AUDIT. Pursuant to Minnesota Statutes Section 16C.05, subdivision 5, the books, records, documents, and accounting procedures and practices relevant this Agreement are subject to examination by Sourcewell or the Minnesota State Auditor for a minimum of six years from the end of this Contract. This clause extends to Participating Entities as it relates to business conducted by that Participating Entity under this Contract.

B. ASSIGNMENT. Neither the Vendor nor Sourcewell may assign or transfer any rights or obligations under this Contract without the prior consent of the parties and a fully executed assignment agreement. Such consent will not be unreasonably withheld.

C. AMENDMENTS. Any amendment to this Contract must be in writing and will not be effective until it has been fully executed by the parties.

D. WAIVER. If either party fails to enforce any provision of this Contract, that failure does not waive the provision or the right to enforce it.

E. CONTRACT COMPLETE. This Contract contains all negotiations and agreements between Sourcewell and Vendor. No other understanding regarding this Contract, whether written or oral, may be used to bind either party. For any conflict between the attached Proposal and the terms set out in Articles 1-22, the terms of Articles 1-22 will govern.

F. RELATIONSHIP OF THE PARTIES. The relationship of the parties is one of independent contractors, each free to exercise judgment and discretion with regard to the conduct of their

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respective businesses. This Contract does not create a partnership, joint venture, or any other relationship such as master-servant, or principal-agent.

11. LIABILITY

Vendor must indemnify, save, and hold Sourcewell and its Participating Entities, including their agents and employees, harmless from any claims or causes of action, including attorneys' fees, arising out of the performance of this Contract by the Vendor or its agents or employees; this indemnification includes injury or death to person(s) or property alleged to have been caused by some defect in the Equipment, Products, or Services under this Contract to the extent the Equipment, Product, or Service has been used according to its specifications.

12. GOVERNMENT DATA PRACTICES

Vendor and Sourcewell must comply with the Minnesota Government Data Practices Act, Minnesota Statutes Chapter 13, as it applies to all data provided by or provided to Sourcewell under this Contract and as it applies to all data created, collected, received, stored, used, maintained, or disseminated by the Vendor under this Contract.

If the Vendor receives a request to release the data referred to in this article, the Vendor must immediately notify Sourcewell and Sourcewell will assist with how the Vendor should respond to the request.

13. INTELLECTUAL PROPERTY, PUBLICITY, MARKETING, AND ENDORSEMENT

A. INTELLECTUAL PROPERTY

1. *Grant of License.* During the term of this Contract:
   a. Sourcewell grants to Vendor a royalty-free, worldwide, non-exclusive right and license to use theTrademark(s) provided to Vendor by Sourcewell in advertising and promotional materials for the purpose of marketing Sourcewell's relationship with Vendor.
   b. Vendor grants to Sourcewell a royalty-free, worldwide, non-exclusive right and license to use Vendor's Trademarks in advertising and promotional materials for the purpose of marketing Vendor's relationship with Sourcewell.
2. *Limited Right of Sublicense*. The right and license granted herein includes a limited right of each party to grant sublicenses to its and their respective distributors, marketing representatives, and agents (collectively "Permitted Sublicensees") in advertising and promotional materials for the purpose of marketing the Parties' relationship to Participating Entities. Any sublicense granted will be subject to the terms and conditions of this Article. Each party will be responsible for any breach of this Article by any of their respective sublicensees.
3. *Use; Quality Control.*

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a. Sourcewell must not alter Vendor's Trademarks from the form provided by Vendor and must comply with Vendor's removal requests as to specific uses of its trademarks or logos.

b. Vendor must not alter Sourcewell's Trademarks from the form provided by Sourcewell and must comply with Sourcewell's removal requests as to specific uses of its trademarks or logos.

c. Each party agrees to use, and to cause its Permitted Sublicensees to use, the other party's Trademarks only in good faith and in a dignified manner consistent with such party's use of the Trademarks. Upon written notice to the breaching party, the breaching party has 30 days of the date of the written notice to cure the breach or the license will be terminated.

4. As applicable, Vendor agrees to indemnify and hold harmless Sourcewell and its Participating Entities against any and all suits, claims, judgments, and costs instituted or recovered against Sourcewell or Participating Entities by any person on account of the use of any Equipment or Products by Sourcewell or its Participating Entities supplied by Vendor in violation of applicable patent or copyright laws.

5. Termination. Upon the termination of this Contract for any reason, each party, including Permitted Sublicensees, will have 30 days to remove all Trademarks from signage, websites, and the like bearing the other party's name or logo (excepting Sourcewell's pre-printed catalog of vendors which may be used until the next printing). Vendor must return all marketing and promotional materials, including signage, provided by Sourcewell, or dispose of it according to Sourcewell's written directions.

B. PUBLICITY. Any publicity regarding the subject matter of this Contract must not be released without prior written approval from the Authorized Representatives. Publicity includes notices, informational pamphlets, press releases, research, reports, signs, and similar public notices prepared by or for the Vendor individually or jointly with others, or any subcontractors, with respect to the program, publications, or services provided resulting from this Contract.

C. MARKETING. Any direct advertising, marketing, or offers with Participating Entities must be approved by Sourcewell. Materials should be sent to the Sourcewell Contract Administrator assigned to this Contract.

D. ENDORSEMENT. The Vendor must not claim that Sourcewell endorses its Equipment, Products, or Services.

14. GOVERNING LAW, JURISDICTION, AND VENUE

Minnesota law governs this Contract. Venue for all legal proceedings out of this Contract, or its breach, must be in the appropriate state court in Todd County or federal court in Fergus Falls, Minnesota.

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15. FORCE MAJEURE

Neither party to this Contract will be held responsible for delay or default caused by acts of God or other conditions that are beyond that party's reasonable control. A party defaulting under this provision must provide the other party prompt written notice of the default.

16. SEVERABILITY

If any provision of this Contract is found to be illegal, unenforceable, or void then both Sourcewell and Vendor will be relieved of all obligations arising under such provisions. If the remainder of this Contract is capable of performance, it will not be affected by such declaration or finding and must be fully performed.

17. PERFORMANCE, DEFAULT, AND REMEDIES

A. PERFORMANCE. During the term of this Contract, the parties will monitor performance and address unresolved contract issues as follows:

1. *Notification.* The parties must promptly notify each other of any known dispute and work in good faith to resolve such dispute within a reasonable period of time. If necessary, Sourcewell and the Vendor will jointly develop a short briefing document that describes the issue(s), relevant impact, and positions of both parties.
2. *Escalation.* If parties are unable to resolve the issue in a timely manner, as specified above, either Sourcewell or Vendor may escalate the resolution of the issue to a higher level of management. The Vendor will have 30 calendar days to cure an outstanding issue.
3. *Performance while Dispute is Pending*. Notwithstanding the existence of a dispute, the Vendor must continue without delay to carry out all of its responsibilities under the Contract that are not affected by the dispute. If the Vendor fails to continue without delay to perform its responsibilities under the Contract, in the accomplishment of all undisputed work, any additional costs incurred by Sourcewell and/or its Participating Entities as a result of such failure to proceed will be borne by the Vendor.

B. DEFAULT AND REMEDIES. Either of the following constitutes cause to declare this Contract, or any Participating Entity order under this Contract, in default:

1. Nonperformance of contractual requirements, or
2. A material breach of any term or condition of this Contract.

Written notice of default and a reasonable opportunity to cure must be issued by the party claiming default. Time allowed for cure will not diminish or eliminate any liability for liquidated or other damages. If the default remains after the opportunity for cure, the non-defaulting party may:

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- Exercise any remedy provided by law or equity, or
- Terminate the Contract or any portion thereof, including any orders issued against the Contract.

18. INSURANCE

A. REQUIREMENTS. At its own expense, Vendor must maintain insurance policy(ies) in effect at all times during the performance of this Contract with insurance company(ies) licensed or authorized to do business in the State of Minnesota having an "AM BEST" rating of A- or better, with coverage and limits of insurance not less than the following:

1. *Workers' Compensation and Employer's Liability.*
Workers' Compensation: As required by any applicable law or regulation.
Employer's Liability Insurance: must be provided in amounts not less than listed below:
Minimum limits:
$500,000 each accident for bodily injury by accident
$500,000 policy limit for bodily injury by disease
$500,000 each employee for bodily injury by disease

2. *Commercial General Liability Insurance.* Vendor will maintain insurance covering its operations, with coverage on an occurrence basis, and must be subject to terms no less broad than the Insurance Services Office ("ISO") Commercial General Liability Form CG0001 (2001 or newer edition), or equivalent. At a minimum, coverage must include liability arising from premises, operations, bodily injury and property damage, independent contractors, products-completed operations including construction defect, contractual liability, blanket contractual liability, and personal injury and advertising injury. All required limits, terms and conditions of coverage must be maintained during the term of this Contract.
Minimum Limits:
$1,000,000 each occurrence Bodily Injury and Property Damage
$1,000,000 Personal and Advertising Injury
$2,000,000 aggregate for Products-Completed operations
$2,000,000 general aggregate

3. *Commercial Automobile Liability Insurance.* During the term of this Contract, Vendor will maintain insurance covering all owned, hired, and non-owned automobiles in limits of liability not less than indicated below. The coverage must be subject to terms no less broad than ISO Business Auto Coverage Form CA 0001 (2010 edition or newer), or equivalent.
Minimum Limits:
$1,000,000 each accident, combined single limit

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4. *Umbrella Insurance*. During the term of this Contract, Vendor will maintain umbrella coverage over Workers' Compensation, Commercial General Liability, and Commercial Automobile.

Minimum Limits:
$2,000,000

5. *Network Security and Privacy Liability Insurance*. During the term of this Contract, Vendor will maintain coverage for network security and privacy liability. The coverage may be endorsed on another form of liability coverage or written on a standalone policy. The insurance must cover claims which may arise from failure of Vendor's security resulting in, but not limited to, computer attacks, unauthorized access, disclosure of not public data – including but not limited to, confidential or private information, transmission of a computer virus, or denial of service.

Minimum limits:
$2,000,000 per occurrence
$2,000,000 annual aggregate

Failure of Vendor to maintain the required insurance will constitute a material breach entitling Sourcewell to immediately terminate this Contract for default.

B. CERTIFICATES OF INSURANCE. Prior to commencing under this Contract, Vendor must furnish to Sourcewell a certificate of insurance, as evidence of the insurance required under this Contract. Prior to expiration of the policy(ies), renewal certificates must be mailed to Sourcewell, 202 12th Street Northeast, P.O. Box 219, Staples, MN 56479 or sent to the Sourcewell Contract Administrator assigned to this Contract. The certificates must be signed by a person authorized by the insurer(s) to bind coverage on their behalf.

Failure to request certificates of insurance by Sourcewell, or failure of Vendor to provide certificates of insurance, in no way limits or relieves Vendor of its duties and responsibilities in this Contract.

C. ADDITIONAL INSURED ENDORSEMENT AND PRIMARY AND NON-CONTRIBUTORY INSURANCE CLAUSE. Vendor agrees to list Sourcewell and its Participating Entities, including their officers, agents, and employees, as an additional insured under the Vendor's commercial general liability insurance policy with respect to liability arising out of activities, "operations," or "work" performed by or on behalf of Vendor, and products and completed operations of Vendor. The policy provision(s) or endorsement(s) must further provide that coverage is primary and not excess over or contributory with any other valid, applicable, and collectible insurance or self-insurance in force for the additional insureds.

D. WAIVER OF SUBROGATION. Vendor waives and must require (by endorsement or otherwise) all its insurers to waive subrogation rights against Sourcewell and other additional insureds for losses paid under the insurance policies required by this Contract or other

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insurance applicable to the Vendor or its subcontractors. The waiver must apply to all deductibles and/or self-insured retentions applicable to the required or any other insurance maintained by the Vendor or its subcontractors. Where permitted by law, Vendor must require similar written express waivers of subrogation and insurance clauses from each of its subcontractors.

E. UMBRELLA/EXCESS LIABILITY/SELF-INSURED RETENTION. The limits required by this Contract can be met by either providing a primary policy or in combination with umbrella/excess liability policy(ies), or self-insured retention.

19. COMPLIANCE

A. LAWS AND REGULATIONS. All Equipment, Products, or Services provided under this Contract must comply fully with applicable federal laws and regulations, and with the laws in the states and provinces in which the Equipment, Products, or Services are sold.

B. LICENSES. Vendor must maintain a valid and current status on all required federal, state/provincial, and local licenses, bonds, and permits required for the operation of the business that the Vendor conducts with Sourcewell and Participating Entities.

20. BANKRUPTCY, DEBARMENT, OR SUSPENSION CERTIFICATION

Vendor certifies and warrants that it is not in bankruptcy or that it has previously disclosed in writing certain information to Sourcewell related to bankruptcy actions. If at any time during this Contract Vendor declares bankruptcy, Vendor must immediately notify Sourcewell in writing.

Vendor certifies and warrants that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from programs operated by the State of Minnesota; the United States federal government or the Canadian government, as applicable; or any Participating Entity. Vendor certifies and warrants that neither it nor its principals have been convicted of a criminal offense related to the subject matter of this Contract. Vendor further warrants that it will provide immediate written notice to Sourcewell if this certification changes at any time.

21. PROVISIONS FOR NON-UNITED STATES FEDERAL ENTITY PROCUREMENTS UNDER UNITED STATES FEDERAL AWARDS OR OTHER AWARDS

Participating Entities that use United States federal grant or FEMA funds to purchase goods or services from this Contract may be subject to additional requirements including the procurement standards of the Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards, 2 C.F.R. § 200. Participating Entities may also require additional requirements based on specific funding specifications. Within this Article, all

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references to “federal” should be interpreted to mean the United States federal government. The following list only applies when a Participating Entity accesses Vendor’s Equipment, Products, or Services with United States federal funds.

A. EQUAL EMPLOYMENT OPPORTUNITY. Except as otherwise provided under 41 C.F.R. § 60, all contracts that meet the definition of “federally assisted construction contract” in 41 C.F.R. § 60-1.3 must include the equal opportunity clause provided under 41 C.F.R. §60-1.4(b), in accordance with Executive Order 11246, “Equal Employment Opportunity” (30 FR 12319, 12935, 3 C.F.R. §, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, “Amending Executive Order 11246 Relating to Equal Employment Opportunity,” and implementing regulations at 41 C.F.R. § 60, “Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor.” The equal opportunity clause is incorporated herein by reference.

B. DAVIS-BACON ACT, AS AMENDED (40 U.S.C. § 3141-3148). When required by federal program legislation, all prime construction contracts in excess of $2,000 awarded by non-federal entities must include a provision for compliance with the Davis-Bacon Act (40 U.S.C. § 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 C.F.R. § 5, “Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction”). In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week. The non-federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-federal entity must report all suspected or reported violations to the federal awarding agency. The contracts must also include a provision for compliance with the Copeland “Anti-Kickback” Act (40 U.S.C. § 3145), as supplemented by Department of Labor regulations (29 C.F.R. § 3, “Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States”). The Act provides that each contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The non-federal entity must report all suspected or reported violations to the federal awarding agency. Vendor must be in compliance with all applicable Davis-Bacon Act provisions.

C. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT (40 U.S.C. § 3701-3708). Where applicable, all contracts awarded by the non-federal entity in excess of $100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. §§ 3702 and 3704, as supplemented by Department of Labor regulations (29 C.F.R. § 5). Under 40 U.S.C. § 3702 of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of

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not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. § 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence. This provision is hereby incorporated by reference into this Contract. Vendor certifies that during the term of an award for all contracts by Sourcewell resulting from this procurement process, Vendor must comply with applicable requirements as referenced above.

D. RIGHTS TO INVENTIONS MADE UNDER A CONTRACT OR AGREEMENT. If the federal award meets the definition of "funding agreement" under 37 C.F.R. § 401.2(a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that "funding agreement," the recipient or subrecipient must comply with the requirements of 37 C.F.R. § 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by the awarding agency. Vendor certifies that during the term of an award for all contracts by Sourcewell resulting from this procurement process, Vendor must comply with applicable requirements as referenced above.

E. CLEAN AIR ACT (42 U.S.C. § 7401-7671Q.) AND THE FEDERAL WATER POLLUTION CONTROL ACT (33 U.S.C. § 1251-1387). Contracts and subgrants of amounts in excess of $150,000 require the non-federal award to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. § 7401- 7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. § 1251- 1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA). Vendor certifies that during the term of this Contract will comply with applicable requirements as referenced above.

F. DEBARMENT AND SUSPENSION (EXECUTIVE ORDERS 12549 AND 12689). A contract award (see 2 C.F.R. § 180.220) must not be made to parties listed on the government wide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 C.F.R. §180 that implement Executive Orders 12549 (3 C.F.R. § 1986 Comp., p. 189) and 12689 (3 C.F.R. § 1989 Comp., p. 235), "Debarment and Suspension." SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549. Vendor certifies that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation by any federal department or agency.

G. BYRD ANTI-LOBBYING AMENDMENT, AS AMENDED (31 U.S.C. § 1352). Vendors must file any required certifications. Vendors must not have used federal appropriated funds to pay any

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person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Vendors must disclose any lobbying with non-federal funds that takes place in connection with obtaining any federal award. Such disclosures are forwarded from tier to tier up to the non-federal award. Vendors must file all certifications and disclosures required by, and otherwise comply with, the Byrd Anti-Lobbying Amendment (31 U.S.C. § 1352).

H. RECORD RETENTION REQUIREMENTS. To the extent applicable, Vendor must comply with the record retention requirements detailed in 2 C.F.R. § 200.333. The Vendor further certifies that it will retain all records as required by 2 C.F.R. § 200.333 for a period of 3 years after grantees or subgrantees submit final expenditure reports or quarterly or annual financial reports, as applicable, and all other pending matters are closed.

I. ENERGY POLICY AND CONSERVATION ACT COMPLIANCE. To the extent applicable, Vendor must comply with the mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act.

J. BUY AMERICAN PROVISIONS COMPLIANCE. To the extent applicable, Vendor must comply with all applicable provisions of the Buy American Act. Purchases made in accordance with the Buy American Act must follow the applicable procurement rules calling for free and open competition.

K. ACCESS TO RECORDS (2 C.F.R. § 200.336). Vendor agrees that duly authorized representatives of a federal agency must have access to any books, documents, papers and records of Vendor that are directly pertinent to Vendor's discharge of its obligations under this Contract for the purpose of making audits, examinations, excerpts, and transcriptions. The right also includes timely and reasonable access to Vendor's personnel for the purpose of interview and discussion relating to such documents.

L. PROCUREMENT OF RECOVERED MATERIALS (2 C.F.R. § 200.322). A non-federal entity that is a state agency or agency of a political subdivision of a state and its contractors must comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 C.F.R. § 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds $10,000 or the value of the quantity acquired during the preceding fiscal year exceeded $10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

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22. CANCELLATION

Sourcewell or Vendor may cancel this Contract at any time, with or without cause, upon 60 days' written notice to the other party. However, Sourcewell may cancel this Contract immediately upon discovery of a material defect in any certification made in Vendor's Proposal. Cancellation of this Contract does not relieve either party of financial, product, or service obligations incurred or accrued prior to cancellation.

Sourcewell	ChargePoint, Inc.
DocuSigned by: Jeremy Schwartz C0FD2A139D06489...	DocuSigned by: Rex S. Jackson D1F473FEF820430...
By: _____	By: _____
Jeremy Schwartz	Rex S. Jackson
Title: Chief Procurement Officer	Title: Chief Financial Officer
Date: 7/15/2021 | 11:43 AM CDT	Date: 7/15/2021 | 11:40 AM CDT

Approved:

DocuSigned by: Chad Coauette 7E42B8F817A64CC...

By: _____

Chad Coauette

Title: Executive Director/CEO

Date: 7/15/2021 | 11:46 AM CDT

RFP 042221 - Electric Vehicle Supply Equipment and Related Services

Vendor Details

Company Name:	ChargePoint, Inc.
Does your company conduct business under any other name? If yes, please state:	No
Address:	254 E. Hacienda Ave. Campbell , Ca 95008-6617
Contact:	Sam Ta
Email:	sam.ta@chargepoint.com
Phone:	425-229-8083
Fax:	408-841-4500
HST#:	26-1080576

Submission Details

Created On:	Monday March 08, 2021 22:21:45
Submitted On:	Thursday April 22, 2021 10:45:43
Submitted By:	Sam Ta
Email:	sam.ta@chargepoint.com
Transaction #:	f4d99719-1da2-499d-9d19-7ab18521985f
Submitter's IP Address:	98.225.2.163

Specifications

Table 1: Proposer Identity & Authorized Representatives

General Instructions (applies to all Tables) Sourcewell prefers a brief but thorough response to each question. Do not merely attach additional documents to your response without also providing a substantive response. Do not leave answers blank; respond "N/A" if the question does not apply to you (preferably with an explanation).

Line Item	Question	Response *	
1	Proposer Legal Name (and applicable d/b/a, if any):	ChargePoint Holdings, Inc.	*
2	Proposer Address:	254 E. Hacienda Ave. Campbell, CA 95008-6617	*
3	Proposer website address:	www.chargepoint.com	*
4	Proposer's Authorized Representative (name, title, address, email address & phone) (The representative must have authority to sign the "Proposer's Assurance of Compliance" on behalf of the Proposer and, in the event of award, will be expected to execute the resulting contract):	Rex S. Jackson Chief Financial Officer rex.jackson@chargepoint.com 254 E. Hacienda Ave. Campbell, CA 95008-6617 Phone: 408-841-4500	*
5	Proposer's primary contact for this proposal (name, title, address, email address & phone):	John Gilbrook Regional Sales Director 254 E. Hacienda Ave. Campbell, CA 95008-6617 Phone: 781-588-1274	*
6	Proposer's other contacts for this proposal, if any (name, title, address, email address & phone):	Bjorn Thorsland Account Executive 254 E. Hacienda Ave. Campbell, CA 95008-6617 Phone: 669-237-3328 bjorn.thorsland@chargepoint.com	

Table 2: Company Information and Financial Strength

Line Item	Question	Response *	

7	Provide a brief history of your company, including your company's core values, business philosophy, and industry longevity related to the requested equipment, products or services.	ChargePoint was founded in 2007 with a single mission in mind – to make EV charging easy and convenient so that everyone feels confident in making the transition to electric transportation. We are one of the only EV charging technology companies that designs, manufacturers, and sells the entire ecosystem of EV charging needs – hardware, software, and services – in one seamless solution. This integrated approach allows ChargePoint to offer an unsurpassed EV driver experience while ensuring that station owners have all the tools and features necessary to keep their stations up and running while aligned with their particular use case. ChargePoint operates across a broad range of end customers and charging use cases including individual homeowners, commercial workplaces, fleets, municipalities, retail, auto OEMs, and more. Our station management software and energy management solutions help people and businesses shift away from fossil fuels and manage growing demand for EV charging. The ChargePoint mobile app, the highest rated app in its segment, allows EV drivers to easily find charging stations, review prices and availability, authenticate, and pay for charging sessions on our network wherever their journey takes them. ChargePoint advocacy and partnership with a variety of EV stakeholders and policy groups throughout the US helps pave the way for widespread EV adoption. ChargePoint has built its solution upon four core principles in support of making the charging experience easy, flexible, and efficient: 1. Scale: Ability to scale from small scale pilots to large scale adoption across multiple sites. 2. Experience: Over a decade of experience in building an effortless charging experience for all. 3. Quality: Reliable and safe charging solutions utilizing industry standards and evaluated using ChargePoint's own Advanced Testing Facility. 4. Service: Best in class services for every mission, including remote monitoring and equipment uptime guarantees. Electric mobility is the smart choice and ChargePoint is excited about our role in helping to build the new fueling network. ChargePoint has more than 110,000 activated places to charge on its network, with access to an additional 160,000 public places to charge through roaming integrations with other major networks. Below are just a few of the exciting milestones achieved as we build out the new fueling network: + More than 88,815,316 charges delivered + Drivers plug into a ChargePoint® network approximately every 2.0 seconds + Drivers have avoided more than 400 liters of gasoline, 283,855,743 kgs of CO2 emissions and 298,795,235 kgs of GHG emissions + More than 4,386,000,000 electric kilometers driven on the ChargePoint Network + ChargePoint stations have dispensed more than 711,469 Megawatt hours (MWh) of electric fuel ChargePoint employs a field, inside and channel sales team that collectively oversee all new and existing customer sales opportunities (ChargePoint employees).
8	What are your company's expectations in the event of an award?	ChargePoint is currently a qualified Sourcewell vendor of EV charging solutions and we would expect similar activities if granted a continuation of that status. As Sourcewell members inquire about purchasing EVSE and related services provided under this contract, we anticipate that Sourcewell would direct those members to ChargePoint where we can assist the member in identifying the best solution, and the best buying and installation path to fit their needs. ChargePoint and/or our channel partners would be able to deliver all of the charging station needs and software solutions described herein. ChargePoint will also proactively promote the contract. As the industry leader, ChargePoint has experience deploying large scale programs across North America and has the resources necessary to quickly train staff and partners on such initiatives. ChargePoint will continue to support listing of the opportunity on its popular EV charger incentives website, conduct marketing campaigns to raise awareness of the opportunity, and support awareness training of our various channel partners and electrical contractors to broaden the number of entities helping to conduct outreach and support Sourcewell members.

9	Demonstrate your financial strength and stability with meaningful data. This could include such items as financial statements, SEC filings, credit and bond ratings, letters of credit, and detailed reference letters. Upload supporting documents (as applicable) in the document upload section of your response.	ChargePoint has developed thousands of established commercial customers and have shipped more than 100,000 charging ports, providing a solid revenue pipeline and financial standing. ChargePoint has raised over $550 million in investment funding prior to becoming a public company from some of the largest and best-known companies including: American Electric Power, Quantum Energy Partners, Linse Capital, Daimler AG, Rho Capital, Braemar Energy Ventures, Canada Pension Plan (CCPIB), Siemens, Constellation Technology Ventures, Chevron Technology Ventures, and BMW. In February of 2021, ChargePoint became the world's first publicly traded global EV charging network when we were listed on the New York Stock Exchange (NYSE) under the stock symbol CHPT. At the close of the transaction to become a publicly traded company, ChargePoint had approximately $615 million in cash (prior to payment of its outstanding term loan), which it anticipates will fund ongoing operations and to support the expansion of the Company's commercial, fleet and residential businesses in North America and Europe. Please refer to the following link for additional information and financials associated with investor relations: https://investors.chargepoint.com/overview/default.aspx	*
10	What is your US market share for the solutions that you are proposing?	ChargePoint has an estimated ~70% market share of networked public L2 chargers within North America.	*
11	What is your Canadian market share for the solutions that you are proposing?	ChargePoint has an estimated ~70% market share of networked public L2 chargers within North America.	*
12	Has your business ever petitioned for bankruptcy protection? If so, explain in detail.	ChargePoint has not petitioned for bankruptcy protection.	*
13	How is your organization best described: is it a manufacturer, a distributor/dealer/reseller, or a service provider? Answer whichever question (either a) or b) just below) best applies to your organization. a) If your company is best described as a distributor/dealer/reseller (or similar entity), provide your written authorization to act as a distributor/dealer/reseller for the manufacturer of the products proposed in this RFP. If applicable, is your dealer network independent or company owned? b) If your company is best described as a manufacturer or service provider, describe your relationship with your sales and service force and with your dealer network in delivering the products and services proposed in this RFP. Are these individuals your employees, or the employees of a third party?	ChargePoint is best described as a manufacturer and service provider. ChargePoint designs and develops a turnkey EVSE solution: we design and manufacturer our own networked charging stations, develop cloud-based network management software, provide driver app and web portal analytics, and maintain dedicated driver and station owner support teams. ChargePoint has a national direct sales force including regionally based teams and corporate inside sales department. Support activities are out of our Arizona facility. All direct Sales and Support are employees of ChargePoint. In addition, ChargePoint also has a full, local and national, network of partners across the US that we engage for sales, installation, and maintenance depending on their discipline. Our partners are not employees of ChargePoint. ChargePoint intends to be a single vendor contact for Sourcewell members from project planning to sales, installation, and station support. If members require turnkey equipment sales and installation services, ChargePoint would likely work together with an appropriate channel partner to provide the desired proposal structure.	*
14	If applicable, provide a detailed explanation outlining the licenses and certifications that are both required to be held, and actually held, by your organization (including third parties and subcontractors that you use) in pursuit of the business contemplated by this RFP.	ChargePoint's local and national network of partners across the US and Canada are trained and certified on the installation of our products through our Training and Certification program. All of our partners have licensed electricians on-staff or maintain partnerships with such electricians. Sourcewell members have the option of using their own licensed electrician for installation of ChargePoint stations. ChargePoint has installation manuals and videos available to help facilitate a successful install. In this case, ChargePoint would need to validate the installation prior to activating an Assure warranty for equipment maintenance and support; this is a simple review and approval of the work performed.	*
15	Provide all "Suspension or Debarment" information that has applied to your organization during the past ten years.	ChargePoint has never been suspended or disbarred.	*

Table 3: Industry Recognition & Marketplace Success

Line Item	Question	Response *	
16	Describe any relevant industry awards or recognition that your company has received in the past five years	ChargePoint Awards + 2019 London Business Awards: Social Impact International Company • Acterra Award: Environmental Innovation 2018 Global Cleantech Hall of Fame + 2017 East Bay Clean Cities, Clean Air Champion Award Architizer A+ Award Popular Choice Winner: Smart Home Category • Electrek Best of CES 2017: Best EV Accessory + 2016 Edison Awards: Silver in the Electric Energy & Propulsion Systems category Climate Change Business Journal: Business Model Innovation for Energy and Carbon Management + 2015 United Nations: Momentum for Change Goldman Sachs: 100 Most Intriguing Entrepreneurs Verizon: Supplier Award for Environmental Excellence Smart Grid Today: 2015 Smart Grid Pioneer Global Cleantech 100 winner for 6 years running + 2014 CNBC: Disruptor 50: The End of the Gas Station? Sustainia: World's 100 Leading Sustainability Innovations + 2013 Pike Research: Top electric vehicle charging station manufacturer World Economic Forum: "Technology Pioneer" Winner Green Parking Council: "Sustainability Leadership Pioneer" + 2012 AlwaysOn: Top 200 green tech companies Winner Sustainia100, a top sustainable solution announced at the Rio+20 conference "The Green Garage" races into The Tech Museum display + 2011 Top ranking and top overall score in Pike Research report of the EV supply equipment industry; + 2010 Time Magazine: 50 Best Inventions Edmund's Green Car Breakthrough Award BusinessWeek: 20 Small Businesses of the Future Greentech Media: Top 50 VC-Funded Startups	*
17	What percentage of your sales are to the governmental sector in the past three years	In the past three years is approximately 20% of our sales are in the government sector.	*
18	What percentage of your sales are to the education sector in the past three years	In the past three years is also approximately 10% of our sales are from the education sector.	*
19	List any state, provincial, or cooperative purchasing contracts that you hold. What is the annual sales volume for each of these contracts over the past three years?	ChargePoint is listed on numerous states, provincial and cooperative purchasing contracts, either directly or indirectly via channel partners. It is likely that every state or province where an EVSE contract or authorized vendor list exists, ChargePoint's products are available either directly or through authorized channel partners. As a privately held company, ChargePoint does not release financial detail related to customer transactions.	*
20	List any GSA contracts or Standing Offers and Supply Arrangements (SOSA) that you hold. What is the annual sales volume for each of these contracts over the past three years?	+ ChargePoint holds a Kinetic GPO contract ($0) + ChargePoint holds an Equalis Group/Sourcing Alliance contract ($0)	*

Table 4: References/Testimonials

Line Item 21. Supply reference information from three customers who are eligible to be Sourcewell participating entities.

Entity Name *	Contact Name *	Phone Number *	
NY NJ Port Authority	Charles Goldberg	(212) 435-6497	*
City of Long Beach	Joe Hunter	(714) 655-3951	*
Austin Energy	Shems Duvall	(512)-799-4785	*

Table 5: Top Five Government or Education Customers

Line Item 22. Provide a list of your top five government, education, or non-profit customers (entity name is optional), including entity type, the state or province the entity is located in, scope of the project(s), size of transaction(s), and dollar volumes from the past three years.

Entity Name	Entity Type *	State / Province *	Scope of Work *	Size of Transactions *	Dollar Volume Past Three Years *	
City of Long Beach	Government	California - CA	Mix of CT4000, CPF50 and CPE250	Various, up to $1.3M	$6.0M	*
City of New York	Government	New York - NY	Mix of CT4000, CPF50 and CPE250	Various, up to $515k	$3.3M	*
County of Santa Clara	Government	California - CA	Mix of CT4000	Various, up to $630k	$1.0M	*
State of Utah	Government	Utah - UT	Mix of CT4000	Various, up to $800k	$900k	*
Long Beach Community College	Education	California - CA	Mix of CT4000	Various, up to $430k	$500k	*

Table 6: Ability to Sell and Deliver Service

Describe your company's capability to meet the needs of Sourcewell participating entities across the US and Canada, as applicable. Your response should address in detail at least the following areas: locations of your network of sales and service providers, the number of workers (full-time equivalents) involved in each sector, whether these workers are your direct employees (or employees of a third party), and any overlap between the sales and service functions.

Line Item	Question	Response *	
23	Sales force.	ChargePoint has over 50 employees in sales. ChargePoint has its own regionally based outside sales teams covering every state within the US and all of the provinces in Canada. We also have dedicated sales teams for federal, fleet and public sectors. Our outside sales team is empowered to travel safely anywhere within their territory to meet with Sourcewell member onsite. They are also capable of hosting online webinars and training sessions when needed. In addition to our outside sales team, we also have corporate based inside sales teams. Through our marketing efforts, existing client base, and market reputation, we receive a significant number of inbound inquiries. To streamline this process for customers, we have a designated inside sales team devoted to all inbound calls and inquiries from existing and prospective clients. Having a designated team handling these inbound phone calls ensures inquiries are handled quickly and efficiently. Once a call is answered and qualified, the inside salesperson connects the customer with the local regional sales representative. The regional sales representative will work with the customer from this point. We also have an inside sales team dedicated to outbound calls. This team could be focused on proactive outreach to Sourcewell members and will also be following up on leads that are generated through various marketing initiatives. ChargePoint also has a team of Solutions Engineers and complex project support resources that can assist in any presale technical education required to get help Sourcewell members understand their EV charging options and ultimately develop an optimized deployment. After deployment, ChargePoint also has a team of Customer Success Managers (CSMs) who look after all existing customers and would make sure Sourcewell members are getting the most out of their ChargePoint solutions. As you know, ChargePoint has held an active Sourcewell award since 2018 and has always been eager to partner with Sourcewell to perform joint marketing or any other contract development activity believed to drive additional success in all forms. Upon securing a new contract, ChargePoint would be pleased to work with Sourcewell to perform a "relaunch" with the intent of building new momentum around the refreshed award. As an example, ChargePoint could leverage our marketing team to run campaigns to generate interest and promote Sourcewell. This has been a productive approach for other initiatives, such as grants that we have been awarded. Our go-to-market approach is quick and seamless which creates a simple process for clients and partners.	*

24	Dealer network or other distribution methods.	ChargePoint has a network of over 65 Value Added Resellers located throughout the US and Canada. These resellers are capable of on-site evaluation, installation, installation quotation, and EV stations sales. A subset of these partner are also Operations and Maintenance (O&M) partners as described below. ChargePoint has a network of over 2,000 certified installers and 13 O&M (Operations & Maintenance) partners located through the United States and Canada who are qualified to perform engineering, permitting, and construction services for any type of EVSE. ChargePoint works closely with our customers and partners to ensure site design, charging station layout, and driver experience is the best in the industry. We have 6 national distribution partners covering us in every state. These partners total nearly 4,000 locations combined and give us the reach to over 70,000 electrical contractors as well as access to local and state gov't agencies across the country. ChargePoint's network of distribution partners have their own sales and marketing teams that they will use to promote the contract to existing and prospective clients. As stated above, ChargePoint will train all distribution partners and installers on the Sourcewell contract details so they can effectively inform customers and generate opportunities. Regardless the sales channel, ChargePoint works closely with our customers and partners to ensure site design, charging station layout, and driver experience is the best in the industry.	*
25	Service force.	ChargePoint's charging solutions come complete with 24/7 driver support, extended hours station owner technical support and maintenance if desired. ChargePoint Support is the largest and most experienced customer service force in the EV charging industry. The ChargePoint support team is based in Scottsdale, AZ with over 50 trained employees and is understood to be the largest in-house EV charging support team in the industry. These numbers do not include our 13 O&M partners that also offer support services and are located throughout the United States and Canada. The support organization is divided into driver, station owner, and activations support teams, with representatives sharing duties and knowledge. In addition, we have plans to add additional headcount by nearly a dozen more by year end. ChargePoint Support works remotely via the ChargePoint Network to assist drivers and diagnose station issues. Once issues are determined, Support works with our network of local O&M partners to perform any require site visits including repairs. Beyond standard technical support, ChargePoint offers ChargePoint Assure, a comprehensive maintenance and management program that is outlined in greater detail in section 9A.	*

26	Describe in detail the process and procedure of your customer service program, if applicable. Include your response-time capabilities and commitments, as well as any incentives that help your providers meet your stated service goals or promises.	ChargePoint operates an in-house Customer Call Center primally based at our Scottsdale, AZ office. Our Customer Call Center supports both EV drivers as well as our station owners and installation partners. Our 40+ Driver Support agents provide 24/7/365 coverage for EV drivers in English, Spanish, and French via a toll-free telephone number clearly posted on the charging equipment. Live representatives will answer the phone quickly and customers will not be routed through a confusing calling tree. The customer service representatives will provide a variety of services to address customer concerns at the charging station. If t possible the Agent will resolve the issue remotely, whether station or driver related. If unable to resolve, the issue will be escalated to Station Support and the driver provided the address of a nearby station if one is not available on site. Driver Support agents handle over 230,000 calls annually with an average speed of answer of 30 seconds or less. Our Customer Support Center also includes Technical Support for station owners and installation partners. This toll-free line is available Monday through Saturday from 5 AM PT to 6 PM PT. Representative help resolve issues from symptom identification, diagnosis, parts logistics, labor logistics, and resolution validation. Our 38 support agents resolve over 100,000 cases annually with an estimated average speed of answer of 30 seconds. All ChargePoint charging equipment include remote diagnostics and “remote start” capabilities. When customer service receives notice that minor operational maintenance is needed, the representative will remotely diagnose the EVSE to verify the extent of the service need. If issues cannot be remotely addressed, ChargePoint will dispatch service personnel to the site for repairs for which parts costs will be covered for items covered by an active warranty. Customer utilizing our Assure offering can rest easy knowing that ChargePoint will proactively monitor the station for any issues. If an issue is detected, ChargePoint will acknowledge the issue within one business day and, if an onsite visit is required, will dispatch labor to the site within one business day of receipt of parts onsite. Our clients also get 98% annual station uptime guarantee with a non-performance penalty for outages caused by station hardware or software failures. Repairs in the field our handled by ChargePoint’s national operations and maintenance (O&M) partners that have all committed to audit requirements and penalties against service level, liability indemnification, customer warranty, pricing accuracy under fixed unit pricing terms, and maintenance of required credentials to perform the work contracted.	*
27	Describe your ability and willingness to provide your products and services to Sourcewell participating entities in the United States.	ChargePoint is already a qualified EV charging vendor with Sourcewell and your members within the United States and we look forward to continuing to support your members moving forward. ChargePoint has an established install base, dedicated sales force, partners, and provide all listed charging hardware, software, and services throughout the United Sates.	*
28	Describe your ability and willingness to provide your products and services to Sourcewell participating entities in Canada.	ChargePoint is already a qualified EV charging vendor with Sourcewell and your members within Canada and we look forward to continuing to support your members moving forward. ChargePoint has an established install base, dedicated sales force, partners, and provide all listed charging hardware, software, and services throughout Canada.	*
29	Identify any geographic areas of the United States or Canada that you will NOT be fully serving through the proposed contract.	ChargePoint, either directly or by leveraging our extensive list of partners, has the ability to fully service all geographic areas of the US and Canada.	*
30	Identify any Sourcewell participating entity sectors (i.e., government, education, not-for-profit) that you will NOT be fully serving through the proposed contract. Explain in detail. For example, does your company have only a regional presence, or do other cooperative purchasing contracts limit your ability to promote another contract?	None.	*
31	Define any specific contract requirements or restrictions that would apply to our participating entities in Hawaii and Alaska and in US Territories.	We do not have any contract issues related to Hawaii and Alaska. We have a large number of stations in operation in Hawaii.	*

Table 7: Marketing Plan

Line Item	Question	Response *	

32	Describe your marketing strategy for promoting this contract opportunity. Upload representative samples of your marketing materials (if applicable) in the document upload section of your response.	ChargePoint will use the following strategy to promote this contract: + Outside Sales: Our sales team and account executives will proactively reach out to all Sourcewell members within their assigned territories to promote the contract. We are currently speaking to many of them already and will ensure they are aware of the contract and the value it will bring them. + Inside Sales: Our inbound team will be able to promote the contract to all inbound inquiries that come in. As mentioned in Question 18, we receive a significant number of inbound leads from potential/existing Sourcewell members, and our inbound team will promote this contract to everyone and educate them on the details of how they can take advantage of it. Our outbound team will focus on proactive outreach to Sourcewell members and all government agencies. They will also call on leads that get generated through our marketing efforts. We have the tools necessary to track leads through campaigns and call on lead lists. + Marketing: Upon award we would do a formal announcement across various channels to get the word out. We will perform regular marketing campaigns to educate the market on this contract. In addition to any help Sourcewell can provide with contact information, we have the tools necessary to quickly pull customer contact information for email campaigns. + Webinars: ChargePoint will offer to create webinars that highlight the benefits of the Sourcewell contract with real life testimonials. These webinars can be vendor neutral and positioned as an educational presentation. + Trade shows: ChargePoint participates in various tradeshows/events around the country and will have marketing material available highlighting our partnership with Sourcewell and details of the contract. + Incentives: We will match all state, local and utility incentives to Sourcewell members and proactively educate prospects about the value of both the incentive program and the Sourcewell partnership. + Distribution Network: Our large distribution/partner network also have sales and marketing teams primarily supporting electrical contractors. Contractors are often a first touch point for customer exploring a charging solution. ChargePoint will work closely with its partners to help them develop effective marketing strategies. We will also train their sales team to effectively leverage this contract. We will have regular follow up calls and trainings to make sure this contract stays top of mind. Examples of our outreach: 1. ChargePoint at the ACT Expo: North America's largest clean fleet show; 2. Incentive Announcement for $25k EVSE incentive in San Francisco and; 3. $3 million in funding available for municipalities in New York.	*
33	Describe your use of technology and digital data (e.g., social media, metadata usage) to enhance marketing effectiveness.	Our marketing approach leverages technology to quickly pull contact information from prospective customers and generate marketing campaigns. ChargePoint is often involved in new programs, contract, grant etc. and can get messaging out to market extremely quickly. We use various marketing tools for generating leads and managing them through the sales funnel. + Organic social posts (Facebook, LinkedIn, Twitter, Instagram) + Digital advertising (banner ads, social ads, paid search, retargeting) + Premium content (gated on chargepoint.com) + Syndicated content + Organic search + Charging Forward blog + Chargepoint.com business, vertical and roles pages + Credits and Incentives web page with link to lead form on chargepoint.com + Forms (content downloads) + Request a station (CP.com) + Events (webinars, industry events, partner events) + Email campaigns (purchased lists, contacts from inbounds) + Marketing automation + Downloads of content/other assets + Inbound calls + Sales Development Reps (SDR) outbound calls + Customer referrals + Driver referrals	*

34	In your view, what is Sourcewell's role in promoting contracts arising out of this RFP? How will you integrate a Sourcewell-awarded contract into your sales process?	ChargePoint has a collaborative and effective partnership in place with Sourcewell with its current contract. ChargePoint would view Sourcewell as a marketing partner to help promote this contract. We would look for support on an initial announcement to current members notifying them of this renewed opportunity. We have methods of gathering contact information, however, hope that you will be able to share membership contact information for ongoing outreach and marketing campaigns. The value of providing us with this information will allow us to move quicker and more efficiently. We would also look for opportunities to collaborate on co-branded marketing initiatives that adhere to ChargePoint's brand guidelines. With Sourcewell's well established relationship with its members and ChargePoint expertise in EV charging, working closely together on marketing initiatives will ensure members feel they are in good hands with their EV charging needs. The Sourcewell contract will be part of every discussion we have with existing and potential Sourcewell members. We are speaking with government agencies every day and leveraging this contract will benefit all stakeholders (Sourcewell, Sourcewell members and ChargePoint).	*
35	Are your products or services available through an e-procurement ordering process? If so, describe your e-procurement system and how governmental and educational customers have used it.	Similar to other types of customers, for most Sourcewell members, choosing and implementing a successful charging solution is an unfamiliar experience. This is why ChargePoint has developed the most extensive, expert sales team in the industry and make these resources available to customers exploring our space. With our help, we're confident customers will be put in a position to implement successful projects. Primarily for this reason, ChargePoint does not have its own e-procurement system, our GSA Schedules are online via www.gsaadvantage.gov.	*

Table 8: Value-Added Attributes

Line Item	Question	Response *	
36	Describe any product, equipment, maintenance, or operator training programs that you offer to Sourcewell participating entities. Include details, such as whether training is standard or optional, who provides training, and any costs that apply.	As standard practice, for free, Sourcewell members have access to: + ChargePoint will provide operational training on the station at start-up. + ChargePoint is also available for Cloud Portal/Network Training after install and station activation. + Training videos and detailed manuals are available also. + On an on-going basis the ChargePoint team is available via email or phone to answer questions or provide additional training. + If required and depending on scope of project, Sourcewell members or their contractors have access to the ChargePoint University portal which is a detailed training and testing that is designed for reseller partner and installer certification.	*
37	Describe any technological advances that your proposed products or services offer.	Since ChargePoint's inception in 2007 in Silicon Valley California, we have led the way forward with technological innovations to help make it easy for drivers to go electric and station owners to offer EV charging. Today ChargePoint uses all of the latest advances: Cloud based Network, M2M IoT Cellular station connectivity, Secure (PCI compliant) Payment processing, Power Management for installation and energy savings, Next-Generation Modular DC Fast Charging, and the largest dedicated engineering team in the industry. Below are just a sample of the latest technological innovations: Professional Services Sometimes it's not just as easy to sell a charging station. Station owners, especially for more complex deployment such as fleet charging, often need additional support to evaluate, design, install, and be trained on the stations. ChargePoint offers a complete array of professional services to support these needs including site modeling, preliminary site design and engineering, site acquisition, project management, station installation and commissioning, as well as training for operators such as at fleet depots. Charge Management Software Smart EV charging is critical to provide value to drivers and site hosts. ChargePoint offers all elements of the charging ecosystem but considers itself a "network first" company in that the software is the most important element of any solution. The associated software provides the tools and interfaces for drivers to find and use stations, and for station operators to efficiently optimize the business of EV charging. Listed below are just a few of the advanced features on the ChargePoint Network software: + Station Locations & Availability: complete visibility of stations and their availability make it easy for drivers to find a compatible charger. + Access Control: Manage and control access to charging stations based on well-defined policies. Enhance the value for the station owner with the right level of control. + Flexible Pricing: Provide the station owner with pricing controls that are in line with station usage. Provide flexibility to update pricing as usage changes. + Authorization, Authentication & Accounting: Ensure safe and secure payment for charging. Security measures include the pseudonymization and encryption of personal data and other capable security measures that ensure the ongoing confidentiality, integrity,	

		availability, and resilience of the network. + Power Management: Ensure that charging stations never draw more power than the site can provide. + Driver Notifications: Notify EV drivers about station availability, state of charge and other key messages to enhance your relationship with drivers. + Queueing (Waitlist): Increase utilization of stations and charge more vehicles by enabling drivers to get in a virtual queue for stations. Power Management For operating costs, software can allow station operators to target “off-peak” periods of lower energy costs or avoid triggering a high demand charge. In addition, use of these features can maximize the number of charging ports within a given site while still keeping overall power requirement at the site meter below a determined level. This helps reduce the necessary electrical infrastructure and utility service required to support a given site and thus save capital expenditures. Below is a summary of the available load management tools available within ChargePoint charge management software: + Power Share: Intelligently share available power across multiple stations by setting a “not to exceed” limit, which may vary by time of day and day of week. Power may be allocated based on a configurable policy using equal share or priority-based first come first served. This approach allows for NEC compliant oversubscription of available electrical service, mitigation of expensive demand charges, and the option to defer utility upgrades which can be costly and delay projects. + Load Shift: Use energy when it is cheapest, usually at night when Time of Use (ToU) charges are lower. In environments where the vehicles have sufficient dwell time during off-peak times, shifting load to the least expensive time of day can provide significant savings. Operators simply plug the vehicles in as normal when they return to the depot, and ChargePoint will automatically start charging the vehicles to align with the lowest cost of electricity, no operator intervention required. + Power Limit: Manage load via building/energy management systems, either through integration via API or installation of a ChargePoint smart meter upstream of the charging stations. This approach optimizes power use by dynamically adjusting power to the charging stations based on real-time monitoring of facility loads. + Demand Response: ChargePoint can facilitate participating in utility driven demand response programs through use of a standards based OpenADR interface or API, allowing the utility to control charging station load during peak events where supply may not meet demand. Fleet Charging Solutions Fleet vehicle can require a range of special charging considerations including optimization of depot charging, access to charging while on-route, and home charging for take-home fleets. ChargePoint provides for all of these charging needs through specialized fleet charging solutions. ChargePoint Fleet Depot software integrate with other fleet back-office systems and enables optimized charging of larger fleets while ensuring that fleet vehicles are charged and ready to meet business and operational objectives at the least possible energy cost and within electrical capacity constraints. ChargePoint also offers our Fleet Mobility plan to support charging of vehicle at publicly available charging stations while on-route and integrated with existing fleet fuel card systems. ChargePoint has partnered with US Bank (Voyager Fleet Card) and WEX to offer customers the convenience of paying for and tracking electric fuel with their existing fleet cards and is continually assessing additional integrations. Finally, ChargePoint offers our Take Home Fleet solution which integrates with our Home Flex charging station and allows fleet managers to access charging data from company vehicle charging at employee's homes to support reimbursement, as necessary. Fleet System Interfaces Fleet System Interface: To ensure a seamless integration with fleet systems relied upon by fleet operators today, ChargePoint has completed or initiated integration discussions with the most common platform including: Geotab, Viriciti, Clever Devices, AssetWorks, Trapeze, Voyager, Wright Express (WEX), and more. A full set of soap/xml-based application programming interfaces (APIs) are available to integrate into a variety of back-office systems and ChargePoint will continue to grow the partnerships with fleet solution providers to best serve fleet operators.	*
38	Describe any “green” initiatives that relate to your company or to your products or services, and include a list of the certifying agency for each.	ChargePoint has a dedicated team of people that works with numerous organizations, including state and federal government, to formulate policies to promote EV adoption and evolution of the grid and other infrastructure that will be necessary to realize widespread electrified transportation. ChargePoint is a member or plays an active role in the following organizations: CALSTART CALSTART is a member-supported organization of more than 140 firms, fleets and agencies worldwide dedicated to supporting a growing high-tech, clean transportation industry that cleans the air, creates jobs, cuts imported oil and reduces global warming emissions. CALSTART provides services and consulting to spur advanced transportation technologies, fuels, systems and the companies that make them. Use the staff directory to find the expert you need.	

CLEANTECH GROUP
The mission of Cleantech Group (CTG) is to accelerate sustainable innovation. Our subscriptions, events and programs are all designed to help corporates, investors, and all players in the innovation ecosystem discover and connect with the key companies, trends, and people in the market. Our coverage is global, spans the entire clean technology theme and is relevant to the future of all industries. The company is headquartered in San Francisco, with a growing international presence in London.

EDTA
The Electric Drive Transportation Association (EDTA) is the trade association promoting battery, hybrid, plug-in hybrid and fuel cell electric drive technologies and infrastructure. EDTA conducts public policy advocacy, provides education and awareness, and enables industry networking and collaboration. EDTA's membership includes vehicle and equipment manufacturers, energy companies, technology developers, component suppliers, government agencies and others.

eMI³
Under the umbrella of ERTICO – ITS Europe, the eMobility ICT Interoperability Innovation, eMI³, is an open group of significant actors from the global Electric Vehicles market who joined forces to harmonize the ICT data definitions, formats, interfaces, and exchange mechanisms in order to enable a common language among all ICT platforms for Electric Vehicles. eMI³ core objectives lie in the development, publication, sharing and promotion of ICT standards. Since 1st December 2015, eMI³ is an ERTICO Innovation Platform established as a Non-Profit International Association under Belgium law.

Parksmart
Parksmart defines and recognizes sustainable practices in parking structure management, programming, design and technology. Industry-driven and field tested, Parksmart distinguishes the forward-thinking parking facilities shaping tomorrow's sustainable mobility network. *

Plug-In Electric Vehicle Collaborative
The California Plug-In Electric Vehicle Collaborative is a public/private organization comprised of 47 members that include key PEV stakeholders all working together to move the PEV market forwards in California.

Silicon Valley Leadership Group
The Silicon Valley Leadership Group is a public policy business trade organization. The Leadership Group was founded in 1978 by David Packard of Hewlett-Packard and represents more than 400 of Silicon Valley's most respected employers on issues, programs and campaigns that affect the economic health and quality of life in Silicon Valley, including energy, transportation, education, housing, health care, tax policies, economic vitality and the environment.

Green Sports Alliance
Leveraging the cultural & market influence of sports to promote healthy, sustainable communities where we live & play. Members collectively provide nearly one of every three private sector jobs in Silicon Valley and contribute more than $3 trillion to the worldwide economy.

California Energy Commission
As the state's primary energy policy and planning agency, the California Energy Commission is committed to reducing energy costs and environmental impacts of energy use - such as greenhouse gas emissions - while ensuring a safe, resilient, and reliable supply of energy.

Los Angeles Business Commission
Uniting the power of business with the power of government for education and advocacy to promote environmental and economic sustainability.

Cleantech San Diego
Cleantech San Diego is a nonprofit member organization that positions the greater San Diego region, including Imperial County, as a global leader in the cleantech economy. We foster collaborations across the private-public-academic landscape, lead advocacy efforts to promote cleantech priorities, and encourage investment in the San Diego region.
Our members include more than 100 local businesses, universities, governments, and nonprofits committed to advancing sustainable solutions for the benefit of the economy and the environment.

39	Identify any third-party issued eco-labels, ratings or certifications that your company has received for the equipment or products included in your Proposal related to energy efficiency or conservation, life-cycle design (cradle-to-cradle), or other green/sustainability factors.	ChargePoint AC L2 stations are Energy Star certified. ChargePoint DC products are intended to be Energy Star certified when the program is fully defined and available for certification. ChargePoint owns an Advanced Test Center that exposes all of our products to extreme environmental accelerated life cycle testing. Tests include solar loading, extreme heat, extreme cold, humidity, seismic, focused pressurized water, impact, and dozens of other tests designed to improve product reliability and longevity. Higher reliability, less on-site visits, fewer replacement parts, and longer life span all contribute to lessening environmental impact.	*
40	Describe any Women or Minority Business Entity (WMBE), Small Business Entity (SBE), or veteran owned business certifications that your company or hub partners have obtained. Upload documentation of certification (as applicable) in the document upload section of your response.	ChargePoint has several authorized resellers with various Women or Minority Business Entity (WMBE) or Small Business Entity (SBE), and Service-Disabled Veteran owned accreditations. ChargePoint will provide a detailed list upon request.	*

41	What unique attributes does your company, your products, or your services offer to Sourcewell participating entities? What makes your proposed solutions unique in your industry as it applies to Sourcewell participating entities?	ChargePoint is a complete systems provider, offering the highest level of integration of hardware, software, and services, and delivering the best value in the industry. Our charging stations, mobile applications, and network management platform are designed to work seamlessly together to provide the best station owner and driver experiences in the market. ChargePoint's extensive technical expertise and fully integrated portfolio also allows ChargePoint to work rapidly with key partners to develop new, innovative solutions in support of a rapidly evolving market. Simply put, ChargePoint is unlike any other charging solution provider in that it provides the scale, experience, service, and quality necessary to make any EV charging initiative a success. Experience An integrated experience provides an effortless charging experience for station owners and drivers. It ensures consistent performance, efficiency, and reliability at every touchpoint whether one is using a mobile app, plugging into a charging station, managing the station or analyzing charging data. ChargePoint has more than 110,000 activated places to charge on its network, with access to an additional 160,000 public places to charge through roaming integrations with other major networks. ChargePoint is the only company that delivers solutions that provide an integrated EV charging experience for businesses and drivers across every touch point and for every use case. We design, develop, and manufacture complete, integrated hardware and software solutions for every charging scenario: from home and multifamily to workplace and fleet. From a top-rated mobile app and award-winning services and support to the most reliable network and stations, ChargePoint has you covered. Scale As EV adoption grows and charging becomes a necessity for your business, you want to rest assured that the charging solution you invest in today will set you up for success in the future by enabling you to support more drivers, add the latest software features and expand your EV fleet with minimal disruption to your business. The EV charging solution you invest in today must set you up for success tomorrow. ChargePoint offers seamless scalable solutions that grow with your business. We will help you get started easily, up to speed quickly and, when the time comes, ramp up effortlessly—all with minimal disruption to your business. Our extensive expertise with incentives, rebates and grants will even save you money every step of the way. No wonder 60% of Fortune 50 companies are ChargePoint customers. Quality You need an EV charging solution that just works no matter how it is used, where it is used or when it is used. A solution that is so reliable that you can just set it and forget it. Your EV charging solution has to work, every time. That is why ChargePoint is the only company that has made a major investment in quality testing on all our stations and software. ChargePoint is the only EV charging solutions company with an advanced in-house testing lab. We rigorously test all our stations and software to ensure your investment can stand up to any element, scenario, or mishap. All our products are UL-listed, ENERGY STAR® and CE (EU) certified, and our modular design minimizes downtime. With so much riding on the New Fueling Network, your EV charging solution just has to work, every time. With ChargePoint, it will. Service Best-in-class support is essential for providing a high caliber experience for all participants in the fueling network, whether one is driving a personal vehicle, delivering goods, driving work vehicles, or riding shared transport. ChargePoint knows comprehensive services are critical for an exceptional EV charging experience. ChargePoint has been in the business of electric fueling longer than anyone else. Since 2007, we have been working with our customers to design comprehensive services built around their needs. Today, from sophisticated networked solutions to top-rated service products, we have the resources to provide our own 24/7 support in multiple languages and the infrastructure to support drivers no matter where they charge on our network. Station operators do not have to take waste previous time to figure out whether the hardware or software vendor is responsible for an issue – just call ChargePoint and we will handle the rest.	*

Table 9A: Warranty

Describe in detail your manufacturer warranty program, including conditions and requirements to qualify, claims procedure, and overall structure. You may upload representative samples of your warranty materials (if applicable) in the document upload section of your response in addition to responding to the questions below.

Line Item	Question	Response *	
42	Do your warranties cover all products, parts, and labor?	ChargePoint provides a standard one-year warranty for all commercial level 2 charging stations and a three-year warranty for our residential charging station. Standard warranty covers parts only. Beyond standard technical support, ChargePoint offers ChargePoint Assure, a comprehensive maintenance and management program that includes dispatched labor at committed service levels to perform on site repairs, proactive dispatch, monthly reports, 24x7 station health monitoring, and a long list of additional features described in more detail below. Assure is available from one to five-year term increments. + Unlimited software configuration changes + 98% annual uptime guarantee with non-performance penalty + Standard one (1) business day response time to station failures or one (1) business day from Parts arrival when required + Automated monthly summary reports and detailed quarterly reports of your station's performance metrics. We send the reports automatically, so you don't have to generate them. + Proactive station monitoring and dispatch + Labor coverage for station equipment issues typically not covered by warranty such as vandalism, abuse and accidents caused by reckless drivers or snowplows. + Additional options are available upon request, such as strategic spares, consigned inventory, and customer training for on- site repairs and maintenance.	*
43	Do your warranties impose usage restrictions or other limitations that adversely affect coverage?	Yes. Please see ChargePoint F_Assure Terms of Service.	*
44	Do your warranties cover the expense of technicians' travel time and mileage to perform warranty repairs?	Yes, for Assure.	*
45	Are there any geographic regions of the United States or Canada (as applicable) for which you cannot provide a certified technician to perform warranty repairs? How will Sourcewell participating entities in these regions be provided service for warranty repair?	No. ChargePoint Assure is available throughout the US and Canada.	*
46	Will you cover warranty service for items made by other manufacturers that are part of your proposal, or are these warranties issues typically passed on to the original equipment manufacturer?	For this proposal, ChargePoint is the original equipment manufacturer of the charging equipment, so all warranty service is covered by ChargePoint.	*
47	What are your proposed exchange and return programs and policies?	ChargePoint and its channel partners strive to avoid any situation where improper products are purchased and returns, or exchanges are requested. On a case-by-case basis ChargePoint may allow returns or exchanges with payment of a 20% restocking fee and payment of any required freight charges to correct the problem. ChargePoint channel partners may also offer returns and exchanges at their discretion. Please refer to ChargePoint Attachment G_Parts Exchange Warranty for details.	*
48	Describe any service contract options for the items included in your proposal.	ChargePoint Assure, as outlined in the response to item 42, is the primary service offering we are including in our proposal. ChargePoint is also developing an enhanced Assure offering called Assure Pro, in concert with our Managed Spares Service, to provide faster repair times.	*

Table 9B: Performance Standards or Guarantees

Describe in detail your performance standards or guarantees, including conditions and requirements to qualify, claims procedure, and overall structure. You may upload representative samples of your performance materials (if applicable) in the document upload section of your response in addition to responding to the questions below.

Line Item	Question	Response *	
49	Describe any performance standards or guarantees that apply to your services (network uptime, power management, charging capabilities, etc.)	ChargePoint Assure, as outlined in section 9A in this proposal, is an optional extended and enhanced warranty offer that provides for proactive monitoring, coordinated repairs, and full parts and labor costs coverage. The SLA associated with Assure provides for a 98% or better uptime guarantee with financial penalties for non-performance. Please see the attachments titled Assure Data Sheet and Assure Terms of Service for additional detail.	*
50	Describe any service standards or guarantees that apply to your services (policies, metrics, KPIs, etc.)	Please refer to Line Item 49.	*

Table 10: Payment Terms and Financing Options

Line Item	Question	Response *	
51	What are your payment terms (e.g., net 10, net 30)?	Net 30. ChargePoint channel partners may offer varying payment terms at their discretion.	*
52	Describe any leasing or financing options available for use by educational or governmental entities.	ChargePoint supports the following options for procurement of charging stations and associated services. In addition to the options available below, ChargePoint's channel partners may also offer additional financing and leasing plans. Outright Purchase Upfront payment of all goods and services. ChargePoint and associated partners then fulfill installation works, network services and ongoing support in accordance with contractual agreements. ChargePoint as a Service (CPaaS) In this unique offer ChargePoint remains the owner of the stations. The customer simply pays a fixed monthly fee for ability to use the stations. ChargePoint maintains the stations with an uptime guarantee. At the end of the term the station can be replaced with the latest version or we will take them back if the Customer chooses to purchase a different solution. Hence, this resolves the problem obsolete hardware that needs to be removed or integrated and fits very nicely with the leasing business. Financing Options ChargePoint partners with major financial providers to offer a full finance offer for all ChargePoint services as well as site 'make-ready'. A simple monthly payment covers all bundled costs over the course of the agreed term with a final payment option for ownership of stations to transfer to Sourcewell and its members.	*
53	Briefly describe your proposed order process. Include enough detail to support your ability to report quarterly sales to Sourcewell as described in the Contract template. For example, indicate whether your dealer network is included in your response and whether each dealer (or some other entity) will process the Sourcewell participating entities' purchase orders.	Depending on Sourcewell member needs, ChargePoint would either process orders directly with the Sourcewell member or through a local channel partner. The channel partner would process an order with the Sourcewell member and an upstream order with ChargePoint for the associated products and services. In either case the Sourcewell member would pay at or below the contract price and ChargePoint would track order details for quarterly payment of the administration fee on any products purchased from ChargePoint.	*
54	Do you accept the P-card procurement and payment process? If so, is there any additional cost to Sourcewell participating entities for using this process?	Yes. ChargePoint and various channel partners can accept credit cards for payment.	*

Table 11: Pricing and Delivery

Provide detailed pricing information in the questions that follow below. Keep in mind that reasonable price and product adjustments can be made during the term of an awarded Contract as desribed in the RFP, the template Contract, and the Sourcewell Price and Product Change Request Form.

Line Item	Question	Response *	
55	Describe your pricing model (e.g., line-item discounts or product-category discounts). Provide detailed pricing data (including standard or list pricing and the Sourcewell discounted price) on all of the items that you want Sourcewell to consider as part of your RFP response. If applicable, provide a SKU for each item in your proposal. Upload your pricing materials (if applicable) in the document upload section of your response.	ChargePoint has provided a detailed line-item price book showing list price and proposed contract price. Freights costs are most cost effectively determined at the time of purchase, based on quantity, mode, distribution point and shipping destination so they have not been provided on a line-item basis. This book is broken into distinct product categories to simplify review. Those categories are Charging Stations, Network Services, Assure Maintenance Plans, and Accessories. Notes are also provided to guide reviewers to creating estimated project pricing.	*
56	Quantify the pricing discount represented by the pricing proposal in this response. For example, if the pricing in your response represents a percentage discount from MSRP or list, state the percentage or percentage range.	Discounts range from 0-20% off MSRP.	*
57	Describe any quantity or volume discounts or rebate programs that you offer.	The pricing provided takes into account an assumption of volume created by purchasing across the Sourcewell membership. However, on a case-by-case basis ChargePoint may consider providing improved pricing to individual members who intend to purchase large volumes in single orders.	*
58	Propose a method of facilitating “sourced” products or related services, which may be referred to as “open market” items or “nonstandard options”. For example, you may supply such items “at cost” or “at cost plus a percentage,” or you may supply a quote for each such request.	ChargePoint would consider any installation services including materials and labor beyond the scope of our Install- Valid service listed in our pricing proposal to be “Open Market” options. In many cases government entities prefer to use previously contracted vendors or employed tradespeople to perform the site preparation for charging station installation. Install-Valid service then allows these entities to purchase just the somewhat specialized charging station assembly, mounting and testing directly from ChargePoint. However, in instances where an Sourcewell member would prefer to procure complete installation services from one vendor ChargePoint would coordinate scoping by an appropriate channel or O&M partner who would then provide a quote for these services to the Sourcewell member. ChargePoint would facilitate this sourcing but would not be directly involved with any financial transactions between the member and ChargePoint partner for those services. Furthermore, ChargePoint would not intend to track quarterly or pay Administrative fee on these services.	*
59	Identify any element of the total cost of acquisition that is NOT included in the pricing submitted with your response. This includes all additional charges associated with a purchase that are not directly identified as freight or shipping charges. For example, list costs for items like pre-delivery inspection, installation, set up, mandatory training, or initial inspection. Identify any parties that impose such costs and their relationship to the Proposer.	As described in question 58 above, ANY installation services including materials and labor beyond the scope of our Install-Valid service is not included in our pricing proposal. In many cases government entities prefer to use previously contracted vendors or employed tradespeople to perform the site preparation for charging station installation. Install-Valid service then allows these entities to purchase just the somewhat specialized charging station assembly, mounting and testing directly from ChargePoint. However, in instances where an Sourcewell member would prefer to procure complete installation services from one vendor ChargePoint would coordinate scoping by an appropriate channel or O&M partner who would then provide a quote for these services to the Sourcewell member. ChargePoint would facilitate this sourcing but would not be directly involved with any financial transactions between the Sourcewell member and ChargePoint partner for those services.	*
60	If freight, delivery, or shipping is an additional cost to the Sourcewell participating entity, describe in detail the complete freight, shipping, and delivery program.	Freight costs are most cost effectively determined at the time of purchase, based on quantity, mode, distribution point and shipping destination so they have not been provided on a line-item basis. ChargePoint will provide pricing upon request. In addition, if Sourcewell members are able to require their own shipping carrier upon purchase.	*
61	Specifically describe freight, shipping, and delivery terms or programs available for Alaska, Hawaii, Canada, or any offshore delivery.	Freight terms for Alaska, Hawaii and Canada are treated no different the contiguous united states. As described above freights costs are most cost effectively determined at the time of purchase, based on quantity, mode, distribution point and shipping destination so they have not been provided on a line-item basis.	*

62	Describe any unique distribution and/or delivery methods or options offered in your proposal.	No unique distribution and/or delivery methods or options offered in your proposal.	*

Table 12: Pricing Offered

Line Item	The Pricing Offered in this Proposal is: *	Comments
63	c. better than the Proposer typically offers to GPOs, cooperative procurement organizations, or state purchasing departments.	

Table 13: Audit and Administrative Fee

Line Item	Question	Response *	
64	Specifically describe any self-audit process or program that you plan to employ to verify compliance with your proposed Contract with Sourcewell. This process includes ensuring that Sourcewell participating entities obtain the proper pricing, that the Vendor reports all sales under the Contract each quarter, and that the Vendor remits the proper administrative fee to Sourcewell.	ChargePoint is well experienced with offering contracted pricing to various public and private entities across the globe. In addition, we operate our business on a world class CRM platform with the ability to easily meet these needs. Upon award, we will leverage our CRM tools to tag any Sourcewell opportunities appropriately, so they receive the contract pricing and terms. In the event these leads require a pass-through channel or O&M partner, we will ensure the partner is conforming to any contract requirements as well. As sales are made and shipments are processed all Sourcewell tagged orders will be archived in our CRM system which can easily be queried quarterly for itemized reporting of products and revenue. From this report the Sourcewell administrative fee can be easily calculated and paid.	*
65	If you are awarded a contract, provide a few examples of internal metrics that will be tracked to measure whether you are having success with the contract.	Upon award, ChargePoint will proactively promote the contract. As the industry leader, ChargePoint has experience deploying large scale programs across North America and have the resources necessary to quickly train staff and partners on new initiatives. Here is an outline of our training approach: + Contract Launch: Appropriate stakeholders from ChargePoint will attend this meeting to learn more about best practices and successful deployments. + ChargePoint Project Team Planning: After the contract launch our ChargePoint project team will immediately develop a training presentation and material for sales management, direct sales team, our marketing team, and our partner network. We will seek Sourcewell's input on our planned presentation prior to performing any training sessions. + Training deployment: We will coordinate training sessions for sales management, direct sales teams, our marketing team, and our partner network. We do these trainings often and typically via webinar. The partner training will be separate from our internal trainings. + Training follow up: o ChargePoint employees: After the initial training we will have follow up webinars with direct sales to make sure this is top of mind. We will share success stories with the team to keep "buzz" going. o Partner: After initial training, we will have follow-up webinars and email campaigns sent to all partners promoting the contract. We will continue to train them on how to leverage this contract within the markets they cover. We currently host several partner trainings throughout the year and will make sure this is a topic. + Website: We will have a link on the "Current Incentives" page on our website to guide Sourcewell members, ChargePoint employees, and partners to learn more about the award.	*

66	Identify a proposed administrative fee that you will pay to Sourcewell for facilitating, managing, and promoting the Sourcewell Contract in the event that you are awarded a Contract. This fee is typically calculated as a percentage of Vendor's sales under the Contract or as a per-unit fee; it is not a line-item addition to the Member's cost of goods. (See the RFP and template Contract for additional details.)	ChargePoint is well experienced with offering contracted pricing to various public and private entities across the globe. In addition, we operate our business on a world class CRM platform with the ability to easily meet these needs. Upon award, we will leverage our CRM tools to tag any Sourcewell opportunities appropriately, so they receive the contract pricing and terms. If these leads are required to pass through a channel or O&M partner, we will ensure the partner is conforming to any contract requirements as well. As sales are made and shipments are processed all Sourcewell tagged orders will be archived in our CRM system which can easily be queried quarterly for itemized reporting of products and revenue. From this report the Sourcewell administrative fee can be easily calculated and paid.	*

Table 14A: Depth and Breadth of Offered Equipment Products and Services

Line Item	Question	Response *	
67	Provide a detailed description of the equipment, products, and services that you are offering in your proposal.	ChargePoint is the only global charging solution provider that offers a complete range of AC and DC charging solutions for all vehicle types and charging use cases. Charging Equipment Charging stations must be safe, reliable, easy to use and capable of measuring detailed energy usage and enabling managed charging. In support of this RFP, we propose the following EVSEs designed, engineered, and manufactured by ChargePoint to work seamlessly with our software and service portfolio: 1. ChargePoint CPH50: The Home Flex (CPH50) is a residential charging station to support the single-family home market. It provides up charging up to 12kW all linked with a powerful mobile app. 2. ChargePoint CPF50: The preferred AC Level 2 charging station for most fleet applications that are located at a depot/behind the fence. 3. ChargePoint CT4000: A commercial AC Level 2 charging station with additional features ideal for mixed-use applications including fleets, employee workplace, and public access charging. 4. ChargePoint Express CPE250: DC Fast Charging up to 62.5kw (single) or 125kW (paired). Designed with high availability, serviceability, and universal compatibility in mind. 5. ChargePoint Express Plus: Distributed DC Fast Charging from 200 to 350kW across up to 8 charging dispensers. Designed on a modular basis to scale with vehicles and power needs. Please refer to the attached data sheets for additional information on the proposed charging stations. Charging Software ChargePoint's EV charge management software is designed to provide operational visibility and management of the complete charging ecosystem and to enable fleet operators to reduce operating costs, increase operational efficiency, and deliver on their mission critical needs. ChargePoint's cloud-based software includes a full suite of features to manage stations including a dashboard, manage access control, set pricing, collected driver fees, view real-time vehicle charging status and remote diagnostics, and track and analysis all charging sessions at the site. Software plans are available in 1-to-5-year terms and are tailored to the specific station and use case. Services ChargePoint offers a range of services to support our proposed EV charging solutions. This includes: + Assure/Assure Pro: Optional extended and enhanced warranty providing proactive monitoring, coordinated repairs, full coverage of parts and labor, and an uptime guarantee of 98%. + Professional Services: These ala carte services are available depending on the specifics of a given site deployment and the needs of the customer. Services include modeling, preliminary site design and engineering, project management, installation and commissioning, and training. Prices are available on a per project basis based on the scope of work.	*
68	Within this RFP category there may be subcategories of solutions. List subcategory titles that best describe your products and services.	ChargePoint is proposing to continue to sell charging hardware, software, and services including maintenance and service for all types of charging use cases.	*

Table 14B: Depth and Breadth of Offered Equipment Products and Services

Indicate below if the listed types or classes of equipment, products, and services are offered within your proposal. Provide additional comments in the text box provided, as necessary.

Line Item	Category or Type	Offered *	Description / Comments *	
69	Non-network electric vehicle charging hardware	○ Yes ◉ No	ChargePoint does not offer non-networked charging solutions given the importance of a network to enable a more positive driver experience and to enable station owners the ability to remotely monitor and adjust operating parameters to optimize the charging experience.	*
70	Network electric vehicle charging hardware	◉ Yes ○ No	ChargePoint offers the CPF50 and CT4000 level 2 stations for private and mixed-use charging respectively, the CPE250 and Express Plus platform for DC fast charging, and the CPH50 Home Flex for residential level 2 charging.	*
71	Services related to electric vehicle charging hardware (refer to RFP Section II. B. 1. b.)	◉ Yes ○ No	ChargePoint offers final installation, commissioning, and ongoing maintenance services for all proposed charging hardware.	*
72	Site assessment, site preparation and materials, and installation services related to electric vehicle charging hardware	◉ Yes ○ No	ChargePoint offers preliminary site design and engineering and final installation services. Additional site construction may also be provided by various ChargePoint channel partners and installation partners.	*
73	Network service provider or operator	◉ Yes ○ No	Via the ChargePoint Network	*
74	Charge monitoring, reporting, or billing services	◉ Yes ○ No	Via the ChargePoint Network	*
75	Grid or power management solutions	◉ Yes ○ No	Via the ChargePoint Network	*

Table 15: Industry Specific Questions

Line Item	Question	Response *
76	Describe the process for installation of your products or services and explain the method of quotation, as applicable.	ChargePoint offers final installation and wiring of all ChargePoint charging stations. Our local and national network of partners across the U.S. and Canada are trained and certified on the installation of our products through our Training and Certification Program. All of our partners have access to licensed electricians which can also provide additional electrical infrastructure construction as necessary to support station installation. Sourcewell members have the option of using their own licensed electrician for installation of ChargePoint stations. ChargePoint has installation manuals and videos available to help facilitate a successful install. In this case, ChargePoint would need to validate the installation prior to activating an Assure warranty for equipment maintenance and support; this is a simple review and approval of the work performed.
77	If your proposal includes delivery of services by prequalified contractors, describe your method of prequalification. State how prequalified contractors will be identified or selected by Sourcewell Participating Entities in the event of contract award.	ChargePoint uses sub-contractors to provide service, support, installation and validation of charging equipment. ChargePoint has a network of over 40 O&M (operations and maintenance) partners and 2,000 certified installers supporting North America. Our local and national network of partners across the US and Canada are trained and certified on the installation of our products through our Training and Certification Program. To ensure project success, we can work with Sourcewell members and our O&M partner to perform engineering, permitting, and construction services for any type of EVSE. ChargePoint is committed to closely with members to ensure site design, charging station layout, and driver experience meets their desires and expectations.
78	Identify the data collected during the initial installation of your equipment, products, or services. Identify the data collected when your equipment, products, and services are accessed by an end-user.	ChargePoint may use the information we collect from or about you for the following business or commercial purposes, such as uses to: + Process your application to create an account with ChargePoint; + Provide our Service to you, including information, products, and services you request from us that enable you to access our charging stations network; + Process billing functions, including payment of fees; + Notify you of changes to our Website or Service; + Manage and administer your account, including to distinguish between multiple vehicles or users under a single account, and for information regarding charging sessions (e.g., duration, energy consumption, station owner and station data); + Manage and respond to any inquiries, correspondence, concerns or complaints you have sent to us; + Communicate with you regarding the Service; + Enable you to communicate with other users; + Promote and market ChargePoint products and services; + Analyze use of the Service; + Improve any services we provide, and research or develop other products or services; + Keep our Service secure and operational; + Provide value added service, promotions, and pricing; + Fulfill the purposes for which you provided it (such as to help you find a ChargePoint station); + Maintain internal records; + Create or maintain aggregated, anonymized, or de-identified information, which we may use and disclose without restriction; + Investigate, prevent, or take action regarding unlawful or harmful activities, including potential threats to physical safety, potential fraud, and violations of our Terms and Conditions; and/or + Safeguard our and others' rights or property. We may combine any of the information that we collect from you with other information, including information that we obtain from third parties, or with information derived from any other products or services we provide. For example, we may combine personal information you provide us, such as an email address, with information automatically collected about your device.
79	Identify the storage location for all data collected in the use of your equipment, products, or services. Describe applicable data security measures and identify any services performed outside the US or Canada, as applicable.	ChargePoint leverages Amazon AWS as our hosting provider, with instances located in the United States, Canada, EU (Germany), and Australia. All data generated through the use of charging stations is stored within the appropriate region. ChargePoint is PCI certified by a 3rd party auditor and has SOC2 Type II certification. We are also in the final stages of completing our ISO 27001 certification, which is expected to be completed by end of May 2021. ChargePoint's primary driver support call center is located in Scottsdale AZ. To provide 24/7 driver support, some driver support calls may be routed to our Amsterdam NL support center.

Table 16: Exceptions to Terms, Conditions, or Specifications Form

Line Item 80. NOTICE: To identify any exception, or to request any modification, to the Sourcewell template Contract terms, conditions, or specifications, a Proposer must submit the exception or requested modification on the **Exceptions to Terms, Conditions, or Specifications Form** immediately below. The contract section, the specific text addressed by the exception or requested modification, and the proposed modification must be identified in detail. Proposer's exceptions and proposed modifications are subject to review and approval of Sourcewell and will not automatically be included in the contract.

Contract Section	Term, Condition, or Specification	Exception or Proposed Modification

Documents

Ensure your submission document(s) conforms to the following:

1. Documents in PDF format are preferred. Documents in Word, Excel, or compatible formats may also be provided.

2. Documents should NOT have a security password, as Sourcewell may not be able to open the file. It is your sole responsibility to ensure that the uploaded document(s) are not either defective, corrupted or blank and that the documents can be opened and viewed by Sourcewell.

3. Sourcewell may reject any response where any document(s) cannot be opened and viewed by Sourcewell.

4. If you need to upload more than one (1) document for a single item, you should combine the documents into one zipped file. If the zipped file contains more than one (1) document, ensure each document is named, in relation to the submission format item responding to. For example, if responding to the Marketing Plan category save the document as “Marketing Plan.”

- Financial Strength and Stability - ChargePoint_Financial Strength & Stability.pdf - Thursday April 22, 2021 10:42:04
- Marketing Plan/Samples - ChargePoint_Marketing Plan & Samples.zip - Thursday April 22, 2021 10:17:09
- WMBE/MBE/SBE or Related Certificates - ChargePoint_Diversity Policy.pdf - Thursday April 22, 2021 10:33:06
- Warranty Information - ChargePoint_Warranty Information.zip - Thursday April 22, 2021 10:09:14
- Pricing - ChargePoint response to RFP 042221 - Electric Vehicle Supply Equipment and Related Services_Pricing.xlsx - Wednesday April 21, 2021 23:15:02
- Upload Additional Document - ChargePoint response to RFP 042221 - Electric Vehicle Supply Equipment and Related Services_Additional Documents.zip - Thursday April 22, 2021 10:36:46

Proposer's Affidavit

PROPOSER AFFIDAVIT AND ASSURANCE OF COMPLIANCE

I certify that I am the authorized representative of the Proposer submitting the foregoing Proposal with the legal authority to bind the Proposer to this Affidavit and Assurance of Compliance:

1. The Proposer is submitting this Proposal under its full and complete legal name, and the Proposer legally exists in good standing in the jurisdiction of its residence.

2. The Proposer warrants that the information provided in this Proposal is true, correct, and reliable for purposes of evaluation for contract award.

3. The Proposer, including any person assisting with the creation of this Proposal, has arrived at this Proposal independently and the Proposal has been created without colluding with any other person, company, or parties that have or will submit a proposal under this solicitation; and the Proposal has in all respects been created fairly without any fraud or dishonesty. The Proposer has not directly or indirectly entered into any agreement or arrangement with any person or business in an effort to influence any part of this solicitation or operations of a resulting contract; and the Proposer has not taken any action in restraint of free trade or competitiveness in connection with this solicitation. Additionally, if Proposer has worked with a consultant on the Proposal, the consultant (an individual or a company) has not assisted any other entity that has submitted or will submit a proposal for this solicitation.

4. To the best of its knowledge and belief, and except as otherwise disclosed in the Proposal, there are no relevant facts or circumstances which could give rise to an organizational conflict of interest. An organizational conflict of interest exists when a vendor has an unfair competitive advantage or the vendor’s objectivity in performing the contract is, or might be, impaired.

5. The contents of the Proposal have not been communicated by the Proposer or its employees or agents to any person not an employee or legally authorized agent of the Proposer and will not be communicated to any such persons prior to Due Date of this solicitation.

6. If awarded a contract, the Proposer will provide to Sourcewell Participating Entities the equipment, products, and services in accordance with the terms, conditions, and scope of a resulting contract.

7. The Proposer possesses, or will possess before delivering any equipment, products, or services, all applicable licenses or certifications necessary to deliver such equipment, products, or services under any resulting contract.

8. The Proposer agrees to deliver equipment, products, and services through valid contracts, purchase orders, or means that are acceptable to Sourcewell Members. Unless otherwise agreed to, the Proposer must provide only new and first-quality products and related services to Sourcewell Members under an awarded Contract.

9. The Proposer will comply with all applicable provisions of federal, state, and local laws, regulations, rules, and orders.

10. The Proposer understands that Sourcewell will reject RFP proposals that are marked "confidential" (or "nonpublic," etc.), either substantially or in their entirety. Under Minnesota Statutes Section 13.591, subdivision 4, all proposals are considered nonpublic data until the evaluation is complete and a Contract is awarded. At that point, proposals become public data. Minnesota Statutes Section 13.37 permits only certain narrowly defined data to be considered a "trade secret," and thus nonpublic data under Minnesota's Data Practices Act.

11. Proposer its employees, agents, and subcontractors are not:

    1. Included on the “Specially Designated Nationals and Blocked Persons” list maintained by the Office of Foreign Assets Control of the United States Department of the Treasury found at: https://www.treasury.gov/ofac/downloads/sdnlist.pdf;

    2. Included on the government-wide exclusions lists in the United States System for Award Management found at: https://sam.gov/SAM/; or

3. Presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from programs operated by the State of Minnesota; the United States federal government or the Canadian government, as applicable; or any Participating Entity. Vendor certifies and warrants that neither it nor its principals have been convicted of a criminal offense related to the subject matter of this solicitation.

☑ By checking this box I acknowledge that I am bound by the terms of the Proposer's Affidavit, have the legal authority to submit this Proposal on behalf of the Proposer, and that this electronic acknowledgment has the same legal effect, validity, and enforceability as if I had hand signed the Proposal. This signature will not be denied such legal effect, validity, or enforceability solely because an electronic signature or electronic record was used in its formation. - Sam Ta, Sr. RFP Manager, ChargePoint Holdings, Inc.

The Proposer declares that there is an actual or potential Conflict of Interest relating to the preparation of its submission, and/or the Proposer foresees an actual or potential Conflict of Interest in performing the contractual obligations contemplated in the bid.

○ **Yes** ◉ **No**

The Bidder acknowledges and agrees that the addendum/addenda below form part of the Bid Document.

Check the box in the column "**I have reviewed this addendum"** below to acknowledge each of the addenda.

File Name	I have reviewed the below addendum and attachments (if applicable)	Pages
Addendum_8_EV_Supply_Eqpt_RFP_042221 Thu April 15 2021 05:17 PM	☑	2
Addendum_7_EV_Supply_Eqpt_RFP_042221 Tue April 13 2021 06:10 PM	☑	3
Addendum_6_EV_Supply_Eqpt_RFP_042221 Mon April 12 2021 06:28 PM	☑	2
Addendum_5_EV_Supply_Eqpt_RFP_042221 Tue April 6 2021 08:27 AM	☑	1
Addendum_4_EV_Supply_Eqpt_RFP_042221 Thu April 1 2021 05:07 PM	☑	1
Addendum_3_EV_Supply_Eqpt_RFP_042221 Fri March 26 2021 09:24 AM	☑	1
Addendum_2_EV_Supply_Eqpt_RFP_042221 Mon March 15 2021 06:38 PM	☑	2
Addendum_1_EV_Supply_Eqpt_RFP_042221 Thu March 11 2021 05:32 PM	☑	1

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AMENDMENT #1
TO
CONTRACT # 042221-CPI

THIS AMENDMENT is by and between **Sourcewell** and **ChargePoint, Inc.** (Vendor).

Sourcewell awarded a contract to Vendor to provide Electric Vehicle Supply Equipment and Related Services to Sourcewell and its Participating Entities, effective July 15, 2021, through July 20, 2025 (Contract).

The parties wish to amend the following terms within the Contract.

1. This Amendment is effective upon the date of the last signature below.

2. Article 2. Equipment, Products, or Services Section, B. Warranty is deleted in its entirety and replaced with the following:

   Vendor warrants that all Equipment, Products, and Services furnished are free from liens and encumbrances, and for a period of one year and consistent with Vendor's Parts Only Warranty (the "Warranty") are free from defects in design, materials, and workmanship. In addition, Vendor warrants the Equipment, Products, and Services are suitable for and will perform in accordance with the ordinary use for which they are intended. Vendor's dealers and distributors must agree to assist the Participating Entity in reaching a resolution in any dispute over warranty terms with the manufacturer. Any manufacturer's warranty that is effective past the expiration of the Vendor's warranty will be passed on to the Participating Entity.

3. Article 6 Participating Entity Use and Purchasing, A. Orders and Payment is deleted in its entirety and replaced with the following:

   To access the contracted Equipment, Products, or Services under this Contract, a Participating Entity must clearly indicate to Vendor that it intends to access this Contract; however, order flow and procedure will be developed jointly between Sourcewell and Vendor. Typically, a Participating Entity will issue an order directly to Vendor. If a Participating Entity issues a purchase order, it may use its own forms as agreed between the Participating Party and Vendor, but the purchase order should clearly note the applicable Sourcewell contract number. All Participating Entity orders under this Contract must be issued prior to expiration of this Contract; however, Vendor performance, Participating Entity payment, and any applicable warranty periods or other Vendor or Participating Entity obligations may extend beyond the term of this Contract.

4. Article 8 Report on Contract Sales Activity and Administrative Fee Payment, B. Administrative Fee is deleted in its entirety and replaced with the following:

   In consideration for the support and services provided by Sourcewell, the Vendor will pay an administrative fee to Sourcewell on all Equipment, Products, and Services provided to Participating Entities. The Administrative Fee must be included in, and not added to, the pricing.

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Vendor may not charge Participating Entities more than the contracted price to offset the Administrative Fee. The Vendor will submit payment to Sourcewell of 2% multiplied by the total sales of all Equipment, Products, and Services purchased by Participating Entities under this Contract during each calendar quarter.

Payments should note the Vendor's name and Sourcewell-assigned contract number in the memo; and must be mailed to the address above "Attn: Accounts Receivable" or remitted electronically to Sourcewell's banking institution per Sourcewell's Finance department instructions. Payments must be received no later than 45 calendar days after the end of each calendar quarter.

5. Article 11 Liability is deleted in its entirety and replaced with the following:

   Vendor must indemnify, save, and hold Sourcewell and its Participating Entities, including their agents and employees, harmless from any third party claims or causes of action, including reasonable attorneys' fees, to the extent arising out of the negligent performance of this Contract by the Vendor or its agents or employees or Vendor's willful misconduct; this indemnification includes injury or death to person(s) or property alleged to have been caused by some defect in the Equipment, Products, or Services under this Contract to the extent the Equipment, Product, or Service has been used according to its specifications

6. Article 21. Provisions for Non-United States Federal Entity Procurements Under United States Federal Awards or Other Awards, Section D. Rights to Inventions Made Under a Contract or Agreement is deleted in its entirety.

Except as amended by this Amendment, the Contract remains in full force and effect.

Sourcewell

By: DocuSigned by: Jeremy Schwartz C0FD2A139D06489...
Jeremy Schwartz, Chief Procurement Officer

Date: 9/27/2021 | 7:22 AM CDT

Approved:

By: DocuSigned by: Chad Coauette 7E42B8F817A64CC...
Chad Coauette, Executive Director/CEO

Date: 9/27/2021 | 7:54 AM CDT

ChargePoint, Inc.

By: DocuSigned by: Rex Jackson AC7507629DCF4EA...
Rex Jackson

Title: CFO

Date: 9/27/2021 | 7:18 AM CDT

CITY OF ONTARIO
303 EAST B STREET | ONTARIO, CALIFORNIA 91764
(909) 395-2000 FAX (909) 395-2070 OntarioCA.gov

PAUL S. LEON
MAYOR

ALAN D. WAPNER
MAYOR PRO TEM

JIM W. BOWMAN
DEBRA PORADA
DAISY MACIAS
COUNCIL MEMBERS

SHEILA MAUTZ
CITY CLERK

JAMES R. MILHISER
CITY TREASURER

SCOTT OCHOA
CITY MANAGER

CITY OF ONTARIO
GOODS & SERVICES AGREEMENT

This Agreement is made and entered into as of _____, by and between the City of Ontario, a municipal corporation organized under the laws of the State of California with its principal place of business at 303 East "B" Street, Ontario, California 91764-4196, County of San Bernardino, State of California ("City") and **BodEV, Inc.**, a **Corporation** with its principal place of business at **2581 Union Ave, La Habra, CA 90631** ("Vendor"). City and Vendor are sometimes individually referred to as "Party" and collectively as "Parties" in this Agreement.

RECITALS

A. Vendor desires to perform and assume responsibility for the provision of certain services and goods required by the City on the terms and conditions set forth in this Agreement. Vendor represents that it is experienced in providing similar services and goods to public clients, that it and its employees or subcontractors have all necessary licenses and permits to perform the services in the State of California and that is familiar with and understands the needs of City.

B. City desires to engage Vendor to sell to City the materials and/or equipment and/or render such services as more particularly described in this Agreement.

TERMS

1. SCOPE OF SERVICES.

1.1 General Scope of Services. Vendor promises and agrees to furnish to the City all labor, materials, tools, equipment, services, and incidental and customary work necessary to fully and adequately supply the **EV Chargers for the Ontario Sports Empire Complex** ("Services") which are more particularly described in Exhibit "A" attached hereto and incorporated herein by reference. All Services shall be subject to, and performed in accordance with, this Agreement, the exhibits attached hereto and incorporated herein by reference, and all applicable local, state and federal laws, rules and regulations.

1.2 Goods. Vendor agrees to sell to City and City agrees to purchase the materials and/or equipment ("Goods") as specified and per the specifications attached hereto and incorporated herein as Exhibit "A." Unless specifically stated otherwise, the Goods shall be new and unused and of the current production year.

2. TERM.

2.1 The term of this Agreement shall be from **March 18, 2025,** to **July 20, 2025**, unless earlier terminated as provided herein. Vendor shall provide all Goods and complete the Services within the term of this Agreement, and shall meet any other established schedules and deadlines. The Parties may, by mutual, written consent, extend the term of this Agreement if necessary to complete the work.

3. FEES AND PAYMENTS.

3.1 Compensation. Vendor shall receive compensation, including authorized reimbursements, for all Goods provided and Services rendered under this Agreement at the rates set forth in Exhibit "A" attached hereto and incorporated herein by reference. The total compensation shall not exceed **One Million One Hundred Eighty-Nine Thousand Seven Hundred Fifty-Eight Dollars ($1,189,758**) without written approval of City's Manager. Extra Work may be authorized, as described below, and if authorized, will be compensated at the rates and manner set forth in this Agreement.

3.2 Payment of Compensation. Vendor shall submit to City a monthly itemized statement which indicates work completed and hours of Services rendered by Vendor and Goods provided. The statement shall describe the amount of Services and Goods provided since the initial commencement date, or since the start of the subsequent billing periods, as appropriate, through the date of the statement. City shall, within 45 days of receiving such statement, review the statement and pay all non-disputed and approved charges thereon.

3.3 Reimbursement for Expenses. Vendor shall not be reimbursed for any expenses unless authorized in writing by City.

3.4 Extra Work. At any time during the term of this Agreement, City may request that Vendor perform Extra Work. As used herein, "Extra Work" means any work which is determined by City to be necessary for the proper completion of the Goods and Services, but which the parties did not reasonably anticipate would be necessary at the execution of this Agreement. Vendor shall not perform, nor be compensated for, Extra Work without written authorization from City's Representative.

3.5 Automated Clearing House ("ACH") payments. It is the City's policy to pay its consultant invoices via electronic fund transfers through the ACH network. All payments due and owing pursuant to a properly issued and correct invoice or under this Agreement shall be made through electronic ACH transfers, unless otherwise agreed upon by both Parties in writing. Vendor shall provide the City with ACH payment details whereby the City shall initiate the ACH transfers to Vendor in the amount required pursuant to a properly issued and correct invoice or under this Agreement. Each Party shall undertake any and all required actions and execute any required documents, instruments, or agreements required to effectuate the requirements of this Section. In the event the City erroneously deposits funds into an account, or otherwise deposits funds to which Vendor is not entitled: (1) Vendor shall immediately notify the City and the financial institution; (2) Vendor shall not withdraw any of the funds which were erroneously deposited or to which Vendor is not entitled; and (3) Vendor authorizes both the City and financial institution to take all actions necessary to correct the error and return to the City all funds erroneously deposited or to which Vendor is not entitled.

4. RESPONSIBILITIES OF VENDOR.

4.1 Control and Payment of Subordinates; Independent Contractor. The Services shall be performed by Vendor or under its supervision. Vendor will determine the means, methods and details of performing the Services subject to the requirements of this Agreement. City retains Vendor on an independent contractor basis and not as an employee. Vendor retains the right to perform similar or different services for others during the term of this Agreement. Any additional personnel performing the Services under this Agreement on behalf of Vendor shall also not be employees of City and shall at all times be under Vendor's exclusive direction and control. Neither City, or any of its officials, officers, directors, employees or agents shall have control over the conduct of Vendor or any of Vendor's officers, employees or agents, except as set forth in this Agreement. Vendor shall pay all wages, salaries, and other amounts due such personnel in connection with their performance of providing Goods and Services under this Agreement and as required by law. Vendor shall be responsible for all reports and obligations respecting such additional personnel, including, but not limited to: social security taxes, income tax withholding, unemployment insurance, disability insurance, and workers' compensation insurance.

4.2 Schedule of Services.

4.2.1 Vendor shall perform the Services and provide Goods expeditiously, within the term of this Agreement, and in accordance with the Schedule of Goods and Services set forth in Exhibit "B" attached hereto and incorporated herein by reference ("Performance time"). Upon request of City, Vendor shall provide a more detailed schedule of anticipated performance to meet the Schedule of Goods and Services. Vendor agrees that if the Goods are not provided and/or the Services are not completed within the Performance Time, it is understood, acknowledged and agreed that the City will suffer damage.

4.2.2 Neither City nor Vendor shall be considered in default of this Agreement for delays in performance caused by circumstances beyond the reasonable control of the non-performing Party. For purposes of this Agreement, such circumstances include a Force Majeure Event. A Force Majeure Event shall mean an event that materially affects a Party's performance and is one or more of the following: (1) Acts of God or other natural disasters; (2) terrorism or other acts of a public enemy; (3) orders of governmental authorities (including, without limitation, unreasonable and unforeseeable delay in the issuance of permits or approvals by governmental authorities that are required for the services); (4) strikes and other organized labor action occurring at the site and the effects thereof on the services, only to the extent such strikes and other organized labor action are beyond the control of Vendor and its subcontractors, and to the extent the effects thereof cannot be avoided by use of replacement workers; and (5) pandemics, epidemics or quarantine restrictions. For purposes of this Section, "orders of governmental authorities," includes ordinances, emergency proclamations and orders, rules to protect the public health, welfare and safety, and other actions of a public agency applicable to the Agreement.

4.2.3 Should a Force Majeure Event occur, the non-performing Party shall, within a reasonable time of being prevented from performing, give written notice to the other Party describing the circumstances preventing continued performance and the efforts being made to resume performance of this Agreement. Force Majeure Events and/or delays, regardless of the Party responsible for the delay, shall not entitle Vendor to any additional compensation. Notwithstanding the foregoing in this section, the City may still terminate this Agreement in accordance with the termination provisions of this Agreement.

4.3 Conformance to Applicable Requirements. All work prepared by Vendor shall be subject to the approval of City.

4.4 Acceptance. The Goods shall be received subject to City's inspection and right of rejection. The Goods shall not be considered accepted until inspection, testing and/or use of the Goods is found to be in accordance with the City's specifications. Final inspection of the Goods shall be at the location specified herein, unless otherwise agreed in writing. If the Goods are found at any time to be defective in material or workmanship, or otherwise not in conformance with specifications, City shall have the right, in addition to any other rights which it may have under warranties or otherwise, to reject such Goods in whole or in part. Rejected Goods shall be held at Vendor's risk for a reasonable time thereafter and shall be returned or disposed of at Vendor's expense. No rejected Goods shall be replaced by Vendor without written instruction or authorization from City.

4.5 Coordination of Services. Vendor agrees to work closely with City staff in the performance of Services and shall be available to City's staff, consultants and other staff at all reasonable times.

4.6 Standard of Care; Performance of Employees. Vendor shall perform all Services under this Agreement in a skillful and competent manner, consistent with the standards generally recognized as being employed by professionals in the same discipline in the State of California. Vendor represents and maintains that it is skilled in the professional calling necessary to perform the Services. Vendor warrants that all employees and subcontractors shall have sufficient skill and experience to perform the Services assigned to them. Vendor represents that it, its employees and subcontractors have all licenses, permits, qualifications and approvals of whatever nature that are legally required to perform the Services, including a City business license, and that such licenses and approvals shall be maintained throughout the term of this Agreement. As provided for in the indemnification provisions of this Agreement, Vendor shall perform, at its own cost and expense and without reimbursement from the City, any services necessary to correct errors or omissions which are caused by the Vendor's failure to comply with the standard of care provided for herein. Any employee of the Vendor or its sub-Vendors who is determined by the City to be uncooperative, incompetent, a threat to the adequate or timely completion of the Services, a threat to the safety of persons or property, or any employee who fails or refuses to perform the Services in a manner acceptable to the City, shall be promptly removed by the Vendor and shall not be re-employed to perform any of the Services provided under this Agreement.

4.7 Warranty. In addition to all warranties which may be provided by law, Vendor warrants that the Goods delivered hereunder shall, (a) be free from defect of material or workmanship and conform strictly to the specifications, drawings, or sample specified or furnished; (b) conform to drawings, plans, specifications, samples or other descriptions furnished, specified, accepted or approved by City; and (c) be merchantable and fit for the purposes intended. The warranty shall be for a period of one (1) year, or such longer period as provided by a manufacturer's warranty or as agreed to by Vendor and City, from the date of final written acceptance of the Goods by City. This warranty shall survive any inspection, delivery, acceptance, or payment by City of the Goods. Vendor, at its own expense, shall repair or replace, at the option of City, any defective Goods within two (2) business days after receipt of notice from City or within four (4) hours in case of emergency, as determined by City. Vendor also warrants that the Goods are free and clear of all liens and encumbrances whatsoever, that Vendor is conveying good and marketable title to same, and that Vendor owns or has a valid license for all of the proprietary technology and intellectual property incorporated within the Goods. Vendor

agrees to indemnify, defend and hold City harmless against any and all third party claims resulting from the breach or inaccuracy of any of the foregoing warranties.

4.8 Reserved.

4.9 Disputes. Should any dispute arise respecting the true value of any work done, of any work omitted, or of any extra work which Vendor may be required to do, or respecting the size of any payment to Vendor during the performance of this Contract, Vendor shall continue to perform the Work while said dispute is decided by the City. If Vendor disputes the City's decision, Vendor shall have such remedies as may be provided by law.

4.10 Laws and Regulations; Employee/Labor Certifications. Vendor shall keep itself fully informed of and in compliance with all local, state and federal laws, rules and regulations in any manner affecting its performance under this Agreement, including all Cal/OSHA requirements, and shall give all notices required by law. Vendor shall be liable for all violations of such laws and regulations in connection with this Agreement. If the Vendor performs any work knowing it to be contrary to such laws, rules and regulations and without giving written notice to the City, Vendor shall be solely responsible for all costs arising therefrom. City is a public entity of the State of California subject to certain provisions of the Health & Safety Code, Government Code, Public Contract Code, and Labor Code of the State. It is stipulated and agreed that all provisions of the law applicable to the public contracts of a municipality are a part of this Agreement to the same extent as though set forth herein and will be complied with. These include but are not limited to the payment of prevailing wages, the stipulation that eight (8) hours' labor shall constitute a legal day's work and that no worker shall be permitted to work in excess of eight (8) hours during any one calendar day except as permitted by law. Vendor shall defend, indemnify and hold City, its officials, directors, officers, employees and agents free and harmless, pursuant to the indemnification provisions of this Agreement, from any claim or liability arising out of any failure or alleged failure to comply with such laws, rules or regulations.

4.10.1 Employment Eligibility; Vendor. By executing this Agreement, Vendor verifies that it fully complies with all requirements and restrictions of state and federal law respecting the employment of undocumented aliens, including, but not limited to, the Immigration Reform and Control Act of 1986, as may be amended from time to time. Such requirements and restrictions include, but are not limited to, examination and retention of documentation confirming the identity and immigration status of each employee of the Vendor. Vendor also verifies that it has not committed a violation of any such law within the five (5) years immediately preceding the date of execution of this Agreement, and shall not violate any such law at any time during the term of the Agreement. Vendor shall avoid any violation of any such law during the term of this Agreement by participating in an electronic verification of work authorization program operated by the United States Department of Homeland Security, by participating in an equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, or by some other legally acceptable method. Vendor shall maintain records of each such verification, and shall make them available to the City or its representatives for inspection and copy at any time during normal business hours. The City shall not be responsible for any costs or expenses related to Vendor's compliance with the requirements provided for in Section 4.10 or any of its sub-sections.

4.10.2 Employment Eligibility; Subcontractors, and Consultants. To the same extent and under the same conditions as Vendor, Vendor shall require all of its subcontractors, and consultants performing any work relating to this Agreement to make the same verifications and comply with all requirements and restrictions provided for herein.

4.10.3 Employment Eligibility; Failure to Comply. Each person executing this Agreement on behalf of Vendor verifies that they are a duly authorized officer of Vendor, and understands that any of the following shall be grounds for the City to terminate the Agreement for cause: (1) failure of Vendor or its subcontractors, or consultants to meet any of the requirements provided for in Sections 4.10.1 or 4.10.2; (2) any misrepresentation or material omission concerning compliance with such requirements (including in those verifications provided to the Vendor under Section 4.10.2); or (3) failure to immediately remove from this contract any person found not to be in compliance with such requirements.

4.10.4 Labor Certification. By its signature hereunder, Vendor certifies that it is aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for Workers' Compensation or to undertake self-insurance in accordance with the provisions of that Code, and agrees to comply with such provisions before commencing the performance of the Services.

4.10.5 Equal Opportunity Employment. Vendor represents that it is an equal opportunity employer and it shall not discriminate against any subcontractor, employee or applicant for employment because of race, religion, color, national origin, handicap, ancestry, sex or age. Such non-discrimination shall include, but not be limited to, all activities related to initial employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff or termination. Vendor shall also comply with all relevant provisions of City's Minority Business Enterprise program, Affirmative Action Plan or other related programs or guidelines currently in effect or hereinafter enacted.

4.10.6 Air Quality. Vendor must fully comply with all applicable laws, rules and regulations in furnishing or using equipment and/or providing services, including, but not limited to, emissions limits and permitting requirements imposed by the California Air Resources Board (CARB). Vendor shall specifically be aware of the CARB limits and requirements' application to "portable equipment", which definition is considered by CARB to include any item of equipment with a fuel-powered engine. Vendor shall indemnify City against any fines or penalties imposed by CARB or any other governmental or regulatory agency for violations of applicable laws, rules and/or regulations by Vendor, its subcontractors, or others for whom Vendor is responsible under its indemnity obligations provided for in this Agreement.

4.10.7 Water Quality.

4.10.7.1 Management and Compliance. To the extent applicable, Vendor's Services must account for, and fully comply with, all local, state and federal laws, rules and regulations that may impact water quality compliance, including, without limitation, all applicable provisions of the Federal Water Pollution Control Act (33 U.S.C. §§ 1300); the California Porter-Cologne Water Quality Control Act (Cal Water Code §§ 13000-14950); laws, rules and regulations of the Environmental Protection Agency, the State Water Resources Control Board and the Santa Ana Regional Water Quality Control Board; the City's ordinances regulating discharges of storm water; and any and all regulations, policies, or permits issued pursuant to any such authority regulating the discharge of pollutants, as that term is used in the Porter-Cologne Water Quality Control Act, to any ground or surface water in the State.

4.10.7.2 Liability for Non-Compliance. Failure to comply with the laws, regulations and policies described in this Section is a violation of law that may subject Vendor or City to penalties, fines, or additional regulatory requirements. Vendor shall defend, indemnify and hold the City, its directors, officials, officers, employees, volunteers and agents free and harmless,

pursuant to the indemnification provisions of this Agreement, from and against any and all fines, penalties, claims or other regulatory requirements imposed as a result of Vendor's non-compliance with the laws, regulations and policies described in this Section, unless such non-compliance is the result of the sole negligence or willful misconduct of the City, its officials, officers, agents, employees or authorized volunteers.

4.10.7.3 Training. In addition to any other standard of care requirements set forth in this Agreement, Vendor warrants that all employees and subcontractors shall have sufficient skill and experience to perform the Services assigned to them without impacting water quality in violation of the laws, regulations and policies described in this Section. Vendor further warrants that it, its employees and subcontractors will receive adequate training, as determined by City, regarding the requirements of the laws, regulations and policies described in this Section as they may relate to the Services provided under this Agreement. Upon request, City will provide Vendor with a list of training programs that meet the requirements of this paragraph.

5. PROJECT MANAGEMENT

5.1 City's Representative. The City hereby designates Daniel Beers, Principal Project Manager, or his or her designee, to act as its representative for the performance of this Agreement ("City's Representative"). City's Representative shall have the power to act on behalf of the City for all purposes under this Agreement. Vendor shall not accept direction or orders from any person other than the City's Representative or his or her designee.

5.2 Vendor's Representative. Vendor hereby designates Brendan O'Donnell, Project Manager or his or her designee, to act as its representative for the performance of this Agreement ("Vendor's Representative"). Vendor's Representative shall have full authority to represent and act on behalf of the Vendor for all purposes under this Agreement. The Vendor's Representative shall supervise and direct the Services, using his best skill and attention, and shall be responsible for all means, methods, techniques, sequences and procedures and for the satisfactory coordination of all work required under this Agreement.

6. INSURANCE.

6.1 Time for Compliance. Vendor shall not commence work under this Agreement until it has provided evidence satisfactory to the City that it has secured all insurance required under this Section. In addition, Vendor shall not allow any subcontractor to commence work on any subcontract until it has provided evidence satisfactory to the City that the subcontractor has secured all insurance required under this Section.

6.2 Minimum Requirements. Vendor shall, at its expense, procure and maintain for the duration of the Agreement insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Agreement by the Vendor, its agents, representatives, employees or subcontractors. Vendor shall also require all of its subcontractors to procure and maintain the same insurance for the duration of the Agreement. Such insurance shall meet at least the following minimum levels of coverage:

6.2.1 Minimum Scope of Insurance. Coverage shall be at least as broad as the latest version of the following: (1) *General Liability*: Insurance Services Office Commercial General Liability coverage (occurrence form CG 0001); (2) *Automobile Liability*: Insurance Services Office Business Auto Coverage form number CA 0001, code 1 (any auto); and (3) *Workers' Compensation and Employer's Liability*: Workers' Compensation insurance as required

by the State of California and Employer's Liability Insurance. The policy shall not contain any exclusion contrary to the Agreement, including but not limited to endorsements or provisions limiting coverage for (1) contractual liability (including but not limited to ISO CG 24 26 or 21 29); or (2) cross liability for claims or suits by one insured against another.

6.2.2 Minimum Limits of Insurance. Vendor shall maintain limits no less than: (1) *General Liability:* $2,000,000 MINIMUM per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with general aggregate limit is used including, but not limited to, form CG 2503, either the general aggregate limit shall apply separately to this Agreement/location or the general aggregate limit shall be twice the required occurrence limit; (2) *Automobile Liability:* $2,000,000 MINIMUM per accident for bodily injury and property damage; and (3) *Workers' Compensation and Employer's Liability:* Workers' Compensation limits as required by the Labor Code of the State of California. Employer's Liability limits of $1,000,000 MINIMUM per accident for bodily injury or disease. Defense costs shall be paid in addition to the limits.

6.2.3 Notices; Cancellation or Reduction of Coverage. At least fifteen (15) days prior to the expiration of any such policy, evidence showing that such insurance coverage has been renewed or extended shall be filed with the City. If such coverage is cancelled or materially reduced, Vendor shall, within ten (10) days after receipt of written notice of such cancellation or reduction of coverage, file with the City evidence of insurance showing that the required insurance has been reinstated or has been provided through another insurance company or companies. In the event any policy of insurance required under this Agreement does not comply with these specifications or is canceled and not replaced, the City has the right but not the duty to obtain the insurance it deems necessary and any premium paid by the City will be promptly reimbursed by Vendor or the City may withhold amounts sufficient to pay premium from Vendor payments. In the alternative, the City may suspend or terminate this Agreement.

6.2.4 Additional Insured. The City of Ontario, its directors, officials, officers, employees, agents, and volunteers shall be named as additional insureds on Vendor's and its subcontractors' policies of commercial general liability and automobile liability insurance using the endorsements and forms specified herein or exact equivalents.

6.3 Insurance Endorsements. The insurance policies shall contain the following provisions, or Vendor shall provide endorsements on forms supplied or approved by the City to add the following provisions to the insurance policies:

6.3.1 General Liability. The general liability policy shall include or be endorsed (amended) to state that: (1) using ISO CG forms 20 10 and 20 37, or endorsements providing the exact same coverage, the City of Ontario, its directors, officials, officers, employees, agents, and volunteers shall be covered as additional insured with respect to the Services or ongoing and complete operations performed by or on behalf of the Vendor, including materials, parts or equipment furnished in connection with such work; and (2) using ISO form 20 01, or endorsements providing the exact same coverage, the insurance coverage shall be primary insurance as respects the City, its directors, officials, officers, employees, agents, and volunteers, or if excess, shall stand in an unbroken chain of coverage excess of the Vendor's scheduled underlying coverage. Any excess insurance shall contain a provision that such coverage shall also apply on a primary and noncontributory basis for the benefit of the City, before the City's own primary insurance, deductible, or self-insurance shall be called upon to protect it as a named insured. Any insurance, deductible, or self-insurance maintained by the City, its directors, officials, officers, employees, agents, and volunteers shall be excess of the Vendor's insurance and shall not be

called upon to contribute with it in any way. Notwithstanding the minimum limits set forth in Section 6.2.2, any available insurance proceeds in excess of the specified minimum limits of coverage shall be available to the parties required to be named as additional insureds pursuant to this Section 6.3.1.

6.3.2 Automobile Liability. The automobile liability policy shall include or be endorsed (amended) to state that: (1) the City, its directors, officials, officers, employees, agents, and volunteers shall be covered as additional insureds with respect to the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by the Vendor or for which the Vendor is responsible; and (2) the insurance coverage shall be primary insurance as respects the City, its directors, officials, officers, employees, agents, and volunteers, or if excess, shall stand in an unbroken chain of coverage excess of the Vendor's scheduled underlying coverage. Any insurance, deductible, or self-insurance maintained by the City, its directors, officials, officers, employees, agents, and volunteers shall be excess of the Vendor's insurance and shall not be called upon to contribute with it in any way. Policy shall contain or be endorsed to contain such provisions. Notwithstanding the minimum limits set forth in Section 6.2.2, any available insurance proceeds in excess of the specified minimum limits of coverage shall be available to the parties required to be named as additional insureds pursuant to this Section 6.3.2.

6.3.3 Workers' Compensation and Employer's Liability Coverage. The insurer shall agree to waive all rights of subrogation against the City, its directors, officials, officers, employees, agents, and volunteers for losses paid under the terms of the insurance policy which arise from work performed by the Vendor.

6.3.4 All Coverages. Each insurance policy required by this Agreement shall be endorsed to state that: (A) coverage shall not be suspended, voided, reduced or canceled except after thirty (30) days (10 days for nonpayment of premium) prior written notice by certified mail, return receipt requested, has been given to the City; and (B) any failure to comply with reporting or other provisions of the policies, including breaches of warranties, shall not affect coverage provided to the City, its directors, officials, officers, employees, agents, and volunteers. Any failure to comply with reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to the City, its officials, officers, employees, agents and volunteers, or any other additional insureds.

6.4 Separation of Insureds; No Special Limitations; Waiver of Subrogation. All insurance required by this Section shall contain standard separation of insureds provisions. In addition, such insurance shall not contain any special limitations on the scope of protection afforded to the City, its directors, officials, officers, employees, agents, and volunteers. Requirement of specific coverage or minimum limits contained in this Section are not intended as a limitation on coverage, limits, or other requirement, or a waiver of any coverage normally provided by any insurance. All policies shall waive any right of subrogation of the insurer against the City, its officials, officers, employees, agents, and volunteers, or any other additional insureds, or shall specifically allow Vendor or others providing insurance evidence in compliance with these specifications to waive their right of recovery prior to a loss. Vendor hereby waives its own right of recovery against City, its officials, officers, employees, agents, and volunteers, or any other additional insureds, and shall require similar written express waivers and insurance clauses from each of its subcontractors.

6.5 Deductibles and Self-Insurance Retentions. Any deductibles or self-insured retentions must be declared to and approved by the City. Vendor shall guarantee that, at the

option of the City, either: (1) the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the City, its directors, officials, officers, employees, agents, and volunteers; or (2) the Vendor shall procure a bond guaranteeing payment of losses and related investigation costs, claims and administrative and defense expenses.

6.6 Subcontractor Insurance Requirements. Vendor shall not allow any subcontractors to commence work on any subcontract relating to the work under the Agreement until they have provided evidence satisfactory to the City that they have secured all insurance required under this Section. If requested by Vendor, the City may approve different scopes or minimum limits of insurance for particular subcontractors. The Vendor and the City shall be named as additional insureds on all subcontractors' policies of Commercial General Liability using ISO form 20 38, or coverage at least as broad.

6.7 Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best's rating no less than A:VIII, licensed to do business in California, and satisfactory to the City.

6.8 Verification of Coverage. Vendor shall furnish City with original certificates of insurance and endorsements effecting coverage required by this Agreement on forms satisfactory to the City. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf, and shall be on forms provided by the City if requested. All certificates and endorsements must be received and approved by the City before work commences. The City reserves the right to require complete, certified copies of all required insurance policies, at any time.

6.9 Reporting of Claims. Vendor shall report to the City, in addition to Vendor's insurer, any and all insurance claims submitted by Vendor in connection with the Services under this Agreement.

7. INDEMNIFICATION.

7.1 Scope of Indemnity. To the fullest extent permitted by law, Vendor shall defend, indemnify and hold the City, its officials, employees, agents and volunteers free and harmless from any and all claims, demands, causes of action, suits, actions, proceedings, costs, expenses, liability, judgments, awards, decrees, settlements, loss, damage or injury of any kind, in law or equity, regardless of whether the allegations are false, fraudulent, or groundless, to property or persons, including wrongful death, (collectively, "Claims") in any manner arising out of, pertaining to, or incident to any acts, errors or omissions, or willful misconduct of Vendor, its officials, officers, employees, subcontractors, consultants or agents arising out of or in connection with the Services, the Goods or this Agreement, including without limitation the payment of all expert witness fees, attorneys' fees and other related costs and expenses. Notwithstanding the foregoing, to the extent required by Civil Code section 2782, Vendor's indemnity obligation shall not apply to such loss or damage which is caused by the sole negligence or willful misconduct of the City.

7.2 Additional Indemnity Obligations. Vendor shall defend, with counsel of City's choosing and at Vendor's own cost, expense and risk, any and all Claims covered by this section that may be brought or instituted against City or its officials, employees, agents and volunteers. In addition, Vendor shall pay and satisfy any judgment, award or decree that may be rendered against City or its officials, employees, agents and volunteers as part of any such claim, suit, action or other proceeding. Vendor shall also reimburse City for the cost of any settlement paid

by City or its officials, employees, agents and volunteers as part of any such claim, suit, action or other proceeding. Such reimbursement shall include payment for City's attorney's fees and costs, including expert witness fees. Vendor shall reimburse City and its officials, employees, agents and volunteers, for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided. Vendor's obligation to indemnify shall survive expiration or termination of this Agreement, and shall not be restricted to insurance proceeds, if any, received by the City, its officials, employees, agents and volunteers.

8. CALIFORNIA LABOR CODE

8.1 Prevailing Wages. Vendor is aware of the requirements of California Labor Code Section 1720, et seq., and 1770, et seq., as well as California Code of Regulations, Title 8, Section 16000, et seq., ("Prevailing Wage Laws"), which require the payment of prevailing wage rates and the performance of other requirements on "public works" and "maintenance" projects. If the Services are being performed as part of an applicable "public works" or "maintenance" project, as defined by the Prevailing Wage Laws, If the total compensation is $1,000 or more, Vendor agrees to fully comply with such Prevailing Wage Laws. City shall provide Vendor with a copy of the prevailing rates of per diem wages in effect at the commencement of this Agreement. Vendor shall make copies of the prevailing rates of per diem wages for each craft, classification or type of worker needed to execute the Services available to interested parties upon request, and shall post copies at the Vendor's principal place of business and at the project site. Vendor shall defend, indemnify and hold the City, its elected officials, officers, employees and agents free and harmless from any claim or liability arising out of any failure or alleged failure to comply with the Prevailing Wage Laws. It is the intent of the parties to effectuate the requirements of sections 1771, 1774, 1775, 1776, 1777.5, 1813, and 1815 of the Labor Code within this Agreement, and Vendor shall therefore comply with such Labor Code sections to the fullest extent required by law.

8.2 Registration. Since the Services are being performed as part of an applicable "public works" or "maintenance" project, then pursuant to Labor Code Sections 1725.5 and 1771.1, the Vendor and all subcontractors must be registered with the Department of Industrial Relations. Vendor shall maintain registration for the duration of this Agreement and require the same of any subcontractor. Notwithstanding the foregoing, the contractor registration requirements mandated by Labor Code Sections 1725.5 and 1771.1 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Sections 1725.5 and 1771.1.

8.3 Compliance Monitoring. This Agreement may also be subject to compliance monitoring and enforcement by the Department of Industrial Relations. It shall be Vendor's sole responsibility to comply with all applicable registration and labor compliance requirements. Any stop orders issued by the Department of Industrial Relations against Vendor or any subcontractor that affect Vendor's performance of Services, including any delay, shall be Vendor's sole responsibility. Any delay arising out of or resulting from such stop orders shall be considered Vendor caused delay and shall not be compensable by the City. Vendor shall defend, indemnify and hold the City, its officials, officers, employees and agents free and harmless from any claim or liability arising out of stop orders issued by the Department of Industrial Relations against Vendor or any subcontractor.

9. SAFETY.

Vendor shall execute and maintain its work so as to avoid injury or damage to any person or property. In carrying out its services, the Vendor shall at all times be in compliance with all

applicable local, state and federal laws, rules and regulations, and shall exercise all necessary precautions for the safety of employees appropriate to the nature of the work and the conditions under which the work is to be performed. Safety precautions as applicable shall include, but shall not be limited to: (A) adequate life protection and life saving equipment and procedures; (B) instructions in accident prevention for all employees and subcontractors, such as safe walkways, scaffolds, fall protection ladders, bridges, gang planks, confined space procedures, trenching and shoring, equipment and other safety devices, equipment and wearing apparel as are necessary or lawfully required to prevent accidents or injuries; and (C) adequate facilities for the proper inspection and maintenance of all safety measures.

10. ACCOUNTING RECORDS.

Vendor shall maintain complete and accurate records with respect to all costs and expenses incurred under this Agreement. All such records shall be clearly identifiable. Vendor shall allow a representative of City during normal business hours to examine, audit, and make transcripts or copies of such records and any other documents created pursuant to this Agreement. Vendor shall allow inspection of all work, data, documents, proceedings, and activities related to the Agreement for a period of three (3) years from the date of final payment under this Agreement.

11. TERMINATION OF AGREEMENT.

11.1 Grounds for Termination. City may, by written notice to Vendor, terminate the whole or any part of this Agreement at any time and without cause by giving written notice to Vendor of such termination, and specifying the effective date thereof, at least seven (7) days before the effective date of such termination. Upon termination, Vendor shall be compensated only for those Services and Goods which have been adequately rendered to City, and Vendor shall be entitled to no further compensation. If terminated for cause because the Vendor refused or failed to deliver the Goods, the City may obtain Goods by whatever method it may deem expedient. If City's cost of obtaining the Goods, including compensation for additional managerial and administrative services, will exceed the unpaid balance of the Goods, Vendor will be liable for and will pay the difference to City. Vendor may not terminate this Agreement except for cause. The rights and remedies of the City provided in this Section shall not be exclusive and are in addition to any other rights and remedies provided by law, equity or under this Agreement.

11.2 Effect of Termination. If this Agreement is terminated as provided herein, City may require Vendor to provide all finished or unfinished documents and data and other information of any kind prepared by Vendor in connection with the performance of the Services under this Agreement. Vendor shall be required to provide such document and other information within fifteen (15) days of the request.

11.3 Additional Services. In the event this Agreement is terminated in whole or in part as provided herein, City may procure, upon such terms and in such manner as it may determine appropriate, goods and services similar to those terminated.

12. GENERAL PROVISIONS.

12.1 Delivery of Notices. All notices permitted or required under this Agreement shall be given to the respective parties at the following address, or at such other address as the respective parties may provide in writing for this purpose:

Vendor:

BodEV, Inc.
2581 Union Ave
La Habra, CA 90631
Attn: Brendan O'Donnell

City:

City of Ontario
303 East "B" Street
Ontario, CA 91764-4196
Attn: Dan Beers, Principal Construction Project Manager

Such notice shall be deemed made when personally delivered or when mailed, forty-eight (48) hours after deposit in the U.S. Mail, first class postage prepaid and addressed to the party at its applicable address. Actual notice shall be deemed adequate notice on the date actual notice occurred, regardless of the method of service.

12.2 Subcontracting. Vendor shall not subcontract any portion of the work required by this Agreement, except as expressly stated herein, without prior written approval of City. Subcontracts, if any, shall contain a provision making them subject to all provisions stipulated in this Agreement.

12.3 Governing Law; Government Code Claim Compliance. This Agreement shall be governed by the laws of the State of California. Venue shall be in San Bernardino County. In addition to any and all contract requirements pertaining to notices of and requests for compensation or payment for extra work, disputed work, claims and/or changed conditions, Vendor must comply with the claim procedures set forth in Government Code sections 900 et seq. prior to filing any lawsuit against the City. Such Government Code claims and any subsequent lawsuit based upon the Government Code claims shall be limited to those matters that remain unresolved after all procedures pertaining to extra work, disputed work, claims, and/or changed conditions have been followed by Vendor. If no such Government Code claim is submitted, or if any prerequisite contractual requirements are not otherwise satisfied as specified herein, Vendor shall be barred from bringing and maintaining a valid lawsuit against the City.

12.4 Time of Essence. Time is of the essence for each and every provision of this Agreement.

12.5 City's Right to Employ Other Vendors. City reserves right to employ other Vendors in connection with the Goods and Services provided under this Agreement.

12.6 Successors and Assigns. This Agreement shall be binding on the successors and assigns of the parties.

12.7 Assignment or Transfer. Vendor shall not assign, hypothecate or transfer, either directly or by operation of law, this Agreement or any interest herein without the prior written consent of the City. Any attempt to do so shall be null and void, and any assignees, hypothecates or transferees shall acquire no right or interest by reason of such attempted assignment, hypothecation or transfer.

12.8 Construction; References; Captions. Since the Parties or their agents have participated fully in the preparation of this Agreement, the language of this Agreement shall be construed simply, according to its fair meaning, and not strictly for or against any Party. Any term

referencing time, days or period for performance shall be deemed calendar days and not work days. All references to Vendor include all personnel, employees, agents, and subcontractors of Vendor, except as otherwise specified in this Agreement. All references to City include its elected officials, officers, employees, agents, and volunteers except as otherwise specified in this Agreement. The captions of the various articles and paragraphs are for convenience and ease of reference only, and do not define, limit, augment, or describe the scope, content or intent of this Agreement.

12.9 Amendment; Modification. No supplement, modification or amendment of this Agreement shall be binding unless executed in writing and signed by both Parties.

12.10 Waiver. No waiver of any default shall constitute a waiver of any other default or breach, whether of the same or other covenant or condition. No waiver, benefit, privilege, or service voluntarily given or performed by a Party shall give the other Party any contractual rights by custom, estoppel or otherwise.

12.11 No Third Party Beneficiaries. Except to the extent expressly provided for in Section 12.7, there are no intended third party beneficiaries of any right or obligation assumed by the Parties.

12.12 Invalidity; Severability. If any portion of this Agreement is declared invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.

12.13 Prohibited Interests. Vendor maintains and warrants that it has not employed nor retained any company or person, other than a bona fide employee working solely for Vendor, to solicit or secure this Agreement. Further, Vendor warrants that it has not paid nor has it agreed to pay any company or person, other than a bona fide employee working solely for Vendor, any fee, commission, percentage, brokerage fee, gift or other consideration contingent upon or resulting from the award or making of this Agreement. Vendor further agrees to file, or shall cause its employees or subcontractors to file, a Statement of Economic Interest with the City's Filing Officer as required under state law in the performance of the Services. For breach or violation of this warranty, City shall have the right to rescind this Agreement without liability. For the term of this Agreement, no member, officer or employee of City, during the term of his or her service with City, shall have any direct interest in this Agreement, or obtain any present or anticipated material benefit arising therefrom.

12.14 Cooperation; Further Acts. The Parties shall fully cooperate with one another, and shall take any additional acts or sign any additional documents as may be necessary, appropriate or convenient to attain the purposes of this Agreement.

12.15 Authority to Enter Agreement. Vendor has all requisite power and authority to conduct its business and to execute, deliver, and perform the Agreement. Each Party warrants that the individuals who have signed this Agreement have the legal power, right, and authority to make this Agreement and bind each respective Party.

12.16 Counterparts. This Agreement may be signed in counterparts, each of which shall constitute an original.

12.17 Entire Agreement. This Agreement contains the entire Agreement of the parties with respect to the subject matter hereof, and supersedes all prior negotiations, understandings or agreements. This Agreement may only be modified by a writing signed by both parties.

SIGNATURES ON NEXT PAGE

SIGNATURE PAGE FOR GOODS & SERVICES AGREEMENT BETWEEN THE CITY OF ONTARIO AND BODEV, INC.

IN WITNESS WHEREOF, the Parties have entered into this Agreement as of the day and year first above written.

CITY OF ONTARIO

Approved By:

_____
Scott Ochoa
City Manager

Approved as to Form:

_____
Best Best & Krieger LLP
City Attorney

Attested By:

_____
Assistant City Clerk

BodEV, INC.

By: _____

Its: _____

Printed Name: _____

By: _____

Its: _____

Printed Name: _____

[If Corporation, TWO SIGNATURES, President OR Vice President AND Secretary OR Treasurer REQUIRED]

EXHIBIT "A"

SCOPE OF SERVICES

BodEV Inc.

QUOTE

Address: 2581 Union Ave, La Habra, CA 90631
Phone: (949) 521-3386
email: Brendan@evBodEV.com

012725-1
Rev. A
Date: 1/27/25

TO:

Contact Name:	Dan Beers	Title	Design & Construction – Principal Project Manager
Customer Name:	City of Ontario	Project Name:	Master List
Customer Phone:	P: 909.395.2806	Project Address:	1333 S. Bon View Ave
Customer Emial:	dbeers@ontarioca.gov	Site City & State:	Ontario CA, 91761
Type of Scope:	Level 2 System Install, 5 yr O&M		

Pricing as per: Sourcewell Contract 042221-CPI

Bill of Material: Master List with 5 Years S

Baseball Stadium: 22 EV level 2 dual chargers
Baseball Stadium Parking Structure: 24 EV Level 2 Dual chargers
Sports Complex: Main entry parking lot: 16 EV Level 2 dual chargers
Eastern Baseball Parking Lot: 16 EV Level 2 dual chargers
Maintenance Yard Parking: 3 EV level 2 dual chargers

ITEM		QTY	COST	AMOUNT
Baseball Stadium	Total for Site: $305,338			
Charging Units, Activation & Network	**NOTES:** $323,144 w/ S/H & Tax			
ChargePoint CP6021B-50A-L5.5	50 A Dual port, pedestal mount, 18 ft cable	22	$ 7,650	$ 168,300
ChargePoint Activation		22	$ 349	$ 7,678
ChargePoint Network 5 Year		44	$ 1,640	$ 72,160
Install & Commissioning of L2 chargers		22	$ 900	$ 19,800
On-Sight 5 Year Operation & Maintenance (O&M) on BodEV Installed Chargers		22	$ 1,700	$ 37,400
Baseball Stadium Parking Structure	Total for Site: $333,096			
Charging Units, Activation & Network	**NOTES:** $352,521 w/ S/H & Tax			
ChargePoint CP6021B-50A-L5.5	50 A Dual port, pedestal mount, 18 ft cable	24	$ 7,650	$ 183,600
ChargePoint Activation		24	$ 349	$ 8,376
ChargePoint Network 5 Year		48	$ 1,640	$ 78,720
Install & Commissioning of L2 chargers		24	$ 900	$ 21,600
On-Sight 5 Year Operation & Maintenance (O&M) on BodEV Installed Chargers		24	$ 1,700	$ 40,800
Sports Complex	Total for Site: $222,064			
Charging Units, Activation & Network	**NOTES:** $235,014 w/ S/H & Tax			
ChargePoint CP6021B-50A-L5.5	50 A Dual port, pedestal mount, 18 ft cable	16	$ 7,650	$ 122,400
ChargePoint Activation		16	$ 349	$ 5,584
ChargePoint Network 5 Year		32	$ 1,640	$ 52,480
Install & Commissioning of L2 chargers		16	$ 900	$ 14,400
On-Sight 5 Year Operation & Maintenance (O&M) on BodEV Installed Chargers		16	$ 1,700	$ 27,200
Eastern Baseball Parking Lot	Total for Site: $222,064			
Charging Units, Activation & Network	**NOTES:** $235,014 w/ S/H & Tax			
ChargePoint CP6021B-50A-L5.5	50 A Dual port, pedestal mount, 18 ft cable	16	$ 7,650	$ 122,400
ChargePoint Activation		16	$ 349	$ 5,584
ChargePoint Network 5 Year		32	$ 1,640	$ 52,480
Install & Commissioning of L2 chargers		16	$ 900	$ 14,400
On-Sight 5 Year Operation & Maintenance (O&M) on BodEV Installed Chargers		16	$ 1,700	$ 27,200
Eastern Baseball Parking Lot	Total for Site: $41,637			
Charging Units, Activation & Network	**NOTES:** $44,065 w/ S/H & Tax			
ChargePoint CP6021B-50A-L5.5	50 A Dual port, pedestal mount, 18 ft cable	3	$ 7,650	$ 22,950
ChargePoint Activation		3	$ 349	$ 1,047
ChargePoint Network 5 Year		6	$ 1,640	$ 9,840
Install & Commissioning of L2 chargers		3	$ 900	$ 2,700
On-Sight 5 Year Operation & Maintenance (O&M) on BodEV Installed Chargers		3	$ 1,700	$ 5,100
		TOTAL		**$ 1,124,199**
		81 **S/H ($140/unit)**		$ 11,340
		Tax 8.75%		$ 54,219
		Quote Total		**$ 1,189,758**

Notes:

Terms and Conditions of Sale can be found at www.evBodEV.com/Legal/TermsOfSale
Quote Good for 30 Days from: 1/27/25

X

Authorized Signatory for City of Ontario | Name | Title | Date

CITY OF ONTARIO *Agenda Report* **March 18, 2025**	**SECTION:** **CONSENT CALENDAR**
Department: Public Works Prepared By: Daniel P Beers Staff Member Presenting: Tito Haes, Executive Director Public Works Reviewed By: Andrea Ampig, Bonnie Tam Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 9

SUBJECT: A CONSTRUCTION CONTRACT WITH TFN ARCHITECTURAL SIGNAGE, INC. FOR SIGNAGE AT THE ONTARIO PROFESSIONAL BASEBALL STADIUM

RECOMMENDATION: That the City Council take the following actions:

A. Authorize the City Manager, or his designee, to execute a Construction Contract with TFN Architectural Signage, Inc., of Placentia, California, to provide signage for Bid No. 1878 - D&C23-011 – Professional Baseball Stadium (Rebid of BC20) in the amount of $1,816,695 and authorize a contingency of $363,339 for a total not-to-exceed contract amount of $2,180,034; and
B. Authorize the City Manager or his designee to execute all documents required for the completion of the project including, but not limited to, contracts, agreements, assessments, easements, reduction of retention accounts, and filing a notice of completion at the conclusion of all construction related activities.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Invest in the City's Infrastructure (Water, Streets, Sewers, Parks, Storm Drains and Public Facilities)

FISCAL IMPACT: The proposed Construction Contract with TFN Architectural Signage, Inc. is in the amount of $1,816,695 plus a contingency of $363,339 for a total not-to-exceed contract amount of $2,180,034. The Fiscal Year 2024-25 Adopted Budget includes appropriations in the Capital Projects -Measure Q Fund for the Signage at the Ontario Professional Baseball Stadium.

BACKGROUND & ANALYSIS: On August 6, 2024, the City Council approved the Environmental Impact Report for the Ontario Sports Empire. The Ontario Sports Empire includes a new Professional Baseball Stadium located at the Northwest corner of Riverside Drive and Hellman Avenue. On September 17, 2024, the City Council awarded Construction Contracts for the Structural Steel and Grading for the Professional Baseball Stadium at the Ontario Sports Empire.

On October 15, 2024, the City Council awarded 24 Construction Contracts for various construction

trades for the Professional Baseball Stadium. At the same meeting, the City Council rejected all bids for three (3) of the construction trades. Bid packages 02-Site Concrete, 06-Finish Carpentry, and 20-Signage had inconsistent bids, and several bidders were deemed non-responsive. To get a competitive and fair cost, Staff recommended rejecting all bids for these categories and rebid. On December 17, 2024, the City Council awarded Construction Contracts for the rebid of bid packages 02-Site Concrete and 06-Finish Carpentry.

On February 6, 2025, five (5) bids were received for Bid No. 1878 - D&C23-011 – Professional Baseball Stadium (Rebid of BC20). Below is a list of the responsible/responsive bids received:

VENDOR	LOCATION	AMOUNT
TFN Architectural Signage, Inc.	Placentia, CA	$1,816,695
Fusion Sign and Design	Riverside, CA	$1,920,213
Drive21, Inc.	New York, CA	$2,094,335
Architectural Design & Signs, Inc.	Corona, CA	$2,261,430
CREO Industrial Arts	Woodinville, WA	$2,351,248

Tilden-Coil Constructors, Inc., the City's Construction Management Company for the Sport Complex Project, and City Staff reviewed each bid and each company's qualifications and responsiveness to the bid requirements. Based on the credentials, pricing, and reference checks, Staff recommends awarding Construction Contract D&C23-011 Professional Baseball Stadium (Rebid of BC20) to TFN Architectural Signage, Inc.

CITY OF ONTARIO
303 EAST B STREET | ONTARIO, CALIFORNIA 91764
(909) 395-2000 FAX (909) 395-2070 OntarioCA.gov

PAUL S. LEON
MAYOR

ALAN D. WAPNER
MAYOR PRO TEM

JIM W. BOWMAN
DEBRA PORADA
DAISY MACIAS
COUNCIL MEMBERS

SHEILA MAUTZ
CITY CLERK

JAMES R. MILHISER
CITY TREASURER

SCOTT OCHOA
CITY MANAGER

SECTION 00500 – CONTRACT FOR CONSTRUCTION

This Contract for Construction ("Contract"), No. D&C23-011 is made and entered as of _____, by and between City of Ontario, with its principal place of business at 303 East "B" Street, Ontario, CA 91764, sometimes hereinafter called the "City" and **TFN Architectural Signage, Inc. dba Third Floor North**, sometimes hereinafter called "Contractor."

WITNESSETH: That the parties hereto have mutually covenanted and agreed, and by these presents do covenant and agree with each other as follows:

ARTICLE 1. SCOPE OF WORK.

The Contractor shall perform all Work within the time stipulated in the Contract, and shall provide all labor, materials, equipment, tools, utility services, and transportation to complete all of the Work required in strict compliance with the Contract Documents as specified in Article 5, below, for the following Project:

Ontario Ballpark – Signage

Contractor is an independent contractor and not an agent of the City. The Contractor and its surety shall be liable to the City for any damages arising as a result of the Contractor's failure to comply with this obligation.

ARTICLE 2. TIME FOR COMPLETION.

Time is of the essence in the performance of the Work. The Work shall be commenced on the date stated in the City's Notice to Proceed. The Contractor shall complete all Work required by the Contract Documents **per the contract schedule and within 391 calendar days** from the commencement date stated in the Notice to Proceed. By its signature hereunder, Contractor agrees the time for completion set forth above is adequate and reasonable to complete the Work.

ARTICLE 3. CONTRACT PRICE.

The City shall pay to the Contractor as full compensation for the performance of the Contract, subject to any additions or deductions as provided in the Contract Documents, and including all

applicable taxes and costs, the sum of **One Million Eight Hundred Sixteen Thousand Six Hundred Ninety-Five Dollars ($1,816,695)**. Payment shall be made as set forth in the General Conditions. The City will pay to Contractor compensation based upon the prices set forth in the Bid Schedule.

ARTICLE 4. LIQUIDATED DAMAGES.

Contractor acknowledges that the City will sustain actual damages for each and every Day completion of the Project is delayed beyond the Contract Time. Because of the nature of the Project, it would be impracticable or extremely difficult to determine the City's actual damages. Accordingly, in accordance with Government Code section 53069.85, it is agreed that the Contractor will pay the City the sum of $10,000 for each and every calendar day of delay beyond the time prescribed in the Contract Documents for finishing the Work, as Liquidated Damages and not as a penalty or forfeiture. In the event this is not paid, the Contractor agrees the City may deduct that amount from any money due or that may become due the Contractor under the Contract. This Section does not exclude recovery of other damages specified in the Contract Documents. Liquidated damages may be deducted from progress payments due Contractor, Project retention or may be collected directly from Contractor, or from Contractor's surety. These provisions for liquidated damages shall not prevent the City, in case of Contractor's default, from terminating the Contractor.

ARTICLE 5. COMPONENT PARTS OF THE CONTRACT.

The "Contract Documents" include the following:

Notice Inviting Bids
Instructions to Bidders
Bid Forms
Bid Acknowledgement
Bid Schedule
Bid Guarantee
Designation of Subcontractors
Non-Collusion Declaration Form
Iran Contracting Act Certification
Public Works Contractor DIR Registration Certification
Performance Bond
Payment (Labor and Materials) Bond
Contract for Construction
General Conditions
Special Conditions
Specifications
Addenda
Construction Plans and Drawings
Standard Specifications for Public Works Construction "Greenbook", latest edition, Except Sections 1-9
Applicable Local Agency Standards and Specifications, as last revised
Reference Specifications
Approved and fully executed Change Orders
Permits
Scope of Work Summary
Any other documents contained in or incorporated into the Contract

The Contractor shall complete the Work in strict accordance with all of the Contract Documents.

All of the Contract Documents are intended to be complementary. Work required by one of the Contract Documents and not by others shall be done as if required by all. In the event of conflict, the various Contract Documents will be given effect in the order set forth in the General Conditions. This Contract shall supersede any prior agreement of the parties.

ARTICLE 6. PROVISIONS REQUIRED BY LAW AND CONTRACTOR COMPLIANCE.

Each and every provision of law required to be included in these Contract Documents shall be deemed to be included in these Contract Documents. The Contractor shall comply with all requirements of applicable federal, state and local laws, rules and regulations, including, but not limited to, the provisions of the California Labor Code and California Public Contract Code which are applicable to this Work.

ARTICLE 7. INDEMNIFICATION.

Contractor shall provide indemnification and defense as set forth in the General Conditions.

ARTICLE 8. PREVAILING WAGES.

Contractor shall be required to pay the prevailing rate of wages in accordance with the Labor Code which such rates shall be made available at the City's Office or may be obtained online at http://www.dir.ca.gov and which must be posted at the job site.

ARTICLE 9. FALSE CLAIMS.

Contractor acknowledges that if a false claim is submitted to the City, it may be considered fraud and Contractor may be subject to criminal prosecution. Contractor acknowledges that the False Claims Act, California Government Code sections 12650, et seq., provides for civil penalties where a person knowingly submits a false claim to a public entity. These provisions include within their scope false claims made with deliberate ignorance of the false information or in reckless disregard of the truth or falsity of the information. In the event the City seeks to recover penalties pursuant to the False Claims Act, it is entitled to recover its litigation costs, including attorneys' fees. Contractor hereby acknowledges that the filing of a false claim may the Contractor to an administrative debarment proceeding wherein Contractor may be prevented from further bidding on public contracts for a period of up to five (5) years.

[REMAINDER OF PAGE LEFT INTENTIONALLY BLANK]

IN WITNESS WHEREOF, this Contract has been duly executed by the above-named parties, on the day and year above written.

CITY OF ONTARIO

By: _____
Scott Ochoa
City Manager

ATTEST:

By: _____
Sheila Mautz, City Clerk

APPROVED AS TO FORM:

By: _____
Best Best & Krieger LLP
City Attorney

TFN Architectural Signage, Inc. dba Third Floor North

By: _____

Its: _____

Printed Name: _____

By: _____

Its: _____

Printed Name: _____

_____
Contractor's License Number and Classification

_____
DIR Registration Number

[IF CORPORATION, TWO SIGNATURES, PRESIDENT **OR** VICE PRESIDENT **AND** SECRETARY **OR** TREASURER **REQUIRED]**

END OF CONTRACT

Notary Acknowledgment

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF _____

On _____, 20___, before me, _____, Notary Public, personally

appeared _____, who proved to me on the basis of satisfactory

evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____
Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

□ Individual
□ Corporate Officer

_____
Title(s)

□ Partner(s) □ Limited □ General
□ Attorney-In-Fact
□ Trustee(s)
□ Guardian/Conservator
□ Other:

Signer is representing:
Name Of Person(s) Or Entity(ies)

_____

_____

DESCRIPTION OF ATTACHED DOCUMENT

_____
Title or Type of Document

_____
Number of Pages

_____
Date of Document

_____
Signer(s) Other Than Named Above

CITY OF ONTARIO *Agenda Report* **March 18, 2025**	**SECTION:** **CONSENT CALENDAR**
Department: Public Works Prepared By: Adrian Escamilla Staff Member Presenting: Tito Haes, Executive Director Public Works Reviewed By: Andrea Ampig, Bonnie Tam Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 10

SUBJECT: **AWARD A CONSTRUCTION CONTRACT TO MCCARTHY BUILDING COMPANIES, INC. FOR DESIGN-BUILD CONSTRUCTION SERVICES FOR THE VINEYARD PARKING STRUCTURE PROJECT**

RECOMMENDATION: That the City Council take the following actions:

A. Authorize the City Manager, or his designee, to execute a Construction Contract with McCarthy Building Companies, Inc., of Newport Beach, California, to provide design-build construction services for the Vineyard Parking Structure in the amount of $24,990,042 and authorize a contingency of $3,748,506 for a total not-to-exceed contract amount of $28,738,548;
B. Authorize the City Manager, or his designee, to execute all documents required for the completion of the project including, but not limited to agreements, assessments, easements, lot line adjustments, reduction of retention accounts, contracts and contract amendments within the authorization limits, and filing a notice of completion at the conclusion of all construction related activities.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Invest in the City's Infrastructure (Water, Streets, Sewers, Parks, Storm Drains and Public Facilities)

FISCAL IMPACT: The proposed Construction Contract with McCarthy Building Companies, Inc. is $24,990,042 plus a contingency of $3,748,506 for a total not-to-exceed contract amount of $28,738,548. If approved, additional appropriations in the Capital Projects - Measure Q Fund will be requested at a future quarterly budget update as needed.

BACKGROUND & ANALYSIS: The proposed Vineyard Parking Structure will be a multi-story parking structure with approximately 650 parking spaces located on Vineyard Avenue and Riverside Drive. The structure will provide the necessary public parking for the Ontario Sports Empire located in the Ontario Ranch Community. The Ontario Sports Empire consists of sports fields, including approximately 13 multi-use fields, eight multi-use baseball/softball fields and open space.

In December 2025, the City solicited pre-qualification proposals for Invitation No. 1844 D&C24-008 Vineyard Parking Structure from Design-Build entities interested in qualifying to build the Vineyard Parking Structure. Six (6) submittals were deemed responsive. Those six (6) Design-Build entities were asked to submit proposals to design and construct the Vineyard Parking Structure. A selection team of City Staff and Transtech, Inc., the Construction Management Company of the Vineyard Parking Structure Project, reviewed and scored the four (4) submittals listed below based on appearance and adherence to the bid documents.

CONTRACTOR NAME	AVERAGE SCORE
McCarthy Building Companies, Inc.	90
Swinerton Builders	75
Bomel Construction	74
Hensel Phelps	55

Based on the scores, McCarthy Building Companies, Inc.'s proposal was deemed most responsive with an overall average rating of 90. Their proposal was the best blend of exterior appeal, favorable project timeline, number of parking spaces, and project cost. McCarthy Building Companies, Inc. has extensive design-build experience. Their recent projects include the C-Block Parking Structure, City Hall Parking Structure, and various external parking structure projects. Staff recommends approval of a Construction Contract with McCarthy Building Companies, Inc. for the Vineyard Parking Structure Project.

The Vineyard Parking Structure is scheduled to become operational by Fall 2026.

CITY OF ONTARIO

CONTRACT DOCUMENTS FOR

D&C24-008 Vineyard Parking Structure

CONTRACT NO. D&C24-008

February 24, 2025

CITY OF ONTARIO
303 EAST B STREET | ONTARIO, CALIFORNIA 91764
(909) 395-2000 FAX (909) 395-2070 OntarioCA.gov

PAUL S. LEON
MAYOR

ALAN D. WAPNER
MAYOR PRO TEM

JIM W. BOWMAN
DEBRA PORADA
DAISY MACIAS
COUNCIL MEMBERS

SHEILA MAUTZ
CITY CLERK

JAMES R. MILHISER
CITY TREASURER

SCOTT OCHOA
CITY MANAGER

SECTION 00500 – CONTRACT FOR CONSTRUCTION

This Contract for Construction ("Contract"), No. D&C24-008 is made and entered as of _____, by and between City of Ontario, with its principal place of business at 303 East "B" Street, Ontario, CA 91764, sometimes hereinafter called the "City" and **McCarthy Building Companies, Inc.**, sometimes hereinafter called "Contractor."

WITNESSETH: That the parties hereto have mutually covenanted and agreed, and by these presents do covenant and agree with each other as follows:

ARTICLE 1. SCOPE OF WORK.

The Contractor shall perform all Work within the time stipulated in the Contract, and shall provide all labor, materials, equipment, tools, utility services, and transportation to complete all of the Work required in strict compliance with the Contract Documents as specified in Article 5, below, for the following Project:

D&C24-008 Vineyard Parking Structure

Contractor is an independent contractor and not an agent of the City. The Contractor and its surety shall be liable to the City for any damages arising as a result of the Contractor's failure to comply with this obligation.

ARTICLE 2. TIME FOR COMPLETION.

Time is of the essence in the performance of the Work. The Work shall be commenced on the date stated in the City's Notice to Proceed. The Contractor shall complete all Work required by the Contract Documents within **571 calendar days** from the commencement date stated in the Notice to Proceed. By its signature hereunder, Contractor agrees the time for completion set forth above is adequate and reasonable to complete the Work.

ARTICLE 3. CONTRACT PRICE.

The City shall pay to the Contractor as full compensation for the performance of the Contract, subject to any additions or deductions as provided in the Contract Documents, and including all applicable taxes and costs, the sum of **Twenty-Four Million Nine Hundred Ninety Thousand and Forty-Two Dollars ($24,990,042)**. Payment shall be made as set forth in the General

Conditions. The City will pay to Contractor compensation based upon the prices set forth in the Bid Schedule.

ARTICLE 4. LIQUIDATED DAMAGES.

Contractor acknowledges that the City will sustain actual damages for each and every Day completion of the Project is delayed beyond the Contract Time. Because of the nature of the Project, it would be impracticable or extremely difficult to determine the City's actual damages. Accordingly, in accordance with Government Code section 53069.85, it is agreed that the Contractor will pay the City the sum of $2,000 for each and every calendar day of delay beyond the time prescribed in the Contract Documents for finishing the Work, as Liquidated Damages and not as a penalty or forfeiture. In the event this is not paid, the Contractor agrees the City may deduct that amount from any money due or that may become due the Contractor under the Contract. This Section does not exclude recovery of other damages specified in the Contract Documents. Liquidated damages may be deducted from progress payments due Contractor, Project retention or may be collected directly from Contractor, or from Contractor's surety. These provisions for liquidated damages shall not prevent the City, in case of Contractor's default, from terminating the Contractor.

ARTICLE 5. COMPONENT PARTS OF THE CONTRACT.

The "Contract Documents" include the following

Instructions to Bidders
Bid Forms
Bid Acknowledgement
Bid Schedule
Bid Guarantee
Designation of Subcontractors
Information Required of Bidders
Non-Collusion Declaration Form
Iran Contracting Act Certification
Public Works Contractor DIR Registration Certification
Performance Bond
Payment (Labor and Materials) Bond
Contract for Construction
General Conditions
Special Conditions
Specifications
Addenda
Construction Plans and Drawings
Standard Specifications for Public Works Construction "Greenbook", latest edition, Except Sections 1-9
Applicable Local Agency Standards and Specifications, as last revised
Reference Specifications
Approved and fully executed Change Orders
Permits
Any other documents contained in or incorporated into the Contract

The Contractor shall complete the Work in strict accordance with all of the Contract Documents.

All of the Contract Documents are intended to be complementary. Work required by one of the Contract Documents and not by others shall be done as if required by all. In the event of conflict, the various Contract Documents will be given effect in the order set forth in the General Conditions. This Contract shall supersede any prior agreement of the parties.

ARTICLE 6. PROVISIONS REQUIRED BY LAW AND CONTRACTOR COMPLIANCE.

Each and every provision of law required to be included in these Contract Documents shall be deemed to be included in these Contract Documents. The Contractor shall comply with all requirements of applicable federal, state and local laws, rules and regulations, including, but not limited to, the provisions of the California Labor Code and California Public Contract Code which are applicable to this Work.

ARTICLE 7. INDEMNIFICATION.

Contractor shall provide indemnification and defense as set forth in the General Conditions.

ARTICLE 8. PREVAILING WAGES.

Contractor shall be required to pay the prevailing rate of wages in accordance with the Labor Code which such rates shall be made available at the City's Office or may be obtained online at http://www.dir.ca.gov and which must be posted at the job site.

ARTICLE 9. FALSE CLAIMS.

Contractor acknowledges that if a false claim is submitted to the City, it may be considered fraud and Contractor may be subject to criminal prosecution. Contractor acknowledges that the False Claims Act, California Government Code sections 12650, et seq., provides for civil penalties where a person knowingly submits a false claim to a public entity. These provisions include within their scope false claims made with deliberate ignorance of the false information or in reckless disregard of the truth or falsity of the information. In the event the City seeks to recover penalties pursuant to the False Claims Act, it is entitled to recover its litigation costs, including attorneys' fees. Contractor hereby acknowledges that the filing of a false claim may the Contractor to an administrative debarment proceeding wherein Contractor may be prevented from further bidding on public contracts for a period of up to five (5) years.

[REMAINDER OF PAGE LEFT INTENTIONALLY BLANK]

IN WITNESS WHEREOF, this Contract has been duly executed by the above-named parties, on the day and year above written.

CITY OF ONTARIO

By: _____
Scott Ochoa
City Manager

ATTEST:

By: _____
Sheila Mautz
City Clerk

APPROVED AS TO FORM:

By: _____
Best Best & Krieger LLP
City Attorney

MCCARTHY BUILDING COMPANIES, INC.

IF CORPORATION, TWO SIGNATURES, PRESIDENT **OR** VICE PRESIDENT **AND** SECRETARY **OR** TREASURER **REQUIRED**

By: _____

Its: _____

Printed Name: _____

By: _____

Its: _____

Printed Name: _____

_____
Contractor's License Number and Classification

_____
DIR Registration Number

END OF CONTRACT

Notary Acknowledgment

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF _____

On _____, 20___, before me, _____, Notary Public, personally

appeared _____, who proved to me on the basis of satisfactory

evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____
Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

☐ Individual
☐ Corporate Officer

_____
Title(s)

☐ Partner(s) ☐ Limited ☐ General
☐ Attorney-In-Fact
☐ Trustee(s)
☐ Guardian/Conservator
☐ Other:

Signer is representing:
Name Of Person(s) Or Entity(ies)

_____

_____

DESCRIPTION OF ATTACHED DOCUMENT

_____
Title or Type of Document

_____
Number of Pages

_____
Date of Document

_____
Signer(s) Other Than Named Above

CITY OF ONTARIO *Agenda Report* **March 18, 2025**	**SECTION:** **CONSENT CALENDAR**
Department: Public Works Prepared By: Manuel Rebolledo Staff Member Presenting: Tito Haes, Executive Director Public Works Reviewed By: Jacqueline Leon, Bonnie Tam Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 11

SUBJECT: AUTHORIZE A SOLE SOURCE PURCHASE WITH FIRE APPARATUS SOLUTIONS FOR TWO (2) NEW KME FIRE PUMPERS

RECOMMENDATION: That the City Council authorize the sole source purchase and delivery of two (2) new KME K180 Fire Pumpers from Fire Apparatus Solutions of Rialto, California, in the amount of $1,996,979 plus a 5% contingency in the amount of $99,849 for a total not-to-exceed amount of $2,096,828.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Maintain the Current High Level of Public Safety

FISCAL IMPACT: The recommendation for the purchase of two (2) new fire apparatus is in the amount of $2,096,828. If approved, additional appropriations in the Equipment Services Fund will be requested at a future quarterly budget update as needed.

BACKGROUND & ANALYSIS: On September 19, 2023, the City Council approved Fire Apparatus Solutions (FAS), of Rialto, California, as a sole source vendor for fire apparatus. On April 2, 2023, FAS became the only authorized KME Dealership in the State of California.

The addition of two new fire pumpers is essential to address the growing needs of our fire department and reserve fleet. Currently, our reserve fleet consists of four units, and one, Unit 006, was placed into service in 1999, far exceeding the recommended service life. The National Fire Protection Agency (NFPA) advises removing fire apparatus from emergency service after 25 years, making Unit 006 no longer viable. The addition of Stations 9 and 11 only accounted for frontline apparatus, not the reserve needs. With operational readiness and mutual aid requests becoming difficult, the reserve fleet's availability has dropped to 0-1 units, straining training and maintenance.

Fleet Services and Fire Department City staff recommend a sole-source purchase through a goods and equipment agreement with FAS, considering service center location, warranty, reliability, and training needs, along with FAS's additional services like annual pump testing, aerial certifications, and routine maintenance. Adding two new reserve engines will increase our reserve fleet to five,

improving operational flexibility, training, and emergency response, ensuring we meet the City and departments growing demands.

QUANTITY	MAKE/MODEL	DEPARTMENT	PRICE
2	KME K180 FIRE PUMPER	FIRE	$2,096,828

PAUL S. LEON
MAYOR

ALAN D. WAPNER
MAYOR PRO TEM

JIM W. BOWMAN
DEBRA PORADA
DAISY MACIAS
COUNCIL MEMBERS

SHEILA MAUTZ
CITY CLERK

JAMES R. MILHISER
CITY TREASURER

SCOTT OCHOA
CITY MANAGER

CITY OF ONTARIO
GOODS AND EQUIPMENT PURCHASE AGREEMENT

This Goods and Equipment Purchase Agreement ("Agreement") is made and entered as of _____, by and between the City of Ontario, a municipal corporation organized under the laws of the State of California with its principal place of business at 303 East "B" Street, Ontario, California 91764-4196, County of San Bernardino, State of California ("City"), **and Fire Apparatus Solutions**, a **S-CORPORATION** with its principal place of business at **1762 S. Sycamore Ave, Rialto, CA 92376** ("Supplier"). City and Supplier are sometimes individually referred to as "Party" and collectively as "Parties" in this Agreement.

Section 1. DEFINITIONS.

A. "Goods" means all machinery, equipment, supplies, items, parts, materials, labor or other services, including design, engineering and installation services, provided by Supplier as specified in Exhibit "A," attached hereto and incorporated herein by reference.

B. "Delivery Date(s)" means that date or dates upon which the Goods is to be delivered to City, ready for approval, testing and/or use as specified in Exhibit "B."

Section 2. MATERIALS AND WORKMANSHIP.

When Exhibit "A" specifies machinery, equipment or material by manufacturer, model or trade name, no substitution will be made without City's written approval. Machinery, equipment or material installed in the Goods without the approval required by this Section 2 will be deemed to be defective material for purposes of Section 4. Where machinery, equipment or materials are referred to in Exhibit "A" as equal to any particular standard, City will decide the question of equality. When requested by City, Supplier will furnish City with the name of the manufacturer, the performance capabilities and other pertinent information necessary to properly determine the quality and suitability of any machines, equipment and material to be incorporated in the Goods. Material samples will be submitted at City's request.

Section 3. INSPECTIONS AND TESTS.

City shall have the right to inspect and/or test the Goods prior to acceptance. If upon inspection or testing the Goods or any portion thereof are found to be nonconforming, unsatisfactory, defective, of inferior quality or workmanship, or fail to meet any requirements or specifications contained in Exhibit "A," then without prejudice to any other rights or remedies, City

may reject the Goods or exercise any of its rights under Section 4.C. The inspection, failure to make inspection, acceptance of goods, or payment for goods shall not impair City's right to reject nonconforming goods, irrespective of City's failure to notify Supplier of a rejection of nonconforming goods or revocation of acceptance thereof or to specify with particularity any defect in nonconforming goods after rejection or acceptance thereof.

Section 4. WARRANTY.

A. Supplier warrants that the Goods will be of merchantable quality and free from defects in design, engineering, material, and workmanship for a period of two (2) years, or such longer period as provided by a manufacturer's warranty or as agreed to by Supplier and City, from the date of final written acceptance of the Goods by City as required for final payment under Section 7. Supplier further warrants that any services provided in connection with the Goods will be performed in a professional and workmanlike manner and in accordance with the highest industry standards.

B. Supplier further warrants that all machinery, equipment, or process included in the Goods will meet the performance requirements and specifications specified in Exhibit "A" and shall be fit for the purpose intended. City's inspection, testing, approval, or acceptance of any such machinery, equipment, or process will not relieve Supplier of its obligations under this Section 4.B.

C. For any breach of the warranties contained in Section 4.A and Section 4.B, Supplier will, immediately after receiving notice from City, at the option of City, and at Supplier's own expense and without cost to City:

1. Repair the defective Goods;

2. Replace the defective Goods with conforming Goods, F.O.B. City's plant, office or other location of City where the Goods was originally performed or delivered; or

3. Repay to City the purchase price of the defective Goods.

If City selects repair or replacement, any defects will be remedied without cost to City, including but not limited to, the costs of removal, repair, and replacement of the defective Goods, and reinstallation of new Goods. All such defective Goods that is so remedied will be similarly warranted as stated above. In addition, Supplier will repair or replace other items of the Goods which may have been damaged by such defects or the repairing of the same, all at its own expense and without cost to City.

D. Supplier also warrants that the Goods is free and clear of all liens and encumbrances whatsoever, that Supplier has a good and marketable title to same, and that Supplier owns or has a valid license for all of the proprietary technology and intellectual property incorporated within the Goods. Supplier agrees to indemnify, defend, and hold City harmless against any and all third party claims resulting from the breach or inaccuracy of any of the foregoing warranties.

E. In the event of a breach by Supplier of its obligations under this Section 4, City will not be limited to the remedies set forth in this Section 4, but will have all the rights and remedies permitted by applicable law, including without limitation, all of the rights and remedies afforded to City under the California Commercial Code.

Section 5. PRICES.

Unless expressly provided otherwise, all prices and fees specified in Exhibit "C," attached hereto and incorporated herein by reference, are firm and shall not be subject to change without the written approval of City. No extra charges of any kind will be allowed unless specifically agreed to in writing by City's authorized representative. The total price shall include (i) all federal, state and local sales, use, excise, privilege, payroll, occupational and other taxes applicable to the Goods furnished to City hereunder; and (ii) all charges for packing, freight and transportation to destination.

Section 6. CHANGES.

City, at any time, by a written order, and without notice to any surety, may make changes in the Goods, including but not limited to, City's requirements and specifications. If such changes affect the cost of the Goods or time required for its performance, an equitable adjustment will be made in the price or time for performance or both. Any change in the price necessitated by such change will be agreed upon between City and Supplier and such change will be authorized by a change order document signed by City and accepted by Supplier.

Section 7. PAYMENTS.

A. Terms of payment, are net thirty (30) days, less any applicable retention, after receipt of invoice, or completion of applicable Progress Milestones. Final payment shall be made by City after Supplier has satisfied all contractual requirements. Payment of invoices shall not constitute acceptance of Goods.

B. If Progress Milestones have been specified in Exhibit "B," then payments for the Goods will be made as the requirements of such Progress Milestones are met. Progress payments for the Goods will be made by City upon proper application by Supplier during the progress of the Goods and according to the terms of payment as specified in Exhibit "B." Supplier's progress billing invoice will include progress payments due for the original scope of work and changes. Each "Item for Payment" shown in Exhibit "B" and each change order will be itemized on the invoice. Invoices for cost plus work, whether part of Exhibit "B" or a change order, must have subcontractor and/or supplier invoices attached to Supplier's invoice. Other format and support documents for invoices will be determined by City in advance of the first invoice cycle.

C. Payments otherwise due may be withheld by City on account of defective Goods not remedied, liens or other claims filed, reasonable evidence indicating probable filing of liens or other claims, failure of Supplier to make payments properly to its subcontractors or for material or labor, the failure of Supplier to perform any of its other obligations under the Agreement, or to protect City against any liability arising out of Supplier's failure to pay or discharge taxes or other obligations. If the causes for which payment is withheld are removed, the withheld payments will

be made promptly. If the said causes are not removed within a reasonable period after written notice, City may remove them at Supplier's expense.

D. Payment of the final Progress Milestone payment or any retention will be made by City upon:

1. Submission of an invoice for satisfactory completion of the requirements of a Progress Milestone as defined in Exhibit "B" and in the amount associated with the Progress Milestone;

2. Written acceptance of the Goods by City;

3. Delivery of all drawings and specifications, if required by City;

4. Delivery of executed full releases of any and all liens arising out of this Agreement; and

5. Delivery of an affidavit listing all persons who might otherwise be entitled to file, claim, or maintain a lien of any kind or character, and containing an averment that all of the said persons have been paid in full.

If any person refuses to furnish an actual release or receipt in full, Supplier may furnish a bond satisfactory to City to indemnify City against any claim or lien at no cost to City.

E. Acceptance by Supplier of payment of the final Progress Milestone payment pursuant to Section 7.D will constitute a waiver, release and discharge of any and all claims and demands of any kind or character which Supplier then has, or can subsequently acquire against City, its successors and assigns, for or on account of any matter or thing arising out of, or in any manner connected with, the performance of this Agreement. However, payment for the final Progress Milestone by City will not constitute a waiver, release or discharge of any claims or demands which City then has, or can subsequently acquire, against Supplier, its successors and assigns, for or on account of any matter or thing arising out of, or in any manner connected with, the performance of this Agreement.

F. Automated Clearing House ("ACH") payments. It is the City's policy to pay its consultant invoices via electronic fund transfers through the ACH network. All payments due and owing pursuant to a properly issued and correct invoice or under this Agreement shall be made through electronic ACH transfers, unless otherwise agreed upon by both Parties in writing. Supplier shall provide the City with ACH payment details whereby the City shall initiate the ACH transfers to Supplier in the amount required pursuant to a properly issued and correct invoice or under this Agreement. Each Party shall undertake any and all required actions and execute any required documents, instruments, or agreements required to effectuate the requirements of this Section. In the event the City erroneously deposits funds into an account, or otherwise deposits funds to which Supplier is not entitled: (1) Supplier shall immediately notify the City and the financial institution; (2) Supplier shall not withdraw any of the funds which were erroneously deposited or to which Supplier is not entitled; and (3) Supplier authorizes both the City and

financial institution to take all actions necessary to correct the error and return to the City all funds erroneously deposited or to which Supplier is not entitled.

Section 8. SCHEDULE FOR DELIVERY.

A. The time of Supplier's performance is of the essence for this Agreement. The Goods will be delivered in accordance with the schedule set forth in Exhibit "B." Supplier must immediately notify City in writing any time delivery is behind schedule or may not be completed on schedule. In addition to any other rights City may have under this Agreement or at law, Supplier shall pay City the sum of **$1,996,979** per item of Goods for each calendar day for which the item of Goods is unavailable beyond the scheduled delivery date(s) specified in Exhibit "B."

B. In the event that the Goods is part of a larger project or projects that require the coordination of multiple contractors or suppliers, then Supplier will fully cooperate in scheduling the delivery so that City can maximize the efficient completion of such project(s).

Section 9. TAXES.

A. Supplier agrees to timely pay all sales and use tax (including any value added or gross receipts tax imposed similar to a sales and use tax) imposed by any federal, state or local taxing authority on the ultimate purchase price of the Goods provided under this Agreement.

B. Supplier will withhold, and require its subcontractors, where applicable, to withhold all required taxes and contributions of any federal, state or local taxing authority which is measured by wages, salaries or other remuneration of its employees or the employees of its subcontractors. Supplier will deposit, or cause to be deposited, in a timely manner with the appropriate taxing authorities all amounts required to be withheld.

C. All other taxes, however denominated or measured, imposed upon the price of the Goods provided hereunder, will be the responsibility of Supplier. In addition, all taxes assessed by any taxing jurisdiction based on Supplier property used or consumed in the provision of the Goods such as and including ad valorem, use, personal property and inventory taxes will be the responsibility of Supplier.

D. Supplier will, upon written request, submit to City written evidence of any filings or payments of all taxes required to be paid by Supplier hereunder.

Section 10. INDEPENDENT CONTRACTOR.

Supplier enters into this Agreement as an independent contractor and not as an employee of City. Supplier shall have no power or authority by this Agreement to bind City in any respect. Nothing in this Agreement shall be construed to be inconsistent with this relationship or status. All employees, agents, contractors or subcontractors hired or retained by the Supplier are employees, agents, contractors or subcontractors of the Supplier and not of City. City shall not be obligated in any way to pay any wage claims or other claims made against Supplier by any such employees, agents, contractors or subcontractors or any other person resulting from performance of this Agreement.

Section 11. SUBCONTRACTS.

Unless otherwise specified, Supplier must obtain City's written permission before subcontracting any portion of the Goods. Except for the insurance requirements in Section 13.A, all subcontracts and orders for the purchase or rental of supplies, materials or equipment, or any other part of the Goods, will require that the subcontractor be bound by and subject to all of the terms and conditions of the Agreement. No subcontract or order will relieve Supplier from its obligations to City, including, but not limited to Supplier's insurance and indemnification obligations. No subcontract or order will bind City.

Section 12. TITLE AND RISK OF LOSS.

Unless otherwise agreed, City will have title to, and risk of loss of, all completed and partially completed portions of the Goods upon delivery, as well as materials delivered to and stored on City property which are intended to become a part of the Goods. However, Supplier will be liable for any loss or damage to the Goods and/or the materials caused by Supplier or its subcontractors, their agents or employees, and Supplier will replace or repair said Goods or materials at its own cost to the complete satisfaction of City. Notwithstanding the foregoing, in the event that the City has paid Supplier for all or a portion of the Goods which remains in the possession of Supplier, then City shall have title to, and the right to take possession of, such Goods at any time following payment therefor. Risk of loss for any Goods which remains in the possession of Supplier shall remain with Supplier until such Goods has been delivered or City has taken possession thereof. Supplier will have risk of loss or damage to Supplier's property used in the construction of the Goods but which does not become a part of the Goods.

Section 13. INDEMNIFICATION.

A. Supplier shall defend, indemnify and hold the City, its officials, officers, employees, volunteers and agents free and harmless from any and all claims, demands, causes of action, costs, expenses, liability, loss, damage or injury, in law or equity, to property or persons, including wrongful death, in any manner arising out of or incident to any alleged acts, omissions, negligence or willful misconduct of Supplier, its officials, officers, employees, agents, subcontractors and subconsultants arising out of or in connection with the Goods or the performance of this Agreement, including without limitation the payment of all consequential damages and attorneys' fees and other related costs and expenses except such loss or damage which was caused by the sole negligence or willful misconduct of the City.

B. Supplier's defense obligation for any and all such aforesaid suits, actions or other legal proceedings of every kind that may be brought or instituted against the City, its officials, officers, employees, agents, or volunteers shall be at Supplier's own cost, expense, and risk. Supplier shall pay and satisfy any judgment, award, or decree that may be rendered against City or its officials, officers, employees, agents, or volunteers, in any such suit, action, or other legal proceeding. Supplier shall reimburse City and its officials, officers, employees, agents, and/or volunteers, for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided.

C. Supplier's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by the City, its officials, officers, employees, agents or volunteers.

Section 14. INSURANCE.

A. General. Supplier shall take out and maintain:

1. Commercial General Liability Insurance, of at least $2,000,000 per occurrence/ $4,000,000 aggregate for bodily injury, personal injury and property damage, at least as broad as Insurance Services Office Commercial General Liability most recent Occurrence Form CG 00 01;

2. Automobile Liability Insurance for bodily injury and property damage including coverage for owned, non-owned and hired vehicles, of at least $2,000,000 per accident for bodily injury and property damage, at least as broad as most recent Insurance Services Office Form Number CA 00 01 covering automobile liability, Code 1 (any auto);

3. Workers' Compensation in compliance with applicable statutory requirements and Employer's Liability Coverage of at least $1,000,000 per occurrence; and

4. Pollution Liability Insurance of at least $2,000,000 per occurrence shall be provided by the Supplier if transporting hazardous materials.

5. If Supplier is also the manufacturer of any equipment included in the Goods, Supplier shall carry Product Liability and/or Errors and Omissions Insurance which covers said equipment with limits of not less than $1,000,000.

B. Additional Insured; Primary; Waiver of Subrogation; No Limitation on Coverage. The policies required under this Section shall give City, its officials, officers, employees, agents or volunteers additional insured status on commercial general liability and automobile liability insurance with the endorsements. Such policies shall contain a provision stating that Supplier's policy is primary insurance and that any insurance, deductible, or self-insurance maintained by the City or any additional insureds shall not be called upon to contribute to any loss, and shall contain or be endorsed with a waiver of subrogation in favor of the City, its officials, officers, employees, agents, and volunteers. The limits set forth herein shall apply separately to each insured against whom claims are made or suits are brought, except with respect to the limits of liability. Requirements of specific coverage or limits contained in this section are not intended as a limitation on coverage, limits, or other requirement, or a waiver of any coverage normally provided by any insurance. Any available coverage shall be provided to the parties required to be named as additional insured pursuant to this Agreement.

C. Cancellation. Each insurance policy required by this Agreement shall be endorsed to state that: (A) coverage shall not be suspended, voided, reduced or canceled except after thirty (30) days (10 days for nonpayment of premium) prior written notice by certified mail, return receipt requested, has been given to the City; and (B) any failure to comply with reporting or other provisions of the policies, including breaches of warranties, shall not affect coverage provided to the City, its directors, officials, officers, employees, agents, and volunteers. Any failure to comply

with reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to the City, its officials, officers, employees, agents and volunteers, or any other additional insureds

D. Insurance Carrier. All insurance required under this Section is to be placed with insurers with a current A.M. Best's rating no less than A-:VII, licensed to do business in California, and satisfactory to the City.

E. Evidence of Insurance. Supplier shall furnish City with original certificates of insurance and endorsements effecting coverage required by the Agreement. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf, and shall be on forms supplied or approved by the City. All certificates and endorsements must be received and approved by the City before delivery commences. The City reserves the right to require complete, certified copies of all required insurance policies, at any time.

F. Subcontractors. All subcontractors shall meet the requirements of this Section before commencing work. In addition, Supplier shall include all subcontractors as insureds under its policies or shall furnish separate certificates and endorsements for each subcontractor. All coverages for subcontractors shall be subject to all of the requirements stated herein.

G. Freight. Supplier shall ensure that third party shippers contracted by Supplier have adequate insurance coverage for the shipped Goods.

Section 15. LIENS.

A. Supplier, subcontractors and suppliers will not make, file or maintain a mechanic's or other lien or claim of any kind or character against the Goods, for or on account of any labor, materials, fixtures, tools, machinery, equipment, or any other things furnished, or any other work done or performance given under, arising out of, or in any manner connected with the Agreement (such liens or claims referred to as "Claims"); and Supplier, subcontractor and suppliers expressly waive and relinquish any and all rights which they now have, or may subsequently acquire, to file or maintain any Claim and Supplier, subcontractor and suppliers agree that this provision waiving the right of Claims will be an independent covenant.

B. Supplier will save and hold City harmless from and against any and all Claims that may be filed by a subcontractor, supplier or any other person or entity and Supplier will, at its own expense, defend any and all actions based upon such Claims and will pay all charges of attorneys and all costs and other expenses arising from such Claims.

Section 16. TERMINATION OF AGREEMENT BY CITY.

A. Should Supplier at any time refuse or fail to deliver the Goods with promptness and diligence, or to perform any of its other obligations under the Agreement, City may terminate Supplier's right to proceed with the delivery of the Goods by written notice to Supplier. In such event City may obtain the Goods by whatever method it may deem expedient, including the hiring of another contractor or other contractors and, for that purpose, may take possession of all

materials, machinery, equipment, tools and appliances and exercise all rights, options and privileges of Supplier. In such case Supplier will not be entitled to receive any further payments until the Goods is delivered. If City's cost of obtaining the Goods, including compensation for additional managerial and administrative services, will exceed the unpaid balance of the Agreement, Supplier will be liable for and will pay the difference to City.

B. City may, for its own convenience, terminate Supplier's right to proceed with the delivery of any portion or all of the Goods by written notice to Supplier. Such termination will be effective in the manner specified in such notice, will be without prejudice to any claims which City may have against Supplier, and will not affect the obligations and duties of Supplier under the Agreement with respect to portions of the Goods not terminated.

C. On receipt of notice under Section 16.B, Supplier will, with respect to the portion of the Goods terminated, unless the notice states otherwise,

1. Immediately discontinue such portion of the Goods and the placing of orders for materials, facilities, and supplies in connection with the Goods,

2. Unless otherwise directed by City, make every reasonable effort to procure cancellation of all existing orders or contracts upon terms satisfactory to City; and

3. Deliver only such portions of the Goods which City deems necessary to preserve and protect those portions of the Goods already in progress and to protect material, plant and equipment at the Goods site or in transit to the Goods site.

D. Upon termination pursuant to Section 16.B, Supplier will be paid a pro rata portion of the compensation in the Agreement for any portion of the terminated Goods already delivered, including material and services for which it has made firm contracts which are not canceled, it being understood that City will be entitled to such material and services. Upon determination of the amount of said pro rata compensation, City will promptly pay such amount to Supplier upon delivery by Supplier of the releases of liens and affidavit, pursuant to Section 7.C.

Section 17. FORCE MAJEURE

A. Supplier shall not be held responsible for failure or delay in shipping nor City for failure or delay in accepting goods described herein if such failure or delay is due to a Force Majeure Event.

B. A Force Majeure Event shall mean an event that materially affects a Party's performance and is one or more of the following: (1) Acts of God or other natural disasters occurring at the project site; (2) terrorism or other acts of a public enemy; (3) orders of governmental authorities (including, without limitation, unreasonable and unforeseeable delay in the issuance of permits or approvals by governmental authorities that are required for the work); (4) pandemics, epidemics or quarantine restrictions; and (5) strikes and other organized labor action occurring at the project site and the effects thereof on the work, only to the extent such strikes and other organized labor action are beyond the control of Supplier and its subcontractors, of every tier, and to the extent the effects thereof cannot be avoided by use of replacement

workers. For purposes of this section, "orders of governmental authorities," includes ordinances, emergency proclamations and orders, rules to protect the public health, welfare and safety, and other actions of the City in its capacity as a municipal authority.

C. In the event of any such excused interference with shipments, City shall have the option either to reduce the quantity provided for in the order accordingly or to exercise its right of cancellation as set forth in this Agreement.

Section 18. MISCELLANEOUS PROVISIONS.

A. Delivery of Notices. All notices permitted or required under this Agreement shall be given to the respective parties at the following address or at such other address as the respective parties may provide in writing for this purpose:

CITY:	SUPPLIER:
City of Ontario 303 East "B" Street Ontario, CA 91764 Attn: [Manuel Rebolledo, Superintendent	Fire Apparatus Solutions 1762 S. Sycamore Ave Rialto, CA 92375 Attn: William Kalmikov

Such notice shall be deemed made when personally delivered or when mailed, forty-eight (48) hours after deposit in the U.S. Mail, first class postage prepaid and addressed to the party at its applicable address. Actual notice shall be deemed adequate notice on the date actual notice occurred, regardless of the method of service.

B. Assignment or Transfer. Supplier shall not assign or transfer any interest in this Agreement whether by assignment or novation, without the prior written consent of the City, which will not be unreasonably withheld. Provided, however, that claims for money due or to become due Supplier from the City under this Agreement may be assigned to a financial institution or to a trustee in bankruptcy, without such approval. Notice of any assignment or transfer, whether voluntary or involuntary, shall be furnished promptly to the City.

C. Successors and Assigns. This Agreement shall be binding on the successors and assigns of the Parties.

D. Amendment; Modification. No supplement, modification, or amendment of this Agreement shall be binding unless executed in writing and signed by both Parties.

E. Waiver. No waiver of any default shall constitute a waiver of any other default or breach, whether of the same or other covenant or condition. No waiver, benefit, privilege, or service voluntarily given or performed by a Party shall give the other Party any contractual rights by custom, estoppel or otherwise.

F. Governing Law. This Agreement shall be governed by the laws of the State of California. Venue shall be in San Bernardino County.

G. Attorneys' Fees and Costs. If any action in law or equity, including an action for declaratory relief, is brought to enforce or interpret the provisions of this Agreement, each Party shall pay its own attorneys' fees.

H. Interpretation. Since the Parties or their agents have participated fully in the preparation of this Agreement, the language of this Agreement shall be construed simply, according to its fair meaning, and not strictly for or against any Party.

I. No Third Party Beneficiaries. There are no intended third party beneficiaries of any right or obligation assumed by the Parties.

J. Authority to Enter Agreement. Each Party warrants that the individuals who have signed this Agreement have the legal power, right and authority to make this Agreement and bind each respective Party.

K. Invalidity; Severability. If any portion of this Agreement is declared invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.

L. Counterparts. This Agreement may be signed in counterparts, each of which shall constitute an original.

M. City's Right to Employ Other Suppliers. City reserves its right to employ other contractors in connection with the Goods.

N. Entire Agreement. This Agreement constitutes the entire agreement between the Parties relative to the Goods specified herein. There are no understandings, agreements, conditions, representations, warranties or promises with respect to this Agreement, except those contained in or referred to in the writing.

SIGNATURES ON FOLLOWING PAGE

SIGNATURE PAGE TO GOODS AND EQUIPMENT PURCHASE AGREEMENT BETWEEN THE CITY OF ONTARIO AND FIRE APPARATUS SOLUTIONS

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement on the date first above written.

CITY OF ONTARIO

Approved By:

_____
Scott Ochoa
City Manager

Approved as to Form:

_____
Best Best & Krieger LLP
City Attorney

Attested By:

_____
Assistant City Clerk

FIRE APPARATUS SOLUTIONS

By: _____

Its: _____

Printed Name: _____

By: _____

Its: _____

Printed Name: _____

Exhibit A
Goods Specifications

Please see attached.

1762 S. Sycamore Ave., Rialto, CA 92376 • 14562 Manzanita Drive, Fontana, CA 92335
Rialto Office No.: (909) 879-7354 • Fontana Office No.: 800-328-1033 • Website: FASService.Org

February 14, 2025

City of Ontario Fire Department
425 East B Street
Ontario, CA 91764

Division Chief Scott Brown:

KME Fire Apparatus is pleased to provide you with this proposal for two (2) KME K180 Model 4119 Type 1 Pumper Apparatus. The price, terms and conditions for the proposed apparatus are as follows:

Option 1: 1 Unit:		Option 2: 2 Units
KME Custom Type 1 Pumper:	$886,751.00	$1,773.502.00
Shelving per specs below	$21,300.00	$42,600.00
Opticom	$4,000.00	$8,000.00
Hale Foam Refill System	$6,100.00	$12,200.00
Subtotal	$918,151.00	$1,836,302.00
California Sales Tax @ 8.75%:	$80,338.21	$160,676.43
Total Price for Single unit:	**$998,4898.21**	**$1,996,978.43**

This price is valid until close of business February 28, 2025
Terms: Net 30 days
Delivery: 300-330 days from ORDER
Liquidated Damages: Due to the supply chain disruptions, KME is not able to honor a penalty clause.

If you have any questions pertaining to this proposal, please contact me at 909-917-4339 or brandonfasfire@gmail.com.

We appreciate the opportunity to offer this proposal to the City of Ontario Fire Department.

Respectfully,
Brandon Gomez
Brandon Gomez

The Following items will be provided once delivered to FAS:

L-1: 3 full depth adjustable pull out shelves, 2 half depth adjustable shelves

L-2: 1 fixed vertical divider, 2 half depth adjustable shelves forward of the vertical divider

L-3: 1 full depth adjustable shelf, 1 half depth adjustable shelf

Rear: 1 full depth floor mounted pull out shelf, 1 full depth adjustable pull out shelf

R-1: 1 full depth adjustable shelf, 3 half depth adjustable shelves

R-2: 2 half depth adjustable shelves

R-3: 1 full depth floor mounted pull out shelf, 1 full depth adjustable pull out shelf, 2 half depth adjustable shelves

Both L-3 and R-3 will require partitions to keep it separated from the rear compartment as well.

½" Sign Gold stripe on cab paint break.

Exhibit B
Delivery Schedule

Delivery: 300-330 days from ORDER

Liquidated Damages**:** Dut to supply chain disruptions, KME in not able to honor a penalty clause.

Exhibit C
Fee Schedule

KME Fire Apparatus is pleased to provide you with this proposal for two (2) KME K180 Model 4119 Type 1 Pumper Apparatus. The price, terms and conditions for the proposed apparatus are as follows:

Option 1: 1 Unit:		Option 2: 2 Units
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Hale Foam Refill System	$6,100.00	$12,200.00
Subtotal	$918,151.00	$1,836,302.00
California Sales Tax @ 8.75%:	$80,338.21	$160,676.43
Total Price for Single unit:	**$998,4898.21**	**$1,996,978.43**

CITY OF ONTARIO *Agenda Report* **March 18, 2025**	**SECTION:** **CONSENT CALENDAR**
Department: Utilities Prepared By: Joline Neal Staff Member Presenting: Scott Burton, Utilities General Manager Reviewed By: Dennice Raygoza, Albert G Gastelum, Michael Sigsbee Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 12

SUBJECT: A MAINTENANCE SERVICES AGREEMENT WITH HYDROLOGICS, INC. FOR ON-CALL ZERO DISCHARGE FLUSHING SERVICES

RECOMMENDATION: That the City Council approve and authorize the City Manager, or designee, to execute a one-year Maintenance Services Agreement with Hydrologics, Inc., of Bosque Farms, New Mexico, for On-Call Zero Discharge Flushing Services in the amount of $600,000 from March 18, 2025 to March 17, 2026, with the option to extend the Agreement for up to four successive one-year periods for a total not-to-exceed amount of $3,000,000.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Operate in a Businesslike Manner
Invest in the City's Infrastructure (Water, Streets, Sewers, Parks, Storm Drains and Public Facilities)

FISCAL IMPACT: The Fiscal Year 2024-2025 Adopted Budget includes appropriations from the Water Capital Fund for these services. The recommended Agreement is for $600,000 for the initial term. At the City's discretion, up to four additional one-year extensions may be executed. Should the City exercise all four successive one-year extensions, the projected amount for the five years (March 18, 2025 to March 17, 2030) would be a total not-to-exceed of $3,000,000.

The City and Contractor have agreed to fixed billing rates and the contractor will be compensated for on-call, as needed services at the billing rates set forth in the proposed Agreement. Prices for the first year are fixed, and after the first year, any proposed increases in fees will be negotiated annually and will not exceed 5% per year. The total compensation paid under the proposed Agreement will be commensurate with the City Council approved plans and budgets. There is no impact to the General Fund.

BACKGROUND & ANALYSIS: The City owns and operates a potable water distribution system with over 700 miles of pipeline, which is continually expanding with the development of the Ontario Ranch. The system is primarily maintained by City Staff. The proposed Agreement will assist Staff in

performing flushing maintenance on an as-needed basis, using a specialized approach. This additional resource will enable the City to perform state-required system flushing and maintain high-quality drinking water while conserving water resources.

Hydrologics, Inc.'s patented Zero Discharge Flushing (ZDF) is a proprietary technology used to flush pipelines in water distribution systems without the water waste typical of traditional flushing and maintenance methods. The ZDF technology is the only approved zero discharge technology by the State Water Board's Division of Drinking Water for best management practices in maintaining water quality. Hydrologics, Inc.'s ZDF technology has been utilized in the water industry for over 12 years by various water agencies.

Staff recommends Hydrologics, Inc.'s ZDF technology because it minimizes customer impacts, conserves drinking water supplies, reduces water pipe replacement costs, and supports the City's water line maintenance and water conservation goals.

CITY OF ONTARIO
303 EAST B STREET | ONTARIO, CALIFORNIA 91764
(909) 395-2000 FAX (909) 395-2070 OntarioCA.gov

PAUL S. LEON
MAYOR

ALAN D. WAPNER
MAYOR PRO TEM

JIM W. BOWMAN
DEBRA PORADA
DAISY MACIAS
COUNCIL MEMBERS

SHEILA MAUTZ
CITY CLERK

JAMES R. MILHISER
CITY TREASURER

SCOTT OCHOA
CITY MANAGER

CITY OF ONTARIO
MAINTENANCE SERVICES AGREEMENT

1. PARTIES AND DATE.

This Agreement is made and entered as of _____, by and between the City of Ontario, a municipal corporation organized under the laws of the State of California with its principal place of business at 303 East "B" Street, Ontario, California 91764-4196, County of San Bernardino, State of California ("City") and Hydrologics, Inc., a Corporation (Massachusetts), with its principal place of business at 1860 Bosque Farms Blvd, Bosque Farms, New Mexico 87068. City and Consultant are sometimes individually referred to herein as "Party" and collectively as "Parties."

2. RECITALS.

2.1 Contractor.

Contractor desires to perform and assume responsibility for the provision of certain maintenance services required by the City on the terms and conditions set forth in this Agreement. Contractor represents that it is experienced in providing zero discharge flushing services to public clients, that it and its employees or subcontractors have all necessary licenses and permits to perform the Services in the State of California, and that is familiar with the plans of City.

2.2 Project.

City desires to engage Contractor to render such services for the On-Call Zero Discharge Flushing Services ("Project") as set forth in this Agreement.

3. TERMS.

3.1 Scope of Services and Term.

3.1.1 General Scope of Services. Contractor promises and agrees to furnish to the City all labor, materials, tools, equipment, services, and incidental and customary work necessary to fully and adequately supply the maintenance services necessary for the Project ("Services"). The Services are more particularly described in Exhibit "A" attached hereto and incorporated herein by reference. All Services shall be subject to, and performed in accordance with, this Agreement, the exhibits attached hereto and incorporated herein by reference, and all applicable local, state and federal laws, rules and regulations.

3.1.2 Term. The term of this Agreement shall be from March 18, 2025 to March 17, 2026, unless earlier terminated as provided herein. The City shall have the unilateral option, at its sole discretion, to renew this Agreement automatically for no more than four additional one-year terms. Contractor shall complete the Services within the term of this Agreement, and shall meet any other established schedules and deadlines. The Parties may, by mutual, written consent, extend the term of this Agreement if necessary to complete the Services.

3.2 Compensation.

3.2.1 Compensation. Contractor shall receive compensation, including authorized reimbursements, for all Services rendered under this Agreement at the rates set forth in Exhibit "C" attached hereto and incorporated herein by reference. The total compensation shall not exceed **Six hundred thousand dollars ($600,000.00**) without written approval of the City Manager. Extra Work may be authorized, as described below, and if authorized, will be compensated at the rates and manner set forth in this Agreement.

3.2.2 Payment of Compensation. Contractor shall submit to City a monthly itemized statement which indicates work completed and hours of Services rendered by Contractor. The statement shall describe the amount of Services and supplies provided since the initial commencement date, or since the start of the subsequent billing periods, as appropriate, through the date of the statement. City shall, within 45 days of receiving such statement, review the statement and pay all approved charges thereon.

3.2.3 Deductions. City may deduct or withhold, as applicable, from each progress payment an amount necessary to protect City from loss because of: (1) stop payment notices as allowed by state law; (2) unsatisfactory prosecution of the Services by Contractor; (3) sums representing expenses, losses, or damages as determined by the City, incurred by the City for which Contractor is liable under the Agreement; and (4) any other sums which the City is entitled to recover from Contractor under the terms of the Agreement or pursuant to state law, including Section 1727 of the California Labor Code. The failure by the City to deduct any of these sums from a progress payment shall not constitute a waiver of the City's right to such sums.

3.2.4 Reimbursement for Expenses. Contractor shall not be reimbursed for any expenses unless authorized in writing by City.

3.2.5 Extra Work. At any time during the term of this Agreement, City may request that Contractor perform Extra Work. As used herein, "Extra Work" means any work which is determined by City to be necessary for the proper completion of the Project, but which the parties did not reasonably anticipate would be necessary at the execution of this Agreement.

Contractor shall not perform, nor be compensated for, Extra Work without written authorization from City's Representative.

3.2.6 Automated Clearing House ("ACH") payments. It is the City's policy to pay its consultant invoices via electronic fund transfers through the ACH network. All payments due and owing pursuant to a properly issued and correct invoice or under this Agreement shall be made through electronic ACH transfers, unless otherwise agreed upon by both Parties in writing. Contractor shall provide the City with ACH payment details whereby the City shall initiate the ACH transfers to Contractor in the amount required pursuant to a properly issued and correct invoice or under this Agreement. Each Party shall undertake any and all required actions and execute any required documents, instruments, or agreements required to effectuate the requirements of this Section. In the event the City erroneously deposits funds into an account, or otherwise deposits funds to which Contractor is not entitled: (1) Contractor shall immediately notify the City and the financial institution; (2) Contractor shall not withdraw any of the funds which were erroneously deposited or to which Contractor is not entitled; and (3) Contractor authorizes both the City and financial institution to take all actions necessary to correct the error and return to the City all funds erroneously deposited or to which Contractor is not entitled.

3.3 Responsibilities of Contractor.

3.3.1 Control and Payment of Subordinates; Independent Contractor. The Services shall be performed by Contractor or under its supervision. Contractor will determine the means, methods and details of performing the Services subject to the requirements of this Agreement. City retains Contractor on an independent contractor basis and not as an employee. Contractor retains the right to perform similar or different services for others during the term of this Agreement. Any additional personnel performing the Services under this Agreement on behalf of Contractor shall also not be employees of City and shall at all times be under Contractor's exclusive direction and control. Contractor shall pay all wages, salaries, and other amounts due such personnel in connection with their performance of Services under this Agreement and as required by law. Contractor shall be responsible for all reports and obligations respecting such additional personnel, including, but not limited to: social security taxes, income tax withholding, unemployment insurance, disability insurance, and workers' compensation insurance.

3.3.2 Schedule of Services. Contractor shall perform the Services expeditiously, within the term of this Agreement, and in accordance with the Schedule of Services set forth in Exhibit "B" attached hereto and incorporated herein by reference. Contractor represents that it has the professional and technical personnel required to perform the Services in conformance with such conditions. In order to facilitate Contractor's conformance with the Schedule, City shall respond to Contractor's submittals in a timely manner. Upon request of City, Contractor shall provide a more detailed schedule of anticipated performance to meet the Schedule of Services.

3.3.3 Conformance to Applicable Requirements. All work prepared by Contractor shall be subject to the approval of City.

3.3.4 City's Representative. The City hereby designates Joline Neal, Water Quality Programs Manager, or her designee, to act as its representative for the performance of this Agreement ("City's Representative"). City's Representative shall have the power to act on behalf of the City for all purposes under this Agreement except for increasing compensation. Contractor shall not accept direction or orders from any person other than the City's Representative or his or her designee.

3.3.5 Contractor's Representative. Contractor hereby designates Matthew Powers, Director of Operations, or his or her designee, to act as its representative for the performance of this Agreement ("Contractor's Representative"). Contractor's Representative shall have full authority to represent and act on behalf of the Contractor for all purposes under this Agreement. The Contractor's Representative shall supervise and direct the Services, using his best skill and attention, and shall be responsible for all means, methods, techniques, sequences and procedures and for the satisfactory coordination of all portions of the Services under this Agreement.

3.3.6 Coordination of Services. Contractor agrees to work closely with City staff in the performance of Services and shall be available to City's staff, consultants and other staff at all reasonable times.

3.3.7 Standard of Care; Performance of Employees. Contractor shall perform all Services under this Agreement in a skillful and competent manner, consistent with the standards generally recognized as being employed by professionals in the same discipline in the State of California. Contractor represents and maintains that it is skilled in the professional calling necessary to perform the Services. Contractor warrants that all employees and subcontractors shall have sufficient skill and experience to perform the Services assigned to them. Finally, Contractor represents that it, its employees and subcontractors have all licenses, permits, qualifications and approvals of whatever nature that are legally required to perform the Services, including a City Business License, and that such licenses and approvals shall be maintained throughout the term of this Agreement. As provided for in the indemnification provisions of this Agreement, Contractor shall perform, at its own cost and expense and without reimbursement from the City, any services necessary to correct errors or omissions which are caused by the Contractor's failure to comply with the standard of care provided for herein. Any employee of the Contractor or its sub-contractors who is determined by the City to be uncooperative, incompetent, a threat to the adequate or timely completion of the Project, a threat to the safety of persons or property, or any employee who fails or refuses to perform the Services in a manner acceptable to the City, shall be promptly removed from the Project by the Contractor and shall not be re-employed to perform any of the Services or to work on the Project.

3.3.8 Period of Performance.

3.3.8.1 Contractor shall perform and complete all Services under this Agreement within the term set forth in Section 3.1.2 above ("Performance Time"). Contractor shall perform the Services in strict accordance with any completion schedule or Project milestones described in Exhibits "A" or "B" attached hereto, or which may be provided separately in writing to the Contractor. Contractor agrees that if the Services are not completed within the aforementioned Performance Time and/or pursuant to any such completion schedule or Project milestones developed pursuant to provisions of this Agreement, it is understood, acknowledged and agreed that the City will suffer damage.

3.3.8.2 Neither City nor Contractor shall be considered in default of this Agreement for delays in performance caused by circumstances beyond the reasonable control of the non-performing Party. For purposes of this Agreement, such circumstances include a Force Majeure Event. A Force Majeure Event shall mean an event that materially affects a Party's performance and is one or more of the following: (1) Acts of God or other natural disasters; (2) terrorism or other acts of a public enemy; (3) orders of governmental authorities (including, without limitation, unreasonable and unforeseeable delay in the issuance of permits or approvals by governmental authorities that are required for the Services); (4) strikes and other organized labor

action occurring at the site and the effects thereof on the Services, only to the extent such strikes and other organized labor action are beyond the control of Contractor and its subconsultants, and to the extent the effects thereof cannot be avoided by use of replacement workers; and (5) pandemics, epidemics or quarantine restrictions. For purposes of this section, "orders of governmental authorities," includes ordinances, emergency proclamations and orders, rules to protect the public health, welfare and safety, and other actions of a public agency applicable to the Services and Agreement.

3.3.8.3 Should a Force Majeure Event occur, the non-performing Party shall, within a reasonable time of being prevented from performing, give written notice to the other Party describing the circumstances preventing continued performance and the efforts being made to resume performance of this Agreement. Force Majeure Events and/or delays, regardless of the Party responsible for the delay, shall not entitle Contractor to any additional compensation. Notwithstanding the foregoing in this section, the City may still terminate this Agreement in accordance with the termination provisions of this Agreement.

3.3.9 Disputes. Should any dispute arise respecting the true value of any work done, of any work omitted, or of any extra work which Contractor may be required to do, or respecting the size of any payment to Contractor during the performance of this Contract, Contractor shall continue to perform the Work while said dispute is decided by the City. If Contractor disputes the City's decision, Contractor shall have such remedies as may be provided by law.

3.3.10 Laws and Regulations; Employee/Labor Certifications.

3.3.10.1 Compliance with Laws. Contractor shall keep itself fully informed of and in compliance with all local, state and federal laws, rules and regulations in any manner affecting the performance of the Project or the Services, including all Cal/OSHA requirements, and shall give all notices required by law. Contractor shall be liable for all violations of such laws and regulations in connection with Services. If the Contractor performs any work knowing it to be contrary to such laws, rules and regulations and without giving written notice to the City, Contractor shall be solely responsible for all costs arising therefrom. City is a public entity of the State of California subject to certain provisions of the Health & Safety Code, Government Code, Public Contract Code, and Labor Code of the State. It is stipulated and agreed that all provisions of the law applicable to the public contracts of a municipality are a part of this Agreement to the same extent as though set forth herein and will be complied with. These include but are not limited to the payment of prevailing wages, the stipulation that eight (8) hours' labor shall constitute a legal day's work and that no worker shall be permitted to work in excess of eight (8) hours during any one calendar day except as permitted by law. Contractor shall defend, indemnify and hold City, its officials, directors, officers, employees and agents free and harmless, pursuant to the indemnification provisions of this Agreement, from any claim or liability arising out of any failure or alleged failure to comply with such laws, rules or regulations.

3.3.10.2 Employment Eligibility; Contractor. By executing this Agreement, Contractor verifies that it fully complies with all requirements and restrictions of state and federal law respecting the employment of undocumented aliens, including, but not limited to, the Immigration Reform and Control Act of 1986, as may be amended from time to time. Such requirements and restrictions include, but are not limited to, examination and retention of documentation confirming the identity and immigration status of each employee of the Contractor. Contractor also verifies that it has not committed a violation of any such law within the five (5) years immediately preceding the date of execution of this Agreement, and shall not violate any

such law at any time during the term of the Agreement. Contractor shall avoid any violation of any such law during the term of this Agreement by participating in an electronic verification of work authorization program operated by the United States Department of Homeland Security, by participating in an equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, or by some other legally acceptable method. Contractor shall maintain records of each such verification, and shall make them available to the City or its representatives for inspection and copy at any time during normal business hours. The City shall not be responsible for any costs or expenses related to Contractor's compliance with the requirements provided for in Section 3.3.10 or any of its sub-sections.

3.3.10.3 Employment Eligibility; Subcontractors, Sub-subcontractors and Consultants. To the same extent and under the same conditions as Contractor, Contractor shall require all of its subcontractors, sub-subcontractors and consultants performing any work relating to the Project or this Agreement to make the same verifications and comply with all requirements and restrictions provided for in Section 3.3.10.1.

3.3.10.4 Employment Eligibility; Failure to Comply. Each person executing this Agreement on behalf of Contractor verifies that they are a duly authorized officer of Contractor, and understands that any of the following shall be grounds for the City to terminate the Agreement for cause: (1) failure of Contractor or its subcontractors, sub-subcontractors or consultants to meet any of the requirements provided for in Sections 3.3.10.1 or 3.3.10.2; (2) any misrepresentation or material omission concerning compliance with such requirements (including in those verifications provided to the Contractor under Section 3.3.10.2); or (3) failure to immediately remove from the Project any person found not to be in compliance with such requirements.

3.3.10.5 Equal Opportunity Employment. Contractor represents that it is an equal opportunity employer and it shall not discriminate against any subcontractor, employee or applicant for employment because of race, religion, color, national origin, handicap, ancestry, sex or age. Such non-discrimination shall include, but not be limited to, all activities related to initial employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff or termination. Contractor shall also comply with all relevant provisions of City's Minority Business Enterprise program, Affirmative Action Plan or other related programs or guidelines currently in effect or hereinafter enacted.

3.3.10.6 Air Quality. Contractor must fully comply with all applicable laws, rules and regulations in furnishing or using equipment and/or providing services, including, but not limited to, emissions limits and permitting requirements imposed by the California Air Resources Board (CARB). Contractor shall specifically be aware of the CARB limits and requirements' application to "portable equipment", which definition is considered by CARB to include any item of equipment with a fuel-powered engine. Contractor shall indemnify City against any fines or penalties imposed by CARB or any other governmental or regulatory agency for violations of applicable laws, rules and/or regulations by Contractor, its subcontractors, or others for whom Contractor is responsible under its indemnity obligations provided for in this Agreement.

3.3.10.7 Water Quality.

(A) To the extent applicable, Contractor's Services must account for, and fully comply with, all local, state and federal laws, rules and regulations that may impact water quality compliance, including, without limitation, all applicable provisions of the

Federal Water Pollution Control Act (33 U.S.C. §§ 1300); the California Porter-Cologne Water Quality Control Act (Cal Water Code §§ 13000-14950); laws, rules and regulations of the Environmental Protection Agency, the State Water Resources Control Board and the Colorado River Regional Water Quality Control Board; the City's ordinances regulating discharges of storm water; and any and all regulations, policies, or permits issued pursuant to any such authority regulating the discharge of pollutants, as that term is used in the Porter-Cologne Water Quality Control Act, to any ground or surface water in the State.

(B) Liability for Non-Compliance. Failure to comply with the laws, regulations and policies described in this Section is a violation of law that may subject Contractor or City to penalties, fines, or additional regulatory requirements. Contractor shall defend, indemnify and hold the City, its directors, officials, officers, employees, volunteers and agents free and harmless, pursuant to the indemnification provisions of this Agreement, from and against any and all fines, penalties, claims or other regulatory requirements imposed as a result of Contractor's non-compliance with the laws, regulations and policies described in this Section, unless such non-compliance is the result of the sole established negligence, willful misconduct or active negligence of the City, its officials, officers, agents, employees or authorized volunteers.

(C) Training. In addition to any other standard of care requirements set forth in this Agreement, Contractor warrants that all employees and subcontractors shall have sufficient skill and experience to perform the Services assigned to them without impacting water quality in violation of the laws, regulations and policies described in this Section. Contractor further warrants that it, its employees and subcontractors will receive adequate training, as determined by City, regarding the requirements of the laws, regulations and policies described in this Section as they may relate to the Services provided under this Agreement. Upon request, City will provide Contractor with a list of training programs that meet the requirements of this paragraph.

3.3.11 Insurance.

3.3.11.1 Time for Compliance. Contractor shall not commence Services under this Agreement until it has provided evidence satisfactory to the City that it has secured all insurance required under this Section. In addition, Contractor shall not allow any subcontractor to commence work on any subcontract until it has provided evidence satisfactory to the City that the subcontractor has secured all insurance required under this Section.

3.3.11.2 Minimum Requirements. Contractor shall, at its expense, procure and maintain for the duration of the Agreement insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Agreement by the Contractor, its agents, representatives, employees or subcontractors. Contractor shall also require all of its subcontractors to procure and maintain the same insurance for the duration of the Agreement. Such insurance shall meet at least the following minimum levels of coverage:

(A) Minimum Scope of Insurance. Coverage shall be at least as broad as the latest version of the following: (1) *General Liability*: Insurance Services Office Commercial General Liability coverage (occurrence form CG 0001); (2) *Automobile Liability*: Insurance Services Office Business Auto Coverage form number CA 0001, code 1 (any auto); and (3) *Workers' Compensation and Employer's Liability*: Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance. The policy shall not contain any exclusion contrary to the Agreement, including but not limited to endorsements or provisions

limiting coverage for (1) contractual liability (including but not limited to ISO CG 24 26 or 21 29); or (2) cross liability for claims or suits by one insured against another.

(B) Minimum Limits of Insurance. Contractor shall maintain limits no less than: (1) *General Liability:* $2,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with general aggregate limit is used including, but not limited to, form CG 2503, either the general aggregate limit shall apply separately to this Agreement/location or the general aggregate limit shall be twice the required occurrence limit; (2) *Automobile Liability:* $2,000,000 per accident for bodily injury and property damage; and (3) *Workers' Compensation and Employer's Liability:* Workers' Compensation limits as required by the Labor Code of the State of California. Employer's Liability limits of $1,000,000 per accident for bodily injury or disease. Defense costs shall be paid in addition to the limits.

(C) Notices; Cancellation or Reduction of Coverage. At least fifteen (15) days prior to the expiration of any such policy, evidence showing that such insurance coverage has been renewed or extended shall be filed with the City. If such coverage is cancelled or materially reduced, Contractor shall, within ten (10) days after receipt of written notice of such cancellation or reduction of coverage, file with the City evidence of insurance showing that the required insurance has been reinstated or has been provided through another insurance company or companies. In the event any policy of insurance required under this Agreement does not comply with these specifications or is canceled and not replaced, the City has the right but not the duty to obtain the insurance it deems necessary and any premium paid by the City will be promptly reimbursed by Contractor or the City may withhold amounts sufficient to pay premium from Contractor payments. In the alternative, the City may suspend or terminate this Agreement.

(D) Additional Insured. The City, its directors, officials, officers, employees, agents, and volunteers shall be named as additional insureds on Contractor's and its subcontractors' policies of commercial general liability and automobile liability insurance using the endorsements and forms specified herein or exact equivalents.

3.3.11.3 Insurance Endorsements. The insurance policies shall contain the following provisions, or Contractor shall provide endorsements on forms supplied or approved by the City to add the following provisions to the insurance policies:

(A) General Liability. The general liability policy shall include or be endorsed (amended) to state that: (1) using ISO CG forms 20 10 and 20 37, or endorsements providing the exact same coverage, the City of Ontario, its directors, officials, officers, employees, agents, and volunteers shall be covered as additional insured with respect to the Services or ongoing and complete operations performed by or on behalf of the Contractor, including materials, parts or equipment furnished in connection with such work; and (2) using ISO form 20 01, or endorsements providing the exact same coverage, the insurance coverage shall be primary insurance as respects the City, its directors, officials, officers, employees, agents, and volunteers, or if excess, shall stand in an unbroken chain of coverage excess of the Contractor's scheduled underlying coverage. Any excess insurance shall contain a provision that such coverage shall also apply on a primary and noncontributory basis for the benefit of the City, before the City's own primary insurance, deductible, or self-insurance shall be called upon to protect it as a named insured. Any insurance, deductible, or self-insurance maintained by the City, its directors, officials, officers, employees, agents, and volunteers shall be excess of the Contractor's insurance and shall not be called upon to contribute with it in any way. Notwithstanding the minimum limits set forth in Section 3.3.11.2(B), any available insurance proceeds in excess of the specified

minimum limits of coverage shall be available to the parties required to be named as additional insureds pursuant to this Section 3.3.11.3(A).

(B) Automobile Liability. The automobile liability policy shall include or be endorsed (amended) to state that: (1) the City, its directors, officials, officers, employees, agents, and volunteers shall be covered as additional insureds with respect to the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by the Contractor or for which the Contractor is responsible; and (2) the insurance coverage shall be primary insurance as respects the City, its directors, officials, officers, employees, agents, and volunteers, or if excess, shall stand in an unbroken chain of coverage excess of the Contractor's scheduled underlying coverage. Any insurance, deductible, or self-insurance maintained by the City, its directors, officials, officers, employees, agents, and volunteers shall be excess of the Contractor's insurance and shall not be called upon to contribute with it in any way. Policy shall contain or be endorsed to contain such provisions. Notwithstanding the minimum limits set forth in Section 3.3.11.2(B), any available insurance proceeds in excess of the specified minimum limits of coverage shall be available to the parties required to be named as additional insureds pursuant to this Section 3.3.11.3(B).

(C) Workers' Compensation and Employer's Liability Coverage. The insurer shall agree to waive all rights of subrogation against the City, its directors, officials, officers, employees, agents, and volunteers for losses paid under the terms of the insurance policy which arise from work performed by the Contractor.

(D) All Coverages. Each insurance policy required by this Agreement shall be endorsed to state that: (A) coverage shall not be suspended, voided, reduced or canceled except after thirty (30) days (10 days for nonpayment of premium) prior written notice by certified mail, return receipt requested, has been given to the City; and (B) any failure to comply with reporting or other provisions of the policies, including breaches of warranties, shall not affect coverage provided to the City, its directors, officials, officers, employees, agents, and volunteers. Any failure to comply with reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to the City, its officials, officers, employees, agents and volunteers, or any other additional insureds.

3.3.11.4 Separation of Insureds; No Special Limitations; Waiver of Subrogation. All insurance required by this Section shall contain standard separation of insureds provisions. In addition, such insurance shall not contain any special limitations on the scope of protection afforded to the City, its directors, officials, officers, employees, agents, and volunteers. Requirement of specific coverage or minimum limits contained in this Section are not intended as a limitation on coverage, limits, or other requirement, or a waiver of any coverage normally provided by any insurance. All policies shall waive any right of subrogation of the insurer against the City, its officials, officers, employees, agents, and volunteers, or any other additional insureds, or shall specifically allow Contractor or others providing insurance evidence in compliance with these specifications to waive their right of recovery prior to a loss. Contractor hereby waives its own right of recovery against City, its officials, officers, employees, agents, and volunteers, or any other additional insureds, and shall require similar written express waivers and insurance clauses from each of its subcontractors.

3.3.11.5 Deductibles and Self-Insurance Retentions. Any deductibles or self-insured retentions must be declared to and approved by the City. Contractor shall guarantee that, at the option of the City, either: (1) the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the City, its directors, officials, officers, employees, agents,

and volunteers; or (2) the Contractor shall procure a bond guaranteeing payment of losses and related investigation costs, claims and administrative and defense expenses.

3.3.11.6 Subcontractor Insurance Requirements. Contractor shall not allow any subcontractors to commence work on any subcontract relating to the work under the Agreement until they have provided evidence satisfactory to the City that they have secured all insurance required under this Section. If requested by Contractor, the City may approve different scopes or minimum limits of insurance for particular subcontractors. The Contractor and the City shall be named as additional insureds on all subcontractors' policies of Commercial General Liability using ISO form 20 38, or coverage at least as broad.

3.3.11.7 Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best's rating no less than A:VIII, licensed to do business in California, and satisfactory to the City.

3.3.11.8 Verification of Coverage. Contractor shall furnish City with original certificates of insurance and endorsements effecting coverage required by this Agreement on forms satisfactory to the City. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf, and shall be on forms provided by the City if requested. All certificates and endorsements must be received and approved by the City before work commences. The City reserves the right to require complete, certified copies of all required insurance policies, at any time.

3.3.11.9 Reporting of Claims. Contractor shall report to the City, in addition to Contractor's insurer, any and all insurance claims submitted by Contractor in connection with the Services under this Agreement.

3.3.12 Safety. Contractor shall execute and maintain its work so as to avoid injury or damage to any person or property. In carrying out its Services, the Contractor shall at all times be in compliance with all applicable local, state and federal laws, rules and regulations, and shall exercise all necessary precautions for the safety of employees appropriate to the nature of the work and the conditions under which the work is to be performed. Safety precautions as applicable shall include, but shall not be limited to: (A) adequate life protection and lifesaving equipment and procedures; (B) instructions in accident prevention for all employees and subcontractors, such as safe walkways, scaffolds, fall protection ladders, bridges, gang planks, confined space procedures, trenching and shoring, equipment and other safety devices, equipment and wearing apparel as are necessary or lawfully required to prevent accidents or injuries; and (C) adequate facilities for the proper inspection and maintenance of all safety measures.

3.3.13 Bonds.

3.3.13.1 Performance Bond. If required by law or otherwise specifically requested by City in Exhibit "C" attached hereto and incorporated herein by reference, Contractor shall execute and provide to City concurrently with this Agreement a Performance Bond in the amount of the total, not-to-exceed compensation indicated in this Agreement, and in a form provided or approved by the City. If such bond is required, no payment will be made to Contractor until it has been received and approved by the City.

3.3.13.2 Payment Bond. If required by law or otherwise specifically requested by City in Exhibit "C" attached hereto and incorporated herein by reference, Contractor

shall execute and provide to City concurrently with this Agreement a Payment Bond in the amount of the total, not-to-exceed compensation indicated in this Agreement, and in a form provided or approved by the City. If such bond is required, no payment will be made to Contractor until it has been received and approved by the City.

3.3.13.3 Bond Provisions. Should, in City's sole opinion, any bond become insufficient or any surety be found to be unsatisfactory, Contractor shall renew or replace the affected bond within 10 days of receiving notice from City. In the event the surety or Contractor intends to reduce or cancel any required bond, at least thirty (30) days prior written notice shall be given to the City, and Contractor shall post acceptable replacement bonds at least ten (10) days prior to expiration of the original bonds. No further payments shall be deemed due or will be made under this Agreement until any replacement bonds required by this Section are accepted by the City. To the extent, if any, that the total compensation is increased in accordance with the Agreement, the Contractor shall, upon request of the City, cause the amount of the bonds to be increased accordingly and shall promptly deliver satisfactory evidence of such increase to the City. To the extent available, the bonds shall further provide that no change or alteration of the Agreement (including, without limitation, an increase in the total compensation, as referred to above), extensions of time, or modifications of the time, terms, or conditions of payment to the Contractor, will release the surety. If the Contractor fails to furnish any required bond, the City may terminate this Agreement for cause.

3.3.13.4 Surety Qualifications. Only bonds executed by an admitted surety insurer, as defined in Code of Civil Procedure Section 995.120, shall be accepted. The surety must be a California-admitted surety with a current A.M. Best's rating no less than A:VIII and satisfactory to the City. If a California-admitted surety insurer issuing bonds does not meet these requirements, the insurer will be considered qualified if it is in conformance with Section 995.660 of the California Code of Civil Procedure, and proof of such is provided to the City.

3.3.14 Work Site.

3.3.14.1 Inspection Of Site. Contractor shall visit sites where Services are to be performed and shall become acquainted with all conditions affecting the Services prior to commencing the Services. Contractor shall make such examinations as it deems necessary to determine the condition of the work sites, its accessibility to materials, workmen and equipment, and to determine Contractor's ability to protect existing surface and subsurface improvements. No claim for allowances–time or money–will be allowed as to such matters after commencement of the Services.

3.3.14.2 Field Measurements. Contractor shall make field measurements, verify field conditions and shall carefully compare such field measurements and conditions and other information known to Contractor with the Contract Documents, including any plans, specifications, or scope of work before commencing Services. Errors, inconsistencies or omissions discovered shall be reported to the City immediately and prior to performing any Services or altering the condition.

3.3.15 Loss and Damage. Contractor shall be responsible for all loss and damage which may arise out of the nature of the Services agreed to herein, or from the action of the elements, or from any unforeseen difficulties which may arise or be encountered in the prosecution of the Services until the same is fully completed and accepted by City.

3.3.16 Warranty. Contractor warrants all Services under the Contract (which for purposes of this Section shall be deemed to include unauthorized work which has not been removed and any non-conforming materials incorporated into the work) to be of good quality and free from any defective or faulty material and workmanship. Contractor agrees that for a period of one year (or the period of time specified elsewhere in the Contract or in any guarantee or warranty provided by any manufacturer or supplier of equipment or materials incorporated into the work, whichever is later) after the date of final acceptance, Contractor shall within ten (10) days after being notified in writing by the City of any defect in the Services or non-conformance of the Services to the Contract, commence and prosecute with due diligence all Services necessary to fulfill the terms of the warranty at its sole cost and expense. Contractor shall act sooner as requested by the City in response to an emergency. In addition, Contractor shall, at its sole cost and expense, repair and replace any portions of the work (or work of other contractors) damaged by its defective Services or which becomes damaged in the course of repairing or replacing defective work. For any work so corrected, Contractor's obligation hereunder to correct defective work shall be reinstated for an additional one year period, commencing with the date of acceptance of such corrected work. Contractor shall perform such tests as the City may require to verify that any corrective actions, including, without limitation, redesign, repairs, and replacements comply with the requirements of the Contract. All costs associated with such corrective actions and testing, including the removal, replacement, and reinstitution of equipment and materials necessary to gain access, shall be the sole responsibility of the Contractor. All warranties and guarantees of subcontractors, suppliers and manufacturers with respect to any portion of the work, whether express or implied, are deemed to be obtained by Contractor for the benefit of the City, regardless of whether or not such warranties and guarantees have been transferred or assigned to the City by separate agreement and Contractor agrees to enforce such warranties and guarantees, if necessary, on behalf of the City. In the event that Contractor fails to perform its obligations under this Section, or under any other warranty or guaranty under this Contract, to the reasonable satisfaction of the City, the City shall have the right to correct and replace any defective or non-conforming work and any work damaged by such work or the replacement or correction thereof at Contractor's sole expense. Contractor shall be obligated to fully reimburse the City for any expenses incurred hereunder upon demand.

3.4 Labor Code Requirements.

3.4.1 Prevailing Wages. Contractor is aware of the requirements of California Labor Code Section 1720, et seq., and 1770, et seq., as well as California Code of Regulations, Title 8, Section 16000, et seq., ("Prevailing Wage Laws"), which require the payment of prevailing wage rates and the performance of other requirements on "public works" and "maintenance" projects. Since the Services are being performed as part of an applicable "public works" or "maintenance" project, as defined by the Prevailing Wage Laws, and since the total compensation is $1,000 or more, Contractor agrees to fully comply with such Prevailing Wage Laws. City shall provide Contractor with a copy of the prevailing rates of per diem wages in effect at the commencement of this Agreement. Contractor shall make copies of the prevailing rates of per diem wages for each craft, classification or type of worker needed to execute the Services available to interested parties upon request, and shall post copies at the Contractor's principal place of business and at the project site. Contractor shall defend, indemnify and hold the City, its elected officials, officers, employees and agents free and harmless from any claim or liability arising out of any failure or alleged failure to comply with the Prevailing Wage Laws. It shall be mandatory upon the Contractor and all subcontractors to comply with all California Labor Code provisions, which include but are not limited to prevailing wages (Labor Code Sections 1771, 1774 and 1775), employment of apprentices (Labor Code Section 1777.5), certified payroll records (Labor Code Sections 1771.4 and 1776), hours of labor (Labor Code Sections 1813 and 1815)

and debarment of contractors and subcontractors (Labor Code Section 1777.1). The requirement to submit certified payroll records directly to the Labor Commissioner under Labor Code section 1771.4 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Section 1771.4.

3.4.2 Registration/DIR Compliance. Since the Services are being performed as part of an applicable "public works" or "maintenance" project, and if the total compensation is $15,000 or more, then pursuant to Labor Code Sections 1725.5 and 1771.1, the Contractor and all subcontractors performing such Services must be registered with the Department of Industrial Relations. Contractor shall maintain registration for the duration of the Project and require the same of any subcontractors, as applicable.

3.4.3 Registration/DIR Compliance. This Project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. It shall be Contractor's sole responsibility to comply with all applicable registration and labor compliance requirements. Any stop orders issued by the Department of Industrial Relations against Contractor or any subcontractor that affect Contractor's performance of Services, including any delay, shall be Contractor's sole responsibility. Any delay arising out of or resulting from such stop orders shall be considered Contractor caused delay and shall not be compensable by the City. Contractor shall defend, indemnify and hold the City, its officials, officers, employees and agents free and harmless from any claim or liability arising out of stop orders issued by the Department of Industrial Relations against Contractor or any subcontractor.

3.4.4 Labor Certification. By its signature hereunder, Consultant certifies that it is aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for Worker's Compensation or to undertake self-insurance in accordance with the provisions of that Code, and agrees to comply with such provisions before commencing the performance of the Services.

3.5 Termination of Agreement.

3.5.1 Grounds for Termination. City may, by written notice to Contractor, terminate the whole or any part of this Agreement at any time and without cause by giving written notice to Contractor of such termination, and specifying the effective date thereof, at least seven (7) days before the effective date of such termination. Upon termination, Contractor shall be compensated only for those services which have been adequately rendered to City, and Contractor shall be entitled to no further compensation. Contractor may not terminate this Agreement except for cause. The rights and remedies of the City provided in this section shall not be exclusive and are in addition to any other rights and remedies provided by law, equity or under this Agreement.

3.5.2 Effect of Termination. If this Agreement is terminated as provided herein, City may require Contractor to provide all finished or unfinished Documents and Data and other information of any kind prepared by Contractor in connection with the performance of Services under this Agreement. Contractor shall be required to provide such document and other information within fifteen (15) days of the request.

3.5.3 Additional Services. In the event this Agreement is terminated in whole or in part as provided herein, City may procure, upon such terms and in such manner as it may determine appropriate, services similar to those terminated.

3.6 Indemnification.

3.6.1 Scope of Indemnity. To the fullest extent permitted by law, Contractor shall defend, indemnify and hold the City, its officials, employees, agents and volunteers free and harmless from any and all claims, demands, causes of action, suits, actions, proceedings, costs, expenses, liability, judgments, awards, decrees, settlements, loss, damage or injury of any kind, in law or equity, regardless of whether the allegations are false, fraudulent, or groundless, to property or persons, including wrongful death, (collectively, "Claims") in any manner arising out of, pertaining to, or incident to any acts, errors or omissions, or willful misconduct of Contractor, its officials, officers, employees, subcontractors, consultants or agents in connection with the performance of the Contractor's Services, the Project or this Agreement, including without limitation the payment of all expert witness fees, attorneys' fees and other related costs and expenses. Notwithstanding the foregoing, to the extent required by Civil Code section 2782, Contractor's indemnity obligation shall not apply to such loss or damage which is caused by the sole or active negligence or willful misconduct of the City.

3.6.2 Additional Indemnity Obligations. Contractor shall defend, with counsel of City's choosing and at Contractor's own cost, expense and risk, any and all Claims covered by this section that may be brought or instituted against City or its officials, employees, agents and volunteers. In addition, Contractor shall pay and satisfy any judgment, award or decree that may be rendered against City or its officials, employees, agents and volunteers as part of any such claim, suit, action or other proceeding. Contractor shall also reimburse City for the cost of any settlement paid by City or its officials, employees, agents and volunteers as part of any such claim, suit, action or other proceeding. Such reimbursement shall include payment for City's attorney's fees and costs, including expert witness fees. Contractor shall reimburse City and its officials, employees, agents and volunteers, for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided. Contractor's obligation to indemnify shall survive expiration or termination of this Agreement, and shall not be restricted to insurance proceeds, if any, received by the City, its officials, employees, agents and volunteers.

3.7 General Provisions.

3.7.1 Accounting Records. Contractor shall maintain complete and accurate records with respect to all costs and expenses incurred under this Agreement. All such records shall be clearly identifiable. Contractor shall allow a representative of City during normal business hours to examine, audit, and make transcripts or copies of such records and any other documents created pursuant to this Agreement. Contractor shall allow inspection of all work, data, documents, proceedings, and activities related to the Agreement for a period of three (3) years from the date of final payment under this Agreement.

3.7.2 Independent Contractors and Subcontracting.

3.7.2.1 Use of Contractors. Contractor is aware of statutory and case law regarding classification of workers as independent contractors, including California Labor Code Section 2750.3 and Dynamex Operations West, Inc. v. Superior Court, 4 Cal. 5th 903 (2018). To ensure that Contractor is in compliance with the California Labor Code, Contractor shall only utilize its employees to provide the Services. Contractor may not provide the services through any independent contractor, subcontractor or subconsultant ("Subcontractor(s)") unless approved by the City as set forth in Section 3.7.2.2 below. Contractor represents and warrants that all personnel who perform the Services on Contractor's behalf are Contractor's employees,

and that Contractor complies with all applicable laws, rules and regulations governing its employees, including, but not limited to, the California Labor Code, Unemployment Insurance Code and all applicable Industrial Welfare Commission Wage Orders.

3.7.2.2 Prior Approval Required. Contractor shall not use any Subcontractor to provide the Services, or any portion of the work required by this Agreement, without prior written approval of City. In the event that City authorizes Contractor to use a Subcontractor, Contractor shall enter into a written agreement with the Subcontractor, which must include all provisions of the Agreement, including a restriction on the Subcontractor's use of further independent contractors, subcontractors or subconsultants without the City's prior written consent.

3.7.3 Delivery of Notices. All notices permitted or required under this Agreement shall be given to the respective parties at the following address, or at such other address as the respective parties may provide in writing for this purpose:

Contractor:

Hydrologics, Inc.
1860 Bosque Farms Blvd
Bosque Farms, NM 87068
Attn: Matthew Powers, Director of Operations

City:

City of Ontario
303 East "B" Street
Ontario, CA 91764
Attn: Joline Neal, Water Quality Programs Manager

Such notice shall be deemed made when personally delivered or when mailed, forty-eight (48) hours after deposit in the U.S. Mail, first class postage prepaid and addressed to the party at its applicable address. Actual notice shall be deemed adequate notice on the date actual notice occurred, regardless of the method of service.

3.7.4 Governing Law; Government Code Claim Compliance. This Agreement shall be governed by the laws of the State of California. Venue shall be in San Bernardino County. In addition to any and all contract requirements pertaining to notices of and requests for compensation or payment for extra work, disputed work, claims and/or changed conditions, Contractor must comply with the claim procedures set forth in Government Code sections 900 et seq. prior to filing any lawsuit against the City. Such Government Code claims and any subsequent lawsuit based upon the Government Code claims shall be limited to those matters that remain unresolved after all procedures pertaining to extra work, disputed work, claims, and/or changed conditions have been followed by Contractor. If no such Government Code claim is submitted, or if any prerequisite contractual requirements are not otherwise satisfied as specified herein, Contractor shall be barred from bringing and maintaining a valid lawsuit against the City.

3.7.5 Attorneys' Fees. If either Party commences an action against the other party, either legal, administrative or otherwise, arising out of or in connection with this Agreement, the prevailing party in such litigation shall be entitled to have and recover from the losing party reasonable attorneys' fees and all other costs of such action.

3.7.6 Time of Essence. Time is of the essence for each and every provision of this Agreement.

3.7.7 City's Right to Employ Other Contractors. City reserves right to employ other contractors in connection with this Project.

3.7.8 Successors and Assigns. This Agreement shall be binding on the successors and assigns of the parties.

3.7.9 Assignment or Transfer. Contractor shall not assign, hypothecate or transfer, either directly or by operation of law, this Agreement or any interest herein without the prior written consent of the City. Any attempt to do so shall be null and void, and any assignees, hypothecates or transferees shall acquire no right or interest by reason of such attempted assignment, hypothecation or transfer.

3.7.10 Construction; References; Captions. Since the Parties or their agents have participated fully in the preparation of this Agreement, the language of this Agreement shall be construed simply, according to its fair meaning, and not strictly for or against any Party. Any term referencing time, days or period for performance shall be deemed calendar days and not work days. All references to Contractor include all personnel, employees, agents, and subcontractors of Contractor, except as otherwise specified in this Agreement. All references to City include its elected officials, officers, employees, agents, and volunteers except as otherwise specified in this Agreement. The captions of the various articles and paragraphs are for convenience and ease of reference only, and do not define, limit, augment, or describe the scope, content or intent of this Agreement.

3.7.11 Amendment; Modification. No supplement, modification or amendment of this Agreement shall be binding unless executed in writing and signed by both Parties.

3.7.12 Waiver. No waiver of any default shall constitute a waiver of any other default or breach, whether of the same or other covenant or condition. No waiver, benefit, privilege, or service voluntarily given or performed by a Party shall give the other Party any contractual rights by custom, estoppel or otherwise.

3.7.13 No Third Party Beneficiaries. Except to the extent expressly provided for in Section 3.5.7, there are no intended third party beneficiaries of any right or obligation assumed by the Parties.

3.7.14 Invalidity; Severability. If any portion of this Agreement is declared invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.

3.7.15 Prohibited Interests. Contractor maintains and warrants that it has not employed nor retained any company or person, other than a bona fide employee working solely for Contractor, to solicit or secure this Agreement. Further, Contractor warrants that it has not paid nor has it agreed to pay any company or person, other than a bona fide employee working solely for Contractor, any fee, commission, percentage, brokerage fee, gift or other consideration contingent upon or resulting from the award or making of this Agreement. Contractor further agrees to file, or shall cause its employees or subcontractors to file, a Statement of Economic Interest with the City's Filing Officer as required under state law in the performance of the Services. For breach or violation of this warranty, City shall have the right to rescind this

Agreement without liability. For the term of this Agreement, no member, officer or employee of City, during the term of his or her service with City, shall have any direct interest in this Agreement, or obtain any present or anticipated material benefit arising therefrom.

3.7.16 Cooperation; Further Acts. The Parties shall fully cooperate with one another, and shall take any additional acts or sign any additional documents as may be necessary, appropriate or convenient to attain the purposes of this Agreement.

3.7.17 Authority to Enter Agreement. Contractor has all requisite power and authority to conduct its business and to execute, deliver, and perform the Agreement. Each Party warrants that the individuals who have signed this Agreement have the legal power, right, and authority to make this Agreement and bind each respective Party.

3.7.18 Counterparts. This Agreement may be signed in counterparts, each of which shall constitute an original.

3.7.19 Entire Agreement. This Agreement contains the entire Agreement of the parties with respect to the subject matter hereof, and supersedes all prior negotiations, understandings or agreements. This Agreement may only be modified by a writing signed by both parties.

SIGNATURES NEXT PAGE

SIGNATURE PAGE FOR MAINTENANCE SERVICES AGREEMENT BETWEEN THE CITY OF ONTARIO AND HYDROLOGICS, INC.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the date first written above.

CITY OF ONTARIO

Approved By:

_____
Scott Ochoa
City Manager

Approved as to Form:

_____
Best Best & Krieger LLP
City Attorney

Attested By:

_____
City Clerk

Hydrologics, Inc.

By: _____

Its: Owner/CEO

Printed Name: Andrew Casson

2000003889
DIR Registration Number

EXHIBIT "A"

SCOPE OF SERVICES

Hydrologics, Inc. shall provide labor, materials, tools, equipment, vehicles, and transportation necessary to complete the On-call Zero Discharge Flushing (ZDF) Services ("Services").

The Scope of Work includes the provision of flushing services on an "as needed and when requested" basis, including both scheduled and emergency response work performed at the sole discretion of the Ontario Municipal Utilities Company ("OMUC").

The Services shall include, but are not limited to:

- Perform pre-cleaning/flushing and disinfection of ZDF vehicles, equipment, and water pipelines.
- Install new filter bags/cartridges on the vehicle unit.
- Perform water quality monitoring and measurements.
- Complete and submit a "Daily Flushing Report" to OMUC for each day of pipeline cleaned.

Roles and Responsibilities

Hydrologics, Inc.

- Provide ZDF unit, equipment, and operators.
- The ZDF scouring system's components shall be National Science Foundation (NSF) 61 compliant. This includes, but is not limited to stainless steel filter vessels, hoses, pumps, chlorine, and piping material.
- Perform chlorination by ANSI/AWWA C653-03 on flushing vehicles and equipment used for water pipeline flushing prior to the start of each service request.
- Collect and measure water quality samples on the ZDF unit before, during, and after flushing services.
- Perform water quality measurements before the start of and during flushing services. Water quality measurements shall be of turbidity and chlorine using real-time inline analyzers.
- Adhere to ANSI/AWWA Standard C651-14 when disinfecting distribution water mains.

- Complete and submit a *Weekly Flushing Report* that contains a weekly summary and a day-by-day detail to OMUC Water Quality Programs at the end of each week services are performed.

Ontario Municipal Utilities Company (OMUC)

- Provide system information before the start of requested services.
- OMUC staff shall turn city-owned valves within the potable water distribution system for Hydrologics, Inc. to complete flushing services.
- Collect and measure water quality samples in the potable water distribution system before the start of requested services.
- Perform water quality sample collection and measurements in the distribution system during and after flushing services.
- Notify the Division of Drinking Water (DDW) when services are expected to begin.
- Perform progress reports to DDW for each flushing activity.
- Hydrologics, Inc. shall work under the direction of OMUC staff before and during the flushing services.
- OMUC shall schedule in advance with Hydrologics, Inc.'s availability to request services.
- OMUC shall make payment to invoices with Net 30-day terms.

EXHIBIT "B"

SCHEDULE OF SERVICES

As required by the City of Ontario

EXHIBIT "C"

COMPENSATION

Services	Cost
Daily Rate (all-inclusive services*), typically covers 1-1.5 miles of distribution per working day **Includes Standard Zero Discharge Flushing (ZDF) process includes 1 Truck/Trailer Unit operated by 2 Hydrologics Employees along with all necessary equipment to perform the flushing operation in a normal potable water distribution system, CA prevailing Wage, 36 filters.*	$7,900.00
Weekly Rate* 5 days per week, 8 hours per day	$39,500.00
Burn Down Rate *Includes disinfection of all Hydrologics Equipment prior to use in customer's system and verified by Bac-T Test.*	$4,000.00
Mobilization Fee	$4,000.00
Additional filters (>36 filters)	$30.00 EA

CITY OF ONTARIO *Agenda Report* **March 18, 2025**	**SECTION:** **CONSENT CALENDAR**
Department: Utilities Prepared By: Jonathan Yang Staff Member Presenting: Scott Burton, Utilities General Manager Reviewed By: Dennice Raygoza, Albert G Gastelum, Michael Sigsbee Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 13

SUBJECT: A DESIGN SERVICES AGREEMENT WITH TRIAD CONSULTING AND SYSTEM DESIGN GROUP LLC FOR SITE SECURITY IMPROVEMENTS

RECOMMENDATION: That the City Council approve and authorize the City Manager, or designee, to execute a Design Services Agreement with Triad Consulting & Systems Design Group LLC, of Corona, California for design and bid support services for Site Security Improvements for a total amount of $935,904, plus a 15% contingency of $140,386, for a total not-to-exceed amount of $1,076,290, and a term from March 18, 2025 to September 18, 2028.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Operate in a Businesslike Manner
Invest in the Growth and Evolution of the City's Economy
Invest in the City's Infrastructure (Water, Streets, Sewers, Parks, Storm Drains and Public Facilities)

FISCAL IMPACT: The Fiscal Year 2024-25 Adopted Budget includes appropriations from the Water Capital Fund for this project. This project is one of several projects identified in the recent Water Revenue Bond issuance approved by the City Council on July 16, 2024. Expenditures will be based on a negotiated billing rate sheet, and proposals will be requested per specific tasks between Triad Consulting & Systems Design Group LLC and the City. There is no impact to the General Fund.

BACKGROUND & ANALYSIS: The City's water distribution system includes over 50 facilities, including reservoirs, wells, pump stations, and pressure reducing stations that provide and distribute the City's potable water supply. In May 2020, a Risk & Resilience Assessment Report (RRA) was completed to develop a complete characterization of system assets, threats and risks. The RRA process resulted in various recommendations to improve resilience and safety to the City's water infrastructure. The top threats to the City's drinking water identified in the RRA included security vulnerabilities at local wells, imported water sources, fire hydrants, and water distribution facility sites.

Staff worked closely with the City's partnering agencies, including the Ontario Police Department

and Information Technology, to gather input and recommendations for security upgrades to infrastructure and sites. As a result, Staff developed a Preliminary Site Security comprehensive scope of work for solicitation of Site Security Improvements design.

The Preliminary Site Security Assessment (Assessment) was completed in September 2022, for 32 existing City water facilities. The intent of the assessment was to determine the necessary upgrades required at each facility to prevent and decrease vagrancy, theft, and property damage. Based on the results, it was recommended that 24 out of the 32 locations undergo security improvements. The improvements include installation of wrought iron fencing, electric sliding gates, fiber optic communication conduit for future integration with the City's Real Time Information Center (RTIC), perimeter and site lighting, intrusion alarms, and security cameras and monitoring equipment.

On September 5, 2024, Staff solicited a Request for Proposals (RFP) on PlanetBids for engineering design services based on the Assessment. In response, on October 9, 2024, the City received several proposals. Staff is recommending award and approval of the Design Services Agreement to Triad Consulting & System Design Group LLC, based upon their experience, qualifications, familiarity with similar type projects, and performance in site security assessments.

CITY OF ONTARIO
303 EAST B STREET | ONTARIO, CALIFORNIA 91764
(909) 395-2000 FAX (909) 395-2070 OntarioCA.gov

PAUL S. LEON
MAYOR

ALAN D. WAPNER
MAYOR PRO TEM

JIM W. BOWMAN
DEBRA PORADA
DAISY MACIAS
COUNCIL MEMBERS

SHEILA MAUTZ
CITY CLERK

JAMES R. MILHISER
CITY TREASURER

SCOTT OCHOA
CITY MANAGER

CITY OF ONTARIO
DESIGN SERVICES AGREEMENT

11. PARTIES AND DATE.

This Agreement is made and entered into as of _____, by and between the City of Ontario, a municipal corporation organized and operating under the laws of the State of California with its principal place of business at 303 East "B" Street, Ontario, California 91764-4196, County of San Bernardino, State of California ("City"), and **Triad Consulting & System Design Group**, a **Limited Liability Company** with its principal place of business at **2925 Mira Vita Way, Corona, CA 92881** (hereinafter referred to as "Consultant"). City and Consultant are sometimes individually referred to herein as "Party" and collectively as "Parties."

12. RECITALS.

12.1 City. City is a municipal corporation organized under the laws of the State of California, with power to contract for services necessary to achieve its purpose.

12.2 Consultant**.** Consultant desires to perform and assume responsibility for the provision of certain professional **engineering** design services required by the City on the terms and conditions set forth in this Agreement. Consultant warrants that it is fully licensed, qualified, and willing to perform the services required by this Agreement; provided, however, that if Consultant is a corporation or other organization, the Project Consultant designated pursuant to

Section 3.2, and not the Consultant itself, shall be fully licensed to practice as an **engineer** in the State of California.

12.3 Project**.** City desires to engage Consultant to render such services for the **UT 1073 Site Security Improvements** ("Project") as set forth in this Agreement.

13. TERMS

13.1 Employment of Consultant.

13.1.1 Scope of Services. Consultant promises and agrees to furnish to City all labor, materials, tools, equipment, services, and incidental and customary work necessary to fully and adequately supply the professional **engineering** and related services necessary for the full and adequate completion of the Project consistent with the provisions of this Agreement (hereinafter referred to as "Services"). The Services are more particularly described throughout this Agreement, including Exhibit "A" attached hereto and incorporated herein by reference. All Services shall be subject to, and performed in accordance with, this Agreement, any exhibits attached hereto and incorporated herein by reference, and all applicable local, state and federal laws, rules and regulations. All Services performed by Consultant shall be subject to the sole and discretionary approval of the City, which approval shall not be unreasonably withheld.

13.1.2 Term. The term of this Agreement shall be from **March 18, 2025** to **September 18, 2028**, unless earlier terminated as provided herein. Consultant shall complete the Services within the term of this Agreement, and shall meet any other established schedules and deadlines.

13.2 Project Consultant; Key Personnel.

13.2.1 **Engineer of Record**. Consultant shall name a specific individual to act as Project Consultant, subject to the approval of City. Consultant hereby designates **Joe Rogowicz** (License No. **E11795**) to act as the **Engineer of Record** for the Project. The **Engineer of Record** shall: (1) maintain oversight of the Services; (2) have full authority to represent and act on behalf of the Consultant for all purposes under this Agreement; (3) supervise and direct the Services using his or her best skill and attention; (4) be responsible for the means, methods, techniques, sequences and procedures used for the Services; (5) adequately coordinate all portions of the Services; and (6) act as principal contact with City and all contractors, consultants, engineers and inspectors on the Project. Any change in the **Engineer of Record** shall be subject to the City's prior written approval, which approval shall not be unreasonably withheld. The new **Engineer of Record** shall be of at least equal competence as the prior **Engineer of Record**. In the event that City and Consultant cannot agree as to the substitution of a new **Engineer of Record**, City shall be entitled to terminate this Agreement for cause.

13.2.2 Key Personnel. In addition to the **Engineer of Record**, Consultant has represented to the City that certain additional key personnel, engineers and consultants will perform the Services under this Agreement. Should one or more of such personnel, engineers or consultants become unavailable, Consultant may substitute others of at least equal competence upon written approval of the City. In the event that City and Consultant cannot agree as to the substitution of key personnel, engineers or consultants, City shall be entitled to terminate this Agreement for cause.

13.3 Hiring of Consultants and Personnel.

13.3.1 Right to Hire or Employ. Consultant shall have the option, unless City objects in writing after notice, to employ at its expense architects, engineers, experts or other consultants qualified and licensed to render services in connection with the planning and/or administration of the Project, and to delegate to them such duties as Consultant may delegate without relieving Consultant from administrative or other responsibility under this Agreement. Consultant shall be responsible for the coordination and cooperation of Consultant's architects, engineers, experts or other consultants. All consultants, including changes in consultants, shall be subject to approval by City in its sole and reasonable discretion. Consultant shall notify City of the identity of all consultants at least fourteen (14) days prior to their commencement of work to allow City to review their qualifications and approve to their participation on the Project in its sole and reasonable discretion.

13.3.2 Qualification and License. All architects, engineers, experts and other consultants retained by Consultant in performance of this Agreement shall be qualified to perform the Services assigned to them, and shall be licensed to practice in their respective professions, where required by law.

13.3.3 Standards and Insurance. All architects, engineers, experts and other consultants hired by Consultant shall be required to meet all of the same standards and insurance requirements set forth in this Agreement, unless other standards or requirements are approved by the City in writing. Unless changes are approved in writing by the City, Consultant's agreements with its consultants shall contain a provision making them subject to all provisions stipulated in this Agreement.

13.3.4 Assignments or Staff Changes. Consultant shall promptly obtain written City approval of any assignment, reassignment or replacement of such architects, engineers, experts and consultants, or of other staff changes of key personnel working on the Project. As provided in the Agreement, any changes in Consultant's consultants and key personnel shall be subject to approval by City.

13.3.5 Draftsman and Clerical Support. Draftsmen and clerical personnel shall be retained by Consultant at Consultant's sole expense.

13.4 Standard of Care.

13.4.1 Standard of Care. Consultant shall perform all Services under this Agreement in a skillful and competent manner, consistent with the standards generally recognized as being employed by professionals qualified to perform the Services in the same discipline in the State of California, and shall be responsible to City for damages sustained by the City and delays to the Project as specified in the indemnification provision of this Agreement. Without limiting the foregoing, Consultant shall be fully responsible to the City for any increased costs incurred by the City as a result of any such delays in the design or construction of the Project. Consultant represents and maintains that it is skilled in the professional calling necessary to perform the Services. Consultant warrants and represents that all of its employees, architects, engineers, experts and other consultants shall have sufficient skill and experience to perform the Services assigned to them. Finally, Consultant represents that it, its employees, architects, engineers, experts and other consultants have all licenses, permits, qualifications and approvals of whatever nature that are legally required to perform the Services assigned to or rendered by them and that such licenses and approvals shall be maintained throughout the term of this Agreement. As

provided for in the indemnification provisions of this Agreement, Consultant shall perform, at its own cost and expense and without reimbursement from the City, any services necessary to correct errors or omissions which are caused by the Consultant's failure to comply with the standard of care provided for herein.

13.4.2 Performance of Employees. Any employee or consultant who is determined by the City to be uncooperative, incompetent, a threat to the adequate or timely completion of the Project, a threat to the safety of persons or property, or any employee or consultant who fails or refuses to perform the Services in a manner acceptable to the City, shall be promptly removed from the Project by the Consultant and shall not be re-employed to perform any of the Services or to work on the Project.

13.5 Laws and Regulations.

13.5.1 Knowledge and Compliance. Consultant shall keep itself fully informed of and in compliance with all applicable local, state and federal laws, rules and regulations in any manner affecting the performance of the Services or the Project, and shall give all notices required of the Consultant by law. Consultant shall be liable, pursuant to the standard of care and indemnification provisions of this Agreement, for all violations of such laws and regulations in connection with its Services. Consultant shall defend, indemnify and hold City, its officials, officers, employees and agents free and harmless, pursuant to the indemnification provisions of this Agreement, from any claim or liability arising out of any failure or alleged failure to comply with such laws, rules or regulations.

13.5.2 Drawings and Specifications. Consultant shall cause all drawings and specifications to conform to any applicable requirements of federal, state and local laws, rules and regulations, including the Uniform Building Code, in effect as of the time the drawings and specifications are prepared or revised during the latest phase of the Services described in Exhibit "A" attached hereto. Any significant revisions made necessary by changes in such laws, rules and regulations after this time may be compensated as Additional Services which were not known or reasonably should not have been known by Consultant. Consultant shall cause the necessary copies of such drawings and specifications to be filed with any governmental bodies with approval jurisdiction over the Project, in accordance with the Services described in Exhibit "A" attached hereto. For the preparation of all such drawings and specifications, the Consultant shall use Computer Aided Design Drafting ("CADD") (e.g., AutoCAD) or other technology acceptable to the Consultant and City.

13.5.3 Americans with Disabilities Act. Consultant will use its best professional efforts to interpret all applicable federal, state and local laws, rules and regulations with respect to access, including those of the Americans with Disabilities Act ("ADA"). Consultant shall inform City of the existence of inconsistencies of which it is aware or reasonably should be aware between federal and state accessibility laws, rules and regulations, as well as any other issues which are subject to conflicting interpretations of the law, and shall provide the City with its interpretation of such inconsistencies and conflicting interpretations. Unless Consultant brings such inconsistencies and conflicting interpretations to the attention of the City and requests City's direction on how to proceed, the Consultant's interpretation of such inconsistencies and conflicting interpretations shall be the sole responsibility and liability of Consultant, and the Consultant shall correct all plans, specifications and other documents prepared for the Project at no additional cost if its interpretations are shown to be incorrect. In the event that the Consultant request's City's direction on how to proceed with respect to any inconsistent and/or conflicting interpretation, the

Consultant shall be responsible to the City only pursuant to the indemnification provisions of this Agreement.

13.5.4 Permits, Approvals and Authorizations. Consultant shall provide City with a list of all permits, approvals or other authorizations required for the Project from all federal, state or local governmental bodies with approval jurisdiction over the Project. Consultant shall then assist the City in obtaining all such permits, approvals and other authorizations. The costs of such permits, approvals and other authorizations shall be paid by the City.

13.5.5 Water Quality Management and Compliance. Consultant shall keep itself and all subcontractors, staff, and employees fully informed of and in compliance with all local, state and federal laws, rules and regulations that may impact, or be implicated by the performance of the Services including, without limitation, all applicable provisions of the City's ordinances regulating water quality and storm water; the Federal Water Pollution Control Act (33 U.S.C. § 1251 *et seq*.); the California Porter-Cologne Water Quality Control Act (Cal Water Code §§ 13000-14950); and any and all regulations, policies, or permits issued pursuant to any such authority. Consultant shall additionally comply with the lawful requirements of the City, and any other municipality, drainage district, or other local agency with jurisdiction over the location where the Services are to be conducted, regulating water quality and storm water discharges. Failure to comply with laws, regulations, and ordinances listed in this Section is a violation of federal and state law.

13.6 Independent Contractor.

13.6.1 Control and Payment of Subordinates. City retains Consultant on an independent contractor basis and Consultant is not an employee of City. Consultant is not an employee for state tax, federal tax or any other purpose, and is not entitled to the rights or benefits afforded to City's employees. Any additional personnel performing the Services under this Agreement on behalf of Consultant shall also not be employees of City, and shall at all times be under Consultant's exclusive direction and control. Consultant shall pay all wages, salaries, and other amounts due such personnel in connection with their performance of Services under this Agreement and as required by law. Consultant shall be responsible for all reports and obligations respecting such additional personnel, including, but not limited to: social security taxes, income tax withholding, unemployment insurance, disability insurance, and workers' compensation insurance.

13.7 Schedule of Services.

13.7.1 Consultant Services. Consultant shall fully and adequately complete the Services described in this Agreement and in Exhibit "A" attached hereto and incorporated herein by reference.

13.7.2 Timely Performance Standard. Consultant shall perform all Services hereunder as expeditiously as is consistent with professional skill and care, as well as the orderly progress of the Project work so as not to be the cause, in whole or in part, of delays in the completion of the Project or in the achievement of any Project milestones, as provided herein. Specifically, Consultant shall perform its Services so as to allow for the full and adequate completion of the Project within the time required by the City and within any completion schedules adopted for the Project. Consultant agrees to coordinate with City's staff, contractors and consultants in the performance of the Services, and shall be available to City's staff, contractors and consultants at all reasonable times.

13.7.3 Performance Schedule. Consultant shall prepare an estimated time schedule for the performance of Consultant's Services, to be adjusted as the Project proceeds. Such schedule shall be subject to the City's review and approval, which approval shall not be unreasonably withheld, and shall include allowances for periods of time required for City's review and approval of submissions, and for approvals of authorities having jurisdiction over Project approval and funding. If City and Consultant cannot mutually agree on a performance schedule, City shall have the authority to immediately terminate this Agreement. The schedule shall not be exceeded by Consultant without the prior written approval of City. If the Consultant's Services are not completed within the time provided by the agreed upon performance schedule, or any milestones established therein, it is understood, acknowledged and agreed that the City will suffer damage for which the Consultant will be responsible.

13.7.4 Excusable Delays. Any delays in Consultant's work caused by the following may be added to the time for completion of any obligations of Consultant: (1) the actions of City or its employees; (2) the actions of those in direct contractual relationship with City; (3) the actions of any governmental agency having jurisdiction over the Project; (4) the actions of any parties not within the reasonable control of the Consultant; and (5) any Force Majeure Event (as defined herein) or other unforeseen occurrence not due to any fault or negligence on the part of Consultant. Neither the City nor the Consultant shall be liable for damages, liquidated or otherwise, to the other on account of such delays.

13.7.5 Force Majeure Events. Neither City nor Consultant shall be considered in default of this Agreement for delays in performance caused by circumstances beyond the reasonable control of the non-performing Party. For purposes of this Agreement, such circumstances include a Force Majeure Event. A Force Majeure Event shall mean an event that materially affects a Party's performance and is one or more of the following: (1) Acts of God or other natural disasters; (2) terrorism or other acts of a public enemy; (3) orders of governmental authorities (including, without limitation, unreasonable and unforeseeable delay in the issuance of permits or approvals by governmental authorities that are required for the services); (4) strikes and other organized labor action occurring at the site and the effects thereof on the services, only to the extent such strikes and other organized labor action are beyond the control of Consultant and its subcontractors, and to the extent the effects thereof cannot be avoided by use of replacement workers; and (5) pandemics, epidemics or quarantine restrictions. For purposes of this section, "orders of governmental authorities," includes ordinances, emergency proclamations and orders, rules to protect the public health, welfare and safety, and other actions of a public agency applicable to the Services and Agreement. Should a Force Majeure Event occur, the non-performing Party shall, within fifteen (15) calendar days of the beginning of an Force Majeure Event, give written notice to the other Party describing the circumstances preventing continued performance and the efforts being made to resume performance of this Agreement. Force Majeure Events shall not entitle Consultant to any additional compensation. Notwithstanding the foregoing in this section, the City may still terminate this Agreement in accordance with the termination provisions of this Agreement.

13.7.6 Request for Excusable Delay Credit. The Consultant shall, within fifteen (15) calendar days of the beginning of any excusable delay, notify the City in writing of the causes of delay (unless City grants in writing a further period of time to file such notice prior to the date of final payment under the Agreement). City will then ascertain the facts and the extent of the delay, and grant an extension of time for completing the Services when, in its sole judgment, the findings of fact justify such an extension. The City's findings of fact thereon shall be final and conclusive on the Parties. Extensions of time shall apply only to that portion of the Services affected by the delay and shall not apply to other portions of the Services not so affected. The

sole remedy of Consultant for extensions of time shall be an extension of the performance time at no cost to the City. If Additional Services are required as a result of an excusable delay, the Parties shall mutually agree thereto pursuant to the Additional Services provision of this Agreement. Should Consultant make an application for an extension of time, Consultant shall submit evidence that the insurance policies required by this Agreement remain in effect during the requested additional period of time.

13.8 Additional Services.

13.8.1 Request for Services. At City's request, Consultant may be asked to perform services not otherwise included in this Agreement, not included within the basic services listed in Exhibit "A" attached hereto, and/or not customarily furnished in accordance with generally accepted architectural practice.

13.8.2 Definition. As used herein, "Additional Services" mean: (1) any work which is determined by City to be necessary for the proper completion of the Project, but which the Parties did not reasonably anticipate would be necessary for the Consultant to perform at the execution of this Agreement; or (2) any work listed as Additional Services in Exhibit "A" attached hereto. Consultant shall not perform, nor be compensated for, Additional Services without prior written authorization from City and without an agreement between the City and Consultant as to the compensation to be paid for such services. City shall pay Consultant for any approved Additional Services, pursuant to the compensation provisions herein, so long as such services are not made necessary through the fault of Consultant pursuant to the indemnification provision of this Agreement.

13.8.3 Examples of Additional Services. Such Additional Services shall not include any redesign or revisions to drawings, specifications or other documents when such revisions are necessary in order to bring such documents into compliance with applicable laws, rules, regulations or codes of which Consultant was aware or should have been aware pursuant to the laws and regulations provision of this Agreement above. Such Additional Services may include, but shall not be limited to:

(a) Separately Bid Portions of Project. Plan preparation and/or administration of work on portions of the Project separately bid.

(b) Furniture and Interior Design. Assistance to City, if requested, for the selection of moveable furniture, equipment or articles which are not included in the Construction Documents.

(c) Fault of Contractor. Services caused by delinquency, default or insolvency of contractor, or by major defects in the work of the contractor, provided that any such services made necessary by the failure of Consultant to detect and report such matters when it reasonably should have done so shall not be compensated.

(d) Inconsistent Approvals or Instructions. Revisions in drawings, specifications or other documents when such revisions are inconsistent with written approvals or instructions previously given and are due to causes beyond the control of Consultant.

(e) Legal Proceedings. Serving as an expert witness on City's behalf or attending legal proceedings to which the Consultant is not a party.

(f) Damage Repair. Supervision of repair of damages to any structure.

(g) Extra Environmental Services. Additional work required for environmental conditions (e.g. asbestos or site conditions) not already contemplated within the Consultant's services for the Project.

13.9 City Responsibilities. City's responsibilities shall include the following:

13.9.1 Data and Information. City shall make available to Consultant all necessary data and information concerning the purpose and requirements of the Project, including scheduling and budget limitations, objectives, constraints and criteria. As part of the budget limitation information, the City shall provide the Consultant with a preliminary construction budget ("City's Preliminary Construction Budget").

13.9.2 Project Survey. If required pursuant to the scope of the Project and if requested by Consultant, City shall furnish Consultant with, or direct Consultant to procure at City's expense, a survey of the Project site prepared by a registered surveyor or civil engineer, any other record documents which shall indicate existing structures, land features, improvements, sewer, water, gas, electrical and utility lines, topographical information and boundary dimensions of the site, and any other such pertinent information.

13.9.3 Bid Phase. Distribute Construction Documents to bidders and conduct the opening and review of bids for the Project.

13.9.4 Testing. Retain consultant(s) to conduct chemical, mechanical, soils, geological or other tests required for proper design of the Project, and furnish such surveys, borings, test pits, and other tests as may be necessary to reveal conditions of the site which must be known to determine soil condition or to ensure the proper development of the required drawings and specifications.

13.9.5 Required Inspections and Tests. Retain consultant(s) to conduct materials testing and inspection or environmental/hazardous materials testing and inspection pursuant to any applicable laws, rules or regulations.

13.9.6 Fees of Reviewing or Licensing Agencies. Directly pay or reimburse the payment of all fees required by any reviewing or licensing agency, or other agency having approval jurisdiction over the Project.

13.9.7 City's Representative. The City hereby designates the City Manager, or his or her designee, to act as its representative for the performance of this Agreement ("City's Representative"). City's Representative shall have the power to act on behalf of the City for all purposes under this Contract. The City Manager hereby designates **Dennis Mejia, PE, Utilities Engineering Division Manager**, or his or her designee, as the City's contact for the implementation of the Services hereunder. Contractor shall not accept direction or orders from any person other than the City's Representative or his or her designee.

13.9.8 Review and Approved Documents. Review all documents submitted by Consultant, including change orders and other matters requiring approval by the City Council or other officials. City shall advise Consultant of decisions pertaining to such documents within a reasonable time after submission, so as not to cause unreasonable delay as provided in the excusable delay provisions of this Agreement above.

13.10 Compensation.

13.10.1 Consultant's Compensation for Basic Services. City shall pay to Consultant, for the performance of all Services rendered under this Agreement, the total not to exceed amount of **Nine Hundred Thirty-Five Thousand Nine Hundred Four** Dollars **($935,904**) ("Total Compensation"). This Total Compensation amount shall be based upon, and may be adjusted according to, the fee schedule and related terms and conditions attached hereto as Exhibit "B" and incorporated herein by reference. The Total Compensation, as may be adjusted upon mutual agreement, shall constitute complete and adequate payment for Services under this Agreement.

13.10.2 Payment for Additional Services. At any time during the term of this Agreement, City may request that Consultant perform Additional Services. As used herein, Additional Services means any work which is determined by City to be necessary for the proper completion of the Project, but which the Parties did not reasonably anticipate would be necessary at the execution of this Agreement. Any additional work in excess of this amount must be approved by the City. If authorized, such Additional Services will be compensated at the rates and in the manner set forth in Exhibit "C" attached hereto and incorporated herein by reference, unless a flat rate or some other form of compensation is mutually agreed upon by the Parties. If City requires Consultant to hire consultants to perform any Additional Services, Consultant shall be compensated therefore at the rates and in the manner set forth in Exhibit "C" attached hereto and incorporated herein by reference, unless a flat rate or some other form of compensation is mutually agreed upon by the Parties. City shall have the authority to review and approve the rates of any such consultants. In addition, Consultant shall be reimbursed for any expenses incurred by such consultants pursuant to the terms and conditions of Section 3.10.3.

13.10.3 Reimbursable Expenses. Reimbursable expenses are in addition to compensation for the Services and Additional Services. Consultant shall not be reimbursed for any expenses unless authorized in writing by City, which approval may be evidenced by inclusion in Exhibit "C" attached hereto. Such reimbursable expenses shall include only those expenses which are reasonably and necessarily incurred by Consultant in the interest of the Project. Consultant shall be required to acquire prior written consent in order to obtain reimbursement for the following: (1) extraordinary transportation expenses incurred in connection with the Project; (2) out-of-town travel expenses incurred in connection with the Project; (3) fees paid for securing approval of authorities having jurisdiction over the Project; (4) bid document duplication costs in excess of $1,000; and (5) other costs, fees and expenses in excess of $1,000.

13.10.4 Payment to Consultant. Consultant's compensation and reimbursable expenses shall be paid by City to Consultant no more often than monthly. Such periodic payments shall be made based upon the percentage of work completed, and in accordance with the phasing and funding schedule provided in Exhibit "B" and the compensation rates indicated in Exhibit "C" attached hereto and incorporated herein by reference. In order to receive payment, Consultant shall present to City an itemized statement which indicates Services performed, percentage of Services completed, method for computing the amount payable, and the amount to be paid. The statement shall describe the amount of Services provided since the initial commencement date, or since the start of the subsequent billing periods, as appropriate, through the date of the statement, as well as those expenses for which reimbursement is requested for that statement period. The amount paid to Consultant shall never exceed the percentage amounts authorized by the phasing and funding schedule located in Exhibit "B" attached hereto. City shall, within thirty (30) days of receiving such statement, review the

statement and pay all approved charges thereon pursuant to the provisions of Civil Code Section 3320. Disputed amounts shall be resolved by the Parties in a mutually agreeable manner.

Payments made for Additional Services shall be made in installments, not more often than monthly, proportionate to the degree of completion of such services or in such other manner as the Parties shall specify when such services are agreed upon, and in accordance with any authorized fee or rate schedule. In order to receive payment, Consultant shall present to City an itemized statement which indicates the Additional Services performed, percentage of Additional Services completed, method for computing the amount payable, and the amount to be paid. The statement shall describe the amount of Additional Services provided since the initial commencement date, or since the start of the subsequent billing periods, as appropriate, through the date of the statement. City shall, within thirty (30) days of receiving such statement, review the statement and pay all approved charges thereon pursuant to the provisions of Civil Code Section 3320. Disputed amounts shall be resolved by the Parties in a mutually agreeable manner.

Upon cancellation or termination of this Agreement, Consultant shall be compensated as set forth in the termination provision herein.

13.10.5 Withholding Payment to Consultant. The City may withhold payment, in whole or in part, to the extent reasonably necessary to protect the City from claims, demands, causes of action, costs, expenses, liabilities, losses, damages, or injuries of any kind to the extent arising out of or caused by the negligence, recklessness, or willful misconduct protected under the indemnification provisions of this Agreement. Failure by City to deduct any sums from a progress payment shall not constitute a waiver of the City's right to such sums. The City may keep any moneys which would otherwise be payable at any time hereunder and apply the same, or so much as may be necessary therefor, to the payment of any expenses, losses, or damages as determined by the City, incurred by the City for which Consultant is liable under the Agreement or state law. Payments to the Consultant for compensation and reimbursable expenses due shall not be contingent on the construction, completion or ultimate success of the Project. Payment to the Consultant shall not be withheld, postponed, or made contingent upon receipt by the City of offsetting reimbursement or credit from Parties not within the Consultant's reasonable control.

13.10.6 Prevailing Wages. Consultant is aware of the requirements of California Labor Code Sections 1720, et seq., and 1770, et seq., as well as California Code of Regulations, Title 8, Section 16000, et seq., ("Prevailing Wage Laws"), which require the payment of prevailing wage rates and the performance of other requirements on certain "public works" and "maintenance" projects. Since the Services are being performed as part of an applicable "public works" or "maintenance" project, as defined by the Prevailing Wage Laws, and Since the total compensation is $1,000 or more, Consultant agrees to fully comply with and to require its consultants to fully comply with such Prevailing Wage Laws. City shall provide Consultant with a copy of the prevailing rates of per diem wages in effect at the commencement of this Agreement. Consultant shall make copies of the prevailing rates of per diem wages for each craft, classification or type of worker needed to execute the Services available to interested parties upon request, and shall post copies at the Consultant's principal place of business and at the Project site. It shall be mandatory upon the Consultant and all subconsultants to comply with all California Labor Code provisions, which include but are not limited to prevailing wages (Labor Code Sections 1771, 1774 and 1775), employment of apprentices (Labor Code Section 1777.5), certified payroll records (Labor Code Sections 1771.4 and 1776), hours of labor (Labor Code Sections 1813 and 1815) and debarment of contractors and subcontractors (Labor Code Section 1777.1). The requirement to submit certified payroll records directly to the Labor Commissioner

under Labor Code section 1771.4 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Section 1771.4. Consultant shall defend, indemnify and hold the City, its elected officials, officers, employees and agents free and harmless from any claims, liabilities, costs, penalties or interest arising out of any failure or alleged failure of the Consultant or its consultants to comply with the Prevailing Wage Laws.

(a) Registration/DIR Compliance. If the Services are being performed as part of an applicable "public works project" of over $25,000 when the project is for construction, alteration, demolition, installation, or repair work, or a public works project of over $15,000 when the project is for maintenance work, in addition to the foregoing, then pursuant to Labor Code sections 1725.5 and 1771.1, the Consultant and all subconsultants performing such Services must be registered with the Department of Industrial Relations ("DIR"). Consultant shall maintain registration for the duration of the Project and require the same of any subconsultants. This project may also be subject to compliance monitoring and enforcement by the DIR. It shall be Consultant's sole responsibility to comply with all applicable registration and labor compliance requirements, including the submission of payroll records directly to the DIR. Any stop orders issued by the Department of Industrial Relations against Consultant or any subconsultant that affect Consultant's performance of services, including any delay, shall be Consultant's sole responsibility. Any delay arising out of or resulting from such stop orders shall be considered Consultant caused delay and shall not be compensable by the City. Consultant shall defend, indemnify and hold the City, its officials, officers, employees and agents free and harmless from any claim or liability arising out of stop orders issued by the Department of Industrial Relations against Consultant or any subconsultant.

3.10.7 Automated Clearing House ("ACH") payments. It is the City's policy to pay its consultant invoices via electronic fund transfers through the ACH network. All payments due and owing pursuant to a properly issued and correct invoice or under this Agreement shall be made through electronic ACH transfers, unless otherwise agreed upon by both Parties in writing. Consultant shall provide the City with ACH payment details whereby the City shall initiate the ACH transfers to Consultant in the amount required pursuant to a properly issued and correct invoice or under this Agreement. Each Party shall undertake any and all required actions and execute any required documents, instruments, or agreements required to effectuate the requirements of this Section. In the event the City erroneously deposits funds into an account, or otherwise deposits funds to which Consultant is not entitled: (1) Consultant shall immediately notify the City and the financial institution; (2) Consultant shall not withdraw any of the funds which were erroneously deposited or to which Consultant is not entitled; and (3) Consultant authorizes both the City and financial institution to take all actions necessary to correct the error and return to the City all funds erroneously deposited or to which Consultant is not entitled.

13.11 Notice to Proceed.

Consultant shall not proceed with performance of any Services under this Agreement unless and until the City provides a written notice to proceed.

13.12 Termination, Suspension and Abandonment.

13.12.1 Grounds for Termination; Consultant's Termination for Cause. City hereby reserves the right to suspend or abandon, at any time and for any reason, all or any portion of the Project and the construction work thereon, or to terminate this Agreement at any time with or without cause. Consultant shall be provided with at least seven (7) days advanced written

notice of such suspension, abandonment or termination. In the event of such suspension, abandonment or termination, Consultant shall be paid for Services and reimbursable expenses rendered up to the date of such suspension, abandonment or termination, pursuant to the schedule of payments provided for in this Agreement, less any claims against or damages suffered by City as a result of the default, if any, by Consultant. Consultant hereby expressly waives any and all claims for damages or compensation arising under this Agreement, except as set forth herein, in the event of such suspension, abandonment or termination. Consultant may terminate this Agreement for substantial breach of performance by the City such as failure to make payment to Consultant as provided in this Agreement.

13.12.2 City's Suspension of Work. If Consultant's Services are suspended by City, City may require Consultant to resume such Services within ninety (90) days after written notice from City. When the Project is resumed, the Total Compensation and schedule of Services shall be equitably adjusted upon mutual agreement of the City and Consultant.

13.12.3 Documents and Other Data. Upon suspension, abandonment or termination, Consultant shall provide to City all preliminary studies, sketches, working drawings, specifications, computations, and all other Project Documents, as defined below, to which City would have been entitled at the completion of Consultant's Services under this Agreement. Upon payment of the amount required to be paid to Consultant pursuant to the termination provisions of this Agreement, City shall have the rights, as provided in this Agreement hereinafter, to use such Project Documents prepared by or on behalf of Consultant under this Agreement. Consultant shall make such documents available to City upon request and without additional compensation other than as may be approved as a reimbursable expense.

13.12.4 Employment of other Consultants. In the event this Agreement is terminated in whole or in part as provided herein, City may procure, upon such terms and in such manner as it may determine appropriate, services similar to those terminated.

13.13 Ownership and Use of Documents; Confidentiality.

13.13.1 Ownership. All plans, specifications, original or reproducible transparencies of working drawings and master plans, preliminary sketches, architectural presentation drawings, structural computations, estimates and any other documents prepared pursuant to this Agreement, including, but not limited to, any other works of authorship fixed in any tangible medium of expression such as writings, physical drawings and data magnetically or otherwise recorded on computer diskettes (hereinafter referred to as the "Project Documents") shall be and remain the property of City. Although the official copyright in all Project Documents shall remain with the Consultant or other applicable subcontractors or consultants, the Project Documents shall be the property of City whether or not the work for which they were made is executed or completed. Within thirty (30) calendar days following completion of the Project, Consultant shall provide to City copies of all Project Documents required by City. In addition, Consultant shall retain copies of all Project Documents on file for a minimum of fifteen (15) years following completion of the Project, and shall make copies available to City upon the payment of reasonable duplication costs. Before destroying the Project Documents following this retention period, Consultant shall make a reasonable effort to notify City and provide City with the opportunity to obtain the documents.

13.13.2 Right to Use. Consultant grants to City the right to use and reuse all or part of the Project Documents, at City's sole discretion and with no additional compensation to Consultant, for the following purposes:

(a) The construction of all or part of this Project.

(b) The repair, renovation, modernization, replacement, reconstruction or expansion of this Project at any time;

(c) The construction of another project by or on behalf of the City for its ownership and use;

City is not bound by this Agreement to employ the services of Consultant in the event such documents are used or reused for these purposes. City shall be able to use or reuse the Project Documents for these purposes without risk of liability to the Consultant or third parties with respect to the condition of the Project Documents, and the use or reuse of the Project Documents for these purposes shall not be construed or interpreted to waive or limit City's right to recover for latent defects or for errors or omissions of the Consultant.

Any use or reuse by City of the Project Documents on any project other than this Project without employing the services of Consultant shall be at City's own risk with respect to third parties. If City uses or reuses the Project Documents on any project other than this Project, it shall remove the Consultant's seal from the Project Documents and hold harmless Consultant and its officers, directors, agents and employees from claims arising out of the negligent use or re-use of the Project Documents on such other project.

13.13.3 License. This Agreement creates a non-exclusive and perpetual license for City to copy, use, modify or reuse any and all Project Documents and any intellectual property rights therein. Consultant shall require any and all subcontractors and consultants to agree in writing that City is granted a non-exclusive and perpetual license for the work of such subcontractors or consultants performed pursuant to this Agreement.

13.13.4 Right to License. Consultant represents and warrants that Consultant has the legal right to license any and all copyrights, designs and other intellectual property embodied in the Project Documents that Consultant prepares or causes to be prepared pursuant to this Agreement. Consultant shall indemnify and hold City harmless pursuant to the indemnification provisions of this Agreement for any breach of this Section. Consultant makes no such representation and warranty in regard to previously prepared designs, plans, specifications, studies, drawings, estimates or other documents that were prepared by design professionals other than Consultant and provided to Consultant by City.

13.13.5 Confidentiality. All Project Documents, either created by or provided to Consultant in connection with the performance of this Agreement, shall be held confidential by Consultant to the extent they are not subject to disclosure pursuant to the Public Records Act. All Project Documents shall not, without the written consent of City, be used or reproduced by Consultant for any purposes other than the performance of the Services. Consultant shall not disclose, cause or facilitate the disclosure of the Project Documents to any person or entity not connected with the performance of the Services or the Project. Nothing furnished to Consultant which is otherwise known to Consultant or is generally known, or has become known, to the related industry shall be deemed confidential. Consultant shall not use City's name or insignia, photographs of the Project, or any publicity pertaining to the Services or the Project in any magazine, trade paper, newspaper, television or radio production or other similar medium without the written consent of City.

13.14 Indemnification.

13.14.1 To the fullest extent permitted by law, Consultant shall defend (with counsel of City's choosing), indemnify and hold the City, its officials, officers, employees, volunteers, and agents free and harmless from any and all claims, demands, causes of action, costs, expenses, liability, loss, damage or injury of any kind, in law or equity, to property or persons, including wrongful death, in any manner arising out of, pertaining to, or incident to any acts, errors or omissions, or willful misconduct of Consultant, its officials, officers, employees, subcontractors, consultants or agents in connection with the performance of the Consultant's Services, the Project or this Agreement, including without limitation the payment of all damages, expert witness fees and attorney's fees and other related costs and expenses except such loss or damage caused by the sole negligence or willful misconduct of the City. Consultant's obligation to indemnify shall survive expiration or termination of this Agreement and shall not be restricted to insurance proceeds, if any, received by Consultant, the City, its officials, officers, employees, agents, or volunteers.

13.14.2 If Consultant's obligation to defend, indemnify, and/or hold harmless arises out of Consultant's performance as a "design professional" (as that term is defined under Civil Code section 2782.8), then, and only to the extent required by Civil Code section 2782.8, which is fully incorporated herein, Consultant's indemnification obligation shall be limited to claims that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the Consultant, and, upon Consultant obtaining a final adjudication by a court of competent jurisdiction, Consultant's liability for such claim, including the cost to defend, shall not exceed the Consultant's proportionate percentage of fault.

13.15 Insurance.

Consultant shall not commence work under this Agreement until it has provided evidence satisfactory to the City that it has secured all insurance required under this Section. In addition, Consultant shall not allow any subconsultant to commence work on any subcontract until it has provided evidence satisfactory to the City that the subconsultant has secured all insurance required under this section.

13.15.1 Types of Insurance Required. As a condition precedent to the effectiveness of this Agreement for work to be performed hereunder, and without limiting the indemnity provisions of the Agreement, Consultant shall, at its expense, procure and maintain in full force and effect for the duration of the Agreement the following policies of insurance. If the existing policies do not meet the insurance requirements set forth herein, Consultant agrees to amend, supplement or endorse the policies to do so.

13.15.2 Additional Insured. The City of Ontario, its officials, officers, employees, agents, and volunteers shall be named as additional insureds on Consultant's and its subconsultants' policies of commercial general liability and automobile liability insurance using the endorsements and forms specified herein or exact equivalents.

13.15.3 Commercial General Liability

(a) The Consultant shall take out and maintain, during the performance of all work under this Agreement, in amounts not less than specified herein, Commercial General Liability Insurance, in a form and with insurance companies acceptable to the City.

(b) Coverage for Commercial General Liability insurance shall be at least as broad as the following: Insurance Services Office Commercial General Liability coverage (Occurrence Form CG 00 01) or exact equivalent. Commercial General Liability Insurance must include coverage for the following:

(i) Bodily Injury and Property Damage

(ii) Personal Injury/Advertising Injury

(iii) Premises/Operations Liability

(iv) Products/Completed Operations Liability

(v) Aggregate Limits that Apply per Project

(vi) Explosion, Collapse and Underground (UCX) exclusion deleted

(vii) Contractual Liability with respect to this Contract

(viii) Broad Form Property Damage

(ix) Independent Consultants Coverage

(c) The policy shall contain no endorsements or provisions limiting coverage for (1) contractual liability; (2) cross liability exclusion for claims or suits by one insured against another; (3) products/completed operations liability; or (4) contain any other exclusion contrary to the Agreement.

(d) The policy shall give City, the City Council and each member of the City Council, its officers, employees, agents and City designated volunteers additional insured status using ISO endorsement forms CG 20 10 10 01 and 20 37 10 01, or endorsements providing the exact same coverage.

(e) The general liability program may utilize either deductibles or provide coverage excess of a self-insured retention, subject to written approval by the City, and provided that such deductibles shall not apply to the City as an additional insured.

13.15.4 Automobile Liability

(a) At all times during the performance of the work under this Agreement, the Consultant shall maintain Automobile Liability Insurance for bodily injury and property damage including coverage for owned, non-owned and hired vehicles, in a form and with insurance companies acceptable to the City.

(b) Coverage for automobile liability insurance shall be at least as broad as Insurance Services Office Form Number CA 00 01 covering automobile liability (Coverage Symbol 1, any auto).

(c) The policy shall give City, the City Council and each member of the City Council, its officers, employees, agents and City designated volunteers additional insured status.

(d) Subject to written approval by the City, the automobile liability program may utilize deductibles, provided that such deductibles shall not apply to the City as an additional insured, but not a self-insured retention.

13.15.5 Workers' Compensation/Employer's Liability

(a) Consultant certifies that he/she is aware of the provisions of Section 3700 of the California Labor Code which requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and he/she will comply with such provisions before commencing work under this Agreement.

(b) To the extent Consultant has employees at any time during the term of this Agreement, at all times during the performance of the work under this Agreement, the Consultant shall maintain full compensation insurance for all persons employed directly by him/her to carry out the work contemplated under this Agreement, all in accordance with the "Workers' Compensation and Insurance Act," Division IV of the Labor Code of the State of California and any acts amendatory thereof, and Employer's Liability Coverage in amounts indicated herein. Consultant shall require all subconsultants to obtain and maintain, for the period required by this Agreement, workers' compensation coverage of the same type and limits as specified in this Section.

13.15.6 Professional Liability (Errors and Omissions)

(a) At all times during the performance of the work under this Agreement the Consultant shall maintain professional liability or Errors and Omissions insurance appropriate to its profession, in a form and with insurance companies acceptable to the City and in an amount indicated herein. This insurance shall be written on a policy form coverage specifically designed to protect against acts, errors or omissions of the Consultant. "Covered Professional Services" as designated in the policy must specifically include work performed under this Agreement. The policy must "pay on behalf of" the insured and must include a provision establishing the insurer's duty to defend.

13.15.7 Minimum Policy Limits Required

(a) The following insurance limits are required for the Agreement:

Coverage	Combined Single Limit
Commercial General Liability	$2,000,000 per occurrence/ $4,000,000 aggregate for bodily injury, personal injury, and property damage
Automobile Liability	$2,000,000 per occurrence for bodily injury and property damage
Employer's Liability	$1,000,000 per occurrence

Professional Liability	$2,000,000 per claim and aggregate (errors and omissions)

(b) Defense costs shall be payable in addition to the limits.

(c) Requirements of specific coverage or limits contained in this Section are not intended as a limitation on coverage, limits, or other requirement, or a waiver of any coverage normally provided by any insurance. Any available coverage shall be provided to the parties required to be named as Additional Insured pursuant to this Agreement.

13.15.8 Evidence Required

(a) Prior to execution of the Agreement, the Consultant shall file with the City evidence of insurance from an insurer or insurers certifying to the coverage of all insurance required herein. Such evidence shall include original copies of the ISO CG 00 01 (or insurer's equivalent) signed by the insurer's representative and Certificate of Insurance (Acord Form 25-S or equivalent), together with required endorsements. All evidence of insurance shall be signed by a properly authorized officer, agent, or qualified representative of the insurer and shall certify the names of the insured, any additional insureds, where appropriate, the type and amount of the insurance, the location and operations to which the insurance applies, and the expiration date of such insurance.

13.15.9 Policy Provisions Required

(a) Consultant shall provide the City at least thirty (30) days prior written notice of cancellation of any policy required by this Agreement, except that the Consultant shall provide at least ten (10) days prior written notice of cancellation of any such policy due to non-payment of premium. If any of the required coverage is cancelled or expires during the term of this Agreement, the Consultant shall deliver renewal certificate(s) including the General Liability Additional Insured Endorsement to the City at least ten (10) days prior to the effective date of cancellation or expiration.

(b) The Commercial General Liability Policy and Automobile Policy shall each contain a provision stating that Consultant's policy is primary insurance and that any insurance, deductible, or self-insurance maintained by the City, its officials, officers, employees, agents, or volunteers shall not contribute with this primary insurance. Policies shall contain or be endorsed to contain such provisions.

(c) The retroactive date (if any) of each policy is to be no later than the effective date of this Agreement. Consultant shall maintain such coverage continuously for a period of at least three years after the completion of the work under this Agreement. Consultant shall purchase a one (1) year extended reporting period A) if the retroactive date is advanced past the effective date of this Agreement; B) if the policy is cancelled or not renewed; or C) if the policy is replaced by another claims-made policy with a retroactive date subsequent to the effective date of this Agreement.

(d) All required insurance coverages, except for the professional liability coverage, shall contain or be endorsed to waiver of subrogation in favor of the City, its officials, officers, employees, agents, and volunteers or shall specifically allow Consultant or others providing insurance evidence in compliance with these specifications to waive their right

of recovery prior to a loss. Consultant hereby waives its own right of recovery against City, and shall require similar written express waivers and insurance clauses from each of its subconsultants.

(e) The limits set forth herein shall apply separately to each insured against whom claims are made or suits are brought, except with respect to the limits of liability. Further the limits set forth herein shall not be construed to relieve the Consultant from liability in excess of such coverage, nor shall it limit the Consultant's indemnification obligations to the City and shall not preclude the City from taking such other actions available to the City under other provisions of the Agreement or law.

13.15.10 Qualifying Insurers

(a) All policies required shall be issued by acceptable insurance companies, as determined by the City, which satisfy the following minimum requirements: Each such policy shall be from a company or companies with a current A.M. Best's rating of no less than A:VII and admitted to transact in the business of insurance in the State of California, or otherwise allowed to place insurance through surplus line brokers under applicable provisions of the California Insurance Code or any federal law.

13.15.11 Additional Insurance Provisions

(a) The foregoing requirements as to the types and limits of insurance coverage to be maintained by Consultant, and any approval of said insurance by the City, is not intended to and shall not in any manner limit or qualify the liabilities and obligations otherwise assumed by the Consultant pursuant to this Agreement, including but not limited to, the provisions concerning indemnification.

(b) If at any time during the life of the Agreement, any policy of insurance required under this Agreement does not comply with these specifications or is canceled and not replaced, City has the right but not the duty to obtain the insurance it deems necessary and any premium paid by City will be promptly reimbursed by Consultant or City will withhold amounts sufficient to pay premium from Consultant payments. In the alternative, City may cancel this Agreement.

(c) The City may require the Consultant to provide complete copies of all insurance policies in effect for the duration of the Project.

(d) Neither the City nor the City Council, nor any member of the City Council, nor any of the officials, officers, employees, agents or volunteers shall be personally responsible for any liability arising under or by virtue of this Agreement.

13.15.12 Subconsultant Insurance Requirements

(a) Consultant shall not allow any subcontractors or subconsultants to commence work on any subcontract until they have provided evidence satisfactory to the City that they have secured all insurance required under this Section. Policies of commercial general liability insurance provided by such subcontractors or subconsultants shall be endorsed to name the City as an additional insured using ISO form CG 20 38 04 13 or an endorsement providing the exact same coverage. If requested by Consultant, City may approve different scopes or minimum limits of insurance for particular subcontractors or subconsultants.

13.16 Records.

Consultant shall maintain complete and accurate records with respect to all costs and expenses incurred under this Agreement. All such records shall be clearly identifiable. Consultant shall allow a representative of City during normal business hours to examine, audit, and make transcripts or copies of such records and any other documents created pursuant to this Agreement. Consultant shall allow inspection of all work, data, documents, proceedings, and activities related to the Agreement for a period of five (5) years from the date of final payment under this Agreement.

13.17 Standardized Manufactured Items.

Consultant shall cooperate and consult with City in the use and selection of manufactured items on the Project, including but not limited to, paint, hardware, plumbing, mechanical and electrical equipment, fixtures, roofing materials and floor coverings. All such manufactured items shall be standardized to City's criteria to the extent such criteria do not interfere with building design.

13.18 Limitation of Agreement.

This Agreement is limited to and includes only the work included in the Project described herein. Any additional or subsequent construction at the site of the Project, or at any other City site, will be covered by, and be the subject of, a separate Agreement for engineering services between City and the Consultant chosen therefor by City.

13.19 Mediation.

Disputes arising from this Agreement may be submitted to mediation if mutually agreeable to the Parties hereto. The type and process of mediation to be utilized shall be subject to the mutual agreement of the Parties.

13.20 Successors and Assigns.

This Agreement shall be binding upon and shall inure to the benefit of the successors in interest, executors, administrators and assigns of each Party to this Agreement. However, Consultant shall not assign or transfer by operation of law or otherwise any or all of its rights, burdens, duties or obligations without the prior written consent of City. Any attempted assignment without such consent shall be invalid and void.

13.21 Asbestos Certification.

Consultant shall certify to City, in writing and under penalty of perjury, that to the best of its knowledge, information and belief no asbestos-containing material or other material deemed to be hazardous by the state or federal government was specified as a building material in any construction document that the Consultant prepares for the Project. Consultant shall require all consultants who prepare any other documents for the Project to submit the same written certification. Consultant shall also assist the City in ensuring that contractors provide City with certification, in writing and under penalty of perjury, that to the best of their knowledge, information and belief no material furnished, installed or incorporated into the Project contains asbestos or any other material deemed to be hazardous by the state or federal government. These certifications shall be part of the final Project submittal. Consultant shall include statements in its

specifications that materials containing asbestos or any other material deemed to be hazardous by the state or federal government are not to be included.

13.22 No Third Party Rights.

This Agreement shall not create any rights in, or inure to the benefits of, any third party except as expressly provided herein.

13.23 Governing Law.

This Agreement shall be construed in accordance with, and governed by, the laws of the State of California. Venue shall be in San Bernardino County.

13.24 Exhibits and Recitals.

All exhibits and recitals contained herein and attached hereto are material parts of this Agreement and are incorporated as if fully set forth.

13.25 Severability.

Should any provision in the Agreement be held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remaining provisions shall continue in full force and effect.

13.26 Non-Waiver.

None of the provisions of this Agreement shall be considered waived by either Party, unless such waiver is specifically specified in writing.

13.27 Safety.

Consultant shall execute and maintain its work so as to avoid injury or damage to any person or property. In carrying out its Services, the Consultant shall at all times be in compliance with all applicable local, state and federal laws, rules and regulations, and shall exercise all necessary precautions for the safety of its employees, consultant and subcontractors appropriate to the nature of the work and the conditions under which the work is to be performed.

13.28 Harassment Policy.

Consultant shall provide a copy of the City's Harassment Policy to each of its employees assigned to perform the tasks under this Agreement. Consultant shall submit to the City's Personnel Manager a statement signed by each of its employees who are assigned to perform the Services under this Agreement certifying receipt of City's Harassment Policy and certifying that they have read the Harassment Policy. A finding by the City that any of Consultant's employees has harassed a City employee shall be grounds for appropriate discipline, up to and including such employee's removal from performance of this Agreement at City's request.

13.29 Delivery of Notices.

All notices permitted or required under this Agreement shall be given to the respective Parties at the following address, or at such other address as the respective Parties may provide in writing for this purpose:

CITY:	CONSULTANT:
City of Ontario	Triad Consulting & System Design Group, LLC
303 East “B” Street	2925 Mira Vista Way,
Ontario, CA 91764	Corona, CA 92881
Attn: Dennis Mejia, P.E., Utilities Engineering Division Manager, OMUC	

Such notice shall be deemed made when personally delivered or when mailed, forty-eight (48) hours after deposit in the U.S. Mail, first class postage prepaid and addressed to the Party at its applicable address. Actual notice shall be deemed adequate notice on the date actual notice occurred, regardless of the method of service.

13.30 Time of Essence.

Time is of the essence for each and every provision of this Agreement.

13.31 City’s Right to Employ Other Consultants.

City reserves right to employ other consultants, including designers, in connection with this Project or other projects.

13.32 Prohibited Interests.

13.32.1 Solicitation. Consultant maintains and warrants that it has not employed nor retained any company or person, other than a bona fide employee working solely for Consultant, to solicit or secure this Agreement. Further, Consultant warrants that it has not paid nor has it agreed to pay any company or person, other than a bona fide employee working solely for Consultant, any fee, commission, percentage, brokerage fee, gift or other consideration contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, City shall have the right to rescind this Agreement without liability.

13.32.2 Conflict of Interest. For the term of this Agreement, no director, official, officer or employee of City, during the term of his or her service with City, shall have any direct interest in this Agreement, or obtain any present or anticipated material benefit arising therefrom.

13.33 Equal Opportunity Employment.

Consultant represents that it is an equal opportunity employer and that it shall not discriminate against any employee or applicant for employment because of race, religion, color, national origin, ancestry, sex, age or any other classification protected by federal or state law. Such non-discrimination shall include, but not be limited to, all activities related to initial employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff or termination. Consultant shall also comply with all relevant provisions of City’s minority business enterprise program, affirmative action plan or other related programs or guidelines currently in effect or hereinafter enacted.

13.34 Labor Certification.

By its signature hereunder, Consultant certifies that it is aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for Worker's Compensation or to undertake self-insurance in accordance with the provisions of that Code, and agrees to comply with such provisions before commencing the performance of the Services.

13.35 Subcontracting.

As specified in this Agreement, Consultant shall not subcontract any portion of the Services required by this Agreement, except as expressly stated herein, without prior written approval of City. Subcontracts, if any, shall contain a provision making them subject to each and every provision of this Agreement.

13.36 Supplemental Conditions.

Any supplemental conditions shall be attached as an exhibit to this Agreement, and that exhibit shall be incorporated herein by reference.

13.37 Entire Agreement.

This Agreement, with its exhibits, contains the entire agreement of the Parties hereto, and supersedes any and all other prior or contemporaneous negotiations, understandings and oral or written agreements between the Parties hereto. Each Party acknowledges that no representations, inducements, promises or agreements have been made by any person which are not incorporated herein, and that any other agreements shall be void. Furthermore, any modification of this Agreement shall only be effective if in writing signed by all Parties hereto.

SIGNATURES ON FOLLOWING PAGE

SIGNATURE PAGE FOR DESIGN SERVICES AGREEMENT BETWEEN THE CITY OF ONTARIO AND TRIAD CONSULTING & SYSTEMS DESIGN GROUP, LLC

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the date first written above.

CITY OF ONTARIO

Approved By:

_____
Scott Ochoa
City Manager

Approved as to Form:

_____
Best Best & Krieger LLP
City Attorney

Attested By:

_____
City Clerk

Triad Consulting & Systems Design Group, LLC

By: _____

Its: _____

Printed Name: _____

By: _____

Its: _____

Printed Name: _____

If Corporation, TWO SIGNATURES, President OR Vice President AND Secretary OR Treasurer REQUIRED

EXHIBIT "A"

PROPOSED SCOPE OF SERVICES

EXHIBIT "A"

SCOPE OF SERVICES

PROJECT DESCRIPTION

Ontario Municipal Utilities Company (OMUC) Staff has recorded an increase of vagrancy, theft, and property damage at multiple well sites and treatment sites throughout the City.

OMUC is requesting a fee proposal from Consultants to provide professional design services for assessment of site security and design to improve safety and security at twenty-six City facilities.

The primary Scope of Work will consist of a site security assessment and design of, but not limited to, installing new wrought iron fences, electric sliding gates with remote control, communication conduit for future fiber optic network, site lighting, perimeter lighting, alarms, security cameras and monitoring equipment, coordination with Southern California Edison (SCE), and constructing of masonry reinforced block walls.

For the purpose of this RFP, the Consultant shall assume that the project will be designed in three construction package/phases, which may include 1. site access and hardening, 2. fixture upgrades and electrical upgrades, and 3. security camera and monitoring equipment upgrades. Final Phasing will be determined during the Preliminary Engineering and Design Phase.

Project locations may be found in **Attachment "1"**. An Initial Assessment Report describing the existing conditions of each City facility and proposed improvements may be found in **Attachment "2"**.

In addition to the Specific Scope of Services from the Consultant's Proposal incorporated as part of the task the Consultant is also responsible for the following General Scope of Services:

1. GENERAL REQUIREMENTS

1.1 Basic Services: Consultant agrees to perform all the necessary professional, engineering (e.g., mechanical, electrical, plumbing, structural, civil, site engineering), and any other necessary engineering services mutually agreeable to the parties for the Project in a timely and professional manner, consistent with the standards of the profession, including those provided for herein.

1.2 Exclusions from Basic Services: The following services shall be excluded from the basic services listed above: "N/A", NOT APPLICABLE.

1.3 Additional Services: Consultant shall perform the following Additional Services for the Project: "N/A", NOT APPLICABLE**.**

1.4 Communication with City: Consultant shall participate in consultations and conferences with authorized representatives of City and/or other local, regional, or state agencies concerned with the Project, which may be necessary for the completion of the Project or the development of documents in accordance with the applicable standards and requirements of law and the City. Such consultations and conferences shall continue throughout the planning and development of the Project. Consultant shall take direction only from the City's Representative, or any other representative specifically designated by the City for this Project.

1.4.1 Weekly Project Check-Ins: Consultant shall provide a minimum of one brief weekly project update via telephone call to the City's Project Manager and follow-up the telephone call with a brief email. The Weekly Check-in shall include current project status; tasks or items completed since last project update; tasks and items expected to be completed in the coming week; any issues that may affect project status; and any action items for the Consultant and City.

1.4.2 Meeting Agendas and Minutes with Action Items: Agendas with attachments shall be sent at least one business day prior to the date of the meeting. Meeting Minutes (draft and final) with Action Items shall be sent within three business days after: all meetings regarding the Project, including meetings with the City or any other parties; and after all Project communications regarding change in project status.

1.4.3 Monthly Billings: Monthly Billings shall be submitted in the City's standard invoicing format. Invoices shall include, at a minimum, number of hours budgeted for each task or sub-task, number of hours spent during the month and cumulative for the project. In addition, the monthly invoices shall identify labor, indirect and other project related costs incurred during the month and brief description of the activities. Consultant shall provide two (2) hard copies and one (1) electronic copy (smart pdf).

1.4.4 Monthly Billing Status Reports: A Monthly Billing Status Report shall be submitted with the Monthly Billing Invoice, which includes summary of work completed and review of work status relative to budget and schedule. Any divergences between work completed and budget expended, and schedule needs to be specifically explained and addressed to avoid future budget short-comings and delays in schedule.

1.4.5 Updated Project Schedule: The Project Schedule shall be updated monthly, or whenever there is an expected change to the deliverables schedules and shall address any deviation from the schedule, if any. Updated project schedules shall be sent with the appropriate weekly check-in.

1.4.6 Updated Project Budget: The Project Budget (including an itemized Costs Estimate) shall be updated whenever there are changes that are expected to significantly impact estimated Project Budget, and at a minimum, with the completion of each task.

1.4.7 Kickoff Meeting: Consultant shall organize, prepare, and attend the Project Kickoff Meeting. The kickoff meeting shall include an agenda and a review of

project scope, schedule, establish project communication procedures, define project deliverables, and meeting schedule.

1.4.8 Decision Log: Consultant shall maintain a decision log in order to record the decisions made by the project team. The decision log shall contain all decisions, including those made during the technical workshops, project meetings, telephone conversations and emails. Decision Log at the minimum shall include the following heading: item number, date, item action description, decision made, action taken, notes.

1.4.9 Format of Deliverables: Consultant shall submit all original documents in one or more of the followings formats as directed to by the City: MS Word, MS Excel, MS Project, MS Power Point, PDF, AutoCAD, ArcGIS.

1.4.10 Coordination with the City of Upland, the City of Rancho Cucamonga, and California Department of Transportation (Caltrans): Reservoir 1212-1A, 1B, WFA 1 (ID-23), 1212-3A (ID-22), 1348-1A, 1B, 1C (ID-24), Booster 1348-3 & 4 (ID-22) are located within the City of Upland. Well 20 (ID-2) is located within the City of Rancho Cucamonga. Well 9, Booster 1348-1, Booster 1348-2 (ID-1) and Well 37,39, 37-IX, 39-IX, Reservoir 1010-2A,2B, CDA Milliken Booster (ID-11) will require coordination with Caltrans. As such, Consultant will establish a point of contact with the agency that will be able to provide any technical input and submit all necessary plans, and specifications to secure all approvals and permits that will be necessary in the project. Consultant, on the City's behalf, shall procure all permits, licenses, and other authorizations necessary to accomplish work. The costs of such permits, approvals and other authorizations shall be paid by the City.

1.4.11 Quality Assurance/ Quality Control (QA/QC): Submittals for the Preliminary Design Report, 60%, 90% and Final Design will be reviewed by Consultant's senior manager knowledgeable in similar projects and not directly involved with the day-to-day project activities prior to delivery. The Senior Manager, as part of their review, will review all elements of the proposed site security improvements, engineering calculations (e.g., geotechnical, structural, and physical loads/stresses), appropriateness and availability of selected materials, adherence to applicable industry and regulatory standards/codes, cost estimate, and schedule.

1.4.12 Project Management: This task addresses the management responsibilities associated with proper scheduling, budget control, invoice preparation, and coordination with the City's Consultant's project team. The City will be advised on the schedule impact of project technical decisions and the project design schedule will be consistently updated (on at least a monthly basis) to reflect current project status.

The following meetings will be held at the City's office in Ontario with the appropriate members of the Consultant's project team:

- Project Kick-off meeting
- Design review workshop, Preliminary Design Report
- Design review meeting (60% Design)

- Design review meeting (90% Design)
- Design review meeting (Final Design)
- Additional meetings (1)

2. PHASE 1 – PROJECT KICKOFF, SITE SECURITY ASSESSMENT, AND PRELIMINARY DESIGN REPORT

Task 1.1 - Project Kick-off

- Consultant will begin this project with a kick-off meeting with City staff. This meeting is a key opportunity for City representatives and the consultant team to steer and further clarify critical elements of the project. The meeting agenda will focus on the project understanding, team member involvement, project constraints, project progress, and anticipated design development impediments. This meeting will also include a review of background information and project scope as well as an overview of the project schedule, objectives, milestones, and details.
- Consultant will interview key personnel of the Engineering and Operations staff to incorporate design preferences and fully understand the issues influencing the project.
- Consultant will establish a single point of contact and commit that person for the duration of the Project to provide timely information relative to the Project issues.
- Consultant will prepare project weekly status reports, meeting minutes and recognize critical issues early on to discuss and resolve them with City staff.
- The project requires project management which includes project setup, scheduling, controlling, and correspondence. Correspondence includes telephone conversations, emails, project status reports, monthly status reports, project memorandums when necessary and detailed monthly invoices.

Task 1.2 – Site Reconnaissance and Detailed Utility Verification

Consultant shall research obtain the City's and other Utility Companies' records for location of existing and future utilities which may conflict with each site's development. These records should include but are not limited to the following:

- Prepare and submit utility information requests to utility owners with facilities in the project vicinity. Consultant shall provide copies of requests sent to all affected parties.
- Prepare and submit utility verification requests to utility owners with facilities in the project vicinity. Consultant shall provide copies of requests sent to all affected parties.
- Prepare and submit utility conflict notices to utility owners with facilities impacted by the proposed project.
- Prepare and submit utility relocation notices to utility owners, as required.
- Obtain utility permits and clearances as required to construct the project.
- Conduct utility coordination meetings, as required.
- Collected as-built information will be compiled, reviewed, and included into the topographic survey base map.
- Record drawings of existing and future facilities that may conflict with the proposed improvements.

- Before the topographic survey of the project is started, Consultant will contact USA and request that utilities be marked for each project site in order that the marking can be surveyed and placed into the base drawing.
- Legal description of surrounding properties.
- Proximity to a source of power.

The data collected by the consultant will be incorporated into the AutoCAD base drawing. Upon completion of compiling the topographic survey and utility agency-provided drawings, project areas will be visited where utility as-built drawing information is insufficient.

Task 1.3 – Topographic Survey

In Consultant's effort to provide an accurate and detailed design, Consultant will provide a topographic survey of each project location. The goal will be to have Underground Service Alert mark the utilities prior to the topographic survey, allowing for this data to be collected. The topographic survey will serve as the project base drawing. City provided Atlas Maps and record drawings will be used to supplement the base drawing. Upon completion of the base drawing the map will be field verified (refer to Task 1.2). The topographic survey will include the following information:

- Horizontal Control based on NAD 83.
- Vertical Control based on NAVD 88.
- Elevations will be based on City or County benchmark elevations.
- Consultant shall provide an aerial survey correlated with the State Plane Coordinate System to obtain a one-foot contour interval topographic and orthographic images at least 100 feet beyond the Project limits including horizontal and vertical control and benchmark delineation consistent with established control and existing City facilities.
- Existing roadway features between the right-of-way, including street addresses for parcels on both sides of the streets, curb and gutter, edges of pavement, sidewalks/parkways, curb returns, curb ramps, driveways; alley intersections, bus pads, bike lanes, street striping, traffic loops.
- Below and above-ground structures including but not limited to poles, existing vaults, and boxes.
- Existing signs; power poles, guy wires.
- Existing surface improvements including fire hydrants located within or adjacent to the right-of-way; water system appurtenances; (water meters with size, water service lines), sanitary sewers and storm drain manholes with surface and invert elevation, clean outs, monitoring wells, catch basins and inlets, gas meters, electric meters, vaults.
- Locations of trees that are four inches in diameter or greater, within or adjacent to the street right-of-way.
- Locations of USA utility markings within the project limits.

Task 1.4: Geotechnical Investigation

The Consultant shall perform a detailed geotechnical investigation and prepare a report for sites requiring new segment walls. The report shall include but is not limited to: borings to determine subsurface conditions and site geology, soil bearing capacity, presence of rock and rock removal capability factors/analysis, anticipated excavation characteristics of materials along the alignment or at the proposed sites, groundwater conditions and dewatering, R-values, moisture content, density, gradation, consolidation, expansion, soil contamination issues, laboratory test results (max density, sieve analysis, Atterberg limit), soil corrosivity, soil chemistry test results (pH, resistivity, sulfate content), corrosion protection and control, pipeline bedding requirements, suitability of native material for backfill, and shoring recommendations. For the purpose of this RFP, the investigation shall assume 25 borings. Additional borings, if necessary and agreed to by the City Project Manager shall be completed after a written contract change order is approved. Boreholes in paved roadways shall be repaired with permanent hot mix patch repair in accordance with **Attachment "3"**. Consultant shall incorporate any and all geotechnical requirements into the planning and design phases of the Project in conformance with the industry standard of care.

Consultant shall summarize all findings, results, and recommendations into a draft geotechnical investigation report. Three (3) copies and one (1) electronic copy of the draft geotechnical report shall be submitted for review. OMUC comments shall be incorporated and three (3) copies and one (1) electronic copy of the final geotechnical report shall be submitted.

Task 1.5 – Site Security Assessment and Preliminary Design Report (30%)

- Consultant shall furnish all labor, materials, equipment, insurance, training and certifications to complete the site security assessment.
- Consultant shall review attached Initial Assessment Report.
- Consultant shall perform all required safety and security assessments of, but not limited to, intrusion to property after hours, doors, locks, keys, fencing, gates, lighting, alarms, communication systems, and security cameras.
- Consultant shall summarize the findings and provide a safety and security assessment report within the preliminary design report.
- Consultant shall Identify the needed improvements, corrective issues, and provide recommendations.
- Consultant shall verify electrical capacity and needs at each site and coordinate with Southern California Edison (SCE) as needed.
- Operations shall be performed while in service without causing disruption to the treatment or distribution system.
- Findings are to be graded in accordance with applicable standards, latest editions, from the following agencies:
    - Guidelines for Physical Security of Water Utilities – ANSI/ASCE/EWRI 56-10
- Identify required permits and clearances needed to construct the project.
- Consultant shall prepare a preliminary plan and design report that summarizes the consultant's evaluation of the project constraints, which include the following:

- Proposed site security improvements.
- Work plan that identifies and discusses the various project constraints and scope items that must be addressed and recommend a plan of action(s) that should be followed to deliver the project.
- Opinion of probable costs.
- Provide phasing recommendations based on input received from City Staff, which may include 1. site access and hardening, 2. fixture upgrades and electrical upgrades, and 3. security camera and monitoring equipment upgrades. Suggested additional recommendations include Critical site improvement priority list, project budget, etc.

- The Design Report will also memorialize the specified materials proposed for the project. A summary of the city-approved variances and deviations from standard plans will be included in the Design Report

Task 1.6 – Coordination with City of Ontario IT Department, City of Ontario Broadband Department, Bay Alarm Company

Consultant shall coordinate between each agency during the design of the security camera and monitoring equipment upgrades. Successful implementation of the project will be contingent on City of Ontario IT Department, City of Ontario Broadband Department, and Bay Alarm Company approval of design. As such, Consultant will establish a point of contact at each agency that will be able to provide any technical input and submit all necessary plans, and specifications to secure all approvals and permits that will be necessary. The proposed design shall be compatible and integrable with the existing security camera and monitoring equipment recommended by coordinated agencies. Consultant, on the City's behalf, shall procure all permits, licenses, and other authorizations necessary to accomplish the work.

Task 1.7 – Project Workshop

Conduct preliminary design workshop including a detailed presentation of OMUC personnel at completion of draft preliminary design report to discuss the project, schedule, cost, constraints, and transition plan to final design.

Consultant shall summarize all findings, results, conclusion, and recommendations into a draft PDR. The Consultant shall submit five (5) copies of each Draft PDR including one (1) electronic copy (smart pdf) and original files for OMUC review. OMUC comments on the Draft PDR shall be incorporated into a Final PDR. The Consultant shall submit to the OMUC eight (8) copies each of the final PDR including an electronic copy (smart pdf) and original files.

<u>Tasks identified in Phase 2 and 3 shall apply to up to three (3) construction phases approved per Task 1.5</u>

3. PHASE 2 – ENGINEERING DESIGN SERVICES AND PROJECT MANAGEMENT

Task 2.1 – Preliminary Design (60%) Submittal

Upon completing record document research and field data collection the Consultant shall compile all gathered information and prepare preliminary design plans. Preliminary design shall include recommended site security improvements required. After the Preliminary Design is approved by the City, the Consultant shall proceed with the detailed design.

The design will include the necessary security and safety improvements. Task 2.1 will include additional data collection as necessary.

The plans will illustrate and specify all necessary information for the Contractor to bid and complete the work.

Along with the 60% construction plan submittal, the technical specifications will be submitted, including the City's front-end contract documents which will be tailored for the project. The City will provide the front-end document boiler plate.

Consultant will provide the plans sheets at 1" = 40' for horizontal and 1" = 4' for vertical scale. The plan set will include title sheet, notes, and standard details.

Consultant will attend a meeting with City staff to review and discuss the 60% plan-check comments and other City staff feedback. Consultant shall maintain a log of 60% plan review comments and responses.

Task 2.2 – Detailed Design (90%) Submittal

With preliminary design (60%) review comments from the City and other entities, Consultant shall prepare detailed design PS & E for the proposed improvements. Plans shall be prepared using computer aided design software (AutoCAD) and shall be printed on size 24x36 paper. The 90% plan submittal shall be stamped and signed by a California Registered Professional Engineer. The 90% special provisions and technical specifications (PS & E) shall be prepared and submitted. The City will review the submitted PS & E, provide comments, and request revisions until it is in compliance with City standards and policies.

The 90% design submittal will include all necessary information for the Contractor to bid and complete the work.

The plans will illustrate and specify the dimensions, type of material, sizes, construction sequencing, and the quality required for the project.

Along with the 90% construction plan submittal, the technical specifications will be submitted, including the City's front-end contract documents which will be tailored for the project.

Consultant will provide the plans sheets at 1" = 40' for horizontal and 1" = 4' for vertical scale. The plan set will include title sheet, notes, and standard details.

Consultant will attend a meeting with City staff to review and discuss the 90% plan-check comments and other City staff feedback. Consultant shall maintain a log of 90%

plan review comments and responses. If warranted by the plan check comments, Consultant shall submit one more iteration of the 90% plans and specifications for review and approval.

Task 2.3 – Final Design Revisions

Consultant shall make all City-requested changes, additions, deletions, and corrections in the Final Design and Specifications at no additional cost, so long as they are not in conflict with the requirements of public agencies having jurisdiction or prior approval, or inconsistent with earlier City direction or Consultant's professional judgment. Consultant shall bring any such conflicts and/or inconsistencies to the attention of City. The parties agree that Consultant, and not the City, possesses the requisite expertise to determine the constructability of the Final Working Drawings and Specifications. However, the City reserves the right to conduct one or more constructability review processes with the Final Working Drawings and Specifications, and to hire an independent Consultant or other consultant to perform such reviews. Any such independent constructability review shall be at City's expense. Consultant shall make all City-requested changes, additions, deletions, and corrections in the Final Working Drawings and Specifications which may result from any constructability review, at no additional cost to the City, so long as they are not in conflict with the requirements of public agencies having jurisdiction or prior approval, or inconsistent with earlier City direction or Consultant's professional judgment. If such changes, additions, deletions, or corrections are inconsistent with prior City direction, Consultant shall make such alterations and be compensated therefore pursuant to the Additional Services provision of this Agreement.

Task 2.4 – Final Working Drawings and Specifications (100% Submittal)

Upon approval of the 90% design PS & E by the City, the Consultant shall prepare the final working documents for bid. A complete set of 100% stamped and signed plans and specifications shall be submitted to the City. Such Final Working Drawings and Specifications shall be developed from the Preliminary Design Phase and Design Development Documents approved by City. The Final Working Drawings and Specifications shall set forth in detail all of the following: (1) the Project construction work to be done; (2) the materials, workmanship, finishes, and equipment required for the architectural, structural, mechanical, and electrical systems; As indicated in (Section 3.9.2 of the Agreement), City may be requested to supply Consultant with the necessary information to determine the proper location of all improvements on and off site, including record drawings ("as-built drawings") in City's possession. Consultant will make a good-faith effort to verify the accuracy of such information by means of a thorough interior and exterior visual survey of site conditions. City shall also make a good-faith effort to verify the accuracy of the as-built drawings and provide any supplemental information to Consultant which may not be shown on the as-built drawings.

Task 2.5 – Permits

Consultant shall identify all required permits and provide a list of permitting agencies, contacts, and requirements needed to obtain such permits. Consultant should identify

the timelines associated with the permit review and approval and potential impacts on project schedule. Consultant shall incorporate comments from the Agencies, if required with the approval from the City, Consultant shall revise the Scope of Work as necessary. Consultant will be responsible in securing easements, construction easements, encroachment permits, rights of way, dedications, infrastructures, road improvements, as well coordinating with utilities and adjacent property owners. The costs of such permits, approvals and other authorizations shall be paid by the City.

Task 2.6 Southern California Edison (SCE) Coordination and Approval

Southern California Edison (SCE) is the electrical utility provider to the city of Ontario. Consultant will coordinate with SCE for providing electrical service or additional capacity needs as required at each site. Consultant shall obtain approved SCE construction plans, which will be included as supplemental information to the contract documents. The City will pay all associated SCE fees.

Task 2.7 – Opinion of Probable Construction Cost (30%, 60%, 90% and 100% Submittal)

During the preparation of the 30%, 60%, 90% and 100% submittal packages, Consultant will prepare an Opinion of Probable Construction Cost (OPCC) for each portion of the project. The OPCC will be tabularized in the same format as the construction document bid sheet.

4. PHASE 3 - BIDDING SUPPORT SERVICES

Task 3.1 – Contract Document Interpretation and Bidding Assistance

During bidding, Consultant will provide interpretation and consultation regarding questions and/or requests for clarification to the plans and specifications. Consultant will assist and support the City taking the lead in preparing bid addenda as required to provide clarification to contract documents and responses to Requests for Information (RFI) and Requests for Clarifications (RFC). Consultant will help City staff with technical details required for the staff report to the City Council.

Task 3.2 – Submittal Review

Each submittal received from the Contractor will be reviewed for its completeness and conformance to the project specifications and City standards by the Consultant. The submittals will be distributed to the City for review and final comments before being returned to the Contractor for action.

Task 3.3 – Pre-Bid Meeting

Once City schedules the Pre-Bid Meeting, the Consultant shall attend the meeting, prepare meeting agenda, facilitate meeting, formally respond to all Requests for Information, and prepare meetings minutes.

Task 3.4 – Analyze Bids

After Project bid openings, Consultant shall assist City Staff in analyzing bids, verifying contractor's license, conduct background check of the lowest, responsive bidder, and make a recommendation for award of the construction contract.

Task 3.5 – Conformed Plans and Specifications

The Consultant shall prepare conformed plans and specifications for use in constructing the project. Conformed plans and specifications shall reflect changes made during bidding and will be noted as a revision to final design plans.

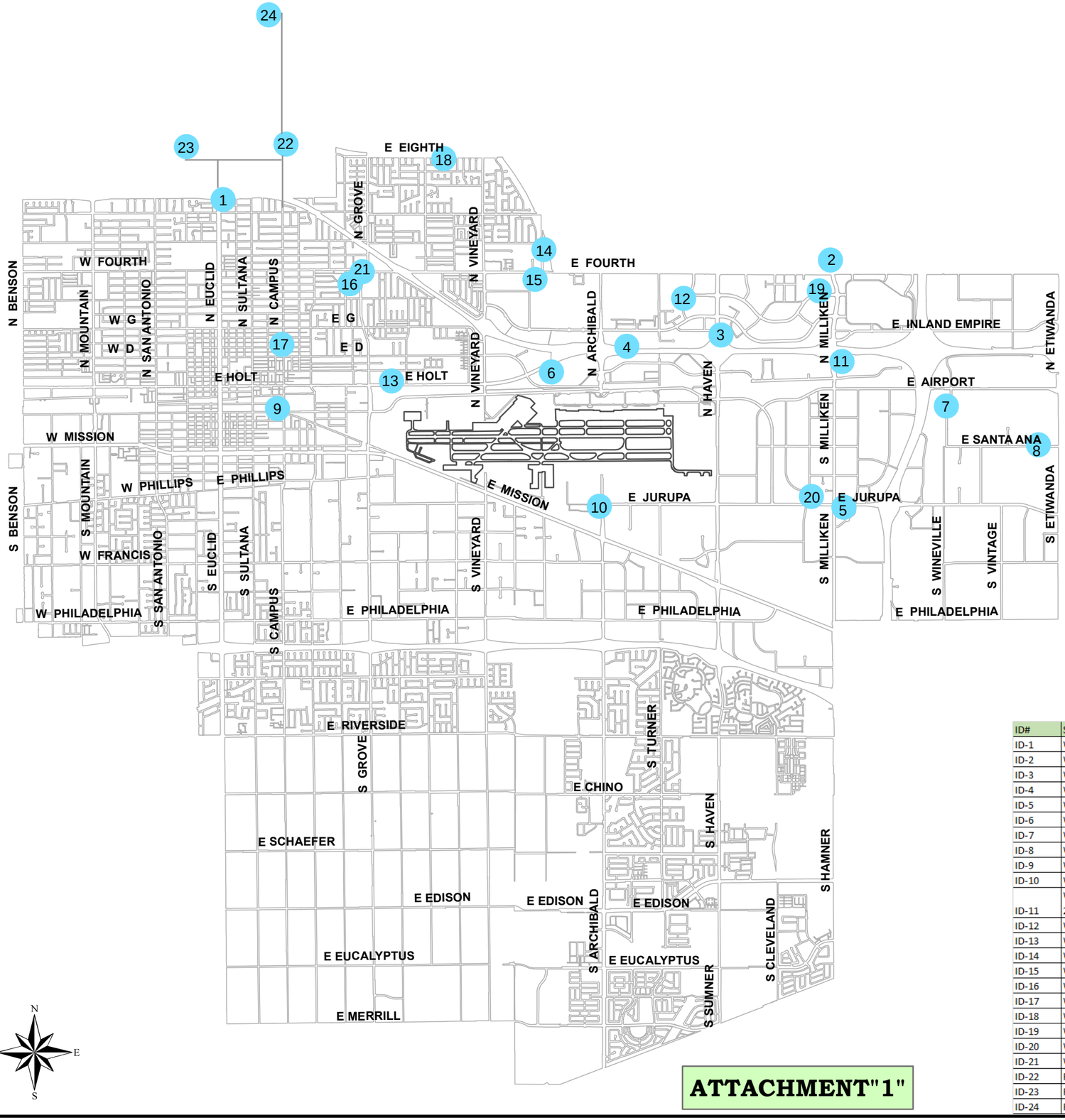
Task 3.6 - Additional Services

Consultant is encouraged in its proposals to identify any additional work that is not specified in this Scope of Work that would be, in its opinion, necessary to complete the project as defined herein. Consultant may propose additional services that in its opinion will improve the efficiency and quality of the project. If identified, the additional work or services must be included in the proposal but separated out in the Consultant's Fee Schedule as Optional Tasks. The City will have final discretion on acceptance and approval of these Optional Tasks.

Attachment “1”
Project Locations

OMUC CONTRACT NO. UT1073
CITY OF ONTARIO
SITE SECURITY IMPROVEMENTS

ONTARIO MUNICIPAL UTILITIES COMPANY



ATTACHMENT"1"

ID#	Site Location	Address (Latitude and Longitude)	Fiber
ID-1	Well 9, Booster 1348-1, 1348-2	300 E Alvarado St, Ontario, CA 91764	No
ID-2	Well 20	9600 Milliken Ave, Rancho Cucamonga, CA 91730	No
ID-3	Well 24	700 N Haven Ave, Ontario, CA 91764 (34.069379, -117.575077)	?
ID-4	Well 25	2982 Inland Empire Blvd, Ontario, CA 91764	?
ID-5	Well 27	4300 E Jurupa St, Ontario, CA 91761 (34.047955, -117.556795)	?
ID-6	Well 29	2505 E Guasti Rd, Ontario, CA 91761 (34.064988, -117.600892)	?
ID-7	Well 30	220 S Wineville Ave, Ontario, CA 91761(34.060490, -117.541260)	?
ID-8	Well 31	5719 E Santa Ana St, Ontario, CA 91761 (34.055544, -117.527381)	No
ID-9	Well 35, Reservoir 1010-1A	652 E Main St, Ontario, CA 91761	?
ID-10	Well 36	1400 S Archibald Ave, Ontario, CA 91761	?
ID-11	Well 37, 39, 37-IX,39-IX , Reservoir 1010-2A, 2B, CDA Milliken Booster	4327 E Guasti Rd, Ontario, CA 91761 (34.065831, -117.557447)	?
ID-12	Well 38	915 N Center Ave, Ontario, CA 91764	?
ID-13	Well 40	1335 E Holt Blvd, Ontario, CA 91761	?
ID-14	Well 41	1278 N Hellman Ave, Ontario, CA 91764	?
ID-15	Well 41-IX	2252 E 4th St, Ontario, CA 91764	?
ID-16	Well 44, 44-IX, Galvin Booster 1074-1, 2, 3, 4	994 N Cucamonga Ave, Ontario, CA 91764	No
ID-17	Well 45	665 East E Street, Ontario, CA 91764	No
ID-18	Well 46	1670 E 8th St, Ontario, CA 91764	No
ID-19	Well 47	4255 Concours St, Ontario, CA 91764 (34.074938, -117.560358)	?
ID-20	Well 49, Reservoir 925-1A, CDA Booster 1, 2, 3	1340 S Dupont Ave, Ontario, CA 91761	?
ID-21	Well 52	1270 E 4th St, Ontario, CA 91764	No
ID-22	Reservoir 1212-3A, Booster 1348-3, 4	50 N Campus Ave, Upland, CA 91786	No
ID-23	Reservoir 1212-1A, 1212-1B, WFA 1	100 S Fern Ave, Upland, CA 91786	No
ID-24	Reservoir 1348-1A, 1B, 1C	596 E 13th St, Upland, CA 91786	No

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Improvements\Agenda Map\Agenda Map UT1073 Site Security Improvements V2.mxd

Attachment “2”
Initial Assessment Report of Existing Conditions
and Preliminary Recommendations

Site Security Improvements at City Facilities

Project Site Locations:

ID#	Site Location	Address (Latitude and Longitude)
ID-1	Well 9, Booster 1348-1, 1348-2	300 E Alvarado St, Ontario, CA 91764
ID-2	Well 20	9600 Milliken Ave, Rancho Cucamonga, CA 91730
ID-3	Well 24	700 N Haven Ave, Ontario, CA 91764 (34.069379, -117.575077)
ID-4	Well 25	2982 Inland Empire Blvd, Ontario, CA 91764
ID-5	Well 27	4300 E Jurupa St, Ontario, CA 91761 (34.047955, -117.556795)
ID-6	Well 29	2505 E Guasti Rd, Ontario, CA 91761 (34.064988, -117.600892)
ID-7	Well 30	220 S Wineville Ave, Ontario, CA 91761(34.060490, -117.541260)
ID-8	Well 31	5719 E Santa Ana St, Ontario, CA 91761 (34.055544, -117.527381)
ID-9	Well 35, Reservoir 1010-1A	652 E Main St, Ontario, CA 91761
ID-10	Well 36	1400 S Archibald Ave, Ontario, CA 91761
ID-11	Well 37, 39, 37-IX,39-IX , Reservoir 1010-2A, 2B, CDA Milliken Booster	4327 E Guasti Rd, Ontario, CA 91761 (34.065831, -117.557447)
ID-12	Well 38	915 N Center Ave, Ontario, CA 91764
ID-13	Well 40	1335 E Holt Blvd, Ontario, CA 91761
ID-14	Well 41	1278 N Hellman Ave, Ontario, CA 91764
ID-15	Well 41-IX	2252 E 4th St, Ontario, CA 91764
ID-16	Well 44, 44-IX, Galvin Booster 1074-1, 2, 3, 4	994 N Cucamonga Ave, Ontario, CA 91764
ID-17	Well 45	665 East E Street, Ontario, CA 91764
ID-18	Well 46	1670 E 8th St, Ontario, CA 91764
ID-19	Well 47	4255 Concours St, Ontario, CA 91764 (34.074938, -117.560358)
ID-20	Well 49, Reservoir 925-1A, CDA Booster 1, 2, 3	1340 S Dupont Ave, Ontario, CA 91761
ID-21	Well 52	1270 E 4th St, Ontario, CA 91764
ID-22	Reservoir 1212-3A, Booster 1348-3, 4	50 N Campus Ave, Upland, CA 91786
ID-23	Reservoir 1212-1A, 1212-1B, WFA 1	100 S Fern Ave, Upland, CA 91786
ID-24	Reservoir 1348-1A, 1B, 1C	596 E 13th St, Upland, CA 91786

Well 9, Booster 1348-1, Booster 1348-2 (ID-1)

Address: 300 E Alvarado St, Ontario, CA 91764



Recommended Improvements:

1. Construction of 8 feet wrought iron fence, 8 feet masonry block wall, or improve the height of the wall around the facility. Improvement to the wall height could be done by constructing an overhanging wrought iron fence on top of the wall to a height of 8 feet.
    a. Construction of 8 feet masonry block wall along Figure 2 and 5 to block loud noises from the freeway. Future coordination with Caltrans will be required.
2. The entrance gate in figure 4 should be replaced with a taller rolling gate.
3. Improvements to the lighting and addition of security cameras to the facility with consciousness that there is a residential community south of the site.



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5

Well 20 (ID-2)

Address: 9600 Milliken Avenue, Rancho Cucamonga, CA 91730



Recommended Improvements:

1. Improve the height of the wall around the facility. Improvement to the wall height could be done by constructing an overhanging wrought iron fence on top of the wall to a height of 8 feet.
2. Improvements to the lighting and the addition of security cameras to the facility.
3. Install a 30' tower to communicate with the city's existing SCADA.

Well 24 (ID-3)

Address: 700 N Haven Avenue, Ontario, CA 91764 (34.069379, -117.575077)



Well 24 is located behind Ontario Airport Hotel. The existing CL2 room is planned to be demolished and rebuilt.

Recommended Improvements:

1. Improvements to the lighting and the addition of security cameras to the facility.
    a. The city will be installing an AMI at this location.
2. Improvements to the entrance gate shall include an automated iron rolling gate.
3. Construction of 8 feet wrought iron fence, 8 feet masonry block wall, or improve the height of the wall around the facility. Improvement to the wall height could be done by constructing an overhanging wrought iron fence on top of the wall to a height of 8 feet. A portion of the wall on the northwest corner will be removed and replaced when the new Chlorine room is constructed.


Fig. 1


Fig. 2


Fig. 3



Well 25 (ID-4)

Address: 2982 Inland Empire Blvd, Ontario, CA 91764



Well 25 is currently deactivated. The city leases part of the location to cell companies and has cell towers within the property grounds.

Recommended Improvements:

1. Construction of 8 feet wrought iron fence or 8 feet masonry block wall.
2. Improvements to the lighting and the addition of security cameras to the facility.
3. Improvements to the entrance gate shall include an automated iron rolling gate with keypads inside and outside of the facility.





Well 27 (ID-5)

Address: 4300 E Jurupa St, Ontario, CA 91761 (34.047955, -117.556795)



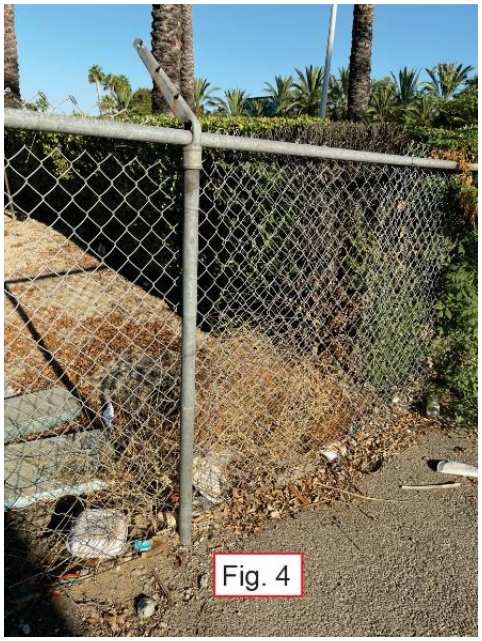
Recommended Improvements:

1. Construct 8 feet wrought iron fence, 8 feet masonry block wall, or improve the height of the wall around the facility. Improvement to the wall height could be done by constructing an overhanging wrought iron fence on top of the wall to a height of 8 feet.



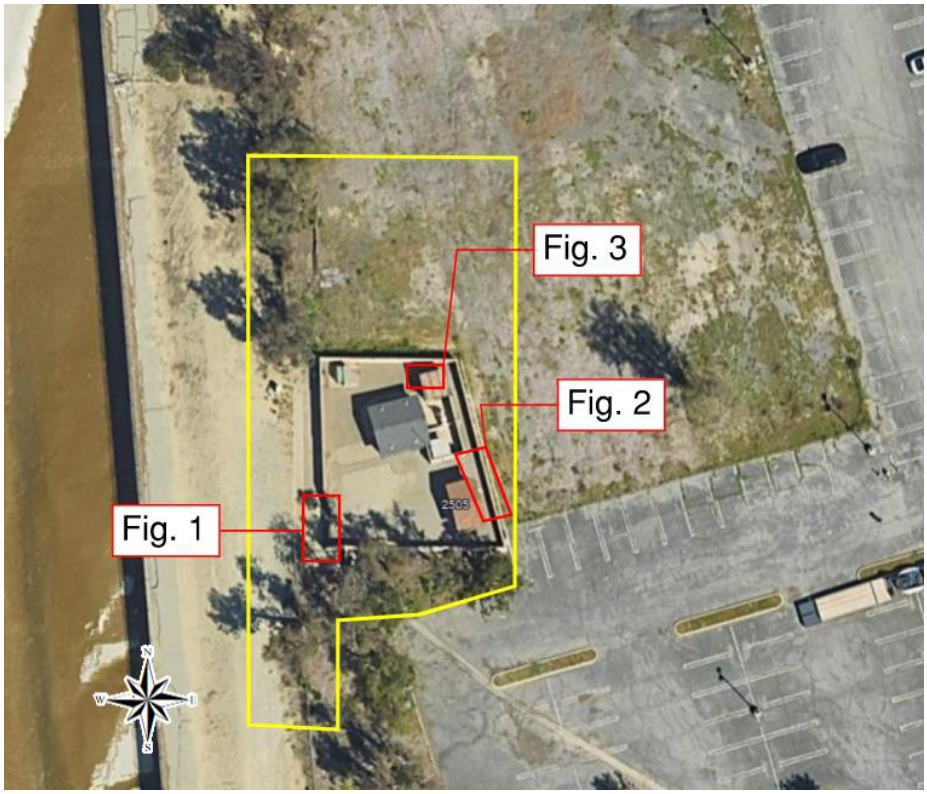






Well 29 (ID-6)

Address: 2505 E Guasti Rd, Ontario, CA 91761 (34.064988, -117.600892)

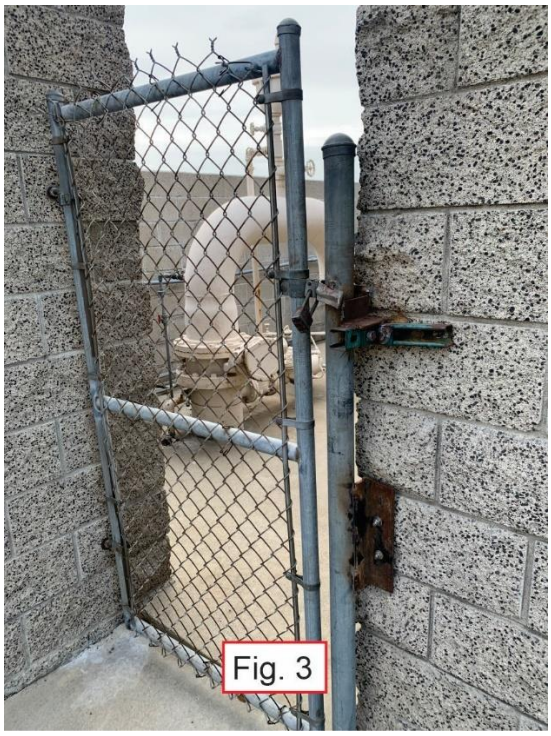


Recommended Improvements:

1. Construct 8 feet wrought iron fence, 8 feet masonry block wall, or improve the height of the wall around the facility. Improvement to the wall height could be done by constructing an overhanging wrought iron fence on top of the wall to a height of 8 feet.
2. Improvements to the entrance gate shall include an automated iron rolling gate.
    a. Figure 1 displays the damaged front gate that will need to be replaced.
3. Improvements to the lighting and the addition of security cameras to the facility.







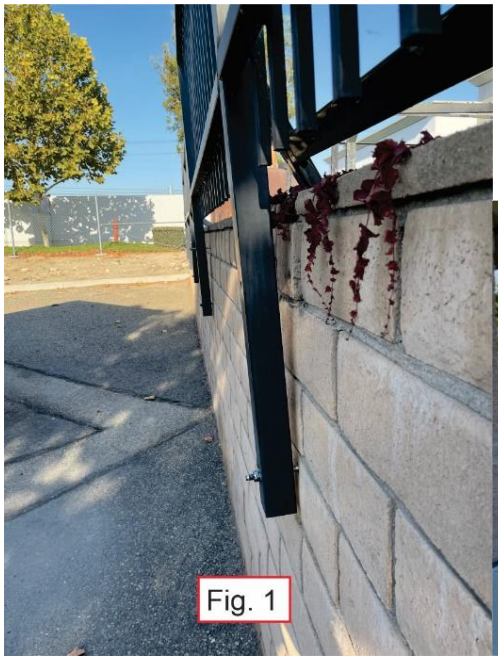
Well 30 (ID-7)

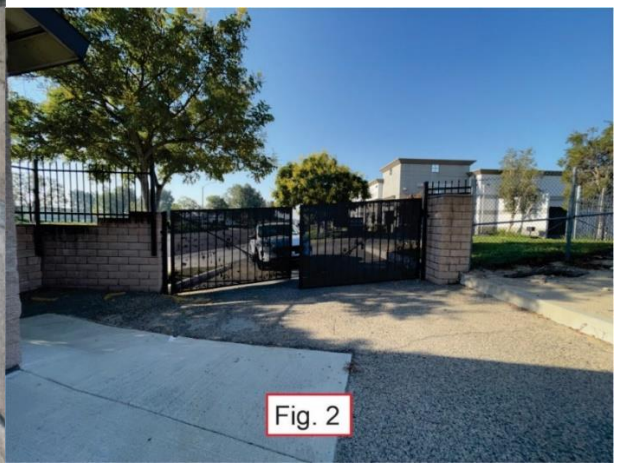
Address: 220 S Wineville Ave, Ontario, CA 91761 (34.060490, -117.541260)



Recommended Improvements:

1. Core drill and post cement the existing falling wrought iron fence into the wall.
2. Construct 8 feet wrought iron fence, 8 feet masonry block wall, or improve the height of the wall around the facility. Improvement to the wall height could be done by constructing an overhanging wrought iron fence on top of the wall to a height of 8 feet.
    a. Figures 3 and 4 are potential areas to remove and replace the existing fencing with a more secure wall. Improvements to the walls should make it conscious that there is a high-pressure gas line in the back half of the site.
3. Improvements to the lighting and the addition of security cameras to the facility.
4. Improvement to the existing entrance gate in Figure 2 by extending the gate farther out towards the property line and installing an electric gate opener.


Fig. 1


Fig. 2





Well 31 (ID-8)

Address: 5719 E Santa Ana St, Ontario, CA 91761 (34.055544, -117.527381)



Recommended Improvements:

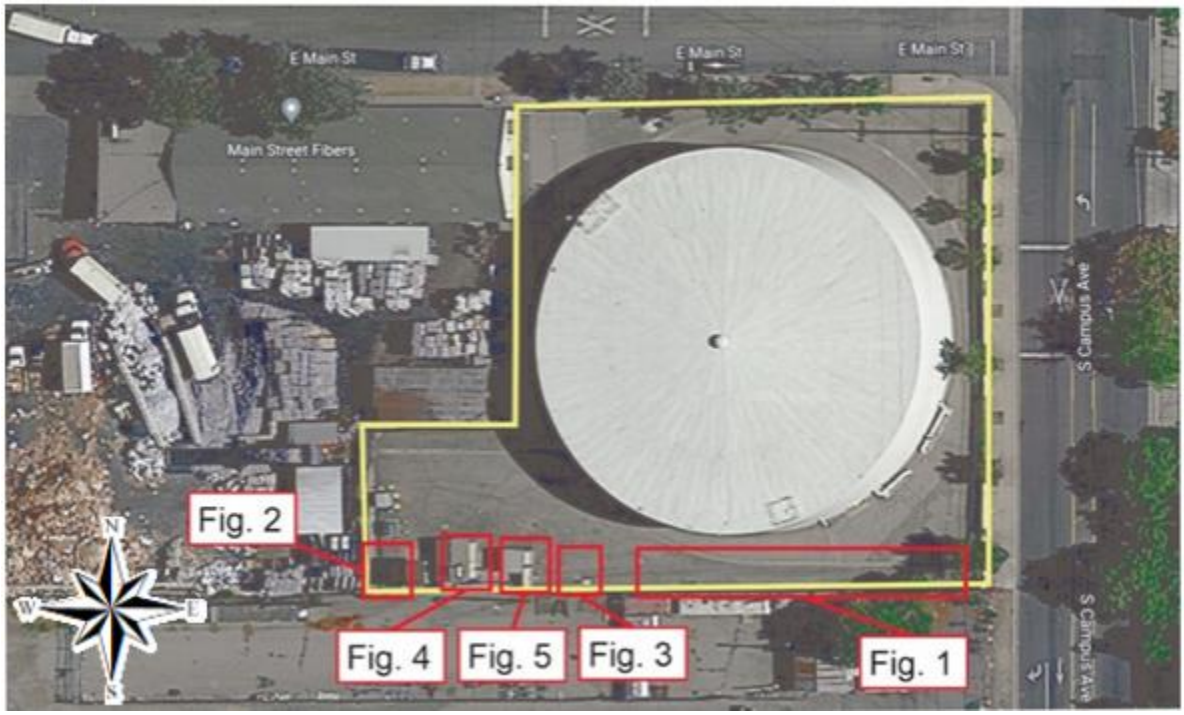
1. Improve the height of the wall around the facility. Improvement to the wall height could be done by constructing an overhanging wrought iron fence on top of the wall to a height of 8 feet.
2. Improvements to the lighting and the addition of security cameras to the facility.
3. Replacement of the entrance gate and automatic gate opener.





Well 35, Reservoir 1010-1A (ID-9)

Address: 652 E Main St, Ontario, CA 91761



Recommended Improvements:

1. Construct 8 feet wrought iron fence, 8 feet masonry block wall, or improve the height of the wall around the facility. Improvement to the wall height could be done by constructing an overhanging wrought iron fence on top of the wall to a height of 8 feet.
2. Improvements to the lighting and the addition of security cameras to the facility.
3. Improvements to the entrance gate to allow the safety loops to be operational.


Fig. 1

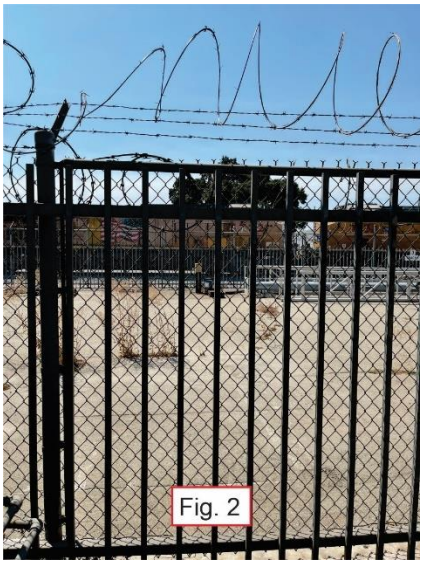
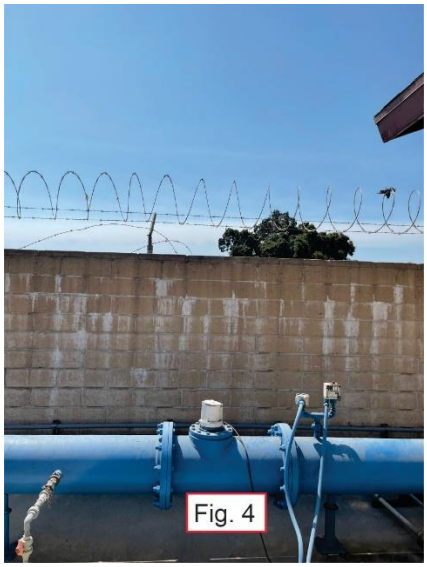

Fig. 2

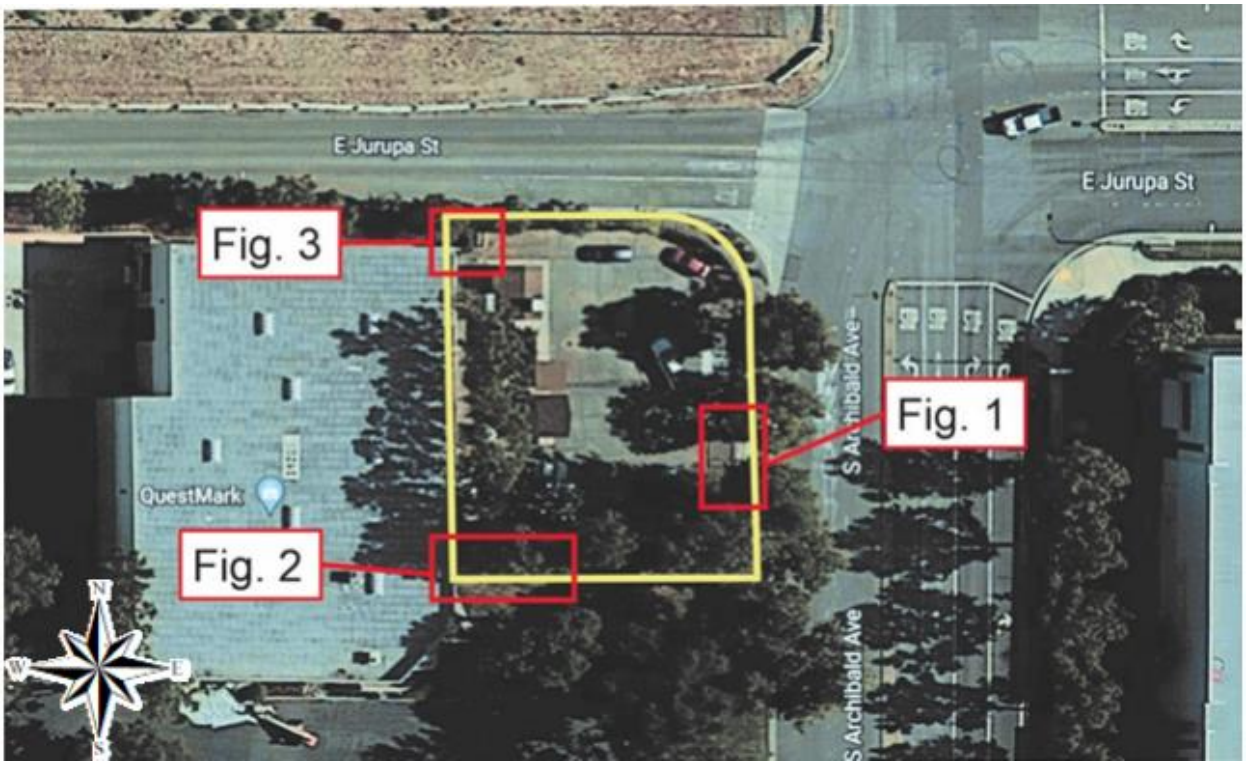

Fig. 3


Fig. 4



Well 36 (ID-10)

Address: 1400 S Archibald Ave, Ontario, CA 91761

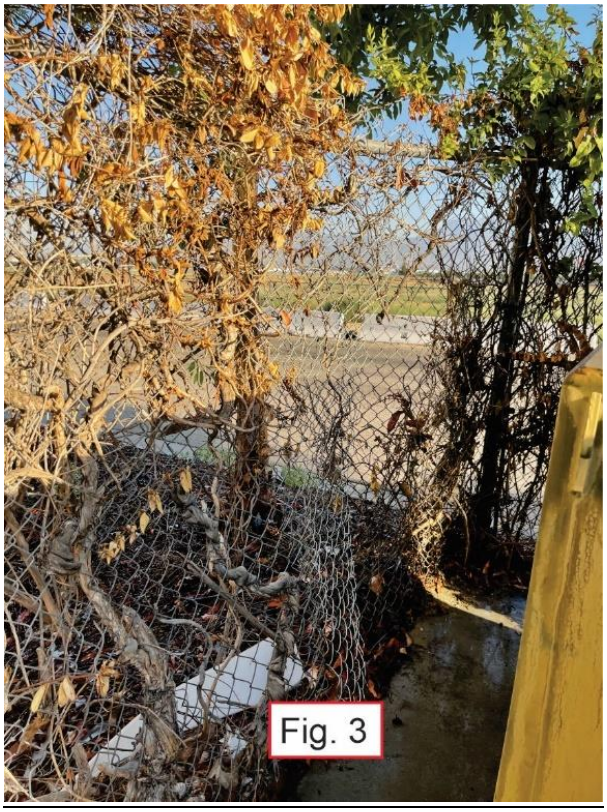


Recommended Improvements:

1. Construct 8 feet wrought iron fence, 8 feet masonry block wall, or improve the height of the wall around the facility.
    a. Improvement to the wall height of the south and west side in Figure 2 could be done by constructing an overhanging wrought iron fence on top of the wall to a height of 8 feet.
        i. A new chlorine room will be constructed on site and the new wall will be required to match the new building.
    b. Improvements to the lighting and the addition of security cameras to the facility.
    c. A walk-through gate should be installed in the southeast corner beside the rolling gate.


Fig. 1


Fig. 2


Fig. 3

Well 37, 39, 37-IX,39-IX, Reservoir 1010-2A, 2B, CDA Milliken Booster (ID-11)

Address: 4327 E Guasti Rd, Ontario, CA 91761 (34.065831, -117.557447)



Recommended Improvements:

1. Construct 8 feet wrought iron fence, 8 feet masonry block wall, or improve the height of the wall around the facility.
    a. Caltrans coordination will be required to approve the walls along the north side of the facility next to the 10 freeway and west side along Milliken Avenue.
    b. Install k-rails on the west side of the facility along Milliken Avenue.
    c. Improvements to the lighting and the addition of security cameras to the facility.
        i. It is recommended that the site have perimeter lighting and security cameras to be added in key areas of the site.


Fig. 1


Fig. 2


Fig. 3

Well 38 (ID-12)

Address: 915 N Center Ave, Ontario, CA 91764

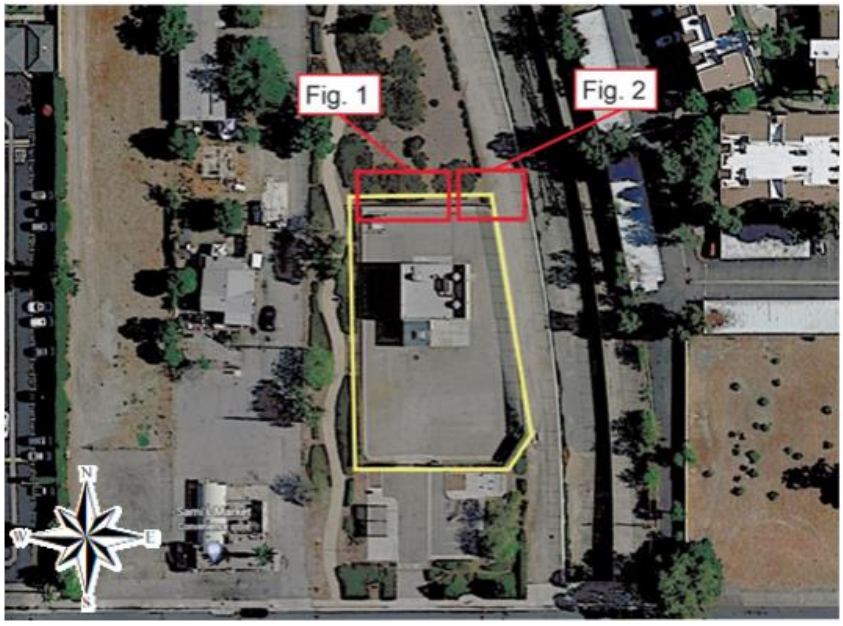


Recommended Improvements:

1. Improvements to the lighting of the facility and the addition of security cameras inside the building.

Well 40 (ID-13)

Address: 1335 E Holt Blvd, Ontario, CA 91761



Recommended Improvements:

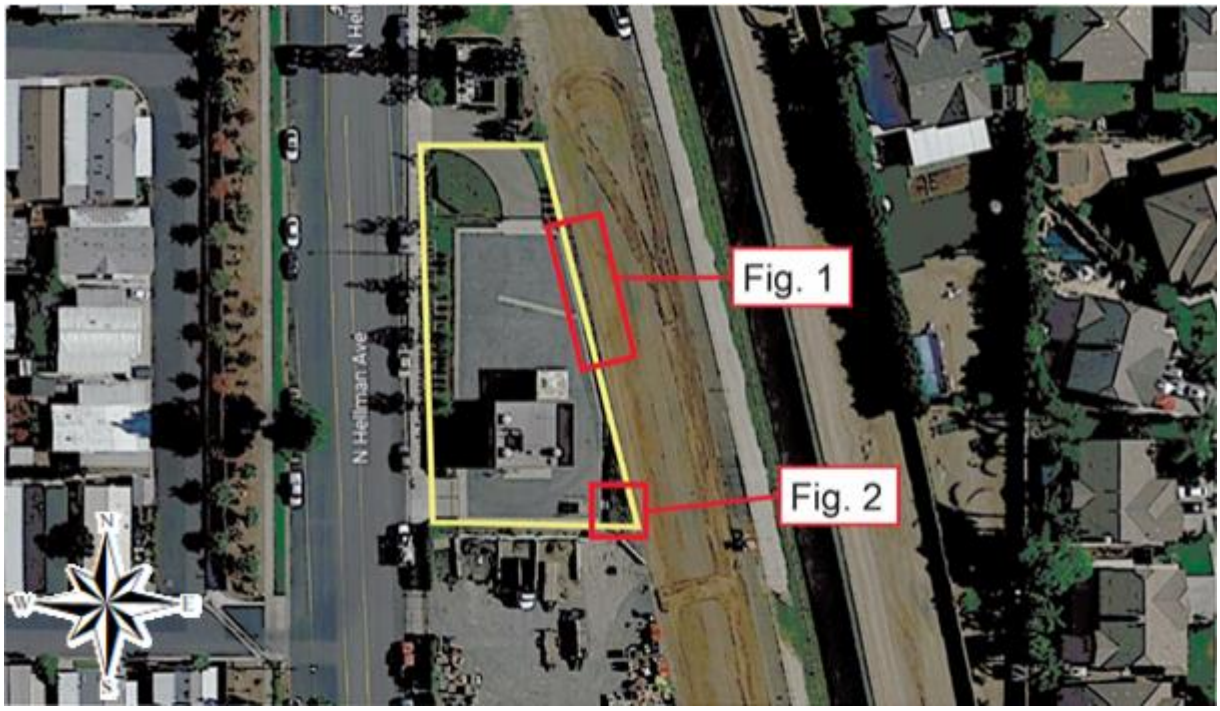
1. Construction of 8 feet wrought iron fence.
    a. Figures 1 and 2 display areas where the chain linked fence has been damaged.
2. Improvements to the lighting and the addition of security cameras to the facility.





Well 41 (ID-14)

Address: 1278 N Hellman Ave, Ontario, CA 91764



Recommended Improvements:

1. Construct 8 feet wrought iron fence around the facility.
2. Improvements to the lighting and the addition of security cameras to the facility.


Fig. 1


Fig. 2

Well 41-IX (ID-15)

Address: 2252 E 4th St, Ontario, CA 91764

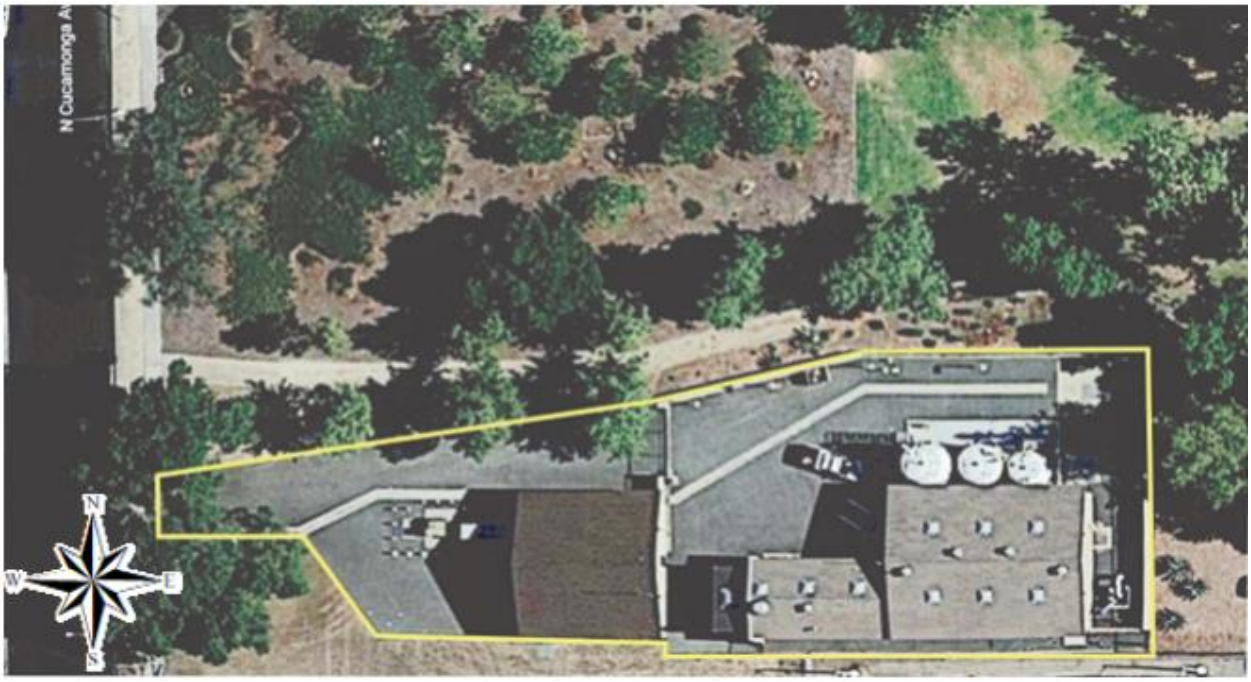


Recommended Improvements:

1. Improvements to the lighting and the addition of security cameras to the facility.

Well 44, Well 44-IX, Galvin Booster 1,2,3,4 (ID-16)

Address: 994 N Cucamonga Ave, Ontario, CA 91764

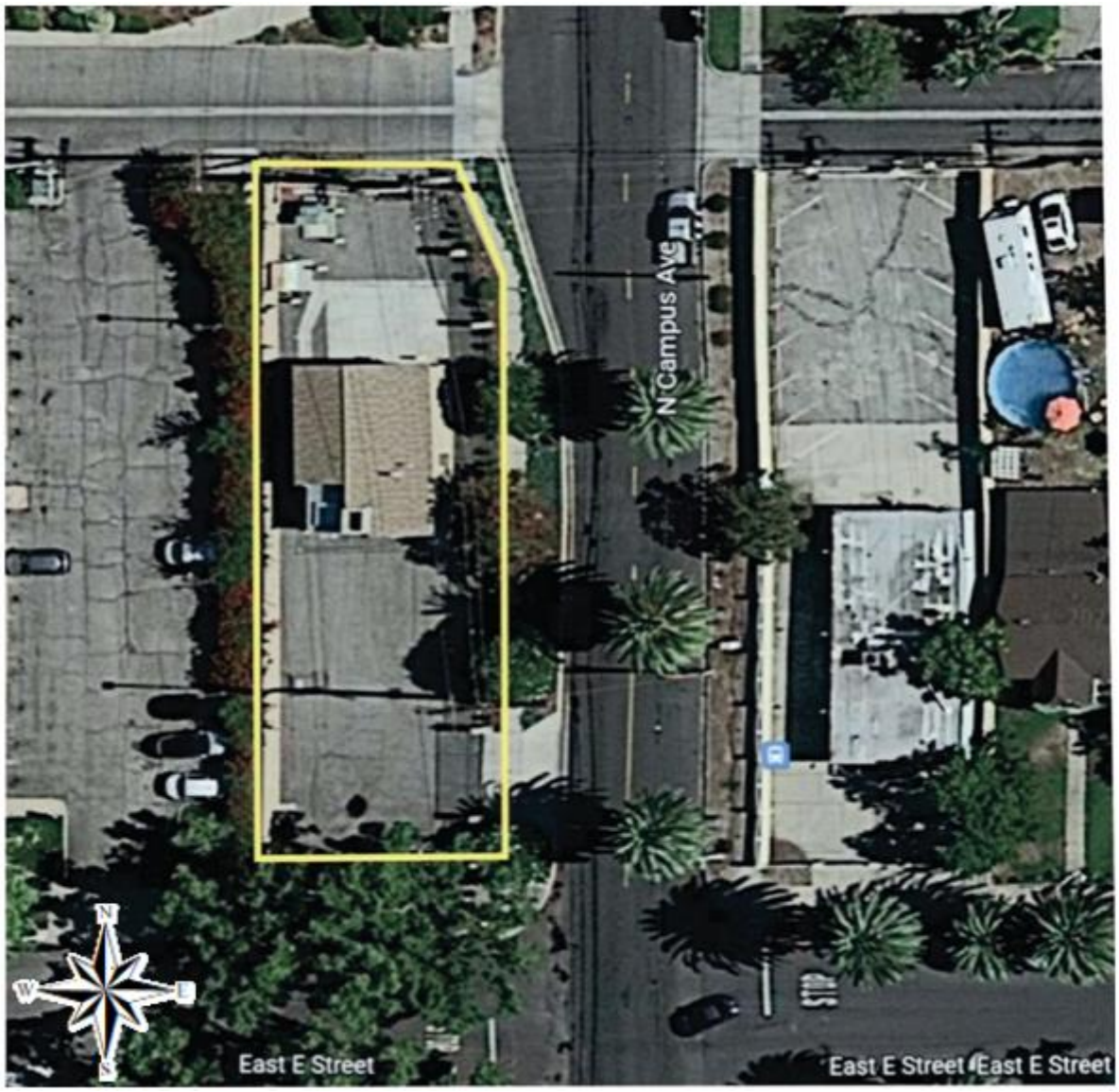


Recommended Improvements:

1. Extend the block wall towards the street and relocate the automatic gate towards the extended wall.

Well 45 (ID-17)

Address: 665 East E Street, Ontario, CA 91764



Recommended Improvements:

1. Improvements to the lighting and the addition of security cameras to the facility will help reduce potential intrusions.

Well 46 (ID-18)

Address: 1670 E 8th St, Ontario, CA 91764

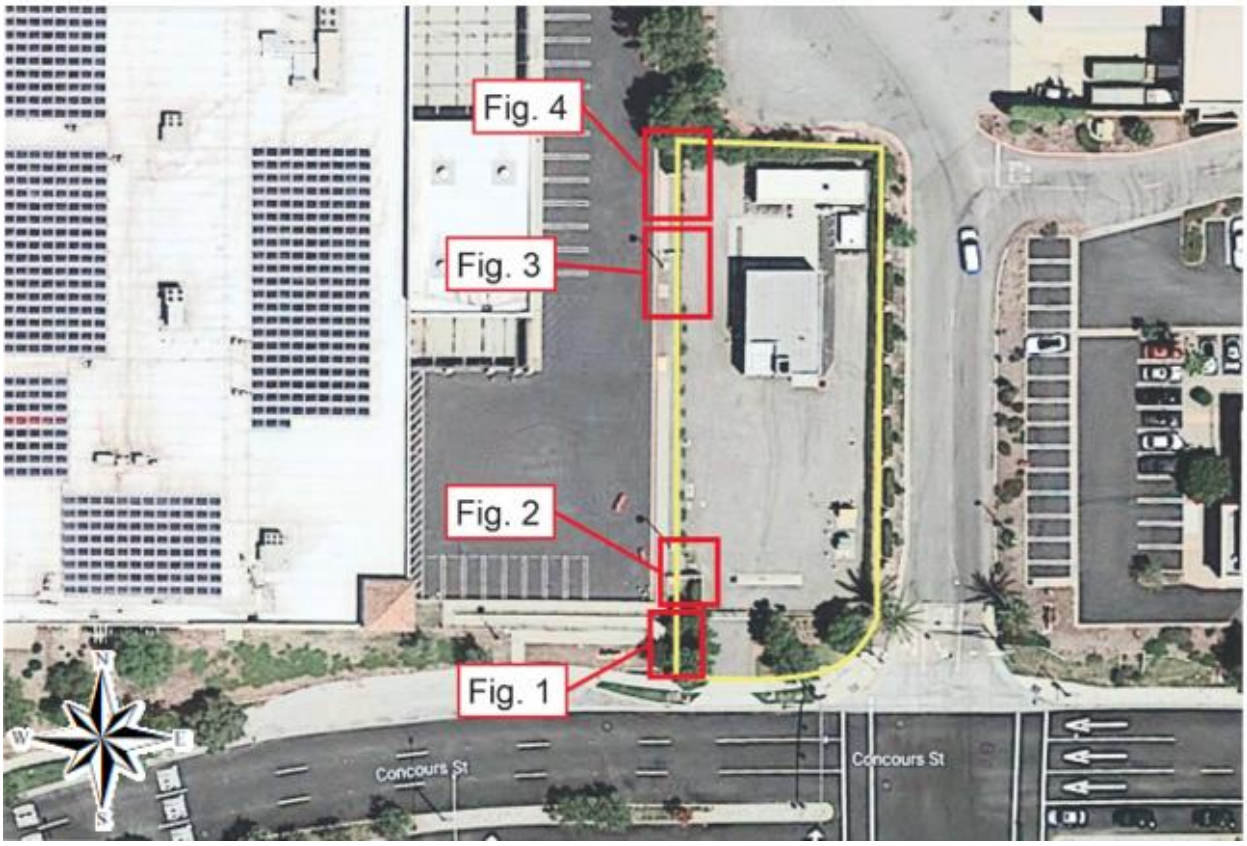


Recommended Improvements:

1. Improvements to the lighting and the addition of security cameras to the facility will help reduce potential intrusions.
    a. Additional security cameras should be monitoring the diesel fuel tank at the facility.

Well 47 (ID-19)

Address: 4255 Concours St, Ontario, CA 91764 (34.074938, -117.560358)



Recommended Improvements:

1. Improvements to the wall height to 8 feet surrounding the facility would help prevent intrusions into the facility.
2. Improvements to the lighting and the addition of security cameras to the facility will help reduce potential intrusions.



Fig. 1



Fig. 2

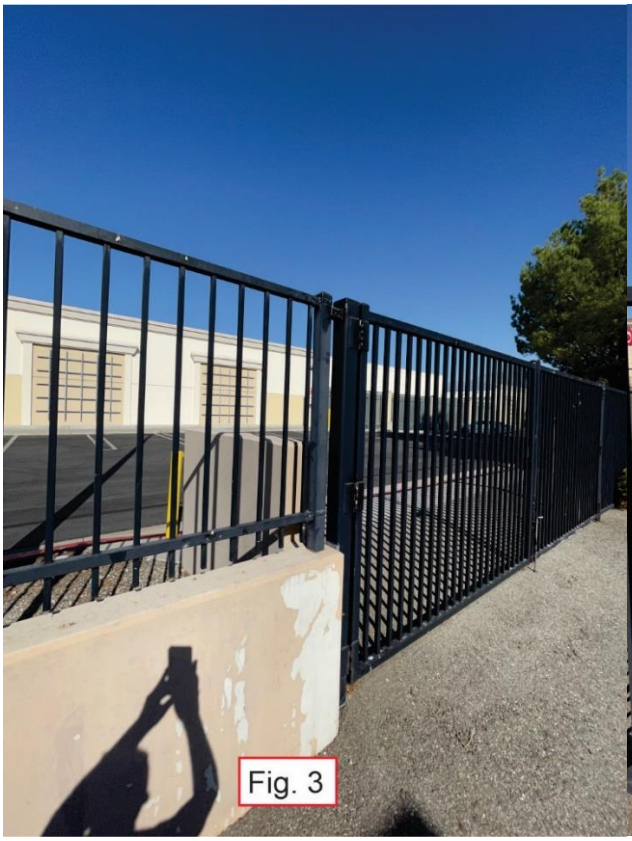


Fig. 3

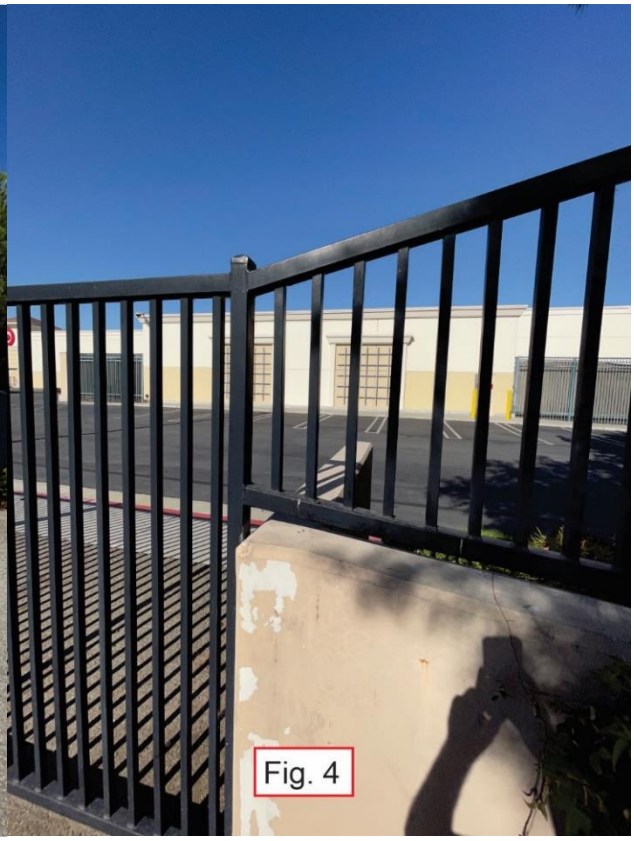
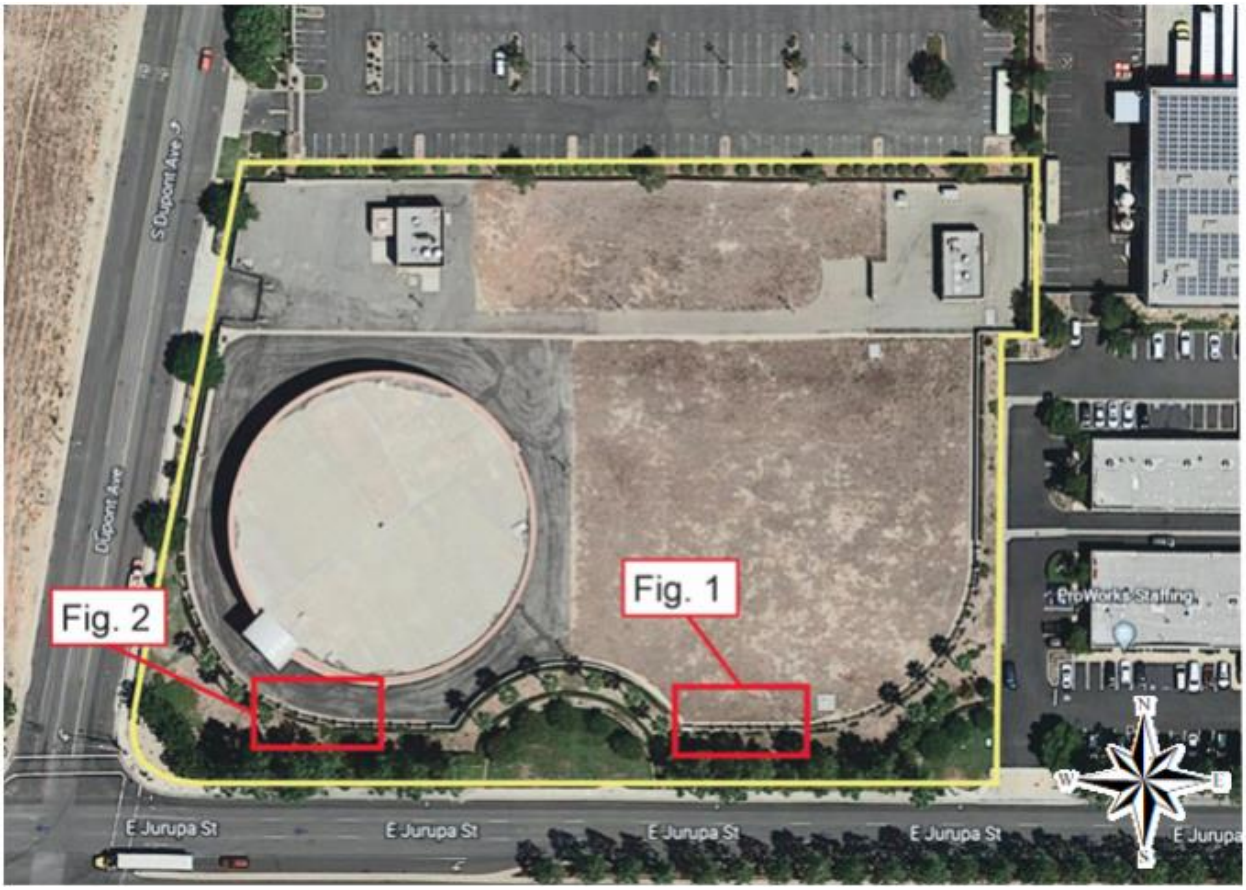


Fig. 4

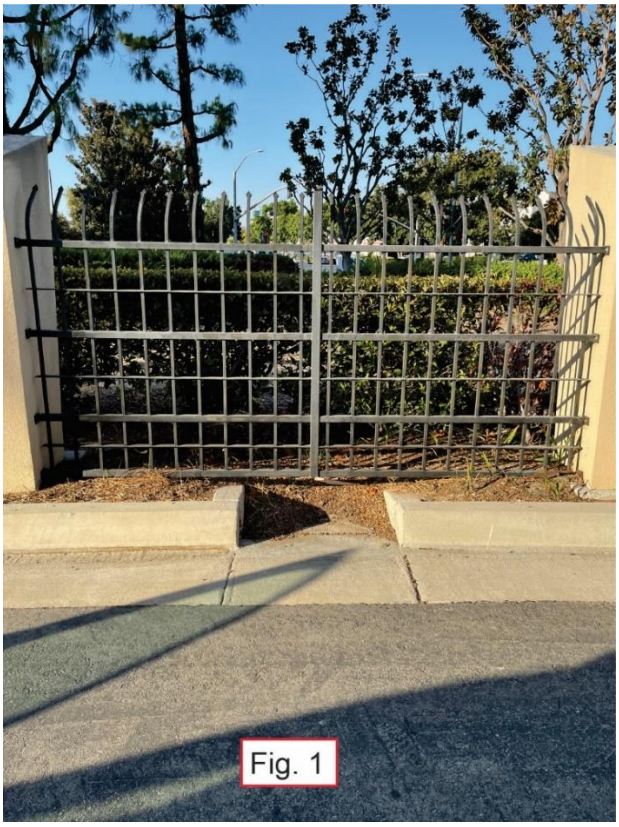
Well 49, Reservoir 925-1A, CDA Booster 1, 2, 3 (ID-20)

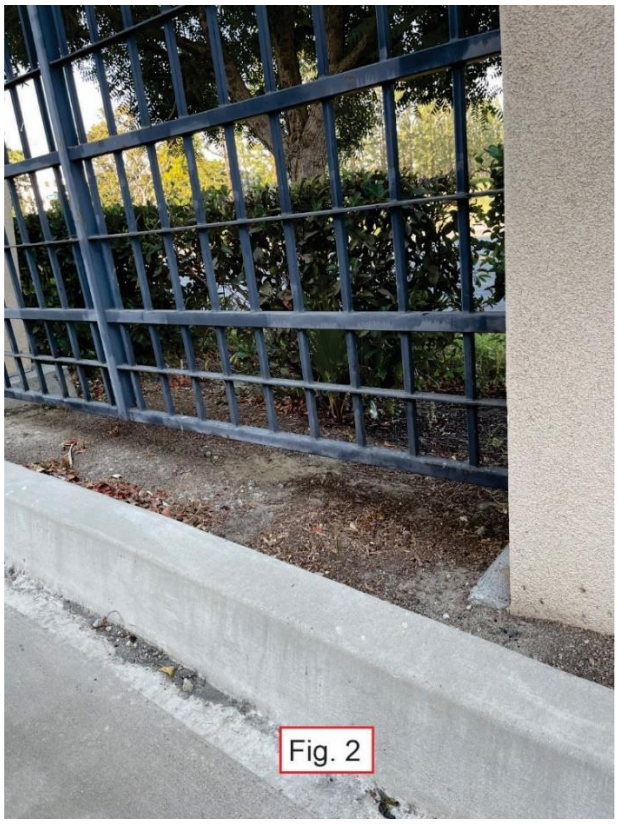
Address: 1340 S Dupont Ave, Ontario, CA 91761



Recommended Improvements:

1. Construct 8 feet wrought iron fence or 8 feet masonry block wall. This will replace the chain link fence and ineffective fence design.
2. Improvements to the lighting and the addition of security cameras to the facility will help reduce potential intrusions.





Well 52 (ID-21)

Address: 1270 E 4th St, Ontario, CA 91764

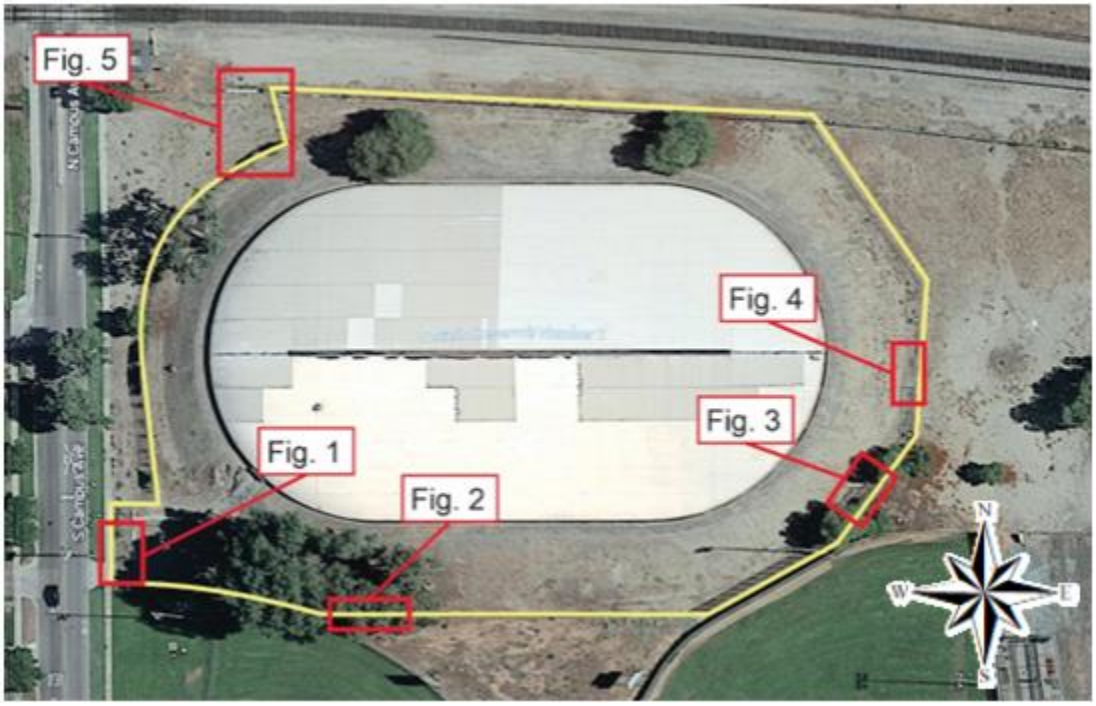


Recommended Improvements:

1. Currently Well 52 does not have any fenced structure around the facility. Construction of 8 feet wrought iron fence would limit the exposure of the facility to intrusions.
2. Improvements by the addition of security cameras inside the facility will help increase security provisions.

Reservoir 1212-3A, Booster 1348-3, 4 (ID-22)

Address: 50 N Campus Ave, Upland, CA 91786



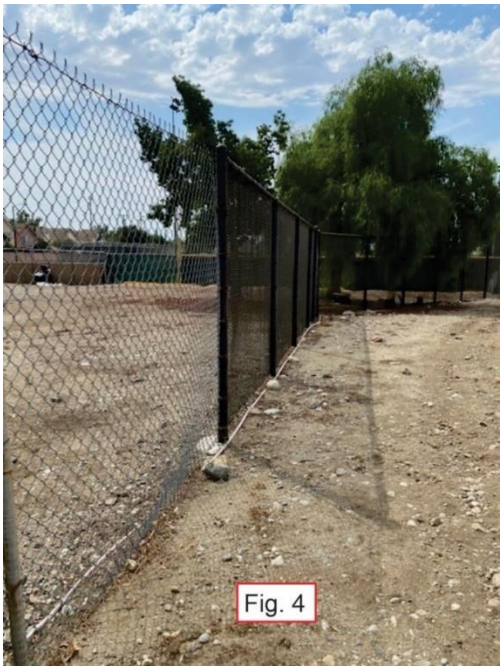
Recommended Improvements:

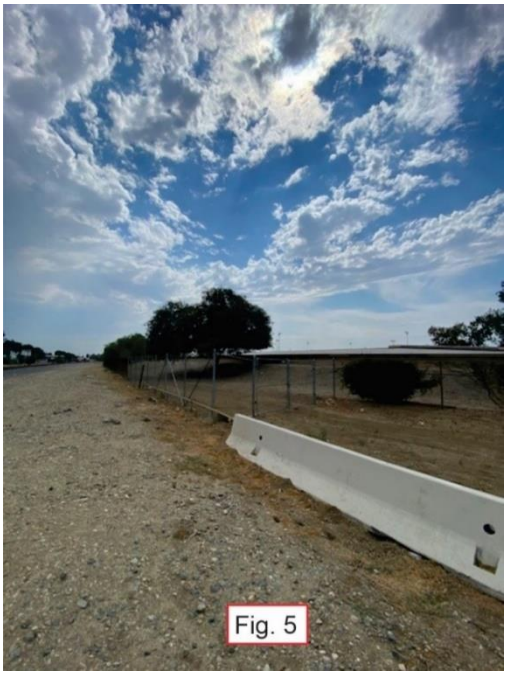
1. Construction of 8 feet wrought iron fence and entrance gate to replace the existing damaged chain linked fence and aged entrance gate. The improved fencing will prevent intrusions.
2. Improvements by addition of perimeter lighting and security cameras to the facility will help reduce potential intrusions.


Fig. 1


Fig. 2


Fig. 3





Reservoir 1212-1A, 1212-1B, WFA 1 (ID-23)

Address: 100 S Fern Ave, Upland, CA 91786



Recommended Improvements:

1. Construction of 8 feet wrought iron fence or an 8 feet masonry block wall will help prevent intruders from trespassing.

2. Improvements to the lighting and the addition of security cameras to the facility will help reduce potential intrusions.

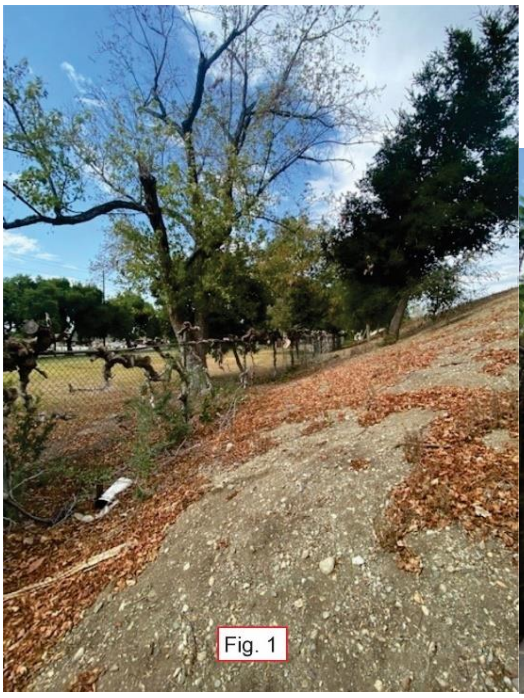

Fig. 1

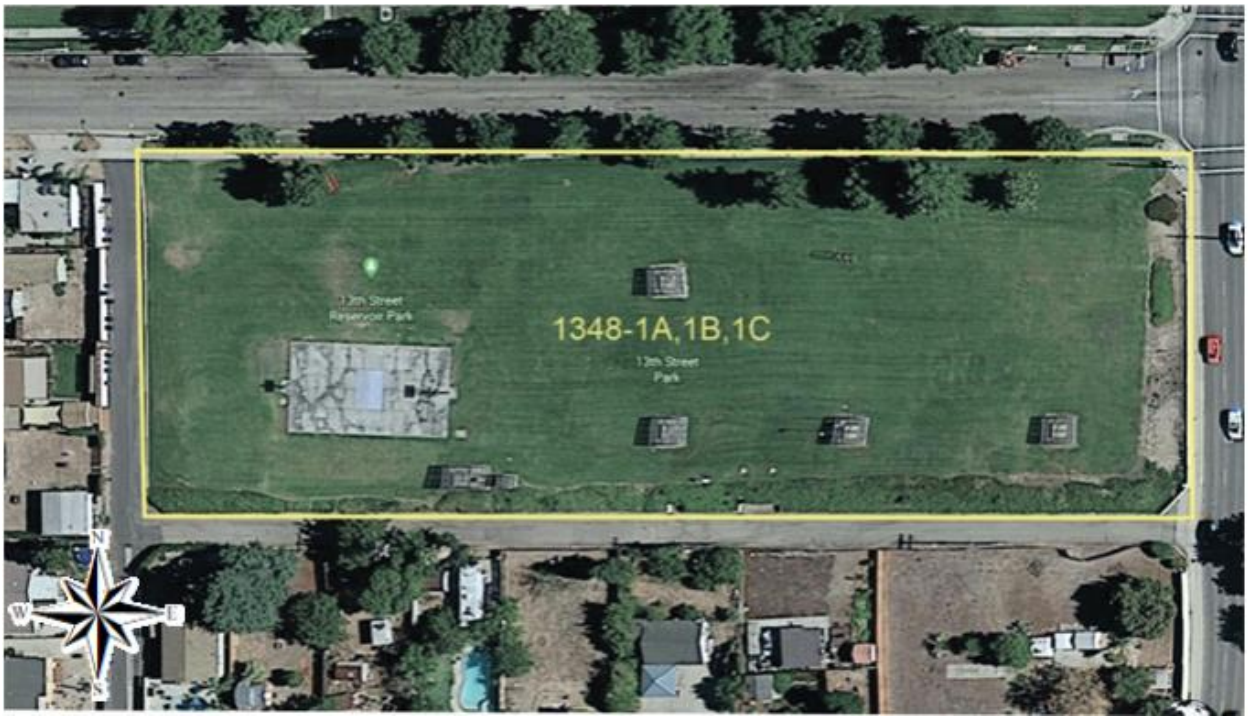

Fig. 2


Fig. 3


Fig. 4

Reservoir 1348-1A, 1B, 1C (ID-24)

Address: 596 E 13th St, Upland, CA 91786



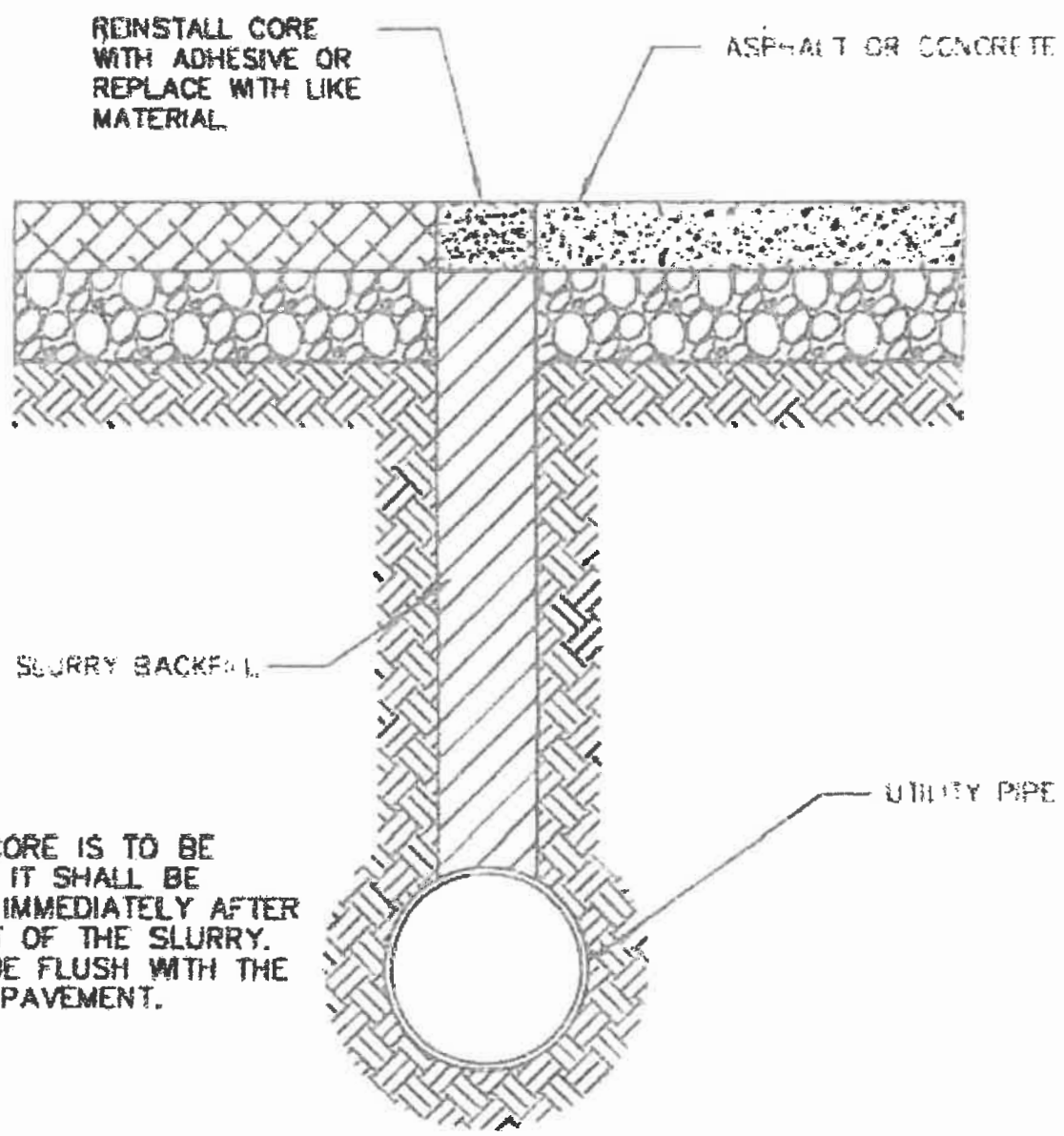
Recommended Improvements:

1. Intrusion switches on the reservoir cages would help provide notifications to vandalism of city property.
2. Installation of a tower or pole to connect with the city's SCADA system would help notify the city of vandalism to city property.

Attachment “3”
Coring or Bore Hole Replacement Detail

PAVEMENT CORES OR SOIL BORINGS SHALL BE RESTORED PER THE DETAIL AND SPECIFICATIONS BELOW

CORING OR BORE HOLE REPLACEMENT DETAIL



NOTE: IF CORE IS TO BE REPLACED, IT SHALL BE INSTALLED IMMEDIATELY AFTER PLACEMENT OF THE SLURRY. IT SHALL BE FLUSH WITH THE ADJACENT PAVEMENT.

EXHIBIT "B"
FEE AND PHASING/FUNDING SCHEDULES

CITY OF ONTARIO

UT 1073 SITE SECURITY IMPROVEMENTS

DETAILED ENGINEERING FEE ESTIMATE
BASIC ENGINEERING SERVICES

TRIAD CONSULTING
SYSTEM DESIGN GROUP

PROJECT SUMMARY

STAFF ASSIGNMENTS

ENGINEERING PHASE DESCRIPTION	PRINCIPAL Hourly Rate $225	SR. SECURITY CONSULT. Hourly Rate $195	SR. ELECTRICAL ENGINEER Hourly Rate $180	SR. SYSTEMS ENGINEER Hourly Rate $180	SECURITY TECHNOLOGIST Hourly Rate $150	SENIOR DESIGNER Hourly Rate $140	PROJECT COORDINATOR Hourly Rate $125	SUB CONTRACTOR Hourly Rate $200	PHASE HOURS	PHASE COST
PHASE 1	212	120	70	231	105	0	410	1357	2505	463760
PHASE 2	241	0	217	310	56	648	419	0	1891	300544
PHASE 3	84	0	67	93	60	50	84	0	438	74200
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
TOTAL HOURS	537	120	354	634	221	698	913	1357	4834	
TOTAL COST	$120,825	$23,400	$63,756	$114,048	$33,150	$97,720	$114,125	$271,480	$838,504	$838,504

Additional services, as needed, authorized by the City	$83,850
Estimated Reimbursable Expenses	$13,550
Total	**$935,904**

CONFIDENTIAL INFORMATION

EXHIBIT "C"
COMPENSATION RATES AND REIMBURSABLE EXPENSES

8. FEE PROPOSAL

Fee Proposal Narrative: Triad Consulting is pleased to submit the following Fee Proposal to the City of Ontario for *RFP – UT 1073 Site Security Improvements*.

Anticipated Effort: Triad Consulting estimates this project to require approximately 4,800 hours of professional and consultative service. We welcome the opportunity to engage in detailed discussions in regard to the scope of work and anticipated tasks to provide the City with the exact services to meet the project requirements in the most cost-beneficial manner.

Fee: Based on the overall project requirements described in *Exhibit "A" Scope of Services* and in *Section 7. Proposed Methods to Accomplish Work* of this proposal, **Triad Consulting proposes a time & material, not-to-exceed (T&MNTE) of $935,904.00 that includes estimated reimbursable expenses and $83,850.00 additional services, as needed, authorized by the City**.

A Fee Sheet listing costs by phase and labor category is included on the following page of this proposal. Note on the Fee Sheet subcontractor fees totaled $271,480.00. They are $148,080.00 for Topographic Surveys by CAL VADA Surveying, Inc. and $123,400.00 for Geotech Investigations by NOVA Services, Inc.

Estimated Reimbursable Expenses: Triad Consulting will invoice for approved reimbursable expenses at cost. Foreseeable reimbursable expenses for this project include; local mileage (current GSA rates) and deliverable reproduction costs. Actual reimbursable expenses may be lower or higher than estimated.

Progress Invoices and Additional Services (Time and Material): Triad Consulting will bill progress monthly for basic and approved additional services according to the following hourly rates.

PROFESSIONAL FEES	PER HOUR
Principal/Project Manager	$225
Senior Security Consultant	$195
Electrical Engineer	$180
Senior System Engineer	$180
System Technologist	$150
System Designer	$140
Project Coordinator	$125

Triad Consulting does not bill for miscellaneous project administration. Triad Consulting's payment terms at Net 30 days.

CITY OF ONTARIO *Agenda Report* **March 18, 2025**	**SECTION:** **CONSENT CALENDAR**
Department: Utilities Prepared By: Joline Neal Staff Member Presenting: Scott Burton, Utilities General Manager Reviewed By: Dennice Raygoza, Albert G Gastelum, Michael Sigsbee Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 14

SUBJECT: **AN ORDINANCE AMENDING CHAPTERS 8B AND 8C OF TITLE 6 OF THE ONTARIO MUNICIPAL CODE RELATED TO WATER SERVICES AND RECYCLED WATER, AND ESTABLISHING CHAPTERS 8D AND 8E TO TITLE 6 OF THE ONTARIO MUNICIPAL CODE RELATED TO POTABLE WATER FACILITIES AND CROSS-CONNECTION CONTROL**

RECOMMENDATION: That the City Council adopt an Ordinance amending Chapters 8B and 8C of Title 6 of the Ontario Municipal Code related to water services and recycled water, and establishing Chapters 8D and 8E to Title 6 of the Ontario Municipal Code related to potable water facilities and cross-connection control.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Operate in a Businesslike Manner
Pursue City's Goals and Objectives by Working with Other Governmental Agencies

FISCAL IMPACT: There is not a direct fiscal impact associated with the adoption of this Ordinance. No changes to the schedule of fees and charges are being recommended.

BACKGROUND & ANALYSIS: On March 4, 2025, the City Council introduced and waived further reading of an Ordinance approving Municipal Code amendments to Chapters 8B and 8C of Title 6 of the Ontario Municipal Code related to water services and recycled water, and establishing Chapters 8D and 8E to Title 6 of the Ontario Municipal Code related to potable water facilities and cross-connection control.

On December 19, 2023, the State Water Resources Control Board adopted its Cross-Connection Control Policy Handbook ("CCCPH"), required by Assembly Bills 1671 and 1180. This new regulation repeals previous Title 17 regulations on cross-connection control and backflow prevention. The CCCPH requires drinking water systems to review their cross-connection control programs and implement an enforceable plan to protect drinking water from contaminants or pollutants from related water user activities. Water systems must submit a Cross-Connection Control Plan to the Division of Drinking Water by July 1, 2025, detailing control measures the water system will use to

protect drinking water.

For clarity and transparency, a general reorganization and separation of salient existing and new items is proposed for approval. Chapter 8B of the Municipal Code generally includes account services, criteria for water service design, construction, operations, and management of potable water facilities. Chapter 8C establishes procedures, specifications, and limitations for expansion and continued development, operation of recycled water facilities and systems, and rules and regulations controlling the use of recycled water. The City owns and operates a potable water distribution system with over 40,000 service connections and responsibly delivers high-quality drinking water to over 185,000 Ontario residents. In tandem, the City owns and operates a recycled water distribution system containing over 50 miles of pipelines with over 550 service connections, which supports the City's water conservation efforts by offsetting potable water use. Recycled water is not approved for drinking water consumption and is primarily used for agricultural purposes, landscape irrigation, and commercial and industrial activities.

Staff and Legal reviewed Chapter 8B & 8C to determine if the current language meets the new state requirements and further reviewed language related to the design and construction of potable water facilities.

Staff and Legal have identified the following deficiencies in Chapter 8B & 8C in complying with the new State requirements:

- The current language does not fully align with the new CCCPH requirements.
- Additional enforceable control measures are needed to protect the City's drinking water system from potential cross-contamination, supported by administrative remedies.
- Roles, responsibilities, and control measures for engineering design, construction, inspection, monitoring, operation, and maintenance need to be more clearly defined.
- There is outdated terminology and City processes related to new service connections and the design and construction of potable water facilities.

To align with new requirements, Staff and Legal are proposing the addition of two new chapters to Title 6 of the Municipal Code:

- Chapter 8D: Potable Water Facilities, defines the roles and responsibilities of applicants, developers, contractors, the City, and customers and provides standards and procedures for the design, construction, monitoring, inspection, and management of potable water facilities.
- Chapter 8E: Cross-Connection Control, provides greater protection of the City's drinking water system from contamination by water users. When recycled water systems are present alongside drinking water systems, the City must implement safeguards to prevent cross-contamination.

The changes will enhance legal compliance, incorporate new standards, and ensure uniform application across the City, while improving transparency and accessibility within the Municipal Code.

Proposed changes to Chapters 8B and 8C include:

- Revision for clarification, consistency, and content organization purposes.
- Definition of the customer responsibility for water use and determination of service charges.
- Removal of language related to engineering design, construction, operations, and management of water service facilities to incorporate into the new Chapter 8D.
- Removal of language related to water quality control and incorporate it into the new Chapter 8E.
- Removal of Title 17 (repealed State regulations) language and incorporating new references to Chapter 8E and new State regulations (CCCPH).

Proposed enactment of Chapters 8D and 8E includes:

- Chapter 8D: Potable Water Facilities:
    - Incorporation and update of language from Chapter 8B on the City's current design and construction specifications and standards for potable water facilities to protect water quality.
    - Defining current City processes, roles, and responsibilities for the City, applicant, developer, contractor, and customer.
- Chapter 8E: Cross-Connection Control:
    - Establishes a Cross-Connection Control Program, the need for the designation of a coordinator, and the City's requirement to safeguard drinking water supplies from contaminants or pollutants from related water user activities.
    - Defines protection types, locations, and control measures for safeguarding drinking water.
    - Establishes the City's right to inspect water user premises, evaluate hazards and contaminants used onsite, and require customers to correct deficiencies with protection needed to prevent contamination.
    - Establishes notification and reporting procedures to test and install devices that protect the City's drinking water system.
    - Establishes enforceable remedies for water users that violate the CCCPH and contaminate the City's drinking water system.

Staff recommends adoption of the proposed changes to Chapters 8B and 8C and enactment of Chapters 8D and 8E to the City's Municipal Code.

ENVIRONMENTAL REVIEW: The Ordinance is exempt from the California Environmental Quality Act ("CEQA") pursuant to Section 15358 (the activity will not result in a direct or reasonably foreseeable indirect physical change in the environment) of the CEQA Guidelines, California Code of Regulations, Title 14, Chapter 3, because it has no potential for resulting in physical change to the environment, directly or indirectly. Moreover, the City Council finds that this Ordinance is also exempt under CEQA pursuant to Guidelines Section 15061(b)(3) (there exists no possibility that the activity will have a significant adverse effect on the environment).

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, AMENDING, REORGANIZING, AND RECODIFYING CHAPTER 8B OF TITLE 6 OF THE ONTARIO MUNICIPAL CODE PERTAINING TO WATER SERVICES, AMENDING AND RECODIFYING CHAPTER 8C OF TITLE 6 OF THE ONTARIO MUNICIPAL CODE PERTAINING TO RECYCLED WATER USE, ENACTING CHAPTER 8D OF TITLE 6 OF THE ONTARIO MUNICIPAL CODE PERTAINING TO POTABLE WATER FACILITIES, AND ENACTING CHAPTER 8E OF TITLE 6 OF THE ONTARIO MUNICIPAL CODE PERTAINING TO CROSS-CONNECTION CONTROL AND FINDING THE ACTION EXEMPT FROM CEQA.

WHEREAS, the City Council finds and declares safe and reliable drinking water is necessary for the City of Ontario's ("City") public health, fire protection, economic development, and the overall quality of life; and

WHEREAS, cross-connections and backflow between non-potable water and/or other liquids, gases, or other substances and the City's potable water supply pose a threat to safety and reliability of its public water system; and

WHEREAS, the State Water Resources Control Board ("State Water Board") adopted its Cross-Connection Control Policy Handbook ("CCCPH") pursuant to Assembly Bill 1671 and Assembly Bill 1180; and

WHEREAS, the CCCPH rendered previous backflow protection and cross-connection control standards inoperative and established new, enforceable standards applicable to the City's public water system; and

WHEREAS, the CCCPH requires the City updates its cross-connection control program and develop a Cross-Connection Control Plan to ensure the protection of the City's potable water supply against actual or potential cross-connections and backflow events; and

WHEREAS, this Ordinance is one legal authority that enables the City to meet CCCPH standards and implement its Cross-Connection Plan; and

WHEREAS, the City hereby determines it necessary to enact its cross-connection control program, as set forth in Chapter 8E of Title 6 of the Municipal Code; and

WHEREAS, City hereby determines it necessary to amend and recodify the rules and regulations for its recycled water service, as set forth in Chapter 8C of Title 6 of the Municipal Code, in order to amend cross-connection provisions to be consistent with the CCCPH and the City's cross-connection program; and

WHEREAS, the City has determined that its existing water ordinance, as set forth in Chapter 8B of Title 6 of the Municipal Code, requires amendment, reorganization, and recodification to consolidate and clarify the rights and responsibilities of the City, applicants, contractors, customers, developers, and property owners concerning water services and potable water facilities.

NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF ONTARIO DOES ORDAIN AS FOLLOWS:

SECTION 1. The recitals above are true and correct and are hereby incorporated herein by this reference.

SECTION 2. Chapter 8B, of Title 6 of the Municipal Code is hereby amended, reorganized, and recodified to read as set forth in Exhibit A attached hereto (new language in underline and deleted language in strikethrough) and by this reference made an operative part of this Ordinance.

SECTION 3. Chapter 8C, of Title 6 of the Municipal Code is hereby amended, reorganized, and recodified to read as set forth in Exhibit B attached hereto (new language in underline and deleted language in strikethrough) and by this reference made an operative part of this Ordinance.

SECTION 4. Chapter 8D, of Title 6 of the Municipal Code is hereby enacted to read as set forth in Exhibit C attached hereto and by this reference made an operative part of this Ordinance.

SECTION 5. Chapter 8E, of Title 6 of the Municipal Code is hereby enacted to read as set forth in Exhibit D attached hereto and by this reference made an operative part of this Ordinance.

SECTION 6. If any section, subsection, subdivision, sentence, clause, or phrase in this Ordinance or any part thereof is for any reason held to be unconstitutional, invalid or ineffective by any court of competent jurisdiction, such decision shall not affect the validity or effectiveness of the remaining portions of this ordinance or any part thereof. The City Council hereby declares that it would have adopted each section irrespective of the fact that any one or more subsections, subdivisions, sentences, clauses, or phrases be declared unconstitutional, invalid or ineffective.

SECTION 7. This Ordinance shall become effective immediately after its adoption by the City Council.

SECTION 8. The City Council finds that adoption of this Ordinance is exempt from the California Environmental Quality Act ("CEQA") pursuant to Section 15358 (the activity will not result in a direct or reasonably foreseeable indirect physical change in the environment) of the CEQA Guidelines, California Code of Regulations, Title 14, Chapter 3, because it has no potential for resulting in physical change to the environment, directly or indirectly. Moreover, the City Council finds that this Ordinance is also exempt under

CEQA pursuant to Guidelines Section 15061(b)(3) (there exists no possibility that the activity will have a significant adverse effect on the environment).

SECTION 9. The Mayor shall sign this Ordinance and the City Clerk shall certify as to the adoption and shall cause a summary thereof to be published at least once, in a newspaper of general circulation in the City of Ontario, California within fifteen (15) days of the adoption. The City Clerk shall post a certified copy of this Ordinance, including the vote for and against the same, in the Office of the City Clerk, in accordance with Government Code Section 36933.

PASSED, APPROVED, AND ADOPTED this 18th day of March 2025.

_____
PAUL S. LEON, MAYOR

ATTEST:

_____
SHEILA MAUTZ, CITY CLERK

APPROVED AS TO FORM:

_____
BEST BEST & KRIEGER LLP
CITY ATTORNEY

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO)
CITY OF ONTARIO)

I, SHEILA MAUTZ, City Clerk of the City of Ontario, DO HEREBY CERTIFY that foregoing Ordinance No. _____ was duly introduced at a regular meeting of the City Council of the City of Ontario held March 4, 2025 and adopted at the regular meeting held March 18, 2025 by the following roll call vote, to wit:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

I hereby certify that the foregoing is the original of Ordinance No. _____ duly passed and adopted by the Ontario City Council at their regular meeting held March 18, 2025 and that Summaries of the Ordinance were published on _____ and _____, in the Inland Valley Daily Bulletin newspaper.

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

EXHIBIT A
(Chapter 8B: Water Services)

EXHIBIT B
(Chapter 8C: Recycled Water Use)

Exhibit C
(Chapter 8D: Potable Water Facilities)

Exhibit D
(Chapter 8E: Cross-Connection Control)

EXHIBIT A

CHAPTER 8B: WATER SERVICES

6-8.45 Definitions
6-8.46 Rules and regulations
6-8.47 Tampering
6-8.48 Service connections outside city
6-8.49 Collection and payment
6-8.50 Disabled person's and senior citizen's discount
6-8.51 Service fees and charges
6-8.52 Water service connection
6-8.53 Reserved
6-8.54 Reserved
6-8.55 Water meters
6-8.56 Fire hydrants
6-8.57 Reserved
6-8.58 Reserved
6-8.59 Reserved
6-8.60 Emergency water regulations
6-8.61 Violations

Sec. 6-8.45. Definitions.

For the purposes of this chapter, unless otherwise apparent from context, certain words and phrases used in this chapter shall have the meanings hereinafter designated. The definitions in this chapter are included for reference purposes only and are not intended to narrow the scope of definitions set forth in federal or state laws or regulations. Words used in this chapter in the singular may include the plural and the plural may include the singular. Use of the masculine shall also mean feminine and neuter.

(a) “City” means the City of Ontario, California.

(b) “City Council” means the City Council of the City of Ontario, California.

(c) “City Manager” means the City Manager of the City of Ontario, or his or her authorized representative.

(d) “Construction water” means the water, potable or recycled, used in conjunction with the building of a structure from conception to transfer of ownership, excluding landscape irrigation, or the water used for soil consolidation, dust control, and the like, during grading operations.

(e) “Cost” means the monetary value of labor, material, material transportation, supervision, engineering, administration, and other necessary overhead expenses.

(f) “Customer” means a person, firm, or corporation who is the recipient of water service from the City.

(g) “Developer” means a person, firm, corporation, partnership, or association who desires water service which requires the installation of new, improved or expanded water service facilities for him or herself or for others, except that employees and consultants of such persons or entities, acting in such capacity, are not developers.

(h) “Municipal Utilities Company” means the Municipal Utilities Company of the City of Ontario.

(i) "Service" or "water service" means the furnishing of water to a customer.

(j) “Service connection” shall mean the water pipe, or pipes, and appurtenances installed by a developer to transport potable water from adjoining City facilities located within a public right-of-way or public utility easement to the developer’s parcel of land. Said service connections shall terminate at the customer side of the meter and meter box located at a specified place approved by the City.

(k) “Utilities Customer Services Department” means the Utilities Customer Services Department of the Municipal Utilities Company.

(l) “Utilities Customer Services Director” means the Director of the Utilities Customer Services Department of the Municipal Utilities Company, or his or her authorized representative.

(§ 6, Ord. 2785, eff. November 16, 2003, as amended by § 2, Ord. 2914, eff. January 1, 2010, and § 2, Ord. 2946, eff. January 6, 2012, § 3, Ord. 3251, eff. July 20, 2023, § 2 Ord. XXX, eff. April XX, 2025)

Sec. 6-8.46. Rules and regulations.

Rules and regulations explaining the procedures and methods of the Municipal Utilities Company in carrying out the provisions of this chapter shall be set forth and may be amended in the manner described in § 1-1.09 of this Code.

(§ 6, Ord. 2785, eff. November 16, 2003, as amended by § 3, Ord. 2946, eff. January 6, 2012, § 1, Ord. 3153, eff. January 21, 2020)

Sec. 6-8.47. Tampering.

No person except an employee or representative of the City shall at any time and in any manner operate the curb stops or valves or the main gates or valves of the City's water system, or interfere with meters or their connections, street mains, or other parts or facilities of the water system.

(§ 6, Ord. 2785, eff. November 16, 2003)

Sec. 6-8.48. Service connections outside city.

No additional customers outside the City shall be served or connected to the water system of the City, and no additional dwellings or customers shall be connected to existing service connections outside the City; provided, however, the City Council may

by motion approve water service outside the City where the owners of land have signed a covenant running with the land that the land shall be annexed whenever possible, and the City Council finds that such annexation would be in the public interest, and the annexation might reasonably be completed within the foreseeable future. The City Council may, however, provide otherwise by written agreement with any city, county, or other governmental agency.

(§ 6, Ord. 2785, eff. November 16, 2003)

Sec. 6-8.49. Collection and payment.

(a) Unified billing system. The City may use a unified billing system for City-furnished services. The charges for water, refuse, storm water abatement, and wastewater services may be billed on the water bill and collected as one (1) item. Failure to pay the amount due in full for any of the services may result in the discontinuation of water services as provided below.

(b) Utility bill payment. Utility bills shall be due and payable to the Utilities Customer Services Department on the bill date to the customer of record. Any utility bill remaining unpaid eighteen (18) business days after such bill date shall be deemed past due and a late charge and penalties will be applied as set forth in §§ 1-2.06 and 1-2.07 of the Ontario Municipal Code. Should a residential account remain unpaid for a period of sixty (60) calendar days from the past due date, water service to the property may be disconnected for nonpayment after the City provides notice pursuant to the City's administrative policy on discontinuation of residential water service, described in paragraph (c) below. Should a non-residential account remain unpaid from thirty (30) calendar days from the past due date, water service to the property may be disconnected for non-payment after mailed notice to the customer of record at least ten (10) calendar days prior to termination.

Residential water customers may contest or appeal a bill in the manner described in the City's adopted policy for discontinuation of residential water service. Non-residential customers may contest or appeal a bill using the same dispute and appeal procedures described in the policy for discontinuation of residential water service.

(c) Disconnection of Residential Water Service. The City Manager may adopt and amend a written administrative policy on discontinuation of residential water service for nonpayment pursuant to Section 6-8.46, and such policy shall be available on the City's website. Such policy may include, but may not be limited to, supplementary provisions concerning billing procedures, discontinuation of service, notification procedures, restoration of service, procedures to contest or appeal a bill, extensions or other alternative payment arrangements, protections available to qualified low-income customers, procedures for becoming a customer of the City under specified circumstances, and related matters. To the extent a policy adopted pursuant to this section conflicts with any provisions of this chapter, this chapter shall control. Except as expressly provided in this section or the policy, the policy shall not apply to non-residential customers.

(d) Water turn on/off. Once terminated, service shall not be turned on again except upon payment of all amounts due on the utility account, including all late charges and penalties, and the cost of making a service call to turn the water off and/or on. The fee to cover the cost of making a service call to turn the water off and/or on shall be set forth in an ordinance adopted by the City Council. Residential customers who demonstrate a household income below 200 percent of the federal poverty line may be eligible for reduced turn-on fees pursuant to applicable law and as further described in the City's policy on discontinuation of residential water service.

(e) Customer liability. Failure to receive a bill shall not relieve the customer of liability. Any amount due shall be deemed a debt to the City, and is subject to the provisions set forth in §§ 1-2.06 and 1-2.07 of the Municipal Code.

(f) Special bill rate. Special bills, split bills, any other irregular bills, or bills covering irregular billing periods, shall be calculated by the Municipal Utilities Company; provided, however, the adjusted rate so made shall be reasonable in accordance with the rate schedule set forth in this section.

(g) Determination of minimum charges. For the purpose of determining minimum charges as set forth in this section, each separate meter connected to the water system shall be charged on individual readiness-to-serve meter fee and commodity charge.

(§ 6, Ord. 2785, eff. November 16, 2003, as amended by § 4, Ord. 2946, eff. January 6, 2012; § 3, Ord. 3251, eff. July 20, 2023)

Sec. 6-8.50. Disabled person's and Senior Citizen's discount.

(a) Disabled person defined. A “disabled person” for the purposes of this section is an adult who has a mental or physical disability that, in the opinion of a licensed physician, renders him or her incapable of being gainfully employed.

(b) Eligible household. An eligible household for the purpose of this section is a separately billed dwelling unit, which is (1) occupied by a person age sixty-five (65) or older, or by a disabled person, and (2) has annual gross household income at or below 200% of federal poverty level. The City may establish detailed qualifications and requirements for demonstrating annual gross household income in a written administrative policy adopted pursuant to Section 6-8.46.

(c) Applications. Applications for an eligible household discount shall be submitted in writing to the Utilities Customer Services Director. The application shall be on a form provided by the Utilities Customer Services Director, shall be completed to show the information elicited by the form and shall be signed under penalty of perjury by the applicant. When the discount is sought based upon a disabled person, the application shall be accompanied by a physicians certificate stating that the person is a disabled person within the meaning of subsection (a) of this section. The Utilities Customer Services Director shall determine whether a household is an eligible household for the purpose of this section and his or her determination shall be final.

(d) Discount. The charges for water, refuse and wastewater service provided to an eligible household, shall be discounted by an amount approved by the City Council pursuant to an ordinance or resolution. The discount shall be available only to customers with individually metered residential water service. The discount shall be in effect for a one (1) year period, which shall begin as determined by the City Council (e.g. upon approval of an individual application, upon the start of the following fiscal year, etc.). To renew the discount for an additional year, the customer must complete and return a renewal application to the City's Utilities Customer Services Department. A renewal notice shall be mailed to the Customer with the utilities bill at or before the end of each year of eligibility. The discount offered under this subsection is subject to City Council approval through the annual budget process and the availability of funds allocated to fund the discount.

(e) Termination of eligibility. A household shall no longer be an eligible household if the Utilities Customer Services Department does not receive a renewal application, if any of the eligibility criteria set forth in subsection (b) above cease to exist, or if funds to provide the discount are unavailable pursuant to subsection (d).

(§ 6, Ord. 2785, eff. November 16, 2003; § 5, Ord. 3251, eff. July 20, 2023)

Sec. 6-8.51. Service fees and charges.

(a) Residential, non-residential, and private fire service water fees and charges. In addition to other fees, assessments, or charges provided by the Municipal Code or adopted by the City Council, the owner or occupant of any parcel of property for which no other water service fee or charge is provided, and which parcel of property is connected to the water system of the City, shall pay monthly water service fees and charges as established from time to time by resolution of the City Council.

(b) Turning water supply on and off. No charge shall be made for shutting off and turning on water supply when requested by the customer for the closing of an old account or the beginning of a new one. When service has been discontinued due to non-payment of utility bills or for any infraction of the rules, the charges to restore water service shall be as listed above. The customer shall pay these charges, plus the amount of any outstanding bills, before service can be restored.

(c) Construction water. All construction water shall be metered and charged.

(d) Temporary service connection. Temporary service connections shall be subject to the fees and deposits as established from time to time by resolution of the City Council. All water delivered through a temporary service connection shall be metered and charged.

(e) Water meter testing fee. Water meter testing fee shall be based on the actual costs of removal, testing and reinstallation of the meter.

(f) Reserved.

(g) Other water service work. This charge is based on actual time, travel and material cost based on the City's burden of labor and overhead rates in effect at the time service is provided.

(h) Outside City services. For water furnished to any customer outside the City limits, the rates shall be double the rates charged inside the City. The City Council may, however, provide otherwise by written agreement with any city, county, or other governmental agency.

(i) Charges for agricultural use. Charges for usage of recycled water for agricultural service, where the agricultural use provides assignment of water production rights to the City, shall be determined by the Utilities General Manager; provided, however, such charges will be consistent with the most recent rate study and current rates charged by the Chino Basin Watermaster for replenishment assessments.

(j) Charges for unmetered service. Unmetered usage of water and charges for unmetered usage of water shall be authorized by the Utilities General Manager prior to such usage; provided, however, such charges shall be reasonably in accordance with the charges established by resolution adopted by the City Council.

(§ 6, Ord. 2785, eff. November 16, 2003, as amended by § 5, Ord. 2806, eff. January 21, 2005, §§ 4, 5, 6 and 7, Ord. 2816, eff. December 1, 2005, § 2, Ord. 2880, eff. February 4, 2008, § 3, Ord. 2914, eff. January 1, 2010, § 2, Ord. 2974, eff. December 19, 2013, § 5, Ord. 3133, eff. July 5, 2019, § 2 Ord. XXX, eff. April XX, 2025)

Sec. 6-8.52. Water service .

(a) Application for water service. Before water is turned on by the City for any purpose, the customer shall apply for new service, at least one (1) business day before desired date of service, in which he or she guarantees payment of future utility bills for the service requested. The customer applying for service shall be held responsible for said utility bills until the service is discontinued on the next business day after the City is notified to discontinue service. When such notice is not received by the City, the customer shall be required to pay for service until one (1) business day after the City has knowledge that the customer has vacated the premises or otherwise discontinued service. No tenant applying for residential utility services shall be required to pay any charges or penalties on account of non-payment of charges by a previous tenant. The City may require that tenants seeking to establish service provide a written lease or rental agreement along with signed authorization from the landlord or property owner to ensure that the tenant is authorized to occupy the property and initiate utility services; provided, however, that the City will not require that service to tenants be furnished on the account of the landlord or property owner unless the property owner voluntarily agrees to that requirement in writing by completing a consent form provided by the City. The City shall require an applicant for utility services or restoration of services after turn-off for a delinquent bill to make an advance payment equal to twice the estimated monthly bill for water, refuse and wastewater services, provided that no such advance payment shall be less than eighty dollars ($80.00).

(b) Water used without application. A customer taking possession of premises and using water from an active service connection without having applied for utility

services shall be held liable for the water delivered from the date of the last recorded meter reading. If the meter is found inoperative, then the quantity consumed shall be estimated. If proper application for utility services is not made upon notification to do so by the City, and if accumulated bills for services are not paid immediately, the services may be discontinued without further notice.

(c) New service connection. For new, improved or expanded service connection, the customer shall submit an application in accordance with section 6-8.809 and 6-8.810 of Chapter 8D of Title 6 of the Ontario Municipal Code.

(§ 6, Ord. 2785, eff. November 16, 2003, as amended by §§ 8 and 9, Ord. 2816, eff. December 1, 2005, § 5, Ord. 2946, eff. January 6, 2012, § 3, Ord. 2974, eff. December 19, 2013, § 2, Ord. 3039, eff. April 3, 2016; § 6, Ord. 3251, eff. July 20, 2023, § 2 Ord. XXX, eff. April XX, 2025)

Sec. 6-8.53 Reserved.

Sec. 6-8.54 Reserved.

Sec. 6-8.55. Water meters.

(a) Accuracy of meter questioned by consumer. When the consumer questions the accuracy of the water meter, the City Manager shall, upon request and payment of the water meter testing fee, cause an official test to be made. Meters are tested by certified testers contracted by the City. The meter shall be tested on variable rates of delivery and, if the average registration is more than three percent (3%) in excess of the actual quantity of water passing through the meter, another meter shall be substituted therefor. The City Manager shall refund to the consumer, in addition to the meter testing fee charged at the rate shown in § 6-8.51(d)(6), the overcharge based upon the reading and billing for the current period preceding the test, unless it can be shown that the error was due to some cause for which the date can be fixed. In the latter case, the overcharge shall be computed back to and not beyond such time.

(b) Non-registering meters. The City may bill the customer for water consumed while the meter was non-registering, but not to exceed a period of two (2) months, at the minimum monthly meter rate, or upon an estimate of the consumption based upon the customer's prior use during the same season of the year, if conditions were similar, or upon an estimate based upon reasonable comparison with the use of other customers during the same period receiving the same class of service under similar circumstances and conditions.

(c) Meter errors. When it is found that error in a meter is due to some cause, the date of which can be fixed, the overcharge or the undercharge shall be computed back to but not beyond such date, not to exceed the current statute of limitations law.

(§ 6, Ord. 2785, eff. November 16, 2003, as amended by § 7, Ord. 2946, eff. January 6, 2012)

Sec. 6-8.56. Fire hydrants.

(a) Purpose of fire hydrants. Fire hydrants are provided for the sole purpose of extinguishing fires, and are to be opened and used only by the Fire Department and Municipal Utilities Company, or such other persons as are specifically authorized by the Municipal Utilities Company. To insure safety of fire hydrants for fire protection, any person or persons authorized by the Municipal Utilities Company to open fire hydrants shall be required to use only an approved spanner wrench, and to replace the caps on outlets when the same are not in use. Failure to meet this requirement shall be sufficient cause to prohibit further use of the hydrants, and the refusal of subsequent authorization for use of the fire hydrants. Damage caused by the failure to comply with the above shall be repaired at the expense of the person(s) authorized.

(b) Unlawful to take water without permit. It is unlawful for any person to take any water from any fire hydrant without a written permit, furnished upon application to the Municipal Utilities Company. Said application shall include a monthly permit fee and deposit equal to the replacement value of meter and backflow valve. Any person taking water from a hydrant without a permit shall be assumed to have taken water in the value of at least One Thousand Dollars ($1,000.00) and shall be charged for said amount.

(§ 6, Ord. 2785, eff. November 16, 2003, as amended by § 8, Ord. 2946, eff. January 6, 2012)

Sec. 6-8.57 Reserved.

Sec. 6-8.58 Reserved.

Sec. 6-8.59 Reserved.

Sec. 6-8.60. Emergency water regulations.

(a) Unplanned interruption of water supply. In the event of an unplanned interruption of water supply causing a water shortage, the City Manager or his or her designee is authorized to restrict water use and apportion the available supply of water among its customers in the most equitable manner possible to continue service fairly and without discrimination, except that preference shall be given to such service as is essential to the public interest and to the preservation of life and health pursuant to § 6-8.22(b).

(b) Notice of water shortage. A notice of a water shortage shall be published in a daily newspaper of general circulation within the City. Any restrictions on the use of water shall become effective immediately upon such publication pursuant to § 6-8.22(c).

(§ 6, Ord. 2785, eff. November 16, 2003, as amended by § 10, Ord. 2946, eff. January 6, 2012)

Sec. 6-8.61. Violations.

It shall be unlawful for any person to violate any provisions of this chapter, and persons violating said provisions shall be subject to Chapter 2 of Title 1 of the Municipal Code.

(§ 6, Ord. 2785, eff. November 16, 2003)

EXHIBIT B

CHAPTER 8C: RECYCLED WATER USE

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Article 1: General Provisions

Sec. 6-8.701. Authority.

Recycled water use is regulated by the California State Water Resources Control Board (State Board) and the Regional Water Quality Control Board, Santa Ana Region (RWQCB). In accordance with waste discharge requirements for water reclamation projects, the RWQCB requires control mechanisms to regulate facilities distributing recycled water. The California Legislature has established a state policy encouraging the use of recycled water (California Water Code, Section 13510). Permission to use recycled water is based on Inland Empire Utilities Agency's ability to treat domestic wastewater in accordance with the Uniform Statewide Recycling Criteria under Title 22, Division 4, Chapter 3 of the California Code of Regulations. These regulations were adopted to ensure proper health protection and specify the treatment degree to meet the needs of the intended applications.

(§ 1, Ord. 2689, eff. June 17, 1999, as amended by § 2, Ord. 3197, eff. January 7, 2022)

Sec. 6-8.702. Purpose.

The purpose of this chapter is to establish procedures, specifications, and limitations for the safe use and operation of recycled water facilities and systems within the City's service area, and adopt rules and regulations controlling such use and operation.

(§ 1, Ord. 2689, eff. June 17, 1999, as amended by § 2, Ord. 3197, eff. January 7, 2022)

Sec. 6-8.703. Goals.

The goals of this chapter are as follows:

(a) Achieve conservation of potable water supplies by using recycled water for current and future demands. Recycled water uses may include:

(1) Agricultural irrigation.

(2) Commercial uses (including flushing toilets and urinals).

(3) Construction use.

(4) Industrial processes.

(5) Landscape irrigation.

(6) Landscape and/or recreational impoundments.

(7) Wildlife habitat.

(8) Groundwater recharge, as approved by the State Board and RWQCB.

(b) Maintain recycled water quality through a stringent pretreatment program for industrial wastewater.

(c) Prevent direct human consumption of recycled water through:

(1) Adherence to all applicable rules and regulations.

(2) Posting of warning signs by the user.

(3) Cross-connection/backflow prevention program.

(d) Control runoff of recycled water through monitoring of the installation and operation of all recycled water facilities and use areas.

(e) Monitor recycled water quality.

(§ 1, Ord. 2689, eff. June 17, 1999, as amended by § 2, Ord. 3197, eff. January 7, 2022)

Sec. 6-8.704. Policy.

(a) It is the policy of the City that recycled water be used for any and all purposes approved by state regulations for recycled water use. Recycled water shall be the primary source of supply for commercial and industrial uses, whenever available and/or feasible. Use of potable water for commercial and industrial uses shall be contrary to City policy, shall not be considered the most beneficial use of a natural resource, and shall be avoided to the maximum extent feasible. If the City determines that recycled water service is feasible under §§ 6-8.710 and 6-8.711, the applicant, owner, or user will be required to use recycled water service.

(1) The people of the State of California have a primary interest in the development of facilities to recycle water containing waste to supplement existing surface and underground water supplies and to assist in meeting the future water requirements of the state (California Water Code, Section 13510). Conservation of all available water resources requires the maximum reuse of recycled water for beneficial uses of water (California Water Code, Section 461). The State of California has declared that use of potable water for non-potable uses may be a waste or an unreasonable use where recycled water is available (California Government Code, Section 65602(e); California Water Code, Section 13550).

(2) It is the policy of the City that recycled water shall be used within the jurisdiction of the City whenever and wherever: 1) there is not an alternative higher or better use for the recycled water; and 2) such use is consistent with legal requirements, preservation of public health, safety and welfare of the public, and protection of the environment.

(§ 1, Ord. 2689, eff. June 17, 1999, as amended by § 2, Ord. 3197, eff. January 7, 2022)

Sec. 6-8.705. Priority.

Connection to the City's recycled water system shall be provided on a first-come, first-served basis, as long as infrastructure and recycled water are available.

(§ 1, Ord. 2689, eff. June 17, 1999, as amended by § 2, Ord. 3197, eff. January 7, 2022)

Sec. 6-8.706. Administrator.

Except as otherwise provided herein, the City Manager shall administer, implement, and enforce the provisions of this chapter. The City Manager may, at his or her discretion, delegate any or all of these powers and duties.

(§ 1, Ord. 2689, eff. June 17, 1999, as amended by § 2, Ord. 3197, eff. January 7, 2022)

Sec. 6-8.707. Other applicable rules and codes.

Other guidelines, rules and regulations, ordinances, and specifications that may be applied by the Administrator to govern the use of recycled water within the City include:

(a) Rules and regulations that deal with backflow prevention, billing, deposits, penalties, delinquencies, and metering for potable water as established in Chapters 8A, 8C, 8D, 8E of Title 6 of the Ontario Municipal Code.

(b) Regional Recycled Water Distribution System Ordinance (Ordinance No. 69, Inland Empire Utilities Agency.)

(c) Water Reclamation (Title 22, Division 4 of the California Code of Regulations.)

(d) State Water Board's Cross-Connection Control Policy Handbook (adopted December 19, 2023.)

(e) Guidelines for Distribution of Non-potable Water (California-Nevada Section AWWA.)

(§ 1, Ord. 2689, eff. June 17, 1999, as amended by § 2, Ord. 3197, eff. January 7, 2022, § 3 Ord. XXX, eff. April XX, 2025)

Sec. 6-8.708. Severability.

If any section, subsection, sentence, clause or phrase of this chapter establishing rules and regulations for the use of recycled water is for any reason found to be invalid or unconstitutional, such decision shall not affect the remaining portions of this chapter.

(§ 1, Ord. 2689, eff. June 17, 1999, as amended by § 2, Ord. 3197, eff. January 7, 2022)

Article 2: Definitions

Sec. 6-8.709. Definitions.

The terms used in this chapter shall have the following meanings:

(a) "Agricultural use" shall mean water used for the production of crops and/or livestock. Agricultural uses include, but are not limited to, the growing of field and nursery crops, row crops, trees and vines, and the feeding of fowl and livestock.

(b) "Air gap separation" or "AG" shall mean a physical vertical separation of at least two (2) times the effective pipe diameter between the free-flowing discharge end of

a potable water supply pipeline and the flood level of an open or non-pressurized receiving vessel, and in no case less than one (1) inch.

(c) "Applicant" shall mean any person, group, firm, partnership, corporation, association, or agency that applies for recycled water service.

(d) "Approved use" shall mean an application of recycled water in a manner, and for a purpose, designated in a recycled water use agreement, and in compliance with applicable state and local rules and regulations.

(e) "Approved use area" shall mean a site with well-defined boundaries designated in a recycled water use agreement in compliance with applicable state and local rules and regulations.

(f) "As-built drawings" shall mean the record drawings that show the completed facilities as constructed or modified.

(g) "Auxiliary water supply" shall mean a source of water, other than an approved water supply, that is either used or equipped, or can be equipped, to be used as a water supply and is located on the premises of, or available to, a customer.

(h) "AWWA" shall mean the American Water Works Association.

(i) "City Council" shall mean the City Council of the City of Ontario.

(j) "City Manager" shall mean the chief administrative officer of the City of Ontario or his or her authorized designee.

(k) "Commercial use" shall mean the water used for non-body contact such as toilets, urinals, decorative fountains, decorative indoor and outdoor landscape, and other uses approved by the City.

(l) "Construction water service" shall mean temporary recycled water service obtained from the City for construction purposes on any new facilities or structures.

(m) "Cross-connection" shall mean any actual or potential connection or structural arrangement between a public water system, including a piping system connection to the City’s distribution system and located on the premises of a customer or available to the customer, and any source or distribution system containing liquid, gas, or other substances not from an approved water supply.

(n) "Cross-Connection Control Policy Handbook” or “CCCPH” shall mean the State Water Board’s Cross-Connection Control Policy Handbook, which are standards and principles for California’s Public Water Systems.

(o) "Direct beneficial use" shall mean the use of recycled water, which has been transported from the point of production to the point of use, without an intervening discharge to waters of the state.

(p) "Discharge" shall mean any release or distribution of recycled water to a use area or disposal site/mechanism. Such discharges are subject to approval by the City.

(q) "Divert" shall mean to change the intended course or path of recycled water into or out of the City's recycled water system without the authorization or consent of the

City. Any unpermitted withdrawal of recycled water from the City's facilities is a "diversion".

(r) "IEUA" shall mean the Inland Empire Utilities Agency.

(s) "Industrial use" shall mean the water used for industrial process such as rinsing, washing, cooling, flushing, circulation, or construction; and other uses approved by the City.

(t) "Infiltration rate" shall mean the rate at which water penetrates the soil surface and enters the soil profile.

(u) "Landscape irrigation" shall mean recycled water used for the propagation and maintenance of trees, shrubs, ground cover and turf used for erosion control and aesthetic value, not for resale or profit purposes.

(v) "Letter of approval" shall mean a written formal letter issued by the State Board approving the use of recycled water at a premise.

(w) "Non-potable water" shall mean water that has not been treated for, or is not acceptable for human consumption, in conformance with federal, state and local water standards. Non-potable water includes recycled water.

(x) "Offsite facilities" shall mean all existing or proposed facilities under the control of the IEUA or the City, from the source of supply to the point of connection with the customer's onsite facilities, up to and including the City's recycled water meter and meter box. Such facilities shall include, without limitation, recycled water transmission mains, recycled water pipes and reservoirs, pumping stations, treatment plants and other appurtenances and property.

(y) "Onsite facilities" shall mean all existing or proposed facilities within property under the control of the customer, normally downstream of the City's recycled water meter and meter box.

(z) "Onsite Recycled Water Supervisor" shall mean a qualified person designated by a recycled water user and approved by the City to be responsible for the safe and efficient operation of the user's recycled water system. This person shall be knowledgeable in the operation of the recycled water system and in the application of federal, state and local guidelines, criteria, standards, and rules and regulations governing the use of recycled water.

(aa) "POC" shall mean the point of connection at the recycled water service meter.

(bb) "Ponding" shall mean the retention of recycled water on the ground surface or human-made surface for a period of time following the cessation of an approved recycled water use activity, such that potential hazard to the public health may result, as determined by regulatory agencies.

(cc) "Potable water" shall mean water furnished to the customer which meets applicable local, state and federal drinking water standards.

(dd) "Recycled water" shall mean water, which as a result of treatment of wastewater, is suitable for direct beneficial use or a controlled use that otherwise would not occur. The treatment of wastewater is accomplished in accordance with the Uniform

Statewide Recycling Criteria set forth in Title 22, Division 4 of the California Code of Regulations.

(ee) "Recycled water system" means the publicly owned property involved in the distribution of recycled water within the City and any privately owned onsite facilities, including piping, pumps, reservoir, land, supply lines (main lines), fittings, and equipment related to such elements.

(ff) "Recycled water facilities" shall mean the systems and structures used in the treatment, storage, pumping, transmission and distribution of recycled water.

(gg) "Recycled water use agreement" shall mean an agreement between the user and the City to use recycled water in compliance with all applicable rules and regulations.

(hh) "Regulatory agency" shall mean any public entity legally constituted by federal, state and local statutes to protect health and water quality.

(ii) "Runoff' shall mean the flow of water along natural or human-made surfaces away from the designated use area.

(jj) "RWQCB" shall mean the California Regional Water Quality Control Board, Santa Ana Region.

(kk) "Service" shall mean the delivery of recycled water to a user.

(ll) "Service connection" shall mean City facilities between the City recycled water distribution system and the customer's meter, including, but not limited to, the meter, meter box, valves, and piping equipment.

(mm) "Standard specifications" shall mean the specifications approved by the City for construction of recycled water facilities.

(nn) "State Board" shall mean the California State Water Resources Control Board.

(oo) "Tampering" shall mean the unauthorized entering, breaking, damaging, destroying, uncovering, defacing, rearranging, injuring, altering, or interference with any temporary or permanent structure (including any pipeline), equipment (including any pumps or backflow devices), or appurtenance owned by the City or that is part of the City's recycled water. Any unpermitted connection the City's facilities is "tampering".

(pp) "Unauthorized discharge" shall mean any release of recycled water that violates any applicable federal, state, or local statutes, regulations, chapters, contracts, or other requirements.

(qq) "Uniform Statewide Recycling Criteria" shall mean the criteria for treatment of recycled water established for the protection of public health and codified under Title 22, Division 4, Chapter 3 of the California Code of Regulations.

(rr) "Use area" shall mean the specific area designated to be served with recycled water through onsite recycled water facilities.

(ss) "User" shall mean any person, group, firm, partnership, corporation, association or agency accepting recycled water from the City's recycled water facilities

for use in accordance with this chapter. "Applicant," "owner," or "customer" are terms that are to be considered as users.

(tt) "Windblown spray" shall mean any dispersed, airborne particles of recycled water capable of being transmitted through the air to a location other than that for which the direct application of recycled water is approved.

(§ 1, Ord. 2689, eff. June 17, 1999, as amended by § 2, Ord. 3197, eff. January 7, 2022, § 3 Ord. XXX, eff. April XX, 2025)

Article 3: Area Served

Sec. 6-8.710. Service area.

The rules and regulations contained in this chapter apply to recycled water service to lands and/or improvements lying within the legal boundaries of the City, and to properties contiguous to the City under the same ownership as abutting lands within the City or its designated service boundary. Recycled water service shall be provided to a specific service area when related distribution facilities are completed, and service becomes available.

(§ 1, Ord. 2689, eff. June 17, 1999, as amended by § 2, Ord. 3197, eff. January 7, 2022)

Article 4: General Requirements

Sec. 6-8.711. Determination of recycled water use area.

(a) General.

(1) The City Council may adopt and periodically review the City's Recycled Water Master Plan and recommend where water service should be made with recycled water in place of potable water. The Master Plan shall be in accordance with all of the requirements of the State Board and the RWQCB, and shall encourage recycled water use.

(2) If the City determines recycled water is available, or will be available within five (5) years, the City may request modifications to existing onsite water facilities and require construction of recycled water systems in new developments.

(3) The City Council may enter into agreements with other municipalities and public entities to identify recycled water use service areas within the City and the jurisdiction of each entity.

(4) The City may identify customers who are located within the City's service area, and within an area identified in the City's Recycled Water Master Plan as an area capable of receiving service from the City's recycled water system, and may determine the feasibility of providing recycled water service to identified users.

(5) If the City determines recycled water service is feasible, applicants for new recycled water service must install onsite facilities to accommodate both potable water and recycled water in accordance with this chapter.

(b) Existing potable water service.

(1) The City may make determinations of areas where existing potable water use should be replaced with recycled water use.

(2) The City shall provide notice of the determination to use recycled water to the current customer, explaining the reasons for recycled water use, procedures to facilitate recycled water use, and proposed conditions and schedule for the conversion. Partial or full conversion of existing customers to recycled water use may be mandated to the extent allowed or required by law.

(3) A customer seeking to convert to recycled water service must submit an application for a letter of approval to the City for review, along with any required application fee. The City shall review the application for completeness and contact the customer regarding the potential provision of recycled water service and the City's recycled water use agreement. If the customer does not agree to the terms of the recycled water use agreement, or if the City determines that recycled water is not available for the proposed use, the City may, in its sole and absolute discretion, refuse to provide such service.

(c) New recycled water service.

(1) Upon submittal by applicant of a tentative map, land use permit, other proposed land development/land use, or request for recycled water service, the Administrator shall make preliminary determinations if recycled water service can be provided to the area in question. Based upon such determinations, use of recycled water and construction of recycled water distribution systems or other facilities, and the application for recycled water service, may be required as conditions of approval for any development application, in addition to any other conditions of the new industrial, commercial or residential development.

(2) Upon submittal by applicant of a proposed alteration or remodeling of multifamily, commercial, or industrial structures which substantially increase a facility's area, volume or size, or upon request for recycled water service, the Administrator shall make preliminary determinations if recycled water service can be provided to the area in question. Based upon such determinations, use of recycled water and construction of recycled water distribution systems or other facilities, and the application for such use, may be required as conditions of approval for any application, in addition to other conditions of approval for the alteration or remodel.

(3) The Administrator may require the use of recycled water for approved uses and refuse or otherwise restrict potable water service when recycled water is available and approved for use.

(4) Any recycled water supply assessments or verifications prepared by the City will not entitle the applicant's project to recycled water service, or to any right, priority, or allocation in any supply, capacity, or facility, or affect the City's obligation to provide service to its users or potential future users. In order to receive service, the applicant, owner, or user must meet all of the applicable requirements of this chapter.

(§ 1, Ord. 2689, eff. June 17, 1999, as amended by § 28, Ord. 2816, eff. December 1, 2005 and § 2, Ord. 3197, eff. January 7, 2022)

Sec. 6-8.712. Authorized uses.

(a) Uses of recycled water include only those uses approved by the State Board and consistent with the Uniform Statewide Recycling Criteria under Title 22 of the California Code of Regulations. Each proposed use will be considered for approval by the City on a case-by-case basis, and the City may determine in its discretion whether it is feasible to furnish recycled water for the proposed use. The City's determination of feasibility will be based on the following factors:

(1) Whether recycled water may be furnished for the intended use at a reasonable cost to the user and the City.

(2) Whether recycled water use is in accordance with the standards of treatment and water quality requirements set forth in Title 22, Division 4, Chapter 3, of the California Code of Regulations and all other applicable federal, state, and local laws and regulations.

(3) Whether the use of recycled water can be made in a manner not detrimental to public health.

(b) Prior to approving such uses, the City may, in its discretion, set forth specific requirements as conditions to providing such services and/or require specific approval from the appropriate regulatory agencies. Prior to approval, the user must comply with the requirements established by this chapter and any other requirements imposed by the Inland Empire Utilities Agency, State Board, or any other regulatory agencies that have jurisdiction over such uses.

(§ 1, Ord. 2689, eff. June 17, 1999, as amended by § 2, Ord. 3197, eff. January 7, 2022)

Sec. 6-8.713. Conditions of service.

(a) Prior to obtaining recycled water service, the user must enter into a recycled water use agreement with the City. Recycled water use shall be subject to terms and conditions established in the agreement, and in accordance with this chapter and other applicable codes, rules, and regulations. If any of the conditions of service are not satisfied at all times, the recycled water use agreement may be revoked by the Administrator, after which all recycled water service shall cease:

(b) The City shall not be liable for any damage by recycled water or resulting from:

(1) Defective plumbing.

(2) Broken or faulty services or recycled water mains.

(3) Onsite facilities failures.

(4) High or low pressure conditions.

(5) Interruptions of service.

(6) Any inappropriate or illegal use or management practices.

(c) All recycled water will be provided to the user in the conditions and quantity specified in the recycled water use agreement.

(d) Recycled water use will not be subject to the same restrictions as potable water during drought conditions and will be supplied as available.

(e) Recycled water service may be terminated whenever the quality of the recycled water does not comply with the requirements of the regulatory agencies, or at any time the provisions of this chapter, or the conditions specified in the recycled water use agreement, are violated.

(§ 1, Ord. 2689, eff. June 17, 1999, as amended by § 2, Ord. 3197, eff. January 7, 2022)

Sec. 6-8.714. Recycled water service application.

(a) An application for a service connection must be made on a form furnished by the City. The applicant shall provide the City with the anticipated recycled water demand (maximum gallons per minute) and shall specify the size of the water meter that is desired; however, the City reserves the right to determine the ultimate size of the service connection and meter. The applicant shall also specify the property to be served. The information supplied by the applicant shall be considered as authoritative and final. If any error in such application shall cause installation of a service connection that is improper, either in size or location, the cost of all changes required shall be borne by the applicant. The steps for obtaining recycled water service are as follows:

(1) The applicant completes and submits a recycled water service application, including existing facility "as-built" drawings or proposed facility plans as appropriate, description of where and how recycled water use is proposed, and any other information pertinent to the use of recycled water as requested by the Administrator.

(2) An engineering report shall be prepared by a qualified engineer registered in California and experienced in the field of wastewater treatment, and submitted to the State Board for approval. The City or Inland Empire Utilities Agency may prepare the report on behalf of the user, provided that the user pays all costs associated with the preparation of the report. The engineering report shall be consistent with State Board guidelines. Pursuant to the Uniform Statewide Recycling Criteria under Title 22 of the California Code of Regulations, the engineering report shall include:

(i) A description of the design of the proposed reclamation system.

(ii) A means for compliance with Title 22 regulations and any other features specified by the State Board.

(iii) A contingency plan which will assure that no untreated or inadequately treated wastewater will be delivered to the use area.

(3) The City shall forward the completed engineering report to the State Board for review and approval.

(4) The user and the City will address any concerns that the State Board may have regarding the engineering report and revise the report accordingly.

(5) Upon the State Board's approval of the engineering report, the user may enter into a recycled water use agreement with the City. The user must enter into the agreement to begin recycled water service and pay any applicable fees.

(6) The Administrator will schedule a start-up test of the onsite recycled water system to ensure that cross-connections do not exist.

(7) Upon the successful completion of the test, the Administrator may authorize recycled water service to begin.

(§ 1, Ord. 2689, eff. June 17, 1999, as amended by § 2, Ord. 3197, eff. January 7, 2022)

Sec. 6-8.715. Recycled water use agreement.

Every applicant agreeing to receive recycled water shall sign a recycled water use agreement (to be furnished by the City) and shall be subject to the following conditions:

(a) The applicant shall pay any specified connection fees, service line charges and other charges, and adhere to the requirements prescribed by this chapter and any additional requirements required by other agencies governing recycled water use.

(b) In order to maintain acceptable operating conditions throughout the recycled water system, the Administrator may schedule recycled water use for specific applications. Such scheduling may involve programming deliveries to different users and/or to various portions of a single user's onsite system. Any scheduling shall consider the operating constraints of the affected users.

(c) The Administrator may temporarily terminate recycled water service at any time recycled water produced by the Inland Empire Utilities Agency does not meet the requirements of the regulatory agencies. Recycled water service would, in such case, be restored when the recycled water meets the governing requirements.

(d) At a minimum, the recycled water use agreement shall include the following:

(1) Names and addresses of the owner of the property and user(s) of the recycled water.

(2) A statement that no changes in the proposed system will be undertaken without amending the agreement.

(3) A statement that the applicant recognizes potential penalties for violation of this chapter and any regulatory agencies.

(4) A copy of the State Board approved engineering report.

(5) Specific quantity of recycled water to be used, including estimated average annual use in acre-feet, and the maximum gallons per minutes (GPM) needed at the point of connection (POC) as shown on the plans.

(6) Approved uses.

(7) A statement that the agreement shall be canceled or amended if:

(i) A change of recycled water use occurs.

(ii) A change in the piping system has been implemented without prior approval.

(iii) A violation of these rules and regulations occurs and results in a system turn-off.

(§ 1, Ord. 2689, eff. June 17, 1999, as amended by § 2, Ord. 3197, eff. January 7, 2022)

Sec. 6-8.716. Rates, fees, charges and deposits.

(a) All rates and fees regarding recycled water service and their administrative costs shall be established by the City Council and incorporated into Ontario Municipal Code Title 6, Chapter 8B. Any changes in fee and rate schedules shall be automatically adopted into this chapter.

(b) Applicants for recycled water service shall pay their fair share for the construction of facilities needed to deliver recycled water to the applicant's property. All fees and estimated construction costs shall be paid prior to construction; however, the City may reimburse the applicant for a portion of the cost of such facilities as described in subsection (c) of this section.

(c) Under certain circumstances, the City may contribute to the cost of designing and/or constructing the facilities needed to deliver recycled water to an applicant's property. Subject to the availability of funds, the City may:

(1) Reimburse an applicant for costs incurred to install oversized facilities in the public right-of-way.

(2) Elect to participate in or construct pipelines, reservoirs, pumping stations or other facilities, as the City determines necessary, and/or as funds are available.

(3) Elect to fund or construct recycled water facilities, necessary for converting existing customers from potable to recycled water, with customer reimbursement to the City in the form of an increased recycled water rate, not to exceed the potable rate, until such time as reimbursement is complete under the terms of the recycled water use agreement.

(§ 1, Ord. 2689, eff. June 17, 1999, as amended by § 29, Ord. 2816, eff. December 1, 2005, and §

Sec. 6-8.717. Construction water service.

Persons desiring recycled water for construction purposes shall request a temporary water meter for connection to a City recycled water fire hydrant, and shall be subject to the fees and deposits as set forth in this chapter. It shall be the responsibility of the customer to identify the approximate location of the recycled water fire hydrant. The customer shall be responsible for any damage and repair to the meter while in the customer's possession. In the event that a meter is stolen, it will be at the City's sole discretion whether the deposit shall be forfeited. If a replacement meter is requested, a new deposit and application may be required for the replacement meter. All temporary water meters shall be installed by City staff and secured to the desired recycled water fire hydrant with a City-provided locking device. The meter shall remain at the City

approved and designated location until such time as the customer requests it to be moved. The customer can request the meter to be relocated at a maximum number of four (4) times per billing period. Requests for removal or relocation will be accomplished the same working day, provided the request is made to the City prior to 1:00 p.m. of the day of the request. Any request made after 1:00 p.m. may be completed the following business day.

(§ 2, Ord. 3197, eff. January 7, 2022, § 3 Ord. XXX, eff. April XX, 2025)

Sec. 6-8.718. Size, location, and installation of service line.

Recycled water service lines shall be extended by the property owner/developer to a curb line or property line of the customer's property, abutting on a public street, highway, road or City easement in which recycled water mains are installed. The size and location and/or type of recycled water service lines, service connections, meters, backflow protection devices, and any/all other appurtenances are subject to review and approval by the City.

(§ 1, Ord. 2689, eff. June 17, 1999, as amended by § 2, Ord. 3197, eff. January 7, 2022)

Sec. 6-8.719. Service connection limitations.

Recycled water service shall be subject to the following conditions:

(a) The City reserves the right to limit the area of land under one (1) ownership to be supplied by one (1) recycled water service connection and recycled water meter.

(b) A recycled water service connection and its corresponding meter shall not be used to supply adjoining property of a different owner, or to supply property of the same owner across a road, street or other public right-of-way.

(c) When a property provided with a recycled water connection and corresponding recycled water meter is subdivided, such connection and meter shall be considered as serving the lot or parcel of land it directly or first enters. Additional recycled water mains and/or recycled water service lines will be required for all subdivided areas in accordance with this chapter.

(d) Private irrigation systems for homeowner's associations and other developments where landscaping around homes and in common areas are served with one (1) recycled water meter, shall not be allowed to cross public roads, easements, or other public rights-of-way without City approval.

(e) All recycled water used on any property where a meter is installed must pass through the meter. Customers shall be held responsible and charged for all recycled water passing through their meters.

(f) Every recycled water service line shall be equipped with an angle curb stop on the inlet side of the meter; such angle curb stop being intended exclusively for the use of the City in controlling the recycled water supply through the recycled water service line. If the curb stop is damaged by the user's use to an extent requiring replacement, such replacement shall be at the user's expense.

(§ 1, Ord. 2689, eff. June 17, 1999, as amended by § 2, Ord. 3197, eff. January 7, 2022)

Sec. 6-8.720. Service pressure.

Whenever possible, the recycled water system will operate at a slightly lower pressure than the potable water system. This will cause potable water to flow in the recycled water system in the event of a cross-connection.

(§ 1, Ord. 2689, eff. June 17, 1999, as amended by § 30, Ord. 2816, eff. December 1, 2005, and § 2, Ord. 3197, eff. January 7, 2022)

Sec. 6-8.721. Relocation of recycled water service lines.

Should a recycled water service line installed pursuant to the request of the applicant, owner, or user be of the wrong size, or installed at a wrong location or depth, then the cost of all changes required shall be paid for by the applicant, owner, or user. All recycled water services provided prior to final street improvements will be considered temporary and the costs for all repairs or changes required to be performed by the City must be paid by the applicant, owner, or user.

(§ 1, Ord. 2689, eff. June 17, 1999, as amended by § 2, Ord. 3197, eff. January 7, 2022)

Article 5: Protective Measures

Sec. 6-8.722. Cross-connections.

Chapter 8E of Title 6 of the Ontario Municipal Code establishes the rules and regulations for the City's active Cross-Connection Control Program ("Program"). Service is conditioned on the users adherence to the Program. The City has designated a Cross-Connection Control Coordinator ("Coordinator") for the Program. When a request for recycled water service is initiated, the applicant must provide sufficient information, including plumbing and building plans, to enable the Administrator, Coordinator, and other regulatory agencies to determine the level of backflow protection required. The proper backflow protection, as determined by the Administrator, Coordinator, and other regulatory agencies, shall then be installed and tested according to Chapter 8E before recycled water service is provided. Users must make their premises open for inspection at all reasonable times in accordance with section 6-8.908 of Chapter 8E.

Any questions or notifications regarding these provisions or the program should be directed to the Coordinator or the Administrator, or his/her designee.

(§ 2, Ord. 3197, eff. January 7, 2022, § 3 Ord. XXX, eff. April XX, 2025)

Sec. 6-8.723. Other measures.

(a) Water meters used for recycled water service shall be tagged or color-coded purple, color Pantone 512 or 522, or otherwise distinguished as such per AWWA standards. These meters shall not be interchanged or used for potable water service after repairs and/or meter testing have been performed.

(b) Where premises contain dual or multiple water systems and piping, the exposed portions of pipelines shall be painted, banded, or marked pursuant to § 6-8.726 at sufficient intervals to distinguish clearly water is safe for drinking purposes and water that is not safe. All outlets intended for drinking purposes shall be plainly marked to indicate that fact.

(c) For residences providing recycled water services, water outlets that serve non-potable water shall be marked with the words "Recycled Water - Do Not Drink".

(d) Periodic inspection by the City of the recycled water facilities will determine if all identifying items are clearly discernable. If not, they shall be immediately replaced, repaired or refurbished as needed, by the user. These items include:

(1) Warning tags.

(2) Painted surfaces.

(3) Warning tape.

(4) Identification tape.

(5) Covers, caps, signs.

(6) Other items that indicate recycled water is being used.

(e) To determine the existence of any cross-connections or backflow conditions into the potable water system, periodic testing by State Board approved methods will be performed by the Administrator and/or other regulatory agencies.

(f) The State and County Health Departments, the Administrator, and the IEUA shall be kept informed by written document of the identity of the person responsible for the user's recycled water system on all premises concerned with these rules and regulations. At each authorized use area, an 'Onsite' Recycled Water Supervisor shall be designated. This supervisor shall be responsible for:

(1) The installation and use of all components of the onsite recycled water system(s).

(2) Prevention of cross-connections.

(3) Change in use of recycled water.

(g) When the recycled water uses or conditions, as determined by the Administrator, Coordinator or other regulatory agencies, represent a clear and immediate hazard to the City's potable and/or recycled water supply that cannot be immediately removed or corrected, the Administrator shall terminate recycled water use. Section 6-8.920 of Chapter 8E establishes the conditions or uses that create a basis for termination.

(§ 1, Ord. 2689, eff. June 17, 1999, as amended by § 31, Ord. 2816, eff. December 1, 2005 and § 2, Ord. 3197, eff. January 7, 2022, § 3 Ord. XXX, eff. April XX, 2025)

Sec. 6-8.724. Emergency connection to the recycled water system to the potable water system.

If the Administrator determines an emergency exists where all or parts of the recycled water system are unable to provide recycled water, the Administrator may approve an emergency temporary connection to the potable water system. Before such emergency temporary connection is made, the portion without recycled water shall be isolated by an air gap separation from the remainder of the recycled water system. This isolation shall occur at either individual services or on the offsite system, as determined by the Administrator. An approved backflow prevention device shall be installed on the potable

water lines in accordance with this chapter and any and all applicable rules and regulations of the state and local health departments. The recycled water system shall be disinfected in accordance with Title 22 California Code of Regulations and AWWA C651 Standard prior to any use of potable water through the system. Before the emergency temporary connection or connections shall be removed, whether onsite or offsite, the user shall notify the City's Municipal Utilities' Water Quality Programs Division. The emergency temporary connection shall be removed before connection to the recycled water system is re-established. Re-establishment of recycled water service must be inspected and approved by the Administrator prior to resuming delivery of recycled water.

Article 6: Facilities Design and Construction

Sec. 6-8.725. Facilities design.

(a) The design of offsite and onsite recycled water facilities, including the preparation of plans and construction specifications, shall be under the responsibility of an engineer registered in the State of California. The design of customer (onsite) facilities that will use recycled water, and preparations of plans and construction specifications, shall be stamped and signed by a State of California registered landscape architect or civil engineer, unless otherwise approved by the Administrator.

(b) Before the Administrator grants final acceptance of any system using recycled water, as-built drawings of the system shall be provided. The installed system shall be tested in accordance with the City Standard Specifications to ensure that the system is in full compliance with applicable rules and regulations.

(c) All offsite and onsite recycled water facilities shall be designed and constructed according to the requirements, conditions, and standards as adopted in the City Standard Specifications to ensure that the system is in full compliance with this chapter. Recycled water systems, both onsite and offsite, shall be separate and independent of any potable water systems.

(d) Where the premises contain dual or multiple water systems, the exposed portions of pipelines shall be identified at sufficient intervals.

(e) Areas irrigated with recycled water must be kept completely separated from domestic water wells and reservoirs. Recycled water shall not be applied or allowed to migrate to within fifty (50) feet of any well used for domestic supply. No impoundment of recycled water shall be located within one hundred (100) feet of any domestic water well, unless it can be demonstrated that special circumstances justify lesser distances to be acceptable.

(f) Adequate means of notification shall be provided to inform the public, employees and others that recycled water is being used. Conspicuous signs with appropriate wording that can be clearly read should be placed at adequate intervals around the authorized use area.

(1) Golf courses should print messages on score cards in a different color indicating recycled water is being used. Water hazards containing recycled water should be posted with appropriate signs.

(2) Languages in addition to English should be used on signs where appropriate.

(§ 2, Ord. 3197, eff. January 7, 2022, § 3 Ord. XXX, eff. April XX, 2025)

Sec. 6-8.726. Offsite recycled water facilities.

(a) Any offsite recycled water distribution facilities required to serve existing or new developments of the property within the City, as determined by the Administrator, shall be provided by the applicant, owner, or customer at their expense, unless the Administrator determines it is a City benefit to construct these capital facilities.

(b) Plans and specifications for all recycled water distribution facilities shall be submitted to and approved by the Administrator, and other regulatory agencies, in advance of construction.

(c) The City will assume responsibility for providing recycled water service to the point of connection of such development on transfer, to the City, of the title to all offsite recycled water systems and any necessary easements. All easements shall be in a form acceptable to the Administrator, and not subject to outstanding obligations to relocate such facilities or any deeds of trust, except in instances where such is determined by the Administrator to be in the best interest of the City.

(d) The City and the property owner or developer may enter into a reimbursement agreement for the portions of a recycled water system that are required to be oversized with capacity to supply more recycled water than the property owner or developer requires. The determination to enter into a reimbursement agreement, and the specific items that are the subject of reimbursement, will be made by the City.

(§ 2, Ord. 3197, eff. January 7, 2022, § 3 Ord. XXX, eff. April XX, 2025)

Sec. 6-8.7273. Onsite recycled water facilities.

(a) The user or the owner of the property shall be responsible for all costs associated with onsite recycled water facilities.

(b) When City standards and specifications require a higher quality material, equipment, design or construction method than that required by other governing codes, rules and regulations, the City standards and specifications shall take precedence.

(1) In areas where recycled water is not immediately available when the use area is ready for construction, and if the City has determined that recycled water will be supplied in the future, onsite facilities shall be designed to use recycled water. Provisions shall be made to allow for connection to the City's offsite recycled water facilities, when available. In the interim, potable or other suitable water may be supplied to the onsite facilities through an "interim service connection."

(2) Conditions of interim service are:

(i) The City anticipates recycled water will be available to the site within five (5) years of the time interim service is initiated.

(ii) The user or the owner of the property must sign a recycled water use agreement.

(iii) The user or the owner of the property must agree to perform or pay for all work necessary to remove the interim connection and make connections to

the permanent recycled water system at the time the recycled water system is installed.

(iv) An approved backflow prevention device is required on the interim service. The backflow prevention device shall be downstream of the meter and shall be a part of the onsite recycled water facilities.

(v) Future recycled water users will pay for the following:

(A) Cost of constructing and abandoning the interim service and cost of constructing the recycled water service.

(B) Applicable recycled water fees at the time service becomes available.

(C) Applicable interim water rates for the type of water delivered through the interim service.

(vi) When recycled water is available to the site, an inspection of the onsite facilities will be conducted by the Administrator to verify that the facilities are still in compliance with the recycled water use agreement. Recycled water service shall be provided on verification of compliance. If the facilities are not in compliance, the Administrator shall notify the user to make any necessary corrections.

(§ 1, Ord. 2689, eff. June 17, 1999, as amended by § 32, Ord. 2816, eff. December 1, 2005 and § 2, Ord. 3197, eff. January 7, 2022, § 3 Ord. XXX, eff. April XX, 2025)

Sec. 6-8.728. Construction.

(a) Construction of all new recycled water facilities will follow City standards and specifications and the American Water Works Association Construction Guidelines for Recycled Water Facilities.

(b) Where it is planned that an existing non-recycled water system shall be converted to a recycled water facility, the facilities to be converted to recycled water shall be investigated in detail at the user's expense, to determine the measures required to bring the system into full compliance with this chapter. No existing potable water facilities shall be connected to or incorporated into the recycled water system without City and State Board approvals.

(c) If, due to onsite failure of the recycled water system, the Administrator determines that it is necessary to convert onsite facilities from a recycled water supply to a potable water supply, a comprehensive investigation shall be performed by or for the City.

(1) The facilities to be converted to recycled water use shall be investigated in detail, including review of any record drawings, preparation of required reports, and determinations by the City of measures necessary to bring the system into full compliance with this chapter for recycled water service.

(2) No potable water facilities shall be connected to or incorporated in the recycled water system that have not been approved for recycled water service by the City.

(d) It shall be the responsibility of the user to pay all costs for such conversion. Conversion costs may include, but not be limited to, the following:

(1) Isolation of the recycled water supply. Service shall be removed and plugged at the City main or abandoned in a manner approved by the Administrator.

(2) Installation of approved backflow prevention devices, as determined by the Administrator, on all potable and/or other water meter connections.

(3) Removal of any/all special recycled water quick couplers. The user shall be responsible for replacement with quick couplers approved for potable water systems.

(4) Notification to all onsite personnel involved.

(5) Removal of all warning labels/signs.

(6) Installation of any/all potable water facilities and payment of any associated capacity fees, as established in Title 6, Chapter 8B, of the Ontario Municipal Code.

(7) System flushing, disinfecting, decontamination, and water quality analyses, as required by the City and/or other regulatory agencies.

(§ 1, Ord. 2689, eff. June 17, 1999, as amended by § 2, Ord. 3197, eff. January 7, 2022, § 3 Ord. XXX, eff. April XX, 2025)

Article 7: Facilities Operation

Sec. 6-8.729. Offsite facilities.

The City and/or the Inland Empire Utilities Agency shall be responsible for the operation, maintenance and surveillance of all offsite recycled water systems. This includes but is not limited to recycled water pipelines, valves, connections, storage facilities, and other related equipment and property up to and including the meter. Only the City and/or the Inland Empire Utilities Agency personnel and their representatives shall operate, adjust, change, alter, move or relocate any portion of their respective offsite recycled water facilities.

(§ 1, Ord. 2689, eff. June 17, 1999, as amended by § 2, Ord. 3197, eff. January 7, 2022, § 3 Ord. XXX, eff. April XX, 2025)

Sec. 6-8.730. Onsite facilities.

(a) General.

(1) The operation, surveillance, repair, and maintenance of all customer recycled water facilities are the responsibility of the user and his or her designated Onsite Recycled Water Supervisor.

(i) The Onsite Recycled Water Supervisor shall be responsible for the installation, operation, and maintenance of the onsite recycled water system, enforcing applicable requirements of the City's recycled water use agreement, preventing potential hazards related to such system, maintenance of the system

plans in "as-built" form, and distribution of recycled water in accordance with applicable laws and permits held by the City.

(2) The Administrator shall have the right to enter the user's premises to monitor and inspect all onsite recycled water facilities. Where necessary, keys and/or lock combinations shall be issued to the Administrator to provide such access during hours of recycled water system operation.

(b) The Onsite Recycled Water Supervisor shall have the following responsibilities pertaining to operation of onsite facilities:

(1) Ensure that all operations personnel are trained and familiarized with the use of recycled water.

(2) Furnish all operations personnel with maintenance instructions, irrigation schedules, controller charts, and as-built drawings to ensure proper operation in accordance with the onsite facilities design and applicable rules and regulations.

(3) Prepare and submit to the Administrator one (1) reproducible set of as-built drawings.

(4) Notify the Administrator of all updates or proposed changes, modifications, or additions to the onsite facilities and operations for review and approval prior to construction or implementation. All updates and proposed changes shall comply with this chapter, the recycled water use agreement and any other applicable rules and regulations.

(5) Ensure that the operation and maintenance of all recycled water facilities remain in accordance with this chapter, the recycled water use agreement and any other applicable rules and regulations.

(6) Operate and control the system in order to prevent direct human consumption of recycled water and to control and limit runoff. The user or the owner of the property shall be responsible for any and all subsequent uses of the recycled water. Operation and control measures to be utilized in this regard shall include where appropriate, but not limited to:

(i) Minimizing discharge onto areas not under control of the user so as to minimize public contact. Full circle sprinklers shall not be used adjacent to sidewalks, roadways, and property lines in order to confine the discharge to the use area.

(ii) Operating the onsite recycled water facilities during periods of minimal human use of the service area, and allowing a maximum dry-out time before the irrigated area will be used by the public.

(iii) Providing adequate first aid kits on the premises, and promptly treating all cuts and abrasions to prevent infection. If infection is likely, a physician should be consulted.

(iv) Taking any other precautionary measures to minimize direct contact with recycled water. User's employees, residents, and the public should not be subjected to recycled water sprays.

(v) Applying recycled water at a rate that does not exceed the infiltration rate of the soil. Where varying soil types are present, the design and operation of the recycled water facilities shall be compatible with the lowest infiltration rate of the soils present.

(vi) Reporting to the Administrator any/all failures in the recycled water system that cause an unauthorized discharge of recycled water.

(vii) Protecting all drinking fountains located within the approved use area, by location and/or a structure from contact with recycled water to the maximum extent possible. Windblown spray, direct application through irrigation or other approved uses are considered sources of recycled water. Protection shall be by design, construction practice, or system operation.

(viii) Protecting facilities that may be used by the public, including but not limited to, eating surfaces and playground equipment located within the approved use areas, by locating seating and/or structures from contact with recycled water to the maximum extent possible. Windblown spray, direct contact by irrigation application, or other approved uses are considered sources of recycled water. Protection shall be by design, construction practice, or system operation.

(c) The user shall enforce the following prohibitions:

(1) Cross-connections, as defined by the Cross-Connection Control Policy Handbook , resulting from the use of recycled water or from the physical presence of a recycled water service, whether by design, construction practice, or system operation, are prohibited.

(2) Discharge of recycled water for any purposes, in areas other than those specifically approved in the recycled water use agreement, and without the prior approval of the Administrator, is prohibited.

(3) Use or installation of permanent hose bibs on any customer water system that presently operates or is designed to operate with recycled water is prohibited.

(4) Conditions that directly or indirectly cause recycled water to pond either within or outside of the approved use area, whether by design, construction practice, or system operation are prohibited, unless designed specifically for ponding and approved by Administrator.

(5) Conditions that directly or indirectly cause runoff of recycled water onto areas outside of approved use areas, whether by design, construction practice, or system operation, are prohibited.

(6) Use of recycled water for any purposes other than those specifically approved in the recycled water use agreement, and without the prior approval of the Administrator, is prohibited.

(7) Conditions that directly or indirectly permit windblown spray to pass outside of the approved use area, whether by design, construction practice, or system operation, are prohibited.

(§ 1, Ord. 2689, eff. June 17, 1999, as amended by § 2, Ord. 3197, eff. January 7, 2022, § 3 Ord. XXX, eff. April XX, 2025)

Sec. 6-8.731. Monitoring and inspection.

(a) The Administrator will periodically monitor and inspect the entire recycled distribution facility, including both offsite and onsite facilities. The Administrator will conduct monitoring programs, maintain records as deemed necessary, inspect onsite facilities for compliance with applicable rules and regulations, and provide reports as requested by the State Board. For these purposes, the Administrator will have the right to enter the user's premises during hours of recycled water system operation to inspect onsite recycled water facilities and approved areas of recycled water use, to ensure compliance with this chapter and Chapter 8E, including the requirement that runoff be controlled and limited (§ 6-8.733(b)(6)) and the prohibition of cross-connections between potable water facilities and recycled water facilities (Chapter 8E).

(b) The approved user shall be responsible for providing access to and cooperation with the City's Cross-Connection Control Specialist or designee so that the City's Cross-Connection Control Specialist or designee can perform periodic cross-connection tests, site inspections and backflow prevention device tests. Site inspections shall include pressure testing of the system(s) as well as a visual check of the entire system to verify that no cross-connections or unapproved connections exist. The approved user shall be responsible for correcting any work which violates the City's regulations, at the user's sole expense, including any costs associated with repair and re-testing the backflow prevention device should the backflow prevention device fails to pass the required test.

(c) If the user or owner changes, the City's Cross-Connection Control Coordinator or designee will perform an inspection and test to verify compliance with this chapter and Chapter 8E.

(§ 1, Ord. 2689, eff. June 17, 1999, as amended by § 2, Ord. 3197, eff. January 7, 2022, § 3 Ord. XXX, eff. April XX, 2025)

Sec. 6-8.732. Maintenance responsibility.

(a) The user or owner is responsible for maintaining all onsite facilities that are under the ownership of parties other than the City.

(b) No person shall place, dispose, deposit or permit the placement, disposal, or deposit of oil, toxic, hazardous or contaminated liquid or waste, trash, soil, building materials, or any other substances, objects, or obstructions in, on, or around meter boxes or other City facilities. No person shall allow or permit meter boxes or other City facilities from becoming obstructed or obscured by trees, shrubs, plants or in any other manner so as to impede their use or access or make their location difficult to determine.

(c) If such substances, objects, or obstructions are not cleaned and removed, or are permitted to obscure or impede use or access to such facilities, the City may accomplish the cleaning and removal at the user's expense. The Administrator will provide reasonable notice to the user before assessing the charge.

(§ 1, Ord. 2689, eff. June 17, 1999, as amended by § 2, Ord. 3197, eff. January 7, 2022, § 3 Ord. XXX, eff. April XX, 2025)

Sec. 6-8.733. Meter testing.

If a recycled water meter fails to register during any period or is known to register inaccurately, the owner or user shall be charged using a reasonable average daily consumption based on prior consumption or based on other reasonable calculations in the absence of historical consumption data. The City will examine and test the meter through which recycled water is being furnished or determine whether it is correctly registering the amount of recycled water being delivered.

(§ 2, Ord. 3197, eff. January 7, 2022, § 3 Ord. XXX, eff. April XX, 2025)

Article 8: Enforcement

Sec. 6-8.734. Illegal connections, diversions, or tampering.

(a) Diversion and tampering are prohibited.

(b) Diversion and tampering are crimes under the California Penal Code and are violations of the Water Code and the Civil Code. Diversion and tampering may be subject to charges and penalties, as well as referral to the District Attorney for criminal prosecution. All charges and penalties shall be applicable and collected in accordance with applicable laws and regulations.

(§ 2, Ord. 3197, eff. January 7, 2022, § 3 Ord. XXX, eff. April XX, 2025)

Sec. 6-8.735. Violations and enforcement.

Nothing in this chapter limits or restricts the City's general authority to enforce noncompliance of applicable rules and regulations. The City retains the right to enforce violations of this chapter in accordance with Chapter 1-5 or in accordance with any other legally authorized process, including but not limited to discontinuing service to any customer that commits a violation, infraction, or otherwise fails to comply with the municipal code, any amendments or additions thereto, and any adopted rules or regulations. Prior to the service disconnection, the City shall provide notice to the customer where a violation, infraction, or otherwise noncompliance results, or is likely to result, in a dangerous or unsanitary condition on the customer's premises, or within the City's water system, and where disconnection of service is necessary to protect the City from fraud, imposition, loss or abuse.

(§ 2, Ord. 3197, eff. January 7, 2022, § 3 Ord. XXX, eff. April XX, 2025)

EXHIBIT C

CHAPTER 8D: POTABLE WATER FACILITIES

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Article 1: General Provisions

Sec. 6-8.800. Purpose and policy.

The purpose of this chapter is to set forth requirements and procedures for the design, construction, monitoring, inspection, and maintenance of potable water facilities, and enable the City to comply with all applicable State and Federal laws and regulations.

(§ 4, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.801. Objectives.

The objectives of this chapter are:

(a) To establish the City's rights and responsibilities regarding design, construction, inspection, operation, and maintenance of potable water facilities.

(b) To establish roles and responsibilities of applicant, developer, contractor, and customer regarding design, construction, monitoring, inspection, and maintenance of potable water facilities.

(§ 4, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.802. Severability.

If any section, subsection, sentence, clause or phrase of this chapter establishing rules and regulations for the use of potable water is for any reason found to be invalid or unconstitutional, such decision shall not affect the remaining portions of this Chapter.

(§ 4, Ord. XXX, eff. April XX, 2025)

Article 2: Definitions

Sec. 6-8.803. Definitions.

(a) "Applicant" shall mean any person, firm, corporation, association, or agency who desires to obtain water services from the City.

(b) "Automated meter reading device" shall mean a specified device installed with metered services with new development and replacement meters that transmits meter read information electronically to a remote receiving device.

(c) “Bacteriological test” shall mean a microbiological examination of water samples routinely taken on the public water system and on all newly constructed water facilities prior to City acceptance, to determine if the water from said potable water facilities meets sanitary quality standards for public consumption set by the California State Water Resources Control Board.

(d) “CADD” shall mean Computer Aided Design and Drafting.

(e) “City” shall mean the City of Ontario, California.

(f) “City Council” shall mean the City Council of the City of Ontario, California.

(g) “City Manager” shall mean the City Manager of the City of Ontario, or his or her authorized representative.

(h) “Contractor” shall mean any person who for himself or herself, in conjunction with, or by or through other, agrees to perform and does perform a construction contract and shall include:

(1) Any person required to be licensed under the California Contractors’ State License Law, and any person contracting with the United States to perform a construction contract, whether such persons are formed or organized under the laws of this state, or another state or country; and

(2) Subcontractors and specialty contractors and those engaged in such building trades as defined in the California Code of Regulations, Title 18, Section 1521.

(i) “Customer” shall mean a person, firm, or corporation who is the recipient of water service from the City.

(j) “DDW” shall mean California State Water Resources Control Board’s Division of Drinking Water.

(k) “Design Development Guidelines and Specifications" shall mean the City’s most current published version for potable water system design and criteria.

(l) “Developer” shall mean a person, firm, corporation, partnership, or association who desires water service which requires the installation of new, improved or expanded water service facilities for him or herself or for others, except that employees and consultants of such persons or entities, acting in such capacity, are not developers.

(m) "Domestic service” shall mean the delivery of potable water through an authorized service connection designated primarily for potable and sanitation uses, and other associated uses.

(n) “ELAP” shall mean the California Environmental Laboratory Accreditation Program.

(o) “Engineer” shall mean the City Engineer of the City of Ontario, or his or her authorized representative.

(p) “Fecal coliform” shall mean a subgroup of total coliforms and are associated with human and animal wastes. Escherichia coli is a fecal coliform species.

(q) "Fire service” shall mean the standby and delivery of water through an authorized service connection designated exclusively for fire protection including automatic sprinklers and fire hydrants.

(r) "Greenbook” shall mean the most current published edition of “Greenbook” Standard Specifications for Public Works Construction.

(s) "Heterotrophic plate count” shall mean a procedure for estimating the number of culturable heterotrophic bacteria in water.

(t) "IEUA” shall mean the Inland Empire Utilities Agency.

(u) “Inspector” shall mean the City of Ontario’s Engineering Department’s Public Works Inspector.

(v) “Municipal Utilities Company” shall mean the Municipal Utilities Company of the City of Ontario.

(w) "NPDES” shall mean National Pollutant Discharge Elimination System.

(x) “Operation and maintenance” shall mean the functions required to ensure continuous operations and viability of the City’s infrastructure.

(y) “Service connection” shall mean the water pipe, or pipes, and appurtenances installed by the developer to transport potable water from adjoining City facilities located within a public right-of-way or public utility easement to the developer’s parcel of land. Said service connections shall terminate at the customer side of the meter and meter box located at a specified place approved by the City.

(z) “Standard Drawings” shall mean the City’s Standard Drawings.

(aa) "Subdivision” shall mean the division, by a developer, of any part of portion of a parcel of land, within the service area of the City, into two or more separate parcels or units for sale or lease for residential, commercial, or industrial purposes.

(bb) “Total coliform” shall mean a coliform group consisting of several genera of bacteria that belong to the family Enterobacteriaceae that live in the intestines of warm-blooded animals, such as humans and animals.

(cc) "Transmission facilities” shall mean any designated City facilities, and appurtenances, considered to be the backbone infrastructure that transports large quantities of water within the City to and from the storage facilities and the City treatment/processing plants. Such facilities shall not be used as, nor be deemed to be,

part of the on-site water facilities which are required for the connection and delivery of water service to a customer or developer.

(dd) "Water facilities" shall mean any water mains, service connections, water service lines, meters, and appurtenances used for providing potable water service to any parcels of land or subdivision of said parcels of land, excluding designated transmission facilities.

(ee) "Water Pipeline Construction Specifications" shall mean the City's most current published version for constructing potable water facilities.

(ff) "Water Pipeline Material Specification and Approved List" shall mean the City's most current published version for materials used to construct potable water facilities.

(§ 4, Ord. XXX, eff. April XX, 2025)

Article 3: General Responsibilities

Sec. 6-8.804. Applicant and developer responsibilities.

(a) The applicant or developer shall be required to pay all applicable fees based on current rates approved by City Council.

(b) The applicant or developer's responsibilities shall generally include engineering, construction, sanitizing, and testing of water facilities in accordance with this chapter and subject to the Engineer and Inspector's approval. Complete engineering shall be by a registered civil engineer and shall include submission of a full set of detailed improvement plans in electronic form of a scale acceptable to the Engineer, along with appropriate plan check and inspection fees. After all changes, modifications, and additions requested by the Engineer have been made on the improvement plans and have been approved, the applicant or developer shall furnish the Engineer a complete set of electronic improvement plans, which shall become the property of the City. In addition to furnishing the Engineer with a complete set of electronic improvement plans, the applicant or developer shall furnish an electronic file containing necessary data for producing CADD drawings in a format approved by the Engineer.

(c) Any changes in installation from the improvement plans submitted pursuant to subsection (b) shall have prior written approval of the Engineer, and the applicant or developer shall furnish the Engineer a complete set of as-built plans before water service is established and provided. An electronic CADD file shall also be furnished for the as-built plans.

(d) The applicant or developer shall have the required installation, chlorination, and sanitization of newly installed water facilities performed by a contractor that meets the licensing requirements in subsection (a) and (b) of section 6-8.805.

(e) The applicant or developer shall ensure that the contractor installs water facilities in accordance with the City's Design Development Guidelines and

Specifications and Standard Drawings unless otherwise granted in writing by the Engineer.

(f) The applicant or developer shall be responsible for relocating or reinstalling any existing water facilities installed in conflict with plans submitted pursuant to subsection (b) or (c). Relocation of water facilities shall be contingent upon the City approval of the plans, which are to be submitted by applicant or developer in a format as required by the Engineer. Under no circumstances may water facilities be relocated unless authorized by the Engineer in writing.

(g) The applicant or developer is responsible for the abandonment of any existing facilities that, through the plan checking process, are deemed unnecessary or inadequate for usage by the new construction. Any abandonment will be done in accordance with the approved plans in conjunction with the construction of the new facilities or in a manner as directed by the Engineer.

(h) The applicant or developer shall comply with any other requirement set forth in this Chapter.

Sec. 6-8.805. Contractor responsibilities.

(a) The contractor shall possess a State of California Class “A” license issued by the Department of Motor Vehicles and a Class “C-34” or Class “C-12” license issued by the Contractors State License Board for the installation of newly installed systems.

(b) The contractor shall possess a State of California Class “C-36” license issued by the Contractors State License Board for the chlorination and sanitization of newly installed systems.

(c) The contractor shall at all times maintain and insure the integrity of newly constructed facilities, including but not limited to pipeline, appurtenance, and devices, during storage, transportation, and installation. Pipe shall be delivered and stored with factory provided end caps. Failure to maintain the integrity of newly constructed facilities through the demonstration of inspection and testing shall allow the City, at its sole discretion, to have the contractor remove, replace, retest, or reinspect at the contractor’s sole expense.

(d) The contractor shall provide and maintain at all times during construction, ample means and devices with which to promptly remove and dispose of all water entering the excavations or other parts of the work. Ground or sub surface water shall not be allowed to rise around pipe installations until joining compound in the joints has set. The contractor shall dispose of the water and any other materials generated from the work site in a suitable manner without damage to adjacent property. No water shall be drained into work built or under construction. Water and any other materials generated from the work site shall be disposed of in such a manner that conforms to state and federal waste disposal laws.

(e) At all times the contractor will coordinate all work with the City to minimize waterline shutdowns made pursuant to section 6-8.828.

(f) The contractor shall have monitoring performed, in connection with chlorination and sanitization the of newly installed systems, by a current certified California Water Distribution Operator and demonstrate formal training by a certified ELAP laboratory. All charges shall be borne by contractor.

(g) The contractor shall disinfect pipelines, valves, hydrants, service laterals, fittings, tanks, and other surfaces exposed to water in accordance with AWWA C651. Sampling locations shall be in accordance with AWWA C651 and the DDW regulations.

(h) The contractor shall dechlorinate and remove pollutants from water flushed from water mains in accordance with AWWA C655 and discharge requirements specified in the City's Specifications and NPDES permits.

(i) Prior to water service being established, the contractor shall complete and pass the hydrostatic pressure, leakage, and disinfection tests prior to connecting any new line to the existing pipe and mains. All tests shall be completed in the presence of the Inspector for recording.

(j) The contractor shall comply with any other requirement set forth in this chapter.

(§ 4, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.806. City rights and responsibilities.

(a) The City is responsible for inspections made pursuant to Article 6 of this chapter.

(b) The City reserves the right to install any water facility which will become the property of the City for maintenance and operation.

(c) The City shall be responsible for the operation and surveillance of all of the City's water facilities, including, but not limited to pipelines, treatment facilities, and appurtenances and property up to and including the City's meter, shall be under the management and control of the City.

(d) No other persons except authorized City employees shall have any right to enter upon, inspect, operate, adjust, change, alter, move, or relocate any portion of the foregoing or any of the City's property. In the event that such should occur, all charges and penalties shall be applicable and collected. Such action shall also be in violation of any and all applicable federal, state, and local statutes, ordinances, regulation, and other requirements.

(§ 4, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.807. Customer responsibilities.

(a) Provision of water service includes a right-of-way on the customer's property for the City to gain unobstructed access to the City's water facilities (e.g., water meter box, fire hydrants, air release valves, etc.) at all times.

(b) The customer is obligated to maintain unrestricted and visible access to the customer's property for the safety of City personnel and to protect the City's water facilities.

(c) The customer shall comply with any other requirement set forth in this chapter.

(§ 4, Ord. XXX, eff. April XX, 2025)

Article 4: New Service Connection Requirements

Sec. 6-8.808. Connection fees.

Connection fees applicable to all new, improved or expanded service connections will be established from time to time by the City and shall include any fees and/or rates established by IEUA through ordinance.

(§ 4, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.809. New service connection.

An applicant shall submit an application for every new, improved or expanded service connection to the Engineering Department. The application shall be accompanied by payment of all appropriate fees. The fee for providing the meter shall include perpetual maintenance.

(§ 4, Ord. XXX, eff. April XX, 2025)

Sec. 6-8. 810. Application for new service connection.

An applicant requesting service connection(s) for a subdivision, commercial, or industrial development shall submit an application to the Engineering Department. The application shall include, but not limited to, the following information:

(a) Name and address of applicant;

(b) Legal description, location of service connection along the frontage of the property to be served;

(c) Two (2) copies of tentative tract map, plot plan, or parcel map;

(d) Meter size of service connection;

(e) Fire flow requirements per Fire Department;

(f) All other required City documents, such as business license;

(g) Purpose for which service shall be used; and

(h) Other information which City may reasonably require.

The information supplied by the applicant the application shall be considered authoritative and final. If any error in such application shall cause installation of a service connection that is improper, either in size or location, the cost of all changes required shall be borne solely by the applicant. Once the application for water service is completed and signed, all appropriate fees and charges are paid, a service connection is installed, a meter is set , and the water is turned on, the charge for water service shall begin. If water service is not required when the service connection is installed, the water meter shall not be installed and the angle curb stop or valve governing the supply will be left shut off and locked. When service is required, the applicant shall contact the City for water service.

(§ 4, Ord. XXX, eff. April XX, 2025)

Sec. 6-8. 811. Conditions of service.

Applicants shall be required to accept and consent to such conditions of pressure and service as are provided by the distribution system at the location of the proposed service connection, and to hold the City harmless for any damages arising out of low pressure, high pressure, fluctuations in pressure, or interruption of service.

(§ 4, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.812. No entitlement to service.

Any water supply assessment or verifications prepared by the City will not entitle the applicant's project to water service or to any right, priority, or allocation in any supply, capacity, or facility, or affect the City's obligation to provide service to its customers or potential future customers. In order to receive service, the applicant must meet all of the applicable requirements of this chapter.

(§ 4, Ord. XXX, eff. April XX, 2025)

Article 5: Design and Construction

Sec. 6-8.813. Water system design specifications and guidelines.

(a) The water system shall be designed and constructed in accordance with criteria described in the most current City of Ontario "Water Master Plan" and other City published design guidelines, specifications, and standards including but not limited to:

(1) Cross-Connection Control Program, Chapter 8E of Title 6 of the Ontario Municipal Code
(2) Design Development Guidelines and Specifications;
(3) Standard Drawings;
(4) Water Master Plan;
(5) Water Pipeline Construction Specifications; and
(6) Water Pipeline Material Specification and Approved List.

Design elements include but are not limited to system layout and pipeline locations, demand and usage, pipe sizing, valving, pressure regulating facilities, air/vacuum release valves, fire hydrants, blow-off appurtenances, service laterals, corrosivity, and tracer wires.

(b) In addition to subsection (a) and (b), design and construction of the water system shall meet the applicable requirements and specifications described in following documents:

(1) This Chapter;
(2) DDW Waterworks Standards Main Separation, California Code of Regulations Title 22, section 64572;
(3) California Fire Code, as it exists or may be amended, for the purposes of fire hydrant location and frequency;
(4) Greenbook; and
(5) Any other requirement or specification the Engineer deems reasonably necessary to ensure compliance with state and federal laws and the reliability and safety of the City's water system.

(§ 4, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.814. Street sub-grade.

If recently installed mains and services are required to be removed, relocated or adjusted to grade as a result of changes requested by the developer or, because of incorrect survey information as to the grade of curbs and street, location of property lines or other utilities, etc., all expenses incurred by making said changes shall be borne solely by the developer. For newly surfaced streets, all trench restoration and resurfacing charges shall be paid by the developer and subject to City street moratorium requirements.

(§ 4, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.815. Right-of-way and easements.

Unless otherwise granted in writing by the Engineer:

(a) No public utilities shall be installed in any street or other location not formally dedicated for such use, except by consent of the property owner and the City. Such consent shall be prepared by the developer, reviewed and approved by the Engineer, in an approved easement deed format provided by the City, and recorded in favor of the City.

(b) Within a utility easement, water main separations shall adhere to the California Code of Regulations Section 64572. Additional minimum separations shall be met for each utility and adhere to this chapter.

(§ 4, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.816. Potable pipeline location.

Crossing of non-potable lines shall adhere to DDW Waterworks Standards Main Separation requirements as contained in California Code of Regulations Title 22, section 64572. If minimum clearance cannot be achieved, a separation waiver request shall be completed and submitted to the Municipal Utilities Company. The Municipal Utilities Company shall review and if in concurrence, submit the request to DDW for state review and approval pursuant to California Code of Regulations Title 22, section 64511.100.

(§ 4, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.817. Fire hydrants.

All fire hydrants shall be installed at a frequency and distance that is consistent with Appendix C and CC of California Fire Code. Fire hydrants shall be installed with a minimum separation of 5-feet from any driveway, street light, power pole, sign, fence, wall, or other development that may obstruct access.

(§ 4, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.818. Water service lines.

(a) Service connections shall be installed to the curb or street right-of-way line as determined by the Engineer. The property to be served shall front on or be adjacent to a dedicated public right-of-way wherein the City maintains or can install a standard potable water main.

(b) The developer or applicant shall determine the size of service connections and meters and their location with respect to the boundaries of the premises to be served prior to issuance of building or plumbing permits by the City.

(c) Notwithstanding subsection (b), the City may determine the size of the water service lines, the service connections, and the meters.

(d) The City shall determine type and size of backflow protection devices for potable water service, in accordance with Chapter 8E of Title 6 of the Ontario Municipal Code, and any and all other appurtenances to the service.

(e) The water service line(s) shall be installed to a curb line of the customer's property, or if no curb, to the customer's property line, abutting upon a public street, highway, alley, easement, lane, or road (other than a freeway) in which are installed water mains of the City. Water service line(s) should not be done until the exact location of the service connection has been approved by the Engineer.

(§ 4, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.819. Service connections.

Unless otherwise granted in writing by the Engineer:

(a) Each residence and/ building, excepting condominium and townhouse projects under separate ownership shall must be provided with a single and separate service connection and water meter except under special conditions as determined by the City.

(b) Two (2) or more dwellings or buildings under one (1) ownership and on the same lot or parcel of land shall have separate service connections for each dwelling or building. A separate landscape irrigation meter is required for a property under the conditions described in Chapter 7, Chapter 8A, or Chapter 8C of Title 6 of the Ontario Municipal Code.

(c) The customer's pipe which connects to the outlet side of the meter shall not be installed until the service connection is completed. If the applicant or developer's pipe is installed to the outlet side of the meter before the service connection is installed and its location does not correspond with the service connection specified on the application form and improvement plans, then the applicant or developer shall pay the additional cost for completing the service connection from the water main to the outlet side of the meter. The service connection and all equipment appurtenant thereto, including the meter and meter box, shall be the sole property of the City, and no part of the cost thereof shall be refunded to the applicant or developer.

(d) The Engineer reserves the right to limit the number of houses or buildings, such as apartments, or the area of land under one ownership to be supplied by one service connection and water meter.

(e) The Engineer may limit the number of service connections to any residential or other project whether under separate or multiple ownership.

(f) A service connection and water meter must not be used to supply adjoining property of a different owner, or to supply property of the same owner across a street, or alley.

(g) No service connection shall be installed on the public or private side of any service lateral that is intended to service joint or adjacent parcels of land.

(h) When property provided with a service connection and water meter is subdivided, that connection and meter will be considered as serving the lot or parcel of land that it directly or first enters. Additional water mains and/or service lines will be required for all subdivided areas in accordance with this chapter.

(i) Every service connection will be equipped with an angle curb stop, or valve, on the inlet side of the meter; that angle curb stop, or valve, is intended exclusively for the use of the City in controlling the water supply through the water service line. If the angle curb stop, or valve, is for any reason damaged by the customer's use to an extent requiring replacement, the City shall have the right to charge the customer for the cost to replace or repair such angle curb stop, or valve.

(j) The City, at its option, may allow connection to the City's water system by persons outside the City limits. Said connection is at the discretion of the City and may be disconnected upon thirty (30) days' notice.

(§ 4, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.820. Fire service connection.

(a) The valve controlling water flow to the service connection shall be closed when a fire service connection is installed and remain so until a written order is received from the owner or lessee of the premises to have the water turned on. After the water is turned on, the City shall not be held liable for damages of any kind whatsoever that may occur on or to the premises serviced as a result of the installation, maintenance, or use of such service connection, or because of fluctuation of pressure, or interruption of supply.

(b) If water is used through a fire service connection for any other purpose than extinguishing of fires or conducting annual testing of the fire system, the City Manager shall have the right to require a meter on the fire service connection at the owner's expense or shut off the entire water supply for such premises. Upon the installation of such a meter, the established water rates then in effect for water services shall apply and be imposed for any water service provided to the property.

(c) The City shall have the right to take a domestic, commercial, or industrial service connection from the fire service connection at the curb to supply the same premises as that to which the fire service connection belongs. The Engineer shall have the right to determine the proportion of the installation costs properly chargeable to each service connection if such segregation of costs becomes necessary. .The established water rates then in effect for water services shall apply and be imposed for any water service provided to the property.

(d) The Engineer shall require the installation on all fire service connections, a backflow prevention assembly device as determined in Chapter 8E of Title 6 of the Ontario Municipal Code.

(§ 4, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.821. Automated meter reading devices.

(a) All new developments shall utilize automated meter reading devices as the standard meter for all new metered services. The cost of the installation for these devices shall be paid and borne solely by the applicant or developer at a cost established from time to time by the City. The City reserves the right to make an installation on the basis of actual cost.

(b) The City shall test each meter prior to installation.

(c) The Municipal Utilities Company shall set all meters after acceptance of the installation by the Engineer, and application for service in accordance with Chapter 8B of Title 6 of the Ontario Municipal Code.

(§ 4, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.822. Backflow prevention assemblies.

(a) An applicant must provide sufficient information, including plumbing and building plans, to enable the City to determine the level of backflow prevention required. The proper backflow protection, as determined by the City, shall be installed, and inspected before water service is provided.

(b) Backflow protection assemblies shall be installed in accordance with the City's standard drawings and Chapter 8E of Title 6 of the Ontario Municipal Code.

(§ 4, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.823. Service relocation.

(a) The City reserves the right to relocate or modify the existing service connection, at any time, upon notification to the consumer.

(b) Whenever service connections, meters, fire hydrants, or other appurtenances are requested to be moved by a customer, the charges for such service relocation shall be borne and solely paid by the customer at the actual cost.

(§ 4, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.824. Temporary service connection.

(a) An applicant shall submit an application for temporary service to a property to the Engineer for his or her review and recommendation. Before any temporary service shall be installed, the applicant shall agree to the following:

(1) Pay the cost of the temporary service connection, appropriate deposit, and the cost of all water delivered to the property;

(2) Not to provide water for or to any other property;

(3) Pay appropriate charges for a permanent service connection for the property when a water main is available and the cost, if any, for removal of the temporary service connection; and

(4) All temporary service connections shall be limited to six (6) months unless an extension is granted by the City Manager.

(5) The applicant or contractor shall be held responsible for loss or damage to the meter from the time it is installed until it is removed, or until 48 hours after notice in writing has been given to the City that the contractor or other person is finished using the meter. In the event that a meter is stolen, it will be at the City's sole discretion whether the deposit shall be forfeited. If a replacement meter is requested, a new deposit and application may be required for the replacement meter.

(6) Flows through a 3-inch or larger temporary service fire hydrant meter shall be limited to a maximum of 330 gallons per minute, unless otherwise authorized in writing at the time of application. Any deliberate attempt on the part of the applicant or user to increase the flow is just cause for the City to discontinue service.

(7) The City reserves the right to interrupt service without notice if such usage is causing pressure in the system to drop below an acceptable range.

(8) Each temporary service customer shall make every attempt to maintain a constant flow through the meter. To achieve this requirement, the customer may be required to provide and install a storage facility (construction tank, small interim reservoir, etc.) at the sole expense of the customer, approved by the City, in conjunction with the meter.

(9) When using fire hydrants for temporary service connections, no more than one outlet per hydrant shall be used for this purpose and shall be accompanied by a tested and properly functioning backflow prevention assembly in accordance with Chapter 8E of Title 6 of the Ontario Municipal Code.

(b) Temporary service connections are primarily installed for the convenience and use of Contractors during construction work.

(c) All meters for temporary service connections shall be installed by the City and secured to the desired fire hydrant with a City locking device and lock. These meters shall remain at this location until such time the responsible person requests it to be moved or removed pursuant to section 6-8.223.

(§ 4, Ord. XXX, eff. April XX, 2025)

Article 6: Monitoring and Inspection

Sec. 6-8. 825. Inspection.

(a) The City Inspector shall inspect all facilities installed by the contractor to insure compliance with the improvement plans, design specifications and requirements as described in section 6-8.813.

(b) Upon completion of the installation and backfill of newly installed systems, and prior to filling the pipeline with water for the pressure test, the contractor shall notify the City that the pipeline system is ready for video inspection. Said notification shall be made at least three working days in advance of the actual video inspection date. The video inspection will be made by a video inspection company approved by the City shall be made in the presence of the City's Inspector.

(1) The video inspection company shall provide the City with the color DVD or electronic video file and a written report detailing the condition of the interior of the mainline and joints. Subsequent to review of the video file and report by the City, the City will notify the contractor within 3 business days that they may then proceed with the filling, testing, and disinfection of the pipeline; or the City will provide a list of corrective measures that must occur prior to acceptance.

(2) Should remedial activities be necessary, the reconstruction methodology shall be approved by the City prior to commencement of the work. Upon completion of the remedial construction, the contractor shall once again notify the City that the newly installed systems are ready for a video inspection. The City reserves the right to re-video any portions of the water system they determine may have been affected by the reconstruction work activities.

(§ 4, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.826. Pressure and leakage testing.

(a) A minimum 4-hour hydrostatic pressure test shall be performed and successfully completed in accordance with AWWA C600 or C605.

(b) The contractor shall apply test pressures at an approved outlet or fitting located within 5 feet vertically of the lowest point of each pipe section to be tested and securely plug such fittings. Where air valves or other suitable outlets are unavailable, the contractor shall provide approved taps and fittings for air release, and securely plug these.

(c) Flushing of mains with water at a velocity of at least 2.5 feet per second over its entire length shall be performed using an eccentric reducer. Velocity through outlets and fittings shall not exceed 25 feet per second during flushing.

(d) Leakage shall be computed as the total quantity of water pumped into the pipeline during the test period, including water added to reach the specified test pressure for the final time. Leakage shall not exceed the rate specified for the type of pipe tested. The contractor shall repeat the testing until the leakage does not exceed the specified leakage rate. The contractor shall repair all visible leaks regardless of the amount of leakage at their sole expense. All tests shall be completed in the presence of the City Inspector who shall record the results.

(§ 4, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.827. Bacteriological sampling and testing.

(a) Prior to bacteriological tests, an application for shutdown must be submitted pursuant to section 6-8.828.

(b) Bacteriological tests shall be analyzed by a certified ELAP laboratory with approved fields of testing for said matrix.

(c) Passing bacteriological tests on two (2) consecutive days shall be achieved prior to connecting the pipeline to the existing water system or placing the pipeline into service. Satisfactory bacteriological results shall conform to the following:

(1) No total or fecal coliform.
(2) A heterotrophic plate count less than 200 colony-forming units (CFU) per milliliter (mL).
(3) Presence of chlorine residual at or below a concentration that does not interfere with the bacteriological testing and compromise the results.

(d) If the initial chlorination fails to produce two (2) consecutive days of passing bacteriological tests, chlorination shall be repeated until two (2) consecutive days of passing bacteriological tests are achieved.

(1) If the third attempt fails to obtain two (2) consecutive days of passing bacteriological test, then the City reserves the right, and at the sole expense of the contractor, to have the contractor clean the newly installed pipeline using a high-velocity flow that produces a neutral output discharge or other technology that removes excessive dirt or debris that has entered in the new installation that conforms to water conversation and NPDES requirements.

(e) Laboratory reports shall be furnished upon issuance to the City and shall include, but not be limited to chain of custody, lab work sheet or summary letter imprinted with the laboratory's name, address, and phone number. The report shall specify the field tests, laboratory analysis and results, and shall be signed by the laboratory director. The Engineer may require that laboratory reports be accompanied with any other form or document to ensure compliance with this section.

(§ 4, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.828. Shutdowns.

(a) Shutdown of the City's in service potable lines shall be requested through an application. Said application shall be submitted to the City ten (10) working days before the first bacteriological test begins.

(b) Shutdowns are generally performed during Monday through Thursday between 9:00 AM and 4:00 PM, unless granted in writing by the Engineer.

(c) The Inspector shall sign off the application when all bacteriological testing has passed, and results are accepted by the City.

(d) After all bacteriological tests have passed, the contractor or developer shall have ten working days to perform the shutdown. If there is failure to perform the shutdown within the ten working day window, bacteriological testing shall be performed once to insure pipeline sterility has been maintained.

(e) Water will be turned on when pipeline has passed all bacteriological testing. There are no exceptions.

(f) For non-steel pipelines, 16-inches or less, the maximum time allowed is six(6) hours unless granted in writing by the Engineer.

(§ 4, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.829. Title of water facilities.

Title to all water facilities, whether installed by the City or a developer, shall be vested in the City upon completion of all work, testing, chlorination, inspection and acceptance for use.

(§ 4, Ord. XXX, eff. April XX, 2025)

Article 7: Operation and Maintenance

Sec. 6-8. 830. Service connection maintained by Municipal Utilities Company.

(a) The Municipal Utilities Company shall maintain the service connection extending from the water main to the meter. The applicant shall install and maintain all pipes and fixtures extending or lying on the outlet side of the meter, excluding a City provided shutoff valve, 12-inch brass nipple and coupling. The Municipal Utilities Company shall set and maintain a meter on each service connection and the customer or owner shall be held liable for any damage to the meter due to his or her negligence. Every service connection shall be equipped with an angle curb stop, or valve, on the inlet side of the meter. Such valve or angle curb stop is intended for the exclusive use of the Municipal Utilities Company to control the water supply through a service connection. If the angle curb stop, or valve, is damaged due to the customer or owners use or negligence, the customer or owner shall be liable for replacement costs.

(b) The City assumes no responsibility for the maintenance and operation of a customer's water system beyond the service connection and point of ownership by the City. All plumbing, water piping, fixtures, connections, devices and related appurtenances beyond the service connection, and beyond the City's point of ownership, shall be maintained by the customer in "good standing condition".

(§ 4, Ord. XXX, eff. April XX, 2025)

Sec. 6-8. 831. City right of ingress to and egress from customer's property.

The City shall have the right of ingress to and egress from the customer's property during reasonable hours for any purpose reasonably related to the furnishing of water services and the exercise of any and all rights secured to it by law or these rules, including inspection of the consumer's customer's piping and equipment for compliance with the Municipal Code and these rules.

(§ 4, Ord. XXX, eff. April XX, 2025)

Sec. 6-8. 832. City access.

A customer shall provide and maintain reasonable access for City representatives to all service connections, meters, back-flow prevention devices, or other facilities pertinent to water service installed on his or her premises.

(§ 4, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.833. Obstruction of or deposit of material in meter boxes or hydrants.

(a) No person shall place, dispose, or deposit or permit the placement, disposal or deposit of oil, toxic, hazardous or contaminated liquid or waste, trash, dirt, building materials or other substances, objects or obstructions in, on or around meter boxes, and it shall be the responsibility of each applicant, owner, or customer to prevent meter boxes, City hydrants or other City facilities from becoming obstructed or obscured by such applicant, owner, or customer's trees, shrubs, plants or in any other manner so as to impede their use or access to them or make their location difficult to determine.

(b) The City shall not be held responsible nor liable for any damage or cost for the replacement or repair of any ground cover and/or plants, shrubs, or other obstructions, which may be removed or damaged while City personnel are using the right-of-way or easements.

(c) If such substances, objects or obstructions are not cleaned and removed or are permitted to obscure or impede such facilities, the City may, after providing reasonable notice to the applicant, developer, customer, or owner accomplish the cleaning and removal and charge the applicant, developer, customer, or owner for the cost of doing so.

(d) The applicant, developer, customer, or owner's failure to comply with the clearance and right-of-way obligations set forth in this chapter shall be deemed a violation of the chapter and termination of service.

(§ 4, Ord. XXX, eff. April XX, 2025)

Sec. 6-8. 834. Quick-closing valves(or other devices).

No person shall not install any quick-closing valves or other equipment or device which shall cause excessive pressure surges in the City water system without prior written approval by the Engineer.

(§ 4, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.835. Change in size of connection or meter.

Where a change or size increase of an existing service connection or meter is requested by a customer, the charges shall be the same as for a new service and any fees not previously paid shall be required.

(§ 4, Ord. XXX, eff. April XX, 2025)

Sec. 6-8. 836. Emergency repairs.

The City shall not accept any responsibility for the maintenance of pressure and reserves the right to discontinue service while making emergency repairs, and the like. Customers depending upon a continuous supply should provide emergency storage.

(§ 4, Ord. XXX, eff. April XX, 2025)

Article 8: Violations

Sec. 6-8.837. Violations.

It shall be unlawful for any person to violate any provisions of this chapter, and persons violating said provisions shall be subject to any of the following acts:

(a) Denial of an application;

(b) Termination of service; and

(c) Penalties pursuant to Chapter 2 of Title 1 of the Municipal Code.

(§ 4, Ord. XXX, eff. April XX, 2025)

EXHIBIT D

CHAPTER 8E: CROSS-CONNECTION CONTROL

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Article 1: General Provisions

Sec. 6-8.900 Purpose.

(a) The purpose of this chapter is to protect the City's potable water supply against actual or potential cross-connections from private on-site systems by isolating on-premises contamination or pollution that may occur due to undiscovered or unauthorized on-site cross-connections. This chapter is intended to protect the City's distribution system through premises containment and is not intended to provide regulatory measures for protecting users from the hazards of cross-connections within

their own premises. Notwithstanding the provisions in this chapter, the City accepts no responsibility for cross-connections or resulting hazards or contamination.

(b) This chapter is intended to comply with the State Water Board's Cross-Connection Control Policy Handbook and shall be in addition to, and not in lieu of, the controls and requirements of other regulatory agencies, such as local government agencies and local and State Health Departments. To the extent anything in the provisions within this chapter conflict with applicable laws or regulations, as may be amended from time to time, the provisions of such laws or regulations, including the Cross-Connection Control Policy Handbook, shall control.

(§ 5, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.901 Applicability.

The requirements imposed by this chapter shall apply to all potable water, irrigation, and fire service connections from the City.

(§ 5, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.902 Cross-Connection Control Coordinator.

The City has developed an active Cross-Connection Control Program ("Program") and designated a Cross-Connection Control Coordinator ("Coordinator") for the Program. The Coordinator shall maintain status as a cross-connection control specialist and be responsible for the development of, and the reporting, tracking, and other administrative duties of the Program. The Coordinator, or his/her designee, and the City Manager, or his/her designee, are authorized to administer and enforce this chapter and the Program.

Any questions or notifications regarding these provisions or the program should be directed to the Coordinator or the City Manager, or his/her designee.

(§ 5, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.903. Other applicable rules and regulations.

Other guidelines, rules and regulations, ordinances, and specifications that may be applied by the Coordinator and/or the City Manager when administering and enforcing the Program include but are not limited to:

(a) Water Programs (Title 40, Chapter 1, Subchapter D of the Code of Federal Regulations.)

(b) Drinking Water (Division 104, Part 12 of the California Health and Safety Code.)

(c) Environmental Health (Title 22, Division 4 of the California Code of Regulations.)

(d) State Water Board's Cross-Connection Control Policy Handbook (adopted December 19, 2023.)

(e) Manual of Cross-Connection Control, published by the Foundation for Cross-Connection Control and Hydraulic Research, University of Southern California, University Park, Los Angeles, CA. Current Edition.

(f) EPA-570/9-89-007 Cross-Connection Control Manual, prepared by the U.S. Environmental Protection Agency.

(g) Uniform Plumbing Code, published by IAPMO, Current Edition.

(h) Manual M-14, published by AWWA, Current Edition.

(i) Water conservation provisions as established in the Chapter 8A of Title 6 of the Ontario Municipal Code

(j) Water services and fees provisions as established in the Chapter 8B of Title 6 of the Ontario Municipal Code

(k) Recycled water use provisions as established in the Chapter 8C of Title 6 of the Ontario Municipal Code

(l) Design and construction of water facilities provisions as established in Chapter 8D of Title 6 of the Ontario Municipal Code

(§ 5, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.904 Severability.

If any section, subsection, sentence, clause or phrase of this chapter establishing rules and regulations for the use of potable water is for any reason found to be invalid or unconstitutional, such decision shall not affect the remaining portions of this chapter.

(§ 5, Ord. XXX, eff. April XX, 2025)

Article 2: Definitions

Sec. 6-8.905. Definitions.

(a) "Air-gap separation" or "AG" shall mean a physical vertical separation of at least two (2) times the effective pipe diameter between the free-flowing discharge end of a potable water supply pipeline and the flood level of an open or non-pressurized receiving vessel, and in no case less than one (1) inch.

(b) "ANSI" shall mean the American National Standards Institute.

(c) "ANSI ISO 17024 accredited certifying organization" shall mean a State Water Board-recognized organization certifying backflow prevention assembly testers and meets CCCPH testing and performance standards.

(d) “Applicant” shall mean any person, firm, corporation, association, or agency who desires to obtain water, sewer, and/or recycled water service from the City.

(e) "Approved water supply” shall mean a water source that has been approved by the State Water Board for domestic use in a public water system and designated as such in a domestic water supply permit issued pursuant to section 116525 of the California Health and Safety Code.

(f) "Auxiliary water supply” shall mean a source of water, other than an approved water supply, that is either used or equipped, or can be equipped, to be used as a water supply and is located on the premises of, or available to, a customer.

(g) "Backflow” shall mean an undesired or unintended reversal of flow of water and/or other liquids, gases, or other substances into the City’s water potable system.

(h) “Backflow prevention assembly” or “BPA” shall mean a mechanical assembly designed and constructed to prevent backflow, such that while in-line it can be maintained and its ability to prevent backflow, as designed, can be field tested, inspected and evaluated.

(i) “Backflow prevention assembly tester” shall mean a person who is certified by an American National Standards Institute ANSI ISO 17024 accredited certifying organization and holds a valid certification.

(j) “Backsiphonage” shall mean a form of backflow due to a reduction in system pressure, which causes a sub-atmospheric pressure to exist in the water system.

(k) “City” shall mean the City of Ontario, California.

(l) “City Council” shall mean the City Council of the City of Ontario, California.

(m) “City Manager” shall mean the City Manager of the City of Ontario, or his or her authorized representative.

(n) "Contaminants” shall mean any substance that shall impair the quality of water, in such a way as to create an actual hazard to the public health through poisoning, the spread of disease, etc.

(o) "Cross-connection” shall mean any actual or potential connection or structural arrangement between a public water system, including a piping system connection to the City’s distribution system and located on the premises of a customer or available to the customer, and any source or distribution system containing liquid, gas, or other substances not from an approved water supply.

(p) "Cross-Connection Control Policy Handbook” or “CCCPH” shall mean the State Water Board’s Cross-Connection Control Policy Handbook, which are standards and principles for California’s Public Water Systems.

(q) “Customer” shall mean a person, firm, or corporation who is the recipient of water service from the City.

(r) "Degree of Hazard” shall mean either a pollutant (non-health hazard) or contaminant (health hazard); derived from the assessment of the materials, which may come in contact with the City’s distribution system through a cross-connection.

(s) "Distribution system” has the same meaning as defined in section 63750.50 of the California Code of Regulations, Title 22, Division 4, Chapter 2.

(t) "Double check detector backflow prevention assembly” or “DCDA” shall mean a double check valve backflow prevention assembly that includes a bypass with a water meter and double check backflow prevention assembly, with the bypass’s water meter accurately registering flow rates up to two gallons per minute and visually showing a registration for all rates of flow. This type of assembly may only be used to isolate low hazard cross-connections.

(u) “Double check detector backflow prevention assembly – type II” or “DCDA-II” shall mean a double check valve backflow prevention assembly that includes a bypass around the second check, with the bypass having a single check valve and a water meter accurately registering flow rates up to two gallons per minute and visually showing a registration for all rates of flow. This type of assembly may only be used to isolate low hazard cross-connections.

(v) “Double check valve backflow prevention assembly” or “DC” shall mean an assembly consisting of two independently acting internally loaded check valves, with tightly closing shut-off valves located at each end of the assembly (upstream and downstream of the two check valves) and fitted with test cocks that enable accurate field testing of the assembly. This type of assembly may only be used to isolate low hazard cross-connections.

(w) "Fire protection system” shall mean automatic fire sprinkler installations and/or private onsite fire hydrants served with potable water through a separate service connection.

(x) "Hazard Assessment” shall mean an evaluation of an applicant, owner, or customer’s premises designed to evaluate the types and degrees of hazard at a user’s premises.

(y) "High hazard cross-connection” shall mean a cross-connection that poses a threat to the potability or safety of the City’s water supply. Materials entering the City’s water supply through a high hazard cross-connection are contaminants or health hazards.

(z) “Low hazard cross-connection” shall mean a cross-connection that has been found to not pose a threat to the potability or safety of the public water supply but may adversely affect the aesthetic quality of the potable water supply. Materials entering the public water supply through a low hazard cross-connection are pollutants or non-health hazards.

(aa) "ISO" shall mean the International Organization for Standardization.

(bb) "Premises" shall mean the lot, parcel, or property to which potable water is being supplied by the City or for which potable water service has been requested.

(cc) "Premises containment" shall mean protection of the City's distribution system from backflow from a customer's premises through the installation of one or more air-gaps or BPAs, installed as close as practical to the user's service connection, in a manner that isolates the customer's water supply from the City's distribution system.

(dd) "Potable water" shall mean water furnished to the customer which meets applicable local, state and federal drinking water standards.

(ee) "Pollutants" shall mean any substance that impairs the quality of the water to a degree, which does not create a hazard to the public health but which does adversely and unreasonably affect the aesthetic qualities of such waters for domestic use.

(ff) "Readily accessible" shall mean capable of being reached for testing and/or maintenance, without the need of removing any access panel, door, or similar obstruction.

(gg) "Reduced pressure principle backflow prevention assembly" or "RP" shall mean an assembly with two independently acting internally loaded check valves, with a hydraulically operating mechanically independent differential-pressure relief valve located between the check valves and below the upstream check valve. The assembly shall have shut-off valves located upstream and downstream of the two check valves, and test cocks to enable accurate field testing of the assembly.

(hh) "Reduced pressure principle detector backflow prevention assembly" or "RPDA" shall mean a reduced pressure principle backflow prevention assembly that includes a bypass with a water meter and reduced pressure principle backflow prevention assembly, with the bypass' water meter accurately registering flow rates up to two gallons per minute and visually showing a registration for all rates of flow.

(ii) "Reduced pressure principle detector backflow prevention assembly – type II" or "RPDA-II" shall mean a reduced pressure principle backflow prevention assembly that includes a bypass around the second check, with the bypass having a single check valve and a water meter accurately registering flow rates up to two gallons per minute and visually showing a registration for all rates of flow.

(jj) "Service connection" shall mean the terminal end of a service connection from the City's distribution system (i.e., where the City may lose jurisdiction and sanitary control of the water at its point of delivery to the consumer's water system) and the point in a water system where the City's water supply can be protected from backflow using an air-gap or backflow prevention assembly. If a water meter is installed at the end of the service connection, then the service connection shall mean the downstream end of the water meter.

(kk) "State Water Board" shall mean the California State Water Resources Control Board.

(§ 5, Ord. XXX, eff. April XX, 2025)

Article 3: Protection Requirements

Sec. 6-8.906. Backflow and unauthorized connections prohibited.

(a) No person is permitted to cause, permit, facilitate or maintain an actual or potential cross-connection or any type of connection that permits an actual or potential backflow of water to the City's distribution system.

(b) No physical connection shall hereafter exist, or be installed, located, maintained or operated, between the City's distribution system (including its appurtenant mains, pipes, fixtures, equipment or appliances) and any other water supply system or any sewer or drainage system, or any steam, gas or chemical line, pipe or conduit, or any device, boiler tank or container whereby a contamination or pollution or any dangerous, impure, unsanitary or nonpotable substance (solid, liquid, or gaseous or any combination thereof) may now, or hereafter be introduced into any portion of City's distribution system by backflow, backsiphonage, or any other method, manner, means, or cause whatsoever.

(c) It is unlawful for any person to make a permanent or temporary connection onto a backflow prevention assembly for the purpose of bypassing the backflow prevention assembly.

(§ 5, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.907. Backflow installation.

(a) No person is permitted to install, maintain, or allow a metered water service connection to any premises served by the City unless the City's distribution system is protected in conformance with applicable State law or regulation (including the Cross-Connection Control Policy Handbook) and this chapter. Any person who is required to install an approved backflow prevention assembly must install, maintain, inspect and test such assembly in accordance with applicable State law or regulation (including the Cross-Connection Control Policy Handbook) and this chapter at the applicant, owner, or customer's own expense and within the time specified for installation. Every backflow prevention assembly required by law, regulation, or this chapter must be of model and size approved by the City. Failure, refusal or inability on the part of the applicant, owner, or customer to install said assembly or assemblies constitutes grounds for discontinuing water service to such metered or non-metered water service connections until such assembly or assemblies have been properly installed.

(b) Backflow prevention assemblies shall be installed on the premises, in accordance with the City's standards, before the first branch line leading off the service and not on the City's portion of the system. Backflow prevention assemblies shall be located as close as practical to the applicant, owner, or customer's service connection,

or at a location approved by the City. Backflow prevention assemblies shall be readily accessible for testing and maintenance and no device shall be submerged at any time.

(c) All backflow prevention assemblies required by this chapter shall be installed in accordance with any and all criteria set forth in Cross-Connection Control Policy Handbook section 3.3.2.

(d) Notwithstanding subsection (a), the City maintains the right to install, test, and maintain a backflow prevention assembly on premises where water service is provided. The cost thereof shall be borne by the applicant, owner, or customer.

(§ 5, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.908. Entry and inspection.

All applicant, owner, or customer systems and premises shall be open for inspection at all reasonable times to authorized representatives of the City to enable the City to ascertain the existence of cross-connections or other structural or sanitary hazards, including violations of the cross-connection rules and regulations in this chapter. When such a condition becomes known, the City shall deny or discontinue service to the premises, in accordance with this chapter. Water service will be discontinued until the applicant, owner, or customer has corrected the condition(s) in conformance with State laws and City requirements relating to plumbing and water supplies, and with regulations adopted pursuant thereto.

(§ 5, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.909. Backflow prevention assembly type.

Newly installed and replaced backflow prevention assemblies required in this chapter shall be of models approved by the City. Approved backflow prevention assemblies meet one of the following requirements:

(a) Air-gaps (“AG”) shall meet the requirements in Table 1, Minimum Air Gaps for Generally used Plumbing Fixtures, page 4 of the American Society of Mechanical Engineers (ASME) A112.1.2- 2012 (R2017);

(b) Double check valve backflow prevention assemblies (“DC”) and reduced pressure principle backflow prevention assemblies (“RP”) shall be inspected, tested, and approved under the standards established in the Manual of Cross-Connection Control, published by the Foundation for Cross-Connection Control and Hydraulic Research, University of Southern California, University Park, Los Angeles, CA. Current Edition.

(§ 5, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.910. Where protection is required.

Backflow protection for the City’s potable water supply shall be provided on each water service connection downstream of the water meter but before the structural dwelling to:

(a) Premises having an auxiliary water supply such as recycled or non-potable water systems;

(b) Premises on which any substance is handled in such fashion that could permit entry into the water system. This shall include the handling of process waters and waters originating from the City's distribution system that have been subject to deterioration in sanitary quality;

(c) Premises where there is any material dangerous to health which is handled in such a fashion as to create an actual or potential hazard. Examples of premises where actual, or potential, health hazards, or conditions will exist include, but are not limited to, the following: sewage treatment plants, sewage pumping stations, chemical manufacturing plants, hospitals, mortuaries, plating works, etc;

(d) Premises that have pressurized equipment installed;

(e) Premises that have landscape where potable water is used to irrigate;

(f) Premises that have fire protection systems installed;

(g) Premises that have internal cross-connections, unless such cross-connections are abated to the satisfaction of the City and approved by the state or local health agency;

(h) Premises having intricate plumbing and piping arrangements or where not all portions of the premises are readily accessible for inspection purposes;

(i) Premises having a repeated history of cross-connections being established or re-established;

(j) Premises being served water through a temporary above ground water service connection;

(k) Premises having a change in customer (either owner or tenant) on any commercial or industrial premise(s) where a backflow prevention assembly is not installed, the new or previous owner or customer shall notify the City immediately. The City will then reassess the level of protection required. Also, any alterations or improvements to existing onsite facilities that may affect the level of protection required must be reported immediately to the City to be evaluated; and,

(l) Premises that meet the definition of high-hazard cross-connection control premise under Appendix D of the Cross-Connection Control Policy Handbook.

(§ 5, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.911. Type of protection required.

(a) The type of protection required on potable water services is related to the degree of hazard that exists on the premises as specified in this chapter and Appendix D of the Cross-Connection Control Policy Handbook.

(b) The type of protective device authorized for potable water services is a reduced pressure principle backflow prevention assembly (“RP”). This includes premises that utilize a single potable water service to a dwelling and irrigating landscape.

(c) Premises identified as a high hazard cross-connection control premise shall install a reduced pressure principle backflow prevention assembly (“RP”) or air-gap separation (“AG”), or both. Customers shall comply with any additional requirements or degrees of protection for particular high hazard cross-connections set forth in Appendix D of the Cross-Connection Control Policy Handbook.

(d) Except for low hazard fire protection systems that meet the criteria forth in Cross-Connection Control Policy Handbook section 3.3.2.(e)(3), fire protection systems shall be protected with either double check detector backflow prevention assembly (“DCDA” or “DCDA-type II”) or reduced pressure principle detector backflow prevention assembly (“RPDA” or “RPDA-type II”).

(e) Dedicated service for the sole purpose of irrigating landscape with potable water shall be protected with a reduced pressure principle backflow prevention assembly (“RP”). Pressure vacuum breakers are not allowed to be installed on dedicated irrigation lines.

(§ 5, Ord. XXX, eff. April XX, 2025)

Article 4: Inspection, Testing, and Maintenance Requirements

Sec. 6-8.912. Inspection and testing of protective assemblies.

(a) It shall be the duty and the sole responsibility of the applicant, owner, or customer of any premises on which backflow prevention assemblies are installed to have inspections and testing made at least once a calendar year, or more often in those instances where successive inspections indicate repeated failure. All inspections and testing shall be performed by a certified backflow prevention assembly tester that meets all requirements set forth in the State Water Board’s Cross-Connection Control Policy Handbook.

(b) Backflow prevention assemblies shall also be tested immediately after they are installed, relocated or repaired and shall not be placed in service unless they are functioning as designed.

(c) Whenever a backflow prevention assembly tester observes a backflow incident or an unprotected cross-connection at a backflow prevention assembly or prior to the applicant, owner, or customer’s premises, the backflow prevention assembly tester shall notify the City within twenty-four (24) hours. The City shall immediately discontinue water service to the premises and conduct an investigation. Water service shall not be restored until the City receives confirmation of a passing test.

(d) Premises with air-gap separations shall be visually inspected at least annually to determine compliance with this chapter by a person certified as backflow prevention assembly tester or certified cross-connection control specialist pursuant to the State Water Board's Cross-Connection Control Policy Handbook.

(e) From time to time, representatives of any health agency having jurisdiction and/or the City may conduct evaluations of any premises where water service is provided by the City. The purpose of such evaluations is to determine if any actual or potential cross-connections exist, if there are any unapproved uses, and to assess compliance with applicable laws and regulations. applicant, owner, or customer shall provide reasonable cooperation in facilitating such evaluations.

(§ 5, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.913. Maintenance of backflow prevention assemblies

(a) The applicant, owner, or customer shall notify the City any time a backflow prevention assembly is repaired, replaced, or relocated.

(b) A backflow prevention assembly shall be repaired or replaced by, and at the sole expense of the applicant, owner, or customer whenever it is found to not function properly as designed. A backflow prevention assembly that fails a test or inspection pursuant to section 6-8.912 must be repaired or replaced within thirty (30) days of notification of the failure.

(c) Records of all tests and repairs shall be maintained by the applicant, owner, or customer and submitted to the City in accordance with section 6-8.918. The City may request records regarding any backflow prevention assemblies on the premises.

(d) A backflow prevention assembly may be removed for repair or replacement, provided that water service is discontinued until repair or replacement is completed and the assembly is returned to service, or the service connection is equipped with other backflow protection approved by the City. A retest shall be performed immediately following the repair or replacement of the assembly.

(e) A backflow prevention assembly may be relocated following confirmation by the City that the relocation will continue to provide the required protection and satisfy installation requirements. A retest shall be performed immediately following the relocation of the assembly before water service is restored.

(§ 5, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.914. Replacement of protective assemblies.

Whenever an existing backflow prevention assembly is to be moved from its present location, or when it requires more than minimum maintenance, or when the City finds that the improper maintenance of the assembly constitutes a hazard to health, the

assembly shall be replaced by the owner with a backflow prevention assembly meeting the requirements of this chapter.

(§ 5, Ord. XXX, eff. April XX, 2025)

Article 5: Notifications

Sec. 6-8.915. Annual backflow testing notifications.

The City will provide annual testing notifications to an owner or customer's premise as follows:

(a) First Notice. The City will notify the owner or customers when routine backflow prevention assembly testing is needed. The notice will include the date when the test shall be completed by forty-five (45) days after the date of the notice.

(b) Second Notice. A second notice shall be sent to each owner or customer that does not have the backflow prevention assembly tested as prescribed in the first notice within the time allowed. The second notice will give the owner or customer a twenty-one (21) day period to have the backflow prevention assembly tested or take other corrective action.

(c) Notice of Non-compliance. If no action is taken within the 21-day period, then a Notice of Non-compliance will be sent to the owner or customer giving the owner or customer a final ten (10) day period to have the assembly tested or take other corrective action.

(§ 5, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.916. Notice to install.

The City shall survey its service area and conduct a hazard assessment as required by Chapter 3, Article 2 of the Cross-Connection Control Policy Handbook. The City shall issue a Notice to Install for all premises assessed and determined to require approved backflow prevention assembly. A backflow prevention assembly shall be installed in accordance with this chapter within ninety (90) days from the date of the Notice to Install.

(§ 5, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.917. Notice of violation.

It shall be the applicant, owner, or customer's responsibility to ensure backflow prevention assemblies are installed appropriately and demonstrate the assembly is functioning adequately as designed. Failure to install or demonstrate the proper functioning of backflow prevention assemblies by the due date prescribed in section 6-8.915 or 6-8.916, or re-test based on criteria described in section 6-8.913, shall be considered non-compliant with this chapter. A Notice of Violation shall be issued stating the cause of non-compliance with this chapter, when water services will be discontinued, corrective actions the owner or customer shall take to correct the

deficiency or violation, and administrative fees to restore water service as prescribed in Chapter 8B of Title 6 of the Ontario Municipal Code.

(§ 5, Ord. XXX, eff. April XX, 2025)

Article 6: Reporting Requirements

Sec. 6-8.918. Reporting backflow test results.

The City uses a unified cross-connection software system for the management and reporting of backflow prevention assemblies. Test results shall be electronically submitted to the City through an electronic portal by the due date prescribed in Section 6-8.916 or 6-8.917 or when a device has been subjected to the criteria described in Section 6-8.914. Copies of the completed forms shall also be sent to the local health department. The City will maintain records in accordance with Cross-Connection Control Policy Handbook section 3.5.1.

(§ 5, Ord. XXX, eff. April XX, 2025)

Sec. 6-8.919. Reporting of pollution or contamination.

In the event of contamination or pollution of the City's distribution system due to a cross-connection on the premises, the local health officer and City shall be promptly advised by the person responsible for the premise so that appropriate measures may be taken to mitigate the contamination or pollution.

(§ 5, Ord. XXX, eff. April XX, 2025)

Article 7: Administrative Remedies

Sec. 6-8.920. Water service termination.

(a) If the City determines that water uses or conditions encountered represent a clear and immediate hazard to the City's potable water supply that cannot be immediately abated, the City shall institute the procedure for discontinuing water service. Conditions or water uses that create a basis for water service termination shall include, but are not limited to, the following:

(1) Refusal to install a required backflow prevention assembly.
(2) Refusal to test a backflow prevention assembly.
(3) Refusal to repair a faulty backflow prevention assembly.
(4) Refusal to replace a faulty backflow prevention assembly.
(5) Direct or indirect connection between the City's distribution system and a sewer system.
(6) Unprotected direct or indirect connection between the City's distribution system and a system or equipment containing contaminants.
(7) Unprotected direct or indirect connection between the City's distribution system and an auxiliary water system.

(8) A situation which presents an immediate health hazard to the City's distribution system, as determined by the State Water Board, health agency or the City.

(b) For conditions described in §§ 6-8.921(a)(1)-(4), the City will terminate service to an applicant, owner, or customer's premise(s) if no action is taken within the due date provided in the Notice of Non-Compliance as described in §§ 6-8.915(c). A final Notice of Violation shall be provided to the applicant, owner, or customer, prescribing the necessary actions to comply with this chapter, state, and federal regulatory requirements, and administrative penalties to restore water service. (b)Water service will be terminated and remain turned off until the assembly is tested and passes the test or other corrective action is taken and approved by the City in accordance with this chapter. Administrative fees to restore water service shall be paid in advance of the water being turned on.

(c) For conditions described in §§ 6-8.921(a)(5)-(8), the City will make reasonable effort to advise the applicant, owner, or customer of intent to terminate water service. Then, the City will terminate the water service and lock the service valve in the closed position. Water service will not be reinstated until correction of all violations has been approved by the City. Failure to correct the violations may result in permanent termination of water service in accordance with this chapter.

(§ 5, Ord. XXX, eff. April XX, 2025)

CITY OF ONTARIO

Agenda Report
March 18, 2025

SECTION:
CONSENT CALENDAR

Department: Communications and Community Relations
Prepared By: Vanny Khu
Department:
Prepared By: Karla Tavera
Staff Member Presenting: Dan Bell, Communications and Community Relations Director
Approved By:

Submitted To: Council/OHA
Approved: _____
Continued To: _____
Denied: _____
Item No: 15

SUBJECT: AN AMENDMENT TO THE PROFESSIONAL SERVICES AGREEMENT WITH WINDSONG PRODUCTIONS, LLC. FOR VIDEO PRODUCTION SERVICES

RECOMMENDATION: That the City Council authorize the City Manager, or his designee, to execute Amendment No. 4 to the Professional Services Agreement with Windsong Productions, LLC., of Fresno, California, for video production services in the amount of $619,544 for a total not-to-exceed amount of $1,727,380 and to extend the term of the agreement to June 30, 2026.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Operate in a Businesslike Manner
Invest in the Growth and Evolution of the City's Economy

FISCAL IMPACT: The Fiscal Year 2024-25 Adopted Budget includes appropriations of $209,896 in Economic Development and $32,945 in the Management Services for video production services from Windsong Productions, LLC. (Windsong). If approved, appropriations will be included in future Annual Budgets to City Council for approval as needed. The recommended Amendment No. 4 increases the total authorized contract amount by $619,544 with a new not-to-exceed total of $1,727,380.

BACKGROUND & ANALYSIS: On November 2, 2021, the City executed a Professional Services Agreement with Windsong for video production services following a competitive Request for Proposals process for a not-to-exceed amount of $235,000. Since then, it was clarified that the $235,000 amount only covered the cost of services for the initial year of the Agreement term (Fiscal Year 2021-22). The vendor was asked to provide cost projections through the end of the Agreement term (Fiscal Year 2023-24). On October 18, 2022, the City Council approved Amendment No. 1 to add the total cost of services for the entire agreement term, bringing the new not-to-exceed amount to $753,312. The City Council approved Amendment No. 2 on February 6, 2024, to expand the scope of services and increase the not-to-exceed amount to $815,047.

Pursuant to the original Agreement, the City has the sole discretion to renew for two additional one-year terms. Amendment No. 3 was approved by the City Council on July 2, 2024, to extend the term for the first additional one-year term and increase the agreement amount by $292,789 to cover the services during Fiscal Year 2024-25, bringing the new not-to-exceed amount to $1,107,836.

Video production services are a critical component of the City's marketing and advertising efforts, allowing the City to create engaging visual content that showcases businesses, projects, and various City initiatives to the public. Windsong's services are utilized for the Made in Ontario series, the annual State of the City video, and other promotional videos highlighting City-hosted events.

To ensure the continuation of these essential services, Amendment No. 4 proposes extending the Agreement for the second additional one-year term through Fiscal Year 2025-26. This amendment includes an increase of $619,544 to cover the additional costs associated with the 2025 State of the City event and ongoing video production services, bringing the new total contract amount to $1,727,380.

This extension will allow the City to maintain high-quality video content that supports its communication and outreach objectives. The continued partnership with Windsong will ensure consistency in production quality and messaging across City platforms. Approval of Amendment No. 4 is recommended to uphold the City's commitment to effective public engagement through professional video production services.

CITY OF ONTARIO
303 EAST B STREET | ONTARIO, CALIFORNIA 91764
(909) 395-2000 FAX (909) 395-2070 OntarioCA.gov

PAUL S. LEON
MAYOR

ALAN D. WAPNER
MAYOR PRO TEM

JIM W. BOWMAN
DEBRA PORADA
DAISY MACIAS
COUNCIL MEMBERS

SHEILA MAUTZ
CITY CLERK

JAMES R. MILHISER
CITY TREASURER

SCOTT OCHOA
CITY MANAGER

March 1, 2025

Windsong Productions, LLC.
351 O Street
Fresno, CA 93721

Re: Notice to Extend Agreement with Windsong Productions, LLC., Amendment No. 4

Dear Joann Mercado Hicks,

As you know, the City of Ontario ("City") and Windsong Productions, LLC. ("Consultant") entered into a Professional Services Agreement dated August 18, 2021, Amendment No. 1 dated September 7, 2022, Amendment No. 2 dated February 6, 2024, and Amendment No. 3 dated July 2, 2024 (the "Agreement"). The term of the Agreement is set to expire on August 18, 2025.

Pursuant to the Agreement, the City has the sole discretion to renew the Agreement for two additional one-year terms. Through this letter, the City hereby extends the term of the Agreement the second additional year and increases the dollar value by six hundred nineteen thousand five hundred forty-four dollars ($619,544) for a new total not to exceed the amount of **one million seven hundred twenty-seven thousand three-hundred eighty dollars ($1,727,380**).

The terms and conditions of the Agreement shall remain the same.

If you have any questions, please don't hesitate to contact Karla Tavera at the City.

Sincerely,

Scott Ochoa
City Manager

BB&K (2021)

ESTIMATE

Windsong Productions
351 O Street
Fresno, CA 93721

TEL. 559.437.3900

City of Ontario

United States

Date: 2025-02-07
Title: **ONT: Customer Service Training Video Production Part I PKG** Estimate #: **12209**
Prepared By: Joann Mercado Hicks

Project Description: Estimate includes (3) x filming days in the City of Ontario. Includes (1) x day of narrator on-camera and city staff interviews and (2) x days of customer service re-enactment scenarios. Estimate does not include the edit of (1) x up to 20 minutes video that focuses on the City of Ontario's Commitment to Customer Service.

Estimate for editing, videos and shoot days and additional production needs to be estimated separately.

Scope of Work	Cost
Video Production Crew for filming for Customer Service Training Video in Ontario, CA. Tentative filming to take place in May/June 2025	**$31,805.00**

Internal Services

Pre Production
- pre-production

Director
- Director to oversee shoot
- Edit oversight to be billed separately.

Producer
- Producer, on set and to oversee pre/post-production

Production Assistant
- PA, on set and to assist in all steps of pre-production

External Expenses

Camera Department
- (1) camera operator with RED camera package and (1) secondary camera operator w/ equivalent camera package; (3) filming days

G&E Swing
- G&E swing; (3) filming days

Hair/Make Up
- HMU; (3) days

Production Management	**$1,140.00**

Internal Services

Client Communication
- no charge

Internal Meeting/Communication

Production Management

ESTIMATE
Windsong Productions
351 O Street
Fresno, CA 93721

TEL. 559.437.3900

Date: 2025-02-07

Title: **ONT: Customer Service Training Video Production Part I PKG** Estimate #: **12209**

scheduling, crew communication pre- and post-shoot

Internal Expenses

Project Archive & Storage

ingest footage and meta-tag, make back-ups, compress footage with timecode for transcribing; upkeep of ONT footage library

Total	$32,945.00

Terms & Conditions

signature printed name date

Approved to proceed and have read and agree with terms and conditions.

signature printed name date

ESTIMATE

Windsong Productions
351 O Street
Fresno, CA 93721

TEL. 559.437.3900

City of Ontario

United States

Date: 2025-02-07
Title: **ONT: Customer Service Training Video Production PKG** Estimate #: **12098 r1**
Prepared By: Joann Mercado Hicks

Project Description: Estimate includes the edit of (1) x up to 20 minutes video that focuses on the City of Ontario's Commitment to Customer Service. Estimate also includes all projected expenses for a quality production.

Additional videos and shoot days to be estimated separately.

Scope of Work	Cost
Video Production Post-production Talent and location fees; additional production needs	**$50,205.00**

Internal Services

Pre Production
included in filming estimate

Scriptwriting/Transcribing
transcribing of up to (6) interviews and scriptwriting of (1) up to 20 minutes customer service video.

Director
Director to oversee edit

Audio Production
audio syncing, studio time and audio mix

Editing
editing of (1) x up to 20 minutes employee training video in Vox style. Includes footage import, edit, color correction, rendering, exporting and proof uploading. Includes up to (2) rounds of client revisions.

Assistant Editing
assistant editor to cull through the footage, catalog and assemble editing timeline

Illustrator
Illustrator to create look and feel for Vox style mixed media for Ontario's Customer Service Video

External Expenses

Talent
Up to (16) improv actors for reenactment scenes; (1) day of filming per talent

Usage Terms:
Digital Media usage: Global and in perpetuity.
Broadcast Media usage: Not required.
Print Media usage: Not required.



ESTIMATE

Windsong Productions
351 O Street
Fresno, CA 93721

TEL. 559.437.3900

Date: 2025-02-07

Title: **ONT: Customer Service Training Video Production PKG** Estimate #: **12098 r1**

Location Fees
location fees for reenactment scenarios
Music
royalty-free music tracks
Per Diem
per diem for crew; (3) filming days

Production Management **$285.00**

Internal Services

Client Communication
no charge
Internal Meeting/Communication
Production Management
scheduling, crew communication pre- and post-shoot

Internal Expenses

Project Archive & Storage
ingest footage and meta-tag, make back-ups, compress footage with timecode for transcribing; upkeep of ONT footage library

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Total $50,490.00

Terms & Conditions

signature printed name date

Approved to proceed and have read and agree with terms and conditions.

signature printed name date

ESTIMATE

Windsong Productions
351 O Street
Fresno, CA 93721

TEL. 559.437.3900

City of Ontario

United States

Date: 2025-02-28
Title: **Ontario: 2026 State of the City Video Production PKG** Estimate #: **12232**
Prepared By: Joann Mercado Hicks

Project Description: Estimate includes (6) total days of filming on-location in Ontario, California. Filming will include Council interviews and b-roll/concept filming for the Ontario State of the City video package. Estimate includes the edit of videos for SOTC 2026 event. Additional videos and filming days to be estimated separately.

Deliverables include:
(1) x up to 20 minutes SOTC Video featuring Council
(1) up to 2 minutes opening video
(1) up to 3 minutes closing video
(4) x :15 seconds SOTC event teaser videos for social.
Voice of God audio files for day of event use
Directional arrows and "screen saver" loop for event day

Scope of Work	Cost

Video Production
State of the City Video PKG 2026
Internal Services
Pre Production
pre-production
Transcribing & Scriptwriting
transcribing of interviews and scriptwriting
Director
director to oversee shoot and edit; (6) days of filming and post-production
Producer
producer to oversee pre/post production
Associate Producer
associate producer to assist in the pre/post production of SOC 2026
Production Assistant
PA; prep and on-location for SOC 2026
Editing
editing of:
(1) x up to 20 minutes SOTC Video featuring Council, (1) up to 2 minutes opening video, (1) up to 3 minutes closing video, and (4) x :15 seconds SOTC teaser videos for social.

Includes footage import, edit, animation, rendering, exporting and proof uploading.
Includes up to (2) round of client revisions per spot.

ESTIMATE
Windsong Productions
351 O Street
Fresno, CA 93721

TEL. 559.437.3900

Date: 2025-02-28
Title: **Ontario: 2026 State of the City Video Production PKG** Estimate #: **12232**

Audio Production
audio syncing, studio time and audio mix
Animation
creation and design of SOC 2026 gfx; for videos only
** Includes directional arrows and "screen saver" style event video
Color Grading
color correction of final SOC videos.
Assistant Editing
assistant editor to cull through the footage, catalog and assemble editing timeline
Audio Engineer
on set audio engineer; (6) days

External Expenses

Director of Photography
(1) camera operator with camera package; (6) days of filming + create look/feel w/ director
B Camera Operator
(1) b camera operator with camera package; (6) days of filming
Grip
(2) x grip/gaffer; (6) days + grip truck rentals
Other
Additional crew for filming days for interviews and SOC March 2026 event
Music
(10) royalty free music track
Audio/ VO
non-union VO talent; in perpetuity, full-usage buyout for SOC videos, includes VOG recordsings
Photographer
Photographer for SOC March 2026 event; includes full usage buyout of up to (100) finished images

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Production Management

Internal Services

Client Communication
no charge
Internal Meeting/Communication
Production Management
scheduling, crew communication pre- and post-shoot

Internal Expenses

Project Archive & Storage
ingest footage and meta-tag, make back-ups, compress footage with timecode for transcribing

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Video Production - Event Filming Day
Sponsorship

Internal Services

Windsong Productions
351 O Street
Fresno, CA 93721

TEL. 559.437.3900

ESTIMATE

Date: 2025-02-28

Title: **Ontario: 2026 State of the City Video Production PKG** Estimate #: **12232**

Pre Production
pre-production for event filming

Director
pre-production and oversight + (1) filming day for SOTC 2026 Event, March 2026

Producer
(1) filming day for SOTC 2026 Event, March 2026

Associate Producer
(1) filming day for SOTC 2026 Event, March 2026

Production Assistant
(1) filming day for SOTC 2026 Event, March 2026

Audio Production
(1) filming day for SOTC 2026 Event, March 2026

Editing
Editing of (1) x up to 90 seconds SOTC Event Highlight Video. Includes up to (2) rounds of revisions, color, gfx pkg and final export for web/tv.

External Expenses

Music
(2) royalty-free music tracks for SOTC Highlight video

Cinematographer
(3) Camera operators for (1) filming day for SOTC 2026 Event, March 2026

Grip
(1) x Grip; (1) filming day for SOTC 2026 Event, March 2026

Sponsorship: State of the City 2024

Internal Services

Sponsorship
Sponsorship: State of the City 2026; [$23,500}

Total $148,955.00

Terms & Conditions

signature printed name date

Approved to proceed and have read and agree with terms and conditions.

signature printed name date

ESTIMATE
Windsong Productions
351 O Street
Fresno, CA 93721

TEL. 559.437.3900

City of Ontario

United States

Date: 2025-02-28
Title: **Made in Ontario: Series 2025-2026** Estimate #: **12233**
Prepared By: Joann Mercado Hicks

Project Description: Estimate includes (5) x filming days to complete a shot list, B-ROLL and interviews with organizations & businesses selected by the City of Ontario. Estimate includes the edit of (9) x up to :90 seconds videos + (9) x :15 seconds Social Media cutdowns (9x16s) that educate the public on local businesses and organizations in the City of Ontario and all projected expenses for a quality production. Additional videos and filming days to be estimated separately.

Scope of Work	Cost
Video Production	**$86,951.00**

Internal Services

Pre Production
pre-production

Copywriting/Transcribing
transcribing of (9) interviews and scriptwriting of (9) x :90 seconds videos

Director
Director to oversee shoot and edit

Producer
Producer, on set and to oversee pre/post production

Assistant Producer
Assistant producer, on set and to assist in all steps of production

Audio Production
audio syncing, studio time and audio mix

Editing
editing of (9) x :90 seconds videos and (9) x :15 seconds social media cutdowns (9x16 exports). Includes footage import, edit, color correction, rendering, exporting and proof uploading. Includes up to (2) rounds of client revisions per spot.

Assistant Editing
assistant editor to cull through the footage, catalog and assemble editing timeline

External Expenses

Director of Photography
(1) director of photography with camera package; (5) filming days

B Camera Operator
(1) b camera operator with camera package; (5) filming days

G&E Swing
G&E swing; (5) filming days

Music
royalty-free music tracks

Per Diem

windsong PRODUCTIONS

ESTIMATE
Windsong Productions
351 O Street
Fresno, CA 93721

TEL. 559.437.3900

Date: 2025-02-28
Title: **Made in Ontario: Series 2025-2026** Estimate #: **12233**

per diem for crew; (5) filming days

Production Management **$3,895.00**

Internal Services

Client Communication
no charge

Internal Meeting/Communication

Production Management
scheduling, crew communication pre- and post-shoot

Internal Expenses

Project Archive & Storage
ingest footage and meta-tag, make back-ups, compress footage with timecode for transcribing; upkeep of ONT footage library

---

Total $90,846.00

Terms & Conditions

signature printed name date

Approved to proceed and have read and agree with terms and conditions.

signature printed name date

ESTIMATE

Windsong Productions
351 O Street
Fresno, CA 93721

TEL. 559.437.3900

Dan Bell, Communications & Community Relations Director
City of Ontario

United States

Date: 2025-02-28
Title: **ONT: Fourth of July Parade & Event Filming/Photography/Edit 2025 PKG** Estimate #: **12234**
Prepared By: Joann Mercado Hicks

Project Description: Estimate includes the filming and photography of the 2026 Ontario Fourth of July Parade, Council and attendee interviews and BROLL coverage of the entire event. Estimate includes the edit of (1) x up to 3 minutes video. Additional videos and filming days to be estimated separately.

Scope of Work	Cost

Video Production
Fourth of July Parade Filming; 2026

Internal Services

Pre Production
: pre-production

Director
: director to oversee shoot and edit

Producer
: producer to oversee pre/post production, on location.

Associate Producer
: associate producer; on-location

Production Assistant
: PA; prep and filming day

Audio Production
: audio syncing, studio time and audio mix

Editing
: editing of (1) x up to 3 minutes highlight video. Includes footage import, edit, animation, color correction, rendering, exporting and proof uploading. Includes up to (2) round of client revisions per spot.

Assistant Editing
: assistant editor to cull through the footage, catalog and assemble editing timeline

External Expenses

Camera Operator
: (3) x camera operators (RED or equivalent) to capture event

Music
: (3) royalty free music track

Grip
: Grip (2) + G&E gear

Photographer
: (1) photographer to capture Fourth of July event; includes delivery of all raw images

Rentals

Windsong Productions
351 O Street
Fresno, CA 93721

TEL. 559.437.3900

ESTIMATE

Date: 2025-02-28

Title: **ONT: Fourth of July Parade & Event Filming/Photography/Edit 2025 PKG** Estimate #: **12234**

Walkie rentals

Production Management

Internal Services

Client Communication

no charge

Internal Meeting/Communication

Production Management

scheduling, crew communication pre- and post-shoot

Internal Expenses

Project Archive & Storage

ingest footage and meta-tag, make back-ups, compress footage with timecode for transcribing

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Total $26,245.00

Terms & Conditions

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Approved to proceed and have read and agree with terms and conditions.

signature printed name date

ESTIMATE

Windsong Productions
351 O Street
Fresno, CA 93721

TEL. 559.437.3900

Dan Bell, Communications & Community Relations Director
City of Ontario

United States

Date: 2025-02-28
Title: **ONT: 2025 Ontario 5K Reindeer Run Filming Production PKG** Estimate #: **12235**
Prepared By: Joann Mercado Hicks

Project Description: Estimate includes the filming and photography of the following events:

2025 Ontario 5K Reindeer Run

Each event includes an edit of (1) x up to 2 minutes highlight video and up to (100) finished photos. Additional videos, videos and filming days to be estimated separately.

Scope of Work	Cost

Video Production
2025 Ontario 5K Reindeer Run; December 2025

Internal Services

Pre Production
pre-production

Director
director to oversee shoot and edit

Producer
producer to oversee pre/post production, on location.

Associate Producer
associate producer; on-location

Production Assistant
On-location production assistant + prep

Audio Production
audio syncing, studio time and audio mix

Editing
editing of (1) x up to 2 minutes highlight videos for Reindeer Run. Includes final approved masters formatted for 9x16 Instagram Reels.

Includes footage import, edit, animation, color correction, rendering, exporting and proof uploading. Includes up to (2) round of client revisions per spot.

Assistant Editing
assistant editor to cull through the footage, catalog and assemble editing timeline

External Expenses

Camera Operator
(3) x camera operators w/ camera packages; (1) day of filming

Grip
Grip (2) + G&E gear

windsong PRODUCTIONS

ESTIMATE
Windsong Productions
351 O Street
Fresno, CA 93721

TEL. 559.437.3900

Date: 2025-02-28
Title: **ONT: 2025 Ontario 5K Reindeer Run Filming Production PKG** Estimate #: **12235**

Photographer
(1) photographer to capture Reindeer Run. includes delivery of up to (100) finished photos.
Music
(3) royalty free music tracks
Rentals
Walkie rentals

Production Management
Internal Services
Client Communication
no charge
Internal Meeting/Communication
Production Management
scheduling, crew communication pre- and post-shoot
Internal Expenses
Project Archive & Storage
ingest footage and meta-tag, make back-ups, compress footage with timecode for transcribing

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Total $20,055.50

Terms & Conditions

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Approved to proceed and have read and agree with terms and conditions.

signature printed name date

ESTIMATE
Windsong Productions
351 O Street
Fresno, CA 93721

TEL. 559.437.3900

Dan Bell, Communications & Community Relations Director
City of Ontario

United States

Date: 2025-02-28
Title: **ONT: 2025 Holiday Light Parade and Tree Lighting Filming Production PKG** Estimate #: **12236**
Prepared By: Joann Mercado Hicks

Project Description: Estimate includes the filming and photography of the following events:

2025 Holiday Light Parade and Tree Lighting

Each event includes an edit of (1) x up to 2 minutes highlight video and up to (100) finished photos. Additional videos, videos and filming days to be estimated separately.

Scope of Work	Cost

Video Production
2025 Holiday Light Parade and Tree Lighting; December 2025

Internal Services

Pre Production
pre-production

Director
director to oversee shoot and edit

Producer
producer to oversee pre/post production, on location.

Associate Producer
associate producer; on-location

Production Assistant
On-location production assistant + prep

Audio Production
audio syncing, studio time and audio mix

Editing
editing of (1) x up to 2 minutes highlight videos for 2025 Holiday Light Parade and Tree Lighting. Includes final approved masters formatted for 9x16 Instagram Reels.

Includes footage import, edit, animation, color correction, rendering, exporting and proof uploading. Includes up to (2) round of client revisions per spot.

Assistant Editing
assistant editor to cull through the footage, catalog and assemble editing timeline

External Expenses

Camera Operator
(3) x camera operators with camera package

Grip
Grip (2) + G&E gear

Windsong Productions
351 O Street
Fresno, CA 93721

TEL. 559.437.3900

ESTIMATE

Date: 2025-02-28

Title: **ONT: 2025 Holiday Light Parade and Tree Lighting Filming Production PKG** Estimate #: **12236**

Photographer
- (1) photographer to capture 2025 Holiday Light Parade and Tree Lighting. includes delivery of up to (100) finished photos.

Music
- (3) royalty free music tracks

Rentals
- Walkie rentals

Production Management

Internal Services

Client Communication
- no charge

Internal Meeting/Communication

Production Management
- scheduling, crew communication pre- and post-shoot

Internal Expenses

Project Archive & Storage
- ingest footage and meta-tag, make back-ups, compress footage with timecode for transcribing

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Total $20,055.50

Terms & Conditions

signature printed name date

Approved to proceed and have read and agree with terms and conditions.

signature printed name date

ESTIMATE

Windsong Productions
351 O Street
Fresno, CA 93721

TEL. 559.437.3900

Dan Bell, Communications & Community Relations Director
City of Ontario

United States

Date: 2025-02-28
Title: **ONT: Ontario Event Filming Production PKG** Estimate #: **12237**
Prepared By: Joann Mercado Hicks

Project Description: Estimate is for budgeting purposes. Estimate indicates for each additional (1) day event for the City of Ontario, does not include Federal Holiday events.

Each event includes an edit of (1) x up to 2 minutes highlight video and up to (100) finished photos.

Additional videos, videos and filming days to be estimated separately.

Scope of Work	Cost

Video Production
Ontario Event Filming Production PKG (per event/one filming day): Budget Purposes Only.

Internal Services

Pre Production
pre-production

Director
director to oversee shoot and edit

Producer
producer to oversee pre/post production, on location.

Associate Producer
associate producer; on-location

Production Assistant
On-location production assistant

Audio Production
audio syncing, studio time and audio mix

Editing
editing of (1) x up to 2 minutes highlight videos for TBD event. Includes final approved masters formatted for 9x16 Instagram Reels.

Includes footage import, edit, animation, color correction, rendering, exporting and proof uploading. Includes up to (2) round of client revisions per spot.

Assistant Editing
assistant editor to cull through the footage, catalog and assemble editing timeline

External Expenses

Camera Operator
(3) x camera operators w/ camera packages; (1) day of filming

Grip

ESTIMATE
Windsong Productions
351 O Street
Fresno, CA 93721

TEL. 559.437.3900

Date: 2025-02-28
Title: **ONT: Ontario Event Filming Production PKG** Estimate #: **12237**

Grip (2) + G&E gear

Photographer
(1) photographer to capture one event. includes delivery of up to (100) finished photos.

Music
(3) royalty free music tracks

Rentals
Walkie rentals

Production Management

Internal Services

Client Communication
no charge

Internal Meeting/Communication

Production Management
scheduling, crew communication pre- and post-shoot

Internal Expenses

Project Archive & Storage
ingest footage and meta-tag, make back-ups, compress footage with timecode for transcribing

---

Total $20,055.50

Terms & Conditions

signature printed name date

Approved to proceed and have read and agree with terms and conditions.

signature printed name date

CITY OF ONTARIO *Agenda Report* **March 18, 2025**	**SECTION:** **CONSENT CALENDAR**
Department: Economic Development Prepared By: Karla Tavera Staff Member Presenting: Jennifer McLain Hiramoto, Economic Development Director Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 16

SUBJECT: A RESOLUTION OF INTENTION TO RENEW THE GREATER ONTARIO TOURISM MARKETING DISTRICT

RECOMMENDATION: That the City Council adopt a Resolution of Intention to renew the existing Greater Ontario Tourism Marketing Plan.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Operate in a Businesslike Manner

FISCAL IMPACT: There is not a direct fiscal impact associated with this action. Because the Greater Ontario Tourism Marketing District (GOTMD) programs are intended to increase tourism in Ontario, there may be an increase in transient occupancy tax and sales tax collections in the future.

BACKGROUND & ANALYSIS: Greater Ontario Tourism Marketing District (GOTMD) is a benefit assessment district that relies on assessments from lodging establishments in Ontario and Rancho Cucamonga. The dollars generated fund the following activities: Sales & Marketing, Tourism Development & Enhancement, Administration & Advocacy, and Contingency/Renewal efforts for Greater Ontario lodging businesses. GOTMD has been in existence since 2013 for an initial five (5) year term, and was subsequently renewed in 2018 for a ten (10) year term. Lodging businesses now wish to renew the GOTMD for an additional ten (10) year term. The action being presented would extend the life of the GOTMD for another ten years.

The renewed GOTMD includes all lodging businesses, including short-term rentals, existing and in the future, available for public occupancy within the boundaries of the cities of Ontario and Rancho Cucamonga. Lodging business owners decided to pursue renewal of the GOTMD in order to continue to build upon its success, and to ensure a revenue source devoted to marketing Greater Ontario as a tourist, meeting and event destination. This is especially critical at this time given global events set to occur in Southern California, such as the Olympics, as well as Ontario's continued investment in establishing itself as a tourism hub, with assets such as the Ontario International Airport, the Ontario Convention Center, the Toyota Arena, and soon the Ontario Sports Empire.

If renewed, the GOTMD would generate approximately $6,000,000 on an annual basis for promotion of travel and tourism specific to Greater Ontario.

Tourism Marketing Districts

Tourism Marketing Districts (TMDs) utilize the efficiencies of private sector operation in the market-based promotion of tourism. These special assessment districts allow assessed business owners to organize their efforts to increase tourism. Hotel owners within the TMD fund the TMD, and those funds are used to provide services that are desired by and benefit the assessed businesses within the TMD.

TMD benefits:

- Funds cannot be diverted for other government programs;
- They are customized to fit the needs of each destination;
- They allow for a wide range of services; including: destination marketing, tourism promotion, and sales lead generation;
- They are designed, created and governed by those who will pay the assessment; and,
- They provide a stable funding source for tourism promotion.

In California, TMDs are primarily formed pursuant to the Property and Business Improvement District Law of 1994 (94 Law). This law allows for the creation of special benefit assessment districts to raise funds within a specific geographic area. The key difference between TMDs and other special benefit assessment districts is that funds raised are returned to the private non-profit corporation governing the TMD.

MANAGEMENT DISTRICT PLAN

The Management District Plan (Attachment 1) includes the proposed boundary of the GOTMD, a service plan and budget and a proposed means of governance. The GOTMD will include all lodging businesses, including short-term rentals, existing and in the future, available for public occupancy within the boundaries of the cities of Ontario and Rancho Cucamonga.

The annual assessment rate is three percent (3%) of gross short-term sleeping room rental revenue. Because the marketing programs will not promote or seek certain stays, assessments will not be collected on revenue resulting from: stays of more than thirty (30) consecutive days; stays by any Federal officer or employee when on official Federal government business; nor on stays by any officer or employee of a foreign government who is exempt by express provision of Federal law or international treaty.

The renewed GOTMD will have a ten (10) year term, beginning July 1, 2028, or as soon as possible thereafter, and ending ten (10) year from its start date. The assessment will be implemented beginning July 1, 2028 or as soon as possible thereafter. Once per year beginning on the anniversary of GOTMD renewal there is a thirty (30) day period in which business owners paying fifty percent (50%) or more of the assessment may protest and begin proceedings to terminate the GOTMD.

The Greater Ontario Convention and Visitors Bureau dba GOCAL (GOCAL) will be responsible for collecting the assessments on a monthly basis from each assessed business. The cities of Ontario and Rancho Cucamonga shall forward the assessments to GOCAL, which will have the responsibility of managing GOTMD programs as provided in the Management District Plan.

GOTMD RENEWAL PROCESS

March 18, 2025 - RESOLUTION OF INTENTION HEARING
Upon the submission of a written petition, signed by the business owners in the renewed district who will pay more than fifty percent (50%) of the assessments proposed to be levied, the Council may initiate proceedings to renew the GOTMD by the adoption of a resolution expressing its intention to renew the GOTMD.

Petition Status: Petitions in favor of GOTMD renewal were submitted by assessed businesses which represent over 50% of the total GOTMD assessment. This majority petition allows the Council to initiate proceedings for GOTMD renewal at the March 18, 2025 meeting.

No later than:

April 4, 2025 - NOTICE
The 94 Law requires the City of Ontario (City) to mail written notice to the owners of all businesses proposed to be assessed within the GOTMD. Mailing the notice begins a mandatory forty-five (45) day period in which assessed business owners may protest GOTMD renewal.

April 15, 2025 - PUBLIC MEETING
Allow public testimony on the renewal of the GOTMD and levy of assessments. No Council action required.

May 20, 2025 - FINAL PUBLIC HEARING
If written protests are received from the owners of businesses in the renewed GOTMD which will pay fifty percent (50%) or more of the assessments proposed to be levied, and protests are not withdrawn so as to reduce the protests to less than fifty percent (50%), no further proceedings to levy the proposed assessment against such businesses shall be taken for a period of one (1) year from the date of the finding of a majority protest by the Council.

If the Council, following the public hearing, decides to establish the renewed GOTMD, the Council shall adopt a resolution of formation.

Staff recommends the adoption of the Resolution of Intention to renew the existing Greater Ontario Tourism Marketing Plan.

GOCAL
GREATER ONTARIO CALIFORNIA









GREATER ONTARIO TOURISM MARKETING DISTRICT

MANAGEMENT DISTRICT PLAN

Prepared Pursuant to the Property and
Business Improvement District Law of 1994,
Streets and Highways Code Section 36600 et seq.
March 5, 2025

2028-2038

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Prepared by
Civitas

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www.civitasadvisors.com

GOCAL
GREATER ONTARIO CALIFORNIA

I. OVERVIEW

Developed by Greater Ontario area lodging businesses and the Greater Ontario Convention and Visitors Bureau dba GOCAL, the Greater Ontario Tourism Marketing District (GOTMD) is an assessment district proposed to continue to provide specific benefits to payors, by funding marketing and sales promotion efforts for assessed businesses. This approach has been used successfully in other destination areas throughout the country to provide the benefit of additional room night sales directly to payors. The GOTMD was formed in 2013 for an initial five (5) year term and was subsequently renewed in 2018 for a ten (10) year term. Lodging businesses now wish to renew the GOTMD for an additional ten (10) year term.

Location: The renewed GOTMD includes all lodging businesses, including short-term rentals, existing and in the future, available for public occupancy within the boundaries of the cities of Ontario and Rancho Cucamonga (Cities), as shown on the map in Section IV.

Services: The GOTMD is designed to provide specific benefits directly to payors by increasing awareness and demand for room night sales. Sales & Marketing and Tourism Development & Enhancement programs will increase demand for overnight tourism and market payors as tourist, meeting and event destinations, thereby increasing demand for room night sales.

Budget: The total GOTMD annual assessment budget for the initial year of its ten (10) year operation is anticipated to be approximately $6,000,000. A similar assessment budget is expected to apply to subsequent years, but this assessment budget is expected to fluctuate as room sales do, and as businesses open and close.

Cost: The annual assessment rate is three percent (3%) of gross short-term sleeping room rental revenue. Because the marketing programs will not promote or seek certain stays, assessments will not be collected on revenue resulting from: stays of more than thirty (30) consecutive days; stays by any Federal officer or employee when on official Federal government business; nor on stays by any officer or employee of a foreign government who is exempt by express provision of Federal law or international treaty.

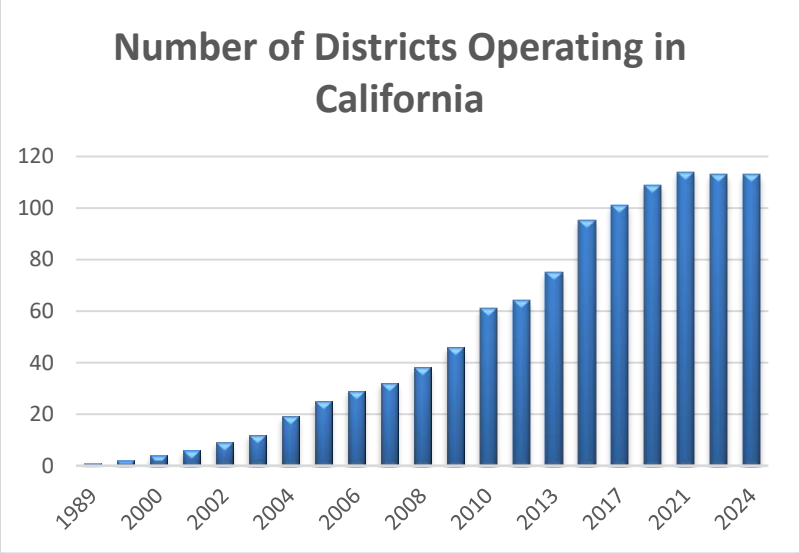
Collection: GOCAL or Cities will be responsible for collecting the assessment on a monthly basis (including any delinquencies, interest, and overdue charges) from each lodging business located in each respective jurisdiction. GOCAL and Cities shall take all reasonable efforts to collect the assessments from each lodging business.

Duration: The renewed GOTMD will have a ten (10) year life, beginning July 1, 2028, or as soon as possible thereafter, and ending ten (10) years from its start date. After ten (10) years, the GOTMD may be renewed pursuant to the Property and Business Improvement District Law of 1994, Streets and Highways Code section 36600 et seq. (94 Law) if lodging business owners support continuing the GOTMD programs.

Management: GOCAL shall continue to serve as the GOTMD's Owners' Association. The Owners' Association is charged with managing funds and implementing programs in accordance with this Plan and must provide annual reports to the City Council.

II. BACKGROUND

Tourism Marketing Districts (TMDs) are an evolution of the traditional Business Improvement District. The first TMD was formed in West Hollywood, California in 1989. Since then, over 100 California destinations have followed suit. In recent years, other states have begun adopting the California model – Illinois, Minnesota, Massachusetts, Montana, South Dakota, Washington, Colorado, Texas and Louisiana have adopted TMD laws. Several other states are in the process of adopting their own legislation. The cities of Wichita, Kansas and Newark, New Jersey used an existing business improvement district law to form a TMD. Additionally, some cities, like Portland, Oregon and Memphis, Tennessee have utilized their home rule powers to create TMDs without a state law.



California's TMDs collectively raise over $300 million annually for local destination marketing. With competitors raising their budgets, and increasing rivalry for visitor dollars, it is important that the Greater Ontario area lodging businesses continue to invest in stable, commerce-specific marketing programs.

TMDs utilize the efficiencies of private sector operation in the market-based promotion of tourism districts. TMDs allow tourism business owners to organize their efforts to increase commerce. Lodging business owners within the TMD pay an assessment and those funds are used to provide services that increase commerce.

In California, most TMDs are formed pursuant to the Property and Business Improvement District Law of 1994. This law allows for the creation of a benefit assessment district to raise funds within a specific geographic area. *The key difference between TMDs and other benefit assessment districts is that funds raised are returned to the private non-profit corporation governing the district.*

There are many benefits to TMDs:

- Funds must be spent on services and improvements that provide a specific benefit only to those who pay;
- Funds cannot be diverted to general government programs;
- They are customized to fit the needs of payors in each destination;
- They allow for a wide range of services;
- They are ***designed, created and governed by those who will pay*** the assessment; and
- They provide a stable, long-term funding source for tourism promotion.

III. ACCOMPLISHMENTS & FUTURE OUTLOOK

Since its formation, the GOTMD has played a pivotal role in strengthening and enhancing the local tourism economy to drive overnight visitation to assessed businesses. As the GOTMD looks ahead to its next chapter, this section highlights key accomplishments from the most recent term, and looks to the future for the renewed GOTMD.

The following charts illustrate the economic impact and tourism activity generated by the GOTMD over the past decade. The first chart demonstrates the total economic impact by fiscal year, while the second chart provides data on sales leads and room nights generated, showing the number of leads pursued and hotel room nights booked as a result of GOTMD efforts.

Fiscal Year	Economic Impact
2013-2014	$52M
2014-2015	$69M
2015- 2016	$97M
2016-2017	$94M
2017-2018	$95M
2018-2019	$92M
2019-2020	--------
2020-2021	$76.5M LOSS
2021-2022	$77.7M
2022-2023	$96.5M
2023-2024	$110M
	TOTAL $792.2M

Fiscal Year	Sales Leads	Room Nights Generated
2013-2014	325	58,584
2014-2015	316	49,417
2015-2016	290	54,540
2016-2017	389	65,937
2017-2018	383	65,937
2018-2019	295	39,456
2019-2020	--------	---------
2020-2021	58 DOWN 75%	No data due to COVID
2021-2022	350	60,009
2022-2023	425	59,000
2023-2024	320	87147

GOCAL is attracting new hotel development and increasing its hotel supply, with 5 new hotels in the works with the Ontario Planning Department. In addition, GOCAL will be experiencing anticipated growth in its tourism and convention assets to expand GOCAL's desirability as a tourism and convention destination. Hotels in development are:

- Hyatt House/Hyatt Place – 256 Rooms (anticipated opening in March/April 2026)
- Residence Inn A-Loft – 225 Rooms (anticipated opening in October 2026)
- Ontario Hotel – 650 Rooms (anticipated opening in Fall 2027)
- Hilton Hampton Inn – 124 (anticipated opening in Spring 2026)
- Everhome Suites – 113 Rooms (anticipated opening in Winter 2025)

Upon completion of the properties above, hotel rooms for the Greater Ontario area will increase by another 1,369 hotel inventory to a total of over 8,000 rooms.

In addition to the anticipated add of more hotels:

- Michael Krouse, President & CEO of GOCAL, led the CalTravel Association's Convention Centers Coalition for the reopening of convention center to begin hosting meetings and conventions and recovery for the industry. GOCAL received a grant for $974,768 combined from the US Department of Commerce Economic Development Administration to assist in those efforts of restoring the meetings and conventions.
- Plans are in the works to expand the Ontario Convention Center to include a 650-room headquarter hotel onsite and a newly constructed parking structure. Construction to begin in 2026.

- Ontario Convention Center has 300 active days per year and has attracted larger conventions for multiple years. This expansion to double the size of the center will allow us to secure meetings and conventions in a next higher tier in size. Coupled with new hotel products, this also supports our ability to grow in the meetings and convention sector.
- Route 66 Cruisin' Reunion, established in 2013, is a two-day classic car show that attracts enthusiasts from all over the country. Each year, we see an increase in classic car participants, and in 2024, an all-time record of over 1,300 cars were on display. This event attracts over 100,000 attendees from several states nationwide over the two days.
- The development of the 200-acre Ontario Sports Empire, a new minor league baseball stadium in South Ontario and future home of a minor league team and LA Dodger affiliate, will increase demand for overnight stays for the projected 1.4 million new visitors.
- The Adept project surrounding the Toyota Arena will be a world-class entertainment district with plans for a Performing Arts Center, open spaces and an outdoor concert venue, restaurants, dining, and a new hotel.
- Ontario International Airport continues to add domestic flights to destinations such as El Paso, Nashville, Washington DC, and Hawaii. The airport is working on future plans for expansion and development of a dedicated state-of-the-art international Terminal 3. Our convention center is located within one mile of the Ontario International Airport.
- Brightline West will provide high-speed rail service to and from Cucamonga Station in Rancho Cucamonga and Las Vegas in 2028, with connectivity to all of Southern California via Metrolink and Amtrak.
- Having established the Greater Ontario Sports and Entertainment Authority, we have dedicated sales and marketing staff booking and marketing to this specific growing industry for professional and youth sports of all kinds.
- Since 2013, we have produced over $1B in economic impact to our region.
- The State of the Region Event hosted annually at the Ontario Convention Center is a premier event for the region to discuss current statistics, provide an economic forecast for the coming year

learn about the dynamic strength of our economy, how to adapt to changing conditions, and build a network of forward-thinking professionals as we plan for the future.

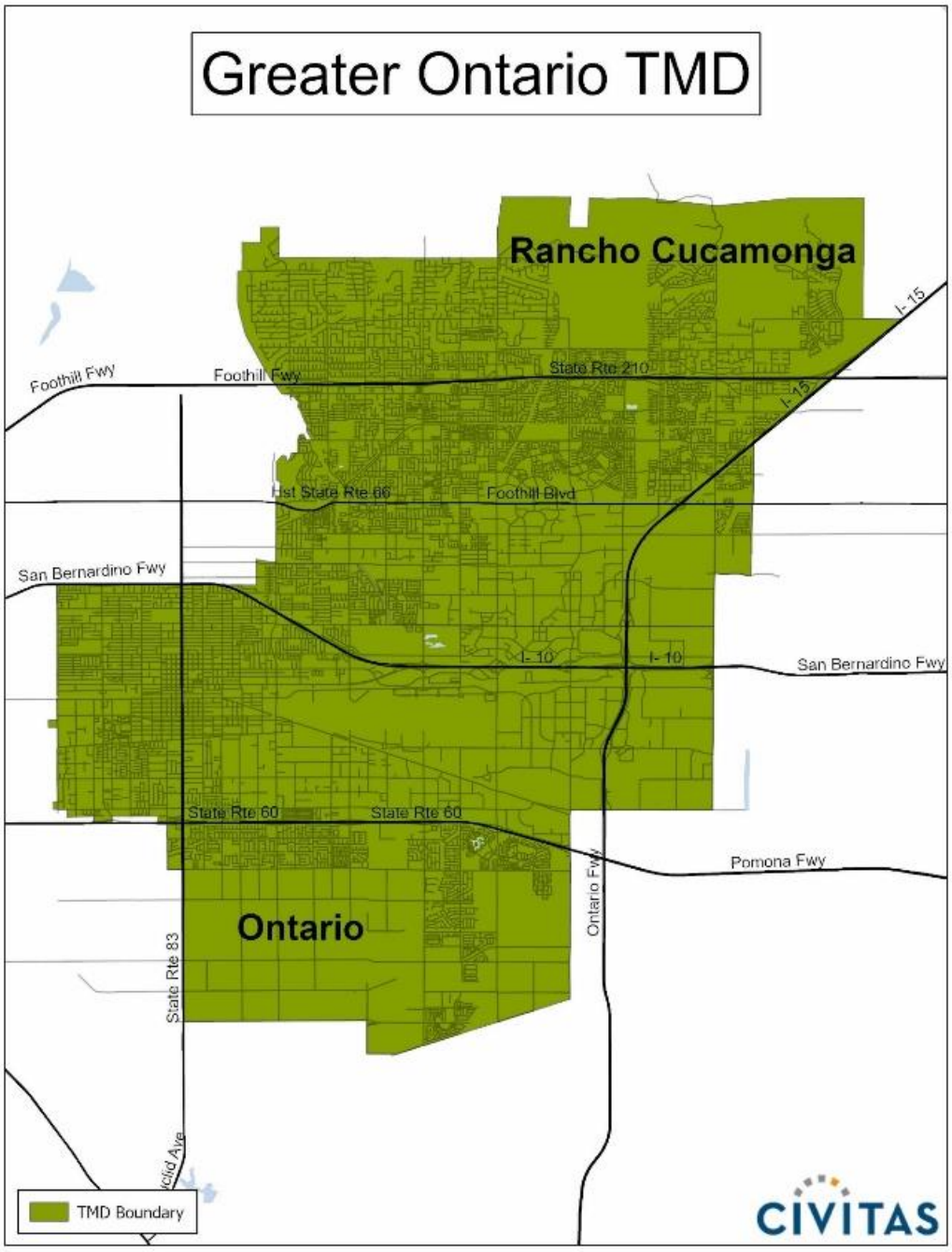
IV. BOUNDARY

The GOTMD will include all lodging businesses, including short-term rentals, existing and in the future, available for public occupancy within the boundaries of the Cities of Ontario and Rancho Cucamonga, as shown in the map below.

Lodging business definition: any structure, or any portion of any structure, which is occupied, or intended or designed for occupancy, by transients for dwelling, lodging, or sleeping purposes and shall include any hotel, inn, tourist home, motel, studio hotel, bachelor hotel, lodging house, rooming house, apartment house, dormitory, public or private club, mobile home or house trailer at a fixed location, or other similar structure, or portion thereof.

Short-term rental definition: a dwelling unit, or any portion thereof, that is rented by the host to another party for a period of not more than 30 consecutive days in exchange for any form of monetary or non-monetary compensation or consideration. "Short-term rental" shall include rental activity in which the host remains on the site of his or her primary residence throughout the duration of the guest's stay, rental activity in which the host remains off the site of his or her primary residence-site for some or all of the duration of the guest's stay, and rental activity that is not a primary residence, and which is available for temporary lodging, for compensation or any form of consideration. "Short-term rental" shall not include: single-room occupancy buildings and a dwelling unit for which a tenant has a month-to-month rental agreement and the rental payments are made on a monthly basis, or corporate housing.

A complete listing of assessed lodging businesses within the renewed GOTMD can be found in Appendix 2.



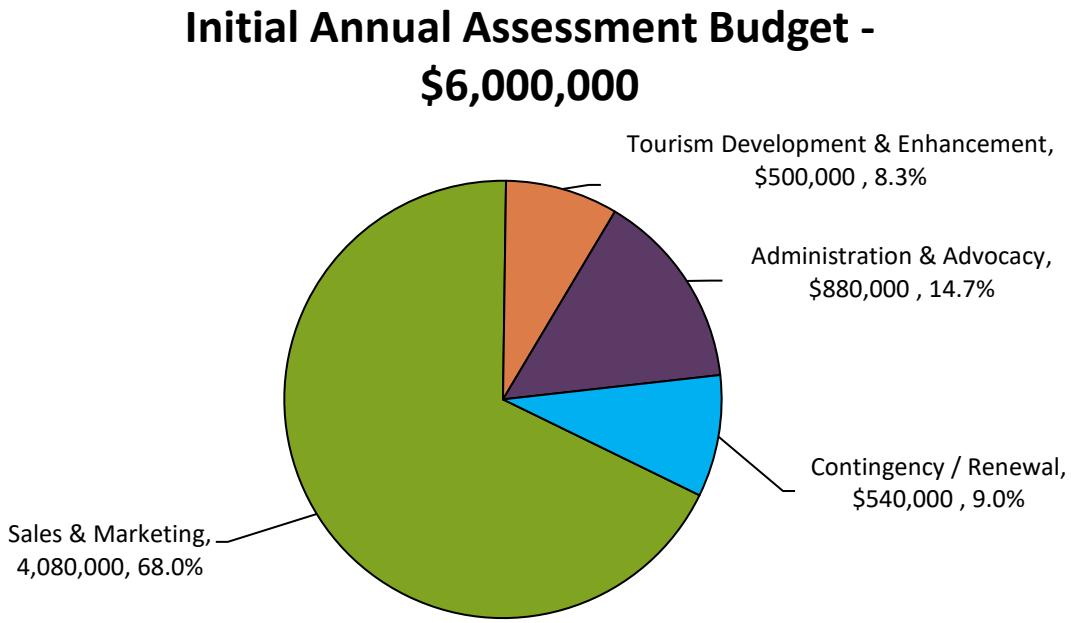
Total Square Miles: 90.21
Distance to Los Angeles: 37 Miles
Distance to Palm Springs: 72 Miles
Distance to San Diego: 113 Miles

V. ASSESSMENT BUDGET AND SERVICES

A. Annual Service Plan

Assessment funds will be spent to provide specific benefits conferred or privileges granted directly to the payors that are not provided to those not charged, and which do not exceed the reasonable cost to the City of Ontario (City) of conferring the benefits or granting the privileges. The privileges and services provided with the GOTMD funds are Sales & Marketing and Tourism Development & Enhancement programs available only to assessed businesses.

A service plan assessment budget has been developed to deliver services that benefit the assessed businesses. A detailed annual assessment budget will be developed and approved by GOCAL. The chart below illustrates the initial annual assessment budget allocations. These activities and allocations will also apply in subsequent years. The total initial assessment budget is estimated to be $6,000,000.



Although actual revenues will fluctuate due to market conditions, the proportional allocations of the budget shall remain the same. However, the City and the GOCAL board shall have the authority to adjust budget allocations between the categories by no more than fifteen percent (15%) of the total budget per year. A description of the proposed improvements and activities for the initial year of operation is below. The same activities are proposed for subsequent years. In the event of a legal challenge against the GOTMD, any and all assessment funds may be used for the costs of defending the GOTMD.

Each budget category includes all costs related to providing that service. For example, the Sales & Marketing budget includes the cost of staff time dedicated to overseeing and implementing the sales and marketing program. Staff time dedicated purely to administrative tasks is allocated to the Administration & Advocacy portion of the budget. The costs of an individual staff member may be allocated to multiple budget categories. The staffing levels necessary to provide the services below will be determined by GOCAL on an as-needed basis.

Sales & Marketing

A Sales & Marketing program will promote assessed businesses as tourist, meeting, and event destinations. The Sales & Marketing program will have a central theme of promoting Ontario and Rancho Cucamonga as desirable places for overnight visits to leisure travelers and meeting planners. The program will have the goal of increasing overnight visitation and room night sales at assessed businesses, and may include the following activities:

- Internet marketing efforts to increase awareness and optimize internet presence to drive overnight visitation and room sales to assessed businesses;
- Print ads in magazines and newspapers targeted at potential visitors to drive overnight visitation and room sales to assessed businesses;
- Television ads targeted at potential visitors to drive overnight visitation and room sales to assessed businesses;
- Promotion and production of special events that draw overnight visitors to assessed businesses;
- Radio ads targeted at potential visitors to drive overnight visitation and room sales to assessed businesses;
- Attendance of trade shows to promote assessed businesses;
- Sales blitzes for assessed businesses;
- Familiarization tours of assessed businesses;
- Preparation and production of collateral promotional materials such as brochures, flyers and maps featuring assessed businesses;
- Attendance of professional industry conferences and affiliation events to promote assessed businesses;
- Market research to identify targets and opportunities to attract overnight visitors to assessed businesses;
- Incentivizing conferences and meetings to book at the destination to increase overnight visitation at assessed businesses.
- Partnership with both local, state and national tourism organizations to target key domestic and international markets to increase overnight visitation at assessed businesses;
- Development and implementation of a public relations and communications strategy, inclusive of social media outlets and press release distribution designed to drive overnight visitation at assessed businesses;
- Lead generation activities designed to attract tourists and group events to assessed businesses; and
- Director of Sales and General Manager meetings to plan and coordinate tourism promotion efforts for assessed businesses

Tourism Development & Enhancement

A Tourism Development & Enhancement program will be designed to improve the visitor experience in an effort to increase overnight visitation at assessed lodging businesses and short-term rentals. It will provide potential funding for programs and initiatives based on criteria to be developed. The focus of the program will be on the entire destination brand footprint to ensure a consistent brand experience. The program may include the following activities, but is not limited to:

- A transportation program connecting hotels with points of interest, the airport and tourism assets, to increase room night sales and enhance the visitor experience;
- An ambassador program with stakeholders to improve the overall destination experience and encourage overnight visitation; and

- Operation of a California Welcome Center (WC) to provide visitor resources and ensure a consistent brand experience throughout the destination.

Administration & Advocacy
The Administration & Advocacy portion of the budget will be utilized to provide the activities and improvements for the GOTMD. These costs may include rent, telephone charges, legal fees, accounting fees, postage, administrative staff, insurance, and other general office expenses. A small portion of the budget may be utilized towards dedicated staff time to provide unified attention, communication and responsiveness throughout the GOTMD and provide a unified voice to represent the GOTMD's best interests.

Contingency / Renewal
A prudent portion of the budget will be allocated to a contingency fund, to account for lower than anticipated collections. If there are contingency funds collected and near the expiration of the GOTMD there are contingency funds remaining, and businesses wish to renew the GOTMD, the contingency funds may be used for renewal costs.

B. Annual Budget

The total ten (10) year assessment budget is projected at approximately $6,000,000 annually, or $60,000,000 through June 2038. A similar budget is expected to apply to subsequent years, but this budget is expected to fluctuate as room sales do and as businesses open and close.

C. California Constitutional Compliance

The GOTMD assessment is not a property-based assessment subject to the requirements of Proposition 218. Courts have found Proposition 218 limited the term 'assessments' to levies on real property.[1] Rather, the GOTMD assessment is a business-based assessment, and is subject to Proposition 26. Pursuant to Proposition 26 all levies are a tax unless they fit one of seven exceptions. Two of these exceptions apply to the GOTMD, a "specific benefit" and a "specific government service." Both require that the costs of benefits or services do not exceed the reasonable costs to the City of conferring the benefits or providing the services.

1. Specific Benefit

Proposition 26 requires that assessment funds be expended on, "a specific benefit conferred or privilege granted directly to the payor that is not provided to those not charged, and which does not exceed the reasonable costs to the local government of conferring the benefit or granting the privilege."[2] The services in this Plan are designed to provide targeted specific benefits directly to assessed businesses, and are intended only to provide specific benefits and services directly to those businesses paying the assessment. These services are tailored not to serve the general public, businesses in general, or parcels of land, but rather to serve the specific businesses within the GOTMD. The activities described in this Plan are specifically targeted to increase demand for room night sales for assessed lodging businesses within the boundaries of the GOTMD and are narrowly tailored. GOTMD funds will be used exclusively to provide the specific benefit of increased demand for room night sales directly to the assessees. Assessment funds shall not be used to feature non-assessed lodging businesses in GOTMD programs, or to directly generate sales for non-assessed businesses. The activities paid for from assessment revenues are business services constituting and providing specific benefits to the assessed businesses. Nothing in this Plan limits the ability of the

[1] *Jarvis v. the City of San Diego* 72 Cal App. 4th 230
[2] Cal. Const. art XIII C § 1(e)(1)

Owners' Association to enter into private contracts with non-assessed lodging businesses for the provision of services to those businesses.

The assessment imposed by this GOTMD is for a specific benefit conferred directly to the payors that are not provided to those not charged. The specific benefit conferred directly to the payors is an increase in demand for room night sales. The specific benefit of an increase in demand for room night sales for assessed lodging businesses will be provided only to lodging businesses paying the district assessment, with Sales & Marketing programs promoting lodging businesses paying the GOTMD assessment. The Sales & Marketing programs will be designed to increase room night sales at each assessed lodging businesses. Because they are necessary to provide the Sales & Marketing programs that specifically benefit the assessed lodging businesses, the Administration & Advocacy and Contingency/Renewal services also provide the specific benefit of increased demand for room night sales to the assessed lodging businesses.

Although the GOTMD, in providing specific benefits to payors, may produce incidental benefits to non-paying businesses, the incidental benefit does not preclude the services from being considered a specific benefit. The legislature has found that, "A specific benefit is not excluded from classification as a 'specific benefit' merely because an indirect benefit to a nonpayor occurs incidentally and without cost to the payor as a consequence of providing the specific benefit to the payor."[3]

2. Specific Government Service

The assessment may also be utilized to provide, "a specific government service or product provided directly to the payor that is not provided to those not charged, and which does not exceed the reasonable costs to the local government of providing the service or product."[4] The legislature has recognized that marketing and promotions services like those to be provided by the GOTMD are government services within the meaning of Proposition 26[5]. Further, the legislature has determined that "a specific government service is not excluded from classification as a 'specific government service' merely because an indirect benefit to a nonpayor occurs incidentally and without cost to the payor as a consequence of providing the specific government service to the payor."[6]

3. Reasonable Cost

GOTMD services will be implemented carefully to ensure they do not exceed the reasonable cost of such services. The full amount assessed will be used to provide the services described herein. Funds will be managed by GOCAL, and reports submitted on an annual basis to the City. Only assessed lodging businesses will be featured in marketing materials, receive sales leads generated from GOTMD-funded activities, be featured in advertising campaigns, and benefit from other GOTMD-funded services. Non-assessed lodging businesses will not receive these, nor any other, GOTMD-funded services and benefits. The assessed lodging business list was compiled from records provided by each jurisdiction and complies with the requirements of the 94 Law. Pursuant to Streets and Highways Code Section 36615, the City Council's determination of ownership is final and conclusive, with no obligation to obtain other information.

The GOTMD-funded programs are targeted directly to benefit assessed businesses. It is, however, possible that there will be a spillover benefit to non-assessed businesses. If non-assessed lodging businesses receive incremental room nights, that portion of the promotion or program generating

[3] Government Code § 53758(a)
[4] Cal. Const. art XIII C § 1(e)(2)
[5] Government Code § 53758(b)
[6] Government Code § 53758(b)

those room nights shall be paid with non-GOTMD funds. GOTMD funds shall only be spent to benefit the assessed businesses and shall not be spent on that portion of any program which directly generates incidental room nights for non-assessed businesses.

D. Assessment

The annual assessment rate is three percent (3%) of gross short-term sleeping room rental revenue. Because the marketing programs will not promote or seek certain stays, assessments will not be collected on: stays of more than thirty (30) consecutive days; stays by any Federal officer or employee when on official Federal government business; nor on stays by any officer or employee of a foreign government who is exempt by express provision of Federal law or international treaty.

The assessment was calculated based on the total cost of the activities to be provided for the benefit of the businesses within the GOTMD, with costs allocated based on the proportional benefit conferred to each assessed business. Activities funded by the GOTMD, are specifically targeted to increase room nights at assessed businesses. All room night sales do not represent the same benefit to the payors. For example, a higher priced room night is of greater benefit than a lower priced room night because the assesses derive greater revenue. To account for this benefit differential and to make sure the benefits are proportional, an assessment formula based on a percentage of revenue has been selected. The proposed formula accurately reflects greater benefit to assessed businesses with higher priced room nights.

The term "gross sleeping room rental revenue" as used herein means: the consideration charged for the occupancy of space in a lodging business valued in money. Gross sleeping room rental revenue shall not include any federal, state or local taxes collected, including but not limited to transient occupancy taxes.

The assessment is levied upon and a direct obligation of the assessed lodging business. However, the assessed lodging business may, at its discretion, pass the assessment on to transients. The amount of assessment, if passed on to each transient, shall be disclosed in advance and separately stated from the amount of rent charged and any other applicable taxes, and each transient shall receive a receipt for payment from the business. If the GOTMD assessment is identified separately it shall be disclosed as the "GOTMD Assessment." As an alternative, the disclosure may include the amount of the GOTMD assessment and the amount of the assessment imposed pursuant to the California Tourism Marketing Act, Government Code §13995 et seq. and shall be disclosed as the "Tourism Assessment." The assessment is imposed solely upon and is the sole obligation of the assessed lodging business even if it is passed on to transients. The assessment shall not be considered revenue for calculation of transient occupancy taxes.

Bonds shall not be issued.

E. Interest and Overdue Charges

The GOTMD shall reimburse the Cities of Ontario and Rancho Cucamonga for any costs associated with collecting unpaid assessments. If sums in excess of the delinquent GOTMD assessment are sought to be recovered in the same collection action by the Cities, the GOTMD shall bear its pro rata share of such collection costs.

1. Any business which fails to remit any assessment within thirty (30) days shall pay an overdue charge in the amount of one-half of one percent (0.5%) per day of the assessment due and owning in addition to the amount of the assessment.

2. Any business which fails to remit any delinquent assessment on or before a period of thirty (30) days following the date on which the assessment first became delinquent (or sixty [60] days after the initial due date) shall pay a second delinquency overdue charge in the amount of ten percent (10%) of the assessment due and owing in addition to the amount of the assessment and the one-half of one percent (0.5%) overdue charge first imposed pursuant to section 1 above.
3. If the collecting City determines that the non-payment of any assessment is due to fraud, an overdue charge in the amount of twenty-five (25%) of the amount of assessment due and owning shall be added thereto in addition to the overdue charges set forth in section 1 and 2 above.
4. In addition to the overdue charges imposed, any business which fails to remit any assessment shall pay interest at the rate of one-half of one percent (0.5%) per month, or fraction thereof, on the amount of the assessment due and owing, exclusive of overdue charges, from the date on which the assessment first became delinquent until paid.

F. Time and Manner for Collecting Assessments

The GOTMD assessment will be implemented beginning July 1, 2028 or as soon as possible thereafter, and end ten (10) years from its start date. The Cities or GOCAL will be responsible for collecting the assessment on a monthly basis (including any delinquencies, overdue charges and interest) from each assessed lodging business located in their respective jurisdictions. GOCAL and Cities shall take all reasonable efforts to collect the assessments from each lodging business within the GOTMD.

1. GOCAL and/or Cities shall make all reasonable efforts to enter into an agreement with all Hosting Platforms to collect and remit the GOTMD assessment on behalf of assessed businesses using the hosting platform.

2. An assessed business, using a Hosting Platform, reserves the right to have the Hosting Platform collect the assessment based on information supplied by the assessed business, and remit such assessment to the assessed business for ultimate reporting and remittance by the assessed business to GOCAL and/or Cities. In such case, the Hosting Platform, upon request from GOCAL and/or Cities, and not more than once per consecutive twelve-month period, shall provide GOCAL and/or Cities with copies of documentation related to assessed business which have provided acknowledgement of its obligation to collect all assessments owed on a gross short-term room rental revenue and to remit and report any assessments collected directly to GOCAL and/or Cities.

VI. GOVERNANCE

A. Owners' Association

The Ontario City Council, through adoption of this Plan, has the right, pursuant to Streets and Highways Code §36651, to identify the body that shall implement the proposed program, which shall be the Owners' Association of the GOTMD as defined in Streets and Highways Code §36612. The Ontario City Council has determined that GOCAL will continue to serve as the Owners' Association for the GOTMD.

B. Brown Act and California Public Records Act Compliance

An Owners' Association is a private entity and may not be considered a public entity for any purpose, nor may its board members or staff be considered to be public officials for any purpose. The Owners' Association is, however, subject to government regulations relating to transparency, namely the Ralph M. Brown Act and the California Public Records Act. These regulations are designed to promote public accountability. The Owners' Association acts as a legislative body under the Ralph M. Brown Act (Government Code §54950 et seq.). Thus, meetings of the Board and certain committees must be held in compliance with the public notice and other requirements of the Brown Act. Accordingly, the Owners' Association shall publicly report any action taken and the vote or abstention on that action of each member present for the action. The Owners' Association is also subject to the record keeping and disclosure requirements of the California Public Records Act.

C. Annual Report

GOCAL shall present an annual report at the end of each year of operation to the City Council pursuant to Streets and Highways Code §36650 (see Appendix 1). The annual report shall include:

- Any proposed changes in the boundaries of the improvement district or in any benefit zones or classification of businesses within the district.
- The improvements and activities to be provided for that fiscal year.
- An estimate of the cost of providing the improvements and the activities for that fiscal year.
- The method and basis of levying the assessment in sufficient detail to allow each business owner to estimate the amount of the assessment to be levied against his or her business for that fiscal year.
- The estimated amount of any surplus or deficit revenues to be carried over from a previous fiscal year.
- The estimated amount of any contributions to be made from sources other than assessments levied pursuant to this part.

APPENDIX 1 – LAW

*** THIS DOCUMENT IS CURRENT THROUGH THE 2023 EXTRA SESSION CH 1, 2023 REGULAR SESSION CH. 890***
(ALL 2023 LEGISLATION)

STREETS AND HIGHWAYS CODE
DIVISION 18. PARKING
PART 7. PROPERTY AND BUSINESS IMPROVEMENT DISTRICT LAW OF 1994

CHAPTER 1. General Provisions

ARTICLE 1. Declarations

36600. Citation of part

This part shall be known and may be cited as the "Property and Business Improvement District Law of 1994."

36601. Legislative findings and declarations; Legislative guidance

The Legislature finds and declares all of the following:

(a) Businesses located and operating within business districts in some of this state's communities are economically disadvantaged, are underutilized, and are unable to attract customers due to inadequate facilities, services, and activities in the business districts.

(b) It is in the public interest to promote the economic revitalization and physical maintenance of business districts in order to create jobs, attract new businesses, and prevent the erosion of the business districts.

(c) It is of particular local benefit to allow business districts to fund business related improvements, maintenance, and activities through the levy of assessments upon the businesses or real property that receive benefits from those improvements.

(d) Assessments levied for the purpose of conferring special benefit upon the real property or a specific benefit upon the businesses in a business district are not taxes for the general benefit of a city, even if property, businesses, or persons not assessed receive incidental or collateral effects that benefit them.

(e) Property and business improvement districts formed throughout this state have conferred special benefits upon properties and businesses within their districts and have made those properties and businesses more useful by providing the following benefits:

(1) Crime reduction. A study by the Rand Corporation has confirmed a 12-percent reduction in the incidence of robbery and an 8-percent reduction in the total incidence of violent crimes within the 30 districts studied.

(2) Job creation.

(3) Business attraction.

(4) Business retention.

(5) Economic growth.

(6) New investments.

(f) With the dissolution of redevelopment agencies throughout the state, property and business improvement districts have become even more important tools with which communities can combat blight, promote economic opportunities, and create a clean and safe environment.

(g) Since the enactment of this act, the people of California have adopted Proposition 218, which added Article XIII D to the Constitution in order to place certain requirements and restrictions on the formation of, and activities, expenditures, and assessments by property-based districts. Article XIII D of the Constitution provides that property-based districts may only levy assessments for special benefits.

(h) The act amending this section is intended to provide the Legislature's guidance with regard to this act, its interaction with the provisions of Article XIII D of the Constitution, and the determination of special benefits in property-based districts.

(1) The lack of legislative guidance has resulted in uncertainty and inconsistent application of this act, which discourages the use of assessments to fund needed improvements, maintenance, and activities in property-based districts, contributing to blight and other underutilization of property.

(2) Activities undertaken for the purpose of conferring special benefits upon property to be assessed inherently produce incidental or collateral effects that benefit property or persons not assessed. Therefore, for special benefits to exist as a separate and distinct category from general benefits, the incidental or collateral effects of those special benefits are inherently part of those special benefits. The mere fact that special benefits produce incidental or collateral effects that benefit property or persons not assessed does not convert any portion of those special benefits or their incidental or collateral effects into general benefits.
(3) It is of the utmost importance that property-based districts created under this act have clarity regarding restrictions on assessments they may levy and the proper determination of special benefits. Legislative clarity with regard to this act will provide districts with clear instructions and courts with legislative intent regarding restrictions on property-based assessments, and the manner in which special benefits should be determined.

36602. Purpose of part

The purpose of this part is to supplement previously enacted provisions of law that authorize cities to levy assessments within property and business improvement districts, to ensure that those assessments conform to all constitutional requirements and are determined and assessed in accordance with the guidance set forth in this act. This part does not affect or limit any other provisions of law authorizing or providing for the furnishing of improvements or activities or the raising of revenue for these purposes.

36603. Preemption of authority or charter city to adopt ordinances levying assessments

Nothing in this part is intended to preempt the authority of a charter city to adopt ordinances providing for a different method of levying assessments for similar or additional purposes from those set forth in this part. A property and business improvement district created pursuant to this part is expressly exempt from the provisions of the Special Assessment Investigation, Limitation and Majority Protest Act of 1931 (Division 4 (commencing with Section 2800)).

36603.5 Part prevails over conflicting provisions

Any provision of this part that conflicts with any other provision of law shall prevail over the other provision of law, as to districts created under this part.

36604. Severability

This part is intended to be construed liberally and, if any provision is held invalid, the remaining provisions shall remain in full force and effect. Assessments levied under this part are not special taxes.

ARTICLE 2. Definitions

36606. "Activities"

"Activities" means, but is not limited to, all of the following that benefit businesses or real property in the district:
(a) Promotion of public events.
(b) Furnishing of music in any public place.
(c) Promotion of tourism within the district.
(d) Marketing and economic development, including retail retention and recruitment.
(e) Providing security, sanitation, graffiti removal, street and sidewalk cleaning, and other municipal services supplemental to those normally provided by the municipality.
(f) Other services provided for the purpose of conferring special benefit upon assessed real property or specific benefits upon assessed businesses located in the district.

36606.5. "Assessment"

"Assessment" means a levy for the purpose of acquiring, constructing, installing, or maintaining improvements and providing activities that will provide certain benefits to properties or businesses located within a property and business improvement district.

36607. "Business"

"Business" means all types of businesses and includes financial institutions and professions.

36608. "City"

"City" means a city, county, city and county, or an agency or entity created pursuant to Article 1 (commencing with Section 6500) of Chapter 5 of Division 7 of Title 1 of the Government Code, the public member agencies of which includes only cities, counties, or a city and county, or the State of California.

36609. "City council"

"City council" means the city council of a city or the board of supervisors of a county, or the agency, commission, or board created pursuant to a joint powers agreement and which is a city within the meaning of this part.

36609.4. "Clerk"

"Clerk" means the clerk of the legislative body.

36609.5. "General benefit"

"General benefit" means, for purposes of a property-based district, any benefit that is not a "special benefit" as defined in Section 36615.5.

36610. "Improvement"

"Improvement" means the acquisition, construction, installation, or maintenance of any tangible property with an estimated useful life of five years or more including, but not limited to, the following:

(a) Parking facilities.
(b) Benches, booths, kiosks, display cases, pedestrian shelters and signs.
(c) Trash receptacles and public restrooms.
(d) Lighting and heating facilities.
(e) Decorations.
(f) Parks.
(g) Fountains.
(h) Planting areas.
(i) Closing, opening, widening, or narrowing of existing streets.
(j) Facilities or equipment, or both, to enhance security of persons and property within the district.
(k) Ramps, sidewalks, plazas, and pedestrian malls.
(l) Rehabilitation or removal of existing structures.

36611. "Management district plan"; "Plan"

"Management district plan" or "plan" means a proposal as defined in Section 36622.

36612. "Owners' association"

"Owners' association" means a private nonprofit entity that is under contract with a city to administer or implement improvements, maintenance, and activities specified in the management district plan. An owners' association may be an existing nonprofit entity or a newly formed nonprofit entity. An owners' association is a private entity and may not be considered a public entity for any purpose, nor may its board members or staff be considered to be public officials for any purpose. Notwithstanding this section, an owners' association shall comply with the Ralph M. Brown Act (Chapter 9 (commencing with Section 54950) of Part 1 of Division 2 of Title 5 of the Government Code), at all times when matters within the subject matter of the district are heard, discussed, or deliberated, and with the California Public Records Act (Division 10 (commencing with Section 7920.000) of Title 1 of the Government Code), for all records relating to activities of the district.

36614. "Property"

"Property" means real property situated within a district.

36614.5. "Property and business improvement district"; "District"

"Property and business improvement district," or "district," means a property and business improvement district established pursuant to this part.

36614.6. "Property-based assessment"

"Property-based assessment" means any assessment made pursuant to this part upon real property.

36614.7. "Property-based district"

"Property-based district" means any district in which a city levies a property-based assessment.

36615. "Property owner"; "Business owner"; "Owner"

"Property owner" means any person shown as the owner of land on the last equalized assessment roll or otherwise known to be the owner of land by the city council. "Business owner" means any person recognized by the city as the owner of the business. "Owner" means either a business owner or a property owner. The city council has no obligation to obtain other information as to the ownership of land or businesses, and its determination of ownership shall be final and conclusive for the purposes of this part. Wherever this part requires the signature of the property owner, the signature of the authorized agent of the property owner shall be sufficient. Wherever this part requires the signature of the business owner, the signature of the authorized agent of the business owner shall be sufficient.

36615.5. "Special benefit" [Effective January 1, 2023]

(a) "Special benefit" means, for purposes of a property-based district, a particular and distinct benefit over and above general benefits conferred on real property located in a district or to the public at large. Special benefit includes incidental or collateral effects that arise from the improvements, maintenance, or activities of property-based districts even if those incidental or collateral effects benefit property or persons not assessed. Special benefit excludes general enhancement of property value.

(b) "Special benefit" also includes, for purposes of a property-based district, a particular and distinct benefit provided directly to each assessed parcel within the district. Merely because parcels throughout an assessment district share the same special benefits does not make the benefits general.

36616. "Tenant"

"Tenant" means an occupant pursuant to a lease of commercial space or a dwelling unit, other than an owner.

ARTICLE 3 Prior Law

36617. Alternate method of financing certain improvements and activities; Effect on other provisions

This part provides an alternative method of financing certain improvements and activities. The provisions of this part shall not affect or limit any other provisions of law authorizing or providing for the furnishing of improvements or activities or the raising of revenue for these purposes. Every improvement area established pursuant to the Parking and Business Improvement Area Law of 1989 (Part 6 (commencing with Section 36500) of this division) is valid and effective and is unaffected by this part.

CHAPTER 2. Establishment

36620. Establishment of property and business improvement district

A property and business improvement district may be established as provided in this chapter.

36620.5. Requirement of consent of city council

A county may not form a district within the territorial jurisdiction of a city without the consent of the city council of that city. A city may not form a district within the unincorporated territory of a county without the consent of the board of supervisors of that county. A city may not form a district within the territorial jurisdiction of another city without the consent of the city council of the other city.

36621. Initiation of proceedings; Petition of property or business owners in proposed district

(a) Upon the submission of a written petition, signed by the property or business owners in the proposed district who will pay more than 50 percent of the assessments proposed to be levied, the city council may initiate proceedings to form a district by the adoption of a resolution expressing its intention to form a district. The amount of assessment attributable to property or a business owned by the same property or business owner that is in excess of 40 percent of the amount of all assessments proposed to be levied, shall not be included in determining whether the petition is signed by property or business owners who will pay more than 50 percent of the total amount of assessments proposed to be levied.

(b) The petition of property or business owners required under subdivision (a) shall include a summary of the management district plan. That summary shall include all of the following:

(1) A map showing the boundaries of the district.

(2) Information specifying where the complete management district plan can be obtained.

(3) Information specifying that the complete management district plan shall be furnished upon request.

(c) The resolution of intention described in subdivision (a) shall contain all of the following:

(1) A brief description of the proposed improvements, maintenance, and activities, the amount of the proposed assessment, a statement as to whether the assessment will be levied on property or businesses within the district, a statement as to whether bonds will be issued, and a description of the exterior boundaries of the proposed district, which may be made by reference to any plan or map that is on file with the clerk. The descriptions and statements do not need to be detailed and shall be sufficient if they enable an owner to generally identify the nature and extent of the improvements, maintenance, and activities, and the location and extent of the proposed district.

(2) A time and place for a public hearing on the establishment of the property and business improvement district and the levy of assessments, which shall be consistent with the requirements of Section 36623.

36622. Contents of management district plan

The management district plan shall include, but is not limited to, all of the following:

(a) If the assessment will be levied on property, a map of the district in sufficient detail to locate each parcel of property and, if businesses are to be assessed, each business within the district. If the assessment will be levied on businesses, a map that identifies the district boundaries in sufficient detail to allow a business owner to reasonably determine whether a business is located within the district boundaries. If the assessment will be levied on property and businesses, a map of the district in sufficient detail to locate each parcel of property and to allow a business owner to reasonably determine whether a business is located within the district boundaries.

(b) The name of the proposed district.

(c) A description of the boundaries of the district, including the boundaries of benefit zones, proposed for establishment or extension in a manner sufficient to identify the affected property and businesses included, which may be made by reference to any plan or map that is on file with the clerk. The boundaries of a proposed property assessment district shall not overlap with the boundaries of another existing property assessment district created pursuant to this part. This part does not prohibit the boundaries of a district created pursuant to this part to overlap with other assessment districts established pursuant to other provisions of law, including, but not limited to, the Parking and Business Improvement Area Law of 1989 (Part 6 (commencing with Section 36500)). This part does not prohibit the boundaries of a business assessment district created pursuant to this part to overlap with another business assessment district created pursuant to this part. This part does not prohibit the boundaries of a business assessment district created pursuant to this part to overlap with a property assessment district created pursuant to this part.

(d) The improvements, maintenance, and activities proposed for each year of operation of the district and the estimated cost thereof. If the improvements, maintenance, and activities proposed for each year of operation are the same, a description of the first year's proposed improvements, maintenance, and activities

and a statement that the same improvements, maintenance, and activities are proposed for subsequent years shall satisfy the requirements of this subdivision.
(e) The total annual amount proposed to be expended for improvements, maintenance, or activities, and debt service in each year of operation of the district. If the assessment is levied on businesses, this amount may be estimated based upon the assessment rate. If the total annual amount proposed to be expended in each year of operation of the district is not significantly different, the amount proposed to be expended in the initial year and a statement that a similar amount applies to subsequent years shall satisfy the requirements of this subdivision.
(f) The proposed source or sources of financing, including the proposed method and basis of levying the assessment in sufficient detail to allow each property or business owner to calculate the amount of the assessment to be levied against their property or business. The plan also shall state whether bonds will be issued to finance improvements.
(g) The time and manner of collecting the assessments.
(h) The specific number of years in which assessments will be levied. In a new district, the maximum number of years shall be five. Upon renewal, a district shall have a term not to exceed 10 years. Notwithstanding these limitations, a district created pursuant to this part to finance capital improvements with bonds may levy assessments until the maximum maturity of the bonds. The management district plan may set forth specific increases in assessments for each year of operation of the district.
(i) The proposed time for implementation and completion of the management district plan.
(j) Any proposed rules and regulations to be applicable to the district.
(k)

(1) A list of the properties or businesses to be assessed, including the assessor's parcel numbers for properties to be assessed, and a statement of the method or methods by which the expenses of a district will be imposed upon benefited real property or businesses, in proportion to the benefit received by the property or business, to defray the cost thereof.
(2) In a property-based district, the proportionate special benefit derived by each identified parcel shall be determined exclusively in relationship to the entirety of the capital cost of a public improvement, the maintenance and operation expenses of a public improvement, or the cost of the activities. An assessment shall not be imposed on any parcel that exceeds the reasonable cost of the proportional special benefit conferred on that parcel. Only special benefits are assessable, and a property-based district shall separate the general benefits, if any, from the special benefits conferred on a parcel. Parcels within a property-based district that are owned or used by any city, public agency, the State of California, or the United States shall not be exempt from assessment unless the governmental entity can demonstrate by clear and convincing evidence that those publicly owned parcels in fact receive no special benefit. The value of any incidental, secondary, or collateral effects that arise from the improvements, maintenance, or activities of a property-based district and that benefit property or persons not assessed shall not be deducted from the entirety of the cost of any special benefit or affect the proportionate special benefit derived by each identified parcel.
(3) In a property-based district, properties throughout the district may share the same special benefits. In a district with boundaries that define which parcels are to receive improvements, maintenance, or activities over and above those services provided by the city, the improvements, maintenance, or activities themselves may constitute a special benefit. The city may impose assessments that are less than the proportional special benefit conferred, but shall not impose assessments that exceed the reasonable costs of the proportional special benefit conferred. Because one or more parcels pay less than the special benefit conferred does not necessarily mean that other parcels are assessed more than the reasonable cost of their special benefit.

(l) In a property-based district, a detailed engineer's report prepared by a registered professional engineer certified by the State of California supporting all assessments contemplated by the management district plan.
(m) Any other item or matter required to be incorporated therein by the city council.

<u>36623.</u> Procedure to levy assessment

(a) If a city council proposes to levy a new or increased property assessment, the notice and protest and hearing procedure shall comply with Section 53753 of the Government Code.
(b) If a city council proposes to levy a new or increased business assessment, the notice and protest and hearing procedure shall comply with Section 54954.6 of the Government Code, except that notice shall be

mailed to the owners of the businesses proposed to be assessed. A protest may be made orally or in writing by any interested person. Every written protest shall be filed with the clerk at or before the time fixed for the public hearing. The city council may waive any irregularity in the form or content of any written protest. A written protest may be withdrawn in writing at any time before the conclusion of the public hearing. Each written protest shall contain a description of the business in which the person subscribing the protest is interested sufficient to identify the business and, if a person subscribing is not shown on the official records of the city as the owner of the business, the protest shall contain or be accompanied by written evidence that the person subscribing is the owner of the business or the authorized representative. A written protest that does not comply with this section shall not be counted in determining a majority protest. If written protests are received from the owners or authorized representatives of businesses in the proposed district that will pay 50 percent or more of the assessments proposed to be levied and protests are not withdrawn so as to reduce the protests to less than 50 percent, no further proceedings to levy the proposed assessment against such businesses, as contained in the resolution of intention, shall be taken for a period of one year from the date of the finding of a majority protest by the city council.

(c) If a city council proposes to conduct a single proceeding to levy both a new or increased property assessment and a new or increased business assessment, the notice and protest and hearing procedure for the property assessment shall comply with subdivision (a), and the notice and protest and hearing procedure for the business assessment shall comply with subdivision (b). If a majority protest is received from either the property or business owners, that respective portion of the assessment shall not be levied. The remaining portion of the assessment may be levied unless the improvement or other special benefit was proposed to be funded by assessing both property and business owners.

36624. Changes to proposed assessments

At the conclusion of the public hearing to establish the district, the city council may adopt, revise, change, reduce, or modify the proposed assessment or the type or types of improvements, maintenance, and activities to be funded with the revenues from the assessments. Proposed assessments may only be revised by reducing any or all of them. At the public hearing, the city council may only make changes in, to, or from the boundaries of the proposed property and business improvement district that will exclude territory that will not benefit from the proposed improvements, maintenance, and activities. Any modifications, revisions, reductions, or changes to the proposed assessment district shall be reflected in the notice and map recorded pursuant to Section 36627.

36625. Resolution of formation

(a) If the city council, following the public hearing, decides to establish a proposed property and business improvement district, the city council shall adopt a resolution of formation that shall include, but is not limited to, all of the following:

(1) A brief description of the proposed improvements, maintenance, and activities, the amount of the proposed assessment, a statement as to whether the assessment will be levied on property, businesses, or both within the district, a statement on whether bonds will be issued, and a description of the exterior boundaries of the proposed district, which may be made by reference to any plan or map that is on file with the clerk. The descriptions and statements need not be detailed and shall be sufficient if they enable an owner to generally identify the nature and extent of the improvements, maintenance, and activities and the location and extent of the proposed district.

(2) The number, date of adoption, and title of the resolution of intention.

(3) The time and place where the public hearing was held concerning the establishment of the district.

(4) A determination regarding any protests received. The city shall not establish the district or levy assessments if a majority protest was received.

(5) A statement that the properties, businesses, or properties and businesses in the district established by the resolution shall be subject to any amendments to this part.

(6) A statement that the improvements, maintenance, and activities to be conferred on businesses and properties in the district will be funded by the levy of the assessments. The revenue from the levy of assessments within a district shall not be used to provide improvements, maintenance, or activities outside the district or for any purpose other than the purposes specified in the resolution of intention, as modified by the city council at the hearing concerning establishment of the district. Notwithstanding the foregoing, improvements and activities that must be provided outside the

district boundaries to create a special or specific benefit to the assessed parcels or businesses may be provided, but shall be limited to marketing or signage pointing to the district.

(7) A finding that the property or businesses within the area of the property and business improvement district will be benefited by the improvements, maintenance, and activities funded by the proposed assessments, and, for a property-based district, that property within the district will receive a special benefit.

(8) In a property-based district, the total amount of all special benefits to be conferred on the properties within the property-based district.

(b) The adoption of the resolution of formation and, if required, recordation of the notice and map pursuant to Section 36627 shall constitute the levy of an assessment in each of the fiscal years referred to in the management district plan.

36627. Notice and assessment diagram

Following adoption of the resolution establishing district assessments on properties pursuant to Section 36625, the clerk shall record a notice and an assessment diagram pursuant to Section 3114. No other provision of Division 4.5 (commencing with Section 3100) applies to an assessment district created pursuant to this part.

36628. Establishment of separate benefit zones within district; Categories of businesses

The city council may establish one or more separate benefit zones within the district based upon the degree of benefit derived from the improvements or activities to be provided within the benefit zone and may impose a different assessment within each benefit zone. If the assessment is to be levied on businesses, the city council may also define categories of businesses based upon the degree of benefit that each will derive from the improvements or activities to be provided within the district and may impose a different assessment or rate of assessment on each category of business, or on each category of business within each zone.

36628.5. Assessments on businesses or property owners

The city council may levy assessments on businesses or on property owners, or a combination of the two, pursuant to this part. The city council shall structure the assessments in whatever manner it determines corresponds with the distribution of benefits from the proposed improvements, maintenance, and activities, provided that any property-based assessment conforms with the requirements set forth in paragraph (2) of subdivision (k) of Section 36622.

36629. Provisions and procedures applicable to benefit zones and business categories

All provisions of this part applicable to the establishment, modification, or disestablishment of a property and business improvement district apply to the establishment, modification, or disestablishment of benefit zones or categories of business. The city council shall, to establish, modify, or disestablish a benefit zone or category of business, follow the procedure to establish, modify, or disestablish a property and business improvement district.

36630. Expiration of district; Creation of new district

If a property and business improvement district expires due to the time limit set pursuant to subdivision (h) of Section 36622, a new management district plan may be created and the district may be renewed pursuant to this part.

CHAPTER 3: Assessments

36631. Time and manner of collection of assessments; Delinquent payments

The collection of the assessments levied pursuant to this part shall be made at the time and in the manner set forth by the city council in the resolution levying the assessment. Assessments levied on real property may be collected at the same time and in the same manner as for the ad valorem property tax, and may provide for the same lien priority and penalties for delinquent payment. All delinquent payments for assessments levied pursuant to this part may be charged interest and penalties.

36632. Assessments to be based on estimated benefit; Classification of real property and businesses; Exclusion of residential and agricultural property

(a) The assessments levied on real property pursuant to this part shall be levied on the basis of the estimated benefit to the real property within the property and business improvement district. The city council may classify properties for purposes of determining the benefit to property of the improvements and activities provided pursuant to this part.
(b) Assessments levied on businesses pursuant to this part shall be levied on the basis of the estimated benefit to the businesses within the property and business improvement district. The city council may classify businesses for purposes of determining the benefit to the businesses of the improvements and activities provided pursuant to this part.
(c) Properties zoned solely for residential use, or that are zoned for agricultural use, are conclusively presumed not to benefit from the improvements and service funded through these assessments, and shall not be subject to any assessment pursuant to this part.

36633. Time for contesting validity of assessment

The validity of an assessment levied under this part shall not be contested in an action or proceeding unless the action or proceeding is commenced within 30 days after the resolution levying the assessment is adopted pursuant to Section 36625. An appeal from a final judgment in an action or proceeding shall be perfected within 30 days after the entry of judgment.

36634. Service contracts authorized to establish levels of city services

The city council may execute baseline service contracts that would establish levels of city services that would continue after a property and business improvement district has been formed.

36635. Request to modify management district plan

The owners' association may, at any time, request that the city council modify the management district plan. Any modification of the management district plan shall be made pursuant to this chapter.

36636. Modification of plan by resolution after public hearing; Adoption of the resolution of intention

(a) Upon the written request of the owners' association, the city council may modify the management district plan after conducting one public hearing on the proposed modifications. The city council may modify the improvements and activities to be funded with the revenue derived from the levy of the assessments by adopting a resolution determining to make the modifications after holding a public hearing on the proposed modifications. If the modification includes the levy of a new or increased assessment, the city council shall comply with Section 36623. Notice of all other public hearings pursuant to this section shall comply with both of the following:
(1) The resolution of intention shall be published in a newspaper of general circulation in the city once at least seven days before the public hearing.
(2) A complete copy of the resolution of intention shall be mailed by first class mail, at least 10 days before the public hearing, to each business owner or property owner affected by the proposed modification.
(b) The city council shall adopt a resolution of intention which states the proposed modification prior to the public hearing required by this section. The public hearing shall be held not more than 90 days after the adoption of the resolution of intention.

36637. Reflection of modification in notices recorded and maps

Any subsequent modification of the resolution shall be reflected in subsequent notices and maps recorded pursuant to Division 4.5 (commencing with Section 3100), in a manner consistent with the provisions of Section 36627.

36638. Assessment as government improvised fee on Civ C § 1770 transaction [Operative July 1, 2024]

(a) A business assessment pursuant to this part is a fee imposed by a government on the transaction for purposes of paragraph (29) of subdivision (a) of Section 1770 of the Civil Code.
(b) This section shall become operative on July 1, 2024.

CHAPTER 3.5 Financing

36640. Bonds authorized; Procedure; Restriction on reduction or termination of assessments

(a) The city council may, by resolution, determine and declare that bonds shall be issued to finance the estimated cost of some or all of the proposed improvements described in the resolution of formation adopted pursuant to Section 36625, if the resolution of formation adopted pursuant to that section provides for the issuance of bonds, under the Improvement Bond Act of 1915 (Division 10 (commencing with Section 8500)) or in conjunction with Marks–Roos Local Bond Pooling Act of 1985 (Article 4 (commencing with Section 6584) of Chapter 5 of Division 7 of Title 1 of the Government Code). Either act, as the case may be, shall govern the proceedings relating to the issuance of bonds, although proceedings under the Bond Act of 1915 may be modified by the city council as necessary to accommodate assessments levied upon business pursuant to this part.

(b) The resolution adopted pursuant to subdivision (a) shall generally describe the proposed improvements specified in the resolution of formation adopted pursuant to Section 36625, set forth the estimated cost of those improvements, specify the number of annual installments and the fiscal years during which they are to be collected. The amount of debt service to retire the bonds shall not exceed the amount of revenue estimated to be raised from assessments over 30 years.

(c) Notwithstanding any other provision of this part, assessments levied to pay the principal and interest on any bond issued pursuant to this section shall not be reduced or terminated if doing so would interfere with the timely retirement of the debt.

CHAPTER 4. Governance

36650. Report by owners' association; Approval or modification by city council

(a) The owners' association shall cause to be prepared a report for each fiscal year, except the first year, for which assessments are to be levied and collected to pay the costs of the improvements, maintenance, and activities described in the report. The owners' association's first report shall be due after the first year of operation of the district. The report may propose changes, including, but not limited to, the boundaries of the property and business improvement district or any benefit zones within the district, the basis and method of levying the assessments, and any changes in the classification of property, including any categories of business, if a classification is used.

(b) The report shall be filed with the clerk and shall refer to the property and business improvement district by name, specify the fiscal year to which the report applies, and, with respect to that fiscal year, shall contain all of the following information:

(1) Any proposed changes in the boundaries of the property and business improvement district or in any benefit zones or classification of property or businesses within the district.

(2) The improvements, maintenance, and activities to be provided for that fiscal year.

(3) An estimate of the cost of providing the improvements, maintenance, and activities for that fiscal year.

(4) The method and basis of levying the assessment in sufficient detail to allow each real property or business owner, as appropriate, to estimate the amount of the assessment to be levied against his or her property or business for that fiscal year.

(5) The estimated amount of any surplus or deficit revenues to be carried over from a previous fiscal year.

(6) The estimated amount of any contributions to be made from sources other than assessments levied pursuant to this part.

(c) The city council may approve the report as filed by the owners' association or may modify any particular contained in the report and approve it as modified. Any modification shall be made pursuant to Sections 36635 and 36636.

The city council shall not approve a change in the basis and method of levying assessments that would impair an authorized or executed contract to be paid from the revenues derived from the levy of assessments, including any commitment to pay principal and interest on any bonds issued on behalf of the district.

36651. Designation of owners' association to provide improvements, maintenance, and activities

The management district plan may, but is not required to, state that an owners' association will provide the improvements, maintenance, and activities described in the management district plan. If the management district plan designates an owners' association, the city shall contract with the designated nonprofit corporation to provide services.

CHAPTER 5. Renewal

36660. Renewal of district; Transfer or refund of remaining revenues; District term limit

(a) Any district previously established whose term has expired, or will expire, may be renewed by following the procedures for establishment as provided in this chapter.
(b) Upon renewal, any remaining revenues derived from the levy of assessments, or any revenues derived from the sale of assets acquired with the revenues, shall be transferred to the renewed district. If the renewed district includes additional parcels or businesses not included in the prior district, the remaining revenues shall be spent to benefit only the parcels or businesses in the prior district. If the renewed district does not include parcels or businesses included in the prior district, the remaining revenues attributable to these parcels shall be refunded to the owners of these parcels or businesses.
(c) Upon renewal, a district shall have a term not to exceed 10 years, or, if the district is authorized to issue bonds, until the maximum maturity of those bonds. There is no requirement that the boundaries, assessments, improvements, or activities of a renewed district be the same as the original or prior district.

CHAPTER 6. Disestablishment

36670. Circumstances permitting disestablishment of district; Procedure

(a) Any district established or extended pursuant to the provisions of this part, where there is no indebtedness, outstanding and unpaid, incurred to accomplish any of the purposes of the district, may be disestablished by resolution by the city council in either of the following circumstances:
(1) If the city council finds there has been misappropriation of funds, malfeasance, or a violation of law in connection with the management of the district, it shall notice a hearing on disestablishment.
(2) During the operation of the district, there shall be a 30-day period each year in which assessees may request disestablishment of the district. The first such period shall begin one year after the date of establishment of the district and shall continue for 30 days. The next such 30-day period shall begin two years after the date of the establishment of the district. Each successive year of operation of the district shall have such a 30-day period. Upon the written petition of the owners or authorized representatives of real property or the owners or authorized representatives of businesses in the district who pay 50 percent or more of the assessments levied, the city council shall pass a resolution of intention to disestablish the district. The city council shall notice a hearing on disestablishment.
(b) The city council shall adopt a resolution of intention to disestablish the district prior to the public hearing required by this section. The resolution shall state the reason for the disestablishment, shall state the time and place of the public hearing, and shall contain a proposal to dispose of any assets acquired with the revenues of the assessments levied within the property and business improvement district. The notice of the hearing on disestablishment required by this section shall be given by mail to the property owner of each parcel or to the owner of each business subject to assessment in the district, as appropriate. The city shall conduct the public hearing not less than 30 days after mailing the notice to the property or business owners. The public hearing shall be held not more than 60 days after the adoption of the resolution of intention.

36671. Refund of remaining revenues upon disestablishment or expiration without renewal of district; Calculation of refund; Use of outstanding revenue collected after disestablishment of district

(a) Upon the disestablishment or expiration without renewal of a district, any remaining revenues, after all outstanding debts are paid, derived from the levy of assessments, or derived from the sale of assets acquired with the revenues, or from bond reserve or construction funds, shall be refunded to the owners of the property or businesses then located and operating within the district in which assessments were levied by

applying the same method and basis that was used to calculate the assessments levied in the fiscal year in which the district is disestablished or expires. All outstanding assessment revenue collected after disestablishment shall be spent on improvements and activities specified in the management district plan.
(b) If the disestablishment occurs before an assessment is levied for the fiscal year, the method and basis that was used to calculate the assessments levied in the immediate prior fiscal year shall be used to calculate the amount of any refund.

APPENDIX 2 – ASSESSED BUSINESSES

HOTEL	DBA	ADDRESS	City
Airport Stay Motel		1211 North Grove Avenue	Ontario
American Inn		755 North Euclid Avenue	Ontario
Ayres Inn & Suites at the Mills Mall		4395 Ontario Mills Parkway	Ontario
Ayres Suites at the Mills Mall		4370 Mills Circle	Ontario
Azure Hotel & Suites Ontario Airport		1945 East Holt Boulevard	Ontario
Baymont Inn & Suite Ontario		1655 East 4th Street	Ontario
Best Western Ontario Airport		209 North Vineyard Avenue	Ontario
Candlewood Suites		1818 East Holt Boulevard	Ontario
Capri Inn		1217 East Holt Boulevard	Ontario
Comfort Inn & Suites		3333 Shelby Drive	Ontario
Comfort Suites		1811 E. Holt Blvd.	Ontario
Country Inn		2359 South Grove Avenue	Ontario
Country Inn & Suites - Ontario Mills		4674 E. Ontario Mills Pkwy	Ontario
Days Inn		1405 East 4th Street	Ontario
Doubletree by Hilton Ontario Airport		222 North Vineyard Avenue	Ontario
Econo Inn (Rodeway Inn)		724 South San Antonio Avenue	Ontario
Economy Inn		2301 South Euclid Avenue	Ontario
Element Ontario		900 Via Piemonte	Ontario
Embassy Suites Ontario		3663 East Guasti Road	Ontario
Express Inn & Suites		1150 North Grove Avenue	Ontario
Extended Stay America #911		3990 East Inland Empire Boulevard	Ontario
Fairfield Inn by Marriott		3201 East Centrelake Drive	Ontario
Folk Inn Ontario Airport		204 North Vineyard Avenue	Ontario
Hampton Inn & Suites - Ontario		4500 E Mills Circle / PO Box 2186 Mo	Ontario
Holiday Inn Express & Suites Ontario		2280 South Haven Ave.	Ontario
Holiday Inn Ontario		2155 E. Convention Center Way	Ontario
Hotel d'Lins		3400 East Shelby Street	Ontario
Hotel Hacienda		2425 South Archibald Avenue	Ontario
Hotel Seville		2441 South Euclid Avenue	Ontario
Hyatt Place Ontario		4760 East Mills Circle	Ontario
La Quinta Inn & Suites #170		3555 East Inland Empire Boulevard	Ontario
Mayfair Inn		1120 East Holt Boulevard	Ontario
Mission Motel		1514 W. Mission Boulevard	Ontario
Motel 6 Ontario Airport		1560 East 4th Street	Ontario
Mountain Inn		2289 South Mountain Avenue	Ontario
Ontario Airport Hotel		700 North Haven Avenue	Ontario
Ontario Airport Inn		1801 East G Street	Ontario
Ontario Gateway Hotel		2200 East Holt Boulevard	Ontario

Ontario Golden Bear Inn		661 West Holt Boulevard	Ontario
Ontario SpringHi 11 Suites		3595 E. Guasti Rd.	Ontario
PepperTree Motel		1241 East Holt Boulevard	Ontario
Quality Inn Ontario Airport		514 North Vineyard Avenue	Ontario
Ramada Ontario Airport		1241 East G Street	Ontario
Rancho Motel		1440 West Mission Boulevard	Ontario
Red Carpet Motel		1117 North Baker Avenue	Ontario
Residence Inn Ontario		2025 East Convention Center Way	Ontario
Rodeway Inn - Ontario Mills Mall		4075 East Guasti Road	Ontario
Sands Motel		1240 West Mission Boulevard	Ontario
Sheraton Ontario Airport		429 North Vineyard Avenue	Ontario
Star Motel		1250 West Mission Boulevard	Ontario
Studio 6		231 North Vineyard Avenue	Ontario
Konomi Marie LLC		2164 E Alondra St	Ontario
Aloft Ontario-Rancho Cucamonga	Aloft Ontario-Rancho Cucamonga	10480 4TH ST	Rancho Cucamonga, Ca 91730-5893
Best Western Plus Heritage Inn Ontario Rancho Cucamonga	Best Western Heritage Inn	8179 SPRUCE AVE	Rancho Cucamonga, Ca 91730-3818
Fairfield Inn & Suites by Marriott Ontario Rancho Cucamonga	Fairfield Inn & Suites	9550 PITTSBURGH AVE	Rancho Cucamonga, Ca 91730-6007
Four Points by Sheraton Ontario-Rancho Cucamonga	Four Points By Sheraton Rancho Cucamonga	11960 FOOTHILL BLVD	Rancho Cucamonga, Ca 91739-9370
Hampton Inn & Suites Ontario Rancho Cucamonga	Hampton Inn & Suites Rancho Cucamonga	11669 FOOTHILL BLVD	Rancho Cucamonga, Ca 91730
Holiday Inn Express & Suites Ontario Airport-Mills Mall, an IHG Hotel	Holiday Inn Express Hotel & Suites	9589 MILLIKEN AVE	Rancho Cucamonga, Ca 91730
Courtyard Ontario Rancho Cucamonga	Rancho Cucamonga Courtyard Inn	11525 MISSION VISTA DR	Rancho Cucamonga, Ca 91730-6085
Hilton Garden Inn Ontario/Rancho Cucamonga	Rancho Cucamonga Garden Inn	11481 MISSION VISTA DR	Rancho Cucamonga, Ca 91730-6056
Homewood Suites by Hilton Ontario-Rancho Cucamonga	Rancho Cucamonga Homewood Inn	11433 MISSION VISTA DR	Rancho Cucamonga, Ca 91730-6056
Residence Inn Ontario/Rancho Cucamonga	Residence Inn Ontario/Rancho Cucamonga	9299 HAVEN AVE	Rancho Cucamonga, Ca 91730-5400
TownePlace Suites Ontario Airport	Towneplace Suites By Marriott	9625 MILLIKEN AVE	Rancho Cucamonga, Ca 91730
Kittitod Pongvattanasomporn		6767 RAMONA AVE	Alta Loma Ca 91701
FENG ZHU YI		4345 S Amherst Ave	Ontario CA91762
JENNY LI		3954 E Catalina St	Ontario CA 91761
YANJUN YANG		9370 Valley View St	Rancho Cucamonga California 91737
WOLE A ADEGOKE		6229 LAUREL BLOSSOM PL	Rancho Cucamonga California 91739
HAIFENG WANG		13215 River Oaks Dr	Rancho Cucamonga CA 91739
	DX FAMILY TRUST	750 W Hollowell St	Ontario CA 91762

	CHEAN NANCY & MICHAEL FAM TR	908 W 4TH ST	Ontario CA 91762
HONGWEI SHI		9596 SEASONS DR	Rancho Cucamonga Ca 91730
KENNY CHEN		10311 FINCH ST	Rancho Cucamonga CA 91737
JIAHAO WU		2938 E Arbor Ln	Ontario CA 91762
WEIJIE XIE		501 E Princeton St	Ontario CA 91764
XIAOGANG SHI		2633 E Clara Ln	Ontario CA 91762
JOANNA D TSAI		11450 Church Street 9	Rancho Cucamonga CA 91730
KE-JIA YU		3255 S Newton Ave	Ontario CA 91761
HAICHUCK ZHANG		9743 Woodleaf Dr	Rancho Cucamonga CA 91737
MICHELLE QIAOLI XU		1985 E Harvard Privado A	Ontario CA 91764
LIU DONGMEI		4014 E Catalina St	Ontario CA 91761
JIAMING LIU		768 W H St	Ontario CA 91762
KEITH DION BRATTON		944 Divino Privado N 64	Ontario CA 91764
	205 N EUCLID LLC	203 N Euclid Ave 1B	Ontario CA 91762
JOSEPH XANO WANG		1749 E Yale St	Ontario CA 91764
	Sol Investments & Solutions Inc	720 N ALAMEDA AVE	Ontario CA 91764
GEORGINA MILANES FONTANILLA		9472 Sunglow Ct	Rancho Cucamonga CA 91730
LI LI		552 E Hawthorne St	Ontario CA 91764
	YANVESTMENT	1924 S Helen Ave	Ontario CA91762
QIHE CHEN		543 W Francis St	Ontario CA 91762
RICHARD OPPELAAR		551 E H St	Ontario CA 91764
SEN LI		1403 N Amador Ave	Ontario CA 91764
YUSHENG NI		9387 Shadowgrove Dr	Rancho Cucamonga California 91730
MICHELLE MA		1369 S EUCLID AVE	Ontario CA 91762
	YU & CHIU FAMILY TRUST 03/06/08	10663 WILDROSE DR	Rancho Cucamonga CA 91730
ZILIANG GU		1711 E Hawthorne St	Ontario CA 91764
JIANLI WANG		10663 ORANGE BLOSSOM DR	Rancho Cucamonga CA 91730
HONG BAO		9153 CANDLEWOOD ST	Rancho Cucamonga CA 91730
KUN SHI		11002 Getaway Dr	Rancho Cucamonga California 91730
XIANXING JIANG		6132 CELESTITE AV	Rancho Cucamonga CA 91701
MAT HO		13062 MALVASIA WAY	Rancho Cucamonga CA 91739-9449
AARON LI		2720 Eagle Creek Pl	Ontario CA 91761
HANA A AL JABARI		11700 BRANDYWINE PL	Rancho Cucamonga CA 91730
LI LI		558 E HAWTHORNE ST A	Ontario CA 91764
HONG CHU		7676 Marine Ave	Rancho Cucamonga CA 91730

XIAO HUANG		4061 E LUNA PASEO 31	Ontario CA 91764
RUBY Khanal		4491 S GRANT PASEO	Ontario CA 91762
	Metaverse Kingdom Castle LLC	3099 E Arbor Ln	Ontario CA 91762
BING JIANG		2614 GARFIELD AVE	Ontario CA91761
WENQING CUI		846 W CHESTNUT ST	Ontario Ca 91762
MEI LI		2819 S Euclid Ave	Ontario CA 91761
LIUTAO TANG		8510 Monte Vista St	Alta Loma California 91701
ZIHUAN LIU		1125 East E Street	Ontario CA 91764
CHUNHUA LI		2476 Salem St	Ontario CA91761
BOWEN LI		608 E Joseph Privado	Ontario CA 91761
BRANDI GREWAL		6009 JADEITE AVE	Alta Loma CA 91737
DEJUN XU		5400 Stoneview Rd	Rancho Cucamonga CA 91739
SHEN KUO HSU		13858 Nash Dr	Rancho Cucamonga CA 91739
MEIRONG DENG		9313 Valley View St	Rancho Cucamonga CA 91737
XIAOFANG XIONG		642 W H St	Ontario CA 91762
WING LUN NG		734 E J ST	Ontario CA 91764
YUGUANG YUAN		3275 E BUTTERFLY LN	Ontario CA 91762
PING LUO		6235 VALINDA AVE	Rancho Cucamonga CA 91737
	GARDUNO MARIA RODRIGUEZ LIV TR 9/9	2107 S Euclid Ave	Ontario CA 91762
XIAOLING YU		11159 ST TROPEZ DR	Rancho Cucamonga California 91730
	CLEMONS CARMEN REVOCABLE TRUST 4/20	5219 Cartilla Ave	Rancho Cucamonga CA 91737
BENNY ANTHONY RAMIREZ AGUILAR		1446 N Campus Ave	Ontario CA 91764
JOSEPH C NG		11241 Terra Vista Pkwy	Rancho Cucamonga CA 91730
	CRT FAMILY TRUST 2/5/13	1105 S Elderberry Ave	Ontario CA 91762
	XU YANHUA FAMILY TRUST	709 W CEDAR ST	Ontario CA 91762
AIDA SEGURA		2902 Palomino Ct	Ontario CA 91761
ALLEN PENG		541 N Vine Ave	Ontario CA 91762
JORGE RAFAEL GUERRERO MAYO		13178 CHATHAM DR	Rancho Cucamonga CA 91739
Wayne Tung		3739 Pinto Pl	Ontario CA 91761
Canden HEUTON	HEUTON REVOCABLE LIVING TRUST 4/17/2	2637 S Quaker Ridge Pl	Ontario CA 91761
	D & R TRUST	3674 S HYCHE AVE	Ontario CA 91761
YAO CHEN		12258 MOUNTAIN ASH CT	Etiwanda CA 91739
YIQIAN ZHOU		213 E F ST	Ontario CA 91764
MAURICIO GARCIA RECILLAS		540 E D St	Ontario CA 91764
YAN RONG ZHENG		8960 LARAMIE DR	RANCHO CUCAMONGA CA 91737

KATHY A MADISON		3266 Sweetwater Dr	Ontario CA 91761
	STEVENS FAMILY TRUST 1/4/19	4869 S MONARCH PL	Ontario Ca 91762
	IWINI SURROGACY INC	1153 Whittlers Pl	Ontario CA 91762
XIN ZUO		2492 E WILLIAMSBURG LN	Ontario Ca 91761
ZHIQIANG QI		9206 Placer St	Rancho Cucamonga CA 91730
CHRISTIAN TAI		3684 Hyche Ave	Ontario CA 91761
FRANCISCO PILA		300 N Allyn Ave	Ontario CA 91764
	CAI LIVING TRUST	6322 Semillon Pl	Rancho Cucamonga CA 91737
HENRY KE		2238 Loggers Ln	Ontario CA 91762
	HDK GROUP LLC	2440 E Salem St	Ontario CA 91761
CHU-JAN CHENG		10460 Alta Loma Dr	Rancho Cucamonga CA 91737
MINA MICHAEL		2638 S CALAVERAS PL	Ontario Ca 91761
MICHELE CHADEAYNE		219 E GRANADA CT	Ontario Ca 91764
LAI YIM WONG		315 N Marin Privado	Ontario CA 91764
	Armendariz Family Living TR 12/16/22	2632 E Dunes St	Ontario CA 91761
ZIYOU HUANG		9553 HAMMOCK PL	RANCHO CUCAMONGA CA 91730
ANNETTE DUSSETT		11149 Summerside Ln	Rancho Cucamonga CA 91701
LAI YIM WONG		6584 Vianza Pl	Rancho Cucamonga CA 91701
YING REN		9703 La Vine Ct	Rancho Cucamonga CA 91701
BENJAMIN BINLING CHEN		2246 Loggers Ln	Ontario CA 91762
WING LUN NG		2242 S Augusta Pl	Ontario CA 91761
WENDY ELIZABETH BELTRAN		735 N Imperial Ave	Ontario CA 91764
DANIEL VASQUEZ		11618 Mt Hood Ct	Rancho Cucamonga California 91737
ABEL MORA		8890 Church St	Rancho Cucamonga CA 91730
JUMING SUN		9821 La Vine Ct	Rancho Cucamonga CA 91701
	Moreno Family Trust 10/27/23	951 E D ST	Ontario CA 91764
WEI XIE		1456 E Merion Ct	Ontario CA 91761
	Cheung Family Revocable Trust 9/19/1	638 W Harvard Pl	Ontario CA 91762
ABEL II MORA		223 S Bermuda Dunes St	Ontario CA 91762
XIAOYU ZHANG		1824 S Fern Ave	Ontario CA 91762
I-CHUN CHEN		604 W Bonnie Brae Ct	Ontario CA 91762
BINGWU GENG		559 E ROSEWOOD CT	Ontario CA 91764
JUNG KAI LAI		6868 Aberdeen Ct	Rancho Cucamonga CA 91739
MARIO PEREZ		1453 E RIVERSIDE DR	Ontario Ca 91761
	Vandermeer Alan & Isabel Rev TR 9/2	6689 Sevilla Pl	Rancho Cucamonga CA 91739

JIA WANG		1013 S EUCLID AVE	Ontario Ca 91762
YANYING SUN		5595 Malachite Ave	Alta Loma CA 91737
NADINE ROUFAIL SAMAAN		12183 Appian Dr	Rancho Cucamonga CA 91739
ANGEL T TONGCO		3159 Clover Ln	Ontario CA 91761
JIANLI WANG		8602 Stoneside Dr	Rancho Cucamonga CA 91730
HOLLY QIAOYI HUANG		3342 S NEWTON AVE	Ontario CA 91761
SHARIF S WAFFIN		9404 Somerset Dr	Rancho Cucamonga CA 91701
MENG-HSIEN SUN		715 E Boxwood Ct	Ontario CA 91761
CATHY WANG		105 E Rosewood Ct	Ontario CA 91764
GABRIEL SANCHEZ		1138 S Greenwood Ave	Ontario CA 91761
KRISTINE SUZANNE ESCUJURI		7710 EASTWOOD AVE	Rancho Cucamonga CA 91730
HARDY NGUYEN		12409 HARWICK DR	Rancho Cucamonga Ca 91739
CRYSTAL EARWOOD		6963 SHAMROCK LN	ALTA LOMA CA 91701
DEYANIRA REQUENES		9949 Meadowood Dr	Rancho Cucamonga California 91737
RAQUEL BIANCA ACOSTA		1159 W E St	Ontario CA 91762
JINGTAO GAO		5090 S CENTENNIAL CIR EAST	Ontario CA 91672
JILL HUANG WONG		321 E Maple St	Ontario CA 91761
JIASHUN JI		2714 S Garfield Ave	Ontario CA 91761
GEORGINA MILANES FONTANILLA		9472 Sunglow Ct	Rancho Cucamonga California 91730
RUI JIAN		2942 S Halton	Ontario CA 91761
WING LUN NG		1952 E Brookside Dr	Ontario CA 91761
JOSEPH XANO & ADELE REV T WANG & TAN		926 W HAWTHORNE ST	Ontario CA 91762
	Cheung Family Revocable Trust 8/19/1	845 Virginia Ave	Ontario CA 91764
DARRYL R LEVESQUE		1016 E I St	Ontario CA 91764
MICHAEL WILLIAMS		6351 CARNABY CT	Rancho Cucamonga CA 91739
DO-YOUNG PARK		8623 Adega Dr	Rancho Cucamonga California 91730
	205 N EUCLID LLC	203 N Euclid Ave 8	Ontario CA 91762
	ICE BLUE LLC	1672 E Harvard Pl A	Ontario CA 91764
JINGTAO GAO		5090 S CENTENNIAL CIR	Ontario CA 91762
MAJID REZA ZEREHI		740 Camalot Ct	Ontario CA 91762
GUANG SHOU LIN		1609 E DEODAR ST	Ontario CA 91764
HAIZHU LIN		4835 S Monarch Pl	Ontario CA 91762
HAO ZHANG		7032 Avenida Leon	Rancho Cucamonga CA 91701
WEICE CHEN		12792 N Rim Way	Rancho Cucamonga California 91739
LIAN HUANG		203 W G St	Ontario CA 91762

SHILONG LEI		963 Orchard Ln	Ontario CA 91764
	ROCHA EDUARDO & ADRIANA FAM TR 2/16	7376 Reserve Pl	Rancho Cucamonga California 91739
HARDY NGUYEN		13198 FIRESTONE DR	Rancho Cucamonga CA 91739
FRANCISCO JAVIER MEZA		307 W 6th St	Ontario CA 91762
MICHAEL CARR BARRON		2884 E La Avenida Dr	Ontario CA91761
YUYA SUZUKI		4853 S PRINCE WAY	Ontario CA 91762
YI Y ROBERTS		14066 Glendale Ct	Rancho Cucamonga California 91739
	205 N EUCLID LLC	203 N Euclid Ave 6A	Ontario CA 91762
XIAOMIN XIAN		214 E F St	Ontario CA91764
	USA LUCKY BABY INC	6998 ETIWANDA AVE	Rancho Cucamonga CA 91739
	ICE BLUE LLC	1672 E Harvard Pl B	Ontario CA 91764
DANIEL T JR CLARK		5554 Glen Ridge Ct	Rancho Cucamonga California 91739
	LAZARUS SAINT FAMILY TRUST 12/29/16	7639 Archibald Ave 7645	Rancho Cucamonga California 91730
WENYIN ZHANG		4714 S JASMINE LN	Ontario CA 91762
TAM NGOC NGUYEN		751 W Holt Blvd	Ontario CA 91762
MIGUEL A JR NAJERA		1516 W Stoneridge Ct	Ontario CA 91762
	IM STILL WITH YOU TRUST 5/2/22	4381 Amherst Ave	Ontario CA 91762
JIAHUI HUANG		938 W GRANADA CT	Ontario CA 91762
DANIEL YANG		2465 E Bennington St	Ontario CA 91761
MINYANG WANG		4892 S Jordan Ave	Ontario CA 91762
ALFRED T FONG		2550 E Canterbury Trail	Ontario CA 91761
ERIC JAMES HONANIE		1309 W Mission Dr 81	Ontario CA 91762
	Chan Phoebe Family Trust 2/11/12	704 W Granada Ct	Ontario CA 91762
HAI ZHU		818 W Bonnie Brae Ct	Ontario CA 91762
	Le Doux Jennifer Revocable TR 6-26	125 E H St	Ontario CA 91764
CHESTER GILCHRIST		1004 W PRINCETON ST	Ontario Ca 91762
RAYMOND CALDERON		1004 W YALE ST	Ontario Ca 91762
	RC DICKSON TRUST 7/11/22	723 W Camalot Ct	Ontario CA 91762

Jurisdiction list as of December 2024.

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO , CALIFORNIA, DECLARING ITS INTENTION TO RENEW THE GREATER ONTARIO TOURISM MARKETING DISTRICT (GOTMD) AND FIXING THE TIME AND PLACE OF A PUBLIC MEETING AND A PUBLIC HEARING THEREON AND GIVING NOTICE THEREOF.

WHEREAS, the City of Ontario (City) created the GOTMD on June 4, 2013 by Resolution No. 2013-041 for a five (5) year term; and

WHEREAS, the GOTMD was subsequently renewed on March 15, 2016 for a ten (10) year term, which ends on June 30, 2028; and

WHEREAS, the Property and Business Improvement Law of 1994, Streets and Highways Code § 36600 et seq., authorizes the City to renew business improvement districts for the purposes of promoting tourism; and

WHEREAS, Greater Ontario Convention and Vicitors Bureau dba GOCAL (GOCAL), lodging business owners, and City representatives have met to consider the renewal of the GOTMD; and

WHEREAS, GOCAL has drafted a Management District Plan (Plan) which sets forth the proposed boundary of the GOTMD, a service plan and budget, and a proposed means of governance; and

WHEREAS, the renewed GOTMD includes lodging businesses, including short-term rentals, in the cities of Ontario and Rancho Cucamonga; and

WHEREAS, consent to include lodging businesses in their respective jurisdictions has been granted from the City of Rancho Cucamonga; and

WHEREAS, lodging businesses who will pay more than fifty percent (50%) of the assessment under the GOTMD have petitioned the City Council of the City (Council) to renew the GOTMD.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL THAT:

1. The recitals set forth herein are true and correct.

2. The Council finds that assessed businesses that will pay more than fifty percent (50%) of the assessment proposed in the Plan have signed and submitted petitions in support of the renewal of the GOTMD. The Council accepts the petitions and adopts this Resolution of Intention to renew the GOTMD and to levy an assessment on all lodging businesses within the GOTMD boundaries in accordance with the Property and Business Improvement District Law of 1994.

3. The Council finds that the Plan satisfies all requirements of Streets and Highways Code §36622.

4. The Council declares its intention to renew the GOTMD and to levy and collect assessments on lodging businesses within the GOTMD boundaries pursuant to the Property and Business Improvement District Law of 1994.

5. The GOTMD shall include all lodging businesses, including short-term rentals, existing and in the future, available for public occupancy within the boundaries of the cities of Ontario and Rancho Cucamonga, as shown in the map attached as Exhibit A.

6. The name of the district shall be the Greater Ontario Tourism Marketing District.

7. The annual assessment rate is three percent (3%) of gross short-term sleeping room rental revenue. Because the marketing programs will not promote or seek certain stays, assessments will not be collected on revenue resulting from: stays of more than thirty (30) consecutive days; stays by any Federal officer or employee when on official Federal government business; nor on stays by any officer or employee of a foreign government who is exempt by express provision of Federal law or international treaty.

8. The assessments levied for the GOTMD shall be applied toward Sales & Marketing, Tourism Development & Enhancement, Administration & Advoacy, and Contingency/Renewal programs to market assessed lodging businesses in the GOTMD as tourist, meeting, and event destinations, as described in the Plan. Funds remaining at the end of any year may be used in subsequent years in which GOTMD assessments are levied as long as they are used consistent with the requirements of this resolution and the Plan.

9. The renewed GOTMD will have a ten (10) year term, beginning July 1, 2028, or as soon as possible thereafter, and ending ten (10) years from its start date, unless renewed pursuant to Streets and Highways Code § 36660.

10. Bonds shall not be issued.

11. The time and place for the public meeting to hear testimony on establishing the GOTMD and levying assessments are set for April 15, 2025, at 6:30 PM, or as soon thereafter as the matter may be heard, in the Council Chambers at the City Hall located at 303 East B Street, Ontario, CA 91764.

12. The time and place for the public hearing to establish the GOTMD and the levy of assessments are set for May 20, 2025, at 6:30 PM, or as soon thereafter as the matter may be heard, in the Council Chambers at the City Hall located at 303 East B Street Ontario, CA 91764. The City Clerk is

directed to provide written notice to the assessed businesses subject to assessment of the date and time of the meeting and hearing, and to provide that notice as required by Streets and Highways Code § 36623, no later than April 4, 2025.

13. At the public meeting and hearing the testimony of all interested persons for or against the renewal of the GOTMD may be received. If at the conclusion of the public hearing, there are of record written protests by the owners of the assessed businesses within the renewed GOTMD that will pay fifty percent (50%) or more of the estimated total assessment of the entire GOTMD, no further proceedings to renew the GOTMD shall occur for a period of one (1) year.

14. The complete Plan is on file with the City Clerk and may be reviewed upon request.

15. This resolution shall take effect immediately upon its adoption by the City Council.

The City Clerk of the City of Ontario shall certify as to the adoption of this Resolution.

PASSED, APPROVED, AND ADOPTED this 18th day of March, 2025.

_____
PAUL S. LEON, MAYOR

ATTEST:

_____
SHEILA MAUTZ, CITY CLERK

APPROVED AS TO FORM:

_____
BEST BEST & KRIEGER LLP
CITY ATTORNEY

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO)
CITY OF ONTARIO)

I, SHEILA MAUTZ, City Clerk of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. 2025- was duly passed and adopted by the City Council of the City of Ontario at their regular meeting held March 18, 2025 by the following roll call vote, to wit:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

_____
SHEILA MAUTZ, CITY CLERK

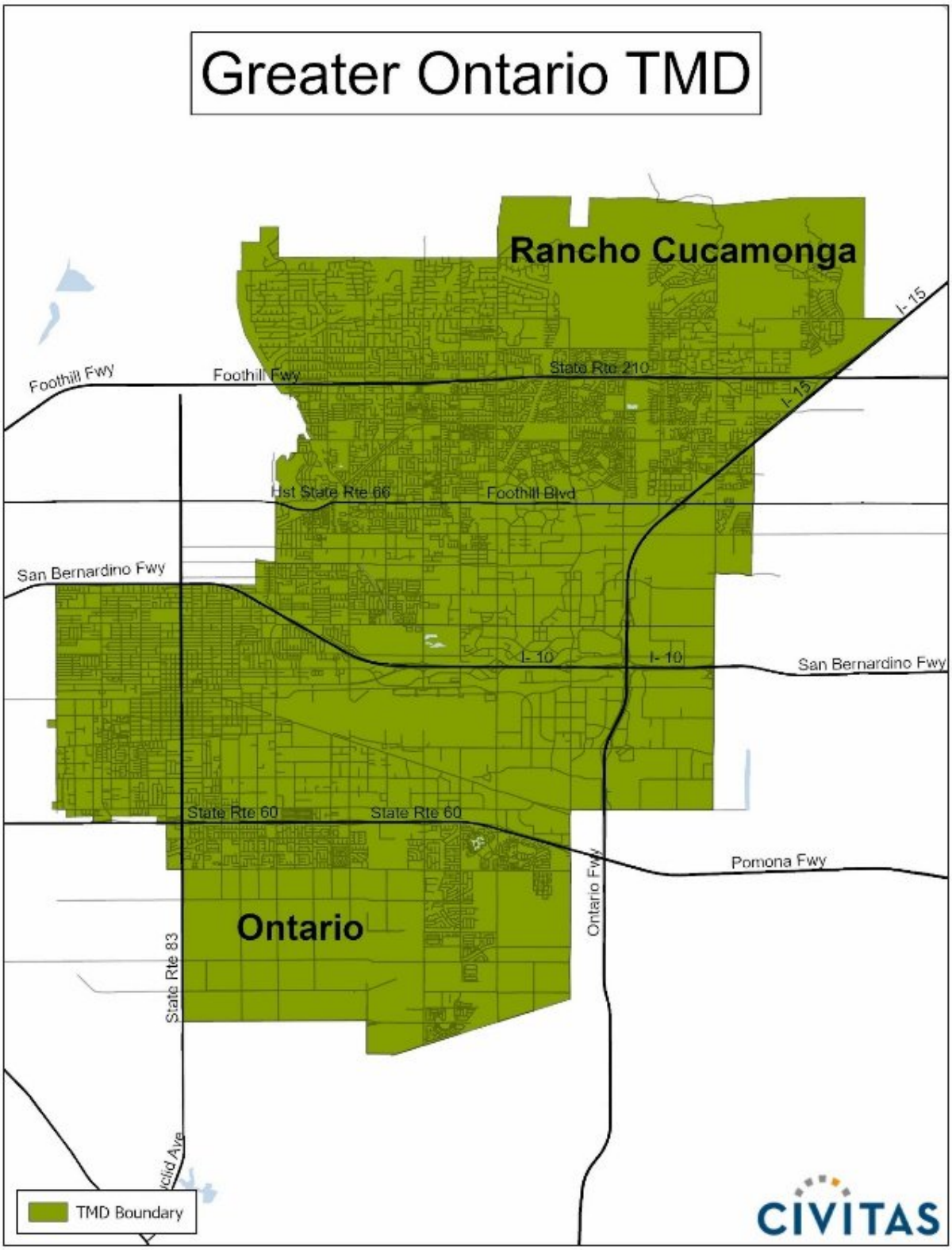
(SEAL)

The foregoing is the original of Resolution No. 2025- duly passed and adopted by the Ontario City Council at their regular meeting held March 18, 2025.

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

EXHIBIT A
District Boundaries



CITY OF ONTARIO *Agenda Report* **March 18, 2025**	**SECTION:** **PUBLIC HEARINGS**
Department: Planning Prepared By: Robert Morales Department: Prepared By: Robert Morales Staff Member Presenting: Rudy Zeledon, Executive Director Community Development Reviewed By: Kimberly Ruddins, Henry Noh Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 17

SUBJECT: **A PUBLIC HEARING TO CONSIDER AN ORDINANCE APPROVING A DEVELOPMENT CODE AMENDMENT, FILE NO. PDCA24-001, TO IMPLEMENT OBJECTIVE DEVELOPMENT AND DESIGN STANDARDS**

RECOMMENDATION: That the City Council introduce and waive further reading of the Ordinance Approving File No. PDCA24-001, a Development Code Amendment, amending the Reference document section of the City's Development Code, to implement Objective Development and Design Standards for multiple-family and mixed-use residential development.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Invest in the Growth and Evolution of the City's Economy
Operate in a Businesslike Manner
Pursue City's Goals and Objectives by Working with Other Governmental Agencies
Focus Resources in Ontario's Commercial and Residential Neighborhoods

FISCAL IMPACT: There is not a direct fiscal impact associated with this action.

BACKGROUND & ANALYSIS: On June 4, 2024, the City Council approved Ordinance No. 3275, an interim Urgency Ordinance that amended the Development Code to establish Objective Development and Design Standards. This action was taken to align with Housing Element Programs 9.19 and 9.21, as well as Government Code Section 65589.5, which mandates local governments to implement objective standards for streamlining housing project approvals while ensuring transparency and consistency. On August 20, 2024, the City Council approved Ordinance No. 3285, which extended Ordinance No. 3275. This extension provided staff with the necessary time to analyze and develop a permanent Ordinance.

The proposed Development Code Amendment is comprised of certain clarifications and revisions to the City of Ontario Development Code, generally described as follows:

- Amending the Reference document section of the City's Development Code, to implement

Objective Development and Design Standards for multiple-family and mixed-use residential development.

The Objective standards refer to clear, measurable criteria such as building height limits, setbacks, and materials, which do not require subjective judgment. In response to these evolving State requirements, the City established more robust Objective Development and Design Standards (ODDS) to streamline housing development approvals and ensure a clear, consistent review process. These standards must be applied to applicable projects in accordance with state laws, including the State Density Bonus Law, Housing Accountability Act, Senate Bill 423 (previously Senate Bill 35), and Senate Bill 330, to promote transparency and facilitate efficient approvals.

The ODDS establishes standards for streamlined ministerial residential projects. All applicable projects under ODDS must adhere to architectural styles outlined in the standards to create unbiased criteria for efficient residential development approvals. ODDS encompass various residential types and establish development and design standards for multi-family and mixed-use areas that currently lack specific standards.

The Ordinance integrates ODDS for multi-family and mixed-use development types, including a compliance checklist and style sheet for various architectural styles. The checklist specifies minimum design requirements, while the style sheets depict both traditional and modern interpretations. Comprehensive numerical standards for setbacks, building heights, and additional criteria are defined for mixed-use and detached multi-family areas, in line with Housing Element Programs 9.19 and 9.21.

On February 25, 2025, the Planning Commission conducted a public hearing to consider the proposed Development Code Amendment. Upon the conclusion of the public hearing, the Planning Commission voted (4-0) to approve Resolution No. PC25-014, recommending that the City Council approve the proposed Development Code Amendment

COMPLIANCE WITH THE ONTARIO PLAN (TOP): The proposed project is consistent with the principles, goals, and policies contained within the Vision, Governance, Policy Plan (General Plan), and City Council priorities components of TOP. Goals and policies of TOP that are furthered by the proposed Development Code Amendment are addressed in the attached Planning Commission backup material.

HOUSING ELEMENT COMPLIANCE: The Project is consistent with the Housing Element of the Policy Plan (general plan) component of TOP, as the project furthers the purposes, principles, goals, and policies of the Housing Element.

ENVIRONMENTAL REVIEW: The proposed Development Code Amendment is exempt from the requirements of the California Environmental Quality Act (CEQA) and the guidelines promulgated thereunder, pursuant to Section 15061(b)(3) of the CEQA Guidelines, in that the activity is covered by the commonsense exemption (general rule) that CEQA applies only to projects that have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA.

CITY OF ONTARIO PLANNING DEPARTMENT

PLANNING COMMISSION AGENDA REPORT

February 25, 2025

303 East B Street, Ontario, California 91764 Phone: 909.395.2036 / Email: PlanningDirector@OntarioCA.gov

FILE NO.: PDCA24-001

SUBJECT: A public hearing to consider a Development Code Amendment amending the Reference document section of the City's Development Code, to implement Objective Development and Design Standards for multiple-family and mixed-use residential development. **City Initiated. City Council action is required.**

RECOMMENDED ACTION: That the Planning Commission consider and adopt a Resolution recommending the City Council approve the Development Code Amendment (File No. PDCA24-001), pursuant to the facts and reasons contained in the staff report and Resolution.

PROJECT SETTING: The proposed Development Code Amendment is of citywide impact, affecting approximately 50 square miles (31,789 acres) of land, which is bordered by Benson Avenue and Euclid Avenue on the west; Interstate 10 Freeway, Eighth Street, and Fourth Street on the north; Etiwanda Avenue and Hamner Avenue on the east; and Merrill Avenue and the San Bernardino County/Riverside County boundary on the south. The City of Ontario is substantially built-out with a mix of residential, commercial, industrial, agricultural, airport, recreational, and institutional/public land uses. According to the latest US Census forecast, the City of Ontario's 2022 estimated population is 179,516 persons and in terms of population, is ranked the 26th largest city in the State and the 146th largest in the nation. Ontario's population has increased by 3.46 percent since the most recent census, which recorded a population of 175,265 in 2020.

BACKGROUND: In recent years, state housing-related statutes have increasingly limited or prohibited the use of local subjective standards for new development. While the City has traditionally relied on a mix of subjective and objective standards to ensure that development projects align with surrounding uses and City goals, the current objective standards alone are not sufficient to ensure compatibility. As state laws continue to limit the use of subjective standards, the need for more thoughtful and comprehensive objective standards has become increasingly urgent.

Objective standards refer to clear, measurable criteria such as building height limits, setbacks, and materials, which do not require subjective judgment. In response to these evolving requirements, the City established more robust Objective Development and Design Standards (ODDS) to streamline housing development approvals and ensure a clear, consistent review process. These standards must be applied to applicable projects

Case Planner:	Robert Morales, Associate Planner
Planning Director Approval:	
Submittal Date:	N/A

Hearing Body	*Date*	*Decision*	*Action*
PC	2/25/25		Recommends
CC 1st reading	3/18/25		Introduction
CC 2nd reading	4/1/25		Final Action

in accordance with state laws, including the State Density Bonus Law, Housing Accountability Act, Senate Bill 423 (previously Senate Bill 35), and Senate Bill 330, to promote transparency and facilitate efficient approvals.

The ODDS establish standards for streamlined ministerial residential projects. All applicable projects under ODDS must adhere to architectural styles outlined in the standards to create unbiased criteria for efficient residential development approvals. ODDS encompass various residential types and establish development and design standards for multi-family and mixed-use areas that currently lack specific standards.

The Ordinance integrates ODDS for multi-family and mixed-use development types, including a compliance checklist and style sheet for various architectural styles. The checklist specifies minimum design requirements, while the style sheets depict both traditional and modern interpretations. Comprehensive numerical standards for setbacks, building heights, and additional criteria are defined for mixed-use and detached multi-family areas, in line with Housing Element Programs 9.19 and 9.21.

On June 4, 2024, the City Council adopted Ordinance No. 3275, an interim Urgency Ordinance implementing a Development Code Amendment to establish Objective Development and Design Standards in compliance with Housing Element Programs 9.19 and 9.21 and Government Code Section 65589.5. This section requires local governments to apply objective standards in their regulatory schema to streamline housing project approvals while ensuring transparency and consistency.

On August 20, 2024, the City Council adopted Ordinance No. 3285, extending Ordinance No. 3275, thereby extending the Urgency Ordinance to allow staff sufficient time to analyze and develop a permanent Ordinance.

PROJECT ANALYSIS:

The proposed Development Code Amendment is comprised of certain clarifications and revisions to the City of Ontario Development Code, generally described as follows:

(1) Amending the Reference document section of the City's Development Code, to implement Objective Development and Design Standards for multiple-family and mixed-use residential development.

PUBLIC NOTIFICATION: The number of owners to whom a public hearing notice would be mailed or delivered is greater than 1,000; therefore, pursuant to Development Code Section 2.03.010.C.2 and Government Code Section 65091(a)(4), in lieu of mailed or delivered notice, a display advertisement of at least 1/8 page was placed in a newspaper of general circulation in the City of Ontario (Inland Valley Daily Bulletin). Public hearing notification was published a minimum of 10 days in advance of the public hearing.

CORRESPONDENCE: As of the preparation of the Resolutions, Planning Department staff has not received any written or verbal communications from the owners or occupants of properties surrounding the Project site or from the public in general, regarding the subject application.

AIRPORT LAND USE COMPATIBILITY PLAN (ALUCP) COMPLIANCE: The California State Aeronautics Act (Public Utilities Code Section 21670 et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

(1) Ontario International Airport Land Use Compatibility Plan ("ONT ALUCP") — On April 19, 2011, the City Council of the City of Ontario approved and adopted the ONT ALUCP, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the recommending body for the projects, the Planning Commission has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, Planning Commission has concluded that the proposed Development Code Amendment are consistent with the policies and criteria set forth within the ONT ALUCP.

(2) Chino Airport Land Use Compatibility Plan ("CNO ALUCP") — On August 2, 2022, the City Council of the City of Ontario approved and adopted a Development Code Amendment to establish the Chino Airport ("CNO") Overlay Zoning District ("OZD") and Reference I, Chino Airport Land Use Compatibility Plan. The CNO OZD and CNO ALUCP established the Airport Influence Area for Chino Airport, solely within the City of Ontario, and limits future land uses and development within the Airport Influence Area, as they relate to safety, airspace protection, and overflight impacts of current and future airport activity. The CNO ALUCP is consistent with policies and criteria set forth within the Caltrans 2011 California Airport Land Use Planning Handbook. The proposed Development Code Amendment may affect certain land development criteria on certain properties located within the Airport Influence Area of Chino Airport, which have been evaluated and found to be consistent with the California Airport Land Use Planning Handbook and the CNO ALUCP. As a result, the Planning Commission has concluded that the proposed Development Code Amendment are consistent with the policies and criteria set forth within the CNO ALUCP.

COMPLIANCE WITH THE ONTARIO PLAN: The proposed Project is consistent with the principles, goals and policies contained within the Vision, Governance, Policy Plan

(general plan), and City Council Priorities components of The Ontario Plan ("TOP"). More specifically, the goals and policies of TOP that are furthered by the proposed Project are as follows:

(1) City Council Goals.

- Invest in the Growth and Evolution of the City's Economy
- Operate in a Businesslike Manner

(2) Vision.

Distinctive Development:

- Commercial and Residential Development

➢ Development quality that is broadly recognized as distinctive and not exclusively tied to the general suburban character typical of much of Southern California.

(3) Policy Plan (General Plan)

Land Use Element:

- Goal LU-1 Balance. A community that has a spectrum of housing types and price ranges that match the jobs in the City and that make it possible for people to live and work in Ontario and maintain a quality of life.

➢ LU-1.1 Strategic Growth. We concentrate growth in strategic locations that help create place and identity, maximize available and planned infrastructure, foster the development of transit, and support the expansion of the active and multimodal transportation networks throughout the City.

Housing Element:

- Goal H-2 Housing Supply & Diversity. Diversity of types of quality housing that are affordable to a range of household income levels, accommodate changing demographics, and support and reinforce the economic sustainability of Ontario.

➢ H-2.5 Housing Design. We require architectural excellence through adherence to City design guidelines, thoughtful site planning, environmentally sustainable practices, and other best practices.

➢ H-2.6 Infill Development. We support the revitalization of neighborhoods through the construction of higher-density residential developments on underutilized residential and commercial sites.

Community Economics Element:

- Goal CE-1 Complete Community: A complete community that provides for all incomes and stages of life.

  - CE-1.6 Diversity of Housing. We collaborate with residents, housing providers, and the development community to provide housing opportunities for every stage of life; we plan for a variety of housing types and price points to encourage the development of housing supportive of our efforts to attract business in growing sectors of the community while being respectful of existing viable uses.

- Goal CE-2 Placemaking: A City of distinctive neighborhoods, districts, corridors, and centers where people choose to be.

  - CE-2.1 *Development Projects*. We require new development and redevelopment to create unique, high-quality places that add value to the community.

  - CE-2.4 *Protection of Investment*. We require that new development and redevelopment protect existing investment by providing architecture and urban design of equal or greater quality.

Community Design Element:

- Goal CD-1 Image & Identity: A dynamic, progressive city containing distinct and complete places that foster a positive sense of identity and belonging among residents, visitors, and businesses.

  - CD-1.1 *City Identity*. We take actions that are consistent with the City being a leading urban center in Southern California while recognizing, enhancing, and preserving the character of our existing viable neighborhoods.

  - CD-1.2 Place Types. We establish Place Types in urban, mixed use, and transit-oriented areas to foster the City's identity as a premier community and require new development within each Place Type to incorporate prescribed urban patterns, forms, and placemaking priorities.

- Goal CD-2 Design Quality. A high level of design quality resulting in neighborhoods, public spaces, parks, and streetscapes that are attractive, safe, functional, human-scale, and distinct.

  - CD-2.1 Quality Building Design and Architecture. We encourage all development projects to convey visual interest and character through:

    - Building volume, massing, and height to provide context-appropriate scale and proportion;

- A true architectural style which is carried out in plan, section, and elevation through all aspects of the building and site design and appropriate for its setting; and
- Exterior building materials that are articulated, high quality, durable, and appropriate for the architectural style.

➢ CD-2.8 Safe Design. We incorporate defensible space design into new and existing developments to ensure the maximum safe travel and visibility on pathways, corridors, and open space and at building entrances and parking areas by avoiding physically and visually isolated spaces, maintaining visibility and accessibility, and using lighting.

➢ CD-2.9 *Landscape Design*. We encourage durable, sustainable, and drought-tolerant landscaping materials and designs that enhance the aesthetics of structures, create and define public and private spaces, and provide shade and environmental benefits.

➢ CD-2.10 *Parking Areas.* We require all development, including single-family residential, to minimize the visual impact of surface, structured, and garage parking areas visible from the public realm in an aesthetically pleasing, safe and environmentally sensitive manner. Examples include:

- Structured parking: facade articulation, screening, appropriate lighting, and landscaping; and
- Garage parking: providing access to single-family residential garages through alley access, recessing garages from the frontage to emphasize front doors or active living spaces.

▪ Goal CD-3 Urban, Mixed Use, and Transit-Oriented Place Types: Vibrant urban environments that are organized around intense buildings, pedestrian and transit areas, public plazas, and linkages between and within developments that are conveniently located, visually appealing and safe during all hours.

➢ CD-3.4 Context-Aware and Appropriate Design. We require appropriate building and site design that complements existing development, respects the intent and identity of the Place Type, and provides appropriate transitions and connections between adjacent uses to ensure compatibility of scale, maintain an appropriate level of privacy for each use, and minimize potential conflicts.

➢ CD-3.5 Active Frontages. We create lively pedestrian streetscapes by requiring primary building, business, and residential entrances, outdoor dining, and storefronts be located on ground floors adjacent to sidewalks or public spaces and designed to maximize safety, comfort, aesthetics, and the intended functionality (as defined by the Place Type).

HOUSING ELEMENT COMPLIANCE: The Project is consistent with the Housing Element of the Policy Plan (general plan) component of The Ontario Plan, as the project furthers the purposes, principals, goals, and policies of the Housing Element.

ENVIRONMENTAL REVIEW: The proposed Development Code Amendment is exempt from the requirements of the California Environmental Quality Act (CEQA) and the guidelines promulgated thereunder, pursuant to Section 15061(b)(3) of the CEQA Guidelines, in that the activity is covered by the commonsense exemption (general rule) that CEQA applies only to projects that have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA.

Attachment A:
Resolution for File No. PDCA24-001

(Document to follow this page)

RESOLUTION NO. PC25-014

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ONTARIO, CALIFORNIA, RECOMMENDING THAT THE CITY COUNCIL APPROVE FILE NO. PDCA24-001 AMENDING THE REFERENCE DOCUMENT SECTION OF THE ONTARIO DEVELOPMENT CODE, TO AUTHORIZE OBJECTIVE DEVELOPMENT AND DESIGN STANDARDS FOR MULTIPLE-FAMILY AND MIXED-USE DEVELOPMENT, AND FINDING THE ACTION TO BE EXEMPT FROM CEQA.

WHEREAS, for the last several years, the State has enacted housing-related statutes that either limit or prohibit the use of local subjective standards for new development; and

WHEREAS, the City has historically regulated new housing development through a mix of subjective and objective standards to ensure that each project is reasonable and compatible with surrounding uses and City goals and objectives; and

WHEREAS, the City's current objective standards on their own are not sufficient to ensure that new housing development is reasonable or compatible; and

WHEREAS, as state law has evolved to increasingly limit the City's use of subjective standards, the need for more and more thoughtful objective standards has become urgent; and

WHEREAS, specifically the approval of multiple-family residential and mixed-use residential development projects in various zoning districts based solely on the default standards currently in the City's Development Code, without additional appropriate objective regulations governing project design, site planning, building massing, height, setback, landscape, building type, architectural review, and similar criteria, threatens to adversely impact the character of existing neighborhoods and to negatively impact property values, personal privacy, and fire safety; and

WHEREAS, the City desires now to amend its local regulatory scheme to provide reasonable and appropriate objective standards, in compliance with state law and the City's own adopted housing element; and

WHEREAS, as part of the implementation of the City's Housing Element Update the City prepared this Development Code Amendment to implement multiple-family residential and mixed-use residential objective development and design standards consistent with the policy program for these standards; and

WHEREAS, the City is adopting an official Ordinance that will allow the City to respond and impose consistent development standards to address the anticipated increase in housing development project applications; and

WHEREAS, the Application is a project pursuant to the California Environmental Quality Act, commencing with Public Resources Code Section 21000 (hereinafter referred to as "CEQA"); and

WHEREAS, the Project is exempt from CEQA pursuant to a categorical exemption (listed in CEQA Guidelines Article 19, commencing with Section 15300) and the application of that categorical exemption is not barred by one of the exceptions set forth in CEQA Guidelines Section 15300.2; and

WHEREAS, Ontario Development Code Table 2.02-1 (Review Matrix) grants the Planning Commission the responsibility and authority to review and make recommendations to the City Council, on the subject Application; and

WHEREAS, the Project has been reviewed for consistency with the Housing Element of the Policy Plan component of The Ontario Plan 2050, as State Housing Element law (as prescribed in Government Code Sections 65580 through 65589.8) requires that development projects must be consistent with the Housing Element, if upon consideration of all its aspects, it is found to further the purposes, principals, goals, and policies of the Housing Element; and

WHEREAS, the Project is located within the Airport Influence Area of Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and is subject to, and must be consistent with, the policies and criteria set forth in the Ontario International Airport Land Use Compatibility Plan (hereinafter referred to as "ALUCP"), which applies only to jurisdictions within San Bernardino County, and addresses the noise, safety, airspace protection, and overflight impacts of current and future airport activity; and

WHEREAS, the proposed Project is located within the Airport Influence Area of Chino Airport, within the City of Ontario boundary, and is subject to, and must be consistent with, the policies criteria set forth in Reference I, Chino Airport Land Use Compatibility Plan (CNO ALUCP), which applies only to jurisdictions within City of Ontario, and addresses the safety, airspace protection, and overflight impacts of current and future airport activity; and

WHEREAS, City of Ontario Development Code Division 2.03 (Public Hearings) prescribes the manner in which public notification shall be provided and hearing procedures to be followed, and all such notifications and procedures have been completed; and

WHEREAS, on June 4, 2024, the City Council of the City of Ontario adopted Ordinance No. 3275, an interim Urgency Ordinance with a 90-day duration to establish Objective Development and Design Standards in compliance with Housing Element Programs 9.19 and 9.21 and Government Code Section 65589.5; and

WHEREAS, on August 20, 2024, the City Council of the City of Ontario adopted Ordinance No. 3285, extending Ordinance No. 3275 providing a nine-month extension of the Urgency Ordinance to allow staff sufficient time to analyze and develop a permanent Ordinance; and

WHEREAS, on February 25, 2025, the Planning Commission of the City of Ontario conducted a hearing to consider the Project, and concluded said hearing on that date; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED, AND RESOLVED by the Planning Commission of the City of Ontario, as follows:

SECTION 1: ***Environmental Determination and Findings.*** As the recommending authority for the Project, the Planning Commission has reviewed and considered the information contained in the administrative record for the Project. Based upon the facts and information contained in the administrative record, including all written and oral evidence presented to the Planning Commission, the Planning Commission finds as follows:

(1) The administrative record has been completed in compliance with CEQA, the State CEQA Guidelines, and the City of Ontario Local CEQA Guidelines; and

(2) The Project has been assessed under CEQA and is deemed exempt based on CEQA Guidelines Section 15183, as it involves the adoption and implementation of Design Standards. This falls under the exemption for Projects Consistent with a Community Plan, General Plan, or Zoning, as it directs staff to adopt standards aligned with the General Plan Housing Element policy for multiple-family residential development. The determination relies on Section 15004, providing guidance on the timing of environmental review. While projects using the Design Standards may need environmental documents, the adoption of Objective Development and Design Standards is exempt from CEQA as it won't significantly impact the environment. Staff recommends City Council acknowledge the exemption, accept the NOE, and instruct staff to file the document under CEQA and the CEQA Guidelines (14 CCR Section 1500, et seq.); and

(3) The application of the categorical exemption is not barred by one of the exceptions set forth in CEQA Guidelines Section 15300.2; and

(4) The determination of CEQA exemption reflects the independent judgment of the Planning Commission.

SECTION 2: ***Housing Element Compliance.*** Pursuant to the requirements of California Government Code Chapter 3, Article 10.6, commencing with Section 65580, as the recommending authority for the Project, the Planning Commission finds that based on the facts and information contained in the Application and supporting documentation, at the time of Project implementation, the Project is consistent with the Housing Element of the Policy Plan (General Plan) component of The Ontario Plan 2050, as the Project site is not one of the properties in the Housing Element Sites Inventory contained in Tables B-1 and B-2 of the Housing Element Technical Report.

SECTION 3: ***Airport Land Use Compatibility Plan ("ALUCP") Compliance.*** The California State Aeronautics Act (Public Utilities Code Section 21670 et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

(1) On April 19, 2011, the City Council of the City of Ontario approved and adopted the Ontario International Airport Land use Compatibility Plan, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the recommending authority for the Project, the Planning Commission has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the Planning Commission therefore finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the ONT ALUCP; and

(2) On August 2, 2022, the City Council of the City of Ontario approved and adopted a Development Code Amendment to establish the Chino Airport ("CNO") Overlay Zoning District ("OZD") and Reference I, Chino Airport Land Use Compatibility Plan ("CNO ALUCP"). The CNO OZD and CNO ALUCP established the Airport Influence Area for Chino Airport, solely within the City of Ontario, and limits future land uses and development within the Airport Influence Area, as they relate to safety, airspace protection, and overflight impacts of current and future airport activity. The CNO ALUCP is consistent with policies and criteria set forth within the Caltrans 2011 California Airport

Land Use Planning Handbook. The proposed Project is located within the Airport Influence Area of Chino Airport and was evaluated and found to be consistent with the California Airport Land Use Planning Handbook and the CNO ALUCP. As the recommending authority for the Project, the Planning Commission has reviewed and considered the facts and information contained in the Application and supporting documentation against the CNO ALUCP compatibility factors, including Safety, Airspace Protection, Overflight. As a result, the Planning Commission therefore finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the California Airport Land Use Planning Handbook and the Chino ALUCP.

SECTION 4: ***Concluding Facts and Reasons.*** Based upon the substantial evidence presented to the Planning Commission during the above-referenced hearing, and upon the specific findings set forth in the Sections 1 through 3 above, the Planning Commission hereby concludes as follows:

(1) The proposed Development Code Amendment is consistent with the goals, policies, plans and exhibits of the Vision, Policy Plan (General Plan), and City Council Goals components of The Ontario Plan ("TOP"). The Development Code Amendment will: (a) serve to promote a community that is consistently seeking—and thoughtfully applying—new ways of doing things better, as encouraged by TOP's Vision; (b) provides for a variety of land uses and building types in our land use planning efforts that result in a complete community where residents at all stages of life, have a wide spectrum of choices of where they can live and recreate, as promoted by Land Use Element Policy LU-1.6, Complete Community; and (c) promotes the City Council Goals through the establishment of Development Code provisions that encourages investment in the growth and evolution of the City's economy and focuses City resources in commercial and residential neighborhoods; and

(2) The proposed Development Code Amendment would not be detrimental to the public interest, health, safety, convenience, or general welfare of the City. The Development Code Amendment incorporates safeguards intended to ensure that the purposes of the Development Code are preserved; the project will not be contrary to or damage the public health, safety, convenience, or general welfare; the project will not result in any significant environmental impacts; and the project will be in full conformity with the Vision, City Council Priorities, and Policy Plan components of The Ontario Plan.

SECTION 5: ***Code Amendment.*** The REFERENCE section of the Ontario Development Code is hereby amended to read in its entirety as follows:

Reference J – Objective Development & Design Standards.

This section incorporates by reference the Objective Development and Design Standards, or "ODDS," that are adopted and amended by the City Council by resolution. The ODDS are binding requirements and standards.

SECTION 6: ***Indemnification.*** The Applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void, or annul this approval. The City of Ontario shall promptly notify the applicant of any such claim, action, or proceeding, and the City of Ontario shall cooperate fully in the defense.

SECTION 7: ***Custodian of Records.*** The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East "B" Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario.

SECTION 8: ***Certification to Adoption.*** The Secretary shall certify to the adoption of the Resolution.

- - - - - - - - - - - - -

The Secretary Pro Tempore for the Planning Commission of the City of Ontario shall certify as to the adoption of this Resolution.

I hereby certify that the foregoing Resolution was duly and regularly introduced, passed and adopted by the Planning Commission of the City of Ontario at a regular meeting thereof held on the 25th day of February 25, 2025, and the foregoing is a full, true and correct copy of said Resolution, and has not been amended or repealed.

Nicola Ricci
Planning Commission Chairman

ATTEST:

Henry K. Noh
Planning Director and
Secretary to the Planning Commission

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO)
CITY OF ONTARIO)

I, Gwen Berendsen, Secretary Pro Tempore of the Planning Commission of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. PC25-014, was duly passed and adopted by the Planning Commission of the City of Ontario at their regular meeting held on February 25, 2025, by the following roll call vote, to wit:

AYES: DeDiemar, Gage, Lampkin, Ricci

NOES: None

ABSENT: Anderson

ABSTAIN: None

Gwen Berendsen
Secretary Pro Tempore

ATTACHMENT A:

File No. PDCA24-001

OBJECTIVE DEVELOPMENT AND DESIGN STANDARDS FOR MULTIPLE-FAMILY AND MIXED-USE DEVELOPMENT

(Ontario Development Code, Reference J)

City of Ontario

Residential Objective Development & Design Standards

March 18, 2025

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Chapter 1: Introduction

Development and design standards regulate the intensity, style, size, and orientation of development. Objective design standards are quantifiable, verifiable, and measurable, offering a predictable and fair process for housing approvals. This document aims to streamline and endorse housing design that aligns with community consistency.

1.1 Purpose

The Objective Development and Design Standards (ODDS) introduced in this document align with The Ontario Plan (TOP) Policy Plan (general plan) and the Ontario Development Code to provide objective standards for streamlined ministerial approval of residential multiple-family and mixed- use development projects consistent with state law and implementation of TOP goals and policies.

The purpose of the Residential ODDS meets 2 primary objectives to:

1. **Comply with state law.** The ODDS provide standards for design, construction, review, and approval of multiple-family residential and mixed-use development, consistent with state law.

2. **Implement TOP's Policy Plan.** The ODDS implement the multiple-family residential and mixed-use land use designations in the Land Use Element and the policies in the Community Design Element, including the vision and intended outcomes of Place Types identified in Figures CD-01 through CD-07.

1.2 Who is this document for?

This document is intended for developers and property owners in the development of real property in the City of Ontario. It serves as a guide for clear communication between property owners, designers, developers, and City staff outlining the key elements of quality design. For property owners, it offers a concise understanding of design elements that are consistent with the Policy Plan and required by the Development Code.

1.3 Applicability

In addition to any objective standards imposed through the underlying base zone, the ODDS document provides standards for housing developments limited to the following areas (refer to the Policy Plan Land Use Plan Exhibits LU-01, LU-04, and CD-01 and the official Zoning Map):

- **Multiple-Family Development.** Applies to all multiple-family residential categories as shown on Policy Plan Land Use Plan Exhibit LU-01 (LMDR, MDR, and HDR, and Mixed-Use land use designations).

- **Mixed-Use Development.** Applies to mixed-use categories as shown on Policy Plan Land Use Plan Exhibit LU-01and associated Place Types as shown on Exhibit CD-01.

1.4 User guide

1. **Identify TOP Policy Plan land use designation and zoning district.**

   a. Refer to Exhibit LU-01 Land Use Plan and identify land use designation.

   b. Refer to the Official Zoning Map to verify zoning and whether the project falls within the Specific Plan or Planned Unit Development (PUD) and adhere to the standards outlined in each document.

   c. Development applications shall utilize ODDS wherever PUD or Specific Plan standards are silent.

2. **Apply multiple-family (Chapter 2) or mixed-use (Chapter 3) development standards.**

3. **Select architecture (Chapter 4).**

   For each project type select 1 of the following 6 styles: Mission-Spanish Colonial Revival, Craftsman, American Mercantile, Tuscan, Modern, or Farmhouse.

4. **ODDS checklist.**

   Fill out the ODDS checklist.

Chapter 2: Multiple Family Standards

2.1 Site Design Standards

2.1.1 Site design

1. **Lot lines** The lines bounding a lot. The classifications of "Lot Line" are as follows:

    a. **Front** This line separates the narrowest street frontage of a lot from a public or private street right-of-way.
    b. **Interior "side"** Any lot line that is not a front or rear lot line and does not border a public or private street right-of-way.
    c. **Rear** The lot line opposite and farthest from the front lot line. In the case of an irregularly shaped lot, a straight line shall be drawn to determine the rear lot line.
    d. **Street side** Any lot line that is not a front or rear lot line, and which abuts a public or private street right-of-way.

2.1.2 Site access

1. **Alleys** Vehicular access to the on-site parking areas shall be from the alley.
2. **Roadway inclusion** Pedestrian access from the public right-of-way must include sidewalk on both sides of the driveway.

2.1.3 Parking

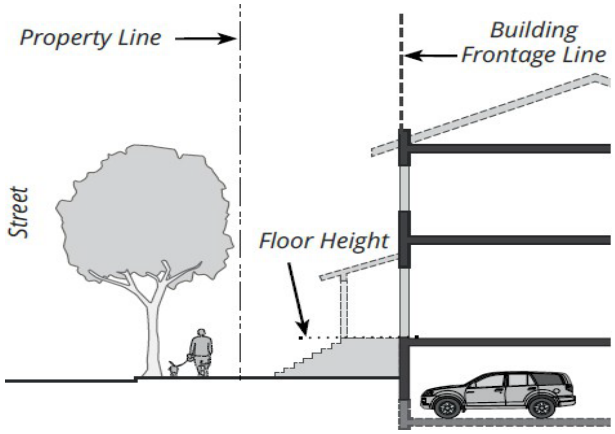
A. Placement on site

Parking shall be designed in compliance with the applicable standards contained in Division 6.03 (Off-Street Parking and Loading) of the Ontario Development Code, except as modified by the following:

1. **Surface parking.**

    a. **Setbacks** Surface parking lots adjacent to public or private streets shall include a landscaped and irrigated setback a minimum of 5 feet in width measured from property line, or aligned with the building façade, whichever is greater.
    b. **Orientation** Surface parking lots shall be located at the rear, side, or internal lot lines and away from the front lot line.
2. **Above-ground parking structures** Ground-floor parking shall be sited behind residential, office, or commercial spaces.
3. **Semi-subterranean parking** A semi-subterranean garage shall not extend beyond the building frontage line and shall not extend higher than 4 feet above sidewalk grade.
4. **Subterranean parking** A subterranean parking structure may extend to all property lines.
5. **Private residential garages** Each private garage must have vehicular access from an alley, side street, or motor court (see Figure 2.1-1).

Figure 2.1-1 Semi-subterranean parking



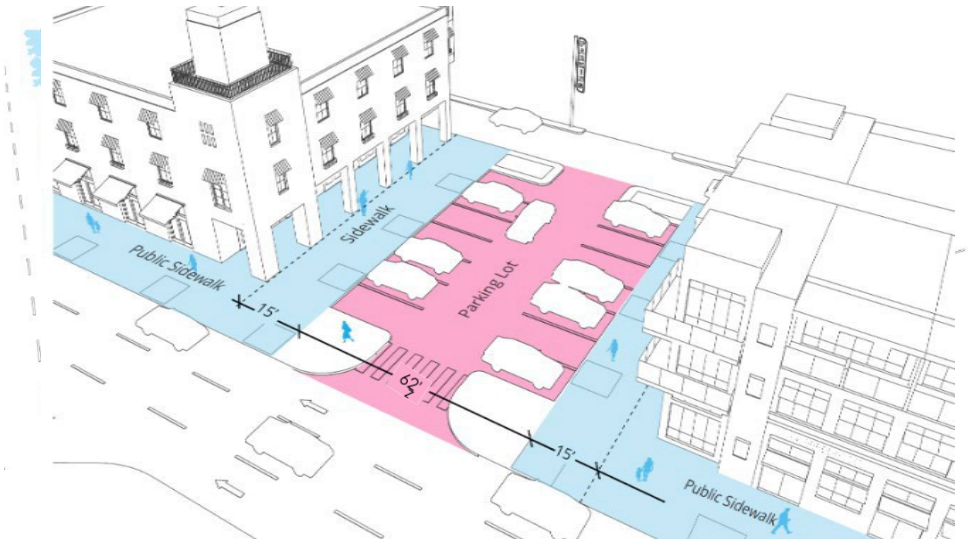
B. Surface parking lot design

Surface parking lots shall be designed in compliance with the applicable standards contained in Division 6.03 (Off-Street Parking and Loading) of the Ontario Development Code, except as modified by the following:

1. **Screening**
    a. **Street-adjacent parking lots**
        i. A street-adjacent surface parking lot shall be screened from view by a low wall or hedge no higher than 3 feet in height.
        ii. Walls and hedges must be a minimum 18 inches from the back of the sidewalk.
        iii. Landscaped berms are prohibited.
    b. **Neighboring parcels** Views from neighboring properties shall be screened with trees and shrubs.
2. **Landscape** Landscaping materials shall be applied in compliance with the applicable objective parking lot landscape standards contained in Ontario Development Code Section 6.05.030 (Required Landscape Areas).
3. **Shade structures** Shade structures, if used, shall match the architectural style of the project buildings.

C. Parking court design

Figure 2.1-2 Parking Court



1. **Design standards.**
    a. The width of the parking court, when measured from 1 building face to the other, shall not exceed 100 feet (see Figure 2.1-2).
    b. The parking court shall consist of only 1 parking bay, and this bay shall not exceed a maximum width of 62 feet.

c. On both sides of the parking court, sidewalks must be established, each with a minimum width of 15 feet. These sidewalks must connect with the adjacent public sidewalk network.

D. Parking structure design

1. **Context-sensitive façade design** Parking structure façades shall incorporate a minimum 2 design elements using the architectural styles identified in Chapter 4: Architectural styles and adhere to Main Street or Urban and facade design standards applied in *Section 2.2.2 Building Types* (see Figure 2.1-3).
2. **Parking structure standards**
   a. Any driveway providing access to a parking structure shall have a minimum width of 28 feet.
   b. Single access lane driveways into the structure shall not exceed 14 feet in width.
   c. Parked vehicles shall be screened from view from adjoining streets.
   d. Signs as shall be consistent with Division 8: Sign Regulations of Ontario Development Code.

Figure 2.1-3 Parking structure and façade design



2.1.4 Open space standards

A. Common open space and public frontage

1. **Common open space type requirements** Common open space shall cover a minimum of 15 percent of the total lot area with the following **exceptions**:
   a. **Close to parks.** Common on-site open space shall not be required for lots within a 1/4-mile of an existing park or plaza a minimum 0.25 acres in size.
   b. **Common open space types.** 1 or more of the common on-site open space types listed under "Common Open Space Types" shall be provided on each lot that has a residential use.
2. **Access and visibility.** At-grade open space shall be accessible and visible from the adjacent ground floor.

B. Common open space types

Forecourt

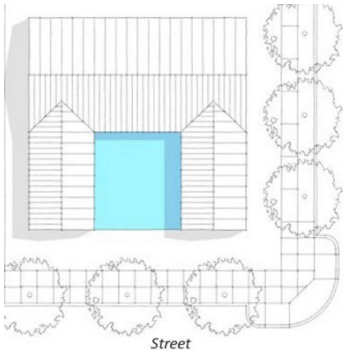
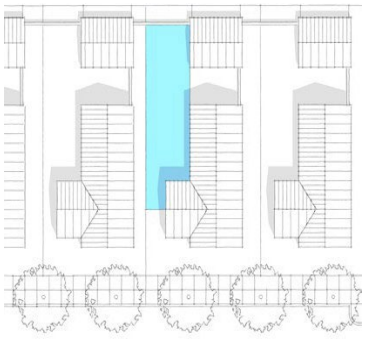


Figure 2.1-4 Forecourt

1. Design standards

a. A forecourt may occur on any floor and may be used as an allowed method of creating façade massing increments.
b. **Minimum dimensions** Forecourts shall be a minimum of 15 feet by 15 feet.

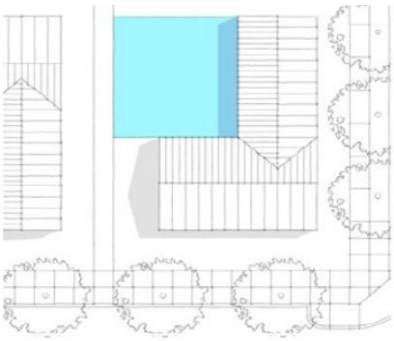
Side garden


Figure 2.1-5 Side Garden

1. Design standards

a. **Minimum side garden dimensions**: 15 feet by 15 feet.
b. Dooryards, porches, stoops, and architectural elements may encroach into the side garden as follows:
   i. Up to a total of 30 percent of the side garden's width or length.
   ii. A ground-floor encroaching element shall be allowed to project a maximum of 8 feet into the side garden.

Court


Figure 2.1-6 Court Configuration

1. Design standards

a. **Minimum dimensions**: All courts shall be a minimum of 20 feet by 30 feet.
b. **Enclosure**
   i. A court shall have building walls on a minimum 2 sides, while the third and fourth side can be defined by architectural or landscape elements (i.e., low walls, trellises, hedges, or rows of trees).
   ii. A driveway located adjacent to a court shall be screened by architectural elements (e.g., low walls or trellises, hedges, or rows of trees).
c. **Access**
   i. Courts shall be accessed from the street or walkway.
   ii. Units shall be allowed to take direct access through a court.
d. **Encroachments**
   i. Dooryards, porches, stoops, and architectural elements may encroach into the Side Yard.

ii. A ground floor encroaching element shall not encroach beyond 8 feet of the building's façade into the court.

e. **Common area** A court shall serve as communal spaces and pedestrian access.

f. **Amenities** A court shall include a minimum 1 of the following amenities: a seating area, a fountain, a BBQ island, or an outdoor fireplace.

Passage

1. **Design standards**

a. Location. Passages shall be provided between buildings or side gardens.

b. Size. Passages shall be a minimum width of 8 feet with minimum of 2 feet of landscape strip on each side.

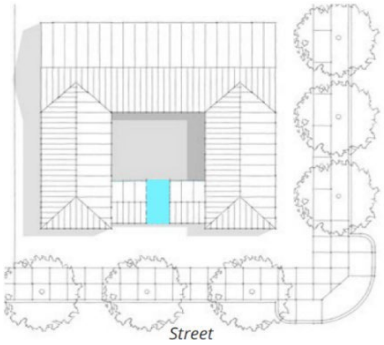


Figure 2.1-7 Passage configuration

C. Private open space

1. **General standards**

a. A minimum of 60 square feet of private open space shall be provided for each residential unit and a minimum 1 of the private on-site open space types shall be provided.

b. **Exception**: Private on-site open space shall not be required for a project site that is located within 1/4-mile distance of an existing park or plaza that is a minimum 0.25 acres in size.

D. Private open space types

Private roof deck

1. **Description** A private open space located on the roof of a building dedicated to a single unit.
2. **Design standards** Minimum dimensions of 7 feet by 7 feet.

Backyard

1. **Description**. A private, landscaped open space located behind each individual unit that is intended to provide passive or active outdoor space for the users of the unit.
2. **Design standards.**
   a. **Size**. Minimum dimensions of 20 feet by 15 feet.
   b. **Encroachments**. Encroachment into the backyard is allowed up to 30% of the rear yard area.

Architectural façade elements as private open space

1. **Description** The following elements defined in *Section 2.3 Architectural Façade Elements* may be used to meet on-site private open space requirements.
   a. Balcony
   b. Terrace Balcony

Entry elements as private open space

1. **Description** The following elements defined in Section 2.4 Entry Elements may be used to meet on-site private open space requirements.
    a. Dooryard
    b. Porch

2.1.5 Landscaping

1. **General to all** Landscaping materials shall be applied in compliance with the applicable landscape standards contained in Ontario Development Code Section 6.05.030 (Required Landscape Areas).

2.1.6 Fences and walls

1. **Fence and wall heights** Walls and fences shall be designed in compliance with the applicable standards contained in Division 6.02 (Walls, Fences, and Obstructions) of the Ontario Development Code.

2.2 Multiple-Family development standards

The following tables and associated standards for multiple-family development standards covering new residential construction, additions, remodels, or repurposed uses that necessitate an entitlement or building permit from the city. all standards listed under table 2.01 Multiple-Family Development Standards are applicable to all multiple-family projects including projects within mixed-use zones.

Table 2.01: Multiple-Family Development Standards

Requirements	Development Type			Additional Regulations
	Multiple-Family Residential			
	Mixed-Use Building Type			
A. BUILDING DEVELOPMENT STANDARDS				
1. Minimum Setback from Public Street Property Lines	**Urban (25 du/ ac or greater)**	**Neighborhood (Less than 25 du/ac)**	**Housing (Less than 25 du/ac and 5 units or less)**	Note 9
a. Arterial	0 feet	10 feet	14 feet	
b. Collector	5 feet	10 feet	14 feet	
c. Local	5 feet	15 feet	20 feet	
2. Minimum Setback from Interior Project Boundary Property Lines	5 feet			
3. Minimum Setback from Public Alley Property Lines	5 feet			
4. Minimum Setback from Private Drives/Alleyways (from edge of drive aisle)				
a. Living Area	10 feet			
b. Garages and Other Nonhabitable Structures	10 feet			
5. Minimum Setback from Dwellings to Parking Spaces				

Requirements	Development Type	Additional Regulations
	Multiple-Family Residential	
	Mixed-Use Building Type	
a. Living Area	10 feet	
b. Garages and Other Nonhabitable Structures	5 feet	
6. Minimum Setback from Parking Space or Drive Aisle to Wall or Fence	5 feet	
7. Minimum Separation Between Detached Buildings		
a. Dwelling Front to Front	< 2-Stories: 25 FT; ≥ 3 Stories: 30 FT unless otherwise specified by massing requirements ("Space between buildings") in Section 2.2.2 Building Types.	Note 5
b. Dwelling Front to Rear	< 2-Stories: 25 FT; ≥ 3 Stories: 30 FT unless otherwise specified by massing requirements ("Space between buildings") in Section 2.2.2 Building Types.	Note 5
c. Dwelling Front to Side	< 2-Stories: 25 FT; ≥ 3 Stories: 30 FT unless otherwise specified by massing requirements ("Space between buildings") in Section 2.2.2 Building Types.	Note 5
d. Dwelling Side to Side	< 2-Stories: 10 FT; ≥ 3 Stories: 15 FT unless otherwise specified by massing requirements ("Space between buildings") in Section 2.2.2 Building Types.	Note 5
e. Dwelling Side to Rear	15 FT; unless otherwise specified by massing requirements ("Space between buildings") in Section 2.2.2 Massing and Façade Design	Note 5
f. Dwelling Rear to Rear	20 FT unless otherwise specified by massing requirements ("Space between buildings") in Section 2.2.2 Building Types.	Note 5
8. Garage to Garage (or other nonhabitable structures)	30 FT – Entry to Entry 30 FT – Entry to Side 10 FT – Side to Side 10 FT – Side to Rear	Note 5
9. Minimum Storage Space	240 CF	Note 4
10. Maximum Street Façade Height		
a. Downtown District	45 feet	Note 8
b. Other Districts & Corridors:	n/a	
c. Neighborhood Centers:	35 feet	
11. Maximum Building Height		
a. Downtown District	n/a	Note 8
b. Other Districts & Corridors:	n/a	Note 5
c. Neighborhood Centers:	60 FT	Note 5
12. Minimum Setback from Major Pipelines	50 FT (to habitable structures)	Note 7

Notes:

1. *An existing lot of record that is substandard as to minimum "project" area and/or dimension(s), shall be permitted all the development rights of the zone in which it is located.*
2. *The density range shall be consistent with the underlying Mix-Used Category identified in Figure LU-04, Mixed Use Areas and defined in Table LU-02, Land Use Designations Summary Table, of the Policy Plan (General Plan). A density bonus and other incentives pursuant to GC Sections 65915 through 65918, may be granted by the Approving Authority. Refer to Development Code Subsection 6.01.010.H (Density Bonus and Other Incentives).*

3. *A health risk assessment shall be required for multiple-family development projects located within 1,000 feet of a freeway, as determined by the Zoning Administrator.*
4. *Lockable private storage space for each residential unit shall be provided within a garage or storage building, or a space directly accessible from the dwelling. Exterior closets accessed from patios or balconies may be used if screened from public view.*
5. *Required building separation, and allowable heights may be differ based on massing type and adjacent uses. See Section 2.2.2 Building Types for additional information regarding building separation. See section 2.2.1 for standards adjusting allowable height. The following items are exceptions to height standards identified in this table and those noted in section 2.2.1:*
   a. *Equipment. Chimneys, elevators, stairs, mechanical houses, screened vents, HVAC equipment, and solar panels may exceed California Building Code height limits.*
   b. *Architectural Elements. Architectural elements such as spires, steeples, or roof lanterns may exceed height limits if consistent with the architectural style outlined in Chapter 4 of the ODDS.*
6. *A lot designated as Mixed-Use (MU) in the Policy Plan (General Plan) shall be developed at no less than the minimum number of dwelling units allowed within the specified density range for the applicable Mixed-Use Category, except that If, because of the configuration/design of a lot, the minimum residential density cannot be achieved, the lot may be developed with non-residential uses.*
7. *Includes major high-pressure pipelines for fuel oil, gasoline, and diesel and aviation fuels within the City. Existing pipelines include:*
   a. *Two parallel pipelines (a 16-inch and a 20-inch) that enter the City at Benson Avenue, traveling parallel to the northerly side of the Southern Pacific right-of-way to Ontario International Airport, then parallel to the southerly side of the Southern Pacific right-of-way, then parallel to the northerly side of the right-of-way beyond Ontario International Airport, then exiting the City at Etiwanda Avenue; and*
   b. *Two parallel pipelines that traverse the easterly portion of the City, entering the City at the southerly portion of Milliken Avenue, then traveling north under Milliken Avenue to Inland Empire Boulevard, then east to Rochester Avenue, then north to the City Limits.*
8. *In the Downtown District, the maximum 45-foot façade height shall extend no more than 70 percent of the frontage. The remaining 30 percent of the frontage shall include an upper-level setback of at least 12 feet, starting at the third story. Usable outdoor spaces, such as roof decks or terraces, may occupy the roof area of the upper-level setback. See Urban Form standards under Section 2.2.2A Urban Building Type.*
9. *Projects less than 1 acre in size but exceeding 25 du/ac can use Neighborhood or Housing Form in lieu of the Urban massing form.*

2.2.1 Height Standards

1. **Height transition zones** Requires all new buildings within 100 feet of less intense development patterns (existing or planned) to reduce heights to ensure neighborhood compatibility.
2. **Multiple family development types** The following height limits shall apply to all proposed multiple family development types.
   a. Buildings within 100 feet of single-family residential dwellings must not exceed 35 feet or the height of adjacent residential buildings, whichever is greater.
   b. Buildings within 100 feet of undeveloped single-family zone parcels shall not exceed 35 feet in height.

2.2.2 Building Types

1. Identify the suitable building type for the project based on its density, including**:**

a. "**Urban**" (applies to multiple-family development projects with 25 dwelling units per acre or more*). Projects less than 1 acre in size but exceeding 25 du/ac can use neighborhood or housing Form in lieu of the urban massing form.*

b. "**Neighborhood**" (applies to multiple-family development projects with fewer than 25 dwelling units per acre that include buildings with more than 5 units).

c. "**Housing**" (applies to multiple-family development projects with fewer than 25 dwelling units per acre that *include buildings with 5 or fewer units)*.

Table 2.2-1 Building Types

Land Use Density	Building Types
Greater than 25 du/ac	Urban
Less than 25 du/ac and greater than 5 units	Neighborhood
Less than 25 du/ac and 5 units or less	Housing form

A. Urban massing and façade design

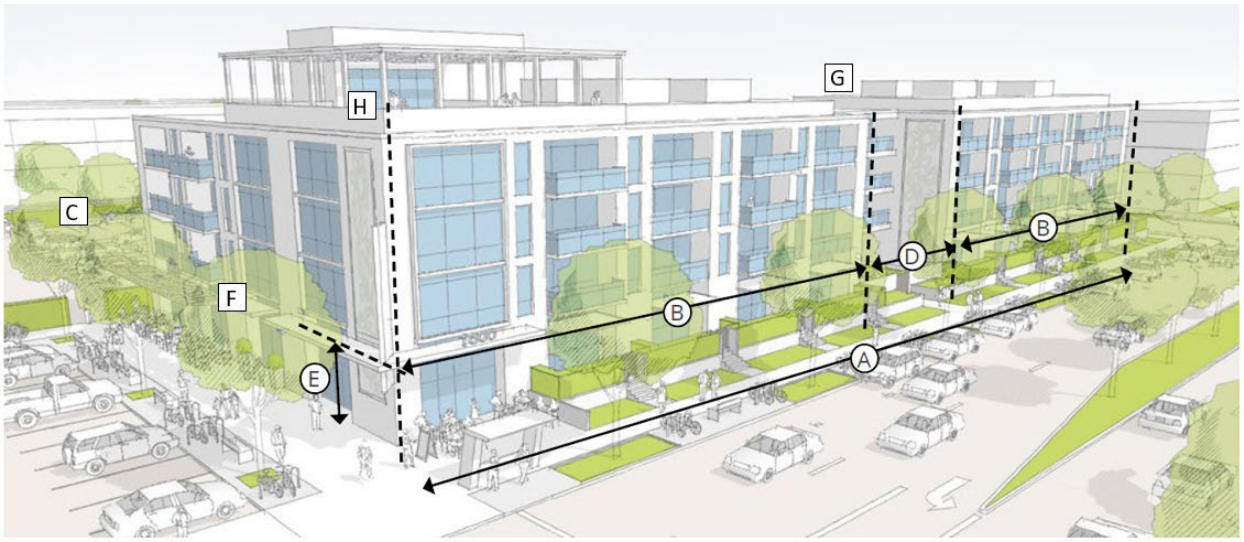
Urban massing and façade design standards are required for all multiple-family developments projects with 25 du/ac or more (see Figures 2.2-1 and 2.2-2).

Massing increments

Massing increments are visually discrete design compositions that are distinguishable from each other and have a coherent look and character from the ground to the top of the facade. Massing increments appear as either distinct buildings or distinct parts of a single building.

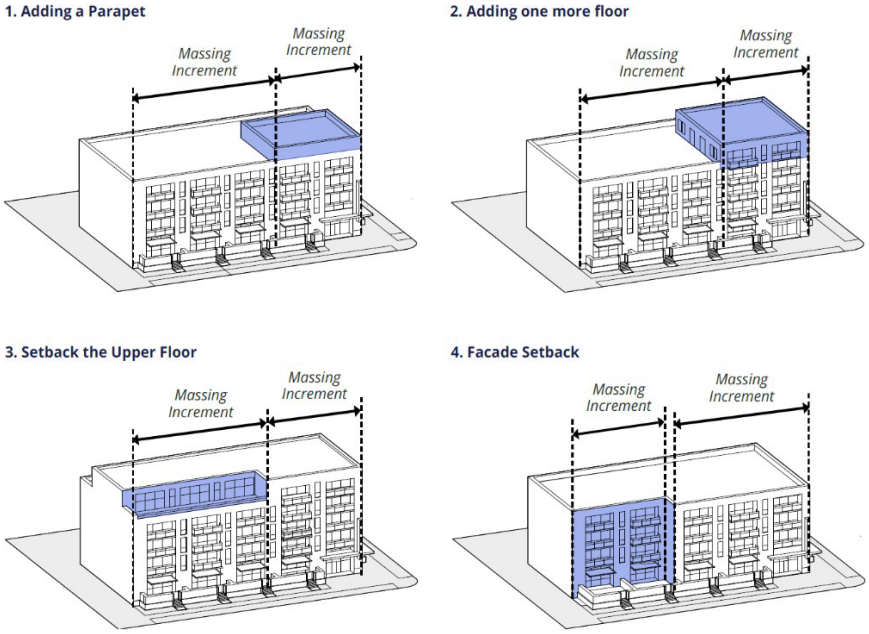
1. **Massing standards**
   a. **Size of massing increments** Building facades along front and side lot lines that face public streets and are longer than 100 feet shall be divided into massing increments as follows:
      i. The maximum length of a single massing increment shall not exceed 150 feet.
      ii. A minimum 2 distinct massing increments shall be provided.
   b. **Articulation of massing increments** Individual massing increments shall be differentiated from 1 another using a minimum 1 of the following massing strategies:
      i. Vary parapet height by a minimum of 3 feet
      ii. Increase number of stories
      iii. Set back upper floor. Set the upper floor or multiple upper floors back a minimum of 15 feet from the facade.
      iv. Set the entire facade back a minimum of 10 feet for 20 feet
      v. Incorporate tower element
   c. **Massing increments with distinct facades** Massing increments that have distinct facades and shall appear as distinct buildings.
   d. **Repeating massing increment design** A massing increment design may be repeated on the same project elevation. Repeated massing increments shall be separated by a distinct massing increment.

Figure 2.2-1 Urban: Massing Diagram



2. Element standards	Standards
a. Building façade along font lot line	400 feet max.
b. Massing increment	150 feet max.
c. Space between buildings	0 feet min.
d. Façade setback (if elected)	10 feet x 10 feet min.
e. Building base height	15 feet min.
f. Building façade alongside lot line	200 feet max.
g. Height difference between massing increments	3 feet min.
h. Upper-level setback from facade	15 feet min.

Figure 2.2-2 Urban: Massing strategies



Façade Composition

1. **Façade composition standards**

Multi-story building façades The building facade shall be divided into a base and body as follows:

a. **Base** Separate the building base (entire ground floor facade or first 2 floors of building's 5 stories or taller) from the rest of the facade for a minimum of 15 feet (fewer than 5 stories) or 25 feet (5 stories or more) from grade, using a minimum **2** of the following strategies:
   i. Provide a string course at the top of the first story
   ii. Specify base materials different from rest of façade
   iii. Specify base colors different from rest of façade
   iv. Provide a ground floor Arcade or Gallery per Section 2.3 Architectural Façade Elements.

b. **Body** The body of the building consists of the facade of all floors located above the base and shall be designed as follows:
   i. Windows shall be organized in bays, bands, curtain wall, and grid of windows consistent with the Facade Fenestration Standards for the Urban massing type.
   ii. Each massing increment must contain its entire facade composition without elements overlapping the division between increments.

Fenestration design

Fenestration design addresses the percentage of window and door openings for ground floors and upper floors and glazing transparency.

1. **Façade fenestration standards**
   a. **Minimum fenestration** Facade designs must meet a minimum fenestration percentage, calculated as the total window and door area divided by the total area of that part of the façade (see Figure 2.2-3).

      i. **Ground floor**
         a. Front lot line: 70% minimum
         b. All other frontages: 50% minimum
         c. Ground floor windowsills on facades along the front lot line shall be no higher than 3 feet above the adjacent grade
         d. Ground floor bathroom windows are prohibited on facades that face front lot line
      ii. **Upper floors** 15% minimum

Figure 2.2-3 Urban: Fenestration Diagram

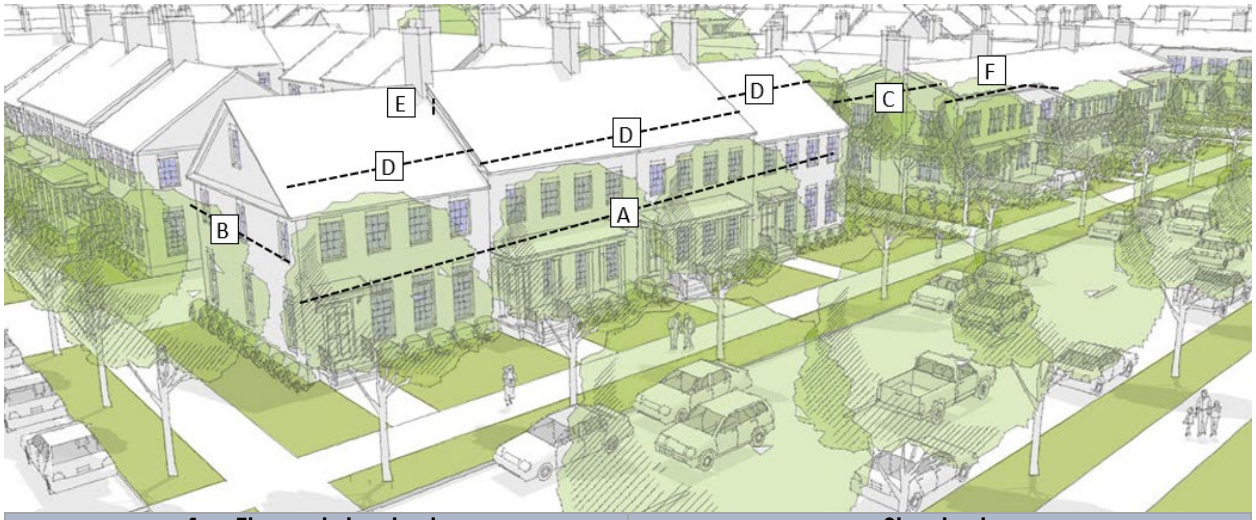


B. Neighborhood massing and façade design

Neighborhood massing and façade design standards are required for all multiple-family development types applicable to multiple-family development projects with fewer than twenty-five (25) du/ac that include buildings with more than 5 units (see Figure 2.2-4).

Massing increments

Figure 2.2-4 Neighborhood: Massing Diagram



1. Element standards	Standards
A. Building façade along front lot line	135 feet max.
B. Building façade length alongside interior lot line	135 feet max.
C. Space between buildings	15 feet min.
D. Massing increment	75 feet max.
E. Height difference between massing increments	2 feet min.
F. Façade setback (if elected)	10 feet x 20 feet

1. **Massing standards.**

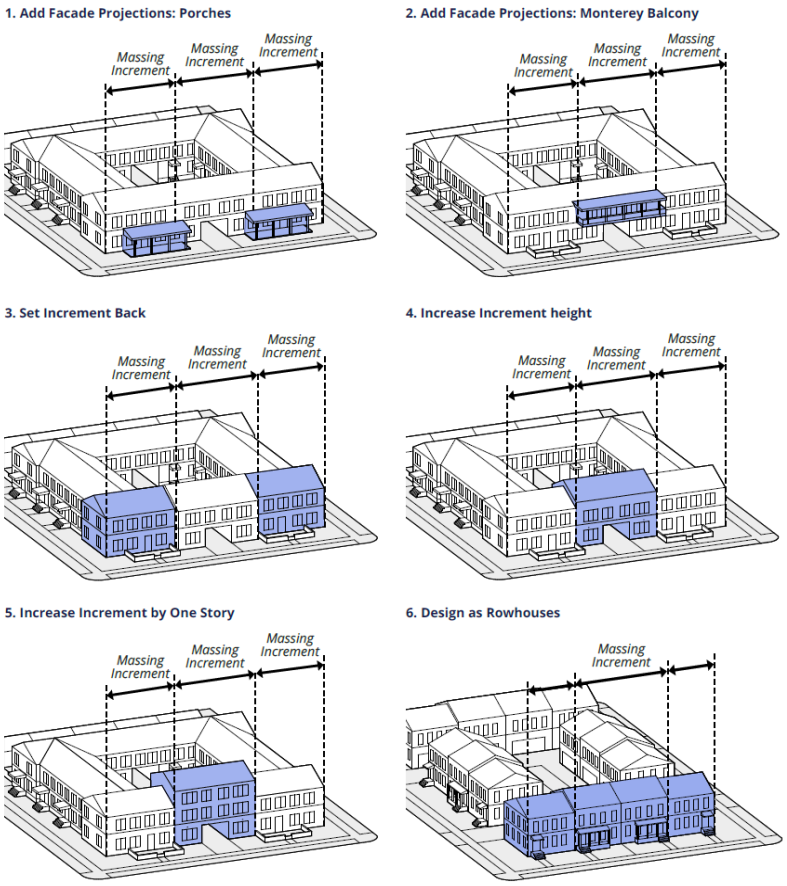
   a. **Size of massing increments.** Building facades along front and side lot lines that face public streets and are longer than 135 feet shall be divided into massing increments as follows:

      i. The maximum length of a single massing increment shall not exceed 75 feet.
      ii. A minimum of 2 distinct massing/architectural increments shall be provided using 1 strategy from the massing strategies list and 1 strategy from architectural strategy list (see Figure 2.2-5).

   b. **Massing strategy list**

      i. Vary height by a minimum of 3 feet.
      ii. Increase number of stories.
      iii. Set back upper floors by a minimum 15 feet.
      iv. Set the entire facade back a minimum of 10 feet for twenty feet.
      v. Increase story height.
      vi. Incorporate tower element.

Figure 2.2-5 Neighborhood: Examples of Massing Strategies Diagram



c. **Architectural strategy list**

i. Use different facade materials and/or colors.
ii. Window treatment and design. Use different window types, configurations, and/or frame colors.
iii. Diversify facade elements (balconies, trellises, chimneys, awnings) as per Section 2.3 Architectural Façade Elements.
iv. Vary the building entry element type or design of stoops, porches, dooryards, and other elements identified in Section 2.4 Entry Elements.
v. Massing increments that have distinct facades, shall appear as distinct buildings.
vi. A massing increment design can be repeated twice on the same project elevation, with a distinct separation between repeated increments.

Façade composition

1. **Façade composition standards**

a. **Multi-story building façades** The building facade shall be divided into a base and body as follows.

i. **Base** Separate the building base (entire ground floor facade or first 2 floors of building's 5 stories or taller) from the rest of the facade for a minimum of 15 feet (fewer than 5 stories) or 25 feet (5 stories or more) from grade, using a minimum 2 of the following strategies.

(a) Provide a string course at the top of the first story.
(b) Specify base materials different from rest of façade.
(c) Specify base colors different from rest of façade.
(d) Provide a ground floor Arcade or Gallery per *Section 2.3 Architectural Façade Elements*.

ii. **Body** The body of the building consists of the facade of all floors located above the base and shall be designed as follows:

(a) Windows shall be organized in bays, bands, curtain wall, and/or grid of windows consistent with the Facade Fenestration Standards for the Neighborhood massing type.
(b) Each massing increment's entire facade composition must be contained within its boundaries, with no overlap of facade elements, like window openings and balconies, across the division between increments.

Fenestration Design

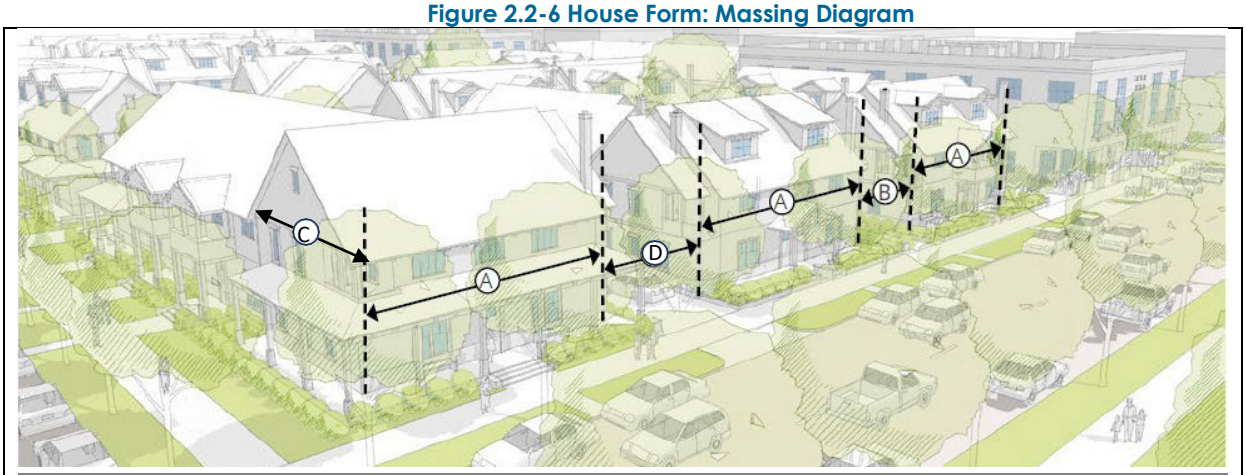
1. **Façade fenestration standards**

a. **Minimum Fenestration** Facade designs must meet a minimum fenestration percentage, calculated as the total window and door area divided by the total area of that part of the facade:
   i. **Ground Floor**: 30% minimum.
      (a) Ground floor windowsills on facades along the front lot line that face public streets shall be no higher than 3 feet above the adjacent grade.
      (b) Ground floor bathroom windows are prohibited on facades that face the front lot line.
   ii. **Upper floors**: 15% minimum.

C. House-form massing and façade design

House-form massing and façade Design standards for projects with densities below 25 du/ac that include buildings with 5 or fewer units (see Figure 2.2-6).

Figure 2.2-6 House Form: Massing Diagram



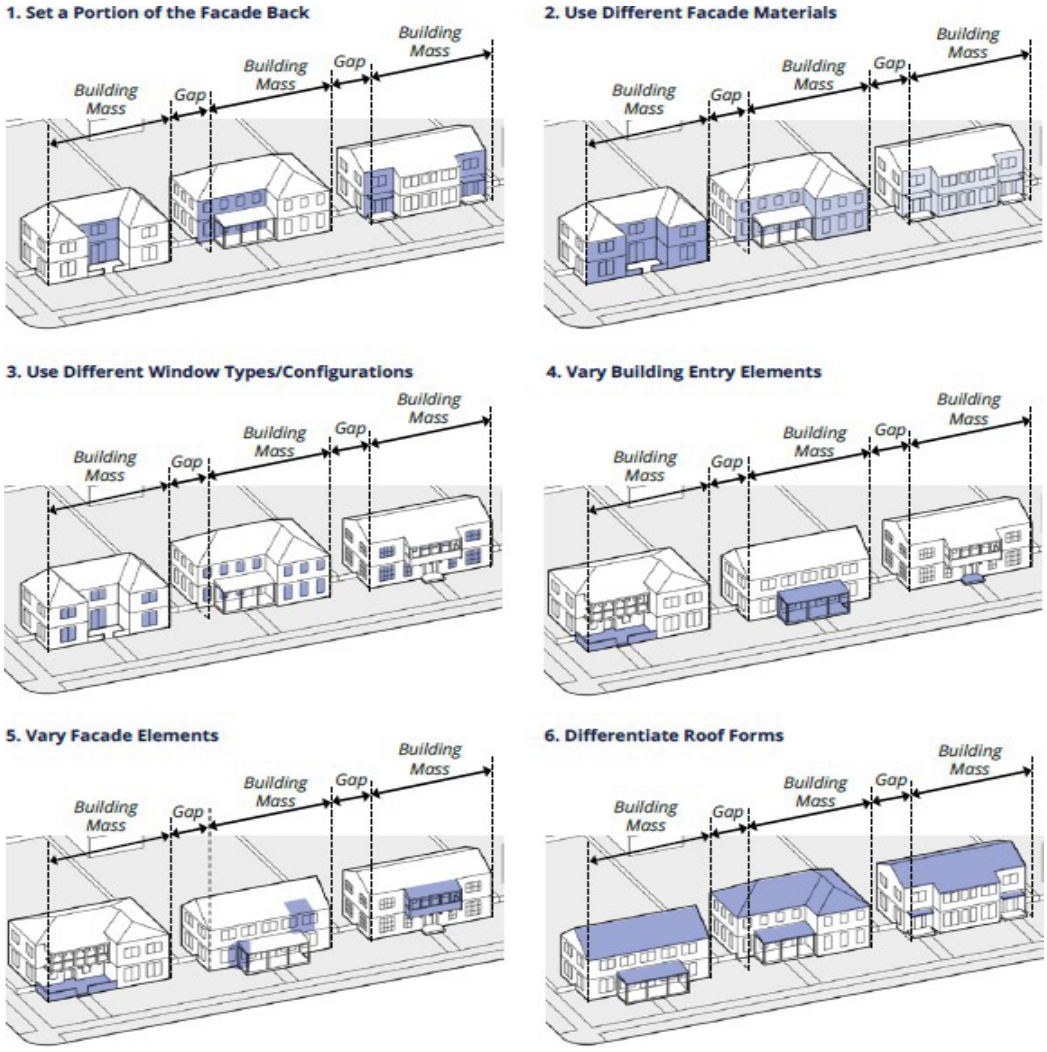
1. Element standards	Standards
A. Building Façade length along font lot line	60 feet max.
B. Massing Increment	60 feet max.
C. Building Façade length alongside lot line	60 feet max.
D. Space between buildings	15 Feet

2. **Massing and façade composition standards**

a. **Massing increments** A massing increment shall include the whole length of a single building façade, up to 60 feet in length. Only 1 massing increment per building façade shall be included (see Figure 2.2-7).
b. **Length of buildings** Buildings along front and side lot lines that face public streets shall be no longer than 60 feet.
c. **Space between buildings** Buildings along front and side lot lines shall be separated by a minimum15 feet.
d. **Articulation of building façade** Frontages along front and side lot lines must differ from neighboring buildings on-site using a minimum of 2 of the specified massing and architectural strategies:

i. **Façade setback** Setting a portion of the facade back a minimum of 2 feet for a length of 20 feet.
ii. **Material or color** Use different facade materials and/or colors consistent with the architectural style.
iii. **Window treatment and design** Use different window types, configurations, and/or frame colors.
iv. **Architectural façade elements** Vary façade elements (balconies, trellises, chimneys, awnings) according to *Section 2.3 Architectural Façade Elements*.
v. **Entry elements** Vary the building entry element type or design of stoops, porches, dooryards, and other elements identified in *Section 2.4 Entry Elements*.
vi. **Vary roof form** Vary the roof form of different increments such as gabled, hipped, and others consistent with the architectural style of the building (selected from Chapter 4).

Figure 2.2-7 House Form Massing Strategies



Fenestration Design

1. **Façade fenestration standards**

Minimum fenestration Facade designs must meet a minimum fenestration percentage, calculated as the total window and door area divided by the total area of that part of the facade:

i. **Ground floor**: 30% minimum.
   (a) Ground floor windowsills on facades along the front lot line that face public streets shall be no higher than 3 feet above the adjacent grade.
   (b) **Exception**: Windows on garage panel door.
   (c) Ground floor bathroom windows are prohibited on facades that face front lot line.
ii. **Upper floors**: 15% minimum.
iii. The horizontal distance between wall openings shall not exceed 15 feet within a facade or massing increment.

2.2.3 Materials and Detailing

Building Materials

1. **Prohibited materials**

a. Fiberglass or plastic (false) architectural or facade elements or ornamentations are prohibited.
b. Rough-cast and sand-finishes are prohibited on all building surfaces that are visible from a street.
c. Reflective materials, such as mirrored glass, shiny metal, and chrome.

2. **Combining materials** When combining 2 or more wall materials on 1 facade:
   a. Place lighter weight materials above more substantial ones (e.g., glass above wood, wood above stucco, stucco above masonry).
   b. Vertical joints between different materials shall only occur at inside corners.

Windows and Doors

1. **Materials and types**

a. **Window recess** Windows shall be recessed specific to each building's architectural style listed in Chapter 4: Architectural styles but shall be no less than 2 inches for any style.
b. **Window Material**
   i. Vinyl or vinyl clad windows shall resemble wood windows (i.e., faux wood or engineered wood) in detailing and profile thickness and employ muted patterns and colors consistent with the building's architectural style.
c. **Trim**
   i. **Window and door trim materials** Wood or cement fiber board is permitted.
   ii. **Building trim materials** Wood, stone, cast stone, pre-cast concrete, glass fiber, reinforced concrete, and cement fiber board.

2.3 Architectural façade elements

2.3.1 Awning

Figure 2.3-1 Awning Diagram



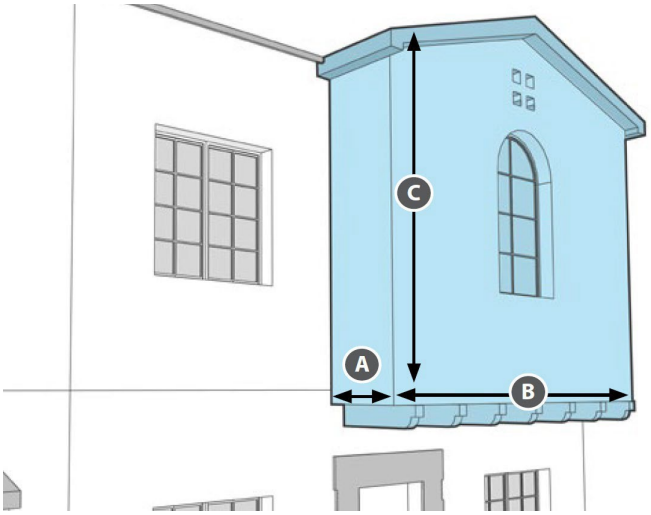
1. Element standards	Minimum	Maximum
A. Depth	Not Applicable	3 feet
B. Clearance above ground	8 feet	Not Applicable
C. Length	See Below	

2. Design standards

a. **Encroachment** Residential Awnings may encroach into the setback or public right-of- way as defined in Division 6.01.010(D)(2): Encroachments into Required Setback Areas of the Ontario Development Code.
b. **Material** Residential Awnings shall be of a simple shed form and made of code-compliant fire-resistant material.
c. **Upper floors** Each individual awning shall cover no more than 1 window opening.

2.3.2 Projecting room

Figure 2.3-2 Projecting Room Diagram



1. Element standards	Minimum	Maximum
A. Depth	Not Applicable	2 feet
B. Width	Not Applicable	20 feet
C. Height	Not Applicable	2-story building: 1 story max. 3-story building: 1 story max. 4-story+ building: 2 stories maximum.

2. Design standards

a. **Encroachment** Projecting rooms may encroach into the setback or public right-of-way as defined in Division 6.01.010(D)(2): Encroachments into Required Setback Areas of the Ontario Development Code.

b. **Support**
   i. Building projecting rooms shall have visible supports (I.e., beams, braces, or brackets).
   ii. Building projecting rooms shall be setback 10 feet from an adjacent property line

c. **Space between projecting rooms** Space between Projecting Rooms shall be 20 feet within the same building plane.

2.3.3 Bay Window

Figure 2.3-3 Bay Window Diagram



1. Element standards	Minimum	Maximum
A. Height	Not Applicable	10 feet
B. Width	Not Applicable	10 feet

2. Design standards.

a. **Encroachment** Bay windows may encroach into the setback or public right-of- way as defined in Division 6.01.010(D)(2): Encroachments into Required Setback Areas of the Ontario Development Code.
b. **Dimensions** Bay windows shall be a maximum of 10 feet wide and shall have a height that is equal to or greater than their width.
c. **Depth:** The depth of Bay Windows shall be a minimum of 3 feet.
d. **Façade placement** Bay windows shall be placed a minimum of 2 feet from any building corner and a minimum of 3 from any other bay window.
e. **Fenestration** Bay windows shall consist of a minimum 75% transparent fenestration.

2.3.4 Balcony

Figure 2.3-4 Balcony Diagram



1. Element standards	Minimum	Maximum
A. Height	Not Applicable	Refer to Design Standards
B. Width		
C. Depth		

2. Design standards

a. **Encroachment** Balconies may encroach into the setback or public right-of- way as defined in Division 6.01.010(D)(2): Encroachments into Required Setback Areas of the Ontario Development Code.
b. **Façade projection or recession** Balconies may project from the facade, be recessed into the facade, or a combination of the two.
c. **Required private open space** Balconies meeting private open space standards shall have a minimum dimension of 7 feet by 7 feet.

2.3.5 Terrace balcony

Figure 2.3-5 Terrace Balcony Diagram



1. Element standards	Minimum	Maximum
A. Height	Not Applicable	Refer to Design Standards
B. Width		
C. Depth		

2. Design standards

a. **Encroachment** Terrace balconies may encroach into the setback or public right-of- way as defined in Division 6.01.010(D)(2): Encroachments into Required Setback Areas of the Ontario Development Code.

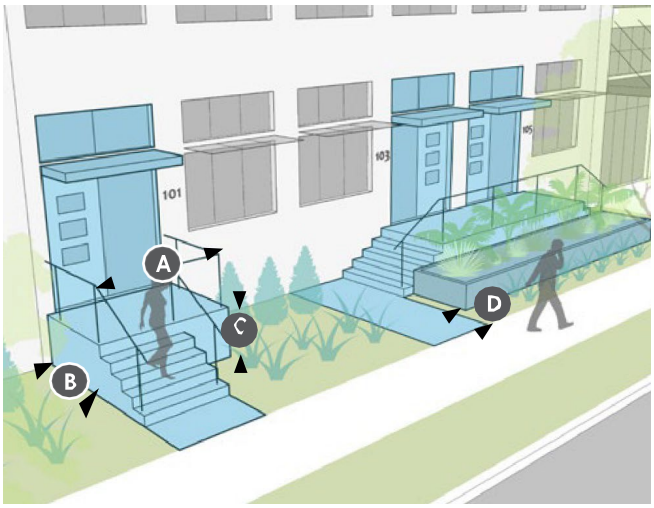
b. **Support**
   i. Terrace balconies shall be supported by continuous walls that extend all the way to the ground.
   ii. Terrace balconies shall not be designed as posts, columns, or pillars.

c. **Required private open space** Terrace balconies meeting private open space requirement shall meet or exceed the 7 feet by 7 feet standards specified in 2.1.5 Open Space Standards.

2.4 Entry elements

2.4.1 Stoop

Figure 2.4-1 Stoop Diagram



1. Element standards	Minimum	Maximum
A. Stoop Width	4 feet	8 feet
B. Stoop Depth (not including stairs)	4 feet	8 feet
C. Stoop Floor Depth	1.5 feet	3 feet
D. Planter/ Fence Height	Not Applicable	3 feet

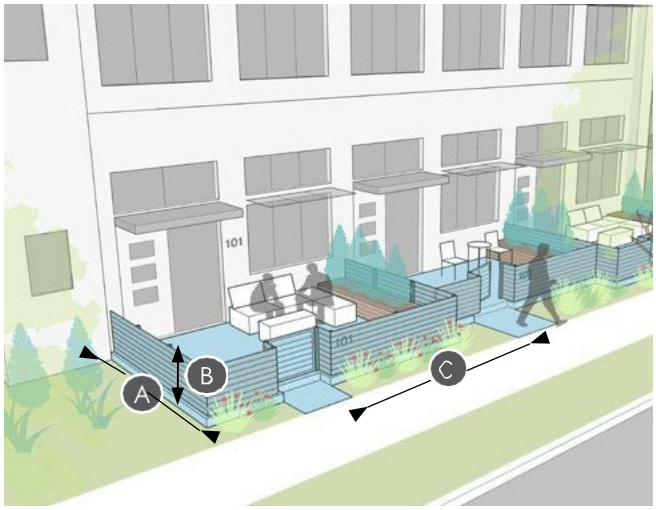
2. Design standards

a. **Relationship to entry** Stoops must align directly with the unit entry(s) they serve.
b. **Number of units served** Stoops shall provide access to a maximum of 2-unit entries.
c. **Lobby entries** Stoops may provide access to a lobby entry.
d. **Stoop stairway orientation** The exterior stoop stairway may be oriented perpendicular or parallel to the adjacent sidewalk.

3. Landscaping Landscaping shall be planted on the sides of the stoop, either at grade or in raised planters. Raised planters shall have a minimum depth of 12 inches.

2.4.2 Dooryard

Figure 2.4-2 Dooryard Diagram



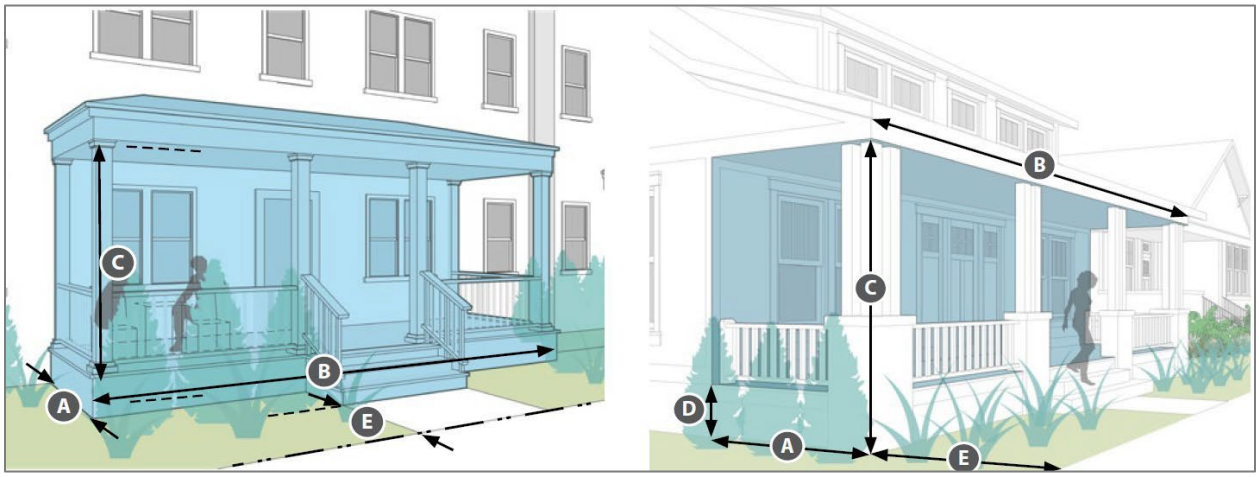
1. Element standards	Minimum	Maximum
A. Depth, Clear	8 feet	Not Applicable
B. Finish level above sidewalk	Not Applicable	3 feet
1. Length of Terrace	Not Applicable	150 feet
C. Distance between stairways	Not Applicable	50 feet

2. Design standards

a. **Relationship to Entry** Dooryards shall align directly with the unit entry(ies) they serve.
b. **Number of Units Served** Dooryards shall provide access to a maximum of 2-unit entries.
c. **Enclosure** Dooryards shall be enclosed by a maximum 3-foot high, decorative walls, fences, or low hedges.
d. **Architectural Style** Walls and/or fences shall match the building's architectural style.
e. **Doorway Stairway Orientation** If the doorway is raised above grade, the exterior stairway for raised Dooryards shall be oriented perpendicular or parallel to the adjacent sidewalk.

2.4.3 Porch

Figure 2.4-3 Porch Diagram



1. Element standards	Minimum	Maximum
A. Porch depth (excluding stairs)	8 feet	Not Applicable
B. Porch width	8 feet	Not Applicable
C. Porch height	8 feet	12 feet
D. Floor height	1.5 feet	3 feet
E. Between porch and front Property Line	5 feet	Not Applicable

2. Design standards

a. **Number of units served** Porches shall provide access to multiple ground-floor unit doors.
b. **Wrap-around porches** Porches shall wrap around building corners.

Chapter 3: Mixed Use Design Standards

3.1 Site Design Standards

General Design and Development Standards that meet or exceed all standards are applicable to all Projects.

3.1.1 Site Design

1. **Lot lines** The lines bounding a lot. The classifications of "Lot Line" are as follows**:**
    a. **Front** This line separates the narrowest street frontage of a lot from a public or private street right-of-way.
    b. **Interior "side"** Any lot line that is not a front or rear lot line and does not border a public or private street right-of-way.
    c. **Rear** The lot line opposite and farthest from the front lot line. In the case of an irregularly shaped lot, a straight line shall be drawn to determine the rear lot line.
    d. **Street side** Any lot line that is not a front or rear lot line, and which abuts a public or private street right-of-way.

3.1.2 Site Access

1. **Alleys** Vehicular access to the on-site parking areas shall be from the alley.
2. **Roadway inclusion** Pedestrian access from the public right-of-way must include sidewalk on both sides of the driveway.

3.1.3 Parking

Parking shall be designed in compliance with the applicable standards contained in Division 6.03 (Off-Street Parking and Loading) of the Ontario Development Code, except as modified by the following:

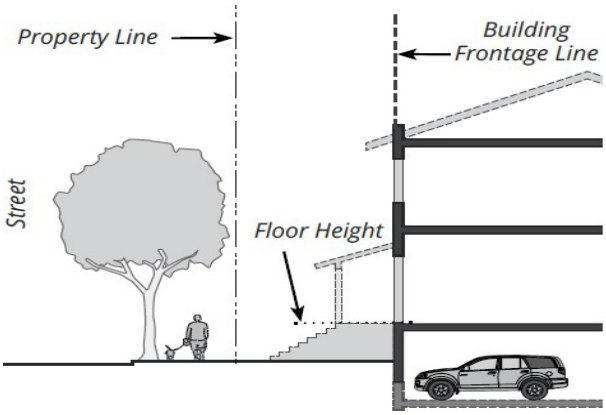
A. Placement on site

Parking shall be designed in compliance with the applicable standards contained in Division 6.03 (Off-Street Parking and Loading) of the Ontario Development Code, except as modified by the following:

1. **Surface parking**
    a. **Setbacks** Surface parking lots adjacent to public or private streets shall include a landscaped and irrigated setback a minimum of 5 feet in width measured from property line, or aligned with the building façade, whichever is greater.
    b. **Orientation** Surface parking lots shall be located at the rear, side, or internal lot lines and away from the front lot line.
2. **Above-ground parking structures** Ground-floor parking shall be sited behind residential, office, or commercial spaces.
3. **Semi-subterranean parking** A semi-subterranean garage shall not extend beyond the building frontage line and shall not extend higher than 4 feet above sidewalk grade.
4. **Subterranean parking** A subterranean parking structure may extend to all property lines (see Figure 3.1-1).

5. **Private residential garages** Each private garage must have vehicular access from an alley, side street, or motor court.

Figure 3.1-1 Semi-subterranean parking

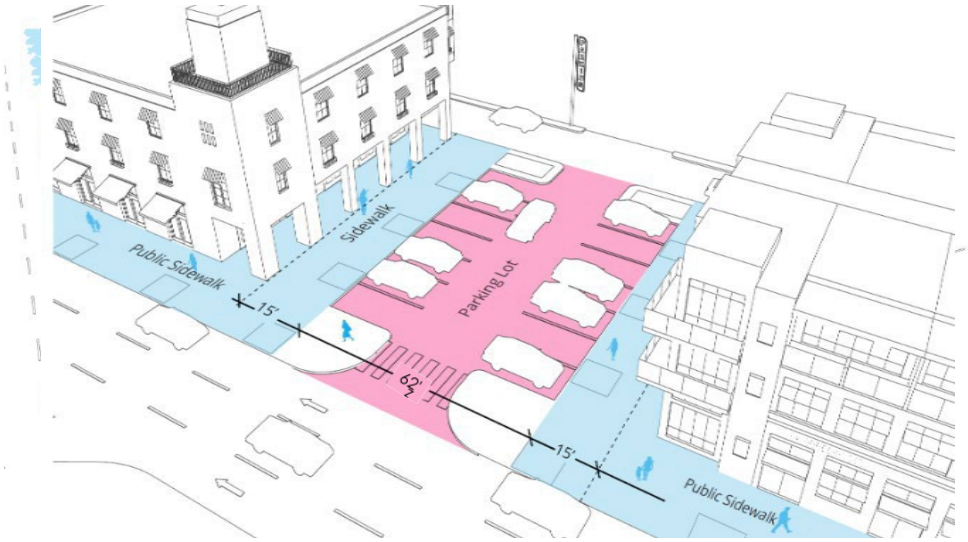


B. Surface parking lot design

1. **Screening**
    a. **Street-adjacent parking lots**
        i. A street-adjacent surface parking lot shall be screened from view by a low wall or hedge no higher than 3 feet in height.
        ii. Walls and hedges must be a minimum 18 inches from the back of the sidewalk.
        iii. Landscaped berms are prohibited.
    b. **Neighboring parcels** Views from neighboring properties shall be screened with trees and shrubs.
2. **Landscape** Landscaping materials shall be applied in compliance with the applicable objective parking lot landscape standards contained in Ontario Development Code Section 6.05.030 (Required Landscape Areas).
3. **Shade structures** Shade structures, if used, shall match the architectural style of the project buildings.

C. Parking court design

Figure 3.1-2 Parking Court



1. **Design standards**
    a. The width of the parking court, when measured from 1 building face to the other, shall not exceed 100 feet (see Figure 3.1-2).
    b. The parking court shall consist of only1parking bay, and this bay shall not exceed a maximum width of 62 feet.
    c. On both sides of the parking court, sidewalks must be established, each with a minimum width of 15 feet. These sidewalks must connect with the adjacent public sidewalk network.

D. Parking structure design

1. **Context-sensitive façade design** Parking structure façades shall incorporate a minimum 2 design elements using the architectural styles identified in Chapter 4: Architectural styles and adhere to Main Street or Urban and facade design standards applied in *Section 3.2.3 Building Types* (see Figure 3.1-3).
2. **Parking structure standards**
    a. Any driveway providing access to a parking structure shall have a minimum width of 28 feet. Single openings shall be no wider than 14 feet.
    b. Parked vehicles shall be shielded from view from adjoining streets.
    c. The exterior elevations of parking structures facing a public street shall incorporate architectural elements from the project building.
    d. Vehicular entries shall be located a minimum 50 feet from the corner of a block.
    e. Signs shall be consistent with Division 8: Sign Regulations of Ontario Development Code.

Figure 3.1-3 Example of parking structure and Façade Design



3.1.4 Open Space Standards

This Section provides standards that direct the design of common and private on-site open spaces.

A. Common open space and public frontage

1. **Common open space type requirements** Common open space shall cover a minimum of 15 percent of the total lot area with the following **exceptions**:
    a. **Close to parks** Common on-site open space shall not be required for lots within a 1/4-mile of an existing park or plaza a minimum 0.25 acres in size.
    b. **Common open space types** 1 or more of the common on-site open space types listed under "Common Open Space Types" shall be provided on each lot that has a residential use.
2. **Access and visibility** At-grade open space shall be accessible and visible from the adjacent ground floor.

B. Common Open Space Types

Forecourt

1. **Design standards**
    a. A forecourt may occur on any floor and may be used as an allowed method of creating façade massing increments.
    b. Minimum dimensions. Forecourts shall be a minimum of 15 feet by 15 feet.

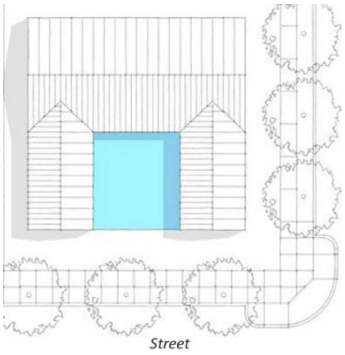


Figure 3.1-4 Forecourt

Side Garden

1. **Design standards**
    a. Minimum side garden dimensions: 15 feet by 15 feet.
    b. Dooryards, porches, stoops, and architectural elements may encroach into the side garden as follows:
        i. Up to a total of 30 percent of the side garden's width and/or length.
        ii. A ground floor encroaching element shall be allowed to project a maximum of 8 feet into the side garden.

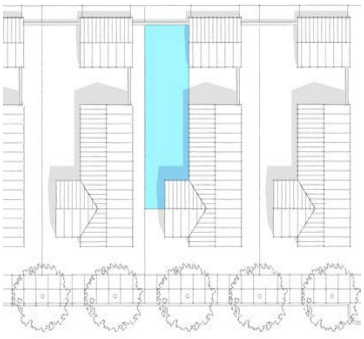


Figure 3.1-5 Side Garden

Court

1. **Design standard**

    a. **Minimum dimensions**: All courts shall be a minimum of 20 feet by 30 feet.
    b. **Enclosure**
        i. A court shall have building walls on at minimum 2 sides, while the third and fourth side can be defined by architectural or landscape elements (i.e., low walls, trellises, hedges, or rows of trees).
        ii. A driveway located adjacent to a court shall be screened by architectural elements (e.g., low walls or trellises, hedges, or rows of trees).
    c. **Access**
        i. Courts shall be accessed from the street or walkway.
        ii. Units shall be allowed to take direct access through a court.

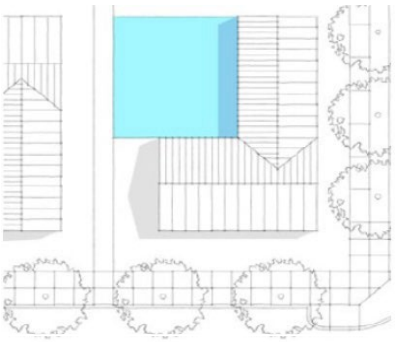


Figure 3.1-6 Court Configuration

d. **Encroachments**
   i. Dooryards, porches, stoops, and architectural elements may encroach into the Side Yard.
   ii. A ground floor encroaching element shall not encroach beyond 8 feet of the building's façade into the court.

e. **Common area** A court shall serve as communal spaces and pedestrian access.
f. **Amenities** A court shall include at minimum 1 of the following amenities: a seating area, a fountain, a BBQ island, or an outdoor fireplace.

Passage

1. **Design standards**
   a. **Location** Passages shall be provided between buildings or side gardens.
   b. **Size** Passages shall be a minimum width of 8 feet with minimum of 2 feet of landscape strip on each side.

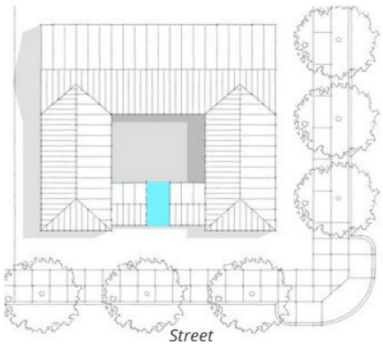


Figure 3.1-7 Passage Configuration

C. Private Open Space

1. General standards
   a. of 60 square feet of private open space shall be provided for each residential unit and a minimum of **1** or more of the private on-site open space types shall be provided, with the following.
   b. **Exception**: Private on-site open space shall not be required for a project site located within 1/4-mile distance of an existing park or plaza that is a minimum 0.25 acres in size.

D. Private Open Space Types

Private Roof Deck

1. **Description** A private open space located on the roof of a building dedicated to a single unit.
2. **Design standards**
   a. Minimum dimensions of 7 feet by 7 feet.
   b. Materials, finishes, fixtures, and colors visible from the street shall be designed consistent with the architectural style of the building.

Backyard

1. **Description** A private, landscaped open space located behind each individual unit that is intended to provide passive or active outdoor space for the users of the unit.
2. **Design standards**
   a. Backyards are located behind the unit.
   b. Minimum dimensions of 20 feet by 15 feet.
   c. Encroachment into the backyard is allowed up to 30% of the space's width and/or length.
   d. Maximum projection for any ground floor element is 8 feet, with a 10-foot upper floor setback from property line if there's usable space above the first floor.

Architectural façade elements as private open space

1. **Description** The following elements defined in *Section 2.3 Architectural Façade Elements* may be used to meet on-site private open space requirements.
    a. Balcony
    b. Terrace Balcony

Entry elements as private open space

1. **Description** The following elements defined in *Section 2.4 Entry Elements* may be used to meet on-site private open space requirements.
    a. Dooryard
    b. Porch

3.1.5 Landscaping

This section provides standards for landscaping, materials, and Irrigation.

1. **General to all** Landscaping materials shall be applied in compliance with the applicable landscape standards contained in Ontario Development Code Section 6.05.030 (Required Landscape Areas).

2. **Paths** Where front yards are landscaped, individual paths to the sidewalk shall be provided for each entrance
3. **Materials** Decorative accents. Paving materials shall incorporate decorative elements consistent with the architectural style of the building.

3.1.6 Fences and Walls

1. **Fence and wall heights** Walls and Fences shall be designed in compliance with the applicable standards contained in Division 6.02 (Walls, Fences, and Obstructions) of the Ontario Development Code.

3.2 Mixed Use Development Standards

The following tables and associated standards for Mixed-Use standards covering new residential construction, additions, remodels, or repurposed uses that necessitate an entitlement or building permit from the City. All standards listed under Table 3.01 Mixed-Use Development are applicable to all mixed-use projects.

Table 3.01 Mixed Use Development Standards per Building Type

Requirements	Mixed-Use Development Standards		Additional Regulations
	Mixed-Use Building Type		
A. BUILDING DEVELOPMENT STANDARDS			
Massing and Façade Design	***Main Street***	***Urban***	
1. Minimum Setback from Public Street Property Lines			Notes 2 & 8
a. **Arterial**	0 feet	0 feet	
b. **Collector**	0 Feet	5 feet	
c. **Local**	5 feet	5 feet	
2. Maximum Setback from Public Street Property Lines			
a. **Arterial**	5 feet	5 feet	
b. **Collector**	10 feet	10 feet	

Requirements	Mixed-Use Development Standards		Additional Regulations
	Mixed-Use Building Type		
c. **Local**	10 feet	10 feet	
3. Minimum Setback from Interior Project Boundary Property Lines	0 feet (attached to adjacent property) 10 feet (freestanding)		
4. Minimum Setback from Public Alley Property Lines	5 Feet		
5. Minimum Setback from Private Drives/Alleyways (from edge of drive aisle)			
a. **Living Area**	10 feet		
b. **Garages and Other Nonhabitable Structures**	5 feet		
6. Minimum Setback from Dwellings to Parking Spaces			
a. **Living Area**	10 feet		
b. **Garages and Other Nonhabitable Structures**	5 feet		
7. Minimum Setback from Parking Space or Drive Aisle to Wall or Fence	5 feet		
8. Minimum Separation Between Detached Buildings			
a. **Dwelling Front to Front**	< 2-Stories: 25 feet; > 3 Stories: 30 feet unless otherwise specified by massing requirements ("Space between buildings") in Section 3.2.3 Building Types.		
b. **Dwelling Front to Rear**	< 2-Stories: 25 feet; > 3 Stories: 30 feet unless otherwise specified by massing requirements ("Space between buildings") in Section 3.2.3 Building Types.		
c. **Dwelling Front to Side**	< 2-Stories: 25 feet; > 3 Stories: 30 feet unless otherwise specified by massing requirements ("Space between buildings") in Section 3.2.3 Building Types.		
d. **Dwelling Side to Side**	< 2-Stories: 5 feet; > 3 Stories: 5 feet unless otherwise specified by massing requirements ("Space between buildings") in Section 3.2.3 Building Types.		
e. **Dwelling Side to Rear**	15 feet unless otherwise specified by massing requirements ("Space between buildings") in Section 3.2.3 Building Types.		
f. **Dwelling Rear to Rear**	20 feet unless otherwise specified by massing requirements ("Space between buildings") in Section 3.2.3 Building Types.		
	30 feet – Entry to Entry		
	30 feet – Entry to Side		
g. **Garage to Garage (or other nonhabitable**	10 feet – Side to Side		
structures)	10 feet – Side to Rear		
9. Minimum Storage Space	240 CF		Note 4
10. Maximum Street Façade Height			
a. Arterial	45 feet	N/a	Note 8
b. Collector	N/a	N/a	
c. **Local**	N/a	N/a	
11. Maximum Building Height (from grade to top of plate)			
a. Arterial	Table 3.2-2 Mixed-Use Building Types		Note 8
b. Collector			
c. Local			
12. Minimum Floor-to- Floor Height			
a. Ground Floor (Non-residential /Residential)	15 feet / 10 feet		
b. Upper and Sub Levels	9 feet		
13. Minimum Setback from Major Pipelines	50 feet (to habitable structures)		Note 6

Notes:

1. *An existing lot of record that is substandard as to minimum "project" area and/or dimension(s), shall be permitted all the development rights of the zone in which it is located. New lots designated as Mixed-Use (MU) in the Policy Plan (General Plan) shall comply with the identified minimum.*
2. *The density range shall be consistent with the underlying Mixed-Used Category identified in Figure LU-04, Mixed Use Areas and defined in Table LU-02, Land Use Designations Summary Table, of the Policy Plan (General Plan). A density bonus and other incentives pursuant to GC Sections 65915 through 65918, may be granted by the Approving Authority. Refer to Development Code Subsection 6.01.010.H (Density Bonus and Other Incentives).*
3. *Measurement of the continuous frontage may include existing frontages, provided there is no more than 10 feet between the frontage of active ground floor uses in the existing building and those of the proposed development project.*
4. *Adequate lockable private storage space for each residential unit shall be provided within a garage or storage building, or a space directly accessible from the dwelling. Exterior closets accessed from patios or balconies may be used if screened from public view.*
5. *A lot designated as Mixed-Use (MU) in the Policy Plan (General Plan) shall be developed at no less than the minimum number of dwelling units allowed within the specified density range for the applicable Mixed-Use Category, except that If, because of the configuration/design of a lot, the minimum residential density cannot be achieved, the lot may be developed with non-residential uses.*
6. *Includes major high-pressure pipelines for fuel oil, gasoline, and diesel and aviation fuels within the City. Existing pipelines include:*
   a. *Two parallel pipelines (a 16-inch and a 20-inch) that enter the City at Benson Avenue, traveling parallel to the northerly side of the Southern Pacific right-of-way to Ontario International Airport, then parallel to the southerly side of the Southern Pacific right-of-way, then parallel to the northerly side of the right-of-way beyond Ontario International Airport, then exiting the City at Etiwanda Avenue; and*
   b. *Two parallel pipelines that traverse the easterly portion of the City, entering the City at the southerly portion of Milliken Avenue, then traveling north under Milliken Avenue to Inland Empire Boulevard, then east to Rochester Avenue, then north to the City Limits.*
7. *The minimum setback from private streets shall be measured from a line running parallel to the street, which is located 12 feet behind face-of-curb (a.k.a., "parkway").*
8. *In the Downtown District, the maximum 45-foot façade height shall extend no more than 70 percent of the frontage. The remaining 30 percent of the frontage shall include an upper-level setback of at least 12 feet, starting at the third story. Usable outdoor spaces, such as roof decks or terraces, may occupy the roof area of the upper-level setback. See Urban Form standards under Section 2.2.2A Urban Building Type.*

3.2.1 Height Standards

1. **Height transition zones** Requires all new buildings within 100 feet of less intense development patterns (existing or planned) to reduce heights to ensure neighborhood compatibility:
2. **Vertical mixed use development types** The following height limits shall apply to all proposed vertical mixed use development types.
    a. Buildings within 100 feet of single-family dwellings shall not exceed 35 feet or the height of adjacent residential buildings.
    b. Buildings within 100 feet of undeveloped parcels with planned less intense uses shall not exceed 35 feet.

3.2.2 Ground Floor Building Frontage

1. **Mixed-Use development types** The ground floor frontage for vertical mixed-use developments must be designed to accommodate commercial uses.

3.2.3 Building Types

Identify the suitable building type based on the location including (see Table 3.2-1):

1. **"Main Street"** (applicable to mixed-use areas within the District Place type as shown on Policy Plan Exhibits LU-04 and CD-01)
2. "**Urban"** (applicable to mixed-use areas outside the District Place type)

Table 3.2-1 Mixed- Use Building Types

TOP Land Use Place type	Max Permitted Height	Building Types
Downtown	45 feet	Main Street
Airport Metro/Entertainment	120 feet	Main Street
Guasti	70 feet	Main Street
South Euclid	70 feet	Main Street
South Employment	70 feet	Main Street
East Holt Blvd	70 feet	Urban
Inland Empire Blvd	70 feet	Urban
Infill	50 feet	Urban
South of Riverside Drive	50 feet	Urban

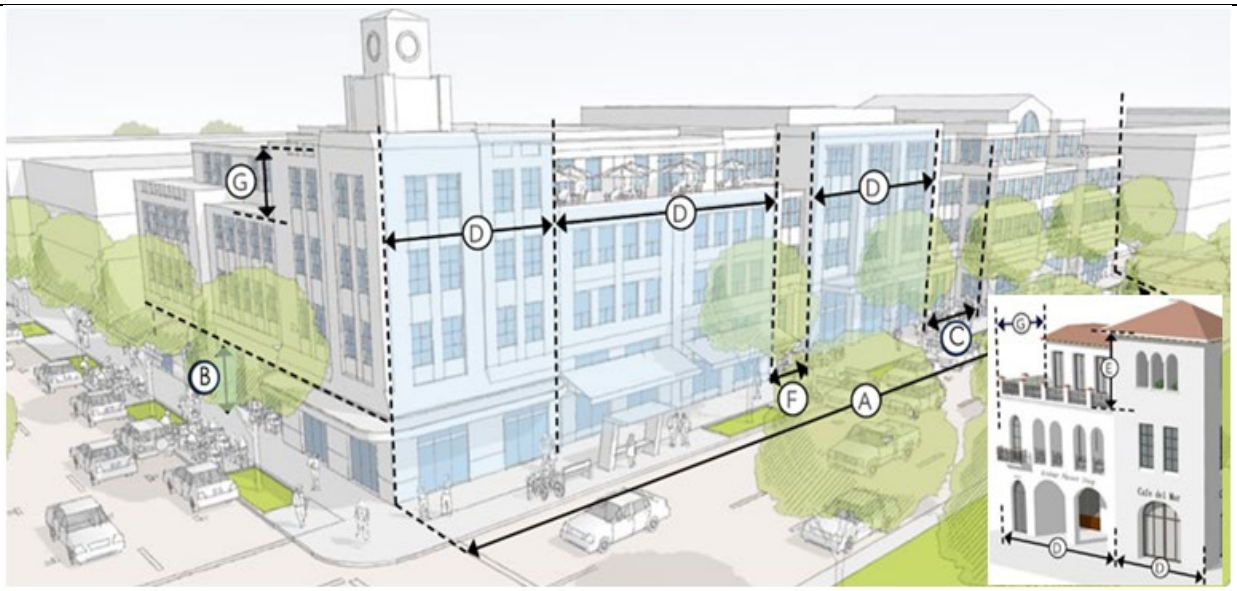
A. Main Street Massing and Façade Design

Main Street Massing and Façade design standards are required in all mixed-use areas within the District Place type, as shown in the City's Policy Plan (Exhibits LU-04 and LU-05).

Massing increment
Massing Increments shall appear as either distinct buildings or distinct parts of a single building.

1. Massing standards

Figure 3.2-1 Main Street: Massing Diagram



1. Element Standards
A. Building Façade along font lot line (300 feet max).
B. Building Façade alongside lot line (150 feet max).
C. Space between buildings (0 feet min).
D. Massing Increment (75 feet max).
E. Height Difference between Massing Increments (3 feet min).
F. Façade Break (10 feet x 10 feet min).
G. Upper-Level Setback (15 feet min).

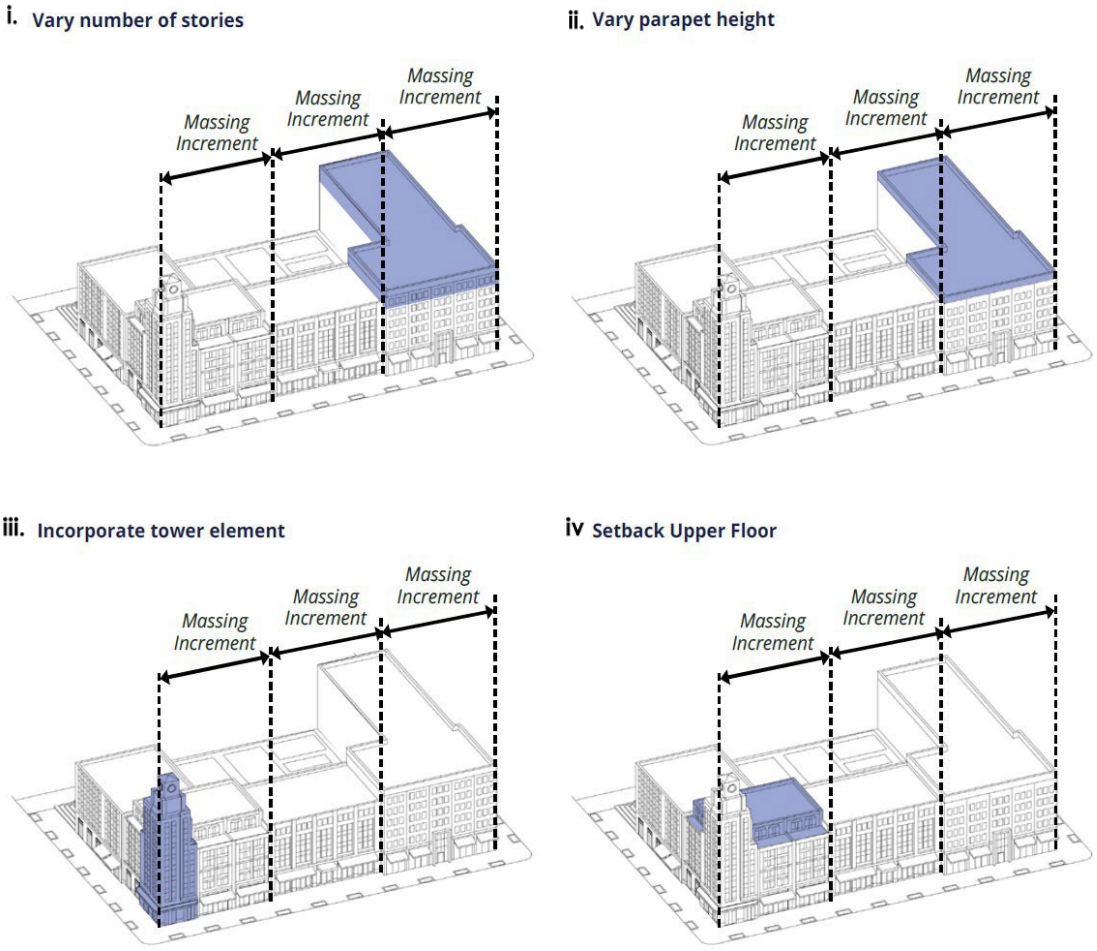
2. Massing standards

a. **Size of massing increments.** Building facades that face public streets and are longer than 75 feet in length shall be divided into massing increments as follows (see Figure 3.2-1):
   i. The maximum length of a single massing increment shall not exceed 75 feet.
   ii. Single building projects less than 150 linear feet of street frontage shall have no massing increments applied.
   iii. Single building projects between 150 and 250 linear feet of street frontage shall have at minimum 2 massing increments separated by a façade break.
   iv. Single project buildings that have more than 250 linear feet of street frontage shall have 3 massing increments each separated by a façade break.

b. **Required difference in facade height**. Adjacent massing increments must vary in façade height measured from the sidewalk to the eave, cornice, or parapet, using a minimum 1 massing strategy (see Figure 3.2-1 and Figure 3.2.2):

i. Vary number of stories.
ii. Vary the parapet height by a minimum of 3 feet.
iii. Incorporate tower element.
iv. Set back upper floor(s) a minimum 15 feet.

Figure 3.2-2 Main Street: Examples of Massing Strategies Diagram



c. **Articulation of massing increments.** Individual massing increments shall be differentiated from one another using 3 of the following architectural strategies (see Figure 3.2-2):
   i. **Set façade increment back.** Set the entire facade increment back a minimum of 3 feet.
   ii. **Base height.** Vary the height of the building base of adjacent increments.
   iii. **Façade colors.** Use different facade materials and/or colors.
   iv. **Window type/configuration.** Use different window types, configurations, and/or frame colors.
   v. **Presence/arrangement of façade elements.** Vary the presence or arrangement of façade elements such as projecting balconies, recessed balconies, trellises, chimneys, and awnings.

d. **Self-contained massing increments.** Facade elements, such as window openings and balconies, shall not overlap the division between massing increments.
e. **Repeating massing increment design.** A massing increment design may be repeated a maximum of 3 times on the same project elevation. Repeated massing increments may not be located immediately adjacent to each other.

Façade Composition

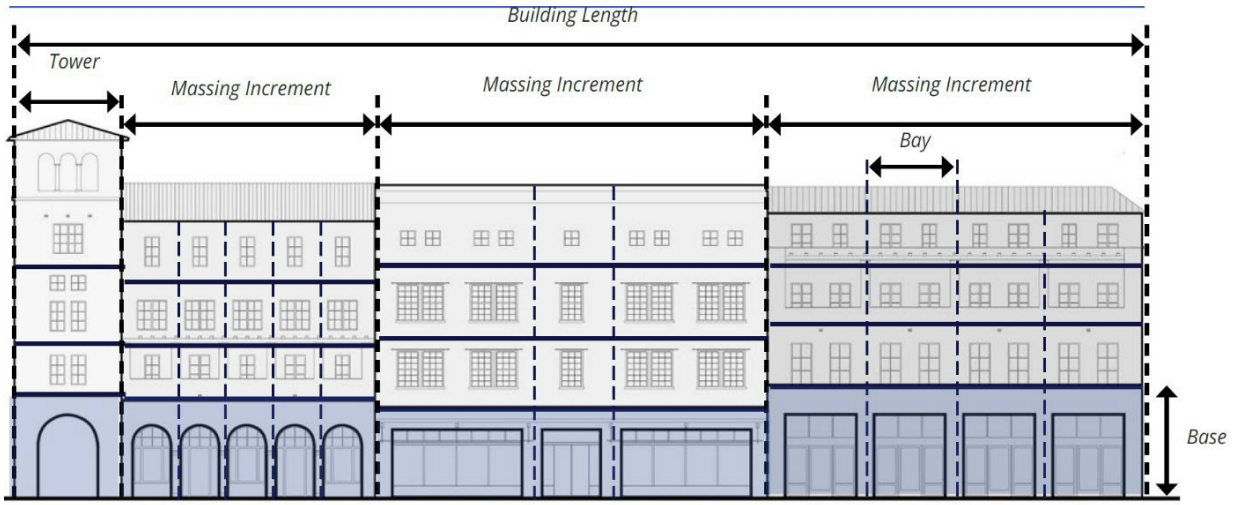
1. **Facade composition standards**
   a. **Facade Grid.** The window, door, and/or shopfront openings of each individual facade shall be organized into a grid as follows:
      i. **Horizontal alignment of elements.** Rooflines, openings, and materials within each facade shall be aligned horizontally.
      ii. **Vertical Bays.** The entirety of a building's façade shall be clearly divided into vertical bays.

   b. **Multi-story building façades.** Multi-story building facades shall be designed to include a base, middle, and top.
      i. **Base.** Building base of entire ground floor for buildings less than 5 stories or 25 feet for buildings 5 stories or more, shall use a minimum of 2 of the following strategies:
         (a) Provide a string course at the top of the first story;
         (b) Specify base materials different from rest of facade;
         (c) Specify base colors different from rest of facade;
         (d) Provide a ground floor Arcade or Gallery per (*Section 3.2 Architectural Façade Elements*).



      ii. **Middle**. The middle of the building—the facade of all floors located above the base—shall be designed as follows:
         (a) Window and door openings shall be organized in bays per the façade fenestration standards of this section.
         (b) If provided, attached façade elements such as balconies, bay windows, and projecting rooms, shall be designed per the façade fenestration standards of this section.
      iii. **Top.** The façade elements that define the upper limits of the building—shall be designed as follows:
         (a) The top of the building facade shall incorporate capping elements, such as a cornice, enhanced ornamentation, or a decorative parapet (see Figure 3.2-3).

Figure 3.2-3 Main Street: Façade Composition



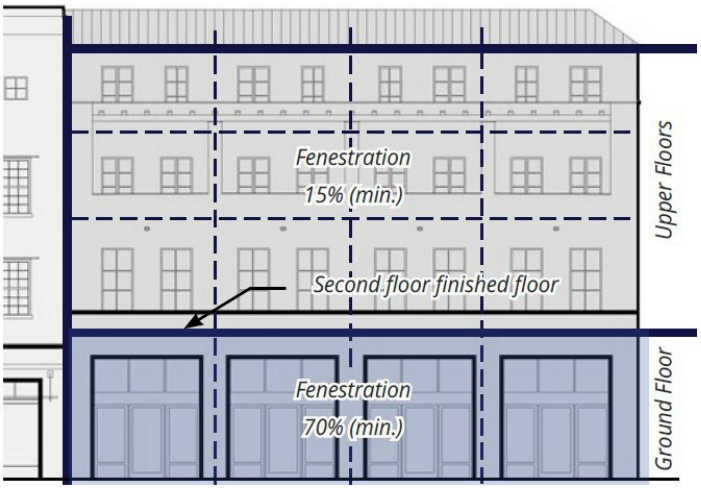
Facades organized according to massing increments that may consist of an individual building or one building that is divided into individual massing increments. Each increment is designed according to a grid of floor levels and bays.

Fenestration Design

Fenestration Design addresses the percentage of window and door openings for ground floors and upper floors and glazing transparency.

1. **Façade fenestration standards.**
    a. **Minimum fenestration.** Facade designs shall include a minimum percentage of fenestration calculated as the total percentage of window and door area divided by the total area of that portion of the façade (see Figure 3.2-4):
        i. **Ground floor**: 70% minimum.
        ii. **Upper floors**: 15% minimum.

Figure 3.2-4 Main Street: Fenestration



2. **General to all floors.** All window jambs/frames shall be set back a minimum of 2 inches back from the facade plane.

3. **Specific to ground floors.** Structural elements shall be visible on the exterior of ground floor facades to visually convey that the upper floors are supported.

    a. **Ground floor windowsills** on facades along the front lot line that face public streets shall be no higher than 3 feet above the adjacent grade.
    b. **Ground floor bathroom windows** prohibited on facades that face front streets.

B. Urban massing and façade design

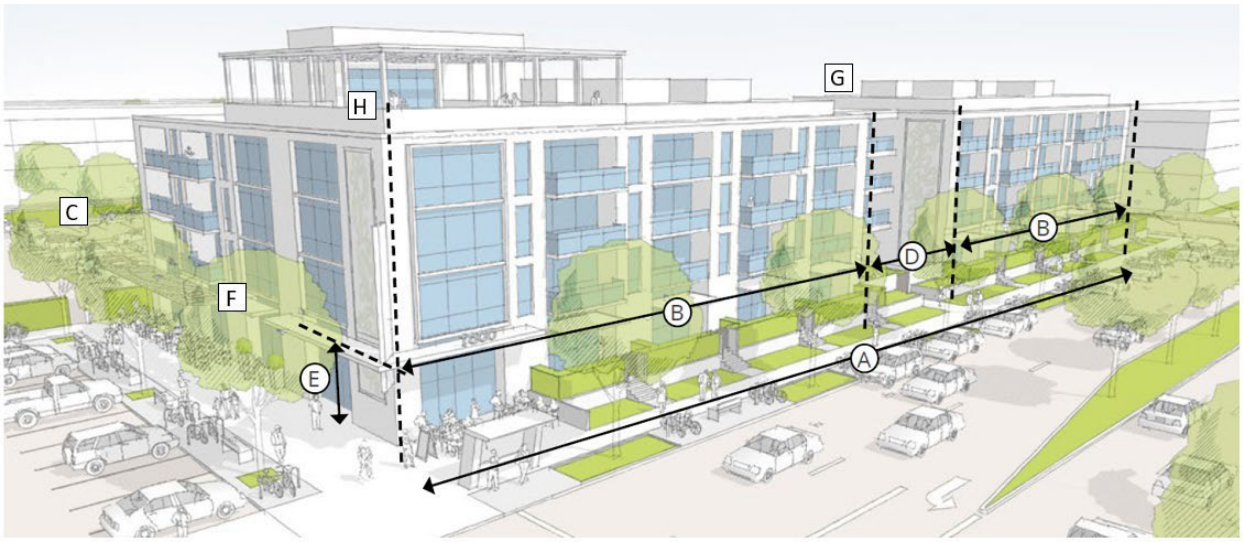
Urban massing and façade design_ Standards are required for all multiple-family developments projects with 25 du/ac or more.

Massing Increments

Massing increments are visually discrete design compositions that are distinguishable from each other and have a coherent look and character from the ground to the top of the facade. Massing Increments appear as either distinct buildings or distinct parts of a single building (see Figure 3.2-5).

1. **Massing standards**

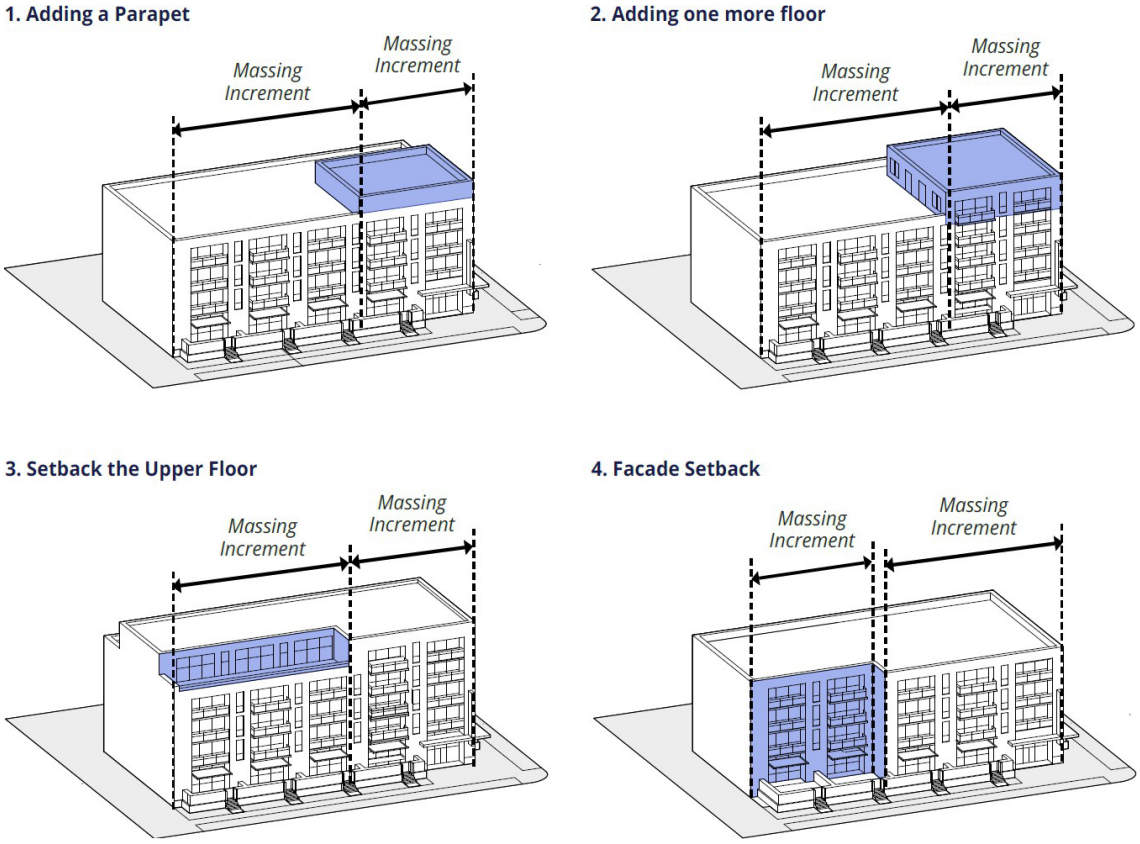
Figure 3.2-5 Urban Massing



Element Standards	Standards
a. Building façade along font lot line	400 feet max
b. Massing increment	150 feet max
c. Space between buildings	0 feet minimum
d. Façade setback (if elected)	10 feet x 10 feet minimum
e. Building base height	15 feet minimum
f. Building façade alongside lot line	200 feet max
g. Height difference between massing increments	3 feet minimum
h. Upper-level setback from facade	15 feet minimum

2. **Size of massing increments** Building facades along front and side lot lines that face public streets and are longer than 100 feet shall be divided into massing increments as follows:
    a. The maximum length of a single massing increment shall not exceed 150 feet (see Figure 3.2-6).
    b. A minimum of **2** distinct massing increments shall be provided.
3. **Articulation of massing increments** Individual massing increments shall be differentiated from one another using at minimum 1 of the following massing strategies:
    a. Vary parapet height by a minimum of 3 feet.
    b. Increase number of stories.
    c. Set the upper floor or multiple upper floors back a minimum of 15 feet from the facade.
    d. Set the entire facade back a minimum of 10 feet for 20 feet.
    e. Incorporate tower element.

Figure 3.2-6 Urban: Examples of Massing Strategies Diagram



1. **Massing increments with distinct facades** Massing increments that have distinct facades and shall appear as distinct buildings.

    a. **Repeating massing increment design** A massing increment design may be repeated on the same project elevation. Repeated massing increments shall be separated by a distinct massing increment

Façade Composition

Façade composition standards address the design and arrangement of various building elevation elements that are applied to each massing increment, including window and door openings, attached and recessed façade elements such as bay windows, balconies, and arcades, and wall materials and colors.

1. **Façade composition standards**

2. **Multi-story building façades** The building facade shall be divided into a base and body as follows.

    b. **Base** Separate the building base (entire ground floor facade or first 2 floors of buildings 5 stories or taller) from the rest of the facade for a minimum of 15 feet (fewer than 5 stories) or 25 feet (5 stories or more) from grade, using a minimum **2** of the following strategies.

        i. Provide a string course at the top of the first story.
        ii. Specify base materials different from rest of façade.
        iii. Specify base colors different from rest of façade.
        iv. Provide a ground floor Arcade or Gallery per Section 3.3 Architectural Façade Elements.

    c. **Body** The body of the building consists of the facade of all floors located above the base and shall be designed as follows:

        i. Windows shall be organized in bays, bands, curtain wall, and/or grid of windows consistent with the Facade Fenestration Standards for the Urban massing type.
        ii. Each massing increment must contain its entire facade composition without elements overlapping the division between increments.

    d. **Strategies** The listed strategies show acceptable ways to differentiate massing increments:

        i. Vary the height of the building body.
        ii. Use different facade materials and/or colors.
        iii. Use different window types/configurations.
        iv. Diversify facade elements, including projecting balconies, recessed balconies, canopies, and awnings.

Fenestration Design

Fenestration Design addresses the percentage of window and door openings for ground floors and upper floors and glazing transparency.

1. **Façade fenestration standards.**

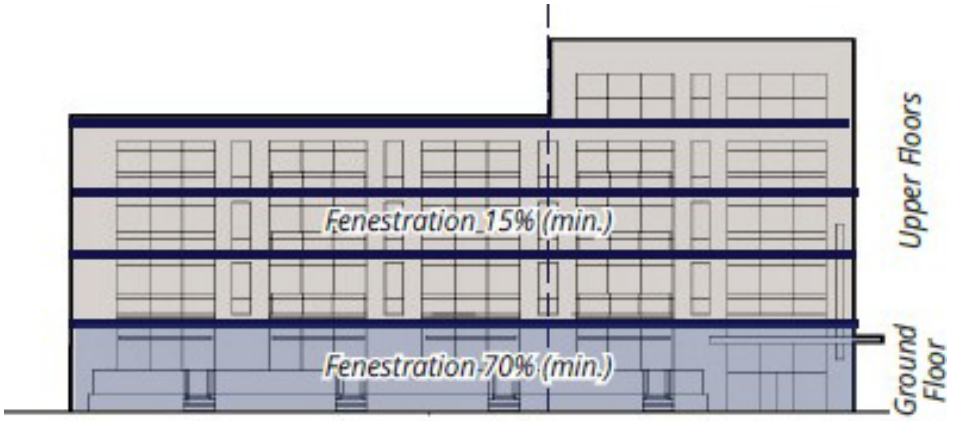
    a. **Minimum fenestration.** Facade designs must meet a minimum fenestration percentage, calculated as the total window and door area divided by the total

area of that part of the facade.

i. **Ground floor**
   (a) Front lot line: 70% minimum
   (b) All other frontages: 50% minimum
   (c) Ground floor windowsills on facades along the front lot line shall be no higher than 3 feet above the adjacent grade.
   (d) Ground floor bathroom windows are prohibited on facades that face front lot line.

ii. **Upper floors** 15% minimum

Figure 3.2-7 Urban: Fenestration Diagram



3.2.4 Materials and Detailing

A. Building Materials

1. **Prohibited materials**
   a. Fiberglass or plastic (false) architectural or facade elements or ornamentations are prohibited.
   b. Rough-cast and sand-finishes are prohibited on all building surfaces that are visible from a street.
   c. Reflective materials, such as mirrored glass, shiny metal, and chrome, are allowed with the following exception:
      i. Application to small areas (up to 50 sq ft or 2% of façade area, whichever is less) for signage highlighting, ensuring no glare nuisance to traffic, pedestrians, or neighboring buildings.
2. **Combining materials.** When combining 2 or more wall materials on 1 facade:
   a. Place lighter weight materials above more substantial ones (e.g., glass above wood, wood above stucco, stucco above masonry).
   b. Vertical joints between different materials shall only occur at inside corners.

B. Windows and Doors

1. **Material and types**
    a. **Window recess** Windows shall be recessed in a manner that is specific to each building's architectural style but shall be no less than 2 inches for any style.
    b. **Architectural style of detailing** Windows, doors, frames, colors, and styles shall be appropriate to the building's architectural style in terms of window type, proportion, and color.
    c. **Materials** Windows and doors shall be made of wood, fiberglass, fiberglass-clad wood, aluminum clad wood, or metal.
    d. **Glazing** Glazing shall be clear glass with no more than ten percent daylight reduction (tinting). Reflective (mirrored) glazing is prohibited.
    e. **Residential buildings** The following are applicable to multiple-family development types.
        i. Vinyl or vinyl clad windows shall resemble wood windows (i.e., faux wood or engineered wood) in detailing and profile thickness and employ muted patterns and colors consistent with the building's architectural style.
        ii. Nail-on windows that are deeply set within their frame are permitted.
        iii. Muntins shall be of a substantial dimension (e.g., not flat) and shall be placed on the exterior of windows.
        iv. Trim:
            a) **Window and door trim materials** Wood or cement fiber board. Foam trim around windows is allowed. Foam trim around doors is prohibited.
            b) **Building trim materials** Wood, stone, cast stone, pre-cast concrete, glass fiber reinforced concrete, and cement fiber board.

3.3 Architectural Façade Elements

The following architectural façade elements shall be incorporated into a development project to fulfill the requirements for façade articulation and/or articulation of massing increment defined in 3.2.3. Massing and Façade Design.

3.3.1 Arcade

Figure 3.3-1 Arcade



1. Element Standards	Minimum	Maximum
A. Depth	12 feet	16 feet
B. Distance from Property Line	0 feet	
C. Opening height, clear	See Below	
D. Overall height	See Below	

2. Design standards

a. **Projection depth** The arcade projection depth from the ground floor facade shall be no greater than the height of the arcade opening (see Figure 3.3-1).

b. **Sidewalk depth beneath arcade** The covered sidewalk under the arcade shall be a minimum of 10 feet wide from the inside of the vertical support to the ground floor building face.

c. **Entry element requirement** Arcades shall be combined with Shopfronts (defined in *Section 3.4 Entry Elements*).

d. **Minimum openings and massing increments** Arcades shall be a minimum of 3 openings wide. The location where an arcade stops or changes in design or dimensions shall correspond to a change in massing increment (*Section 3.2.3.*

Massing and Façade Design) for massing increment requirements).

e. **Vertical supports** Vertical supports may be piers, columns, or arches. The width of a vertical support shall not exceed 3 feet.
f. **Width of openings** The openings between vertical supports, as seen from the street, shall be taller than they are wide.
g. **Shape and cadence of openings** Openings, whether rectangular or arched, must align with facade bays if present (vertical bays are mandatory for Main Street standards and optional for other massing types in *Section 3.2.3. Massing and Façade Design*).
h. **Vertical clearance** The minimum vertical clearance at each opening shall be a minimum of 12 feet, excluding decorative brackets, spandrels, and/or lower portions of arches.
i. **Arcade height relative to interior building floor height** The height of the soffit inside the arcade shall be no less than the height of the ceiling of the floor to which it corresponds.
j. **Architectural style** Arcade detailing, including lighting, shall utilize the architectural style of the building.

3.3.2 Gallery

Figure 3.3-2 Gallery



1. Element standards	Minimum	Maximum
A. Depth, clear	10 feet	16 feet
B. Distance to property line, clear	0 feet	5 feet
C. Opening height, clear	12 feet	2 floors
D. Overall height	See Below	

2. Design standards

a. **Projection depth** Gallery projection depth from the ground floor facade shall be no greater than the height of the gallery opening (see Figure 3.2-2 "A").

b. **Sidewalk depth beneath gallery** Covered sidewalk width under the gallery must be a minimum of 10 feet from the inside of the vertical support to the ground floor building face (see Figure 3.2-2 "A").

c. **Minimum openings and massing increments** Galleries shall be a minimum of 3 openings wide. The location where a gallery stops or changes in design or dimensions shall correspond to a change in massing increment (*see Section 3.2.3. Massing and Façade Design*).

d. **Vertical supports** Vertical supports may be piers or columns. The width of a vertical support shall not exceed 1 foot.

e. **Width of openings** Openings between vertical supports, as seen from the street, shall be taller than they are wide.

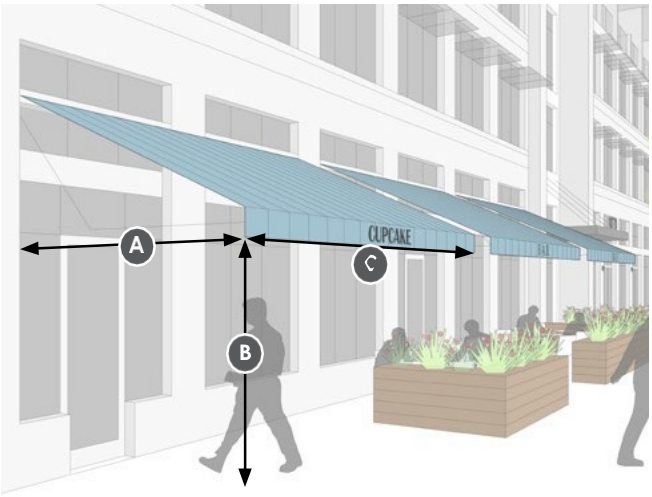
f. **Shape and cadence of openings** Openings may be rectangular but shall not be arched.

g. **Vertical clearance** Minimum vertical clearance at each opening shall be a minimum of 12 feet, excluding decorative brackets and spandrels.

h. **Gallery height relative to interior building floor height.** Height of the soffit inside the gallery shall be no less than the height of the ceiling of the floor to which it corresponds.
i. **Vertical alignment** Galleries may be single or double-story and shall correlate with building floors (see "D" in above figure).
j. **Architectural style** Gallery detailing, including lighting shall utilize the architectural style of the building.

3.3.3 Commercial Awning

Figure 3.3-3 Commercial Awning Diagram



1. Element standards	Minimum	Maximum
A. Depth	4 feet	Not Applicable
B. Clearance above sidewalk	8 feet	Not Applicable
C. Length	See Below	

2. Design standards

a. **Encroachment** Commercial awnings may encroach into the setback or public right-of- way as defined in Division 6.01.010(D)(2): Encroachments into Required Setback Areas of the Ontario Development Code (see Figure 3.3-3).

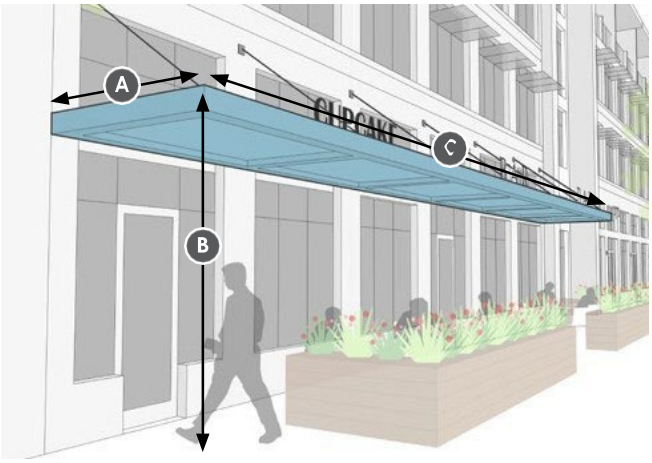
b. **Material** Commercial awnings shall be of a simple shed form, made of code-compliant fire-resistant canvas.

c. **Width.** Awning widths shall equal in size to shopfront opening widths.

d. **Prohibited lighting** Internally illuminated and back-lit awnings and any associated light diffusers are prohibited.

3.3.4 Commercial canopy

Figure 3.3-4 Commercial Canopy



1. Element standards	Minimum	Maximum
A. Depth	Not Applicable	3 feet
B. Minimum clearance above ground	Not Applicable	12 feet
C. Length of terrace	Not Applicable	150 feet

2. Design standards

a. **Encroachment** Commercial canopies may encroach into the setback or public right-of- way as defined in Division 6.01.010(D)(2): Encroachments into Required Setback Areas of the Ontario Development Code (see Figure 3.3-4).

b. **Form and material** Canopies shall be of a simple form, made of metal and/or glass.

c. **Support** Canopies shall be supported either from below by metal brackets, or from above by rods and wires that affix to the wall.

d. **Width** Canopies may extend across multiple storefronts.

3.3.5 Awning

Figure 3.3-5 Awning



1. Element standards	Minimum	Maximum
A. Depth	Not Applicable	3 feet
B. Clearance above ground	8 feet	Not Applicable
C. Length	See Below	

2. Design Standards

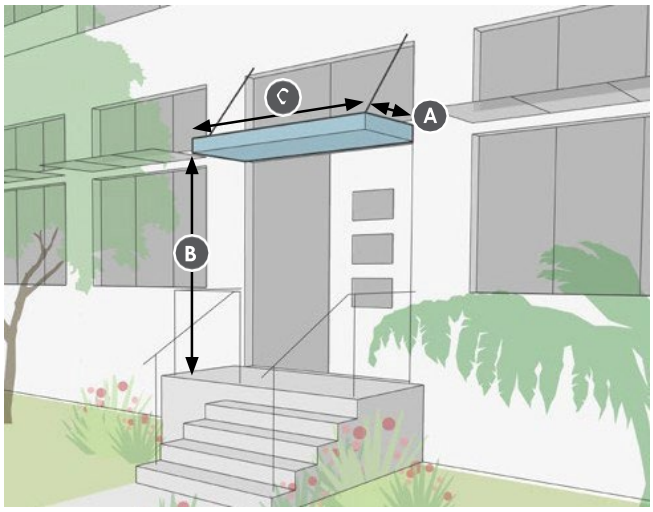
a. **Encroachment** Residential awnings may encroach into the setback or public right-of- way as defined in Division 6.01.010(D)(2): Encroachments into Required Setback Areas of the Ontario Development Code (see Figure 3.3-5).

b. **Material** Residential awnings shall be of simple shed form, made of code-compliant fire-resistant.

c. **Upper floors** Each individual awning shall cover no more than 1 window opening.

3.3.6 Canopy

Figure 3.3-6 Canopy



1. Element standards	Minimum	Maximum
A. Depth	Not Applicable	3 feet
B. Minimum clearance from landing	7 feet	8 feet
C. Length of terrace	Not Applicable	8 feet

2. Design standards

a. **Material** Canopies shall be of a simple form, made of metal and/or glass.

b. **Support** Canopies shall be supported either from below by metal brackets, or from above by rods or wires that affix to the wall (see Figure 3.3-6).

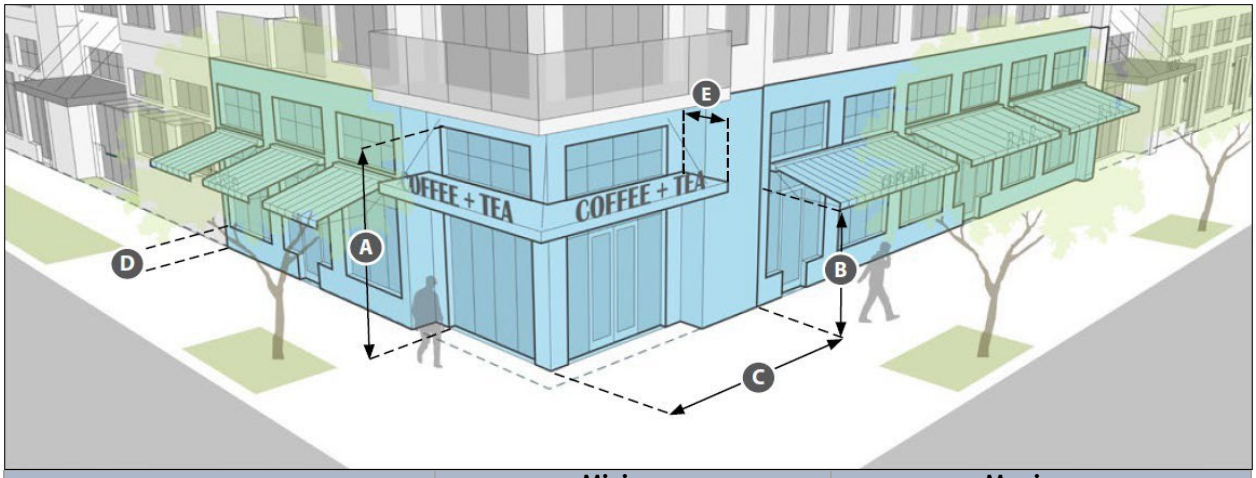
c. **Upper floors** Each individual canopy shall cover no more than 1 window opening.

3.4 Entry Elements

This section regulates the design of Building entry elements such as porches, dooryards, stoops, shopfronts, and lobby entries to the fulfill façade articulation requirements identified in *Section 3.1.3. Massing and Façade Design*.

3.4.1 Shopfront

Figure 3.4-1 Shopfront

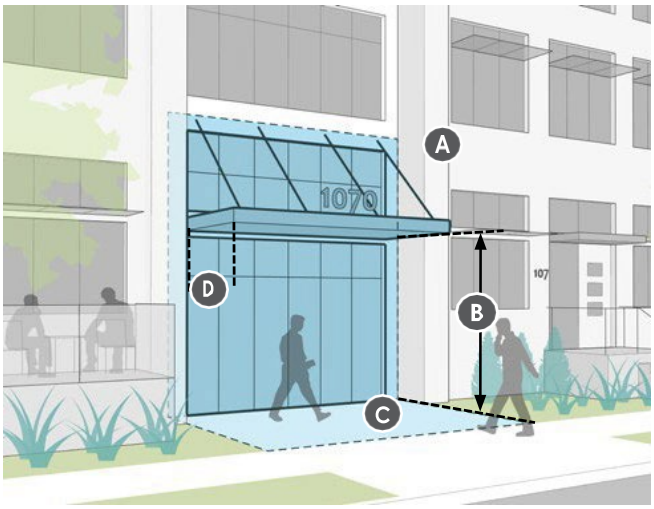


1. Element standards	Minimum	Maximum
A. Height to top of transom	12 feet	16 feet
B. Height to bottom of canopy/awning	8 feet	10 feet
C. Width of each shopfront bay	10 feet	25 feet
D. Height of shopfront base	1 foot	3 feet
E. Awning/Canopy Depth	4 feet	Not Applicable

2. **Design standards**
   a. **Vertical bays** Shopfront openings must align into bays, following the vertical bay specifications in *Section 3.2.3. Massing and Façade Design* of main street standards (see Figure 3.4-1).
   b. **Architectural façade elements**
      i. Shopfronts in vertical mixed-use buildings may integrate with Galleries or Arcades.
      ii. **Visibility** Windowsills in non-entry bays shall not exceed 2 feet above grade.
   c. **Setback use and design** Recessed shopfronts without dooryard, terrace, or porch designs shall extend to the property line.

3.4.2 Lobby Entry

Figure 3.4-2 Lobby Entry



1. Element standards	Minimum	Maximum
A. Height to top of transom	10 feet	20 feet
B. Height to bottom of canopy/awning	8 feet	Not Applicable
C. Distance to property line	Not Applicable	20 feet
D. Awning/Canopy Depth	4 feet	Not Applicable

2. Design standards.

a. **Lobby entries** shall be visible and distinguishable from adjacent ground floor units and include a minimum of 1 of the following design strategies (see Figure 3.4-2):
   i. Center placement for symmetry.
   ii. Prominent corner location.
   iii. Incorporate 2 architectural elements (columns, overhanging roofs, canopies, awnings, or ornamental light fixtures).
   iv. Recessed entry.
   v. Entry framing.

b. **Main Street massing types**
   i. Lobby entries shall not exceed 20% of the frontage length.
   ii. Allocate the remaining length to shopfronts.

c. **Visibility** Lobbies entries shall be visible from the public right of way as follows:
   i. Windowsills shall be no higher than 2 feet above adjacent grade.
   ii. Internal shade devices such as blinds, shades, or curtains are prohibited.

d. A forecourt may be introduced to provide a transition between the entry and sidewalk (forecourt standards are discussed in *Section 3.1.5 Open Space Standards*)

Chapter 4. Architectural styles

Below is a list of Architectural styles which shall be applied. A maximum of 1 architectural style shall be applied to each project.

4.1 Mission-Spanish Colonial Revival
4.2 Craftsman
4.3 American Mercantile
4.4 Tuscan
4.5 Modern
4.6 Farmhouse

4.1 Mission - Spanish Colonial Revival

Influenced by Spanish/Mediterranean and early Californian styles in the late 19th and early 20th centuries, the Spanish Colonial Revival style is asymmetrically arranged and includes low-pitched roofs covered with S-type clay red roofing tiles, wooden frames with stucco siding, and arches above doors, porch entries, and main windows (see Figure 4.1-1).

Figure 4.1-1 Mission - Spanish Colonial Revival



4.1.1 Form and Massing

1. **Façade design (Apply all)**

   a. Asymmetrical façade/elevations
   b. Three or more roof planes
   c. A minimum of 50 percent of the units shall have balconies or window treatments (such as shutters or awnings)
   d. Entrances are recessed a minimum 12 inches
   e. Additional details for projects over 4 stories, vertical mixed use, or with more than 15 buildings (requires 2 details):

i. Include **2** add-on projections such as verandas, arcades, balconies, and exterior stairs
ii. The ends of building massing's shall be stepped down
iii. One focal point, such as courtyard, tower, or fountain
iv. Apply wingwalls or columns on the ground level

4.1.2 Roof

1. **Roof design (Apply all)**
   a. Low-pitched (4:12 maximum) cross- or side-gabled roofs. The pitch shall remain constant except for a veranda or arcade.
   b. Red, fired, clay tile roofs. Tile types include both Spanish (S-shaped) and Mission (half-cylinder)
   c. Hipped roofs shall only be used in combination with gables or on a tower element.
   d. Shed roofs are only used in conjunction with verandas
   e. When a flat roof is used, it shall be screened by a parapet that is an extension of the wall plane or by a modified Mansard roof.

4.1.3 Materials and Colors

1. **Materials and colors (Apply all)**
   a. Roof tiles shall use terracotta, brown earth tones, or rustic red color palettes.
   b. White, cream, or tan stucco wall with smooth (20/30) textured finish (i.e., hand troweled)
   c. Wood shall be used as secondary wall material for the following and similar elements:

      i. Posts and exposed beams
      ii. Railing, spindles, and grille work
      iii. Shutters, window frames, and doors

   d. If windows have shutters, the shutters' color shall match the accent color that is used for doors or decorative trim.
   e. A minimum of 1 wrought-iron element (such as railings, hardware, and gates) shall be used.

4.1.4 Doors and Windows

1. **Door and windows (Apply all)**
   a. Accent windows shall be a minimum of 20 percent of the total windows
   b. The primary facade shall include a minimum of 1 arched element
   c. A minimum of 50 percent of the windows shall be casement windows
   d. All entrance-door surrounds shall be banded with ceramic tile, molded plaster, or painted accents.
   e. All casement windows and double-hung windows shall have wood frames
   f. Eighty percent of the windows shall have window muntins

4.1.5 Decorative Details

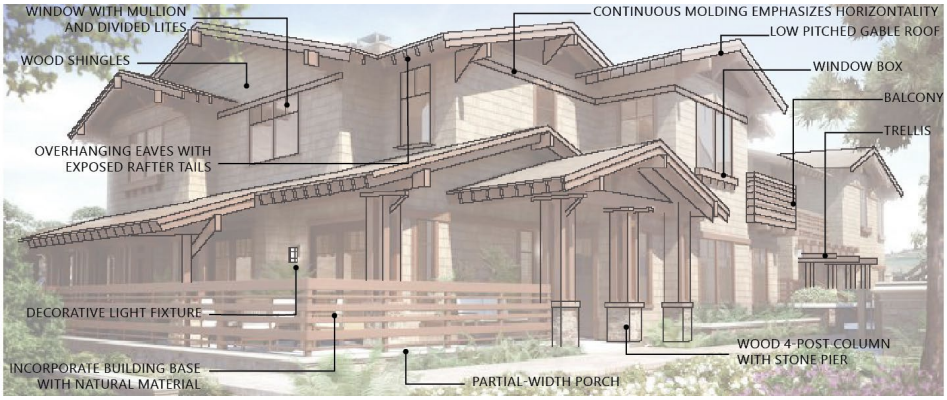
1. **Decorative details**
   a. All residential projects shall provide **a minimum of 4** of the following; and
   b. Residential projects 4 stories and taller, mixed-use projects, or projects with more than 15 buildings shall provide **a minimum of 6** of the following:

      i. Entry/front porch or patio
      ii. Decorative tiles
      iii. Clay tile vents
      iv. Wrought-iron balcony railings or support brackets
      v. Dark-metal light fixture and hardwires
      vi. Paired wood (or wood simulated) garage doors with iron hardware
      vii. Verandas, pergolas, or arcades
      viii. Exterior stairs
      ix. Awnings with metal spear supports

4.2 Craftsman

The Craftsman or California Bungalow style, originating from the early 20th-century Arts and Crafts movement. Notable features include the artful use of wood and natural materials, low-pitched roofs, horizontal orientation, earth-toned colors, exposed rafters, decorative brackets, porches, and columns (see Figure 4.2-1).

Figure 4.2-1 Craftsman



4.2.1 Form and Massing

1. **Façade design (Apply all)**
    a. Asymmetrical facades/elevations
    b. Three or more roof planes on the primary facade
    c. Front-facing gable roofs
    d. Street-facing units shall have balconies or porches
    e. The front lot line façade shall have 2 to 3 materials/colors

4.2.2 Roof

1. **Roof design (Apply all)**
    a. Low- to moderate-pitched gable or hipped roofs from 6:12 to 8:12
    b. Overhanging eaves (minimum 24 inches along primary elevation) with exposed rafter tails or beams.
    c. Brackets or knee braces at gabled ends
    d. Use of imitation wood or asphalt shingles

4.2.3 Materials and Colors

1. **Materials and colors (Apply all)**
    a. Brick or stone shall be used in the base
    b. Primary wall materials shall include dark-color wood shingles, clapboard siding, or fiber cement siding and natural materials such as stone or brick.
    c. Use of earth-toned color palette, such as browns and greens

d. The front lot line façade shall have a **minimum of 3** paint colors: 1 for the cladding, 1 for trim, and 1 for accents such as windows and decorative details.

4.2.4 Doors and Windows

1. **Door and windows (Apply all)**
   a. A minimum of 50 percent of the windows shall be casement windows.
   b. A minimum of 80 percent of the primary windows shall be multi-paned.
   c. A minimum of 2 types/shapes of windows shall be used
   d. Utilize flat wood trims (typically 4½ inches or 5½ inches wide) around the primary windows and entry doors.
   e. Window and door trim color shall be different with the color of the walls.
   f. Entry doors and garage doors shall have 1 row of vertical or horizontal glass panels.

4.2.5 Decorative Details

1. **Decorative details**
   a. All residential projects shall provide **a minimum of 4** of the following; and
   b. Residential projects 4 stories and taller, mixed-use projects, or projects with more than 15 buildings shall provide **a minimum of 6** of the following:

      i. Stone pier and battered wood support
      ii. Exposed rafter tails and knee-brace brackets
      iii. Dormers on the front façade
      iv. Second-story balcony
      v. Decorative attic/gable vent
      vi. Light fixtures shall be box-shaped, with metal frame and geometric pattern
      vii. Chimneys are visible at the exterior and arranged on a side elevation
      viii. Stained-glass or transom windows
      ix. Covered front porches shall tapered pillars
      x. Ground-level windows shall have muntins

4.3 American mercantile

This building type began in the late 19th century when, in the process of identifying towns and cities, housing and offices were built over retail stores. This mixed-use strategy is still relevant today as the reurbanization of existing city centers becomes an established pattern (see Figure 4.3-1).

Figure 4.3-1 American Mercantile



4.3.1 Form and Massing

1. **Façade design (Apply all)**
    a. Asymmetrical facades/elevations
    b. Simple, rectangular form
    c. Symmetrical placement of piers, columns, ground-floor storefronts, and openings on upper levels.
    d. Transparent windows and doorways shall be no less than 80 percent of the street frontage at the ground level.
    e. Multistory facades are divided into base, body, and top, with the ground floor taller than the upper floors.
    f. Columns or lintels over openings
    g. Bases are articulated by changes in material or changes in wall plane
    h. Minimal projections or recessions on wall plane

4.3.2 Roof

1. **Roof design (Apply all)**
    a. Flat roof.
    b. A projecting cornice or a receding, stepped parapet
    c. Cornice and details mimic and reference historical detailing
    d. Street-facing gable roof with roof pitches at minimum 5:12 unless concealed behind a parapet.

4.3.2 Materials and Colors

1. **Materials and colors (Apply all)**
    a. Walls shall be composed of brick
    b. Decorative moldings, cornices, or an applied ornament of stone or cast concrete shall be used.
    c. No more than 3 colors shall be used on any given facade
    d. Stucco and clapboard is prohibited

4.3.4 Doors and Windows

1. **Door and windows (Apply all)**
    a. Ground-floor windows and doors shall be large and expansive with a transom.
    b. Upper-floor windows shall be double-hung vertically and grouped with a rhythm consistent with the major storefront openings below.
    c. Entrance shall have higher bays, recessed entries by a minimum of 3 feet, or different color/materials.
    d. Upper-floor windows shall have window lintel and sill
    e. Transom windows above the doors and windows on the ground level
    f. Fifty percent of windows shall have muntins
    g. Upper floor windows shall have a minimum 2-inch recess

4.3.5 Decorative Details

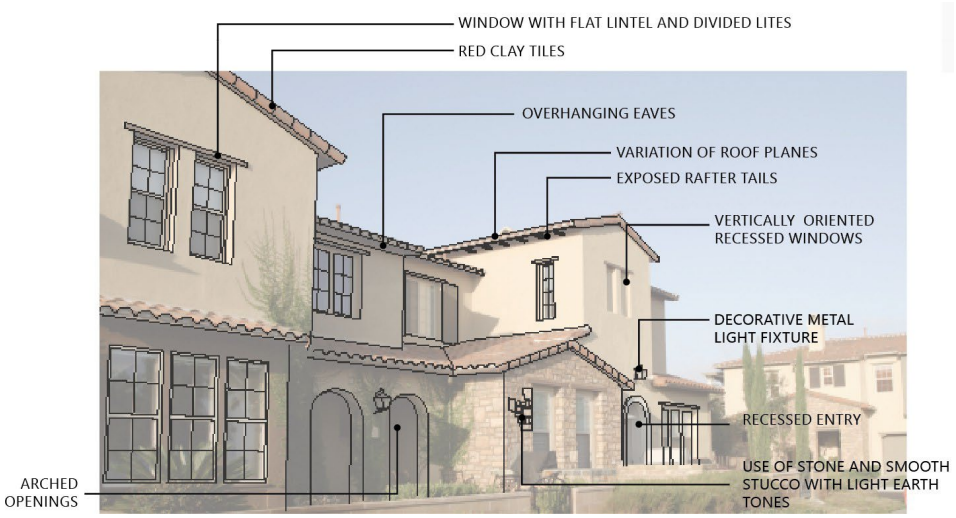
1. **Decorative details**
    a. All residential projects shall provide **a minimum of 4** of the following; and
    b. Residential projects 4 stories and taller, mixed-use projects, or projects with more than 15 buildings shall provide **a minimum of 6** of the following:

        i. Awnings, canopies, and second-floor balconies
        ii. Pedimented windows
        iii. Wide window trim with a keystone
        iv. Double-bracketed cornice
        v. Gable roof
        vi. Roof finial
        vii. Transom above door and windows on the ground level
        viii. Metal balcony railing
        ix. Canopy or awning
        x. Recessed entries
        xi. Cast-iron columns
        xii. Shopfront millwork

4.4 Tuscan

A blend of Spanish Revival and rural Italian elements, this interpretation of traditional Mediterranean architecture features stone and stucco, light earth tones, and red-tiled roofs. Classical elements like columns, arches, and decorative ironwork enhance visual complexity. Italianate references are evident in squared towers and projections. Features include porches, porticoes, and vertically oriented, recessed windows (see Figure 4.4-1).

Figure 4.4-1 Tuscan



4.4.1 Form and Massing

1. **Façade design (Apply all)**
    a. Asymmetrical arrangement of windows and design elements along front lot line.
    b. Porches, porticoes and/or Juliet balconies
    c. Recessed entries (a minimum of 3 feet)

4.4.2 Roof

1. **Roof design (Apply all)**
    a. Flat or low-pitched hip or gable roof (maximum 6:12 slope)
    b. Red-toned clay tiles
    c. Multiple roof levels (at minimum 3)
    d. Large overhanging eaves (minimum 12 inches) along primary elevation

4.4.3 Materials and Colors

1. **Materials and colors (Apply all)**
    a. Incorporate rough-hewn stone as accent feature
    b. Flat stucco walls in light earth tones
    c. Use of earth-toned color palette
    d. Brown or beige window frames

4.4.4 Doors and windows

1. **Doors and windows (Apply all)**
    a. Single- or double-hung windows shall be more horizontal in proportion, with six-over-six muntin patterns and 5½-inch-wide trim.
    b. Casement windows shall be paired with four-pane patterns for smaller windows and eight-pane patterns for larger windows.
    c. Vertically oriented rectangular or arched windows arranged in asymmetrical patterns.
    d. Casement or double-hung sash with flat or arched lintels
    e. Windows shall be recessed 3 to 12 inches

4.4.5 Decorative details

1. **Decorative details**
    a. All residential projects shall provide **a minimum of 4** of the following; and
    b. Residential projects 4 stories and taller, mixed-use projects, or projects with more than 15 buildings shall provide **a minimum of 6** of the following:

        i. Juliet balconies
        ii. Rafter extensions and brackets
        iii. Stone or stucco window/door trim
        iv. Rectangular or arched wooden door
        v. Arcade or porch at entry
        vi. Decorative ironwork (window grilles, railings, light fixtures, decorative planters)
        vii. Arched windows
        viii. Paired decorative wood shutters. Shutters shall be equal to half the width of the window. Shutter styles shall be paneled or louvered.
        ix. Use of brick, stone, or wood columns
        x. Stucco or stone chimneys
        xi. Different-color wood trellis
        xii. Arched openings and doorways at the ground level

4.5 Modern

Modern architecture prioritizes clean lines, geometric shapes, and the use of unconventional or industrial materials such as glass, metal, concrete, steel, and reclaimed materials characterized by extensive large windows, contemporary buildings maximize natural light, and passive solar heating (see Figure 4.5-1).

Figure 4.5-1 Modern



4.5.1 Form and Massing

1. **Façade design (Apply all)**
    a. An irregular, asymmetrical façade
    b. Rectangular structure
    c. Horizontal massing
    d. Straight and continuous lines
    e. Repeating lines and elements

4.5.2 Roof

1. **Roof design.** Flat or low-pitched roofs (4:12 slope max)

4.5.3 Materials and Colors

1. **Materials and colors (Apply all)**
    a. Use of raw and natural materials including wood, concrete, metal, and glass.
    b. Traditional materials (such as smooth stucco (20/30), wood, brick, and stone) shall be used as an accent material.
    c. Minimum 2 materials on the building facade.
    d. Use of color blocking for geometric forms and break up massing elements.
    e. Building facade shall incorporate **a minimum of 2** of the following as an accent:

        i. Awnings

ii. Popouts, trellis
iii. Arbor structures
iv. Balconies

4.5.4 Doors and Windows

1. **Door and windows (Apply all)**
   a. Large glass doors and/or window openings
   b. Window wrapping around a corner of the building
   c. Narrow aluminum window frames

4.5.5 Decorative Details

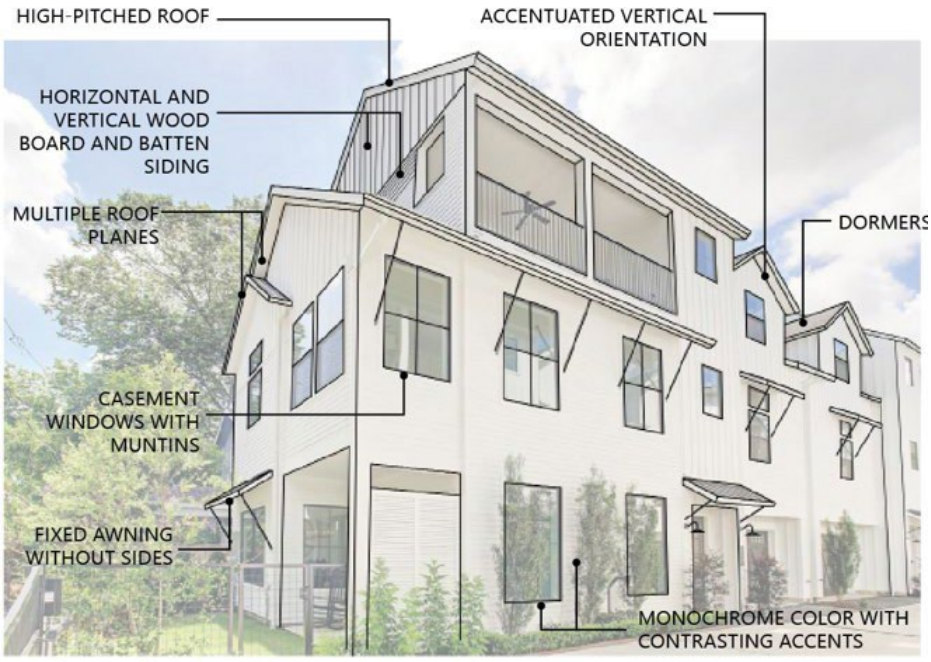
1. **Decorative details (Apply all)**
   a. All residential projects shall provide **a minimum of 4** of the following; and
   b. Residential projects 4 stories and taller, mixed-use projects, or projects with more than 15 buildings shall provide **a minimum of 6** of the following:

      i. Metal balcony railings
      ii. Clerestory windows
      iii. Floor-to-ceiling glass door
      iv. Floor-to-ceiling glass windows on the ground level
      v. Roof decks
      vi. Trellis shade structures
      vii. Metal awning
      viii. Roof overhang with exposed wood or steel frame

4.6 Farmhouse

Farmhouse style utilizes vertical or horizontal wood siding, monochrome colors with contrasting accents, minimal ornamentation, and medium to high-pitched roofs. Minimal detailing includes awnings, porches, and wall-mounted gooseneck lights (see Figure 4.6-1).

Figure 4.6-1 Farmhouse



4.6.1 Form and Massing

1. **Façade design (Apply all)**
    a. Straight exterior lines, geometric form
    b. Asymmetrical massing with a gable at the front of the house
    c. Repeating shapes and lines
    d. Gable roof creating a triangular wall on the ends.
    e. Incorporate farm and ranch forms (i.e. barns, silos, sheds, tank houses, and granary towers)
    f. Multiple gable and shed roof planes
    g. Geometric forms, industrial materials, and repetition
    h. Covered porches and awnings to break up volumes between lower and upper floors.
    i. Variation in projecting wall planes with a minimum 12-inch depth

4.6.2 Roof

1. **Roof design (Apply all)**
    a. High-pitched gabled roof or shed roof (minimum 6:12 slope)
    b. Intersecting gable roofs
    c. Dark asphalt shingle, metal roofs, or synthetic slate shingles
    d. Triangular rooflines
    e. Large overhangs (minimum 2 feet in length) above the patio and garage

4.6.3 Materials and Colors

1. **Materials and colors (Apply all)**
    a. Use metal, wood, or masonry
    b. Utilize board-and-batten siding, corrugated panels
    c. Monochrome accents of doors, windows, or architectural features
    d. Stucco is permitted as an accent material

4.6.4 Doors and Windows

1. **Doors and windows (Apply all)**
    a. Windows shall be double-hung with a proportion of 2 or 2½ times taller than wide
    b. Groupings of 2 or 3 double-hung window units
    c. Multi-paned windows
    d. Accent trim around window and door openings
    e. Double-hung or casement windows

4.6.5 Decorative Details

1. **Decorative details**
    a. All residential projects shall provide **a minimum of 4** of the following; and
    b. Residential projects 4 stories and taller, mixed-use projects, or projects with more than 15 buildings shall provide **a minimum of 6** of the following:

        i. Wide front porch with simple columns
        ii. Covered patio
        iii. Shed or gabled dormers
        iv. Carriage-style garage doors
        v. Dark shutters and window sashes
        vi. Gable brackets, vents, and trim
        vii. Iron-inspired barn-style lighting
        viii. Metal awnings without sides
        ix. Gooseneck light fixtures at the entrance
        x. Large doors and windows to maximize natural light
        xi. Multi-paned windows on the ground-level windows and doors

Chapter 5. Administration

5.1 Administration of Standards

This chapter provides methodology for the implementation of the Objective Design Standards, including administration, project approval, and appeals. The responsibilities of the City of Ontario Planning Staff shall include administering, interpreting, and enforcing all requirements and standards of this document.

Any terms not defined herein and any issues affecting the design and development of the subject project area not specifically addressed in the ODDS shall be governed by the provisions of the Ontario Development Code.

5.1.1 Interpretation and Severability

Unless otherwise provided herein, any ambiguity concerning the content or application of the Objective Design Standards shall be resolved by the City of Ontario Executive Director Community Development (Director) or his / her designee in a manner consistent with the goals, policies, purpose, and intent established in this document. If any portion of these standards is declared to be invalid or ineffective in whole or in part, such decision shall not affect the validity of the remaining parts of the remaining portions thereof.

5.1.2 Reference Documents

- **The Ontario Plan**
- **City of Ontario Development Code**

5.2 Glossary of terms

Alley. A narrow, low-capacity thoroughfare with 1 shared lane and no parking lanes which provides secondary access to all Lots within a Block. Driveways, Parking Aisles, and Fire Lanes are not Alleys.

Arbor (entrance arbor). A wooden structure that is intended to define an entrance into an on-site outdoor space, such as a front yard or parking lot.

Arcade. A facade with a ground floor colonnade supporting the upper stories of the building, intended to provide shade, glare control, and weather protection.

Bay. A facade division comprised of groupings of vertically aligned facade elements, such as shopfronts, windows, awnings, and wall materials that are stacked 1 above the other. Bays can be differentiated from 1 another by changes in material, color, and/or use of architectural elements such as pilasters.

Bay Window. A window or series of windows projecting from the exterior wall of a building and forming an extension, or bay, of the room. Subject to the requirements of the regulating zone, bay windows may encroach into the setback or public right-of-way.

Block. An aggregation of Lots, Passages, Carless Streets, and driveways which are bound on all sides by Streets. Block dimensions are measured along private Street Rights-of-way.

Building Base. The lowermost portion of a building facade that is distinctly differentiated from upper floors or upper wall surfaces. The base of mixed-use buildings consists of the ground floor or, for taller buildings, an ensemble of the first 2 floors. The base of multi-family or office buildings can consist of the entire ground floor, or a low band (three to 4 feet high) comprised of different materials or colors than upper wall surfaces.

Building Length. The length of the building as measured parallel to the front property line

Court. A semi-public, shared open space within a lot, for use by more than 1 resident or commercial tenant. Courts generally provide visitor access from the street to dwellings, retail, or office spaces, and/or buildings within the lot that lack direct access from the street. The degree of enclosure or openness of the court may vary, as per the requirements of each zone and the design intent of the project designer.

Director. The Director of Community Development, or designee.

Drive Aisle. A vehicular lane within a parking lot that provides access to the individual parking spaces.

Driveway. A vehicular lane within a lot that leads to onsite parking.

Encroachment: Structure extending into a required setback area.

Facade: Exterior wall of a building adjacent to a street or public open space.

Facade Increment: Visually distinguished complete facade composition.

Fenestration: Transparent glass openings in a building face.

Fire Lane: On-site right of way for emergency vehicle access.

Forecourt: Open space extension into a lot, defined by building faces.

Frontage, Private: Building facade and area between it and property line along a street.

Frontage, Public: Area between street-adjacent property line and the first travel lane.

Gallery: Ground-floor colonnade providing shade, glare control, and weather protection.

Green: Publicly accessible open space at the intersection of streets, landscaped for recreation.

Ground Floor: Building floor nearest to the existing grade around the building.

Height, Building: Height measured from finished grade at any property line along the street.

Loggia: Colonnaded or arcaded space within a building, open to the air on 1 side.

Lot: Portion of land for allowed development, synonymous with "property" or "design site."

Lot Line: Front, side, or rear boundary of a lot, synonymous with property line.

Massing (or Facade) Increment: Segment of a building facade divided into visually discrete compositions.

Passage: A pathway designed for pedestrians on a property, like a Paseo, but may not extend through an entire block.

Parking Court: A public space between buildings designed for surface parking.

Pergola: A wooden structure intended to provide shade or define an entrance into an on-site outdoor space.

Pier, Shopfront: The vertical elements on either side of a shopfront bay.

Place Types: A classification of urban environments based on streetscape and building character, including attributes such as building placement, height, frontage, land use, density, and streetscape design.

Plaza: An open space at the intersection of important streets for civic and commercial activities. Sizes range from one-half (1/2) acre to 2 acres, defined by surrounding buildings and typically paved with arranged shade trees. Amenities may include fountains and food kiosks.

Primary Access: The principal means of approaching and entering a building or property.

Primary entrances: Typically referring to front doors, including direct access into a ground floor residential unit, nonresidential space, common lobby, or zaguan leading to a court.

Privacy Windows: Windows that are either opaque and unopenable or start at minimum 6 feet from the floor.

Public Open Space: Off-street outdoor space owned by the city for public use or on a private parcel adjacent to a right of way, functioning as a public space.

Publicly Accessible: Open spaces or streets open/available to the public, whether publicly or privately owned.

Shopfront: A ground-floor frontage assembly with large transparent windows, a conspicuous entrance leading directly into the unit, spatially defined by vertical elements called piers.

Side, Lot Line: Any property line shared with a neighboring property when there is no public open space between them.

Side yard: The portion of a parcel extending from the front property line to the rear property line and between the side property line and the closest side of the principal building. It may also be designed as open space.

Story height: The vertical distance from floor to ceiling, measured from the top of the floor finish to the bottom of the ceiling joists for the topmost story.

Street: A right of way defined as a street, excluding paseos, driveways, parking aisles, fire lanes, and alleys.

Street, Front: The side of the lot adjacent to a street, a property may have multiple fronts.

Street, Side: (Applicable only to corner lots) The side of the lot adjacent to a street or public open space that is not considered the front.

Trellis: A wood or metal frame supporting thin overhead wooden or metal strips or latticework, providing shade and supporting climbing plants. It may be freestanding.

5.3 Checklist

See Attachment A

ATTACHMENT A

March 18, 2025

Objective Development & Design Standards Checklist

The Objective Development & Design Standards (ODDS) Checklist is applicable to both Multiple Family Development and Mixed-Use Development. Refer to the ODDS Chapter's 1 through 4 for specific additional information.

In addition to any objective standards imposed through the underlying base zone, the ODDS document provides standards for housing developments limited to the following areas (refer to the Policy Plan Land Use Plan Exhibits LU-01, LU-04, and CD-01 and the official Zoning Map):

- **Multiple-Family Development.** Applies to all multiple-family residential categories as shown on Policy Plan Land Use Plan Exhibit LU-01 (LMDR, MDR, and HDR, and Mixed-Use land use designations).
- **Mixed-Use Development.** Applies to mixed-use categories as shown on Policy Plan Land Use Plan Exhibit LU-01and associated Place Types as shown on Exhibit CD-01.

The Applicant is required to provide a completed Checklist upon application submittal.

ODDS – Chapter 2

2.0 MULTIPLE FAMILY STANDARDS

	Applicant		City	
	Done	N/A	Done	N/A
2.1 Site Design Standards				
2.1.1 Site Design				
1. **Lot lines** The lines bounding a lot. The classifications of "Lot Line" are as follows:				
a. **Front** This line separates the narrowest street frontage of a lot from a public or private street right-of-way				
b. **Interior "side"** Any lot line that is not a front or rear lot line and does not border a public or private street right-of-way				
c. **Rear** The lot line opposite and farthest from the front lot line. In the case of an irregularly shaped lot, a straight line shall be drawn to determine the rear lot line.				
d. **Street side** Any lot line that is not a front or rear lot line, and which abuts a public or private street right-of-way				
2.1.2 Site Access				
1. **Alleys** Vehicular access to the on-site parking areas shall be from the alley				
2. **Roadway inclusion** Pedestrian access from the public right-of-way must include sidewalk on both sides of the driveway				
2.1.3 Parking				
A. Placement on site Parking shall be designed in compliance with the applicable standards contained in Division 6.03 (Off-Street Parking and Loading) of the Ontario Development Code, except as modified by the following:				
1. **Surface parking**				
a. **Setbacks** Surface parking lots adjacent to public or private streets shall include a landscaped and irrigated setback a minimum of 5 feet in width measured from property.				
b. **Orientation** Surface parking lots shall be located at the rear, side, or internal lot lines and away from the front lot line.				
2. **Above-ground parking structures** Ground-floor parking shall be sited behind residential, office, or commercial spaces.				
3. **Semi-subterranean parking** A semi-subterranean garage shall not extend beyond the building frontage line and shall not extend higher than 4 feet above sidewalk grade.				
4. **Subterranean parking** A subterranean parking structure may extend to all property lines.				
5. **Private residential garages** Each private garage must have vehicular access from an alley, side street, or motor court.				
B. Surface parking lot design. Surface parking lots shall be designed in compliance with the applicable standards contained in Division 6.03 (Off-Street Parking and Loading) of the Ontario Development Code, except as modified by the following:				
1. **Screening**				
a. **Street-adjacent parking lots**				
i. A street-adjacent surface parking lot shall be screened from view by a low wall or hedge no higher than 3 feet				

ODDS – Chapter 2

2.0 MULTIPLE FAMILY STANDARDS

	Applicant		City	
	Done	N/A	Done	N/A
in height.				
ii. Walls and hedges must be a minimum 18 inches from the back of sidewalk				
iii. Landscaped berms are prohibited				
b. **Neighboring parcels** Views from neighboring properties shall be screened with trees and shrubs				
2. **Landscape** Landscaping materials shall be applied in compliance with the applicable objective parking lot landscape standards contained in Ontario Development Code Section 6.05.030 (Required Landscape Areas)				
3. **Shade structures** Shade structures, if used, shall match the architectural style of the project buildings				
C. Parking court design				
1. **Design standards**				
a. The width of the parking court, when measured from 1 building face to the other, shall not exceed 100 feet				
b. The parking court shall consist of only 1 parking bay, and this bay shall not exceed a maximum width of 62 feet				
c. On both sides of the parking court, sidewalks must be established, each with a minimum width of 15 feet. These sidewalks must connect with the adjacent public sidewalk network.				
D. Parking structure design				
1. **Context-sensitive façade design** Parking structure façades shall incorporate a minimum 2 design elements using the architectural styles identified in Chapter 4: Architectural styles and adhere to Main Street or Urban and facade design standards applied in Section 2.2.2 Building Types.				
2. **Parking structure standards**				
a. Any driveway providing access to a parking structure shall have a minimum width of 28 feet				
b. Single access lane driveways into the structure shall not exceed 14 feet in width				
c. Parked vehicles shall be screened from view from adjoining streets				
d. Signs as shall be consistent with Division 8: Sign Regulations of Ontario Development Code				
2.1.4 Open Space Standards				
A. Common open space and public frontage				
1. **Common open space type requirements** Common open space shall cover a minimum of 15 percent of the total lot area with the following **exceptions**:				
a. **Close to park** Common on-site open space shall not be required for lots within a 1/4-mile of an existing park or plaza a minimum 0.25 acres in size				

ODDS – Chapter 2

2.0 MULTIPLE FAMILY STANDARDS

	Applicant		City	
	Done	N/A	Done	N/A
b. **Common open space types** 1 or more of the common on-site open space types listed under "Common Open Space Types" shall be provided on each lot that has a residential use.				
2. **Access and visibility** At-grade open space shall be accessible and visible from the adjacent ground floor				
B. Common open space types				
Forecourt				
1. **Design standards**				
a. A forecourt may occur on any floor and may be used as an allowed method of creating façade massing increments.				
b. **Minimum dimensions** Forecourts shall be a minimum of 15 feet by 15 feet				
Side garden				
1. **Design standards**				
a. **Minimum side garden dimensions**: 15 feet by 15 feet				
b. Dooryards, porches, stoops, and architectural elements may encroach into the side garden as follows:				
i. Up to a total of 30 percent of the side garden's width or length				
ii. A ground-floor encroaching element shall be allowed to project a maximum of 8 feet into the side garden				
Court				
1. **Design standards.**				
a. **Minimum dimensions:** All courts shall be a minimum of 20 feet by 30 feet				
b. **Enclosure**				
i. A court shall have building walls on a minimum 2 sides, while the third and fourth side can be defined by architectural or landscape elements (i.e., low walls, trellises, hedges, or rows of trees).				
ii. A driveway located adjacent to a court shall be screened by architectural elements (e.g., low walls or trellises, hedges, or rows of trees).				
c. **Access**				
i. Courts shall be accessed from the street or walkway				
ii. Units shall be allowed to take direct access through a court				
d. **Encroachments**				
i. Dooryards, porches, stoops, and architectural elements may encroach into the Side Yard				
ii. A ground floor encroaching element shall not encroach beyond 8 feet of the building's façade into the court				
e. **Common Area** A court shall serve as communal spaces and pedestrian access				

ODDS – Chapter 2

2.0 MULTIPLE FAMILY STANDARDS

	Applicant		City	
	Done	N/A	Done	N/A
f. **Amenities** A court shall include a minimum 1 of the following amenities: a seating area, a fountain, a BBQ island, or an outdoor fireplace.				

ODDS – Chapter 2

2.0 MULTIPLE FAMILY STANDARDS

	Applicant		City	
	Done	N/A	Done	N/A
Passage				
1. **Design standards**				
a. **Location** Passages shall be provided between buildings or side gardens				
b. **Size** Passages shall be a minimum width of 8 feet with minimum of 2 feet of landscape strip on each side				
C. Private Open Space				
1. **General standards**				
a. A minimum of 60 square feet of private open space shall be provided for each residential unit and a minimum 1 of the private on-site open space types shall be provided.				
b. **Exception:** Private on-site open space shall not be required for a project site that is located within 1/4-mile distance of an existing park or plaza that is a minimum 0.25 acres in size.				
D. Private Open Space Types				
Private roof deck				
1. **Description** A private open space located on the roof of a building dedicated to a single unit				
2. **Design standards** Minimum dimensions of 7 feet by 7 feet				
Backyard				
1. **Description** A private, landscaped open space located behind each individual unit that is intended to provide passive or active outdoor space for the users of the unit.				
2. **Design standards**				
a. **Size** Minimum dimensions of 20 feet by 15 feet				
b. **Encroachments** Encroachment into the backyard is allowed up to 30% of the rear yard area				
Architectural façade elements as private open space				
1. **Description** The following elements defined in Section 2.3 Architectural Façade Elements may be used to meet on-site private open space requirements.				
a. Balcony				
b. Terrace Balcony				
Entry elements as private open space				
1. **Description** The following elements defined in Section 2.4 Entry Elements may be used to meet on-site private open space requirements.				

ODDS – Chapter 2

2.0 MULTIPLE FAMILY STANDARDS	Applicant		City	
	Done	N/A	Done	N/A
a. Dooryard				
b. Porch				
2.1.5 Landscaping				
1. **General to all** Landscaping materials shall be applied in compliance with the applicable landscape standards contained in Ontario Development Code Section 6.05.030 (Required Landscape Areas).				
2.1.6 Fences and Walls				
1. **Fence and wall heights** Walls and fences shall be designed in compliance with the applicable standards contained in Division 6.02 (Walls, Fences, and Obstructions) of the Ontario Development Code.				
2.2 Multiple-Family development standards				
Table 2.01 Multiple-Family Development Standards per Development Type *(Refer Section 2.2.2 Building Types)*				
A. Building Development Standards				
1. **Minimum Setback from Public Street Property Lines:** *(refer to Note 9 – Table 2.01).*				
a. **Arterial** **Urban** (25 du/ ac or greater) - 0 feet **Neighborhood** (Less than 25 du/ac) – 10 feet **Housing** (Less than 25 du/ac and 5 units or less – 14 feet				
b. **Collector** **Urban** (25 du/ ac or greater) - 5 feet **Neighborhood** (Less than 25 du/ac) – 10 feet **Housing** (Less than 25 du/ac and 5 units or less – 14 feet				
c. **Local** **Urban** (25 du/ ac or greater) – 5 feet **Neighborhood** (Less than 25 du/ac) – 15 feet **Housing** (Less than 25 du/ac and 5 units or less – 20 feet				
2. **Minimum Setback from Interior Project Boundary Property Lines –** 5 feet				
3. **Minimum Setback from Public Alley Property Lines –** 5 feet				
4. **Minimum Setback from Private Drives/Alleyways (from edge of drive aisle)**				
a. Living Area – 10 feet				

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2.0 MULTIPLE FAMILY STANDARDS	Applicant		City	
	Done	N/A	Done	N/A
b. Garages and other nonhabitable Structures – 10 feet				
5. **Minimum Setback from Dwellings to Parking Spaces**				
a. Living Area – 10 feet				
b. Garages and other non-habitable structures – 5 feet				
6. **Minimum Setback from Parking Space or Drive Aisle to Wall or Fence –** 5 feet				
7. **Minimum Separation Between Detached Buildings:**				
a. Dwelling Front to Front- < 2-Stories: 25 FT; > 3 Stories: 30 FT unless otherwise specified by massing requirements ("Space between buildings") in Section 2.2.2 Building Types. *(refer to Note 5 – Table 2.01)*.				
b. Dwelling Front to Rear- < 2-Stories: 25 FT; > 3 Stories: 30 FT unless otherwise specified by massing requirements ("Space between buildings") in Section 2.2.2 Building Types. *(refer to Note 5 – Table 2.01)*.				
c. Dwelling Front to Side - < 2-Stories: 25 FT; > 3 Stories: 30 FT unless otherwise specified by massing requirements ("Space between buildings") in Section 2.2.2 Building Types. *(refer to Note 5 – Table 2.01)*.				
d. Dwelling Side to Side - < 2-Stories: 10 FT; > 3 Stories: 15 FT unless otherwise specified by massing requirements ("Space between buildings") in Section 2.2.2 Building Types. *(refer to Note 5 – Table 2.01)*.				
e. Dwelling Side to Rear - 15 FT; unless otherwise specified by massing requirements ("Space between buildings") in Section 2.2.2 Building Types. *(refer to Note 5 – Table 2.01)*.				
f. Dwelling Rear to Rear- 20 FT unless otherwise specified by massing requirements ("Space between buildings") in Section 2.2.2 Building Types. *(refer to Note 5 – Table 2.01)*.				
8. **Garage to Garage (or other nonhabitable structures)** a. 30 FT – Entry to Entry b. 30 FT – Entry to Side c. 10 FT – Side to Side d. 10 FT – Side to Rear				
9. **Minimum Storage Space –** 240 CF *(refer to Note 4 – Table 2.01)*				
10. **Maximum Street Façade Height** a. Downtown District – 45 Feet *(refer to Note 8 – Table 2.01)* b. Other Districts & Corridors – n/a c. Neighborhood Centers - 35 Feet				
11. **Maximum Building Height**				

ODDS – Chapter 2				
2.0 MULTIPLE FAMILY STANDARDS	Applicant		City	
	Done	N/A	Done	N/A
a. Downtown District – n/a *(refer to Note 8 – Table 2.01)* b. Other Districts & Corridors – n/a *(refer to Note 5 – Table 2.01)* c. Neighborhood Centers -60 FT *(refer to Note 5 – Table 2.01)*				
12. **Minimum Setback from Major Pipelines -** 50 FT (to habitable structures) *(refer to Note 7 – Table 2.01)*				
2.2.1 Height Standards				
1. **Height transition zones** Requires all new buildings within 100 feet of less intense development patterns (existing or planned) to reduce heights to ensure neighborhood compatibility.				
2. **Multiple family development types** The following height limits shall apply to all proposed multiple family development types.				
a. Buildings within 100 feet of single-family residential dwellings must not exceed 35 feet or the height of adjacent residential buildings, whichever is greater				
b. Buildings within 100 feet of undeveloped single-family zone parcels shall not exceed 35 feet in height				
2.2.2 Building Types				
1. **Identify** the suitable building type for the project based on its density, including:				
a. **"Urban"** (applies to multiple-family development projects with 25 dwelling units per acre or more). Projects less than 1 acre in size but exceeding 25 du/ac can use neighborhood or housing Form in lieu of the urban massing form.				
b. **"Housing"** (applies to multiple-family development projects with fewer than 25 dwelling units per acre that include buildings with 5 or fewer units).				
c. **"Neighborhood"** (applies to multiple-family development projects with fewer than 25 dwelling units per acre that include buildings with more than 5 units)				
A. Urban massing and façade design				
Urban massing and façade design standards are required for all multiple-family developments projects with 25 du/ac or more				
Massing increments				
1. **Massing standards**				
a. **Size of massing increments** Building facades along front and side lot lines that face public streets and are longer than 100 feet shall be divided into massing increments as follows: i. The maximum length of a single massing increment shall not exceed 150 feet ii. A minimum 2 distinct massing increments shall be provided				

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2.0 MULTIPLE FAMILY STANDARDS	Applicant		City	
	Done	N/A	Done	N/A
b. **Articulation of massing increments** Individual massing increments shall be differentiated from one another using a minimum 1 of the following massing strategies:				
i. Vary parapet height by a minimum of 3 feet				
ii. Increase number of stories				
iii. Set back upper floor. Set the upper floor or multiple upper floors back a minimum of 15 feet from the facade				
iv. Set the entire facade back a minimum of 10 feet for 20 feet				
v. Incorporate tower element				
c. **Massing increments with distinct facades** Massing increments that have distinct facades and shall appear as distinct buildings.				
d. **Repeating massing increment design** A massing increment design may be repeated on the same project elevation. Repeated massing increments shall be separated by a distinct massing increment.				
2. **Element standards**				
a. Building façade along font lot line - 400 feet max				
b. Massing increment - 150 feet max				
c. Space between buildings - 0 feet min				
d. Façade setback (if elected) - 10 feet x 10 feet min				
e. Building base height - 15 feet min				
f. Building façade alongside lot line - 200 feet max.				
g. Height difference between massing increments - 3 feet min				
h. Upper-level setback from façade - 15 feet min				
Façade Composition				
1. **Façade composition standards**. The building facade shall be divided into a base and body as follows:				
a. **Base** Separate the building base (entire ground floor facade or first 2 floors of building's 5 stories or taller) from the rest of the facade for a minimum of 15 feet (fewer than 5 stories) or 25 feet (5 stories or more) from grade, using a minimum **2** of the following strategies:				
i. Provide a string course at the top of the first story				
ii. Specify base materials different from rest of façade				
iii. Specify base colors different from rest of façade				
iv. Provide a ground floor Arcade or Gallery per Section 2.3 Architectural Façade Elements.				

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2.0 MULTIPLE FAMILY STANDARDS

	Applicant		City	
	Done	N/A	Done	N/A
b. **Body** The body of the building consists of the facade of all floors located above the base and shall be designed as follows:				
i. Windows shall be organized in bays, bands, curtain wall, and grid of windows consistent with the Facade Fenestration Standards for the Urban massing type.				
ii. Each massing increment must contain its entire facade composition without elements overlapping the division between increments.				
Fenestration design				
1. **Façade fenestration standards**				
a. **Minimum fenestration** Facade designs must meet a minimum fenestration percentage, calculated as the total window and door area divided by the total area of that part of the façade.				
i. **Ground floor** (a) Front lot line: 70% minimum (b) All other frontages: 50% minimum (c) Ground floor windowsills on facades along the front lot line shall be no higher than 3 feet above the adjacent grade (d) Ground floor bathroom windows are prohibited on facades that face front lot line				
ii. **Upper floors** 15% minimum.				
B. Neighborhood massing and façade design				
Neighborhood massing and façade Design standards are required for all multiple-family development types applicable to multiple-family development projects with fewer than twenty- five (25) du/ac that include buildings with more than 5 units.				
Massing increments				
1. **Element standards**				
a. Building façade along front lot line – 135 feet max				
b. Building façade length alongside interior lot line – 135 feet max				
c. Space between buildings – 15 feet min				
d. Massing increment – 75 feet max				
e. Height difference between massing increments – 2 feet min				
f. Façade setback (if elected) – 10 feet x 20 feet				
2. **Massing standards** a. **Size of massing increments** Building facades along front and side lot lines that face public streets and are longer than				

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2.0 MULTIPLE FAMILY STANDARDS	Applicant		City	
	Done	N/A	Done	N/A
135 feet shall be divided into massing increments as follows:				
i. The maximum length of a single massing increment shall not exceed 75 feet				
ii. A minimum of 2 distinct massing/architectural increments shall be provided using 1 strategy from the massing strategies list and 1 strategy from architectural strategy list.				
b. **Massing strategy list**				
i. Vary height by a minimum of 3 feet				
ii. Increase number of stories				
iii. Set back upper floors by a minimum 15 feet				
iv. Set the entire facade back a minimum of 10 feet for twenty feet				
v. Increase story height				
vi. Incorporate tower element				
c. **Architectural strategy list**				
i. Use different facade materials and/or colors				
ii. Window treatment and design. Use different window types, configurations, and/or frame colors				
iii. Diversify facade elements (balconies, trellises, chimneys, awnings) as per Section 2.3 Architectural Façade Elements.				
iv. Vary the building entry element type or design of stoops, porches, dooryards, and other elements identified in Section 2.4 Entry Elements.				
v. Massing increments that have distinct facades, shall appear as distinct buildings				
vi. A massing increment design can be repeated twice on the same project elevation, with a distinct separation between repeated increments.				
Façade composition				
1. **Façade composition standards**				
a. **Multi-story building façades** The building facade shall be divided into a base and body as follows:				
i. **Base** Separate the building base (entire ground floor facade or first 2 floors of building's 5 stories or taller) from the rest of the facade for a minimum of 15 feet (fewer than 5 stories) or 25 feet (5 stories or more) from grade, using a minimum 2 of the following strategies.				
(a) Provide a string course at the top of the first story				
(b) Specify base materials different from rest of façade				
(c) Specify base colors different from rest of façade				

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2.0 MULTIPLE FAMILY STANDARDS	Applicant		City	
	Done	N/A	Done	N/A
(d) Provide a ground floor Arcade or Gallery per Section 2.3 Architectural Façade Elements				
ii. **Body** The body of the building consists of the facade of all floors located above the base and shall be designed as follows:				
(a) Windows shall be organized in bays, bands, curtain wall, and/or grid of windows consistent with the Facade Fenestration Standards for the Neighborhood massing type.				
(b) Each massing increment's entire facade composition must be contained within its boundaries, with no overlap of facade elements, like window openings and balconies, across the division between increments.				
Fenestration Design				
1. **Façade fenestration standards**				
a. **Minimum Fenestration** Facade designs must meet a minimum fenestration percentage, calculated as the total window and door area divided by the total area of that part of the facade:				
i. **Ground Floor:** 30% minimum (a) Ground floor windowsills on facades along the front lot line that face public streets shall be no higher than 3 feet above the adjacent grade.				
(b) Ground floor bathroom windows are prohibited on facades that face the front lot line				
ii. **Upper floors:** 15% minimum				
C. House-form massing and façade design				
House-form massing and façade Design standards for projects with densities below 25 du/ac that include buildings with 5 or fewer units.				
1. **Element standards**				
a. Building Façade length along font lot line – 60 feet max.				
b. Massing Increment - 60 feet max.				
c. Building Façade length alongside lot line - 60 feet max.				
d. Space between buildings – 15 feet max.				
2. **Massing and façade composition standards**				
a. **Massing increments** A massing increment shall include the whole length of a single building façade, up to 60 feet in length. Only **1** massing increment per building façade shall be included.				
b. **Length of buildings** Buildings along front and side lot lines that face public streets shall be no longer than 60 feet.				
c. **Space between buildings** Buildings along front and side lot lines shall be separated by a minimum 15 feet.				

ODDS – Chapter 2

2.0 MULTIPLE FAMILY STANDARDS	Applicant		City	
	Done	N/A	Done	N/A
d. **Articulation of building façade**. Frontages along front and side lot lines must differ from neighboring buildings on-site using a minimum of **2** of the specified massing and architectural strategies:				
i. **Façade setback** Setting a portion of the facade back a minimum of 2 feet for a length of 20 feet				
ii. **Material or color** Use different facade materials and/or colors consistent with the architectural style				
iii. **Window treatment and design** Use different window types, configurations, and/or frame colors				
iv. **Architectural façade elements** Vary façade elements (balconies, trellises, chimneys, awnings) according to Section 2.3 Architectural Façade Elements.				
v. **Entry elements** Vary the building entry element type or design of stoops, porches, dooryards, and other elements identified in Section 2.4 Entry Elements.				
vi. **Vary roof form** Vary the roof form of different increments such as gabled, hipped, and others consistent with the architectural style of the building (selected from Chapter 4).				
Fenestration Design				
1. **Façade fenestration standards**				
a. **Minimum fenestration.** Facade designs must meet a minimum fenestration percentage, calculated as the total window and door area divided by the total area of that part of the facade:				
i. **Ground floor:** 30% minimum (a) Ground floor windowsills on facades along the front lot line that face public streets shall be no higher than 3 feet above the adjacent grade. (b) **Exception:** Windows on garage panel door (c) Ground floor bathroom windows are prohibited on facades that face front lot line				
ii. **Upper floors:** 15% minimum				
iii. The horizontal distance between wall openings shall not exceed 15 feet within a facade or massing increment.				
2.2.3 Material and Detailing				
Building Materials				
1. **Prohibited materials**				
a. Fiberglass or plastic (false) architectural or facade elements or ornamentations are prohibited				
b. Rough-cast and sand-finishes are prohibited on all building surfaces that are visible from a street				
c. Reflective materials, such as mirrored glass, shiny metal, and chrome				
2. **Combining materials** When combining **2** or more wall materials on **1** facade:				
a. Place lighter weight materials above more substantial ones (e.g., glass above wood, wood above stucco, stucco				

ODDS – Chapter 2				
2.0 MULTIPLE FAMILY STANDARDS	**Applicant**		**City**	
	Done	N/A	Done	N/A
above masonry).				
b. Vertical joints between different materials shall only occur at inside corners.				
Windows and Doors				
1. **Materials and types**				
a. **Window recess** Windows shall be recessed specific to each building's architectural style listed in Chapter 4: Architectural styles but shall be no less than 2 inches for any style.				
b. **Window Material**				
i. Vinyl or vinyl clad windows shall resemble wood windows (i.e., faux wood or engineered wood) in detailing and profile thickness and employ muted patterns and colors consistent with the building's architectural style.				
c. **Trim**				
i. **Window and door trim materials** Wood or cement fiber board is permitted				
ii. **Building trim materials** Wood, stone, cast stone, pre-cast concrete, glass fiber, reinforced concrete, and cement fiber board.				

ODDS – Chapter 2

2.0 MULTIPLE FAMILY STANDARDS

	Applicant		City	
	Done	N/A	Done	N/A
2.3. Architectural façade elements				
2.3.1 Awning				
1. **Element standards**				
a. **Depth**				
Minimum - Not applicable				
Maximum - 3 feet				
b. **Clearance above ground**				
Minimum - 8 feet				
Maximum - Not applicable				
c. **Length** Refer to Design Standards				
2. **Design standards**				
a. **Encroachment** Residential Awnings may encroach into the setback or public right- of- way as defined in Division 6.01.010(D)(2): Encroachments into Required Setback Areas of the Ontario Development Code.				
b. **Material** Residential Awnings shall be of a simple shed form and made of code- compliant fire-resistant material.				
c. **Upper floors** Each individual awning shall cover no more than **1** window opening.				
2.3.2 Projecting Room				
1. **Element standards**				
a. **Depth**				
Minimum - Not applicable				
Maximum - 2 feet				
b. **Width**				
Minimum - Not applicable				
Maximum - 20 feet				
c. **Height**				
i. 2-story building: 1 story max				
ii. 3 story building: 1 story max				
iii. 4 story+ building: 2 stories max				

ODDS – Chapter 2

2.0 MULTIPLE FAMILY STANDARDS	Applicant		City	
	Done	N/A	Done	N/A
2. **Design standards**				
a. **Encroachment** Projecting rooms may encroach into the setback or public right-of- way as defined in Division 6.01.010(D)(2): Encroachments into Required Setback Areas of the Ontario Development Code.				
b. **Support**				
i. Building projecting rooms shall have visible supports (e.g., beams, braces, or brackets)				
ii. Building projecting rooms shall be set back 10 feet from an adjacent property line				
c. **Space between projecting rooms.** Space between Projecting Rooms shall be 20 feet within the same building plane.				
2.3.3 Bay Window				
1. **Element standards**				
a. **Height**				
Minimum - Not applicable				
Maximum - 10 feet				
b. **Width**				
Minimum - Not applicable				
Maximum - 10 feet				
2. **Design standards**				
a. **Encroachment** Bay windows may encroach into the setback or public right- of- way as defined in Division 6.01.010(D)(2): Encroachments into Required Setback Areas of the Ontario Development Code.				
b. **Dimensions** Bay windows shall be a maximum of 10 feet wide and shall have a height that is equal to or greater than their width.				
c. **Depth** The depth of Bay Windows shall be a minimum of 3 feet				
d. **Façade placement** Bay windows shall be placed a minimum of 2 feet from any building corner and a minimum of 3 from any other bay window.				
e. **Fenestration** Bay windows shall consist of a minimum 75% transparent fenestration				
2.3.4 Balcony				
1. **Element standards**				
a. **Height**				
Minimum – Not applicable.				

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2.0 MULTIPLE FAMILY STANDARDS	Applicant		City	
	Done	N/A	Done	N/A
Maximum - Refer to Design Standards				
b. **Width**				
Minimum - Not applicable				
Maximum - Not applicable				
c. **Depth**				
Minimum - Not applicable				
Maximum - Refer to Design Standards				
2. **Design standards**				
a. **Encroachment** Balconies may encroach into the setback or public right- of- way as defined in Division 6.01.010(D)(2): Encroachments into Required Setback Areas of the Ontario Development Code.				
b. **Façade Projection or recession** Balconies may project from the facade, be recessed into the facade, or use a combination of both.				
c. **Required Private Open Space** Balconies meeting private open space standards shall have minimum dimensions of 7 feet by 7 feet specified in 2.1.5 Open Space Standards.				
2.3.5 Terrace balcony				
1. **Element standards**				
a. **Height**				
Minimum - Not applicable				
Maximum - Refer to Design Standards				
b. **Width**				
Minimum - Not applicable				
Maximum - Not applicable				
c. **Depth**				
Minimum - Not applicable				
Maximum - Refer to Design Standards				
2. **Design standards**				
a. **Encroachment** Terrace balconies may encroach into the setback or public right- of- way as defined in Division 6.01.010(D)(2): Encroachments into Required Setback Areas of the Ontario Development Code.				

ODDS – Chapter 2				
2.0 MULTIPLE FAMILY STANDARDS	**Applicant**		**City**	
	Done	N/A	Done	N/A
b. **Support**				
i. Terrace balconies shall be supported by continuous walls that extend all the way to the ground.				
ii. Terrace balconies shall not be designed as posts, columns, or pillars.				
c. **Required private open space** Terrace balconies meeting private open space standards shall have minimum dimensions of 7 feet by 7 feet specified in 2.1.5 Open Space Standards.				

ODDS – Chapter 2

2.0 MULTIPLE FAMILY STANDARDS

	Applicant		City	
	Done	N/A	Done	N/A
2.4. Entry elements				
2.4.1 Stoop				
1. **Element standards**				
a. **Stoop Width**				
Minimum - 4 feet				
Maximum - 8 feet				
b. **Stoop Depth (not including stairs)**				
Minimum - 4 feet				
Maximum - 8 feet				
c. **Stoop Floor Depth**				
Minimum - 1.5 feet				
Maximum - 3 feet				
d. **Planter/ Fence Height**				
Minimum - Not applicable				
Maximum - 3 feet				
2. **Design standards**				
a. **Relationship to entry** Stoops must align directly with the unit entry(s) they serve.				
b. **Number of units served** Stoops shall provide access to a maximum of 2-unit entries.				
c. **Lobby entries** Stoops may provide access to a lobby entry.				
d. **Stoop stairway orientation** The exterior stoop stairway may be oriented perpendicular or parallel to the adjacent sidewalk.				
3. **Landscaping** Landscaping shall be planted on the sides of the stoop, either at grade or in raised planters. Raised planters shall have a minimum depth of 12 inches.				
2.4.2 Dooryard				
1. **Element standards**				
a. **Depth, Clear**				
Minimum - 8 feet				
Maximum - Not applicable				

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2.0 MULTIPLE FAMILY STANDARDS	Applicant		City	
	Done	N/A	Done	N/A
b. **Finish level above sidewalk**				
Minimum - Not applicable				
Maximum - 3 feet				
c. **Length of Terrace**				
Minimum - Not applicable				
Maximum - 150 feet				
d. **Distance between stairways**				
Minimum - Not applicable				
Maximum - 50 feet				
2. **Design standards**				
a. **Relationship to Entry** Dooryards shall align directly with the unit entry(ies) they serve.				
b. **Number of units served** Stoops shall provide access to a maximum of 2-unit entries.				
c. **Enclosure** Dooryards shall be enclosed by a maximum 3-foot high, decorative walls, fences, or low hedges.				
d. **Architectural Style** Walls and/or fences shall match the building's architectural style.				
e. **Doorway Stairway Orientation** If the doorway is raised above grade, the exterior stairway for raised Dooryards shall be oriented perpendicular or parallel to the adjacent sidewalk.				
2.4.3 Porch				
1. **Element standards**				
a. **Porch Depth**				
Minimum - 8 feet				
Maximum - Not applicable				
b. **Porch width**				
Minimum - 8 feet				
Maximum - Not applicable				
c. **Porch height.**				
Minimum - 8 feet				
Maximum - 12 feet				
d. **Floor height.**				

ODDS – Chapter 2

2.0 MULTIPLE FAMILY STANDARDS	Applicant		City	
	Done	N/A	Done	N/A
Minimum - 1.5 feet				
Maximum - 3 feet				
e. **Space between porch and front property line**				
Minimum - 5 feet				
Maximum - Not applicable				
2. **Design standards**				
a. **Number of units served** Porches shall provide access to multiple ground-floor unit doors.				
b. **Wrap-around porches** Porches shall wrap around building corners.				

ODDS – Chapter 3

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
3.1 Site Design Standards				
3.1.1 Site Design				
1. **Lot lines** The lines bounding a lot. The classifications of "Lot Line" are as follows:				
a. **Front** This line separates the narrowest street frontage of a lot from a public or private street right-of-way.				
b. **Interior "side"** Any lot line that is not a front or rear lot line and does not border a public or private street right-of-way.				
c. **Rear** The lot line opposite and farthest from the front lot line. In the case of an irregularly shaped lot, a straight line shall be drawn to determine the rear lot line.				
d. **Street side** Any lot line that is not a front or rear lot line, and which abuts a public or private street right-of-way				
3.1.2 Site Access				
1. **Alleys** Vehicular access to the on-site parking areas shall be from the alley				
2. **Roadway inclusion** Pedestrian access from the public right-of-way must include sidewalk on both sides of the driveway.				
3.1.3 Parking				
A. Placement on site Parking shall be designed in compliance with the applicable standards contained in Division 6.03 (Off-Street Parking and Loading) of the Ontario Development Code, except as modified by the following:				
1. **Surface Parking**				
a. **Setbacks** Surface parking lots adjacent to public or private streets shall include a landscaped and irrigated setback a minimum of 5 feet in width measured from property line, or aligned with the building façade, whichever is greater.				
b. **Orientation** Surface parking lots shall be located at the rear, side, or internal lot lines and away from the front lot line.				
2. **Above-ground parking structures** Ground-floor parking shall be sited behind residential, office, or commercial spaces				
3. **Semi-subterranean parking** A semi-subterranean garage shall not extend beyond the building frontage line and shall not extend higher than 4 feet above sidewalk grade				
4. **Subterranean parking** A subterranean parking structure may extend to all property lines.				
5. **Private residential garages** Each private garage must have vehicular access from an alley, side street, or motor court.				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
B. Surface parking lot design: Surface parking lots shall be designed in compliance with the applicable standards contained in Division 6.03 (Off-Street Parking and Loading) of the Ontario Development Code, except as modified by the following:				
1. **Screening**				
a. **Street-adjacent parking lots**				
i. A street-adjacent surface parking lot shall be screened from view by a low wall or hedge no higher than 3 feet in height. Walls and hedges must be a minimum 18 inches from the back of the sidewalk.				
ii. Walls and hedges must be a minimum 18 inches from the back of the sidewalk				
iii. Landscaped berms are prohibited				
b. **Neighboring parcels** Views from neighboring properties shall be screened with trees and shrubs.				
2. **Landscape** Landscaping materials shall be applied in compliance with the applicable objective parking lot landscape standards contained in Ontario Development Code Section 6.05.030 (Required Landscape Areas).				
3. **Shade structures** Shade structures, if used, shall match the architectural style of the project buildings				
C. Parking court design				
1. **Design standards**				
a. The width of the parking court, when measured from 1 building face to the other, shall not exceed 100 feet				
b. The parking court shall consist of only **1** parking bay, and this bay shall not exceed a maximum width of 62 feet.				
c. On both sides of the parking court, sidewalks must be established, each with a minimum width of 15 feet. These sidewalks must connect with the adjacent public sidewalk network.				
D. Parking structure design				
1. **Context-sensitive façade design** Parking structure façades shall incorporate a minimum **2** design elements using the architectural styles identified in Chapter 4: Architectural styles and adhere to Main Street or Urban and facade design standards applied in 3 Building Types.				
2. **Parking structure standards**				
a. Any driveway providing access to a parking structure shall have a minimum width of 28 feet. Single openings shall be no wider than 14 feet.				
b. Parked vehicles shall be shielded from view from adjoining streets				
c. The exterior elevations of parking structures facing a public street shall incorporate architectural elements from the project building.				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
d. Vehicular entries shall be located a minimum 50 feet from the corner of a block				
e. Signs as shall be consistent with Division 8: Sign Regulations of Ontario Development Code.				
3.1.4 Open Space Standards				
A. Common open space and public frontage				
1. **Common open space type requirements** Common open space shall cover a minimum of 15 percent of the total lot area with the following **exceptions**:				
a. **Close to parks** Common on-site open space shall not be required for lots within a 1/4-mile of an existing park or plaza a minimum 0.25 acres in size.				
b. **Common open space types** At least **1** or more of the common on-site open space types listed under "Common Open Space Types" shall be provided on each lot that has a residential use.				
2. **Access and visibility** At-grade open space shall be accessible and visible from the adjacent ground floor				
B. Common open space and public frontage				
Forecourt				
1. **Design standards**				
a. A forecourt may occur on any floor and may be used as an allowed method of creating façade massing increments.				
b. Minimum dimensions. Forecourts shall be a minimum of 15 feet by 15 feet				
Side garden				
1. **Design standards**				
a. Minimum side garden dimensions: 15 feet by 15 feet				
b. Dooryards, porches, stoops, and architectural elements may encroach into the side garden as follows:				
i. Up to a total of 30 percent of the side garden's width or length				
ii. A ground-floor encroaching element shall be allowed to project a maximum of 8 feet into the side garden.				
Court				
1. **Design standards**				
a. **Minimum dimensions:** All courts shall be a minimum of 20 feet by 30 feet				
b. **Enclosure**				
i. A court shall have building walls on a minimum 2 sides, while the third and fourth side can be defined by				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
architectural or landscape elements (i.e., low walls, trellises, hedges, or rows of trees).				
ii. A driveway located adjacent to a court shall be screened by architectural elements (e.g., low walls or trellises, hedges, or rows of trees).				
c. **Access**				
i. Courts shall be accessed from the street or walkway				
ii. Units shall be allowed to take direct access through a court				
d. **Encroachments**				
i. Dooryards, porches, stoops, and architectural elements may encroach into the Side Yard.				
ii. A ground floor encroaching element shall not encroach beyond 8 feet of the building's façade into the court.				
e. **Common area** A court shall serve as communal spaces and pedestrian access				
f. **Amenities** A court shall include a minimum **1** of the following amenities: a seating area, a fountain, a BBQ island, or an outdoor fireplace.				
Passage				
1. **Design standards.**				
a. **Location** Passages shall be provided between buildings or side gardens.				
b. **Size** Passages shall be a minimum width of 8 feet with minimum of 2 feet of landscape strip on each side.				
C. Private Open Space				
1. **General standards**				
a. A minimum 60 square feet of private open space shall be provided for each residential unit and a minimum **1** of the private on-site open space types shall be provided.				
b. **Exception:** Private on-site open space shall not be required for a project site that is located within 1/4-mile distance of an existing park or plaza that is a minimum 0.25 acres in size.				
D. Private Open Space Types				
Private roof deck				
1. **Description** A private open space located on the roof of a building dedicated to a single unit.				
2. **Design standards**				
a. Minimum dimensions of 7 feet by 7 feet				
b. Materials, finishes, fixtures, and colors visible from the street shall be designed consistent with the architectural style of the building.				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
Backyard				
1. **Description** A private, landscaped open space located behind each individual unit that is intended to provide passive or active outdoor space for the users of the unit.				
2. **Design standards**				
a. Backyards are located behind the unit				
b. Size. Minimum dimensions of 20 feet by 15 feet				
c. Encroachments. Encroachment into the backyard is allowed up to 30% of the space's width and/or length.				
d. Maximum projection for any ground floor element is 8 feet, with a 10-foot upper floor setback from property line if there's usable space above the first floor.				
Architectural façade elements as private open space				
1. **Description** The following elements defined in Section 2.3 Architectural Façade Elements may be used to meet on-site private open space requirements.				
a. Balcony				
b. Terrace Balcony				
Entry elements as private open space				
1. **Description** The following elements defined in Section 2.4 Entry Elements may be used to meet on-site private open space requirements.				
a. Dooryard				
b. Porch				
3.1.5 Landscaping				
1. **General to all** Landscaping materials shall be applied in compliance with the applicable landscape standards contained in Ontario Development Code Section 6.05.030 (Required Landscape Areas).				
2. **Paths** Where front yards are landscaped, individual paths to sidewalk shall be provided for each entrance.				
3. **Materials** Decorative accents. Paving materials shall incorporate decorative elements consistent with the architectural style of the building.				
3.1.6 Fences and Walls				
1. **Fence and wall heights** Walls and fences shall be designed in compliance with the applicable standards contained in				

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3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
Division 6.02 (Walls, Fences, and Obstructions) of the Ontario Development Code.				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
3.2 Mixed Use Development Standards				
Table 3.01 Mixed Use Development Standards per Building Type *(see Section 3.2.2 Building Types)*				
A. Building Development Standards				
1. **Minimum Setback from Public Street Property Lines:** *(refer to Note 2 & 8 – Table 3.01).*				
a. **Arterial.** **Main Street** – 0 Feet **Urban** - 0 Feet				
b. **Collector.** **Main Street** – 0 Feet **Urban** - 5 Feet				
c. **Local.** **Main Street** – 5 Feet **Urban** - 5 Feet				
2. **Maximum Setback from Public Street Property Lines:** *(refer to Note 2 & 8 – Table 3.01).*				
a. **Arterial.** **Main Street** – 5 Feet **Urban** - 5 Feet				
b. **Collector.** **Main Street** – 10 Feet **Urban** - 10 Feet				
c. **Local.** **Main Street** – 10 Feet **Urban** - 10 Feet				
3. **Minimum Setback from Interior Project Boundary Property Lines:**				
a. 0 feet (attached to adjacent property)				
b. 10 feet (freestanding)				
4. **Minimum Setback from Public Alley Property Lines –** 5 feet				
5. **Minimum Setback from Private Drives/Alleyways (from edge of drive aisle):**				
a. Living Area – 10 feet				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
b. Garages and other non-habitable structures –5 feet				
6. **Minimum Setback from Dwellings to Parking Spaces:**				
a. Living Area – 10 feet				
b. Garages and other non-habitable structures –5 feet				
7. **Minimum Setback from Parking Space or Drive Aisle to Wall or Fence** –5 feet				
8. **Minimum Separation Between Detached Buildings:**				
a. Dwelling Front to Front- < 2-Stories: 25 FT; > 3 Stories: 30 FT unless otherwise specified by massing requirements ("Space between buildings") in Section 3.2.3 Building Types. *(refer to Note 5 – Table 2.01)*				
b. Dwelling Front to Rear- < 2-Stories: 25 FT; > 3 Stories: 30 FT unless otherwise specified by massing requirements ("Space between buildings") in Section 3.2.3 Building Types. *(refer to Note 5 – Table 2.01)*.				
c. Dwelling Front to Side - < 2-Stories: 25 FT; > 3 Stories: 30 FT unless otherwise specified by massing requirements ("Space between buildings") in Section 3.2.3Building Types. *(refer to Note 5 – Table 2.01)*.				
d. Dwelling Side to Side - < 2-Stories: 10 FT; > 3 Stories: 15 FT unless otherwise specified by massing requirements ("Space between buildings") in Section 3.2.3 Building Types. *(refer to Note 5 – Table 2.01)*.				
e. Dwelling Side to Rear - 15 FT; unless otherwise specified by massing requirements ("Space between buildings") in Section 3.2.3 Building Types. *(refer to Note 5 – Table 2.01)*.				
f. Dwelling Rear to Rear- 20 FT unless otherwise specified by massing requirements ("Space between buildings") in Section 3.2.3 Building Types. *(refer to Note 5 – Table 2.01)*.				
g. Garage to Garage (or other nonhabitable structures). 30 FT – Entry to Entry 30 FT – Entry to Side 10 FT – Side to Side 10 FT – Side to Rear				
9. **Minimum Storage Space –** 240 CF *(refer to Note 4 – Table 3.01)*.				
10. **Maximum Street Façade Height** *(refer to Note 8 – Table 3.01)*. a. **Arterial** **Main Street** – 45 feet **Urban** – N/a				
b. **Collector**				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
Main Street – N/a				
Urban – N/a				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
c. **Local** **Main Street** – N/a **Urban** – N/a				
11. **Maximum Building Height (from grade to top of plate).** a. **Arterial** **Main Street** – 120 feet **Urban** – 120 feet				
b. **Collector** **Main Street** – 70 feet **Urban** – 70 feet				
c. **Local** **Main Street** – 50 feet **Urban** – 50 feet				
12. **Minimum Floor to Floor Height**				
a. **Ground Floor** **Non-residential** – 15 feet **Residential** – 10 feet				
b. **Upper and Sub Levels –** 9 feet				
13. **Minimum Setback from Major Pipelines –** 50 feet (to habitable structures) *(refer to Note 6 – Table 3.01)*				
3.2.1 Height Standards				
1. **Height transition zones** Requires all new buildings within 100 feet of less intense development patterns (existing or planned) to reduce heights to ensure neighborhood compatibility.				
2. **Vertical mixed use development types** The following height limits shall apply to all proposed multiple family development types.				
a. Buildings within 100 feet of single-family residential dwellings must not exceed 35 feet or the height of adjacent residential buildings.				
b. Buildings within 100 feet of undeveloped single-family zone parcels shall not exceed 35 feet in height.				
3.2.2 Ground Floor Building Frontage				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
1. **Mixed-Use development types.** The ground floor frontage for vertical mixed-use developments must be designed to accommodate commercial uses.				
3.2.3 Building Types				
Identify the suitable building type based on location, including:				
1. **"Main Street"** (applicable to mixed-use areas within the District Place type as shown on Policy Plan Exhibits LU-04 and CD-01).				
2. **"Urban"** (applicable to mixed-use areas outside the District Place type).				

(Table 3.2-2 Mixed-Use Building Types)

TOP Land Use Place type	Max Permitted Height	Building Types
Downtown	45 feet	Main Street
Airport Metro/Entertainment	120 feet	Main Street
Guasti	70 feet	Main Street
South Euclid	70 feet	Main Street
South Employment	70 feet	Main Street
East Holt Blvd	70 feet	Urban
Inland Empire Blvd	70 feet	Urban
Infill	50 feet	Urban
South of Riverside Drive	50 feet	Urban

A. Main Street Massing and Façade Design				
Massing increments				
1. **Element standards**				
a. Building Façade along font lot line (300 feet max)				
b. Building Façade alongside lot line (150 feet max)				
c. Space between buildings (0 feet min)				
d. Massing Increment (75 feet max)				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
e. Height Difference between Massing Increments (3 feet min)				
f. Façade Break (10 feet x 10 feet min)				
g. Upper-Level Setback (15 feet min)				
2. **Massing standards**				
a. **Size of massing increments** Building facades that face public streets and are longer than 75 feet in length shall be divided into massing increments as follows:				
i. The maximum length of a single massing increment shall not exceed 75 feet.				
ii. Single building projects less than 150 linear feet of street frontage shall have no massing increments applied.				
iii. Single building projects between 150 and 250 linear feet of street frontage shall have at minimum 2 massing increments separated by a façade break.				
iv. Single project buildings that have more than 250 linear feet of street frontage shall have 3 massing increments each separated by a façade break.				
b. **Required difference in facade height.** Adjacent massing increments must vary in façade height measured from the sidewalk to the eave, cornice, or parapet, using a minimum **1** massing strategy:				
i. Vary number of stories				
ii. Vary the parapet height by a minimum of 3 feet				
iii. Incorporate tower element				
iv. Set back upper floor(s) a minimum 15 feet				
c. **Articulation of massing increments.** Individual massing increments shall be differentiated from one another using **3** of the following architectural strategies:				
i. **Set façade increment back** Set the entire facade increment back a minimum of 3 feet.				
ii. **Base height** Vary the height of the building base of adjacent increments.				
iii. **Façade colors** Use different facade materials and/or colors.				
iv. Window type/configuration. Use different window types, configurations, and/or frame colors.				
v. **Presence/arrangement of façade elements** Vary the presence or arrangement of façade elements such as projecting balconies, recessed balconies, trellises, chimneys, and awnings.				
d. **Self-contained massing increments** Facade elements, such as window openings and balconies, shall not overlap the division between massing increments.				
e. **Repeating massing increment design** A massing increment design may be repeated a maximum of 3 times on				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
the same project elevation. Repeated massing increments may not be located immediately adjacent to each other.				
Façade Composition				
1. **Facade composition standards**				
a. **Facade Grid** The window, door, and/or shopfront openings of each individual facade shall be organized into a grid as follows:				
i. **Horizontal alignment of elements** Rooflines, openings, and materials within each facade shall be aligned horizontally.				
ii. **Vertical Bays** The entirety of a building's façade shall be clearly divided into vertical bays.				
b. **Multi-story building façades** Multi-story building facades shall be designed to include a base, middle, and top.				
i. **Base** Building base of entire ground floor for buildings less than 5 stories or 25 feet for buildings 5 stories or more, shall use a minimum of 2 of the following strategies:				
(a) Provide a string course at the top of the first story;				
(b) Specify base materials different from rest of facade;				
(c) Specify base colors different from rest of facade;				
(d) Provide a ground floor Arcade or Gallery per (Section 3.2 Architectural Façade Elements).				
ii. **Middle** The middle of the building—the facade of all floors located above the base—shall be designed as follows:				
(a) Window and door openings shall be organized in bays per the façade fenestration standards of this section.				
(b) If provided, attached façade elements such as balconies, bay windows, and projecting rooms, shall be designed per the façade fenestration standards of this section.				
iii. **Top** The façade elements that define the upper limits of the building—shall be designed as follows:				
(a) The top of the building facade shall incorporate capping elements, such as a cornice, enhanced ornamentation, or a decorative parapet.				
Fenestration Design				
1. **Façade fenestration standards**				
a. **Minimum Fenestration.** Facade designs shall include a minimum percentage of fenestration calculated as the total percentage of window and door area divided by the total area of that portion of the façade:				
i. **Ground Floor:** 70% minimum				

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3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
ii. **Upper Floors:** 15% minimum				
2. **General to all floors.** All window jambs/frames shall be set back a minimum of 2 inches back from the facade plane.				
3. **Specific to ground floors** Structural elements shall be visible on the exterior of ground floor facades to visually convey that the upper floors are supported.				
a. **Ground floor windowsills** Facades along the front lot line that face public streets shall be no higher than 3 feet above the adjacent grade.				
b. **Ground floor bathroom windows** Prohibited on facades that face front streets.				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
B. Urban massing and façade design				
1. **Urban massing and façade design** standards are required for all multiple-family developments projects with 25 du/ac or more.				
Massing increments				
1. **Massing Standards**				
a. Building Façade along font lot line (400 feet max)				
b. Massing Increment (150 feet max)				
c. Space between buildings (0 feet min)				
d. Façade Setback (if elected) (10 feet x 10 feet minimum)				
e. Building base height (15 feet min)				
f. Building façade alongside lot line (200 feet max).				
g. Height difference between massing Increments (3 feet min)				
h. Upper-level setback from façade (15 feet min)				
2. **Size of massing increments** Building facades along front and side lot lines that face public streets and are longer than 100 feet shall be divided into massing increments as follows:				
a. The maximum length of a single massing increment shall not exceed 150 feet				
b. A minimum of **2** distinct massing increments shall be provided				
3. **Articulation of massing increments** Individual massing increments shall be differentiated from one another using a minimum **1** of the following massing strategies:				
a. Vary parapet height by a minimum of 3 feet				
b. Increase number of stories				
c. Set back upper floor. Set the upper floor or multiple upper floors back a minimum of 15 feet from the facade				
d. Set the entire facade back a minimum of 10 feet for 20 feet				
e. Incorporate tower element				
4. **Massing increments with distinct facades** Massing increments that have distinct facades and shall appear as distinct buildings.				
a. **Repeating massing increment design** A massing increment design may be repeated on the same project				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
elevation. Repeated massing increments shall be separated by a distinct massing increment.				
Façade Composition				
1. **Façade Composition Standards.**				
2. **Multi-story building façades. The building facade shall be divided into a base and body as follows:**				
a. **Base** Separate the building base (entire ground floor facade or first 2 floors of building's 5 stories or taller) from the rest of the facade for a minimum of 15 feet (fewer than 5 stories) or 25 feet (5 stories or more) from grade, using a minimum **2** of the following strategies:				
i. Provide a string course at the top of the first story.				
ii. Specify base materials different from rest of façade.				
iii. Specify base colors different from rest of façade.				
iv. Provide a ground floor Arcade or Gallery per Section 2.3 Architectural Façade Elements.				
b. **Body** The body of the building consists of the facade of all floors located above the base and shall be designed as follows:				
i. Windows shall be organized in bays, bands, curtain wall, and grid of windows consistent with the Facade Fenestration Standards for the Urban massing type.				
ii. Each massing increment must contain its entire facade composition without elements overlapping the division between increments.				
c. **Strategies** The listed strategies show acceptable ways to differentiate massing increments:				
i. Vary the height of the building body.				
ii. Use different facade materials and/or colors.				
iii. Use different window types/configurations.				
iv. Diversify facade elements, including projecting balconies, recessed balconies, canopies, and awnings.				
Fenestration design Fenestration design addresses the percentage of window and door openings for ground floors and upper floors and glazing transparency.				
1. **Façade fenestration standards**				
a. **Minimum fenestration** Facade designs must meet a minimum fenestration percentage, calculated as the total window and door area divided by the total area of that part of the façade.				
i. **Ground floor**				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
(a) Front lot line: 70% minimum.				
(b) All other frontages: 50% minimum.				
(c) Ground floor windowsills on facades along the front lot line shall be no higher than 3 feet above the adjacent grade.				
(d) Ground floor bathroom windows are prohibited on facades that face front lot line.				
ii. **Upper floors.** 15% minimum.				
3.2.4 Material and Detailing				
A. Building Materials				
1. **Prohibited materials**				
a. Fiberglass or plastic (false) architectural or facade elements or ornamentations.				
b. Rough-cast and sand-finishes are prohibited on all building surfaces that are visible from a street.				
c. Reflective materials, such as mirrored glass, shiny metal, and chrome are allowed with the following **exception**:				
i. Application to small areas (up to 50 sq ft or 2% of façade area, whichever is less) for signage highlighting, ensuring no glare nuisance to traffic, pedestrians, or neighboring buildings.				
2. **Combining materials** When combining **2** or more wall materials on **1** facade:				
a. Place lighter weight materials above more substantial ones (e.g., glass above wood, wood above stucco, stucco above masonry).				
b. Vertical joints between different materials shall only occur at inside corners.				
B. Windows and Doors				
1. **Material and types**				
a. **Window recess** Windows shall be recessed in a manner that is specific to each building's architectural style but shall be no less than 2 inches for any style.				
b. **Architectural style of detailing** Windows, doors, frames, colors, and styles shall be appropriate to the building's architectural style in terms of window type, proportion, and color.				
c. **Materials** Windows and doors shall be made of wood, fiberglass, fiberglass-clad wood, aluminum clad wood, or metal.				
d. **Glazing** Glazing shall be clear glass with no more than ten percent daylight reduction (tinting). Reflective (mirrored) glazing is prohibited.				
e. **Residential buildings** The following are applicable to multiple-family development types.				
i. Vinyl or vinyl clad windows shall resemble wood windows (i.e., faux wood or engineered wood) in detailing				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
and profile thickness and employ muted patterns and colors consistent with the building's architectural style.				
ii. Nail-on windows that are deeply set within their frame are permitted.				
iii. Muntins shall be of a substantial dimension (e.g., not flat) and shall be placed on the exterior of windows.				
i. Trim:				
(a) **Window and door trim materials** Wood or cement fiber board. Foam trim around windows is allowed. Foam trim around doors is prohibited.				
(b) **Building trim materials** Wood, stone, cast stone, pre-cast concrete, glass fiber reinforced concrete, and cement fiber board.				
3.3. Architectural Façade Elements				
3.3.1 Arcade				
1. **Element standards**				
a. **Depth**				
Minimum - 12 Feet				
Maximum - 16 Feet				
b. **Distance from property line** - 0 Feet				
c. **Open height, clear** – refer to Design standards below				
d. **Overall height** - refer to Design standards below				
2. **Design standards**				
a. **Projection depth** The arcade projection depth from the ground floor facade shall be no greater than the height of the arcade opening.				
b. **Sidewalk depth beneath arcade** The covered sidewalk under the arcade shall be a minimum of 10 feet wide from the inside of the vertical support to the ground floor building face.				
c. **Entry element requirement** Arcades shall be combined with Shopfronts (defined in *Section 3.4 Entry Elements*).				
d. **Minimum openings and massing increments** Arcades shall be a minimum of 3 openings wide. The location where an arcade stops or changes in design or dimensions shall correspond to a change in massing increment (*Section 3.2.3. Massing and Façade Design*) for massing increment requirements.				
e. **Vertical supports** Vertical supports may be piers, columns, or arches. The width of a vertical support shall not exceed 3 feet.				
f. **Width of openings** The openings between vertical supports, as seen from the street, shall be taller than they are wide.				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
g. **Shape and cadence of openings** Openings, whether rectangular or arched, must align with facade bays if present (vertical bays are mandatory for Main Street standards and optional for other massing types in *Section 3.2.3. Massing and Façade Design*).				
h. **Vertical clearance** The minimum vertical clearance at each opening shall be a minimum of 12 feet, excluding decorative brackets, spandrels, and/or lower portions of arches.				
i. **Arcade height relative to interior building floor height** The height of the soffit inside the arcade shall be no less than the height of the ceiling of the floor to which it corresponds.				
j. **Architectural style** Arcade detailing, including lighting, shall utilize the architectural style of the building.				
3.3.2 Gallery				
1. **Element standards**				
a. **Depth**, clear				
Minimum - 10 Feet				
Maximum - 16 Feet				
b. **Distance from property line**, clear				
Minimum - 0 Feet				
Maximum - 5 Feet				
c. **Overall Height,** clear				
Minimum - 12 Feet				
Maximum - 2 Floors				
d. **Overall height** - refer to Design standards below				
2. **Design standards**				
a. **Projection depth** Gallery projection depth from the ground floor facade shall be no greater than the height of the gallery opening.				
b. **Sidewalk depth beneath gallery** Covered sidewalk width under the gallery must be a minimum of 10 feet from the inside of the vertical support to the ground floor building face.				
c. **Minimum openings and massing increments** Galleries shall be a minimum of 3 openings wide. The location where a gallery stops or changes in design or dimensions shall correspond to a change in massing increment (see Section 3.2.3. Massing and Façade Design).				
d. **Vertical supports** Vertical supports may be piers or columns. The width of a vertical support shall not exceed 1				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
foot.				
e. **Width of openings** Openings between vertical supports, as seen from the street, shall be taller than they are wide.				
f. **Shape and cadence of openings** Openings may be rectangular but shall not be arched.				
g. **Vertical clearance** Minimum vertical clearance at each opening shall be a minimum of 12 feet, excluding decorative brackets and spandrels.				
h. **Gallery height relative to interior building floor height** Height of the soffit inside the gallery shall be no less than the height of the ceiling of the floor to which it corresponds.				
i. **Vertical alignment** Galleries may be single or double-story and shall correlate with building floors .				
j. **Architectural style** Gallery detailing, including lighting shall utilize the architectural style of the building.				
3.3.3 Commercial Awning				
1. **Element standards**				
a. **Depth**				
Minimum – 4 Feet				
Maximum - Not applicable				
b. **Clearance above sidewalk**				
Minimum – 8 Feet				
Maximum – Not applicable				
c. **Length**				
Minimum - refer to Design standards below				
Maximum - refer to Design standards below				
2. **Design standards**				
a. **Encroachment** Commercial awnings may encroach into the setback or public right-of- way as defined in Division 6.01.010(D)(2): Encroachments into Required Setback Areas of the Ontario Development Code.				
b. **Material** Commercial awnings shall be of a simple shed form, made of code- compliant fire-resistant canvas.				
c. **Width** Awning widths shall equal in size to shopfront opening widths.				
d. **Prohibited lighting** Internally illuminated and back-lit awnings and any associated light diffusers are prohibited.				
3.3.4 Commercial canopy				
1. **Element standards**				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
a. **Depth**				
Minimum – Not applicable				
Maximum - 3 Feet				
b. **Minimum clearance above ground**				
Minimum – Not applicable				
Maximum – 12 Feet				
c. **Length of terrace**				
Minimum - Not applicable				
Maximum – 150 Feet				
2. **Design standards**				
a. **Encroachment** Commercial canopies may encroach into the setback or public right-of- way as defined in Division 6.01.010(D)(2): Encroachments into Required Setback Areas of the Ontario Development Code.				
b. **Form and material** Canopies shall be of a simple form, made of metal and/or glass.				
c. **Support.** Canopies shall be supported either from below by metal brackets, or from above by rods and wires that affix to the wall.				
d. **Width** Canopies may extend across multiple storefronts.				
3.3.5 Awning				
1. **Element standards**				
a. **Depth**				
Minimum – Not Applicable				
Maximum - 3 Feet				
b. **Clearance above ground**				
Minimum – 8 Feet				
Maximum – Not Applicable				
c. **Length**				
Minimum - refer to Design standards below				
Maximum - refer to Design standards below				
2. **Design standards**				

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3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
a. **Encroachment** Residential awnings may encroach into the setback or public right- of- way as defined in Division 6.01.010(D)(2): Encroachments into Required Setback Areas of the Ontario Development Code.				
b. **Material** Residential awnings shall be of a simple shed form, made of code- compliant fire-resistant.				
c. **Upper floors** Each individual awning shall cover no more than 1 window opening.				
3.3.6 Canopy				
1. **Element standards**				
a. **Depth**				
Minimum – Not Applicable				
Maximum - 3 Feet				
b. **Minimum clearance from landing**				
Minimum – 7 Feet				
Maximum – 8 Feet				
c. **Length of terrace**				
Minimum - Not Applicable				
Maximum - 8 Feet				
2. **Design standards**				
a. **Material** Canopies shall be of a simple form, made of metal and/or glass.				
b. **Support** Canopies shall be supported either from below by metal brackets, or from above by rods or wires that affix to the wall.				
c. **Upper floors** Each individual canopy shall cover no more than 1 window opening.				
3.4. Entry Elements				
3.4.1 Shopfront				
1. **Element standards**				
a. **Height to top of transom**				
Minimum – 12 Feet				
Maximum - 16 Feet				
b. **Height to bottom of canopy/awning**				
Minimum – 8 Feet				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
Maximum – 10 Feet				
c. **Width of each shopfront bay**				
Minimum - 10 Feet				
Maximum - 25 Feet				
d. **Height of shopfront base**				
Minimum - 1 Foot				
Maximum - 3 Feet				
e. **Awning/Canopy Depth**				
Minimum - 4 Feet				
Maximum - Not Applicable				
2. **Design standards**				
a. **Vertical bays** Shopfront openings must align into bays, following the vertical bay specifications in *Section 3.2.3. Massing and Façade Design* of main street standards.				
b. **Architectural façade elements**				
i. Shopfronts in vertical mixed-use buildings may integrate with Galleries or Arcades.				
ii. **Visibility** Windowsills in non-entry bays shall not exceed 2 feet above grade.				
c. **Setback use and design** Recessed shopfronts without dooryard, terrace, or porch designs shall extend to the property line.				
3.4.2 Lobby Entry				
1. **Element standards**				
a. **Height to top of transom**				
Minimum – 10 Feet				
Maximum - 20 Feet				
b. **Height to bottom of canopy/awning**				
Minimum – 8 Feet				
Maximum – Not Applicable				
c. **Distance to property line**				
Minimum - Not Applicable				
Maximum - 20 Feet				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
d. **Awning/Canopy Depth**				
Minimum - 4 Feet				
Maximum - Not Applicable				
2. **Design standards**				
a. **Lobby entries** shall be visible and distinguishable from adjacent ground floor units and include a minimum of **1** of the following design strategies:				
i. Center placement for symmetry				
ii. Prominent corner location				
iii. Incorporate 2 architectural elements (columns, overhanging roofs, canopies, awnings, or ornamental light fixtures)				
iv. Recessed entry				
v. Entry framing				
b. **Main Street massing types**				
i. Lobby entries shall not exceed 20% of the frontage length				
ii. Allocate the remaining length to shopfronts				
c. **Visibility** Lobbies entries shall be visible from the public right of way as follows:				
i. Windowsills shall be no higher than 2 feet above adjacent grade				
ii. Internal shade devices such as blinds, shades, or curtains are prohibited				
d. **Forecourt** may be introduced to provide a transition between the entry and sidewalk (forecourt standards are discussed in Section 3.1.5 Open Space Standards).				

ODDS – Chapter 4

4.0 Architectural Styles

	Applicant		City	
	Done	N/A	Done	N/A
4.1 Mission – Spanish Colonial Revival				
4.1.1 Form and Massing				
1. **Façade design (Apply all)**				
a. Asymmetrical façade/elevations				
b. Three or more roof planes.				
c. A minimum of 50 percent of the units shall have balconies or window treatments (such as shutters or awnings)				
d. Entrances are recessed a minimum 12 inches				
e. Additional details for projects over 4 stories, vertical mixed use, or with more than 15 buildings (requires 2 details):				
i. Include 2 add-on projections such as verandas, arcades, balconies, and exterior stairs				
ii. The ends of building massing's shall be stepped down				
iii. One focal point, such as courtyard, tower, or fountain				
iv. Apply wingwalls or columns on the ground level				
4.1.2 Roof				
1. **Roof design (Apply all)**				
a. Low-pitched (4:12 maximum) cross- or side-gabled roofs. The pitch shall remain constant except for a veranda or arcade.				
b. Red, fired, clay tile roofs. Tile types include both Spanish (S-shaped) and Mission (half-cylinder)				
c. Hipped roofs shall only be used in combination with gables or on a tower element				
d. Shed roofs are only used in conjunction with verandas				
e. When a flat roof is used, it shall be screened by a parapet that is an extension of the wall plane or by a modified Mansard roof				
4.1.3 Materials and Color				
1. **Materials and colors (Apply all)**				
a. Roof tiles shall use terracotta, brown earth tones, or rustic red color palettes.				
b. White, cream, or tan stucco wall with smooth (20/30) textured finish (i.e., hand troweled)				
c. Wood shall be used as secondary wall material for the following and similar elements:				
i. Posts and exposed beams				
ii. Railing, spindles, and grille work				

ODDS – Chapter 4

4.0 Architectural Styles	Applicant		City	
	Done	N/A	Done	N/A
4.1 Mission – Spanish Colonial Revival				
iii. Shutters, window frames, and doors				
d. If windows have shutters, the shutters' color shall match the accent color that is used for doors or decorative trim				
e. A minimum of 1 wrought-iron element (such as railings, hardware, and gates) shall be used				
4.1.4 Doors and Windows				
1. **Door and windows (Apply all)**				
a. Accent windows shall be a minimum of 20 percent of the total windows				
b. The primary facade shall include a minimum of 1 arched element				
c. A minimum of 50 percent of the windows shall be casement windows				
d. All entrance-door surrounds shall be banded with ceramic tile, molded plaster, or painted accents				
e. All casement windows and double-hung windows shall have wood frames				
f. Eighty percent of the windows shall have window muntins				
4.1.5 Decorative Details				
1. **Decorative details**				
a. All residential projects shall provide **a minimum of 4** of the following, and				
b. Residential projects 4 stories and taller, mixed-use projects, or projects with more than 15 buildings shall provide **a minimum of 6** of the following				
i. Entry/front porch or patio				
ii. Decorative tiles				
iii. Clay tile vents				
iv. Wrought-iron balcony railings or support brackets				
v. Dark-metal light fixture and hardwires				
vi. Paired wood (or wood simulated) garage doors with iron hardware				
vii. Verandas, pergolas, or arcades				
viii. Exterior stairs				
ix. Awnings with metal spear supports				

ODDS – Chapter 4

Architectural Styles

	Applicant		City	
	Done	N/A	Done	N/A
4.2 Craftsman				
4.2.1 Form and Massing				
1. **Façade design (Apply all)**				
a. Asymmetrical facades/elevations				
b. Three or more roof planes on the primary facade				
c. Front-facing gable roofs				
d. Street-facing units shall have balconies or porches				
e. The front lot line façade shall have 2 to 3 materials/colors				
4.2.2 Roof				
1. **Roof design (Apply all)**				
a. Low- to moderate-pitched gable or hipped roofs from 6:12 to 8:12				
b. Overhanging eaves (minimum 24 inches along primary elevation) with exposed rafter tails or beams				
c. Brackets or knee braces at gabled ends				
d. Use of imitation wood or asphalt shingles				
4.2.3 Materials and Color				
1. **Materials and colors (Apply all)**				
a. Brick or stone shall be used in the base				
b. Primary wall materials shall include dark-color wood shingles, clapboard siding, or fiber cement siding and natural materials such as stone or brick				
c. Use of earth-toned color palette, such as browns and greens				
d. The front lot line façade shall have a minimum 3 paint colors: 1 for the cladding ,1 for trim, and 1 for accents such as windows and decorative details.				
4.2.4 Doors and Windows				
1. **Door and windows (Apply all)**				
a. A minimum of 50 percent of the windows shall be casement windows				
b. A minimum of 80 percent of the primary windows shall be multi-paned				
c. A minimum of 2 types/shapes of windows shall be used				
d. Utilize flat wood trims (typically 4½ inches or 5½ inches wide) around the primary windows and entry doors				

ODDS – Chapter 4				
Architectural Styles	**Applicant**		**City**	
	Done	N/A	Done	N/A
4.2 Craftsman				
e. Window and door trim color shall be different with the color of the walls				
f. Entry doors and garage doors shall have 1 row of vertical or horizontal glass panels				
4.2.5 Decorative Details				
1. **Decorative details**				
a. All residential projects shall provide **a minimum of 4** of the following, and				
b. Residential projects 4 stories and taller, mixed-use projects, or projects with more than 15 buildings shall provide **a minimum of 6** of the following:				
i. Stone pier and battered wood support				
ii. Exposed rafter tails and knee-brace brackets				
iii. Dormers on the front façade				
iv. Second-story balcony				
v. Decorative attic/gable vent				
vi. Light fixtures shall be box-shaped, with metal frame and geometric pattern				
vii. Chimneys are visible at the exterior and arranged on a side elevation				
viii. Stained-glass or transom windows				
ix. Covered front porches shall tapered pillars				
x. Ground-level windows shall have muntins				

ODDS – Chapter 4

Architectural Styles	Applicant		City	
	Done	N/A	Done	N/A
4.3 American mercantile				
4.3.1 Form and Massing				
1. **Façade design (Apply all)**				
a. Asymmetrical facades/elevations				
b. Simple, rectangular form				
c. Symmetrical placement of piers, columns, ground-floor storefronts, and openings on upper levels				
d. Transparent windows and doorways shall be no less than 80 percent of the street frontage at the ground level				
e. Multistory facades are divided into base, body, and top, with the ground floor taller than the upper floors				
f. Columns or lintels over openings				
g. Bases are articulated by changes in material or changes in wall plane				
h. Minimal projections or recessions on wall plane				
4.3.2 Roof				
1. **Roof design (Apply all)**				
a. Flat roof				
b. A projecting cornice or a receding, stepped parapet				
c. Cornice and details mimic and reference historical detailing				
d. Street-facing gable roof with roof pitches at minimum 5:12 unless concealed behind a parapet				
4.3.3 Materials and Color				
1. **Materials and colors (Apply all)**				
a. Walls shall be composed of brick.				
b. Decorative moldings, cornices, or an applied ornament of stone or cast concrete shall be used.				
c. No more than 3 colors shall be used on any given facade.				
d. Stucco and clapboard is prohibited.				
4.3.4 Doors and Windows				
1. **Door and windows (Apply all)**				
a. Ground-floor windows and doors shall be large and expansive with a transom.				
b. Upper-floor windows shall be double-hung vertically and grouped with a rhythm consistent with the major storefront openings below.				

ODDS – Chapter 4

Architectural Styles	Applicant		City	
	Done	N/A	Done	N/A
c. Entrance shall have higher bays, recessed entries by a minimum of 3 feet, or different color/materials				
d. Upper-floor windows shall have window lintel and sill				
e. Transom windows above the doors and windows on the ground level				
f. Fifty percent of windows shall have muntins				
g. Upper floor windows shall have a minimum 2-inch recess				
4.3.5 Decorative Details				
1. **Decorative details**				
a. All residential projects shall provide **a minimum of 4** of the following, and				
b. Residential projects 4 stories and taller, mixed-use projects, or projects with more than 15 buildings shall provide **a minimum of 6** of the following:				
i. Awnings, canopies, and second-floor balconies				
ii. Pedimented windows				
iii. Wide window trim with a keystone				
iv. Double-bracketed cornice				
v. Gable roof				
vi. Roof finial				
vii. Transom above door and windows on the ground level				
viii. Metal balcony railing				
ix. Canopy or awning				
x. Recessed entries				
xi. Cast-iron columns				
xii. Shopfront millwork				

ODDS – Chapter 4

Architectural Styles	Applicant		City	
	Done	N/A	Done	N/A
4.4 Tuscan				
4.4.1 Form and Massing				
1. **Façade design (Apply all)**				
a. Asymmetrical arrangement of windows and design elements along front lot line				
b. Porches, porticoes and/or Juliet balconies				
c. Recessed entries (a minimum of 3 feet)				
4.4.2 Roof				
1. **Roof design (Apply all)**				
a. Flat or low-pitched hip or gable roof (maximum 6:12 slope)				
b. Red-toned clay tiles				
c. Multiple roof levels (at minimum 3)				
d. Large overhanging eaves (minimum 12 inches) along primary elevation				
4.4.3 Materials and Color				
1. **Materials and colors (Apply all)**				
a. Incorporate rough-hewn stone as accent feature				
b. Flat stucco walls in light earth tones				
c. Use of earth-toned color palette				
d. Brown or beige window frames				
4.4.4 Doors and Windows				
1. **Door and windows (Apply all)**				
a. Single- or double-hung windows shall be more horizontal in proportion, with six-over- six muntin patterns and 5½-inch-wide trim				
b. Casement windows shall be paired with four-pane patterns for smaller windows and eight-pane patterns for larger windows				
c. Vertically oriented rectangular or arched windows arranged in asymmetrical patterns				
d. Casement or double-hung sash with flat or arched lintels				
e. Windows shall be recessed 3 to 12 inches				

ODDS – Chapter 4

Architectural Styles

	Applicant		City	
	Done	N/A	Done	N/A
4.4.5 Decorative Details				
1. **Decorative details**				
a. All residential projects shall provide **a minimum of 4** of the following, and				
b. Residential projects 4 stories and taller, mixed-use projects, or projects with more than 15 buildings shall provide **a minimum of 6** of the following:				
i. Juliet balconies				
ii. Rafter extensions and brackets				
iii. Stone or stucco window/door trim				
iv. Rectangular or arched wooden door				
v. Arcade or porch at entry				
vi. Decorative ironwork (window grilles, railings, light fixtures, decorative planters)				
vii. Arched windows				
viii. Paired decorative wood shutters. Shutters shall be equal to half the width of the window. Shutter styles shall be paneled or louvered				
ix. Use of brick, stone, or wood columns				
x. Stucco or stone chimneys				
xi. Different-color wood trellis				
xii. Arched openings and doorways at the ground level				

ODDS – Chapter 4

Architectural Styles	Applicant		City	
	Done	N/A	Done	N/A
4.5 Modern				
4.5.1 Form and Massing				
1. **Façade design (Apply all)**				
a. An irregular, asymmetrical façade				
b. Rectangular structure				
c. Horizontal massing				
d. Straight and continuous lines				
e. Repeating lines and elements				
4.5.2 Roof				
1. **Roof design (Apply all)**				
a. Flat or low-pitched roofs (4:12 slope max)				
4.5.3 Materials and Color				
1. **Materials and colors (Apply all)**				
a. Use of raw and natural materials including wood, concrete, metal, and glass				
b. Traditional materials (such as smooth stucco (20/30), wood, brick, and stone) shall be used as an accent material				
c. Minimum **2** materials on the building facade				
d. Use of color blocking for geometric forms and break up massing elements				
e. Building facade shall incorporate **a minimum of 2** of the following as an accent:				
i. Awnings				
ii. Popouts, trellis				
iii. Arbor structures				
iv. Balconies				
4.5.4 Doors and Windows				
1. **Door and windows (Apply all)**				
a. Large glass doors and/or window openings				
b. Window wrapping around a corner of the building				
c. Narrow aluminum window frames				

Architectural Styles

	Applicant		City	
	Done	N/A	Done	N/A
4.5.5 Decorative Details				
1. **Decorative details**				
a. All residential projects shall provide **a minimum of 4** of the following, and				
b. Residential projects 4 stories and taller, mixed-use projects, or projects with more than 15 buildings shall provide **a minimum of 6** of the following:				
i. Metal balcony railings				
ii. Clerestory windows				
iii. Floor-to-ceiling glass door				
iv. Floor-to-ceiling glass windows on the ground level				
v. Roof decks				
vi. Trellis shade structures				
vii. Metal awning				
viii. Roof overhang with exposed wood or steel frame				

ODDS – Chapter 4

Architectural Styles	Applicant		City	
	Done	N/A	Done	N/A
4.6 Farmhouse				
4.6.1 Form and Massing				
1. **Façade design (Apply all)**				
a. Straight exterior lines, geometric form				
b. Asymmetrical massing with a gable at the front of the house				
c. Repeating shapes and lines				
d. Gable roof creating a triangular wall on the ends				
e. Incorporate farm and ranch forms (i.e. barns, silos, sheds, tank houses, and granary towers)				
f. Multiple gable and shed roof planes				
g. Geometric forms, industrial materials, and repetition				
h. Covered porches and awnings to break up volumes between lower and upper floors				
i. Variation in projecting wall planes with a minimum 12-inch depth				
4.6.2 Roof				
1. **Roof design (Apply all)**				
a. High-pitched gabled roof or shed roof (minimum 6:12 slope)				
b. Intersecting gable roofs				
c. Dark asphalt shingle, metal roofs, or synthetic slate shingles				
d. Triangular rooflines				
e. Large overhangs (minimum 2 feet in length) above the patio and garage				
4.6.3 Materials and Color				
1. **Materials and colors (Apply all)**				
a. Use metal, wood, or masonry				
b. Utilize board-and-batten siding, corrugated panels				
c. Monochrome accents of doors, windows, or architectural features				
d. Stucco is permitted as an accent material				

Architectural Styles

	Applicant		City	
	Done	N/A	Done	N/A
4.6.4 Doors and Windows				
1. **Door and windows (Apply all)**				
a. Windows shall be double-hung with a proportion of 2 or 2½ times taller than wide				
b. Groupings of 2 or 3 double-hung window units				
c. Multi-paned windows				
d. Accent trim around window and door openings				
e. Double-hung or casement windows				
4.6.5 Decorative Details				
1. **Decorative details**				
a. All residential projects shall provide **a minimum of 4** of the following, and				
b. Residential projects 4 stories and taller, mixed-use projects, or projects with more than 15 buildings shall provide **a minimum of 6** of the following:				
i. Wide front porch with simple columns				
ii. Covered patio				
iii. Shed or gabled dormers				
iv. Carriage-style garage doors				
v. Dark shutters and window sashe				
vi. Gable brackets, vents, and trim				
vii. Iron-inspired barn-style lighting				
viii. Metal awnings without sides				
ix. Gooseneck light fixtures at the entrance				
x. Large doors and windows to maximize natural light				
xi. Multi-paned windows on the ground-level windows and doors				

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING FILE NO PDCA24-001, A DEVELOPMENT CODE AMENDMENT AMENDING THE REFERENCE DOCUMENT SECTION OF THE CITY'S DEVELOPMENT CODE, TO IMPLEMENT OBJECTIVE DEVELOPMENT AND DESIGN STANDARDS FOR MULTIPLE-FAMILY AND MIXED-USE RESIDENTIAL DEVELOPMENT AND MAKING FINDINGS IN SUPPORT THEREOF.

WHEREAS, for the last several years, the State has enacted housing-related statutes that either limit or prohibit the use of local subjective standards for new development; and

WHEREAS, the City has historically regulated new housing development through a mix of subjective and objective standards to ensure that each project is reasonable and compatible with surrounding uses and City goals and objectives; and

WHEREAS, the City's current objective standards on their own are not sufficient to ensure that new housing development is reasonable or compatible; and

WHEREAS, as state law has evolved to increasingly limit the City's use of subjective standards, the need for more and more-thoughtful objective standards has become urgent; and

WHEREAS, specifically the approval of multiple-family residential and mixed-use residential development projects in various zoning districts based solely on the default standards currently in the City's Development Code, without additional appropriate objective regulations governing project design, site planning, building massing, height, setback, landscape, building type, architectural review, and similar criteria, threatens to adversely impact the character of existing neighborhoods and to negatively impact property values, personal privacy, and fire safety; and

WHEREAS, the City desires now to amend its local regulatory scheme to provide reasonable and appropriate objective standards, in compliance with state law and the City's own adopted housing element; and

WHEREAS, as part of the implementation of the City's Housing Element Update the City prepared this Development Code Amendment to implement multiple-family residential and mixed-use residential objective development and design standards consistent with the policy program for these standards; and

WHEREAS, on June 4, 2024, the City Council of the City of Ontario held a public hearing to consider the Project and subsequently adopted an Urgency Ordinance with a 90-day duration; and

WHEREAS, on August 20, 2024, the City Council of the City of Ontario conducted a public hearing and approved a nine-month extension of the Urgency Ordinance; and

WHEREAS, the City is adopting an official Ordinance that will allow the City to respond and impose consistent development standards to address the anticipated increase in housing development project applications; and

WHEREAS, City of Ontario Development Code Division 2.03 (Public Hearings) prescribes the manner in which public notification shall be provided and hearing procedures to be followed, and all such notifications and procedures have been completed; and

WHEREAS, on February 25, 2025, the Planning Commission of the City of Ontario conducted a hearing to consider the Project, and recommended that the City Council adopt the Ordinance; and

WHEREAS, on March 18, 2025, the City Council of the City of Ontario conducted a hearing to consider the Project, and concluded said hearing on that date; and

WHEREAS, all legal prerequisites to the adoption of this Ordinance have occurred.

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED, AND ORDAINED by the City Council of the City of Ontario, as follows:

SECTION 1: ***Incorporation of Recitals.*** The recitals above are each incorporated by reference and adopted as findings by the City Council.

SECTION 2: ***Environmental Determination and Findings.*** Adoption of this Ordinance has been assessed under CEQA and is deemed exempt based on CEQA Guidelines Section 15183, as it involves the adoption and implementation of Design Standards. This falls under the exemption for Projects Consistent with a Community Plan, General Plan, or Zoning, as it directs staff to adopt standards aligned with the General Plan Housing Element policy for multiple-family residential development. The determination relies on Section 15004, providing guidance on the timing of environmental review. While projects using the Design Standards may need environmental documents, the adoption of Objective Development and Design Standards is exempt from CEQA as it won't significantly impact the environment. Staff recommends City Council acknowledge the exemption, accept the NOE, and instruct staff to file the document under CEQA and the CEQA Guidelines (14 CCR Section 1500 et seq.).

SECTION 3: ***General Plan Consistency.*** This Ordinance is, as a matter of law, consistent with the City's General Plan under the principles, goals and policies contained within the Vision, Governance, Policy Plan (general plan), and City Council Priorities components of The Ontario Plan ("TOP"). More specifically, the goals and policies of TOP that are furthered by the proposed Project are as follows:

(1) City Council Goals.

- Invest in the Growth and Evolution of the City's Economy
- Operate in a Businesslike Manner

(2) Vision.

Distinctive Development:

- Commercial and Residential Development

  - Development quality that is broadly recognized as distinctive and not exclusively tied to the general suburban character typical of much of Southern California.

(3) Policy Plan (General Plan)

Land Use Element:

- Goal LU-1 Balance. A community that has a spectrum of housing types and price ranges that match the jobs in the City and that make it possible for people to live and work in Ontario and maintain a quality of life.

  - LU-1.1 Strategic Growth. We concentrate growth in strategic locations that help create place and identity, maximize available and planned infrastructure, foster the development of transit, and support the expansion of the active and multimodal transportation networks throughout the City.

Housing Element:

- Goal H-2 Housing Supply & Diversity. Diversity of types of quality housing that are affordable to a range of household income levels, accommodate changing demographics, and support and reinforce the economic sustainability of Ontario.

  - H-2.5 Housing Design. We require architectural excellence through adherence to City design guidelines, thoughtful site planning, environmentally sustainable practices, and other best practices.

  - H-2.6 Infill Development. We support the revitalization of neighborhoods through the construction of higher-density residential developments on underutilized residential and commercial sites.

Community Economics Element:

- Goal CE-1 Complete Community: A complete community that provides for all incomes and stages of life.

- CE-1.6 Diversity of Housing. We collaborate with residents, housing providers, and the development community to provide housing opportunities for every stage of life; we plan for a variety of housing types and price points to encourage the development of housing supportive of our efforts to attract business in growing sectors of the community while being respectful of existing viable uses.

- Goal CE-2 Placemaking: A City of distinctive neighborhoods, districts, corridors, and centers where people choose to be.

  - CE-2.1 *Development Projects.* We require new development and redevelopment to create unique, high-quality places that add value to the community.

  - CE-2.4 *Protection of Investment.* We require that new development and redevelopment protect existing investment by providing architecture and urban design of equal or greater quality.

Community Design Element:

- Goal CD-1 Image & Identity: A dynamic, progressive city containing distinct and complete places that foster a positive sense of identity and belonging among residents, visitors, and businesses.

  - CD-1.1 *City Identity.* We take actions that are consistent with the City being a leading urban center in Southern California while recognizing, enhancing, and preserving the character of our existing viable neighborhoods.

  - CD-1.2 Place Types. We establish Place Types in urban, mixed use, and transit-oriented areas to foster the City's identity as a premier community and require new development within each Place Type to incorporate prescribed urban patterns, forms, and placemaking priorities.

- Goal CD-2 Design Quality. A high level of design quality resulting in neighborhoods, public spaces, parks, and streetscapes that are attractive, safe, functional, human-scale, and distinct.

  - CD-2.1 Quality Building Design and Architecture. We encourage all development projects to convey visual interest and character through:

    - Building volume, massing, and height to provide context-appropriate scale and proportion;
    - A true architectural style which is carried out in plan, section, and elevation through all aspects of the building and site design and appropriate for its setting; and
    - Exterior building materials that are articulated, high quality, durable, and appropriate for the architectural style.

- CD-2.8 Safe Design. We incorporate defensible space design into new and existing developments to ensure the maximum safe travel and visibility on pathways, corridors, and open space and at building entrances and parking areas by avoiding physically and visually isolated spaces, maintaining visibility and accessibility, and using lighting.

- CD-2.9 *Landscape Design.* We encourage durable, sustainable, and drought-tolerant landscaping materials and designs that enhance the aesthetics of structures, create and define public and private spaces, and provide shade and environmental benefits.

- CD-2.10 *Parking Areas.* We require all development, including single-family residential, to minimize the visual impact of surface, structured, and garage parking areas visible from the public realm in an aesthetically pleasing, safe and environmentally sensitive manner. Examples include:

    - Structured parking: facade articulation, screening, appropriate lighting, and landscaping; and
    - Garage parking: providing access to single-family residential garages through alley access, recessing garages from the frontage to emphasize front doors or active living spaces.

- Goal CD-3 Urban, Mixed Use, and Transit-Oriented Place Types: Vibrant urban environments that are organized around intense buildings, pedestrian and transit areas, public plazas, and linkages between and within developments that are conveniently located, visually appealing and safe during all hours.

    - CD-3.4 Context-Aware and Appropriate Design. We require appropriate building and site design that complements existing development, respects the intent and identity of the Place Type, and provides appropriate transitions and connections between adjacent uses to ensure compatibility of scale, maintain an appropriate level of privacy for each use, and minimize potential conflicts.

    - CD-3.5 Active Frontages. We create lively pedestrian streetscapes by requiring primary building, business, and residential entrances, outdoor dining, and storefronts be located on ground floors adjacent to sidewalks or public spaces and designed to maximize safety, comfort, aesthetics, and the intended functionality (as defined by the Place Type).

SECTION 4: ***Code Amendment.*** The REFERENCE Section of the Ontario Development Code is hereby amended to read in its entirety as follows:

Reference J – Objective Development & Design Standards.
This section incorporates by reference the Objective Development and Design Standards, or "ODDS," that are adopted and amended by the City Council by resolution. The ODDS are binding requirements and standards.

SECTION 5: ***City Council Action.*** Based upon the findings and conclusions set forth in Sections 1 through 4, above, the City Council hereby APPROVES the herein described changes that comprise the Development Code Amendment, and which are attached hereto as "Attachment A," and incorporated herein by this reference.

SECTION 6: ***Custodian of Records.*** The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East "B" Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario.

SECTION 7: ***Severability.*** If any provision of this ordinance or its application to any person or circumstance is held to be invalid, such invalidity has no effect on the other provisions or applications of the ordinance that can be given effect without the invalid provision or application, and to this extent, the provisions of this ordinance are severable. The City Council declares that it would have adopted this ordinance irrespective of the invalidity of any portion thereof.

SECTION 8: ***Effective Date.*** This Ordinance shall become effective 30 days following its adoption.

SECTION 9: ***Publication and Posting.*** The Mayor shall sign this Ordinance and the City Clerk shall certify as to the adoption and shall cause a summary thereof to be published at least once, in a newspaper of general circulation in the City of Ontario, California within 15 days following the adoption. The City Clerk shall post a certified copy of this ordinance, including the vote for and against the same, in the Office of the City Clerk, in accordance with Government Code Section 36933.

PASSED, APPROVED, AND ADOPTED this _____ day of _____ 2024.

_____
PAUL S. LEON, MAYOR

ATTEST:

_____
SHEILA MAUTZ, CITY CLERK

APPROVED AS TO FORM:

_____
BEST BEST & KRIEGER LLP
CITY ATTORNEY

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO)
CITY OF ONTARIO)

I, SHEILA MAUTZ, City Clerk of the City of Ontario, DO HEREBY CERTIFY that foregoing Ordinance No. _____ was duly introduced at a regular meeting of the City Council of the City of Ontario held _____ and adopted at the regular meeting held _____, 2024 by the following roll call vote, to wit:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

I hereby certify that the foregoing is the original of Ordinance No. _____ duly passed and adopted by the Ontario City Council at their regular meeting held _____ and that Summaries of the Ordinance were published on _____ and _____, in the Inland Valley Daily Bulletin newspaper.

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

ATTACHMENT A:

File No. PDCA24-001

OBJECTIVE DEVELOPMENT AND DESIGN STANDARDS FOR MULTIPLE-FAMILY AND MIXED-USE DEVELOPMENT

(Ontario Development Code, Reference J)

City of Ontario

Residential Objective Development & Design Standards

March 18, 2025

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Chapter 1: Introduction

Development and design standards regulate the intensity, style, size, and orientation of development. Objective design standards are quantifiable, verifiable, and measurable, offering a predictable and fair process for housing approvals. This document aims to streamline and endorse housing design that aligns with community consistency.

1.1 Purpose

The Objective Development and Design Standards (ODDS) introduced in this document align with The Ontario Plan (TOP) Policy Plan (general plan) and the Ontario Development Code to provide objective standards for streamlined ministerial approval of residential multiple-family and mixed- use development projects consistent with state law and implementation of TOP goals and policies.

The purpose of the Residential ODDS meets 2 primary objectives to:

1. **Comply with state law.** The ODDS provide standards for design, construction, review, and approval of multiple-family residential and mixed-use development, consistent with state law.

2. **Implement TOP's Policy Plan.** The ODDS implement the multiple-family residential and mixed-use land use designations in the Land Use Element and the policies in the Community Design Element, including the vision and intended outcomes of Place Types identified in Figures CD-01 through CD-07.

1.2 Who is this document for?

This document is intended for developers and property owners in the development of real property in the City of Ontario. It serves as a guide for clear communication between property owners, designers, developers, and City staff outlining the key elements of quality design. For property owners, it offers a concise understanding of design elements that are consistent with the Policy Plan and required by the Development Code.

1.3 Applicability

In addition to any objective standards imposed through the underlying base zone, the ODDS document provides standards for housing developments limited to the following areas (refer to the Policy Plan Land Use Plan Exhibits LU-01, LU-04, and CD-01 and the official Zoning Map):

- **Multiple-Family Development.** Applies to all multiple-family residential categories as shown on Policy Plan Land Use Plan Exhibit LU-01 (LMDR, MDR, and HDR, and Mixed-Use land use designations).

- **Mixed-Use Development.** Applies to mixed-use categories as shown on Policy Plan Land Use Plan Exhibit LU-01and associated Place Types as shown on Exhibit CD-01.

1.4 User guide

1. **Identify TOP Policy Plan land use designation and zoning district.**

   a. Refer to Exhibit LU-01 Land Use Plan and identify land use designation.

   b. Refer to the Official Zoning Map to verify zoning and whether the project falls within the Specific Plan or Planned Unit Development (PUD) and adhere to the standards outlined in each document.

   c. Development applications shall utilize ODDS wherever PUD or Specific Plan standards are silent.

2. **Apply multiple-family (Chapter 2) or mixed-use (Chapter 3) development standards.**

3. **Select architecture (Chapter 4).**

   For each project type select 1 of the following 6 styles: Mission-Spanish Colonial Revival, Craftsman, American Mercantile, Tuscan, Modern, or Farmhouse.

4. **ODDS checklist.**

   Fill out the ODDS checklist.

Chapter 2: Multiple Family Standards

2.1 Site Design Standards

2.1.1 Site design

1. **Lot lines** The lines bounding a lot. The classifications of "Lot Line" are as follows:

    a. **Front** This line separates the narrowest street frontage of a lot from a public or private street right-of-way.
    b. **Interior "side"** Any lot line that is not a front or rear lot line and does not border a public or private street right-of-way.
    c. **Rear** The lot line opposite and farthest from the front lot line. In the case of an irregularly shaped lot, a straight line shall be drawn to determine the rear lot line.
    d. **Street side** Any lot line that is not a front or rear lot line, and which abuts a public or private street right-of-way.

2.1.2 Site access

1. **Alleys** Vehicular access to the on-site parking areas shall be from the alley.
2. **Roadway inclusion** Pedestrian access from the public right-of-way must include sidewalk on both sides of the driveway.

2.1.3 Parking

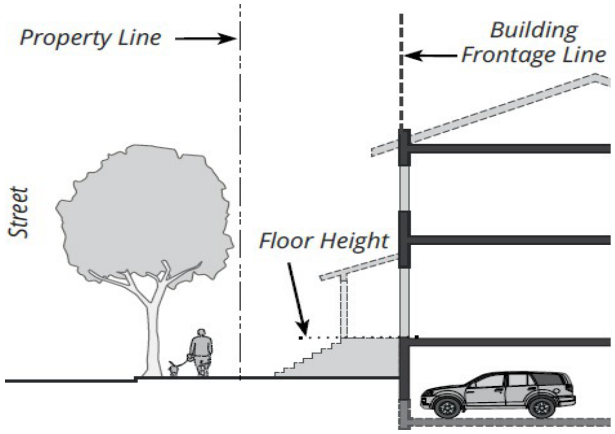
A. Placement on site

Parking shall be designed in compliance with the applicable standards contained in Division 6.03 (Off-Street Parking and Loading) of the Ontario Development Code, except as modified by the following:

1. **Surface parking.**

    a. **Setbacks** Surface parking lots adjacent to public or private streets shall include a landscaped and irrigated setback a minimum of 5 feet in width measured from property line, or aligned with the building façade, whichever is greater.
    b. **Orientation** Surface parking lots shall be located at the rear, side, or internal lot lines and away from the front lot line.
2. **Above-ground parking structures** Ground-floor parking shall be sited behind residential, office, or commercial spaces.
3. **Semi-subterranean parking** A semi-subterranean garage shall not extend beyond the building frontage line and shall not extend higher than 4 feet above sidewalk grade.
4. **Subterranean parking** A subterranean parking structure may extend to all property lines.
5. **Private residential garages** Each private garage must have vehicular access from an alley, side street, or motor court (see Figure 2.1-1).

Figure 2.1-1 Semi-subterranean parking



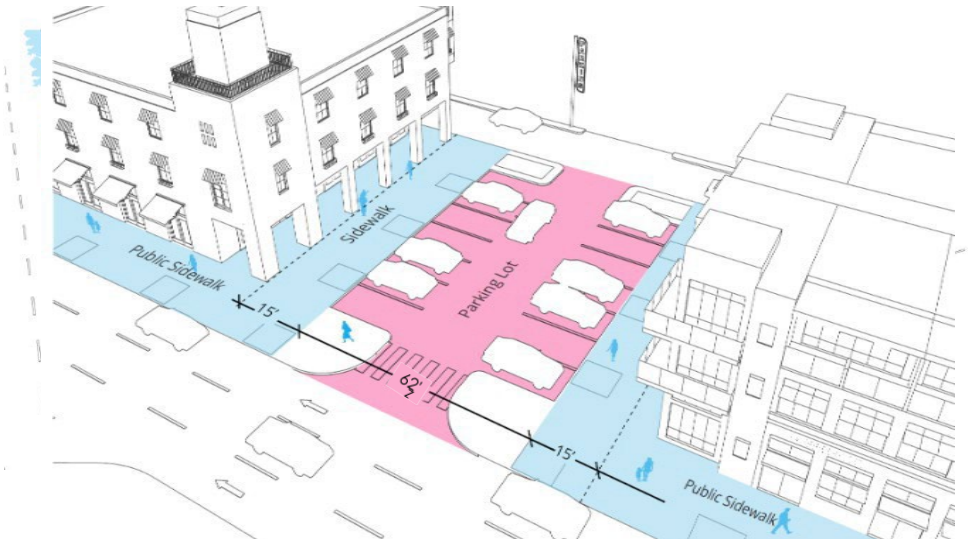
B. Surface parking lot design

Surface parking lots shall be designed in compliance with the applicable standards contained in Division 6.03 (Off-Street Parking and Loading) of the Ontario Development Code, except as modified by the following:

1. **Screening**
    a. **Street-adjacent parking lots**
        i. A street-adjacent surface parking lot shall be screened from view by a low wall or hedge no higher than 3 feet in height.
        ii. Walls and hedges must be a minimum 18 inches from the back of the sidewalk.
        iii. Landscaped berms are prohibited.
    b. **Neighboring parcels** Views from neighboring properties shall be screened with trees and shrubs.
2. **Landscape** Landscaping materials shall be applied in compliance with the applicable objective parking lot landscape standards contained in Ontario Development Code Section 6.05.030 (Required Landscape Areas).
3. **Shade structures** Shade structures, if used, shall match the architectural style of the project buildings.

C. Parking court design

Figure 2.1-2 Parking Court



1. **Design standards.**
    a. The width of the parking court, when measured from 1 building face to the other, shall not exceed 100 feet (see Figure 2.1-2).
    b. The parking court shall consist of only 1 parking bay, and this bay shall not exceed a maximum width of 62 feet.

c. On both sides of the parking court, sidewalks must be established, each with a minimum width of 15 feet. These sidewalks must connect with the adjacent public sidewalk network.

D. Parking structure design

1. **Context-sensitive façade design** Parking structure façades shall incorporate a minimum 2 design elements using the architectural styles identified in Chapter 4: Architectural styles and adhere to Main Street or Urban and facade design standards applied in *Section 2.2.2 Building Types* (see Figure 2.1-3).
2. **Parking structure standards**
   a. Any driveway providing access to a parking structure shall have a minimum width of 28 feet.
   b. Single access lane driveways into the structure shall not exceed 14 feet in width.
   c. Parked vehicles shall be screened from view from adjoining streets.
   d. Signs as shall be consistent with Division 8: Sign Regulations of Ontario Development Code.

Figure 2.1-3 Parking structure and façade design



2.1.4 Open space standards

A. Common open space and public frontage

1. **Common open space type requirements** Common open space shall cover a minimum of 15 percent of the total lot area with the following **exceptions**:
   a. **Close to parks.** Common on-site open space shall not be required for lots within a 1/4-mile of an existing park or plaza a minimum 0.25 acres in size.
   b. **Common open space types.** 1 or more of the common on-site open space types listed under "Common Open Space Types" shall be provided on each lot that has a residential use.
2. **Access and visibility.** At-grade open space shall be accessible and visible from the adjacent ground floor.

B. Common open space types

Forecourt

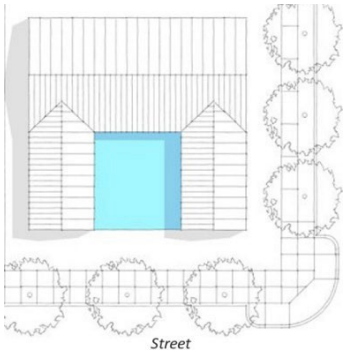
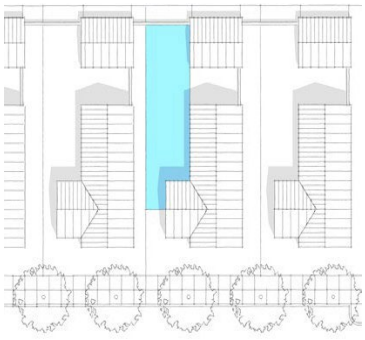


Figure 2.1-4 Forecourt

1. Design standards

a. A forecourt may occur on any floor and may be used as an allowed method of creating façade massing increments.
b. **Minimum dimensions** Forecourts shall be a minimum of 15 feet by 15 feet.

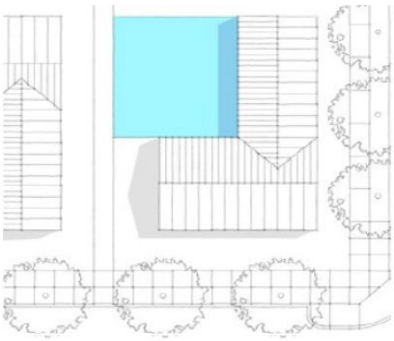
Side garden


Figure 2.1-5 Side Garden

1. Design standards

a. **Minimum side garden dimensions**: 15 feet by 15 feet.
b. Dooryards, porches, stoops, and architectural elements may encroach into the side garden as follows:
   i. Up to a total of 30 percent of the side garden's width or length.
   ii. A ground-floor encroaching element shall be allowed to project a maximum of 8 feet into the side garden.

Court


Figure 2.1-6 Court Configuration

1. Design standards

a. **Minimum dimensions**: All courts shall be a minimum of 20 feet by 30 feet.
b. **Enclosure**
   i. A court shall have building walls on a minimum 2 sides, while the third and fourth side can be defined by architectural or landscape elements (i.e., low walls, trellises, hedges, or rows of trees).
   ii. A driveway located adjacent to a court shall be screened by architectural elements (e.g., low walls or trellises, hedges, or rows of trees).
c. **Access**
   i. Courts shall be accessed from the street or walkway.
   ii. Units shall be allowed to take direct access through a court.
d. **Encroachments**
   i. Dooryards, porches, stoops, and architectural elements may encroach into the Side Yard.

ii. A ground floor encroaching element shall not encroach beyond 8 feet of the building's façade into the court.

e. **Common area** A court shall serve as communal spaces and pedestrian access.

f. **Amenities** A court shall include a minimum 1 of the following amenities: a seating area, a fountain, a BBQ island, or an outdoor fireplace.

Passage

1. **Design standards**

a. Location. Passages shall be provided between buildings or side gardens.

b. Size. Passages shall be a minimum width of 8 feet with minimum of 2 feet of landscape strip on each side.

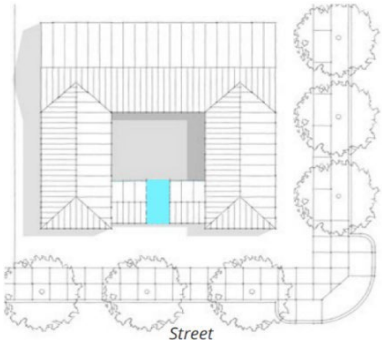


Figure 2.1-7 Passage configuration

C. Private open space

1. **General standards**

a. A minimum of 60 square feet of private open space shall be provided for each residential unit and a minimum 1 of the private on-site open space types shall be provided.

b. **Exception**: Private on-site open space shall not be required for a project site that is located within 1/4-mile distance of an existing park or plaza that is a minimum 0.25 acres in size.

D. Private open space types

Private roof deck

1. **Description** A private open space located on the roof of a building dedicated to a single unit.
2. **Design standards** Minimum dimensions of 7 feet by 7 feet.

Backyard

1. **Description**. A private, landscaped open space located behind each individual unit that is intended to provide passive or active outdoor space for the users of the unit.
2. **Design standards.**
   a. **Size**. Minimum dimensions of 20 feet by 15 feet.
   b. **Encroachments**. Encroachment into the backyard is allowed up to 30% of the rear yard area.

Architectural façade elements as private open space

1. **Description** The following elements defined in *Section 2.3 Architectural Façade Elements* may be used to meet on-site private open space requirements.
   a. Balcony
   b. Terrace Balcony

Entry elements as private open space

1. **Description** The following elements defined in Section 2.4 Entry Elements may be used to meet on-site private open space requirements.
    a. Dooryard
    b. Porch

2.1.5 Landscaping

1. **General to all** Landscaping materials shall be applied in compliance with the applicable landscape standards contained in Ontario Development Code Section 6.05.030 (Required Landscape Areas).

2.1.6 Fences and walls

1. **Fence and wall heights** Walls and fences shall be designed in compliance with the applicable standards contained in Division 6.02 (Walls, Fences, and Obstructions) of the Ontario Development Code.

2.2 Multiple-Family development standards

The following tables and associated standards for multiple-family development standards covering new residential construction, additions, remodels, or repurposed uses that necessitate an entitlement or building permit from the city. all standards listed under table 2.01 Multiple-Family Development Standards are applicable to all multiple-family projects including projects within mixed-use zones.

Table 2.01: Multiple-Family Development Standards

Requirements	Development Type			Additional Regulations
	Multiple-Family Residential			
	Mixed-Use Building Type			
A. BUILDING DEVELOPMENT STANDARDS				
1. Minimum Setback from Public Street Property Lines	**Urban (25 du/ ac or greater)**	**Neighborhood (Less than 25 du/ac)**	**Housing (Less than 25 du/ac and 5 units or less)**	Note 9
a. Arterial	0 feet	10 feet	14 feet	
b. Collector	5 feet	10 feet	14 feet	
c. Local	5 feet	15 feet	20 feet	
2. Minimum Setback from Interior Project Boundary Property Lines	5 feet			
3. Minimum Setback from Public Alley Property Lines	5 feet			
4. Minimum Setback from Private Drives/Alleyways (from edge of drive aisle)				
a. Living Area	10 feet			
b. Garages and Other Nonhabitable Structures	10 feet			
5. Minimum Setback from Dwellings to Parking Spaces				

Requirements	Development Type	Additional Regulations
	Multiple-Family Residential	
	Mixed-Use Building Type	
a. Living Area	10 feet	
b. Garages and Other Nonhabitable Structures	5 feet	
6. Minimum Setback from Parking Space or Drive Aisle to Wall or Fence	5 feet	
7. Minimum Separation Between Detached Buildings		
a. Dwelling Front to Front	< 2-Stories: 25 FT; ≥ 3 Stories: 30 FT unless otherwise specified by massing requirements ("Space between buildings") in Section 2.2.2 Building Types.	Note 5
b. Dwelling Front to Rear	< 2-Stories: 25 FT; ≥ 3 Stories: 30 FT unless otherwise specified by massing requirements ("Space between buildings") in Section 2.2.2 Building Types.	Note 5
c. Dwelling Front to Side	< 2-Stories: 25 FT; ≥ 3 Stories: 30 FT unless otherwise specified by massing requirements ("Space between buildings") in Section 2.2.2 Building Types.	Note 5
d. Dwelling Side to Side	< 2-Stories: 10 FT; ≥ 3 Stories: 15 FT unless otherwise specified by massing requirements ("Space between buildings") in Section 2.2.2 Building Types.	Note 5
e. Dwelling Side to Rear	15 FT; unless otherwise specified by massing requirements ("Space between buildings") in Section 2.2.2 Massing and Façade Design	Note 5
f. Dwelling Rear to Rear	20 FT unless otherwise specified by massing requirements ("Space between buildings") in Section 2.2.2 Building Types.	Note 5
8. Garage to Garage (or other nonhabitable structures)	30 FT – Entry to Entry 30 FT – Entry to Side 10 FT – Side to Side 10 FT – Side to Rear	Note 5
9. Minimum Storage Space	240 CF	Note 4
10. Maximum Street Façade Height		
a. Downtown District	45 feet	Note 8
b. Other Districts & Corridors:	n/a	
c. Neighborhood Centers:	35 feet	
11. Maximum Building Height		
a. Downtown District	n/a	Note 8
b. Other Districts & Corridors:	n/a	Note 5
c. Neighborhood Centers:	60 FT	Note 5
12. Minimum Setback from Major Pipelines	50 FT (to habitable structures)	Note 7

Notes:

1. *An existing lot of record that is substandard as to minimum "project" area and/or dimension(s), shall be permitted all the development rights of the zone in which it is located.*
2. *The density range shall be consistent with the underlying Mix-Used Category identified in Figure LU-04, Mixed Use Areas and defined in Table LU-02, Land Use Designations Summary Table, of the Policy Plan (General Plan). A density bonus and other incentives pursuant to GC Sections 65915 through 65918, may be granted by the Approving Authority. Refer to Development Code Subsection 6.01.010.H (Density Bonus and Other Incentives).*

3. *A health risk assessment shall be required for multiple-family development projects located within 1,000 feet of a freeway, as determined by the Zoning Administrator.*
4. *Lockable private storage space for each residential unit shall be provided within a garage or storage building, or a space directly accessible from the dwelling. Exterior closets accessed from patios or balconies may be used if screened from public view.*
5. *Required building separation, and allowable heights may be differ based on massing type and adjacent uses. See Section 2.2.2 Building Types for additional information regarding building separation. See section 2.2.1 for standards adjusting allowable height. The following items are exceptions to height standards identified in this table and those noted in section 2.2.1:*
   a. *Equipment. Chimneys, elevators, stairs, mechanical houses, screened vents, HVAC equipment, and solar panels may exceed California Building Code height limits.*
   b. *Architectural Elements. Architectural elements such as spires, steeples, or roof lanterns may exceed height limits if consistent with the architectural style outlined in Chapter 4 of the ODDS.*
6. *A lot designated as Mixed-Use (MU) in the Policy Plan (General Plan) shall be developed at no less than the minimum number of dwelling units allowed within the specified density range for the applicable Mixed-Use Category, except that If, because of the configuration/design of a lot, the minimum residential density cannot be achieved, the lot may be developed with non-residential uses.*
7. *Includes major high-pressure pipelines for fuel oil, gasoline, and diesel and aviation fuels within the City. Existing pipelines include:*
   a. *Two parallel pipelines (a 16-inch and a 20-inch) that enter the City at Benson Avenue, traveling parallel to the northerly side of the Southern Pacific right-of-way to Ontario International Airport, then parallel to the southerly side of the Southern Pacific right-of-way, then parallel to the northerly side of the right-of-way beyond Ontario International Airport, then exiting the City at Etiwanda Avenue; and*
   b. *Two parallel pipelines that traverse the easterly portion of the City, entering the City at the southerly portion of Milliken Avenue, then traveling north under Milliken Avenue to Inland Empire Boulevard, then east to Rochester Avenue, then north to the City Limits.*
8. *In the Downtown District, the maximum 45-foot façade height shall extend no more than 70 percent of the frontage. The remaining 30 percent of the frontage shall include an upper-level setback of at least 12 feet, starting at the third story. Usable outdoor spaces, such as roof decks or terraces, may occupy the roof area of the upper-level setback. See Urban Form standards under Section 2.2.2A Urban Building Type.*
9. *Projects less than 1 acre in size but exceeding 25 du/ac can use Neighborhood or Housing Form in lieu of the Urban massing form.*

2.2.1 Height Standards

1. **Height transition zones** Requires all new buildings within 100 feet of less intense development patterns (existing or planned) to reduce heights to ensure neighborhood compatibility.
2. **Multiple family development types** The following height limits shall apply to all proposed multiple family development types.
   a. Buildings within 100 feet of single-family residential dwellings must not exceed 35 feet or the height of adjacent residential buildings, whichever is greater.
   b. Buildings within 100 feet of undeveloped single-family zone parcels shall not exceed 35 feet in height.

2.2.2 Building Types

1. Identify the suitable building type for the project based on its density, including**:**

a. "**Urban**" (applies to multiple-family development projects with 25 dwelling units per acre or more*). Projects less than 1 acre in size but exceeding 25 du/ac can use neighborhood or housing Form in lieu of the urban massing form.*

b. "**Neighborhood**" (applies to multiple-family development projects with fewer than 25 dwelling units per acre that include buildings with more than 5 units).

c. "**Housing**" (applies to multiple-family development projects with fewer than 25 dwelling units per acre that *include buildings with 5 or fewer units)*.

Table 2.2-1 Building Types

Land Use Density	Building Types
Greater than 25 du/ac	Urban
Less than 25 du/ac and greater than 5 units	Neighborhood
Less than 25 du/ac and 5 units or less	Housing form

A. Urban massing and façade design

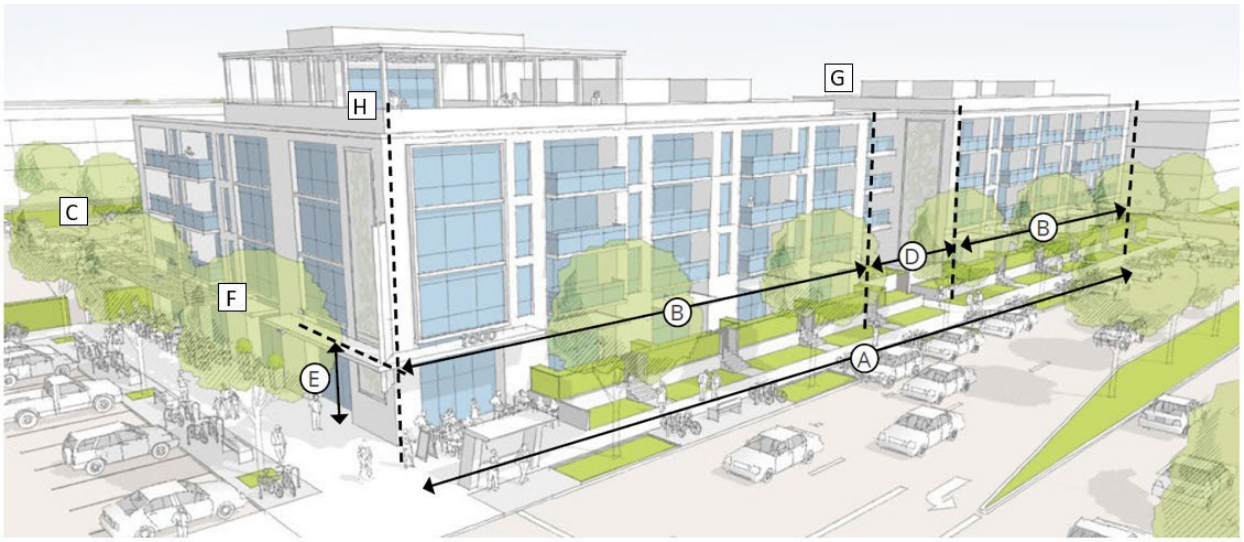
Urban massing and façade design standards are required for all multiple-family developments projects with 25 du/ac or more (see Figures 2.2-1 and 2.2-2).

Massing increments

Massing increments are visually discrete design compositions that are distinguishable from each other and have a coherent look and character from the ground to the top of the facade. Massing increments appear as either distinct buildings or distinct parts of a single building.

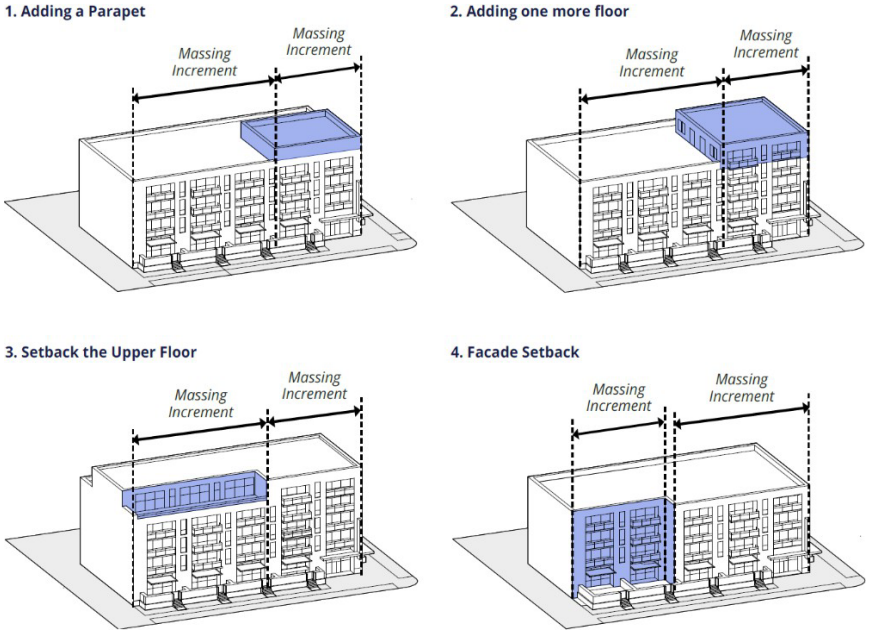
1. **Massing standards**
   a. **Size of massing increments** Building facades along front and side lot lines that face public streets and are longer than 100 feet shall be divided into massing increments as follows:
      i. The maximum length of a single massing increment shall not exceed 150 feet.
      ii. A minimum 2 distinct massing increments shall be provided.
   b. **Articulation of massing increments** Individual massing increments shall be differentiated from 1 another using a minimum 1 of the following massing strategies:
      i. Vary parapet height by a minimum of 3 feet
      ii. Increase number of stories
      iii. Set back upper floor. Set the upper floor or multiple upper floors back a minimum of 15 feet from the facade.
      iv. Set the entire facade back a minimum of 10 feet for 20 feet
      v. Incorporate tower element
   c. **Massing increments with distinct facades** Massing increments that have distinct facades and shall appear as distinct buildings.
   d. **Repeating massing increment design** A massing increment design may be repeated on the same project elevation. Repeated massing increments shall be separated by a distinct massing increment.

Figure 2.2-1 Urban: Massing Diagram



2. Element standards	Standards
a. Building façade along font lot line	400 feet max.
b. Massing increment	150 feet max.
c. Space between buildings	0 feet min.
d. Façade setback (if elected)	10 feet x 10 feet min.
e. Building base height	15 feet min.
f. Building façade alongside lot line	200 feet max.
g. Height difference between massing increments	3 feet min.
h. Upper-level setback from facade	15 feet min.

Figure 2.2-2 Urban: Massing strategies



Façade Composition

1. **Façade composition standards**

Multi-story building façades The building facade shall be divided into a base and body as follows:

a. **Base** Separate the building base (entire ground floor facade or first 2 floors of building's 5 stories or taller) from the rest of the facade for a minimum of 15 feet (fewer than 5 stories) or 25 feet (5 stories or more) from grade, using a minimum **2** of the following strategies:
   i. Provide a string course at the top of the first story
   ii. Specify base materials different from rest of façade
   iii. Specify base colors different from rest of façade
   iv. Provide a ground floor Arcade or Gallery per Section 2.3 Architectural Façade Elements.

b. **Body** The body of the building consists of the facade of all floors located above the base and shall be designed as follows:
   i. Windows shall be organized in bays, bands, curtain wall, and grid of windows consistent with the Facade Fenestration Standards for the Urban massing type.
   ii. Each massing increment must contain its entire facade composition without elements overlapping the division between increments.

Fenestration design

Fenestration design addresses the percentage of window and door openings for ground floors and upper floors and glazing transparency.

1. **Façade fenestration standards**
   a. **Minimum fenestration** Facade designs must meet a minimum fenestration percentage, calculated as the total window and door area divided by the total area of that part of the façade (see Figure 2.2-3).

      i. **Ground floor**
         a. Front lot line: 70% minimum
         b. All other frontages: 50% minimum
         c. Ground floor windowsills on facades along the front lot line shall be no higher than 3 feet above the adjacent grade
         d. Ground floor bathroom windows are prohibited on facades that face front lot line
      ii. **Upper floors** 15% minimum

Figure 2.2-3 Urban: Fenestration Diagram

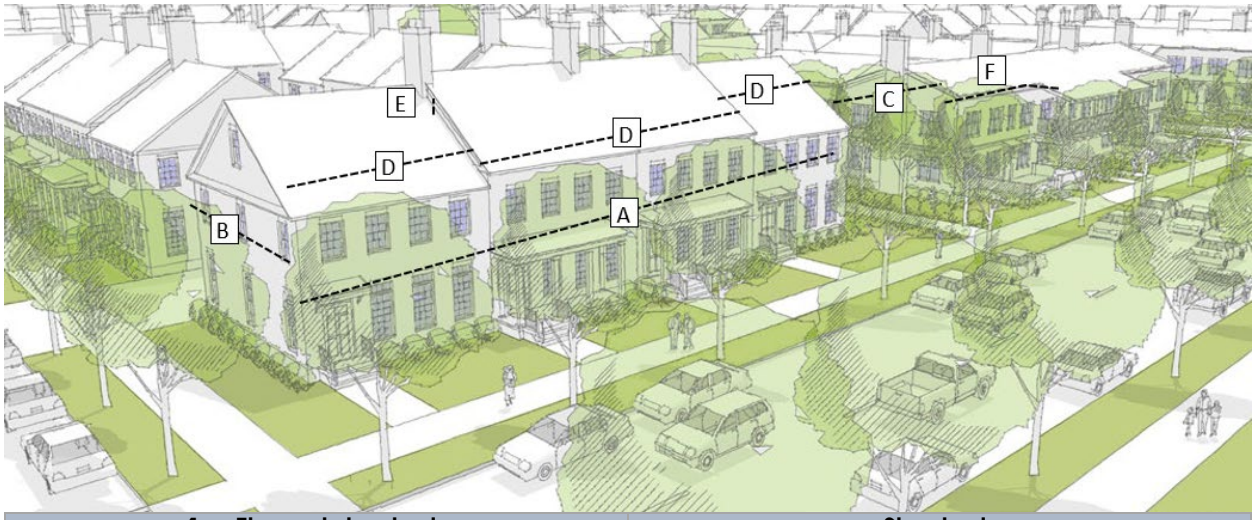


B. Neighborhood massing and façade design

Neighborhood massing and façade design standards are required for all multiple-family development types applicable to multiple-family development projects with fewer than twenty-five (25) du/ac that include buildings with more than 5 units (see Figure 2.2-4).

Massing increments

Figure 2.2-4 Neighborhood: Massing Diagram



1. Element standards	Standards
A. Building façade along front lot line	135 feet max.
B. Building façade length alongside interior lot line	135 feet max.
C. Space between buildings	15 feet min.
D. Massing increment	75 feet max.
E. Height difference between massing increments	2 feet min.
F. Façade setback (if elected)	10 feet x 20 feet

1. **Massing standards.**

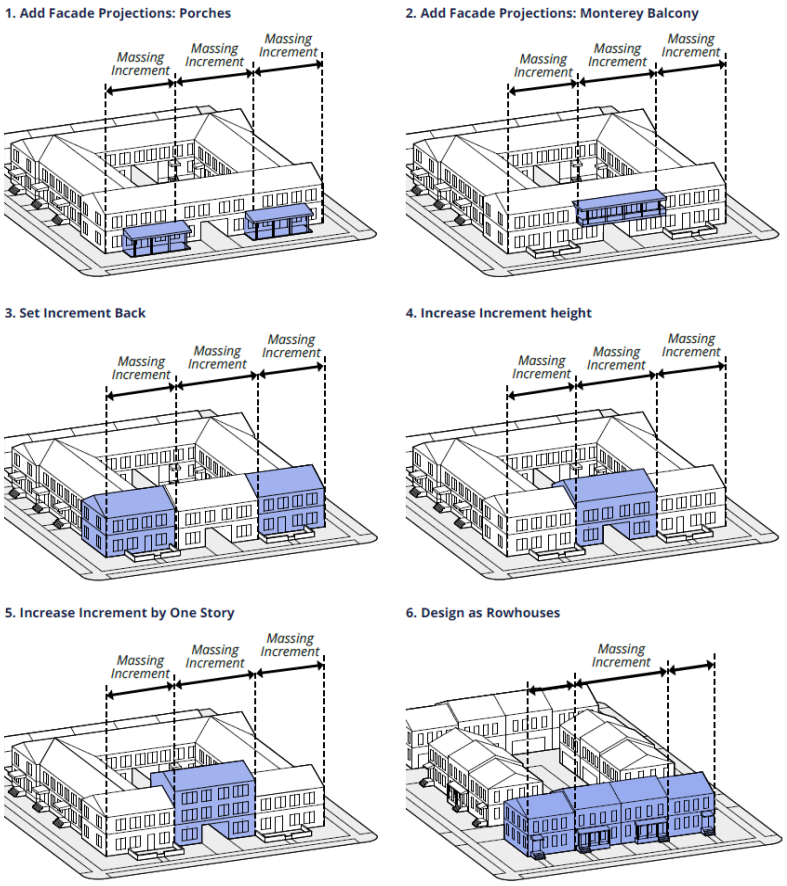
   a. **Size of massing increments.** Building facades along front and side lot lines that face public streets and are longer than 135 feet shall be divided into massing increments as follows:

      i. The maximum length of a single massing increment shall not exceed 75 feet.
      ii. A minimum of 2 distinct massing/architectural increments shall be provided using 1 strategy from the massing strategies list and 1 strategy from architectural strategy list (see Figure 2.2-5).

   b. **Massing strategy list**

      i. Vary height by a minimum of 3 feet.
      ii. Increase number of stories.
      iii. Set back upper floors by a minimum 15 feet.
      iv. Set the entire facade back a minimum of 10 feet for twenty feet.
      v. Increase story height.
      vi. Incorporate tower element.

Figure 2.2-5 Neighborhood: Examples of Massing Strategies Diagram



c. **Architectural strategy list**

i. Use different facade materials and/or colors.
ii. Window treatment and design. Use different window types, configurations, and/or frame colors.
iii. Diversify facade elements (balconies, trellises, chimneys, awnings) as per Section 2.3 Architectural Façade Elements.
iv. Vary the building entry element type or design of stoops, porches, dooryards, and other elements identified in Section 2.4 Entry Elements.
v. Massing increments that have distinct facades, shall appear as distinct buildings.
vi. A massing increment design can be repeated twice on the same project elevation, with a distinct separation between repeated increments.

Façade composition

1. **Façade composition standards**

a. **Multi-story building façades** The building facade shall be divided into a base and body as follows.

i. **Base** Separate the building base (entire ground floor facade or first 2 floors of building's 5 stories or taller) from the rest of the facade for a minimum of 15 feet (fewer than 5 stories) or 25 feet (5 stories or more) from grade, using a minimum 2 of the following strategies.

(a) Provide a string course at the top of the first story.
(b) Specify base materials different from rest of façade.
(c) Specify base colors different from rest of façade.
(d) Provide a ground floor Arcade or Gallery per *Section 2.3 Architectural Façade Elements*.

ii. **Body** The body of the building consists of the facade of all floors located above the base and shall be designed as follows:

(a) Windows shall be organized in bays, bands, curtain wall, and/or grid of windows consistent with the Facade Fenestration Standards for the Neighborhood massing type.
(b) Each massing increment's entire facade composition must be contained within its boundaries, with no overlap of facade elements, like window openings and balconies, across the division between increments.

Fenestration Design

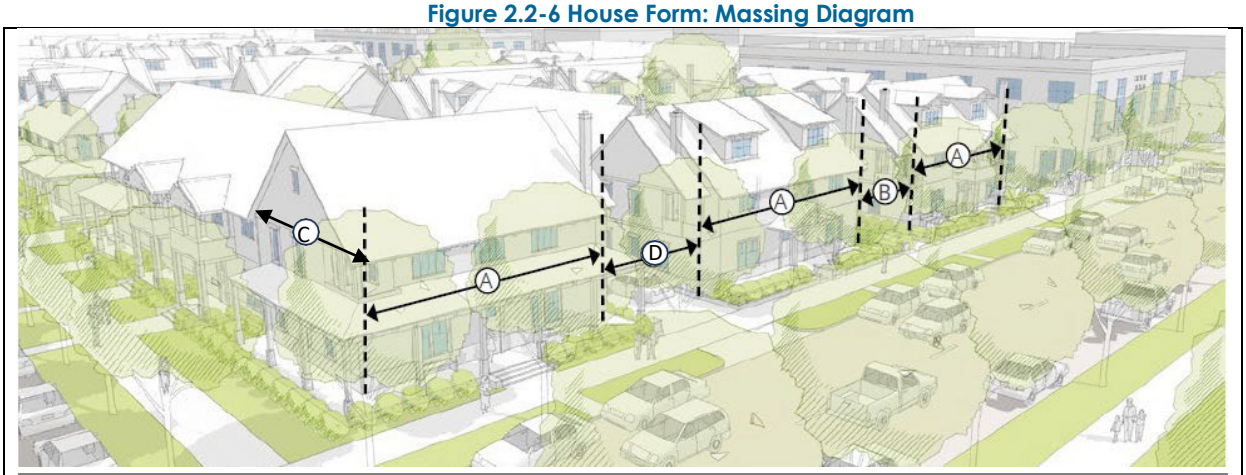
1. **Façade fenestration standards**

   a. **Minimum Fenestration** Facade designs must meet a minimum fenestration percentage, calculated as the total window and door area divided by the total area of that part of the facade:
      i. **Ground Floor**: 30% minimum.
         (a) Ground floor windowsills on facades along the front lot line that face public streets shall be no higher than 3 feet above the adjacent grade.
         (b) Ground floor bathroom windows are prohibited on facades that face the front lot line.
      ii. **Upper floors**: 15% minimum.

C. House-form massing and façade design

House-form massing and façade Design standards for projects with densities below 25 du/ac that include buildings with 5 or fewer units (see Figure 2.2-6).

Figure 2.2-6 House Form: Massing Diagram



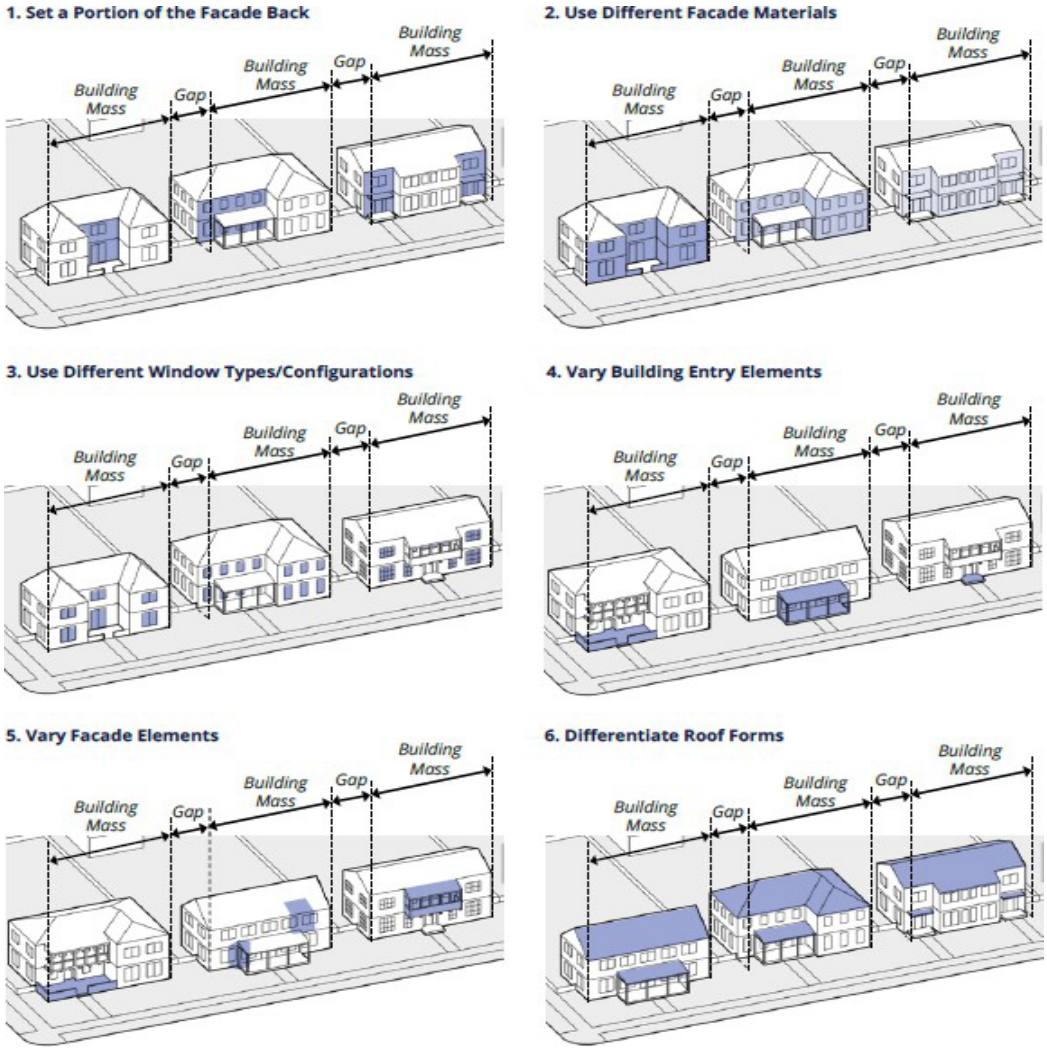
1. Element standards	Standards
A. Building Façade length along font lot line	60 feet max.
B. Massing Increment	60 feet max.
C. Building Façade length alongside lot line	60 feet max.
D. Space between buildings	15 Feet

2. **Massing and façade composition standards**

   a. **Massing increments** A massing increment shall include the whole length of a single building façade, up to 60 feet in length. Only 1 massing increment per building façade shall be included (see Figure 2.2-7).
   b. **Length of buildings** Buildings along front and side lot lines that face public streets shall be no longer than 60 feet.
   c. **Space between buildings** Buildings along front and side lot lines shall be separated by a minimum15 feet.
   d. **Articulation of building façade** Frontages along front and side lot lines must differ from neighboring buildings on-site using a minimum of 2 of the specified massing and architectural strategies:

i. **Façade setback** Setting a portion of the facade back a minimum of 2 feet for a length of 20 feet.
ii. **Material or color** Use different facade materials and/or colors consistent with the architectural style.
iii. **Window treatment and design** Use different window types, configurations, and/or frame colors.
iv. **Architectural façade elements** Vary façade elements (balconies, trellises, chimneys, awnings) according to *Section 2.3 Architectural Façade Elements*.
v. **Entry elements** Vary the building entry element type or design of stoops, porches, dooryards, and other elements identified in *Section 2.4 Entry Elements*.
vi. **Vary roof form** Vary the roof form of different increments such as gabled, hipped, and others consistent with the architectural style of the building (selected from Chapter 4).

Figure 2.2-7 House Form Massing Strategies



Fenestration Design

1. **Façade fenestration standards**

Minimum fenestration Facade designs must meet a minimum fenestration percentage, calculated as the total window and door area divided by the total area of that part of the facade:

i. **Ground floor**: 30% minimum.
   (a) Ground floor windowsills on facades along the front lot line that face public streets shall be no higher than 3 feet above the adjacent grade.
   (b) **Exception**: Windows on garage panel door.
   (c) Ground floor bathroom windows are prohibited on facades that face front lot line.
ii. **Upper floors**: 15% minimum.
iii. The horizontal distance between wall openings shall not exceed 15 feet within a facade or massing increment.

2.2.3 Materials and Detailing

Building Materials

1. **Prohibited materials**

   a. Fiberglass or plastic (false) architectural or facade elements or ornamentations are prohibited.
   b. Rough-cast and sand-finishes are prohibited on all building surfaces that are visible from a street.
   c. Reflective materials, such as mirrored glass, shiny metal, and chrome.
2. **Combining materials** When combining 2 or more wall materials on 1 facade:
   a. Place lighter weight materials above more substantial ones (e.g., glass above wood, wood above stucco, stucco above masonry).
   b. Vertical joints between different materials shall only occur at inside corners.

Windows and Doors

1. **Materials and types**

   a. **Window recess** Windows shall be recessed specific to each building's architectural style listed in Chapter 4: Architectural styles but shall be no less than 2 inches for any style.
   b. **Window Material**
      i. Vinyl or vinyl clad windows shall resemble wood windows (i.e., faux wood or engineered wood) in detailing and profile thickness and employ muted patterns and colors consistent with the building's architectural style.
   c. **Trim**
      i. **Window and door trim materials** Wood or cement fiber board is permitted.
      ii. **Building trim materials** Wood, stone, cast stone, pre-cast concrete, glass fiber, reinforced concrete, and cement fiber board.

2.3 Architectural façade elements

2.3.1 Awning

Figure 2.3-1 Awning Diagram



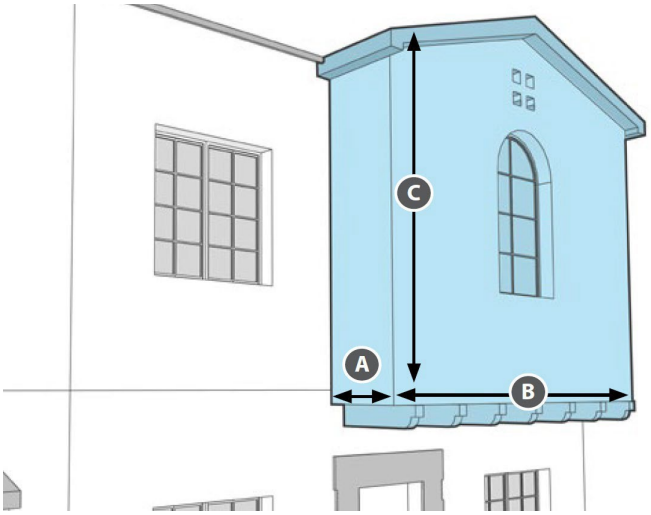
1. Element standards	Minimum	Maximum
A. Depth	Not Applicable	3 feet
B. Clearance above ground	8 feet	Not Applicable
C. Length	See Below	

2. Design standards

a. **Encroachment** Residential Awnings may encroach into the setback or public right-of- way as defined in Division 6.01.010(D)(2): Encroachments into Required Setback Areas of the Ontario Development Code.
b. **Material** Residential Awnings shall be of a simple shed form and made of code-compliant fire-resistant material.
c. **Upper floors** Each individual awning shall cover no more than 1 window opening.

2.3.2 Projecting room

Figure 2.3-2 Projecting Room Diagram



1. Element standards	Minimum	Maximum
A. Depth	Not Applicable	2 feet
B. Width	Not Applicable	20 feet
C. Height	Not Applicable	2-story building: 1 story max. 3-story building: 1 story max. 4-story+ building: 2 stories maximum.

2. Design standards

a. **Encroachment** Projecting rooms may encroach into the setback or public right-of-way as defined in Division 6.01.010(D)(2): Encroachments into Required Setback Areas of the Ontario Development Code.

b. **Support**
   i. Building projecting rooms shall have visible supports (I.e., beams, braces, or brackets).
   ii. Building projecting rooms shall be setback 10 feet from an adjacent property line

c. **Space between projecting rooms** Space between Projecting Rooms shall be 20 feet within the same building plane.

2.3.3 Bay Window

Figure 2.3-3 Bay Window Diagram



1. Element standards	Minimum	Maximum
A. Height	Not Applicable	10 feet
B. Width	Not Applicable	10 feet

2. Design standards.

a. **Encroachment** Bay windows may encroach into the setback or public right-of- way as defined in Division 6.01.010(D)(2): Encroachments into Required Setback Areas of the Ontario Development Code.
b. **Dimensions** Bay windows shall be a maximum of 10 feet wide and shall have a height that is equal to or greater than their width.
c. **Depth:** The depth of Bay Windows shall be a minimum of 3 feet.
d. **Façade placement** Bay windows shall be placed a minimum of 2 feet from any building corner and a minimum of 3 from any other bay window.
e. **Fenestration** Bay windows shall consist of a minimum 75% transparent fenestration.

2.3.4 Balcony

Figure 2.3-4 Balcony Diagram



1. Element standards	Minimum	Maximum
A. Height	Not Applicable	Refer to Design Standards
B. Width		
C. Depth		

2. Design standards

a. **Encroachment** Balconies may encroach into the setback or public right-of- way as defined in Division 6.01.010(D)(2): Encroachments into Required Setback Areas of the Ontario Development Code.
b. **Façade projection or recession** Balconies may project from the facade, be recessed into the facade, or a combination of the two.
c. **Required private open space** Balconies meeting private open space standards shall have a minimum dimension of 7 feet by 7 feet.

2.3.5 Terrace balcony

Figure 2.3-5 Terrace Balcony Diagram



1. Element standards	Minimum	Maximum
A. Height	Not Applicable	Refer to Design Standards
B. Width		
C. Depth		

2. Design standards

a. **Encroachment** Terrace balconies may encroach into the setback or public right-of- way as defined in Division 6.01.010(D)(2): Encroachments into Required Setback Areas of the Ontario Development Code.

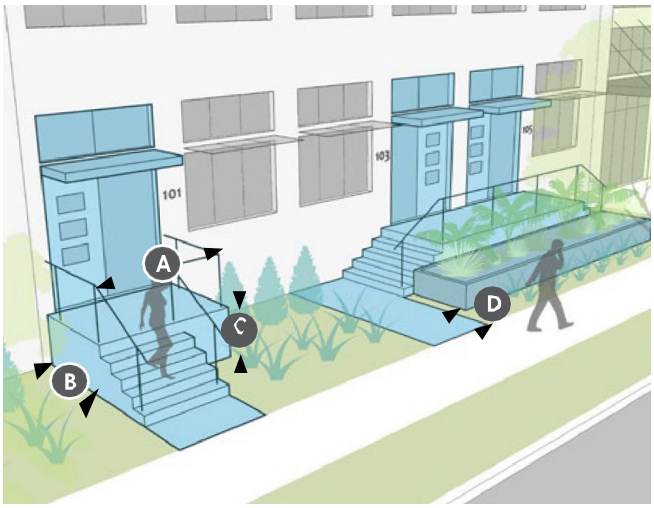
b. **Support**
   i. Terrace balconies shall be supported by continuous walls that extend all the way to the ground.
   ii. Terrace balconies shall not be designed as posts, columns, or pillars.

c. **Required private open space** Terrace balconies meeting private open space requirement shall meet or exceed the 7 feet by 7 feet standards specified in 2.1.5 Open Space Standards.

2.4 Entry elements

2.4.1 Stoop

Figure 2.4-1 Stoop Diagram



1. Element standards	Minimum	Maximum
A. Stoop Width	4 feet	8 feet
B. Stoop Depth (not including stairs)	4 feet	8 feet
C. Stoop Floor Depth	1.5 feet	3 feet
D. Planter/ Fence Height	Not Applicable	3 feet

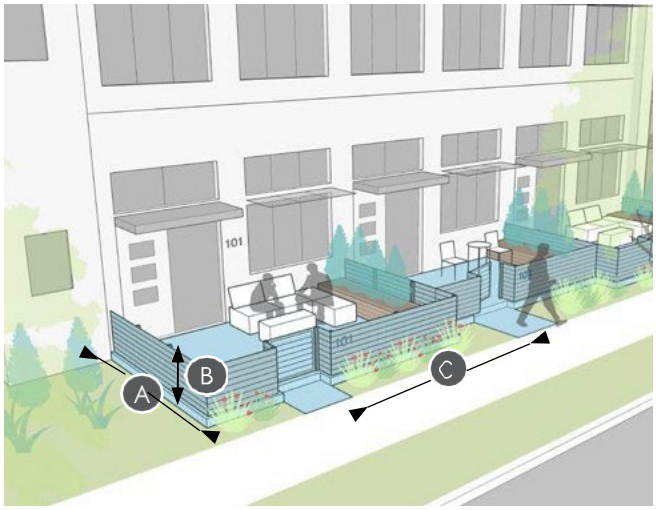
2. Design standards

a. **Relationship to entry** Stoops must align directly with the unit entry(s) they serve.
b. **Number of units served** Stoops shall provide access to a maximum of 2-unit entries.
c. **Lobby entries** Stoops may provide access to a lobby entry.
d. **Stoop stairway orientation** The exterior stoop stairway may be oriented perpendicular or parallel to the adjacent sidewalk.

3. Landscaping Landscaping shall be planted on the sides of the stoop, either at grade or in raised planters. Raised planters shall have a minimum depth of 12 inches.

2.4.2 Dooryard

Figure 2.4-2 Dooryard Diagram



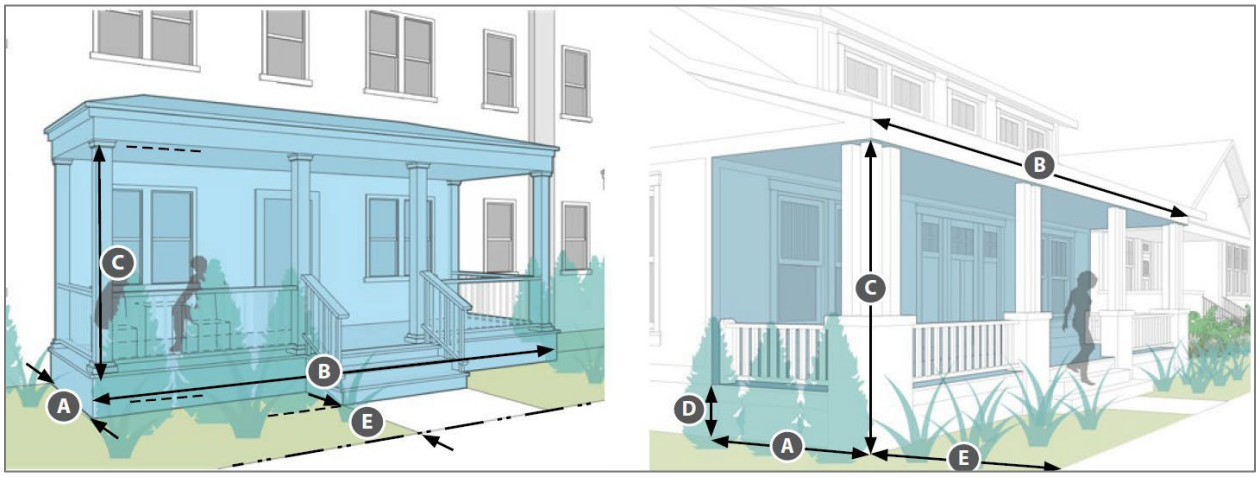
1. Element standards	Minimum	Maximum
A. Depth, Clear	8 feet	Not Applicable
B. Finish level above sidewalk	Not Applicable	3 feet
1. Length of Terrace	Not Applicable	150 feet
C. Distance between stairways	Not Applicable	50 feet

2. Design standards

a. **Relationship to Entry** Dooryards shall align directly with the unit entry(ies) they serve.
b. **Number of Units Served** Dooryards shall provide access to a maximum of 2-unit entries.
c. **Enclosure** Dooryards shall be enclosed by a maximum 3-foot high, decorative walls, fences, or low hedges.
d. **Architectural Style** Walls and/or fences shall match the building's architectural style.
e. **Doorway Stairway Orientation** If the doorway is raised above grade, the exterior stairway for raised Dooryards shall be oriented perpendicular or parallel to the adjacent sidewalk.

2.4.3 Porch

Figure 2.4-3 Porch Diagram



1. Element standards	Minimum	Maximum
A. Porch depth (excluding stairs)	8 feet	Not Applicable
B. Porch width	8 feet	Not Applicable
C. Porch height	8 feet	12 feet
D. Floor height	1.5 feet	3 feet
E. Between porch and front Property Line	5 feet	Not Applicable

2. Design standards

a. **Number of units served** Porches shall provide access to multiple ground-floor unit doors.
b. **Wrap-around porches** Porches shall wrap around building corners.

Chapter 3: Mixed Use Design Standards

3.1 Site Design Standards

General Design and Development Standards that meet or exceed all standards are applicable to all Projects.

3.1.1 Site Design

1. **Lot lines** The lines bounding a lot. The classifications of "Lot Line" are as follows**:**
    a. **Front** This line separates the narrowest street frontage of a lot from a public or private street right-of-way.
    b. **Interior "side"** Any lot line that is not a front or rear lot line and does not border a public or private street right-of-way.
    c. **Rear** The lot line opposite and farthest from the front lot line. In the case of an irregularly shaped lot, a straight line shall be drawn to determine the rear lot line.
    d. **Street side** Any lot line that is not a front or rear lot line, and which abuts a public or private street right-of-way.

3.1.2 Site Access

1. **Alleys** Vehicular access to the on-site parking areas shall be from the alley.
2. **Roadway inclusion** Pedestrian access from the public right-of-way must include sidewalk on both sides of the driveway.

3.1.3 Parking

Parking shall be designed in compliance with the applicable standards contained in Division 6.03 (Off-Street Parking and Loading) of the Ontario Development Code, except as modified by the following:

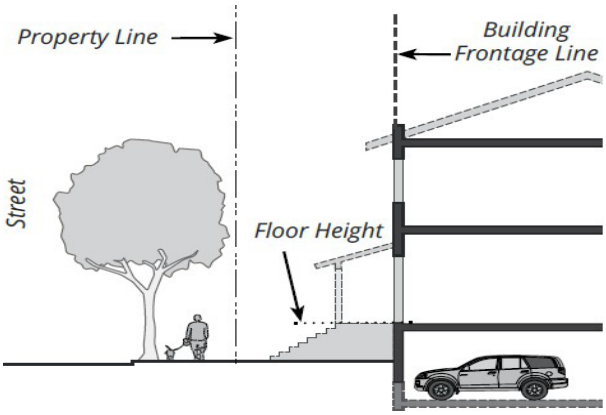
A. Placement on site

Parking shall be designed in compliance with the applicable standards contained in Division 6.03 (Off-Street Parking and Loading) of the Ontario Development Code, except as modified by the following:

1. **Surface parking**
    a. **Setbacks** Surface parking lots adjacent to public or private streets shall include a landscaped and irrigated setback a minimum of 5 feet in width measured from property line, or aligned with the building façade, whichever is greater.
    b. **Orientation** Surface parking lots shall be located at the rear, side, or internal lot lines and away from the front lot line.
2. **Above-ground parking structures** Ground-floor parking shall be sited behind residential, office, or commercial spaces.
3. **Semi-subterranean parking** A semi-subterranean garage shall not extend beyond the building frontage line and shall not extend higher than 4 feet above sidewalk grade.
4. **Subterranean parking** A subterranean parking structure may extend to all property lines (see Figure 3.1-1).

5. **Private residential garages** Each private garage must have vehicular access from an alley, side street, or motor court.

Figure 3.1-1 Semi-subterranean parking

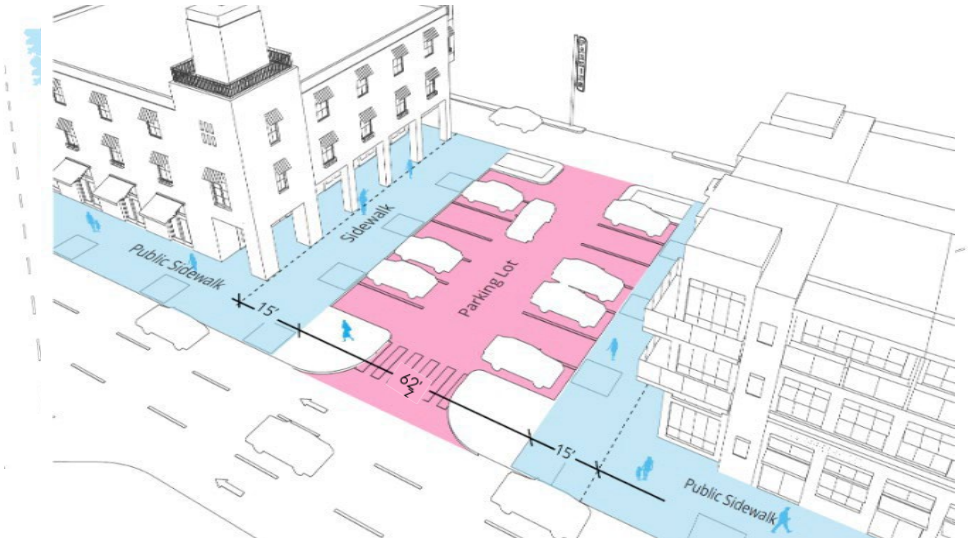


B. Surface parking lot design

1. **Screening**
    a. **Street-adjacent parking lots**
        i. A street-adjacent surface parking lot shall be screened from view by a low wall or hedge no higher than 3 feet in height.
        ii. Walls and hedges must be a minimum 18 inches from the back of the sidewalk.
        iii. Landscaped berms are prohibited.
    b. **Neighboring parcels** Views from neighboring properties shall be screened with trees and shrubs.
2. **Landscape** Landscaping materials shall be applied in compliance with the applicable objective parking lot landscape standards contained in Ontario Development Code Section 6.05.030 (Required Landscape Areas).
3. **Shade structures** Shade structures, if used, shall match the architectural style of the project buildings.

C. Parking court design

Figure 3.1-2 Parking Court



1. **Design standards**
    a. The width of the parking court, when measured from 1 building face to the other, shall not exceed 100 feet (see Figure 3.1-2).
    b. The parking court shall consist of only1parking bay, and this bay shall not exceed a maximum width of 62 feet.
    c. On both sides of the parking court, sidewalks must be established, each with a minimum width of 15 feet. These sidewalks must connect with the adjacent public sidewalk network.

D. Parking structure design

1. **Context-sensitive façade design** Parking structure façades shall incorporate a minimum 2 design elements using the architectural styles identified in Chapter 4: Architectural styles and adhere to Main Street or Urban and facade design standards applied in *Section 3.2.3 Building Types* (see Figure 3.1-3).
2. **Parking structure standards**
    a. Any driveway providing access to a parking structure shall have a minimum width of 28 feet. Single openings shall be no wider than 14 feet.
    b. Parked vehicles shall be shielded from view from adjoining streets.
    c. The exterior elevations of parking structures facing a public street shall incorporate architectural elements from the project building.
    d. Vehicular entries shall be located a minimum 50 feet from the corner of a block.
    e. Signs shall be consistent with Division 8: Sign Regulations of Ontario Development Code.

Figure 3.1-3 Example of parking structure and Façade Design



3.1.4 Open Space Standards

This Section provides standards that direct the design of common and private on-site open spaces.

A. Common open space and public frontage

1. **Common open space type requirements** Common open space shall cover a minimum of 15 percent of the total lot area with the following **exceptions**:
    a. **Close to parks** Common on-site open space shall not be required for lots within a 1/4-mile of an existing park or plaza a minimum 0.25 acres in size.
    b. **Common open space types** 1 or more of the common on-site open space types listed under "Common Open Space Types" shall be provided on each lot that has a residential use.
2. **Access and visibility** At-grade open space shall be accessible and visible from the adjacent ground floor.

B. Common Open Space Types

Forecourt

1. **Design standards**
    a. A forecourt may occur on any floor and may be used as an allowed method of creating façade massing increments.
    b. Minimum dimensions. Forecourts shall be a minimum of 15 feet by 15 feet.

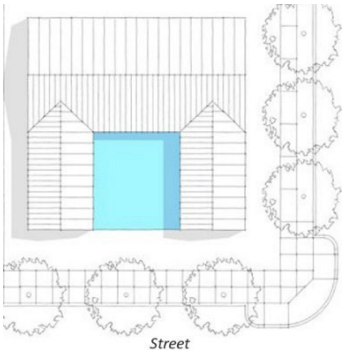


Figure 3.1-4 Forecourt

Side Garden

1. **Design standards**
    a. Minimum side garden dimensions: 15 feet by 15 feet.
    b. Dooryards, porches, stoops, and architectural elements may encroach into the side garden as follows:
        i. Up to a total of 30 percent of the side garden's width and/or length.
        ii. A ground floor encroaching element shall be allowed to project a maximum of 8 feet into the side garden.

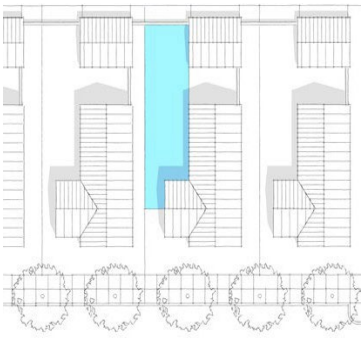


Figure 3.1-5 Side Garden

Court

1. **Design standard**

    a. **Minimum dimensions**: All courts shall be a minimum of 20 feet by 30 feet.
    b. **Enclosure**
        i. A court shall have building walls on at minimum 2 sides, while the third and fourth side can be defined by architectural or landscape elements (i.e., low walls, trellises, hedges, or rows of trees).
        ii. A driveway located adjacent to a court shall be screened by architectural elements (e.g., low walls or trellises, hedges, or rows of trees).
    c. **Access**
        i. Courts shall be accessed from the street or walkway.
        ii. Units shall be allowed to take direct access through a court.

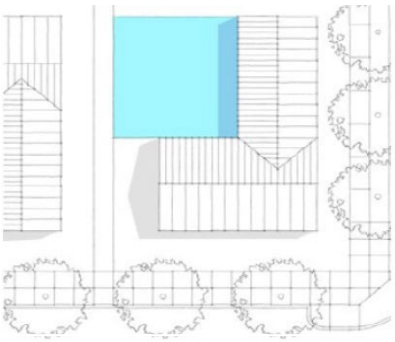


Figure 3.1-6 Court Configuration

d. **Encroachments**
   i. Dooryards, porches, stoops, and architectural elements may encroach into the Side Yard.
   ii. A ground floor encroaching element shall not encroach beyond 8 feet of the building's façade into the court.

e. **Common area** A court shall serve as communal spaces and pedestrian access.
f. **Amenities** A court shall include at minimum 1 of the following amenities: a seating area, a fountain, a BBQ island, or an outdoor fireplace.

Passage

1. **Design standards**
   a. **Location** Passages shall be provided between buildings or side gardens.
   b. **Size** Passages shall be a minimum width of 8 feet with minimum of 2 feet of landscape strip on each side.

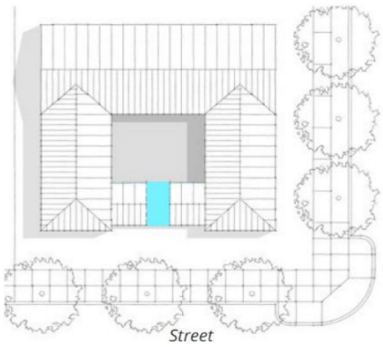


Figure 3.1-7 Passage Configuration

C. Private Open Space

1. General standards
   a. of 60 square feet of private open space shall be provided for each residential unit and a minimum of **1** or more of the private on-site open space types shall be provided, with the following.
   b. **Exception**: Private on-site open space shall not be required for a project site located within 1/4-mile distance of an existing park or plaza that is a minimum 0.25 acres in size.

D. Private Open Space Types

Private Roof Deck

1. **Description** A private open space located on the roof of a building dedicated to a single unit.
2. **Design standards**
   a. Minimum dimensions of 7 feet by 7 feet.
   b. Materials, finishes, fixtures, and colors visible from the street shall be designed consistent with the architectural style of the building.

Backyard

1. **Description** A private, landscaped open space located behind each individual unit that is intended to provide passive or active outdoor space for the users of the unit.
2. **Design standards**
   a. Backyards are located behind the unit.
   b. Minimum dimensions of 20 feet by 15 feet.
   c. Encroachment into the backyard is allowed up to 30% of the space's width and/or length.
   d. Maximum projection for any ground floor element is 8 feet, with a 10-foot upper floor setback from property line if there's usable space above the first floor.

Architectural façade elements as private open space

1. **Description** The following elements defined in *Section 2.3 Architectural Façade Elements* may be used to meet on-site private open space requirements.
    a. Balcony
    b. Terrace Balcony

Entry elements as private open space

1. **Description** The following elements defined in *Section 2.4 Entry Elements* may be used to meet on-site private open space requirements.
    a. Dooryard
    b. Porch

3.1.5 Landscaping

This section provides standards for landscaping, materials, and Irrigation.

1. **General to all** Landscaping materials shall be applied in compliance with the applicable landscape standards contained in Ontario Development Code Section 6.05.030 (Required Landscape Areas).

2. **Paths** Where front yards are landscaped, individual paths to the sidewalk shall be provided for each entrance
3. **Materials** Decorative accents. Paving materials shall incorporate decorative elements consistent with the architectural style of the building.

3.1.6 Fences and Walls

1. **Fence and wall heights** Walls and Fences shall be designed in compliance with the applicable standards contained in Division 6.02 (Walls, Fences, and Obstructions) of the Ontario Development Code.

3.2 Mixed Use Development Standards

The following tables and associated standards for Mixed-Use standards covering new residential construction, additions, remodels, or repurposed uses that necessitate an entitlement or building permit from the City. All standards listed under Table 3.01 Mixed-Use Development are applicable to all mixed-use projects.

Table 3.01 Mixed Use Development Standards per Building Type

Requirements	Mixed-Use Development Standards		Additional Regulations
	Mixed-Use Building Type		
A. BUILDING DEVELOPMENT STANDARDS			
Massing and Façade Design	***Main Street***	***Urban***	
1. Minimum Setback from Public Street Property Lines			Notes 2 & 8
a. **Arterial**	0 feet	0 feet	
b. **Collector**	0 Feet	5 feet	
c. **Local**	5 feet	5 feet	
2. Maximum Setback from Public Street Property Lines			
a. **Arterial**	5 feet	5 feet	
b. **Collector**	10 feet	10 feet	

Requirements	Mixed-Use Development Standards		Additional Regulations
	Mixed-Use Building Type		
c. **Local**	10 feet	10 feet	
3. Minimum Setback from Interior Project Boundary Property Lines	0 feet (attached to adjacent property) 10 feet (freestanding)		
4. Minimum Setback from Public Alley Property Lines	5 Feet		
5. Minimum Setback from Private Drives/Alleyways (from edge of drive aisle)			
a. **Living Area**	10 feet		
b. **Garages and Other Nonhabitable Structures**	5 feet		
6. Minimum Setback from Dwellings to Parking Spaces			
a. **Living Area**	10 feet		
b. **Garages and Other Nonhabitable Structures**	5 feet		
7. Minimum Setback from Parking Space or Drive Aisle to Wall or Fence	5 feet		
8. Minimum Separation Between Detached Buildings			
a. **Dwelling Front to Front**	< 2-Stories: 25 feet; > 3 Stories: 30 feet unless otherwise specified by massing requirements ("Space between buildings") in Section 3.2.3 Building Types.		
b. **Dwelling Front to Rear**	< 2-Stories: 25 feet; > 3 Stories: 30 feet unless otherwise specified by massing requirements ("Space between buildings") in Section 3.2.3 Building Types.		
c. **Dwelling Front to Side**	< 2-Stories: 25 feet; > 3 Stories: 30 feet unless otherwise specified by massing requirements ("Space between buildings") in Section 3.2.3 Building Types.		
d. **Dwelling Side to Side**	< 2-Stories: 5 feet; > 3 Stories: 5 feet unless otherwise specified by massing requirements ("Space between buildings") in Section 3.2.3 Building Types.		
e. **Dwelling Side to Rear**	15 feet unless otherwise specified by massing requirements ("Space between buildings") in Section 3.2.3 Building Types.		
f. **Dwelling Rear to Rear**	20 feet unless otherwise specified by massing requirements ("Space between buildings") in Section 3.2.3 Building Types.		
g. **Garage to Garage (or other nonhabitable structures)**	30 feet – Entry to Entry 30 feet – Entry to Side 10 feet – Side to Side 10 feet – Side to Rear		
9. Minimum Storage Space	240 CF		Note 4
10. Maximum Street Façade Height			
a. Arterial	45 feet	N/a	Note 8
b. Collector	N/a	N/a	
c. **Local**	N/a	N/a	
11. Maximum Building Height (from grade to top of plate)			
a. Arterial **b. Collector** **c. Local**	Table 3.2-2 Mixed-Use Building Types		Note 8
12. Minimum Floor-to- Floor Height			
a. Ground Floor (Non-residential /Residential)	15 feet / 10 feet		
b. Upper and Sub Levels	9 feet		
13. Minimum Setback from Major Pipelines	50 feet (to habitable structures)		Note 6

Notes:

1. *An existing lot of record that is substandard as to minimum "project" area and/or dimension(s), shall be permitted all the development rights of the zone in which it is located. New lots designated as Mixed-Use (MU) in the Policy Plan (General Plan) shall comply with the identified minimum.*
2. *The density range shall be consistent with the underlying Mixed-Used Category identified in Figure LU-04, Mixed Use Areas and defined in Table LU-02, Land Use Designations Summary Table, of the Policy Plan (General Plan). A density bonus and other incentives pursuant to GC Sections 65915 through 65918, may be granted by the Approving Authority. Refer to Development Code Subsection 6.01.010.H (Density Bonus and Other Incentives).*
3. *Measurement of the continuous frontage may include existing frontages, provided there is no more than 10 feet between the frontage of active ground floor uses in the existing building and those of the proposed development project.*
4. *Adequate lockable private storage space for each residential unit shall be provided within a garage or storage building, or a space directly accessible from the dwelling. Exterior closets accessed from patios or balconies may be used if screened from public view.*
5. *A lot designated as Mixed-Use (MU) in the Policy Plan (General Plan) shall be developed at no less than the minimum number of dwelling units allowed within the specified density range for the applicable Mixed-Use Category, except that If, because of the configuration/design of a lot, the minimum residential density cannot be achieved, the lot may be developed with non-residential uses.*
6. *Includes major high-pressure pipelines for fuel oil, gasoline, and diesel and aviation fuels within the City. Existing pipelines include:*
   a. *Two parallel pipelines (a 16-inch and a 20-inch) that enter the City at Benson Avenue, traveling parallel to the northerly side of the Southern Pacific right-of-way to Ontario International Airport, then parallel to the southerly side of the Southern Pacific right-of-way, then parallel to the northerly side of the right-of-way beyond Ontario International Airport, then exiting the City at Etiwanda Avenue; and*
   b. *Two parallel pipelines that traverse the easterly portion of the City, entering the City at the southerly portion of Milliken Avenue, then traveling north under Milliken Avenue to Inland Empire Boulevard, then east to Rochester Avenue, then north to the City Limits.*
7. *The minimum setback from private streets shall be measured from a line running parallel to the street, which is located 12 feet behind face-of-curb (a.k.a., "parkway").*
8. *In the Downtown District, the maximum 45-foot façade height shall extend no more than 70 percent of the frontage. The remaining 30 percent of the frontage shall include an upper-level setback of at least 12 feet, starting at the third story. Usable outdoor spaces, such as roof decks or terraces, may occupy the roof area of the upper-level setback. See Urban Form standards under Section 2.2.2A Urban Building Type.*

3.2.1 Height Standards

1. **Height transition zones** Requires all new buildings within 100 feet of less intense development patterns (existing or planned) to reduce heights to ensure neighborhood compatibility:
2. **Vertical mixed use development types** The following height limits shall apply to all proposed vertical mixed use development types.
    a. Buildings within 100 feet of single-family dwellings shall not exceed 35 feet or the height of adjacent residential buildings.
    b. Buildings within 100 feet of undeveloped parcels with planned less intense uses shall not exceed 35 feet.

3.2.2 Ground Floor Building Frontage

1. **Mixed-Use development types** The ground floor frontage for vertical mixed-use developments must be designed to accommodate commercial uses.

3.2.3 Building Types

Identify the suitable building type based on the location including (see Table 3.2-1):

1. **"Main Street"** (applicable to mixed-use areas within the District Place type as shown on Policy Plan Exhibits LU-04 and CD-01)
2. "**Urban"** (applicable to mixed-use areas outside the District Place type)

Table 3.2-1 Mixed- Use Building Types

TOP Land Use Place type	Max Permitted Height	Building Types
Downtown	45 feet	Main Street
Airport Metro/Entertainment	120 feet	Main Street
Guasti	70 feet	Main Street
South Euclid	70 feet	Main Street
South Employment	70 feet	Main Street
East Holt Blvd	70 feet	Urban
Inland Empire Blvd	70 feet	Urban
Infill	50 feet	Urban
South of Riverside Drive	50 feet	Urban

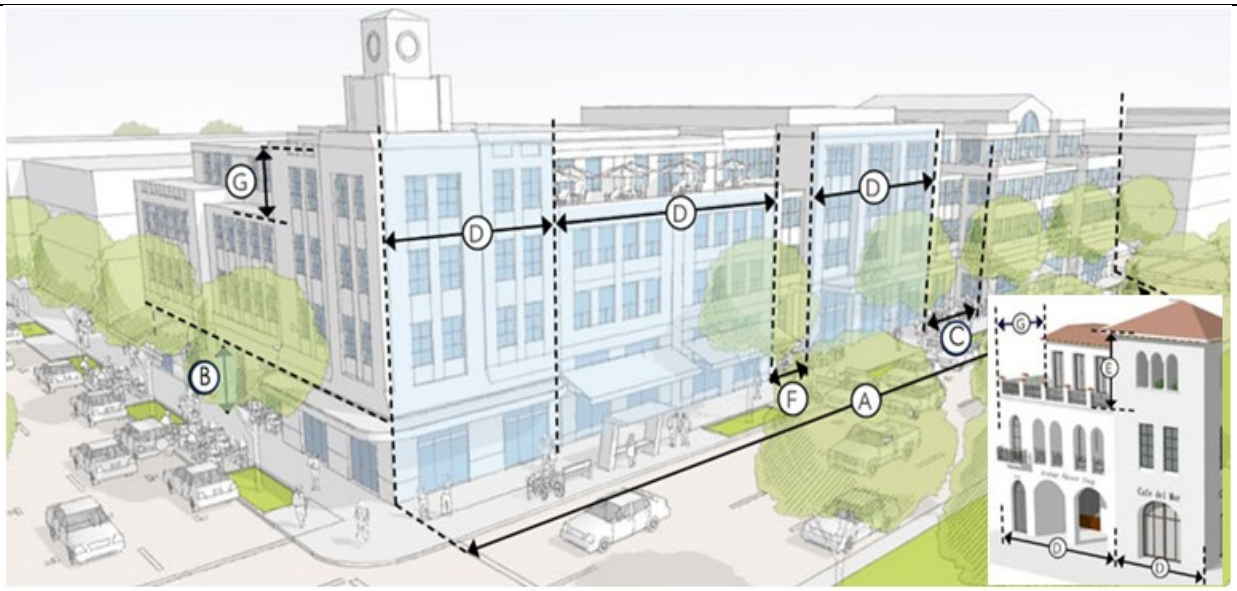
A. Main Street Massing and Façade Design

Main Street Massing and Façade design standards are required in all mixed-use areas within the District Place type, as shown in the City's Policy Plan (Exhibits LU-04 and LU-05).

Massing increment
Massing Increments shall appear as either distinct buildings or distinct parts of a single building.

1. Massing standards

Figure 3.2-1 Main Street: Massing Diagram



1. Element Standards
A. Building Façade along font lot line (300 feet max).
B. Building Façade alongside lot line (150 feet max).
C. Space between buildings (0 feet min).
D. Massing Increment (75 feet max).
E. Height Difference between Massing Increments (3 feet min).
F. Façade Break (10 feet x 10 feet min).
G. Upper-Level Setback (15 feet min).

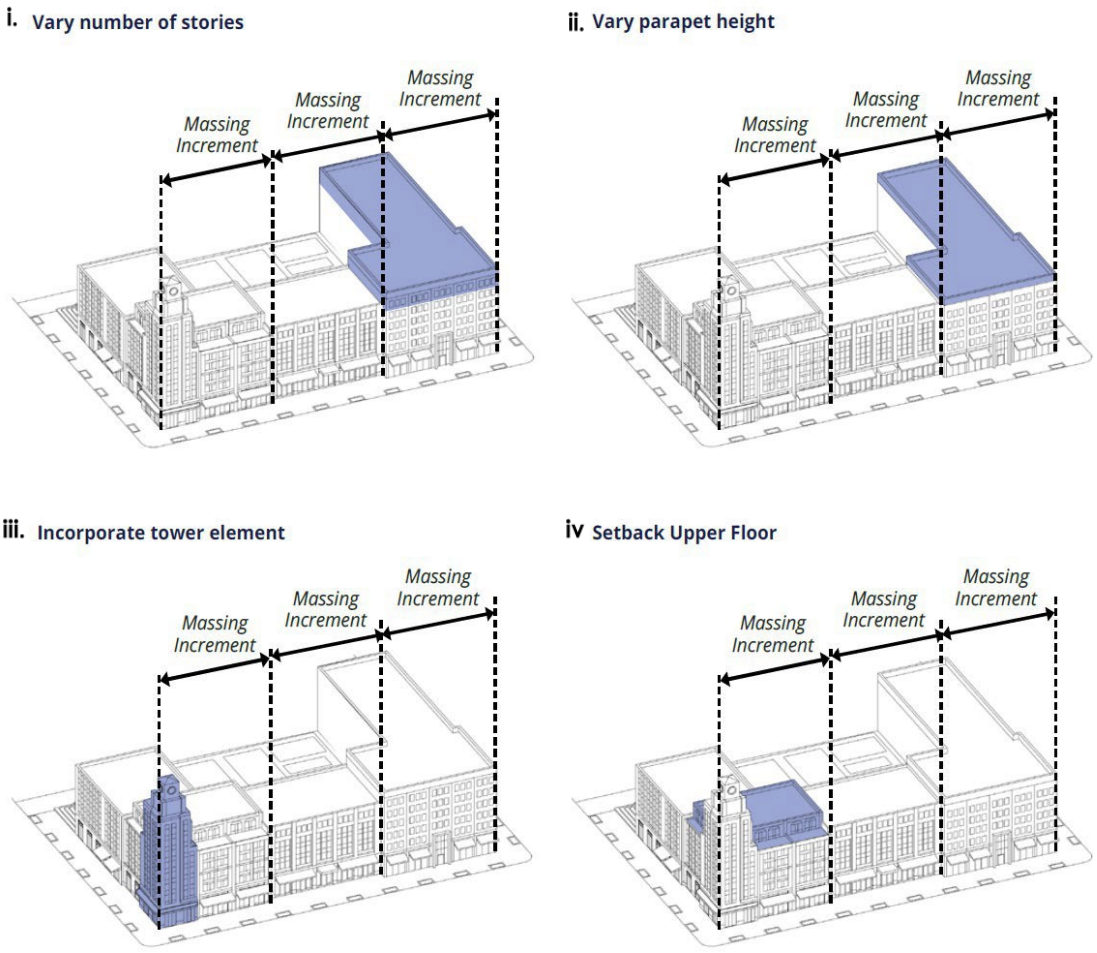
2. Massing standards

a. **Size of massing increments.** Building facades that face public streets and are longer than 75 feet in length shall be divided into massing increments as follows (see Figure 3.2-1):
   i. The maximum length of a single massing increment shall not exceed 75 feet.
   ii. Single building projects less than 150 linear feet of street frontage shall have no massing increments applied.
   iii. Single building projects between 150 and 250 linear feet of street frontage shall have at minimum 2 massing increments separated by a façade break.
   iv. Single project buildings that have more than 250 linear feet of street frontage shall have 3 massing increments each separated by a façade break.

b. **Required difference in facade height**. Adjacent massing increments must vary in façade height measured from the sidewalk to the eave, cornice, or parapet, using a minimum 1 massing strategy (see Figure 3.2-1 and Figure 3.2.2):

i. Vary number of stories.
ii. Vary the parapet height by a minimum of 3 feet.
iii. Incorporate tower element.
iv. Set back upper floor(s) a minimum 15 feet.

Figure 3.2-2 Main Street: Examples of Massing Strategies Diagram



c. **Articulation of massing increments.** Individual massing increments shall be differentiated from one another using 3 of the following architectural strategies (see Figure 3.2-2):
   i. **Set façade increment back.** Set the entire facade increment back a minimum of 3 feet.
   ii. **Base height.** Vary the height of the building base of adjacent increments.
   iii. **Façade colors.** Use different facade materials and/or colors.
   iv. **Window type/configuration.** Use different window types, configurations, and/or frame colors.
   v. **Presence/arrangement of façade elements.** Vary the presence or arrangement of façade elements such as projecting balconies, recessed balconies, trellises, chimneys, and awnings.

d. **Self-contained massing increments.** Facade elements, such as window openings and balconies, shall not overlap the division between massing increments.
e. **Repeating massing increment design.** A massing increment design may be repeated a maximum of 3 times on the same project elevation. Repeated massing increments may not be located immediately adjacent to each other.

Façade Composition

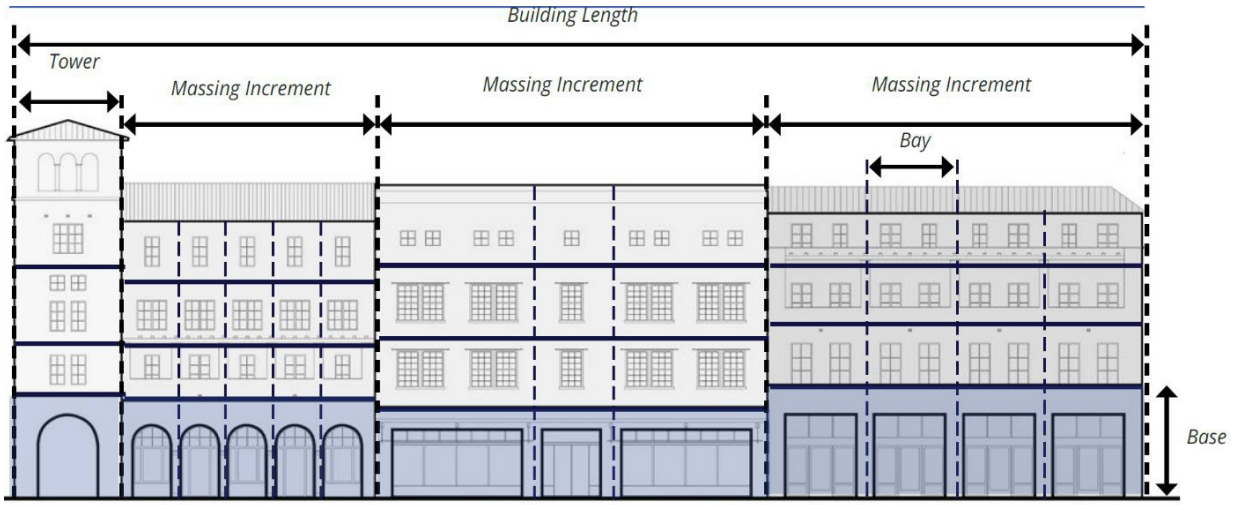
1. **Facade composition standards**
   a. **Facade Grid.** The window, door, and/or shopfront openings of each individual facade shall be organized into a grid as follows:
      i. **Horizontal alignment of elements.** Rooflines, openings, and materials within each facade shall be aligned horizontally.
      ii. **Vertical Bays.** The entirety of a building's façade shall be clearly divided into vertical bays.

   b. **Multi-story building façades.** Multi-story building facades shall be designed to include a base, middle, and top.
      i. **Base.** Building base of entire ground floor for buildings less than 5 stories or 25 feet for buildings 5 stories or more, shall use a minimum of 2 of the following strategies:
         (a) Provide a string course at the top of the first story;
         (b) Specify base materials different from rest of facade;
         (c) Specify base colors different from rest of facade;
         (d) Provide a ground floor Arcade or Gallery per (*Section 3.2 Architectural Façade Elements*).



      ii. **Middle**. The middle of the building—the facade of all floors located above the base—shall be designed as follows:
         (a) Window and door openings shall be organized in bays per the façade fenestration standards of this section.
         (b) If provided, attached façade elements such as balconies, bay windows, and projecting rooms, shall be designed per the façade fenestration standards of this section.
      iii. **Top.** The façade elements that define the upper limits of the building—shall be designed as follows:
         (a) The top of the building facade shall incorporate capping elements, such as a cornice, enhanced ornamentation, or a decorative parapet (see Figure 3.2-3).

Figure 3.2-3 Main Street: Façade Composition



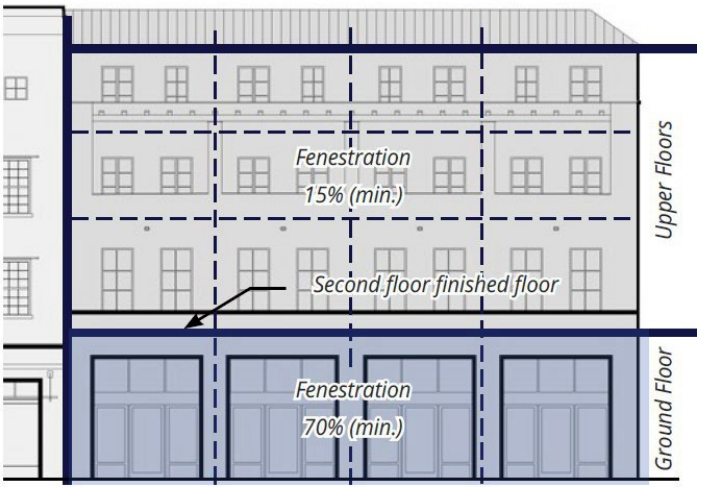
Facades organized according to massing increments that may consist of an individual building or one building that is divided into individual massing increments. Each increment is designed according to a grid of floor levels and bays.

Fenestration Design

Fenestration Design addresses the percentage of window and door openings for ground floors and upper floors and glazing transparency.

1. **Façade fenestration standards.**
    a. **Minimum fenestration.** Facade designs shall include a minimum percentage of fenestration calculated as the total percentage of window and door area divided by the total area of that portion of the façade (see Figure 3.2-4):
        i. **Ground floor**: 70% minimum.
        ii. **Upper floors**: 15% minimum.

Figure 3.2-4 Main Street: Fenestration



2. **General to all floors.** All window jambs/frames shall be set back a minimum of 2 inches back from the facade plane.

3. **Specific to ground floors.** Structural elements shall be visible on the exterior of ground floor facades to visually convey that the upper floors are supported.

    a. **Ground floor windowsills** on facades along the front lot line that face public streets shall be no higher than 3 feet above the adjacent grade.
    b. **Ground floor bathroom windows** prohibited on facades that face front streets.

B. Urban massing and façade design

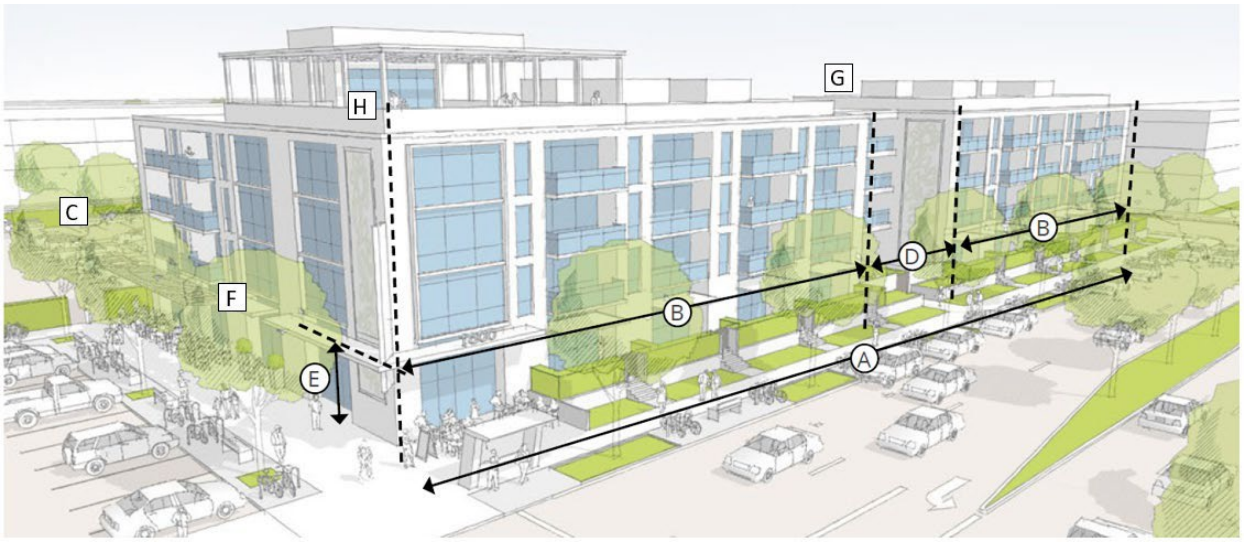
Urban massing and façade design_ Standards are required for all multiple-family developments projects with 25 du/ac or more.

Massing Increments

Massing increments are visually discrete design compositions that are distinguishable from each other and have a coherent look and character from the ground to the top of the facade. Massing Increments appear as either distinct buildings or distinct parts of a single building (see Figure 3.2-5).

1. **Massing standards**

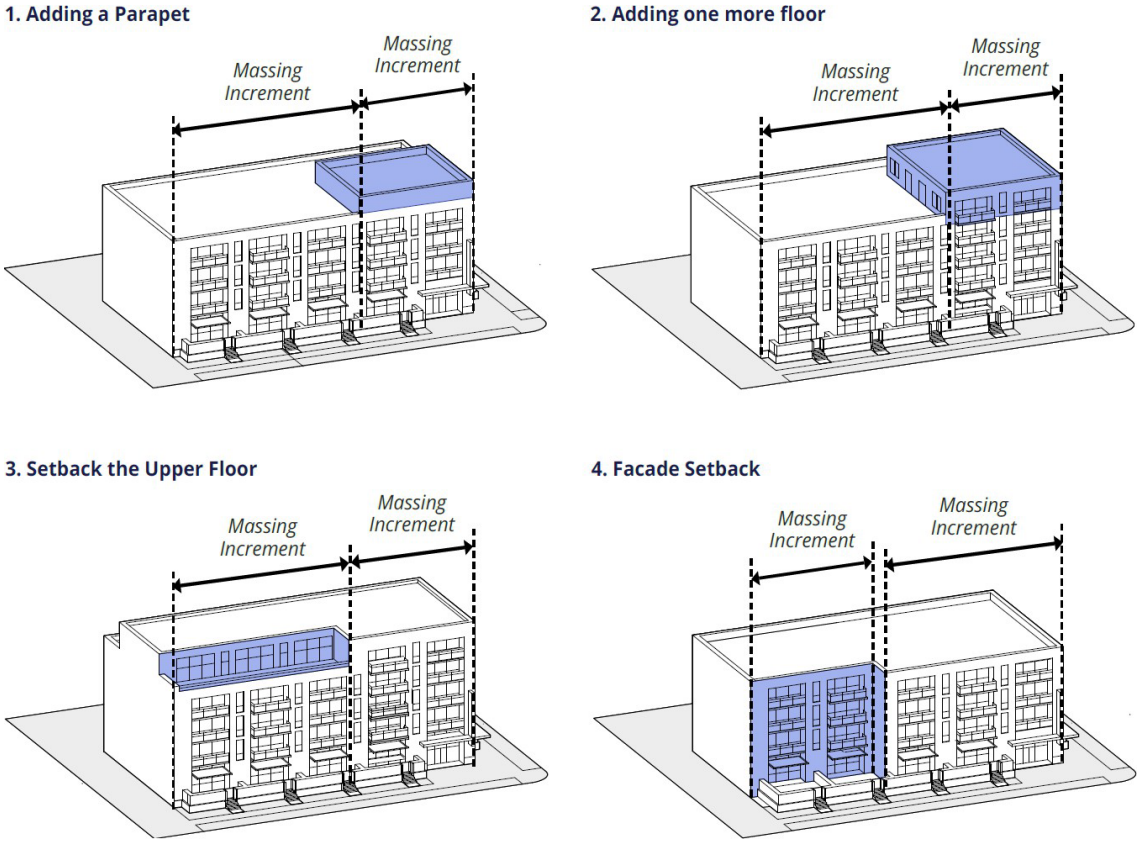
Figure 3.2-5 Urban Massing



Element Standards	Standards
a. Building façade along font lot line	400 feet max
b. Massing increment	150 feet max
c. Space between buildings	0 feet minimum
d. Façade setback (if elected)	10 feet x 10 feet minimum
e. Building base height	15 feet minimum
f. Building façade alongside lot line	200 feet max
g. Height difference between massing increments	3 feet minimum
h. Upper-level setback from facade	15 feet minimum

2. **Size of massing increments** Building facades along front and side lot lines that face public streets and are longer than 100 feet shall be divided into massing increments as follows:
    a. The maximum length of a single massing increment shall not exceed 150 feet (see Figure 3.2-6).
    b. A minimum of **2** distinct massing increments shall be provided.
3. **Articulation of massing increments** Individual massing increments shall be differentiated from one another using at minimum 1 of the following massing strategies:
    a. Vary parapet height by a minimum of 3 feet.
    b. Increase number of stories.
    c. Set the upper floor or multiple upper floors back a minimum of 15 feet from the facade.
    d. Set the entire facade back a minimum of 10 feet for 20 feet.
    e. Incorporate tower element.

Figure 3.2-6 Urban: Examples of Massing Strategies Diagram



1. **Massing increments with distinct facades** Massing increments that have distinct facades and shall appear as distinct buildings.

    a. **Repeating massing increment design** A massing increment design may be repeated on the same project elevation. Repeated massing increments shall be separated by a distinct massing increment

Façade Composition

Façade composition standards address the design and arrangement of various building elevation elements that are applied to each massing increment, including window and door openings, attached and recessed façade elements such as bay windows, balconies, and arcades, and wall materials and colors.

1. **Façade composition standards**

2. **Multi-story building façades** The building facade shall be divided into a base and body as follows.

    b. **Base** Separate the building base (entire ground floor facade or first 2 floors of buildings 5 stories or taller) from the rest of the facade for a minimum of 15 feet (fewer than 5 stories) or 25 feet (5 stories or more) from grade, using a minimum **2** of the following strategies.

        i. Provide a string course at the top of the first story.
        ii. Specify base materials different from rest of façade.
        iii. Specify base colors different from rest of façade.
        iv. Provide a ground floor Arcade or Gallery per Section 3.3 Architectural Façade Elements.

    c. **Body** The body of the building consists of the facade of all floors located above the base and shall be designed as follows:

        i. Windows shall be organized in bays, bands, curtain wall, and/or grid of windows consistent with the Facade Fenestration Standards for the Urban massing type.
        ii. Each massing increment must contain its entire facade composition without elements overlapping the division between increments.

    d. **Strategies** The listed strategies show acceptable ways to differentiate massing increments:

        i. Vary the height of the building body.
        ii. Use different facade materials and/or colors.
        iii. Use different window types/configurations.
        iv. Diversify facade elements, including projecting balconies, recessed balconies, canopies, and awnings.

Fenestration Design

Fenestration Design addresses the percentage of window and door openings for ground floors and upper floors and glazing transparency.

1. **Façade fenestration standards.**

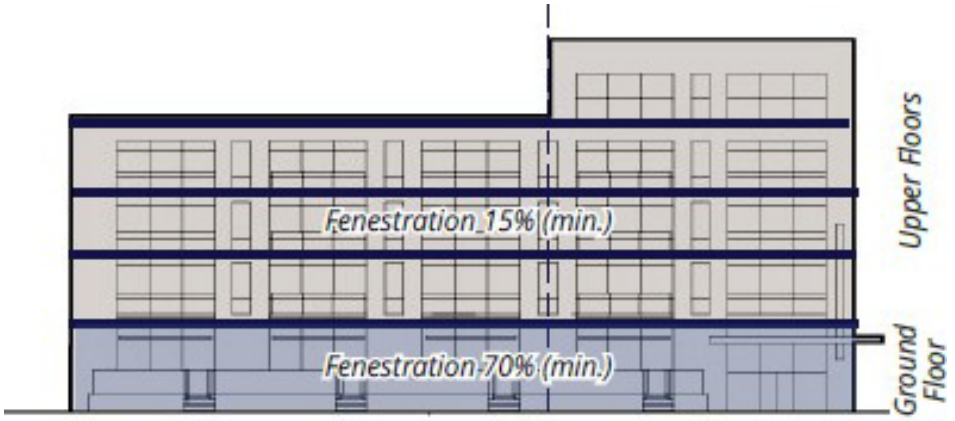
    a. **Minimum fenestration.** Facade designs must meet a minimum fenestration percentage, calculated as the total window and door area divided by the total

area of that part of the facade.

i. **Ground floor**
   (a) Front lot line: 70% minimum
   (b) All other frontages: 50% minimum
   (c) Ground floor windowsills on facades along the front lot line shall be no higher than 3 feet above the adjacent grade.
   (d) Ground floor bathroom windows are prohibited on facades that face front lot line.

ii. **Upper floors** 15% minimum

Figure 3.2-7 Urban: Fenestration Diagram



3.2.4 Materials and Detailing

A. Building Materials

1. **Prohibited materials**
   a. Fiberglass or plastic (false) architectural or facade elements or ornamentations are prohibited.
   b. Rough-cast and sand-finishes are prohibited on all building surfaces that are visible from a street.
   c. Reflective materials, such as mirrored glass, shiny metal, and chrome, are allowed with the following exception:
      i. Application to small areas (up to 50 sq ft or 2% of façade area, whichever is less) for signage highlighting, ensuring no glare nuisance to traffic, pedestrians, or neighboring buildings.
2. **Combining materials.** When combining 2 or more wall materials on 1 facade:
   a. Place lighter weight materials above more substantial ones (e.g., glass above wood, wood above stucco, stucco above masonry).
   b. Vertical joints between different materials shall only occur at inside corners.

B. Windows and Doors

1. **Material and types**
    a. **Window recess** Windows shall be recessed in a manner that is specific to each building's architectural style but shall be no less than 2 inches for any style.
    b. **Architectural style of detailing** Windows, doors, frames, colors, and styles shall be appropriate to the building's architectural style in terms of window type, proportion, and color.
    c. **Materials** Windows and doors shall be made of wood, fiberglass, fiberglass-clad wood, aluminum clad wood, or metal.
    d. **Glazing** Glazing shall be clear glass with no more than ten percent daylight reduction (tinting). Reflective (mirrored) glazing is prohibited.
    e. **Residential buildings** The following are applicable to multiple-family development types.
        i. Vinyl or vinyl clad windows shall resemble wood windows (i.e., faux wood or engineered wood) in detailing and profile thickness and employ muted patterns and colors consistent with the building's architectural style.
        ii. Nail-on windows that are deeply set within their frame are permitted.
        iii. Muntins shall be of a substantial dimension (e.g., not flat) and shall be placed on the exterior of windows.
        iv. Trim:
            a) **Window and door trim materials** Wood or cement fiber board. Foam trim around windows is allowed. Foam trim around doors is prohibited.
            b) **Building trim materials** Wood, stone, cast stone, pre-cast concrete, glass fiber reinforced concrete, and cement fiber board.

3.3 Architectural Façade Elements

The following architectural façade elements shall be incorporated into a development project to fulfill the requirements for façade articulation and/or articulation of massing increment defined in 3.2.3. Massing and Façade Design.

3.3.1 Arcade

Figure 3.3-1 Arcade



1. Element Standards	Minimum	Maximum
A. Depth	12 feet	16 feet
B. Distance from Property Line	0 feet	
C. Opening height, clear	See Below	
D. Overall height	See Below	

2. Design standards

a. **Projection depth** The arcade projection depth from the ground floor facade shall be no greater than the height of the arcade opening (see Figure 3.3-1).

b. **Sidewalk depth beneath arcade** The covered sidewalk under the arcade shall be a minimum of 10 feet wide from the inside of the vertical support to the ground floor building face.

c. **Entry element requirement** Arcades shall be combined with Shopfronts (defined in *Section 3.4 Entry Elements*).

d. **Minimum openings and massing increments** Arcades shall be a minimum of 3 openings wide. The location where an arcade stops or changes in design or dimensions shall correspond to a change in massing increment (*Section 3.2.3.*

Massing and Façade Design) for massing increment requirements).

e. **Vertical supports** Vertical supports may be piers, columns, or arches. The width of a vertical support shall not exceed 3 feet.
f. **Width of openings** The openings between vertical supports, as seen from the street, shall be taller than they are wide.
g. **Shape and cadence of openings** Openings, whether rectangular or arched, must align with facade bays if present (vertical bays are mandatory for Main Street standards and optional for other massing types in *Section 3.2.3. Massing and Façade Design*).
h. **Vertical clearance** The minimum vertical clearance at each opening shall be a minimum of 12 feet, excluding decorative brackets, spandrels, and/or lower portions of arches.
i. **Arcade height relative to interior building floor height** The height of the soffit inside the arcade shall be no less than the height of the ceiling of the floor to which it corresponds.
j. **Architectural style** Arcade detailing, including lighting, shall utilize the architectural style of the building.

3.3.2 Gallery

Figure 3.3-2 Gallery



1. Element standards	Minimum	Maximum
A. Depth, clear	10 feet	16 feet
B. Distance to property line, clear	0 feet	5 feet
C. Opening height, clear	12 feet	2 floors
D. Overall height	See Below	

2. Design standards

a. **Projection depth** Gallery projection depth from the ground floor facade shall be no greater than the height of the gallery opening (see Figure 3.2-2 "A").

b. **Sidewalk depth beneath gallery** Covered sidewalk width under the gallery must be a minimum of 10 feet from the inside of the vertical support to the ground floor building face (see Figure 3.2-2 "A").

c. **Minimum openings and massing increments** Galleries shall be a minimum of 3 openings wide. The location where a gallery stops or changes in design or dimensions shall correspond to a change in massing increment (*see Section 3.2.3. Massing and Façade Design*).

d. **Vertical supports** Vertical supports may be piers or columns. The width of a vertical support shall not exceed 1 foot.

e. **Width of openings** Openings between vertical supports, as seen from the street, shall be taller than they are wide.

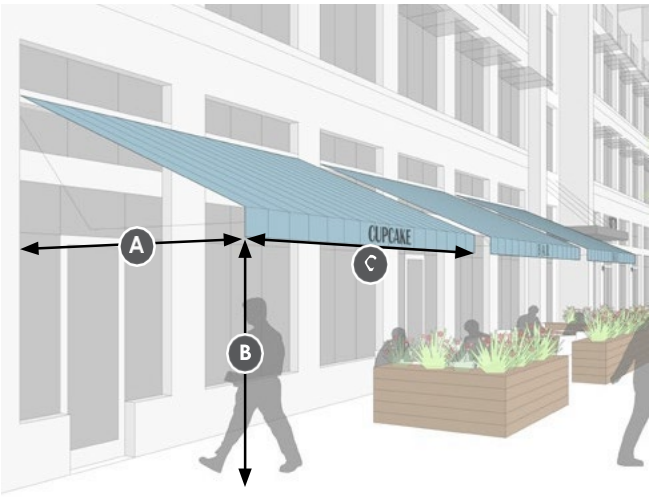
f. **Shape and cadence of openings** Openings may be rectangular but shall not be arched.

g. **Vertical clearance** Minimum vertical clearance at each opening shall be a minimum of 12 feet, excluding decorative brackets and spandrels.

h. **Gallery height relative to interior building floor height.** Height of the soffit inside the gallery shall be no less than the height of the ceiling of the floor to which it corresponds.
i. **Vertical alignment** Galleries may be single or double-story and shall correlate with building floors (see "D" in above figure).
j. **Architectural style** Gallery detailing, including lighting shall utilize the architectural style of the building.

3.3.3 Commercial Awning

Figure 3.3-3 Commercial Awning Diagram



1. Element standards	Minimum	Maximum
A. Depth	4 feet	Not Applicable
B. Clearance above sidewalk	8 feet	Not Applicable
C. Length	See Below	

2. Design standards

a. **Encroachment** Commercial awnings may encroach into the setback or public right-of- way as defined in Division 6.01.010(D)(2): Encroachments into Required Setback Areas of the Ontario Development Code (see Figure 3.3-3).

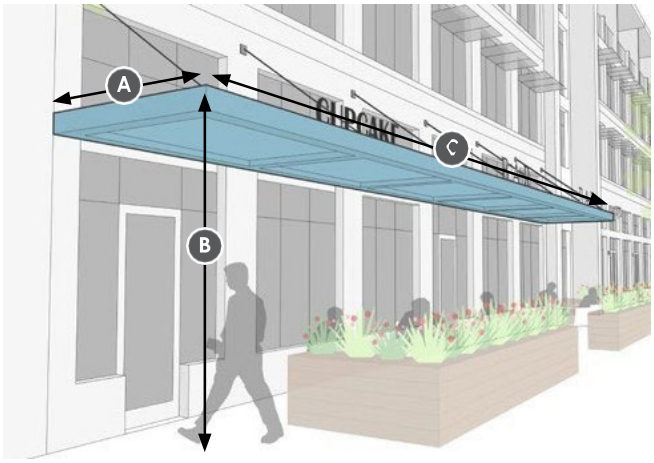
b. **Material** Commercial awnings shall be of a simple shed form, made of code-compliant fire-resistant canvas.

c. **Width.** Awning widths shall equal in size to shopfront opening widths.

d. **Prohibited lighting** Internally illuminated and back-lit awnings and any associated light diffusers are prohibited.

3.3.4 Commercial canopy

Figure 3.3-4 Commercial Canopy



1. Element standards	Minimum	Maximum
A. Depth	Not Applicable	3 feet
B. Minimum clearance above ground	Not Applicable	12 feet
C. Length of terrace	Not Applicable	150 feet

2. Design standards

a. **Encroachment** Commercial canopies may encroach into the setback or public right-of- way as defined in Division 6.01.010(D)(2): Encroachments into Required Setback Areas of the Ontario Development Code (see Figure 3.3-4).

b. **Form and material** Canopies shall be of a simple form, made of metal and/or glass.

c. **Support** Canopies shall be supported either from below by metal brackets, or from above by rods and wires that affix to the wall.

d. **Width** Canopies may extend across multiple storefronts.

3.3.5 Awning

Figure 3.3-5 Awning



1. Element standards	Minimum	Maximum
A. Depth	Not Applicable	3 feet
B. Clearance above ground	8 feet	Not Applicable
C. Length	See Below	

2. Design Standards

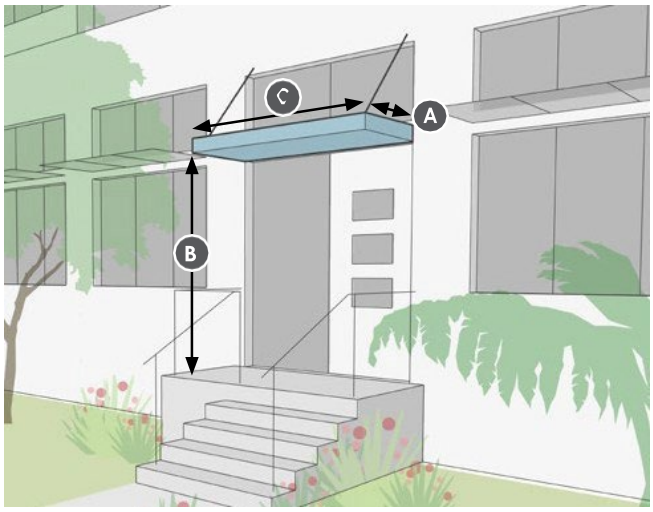
a. **Encroachment** Residential awnings may encroach into the setback or public right-of- way as defined in Division 6.01.010(D)(2): Encroachments into Required Setback Areas of the Ontario Development Code (see Figure 3.3-5).

b. **Material** Residential awnings shall be of simple shed form, made of code-compliant fire-resistant.

c. **Upper floors** Each individual awning shall cover no more than 1 window opening.

3.3.6 Canopy

Figure 3.3-6 Canopy



1. Element standards	Minimum	Maximum
A. Depth	Not Applicable	3 feet
B. Minimum clearance from landing	7 feet	8 feet
C. Length of terrace	Not Applicable	8 feet

2. Design standards

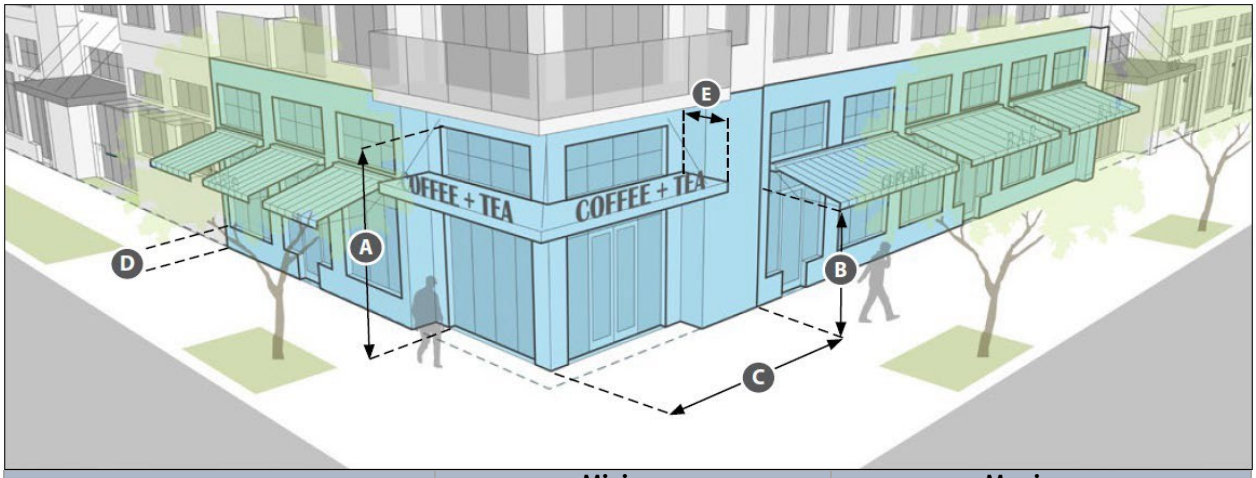
a. **Material** Canopies shall be of a simple form, made of metal and/or glass.
b. **Support** Canopies shall be supported either from below by metal brackets, or from above by rods or wires that affix to the wall (see Figure 3.3-6).
c. **Upper floors** Each individual canopy shall cover no more than 1 window opening.

3.4 Entry Elements

This section regulates the design of Building entry elements such as porches, dooryards, stoops, shopfronts, and lobby entries to the fulfill façade articulation requirements identified in *Section 3.1.3. Massing and Façade Design*.

3.4.1 Shopfront

Figure 3.4-1 Shopfront

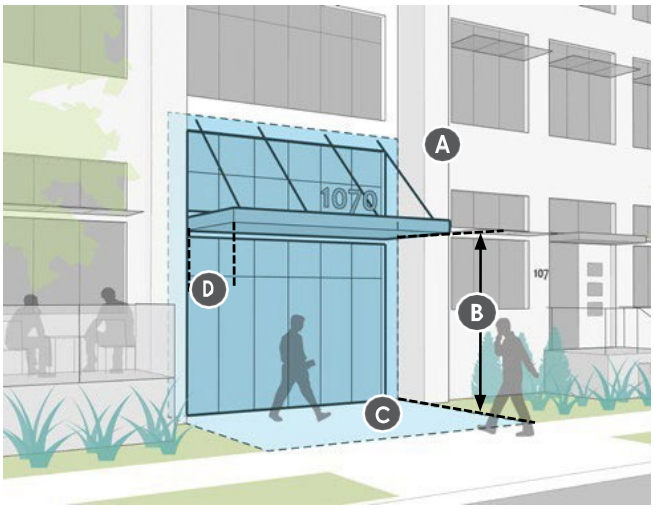


1. Element standards	Minimum	Maximum
A. Height to top of transom	12 feet	16 feet
B. Height to bottom of canopy/awning	8 feet	10 feet
C. Width of each shopfront bay	10 feet	25 feet
D. Height of shopfront base	1 foot	3 feet
E. Awning/Canopy Depth	4 feet	Not Applicable

2. **Design standards**
   a. **Vertical bays** Shopfront openings must align into bays, following the vertical bay specifications in *Section 3.2.3. Massing and Façade Design* of main street standards (see Figure 3.4-1).
   b. **Architectural façade elements**
      i. Shopfronts in vertical mixed-use buildings may integrate with Galleries or Arcades.
      ii. **Visibility** Windowsills in non-entry bays shall not exceed 2 feet above grade.
   c. **Setback use and design** Recessed shopfronts without dooryard, terrace, or porch designs shall extend to the property line.

3.4.2 Lobby Entry

Figure 3.4-2 Lobby Entry



1. Element standards	Minimum	Maximum
A. Height to top of transom	10 feet	20 feet
B. Height to bottom of canopy/awning	8 feet	Not Applicable
C. Distance to property line	Not Applicable	20 feet
D. Awning/Canopy Depth	4 feet	Not Applicable

2. Design standards.

a. **Lobby entries** shall be visible and distinguishable from adjacent ground floor units and include a minimum of 1 of the following design strategies (see Figure 3.4-2):
   i. Center placement for symmetry.
   ii. Prominent corner location.
   iii. Incorporate 2 architectural elements (columns, overhanging roofs, canopies, awnings, or ornamental light fixtures).
   iv. Recessed entry.
   v. Entry framing.

b. **Main Street massing types**
   i. Lobby entries shall not exceed 20% of the frontage length.
   ii. Allocate the remaining length to shopfronts.

c. **Visibility** Lobbies entries shall be visible from the public right of way as follows:
   i. Windowsills shall be no higher than 2 feet above adjacent grade.
   ii. Internal shade devices such as blinds, shades, or curtains are prohibited.

d. A forecourt may be introduced to provide a transition between the entry and sidewalk (forecourt standards are discussed in *Section 3.1.5 Open Space Standards*)

Chapter 4. Architectural styles

Below is a list of Architectural styles which shall be applied. A maximum of 1 architectural style shall be applied to each project.

4.1 Mission-Spanish Colonial Revival
4.2 Craftsman
4.3 American Mercantile
4.4 Tuscan
4.5 Modern
4.6 Farmhouse

4.1 Mission - Spanish Colonial Revival

Influenced by Spanish/Mediterranean and early Californian styles in the late 19th and early 20th centuries, the Spanish Colonial Revival style is asymmetrically arranged and includes low-pitched roofs covered with S-type clay red roofing tiles, wooden frames with stucco siding, and arches above doors, porch entries, and main windows (see Figure 4.1-1).

Figure 4.1-1 Mission - Spanish Colonial Revival



4.1.1 Form and Massing

1. **Façade design (Apply all)**

    a. Asymmetrical façade/elevations
    b. Three or more roof planes
    c. A minimum of 50 percent of the units shall have balconies or window treatments (such as shutters or awnings)
    d. Entrances are recessed a minimum 12 inches
    e. Additional details for projects over 4 stories, vertical mixed use, or with more than 15 buildings (requires 2 details):

i. Include **2** add-on projections such as verandas, arcades, balconies, and exterior stairs
ii. The ends of building massing's shall be stepped down
iii. One focal point, such as courtyard, tower, or fountain
iv. Apply wingwalls or columns on the ground level

4.1.2 Roof

1. **Roof design (Apply all)**
   a. Low-pitched (4:12 maximum) cross- or side-gabled roofs. The pitch shall remain constant except for a veranda or arcade.
   b. Red, fired, clay tile roofs. Tile types include both Spanish (S-shaped) and Mission (half-cylinder)
   c. Hipped roofs shall only be used in combination with gables or on a tower element.
   d. Shed roofs are only used in conjunction with verandas
   e. When a flat roof is used, it shall be screened by a parapet that is an extension of the wall plane or by a modified Mansard roof.

4.1.3 Materials and Colors

1. **Materials and colors (Apply all)**
   a. Roof tiles shall use terracotta, brown earth tones, or rustic red color palettes.
   b. White, cream, or tan stucco wall with smooth (20/30) textured finish (i.e., hand troweled)
   c. Wood shall be used as secondary wall material for the following and similar elements:

      i. Posts and exposed beams
      ii. Railing, spindles, and grille work
      iii. Shutters, window frames, and doors

   d. If windows have shutters, the shutters' color shall match the accent color that is used for doors or decorative trim.
   e. A minimum of 1 wrought-iron element (such as railings, hardware, and gates) shall be used.

4.1.4 Doors and Windows

1. **Door and windows (Apply all)**
   a. Accent windows shall be a minimum of 20 percent of the total windows
   b. The primary facade shall include a minimum of 1 arched element
   c. A minimum of 50 percent of the windows shall be casement windows
   d. All entrance-door surrounds shall be banded with ceramic tile, molded plaster, or painted accents.
   e. All casement windows and double-hung windows shall have wood frames
   f. Eighty percent of the windows shall have window muntins

4.1.5 Decorative Details

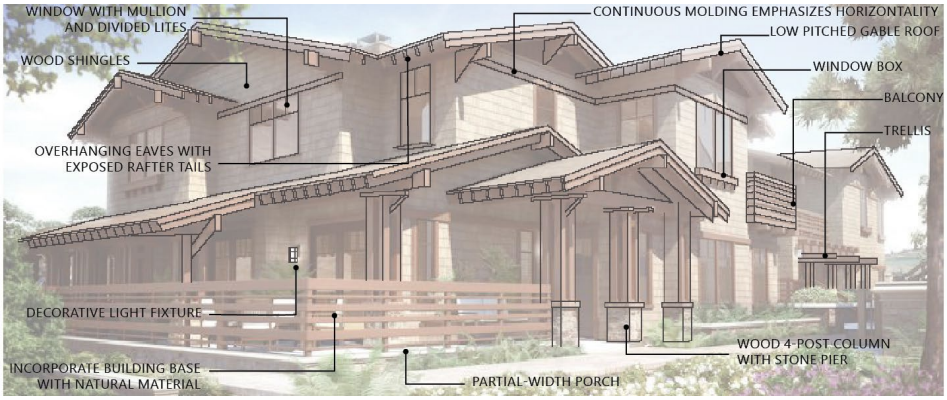
1. **Decorative details**
    a. All residential projects shall provide **a minimum of 4** of the following; and
    b. Residential projects 4 stories and taller, mixed-use projects, or projects with more than 15 buildings shall provide **a minimum of 6** of the following:

        i. Entry/front porch or patio
        ii. Decorative tiles
        iii. Clay tile vents
        iv. Wrought-iron balcony railings or support brackets
        v. Dark-metal light fixture and hardwires
        vi. Paired wood (or wood simulated) garage doors with iron hardware
        vii. Verandas, pergolas, or arcades
        viii. Exterior stairs
        ix. Awnings with metal spear supports

4.2 Craftsman

The Craftsman or California Bungalow style, originating from the early 20th-century Arts and Crafts movement. Notable features include the artful use of wood and natural materials, low-pitched roofs, horizontal orientation, earth-toned colors, exposed rafters, decorative brackets, porches, and columns (see Figure 4.2-1).

Figure 4.2-1 Craftsman



4.2.1 Form and Massing

1. **Façade design (Apply all)**
    a. Asymmetrical facades/elevations
    b. Three or more roof planes on the primary facade
    c. Front-facing gable roofs
    d. Street-facing units shall have balconies or porches
    e. The front lot line façade shall have 2 to 3 materials/colors

4.2.2 Roof

1. **Roof design (Apply all)**
    a. Low- to moderate-pitched gable or hipped roofs from 6:12 to 8:12
    b. Overhanging eaves (minimum 24 inches along primary elevation) with exposed rafter tails or beams.
    c. Brackets or knee braces at gabled ends
    d. Use of imitation wood or asphalt shingles

4.2.3 Materials and Colors

1. **Materials and colors (Apply all)**
    a. Brick or stone shall be used in the base
    b. Primary wall materials shall include dark-color wood shingles, clapboard siding, or fiber cement siding and natural materials such as stone or brick.
    c. Use of earth-toned color palette, such as browns and greens

d. The front lot line façade shall have a **minimum of 3** paint colors: 1 for the cladding, 1 for trim, and 1 for accents such as windows and decorative details.

4.2.4 Doors and Windows

1. **Door and windows (Apply all)**
   a. A minimum of 50 percent of the windows shall be casement windows.
   b. A minimum of 80 percent of the primary windows shall be multi-paned.
   c. A minimum of 2 types/shapes of windows shall be used
   d. Utilize flat wood trims (typically 4½ inches or 5½ inches wide) around the primary windows and entry doors.
   e. Window and door trim color shall be different with the color of the walls.
   f. Entry doors and garage doors shall have 1 row of vertical or horizontal glass panels.

4.2.5 Decorative Details

1. **Decorative details**
   a. All residential projects shall provide **a minimum of 4** of the following; and
   b. Residential projects 4 stories and taller, mixed-use projects, or projects with more than 15 buildings shall provide **a minimum of 6** of the following:

      i. Stone pier and battered wood support
      ii. Exposed rafter tails and knee-brace brackets
      iii. Dormers on the front façade
      iv. Second-story balcony
      v. Decorative attic/gable vent
      vi. Light fixtures shall be box-shaped, with metal frame and geometric pattern
      vii. Chimneys are visible at the exterior and arranged on a side elevation
      viii. Stained-glass or transom windows
      ix. Covered front porches shall tapered pillars
      x. Ground-level windows shall have muntins

4.3 American mercantile

This building type began in the late 19th century when, in the process of identifying towns and cities, housing and offices were built over retail stores. This mixed-use strategy is still relevant today as the reurbanization of existing city centers becomes an established pattern (see Figure 4.3-1).

Figure 4.3-1 American Mercantile



4.3.1 Form and Massing

1. **Façade design (Apply all)**
    a. Asymmetrical facades/elevations
    b. Simple, rectangular form
    c. Symmetrical placement of piers, columns, ground-floor storefronts, and openings on upper levels.
    d. Transparent windows and doorways shall be no less than 80 percent of the street frontage at the ground level.
    e. Multistory facades are divided into base, body, and top, with the ground floor taller than the upper floors.
    f. Columns or lintels over openings
    g. Bases are articulated by changes in material or changes in wall plane
    h. Minimal projections or recessions on wall plane

4.3.2 Roof

1. **Roof design (Apply all)**
    a. Flat roof.
    b. A projecting cornice or a receding, stepped parapet
    c. Cornice and details mimic and reference historical detailing
    d. Street-facing gable roof with roof pitches at minimum 5:12 unless concealed behind a parapet.

4.3.2 Materials and Colors

1. **Materials and colors (Apply all)**
    a. Walls shall be composed of brick
    b. Decorative moldings, cornices, or an applied ornament of stone or cast concrete shall be used.
    c. No more than 3 colors shall be used on any given facade
    d. Stucco and clapboard is prohibited

4.3.4 Doors and Windows

1. **Door and windows (Apply all)**
    a. Ground-floor windows and doors shall be large and expansive with a transom.
    b. Upper-floor windows shall be double-hung vertically and grouped with a rhythm consistent with the major storefront openings below.
    c. Entrance shall have higher bays, recessed entries by a minimum of 3 feet, or different color/materials.
    d. Upper-floor windows shall have window lintel and sill
    e. Transom windows above the doors and windows on the ground level
    f. Fifty percent of windows shall have muntins
    g. Upper floor windows shall have a minimum 2-inch recess

4.3.5 Decorative Details

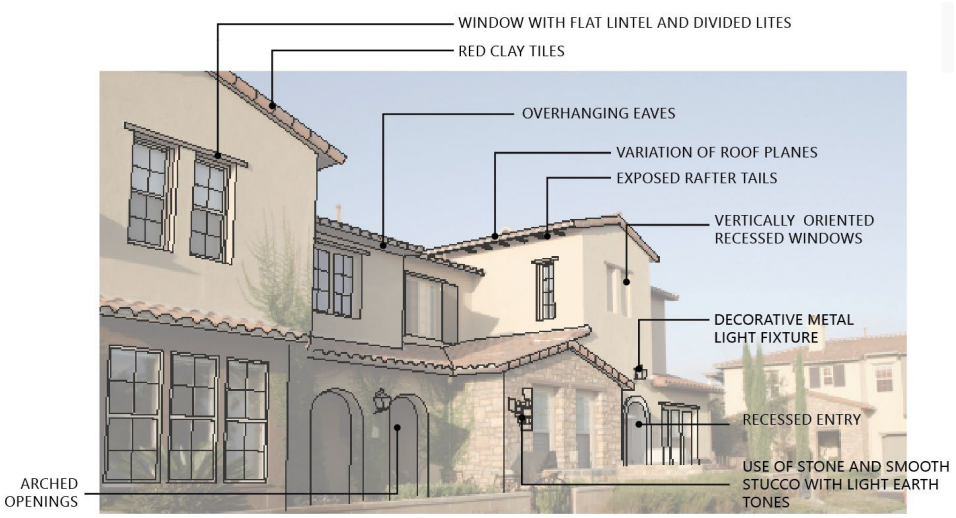
1. **Decorative details**
    a. All residential projects shall provide **a minimum of 4** of the following; and
    b. Residential projects 4 stories and taller, mixed-use projects, or projects with more than 15 buildings shall provide **a minimum of 6** of the following:

        i. Awnings, canopies, and second-floor balconies
        ii. Pedimented windows
        iii. Wide window trim with a keystone
        iv. Double-bracketed cornice
        v. Gable roof
        vi. Roof finial
        vii. Transom above door and windows on the ground level
        viii. Metal balcony railing
        ix. Canopy or awning
        x. Recessed entries
        xi. Cast-iron columns
        xii. Shopfront millwork

4.4 Tuscan

A blend of Spanish Revival and rural Italian elements, this interpretation of traditional Mediterranean architecture features stone and stucco, light earth tones, and red-tiled roofs. Classical elements like columns, arches, and decorative ironwork enhance visual complexity. Italianate references are evident in squared towers and projections. Features include porches, porticoes, and vertically oriented, recessed windows (see Figure 4.4-1).

Figure 4.4-1 Tuscan



4.4.1 Form and Massing

1. **Façade design (Apply all)**
    a. Asymmetrical arrangement of windows and design elements along front lot line.
    b. Porches, porticoes and/or Juliet balconies
    c. Recessed entries (a minimum of 3 feet)

4.4.2 Roof

1. **Roof design (Apply all)**
    a. Flat or low-pitched hip or gable roof (maximum 6:12 slope)
    b. Red-toned clay tiles
    c. Multiple roof levels (at minimum 3)
    d. Large overhanging eaves (minimum 12 inches) along primary elevation

4.4.3 Materials and Colors

1. **Materials and colors (Apply all)**
    a. Incorporate rough-hewn stone as accent feature
    b. Flat stucco walls in light earth tones
    c. Use of earth-toned color palette
    d. Brown or beige window frames

4.4.4 Doors and windows

1. **Doors and windows (Apply all)**
    a. Single- or double-hung windows shall be more horizontal in proportion, with six-over-six muntin patterns and 5½-inch-wide trim.
    b. Casement windows shall be paired with four-pane patterns for smaller windows and eight-pane patterns for larger windows.
    c. Vertically oriented rectangular or arched windows arranged in asymmetrical patterns.
    d. Casement or double-hung sash with flat or arched lintels
    e. Windows shall be recessed 3 to 12 inches

4.4.5 Decorative details

1. **Decorative details**
    a. All residential projects shall provide **a minimum of 4** of the following; and
    b. Residential projects 4 stories and taller, mixed-use projects, or projects with more than 15 buildings shall provide **a minimum of 6** of the following:

        i. Juliet balconies
        ii. Rafter extensions and brackets
        iii. Stone or stucco window/door trim
        iv. Rectangular or arched wooden door
        v. Arcade or porch at entry
        vi. Decorative ironwork (window grilles, railings, light fixtures, decorative planters)
        vii. Arched windows
        viii. Paired decorative wood shutters. Shutters shall be equal to half the width of the window. Shutter styles shall be paneled or louvered.
        ix. Use of brick, stone, or wood columns
        x. Stucco or stone chimneys
        xi. Different-color wood trellis
        xii. Arched openings and doorways at the ground level

4.5 Modern

Modern architecture prioritizes clean lines, geometric shapes, and the use of unconventional or industrial materials such as glass, metal, concrete, steel, and reclaimed materials characterized by extensive large windows, contemporary buildings maximize natural light, and passive solar heating (see Figure 4.5-1).

Figure 4.5-1 Modern



4.5.1 Form and Massing

1. **Façade design (Apply all)**
    a. An irregular, asymmetrical façade
    b. Rectangular structure
    c. Horizontal massing
    d. Straight and continuous lines
    e. Repeating lines and elements

4.5.2 Roof

1. **Roof design.** Flat or low-pitched roofs (4:12 slope max)

4.5.3 Materials and Colors

1. **Materials and colors (Apply all)**
    a. Use of raw and natural materials including wood, concrete, metal, and glass.
    b. Traditional materials (such as smooth stucco (20/30), wood, brick, and stone) shall be used as an accent material.
    c. Minimum 2 materials on the building facade.
    d. Use of color blocking for geometric forms and break up massing elements.
    e. Building facade shall incorporate **a minimum of 2** of the following as an accent:

        i. Awnings

ii. Popouts, trellis
iii. Arbor structures
iv. Balconies

4.5.4 Doors and Windows

1. **Door and windows (Apply all)**
    a. Large glass doors and/or window openings
    b. Window wrapping around a corner of the building
    c. Narrow aluminum window frames

4.5.5 Decorative Details

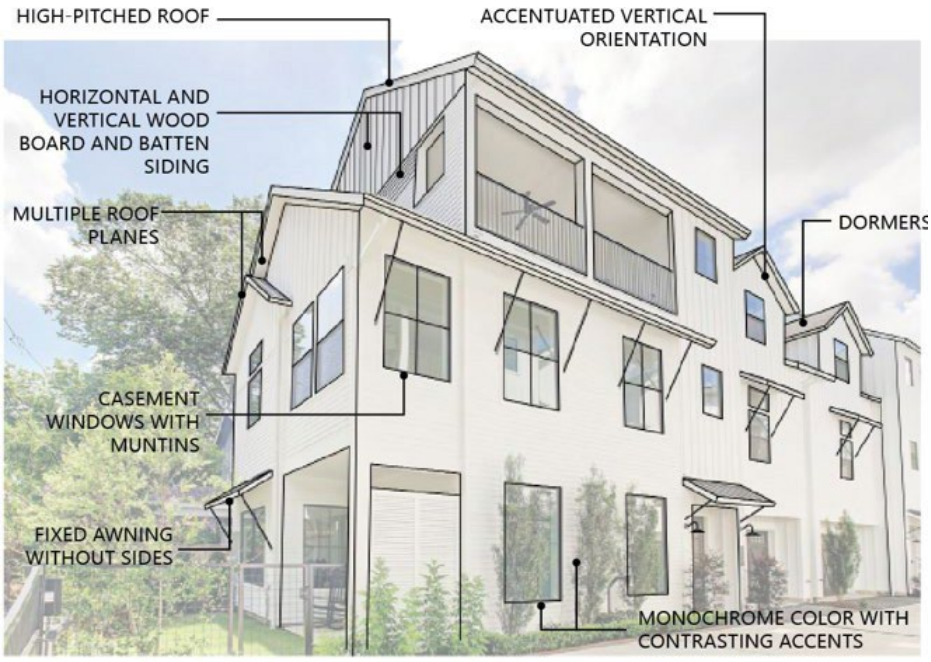
1. **Decorative details (Apply all)**
    a. All residential projects shall provide **a minimum of 4** of the following; and
    b. Residential projects 4 stories and taller, mixed-use projects, or projects with more than 15 buildings shall provide **a minimum of 6** of the following:

        i. Metal balcony railings
        ii. Clerestory windows
        iii. Floor-to-ceiling glass door
        iv. Floor-to-ceiling glass windows on the ground level
        v. Roof decks
        vi. Trellis shade structures
        vii. Metal awning
        viii. Roof overhang with exposed wood or steel frame

4.6 Farmhouse

Farmhouse style utilizes vertical or horizontal wood siding, monochrome colors with contrasting accents, minimal ornamentation, and medium to high-pitched roofs. Minimal detailing includes awnings, porches, and wall-mounted gooseneck lights (see Figure 4.6-1).

Figure 4.6-1 Farmhouse



4.6.1 Form and Massing

1. **Façade design (Apply all)**
    a. Straight exterior lines, geometric form
    b. Asymmetrical massing with a gable at the front of the house
    c. Repeating shapes and lines
    d. Gable roof creating a triangular wall on the ends.
    e. Incorporate farm and ranch forms (i.e. barns, silos, sheds, tank houses, and granary towers)
    f. Multiple gable and shed roof planes
    g. Geometric forms, industrial materials, and repetition
    h. Covered porches and awnings to break up volumes between lower and upper floors.
    i. Variation in projecting wall planes with a minimum 12-inch depth

4.6.2 Roof

1. **Roof design (Apply all)**
    a. High-pitched gabled roof or shed roof (minimum 6:12 slope)
    b. Intersecting gable roofs
    c. Dark asphalt shingle, metal roofs, or synthetic slate shingles
    d. Triangular rooflines
    e. Large overhangs (minimum 2 feet in length) above the patio and garage

4.6.3 Materials and Colors

1. **Materials and colors (Apply all)**
    a. Use metal, wood, or masonry
    b. Utilize board-and-batten siding, corrugated panels
    c. Monochrome accents of doors, windows, or architectural features
    d. Stucco is permitted as an accent material

4.6.4 Doors and Windows

1. **Doors and windows (Apply all)**
    a. Windows shall be double-hung with a proportion of 2 or 2½ times taller than wide
    b. Groupings of 2 or 3 double-hung window units
    c. Multi-paned windows
    d. Accent trim around window and door openings
    e. Double-hung or casement windows

4.6.5 Decorative Details

1. **Decorative details**
    a. All residential projects shall provide **a minimum of 4** of the following; and
    b. Residential projects 4 stories and taller, mixed-use projects, or projects with more than 15 buildings shall provide **a minimum of 6** of the following:

        i. Wide front porch with simple columns
        ii. Covered patio
        iii. Shed or gabled dormers
        iv. Carriage-style garage doors
        v. Dark shutters and window sashes
        vi. Gable brackets, vents, and trim
        vii. Iron-inspired barn-style lighting
        viii. Metal awnings without sides
        ix. Gooseneck light fixtures at the entrance
        x. Large doors and windows to maximize natural light
        xi. Multi-paned windows on the ground-level windows and doors

Chapter 5. Administration

5.1 Administration of Standards

This chapter provides methodology for the implementation of the Objective Design Standards, including administration, project approval, and appeals. The responsibilities of the City of Ontario Planning Staff shall include administering, interpreting, and enforcing all requirements and standards of this document.

Any terms not defined herein and any issues affecting the design and development of the subject project area not specifically addressed in the ODDS shall be governed by the provisions of the Ontario Development Code.

5.1.1 Interpretation and Severability

Unless otherwise provided herein, any ambiguity concerning the content or application of the Objective Design Standards shall be resolved by the City of Ontario Executive Director Community Development (Director) or his / her designee in a manner consistent with the goals, policies, purpose, and intent established in this document. If any portion of these standards is declared to be invalid or ineffective in whole or in part, such decision shall not affect the validity of the remaining parts of the remaining portions thereof.

5.1.2 Reference Documents

- **The Ontario Plan**
- **City of Ontario Development Code**

5.2 Glossary of terms

Alley. A narrow, low-capacity thoroughfare with 1 shared lane and no parking lanes which provides secondary access to all Lots within a Block. Driveways, Parking Aisles, and Fire Lanes are not Alleys.

Arbor (entrance arbor). A wooden structure that is intended to define an entrance into an on-site outdoor space, such as a front yard or parking lot.

Arcade. A facade with a ground floor colonnade supporting the upper stories of the building, intended to provide shade, glare control, and weather protection.

Bay. A facade division comprised of groupings of vertically aligned facade elements, such as shopfronts, windows, awnings, and wall materials that are stacked 1 above the other. Bays can be differentiated from 1 another by changes in material, color, and/or use of architectural elements such as pilasters.

Bay Window. A window or series of windows projecting from the exterior wall of a building and forming an extension, or bay, of the room. Subject to the requirements of the regulating zone, bay windows may encroach into the setback or public right-of-way.

Block. An aggregation of Lots, Passages, Carless Streets, and driveways which are bound on all sides by Streets. Block dimensions are measured along private Street Rights-of-way.

Building Base. The lowermost portion of a building facade that is distinctly differentiated from upper floors or upper wall surfaces. The base of mixed-use buildings consists of the ground floor or, for taller buildings, an ensemble of the first 2 floors. The base of multi-family or office buildings can consist of the entire ground floor, or a low band (three to 4 feet high) comprised of different materials or colors than upper wall surfaces.

Building Length. The length of the building as measured parallel to the front property line

Court. A semi-public, shared open space within a lot, for use by more than 1 resident or commercial tenant. Courts generally provide visitor access from the street to dwellings, retail, or office spaces, and/or buildings within the lot that lack direct access from the street. The degree of enclosure or openness of the court may vary, as per the requirements of each zone and the design intent of the project designer.

Director. The Director of Community Development, or designee.

Drive Aisle. A vehicular lane within a parking lot that provides access to the individual parking spaces.

Driveway. A vehicular lane within a lot that leads to onsite parking.

Encroachment: Structure extending into a required setback area.

Facade: Exterior wall of a building adjacent to a street or public open space.

Facade Increment: Visually distinguished complete facade composition.

Fenestration: Transparent glass openings in a building face.

Fire Lane: On-site right of way for emergency vehicle access.

Forecourt: Open space extension into a lot, defined by building faces.

Frontage, Private: Building facade and area between it and property line along a street.

Frontage, Public: Area between street-adjacent property line and the first travel lane.

Gallery: Ground-floor colonnade providing shade, glare control, and weather protection.

Green: Publicly accessible open space at the intersection of streets, landscaped for recreation.

Ground Floor: Building floor nearest to the existing grade around the building.

Height, Building: Height measured from finished grade at any property line along the street.

Loggia: Colonnaded or arcaded space within a building, open to the air on 1 side.

Lot: Portion of land for allowed development, synonymous with "property" or "design site."

Lot Line: Front, side, or rear boundary of a lot, synonymous with property line.

Massing (or Facade) Increment: Segment of a building facade divided into visually discrete compositions.

Passage: A pathway designed for pedestrians on a property, like a Paseo, but may not extend through an entire block.

Parking Court: A public space between buildings designed for surface parking.

Pergola: A wooden structure intended to provide shade or define an entrance into an on-site outdoor space.

Pier, Shopfront: The vertical elements on either side of a shopfront bay.

Place Types: A classification of urban environments based on streetscape and building character, including attributes such as building placement, height, frontage, land use, density, and streetscape design.

Plaza: An open space at the intersection of important streets for civic and commercial activities. Sizes range from one-half (1/2) acre to 2 acres, defined by surrounding buildings and typically paved with arranged shade trees. Amenities may include fountains and food kiosks.

Primary Access: The principal means of approaching and entering a building or property.

Primary entrances: Typically referring to front doors, including direct access into a ground floor residential unit, nonresidential space, common lobby, or zaguan leading to a court.

Privacy Windows: Windows that are either opaque and unopenable or start at minimum 6 feet from the floor.

Public Open Space: Off-street outdoor space owned by the city for public use or on a private parcel adjacent to a right of way, functioning as a public space.

Publicly Accessible: Open spaces or streets open/available to the public, whether publicly or privately owned.

Shopfront: A ground-floor frontage assembly with large transparent windows, a conspicuous entrance leading directly into the unit, spatially defined by vertical elements called piers.

Side, Lot Line: Any property line shared with a neighboring property when there is no public open space between them.

Side yard: The portion of a parcel extending from the front property line to the rear property line and between the side property line and the closest side of the principal building. It may also be designed as open space.

Story height: The vertical distance from floor to ceiling, measured from the top of the floor finish to the bottom of the ceiling joists for the topmost story.

Street: A right of way defined as a street, excluding paseos, driveways, parking aisles, fire lanes, and alleys.

Street, Front: The side of the lot adjacent to a street, a property may have multiple fronts.

Street, Side: (Applicable only to corner lots) The side of the lot adjacent to a street or public open space that is not considered the front.

Trellis: A wood or metal frame supporting thin overhead wooden or metal strips or latticework, providing shade and supporting climbing plants. It may be freestanding.

5.3 Checklist

See Attachment A

ATTACHMENT A

March 18, 2025

Objective Development & Design Standards Checklist

The Objective Development & Design Standards (ODDS) Checklist is applicable to both Multiple Family Development and Mixed-Use Development. Refer to the ODDS Chapter's 1 through 4 for specific additional information.

In addition to any objective standards imposed through the underlying base zone, the ODDS document provides standards for housing developments limited to the following areas (refer to the Policy Plan Land Use Plan Exhibits LU-01, LU-04, and CD-01 and the official Zoning Map):

- **Multiple-Family Development.** Applies to all multiple-family residential categories as shown on Policy Plan Land Use Plan Exhibit LU-01 (LMDR, MDR, and HDR, and Mixed-Use land use designations).
- **Mixed-Use Development.** Applies to mixed-use categories as shown on Policy Plan Land Use Plan Exhibit LU-01and associated Place Types as shown on Exhibit CD-01.

The Applicant is required to provide a completed Checklist upon application submittal.

ODDS – Chapter 2

2.0 MULTIPLE FAMILY STANDARDS

	Applicant		City	
	Done	N/A	Done	N/A
2.1 Site Design Standards				
2.1.1 Site Design				
1. **Lot lines** The lines bounding a lot. The classifications of "Lot Line" are as follows:				
a. **Front** This line separates the narrowest street frontage of a lot from a public or private street right-of-way				
b. **Interior "side"** Any lot line that is not a front or rear lot line and does not border a public or private street right-of-way				
c. **Rear** The lot line opposite and farthest from the front lot line. In the case of an irregularly shaped lot, a straight line shall be drawn to determine the rear lot line.				
d. **Street side** Any lot line that is not a front or rear lot line, and which abuts a public or private street right-of-way				
2.1.2 Site Access				
1. **Alleys** Vehicular access to the on-site parking areas shall be from the alley				
2. **Roadway inclusion** Pedestrian access from the public right-of-way must include sidewalk on both sides of the driveway				
2.1.3 Parking				
A. Placement on site Parking shall be designed in compliance with the applicable standards contained in Division 6.03 (Off-Street Parking and Loading) of the Ontario Development Code, except as modified by the following:				
1. **Surface parking**				
a. **Setbacks** Surface parking lots adjacent to public or private streets shall include a landscaped and irrigated setback a minimum of 5 feet in width measured from property.				
b. **Orientation** Surface parking lots shall be located at the rear, side, or internal lot lines and away from the front lot line.				
2. **Above-ground parking structures** Ground-floor parking shall be sited behind residential, office, or commercial spaces.				
3. **Semi-subterranean parking** A semi-subterranean garage shall not extend beyond the building frontage line and shall not extend higher than 4 feet above sidewalk grade.				
4. **Subterranean parking** A subterranean parking structure may extend to all property lines.				
5. **Private residential garages** Each private garage must have vehicular access from an alley, side street, or motor court.				
B. Surface parking lot design. Surface parking lots shall be designed in compliance with the applicable standards contained in Division 6.03 (Off-Street Parking and Loading) of the Ontario Development Code, except as modified by the following:				
1. **Screening**				
a. **Street-adjacent parking lots**				
i. A street-adjacent surface parking lot shall be screened from view by a low wall or hedge no higher than 3 feet				

ODDS – Chapter 2

2.0 MULTIPLE FAMILY STANDARDS	Applicant		City	
	Done	N/A	Done	N/A
in height.				
ii. Walls and hedges must be a minimum 18 inches from the back of sidewalk				
iii. Landscaped berms are prohibited				
b. **Neighboring parcels** Views from neighboring properties shall be screened with trees and shrubs				
2. **Landscape** Landscaping materials shall be applied in compliance with the applicable objective parking lot landscape standards contained in Ontario Development Code Section 6.05.030 (Required Landscape Areas)				
3. **Shade structures** Shade structures, if used, shall match the architectural style of the project buildings				
C. Parking court design				
1. **Design standards**				
a. The width of the parking court, when measured from 1 building face to the other, shall not exceed 100 feet				
b. The parking court shall consist of only 1 parking bay, and this bay shall not exceed a maximum width of 62 feet				
c. On both sides of the parking court, sidewalks must be established, each with a minimum width of 15 feet. These sidewalks must connect with the adjacent public sidewalk network.				
D. Parking structure design				
1. **Context-sensitive façade design** Parking structure façades shall incorporate a minimum 2 design elements using the architectural styles identified in Chapter 4: Architectural styles and adhere to Main Street or Urban and facade design standards applied in Section 2.2.2 Building Types.				
2. **Parking structure standards**				
a. Any driveway providing access to a parking structure shall have a minimum width of 28 feet				
b. Single access lane driveways into the structure shall not exceed 14 feet in width				
c. Parked vehicles shall be screened from view from adjoining streets				
d. Signs as shall be consistent with Division 8: Sign Regulations of Ontario Development Code				
2.1.4 Open Space Standards				
A. Common open space and public frontage				
1. **Common open space type requirements** Common open space shall cover a minimum of 15 percent of the total lot area with the following **exceptions**:				
a. **Close to park** Common on-site open space shall not be required for lots within a 1/4-mile of an existing park or plaza a minimum 0.25 acres in size				

ODDS – Chapter 2

2.0 MULTIPLE FAMILY STANDARDS	Applicant		City	
	Done	N/A	Done	N/A
b. **Common open space types** 1 or more of the common on-site open space types listed under "Common Open Space Types" shall be provided on each lot that has a residential use.				
2. **Access and visibility** At-grade open space shall be accessible and visible from the adjacent ground floor				
B. Common open space types				
Forecourt				
1. **Design standards**				
a. A forecourt may occur on any floor and may be used as an allowed method of creating façade massing increments.				
b. **Minimum dimensions** Forecourts shall be a minimum of 15 feet by 15 feet				
Side garden				
1. **Design standards**				
a. **Minimum side garden dimensions**: 15 feet by 15 feet				
b. Dooryards, porches, stoops, and architectural elements may encroach into the side garden as follows:				
i. Up to a total of 30 percent of the side garden's width or length				
ii. A ground-floor encroaching element shall be allowed to project a maximum of 8 feet into the side garden				
Court				
1. **Design standards.**				
a. **Minimum dimensions:** All courts shall be a minimum of 20 feet by 30 feet				
b. **Enclosure**				
i. A court shall have building walls on a minimum 2 sides, while the third and fourth side can be defined by architectural or landscape elements (i.e., low walls, trellises, hedges, or rows of trees).				
ii. A driveway located adjacent to a court shall be screened by architectural elements (e.g., low walls or trellises, hedges, or rows of trees).				
c. **Access**				
i. Courts shall be accessed from the street or walkway				
ii. Units shall be allowed to take direct access through a court				
d. **Encroachments**				
i. Dooryards, porches, stoops, and architectural elements may encroach into the Side Yard				
ii. A ground floor encroaching element shall not encroach beyond 8 feet of the building's façade into the court				
e. **Common Area** A court shall serve as communal spaces and pedestrian access				

ODDS – Chapter 2

2.0 MULTIPLE FAMILY STANDARDS

	Applicant		City	
	Done	N/A	Done	N/A
f. **Amenities** A court shall include a minimum 1 of the following amenities: a seating area, a fountain, a BBQ island, or an outdoor fireplace.				

ODDS – Chapter 2

2.0 MULTIPLE FAMILY STANDARDS	Applicant		City	
	Done	N/A	Done	N/A
Passage				
1. **Design standards**				
a. **Location** Passages shall be provided between buildings or side gardens				
b. **Size** Passages shall be a minimum width of 8 feet with minimum of 2 feet of landscape strip on each side				
C. Private Open Space				
1. **General standards**				
a. A minimum of 60 square feet of private open space shall be provided for each residential unit and a minimum 1 of the private on-site open space types shall be provided.				
b. **Exception:** Private on-site open space shall not be required for a project site that is located within 1/4-mile distance of an existing park or plaza that is a minimum 0.25 acres in size.				
D. Private Open Space Types				
Private roof deck				
1. **Description** A private open space located on the roof of a building dedicated to a single unit				
2. **Design standards** Minimum dimensions of 7 feet by 7 feet				
Backyard				
1. **Description** A private, landscaped open space located behind each individual unit that is intended to provide passive or active outdoor space for the users of the unit.				
2. **Design standards**				
a. **Size** Minimum dimensions of 20 feet by 15 feet				
b. **Encroachments** Encroachment into the backyard is allowed up to 30% of the rear yard area				
Architectural façade elements as private open space				
1. **Description** The following elements defined in Section 2.3 Architectural Façade Elements may be used to meet on-site private open space requirements.				
a. Balcony				
b. Terrace Balcony				
Entry elements as private open space				
1. **Description** The following elements defined in Section 2.4 Entry Elements may be used to meet on-site private open space requirements.				

ODDS – Chapter 2

2.0 MULTIPLE FAMILY STANDARDS	Applicant		City	
	Done	N/A	Done	N/A
a. Dooryard				
b. Porch				
2.1.5 Landscaping				
1. **General to all** Landscaping materials shall be applied in compliance with the applicable landscape standards contained in Ontario Development Code Section 6.05.030 (Required Landscape Areas).				
2.1.6 Fences and Walls				
1. **Fence and wall heights** Walls and fences shall be designed in compliance with the applicable standards contained in Division 6.02 (Walls, Fences, and Obstructions) of the Ontario Development Code.				
2.2 Multiple-Family development standards				
Table 2.01 Multiple-Family Development Standards per Development Type *(Refer Section 2.2.2 Building Types)*				
A. Building Development Standards				
1. **Minimum Setback from Public Street Property Lines:** *(refer to Note 9 – Table 2.01).*				
a. **Arterial** **Urban** (25 du/ ac or greater) - 0 feet **Neighborhood** (Less than 25 du/ac) – 10 feet **Housing** (Less than 25 du/ac and 5 units or less – 14 feet				
b. **Collector** **Urban** (25 du/ ac or greater) - 5 feet **Neighborhood** (Less than 25 du/ac) – 10 feet **Housing** (Less than 25 du/ac and 5 units or less – 14 feet				
c. **Local** **Urban** (25 du/ ac or greater) – 5 feet **Neighborhood** (Less than 25 du/ac) – 15 feet **Housing** (Less than 25 du/ac and 5 units or less – 20 feet				
2. **Minimum Setback from Interior Project Boundary Property Lines –** 5 feet				
3. **Minimum Setback from Public Alley Property Lines –** 5 feet				
4. **Minimum Setback from Private Drives/Alleyways (from edge of drive aisle)**				
a. Living Area – 10 feet				

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2.0 MULTIPLE FAMILY STANDARDS	Applicant		City	
	Done	N/A	Done	N/A
b. Garages and other nonhabitable Structures – 10 feet				
5. **Minimum Setback from Dwellings to Parking Spaces**				
a. Living Area – 10 feet				
b. Garages and other non-habitable structures – 5 feet				
6. **Minimum Setback from Parking Space or Drive Aisle to Wall or Fence –** 5 feet				
7. **Minimum Separation Between Detached Buildings:**				
a. Dwelling Front to Front- < 2-Stories: 25 FT; > 3 Stories: 30 FT unless otherwise specified by massing requirements ("Space between buildings") in Section 2.2.2 Building Types. *(refer to Note 5 – Table 2.01)*.				
b. Dwelling Front to Rear- < 2-Stories: 25 FT; > 3 Stories: 30 FT unless otherwise specified by massing requirements ("Space between buildings") in Section 2.2.2 Building Types. *(refer to Note 5 – Table 2.01)*.				
c. Dwelling Front to Side - < 2-Stories: 25 FT; > 3 Stories: 30 FT unless otherwise specified by massing requirements ("Space between buildings") in Section 2.2.2 Building Types. *(refer to Note 5 – Table 2.01)*.				
d. Dwelling Side to Side - < 2-Stories: 10 FT; > 3 Stories: 15 FT unless otherwise specified by massing requirements ("Space between buildings") in Section 2.2.2 Building Types. *(refer to Note 5 – Table 2.01)*.				
e. Dwelling Side to Rear - 15 FT; unless otherwise specified by massing requirements ("Space between buildings") in Section 2.2.2 Building Types. *(refer to Note 5 – Table 2.01)*.				
f. Dwelling Rear to Rear- 20 FT unless otherwise specified by massing requirements ("Space between buildings") in Section 2.2.2 Building Types. *(refer to Note 5 – Table 2.01)*.				
8. **Garage to Garage (or other nonhabitable structures)** a. 30 FT – Entry to Entry b. 30 FT – Entry to Side c. 10 FT – Side to Side d. 10 FT – Side to Rear				
9. **Minimum Storage Space –** 240 CF *(refer to Note 4 – Table 2.01)*				
10. **Maximum Street Façade Height** a. Downtown District – 45 Feet *(refer to Note 8 – Table 2.01)* b. Other Districts & Corridors – n/a c. Neighborhood Centers - 35 Feet				
11. **Maximum Building Height**				

ODDS – Chapter 2				
2.0 MULTIPLE FAMILY STANDARDS	Applicant		City	
	Done	N/A	Done	N/A
a. Downtown District – n/a *(refer to Note 8 – Table 2.01)* b. Other Districts & Corridors – n/a *(refer to Note 5 – Table 2.01)* c. Neighborhood Centers -60 FT *(refer to Note 5 – Table 2.01)*				
12. **Minimum Setback from Major Pipelines -** 50 FT (to habitable structures) *(refer to Note 7 – Table 2.01)*				
2.2.1 Height Standards				
1. **Height transition zones** Requires all new buildings within 100 feet of less intense development patterns (existing or planned) to reduce heights to ensure neighborhood compatibility.				
2. **Multiple family development types** The following height limits shall apply to all proposed multiple family development types.				
a. Buildings within 100 feet of single-family residential dwellings must not exceed 35 feet or the height of adjacent residential buildings, whichever is greater				
b. Buildings within 100 feet of undeveloped single-family zone parcels shall not exceed 35 feet in height				
2.2.2 Building Types				
1. **Identify** the suitable building type for the project based on its density, including:				
a. **"Urban"** (applies to multiple-family development projects with 25 dwelling units per acre or more). Projects less than 1 acre in size but exceeding 25 du/ac can use neighborhood or housing Form in lieu of the urban massing form.				
b. **"Housing"** (applies to multiple-family development projects with fewer than 25 dwelling units per acre that include buildings with 5 or fewer units).				
c. **"Neighborhood"** (applies to multiple-family development projects with fewer than 25 dwelling units per acre that include buildings with more than 5 units)				
A. Urban massing and façade design				
Urban massing and façade design standards are required for all multiple-family developments projects with 25 du/ac or more				
Massing increments				
1. **Massing standards**				
a. **Size of massing increments** Building facades along front and side lot lines that face public streets and are longer than 100 feet shall be divided into massing increments as follows: i. The maximum length of a single massing increment shall not exceed 150 feet ii. A minimum 2 distinct massing increments shall be provided				

ODDS – Chapter 2

2.0 MULTIPLE FAMILY STANDARDS	Applicant		City	
	Done	N/A	Done	N/A
b. **Articulation of massing increments** Individual massing increments shall be differentiated from one another using a minimum 1 of the following massing strategies:				
i. Vary parapet height by a minimum of 3 feet				
ii. Increase number of stories				
iii. Set back upper floor. Set the upper floor or multiple upper floors back a minimum of 15 feet from the facade				
iv. Set the entire facade back a minimum of 10 feet for 20 feet				
v. Incorporate tower element				
c. **Massing increments with distinct facades** Massing increments that have distinct facades and shall appear as distinct buildings.				
d. **Repeating massing increment design** A massing increment design may be repeated on the same project elevation. Repeated massing increments shall be separated by a distinct massing increment.				
2. **Element standards**				
a. Building façade along font lot line - 400 feet max				
b. Massing increment - 150 feet max				
c. Space between buildings - 0 feet min				
d. Façade setback (if elected) - 10 feet x 10 feet min				
e. Building base height - 15 feet min				
f. Building façade alongside lot line - 200 feet max.				
g. Height difference between massing increments - 3 feet min				
h. Upper-level setback from façade - 15 feet min				
Façade Composition				
1. **Façade composition standards**. The building facade shall be divided into a base and body as follows:				
a. **Base** Separate the building base (entire ground floor facade or first 2 floors of building's 5 stories or taller) from the rest of the facade for a minimum of 15 feet (fewer than 5 stories) or 25 feet (5 stories or more) from grade, using a minimum **2** of the following strategies:				
i. Provide a string course at the top of the first story				
ii. Specify base materials different from rest of façade				
iii. Specify base colors different from rest of façade				
iv. Provide a ground floor Arcade or Gallery per Section 2.3 Architectural Façade Elements.				

ODDS – Chapter 2

2.0 MULTIPLE FAMILY STANDARDS

	Applicant		City	
	Done	N/A	Done	N/A
b. **Body** The body of the building consists of the facade of all floors located above the base and shall be designed as follows:				
i. Windows shall be organized in bays, bands, curtain wall, and grid of windows consistent with the Facade Fenestration Standards for the Urban massing type.				
ii. Each massing increment must contain its entire facade composition without elements overlapping the division between increments.				
Fenestration design				
1. **Façade fenestration standards**				
a. **Minimum fenestration** Facade designs must meet a minimum fenestration percentage, calculated as the total window and door area divided by the total area of that part of the façade.				
i. **Ground floor** (a) Front lot line: 70% minimum (b) All other frontages: 50% minimum (c) Ground floor windowsills on facades along the front lot line shall be no higher than 3 feet above the adjacent grade (d) Ground floor bathroom windows are prohibited on facades that face front lot line				
ii. **Upper floors** 15% minimum.				
B. Neighborhood massing and façade design				
Neighborhood massing and façade Design standards are required for all multiple-family development types applicable to multiple-family development projects with fewer than twenty- five (25) du/ac that include buildings with more than 5 units.				
Massing increments				
1. **Element standards**				
a. Building façade along front lot line – 135 feet max				
b. Building façade length alongside interior lot line – 135 feet max				
c. Space between buildings – 15 feet min				
d. Massing increment – 75 feet max				
e. Height difference between massing increments – 2 feet min				
f. Façade setback (if elected) – 10 feet x 20 feet				
2. **Massing standards** a. **Size of massing increments** Building facades along front and side lot lines that face public streets and are longer than				

ODDS – Chapter 2

2.0 MULTIPLE FAMILY STANDARDS	Applicant		City	
	Done	N/A	Done	N/A
135 feet shall be divided into massing increments as follows:				
i. The maximum length of a single massing increment shall not exceed 75 feet				
ii. A minimum of 2 distinct massing/architectural increments shall be provided using 1 strategy from the massing strategies list and 1 strategy from architectural strategy list.				
b. **Massing strategy list**				
i. Vary height by a minimum of 3 feet				
ii. Increase number of stories				
iii. Set back upper floors by a minimum 15 feet				
iv. Set the entire facade back a minimum of 10 feet for twenty feet				
v. Increase story height				
vi. Incorporate tower element				
c. **Architectural strategy list**				
i. Use different facade materials and/or colors				
ii. Window treatment and design. Use different window types, configurations, and/or frame colors				
iii. Diversify facade elements (balconies, trellises, chimneys, awnings) as per Section 2.3 Architectural Façade Elements.				
iv. Vary the building entry element type or design of stoops, porches, dooryards, and other elements identified in Section 2.4 Entry Elements.				
v. Massing increments that have distinct facades, shall appear as distinct buildings				
vi. A massing increment design can be repeated twice on the same project elevation, with a distinct separation between repeated increments.				
Façade composition				
1. **Façade composition standards**				
a. **Multi-story building façades** The building facade shall be divided into a base and body as follows:				
i. **Base** Separate the building base (entire ground floor facade or first 2 floors of building's 5 stories or taller) from the rest of the facade for a minimum of 15 feet (fewer than 5 stories) or 25 feet (5 stories or more) from grade, using a minimum 2 of the following strategies.				
(a) Provide a string course at the top of the first story				
(b) Specify base materials different from rest of façade				
(c) Specify base colors different from rest of façade				

ODDS – Chapter 2

2.0 MULTIPLE FAMILY STANDARDS

	Applicant		City	
	Done	N/A	Done	N/A
(d) Provide a ground floor Arcade or Gallery per Section 2.3 Architectural Façade Elements				
ii. **Body** The body of the building consists of the facade of all floors located above the base and shall be designed as follows:				
(a) Windows shall be organized in bays, bands, curtain wall, and/or grid of windows consistent with the Facade Fenestration Standards for the Neighborhood massing type.				
(b) Each massing increment's entire facade composition must be contained within its boundaries, with no overlap of facade elements, like window openings and balconies, across the division between increments.				
Fenestration Design				
1. **Façade fenestration standards**				
a. **Minimum Fenestration** Facade designs must meet a minimum fenestration percentage, calculated as the total window and door area divided by the total area of that part of the facade:				
i. **Ground Floor:** 30% minimum (a) Ground floor windowsills on facades along the front lot line that face public streets shall be no higher than 3 feet above the adjacent grade.				
(b) Ground floor bathroom windows are prohibited on facades that face the front lot line				
ii. **Upper floors:** 15% minimum				
C. House-form massing and façade design				
House-form massing and façade Design standards for projects with densities below 25 du/ac that include buildings with 5 or fewer units.				
1. **Element standards**				
a. Building Façade length along font lot line – 60 feet max.				
b. Massing Increment - 60 feet max.				
c. Building Façade length alongside lot line - 60 feet max.				
d. Space between buildings – 15 feet max.				
2. **Massing and façade composition standards**				
a. **Massing increments** A massing increment shall include the whole length of a single building façade, up to 60 feet in length. Only **1** massing increment per building façade shall be included.				
b. **Length of buildings** Buildings along front and side lot lines that face public streets shall be no longer than 60 feet.				
c. **Space between buildings** Buildings along front and side lot lines shall be separated by a minimum 15 feet.				

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2.0 MULTIPLE FAMILY STANDARDS	Applicant		City	
	Done	N/A	Done	N/A
d. **Articulation of building façade**. Frontages along front and side lot lines must differ from neighboring buildings on-site using a minimum of **2** of the specified massing and architectural strategies:				
i. **Façade setback** Setting a portion of the facade back a minimum of 2 feet for a length of 20 feet				
ii. **Material or color** Use different facade materials and/or colors consistent with the architectural style				
iii. **Window treatment and design** Use different window types, configurations, and/or frame colors				
iv. **Architectural façade elements** Vary façade elements (balconies, trellises, chimneys, awnings) according to Section 2.3 Architectural Façade Elements.				
v. **Entry elements** Vary the building entry element type or design of stoops, porches, dooryards, and other elements identified in Section 2.4 Entry Elements.				
vi. **Vary roof form** Vary the roof form of different increments such as gabled, hipped, and others consistent with the architectural style of the building (selected from Chapter 4).				
Fenestration Design				
1. **Façade fenestration standards**				
a. **Minimum fenestration.** Facade designs must meet a minimum fenestration percentage, calculated as the total window and door area divided by the total area of that part of the facade:				
i. **Ground floor:** 30% minimum (a) Ground floor windowsills on facades along the front lot line that face public streets shall be no higher than 3 feet above the adjacent grade. (b) **Exception:** Windows on garage panel door (c) Ground floor bathroom windows are prohibited on facades that face front lot line				
ii. **Upper floors:** 15% minimum				
iii. The horizontal distance between wall openings shall not exceed 15 feet within a facade or massing increment.				
2.2.3 Material and Detailing				
Building Materials				
1. **Prohibited materials**				
a. Fiberglass or plastic (false) architectural or facade elements or ornamentations are prohibited				
b. Rough-cast and sand-finishes are prohibited on all building surfaces that are visible from a street				
c. Reflective materials, such as mirrored glass, shiny metal, and chrome				
2. **Combining materials** When combining **2** or more wall materials on **1** facade:				
a. Place lighter weight materials above more substantial ones (e.g., glass above wood, wood above stucco, stucco				

ODDS – Chapter 2				
2.0 MULTIPLE FAMILY STANDARDS	Applicant		City	
	Done	N/A	Done	N/A
above masonry).				
b. Vertical joints between different materials shall only occur at inside corners.				
Windows and Doors				
1. **Materials and types**				
a. **Window recess** Windows shall be recessed specific to each building's architectural style listed in Chapter 4: Architectural styles but shall be no less than 2 inches for any style.				
b. **Window Material**				
i. Vinyl or vinyl clad windows shall resemble wood windows (i.e., faux wood or engineered wood) in detailing and profile thickness and employ muted patterns and colors consistent with the building's architectural style.				
c. **Trim**				
i. **Window and door trim materials** Wood or cement fiber board is permitted				
ii. **Building trim materials** Wood, stone, cast stone, pre-cast concrete, glass fiber, reinforced concrete, and cement fiber board.				

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2.0 MULTIPLE FAMILY STANDARDS

	Applicant		City	
	Done	N/A	Done	N/A
2.3. Architectural façade elements				
2.3.1 Awning				
1. **Element standards**				
a. **Depth**				
Minimum - Not applicable				
Maximum - 3 feet				
b. **Clearance above ground**				
Minimum - 8 feet				
Maximum - Not applicable				
c. **Length** Refer to Design Standards				
2. **Design standards**				
a. **Encroachment** Residential Awnings may encroach into the setback or public right- of- way as defined in Division 6.01.010(D)(2): Encroachments into Required Setback Areas of the Ontario Development Code.				
b. **Material** Residential Awnings shall be of a simple shed form and made of code- compliant fire-resistant material.				
c. **Upper floors** Each individual awning shall cover no more than **1** window opening.				
2.3.2 Projecting Room				
1. **Element standards**				
a. **Depth**				
Minimum - Not applicable				
Maximum - 2 feet				
b. **Width**				
Minimum - Not applicable				
Maximum - 20 feet				
c. **Height**				
i. 2-story building: 1 story max				
ii. 3 story building: 1 story max				
iii. 4 story+ building: 2 stories max				

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2.0 MULTIPLE FAMILY STANDARDS	Applicant		City	
	Done	N/A	Done	N/A
2. **Design standards**				
a. **Encroachment** Projecting rooms may encroach into the setback or public right-of- way as defined in Division 6.01.010(D)(2): Encroachments into Required Setback Areas of the Ontario Development Code.				
b. **Support**				
i. Building projecting rooms shall have visible supports (e.g., beams, braces, or brackets)				
ii. Building projecting rooms shall be set back 10 feet from an adjacent property line				
c. **Space between projecting rooms.** Space between Projecting Rooms shall be 20 feet within the same building plane.				
2.3.3 Bay Window				
1. **Element standards**				
a. **Height**				
Minimum - Not applicable				
Maximum - 10 feet				
b. **Width**				
Minimum - Not applicable				
Maximum - 10 feet				
2. **Design standards**				
a. **Encroachment** Bay windows may encroach into the setback or public right- of- way as defined in Division 6.01.010(D)(2): Encroachments into Required Setback Areas of the Ontario Development Code.				
b. **Dimensions** Bay windows shall be a maximum of 10 feet wide and shall have a height that is equal to or greater than their width.				
c. **Depth** The depth of Bay Windows shall be a minimum of 3 feet				
d. **Façade placement** Bay windows shall be placed a minimum of 2 feet from any building corner and a minimum of 3 from any other bay window.				
e. **Fenestration** Bay windows shall consist of a minimum 75% transparent fenestration				
2.3.4 Balcony				
1. **Element standards**				
a. **Height**				
Minimum – Not applicable.				

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2.0 MULTIPLE FAMILY STANDARDS	Applicant		City	
	Done	N/A	Done	N/A
Maximum - Refer to Design Standards				
b. **Width**				
Minimum - Not applicable				
Maximum - Not applicable				
c. **Depth**				
Minimum - Not applicable				
Maximum - Refer to Design Standards				
2. **Design standards**				
a. **Encroachment** Balconies may encroach into the setback or public right- of- way as defined in Division 6.01.010(D)(2): Encroachments into Required Setback Areas of the Ontario Development Code.				
b. **Façade Projection or recession** Balconies may project from the facade, be recessed into the facade, or use a combination of both.				
c. **Required Private Open Space** Balconies meeting private open space standards shall have minimum dimensions of 7 feet by 7 feet specified in 2.1.5 Open Space Standards.				
2.3.5 Terrace balcony				
1. **Element standards**				
a. **Height**				
Minimum - Not applicable				
Maximum - Refer to Design Standards				
b. **Width**				
Minimum - Not applicable				
Maximum - Not applicable				
c. **Depth**				
Minimum - Not applicable				
Maximum - Refer to Design Standards				
2. **Design standards**				
a. **Encroachment** Terrace balconies may encroach into the setback or public right- of- way as defined in Division 6.01.010(D)(2): Encroachments into Required Setback Areas of the Ontario Development Code.				

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2.0 MULTIPLE FAMILY STANDARDS	Applicant		City	
	Done	N/A	Done	N/A
b. **Support**				
i. Terrace balconies shall be supported by continuous walls that extend all the way to the ground.				
ii. Terrace balconies shall not be designed as posts, columns, or pillars.				
c. **Required private open space** Terrace balconies meeting private open space standards shall have minimum dimensions of 7 feet by 7 feet specified in 2.1.5 Open Space Standards.				

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2.0 MULTIPLE FAMILY STANDARDS

	Applicant		City	
	Done	N/A	Done	N/A
2.4. Entry elements				
2.4.1 Stoop				
1. **Element standards**				
a. **Stoop Width**				
Minimum - 4 feet				
Maximum - 8 feet				
b. **Stoop Depth (not including stairs)**				
Minimum - 4 feet				
Maximum - 8 feet				
c. **Stoop Floor Depth**				
Minimum - 1.5 feet				
Maximum - 3 feet				
d. **Planter/ Fence Height**				
Minimum - Not applicable				
Maximum - 3 feet				
2. **Design standards**				
a. **Relationship to entry** Stoops must align directly with the unit entry(s) they serve.				
b. **Number of units served** Stoops shall provide access to a maximum of 2-unit entries.				
c. **Lobby entries** Stoops may provide access to a lobby entry.				
d. **Stoop stairway orientation** The exterior stoop stairway may be oriented perpendicular or parallel to the adjacent sidewalk.				
3. **Landscaping** Landscaping shall be planted on the sides of the stoop, either at grade or in raised planters. Raised planters shall have a minimum depth of 12 inches.				
2.4.2 Dooryard				
1. **Element standards**				
a. **Depth, Clear**				
Minimum - 8 feet				
Maximum - Not applicable				

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2.0 MULTIPLE FAMILY STANDARDS	Applicant		City	
	Done	N/A	Done	N/A
b. **Finish level above sidewalk**				
Minimum - Not applicable				
Maximum - 3 feet				
c. **Length of Terrace**				
Minimum - Not applicable				
Maximum - 150 feet				
d. **Distance between stairways**				
Minimum - Not applicable				
Maximum - 50 feet				
2. **Design standards**				
a. **Relationship to Entry** Dooryards shall align directly with the unit entry(ies) they serve.				
b. **Number of units served** Stoops shall provide access to a maximum of 2-unit entries.				
c. **Enclosure** Dooryards shall be enclosed by a maximum 3-foot high, decorative walls, fences, or low hedges.				
d. **Architectural Style** Walls and/or fences shall match the building's architectural style.				
e. **Doorway Stairway Orientation** If the doorway is raised above grade, the exterior stairway for raised Dooryards shall be oriented perpendicular or parallel to the adjacent sidewalk.				
2.4.3 Porch				
1. **Element standards**				
a. **Porch Depth**				
Minimum - 8 feet				
Maximum - Not applicable				
b. **Porch width**				
Minimum - 8 feet				
Maximum - Not applicable				
c. **Porch height.**				
Minimum - 8 feet				
Maximum - 12 feet				
d. **Floor height.**				

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2.0 MULTIPLE FAMILY STANDARDS	Applicant		City	
	Done	N/A	Done	N/A
Minimum - 1.5 feet				
Maximum - 3 feet				
e. **Space between porch and front property line**				
Minimum - 5 feet				
Maximum - Not applicable				
2. **Design standards**				
a. **Number of units served** Porches shall provide access to multiple ground-floor unit doors.				
b. **Wrap-around porches** Porches shall wrap around building corners.				

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3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
3.1 Site Design Standards				
3.1.1 Site Design				
1. **Lot lines** The lines bounding a lot. The classifications of "Lot Line" are as follows:				
a. **Front** This line separates the narrowest street frontage of a lot from a public or private street right-of-way.				
b. **Interior "side"** Any lot line that is not a front or rear lot line and does not border a public or private street right-of-way.				
c. **Rear** The lot line opposite and farthest from the front lot line. In the case of an irregularly shaped lot, a straight line shall be drawn to determine the rear lot line.				
d. **Street side** Any lot line that is not a front or rear lot line, and which abuts a public or private street right-of-way				
3.1.2 Site Access				
1. **Alleys** Vehicular access to the on-site parking areas shall be from the alley				
2. **Roadway inclusion** Pedestrian access from the public right-of-way must include sidewalk on both sides of the driveway.				
3.1.3 Parking				
A. Placement on site Parking shall be designed in compliance with the applicable standards contained in Division 6.03 (Off-Street Parking and Loading) of the Ontario Development Code, except as modified by the following:				
1. **Surface Parking**				
a. **Setbacks** Surface parking lots adjacent to public or private streets shall include a landscaped and irrigated setback a minimum of 5 feet in width measured from property line, or aligned with the building façade, whichever is greater.				
b. **Orientation** Surface parking lots shall be located at the rear, side, or internal lot lines and away from the front lot line.				
2. **Above-ground parking structures** Ground-floor parking shall be sited behind residential, office, or commercial spaces				
3. **Semi-subterranean parking** A semi-subterranean garage shall not extend beyond the building frontage line and shall not extend higher than 4 feet above sidewalk grade				
4. **Subterranean parking** A subterranean parking structure may extend to all property lines.				
5. **Private residential garages** Each private garage must have vehicular access from an alley, side street, or motor court.				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
B. Surface parking lot design: Surface parking lots shall be designed in compliance with the applicable standards contained in Division 6.03 (Off-Street Parking and Loading) of the Ontario Development Code, except as modified by the following:				
1. **Screening**				
a. **Street-adjacent parking lots**				
i. A street-adjacent surface parking lot shall be screened from view by a low wall or hedge no higher than 3 feet in height. Walls and hedges must be a minimum 18 inches from the back of the sidewalk.				
ii. Walls and hedges must be a minimum 18 inches from the back of the sidewalk				
iii. Landscaped berms are prohibited				
b. **Neighboring parcels** Views from neighboring properties shall be screened with trees and shrubs.				
2. **Landscape** Landscaping materials shall be applied in compliance with the applicable objective parking lot landscape standards contained in Ontario Development Code Section 6.05.030 (Required Landscape Areas).				
3. **Shade structures** Shade structures, if used, shall match the architectural style of the project buildings				
C. Parking court design				
1. **Design standards**				
a. The width of the parking court, when measured from 1 building face to the other, shall not exceed 100 feet				
b. The parking court shall consist of only **1** parking bay, and this bay shall not exceed a maximum width of 62 feet.				
c. On both sides of the parking court, sidewalks must be established, each with a minimum width of 15 feet. These sidewalks must connect with the adjacent public sidewalk network.				
D. Parking structure design				
1. **Context-sensitive façade design** Parking structure façades shall incorporate a minimum **2** design elements using the architectural styles identified in Chapter 4: Architectural styles and adhere to Main Street or Urban and facade design standards applied in 3 Building Types.				
2. **Parking structure standards**				
a. Any driveway providing access to a parking structure shall have a minimum width of 28 feet. Single openings shall be no wider than 14 feet.				
b. Parked vehicles shall be shielded from view from adjoining streets				
c. The exterior elevations of parking structures facing a public street shall incorporate architectural elements from the project building.				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
d. Vehicular entries shall be located a minimum 50 feet from the corner of a block				
e. Signs as shall be consistent with Division 8: Sign Regulations of Ontario Development Code.				
3.1.4 Open Space Standards				
A. Common open space and public frontage				
1. **Common open space type requirements** Common open space shall cover a minimum of 15 percent of the total lot area with the following **exceptions**:				
a. **Close to parks** Common on-site open space shall not be required for lots within a 1/4-mile of an existing park or plaza a minimum 0.25 acres in size.				
b. **Common open space types** At least **1** or more of the common on-site open space types listed under "Common Open Space Types" shall be provided on each lot that has a residential use.				
2. **Access and visibility** At-grade open space shall be accessible and visible from the adjacent ground floor				
B. Common open space and public frontage				
Forecourt				
1. **Design standards**				
a. A forecourt may occur on any floor and may be used as an allowed method of creating façade massing increments.				
b. Minimum dimensions. Forecourts shall be a minimum of 15 feet by 15 feet				
Side garden				
1. **Design standards**				
a. Minimum side garden dimensions: 15 feet by 15 feet				
b. Dooryards, porches, stoops, and architectural elements may encroach into the side garden as follows:				
i. Up to a total of 30 percent of the side garden's width or length				
ii. A ground-floor encroaching element shall be allowed to project a maximum of 8 feet into the side garden.				
Court				
1. **Design standards**				
a. **Minimum dimensions:** All courts shall be a minimum of 20 feet by 30 feet				
b. **Enclosure**				
i. A court shall have building walls on a minimum 2 sides, while the third and fourth side can be defined by				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
architectural or landscape elements (i.e., low walls, trellises, hedges, or rows of trees).				
ii. A driveway located adjacent to a court shall be screened by architectural elements (e.g., low walls or trellises, hedges, or rows of trees).				
c. **Access**				
i. Courts shall be accessed from the street or walkway				
ii. Units shall be allowed to take direct access through a court				
d. **Encroachments**				
i. Dooryards, porches, stoops, and architectural elements may encroach into the Side Yard.				
ii. A ground floor encroaching element shall not encroach beyond 8 feet of the building's façade into the court.				
e. **Common area** A court shall serve as communal spaces and pedestrian access				
f. **Amenities** A court shall include a minimum **1** of the following amenities: a seating area, a fountain, a BBQ island, or an outdoor fireplace.				
Passage				
1. **Design standards.**				
a. **Location** Passages shall be provided between buildings or side gardens.				
b. **Size** Passages shall be a minimum width of 8 feet with minimum of 2 feet of landscape strip on each side.				
C. Private Open Space				
1. **General standards**				
a. A minimum 60 square feet of private open space shall be provided for each residential unit and a minimum **1** of the private on-site open space types shall be provided.				
b. **Exception:** Private on-site open space shall not be required for a project site that is located within 1/4-mile distance of an existing park or plaza that is a minimum 0.25 acres in size.				
D. Private Open Space Types				
Private roof deck				
1. **Description** A private open space located on the roof of a building dedicated to a single unit.				
2. **Design standards**				
a. Minimum dimensions of 7 feet by 7 feet				
b. Materials, finishes, fixtures, and colors visible from the street shall be designed consistent with the architectural style of the building.				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
Backyard				
1. **Description** A private, landscaped open space located behind each individual unit that is intended to provide passive or active outdoor space for the users of the unit.				
2. **Design standards**				
a. Backyards are located behind the unit				
b. Size. Minimum dimensions of 20 feet by 15 feet				
c. Encroachments. Encroachment into the backyard is allowed up to 30% of the space's width and/or length.				
d. Maximum projection for any ground floor element is 8 feet, with a 10-foot upper floor setback from property line if there's usable space above the first floor.				
Architectural façade elements as private open space				
1. **Description** The following elements defined in Section 2.3 Architectural Façade Elements may be used to meet on-site private open space requirements.				
a. Balcony				
b. Terrace Balcony				
Entry elements as private open space				
1. **Description** The following elements defined in Section 2.4 Entry Elements may be used to meet on-site private open space requirements.				
a. Dooryard				
b. Porch				
3.1.5 Landscaping				
1. **General to all** Landscaping materials shall be applied in compliance with the applicable landscape standards contained in Ontario Development Code Section 6.05.030 (Required Landscape Areas).				
2. **Paths** Where front yards are landscaped, individual paths to sidewalk shall be provided for each entrance.				
3. **Materials** Decorative accents. Paving materials shall incorporate decorative elements consistent with the architectural style of the building.				
3.1.6 Fences and Walls				
1. **Fence and wall heights** Walls and fences shall be designed in compliance with the applicable standards contained in				

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3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
Division 6.02 (Walls, Fences, and Obstructions) of the Ontario Development Code.				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
3.2 Mixed Use Development Standards				
Table 3.01 Mixed Use Development Standards per Building Type *(see Section 3.2.2 Building Types)*				
A. Building Development Standards				
1. **Minimum Setback from Public Street Property Lines:** *(refer to Note 2 & 8 – Table 3.01).*				
a. **Arterial.** **Main Street** – 0 Feet **Urban** - 0 Feet				
b. **Collector.** **Main Street** – 0 Feet **Urban** - 5 Feet				
c. **Local.** **Main Street** – 5 Feet **Urban** - 5 Feet				
2. **Maximum Setback from Public Street Property Lines:** *(refer to Note 2 & 8 – Table 3.01).*				
a. **Arterial.** **Main Street** – 5 Feet **Urban** - 5 Feet				
b. **Collector.** **Main Street** – 10 Feet **Urban** - 10 Feet				
c. **Local.** **Main Street** – 10 Feet **Urban** - 10 Feet				
3. **Minimum Setback from Interior Project Boundary Property Lines:**				
a. 0 feet (attached to adjacent property)				
b. 10 feet (freestanding)				
4. **Minimum Setback from Public Alley Property Lines –** 5 feet				
5. **Minimum Setback from Private Drives/Alleyways (from edge of drive aisle):**				
a. Living Area – 10 feet				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
b. Garages and other non-habitable structures –5 feet				
6. **Minimum Setback from Dwellings to Parking Spaces:**				
a. Living Area – 10 feet				
b. Garages and other non-habitable structures –5 feet				
7. **Minimum Setback from Parking Space or Drive Aisle to Wall or Fence** –5 feet				
8. **Minimum Separation Between Detached Buildings:**				
a. Dwelling Front to Front- < 2-Stories: 25 FT; > 3 Stories: 30 FT unless otherwise specified by massing requirements ("Space between buildings") in Section 3.2.3 Building Types. *(refer to Note 5 – Table 2.01)*				
b. Dwelling Front to Rear- < 2-Stories: 25 FT; > 3 Stories: 30 FT unless otherwise specified by massing requirements ("Space between buildings") in Section 3.2.3 Building Types. *(refer to Note 5 – Table 2.01)*.				
c. Dwelling Front to Side - < 2-Stories: 25 FT; > 3 Stories: 30 FT unless otherwise specified by massing requirements ("Space between buildings") in Section 3.2.3Building Types. *(refer to Note 5 – Table 2.01)*.				
d. Dwelling Side to Side - < 2-Stories: 10 FT; > 3 Stories: 15 FT unless otherwise specified by massing requirements ("Space between buildings") in Section 3.2.3 Building Types. *(refer to Note 5 – Table 2.01)*.				
e. Dwelling Side to Rear - 15 FT; unless otherwise specified by massing requirements ("Space between buildings") in Section 3.2.3 Building Types. *(refer to Note 5 – Table 2.01)*.				
f. Dwelling Rear to Rear- 20 FT unless otherwise specified by massing requirements ("Space between buildings") in Section 3.2.3 Building Types. *(refer to Note 5 – Table 2.01)*.				
g. Garage to Garage (or other nonhabitable structures). 30 FT – Entry to Entry 30 FT – Entry to Side 10 FT – Side to Side 10 FT – Side to Rear				
9. **Minimum Storage Space –** 240 CF *(refer to Note 4 – Table 3.01)*.				
10. **Maximum Street Façade Height** *(refer to Note 8 – Table 3.01)*. a. **Arterial** **Main Street** – 45 feet **Urban** – N/a				
b. **Collector**				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
Main Street – N/a				
Urban – N/a				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
c. **Local** **Main Street** – N/a **Urban** – N/a				
11. **Maximum Building Height (from grade to top of plate).** a. **Arterial** **Main Street** – 120 feet **Urban** – 120 feet				
b. **Collector** **Main Street** – 70 feet **Urban** – 70 feet				
c. **Local** **Main Street** – 50 feet **Urban** – 50 feet				
12. **Minimum Floor to Floor Height**				
a. **Ground Floor** **Non-residential** – 15 feet **Residential** – 10 feet				
b. **Upper and Sub Levels –** 9 feet				
13. **Minimum Setback from Major Pipelines –** 50 feet (to habitable structures) *(refer to Note 6 – Table 3.01)*				
3.2.1 Height Standards				
1. **Height transition zones** Requires all new buildings within 100 feet of less intense development patterns (existing or planned) to reduce heights to ensure neighborhood compatibility.				
2. **Vertical mixed use development types** The following height limits shall apply to all proposed multiple family development types.				
a. Buildings within 100 feet of single-family residential dwellings must not exceed 35 feet or the height of adjacent residential buildings.				
b. Buildings within 100 feet of undeveloped single-family zone parcels shall not exceed 35 feet in height.				
3.2.2 Ground Floor Building Frontage				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
1. **Mixed-Use development types.** The ground floor frontage for vertical mixed-use developments must be designed to accommodate commercial uses.				
3.2.3 Building Types				
Identify the suitable building type based on location, including:				
1. **"Main Street"** (applicable to mixed-use areas within the District Place type as shown on Policy Plan Exhibits LU-04 and CD-01).				
2. **"Urban"** (applicable to mixed-use areas outside the District Place type).				

(Table 3.2-2 Mixed-Use Building Types)

TOP Land Use Place type	Max Permitted Height	Building Types
Downtown	45 feet	Main Street
Airport Metro/Entertainment	120 feet	Main Street
Guasti	70 feet	Main Street
South Euclid	70 feet	Main Street
South Employment	70 feet	Main Street
East Holt Blvd	70 feet	Urban
Inland Empire Blvd	70 feet	Urban
Infill	50 feet	Urban
South of Riverside Drive	50 feet	Urban

A. Main Street Massing and Façade Design				
Massing increments				
1. **Element standards**				
a. Building Façade along font lot line (300 feet max)				
b. Building Façade alongside lot line (150 feet max)				
c. Space between buildings (0 feet min)				
d. Massing Increment (75 feet max)				

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3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
e. Height Difference between Massing Increments (3 feet min)				
f. Façade Break (10 feet x 10 feet min)				
g. Upper-Level Setback (15 feet min)				
2. **Massing standards**				
a. **Size of massing increments** Building facades that face public streets and are longer than 75 feet in length shall be divided into massing increments as follows:				
i. The maximum length of a single massing increment shall not exceed 75 feet.				
ii. Single building projects less than 150 linear feet of street frontage shall have no massing increments applied.				
iii. Single building projects between 150 and 250 linear feet of street frontage shall have at minimum 2 massing increments separated by a façade break.				
iv. Single project buildings that have more than 250 linear feet of street frontage shall have 3 massing increments each separated by a façade break.				
b. **Required difference in facade height.** Adjacent massing increments must vary in façade height measured from the sidewalk to the eave, cornice, or parapet, using a minimum **1** massing strategy:				
i. Vary number of stories				
ii. Vary the parapet height by a minimum of 3 feet				
iii. Incorporate tower element				
iv. Set back upper floor(s) a minimum 15 feet				
c. **Articulation of massing increments.** Individual massing increments shall be differentiated from one another using **3** of the following architectural strategies:				
i. **Set façade increment back** Set the entire facade increment back a minimum of 3 feet.				
ii. **Base height** Vary the height of the building base of adjacent increments.				
iii. **Façade colors** Use different facade materials and/or colors.				
iv. Window type/configuration. Use different window types, configurations, and/or frame colors.				
v. **Presence/arrangement of façade elements** Vary the presence or arrangement of façade elements such as projecting balconies, recessed balconies, trellises, chimneys, and awnings.				
d. **Self-contained massing increments** Facade elements, such as window openings and balconies, shall not overlap the division between massing increments.				
e. **Repeating massing increment design** A massing increment design may be repeated a maximum of 3 times on				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
the same project elevation. Repeated massing increments may not be located immediately adjacent to each other.				
Façade Composition				
1. **Facade composition standards**				
a. **Facade Grid** The window, door, and/or shopfront openings of each individual facade shall be organized into a grid as follows:				
i. **Horizontal alignment of elements** Rooflines, openings, and materials within each facade shall be aligned horizontally.				
ii. **Vertical Bays** The entirety of a building's façade shall be clearly divided into vertical bays.				
b. **Multi-story building façades** Multi-story building facades shall be designed to include a base, middle, and top.				
i. **Base** Building base of entire ground floor for buildings less than 5 stories or 25 feet for buildings 5 stories or more, shall use a minimum of 2 of the following strategies:				
(a) Provide a string course at the top of the first story;				
(b) Specify base materials different from rest of facade;				
(c) Specify base colors different from rest of facade;				
(d) Provide a ground floor Arcade or Gallery per (Section 3.2 Architectural Façade Elements).				
ii. **Middle** The middle of the building—the facade of all floors located above the base—shall be designed as follows:				
(a) Window and door openings shall be organized in bays per the façade fenestration standards of this section.				
(b) If provided, attached façade elements such as balconies, bay windows, and projecting rooms, shall be designed per the façade fenestration standards of this section.				
iii. **Top** The façade elements that define the upper limits of the building—shall be designed as follows:				
(a) The top of the building facade shall incorporate capping elements, such as a cornice, enhanced ornamentation, or a decorative parapet.				
Fenestration Design				
1. **Façade fenestration standards**				
a. **Minimum Fenestration.** Facade designs shall include a minimum percentage of fenestration calculated as the total percentage of window and door area divided by the total area of that portion of the façade:				
i. **Ground Floor:** 70% minimum				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
ii. **Upper Floors:** 15% minimum				
2. **General to all floors.** All window jambs/frames shall be set back a minimum of 2 inches back from the facade plane.				
3. **Specific to ground floors** Structural elements shall be visible on the exterior of ground floor facades to visually convey that the upper floors are supported.				
a. **Ground floor windowsills** Facades along the front lot line that face public streets shall be no higher than 3 feet above the adjacent grade.				
b. **Ground floor bathroom windows** Prohibited on facades that face front streets.				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
B. Urban massing and façade design				
1. **Urban massing and façade design** standards are required for all multiple-family developments projects with 25 du/ac or more.				
Massing increments				
1. **Massing Standards**				
a. Building Façade along font lot line (400 feet max)				
b. Massing Increment (150 feet max)				
c. Space between buildings (0 feet min)				
d. Façade Setback (if elected) (10 feet x 10 feet minimum)				
e. Building base height (15 feet min)				
f. Building façade alongside lot line (200 feet max).				
g. Height difference between massing Increments (3 feet min)				
h. Upper-level setback from façade (15 feet min)				
2. **Size of massing increments** Building facades along front and side lot lines that face public streets and are longer than 100 feet shall be divided into massing increments as follows:				
a. The maximum length of a single massing increment shall not exceed 150 feet				
b. A minimum of **2** distinct massing increments shall be provided				
3. **Articulation of massing increments** Individual massing increments shall be differentiated from one another using a minimum **1** of the following massing strategies:				
a. Vary parapet height by a minimum of 3 feet				
b. Increase number of stories				
c. Set back upper floor. Set the upper floor or multiple upper floors back a minimum of 15 feet from the facade				
d. Set the entire facade back a minimum of 10 feet for 20 feet				
e. Incorporate tower element				
4. **Massing increments with distinct facades** Massing increments that have distinct facades and shall appear as distinct buildings.				
a. **Repeating massing increment design** A massing increment design may be repeated on the same project				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
elevation. Repeated massing increments shall be separated by a distinct massing increment.				
Façade Composition				
1. **Façade Composition Standards.**				
2. **Multi-story building façades. The building facade shall be divided into a base and body as follows:**				
a. **Base** Separate the building base (entire ground floor facade or first 2 floors of building's 5 stories or taller) from the rest of the facade for a minimum of 15 feet (fewer than 5 stories) or 25 feet (5 stories or more) from grade, using a minimum **2** of the following strategies:				
i. Provide a string course at the top of the first story.				
ii. Specify base materials different from rest of façade.				
iii. Specify base colors different from rest of façade.				
iv. Provide a ground floor Arcade or Gallery per Section 2.3 Architectural Façade Elements.				
b. **Body** The body of the building consists of the facade of all floors located above the base and shall be designed as follows:				
i. Windows shall be organized in bays, bands, curtain wall, and grid of windows consistent with the Facade Fenestration Standards for the Urban massing type.				
ii. Each massing increment must contain its entire facade composition without elements overlapping the division between increments.				
c. **Strategies** The listed strategies show acceptable ways to differentiate massing increments:				
i. Vary the height of the building body.				
ii. Use different facade materials and/or colors.				
iii. Use different window types/configurations.				
iv. Diversify facade elements, including projecting balconies, recessed balconies, canopies, and awnings.				
Fenestration design Fenestration design addresses the percentage of window and door openings for ground floors and upper floors and glazing transparency.				
1. **Façade fenestration standards**				
a. **Minimum fenestration** Facade designs must meet a minimum fenestration percentage, calculated as the total window and door area divided by the total area of that part of the façade.				
i. **Ground floor**				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
(a) Front lot line: 70% minimum.				
(b) All other frontages: 50% minimum.				
(c) Ground floor windowsills on facades along the front lot line shall be no higher than 3 feet above the adjacent grade.				
(d) Ground floor bathroom windows are prohibited on facades that face front lot line.				
ii. **Upper floors.** 15% minimum.				
3.2.4 Material and Detailing				
A. Building Materials				
1. **Prohibited materials**				
a. Fiberglass or plastic (false) architectural or facade elements or ornamentations.				
b. Rough-cast and sand-finishes are prohibited on all building surfaces that are visible from a street.				
c. Reflective materials, such as mirrored glass, shiny metal, and chrome are allowed with the following **exception**:				
i. Application to small areas (up to 50 sq ft or 2% of façade area, whichever is less) for signage highlighting, ensuring no glare nuisance to traffic, pedestrians, or neighboring buildings.				
2. **Combining materials** When combining **2** or more wall materials on **1** facade:				
a. Place lighter weight materials above more substantial ones (e.g., glass above wood, wood above stucco, stucco above masonry).				
b. Vertical joints between different materials shall only occur at inside corners.				
B. Windows and Doors				
1. **Material and types**				
a. **Window recess** Windows shall be recessed in a manner that is specific to each building's architectural style but shall be no less than 2 inches for any style.				
b. **Architectural style of detailing** Windows, doors, frames, colors, and styles shall be appropriate to the building's architectural style in terms of window type, proportion, and color.				
c. **Materials** Windows and doors shall be made of wood, fiberglass, fiberglass-clad wood, aluminum clad wood, or metal.				
d. **Glazing** Glazing shall be clear glass with no more than ten percent daylight reduction (tinting). Reflective (mirrored) glazing is prohibited.				
e. **Residential buildings** The following are applicable to multiple-family development types.				
i. Vinyl or vinyl clad windows shall resemble wood windows (i.e., faux wood or engineered wood) in detailing				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
and profile thickness and employ muted patterns and colors consistent with the building's architectural style.				
ii. Nail-on windows that are deeply set within their frame are permitted.				
iii. Muntins shall be of a substantial dimension (e.g., not flat) and shall be placed on the exterior of windows.				
i. Trim:				
(a) **Window and door trim materials** Wood or cement fiber board. Foam trim around windows is allowed. Foam trim around doors is prohibited.				
(b) **Building trim materials** Wood, stone, cast stone, pre-cast concrete, glass fiber reinforced concrete, and cement fiber board.				
3.3. Architectural Façade Elements				
3.3.1 Arcade				
1. **Element standards**				
a. **Depth**				
Minimum - 12 Feet				
Maximum - 16 Feet				
b. **Distance from property line** - 0 Feet				
c. **Open height, clear** – refer to Design standards below				
d. **Overall height** - refer to Design standards below				
2. **Design standards**				
a. **Projection depth** The arcade projection depth from the ground floor facade shall be no greater than the height of the arcade opening.				
b. **Sidewalk depth beneath arcade** The covered sidewalk under the arcade shall be a minimum of 10 feet wide from the inside of the vertical support to the ground floor building face.				
c. **Entry element requirement** Arcades shall be combined with Shopfronts (defined in *Section 3.4 Entry Elements*).				
d. **Minimum openings and massing increments** Arcades shall be a minimum of 3 openings wide. The location where an arcade stops or changes in design or dimensions shall correspond to a change in massing increment (*Section 3.2.3. Massing and Façade Design*) for massing increment requirements.				
e. **Vertical supports** Vertical supports may be piers, columns, or arches. The width of a vertical support shall not exceed 3 feet.				
f. **Width of openings** The openings between vertical supports, as seen from the street, shall be taller than they are wide.				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
g. **Shape and cadence of openings** Openings, whether rectangular or arched, must align with facade bays if present (vertical bays are mandatory for Main Street standards and optional for other massing types in *Section 3.2.3. Massing and Façade Design*).				
h. **Vertical clearance** The minimum vertical clearance at each opening shall be a minimum of 12 feet, excluding decorative brackets, spandrels, and/or lower portions of arches.				
i. **Arcade height relative to interior building floor height** The height of the soffit inside the arcade shall be no less than the height of the ceiling of the floor to which it corresponds.				
j. **Architectural style** Arcade detailing, including lighting, shall utilize the architectural style of the building.				
3.3.2 Gallery				
1. **Element standards**				
a. **Depth**, clear				
Minimum - 10 Feet				
Maximum - 16 Feet				
b. **Distance from property line**, clear				
Minimum - 0 Feet				
Maximum - 5 Feet				
c. **Overall Height,** clear				
Minimum - 12 Feet				
Maximum - 2 Floors				
d. **Overall height** - refer to Design standards below				
2. **Design standards**				
a. **Projection depth** Gallery projection depth from the ground floor facade shall be no greater than the height of the gallery opening.				
b. **Sidewalk depth beneath gallery** Covered sidewalk width under the gallery must be a minimum of 10 feet from the inside of the vertical support to the ground floor building face.				
c. **Minimum openings and massing increments** Galleries shall be a minimum of 3 openings wide. The location where a gallery stops or changes in design or dimensions shall correspond to a change in massing increment (see Section 3.2.3. Massing and Façade Design).				
d. **Vertical supports** Vertical supports may be piers or columns. The width of a vertical support shall not exceed 1				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
foot.				
e. **Width of openings** Openings between vertical supports, as seen from the street, shall be taller than they are wide.				
f. **Shape and cadence of openings** Openings may be rectangular but shall not be arched.				
g. **Vertical clearance** Minimum vertical clearance at each opening shall be a minimum of 12 feet, excluding decorative brackets and spandrels.				
h. **Gallery height relative to interior building floor height** Height of the soffit inside the gallery shall be no less than the height of the ceiling of the floor to which it corresponds.				
i. **Vertical alignment** Galleries may be single or double-story and shall correlate with building floors .				
j. **Architectural style** Gallery detailing, including lighting shall utilize the architectural style of the building.				
3.3.3 Commercial Awning				
1. **Element standards**				
a. **Depth**				
Minimum – 4 Feet				
Maximum - Not applicable				
b. **Clearance above sidewalk**				
Minimum – 8 Feet				
Maximum – Not applicable				
c. **Length**				
Minimum - refer to Design standards below				
Maximum - refer to Design standards below				
2. **Design standards**				
a. **Encroachment** Commercial awnings may encroach into the setback or public right-of- way as defined in Division 6.01.010(D)(2): Encroachments into Required Setback Areas of the Ontario Development Code.				
b. **Material** Commercial awnings shall be of a simple shed form, made of code- compliant fire-resistant canvas.				
c. **Width** Awning widths shall equal in size to shopfront opening widths.				
d. **Prohibited lighting** Internally illuminated and back-lit awnings and any associated light diffusers are prohibited.				
3.3.4 Commercial canopy				
1. **Element standards**				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
a. **Depth**				
Minimum – Not applicable				
Maximum - 3 Feet				
b. **Minimum clearance above ground**				
Minimum – Not applicable				
Maximum – 12 Feet				
c. **Length of terrace**				
Minimum - Not applicable				
Maximum – 150 Feet				
2. **Design standards**				
a. **Encroachment** Commercial canopies may encroach into the setback or public right-of- way as defined in Division 6.01.010(D)(2): Encroachments into Required Setback Areas of the Ontario Development Code.				
b. **Form and material** Canopies shall be of a simple form, made of metal and/or glass.				
c. **Support.** Canopies shall be supported either from below by metal brackets, or from above by rods and wires that affix to the wall.				
d. **Width** Canopies may extend across multiple storefronts.				
3.3.5 Awning				
1. **Element standards**				
a. **Depth**				
Minimum – Not Applicable				
Maximum - 3 Feet				
b. **Clearance above ground**				
Minimum – 8 Feet				
Maximum – Not Applicable				
c. **Length**				
Minimum - refer to Design standards below				
Maximum - refer to Design standards below				
2. **Design standards**				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
a. **Encroachment** Residential awnings may encroach into the setback or public right- of- way as defined in Division 6.01.010(D)(2): Encroachments into Required Setback Areas of the Ontario Development Code.				
b. **Material** Residential awnings shall be of a simple shed form, made of code- compliant fire-resistant.				
c. **Upper floors** Each individual awning shall cover no more than 1 window opening.				
3.3.6 Canopy				
1. **Element standards**				
a. **Depth**				
Minimum – Not Applicable				
Maximum - 3 Feet				
b. **Minimum clearance from landing**				
Minimum – 7 Feet				
Maximum – 8 Feet				
c. **Length of terrace**				
Minimum - Not Applicable				
Maximum - 8 Feet				
2. **Design standards**				
a. **Material** Canopies shall be of a simple form, made of metal and/or glass.				
b. **Support** Canopies shall be supported either from below by metal brackets, or from above by rods or wires that affix to the wall.				
c. **Upper floors** Each individual canopy shall cover no more than 1 window opening.				
3.4. Entry Elements				
3.4.1 Shopfront				
1. **Element standards**				
a. **Height to top of transom**				
Minimum – 12 Feet				
Maximum - 16 Feet				
b. **Height to bottom of canopy/awning**				
Minimum – 8 Feet				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
Maximum – 10 Feet				
c. **Width of each shopfront bay**				
Minimum - 10 Feet				
Maximum - 25 Feet				
d. **Height of shopfront base**				
Minimum - 1 Foot				
Maximum - 3 Feet				
e. **Awning/Canopy Depth**				
Minimum - 4 Feet				
Maximum - Not Applicable				
2. **Design standards**				
a. **Vertical bays** Shopfront openings must align into bays, following the vertical bay specifications in *Section 3.2.3. Massing and Façade Design* of main street standards.				
b. **Architectural façade elements**				
i. Shopfronts in vertical mixed-use buildings may integrate with Galleries or Arcades.				
ii. **Visibility** Windowsills in non-entry bays shall not exceed 2 feet above grade.				
c. **Setback use and design** Recessed shopfronts without dooryard, terrace, or porch designs shall extend to the property line.				
3.4.2 Lobby Entry				
1. **Element standards**				
a. **Height to top of transom**				
Minimum – 10 Feet				
Maximum - 20 Feet				
b. **Height to bottom of canopy/awning**				
Minimum – 8 Feet				
Maximum – Not Applicable				
c. **Distance to property line**				
Minimum - Not Applicable				
Maximum - 20 Feet				

3.0 Mixed Use Design Standards

	Applicant		City	
	Done	N/A	Done	N/A
d. **Awning/Canopy Depth**				
Minimum - 4 Feet				
Maximum - Not Applicable				
2. **Design standards**				
a. **Lobby entries** shall be visible and distinguishable from adjacent ground floor units and include a minimum of **1** of the following design strategies:				
i. Center placement for symmetry				
ii. Prominent corner location				
iii. Incorporate 2 architectural elements (columns, overhanging roofs, canopies, awnings, or ornamental light fixtures)				
iv. Recessed entry				
v. Entry framing				
b. **Main Street massing types**				
i. Lobby entries shall not exceed 20% of the frontage length				
ii. Allocate the remaining length to shopfronts				
c. **Visibility** Lobbies entries shall be visible from the public right of way as follows:				
i. Windowsills shall be no higher than 2 feet above adjacent grade				
ii. Internal shade devices such as blinds, shades, or curtains are prohibited				
d. **Forecourt** may be introduced to provide a transition between the entry and sidewalk (forecourt standards are discussed in Section 3.1.5 Open Space Standards).				

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4.0 Architectural Styles

	Applicant		City	
	Done	N/A	Done	N/A
4.1 Mission – Spanish Colonial Revival				
4.1.1 Form and Massing				
1. **Façade design (Apply all)**				
a. Asymmetrical façade/elevations				
b. Three or more roof planes.				
c. A minimum of 50 percent of the units shall have balconies or window treatments (such as shutters or awnings)				
d. Entrances are recessed a minimum 12 inches				
e. Additional details for projects over 4 stories, vertical mixed use, or with more than 15 buildings (requires 2 details):				
i. Include 2 add-on projections such as verandas, arcades, balconies, and exterior stairs				
ii. The ends of building massing's shall be stepped down				
iii. One focal point, such as courtyard, tower, or fountain				
iv. Apply wingwalls or columns on the ground level				
4.1.2 Roof				
1. **Roof design (Apply all)**				
a. Low-pitched (4:12 maximum) cross- or side-gabled roofs. The pitch shall remain constant except for a veranda or arcade.				
b. Red, fired, clay tile roofs. Tile types include both Spanish (S-shaped) and Mission (half-cylinder)				
c. Hipped roofs shall only be used in combination with gables or on a tower element				
d. Shed roofs are only used in conjunction with verandas				
e. When a flat roof is used, it shall be screened by a parapet that is an extension of the wall plane or by a modified Mansard roof				
4.1.3 Materials and Color				
1. **Materials and colors (Apply all)**				
a. Roof tiles shall use terracotta, brown earth tones, or rustic red color palettes.				
b. White, cream, or tan stucco wall with smooth (20/30) textured finish (i.e., hand troweled)				
c. Wood shall be used as secondary wall material for the following and similar elements:				
i. Posts and exposed beams				
ii. Railing, spindles, and grille work				

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4.0 Architectural Styles	Applicant		City	
	Done	N/A	Done	N/A
4.1 Mission – Spanish Colonial Revival				
iii. Shutters, window frames, and doors				
d. If windows have shutters, the shutters' color shall match the accent color that is used for doors or decorative trim				
e. A minimum of 1 wrought-iron element (such as railings, hardware, and gates) shall be used				
4.1.4 Doors and Windows				
1. **Door and windows (Apply all)**				
a. Accent windows shall be a minimum of 20 percent of the total windows				
b. The primary facade shall include a minimum of 1 arched element				
c. A minimum of 50 percent of the windows shall be casement windows				
d. All entrance-door surrounds shall be banded with ceramic tile, molded plaster, or painted accents				
e. All casement windows and double-hung windows shall have wood frames				
f. Eighty percent of the windows shall have window muntins				
4.1.5 Decorative Details				
1. **Decorative details**				
a. All residential projects shall provide **a minimum of 4** of the following, and				
b. Residential projects 4 stories and taller, mixed-use projects, or projects with more than 15 buildings shall provide **a minimum of 6** of the following				
i. Entry/front porch or patio				
ii. Decorative tiles				
iii. Clay tile vents				
iv. Wrought-iron balcony railings or support brackets				
v. Dark-metal light fixture and hardwires				
vi. Paired wood (or wood simulated) garage doors with iron hardware				
vii. Verandas, pergolas, or arcades				
viii. Exterior stairs				
ix. Awnings with metal spear supports				

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Architectural Styles

	Applicant		City	
	Done	N/A	Done	N/A
4.2 Craftsman				
4.2.1 Form and Massing				
1. **Façade design (Apply all)**				
a. Asymmetrical facades/elevations				
b. Three or more roof planes on the primary facade				
c. Front-facing gable roofs				
d. Street-facing units shall have balconies or porches				
e. The front lot line façade shall have 2 to 3 materials/colors				
4.2.2 Roof				
1. **Roof design (Apply all)**				
a. Low- to moderate-pitched gable or hipped roofs from 6:12 to 8:12				
b. Overhanging eaves (minimum 24 inches along primary elevation) with exposed rafter tails or beams				
c. Brackets or knee braces at gabled ends				
d. Use of imitation wood or asphalt shingles				
4.2.3 Materials and Color				
1. **Materials and colors (Apply all)**				
a. Brick or stone shall be used in the base				
b. Primary wall materials shall include dark-color wood shingles, clapboard siding, or fiber cement siding and natural materials such as stone or brick				
c. Use of earth-toned color palette, such as browns and greens				
d. The front lot line façade shall have a minimum 3 paint colors: 1 for the cladding ,1 for trim, and 1 for accents such as windows and decorative details.				
4.2.4 Doors and Windows				
1. **Door and windows (Apply all)**				
a. A minimum of 50 percent of the windows shall be casement windows				
b. A minimum of 80 percent of the primary windows shall be multi-paned				
c. A minimum of 2 types/shapes of windows shall be used				
d. Utilize flat wood trims (typically 4½ inches or 5½ inches wide) around the primary windows and entry doors				

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Architectural Styles	**Applicant**		**City**	
	Done	N/A	Done	N/A
4.2 Craftsman				
e. Window and door trim color shall be different with the color of the walls				
f. Entry doors and garage doors shall have 1 row of vertical or horizontal glass panels				
4.2.5 Decorative Details				
1. **Decorative details**				
a. All residential projects shall provide **a minimum of 4** of the following, and				
b. Residential projects 4 stories and taller, mixed-use projects, or projects with more than 15 buildings shall provide **a minimum of 6** of the following:				
i. Stone pier and battered wood support				
ii. Exposed rafter tails and knee-brace brackets				
iii. Dormers on the front façade				
iv. Second-story balcony				
v. Decorative attic/gable vent				
vi. Light fixtures shall be box-shaped, with metal frame and geometric pattern				
vii. Chimneys are visible at the exterior and arranged on a side elevation				
viii. Stained-glass or transom windows				
ix. Covered front porches shall tapered pillars				
x. Ground-level windows shall have muntins				

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Architectural Styles	Applicant		City	
	Done	N/A	Done	N/A
4.3 American mercantile				
4.3.1 Form and Massing				
1. **Façade design (Apply all)**				
a. Asymmetrical facades/elevations				
b. Simple, rectangular form				
c. Symmetrical placement of piers, columns, ground-floor storefronts, and openings on upper levels				
d. Transparent windows and doorways shall be no less than 80 percent of the street frontage at the ground level				
e. Multistory facades are divided into base, body, and top, with the ground floor taller than the upper floors				
f. Columns or lintels over openings				
g. Bases are articulated by changes in material or changes in wall plane				
h. Minimal projections or recessions on wall plane				
4.3.2 Roof				
1. **Roof design (Apply all)**				
a. Flat roof				
b. A projecting cornice or a receding, stepped parapet				
c. Cornice and details mimic and reference historical detailing				
d. Street-facing gable roof with roof pitches at minimum 5:12 unless concealed behind a parapet				
4.3.3 Materials and Color				
1. **Materials and colors (Apply all)**				
a. Walls shall be composed of brick.				
b. Decorative moldings, cornices, or an applied ornament of stone or cast concrete shall be used.				
c. No more than 3 colors shall be used on any given facade.				
d. Stucco and clapboard is prohibited.				
4.3.4 Doors and Windows				
1. **Door and windows (Apply all)**				
a. Ground-floor windows and doors shall be large and expansive with a transom.				
b. Upper-floor windows shall be double-hung vertically and grouped with a rhythm consistent with the major storefront openings below.				

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Architectural Styles	Applicant		City	
	Done	N/A	Done	N/A
c. Entrance shall have higher bays, recessed entries by a minimum of 3 feet, or different color/materials				
d. Upper-floor windows shall have window lintel and sill				
e. Transom windows above the doors and windows on the ground level				
f. Fifty percent of windows shall have muntins				
g. Upper floor windows shall have a minimum 2-inch recess				
4.3.5 Decorative Details				
1. **Decorative details**				
a. All residential projects shall provide **a minimum of 4** of the following, and				
b. Residential projects 4 stories and taller, mixed-use projects, or projects with more than 15 buildings shall provide **a minimum of 6** of the following:				
i. Awnings, canopies, and second-floor balconies				
ii. Pedimented windows				
iii. Wide window trim with a keystone				
iv. Double-bracketed cornice				
v. Gable roof				
vi. Roof finial				
vii. Transom above door and windows on the ground level				
viii. Metal balcony railing				
ix. Canopy or awning				
x. Recessed entries				
xi. Cast-iron columns				
xii. Shopfront millwork				

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Architectural Styles	Applicant		City	
	Done	N/A	Done	N/A
4.4 Tuscan				
4.4.1 Form and Massing				
1. **Façade design (Apply all)**				
a. Asymmetrical arrangement of windows and design elements along front lot line				
b. Porches, porticoes and/or Juliet balconies				
c. Recessed entries (a minimum of 3 feet)				
4.4.2 Roof				
1. **Roof design (Apply all)**				
a. Flat or low-pitched hip or gable roof (maximum 6:12 slope)				
b. Red-toned clay tiles				
c. Multiple roof levels (at minimum 3)				
d. Large overhanging eaves (minimum 12 inches) along primary elevation				
4.4.3 Materials and Color				
1. **Materials and colors (Apply all)**				
a. Incorporate rough-hewn stone as accent feature				
b. Flat stucco walls in light earth tones				
c. Use of earth-toned color palette				
d. Brown or beige window frames				
4.4.4 Doors and Windows				
1. **Door and windows (Apply all)**				
a. Single- or double-hung windows shall be more horizontal in proportion, with six-over- six muntin patterns and 5½-inch-wide trim				
b. Casement windows shall be paired with four-pane patterns for smaller windows and eight-pane patterns for larger windows				
c. Vertically oriented rectangular or arched windows arranged in asymmetrical patterns				
d. Casement or double-hung sash with flat or arched lintels				
e. Windows shall be recessed 3 to 12 inches				

ODDS – Chapter 4

Architectural Styles

	Applicant		City	
	Done	N/A	Done	N/A
4.4.5 Decorative Details				
1. **Decorative details**				
a. All residential projects shall provide **a minimum of 4** of the following, and				
b. Residential projects 4 stories and taller, mixed-use projects, or projects with more than 15 buildings shall provide **a minimum of 6** of the following:				
i. Juliet balconies				
ii. Rafter extensions and brackets				
iii. Stone or stucco window/door trim				
iv. Rectangular or arched wooden door				
v. Arcade or porch at entry				
vi. Decorative ironwork (window grilles, railings, light fixtures, decorative planters)				
vii. Arched windows				
viii. Paired decorative wood shutters. Shutters shall be equal to half the width of the window. Shutter styles shall be paneled or louvered				
ix. Use of brick, stone, or wood columns				
x. Stucco or stone chimneys				
xi. Different-color wood trellis				
xii. Arched openings and doorways at the ground level				

ODDS – Chapter 4

Architectural Styles	Applicant		City	
	Done	N/A	Done	N/A
4.5 Modern				
4.5.1 Form and Massing				
1. **Façade design (Apply all)**				
a. An irregular, asymmetrical façade				
b. Rectangular structure				
c. Horizontal massing				
d. Straight and continuous lines				
e. Repeating lines and elements				
4.5.2 Roof				
1. **Roof design (Apply all)**				
a. Flat or low-pitched roofs (4:12 slope max)				
4.5.3 Materials and Color				
1. **Materials and colors (Apply all)**				
a. Use of raw and natural materials including wood, concrete, metal, and glass				
b. Traditional materials (such as smooth stucco (20/30), wood, brick, and stone) shall be used as an accent material				
c. Minimum **2** materials on the building facade				
d. Use of color blocking for geometric forms and break up massing elements				
e. Building facade shall incorporate **a minimum of 2** of the following as an accent:				
i. Awnings				
ii. Popouts, trellis				
iii. Arbor structures				
iv. Balconies				
4.5.4 Doors and Windows				
1. **Door and windows (Apply all)**				
a. Large glass doors and/or window openings				
b. Window wrapping around a corner of the building				
c. Narrow aluminum window frames				

Architectural Styles

	Applicant		City	
	Done	N/A	Done	N/A
4.5.5 Decorative Details				
1. **Decorative details**				
a. All residential projects shall provide **a minimum of 4** of the following, and				
b. Residential projects 4 stories and taller, mixed-use projects, or projects with more than 15 buildings shall provide **a minimum of 6** of the following:				
i. Metal balcony railings				
ii. Clerestory windows				
iii. Floor-to-ceiling glass door				
iv. Floor-to-ceiling glass windows on the ground level				
v. Roof decks				
vi. Trellis shade structures				
vii. Metal awning				
viii. Roof overhang with exposed wood or steel frame				

ODDS – Chapter 4

Architectural Styles	Applicant		City	
	Done	N/A	Done	N/A
4.6 Farmhouse				
4.6.1 Form and Massing				
1. **Façade design (Apply all)**				
a. Straight exterior lines, geometric form				
b. Asymmetrical massing with a gable at the front of the house				
c. Repeating shapes and lines				
d. Gable roof creating a triangular wall on the ends				
e. Incorporate farm and ranch forms (i.e. barns, silos, sheds, tank houses, and granary towers)				
f. Multiple gable and shed roof planes				
g. Geometric forms, industrial materials, and repetition				
h. Covered porches and awnings to break up volumes between lower and upper floors				
i. Variation in projecting wall planes with a minimum 12-inch depth				
4.6.2 Roof				
1. **Roof design (Apply all)**				
a. High-pitched gabled roof or shed roof (minimum 6:12 slope)				
b. Intersecting gable roofs				
c. Dark asphalt shingle, metal roofs, or synthetic slate shingles				
d. Triangular rooflines				
e. Large overhangs (minimum 2 feet in length) above the patio and garage				
4.6.3 Materials and Color				
1. **Materials and colors (Apply all)**				
a. Use metal, wood, or masonry				
b. Utilize board-and-batten siding, corrugated panels				
c. Monochrome accents of doors, windows, or architectural features				
d. Stucco is permitted as an accent material				

Architectural Styles

	Applicant		City	
	Done	N/A	Done	N/A
4.6.4 Doors and Windows				
1. **Door and windows (Apply all)**				
a. Windows shall be double-hung with a proportion of 2 or 2½ times taller than wide				
b. Groupings of 2 or 3 double-hung window units				
c. Multi-paned windows				
d. Accent trim around window and door openings				
e. Double-hung or casement windows				
4.6.5 Decorative Details				
1. **Decorative details**				
a. All residential projects shall provide **a minimum of 4** of the following, and				
b. Residential projects 4 stories and taller, mixed-use projects, or projects with more than 15 buildings shall provide **a minimum of 6** of the following:				
i. Wide front porch with simple columns				
ii. Covered patio				
iii. Shed or gabled dormers				
iv. Carriage-style garage doors				
v. Dark shutters and window sashe				
vi. Gable brackets, vents, and trim				
vii. Iron-inspired barn-style lighting				
viii. Metal awnings without sides				
ix. Gooseneck light fixtures at the entrance				
x. Large doors and windows to maximize natural light				
xi. Multi-paned windows on the ground-level windows and doors				

CITY OF ONTARIO *Agenda Report* **March 18, 2025**	**SECTION:** **PUBLIC HEARINGS**
Department: Planning Prepared By: Thomas Grahn Department: Prepared By: Thomas Grahn Staff Member Presenting: Rudy Zeledon, Executive Director Community Development Reviewed By: Kimberly Ruddins, Henry Noh, Rudy Zeledon Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 18

SUBJECT: **A PUBLIC HEARING TO CONSIDER AN ORDINANCE APPROVING A DEVELOPMENT CODE AMENDMENT, FILE NO. PDCA24-004, REGARDING ACCESSORY DWELLING UNITS AND JUNIOR ACCESSORY DWELLING UNITS**

RECOMMENDATION:

That the City Council open the public hearing, receive public testimony, close the public hearing, and by motion:

A. Find that the adoption of the proposed Ordinance is statutorily exempt from review under the California Environmental Quality Act ("CEQA") under Public Resources Code section 21080.17; and
B. Consider and adopt an Ordinance upholding the recommendation of the Planning Commission approving the Development Code Amendment (File No. PDCA24-004), pursuant to the facts and reasons contained in the staff report and Ordinance.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Invest in the Growth and Evolution of the City's Economy
Operate in a Businesslike Manner

FISCAL IMPACT: There is not a direct fiscal impact associated with this action.

BACKGROUND & ANALYSIS: On February 18, 2025, the City Council adopted an Urgency Ordinance revising and clarifying certain provisions of Chapter 5.0 (Zoning and Land Use) of the Development Code regarding Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) to comply with recent changes in State Law imposed by Assembly Bill 2533 (AB 2533) and Senate Bill 1211 (SB 1211). On February 25, 2025, the Planning Commission adopted a Resolution recommending the City Council adopt an Ordinance revising and clarifying those same provisions of Chapter 5.0 (Zoning and Land Use) of the Development Code regarding ADUs and JADUs to

comply with recent changes in State Law imposed by AB 2533 and SB 1211. The proposed Ordinance will amend Division 5.03 - Supplemental Land Use Regulations, Section 5.03.010 (Accessory Dwelling Units) of the City's Development Code to comply with recent changes to state law that impose new limits on local authority to regulate Accessory Dwelling Units ("ADUs") and Junior Accessory Dwelling Units ("JADUs"). Both AB 2533 and SB 1211 took effect January 1, 2025. To remain valid, the City's ADU Ordinance must comply with requirements imposed by AB 2533 and SB 1211. Adopting the proposed Ordinance ensures that the City's ADU Ordinance will be valid under AB 2533 and SB 1211.

PROJECT ANALYSIS: In recent years, the California Legislature has approved, and the Governor has signed into law, a number of bills that, among other things, amended various sections of the Government Code to impose new limits on local authority to regulate ADUs and JADUs. In 2024, the California Legislature approved, and the Governor signed into law, two new bills — AB 2533 and SB 1211 — that further amend state ADU law as summarized below.

AB 2533 – Unpermitted ADUs and JADUs

Subject to limited exceptions, existing state law prohibits a city from denying a permit to legalize an unpermitted ADU that was constructed before January 1, 2018, if the denial is based on the ADU not complying with applicable building, state, or local ADU standards. One exception allows a city to deny a permit to legalize if the city makes a written finding that correcting the violation is necessary to protect the health and safety of the public or the occupants of the structure.

AB 2533 changes this by: (1) expanding the above prohibition to also include JADUs; (2) moving the construction-cutoff date from January 1, 2018, to January 1, 2020; and (3) replacing the above exception with a requirement that local agencies find that correcting the violation is necessary to comply with the standards specified in Health and Safety Code section 17920.3 (Substandard Buildings). (See amended Gov. Code, § 66332(a)–(f)).

SB 1211 – Replacement Parking Requirements; Multifamily ADUs

Replacement Parking

Existing state law prohibits the City from requiring off-street parking spaces to be replaced when a garage, carport, or covered parking structure is demolished in conjunction with the construction of, or conversion to, an ADU.

SB 1211 amends this prohibition to now also prohibit a city from requiring replacement parking when an uncovered parking space is demolished for or replaced with an ADU. (See amended Gov. Code, § 66314(d)(11).)

Multifamily ADUs

SB 1211 further defines *livable space* in connection with converted ADUs inside a multifamily dwelling structure. Existing state law requires the City to ministerially approve qualifying building-permit applications for ADUs within "portions of existing multifamily dwelling structures that are not used as livable space, including, but not limited to, storage rooms, boiler rooms, passageways, attics, basements, or garages ...." The term "livable space" is not defined by existing state ADU law.

SB 1211 changes this by adding a new definition: "'Livable space' means a space in a dwelling intended for human habitation, including living, sleeping, eating, cooking, or sanitation." (See amended Gov. Code, § 66313(e)).

SB 1211 also increases the number of detached ADUs that lots with an existing multifamily dwelling can have. Existing state law allows a lot with an existing or proposed multifamily dwelling to have up to two detached ADUs.

Under SB 1211, a lot with an *existing* multifamily dwelling can have up to eight detached ADUs, or as many detached ADUs as there are primary dwelling units on the lot, whichever is less. (See amended Gov. Code, § 66323(a)(4)(A)(ii).) SB 1211 does not alter the number of ADUs that a lot with a *proposed* multifamily dwelling can have — the limit remains at two. (See amended Gov. Code, § 66323(a)(4)).

ENVIRONMENTAL REVIEW: Under California Public Resources Code section 21080.17, CEQA does not apply to the adoption of an Ordinance by a city or county implementing the provisions of Article 2 of Chapter 13 of Division 1 of Title 7 of the California Government Code, which is California's ADU law and which also regulates JADUs, as defined by section 66313. Therefore, the adoption of the proposed Ordinance is statutorily exempt from CEQA in that it implements state ADU law.

CITY OF ONTARIO PLANNING DEPARTMENT

PLANNING COMMISSION AGENDA REPORT

February 25, 2025

303 East B Street, Ontario, California 91764 Phone: 909.395.2036 / Email: PlanningDirector@OntarioCA.gov

FILE NO.: PDCA24-004

SUBJECT: A public hearing to consider Development Code Amendment revising and clarifying certain provisions of Chapter 5.0 (Zoning and Land Use) of the Development Code regarding Accessory Dwelling Units and Junior Accessory Dwelling Units to comply with recent changes in State Law; and Finding the Action to be Statutorily Exempt from CEQA under Section 21080.17 of the Public Resources Code. **City Initiated. City Council action is required.**

RECOMMENDED ACTION: That the Planning Commission open the public hearing, receive public testimony, close the public hearing, and by motion:

(1) Find that the adoption of the proposed ordinance is statutorily exempt from review under the California Environmental Quality Act ("CEQA") under Public Resources Code section 21080.17; and

(2) Consider and adopt a Resolution recommending the City Council approve the Development Code Amendment (File No. PDCA24-004), pursuant to the facts and reasons contained in the staff report and Resolution.

PROJECT SETTING: The proposed Development Code Amendment is of citywide impact, affecting approximately 50 square miles (31,789 acres) of land, which is generally bordered by Benson Avenue and Euclid Avenue on the west; Interstate 10 Freeway, Eighth Street, and Fourth Street on the north; Etiwanda Avenue and Hamner Avenue on the east; and Merrill Avenue and the San Bernardino County/Riverside County boundary on the south. The City of Ontario is substantially built-out with a mix of residential, commercial, industrial, agricultural, airport, recreational, and institutional/public land uses. According to the latest US Census forecast, the City of Ontario's 2022 estimated population is 179,516 persons and in terms of population, is ranked the 26th largest city in the State and the 146th largest in the nation. Ontario's population has increased by 3.46 percent since the most recent census, which recorded a population of 175,265 in 2020.

BACKGROUND: On February 18, 2025, the City Council adopted an Urgency Ordinance revising and clarifying certain provisions of Chapter 5.0 (Zoning and Land Use) of the Development Code regarding Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) to comply with recent changes in State Law imposed by Assembly Bill 2533 (AB 2533) and Senate Bill 1211 (SB 1211). Both AB 2533 and SB 1211 took effect

Case Planner:	Tom Grahn, Senior Planner
Planning Director Approval:	
Submittal Date:	N/A

Hearing Body	*Date*	*Decision*	*Action*
PC	2/25/2025		Recommends
CC 1st reading	3/18/2025		Introduction
CC 2nd reading	4/1/2025		Final Action

January 1, 2025. To remain valid, the City's ADU Ordinance must comply with requirements imposed by AB 2533 and SB 1211. Adopting the proposed Resolution ensures that the City's ADU Ordinance will be valid under AB 2533 and SB 1211.

PROJECT ANALYSIS:

In recent years, the California Legislature has approved, and the Governor has signed into law, a number of bills that, among other things, amended various sections of the Government Code to impose new limits on local authority to regulate ADUs and JADUs. In 2024, the California Legislature approved, and the Governor signed into law, two new bills — AB 2533 and SB 1211 — that further amend state ADU law as summarized below.

AB 2533 – Unpermitted ADUs and JADUs

Subject to limited exceptions, existing state law prohibits a city from denying a permit to legalize an unpermitted ADU that was constructed before January 1, 2018, if the denial is based on the ADU not complying with applicable building, state, or local ADU standards. One exception allows a city to deny a permit to legalize if the city makes a written finding that correcting the violation is necessary to protect the health and safety of the public or the occupants of the structure.

AB 2533 changes this by: (1) expanding the above prohibition to also include JADUs; (2) moving the construction-cutoff date from January 1, 2018, to January 1, 2020; and (3) replacing the above exception with a requirement that local agencies find that correcting the violation is necessary to comply with the standards specified in Health and Safety Code section 17920.3 (Substandard Buildings). (See amended Gov. Code, § 66332(a)–(f).)

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Replacement Parking
Existing state law prohibits the City from requiring off-street parking spaces to be replaced when a garage, carport, or covered parking structure is demolished in conjunction with the construction of, or conversion to, an ADU.

SB 1211 amends this prohibition to now also prohibit a city from requiring replacement parking when an uncovered parking space is demolished for or replaced with an ADU. (See amended Gov. Code, § 66314(d)(11).)

Multifamily ADUs
SB 1211 further defines *livable space* in connection with converted ADUs inside a multifamily dwelling structure. Existing state law requires the City to ministerially approve qualifying building-permit applications for ADUs within "portions of existing multifamily dwelling structures that are not used as livable space, including, but not limited to,

storage rooms, boiler rooms, passageways, attics, basements, or garages ...." The term "livable space" is not defined by existing state ADU law.

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SB 1211 also increases the number of detached ADUs that lots with an existing multifamily dwelling can have. Existing state law allows a lot with an existing or proposed multifamily dwelling to have up to two detached ADUs.

Under SB 1211, a lot with an *existing* multifamily dwelling can have up to eight detached ADUs, or as many detached ADUs as there are primary dwelling units on the lot, whichever is less. (See amended Gov. Code, § 66323(a)(4)(A)(ii).) SB 1211 does not alter the number of ADUs that a lot with a *proposed* multifamily dwelling can have — the limit remains at two. (See amended Gov. Code, § 66323(a)(4).)

PUBLIC NOTIFICATION: The number of owners to whom a public hearing notice would be mailed or delivered is greater than 1,000; therefore, pursuant to Development Code Section 2.03.010.C.2 and Government Code Section 65091(a)(4), in lieu of mailed or delivered notice, a display advertisement of at least 1/8 page was placed in a newspaper of general circulation in the City of Ontario (Inland Valley Daily Bulletin). Public hearing notification was published a minimum of 10 days in advance of the public hearing.

CORRESPONDENCE: As of the preparation of the Resolution, Planning Department staff has not received any written or verbal communications from the owners or occupants of properties surrounding the Project site or from the public in general, regarding the subject application.

AIRPORT LAND USE COMPATIBILITY PLAN (ALUCP) COMPLIANCE: The California State Aeronautics Act (Public Utilities Code Section 21670, et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

(1) Ontario International Airport Land Use Compatibility Plan ("ONT ALUCP") — On April 19, 2011, the City Council of the City of Ontario approved and adopted the ONT ALUCP, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the recommending body for the projects, the Planning Commission has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including

[1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, Planning Commission has concluded that the proposed Development Code Amendment and Zone Change are consistent with the policies and criteria set forth within the ONT ALUCP.

(2) Chino Airport Land Use Compatibility Plan ("CNO ALUCP") — On August 2, 2022, the City Council of the City of Ontario approved and adopted a Development Code Amendment to establish the Chino Airport ("CNO") Overlay Zoning District ("OZD") and Reference I, Chino Airport Land Use Compatibility Plan. The CNO OZD and CNO ALUCP established the Airport Influence Area for Chino Airport, solely within the City of Ontario, and limits future land uses and development within the Airport Influence Area, as they relate to safety, airspace protection, and overflight impacts of current and future airport activity. The CNO ALUCP is consistent with policies and criteria set forth within the Caltrans 2011 California Airport Land Use Planning Handbook. The proposed Development Code Amendment may affect certain land development criteria on certain properties located within the Airport Influence Area of Chino Airport, which have been evaluated and found to be consistent with the California Airport Land Use Planning Handbook and the CNO ALUCP. As a result, the Planning Commission has concluded that the proposed Development Code Amendment and Zone Change are consistent with the policies and criteria set forth within the CNO ALUCP.

COMPLIANCE WITH THE ONTARIO PLAN: The proposed Project is consistent with the principles, goals and policies contained within the Vision, Governance, Policy Plan (general plan), and City Council Priorities components of The Ontario Plan ("TOP"). More specifically, the goals and policies of TOP that are furthered by the proposed Project are as follows:

(1) City Council Goals.

- Invest in the Growth and Evolution of the City's Economy
- Operate in a Businesslike Manner

(2) Vision.

Distinctive Development:

- Commercial and Residential Development

➢ Development quality that is broadly recognized as distinctive and not exclusively tied to the general suburban character typical of much of Southern California.

(3) Governance.

Decision Making:

- Goal G1: Sustained decision-making that consistently moves Ontario towards its Vision by using The Ontario Plan as a framework for assessing choices.

  - G 1-2. Long-term Benefit. We require decisions to demonstrate and document how they add value to the community and support the Ontario Vision.

(4) Policy Plan (General Plan).

Land Use Element:

- Goal LU-1 Balance: A community that has a spectrum of housing types and price ranges that match the jobs in the City and that make it possible for people to live and work in Ontario and maintain a quality of life.

  - LU-1.6 Complete Community. We incorporate a variety of land uses and building types in our land use planning efforts that result in a complete community where residents at all stages of life, employers, workers, and visitors have a wide spectrum of choices of where they can live, work, shop and recreate within Ontario.

Housing Element:

- Goal H-2 Housing Supply & Diversity: Diversity of types of quality housing that are affordable to a range of household income levels, accommodate changing demographics, and support and reinforce the economic sustainability of Ontario.

  - H-2.5 Housing Design. We require architectural excellence through adherence to City design guidelines, thoughtful site planning, environmentally sustainable practices, and other best practices.

- Goal H-5 Special Needs: A full range of housing types and community services that meet the special housing needs for all individuals and families in Ontario, regardless of income level, age, or other status.

  - H-5.2 Family Housing. We support the development of larger rental apartments that are appropriate for families with children, including, as feasible, the provision of services, recreation, and other amenities.

HOUSING ELEMENT COMPLIANCE: The Project is consistent with the Housing Element of the Policy Plan (general plan) component of The Ontario Plan, as the project furthers the purposes, principals, goals, and policies of the Housing Element.

ENVIRONMENTAL REVIEW: Under California Public Resources Code section 21080.17, CEQA does not apply to the adoption of an Ordinance by a city or county implementing

the provisions of Article 2 of Chapter 13 of Division 1 of Title 7 of the Government Code, which is California's ADU law and which also regulates JADUs, as defined by section 66313. Therefore, the adoption of the proposed Ordinance is statutorily exempt from CEQA in that it implements state ADU law.

RESOLUTION NO. PC25-015

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ONTARIO, CALIFORNIA, RECOMMENDING THAT THE CITY COUNCIL APPROVE A DEVELOPMENT CODE AMENDMENT, FILE NO. PDCA24-004, AMENDING DIVISION 5.03 & SUPPLEMENTAL LAND USE REGULATIONS, SECTION 5.03.010 OF THE CITY'S DEVELOPMENT CODE RELATING TO ACCESSORY DWELLING UNITS AND JUNIOR ACCESSORY DWELLING UNITS IN THE CITY, AND FINDING THE ACTION TO BE STATUTORILY EXEMPT FROM CEQA UNDER PUBLIC RESOURCES CODE § 21080.17, AND MAKING FINDINGS IN SUPPORT THEREOF.

WHEREAS, THE CITY OF ONTARIO ("Applicant") has initiated an Application for the approval of a Development Code Amendment, File No. PDCA24-004, as described title of this Resolution (hereinafter referred to as "Application" or "Project"); and

WHEREAS, the City of Ontario Development Code (Ontario Municipal Code Title 9) provides the legislative framework for the implementation of The Ontario Plan, which establishes long term principals, goals, and policies for guiding the growth and development of the City in a manner that achieves Ontario's vision, and promotes and protects the public health, safety, comfort, convenience, prosperity, and welfare of its citizens; and

WHEREAS, the Development Code Amendment is of citywide impact, affecting approximately 50 square miles (31,789 acres) of land, which is generally bordered by Benson Avenue and Euclid Avenue on the west; Interstate 10 Freeway, Eighth Street, and Fourth Street on the north; Etiwanda Avenue and Hamner Avenue on the east; and Merrill Avenue and the San Bernardino County/Riverside County boundary on the south; and

WHEREAS, the Planning and Zoning Law authorizes cities to act by Ordinance to provide for the creation and regulation of accessory dwelling units ("ADUs") and junior accessory dwelling units ("JADUs"); and

WHEREAS, in recent years, the California Legislature has approved, and the Governor has signed into law, a number of bills that, among other things, amend various sections of the Government Code to impose new limits on local authority to regulate ADUs and JADUs; and

WHEREAS, in 2024, the California Legislature approved, and the Governor signed into law, Assembly Bill 2533 ("AB 2533") and Senate Bill 1211 ("SB 1211"), which further amend state ADU law; and

WHEREAS, AB 2533 and SB 1211 took effect on January 1, 2025, and for the City's ADU ordinance to remain valid, it must be amended to reflect the requirements of AB 2533 and SB 1211; and

WHEREAS, the City desires to amend its local regulatory scheme for the construction of ADUs and JADUs to reflect AB 2533's and SB 1211's changes to state law; and

WHEREAS, Ontario Development Code Table 2.02-1 (Review Matrix) grants the Planning Commission the responsibility and authority to review and make recommendation to the City Council on the subject Application; and

WHEREAS, City of Ontario Development Code Division 2.03 (Public Hearings) prescribes the manner in which public notification shall be provided and hearing procedures to be followed, and all such notifications and procedures have been completed; and

WHEREAS, on February 25, 2025, the Planning Commission of the City of Ontario conducted a hearing to consider the Project, and concluded said hearing on that date; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED, AND RESOLVED by the Planning Commission of the City of Ontario, as follows:

SECTION 1: ***Incorporation***. The recitals above are true and correct and are each incorporated by reference and adopted as findings by the Planning Commission.

SECTION 2: ***Environmental Determination and Findings.*** The Planning Commission recommends that the City Council find that, under California Public Resources Code section 21080.17, the California Environmental Quality Act ("CEQA") does not apply to the adoption of an Ordinance by a city or county implementing the provisions of Article 2 of Chapter 13 of Division 1 of Title 7 of the California Government Code, which is California's ADU law and which also regulates JADUs, as defined by section 66313. Therefore, adoption of the proposed Ordinance is statutorily exempt from CEQA in that it implements state ADU law.

SECTION 3: ***Housing Element Compliance.*** Pursuant to the requirements of California Government Code Chapter 3, Article 10.6, commencing with Section 65580, as the recommending authority for the Project, the Planning Commission finds that based on the facts and information contained in the Application and supporting documentation, the project is consistent with the Housing Element of the Policy Plan (General Plan) component of The Ontario Plan.

SECTION 4: ***Airport Land Use Compatibility Plan ("ALUCP") Compliance.*** The California State Aeronautics Act (Public Utilities Code Section 21670, et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

(1) On April 19, 2011, the City Council of the City of Ontario approved and adopted the Ontario International Airport Land use Compatibility Plan, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the recommending body for the Project, the Planning Commission has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the Planning Commission, therefore, finds and determines that the Project is consistent with the policies and criteria set forth within the ONT ALUCP; and

(2) On August 2, 2022, the City Council of the City of Ontario approved and adopted a Development Code Amendment to establish the Chino Airport ("CNO") Overlay Zoning District ("OZD") and Reference I, Chino Airport Land Use Compatibility Plan ("CNO ALUCP"). The CNO OZD and CNO ALUCP established the Airport Influence Area for Chino Airport, solely within the City of Ontario, and limits future land uses and development within the Airport Influence Area, as they relate to safety, airspace protection, and overflight impacts of current and future airport activity. The CNO ALUCP is consistent with policies and criteria set forth within the Caltrans 2011 California Airport Land Use Planning Handbook. The proposed Project is located within the Airport Influence Area of Chino Airport and was evaluated and found to be consistent with the California Airport Land Use Planning Handbook and the CNO ALUCP. As the recommending body for the Project, the Planning Commission has reviewed and considered the facts and information contained in the Application and supporting documentation against the CNO ALUCP compatibility factors, including Safety, Airspace Protection, Overflight. As a result, the Planning Commission, therefore, finds and determines that the Project is consistent with the policies and criteria set forth within the California Airport Land Use Planning Handbook and the CNO ALUCP.

SECTION 5: ***Concluding Facts and Reasons.*** Based upon the substantial evidence presented to the Planning Commission during the above-referenced hearing,

and upon the specific findings set forth in Sections 1 through 4, above, the Planning Commission hereby concludes as follows:

(1) The proposed Development Code Amendment is consistent with the goals, policies, plans and exhibits of the Vision, Policy Plan (General Plan), and City Council Goals components of The Ontario Plan ("TOP"). The Development Code Amendment will: (a) serve to promote a community that is consistently seeking—and thoughtfully applying—new ways of doing things better, as encouraged by TOP's Vision; (b) provides for a variety of land uses and building types in our land use planning efforts that result in a complete community where residents at all stages of life, have a wide spectrum of choices of where they can live and recreate, as promoted by Land Use Element Policy LU-1.6, Complete Community; and (c) promotes the City Council Goals through the establishment of Development Code provisions that encourages investment in the growth and evolution of the City's economy and focuses City resources in commercial and residential neighborhoods; and

(2) The proposed Development Code Amendment would not be detrimental to the public interest, health, safety, convenience, or general welfare of the City. The Development Code Amendment incorporates safeguards intended to ensure that the purposes of the Development Code are preserved; the project will not be contrary to or damage the public health, safety, convenience, or general welfare; the project will not result in any significant environmental impacts; and the project will be in full conformity with the Vision, City Council Priorities, and Policy Plan components of The Ontario Plan.

SECTION 6: ***Planning Commission Action.*** Based upon the findings and conclusions set forth in Sections 1 through 5, above, the Planning Commission hereby RECOMMENDS THE CITY COUNCIL APPROVES the herein described changes that comprise the Development Code Amendment, and which are attached hereto as "Attachment A," and incorporated herein by this reference.

SECTION 7: ***Custodian of Records.*** The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East B Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario.

SECTION 8: ***Certification to Adoption.*** The Secretary shall certify to the adoption of the Resolution.

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The Secretary Pro Tempore for the Planning Commission of the City of Ontario shall certify as to the adoption of this Resolution.

I hereby certify that the foregoing Resolution was duly and regularly introduced, passed and adopted by the Planning Commission of the City of Ontario at a regular meeting thereof held on the 25th day of February 2025, and the foregoing is a full, true and correct copy of said Resolution, and has not been amended or repealed.

Nicola Ricci
Planning Commission Chairperson

ATTEST:

Henry Noh
Planning Director and
Secretary of the Planning Commission

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO)
CITY OF ONTARIO)

I, Gwen Berendsen, Secretary Pro Tempore of the Planning Commission of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. PC25-015, was duly passed and adopted by the Planning Commission of the City of Ontario at their regular meeting held on February 25, 2025, by the following roll call vote, to wit:

AYES: DeDiemar, Gage, Lampkin, Ricci

NOES: None

ABSENT: Anderson

ABSTAIN: None

Gwen Berendsen
Secretary Pro Tempore

ATTACHMENT A:

File No. PDCA24-004
2025 Development Code Amendment
For ADUs and JADUs

(Document to follow this page)

City of Ontario Development Code
Division 5.03 – Supplemental Land Use Regulations
5.03.010: Accessory Dwelling Units

A. **Purpose.** The purpose of this Section is to allow and regulate accessory dwelling units (ADUs) and junior accessory dwelling units (JADUs) in compliance with Article 2 of Chapter 13 of Division 1 of Title 7 of the California Government Code.

B. **Effect of Conforming.** An ADU or JADU that conforms to the standards in this Section will not be:

1. Deemed to be inconsistent with the City's general plan and zoning designation for the lot on which the ADU or JADU is located.

2. Deemed to exceed the allowable density for the lot on which the ADU or JADU is located.

3. Considered in the application of any local ordinance, policy, or program to limit residential growth.

4. Required to correct a nonconforming zoning condition, as defined in Subsection C.7, below. This does not prevent the City from enforcing compliance with applicable building standards in accordance with Health and Safety Code Section 17980.12.

C. **Definitions.** As used in this Section, the words or phrases listed below shall have the meanings thereafter specified:

1. Accessory Dwelling Unit (ADU). An attached or a detached residential dwelling unit that provides complete independent living facilities for one or more persons and is located on a lot with a proposed or existing primary residence. An accessory dwelling unit also includes the following:

a. An efficiency unit, as defined by HSC Section 17958.1; and

b. A manufactured home, as defined by HSC Section 18007.

2. Accessory Structure. A structure that is accessory and incidental to a dwelling located on the same lot.

3. Complete Independent Living Facilities. Permanent provisions for living, sleeping, eating, cooking, and sanitation on the same parcel as the single-family or multiple-family dwelling is or will be situated.

4. Efficiency Kitchen. A kitchen that includes each of the following:

a. A cooking facility with appliances.

b. A food preparation counter and storage cabinets that are of a reasonable size in relation to the JADU.

5. Junior Accessory Dwelling Unit (JADU). A residential unit that:

a. Is no more than 500 SF in size;

b. Is contained entirely within an existing or proposed single-family structure. An enclosed use within the residence, such as an attached garage, is considered to be a part of and contained within the single-family structure;

c. Includes its own separate sanitation facilities or shares sanitation facilities with the existing or proposed single-family structure;

d. If the unit does not include its own separate bathroom, then it contains an interior entrance to the main living area of the existing or proposed single-family structure in addition to an exterior entrance that is separate from the main entrance to the primary dwelling; and

e. It includes an efficiency kitchen, as defined in Subsection C.4, above.

6. Livable Space. A space in a dwelling intended for human habitation, including living, sleeping, eating, cooking, or sanitation.

7. Living Area. The interior habitable area of a dwelling unit, including basements and attics, but does not include a garage or any accessory structure.

8. Nonconforming Zoning Condition. A physical improvement on a property that does not conform with current zoning standards.

9. Passageway. A pathway that is unobstructed clear to the sky and extends from a street to one entrance of the ADU or JADU.

10. Proposed Dwelling. A dwelling that is the subject of a permit application and that meets the requirements for permitting.

11. Public Transit. A location, including but not limited to a bus stop or train station, where the public may access buses, trains, subways, and other forms of transportation that charge set fares, run on fixed routes, and are available to the public.

12. Tandem Parking. Two or more automobiles parked on a driveway or on any other location on a lot, lined up one behind the other.

D. **Approvals.** The following approvals apply to ADUs and JADUs under this Section:

1. Building Permit Only. If an ADU or JADU complies with each of the general requirements in subsection E below, it is allowed with only a building permit in the following scenarios:

a. *Converted on Single-Family Lot.* One ADU as described in this Subsection D.1.a and one JADU on a lot with a proposed or existing single-family dwelling on it, where the ADU or JADU:

(1) Is either: within the space of a proposed single-family dwelling; within the existing space of an existing single-family dwelling; or (in the case of and ADU only) within the existing space of an accessory structure, plus up to 150 additional SF if the expansion is limited to accommodating ingress and egress; and

(2) Has exterior access that is independent of that for the single-family dwelling; and

(3) Has side and rear setbacks sufficient for fire and safety, as dictated by applicable building and fire codes; and

(4) The JADU complies with the requirements of Government Code Sections 66333 through 66339.

b. *Limited Detached on Single-Family Lot.* One detached, new-construction ADU on a lot with a proposed or existing single-family dwelling (in addition to any JADU that might otherwise be established on the lot under Subsection D.1.a, above), if the detached ADU satisfies each of the following limitations:

(1) The side- and rear-yard setbacks are at least 4 FT; and

(2) The total floor area is 800 SF or smaller; and

(3) The peak height above grade does not exceed the applicable height limit provided in Subsection E.2, below.

c. *Converted on Multiple-Family Lot.* One or more ADUs within portions of existing multiple-family dwelling structures that are not used as livable space, including but not limited to storage rooms, boiler rooms, passageways, attics, basements, or garages, if each converted ADU complies with state building standards for dwellings. Under this Subsection D.1.c, at least one converted ADU is allowed within an existing multiple-family dwelling, up to a quantity equal to 25 percent of the existing multiple-family dwelling units.

d. *Limited Detached on Multiple-Family Lot.* No more than two detached ADUs on a lot that has an existing or proposed multiple-family dwelling, or up to 8 detached ADUs on a lot with and existing multiple-family dwelling, if each detached ADU satisfies all of the following:

(1) The side- and rear-yard setbacks are at least 4 FT. If the existing multiple-family dwelling has a rear or side yard setback of less than 4 FT, the City shall not require any modification to the multiple-family dwelling as a condition of approving the ADU; and

(2) The peak height above grade does not exceed the applicable height limit provided in Subsection E.2, below.

(3) If the lot has an existing multiple-family dwelling, the quantity of detached ADUs does not exceed the number of primary dwelling units on the lot.

2. Process and Timing.

a. An ADU permit is considered and approved ministerially, without discretionary review or a hearing.

b. The City must approve or deny an application to create an ADU or JADU within 60 days from the date that the City receives a completed application. If the City has not

approved or denied the completed application within 60 days, the application is deemed approved unless either:

(1) The applicant requests a delay, in which case the 60-day time period is tolled for the period of the requested delay, or

(2) When an application to create an ADU or JADU is submitted with a permit application to create a new single-family or multiple-family dwelling on the lot, the City may delay acting on the permit application for the ADU or JADU until the City acts on the permit application to create the new single-family or multiple-family dwelling, but the application to create the ADU or JADU will still be considered ministerially, without discretionary review or a hearing.

c. If the City denies application to create an ADU or JADU, the City must provide the applicant with comments that include, among other things, a list of all the defective or deficient items and a description of how the application may be remedied by the applicant. Notice of the denial and corresponding comments must be provided to the applicant within the 60-day time period established by Subsection D.3.b, above.

d. A demolition permit for a detached garage that is to be replaced with an ADU is reviewed with the application for the ADU and issued at the same time.

E. **General ADU and JADU Requirements.** The following requirements apply to all ADUs and JADUs that are approved under Subsections D.1 or D.2, above:

1. Zoning.

a. An ADU subject only to a building permit under Subsection D.1, above, may be created on a lot in a residential or mixed-use zoning district.

b. An ADU subject to an ADU permit under Subsection D.2, above, may be created on a lot that is zoned to allow single-family dwelling residential use or multiple-family dwelling residential use.

c. In accordance with Government Code section 66333(a), a JADU may only be created on a lot zoned for single-family residences.

2. Height.

a. Except as otherwise provided by Subsections E.2.b and E.2.c, below, a detached ADU created on a lot with an existing or proposed single-family or multiple-family dwelling unit may not exceed 16 FT in height.

b. A detached ADU may be up to 18 FT in height if it is created on a lot with an existing or proposed single-family or multiple-family dwelling unit that is located within one-half mile walking distance of a major transit stop or a high quality transit corridor, as those terms are defined in Section 21155 of the Public Resources Code, and the ADU may be up to two additional feet in height (for a maximum of 20 FT) if necessary to accommodate a roof pitch on the ADU that is aligned with the roof pitch of the primary dwelling unit.

c. A detached ADU created on a lot with an existing or proposed multiple-family dwelling that has more than one story may not exceed 18 FT in height.

d. An ADU that is attached to the primary dwelling may not exceed 25 FT in height or the height limitation imposed by the underlying zone that applies to the primary dwelling, whichever is lower. Notwithstanding the foregoing, ADUs subject to this Subsection E.2.d may not exceed two stories.

e. For purposes of this Subsection E.2, height is measured from existing legal grade or the level of the lowest floor, whichever is lower, to the peak of the structure.

3. Fire Sprinklers.

a. Fire sprinklers are required in an ADU if sprinklers are required in the primary residence.

b. The construction of an ADU does not trigger a requirement for fire sprinklers to be installed in the existing primary dwelling.

4. Rental Term. No ADU or JADU may be rented for a term that is shorter than 30 days. This prohibition applies regardless of when the ADU or JADU was created.

5. No Separate Sale or Conveyance. An ADU or JADU may be rented, but, except as provided in Government Code section 66341, no ADU or JADU may be sold or otherwise conveyed separately from the lot and the primary dwelling (in the case of a single-family lot) or from the lot and all of the dwellings (in the case of a multiple-family lot).

6. Septic System. If the ADU or JADU will connect to an onsite wastewater-treatment system, the owner must include with the application a percolation test completed within the last 5 years or, if the percolation test has been recertified, within the last 10 years.

7. Owner Occupancy.

a. An ADU created under this section on or after January 1, 2020 are not subject to an owner-occupancy requirement.

b. As required by state law, all JADUs are subject to an owner-occupancy requirement. A natural person with legal or equitable title to the property must reside on the property, in either the primary dwelling or JADU, as the person's legal domicile and permanent residence. However, the owner-occupancy requirement in this Subsection E.7.b does not apply if the property is entirely owned by another governmental agency, land trust, or housing organization.

8. "Rent Reporting. In order to facilitate the City's obligation to identify adequate sites for housing in accordance with Government Code Sections 65583.1 and 66330, the following requirements must be satisfied:

a. With the building-permit application, the applicant must provide the City with an estimate of the projected annualized rent that will be charged for the ADU or JADU.

b. Within 90 days after each January 1 following issuance of the building permit, the owner must report the actual rent charged for the ADU or JADU during the prior year. If the City does not receive the report within the 90-day period, the owner is in violation of this Code, and the City may send the owner a notice of violation and allow the owner another 30

days to submit the report. If the owner fails to submit the report within the 30-day period, the City may enforce this provision in accordance with applicable law.

9. Building and Safety.

a. *Must Comply with Building Code*. Subject to Subsection E.10.b, below, all ADUs and JADUs must comply with all local building code requirements.

b. *No Change of Occupancy*. Construction of an ADU does not constitute a Group R occupancy change under the local building code, as described in Section 310 of the California Building Code, unless the building official or Community Improvement Division officer makes a written finding based on substantial evidence in the record that the construction of the ADU could have a specific, adverse impact on public health and safety. Nothing in this Subsection E.10.b prevents the City from changing the occupancy code of a space that was uninhabitable space or that was only permitted for nonresidential use and was subsequently converted for residential use in accordance with this Section.

F. **Specific ADU Requirements.** The following requirements apply only to ADUs that require an ADU permit under Subsection D.2, above.

1. Maximum Size.

a. The maximum size of a detached or attached ADU subject to this Subsection F is 850 SF for a studio or one-bedroom unit and 1,000 SF for a unit with two or more bedrooms.

b. An attached ADU that is created on a lot with an existing primary dwelling is further limited to 50 percent of the floor area of the existing primary dwelling.

c. Application of other development standards in this Subsection F, such as lot coverage, might further limit the size of the ADU, but no application of the percent-based size limit in Subsection F.1.b, above, or front setback, lot coverage limit, or open-space requirement may require the ADU to be less than 800 SF.

2. Building Setbacks.

a. Subject to Subsection F.1.c, above, an ADU that is subject to this Subsection F shall maintain a minimum front yard setback of 30 FT from arterial street rights-of-way and 20 FT from all collector and local street rights-of-way.

b. An ADU that is subject to this Subsection F must conform to 4-FT side yard and rear yard setbacks.

c. No setback is required for an ADU that is subject to this Subsection F if the ADU is constructed in the same location and to the same dimensions as an existing structure.

3. Lot Coverage. No ADU subject to this Subsection F may cause the total lot coverage of the lot to exceed the maximum lot coverages shown in the Tables below, subject to Subsection F.1.c, above.

Traditional Single-Family Residential Development Standards

Requirements	***Residential Zoning Districts***				
	AR-2	***RE-2***	***RE-4***	***LDR-5***	***MDR-11, MDR-18, MDR-25 & HDR-45***
Maximum Lot Coverage	30%	40%		50%	60%

Small Lot Traditional and Alley-Loaded Single-Family Residential Development Standards

Requirements	***Residential Zoning Districts***		
	LDR-5	***MDR-11***	***MDR-18, MDR-25 & HDR-45***
Maximum Lot Coverage	55%	60%	70%

Multiple-Family Residential Development Standards

Requirements	***Residential Zoning Districts***			
	MDR-11	***MDR-18***	***MDR-25***	***HDR- 45***
Maximum Project Coverage	60%			100%

4. Minimum Open Space. No ADU subject to this Subsection F may cause the total percentage of open space of the lot to fall below the minimum requirements specified below, subject to Subsection F.1.c, above.

a. *Small Lot Traditional and Alley-Loaded Development Projects, and Cluster Single-Family Development Projects.* Small lot traditional, small lot alley-loaded, and cluster single-family development projects that consist of more than 3 dwellings, shall devote a minimum of 20 percent of the project site to open space.

b. *Multiple-Family and Mixed-Use Development Projects.* Multiple-family development projects and the multiple-family residential portion of mixed-use development projects that consist of more than 3 dwellings, shall provide open space as follows:

Minimum Open Space Requirements for Multiple-Family and Mixed-Use Development Projects

Open Space Type	***Zoning Districts***		
	MDR-11 & MDR-18	***MDR-25***	***HDR-45***
Private Open Space	200 SF (40%)	150 SF (37.5%)	60 SF (20%)
Common Open Space	300 SF (60%)	250 SF (62.5%)	250 SF (80%)
Total Open Space	500 SF (100%)	400 SF (100%)	310 SF (100%)

5. Passageway. No passageway, as defined by Subsection C.9, above, is required for an ADU.

6. Off-Street Parking.

a. *Generally.* One off-street parking space is required for each ADU. The parking space may be provided in setback areas or as tandem parking, as defined by Subsection C.12, above.

b. *Exceptions.* No parking under Subsection F.7.a, above, is required in the following situations:

(1) The ADU is located within one-half mile walking distance of public transit, as defined in Subsection C.11, above.

(2) The ADU is located within an architecturally and historically significant historic district.

(3) The ADU is part of the proposed or existing primary residence, or an accessory structure under Subsection D.1.a, above.

(4) When on-street parking permits are required but not offered to the occupant of the ADU.

(5) When there is an established car share vehicle stop located within one block of the ADU.

(6) When the permit application to create an ADU is submitted with an application to create a new single-family or multiple-family dwelling on the same lot, provided that the ADU or the lot satisfies any other criteria listed in Subsections F.6.b(1) through F.6.b(5), above.

c. *No Replacement.* When a garage, carport, covered parking structure, or uncovered parking space is demolished in conjunction with the construction of an ADU or converted to an ADU, those off-street parking spaces are not required to be replaced.

7. Architectural Requirements.

a. The materials and colors of the exterior walls, roof, and windows and doors must match the appearance and architectural design of those of the primary dwelling.

b. The roof slope must match that of the dominant roof slope of the primary dwelling. The dominant roof slope is the slope shared by the largest portion of the roof.

c. The exterior lighting must be limited to down-lights or as otherwise required by the City's Building or Fire Code.

d. The ADU must have an independent exterior entrance, apart from that of the primary dwelling.

e. The interior horizontal dimensions of an ADU must be at least 10 FT wide in every direction, with a minimum interior wall height of 7 FT.

f. Windows and doors of the ADU may not have a direct line of sight to an adjoining residential property. Fencing, landscaping, or privacy glass may be used to provide screening and prevent a direct line-of-sight.

g. All windows and doors in an ADU are less than 30 FT from a property line that is not a public right-of-way line must either be (for windows) clerestory with the bottom of the glass at least 6 FT above the finished floor, or (for windows and for doors) utilize frosted or obscure glass.

8. Landscape Requirements. A Landscape Plan shall be submitted to the City, which provides for evergreen landscape screening, to include trees, shrubs, and groundcovers that shall be planted, permanently irrigated, and fully maintained, and which is located between an ADU and adjacent parcels, and where an ADU impacts a front yard and/or is subject to public views from a public or private street. Evergreen landscape screening shall be provided as follows:

a. Minimum 15-gallon size screening shrubs shall be installed at every 5 linear feet of exterior building wall. Alternatively, a 6-FT high decorative masonry block wall may be constructed.

b. ADUs created by garage conversion, which results in the removal of the garage door, shall provide a minimum 3-FT wide foundation landscape planter for the full length of the wall wherein the garage door was removed, which shall be fully landscaped and irrigated, and permanently maintained.

c. All landscaping must be drought tolerant and California friendly.

d. Landscape and irrigation plans shall be prepared and submitted to the City for review and approval.

9. Historical Protections. An ADU that is on or within 600 feet of real property that is listed in the California Register of Historic Resources must be located so as to not be visible from any public right-of-way.

G. **Fees.** The following requirements apply to all ADUs and JADUs that are approved under Subsections D.1 or D.2, above.

1. Impact Fees.

a. No impact fee is required for an ADU that is less than 750 SF in size. For the purposes of this Subsection G.1, the term "impact fee" means a "fee" under the Mitigation Fee Act (Government Code Section 66000(b)) and a fee under the Quimby Act (Government Code Section 66477). "Impact fee" as used in this Section, does not include any connection fee or capacity charge for water or sewer service.

b. Any impact fee that is required for an ADU that is 750 SF or larger in size must be charged proportionately in relation to the square footage of the primary dwelling unit (e.g., the floor area of the ADU, divided by the floor area of the primary dwelling, times the typical fee amount charged for a new dwelling.)

2. Utility Fees.

a. If an ADU is constructed with a new single-family home, a separate utility connection directly between the ADU and the utility and payment of the normal connection fee and capacity charge for a new dwelling are required.

b. Except as described in Subsection G.2.a, converted ADUs on a single-family lot that are created under Subsection D.1.a above are not required to have a new or separate utility connection directly between the ADU and the utility. Nor is a connection fee or capacity charge required.

c. Except as described in Subsection G.2.a, all ADUs that are not covered by Subsection G.2.b require a new, separate utility connection directly between the ADU and the utility for any utility that is provided by the city. All utilities that are not provided by the city are subject to the connection and fee requirements of the utility provider.

(1) The connection is subject to a connection fee or capacity charge that is proportionate to the burden created by the ADU based on either the floor area or the number of drainage-fixture units (DFU) values, as defined by the Uniform Plumbing Code, upon the water or sewer system.

(2) The portion of the fee or charge that is charged by the city may not exceed the reasonable cost of providing this service.

H. **Nonconforming Zoning Code Conditions, Building Code Violations, and Unpermitted Structures.**

1. Generally. The City will not deny an ADU or JADU application due to a nonconforming zoning condition, building code violation, or unpermitted structure on the lot that does not present a threat to the public health and safety and that is not affected by the construction of the ADU or JADU.

2. Unpermitted ADUs constructed before 2020.

a. *Permit to Legalize.* As required by state law, the City may not deny a permit to legalize an existing, but unpermitted ADU or JADU that was constructed before January 1, 2020, if denial is based on either of the following grounds:

(1) The ADU or JADU violates applicable building standards; or

(2) The ADU or JADU does not comply with state ADU or JADU law or this ADU ordinance (Section 5.03.010).

b. *Exceptions.*

(1) Notwithstanding Subsection H.2.a, above the City may deny a permit to legalize an existing but unpermitted ADU or JADU that was constructed before January 1, 2020, if the City makes a finding that correcting a violation is necessary to comply with the standards specified in California Health and Safety Code section 17920.3.

(2) Subsection H.2.a, above does not apply to a building that is deemed to be substandard in accordance with California Health and Safety Code Section 17920.3.

I. **Nonconforming ADUs and Discretionary Approval.** Any proposed ADU or JADU that would otherwise be allowed under this section but that does not conform to the objective design or development standards set forth in Subsections A through H of this Section may be allowed by the City, subject to a Conditional Use Permit issued in accordance with the other provisions of this Development Code.

5.03.000: Purpose

The purpose of this Division is to provide operating, site planning and/or development standards for certain land uses allowed by Division 5.02 (Land Use) of this Development Code, and for activities and facilities that require special standards to mitigate their potential adverse impacts, thereby assuring a land use, activity, and/or facility of stable and desirable character, which is compatible with existing and future development and land uses in the vicinity, and protects the use and enjoyment of neighboring properties consistent with goals and policies of The Ontario Plan.

5.03.005: Applicability

A. The land uses, activities and facilities addressed by this Division shall be located in compliance with Division 5.02 (Land Use) of this Development Code.

B. The standards for specific uses, activities and facilities established by this Division shall supplement, and are required in addition to, the applicable development and subdivision regulations contained in Chapter 6.0 (Development and Subdivision Regulations) of this Development Code.

C. Each and every physical improvement required to be installed or constructed in conjunction with the establishment of a land use, activity or facility addressed by this Division, shall be completed prior to the commencement of the land use.

5.03.010: Accessory Dwelling Units

A. **Purpose.** The purpose of this Section is to allow and regulate accessory dwelling units (ADUs) and junior accessory dwelling units (JADUs) in compliance with Article 2 of Chapter 13 of Division 1 of Title 7 of the California Government Code ~~Sections 65852.2 and 65852.22~~.

B. **Effect of Conforming.** An ADU or JADU that conforms to the standards in this Section will not be:

1. Deemed to be inconsistent with the City's general plan and zoning designation for the lot on which the ADU or JADU is located.

2. Deemed to exceed the allowable density for the lot on which the ADU or JADU is located.

3. Considered in the application of any local ordinance, policy, or program to limit residential growth.

4. Required to correct a nonconforming zoning condition, as defined in Subsection C.7, below. This does not prevent the City from enforcing compliance with applicable building standards in accordance with Health and Safety Code Section 17980.12.

C. **Definitions.** As used in this Section, the words or phrases listed below shall have the meanings thereafter specified:

1. Accessory Dwelling Unit (ADU). An attached or a detached residential dwelling unit that provides complete independent living facilities for one or more persons and is located on a lot with a proposed or existing primary residence. An accessory dwelling unit also includes the following:

a. An efficiency unit, as defined by HSC Section 17958.1; and

b. A manufactured home, as defined by HSC Section 18007.

2. Accessory Structure. A structure that is accessory and incidental to a dwelling located on the same lot.

3. Complete Independent Living Facilities. Permanent provisions for living, sleeping, eating, cooking, and sanitation on the same parcel as the single-family or multiple-family dwelling is or will be situated.

4. Efficiency Kitchen. A kitchen that includes each of the following:

a. A cooking facility with appliances.

b. A food preparation counter and storage cabinets that are of a reasonable size in relation to the JADU.

5. Junior Accessory Dwelling Unit (JADU). A residential unit that:

a. Is no more than 500 SF in size;

b. Is contained entirely within an existing or proposed single-family structure. An enclosed use within the residence, such as an attached garage, is considered to be a part of and contained within the single-family structure;

c. Includes its own separate sanitation facilities or shares sanitation facilities with the existing or proposed single-family structure;

d. If the unit does not include its own separate bathroom, then it contains an interior entrance to the main living area of the existing or proposed single-family structure in addition to an exterior entrance that is separate from the main entrance to the primary dwelling; and

e. It includes an efficiency kitchen, as defined in Subsection C.4, above.

6. Livable Space. A space in a dwelling intended for human habitation, including living, sleeping, eating, cooking, or sanitation.

~~6.~~7. Living Area. The interior habitable area of a dwelling unit, including basements and attics, but does not include a garage or any accessory structure.

~~7.~~8. Nonconforming Zoning Condition. A physical improvement on a property that does not conform with current zoning standards.

~~8.~~9. Passageway. A pathway that is unobstructed clear to the sky and extends from a street to one entrance of the ADU or JADU.

~~9.~~10. Proposed Dwelling. A dwelling that is the subject of a permit application and that meets the requirements for permitting.

~~10.~~11. Public Transit. A location, including but not limited to a bus stop or train station, where the public may access buses, trains, subways, and other forms of transportation that charge set fares, run on fixed routes, and are available to the public.

~~11.~~12. Tandem Parking. Two or more automobiles parked on a driveway or on any other location on a lot, lined up one behind the other.

D. Approvals. The following approvals apply to ADUs and JADUs under this Section:

1. Building Permit Only. If an ADU or JADU complies with each of the general requirements in subsection E below, it is allowed with only a building permit in the following scenarios:

a. *Converted on Single-Family Lot.* One ADU as described in this Subsection D.1.a and one JADU on a lot with a proposed or existing single-family dwelling on it, where the ADU or JADU:

(1) Is either: within the space of a proposed single-family dwelling; within the existing space of an existing single-family dwelling;~~,~~ or (in the case of and ADU only) within the existing space of an accessory structure, plus up to 150 additional SF if the expansion is limited to accommodating ingress and egress; and

(2) Has exterior access that is independent of that for the single-family dwelling; and

(3) Has side and rear setbacks sufficient for fire and safety, as dictated by applicable building and fire codes; and

(4) The JADU complies with the requirements of Government Code Sections ~~65852.22~~66333 through 66339.

b. *Limited Detached on Single-Family Lot.* One detached, new-construction ADU on a lot with a proposed or existing single-family dwelling (in addition to any JADU that might otherwise be established on the lot under Subsection D.1.a, above), if the detached ADU satisfies each of the following limitations:

(1) The side- and rear-yard setbacks are at least 4 FT; and

(2) The total floor area is 800 SF or smaller; and

(3) The peak height above grade does not exceed the applicable height limit provided in Subsection E.2, below.

c. *Converted on Multiple-Family Lot.* One or more ADUs within portions of existing multiple-family dwelling structures that are not used as livable space, including but not limited to storage rooms, boiler rooms, passageways, attics, basements, or garages, if each converted ADU complies with state building standards for dwellings. Under this Subsection D.1.c,

at least one converted ADU is allowed within an existing multiple-family dwelling, up to a quantity equal to 25 percent of the existing multiple-family dwelling units.

d. *Limited Detached on Multiple-Family Lot.* No more than two detached ADUs on a lot ~~that has an existing or~~with a proposed multiple-family dwelling, or up to 8 detached ADUs on a lot with and existing multiple-family dwelling, if each detached ADU satisfies ~~both~~all of the following ~~limitations~~:

(1) The side- and rear-yard setbacks are at least 4 FT. If the existing multiple-family dwelling has a rear or side yard setback of less than 4 FT, the City shall not require any modification to the multiple-family dwelling as a condition of approving the ADU; and

(2) The peak height above grade does not exceed the applicable height limit provided in Subsection E.2, below.

~~(2)~~**(3)** If the lot has an existing multiple-family dwelling, the quantity of detached ADUs does not exceed the number of primary dwelling units on the lot.

2. Process and Timing.

a. The City must approve or deny an application to create an ADU or JADU within 60 days from the date that the City receives a completed application. If the City has not approved or denied the completed application within 60 days, the application is deemed approved unless either:

(1) The applicant requests a delay, in which case the 60-day time period is tolled for the period of the requested delay, or

(2) When an application to create an ADU or JADU is submitted with a permit application to create a new single-family or multiple-family dwelling on the lot, the City may delay acting on the permit application for the ADU or JADU until the City acts on the permit application to create the new single-family or multiple-family dwelling, but the application to create the ADU or JADU will still be considered ministerially, without discretionary review or a hearing.

b. If the City denies application to create an ADU or JADU, the City must provide the applicant with comments that include, among other things, a list of all the defective or deficient items and a description of how the application may be remedied by the applicant. Notice of the denial and corresponding comments must be provided to the applicant within the 60-day time period established by Subsection D.3.b, above.

c. A demolition permit for a detached garage that is to be replaced with an ADU is reviewed with the application for the ADU and issued at the same time.

E. General ADU and JADU Requirements. The following requirements apply to all ADUs and JADUs that are approved under Subsections D.1 or D.2, above:

1. Zoning.

a. An ADU ~~or JADU~~ subject only to a building permit under Subsection D.1, above, may be created on a lot in a residential or mixed-use zoning district.

b. An ADU ~~or JADU~~ subject to ~~an ADU permit under~~ Subsection D.2, above, may be created on a lot that is zoned to allow single-family dwelling residential use or multiple-family dwelling residential use.

~~b.~~**c.** In accordance with Government Code section 66333(a), a JADU may only be created on a lot zoned for single-family residences.

2. Height.

a. Except as otherwise provided by Subsections E.2.b and E.2.c, below, a detached ADU created on a lot with an existing or proposed single-family or multiple-family dwelling unit may not exceed 16 FT in height.

b. A detached ADU may be up to 18 FT in height if it is created on a lot with an existing or proposed single-family or multiple-family dwelling unit that is located within one-half mile walking distance of a major transit stop or a high quality transit corridor, as those terms are defined in Section 21155 of the Public Resources Code, and the ADU may be up to two additional feet in height (for a maximum of 20 FT) if necessary to accommodate a roof pitch on the ADU that is aligned with the roof pitch of the primary dwelling unit.

c. A detached ADU created on a lot with an existing or proposed multiple-family dwelling that has more than one story may not exceed 18 FT in height.

d. An ADU that is attached to the primary dwelling may not exceed 25 FT in height or the height limitation imposed by the underlying zone that applies to the primary dwelling, whichever is lower. Notwithstanding the foregoing, ADUs subject to this Subsection E.2.d may not exceed two stories.

e. For purposes of this Ssubsection E.2, height is measured from existing legal grade or the level of the lowest floor, whichever is lower, to the peak of the structure.

3. Fire Sprinklers.

a. Fire sprinklers are required in an ADU if sprinklers are required in the primary residence.

b. The construction of an ADU does not trigger a requirement for fire sprinklers to be installed in the existing primary dwelling.

4. Rental Term. No ADU or JADU may be rented for a term that is shorter than 30 days. This prohibition applies regardless of when the ADU or JADU was created.

5. No Separate Sale or Conveyance. An ADU or JADU may be rented~~; however~~ but, except as provided in Government Code section 66341, no ADU or JADU may be sold or otherwise conveyed separately from the lot and the primary dwelling (in the case of a single-family lot) or from the lot and all of the dwellings (in the case of a multiple-family lot)~~, except as otherwise provided in Government Code Section 65852.26~~.

6. Septic System. If the ADU or JADU will connect to an onsite wastewater-treatment system, the owner must include with the application a percolation test completed within the last 5 years or, if the percolation test has been recertified, within the last 10 years.

7. Owner Occupancy.

a. An ADU created under this section on orpermitted after January 1, 2020~~, but before January 1, 2025, is~~ are not subject to an~~the~~ owner-occupancy requirement ~~that was in place when the ADU was created~~.

~~**b.** Unless applicable law requires otherwise, all ADUs that are permitted on or after January 1, 2025 are subject to an owner-occupancy requirement. A natural person with legal or equitable title to the property must reside on the property as the person's legal domicile and permanent residence.~~

~~c.~~b. As required by state law, all JADUs are subject to an owner-occupancy requirement. A natural person with legal or equitable title to the property must reside on the property, in either the primary dwelling or JADU, as the person's legal domicile and permanent residence. However, the owner-occupancy requirement in this Subsection E.7.b~~c~~ does not apply if the property is entirely owned by another governmental agency, land trust, or housing organization.

8. "RentIncome Reporting. In order to facilitate the City's obligation to identify adequate sites for housing in accordance with Government Code Sections 65583.1 and 6633065852.2, the following requirements must be satisfied:

a. With the building-permit application, the applicant must provide the City with an estimate of the projected annualized rent that will be charged for the ADU or JADU.

b. Within 90 days after each January 1 ~~yearly anniversary of the~~following issuance of the building permit, the owner must report the actual rent charged for the ADU or JADU during the prior year. If the City does not receive the report within the 90-day period, the owner is in violation of this Code, and the City may send the owner a notice of violation and allow the owner another 30 days to submit the report. If the owner fails to submit the report within the 30-day period, the City may enforce this provision in accordance with applicable law.

9. Building and Safety.

a. *Must Comply with Building Code.* Subject to Subsection E.10.b, below, all ADUs and JADUs must comply with all local building code requirements.

b. *No Change of Occupancy.* Construction of an ADU does not constitute a Group R occupancy change under the local building code, as described in Section 310 of the California Building Code, unless the building official or Community Improvement~~Code Enforcement~~ Division officer makes a written finding based on substantial evidence in the record that the construction of the ADU could have a specific, adverse impact on public health and safety. Nothing in this Subsection E.10.b prevents the City from changing the occupancy code of a space that was uninhabitable space or that was only permitted for nonresidential use and was subsequently converted for residential use in accordance with this Section.

F. Specific ADU Requirements. The following requirements apply only to ADUs that require an ADU permit under Subsection D.2, above.

1. Maximum Size.

a. The maximum size of a detached or attached ADU subject to this Subsection F is 850 SF for a studio or one-bedroom unit and 1,000 SF for a unit with two or more bedrooms.

b. An attached ADU that is created on a lot with an existing primary dwelling is further limited to 50 percent of the floor area of the existing primary dwelling.

c. Application of other development standards in this Subsection F, such as lot coverage, might further limit the size of the ADU, but~~; nevertheless,~~ no application of the percent-based size limit in Subsection F.1.b, above, or front setback, lot coverage limit, or open-space requirement may require the ADU to be less than 800 SF.

2. Building Setbacks.

a. Subject to Subsection F.1.c, above, an ADU that is subject to this Subsection F shall maintain a minimum front yard setback of 30 FT from arterial street rights-of-way and 20 FT from all collector and local street rights-of-way.

b. An ADU that is subject to this Subsection F must conform to 4-FT side yard and rear yard setbacks.

c. No setback is required for an ADU that is subject to this Subsection F if the ADU is constructed in the same location and to the same dimensions as an existing structure.

3. Lot Coverage. No ADU subject to this Subsection F may cause the total lot coverage of the lot to exceed the maximum lot coverages shown in the Tables below, subject to Subsection F.1.c, above.

Traditional Single-Family Residential Development Standards

Requirements	*Residential Zoning Districts*				
	AR-2	*RE-2*	*RE-4*	*LDR-5*	*MDR-11, MDR-18, MDR-25 & HDR-45*
Maximum Lot Coverage	30%	40%		50%	60%

Small Lot Traditional and Alley-Loaded Single-Family Residential Development Standards

Requirements	*Residential Zoning Districts*		
	LDR-5	*MDR-11*	*MDR-18, MDR-25 & HDR-45*
Maximum Lot Coverage	55%	60%	70%

Multiple-Family Residential Development Standards

Requirements	*Residential Zoning Districts*			
	MDR-11	*MDR-18*	*MDR-25*	*HDR- 45*
Maximum Project Coverage	60%			100%

4. Minimum Open Space. No ADU subject to this Subsection F may cause the total percentage of open space of the lot to fall below the minimum requirements specified below, subject to Subsection F.1.c, above.

a. *Small Lot Traditional and Alley-Loaded Development Projects, and Cluster Single-Family Development Projects.* Small lot traditional, small lot alley-loaded, and cluster single-family development projects that consist of more than 3 dwellings, shall devote a minimum of 20 percent of the project site to open space.

b. *Multiple-Family and Mixed-Use Development Projects.* Multiple-family development projects and the multiple-family residential portion of mixed-use development projects that consist of more than 3 dwellings, shall provide open space as follows:

Minimum Open Space Requirements for Multiple-Family and Mixed-Use Development Projects

Open Space Type	Zoning Districts		
	MDR-11 & MDR-18	MDR-25	HDR-45
Private Open Space	200 SF (40%)	150 SF (37.5%)	60 SF (20%)
Common Open Space	300 SF (60%)	250 SF (62.5%)	250 SF (80%)
Total Open Space	500 SF (100%)	400 SF (100%)	310 SF (100%)

5. Passageway. No passageway, as defined by Subsection C.~~8~~9, above, is required for an ADU.

6. Off-Street Parking.

a. *Generally.* One off-street parking space is required for each ADU. The parking space may be provided in setback areas or as tandem parking, as defined by Subsection C.~~11~~12, above.

b. *Exceptions.* No parking under Subsection F.7.a, above, is required in the following situations:

(1) The ADU is located within one-half mile walking distance of public transit, as defined in Subsection C.~~10~~11, above.

(2) The ADU is located within an architecturally and historically significant historic district.

(3) The ADU is part of the proposed or existing primary residence, or an accessory structure under Subsection D.1.a, above.

(4) When on-street parking permits are required but not offered to the occupant of the ADU.

(5) When there is an established car share vehicle stop located within one block of the ADU.

(6) When the permit application to create an ADU is submitted with an application to create a new single-family or multiple-family dwelling on the same lot, provided that the ADU or the lot satisfies any other criteria listed in Subsections F.6.b(1) through F.6.b(5), above.

c. *No Replacement.* When a garage, carport, ~~or~~ covered parking structure, or uncovered parking space is demolished in conjunction with the construction of an ADU or converted to an ADU, those off-street parking spaces are not required to be replaced.

7. Architectural Requirements.

a. The materials and colors of the exterior walls, roof, and windows and doors must match the appearance and architectural design of those of the primary dwelling.

b. The roof slope must match that of the dominant roof slope of the primary dwelling. The dominant roof slope is the slope shared by the largest portion of the roof.

c. The exterior lighting must be limited to down-lights or as otherwise required by the City's Building or Fire Code.

d. The ADU must have an independent exterior entrance, apart from that of the primary dwelling.

e. The interior horizontal dimensions of an ADU must be at least 10 FT wide in every direction, with a minimum interior wall height of 7 FT.

f. Windows and doors of the ADU may not have a direct line of sight to an adjoining residential property. Fencing, landscaping, or privacy glass may be used to provide screening and prevent a direct line-of-sight.

g. All windows and doors in an ADU are less than 30 FT from a property line that is not a public right-of-way line must either be (for windows) clerestory with the bottom of the glass at least 6 FT above the finished floor, or (for windows and for doors) utilize frosted or obscure glass.

8. Landscape Requirements. A Landscape Plan shall be submitted to the City, which provides for evergreen landscape screening, to include trees, shrubs, and groundcovers that shall be planted, permanently irrigated, and fully maintained, and which is located between an ADU and adjacent parcels, and where an ADU impacts a front yard and/or is subject to public views from a public or private street. Evergreen landscape screening shall be provided as follows:

a. Minimum 15-gallon size screening shrubs shall be installed at every 5 linear feet of exterior building wall. Alternatively, a 6-FT high decorative masonry block wall may be constructed.

b. ADUs created by garage conversion, which results in the removal of the garage door, shall provide a minimum 3-FT wide foundation landscape planter for the full length of the wall wherein the garage door was removed, which shall be fully landscaped and irrigated, and permanently maintained.

c. All landscaping must be drought tolerant and California friendly.

d. Landscape and irrigation plans shall be prepared and submitted to the City for review and approval.

9. Historical Protections. An ADU that is on or within 600 feet of real property that is listed in the California Register of Historic Resources must be located so as to not be visible from any public right-of-way.

G. Fees. The following requirements apply to all ADUs and JADUs that are approved under Subsections D.1 or D.2, above.

1. Impact Fees.

a. No impact fee is required for an ADU that is less than 750 SF in size. For the purposes of this Subsection G.1, the term "impact fee" means a "fee" under the Mitigation Fee Act (Government Code Section 66000(b)) and a fee under the Quimby Act (Government Code Section 66477). "Impact fee" as used in this Section, does not include any connection fee or capacity charge for water or sewer service.

b. Any impact fee that is required for an ADU that is 750 SF or larger in size must be charged proportionately in relation to the square footage of the primary dwelling unit (e.g., the floor area of the ADU, divided by the floor area of the primary dwelling, times the typical fee amount charged for a new dwelling.)

2. Utility Fees.

a. If an ADU is constructed with a new single-family home, a separate utility connection directly between the ADU and the utility and payment of the normal connection fee and capacity charge for a new dwelling are required~~ADUs and JADUs shall not be required to have a new or separate utility connection directly between the ADU or JADU and the utility, nor shall a connection fee or capacity charge be required~~.

b. Except as described in Subsection G.2.a, converted ADUs on a single-family lot that are created under Subsection D.1.a above are not required to have a new or separate utility connection directly between the ADU and the utility. Nor is a connection fee or capacity charge required.

c. Except as described in Subsection G.2.a, all ADUs that are not covered by Subsection G.2.b require a new, separate utility connection directly between the ADU and the utility for any utility that is provided by the city. All utilities that are not provided by the city are subject to the connection and fee requirements of the utility provider.

(1) The connection is subject to a connection fee or capacity charge that is proportionate to the burden created by the ADU based on either the floor area or the number of drainage-fixture units (DFU) values, as defined by the Uniform Plumbing Code, upon the water or sewer system.

~~(1)~~**(2)** The portion of the fee or charge that is charged by the city may not exceed the reasonable cost of providing this service.

H. Nonconforming Zoning Code Conditions, Building Code Violations, and Unpermitted Structures.

1. Generally. The City will not deny an ADU or JADU application due to a nonconforming zoning condition, building code violation, or unpermitted structure on the lot that

does not present a threat to the public health and safety and that is not affected by the construction of the ADU or JADU.

2. Unpermitted ADUs constructed before 20202018.

a. *Permit to Legalize.* As required by state law, the City may not deny a permit to legalize an existing, but unpermitted ADU or JADU that was constructed before January 1, 20202018, if denial is based on either of the following grounds:

(1) The ADU or JADU violates applicable building standards; or

(2) The ADU or JADU does not comply with state ADU or JADU law ~~(Government Code Section 65852.2)~~ or this ADU ordinance (Section 5.03.010).

b. *Exceptions.*

(1) Notwithstanding Subsection H.2.a, above the City may deny a permit to legalize an existing but unpermitted ADU or JADU that was constructed before January -1, 20202018, if the City makes a finding that correcting a violation is necessary to ~~protect the health and safety of the public or of occupants of the structure~~comply with the standards specified in California Health and Safety Code section 17920.3.

(2) Subsection H.2.a, above does not apply to a building that is deemed to be substandard in accordance with California Health and Safety Code Section 17920.3.

I. Nonconforming ADUs and Discretionary Approval. Any proposed ADU or JADU that would otherwise be allowed under this section but that does not conform to the objective design or development standards set forth in Subsections A through H of this Section may be allowed by the City, subject to a Conditional Use Permit issued in accordance with the other provisions of this Development Code.

5.03.011: Accessory Residential Structures

A. Purpose. The purpose of this Section is to establish standards for the construction and use of Accessory Residential Structures (other than Accessory Dwelling Units allowed pursuant to Section 5.03.010 of this Development Code) in conjunction with existing single-family dwellings located within single-family or multiple-family zoning districts. (Note: The construction and use of Accessory Residential Structures in conjunction with existing multiple-family dwellings shall be subject to the development standards applicable to the primary multiple-family dwellings.)

B. Applicability. For purposes of this Section, the herein established development standards shall apply to Accessory Residential Structures such as garages, carports, guesthouses, storage sheds, pool houses, recreation rooms, etc., which are incidental or subordinate to the primary dwelling.

C. Definitions. As used in this Section, the words or phrases listed below shall have the meanings thereafter specified:

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING A DEVELOPMENT CODE AMENDMENT, FILE NO. PDCA24-004, AMENDING DIVISION 5.03 & SUPPLEMENTAL LAND USE REGULATIONS, SECTION 5.03.010 OF THE CITY'S DEVELOPMENT CODE RELATING TO ACCESSORY DWELLING UNITS AND JUNIOR ACCESSORY DWELLING UNITS IN THE CITY, AND FINDING THE ACTION TO BE STATUTORILY EXEMPT FROM CEQA UNDER PUBLIC RESOURCES CODE § 21080.17, AND MAKING FINDINGS IN SUPPORT THEREOF.

WHEREAS, THE CITY OF ONTARIO ("Applicant") has initiated an Application for the approval of a Development Code Amendment, File No. PDCA24-004, as described title of this Ordinance (hereinafter referred to as "Application" or "Project"); and

WHEREAS, the City of Ontario Development Code (Ontario Municipal Code Title 9) provides the legislative framework for the implementation of The Ontario Plan, which establishes long term principals, goals, and policies for guiding the growth and development of the City in a manner that achieves Ontario's vision, and promotes and protects the public health, safety, comfort, convenience, prosperity, and welfare of its citizens; and

WHEREAS, the Development Code Amendment is of citywide impact, affecting approximately 50 square miles (31,789 acres) of land, which is generally bordered by Benson Avenue and Euclid Avenue on the west; Interstate 10 Freeway, Eighth Street, and Fourth Street on the north; Etiwanda Avenue and Hamner Avenue on the east; and Merrill Avenue and the San Bernardino County/Riverside County boundary on the south; and

WHEREAS, the Planning and Zoning Law authorizes cities to act by Ordinance to provide for the creation and regulation of accessory dwelling units ("ADUs") and junior accessory dwelling units ("JADUs"); and

WHEREAS, in recent years, the California Legislature has approved, and the Governor has signed into law, a number of bills that, among other things, amend various sections of the Government Code to impose new limits on local authority to regulate ADUs and JADUs; and

WHEREAS, in 2024, the California Legislature approved, and the Governor signed into law, Assembly Bill 2533 ("AB 2533") and Senate Bill 1211 ("SB 1211"), which further amend state ADU law; and

WHEREAS, AB 2533 and SB 1211 took effect on January 1, 2025, and for the City's ADU ordinance to remain valid, it must be amended to reflect the requirements of AB 2533 and SB 1211; and

WHEREAS, the City desires to amend its local regulatory scheme for the construction of ADUs and JADUs to reflect AB 2533's and SB 1211's changes to state law; and

WHEREAS, pursuant to the provisions of Government Code Title 1, Division 1, Chapter 3 (commencing with Government Code Section 65100) Ontario Development Code Table 2.02-1 (Review Matrix) assigns the City Council the responsibility and authority to review act on the Development Code Amendment following review and recommendation on the matter by the Planning Commission; and

WHEREAS, City of Ontario Development Code Division 2.03 (Public Hearings) prescribes the manner in which public notification shall be provided and hearing procedures to be followed, and all such notifications and procedures have been completed; and

WHEREAS, on February 25, 2025, the Planning Commission of the City of Ontario conducted a hearing to consider the Development Code Amendment and concluded said hearing on that date, voting to issue Resolution No. PC25-015, recommending the City Council approve the Development Code Amendment; and

WHEREAS, on March 18, 2025, the City Council of the City of Ontario conducted a public hearing on the Development Code Amendment and concluded said hearing on that date; and

WHEREAS, all legal prerequisites to the adoption of this Ordinance have occurred.

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED, AND RESOLVED by the City Council of the City of Ontario, as follows:

SECTION 1: ***Incorporation***. The recitals above are true and correct and are each incorporated by reference and adopted as findings by the City Council.

SECTION 2: ***Environmental Determination and Findings.*** The City Council finds that, under California Public Resources Code section 21080.17, the California Environmental Quality Act ("CEQA") does not apply to the adoption of an Ordinance by a city or county implementing the provisions of Article 2 of Chapter 13 of Division 1 of Title 7 of the California Government Code, which is California's ADU law and which also regulates JADUs, as defined by section 66313. Therefore, adoption of the proposed Ordinance is statutorily exempt from CEQA in that it implements state ADU law.

SECTION 3: ***Housing Element Compliance.*** Pursuant to the requirements of California Government Code Chapter 3, Article 10.6, commencing with Section 65580, as

the decision-making body for the Project, the City Council finds that based on the facts and information contained in the Application and supporting documentation, the project is consistent with the Housing Element of the Policy Plan (General Plan) component of The Ontario Plan.

SECTION 4: ***Airport Land Use Compatibility Plan ("ALUCP") Compliance.*** The California State Aeronautics Act (Public Utilities Code Section 21670, et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

(1) On April 19, 2011, the City Council of the City of Ontario approved and adopted the Ontario International Airport Land use Compatibility Plan, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the decision-making body for the Project, the City Council has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the City Council, therefore, finds and determines that the Project is consistent with the policies and criteria set forth within the ONT ALUCP; and

(2) On August 2, 2022, the City Council of the City of Ontario approved and adopted a Development Code Amendment to establish the Chino Airport ("CNO") Overlay Zoning District ("OZD") and Reference I, Chino Airport Land Use Compatibility Plan ("CNO ALUCP"). The CNO OZD and CNO ALUCP established the Airport Influence Area for Chino Airport, solely within the City of Ontario, and limits future land uses and development within the Airport Influence Area, as they relate to safety, airspace protection, and overflight impacts of current and future airport activity. The CNO ALUCP is consistent with policies and criteria set forth within the Caltrans 2011 California Airport Land Use Planning Handbook. The proposed Project is located within the Airport Influence Area of Chino Airport and was evaluated and found to be consistent with the California Airport Land Use Planning Handbook and the CNO ALUCP. As the decision-making body for the Project, the City Council has reviewed and considered the facts and information contained in the Application and supporting documentation against the CNO ALUCP compatibility factors, including

Safety, Airspace Protection, Overflight. As a result, the City Council, therefore, finds and determines that the Project is consistent with the policies and criteria set forth within the California Airport Land Use Planning Handbook and the CNO ALUCP.

SECTION 5: ***Concluding Facts and Reasons.*** Based upon the substantial evidence presented to the City Council during the above-referenced hearing, and upon the specific findings set forth in Sections 1 through 4, above, the City Council hereby concludes as follows:

(1) The proposed Development Code Amendment is consistent with the goals, policies, plans and exhibits of the Vision, Policy Plan (General Plan), and City Council Goals components of The Ontario Plan ("TOP"). The Development Code Amendment will: (a) serve to promote a community that is consistently seeking—and thoughtfully applying—new ways of doing things better, as encouraged by TOP's Vision; (b) provides for a variety of land uses and building types in our land use planning efforts that result in a complete community where residents at all stages of life, have a wide spectrum of choices of where they can live and recreate, as promoted by Land Use Element Policy LU-1.6, Complete Community; and (c) promotes the City Council Goals through the establishment of Development Code provisions that encourages investment in the growth and evolution of the City's economy and focuses City resources in commercial and residential neighborhoods; and

(2) The proposed Development Code Amendment would not be detrimental to the public interest, health, safety, convenience, or general welfare of the City. The Development Code Amendment incorporates safeguards intended to ensure that the purposes of the Development Code are preserved; the project will not be contrary to or damage the public health, safety, convenience, or general welfare; the project will not result in any significant environmental impacts; and the project will be in full conformity with the Vision, City Council Priorities, and Policy Plan components of The Ontario Plan.

SECTION 6: ***City Council Action.*** Based upon the findings and conclusions set forth in Sections 1 through 5, above, the City Council hereby APPROVES the herein described changes that comprise the Development Code Amendment, and which are attached hereto as "Attachment A," and incorporated herein by this reference.

SECTION 7. ***Custodian of Records.*** The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East "B" Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario.

SECTION 8. ***Severability.*** If any section, sentence, clause or phrase of this Ordinance or the application thereof to any entity, person or circumstance is held for any reason to be invalid or unconstitutional, such invalidity or unconstitutionality shall not affect other provisions or applications of this Ordinance which can be given effect without the invalid provision or application, and to this end the provisions of this Ordinance are severable. The People of the City of Ontario hereby declare that they would have adopted this Ordinance and each section, sentence, clause, or phrase thereof, irrespective of the fact that any one or more section, subsections, sentences, clauses, or phrases be declared invalid or unconstitutional.

SECTION 9. ***Effective Date.*** This Ordinance shall become effective 30 days following its adoption.

SECTION 10. ***Publication and Posting.*** The Mayor shall sign this Ordinance and the City Clerk shall certify as to the adoption and shall cause a summary thereof to be published at least once, in a newspaper of general circulation in the City of Ontario, California within 15 days following adoption. The City Clerk shall post a certified copy of this Ordinance, including the vote for and against the same, in the Office of the City Clerk in accordance with Government Code Section 36933.

PASSED, APPROVED, AND ADOPTED this _____ day of _____ 2025.

_____
PAUL S. LEON, MAYOR

ATTEST:

_____
SHEILA MAUTZ, CITY CLERK

APPROVED AS TO FORM:

_____
BEST BEST & KRIEGER LLP
CITY ATTORNEY

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO)
CITY OF ONTARIO)

I, SHEILA MAUTZ, City Clerk of the City of Ontario, DO HEREBY CERTIFY that foregoing Ordinance No. _____ was duly introduced at a regular meeting of the City Council of the City of Ontario held _____ and adopted at the regular meeting held _____, 2025 by the following roll call vote, to wit:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

I hereby certify that the foregoing is the original of Ordinance No. _____ duly passed and adopted by the Ontario City Council at their regular meeting held _____ and that Summaries of the Ordinance were published on _____ and _____, in the Inland Valley Daily Bulletin newspaper.

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

ATTACHMENT A:

File No. PDCA24-004
2025 Development Code Amendment
For ADUs and JADUs

(Document to follow this page)

A. Purpose. The purpose of this Section is to allow and regulate accessory dwelling units (ADUs) and junior accessory dwelling units (JADUs) in compliance with Article 2 of Chapter 13 of Division 1 of Title 7 of the California Government Code.

B. Effect of Conforming. An ADU or JADU that conforms to the standards in this Section will not be:

1. Deemed to be inconsistent with the City's general plan and zoning designation for the lot on which the ADU or JADU is located.

2. Deemed to exceed the allowable density for the lot on which the ADU or JADU is located.

3. Considered in the application of any local ordinance, policy, or program to limit residential growth.

4. Required to correct a nonconforming zoning condition, as defined in Subsection C.7, below. This does not prevent the City from enforcing compliance with applicable building standards in accordance with Health and Safety Code Section 17980.12.

C. Definitions. As used in this Section, the words or phrases listed below shall have the meanings thereafter specified:

1. Accessory Dwelling Unit (ADU). An attached or a detached residential dwelling unit that provides complete independent living facilities for one or more persons and is located on a lot with a proposed or existing primary residence. An accessory dwelling unit also includes the following:

a. An efficiency unit, as defined by HSC Section 17958.1; and

b. A manufactured home, as defined by HSC Section 18007.

2. Accessory Structure. A structure that is accessory and incidental to a dwelling located on the same lot.

3. Complete Independent Living Facilities. Permanent provisions for living, sleeping, eating, cooking, and sanitation on the same parcel as the single-family or multiple-family dwelling is or will be situated.

4. Efficiency Kitchen. A kitchen that includes each of the following:

a. A cooking facility with appliances.

b. A food preparation counter and storage cabinets that are of a reasonable size in relation to the JADU.

5. Junior Accessory Dwelling Unit (JADU). A residential unit that:

a. Is no more than 500 SF in size;

b. Is contained entirely within an existing or proposed single-family structure. An enclosed use within the residence, such as an attached garage, is considered to be a part of and contained within the single-family structure;

c. Includes its own separate sanitation facilities or shares sanitation facilities with the existing or proposed single-family structure;

d. If the unit does not include its own separate bathroom, then it contains an interior entrance to the main living area of the existing or proposed single-family structure in addition to an exterior entrance that is separate from the main entrance to the primary dwelling; and

e. It includes an efficiency kitchen, as defined in Subsection C.4, above.

6. Livable Space. A space in a dwelling intended for human habitation, including living, sleeping, eating, cooking, or sanitation.

7. Living Area. The interior habitable area of a dwelling unit, including basements and attics, but does not include a garage or any accessory structure.

8. Nonconforming Zoning Condition. A physical improvement on a property that does not conform with current zoning standards.

9. Passageway. A pathway that is unobstructed clear to the sky and extends from a street to one entrance of the ADU or JADU.

10. Proposed Dwelling. A dwelling that is the subject of a permit application and that meets the requirements for permitting.

11. Public Transit. A location, including but not limited to a bus stop or train station, where the public may access buses, trains, subways, and other forms of transportation that charge set fares, run on fixed routes, and are available to the public.

12. Tandem Parking. Two or more automobiles parked on a driveway or on any other location on a lot, lined up one behind the other.

D. Approvals. The following approvals apply to ADUs and JADUs under this Section:

1. Building Permit Only. If an ADU or JADU complies with each of the general requirements in subsection E below, it is allowed with only a building permit in the following scenarios:

a. *Converted on Single-Family Lot.* One ADU as described in this Subsection D.1.a and one JADU on a lot with a proposed or existing single-family dwelling on it, where the ADU or JADU:

(1) Is either: within the space of a proposed single-family dwelling; within the existing space of an existing single-family dwelling; or (in the case of and ADU only) within the existing space of an accessory structure, plus up to 150 additional SF if the expansion is limited to accommodating ingress and egress; and

(2) Has exterior access that is independent of that for the single-family dwelling; and

(3) Has side and rear setbacks sufficient for fire and safety, as dictated by applicable building and fire codes; and

(4) The JADU complies with the requirements of Government Code Sections 66333 through 66339.

b. *Limited Detached on Single-Family Lot.* One detached, new-construction ADU on a lot with a proposed or existing single-family dwelling (in addition to any JADU that might otherwise be established on the lot under Subsection D.1.a, above), if the detached ADU satisfies each of the following limitations:

(1) The side- and rear-yard setbacks are at least 4 FT; and

(2) The total floor area is 800 SF or smaller; and

(3) The peak height above grade does not exceed the applicable height limit provided in Subsection E.2, below.

c. *Converted on Multiple-Family Lot.* One or more ADUs within portions of existing multiple-family dwelling structures that are not used as livable space, including but not limited to storage rooms, boiler rooms, passageways, attics, basements, or garages, if each converted ADU complies with state building standards for dwellings. Under this Subsection D.1.c, at least one converted ADU is allowed within an existing multiple-family dwelling, up to a quantity equal to 25 percent of the existing multiple-family dwelling units.

d. *Limited Detached on Multiple-Family Lot.* No more than two detached ADUs on a lot that has an existing or proposed multiple-family dwelling, or up to 8 detached ADUs on a lot with and existing multiple-family dwelling, if each detached ADU satisfies all of the following:

(1) The side- and rear-yard setbacks are at least 4 FT. If the existing multiple-family dwelling has a rear or side yard setback of less than 4 FT, the City shall not require any modification to the multiple-family dwelling as a condition of approving the ADU; and

(2) The peak height above grade does not exceed the applicable height limit provided in Subsection E.2, below.

(3) If the lot has an existing multiple-family dwelling, the quantity of detached ADUs does not exceed the number of primary dwelling units on the lot.

2. Process and Timing.

a. An ADU permit is considered and approved ministerially, without discretionary review or a hearing.

b. The City must approve or deny an application to create an ADU or JADU within 60 days from the date that the City receives a completed application. If the City has not

approved or denied the completed application within 60 days, the application is deemed approved unless either:

(1) The applicant requests a delay, in which case the 60-day time period is tolled for the period of the requested delay, or

(2) When an application to create an ADU or JADU is submitted with a permit application to create a new single-family or multiple-family dwelling on the lot, the City may delay acting on the permit application for the ADU or JADU until the City acts on the permit application to create the new single-family or multiple-family dwelling, but the application to create the ADU or JADU will still be considered ministerially, without discretionary review or a hearing.

c. If the City denies application to create an ADU or JADU, the City must provide the applicant with comments that include, among other things, a list of all the defective or deficient items and a description of how the application may be remedied by the applicant. Notice of the denial and corresponding comments must be provided to the applicant within the 60-day time period established by Subsection D.3.b, above.

d. A demolition permit for a detached garage that is to be replaced with an ADU is reviewed with the application for the ADU and issued at the same time.

E. General ADU and JADU Requirements. The following requirements apply to all ADUs and JADUs that are approved under Subsections D.1 or D.2, above:

1. Zoning.

a. An ADU subject only to a building permit under Subsection D.1, above, may be created on a lot in a residential or mixed-use zoning district.

b. An ADU subject to an ADU permit under Subsection D.2, above, may be created on a lot that is zoned to allow single-family dwelling residential use or multiple-family dwelling residential use.

c. In accordance with Government Code section 66333(a), a JADU may only be created on a lot zoned for single-family residences.

2. Height.

a. Except as otherwise provided by Subsections E.2.b and E.2.c, below, a detached ADU created on a lot with an existing or proposed single-family or multiple-family dwelling unit may not exceed 16 FT in height.

b. A detached ADU may be up to 18 FT in height if it is created on a lot with an existing or proposed single-family or multiple-family dwelling unit that is located within one-half mile walking distance of a major transit stop or a high quality transit corridor, as those terms are defined in Section 21155 of the Public Resources Code, and the ADU may be up to two additional feet in height (for a maximum of 20 FT) if necessary to accommodate a roof pitch on the ADU that is aligned with the roof pitch of the primary dwelling unit.

c. A detached ADU created on a lot with an existing or proposed multiple-family dwelling that has more than one story may not exceed 18 FT in height.

d. An ADU that is attached to the primary dwelling may not exceed 25 FT in height or the height limitation imposed by the underlying zone that applies to the primary dwelling, whichever is lower. Notwithstanding the foregoing, ADUs subject to this Subsection E.2.d may not exceed two stories.

e. For purposes of this Subsection E.2, height is measured from existing legal grade or the level of the lowest floor, whichever is lower, to the peak of the structure.

3. Fire Sprinklers.

a. Fire sprinklers are required in an ADU if sprinklers are required in the primary residence.

b. The construction of an ADU does not trigger a requirement for fire sprinklers to be installed in the existing primary dwelling.

4. Rental Term. No ADU or JADU may be rented for a term that is shorter than 30 days. This prohibition applies regardless of when the ADU or JADU was created.

5. No Separate Sale or Conveyance. An ADU or JADU may be rented, but, except as provided in Government Code section 66341, no ADU or JADU may be sold or otherwise conveyed separately from the lot and the primary dwelling (in the case of a single-family lot) or from the lot and all of the dwellings (in the case of a multiple-family lot).

6. Septic System. If the ADU or JADU will connect to an onsite wastewater-treatment system, the owner must include with the application a percolation test completed within the last 5 years or, if the percolation test has been recertified, within the last 10 years.

7. Owner Occupancy.

a. An ADU created under this section on or after January 1, 2020 are not subject to an owner-occupancy requirement.

b. As required by state law, all JADUs are subject to an owner-occupancy requirement. A natural person with legal or equitable title to the property must reside on the property, in either the primary dwelling or JADU, as the person's legal domicile and permanent residence. However, the owner-occupancy requirement in this Subsection E.7.b does not apply if the property is entirely owned by another governmental agency, land trust, or housing organization.

8. "Rent Reporting. In order to facilitate the City's obligation to identify adequate sites for housing in accordance with Government Code Sections 65583.1 and 66330, the following requirements must be satisfied:

a. With the building-permit application, the applicant must provide the City with an estimate of the projected annualized rent that will be charged for the ADU or JADU.

b. Within 90 days after each January 1 following issuance of the building permit, the owner must report the actual rent charged for the ADU or JADU during the prior year. If the City does not receive the report within the 90-day period, the owner is in violation of this Code, and the City may send the owner a notice of violation and allow the owner another 30

days to submit the report. If the owner fails to submit the report within the 30-day period, the City may enforce this provision in accordance with applicable law.

9. Building and Safety.

a. *Must Comply with Building Code.* Subject to Subsection E.10.b, below, all ADUs and JADUs must comply with all local building code requirements.

b. *No Change of Occupancy.* Construction of an ADU does not constitute a Group R occupancy change under the local building code, as described in Section 310 of the California Building Code, unless the building official or Community Improvement Division officer makes a written finding based on substantial evidence in the record that the construction of the ADU could have a specific, adverse impact on public health and safety. Nothing in this Subsection E.10.b prevents the City from changing the occupancy code of a space that was uninhabitable space or that was only permitted for nonresidential use and was subsequently converted for residential use in accordance with this Section.

F. Specific ADU Requirements. The following requirements apply only to ADUs that require an ADU permit under Subsection D.2, above.

1. Maximum Size.

a. The maximum size of a detached or attached ADU subject to this Subsection F is 850 SF for a studio or one-bedroom unit and 1,000 SF for a unit with two or more bedrooms.

b. An attached ADU that is created on a lot with an existing primary dwelling is further limited to 50 percent of the floor area of the existing primary dwelling.

c. Application of other development standards in this Subsection F, such as lot coverage, might further limit the size of the ADU, but no application of the percent-based size limit in Subsection F.1.b, above, or front setback, lot coverage limit, or open-space requirement may require the ADU to be less than 800 SF.

2. Building Setbacks.

a. Subject to Subsection F.1.c, above, an ADU that is subject to this Subsection F shall maintain a minimum front yard setback of 30 FT from arterial street rights-of-way and 20 FT from all collector and local street rights-of-way.

b. An ADU that is subject to this Subsection F must conform to 4-FT side yard and rear yard setbacks.

c. No setback is required for an ADU that is subject to this Subsection F if the ADU is constructed in the same location and to the same dimensions as an existing structure.

3. Lot Coverage. No ADU subject to this Subsection F may cause the total lot coverage of the lot to exceed the maximum lot coverages shown in the Tables below, subject to Subsection F.1.c, above.

Traditional Single-Family Residential Development Standards

Requirements	*Residential Zoning Districts*				
	AR-2	*RE-2*	*RE-4*	*LDR-5*	*MDR-11, MDR-18, MDR-25 & HDR-45*
Maximum Lot Coverage	30%	40%		50%	60%

Small Lot Traditional and Alley-Loaded Single-Family Residential Development Standards

Requirements	*Residential Zoning Districts*		
	LDR-5	*MDR-11*	*MDR-18, MDR-25 & HDR-45*
Maximum Lot Coverage	55%	60%	70%

Multiple-Family Residential Development Standards

Requirements	*Residential Zoning Districts*			
	MDR-11	*MDR-18*	*MDR-25*	*HDR- 45*
Maximum Project Coverage	60%			100%

4. Minimum Open Space. No ADU subject to this Subsection F may cause the total percentage of open space of the lot to fall below the minimum requirements specified below, subject to Subsection F.1.c, above.

a. *Small Lot Traditional and Alley-Loaded Development Projects, and Cluster Single-Family Development Projects.* Small lot traditional, small lot alley-loaded, and cluster single-family development projects that consist of more than 3 dwellings, shall devote a minimum of 20 percent of the project site to open space.

b. *Multiple-Family and Mixed-Use Development Projects.* Multiple-family development projects and the multiple-family residential portion of mixed-use development projects that consist of more than 3 dwellings, shall provide open space as follows:

Minimum Open Space Requirements for Multiple-Family and Mixed-Use Development Projects

Open Space Type	*Zoning Districts*		
	MDR-11 & MDR-18	*MDR-25*	*HDR-45*
Private Open Space	200 SF (40%)	150 SF (37.5%)	60 SF (20%)
Common Open Space	300 SF (60%)	250 SF (62.5%)	250 SF (80%)
Total Open Space	500 SF (100%)	400 SF (100%)	310 SF (100%)

5. Passageway. No passageway, as defined by Subsection C.9, above, is required for an ADU.

6. Off-Street Parking.

a. *Generally.* One off-street parking space is required for each ADU. The parking space may be provided in setback areas or as tandem parking, as defined by Subsection C.12, above.

b. *Exceptions.* No parking under Subsection F.7.a, above, is required in the following situations:

(1) The ADU is located within one-half mile walking distance of public transit, as defined in Subsection C.11, above.

(2) The ADU is located within an architecturally and historically significant historic district.

(3) The ADU is part of the proposed or existing primary residence, or an accessory structure under Subsection D.1.a, above.

(4) When on-street parking permits are required but not offered to the occupant of the ADU.

(5) When there is an established car share vehicle stop located within one block of the ADU.

(6) When the permit application to create an ADU is submitted with an application to create a new single-family or multiple-family dwelling on the same lot, provided that the ADU or the lot satisfies any other criteria listed in Subsections F.6.b(1) through F.6.b(5), above.

c. *No Replacement.* When a garage, carport, covered parking structure, or uncovered parking space is demolished in conjunction with the construction of an ADU or converted to an ADU, those off-street parking spaces are not required to be replaced.

7. Architectural Requirements.

a. The materials and colors of the exterior walls, roof, and windows and doors must match the appearance and architectural design of those of the primary dwelling.

b. The roof slope must match that of the dominant roof slope of the primary dwelling. The dominant roof slope is the slope shared by the largest portion of the roof.

c. The exterior lighting must be limited to down-lights or as otherwise required by the City's Building or Fire Code.

d. The ADU must have an independent exterior entrance, apart from that of the primary dwelling.

e. The interior horizontal dimensions of an ADU must be at least 10 FT wide in every direction, with a minimum interior wall height of 7 FT.

f. Windows and doors of the ADU may not have a direct line of sight to an adjoining residential property. Fencing, landscaping, or privacy glass may be used to provide screening and prevent a direct line-of-sight.

g. All windows and doors in an ADU are less than 30 FT from a property line that is not a public right-of-way line must either be (for windows) clerestory with the bottom of the glass at least 6 FT above the finished floor, or (for windows and for doors) utilize frosted or obscure glass.

8. Landscape Requirements. A Landscape Plan shall be submitted to the City, which provides for evergreen landscape screening, to include trees, shrubs, and groundcovers that shall be planted, permanently irrigated, and fully maintained, and which is located between an ADU and adjacent parcels, and where an ADU impacts a front yard and/or is subject to public views from a public or private street. Evergreen landscape screening shall be provided as follows:

a. Minimum 15-gallon size screening shrubs shall be installed at every 5 linear feet of exterior building wall. Alternatively, a 6-FT high decorative masonry block wall may be constructed.

b. ADUs created by garage conversion, which results in the removal of the garage door, shall provide a minimum 3-FT wide foundation landscape planter for the full length of the wall wherein the garage door was removed, which shall be fully landscaped and irrigated, and permanently maintained.

c. All landscaping must be drought tolerant and California friendly.

d. Landscape and irrigation plans shall be prepared and submitted to the City for review and approval.

9. Historical Protections. An ADU that is on or within 600 feet of real property that is listed in the California Register of Historic Resources must be located so as to not be visible from any public right-of-way.

G. Fees. The following requirements apply to all ADUs and JADUs that are approved under Subsections D.1 or D.2, above.

1. Impact Fees.

a. No impact fee is required for an ADU that is less than 750 SF in size. For the purposes of this Subsection G.1, the term "impact fee" means a "fee" under the Mitigation Fee Act (Government Code Section 66000(b)) and a fee under the Quimby Act (Government Code Section 66477). "Impact fee" as used in this Section, does not include any connection fee or capacity charge for water or sewer service.

b. Any impact fee that is required for an ADU that is 750 SF or larger in size must be charged proportionately in relation to the square footage of the primary dwelling unit (e.g., the floor area of the ADU, divided by the floor area of the primary dwelling, times the typical fee amount charged for a new dwelling.)

2. Utility Fees.

a. If an ADU is constructed with a new single-family home, a separate utility connection directly between the ADU and the utility and payment of the normal connection fee and capacity charge for a new dwelling are required.

b. Except as described in Subsection G.2.a, converted ADUs on a single-family lot that are created under Subsection D.1.a above are not required to have a new or separate utility connection directly between the ADU and the utility. Nor is a connection fee or capacity charge required.

c. Except as described in Subsection G.2.a, all ADUs that are not covered by Subsection G.2.b require a new, separate utility connection directly between the ADU and the utility for any utility that is provided by the city. All utilities that are not provided by the city are subject to the connection and fee requirements of the utility provider.

(1) The connection is subject to a connection fee or capacity charge that is proportionate to the burden created by the ADU based on either the floor area or the number of drainage-fixture units (DFU) values, as defined by the Uniform Plumbing Code, upon the water or sewer system.

(2) The portion of the fee or charge that is charged by the city may not exceed the reasonable cost of providing this service.

H. Nonconforming Zoning Code Conditions, Building Code Violations, and Unpermitted Structures.

1. Generally. The City will not deny an ADU or JADU application due to a nonconforming zoning condition, building code violation, or unpermitted structure on the lot that does not present a threat to the public health and safety and that is not affected by the construction of the ADU or JADU.

2. Unpermitted ADUs constructed before 2020.

a. *Permit to Legalize.* As required by state law, the City may not deny a permit to legalize an existing, but unpermitted ADU or JADU that was constructed before January 1, 2020, if denial is based on either of the following grounds:

(1) The ADU or JADU violates applicable building standards; or

(2) The ADU or JADU does not comply with state ADU or JADU law or this ADU ordinance (Section 5.03.010).

b. *Exceptions.*

(1) Notwithstanding Subsection H.2.a, above the City may deny a permit to legalize an existing but unpermitted ADU or JADU that was constructed before January 1, 2020, if the City makes a finding that correcting a violation is necessary to comply with the standards specified in California Health and Safety Code section 17920.3.

(2) Subsection H.2.a, above does not apply to a building that is deemed to be substandard in accordance with California Health and Safety Code Section 17920.3.

I. Nonconforming ADUs and Discretionary Approval. Any proposed ADU or JADU that would otherwise be allowed under this section but that does not conform to the objective design or development standards set forth in Subsections A through H of this Section may be allowed by the City, subject to a Conditional Use Permit issued in accordance with the other provisions of this Development Code.

5.03.000: Purpose

The purpose of this Division is to provide operating, site planning and/or development standards for certain land uses allowed by Division 5.02 (Land Use) of this Development Code, and for activities and facilities that require special standards to mitigate their potential adverse impacts, thereby assuring a land use, activity, and/or facility of stable and desirable character, which is compatible with existing and future development and land uses in the vicinity, and protects the use and enjoyment of neighboring properties consistent with goals and policies of The Ontario Plan.

5.03.005: Applicability

A. The land uses, activities and facilities addressed by this Division shall be located in compliance with Division 5.02 (Land Use) of this Development Code.

B. The standards for specific uses, activities and facilities established by this Division shall supplement, and are required in addition to, the applicable development and subdivision regulations contained in Chapter 6.0 (Development and Subdivision Regulations) of this Development Code.

C. Each and every physical improvement required to be installed or constructed in conjunction with the establishment of a land use, activity or facility addressed by this Division, shall be completed prior to the commencement of the land use.

5.03.010: Accessory Dwelling Units

A. **Purpose.** The purpose of this Section is to allow and regulate accessory dwelling units (ADUs) and junior accessory dwelling units (JADUs) in compliance with Article 2 of Chapter 13 of Division 1 of Title 7 of the California Government Code ~~Sections 65852.2 and 65852.22~~.

B. **Effect of Conforming.** An ADU or JADU that conforms to the standards in this Section will not be:

1. Deemed to be inconsistent with the City's general plan and zoning designation for the lot on which the ADU or JADU is located.

2. Deemed to exceed the allowable density for the lot on which the ADU or JADU is located.

3. Considered in the application of any local ordinance, policy, or program to limit residential growth.

4. Required to correct a nonconforming zoning condition, as defined in Subsection C.7, below. This does not prevent the City from enforcing compliance with applicable building standards in accordance with Health and Safety Code Section 17980.12.

C. **Definitions.** As used in this Section, the words or phrases listed below shall have the meanings thereafter specified:

1. Accessory Dwelling Unit (ADU). An attached or a detached residential dwelling unit that provides complete independent living facilities for one or more persons and is located on a lot with a proposed or existing primary residence. An accessory dwelling unit also includes the following:

a. An efficiency unit, as defined by HSC Section 17958.1; and

b. A manufactured home, as defined by HSC Section 18007.

2. Accessory Structure. A structure that is accessory and incidental to a dwelling located on the same lot.

3. Complete Independent Living Facilities. Permanent provisions for living, sleeping, eating, cooking, and sanitation on the same parcel as the single-family or multiple-family dwelling is or will be situated.

4. Efficiency Kitchen. A kitchen that includes each of the following:

a. A cooking facility with appliances.

b. A food preparation counter and storage cabinets that are of a reasonable size in relation to the JADU.

5. Junior Accessory Dwelling Unit (JADU). A residential unit that:

a. Is no more than 500 SF in size;

b. Is contained entirely within an existing or proposed single-family structure. An enclosed use within the residence, such as an attached garage, is considered to be a part of and contained within the single-family structure;

c. Includes its own separate sanitation facilities or shares sanitation facilities with the existing or proposed single-family structure;

d. If the unit does not include its own separate bathroom, then it contains an interior entrance to the main living area of the existing or proposed single-family structure in addition to an exterior entrance that is separate from the main entrance to the primary dwelling; and

e. It includes an efficiency kitchen, as defined in Subsection C.4, above.

6. Livable Space. A space in a dwelling intended for human habitation, including living, sleeping, eating, cooking, or sanitation.

~~6.~~7. Living Area. The interior habitable area of a dwelling unit, including basements and attics, but does not include a garage or any accessory structure.

~~7.~~8. Nonconforming Zoning Condition. A physical improvement on a property that does not conform with current zoning standards.

~~8.~~9. Passageway. A pathway that is unobstructed clear to the sky and extends from a street to one entrance of the ADU or JADU.

~~9.~~10. Proposed Dwelling. A dwelling that is the subject of a permit application and that meets the requirements for permitting.

~~10.~~11. Public Transit. A location, including but not limited to a bus stop or train station, where the public may access buses, trains, subways, and other forms of transportation that charge set fares, run on fixed routes, and are available to the public.

~~11.~~12. Tandem Parking. Two or more automobiles parked on a driveway or on any other location on a lot, lined up one behind the other.

D. Approvals. The following approvals apply to ADUs and JADUs under this Section:

1. Building Permit Only. If an ADU or JADU complies with each of the general requirements in subsection E below, it is allowed with only a building permit in the following scenarios:

a. *Converted on Single-Family Lot.* One ADU as described in this Subsection D.1.a and one JADU on a lot with a proposed or existing single-family dwelling on it, where the ADU or JADU:

(1) Is either: within the space of a proposed single-family dwelling; within the existing space of an existing single-family dwelling;~~,~~ or (in the case of and ADU only) within the existing space of an accessory structure, plus up to 150 additional SF if the expansion is limited to accommodating ingress and egress; and

(2) Has exterior access that is independent of that for the single-family dwelling; and

(3) Has side and rear setbacks sufficient for fire and safety, as dictated by applicable building and fire codes; and

(4) The JADU complies with the requirements of Government Code Sections ~~65852.22~~66333 through 66339.

b. *Limited Detached on Single-Family Lot.* One detached, new-construction ADU on a lot with a proposed or existing single-family dwelling (in addition to any JADU that might otherwise be established on the lot under Subsection D.1.a, above), if the detached ADU satisfies each of the following limitations:

(1) The side- and rear-yard setbacks are at least 4 FT; and

(2) The total floor area is 800 SF or smaller; and

(3) The peak height above grade does not exceed the applicable height limit provided in Subsection E.2, below.

c. *Converted on Multiple-Family Lot.* One or more ADUs within portions of existing multiple-family dwelling structures that are not used as livable space, including but not limited to storage rooms, boiler rooms, passageways, attics, basements, or garages, if each converted ADU complies with state building standards for dwellings. Under this Subsection D.1.c,

at least one converted ADU is allowed within an existing multiple-family dwelling, up to a quantity equal to 25 percent of the existing multiple-family dwelling units.

d. *Limited Detached on Multiple-Family Lot.* No more than two detached ADUs on a lot ~~that has an existing or~~with a proposed multiple-family dwelling, or up to 8 detached ADUs on a lot with and existing multiple-family dwelling, if each detached ADU satisfies ~~both~~all of the following ~~limitations~~:

(1) The side- and rear-yard setbacks are at least 4 FT. If the existing multiple-family dwelling has a rear or side yard setback of less than 4 FT, the City shall not require any modification to the multiple-family dwelling as a condition of approving the ADU; and

(2) The peak height above grade does not exceed the applicable height limit provided in Subsection E.2, below.

~~(2)~~**(3)** If the lot has an existing multiple-family dwelling, the quantity of detached ADUs does not exceed the number of primary dwelling units on the lot.

2. Process and Timing.

a. The City must approve or deny an application to create an ADU or JADU within 60 days from the date that the City receives a completed application. If the City has not approved or denied the completed application within 60 days, the application is deemed approved unless either:

(1) The applicant requests a delay, in which case the 60-day time period is tolled for the period of the requested delay, or

(2) When an application to create an ADU or JADU is submitted with a permit application to create a new single-family or multiple-family dwelling on the lot, the City may delay acting on the permit application for the ADU or JADU until the City acts on the permit application to create the new single-family or multiple-family dwelling, but the application to create the ADU or JADU will still be considered ministerially, without discretionary review or a hearing.

b. If the City denies application to create an ADU or JADU, the City must provide the applicant with comments that include, among other things, a list of all the defective or deficient items and a description of how the application may be remedied by the applicant. Notice of the denial and corresponding comments must be provided to the applicant within the 60-day time period established by Subsection D.3.b, above.

c. A demolition permit for a detached garage that is to be replaced with an ADU is reviewed with the application for the ADU and issued at the same time.

E. General ADU and JADU Requirements. The following requirements apply to all ADUs and JADUs that are approved under Subsections D.1 or D.2, above:

1. Zoning.

a. An ADU ~~or JADU~~ subject only to a building permit under Subsection D.1, above, may be created on a lot in a residential or mixed-use zoning district.

b. An ADU ~~or JADU~~ subject to ~~an ADU permit under~~ Subsection D.2, above, may be created on a lot that is zoned to allow single-family dwelling residential use or multiple-family dwelling residential use.

~~b.~~**c.** In accordance with Government Code section 66333(a), a JADU may only be created on a lot zoned for single-family residences.

2. Height.

a. Except as otherwise provided by Subsections E.2.b and E.2.c, below, a detached ADU created on a lot with an existing or proposed single-family or multiple-family dwelling unit may not exceed 16 FT in height.

b. A detached ADU may be up to 18 FT in height if it is created on a lot with an existing or proposed single-family or multiple-family dwelling unit that is located within one-half mile walking distance of a major transit stop or a high quality transit corridor, as those terms are defined in Section 21155 of the Public Resources Code, and the ADU may be up to two additional feet in height (for a maximum of 20 FT) if necessary to accommodate a roof pitch on the ADU that is aligned with the roof pitch of the primary dwelling unit.

c. A detached ADU created on a lot with an existing or proposed multiple-family dwelling that has more than one story may not exceed 18 FT in height.

d. An ADU that is attached to the primary dwelling may not exceed 25 FT in height or the height limitation imposed by the underlying zone that applies to the primary dwelling, whichever is lower. Notwithstanding the foregoing, ADUs subject to this Subsection E.2.d may not exceed two stories.

e. For purposes of this Ssubsection E.2, height is measured from existing legal grade or the level of the lowest floor, whichever is lower, to the peak of the structure.

3. Fire Sprinklers.

a. Fire sprinklers are required in an ADU if sprinklers are required in the primary residence.

b. The construction of an ADU does not trigger a requirement for fire sprinklers to be installed in the existing primary dwelling.

4. Rental Term. No ADU or JADU may be rented for a term that is shorter than 30 days. This prohibition applies regardless of when the ADU or JADU was created.

5. No Separate Sale or Conveyance. An ADU or JADU may be rented, ~~; however~~ but, except as provided in Government Code section 66341, no ADU or JADU may be sold or otherwise conveyed separately from the lot and the primary dwelling (in the case of a single-family lot) or from the lot and all of the dwellings (in the case of a multiple-family lot) ~~, except as otherwise provided in Government Code Section 65852.26~~.

6. Septic System. If the ADU or JADU will connect to an onsite wastewater-treatment system, the owner must include with the application a percolation test completed within the last 5 years or, if the percolation test has been recertified, within the last 10 years.

7. Owner Occupancy.

a. An ADU created under this section on orpermitted after January 1, 2020~~, but before January 1, 2025, is~~ are not subject to an~~the~~ owner-occupancy requirement ~~that was in place when the ADU was created~~.

~~**b.** Unless applicable law requires otherwise, all ADUs that are permitted on or after January 1, 2025 are subject to an owner-occupancy requirement. A natural person with legal or equitable title to the property must reside on the property as the person's legal domicile and permanent residence.~~

~~c.~~b. As required by state law, all JADUs are subject to an owner-occupancy requirement. A natural person with legal or equitable title to the property must reside on the property, in either the primary dwelling or JADU, as the person's legal domicile and permanent residence. However, the owner-occupancy requirement in this Subsection E.7.b~~c~~ does not apply if the property is entirely owned by another governmental agency, land trust, or housing organization.

8. "RentIncome Reporting. In order to facilitate the City's obligation to identify adequate sites for housing in accordance with Government Code Sections 65583.1 and 6633065852.2, the following requirements must be satisfied:

a. With the building-permit application, the applicant must provide the City with an estimate of the projected annualized rent that will be charged for the ADU or JADU.

b. Within 90 days after each January 1 ~~yearly anniversary of the~~following issuance of the building permit, the owner must report the actual rent charged for the ADU or JADU during the prior year. If the City does not receive the report within the 90-day period, the owner is in violation of this Code, and the City may send the owner a notice of violation and allow the owner another 30 days to submit the report. If the owner fails to submit the report within the 30-day period, the City may enforce this provision in accordance with applicable law.

9. Building and Safety.

a. *Must Comply with Building Code.* Subject to Subsection E.10.b, below, all ADUs and JADUs must comply with all local building code requirements.

b. *No Change of Occupancy.* Construction of an ADU does not constitute a Group R occupancy change under the local building code, as described in Section 310 of the California Building Code, unless the building official or Community Improvement~~Code Enforcement~~ Division officer makes a written finding based on substantial evidence in the record that the construction of the ADU could have a specific, adverse impact on public health and safety. Nothing in this Subsection E.10.b prevents the City from changing the occupancy code of a space that was uninhabitable space or that was only permitted for nonresidential use and was subsequently converted for residential use in accordance with this Section.

F. Specific ADU Requirements. The following requirements apply only to ADUs that require an ADU permit under Subsection D.2, above.

1. Maximum Size.

a. The maximum size of a detached or attached ADU subject to this Subsection F is 850 SF for a studio or one-bedroom unit and 1,000 SF for a unit with two or more bedrooms.

b. An attached ADU that is created on a lot with an existing primary dwelling is further limited to 50 percent of the floor area of the existing primary dwelling.

c. Application of other development standards in this Subsection F, such as lot coverage, might further limit the size of the ADU, but~~; nevertheless,~~ no application of the percent-based size limit in Subsection F.1.b, above, or front setback, lot coverage limit, or open-space requirement may require the ADU to be less than 800 SF.

2. Building Setbacks.

a. Subject to Subsection F.1.c, above, an ADU that is subject to this Subsection F shall maintain a minimum front yard setback of 30 FT from arterial street rights-of-way and 20 FT from all collector and local street rights-of-way.

b. An ADU that is subject to this Subsection F must conform to 4-FT side yard and rear yard setbacks.

c. No setback is required for an ADU that is subject to this Subsection F if the ADU is constructed in the same location and to the same dimensions as an existing structure.

3. Lot Coverage. No ADU subject to this Subsection F may cause the total lot coverage of the lot to exceed the maximum lot coverages shown in the Tables below, subject to Subsection F.1.c, above.

Traditional Single-Family Residential Development Standards

Requirements	*Residential Zoning Districts*				
	AR-2	*RE-2*	*RE-4*	*LDR-5*	*MDR-11, MDR-18, MDR-25 & HDR-45*
Maximum Lot Coverage	30%	40%		50%	60%

Small Lot Traditional and Alley-Loaded Single-Family Residential Development Standards

Requirements	*Residential Zoning Districts*		
	LDR-5	*MDR-11*	*MDR-18, MDR-25 & HDR-45*
Maximum Lot Coverage	55%	60%	70%

Multiple-Family Residential Development Standards

Requirements	*Residential Zoning Districts*			
	MDR-11	*MDR-18*	*MDR-25*	*HDR- 45*
Maximum Project Coverage	60%			100%

4. Minimum Open Space. No ADU subject to this Subsection F may cause the total percentage of open space of the lot to fall below the minimum requirements specified below, subject to Subsection F.1.c, above.

a. *Small Lot Traditional and Alley-Loaded Development Projects, and Cluster Single-Family Development Projects.* Small lot traditional, small lot alley-loaded, and cluster single-family development projects that consist of more than 3 dwellings, shall devote a minimum of 20 percent of the project site to open space.

b. *Multiple-Family and Mixed-Use Development Projects.* Multiple-family development projects and the multiple-family residential portion of mixed-use development projects that consist of more than 3 dwellings, shall provide open space as follows:

Minimum Open Space Requirements for Multiple-Family and Mixed-Use Development Projects

Open Space Type	Zoning Districts		
	MDR-11 & MDR-18	MDR-25	HDR-45
Private Open Space	200 SF (40%)	150 SF (37.5%)	60 SF (20%)
Common Open Space	300 SF (60%)	250 SF (62.5%)	250 SF (80%)
Total Open Space	500 SF (100%)	400 SF (100%)	310 SF (100%)

5. Passageway. No passageway, as defined by Subsection C.~~8~~9, above, is required for an ADU.

6. Off-Street Parking.

a. *Generally.* One off-street parking space is required for each ADU. The parking space may be provided in setback areas or as tandem parking, as defined by Subsection C.~~11~~12, above.

b. *Exceptions.* No parking under Subsection F.7.a, above, is required in the following situations:

(1) The ADU is located within one-half mile walking distance of public transit, as defined in Subsection C.~~10~~11, above.

(2) The ADU is located within an architecturally and historically significant historic district.

(3) The ADU is part of the proposed or existing primary residence, or an accessory structure under Subsection D.1.a, above.

(4) When on-street parking permits are required but not offered to the occupant of the ADU.

(5) When there is an established car share vehicle stop located within one block of the ADU.

(6) When the permit application to create an ADU is submitted with an application to create a new single-family or multiple-family dwelling on the same lot, provided that the ADU or the lot satisfies any other criteria listed in Subsections F.6.b(1) through F.6.b(5), above.

c. *No Replacement.* When a garage, carport, ~~or~~ covered parking structure, or uncovered parking space is demolished in conjunction with the construction of an ADU or converted to an ADU, those off-street parking spaces are not required to be replaced.

7. Architectural Requirements.

a. The materials and colors of the exterior walls, roof, and windows and doors must match the appearance and architectural design of those of the primary dwelling.

b. The roof slope must match that of the dominant roof slope of the primary dwelling. The dominant roof slope is the slope shared by the largest portion of the roof.

c. The exterior lighting must be limited to down-lights or as otherwise required by the City's Building or Fire Code.

d. The ADU must have an independent exterior entrance, apart from that of the primary dwelling.

e. The interior horizontal dimensions of an ADU must be at least 10 FT wide in every direction, with a minimum interior wall height of 7 FT.

f. Windows and doors of the ADU may not have a direct line of sight to an adjoining residential property. Fencing, landscaping, or privacy glass may be used to provide screening and prevent a direct line-of-sight.

g. All windows and doors in an ADU are less than 30 FT from a property line that is not a public right-of-way line must either be (for windows) clerestory with the bottom of the glass at least 6 FT above the finished floor, or (for windows and for doors) utilize frosted or obscure glass.

8. Landscape Requirements. A Landscape Plan shall be submitted to the City, which provides for evergreen landscape screening, to include trees, shrubs, and groundcovers that shall be planted, permanently irrigated, and fully maintained, and which is located between an ADU and adjacent parcels, and where an ADU impacts a front yard and/or is subject to public views from a public or private street. Evergreen landscape screening shall be provided as follows:

a. Minimum 15-gallon size screening shrubs shall be installed at every 5 linear feet of exterior building wall. Alternatively, a 6-FT high decorative masonry block wall may be constructed.

b. ADUs created by garage conversion, which results in the removal of the garage door, shall provide a minimum 3-FT wide foundation landscape planter for the full length of the wall wherein the garage door was removed, which shall be fully landscaped and irrigated, and permanently maintained.

c. All landscaping must be drought tolerant and California friendly.

d. Landscape and irrigation plans shall be prepared and submitted to the City for review and approval.

9. Historical Protections. An ADU that is on or within 600 feet of real property that is listed in the California Register of Historic Resources must be located so as to not be visible from any public right-of-way.

G. Fees. The following requirements apply to all ADUs and JADUs that are approved under Subsections D.1 or D.2, above.

1. Impact Fees.

a. No impact fee is required for an ADU that is less than 750 SF in size. For the purposes of this Subsection G.1, the term "impact fee" means a "fee" under the Mitigation Fee Act (Government Code Section 66000(b)) and a fee under the Quimby Act (Government Code Section 66477). "Impact fee" as used in this Section, does not include any connection fee or capacity charge for water or sewer service.

b. Any impact fee that is required for an ADU that is 750 SF or larger in size must be charged proportionately in relation to the square footage of the primary dwelling unit (e.g., the floor area of the ADU, divided by the floor area of the primary dwelling, times the typical fee amount charged for a new dwelling.)

2. Utility Fees.

a. If an ADU is constructed with a new single-family home, a separate utility connection directly between the ADU and the utility and payment of the normal connection fee and capacity charge for a new dwelling are required~~ADUs and JADUs shall not be required to have a new or separate utility connection directly between the ADU or JADU and the utility, nor shall a connection fee or capacity charge be required~~.

b. Except as described in Subsection G.2.a, converted ADUs on a single-family lot that are created under Subsection D.1.a above are not required to have a new or separate utility connection directly between the ADU and the utility. Nor is a connection fee or capacity charge required.

c. Except as described in Subsection G.2.a, all ADUs that are not covered by Subsection G.2.b require a new, separate utility connection directly between the ADU and the utility for any utility that is provided by the city. All utilities that are not provided by the city are subject to the connection and fee requirements of the utility provider.

(1) The connection is subject to a connection fee or capacity charge that is proportionate to the burden created by the ADU based on either the floor area or the number of drainage-fixture units (DFU) values, as defined by the Uniform Plumbing Code, upon the water or sewer system.

~~(1)~~**(2)** The portion of the fee or charge that is charged by the city may not exceed the reasonable cost of providing this service.

H. Nonconforming Zoning Code Conditions, Building Code Violations, and Unpermitted Structures.

1. Generally. The City will not deny an ADU or JADU application due to a nonconforming zoning condition, building code violation, or unpermitted structure on the lot that

does not present a threat to the public health and safety and that is not affected by the construction of the ADU or JADU.

2. Unpermitted ADUs constructed before 20202018.

a. *Permit to Legalize.* As required by state law, the City may not deny a permit to legalize an existing, but unpermitted ADU or JADU that was constructed before January 1, 20202018, if denial is based on either of the following grounds:

(1) The ADU or JADU violates applicable building standards; or

(2) The ADU or JADU does not comply with state ADU or JADU law ~~(Government Code Section 65852.2)~~ or this ADU ordinance (Section 5.03.010).

b. *Exceptions.*

(1) Notwithstanding Subsection H.2.a, above the City may deny a permit to legalize an existing but unpermitted ADU or JADU that was constructed before January -1, 20202018, if the City makes a finding that correcting a violation is necessary to ~~protect the health and safety of the public or of occupants of the structure~~comply with the standards specified in California Health and Safety Code section 17920.3.

(2) Subsection H.2.a, above does not apply to a building that is deemed to be substandard in accordance with California Health and Safety Code Section 17920.3.

I. Nonconforming ADUs and Discretionary Approval. Any proposed ADU or JADU that would otherwise be allowed under this section but that does not conform to the objective design or development standards set forth in Subsections A through H of this Section may be allowed by the City, subject to a Conditional Use Permit issued in accordance with the other provisions of this Development Code.

5.03.011: Accessory Residential Structures

A. Purpose. The purpose of this Section is to establish standards for the construction and use of Accessory Residential Structures (other than Accessory Dwelling Units allowed pursuant to Section 5.03.010 of this Development Code) in conjunction with existing single-family dwellings located within single-family or multiple-family zoning districts. (Note: The construction and use of Accessory Residential Structures in conjunction with existing multiple-family dwellings shall be subject to the development standards applicable to the primary multiple-family dwellings.)

B. Applicability. For purposes of this Section, the herein established development standards shall apply to Accessory Residential Structures such as garages, carports, guesthouses, storage sheds, pool houses, recreation rooms, etc., which are incidental or subordinate to the primary dwelling.

C. Definitions. As used in this Section, the words or phrases listed below shall have the meanings thereafter specified:

CITY OF ONTARIO *Agenda Report* **March 18, 2025**	**SECTION:** **PUBLIC HEARINGS**
Department: Development Administration Prepared By: Pablo De Lara Staff Member Presenting: Rudy Zeledon, Executive Director Community Development Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 19

SUBJECT: **A PUBLIC HEARING TO CONSIDER THE ADOPTION OF AN ORDINANCE APPROVING A DEVELOPMENT AGREEMENT (FILE NO. PDA22-004) BETWEEN THE CITY OF ONTARIO AND ROSEVILLE INVESTMENTS, LLC AND AMERICAN SUPERIOR LAND, LLC.**

RECOMMENDATION: That the City Council introduce and waive further reading of an Ordinance Approving a Development Agreement (File No. PDA22-004) between the City of Ontario and Roseville Investments, LLC and American Superior Land, LLC.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Invest in the Growth and Evolution of the City's Economy
Operate in a Businesslike Manner
Focus Resources in Ontario's Commercial and Residential Neighborhoods
Invest in the City's Infrastructure (Water, Streets, Sewers, Parks, Storm Drains and Public Facilities)
Ensure the Development of a Well Planned, Balanced, and Self-Sustaining Community in Ontario Ranch

FISCAL IMPACT: There is not a direct fiscal impact associated with this action. The Development Agreement will provide funding from the formation of a Community Facilities District (CFD) for City services and facilities required to support the Rich-Haven Specific Plan (Specific Plan) development, thereby mitigating the increased costs associated with such services. In addition, the City will receive development impact, compliance processing, licensing, and permitting fees. No General Fund revenue will be used to support the Ontario Ranch development.

BACKGROUND & ANALYSIS: The Ontario Ranch Financial commitments required for construction of properties within a specific plan are substantial. Therefore, to adequately forecast these costs and gain assurance that the Project may proceed under the existing policies, rules, and regulations, Richland Developers Inc., Roseville Investments, LLC and American Superior Land, LLC (collectively the "Applicant" or "Owner"), has requested that the City enter into negotiations to create a Development Agreement (Agreement).

The Agreement proposes to include 106.1 gross acres of land within Planning Areas 1A, 1B, and 1C land use districts of the Rich-Haven Specific Plan, as shown on the attached Exhibit A. The Agreement grants the Applicant a vested right to develop Tentative Tract Map 20526 (the Map), provided that the Owner complies with the terms and conditions of the Specific Plan and related EIR.

The Map (see attached Exhibit B) is located at the southwest corner of Haven Avenue and Riverside Drive. It proposes to subdivide 106.1 gross acres of land into 12 numbered lots and 10 lettered lots for residential uses, a public school, private drives, landscape edges, and common open space purposes.

The term of the Agreement is for 10 years, with a 5-year option to renew. The main points of the Agreement address funding for all new City expenses created by the Project, which includes: Development Impact Fees (DIF) for construction of public improvements (i.e. streets and bridges, sewer, water, storm drain and Fiber); and the creation of a Community Facilities District (CFD) for the maintenance of public facilities.

In considering the Agreement at their meeting on February 25, 2025, the Planning Commission found the Agreement to be consistent with State law, The Ontario Plan, and the City's Development Agreement policies. As a result, the Planning Commission adopted Resolution No. PC25-010 with a 4 to 0 vote, recommending City Council approval of the Agreement.

ENVIRONMENTAL REVIEW: The environmental impacts of this Project were previously reviewed in conjunction with File No. PSP05-004, the Rich-Haven Specific Plan for which an Environmental Impact Report (SCH# 2006051081) was previously adopted by the City Council on December 4, 2007. This Application introduces no new significant environmental impacts. All previously adopted mitigation measures are a condition of Project approval and are incorporated herein by this reference.

Exhibit A:
Rich-Haven SPECIFIC PLAN LAND USE MAP (File No. PSP05-004)

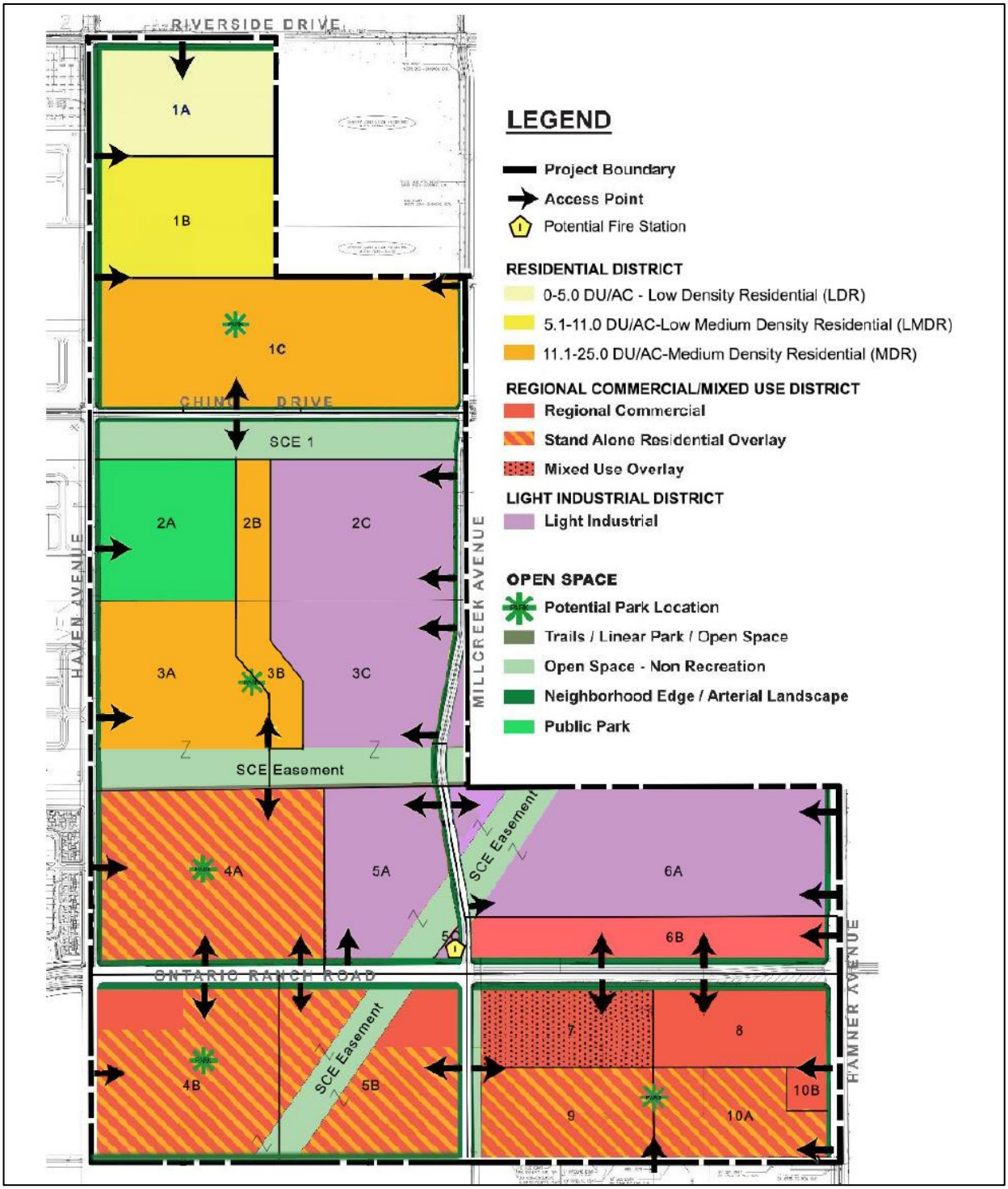
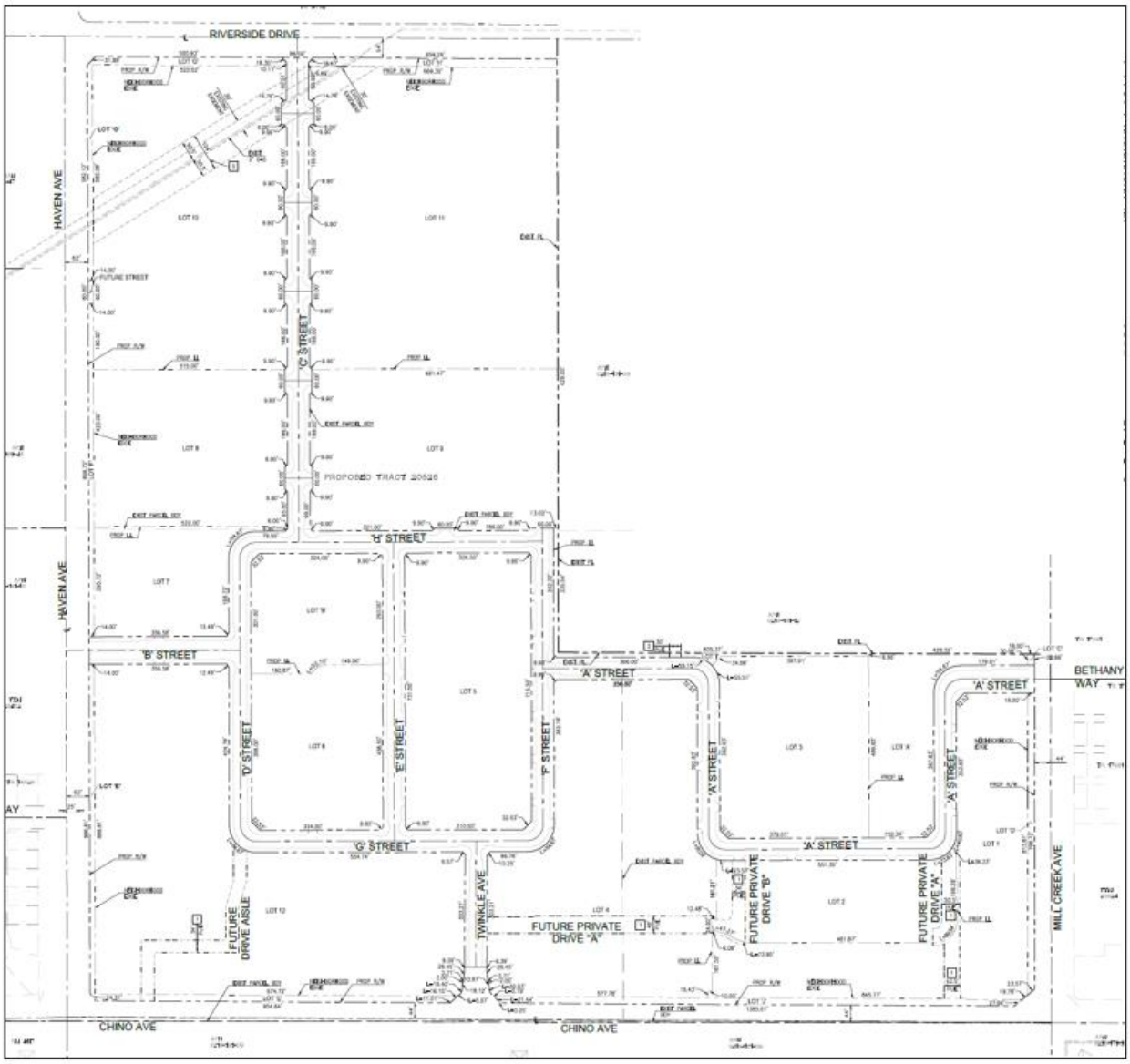


Exhibit B:
TENTATIVE TRACT MAP NO. 20526



ORDINANCE NO. _____

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, FILE NO. PDA22-004, A DEVELOPMENT AGREEMENT BETWEEN THE CITY OF ONTARIO AND, ROSEVILLE INVESTMENTS, LLC AND AMERICAN SUPERIOR LAND, LLC, TO ESTABLISH THE TERMS AND CONDITIONS ASSOCIATED WITH TENTATIVE TRACT MAP 20526 (FILE NO. PMTT22-012), LOCATED AT THE SOUTHEAST CORNER OF HAVEN AVENUE AND RIVERSIDE DRIVE, WITHIN PLANNING AREAS 1A, 1B, AND 1C OF THE RICH-HAVEN SPECIFIC PLAN (FILE NO. PSP05-004). (APNS: 0218-161-11, 0218-161-04, 0218-161-05, AND 0218-161-10).

WHEREAS, Richland Developers, Inc ("Applicant") has filed an Application for the approval of a Development Agreement, File No. PDA22-004, as described in the title of this Resolution (hereinafter referred to as "Application" or "Project"); and

WHEREAS, the Application applies to 106.1 gross acres of land, located at the southeast corner of Haven Avenue and Riverside Drive, within Planning Areas 1A, 1B, and 1C of the Rich-Haven Specific Plan (File No. PSP05-004); and

WHEREAS, the Applicant submitted Tentative Tract Map No. 20526 (File No. PMTT22-012), subdividing 106.1 gross acres of land into 12 numbered lots and 10 lettered lots for residential uses, a public school, private drives, landscape edges, and common open space purposes; and

WHEREAS, the environmental impacts of this Project were previously reviewed in conjunction with File No. PSP05-004, the Rich-Haven Specific Plan for which an Environmental Impact Report (SCH# 2006051081) was previously adopted by the City Council on December 4, 2007. This Application introduces no new significant environmental impacts; and

WHEREAS, the City's "Local Guidelines for the Implementation of the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed; and

WHEREAS, Ontario Development Code Table 2.02-1 (Review Matrix) grants the City Council the responsibility and authority to review and act on the subject Application; and

WHEREAS, the Project has been reviewed for consistency with the Housing Element of the Policy Plan component of The Ontario Plan, as State Housing Element law (as prescribed in Government Code Sections 65580 through 65589.8) requires that development projects must be consistent with the Housing Element, if upon consideration of all its aspects, it is found to further the purposes, principals, goals, and policies of the Housing Element; and

WHEREAS, the Project is located within the Airport Influence Area of Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and is subject to, and must be consistent with, the policies and criteria set forth in the Ontario International Airport Land Use Compatibility Plan (hereinafter referred to as "ALUCP"), which applies only to jurisdictions within San Bernardino County, and addresses the noise, safety, airspace protection, and overflight impacts of current and future airport activity; and

WHEREAS, City of Ontario Development Code Division 2.03 (Public Hearings) prescribes the manner in which public notification shall be provided and hearing procedures to be followed, and all such notifications and procedures have been completed; and

WHEREAS, on February 25, 2025, the Planning Commission of the City of Ontario conducted a hearing to consider the Project, and concluded said hearing on that date, voting to issue Resolution No._____ recommending the City Council approve the Application; and

WHEREAS, on March 18, 2025, the City Council of the City of Ontario conducted a hearing to consider the Project, and concluded said hearing on that date; and

WHEREAS, all legal prerequisites to the adoption of this Ordinance have occurred.

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED, AND RESOLVED by the City Council of the City of Ontario, as follows:

SECTION 1: ***Environmental Determination and Findings.*** As the recommending authority for the Project, the City Council has reviewed and considered the information contained in the previous Certified EIR and supporting documentation. Based upon the facts and information contained in the previous Certified EIR and supporting documentation, the City Council finds as follows:

(1) the environmental impacts of this Project were previously reviewed in conjunction with File No. PSP05-004, the Rich-Haven Specific Plan for which an Environmental Impact Report (SCH# 2006051081) was previously adopted by the City Council on December 4, 2007. This Application introduces no new significant environmental impacts; and

(2) The previous Certified EIR contains a complete and accurate reporting of the environmental impacts associated with the Project; and

(3) The previous Certified EIR was completed in compliance with CEQA and the Guidelines promulgated thereunder; and

(4) The previous Certified EIR reflects the independent judgment of the City Council; and

(5) The proposed project will introduce no new significant environmental impacts beyond those previously analyzed in the previous Certified EIR, and all mitigation measures previously adopted with the Certified EIR, are incorporated herein by this reference.

SECTION 2: ***Subsequent or Supplemental Environmental Review Not Required.*** Based on the information presented to the City Council, and the specific findings set forth in Section 1, above, the City Council finds that the preparation of a subsequent or supplemental Certified EIR is not required for the Project, as the Project:

(1) Does not constitute substantial changes to the Certified EIR that will require major revisions to the Certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and

(2) Does not constitute substantial changes with respect to the circumstances under which the Certified EIR was prepared, that will require major revisions to the Certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of the previously identified significant effects; and

(3) Does not contain new information of substantial importance that was not known and could not have been known with the exercise of reasonable diligence at the time the Certified EIR was certified/adopted, that shows any of the following:

(a) The project will have one or more significant effects not discussed in the Certified EIR; or

(b) Significant effects previously examined will be substantially more severe than shown in the Certified EIR; or

(c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the City declined to adopt such measures; or

(d) Mitigation measures or alternatives considerably different from those analyzed in the Certified EIR would substantially reduce one or more significant effects on the environment, but which the City declined to adopt.

SECTION 3: ***Housing Element Compliance.*** Pursuant to the requirements of California Government Code Chapter 3, Article 10.6, commencing with Section 65580, as the recommending authority for the Project, the City Council finds that based on the facts

and information contained in the Application and supporting documentation, at the time of Project implementation, the project is consistent with the Housing Element of the Policy Plan (General Plan) component of The Ontario Plan. The project site is not one of the properties in the Housing Element Sites contained in Tables B-1 and B-2 (Housing Element Sites Inventory) of the Housing Element Technical Report.

SECTION 4: ***Airport Land Use Compatibility Plan ("ALUCP") Compliance.*** The California State Aeronautics Act (Public Utilities Code Section 21670 et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

(1) On April 19, 2011, the City Council of the City of Ontario approved and adopted the Ontario International Airport Land use Compatibility Plan, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the recommending authority for the Project, the City Council has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the City Council, therefore, finds and determines that the Project, is will be consistent with the policies and criteria set forth within the ONT ALUCP; and

(2) On August 2, 2022, the City Council of the City of Ontario approved and adopted a Development Code Amendment to establish the Chino Airport ("CNO") Overlay Zoning District ("OZD") and Reference I, Chino Airport Land Use Compatibility Plan ("CNO ALUCP"). The CNO OZD and CNO ALUCP established the Airport Influence Area for Chino Airport, solely within the City of Ontario, and limits future land uses and development within the Airport Influence Area, as they relate to safety, airspace protection, and overflight impacts of current and future airport activity. The CNO ALUCP is consistent with policies and criteria set forth within the Caltrans 2011 California Airport Land Use Planning Handbook. The proposed Project is located within the Airport Influence Area of Chino Airport and was evaluated and found to be consistent with the California Airport Land Use Planning Handbook and the CNO ALUCP. As the recommending authority for the Project, the City Council has reviewed and considered the facts and information contained in the Application and supporting documentation against the CNO ALUCP compatibility factors, including Safety, Airspace Protection, Overflight. As a result, the City Council,

therefore, finds and determines that the Project is consistent with the policies and criteria set forth within the California Airport Land Use Planning Handbook and the Chino ALUCP.

SECTION 5: ***Concluding Facts and Reasons.*** Based upon the substantial evidence presented to the City Council during the above-referenced hearing, and upon the specific findings set forth in Section 1 through 4, above, the City Council hereby concludes as follows:

(1) The Development Agreement applies to 106.1 gross acres of land located at the southeast corner of Haven Avenue and Riverside Drive, within Planning Areas 1A, 1B, and 1C of the Rich-Haven Specific Plan (File No. PSP05-004); and

(2) The Development Agreement establishes parameters for the development of land within the Rich-Haven Specific Plan. The Development Agreement also grants the Applicant, the right to develop, the ability to quantify the fees; and establish the terms and conditions that apply to those projects. These terms and conditions are consistent with The Ontario Plan Policy Plan (General Plan), design guidelines and development standards for the Rich-Haven Specific Plan; and

(3) The Development Agreement grants the Applicant a vested right to develop Tentative Tract Map 20526 (File No. PMTT22-012) as long as the Applicant complies with the terms and conditions of the Rich-Haven Specific Plan and EIR. Tentative Tract Map 20526 is located at the southeast corner of Haven Avenue and Riverside Drive, within Planning Areas 1A, 1B, and 1C of the Rich-Haven Specific Plan, and proposes to subdivide 106.1 gross acres of land into 12 numbered lots and 10 lettered lots for residential uses, a public school, private drives, landscape edges, and common open space purposes; and

(4) The Development Agreement has been prepared in conformance with the goals and policies of The Ontario Plan Policy Plan (General Plan); and

(5) The Development Agreement does not conflict with the Land Use Policies of The Ontario Plan Policy Plan (General Plan) and will provide for development, within the district, in a manner consistent with the Policy Plan and with related development; and

(6) This Development Agreement will promote the goals and objectives of the Land Use Element of the Policy Plan; and

(7) This Development Agreement will not be materially injurious or detrimental to the adjacent properties and will not have a significant impact on the environment or the surrounding properties for which a Subsequent Environmental Impact Report (SCH# 2006051081) was previously adopted by the City Council on December 4, 2007; and

(8) This Application introduces no new significant environmental impacts. All previously adopted mitigation measures are a condition of project approval and are incorporated herein by this reference.

SECTION 6: ***City Council Action.*** Based upon the findings and conclusions set forth in Sections 1 through 5, above, the City Council hereby APPROVES the Development Agreement (File No. PDA22-004), attached hereto as "Attachment A," and incorporated herein by this reference.

SECTION 7: **City Manager Administrative Authority.** The City Council acknowledges that refinements and further development of the Ontario Ranch development area may demonstrate that changes are appropriate with respect to the details and performance of the parties under the Development Agreement. The City Council desires to retain a certain degree of flexibility with respect to the details of the Ontario Ranch developments, and with respect to those items covered in general terms under the Development Agreement. If and when the City Manager (or designee) and the Developer mutually find that changes, adjustments, or clarifications are appropriate to further the intended purposes of the Development Agreement, and such are not materially inconsistent with the Development Agreement, they may, unless otherwise required by law, effectuate such changes, adjustments, or clarifications by written amendment to this Agreement, or through one or more memoranda which are mutually approved by the City Manager on behalf of the City and by the Developer, and, after execution, shall be attached to the Development Agreement and become a part thereof. Unless otherwise required by law, no such changes, adjustments, or clarifications shall require prior notice or hearing before the City Council. The City Manager, with the approval of the City Attorney, shall have the authority but not the obligation to execute amendments, memoranda or other documents, and may take any action necessary to implement the Development Agreement.

SECTION 8 ***Indemnification.*** The Applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void, or annul this approval. The City of Ontario shall promptly notify the applicant of any such claim, action, or proceeding, and the City of Ontario shall cooperate fully in the defense.

SECTION 9: ***Custodian of Records.*** The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East "B" Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario.

SECTION 10: ***Severability.*** If any section, sentence, clause or phrase of this Ordinance or the application thereof to any entity, person or circumstance is held for any reason to be invalid or unconstitutional, such invalidity or unconstitutionality shall not affect other provisions or applications of this Ordinance which can be given effect without the invalid provision or application, and to this end the provisions of this Ordinance are severable. The People of the City of Ontario hereby declare that they would have adopted this Ordinance and each section, sentence, clause or phrase thereof, irrespective of the

fact that any one or more section, subsections, sentences, clauses or phrases be declared invalid or unconstitutional.

SECTION 11: ***Effective Date.*** This Ordinance shall become effective 30 days following its adoption.

SECTION 12: ***Publication and Posting.*** The Mayor shall sign this Ordinance and the City Clerk shall certify as to the adoption and shall cause a summary thereof to be published at least once, in a newspaper of general circulation in the City of Ontario, California within fifteen (15) days of the adoption. The City Clerk shall post a certified copy of this ordinance, including the vote for and against the same, in the Office of the City Clerk, in accordance with Government Code Section 36933.

PASSED, APPROVED, AND ADOPTED this _____ day of _____ 2025.

_____
PAUL S. LEON, MAYOR

ATTEST:

_____
SHEILA MAUTZ, CITY CLERK

APPROVED AS TO FORM:

_____
BEST BEST & KRIEGER LLP
CITY ATTORNEY

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO)
CITY OF ONTARIO)

I, SHEILA MAUTZ, City Clerk of the City of Ontario, DO HEREBY CERTIFY that foregoing Ordinance No. _____ was duly introduced at a regular meeting of the City Council of the City of Ontario held _____ and adopted at the regular meeting held _____, 2025 by the following roll call vote, to wit:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

I hereby certify that the foregoing is the original of Ordinance No. _____ duly passed and adopted by the Ontario City Council at their regular meeting held _____ and that Summaries of the Ordinance were published on _____ and _____, in the Inland Valley Daily Bulletin newspaper.

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

ATTACHMENT A:

FILE NO. PDA22-004

DEVELOPMENT AGREEMENT

By and Between

City of Ontario
a California municipal corporation

and

Roseville Investments, LLC
a Delaware limited liability company

and

American Superior Land, LLC
a Florida limited liability company

(Development Agreement to follow this page)

RECORDING REQUESTED BY AND
WHEN RECORDED MAIL TO:

CITY OF ONTARIO
CITY CLERK / RECORDS MANAGEMENT
303 EAST "B" STREET
ONTARIO, CA 91764-4196

Exempt from Fees Per Gov. Code § 6103

Space above this line for Recorder's Use Only

FILE NO. PDA22-004

DEVELOPMENT AGREEMENT

By and Between

City of Ontario
a California municipal corporation

and

Roseville Investments, LLC
a Delaware limited liability company

and

American Superior Land, LLC
a Florida limited liability company

_____, 2025

San Bernardino County, California

DEVELOPMENT AGREEMENT PDA22-004

This Development Agreement (hereinafter "Agreement") is entered into effective as of the ____ day of _____, 2025 by and among the City of Ontario, a California municipal corporation (hereinafter "CITY"), and, Roseville Investments, LLC, American Superior Land, LLC, (hereinafter "OWNER"):

RECITALS

WHEREAS, CITY is authorized to enter into binding development agreements with persons having legal or equitable interests in real property for the development of such property, pursuant to Section 65864, et seq. of the Government Code; and

WHEREAS, OWNER has requested CITY to enter into a development agreement and proceedings have been taken in accordance with the rules and regulations of CITY; and

WHEREAS, by electing to enter into this Agreement, CITY shall bind future City Councils of CITY by the obligations specified herein and limit the future exercise of certain governmental and proprietary powers of CITY; and

WHEREAS, the terms and conditions of this Agreement have undergone extensive review by CITY and the City Council and have been found to be fair, just and reasonable; and

WHEREAS, the best interests of the citizens of the CITY and the public health, safety and welfare will be served by entering into this Agreement; and

WHEREAS, all of the procedures of the California Environmental Quality Act have been met with respect to the Project and the Agreement in that Rich Haven Specific Plan (State Clearinghouse No. 2006051081 (the "FEIR"). The City Council found and determined that the FEIR was prepared in accordance with the requirements of the California Environmental Quality Act and adequately describes the impacts of the project described in the FEIR, which included consideration of this Agreement; and

WHEREAS, this Agreement and the Project are consistent with the CITY's Comprehensive General Plan and the Rich Haven Specific Plan; and

WHEREAS, all actions taken and approvals given by CITY have been duly taken or approved in accordance with all applicable legal requirements for notice, public hearings, findings, votes, and other procedural matters; and

WHEREAS, development of the Property in accordance with this Agreement will provide substantial benefits to CITY and will further important policies and goals of CITY; and

WHEREAS, this Agreement will eliminate uncertainty in planning and provide for the orderly development of the Property, ensure progressive installation of necessary

improvements, provide for public services appropriate to the development of the Project, and generally serve the purposes for which development agreements under Sections 65864 et seq. of the Government Code are intended; and

WHEREAS, OWNER has incurred and will in the future incur substantial costs in excess of the generally applicable requirements in order to assure vesting of legal rights to develop the Property in accordance with this Agreement.

WHEREAS, the Property is located in an area of the City of Ontario that has been known as the "New Model Colony" area and the New Model Colony area has now been renamed as "Ontario Ranch."

COVENANTS

NOW, THEREFORE, in consideration of the above recitals and of the mutual covenants hereinafter contained and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. DEFINITIONS AND EXHIBITS.

1.1 Definitions. The following terms when used in this Agreement shall be defined as follows:

1.1.1 "Agreement" means this Development Agreement.

1.1.2 "CITY" means the City of Ontario, California, a California municipal corporation.

1.1.3 "Construction Agreement" means that certain Agreement for the Financing and Construction of Phases I and II Infrastructure Improvements to Serve an Easterly Portion of the New Model Colony, entered into between the CITY and NMC Builders as of the 4th day of October, 2005, and all amendments thereto and "Construction Agreement Amendment" means that First Amended and Restated Agreement for the Financing and Construction of Limited Infrastructure Improvements to Serve and Easterly Portion of the New Model Colony entered into between the CITY and NMC Builders as of the 21st day of August 2012.

1.1.4 "Development" means the improvement of the Property for the purposes of completing the structures, improvements and facilities comprising the Project including, but not limited to: grading; the construction of public infrastructure and public facilities related to the Project whether located within or outside the Property; the construction of buildings and structures; and the installation of landscaping. "Development" does not include the maintenance, repair, reconstruction or redevelopment of any building, structure, improvement or facility after the construction and completion thereof.

1.1.5 "Development Approvals" means all permits and other entitlements for use subject to approval or issuance by CITY in connection with development of the Property including, but not limited to:

(a) specific plans and specific plan amendments;

(b) tentative and final subdivision and parcel maps;

(c) development plan review;

(d) conditional use permits (including model home use permits), public use permits and plot plans;

(e) zoning;

(f) grading and building permits.

1.1.6 “Development Exaction” means any requirement of CITY in connection with or pursuant to any Land Use Regulation or Development Approval for the dedication of land, the construction of improvements or public facilities, or the payment of fees in order to lessen, offset, mitigate or compensate for the impacts of development on the environment or other public interests.

1.1.7 “Development Impact Fee” means a monetary exaction, other than a tax or special assessment, whether characterized as a fee or a tax and whether established for a broad class of projects by legislation of general applicability or imposed on a specific project on an ad hoc basis, that is charged by a local agency to the applicant in connection with approval of a development project for the purpose of defraying all or a portion of the cost of public facilities related to the development project, and, for purposes of this Agreement only, includes fees collected under development agreements adopted pursuant to Article 2.5 of the Government Code (commencing with Section 65864) of Chapter 4, For purposes of this Agreement only, "Development Impact Fee" shall not include processing fees and charges imposed by CITY to cover the estimated actual costs to CITY of processing applications for Development Approvals or for monitoring compliance with any Development Approvals granted or issued, including, without limitation, fees for zoning variances; zoning changes; use permits; building inspections; building permits; filing and processing applications and petitions filed with the local agency formation commission or conducting preliminary proceedings or proceedings under the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000, Division 3 (commencing with Section 56000) of Title 5 of the Government Code; the processing of maps under the provisions of the Subdivision Map Act, Division 2 (commencing with Section 66410) of Title 7 of the Government Code; or planning services under the authority of Chapter 3 (commencing with Section 65100) of Division 1 of Title 7 of the Government Code, fees and charges as described in Sections 51287, 56383, 57004, 65104, 65456, 65863.7, 65909.5, 66013, 66014, and 66451.2 of the Government Code, Sections 17951, 19132.3, and 19852 of the Health and Safety Code, Section 41901 of the Public Resources Code, and Section 21671.5 of the Public Utilities Code, as such codes may be amended or superceded, including by amendment or replacement.

1.1.8 “Development Plan” means the Existing Development Approvals and the Existing Land Use Regulations applicable to development of the Property.

1.1.9 “Effective Date” means the date that the ordinance approving this Agreement goes into effect.

1.1.10 “Existing Development Approvals” means all Development Approvals approved or issued prior to the Effective Date. Existing Development Approvals includes the Approvals incorporated herein as Exhibit “C” and all other Approvals which are a matter of public record on the Effective Date.

1.1.11 “Existing Land Use Regulations” means all Land Use Regulations in effect on the Effective Date. Existing Land Use Regulations includes the Regulations incorporated herein as Exhibit “D” and all other Land Use Regulations that are in effect and a matter of public record on the Effective Date.

1.1.12 “General Plan” means the General Plan adopted on August 16, 2022.

1.1.13 “Improvement” or “Improvements” means those public improvements required to support the development of the Project as described in the Tract Map conditions for Tract No.20526 as further described in Exhibit “F” (the “Infrastructure Improvements Exhibit”).

1.1.14 “Land Use Regulations” means all ordinances, resolutions, codes, rules, regulations and official policies of CITY governing the development and use of land, including, without limitation, the permitted use of land, the density or intensity of use, subdivision requirements, timing and phasing of development, the maximum height and size of buildings, the provisions for reservation or dedication of land for public purposes, and the design, improvement and construction standards and specifications applicable to the development of the Property. “Land Use Regulations” does not include any CITY ordinance, resolution, code, rule, regulation or official policy, governing:

(a) the conduct of businesses, professions, and occupations;

(b) taxes and assessments;

(c) the control and abatement of nuisances;

(d) the granting of encroachment permits and the conveyance of similar rights and interests that provide for the use of or the entry upon public property;

(e) the exercise of the power of eminent domain.

1.1.15 “Mortgagee” means a mortgagee of a mortgage, a beneficiary under a deed of trust or any other security-device lender, and their successors and assigns.

1.1.16 “Model Units” includes model units, private common recreation facilities and sales facilities constructed by OWNER prior to the construction of any Production units and not offered for sale and occupancy for a period of time after the issuance of permits for Production Units.

1.1.17 “Net MDD” means net maximum daily water demand.

1.1.18 “NMC Builders” means the consortium of investors and developers responsible for the construction of infrastructure within the New Model Colony incorporated as NMC Builders, LLC.

1.1.19 “OWNER” means the persons and entities listed as owner on page 1 of this Agreement and their permitted successors in interest to all or any part of the Property.

1.1.20 “Phase 2 Water EDUs” means the number of equivalent dwelling units or non-residential square footage assigned to OWERN upon payment to CITY of the Phase 2 Water Participation Fee for the Project and evidenced by the issuance by CITY of a Certificate of Phase 2 Net MDD Availability in the form attached as Exhibit “G”. 1.1.21 “Phase 2 Water Improvements” means the future water infrastructure Improvements required for the issuance by CITY of the “Water Availability Equivalents” (WAE) for the Project.

1.1.21 “Phase 2 Water Participation Fee” means the fee paid to City upon City approval of the first Development Entitlement for the Project, to fund the Property’s respective share of the projected costs of the design and construction of the Phase 2 Water Improvements by City. The Phase 2 Water Participation Fee shall be the calculated amount of the Regional Water DIF for the Project based upon the number of units, and land use category for residential units or the number of square feet, and land use category for non-residential square footage of the Project.

1.1.22 “Production Unit(s)” means all units constructed for sale and occupancy by OWNER and excludes the specified number of Model Units constructed by OWNER for promotion of sales.

1.1.23 “Project” means the development of the Property contemplated by the Development Plan, as such Plan may be further defined, enhanced or modified pursuant to the provisions of this Agreement.

1.1.24 “Property” means the real property described on Exhibit “A” and shown on Exhibit “B” to this Agreement.

1.1.25 “Reservations of Authority” means the rights and authority excepted from the assurances and rights provided to OWNER under this Agreement and reserved to CITY under Section 3.6 of this Agreement.

1.1.26 “Specific Plan” means that certain specific plan adopted by the City Council, and entitled, “Rich Haven Specific Plan.”

1.1.27 "Storm Water Treatment Capacity Availability” means a designated portion of the total Storm Water Treatment Capacity Availability made available through the completion of construction of a Phase of regional storm water treatment facilities by the NMC Builders LLC as described in the Construction Agreement Amendment. The amount, in acres, of Storm Water Treatment Capacity Availability required for the

issuance of a grading permit shall be based upon the factors and assumptions listed in the Construction Agreement Amendment.

1.1.28 "Subsequent Development Approvals" means all Development Approvals required subsequent to the Effective Date in connection with development of the Property.

1.1.29 "Subsequent Land Use Regulations" means any Land Use Regulations adopted and effective after the Effective Date of this Agreement.

1.1.30 "Water Availability Equivalent (WAE)" means a designated portion of the total Net MDD made available through the construction of each Phase described in the Water Phasing Plan of the Construction Agreement. The number of Water Availability Equivalents (of portions thereof) required for the issuance of each building permit shall be based upon water demand factors and assumptions listed in the Construction Agreement and Construction Agreement Amendment as "Water Availability Equivalents by Land Use" for each land use category.

1.1.31 "Amendment to the Construction Agreement" means the amendment to the Construction Agreement modifying the boundaries of the property in Exhibit A of such Construction Agreement to include the Property covered by this Agreement and to provide for the additional funds required for CITY's future construction of the "Phase 2 Water Improvements" described in a modification to Exhibit C-3 of the Construction Agreement.

1.2 Exhibits. The following documents are attached to, and by this reference made a part of, this Agreement:

Exhibit "A" — Legal Description of the Property.

Exhibit "B" — Map showing Property and its location.

Exhibit "C" — Existing Development Approvals.

Exhibit "D" — Existing Land Use Regulations.

Exhibit "E" — Description of Required Infrastructure Improvements

Exhibit "F" — Depiction of Required Infrastructure Improvements and Phasing

Exhibit "G" - Form of Certificate of Net MDD to be issued by CITY

Exhibit "H" – Form of Certificate of DIF Credit to be issued by CITY

Exhibit "I-1" – Ontario Ranch Water Supply Phasing Plan

Exhibit "I-2" - Water Demand Equivalents by Land Use

Exhibit "J" - Form of Plume Disclosure Letter

2. GENERAL PROVISIONS.

2.1 Binding Effect of Agreement. The Property is hereby made subject to this Agreement. Development of the Property is hereby authorized and shall be carried out only in accordance with the terms of this Agreement.

2.2 Ownership of Property. OWNER represents and covenants that it is the owner of the fee simple title to the Property or a portion thereof, or has the right to acquire fee simple title to the Property or a portion thereof from the current owner(s) thereof. To the extent OWNER does not own fee simple title to the Property, OWNER shall obtain written consent from the current fee owner of the Property agreeing to the terms of this Agreement and the recordation thereof.

2.3 Term. The term of this Agreement shall commence on the Effective Date and shall continue for an initial term of ten (10) years thereafter unless this term is modified or extended pursuant to the provisions of this Agreement. The term of this Agreement may be extended for an additional five (5) years following expiration of the initial ten (10) year term, provided the following have occurred:

(a) OWNER provides at least 180 days written notice to CITY prior to expiration of the initial term; and

(b) In non-mixed use and residential use only projects, the OWNER shall have obtained, as applicable, building permits for at least seventy percent (70%) of the actual number of residential units permitted under this Agreement; and

(c) OWNER is not then in uncured default of this Agreement.

2.4 Assignment.

2.4.1 Right to Assign. OWNER shall have the right to sell, transfer or assign the Property in whole or in part (provided that no such partial transfer shall violate the Subdivision Map Act, Government Code Section 66410, et seq.), to any person, partnership, limited liability company, joint venture, firm or corporation at any time during the term of this Agreement; provided, however, that any such sale, transfer or assignment shall include the assignment and assumption of the rights, duties and obligations arising under or from this Agreement and be made in strict compliance with the following:

(a) No sale, transfer or assignment of any right or interest under this Agreement shall be made unless made together with the sale, transfer or assignment of all or a part of the Property. OWNER may be required to provide disclosure that the Property is within the South Archibald Trichloroethylene (TCE) Plume. OWNER may wish to provide the attached Disclosure Letter (Exhibit G) as part of the Real Estate Transfer Disclosure requirements under California Civil Code Section 1102 et seq.(b)

(b) Concurrent with any such sale, transfer or assignment, or within fifteen (15) business days thereafter, OWNER shall notify CITY's City Manager, in writing, of such sale, transfer or assignment and shall provide CITY with: (1) an executed

agreement, in a form reasonably acceptable to CITY, by the purchaser, transferee or assignee and providing therein that the purchaser, transferee or assignee expressly and unconditionally assumes all the duties and obligations of OWNER under this Agreement with respect to the portion of the Property so sold, transferred or assigned; and (2) the payment of the applicable processing charge to cover the CITY's review and consideration of such sale, transfer or assignment.

(c) Any sale, transfer or assignment not made in strict compliance with the foregoing conditions shall constitute a default by OWNER under this Agreement. Notwithstanding the failure of any purchaser, transferee or assignee to execute the agreement required by Paragraph (b) of this Subsection 2.4.1, the burdens of this Agreement shall be binding upon such purchaser, transferee or assignee, but the benefits of this Agreement shall not inure to such purchaser, transferee or assignee until and unless such agreement is executed. The City Manager shall have the authority to review, consider and either approve, conditionally approve, or deny any proposed sale, transfer or assignment that is not made in compliance with this section 2.4.

2.4.2 Release of Transferring Owner. Notwithstanding any sale, transfer or assignment, a transferring OWNER shall continue to be obligated under this Agreement unless such transferring owner is given a release in writing by CITY, which release shall be provided by CITY upon the full satisfaction by such transferring owner of the following conditions:

(a) OWNER no longer has a legal or equitable interest in all or any part of the portion of the Property sold, transferred or assigned.

(b) OWNER is not then in default under this Agreement.

(c) OWNER has provided CITY with the notice and executed agreement required under Paragraph (b) of Subsection 2.4.1 above.

(d) The purchaser, transferee or assignee provides CITY with security equivalent to any security previously provided by OWNER to secure performance of its obligations hereunder.

2.4.3 Effect of Assignment and Release of Obligations. In the event of a sale, transfer or assignment pursuant to the provisions of Section 2.4.2 above:

(a) The assignee shall be liable for the performance of all obligations of OWNER with respect to transferred property, but shall have no obligations with respect to the portions of the Property, if any, not transferred (the "Retained Property").

(b) The owner of the Retained Property shall be liable for the performance of all obligations of OWNER with respect to Retained Property, but shall have no further obligations with respect to the transferred property.

(c) The assignee's exercise, use and enjoyment of the Property or portion thereof shall be subject to the terms of this Agreement to the same extent as if the assignee were the OWNER.

2.4.4 Subsequent Assignment. Any subsequent sale, transfer or assignment after an initial sale, transfer or assignment shall be made only in accordance with and subject to the terms and conditions of this Section 2.4.

2.4.5 Termination of Agreement with Respect to Individual Lots Upon Sale to Public and Completion of Construction. The provisions of Subsection 2.4.1 shall not apply to the sale or lease (for a period longer than one year) of any lot which has been finally subdivided and is individually (and not in "bulk") sold or leased to a member of the public or other ultimate user. Notwithstanding any other provisions of this Agreement, this Agreement shall terminate with respect to any lot and such lot shall be released and no longer be subject to this Agreement without the execution or recordation of any further document upon satisfaction of both of the following conditions:

(a) The lot has been finally subdivided and individually (and not in "bulk") sold or leased (for a period longer than one year) to a member of the public or other ultimate user; and,

(b) A certificate of occupancy has been issued for a building on the lot, and the fees set forth under Section 4 of this Agreement have been paid.

2.4.6 Partial Assignment and Assumption. CITY and OWNER agree OWNER may partially assign its obligations and rights under this Agreement, and all amendments hereto, to a purchaser, transferee or assignee of a lot, which has been subdivided subject to provisions of a partial assignment and assumption agreement in a form approved by CITY. Any such complete and executed partial assignment and assumption of this Agreement shall be submitted to CITY for approval pursuant to Section 2.4.1 of this Agreement. CITY shall review, and if the above conditions, including but not limited to, those conditions in Section 2.4.2, are satisfied, CITY may approve the partial assignment and release and notify the purchaser, transferee or assignee in writing thereof. No such release approved pursuant to this Subsection 2.4.6 shall cause, or otherwise affect, a release of OWNER from the duties and obligations under this Agreement that are retained by OWNER and excluded from the transfer or assignment.

2.5 Amendment or Cancellation of Agreement. This Agreement may be amended or cancelled in whole or in part only in the manner provided for in Government Code Section 65868.1. Any amendment of this Agreement, which amendment has been requested by OWNER, shall be considered by the CITY only upon the payment of the applicable processing charge. This provision shall not limit any remedy of CITY or OWNER as provided by this Agreement. Either Party or successor in interest, may propose an amendment to or cancellation, in whole or in part, of this Agreement. Any amendment or cancellation shall be by mutual consent of the parties or their successors in interest except as provided otherwise in this Agreement or in Government Code Section 65865.1. For purposes of this section, the term "successor in interest" shall mean

any person having a legal or equitable interest in the whole of the Property, or any portion thereof as to which such person wishes to amend or cancel this Agreement. The procedure for proposing and adopting an amendment to, or cancellation of, in whole or in part, this Agreement shall be the same as the procedure for adopting and entering into this Agreement in the first instance. Notwithstanding the foregoing sentence, if the CITY initiates the proposed amendment to, or cancellation of, in whole or in part, this Agreement, CITY shall first give notice to the OWNER of its intention to initiate such proceedings at least sixty (60) days in advance of the giving the public notice of intention to consider the amendment or cancellation.

2.5.1 Amendment to Reflect Consistency With Future Amendments to the Construction Agreement. To the extent any future amendment to the Construction Agreement provides for modifications to rights or obligations that differ from or alter the same or similar rights or obligations contained in this Development Agreement, OWNER reserves the right to request an amendment to the Development Agreement to reflect any or all of such modifications.

2.5.2 Minor Modification. Upon the written application of OWNER, minor modifications and changes to the Development Plan including modifications to building design or footprint (not affecting minimum setbacks), parking layout and design, and landscape area design may be approved by the Director of the Planning Department without the need to amend this Development Agreement. Other changes in the Development Plan shall be processed pursuant to the City Zoning Ordinance. It is also contemplated by CITY and OWNER that OWNER may, from time to time, seek amendments to one or more of the Development Approvals. Any such amendments are contemplated by CITY and OWNER as being within the scope of this Agreement as long as they are consistent with the Land Use Regulations and shall, upon approval by CITY, continue to constitute the Development Approvals as referenced herein. The parties agree that any such modifications or amendments shall not constitute an amendment to this Agreement nor require an amendment to this Agreement.

2.6 Termination. This Agreement shall be deemed terminated and of no further effect upon the occurrence of any of the following events:

(a) Expiration of the stated term of this Agreement as set forth in Section 2.3. (b) Entry of a final judgment setting aside, voiding or annulling the adoption of the ordinance approving this Agreement.

(c) The adoption of a referendum measure overriding or repealing the ordinance approving this Agreement.

(d) Completion of the Project in accordance with the terms of this Agreement including issuance of all required occupancy permits and acceptance by CITY or applicable public agency of all required dedications.

Termination of this Agreement shall not constitute termination of any other land use entitlements approved for the Property. Upon the termination of this Agreement,

no party shall have any further right or obligation hereunder except with respect to any obligation to have been performed prior to such termination or with respect to any default in the performance of the provisions of this Agreement which has occurred prior to such termination or with respect to any obligations which are specifically set forth as surviving this Agreement. Upon such termination, any public facilities and services mitigation fees paid pursuant to Section 4.2 of this Agreement by OWNER to CITY for residential units on which construction has not yet begun shall be refunded to OWNER by CITY.

2.7 Notices.

(a) As used in this Agreement, "notice" includes, but is not limited to, the communication of notice, request, demand, approval, statement, report, acceptance, consent, waiver, appointment or other communication required or permitted hereunder.

(b) All notices shall be in writing and shall be considered given either: (i) when delivered in person, including, without limitation, by courier, to the recipient named below; or (ii) on the date of delivery shown on the return receipt, after deposit in the United States mail in a sealed envelope as either registered or certified mail with return receipt requested, and postage and postal charges prepaid, and addressed to the recipient named below. All notices shall be addressed as follows:

If to CITY:
Scott Ochoa, City Manager
City of Ontario
303 East "B" Street
Ontario, CA 91764

with a copy to:
Ruben Duran, City Attorney
Best Best & Krieger, LLP
2855 E Guasti Road
Ontario, CA 91761

If to OWNER:
Richland
Attn: Craig Cristina, Vice President
3161 Michelson Drive, Suite 425
Irvine, CA 92612

with a copy to:
Richland
Attn: Legal Department
3161 Michelson Drive, Suite 425
Irvine, CA 92612

(c) Either party may, by notice given at any time, require subsequent notices to be given to another person or entity, whether a party or an officer or representative of a party, or to a different address, or both. Notices given before actual receipt of notice of change shall not be invalidated by the change.

3. DEVELOPMENT OF THE PROPERTY.

3.1 Rights to Develop. Subject to the terms of this Agreement including the Reservations of Authority, OWNER shall have a vested right to develop the Property in accordance with, and to the extent of, the Development Plan. The Project shall remain subject to all Subsequent Development Approvals required to complete the Project as contemplated by the Development Plan. Except as otherwise provided in this Agreement,

the permitted uses of the Property, the density and intensity of use, the maximum height and size of proposed buildings, and provisions for reservation and dedication of land for public purposes shall be those set forth in the Development Plan.

3.2 Effect of Agreement on Land Use Regulations. Except as otherwise provided under the terms of this Agreement including the Reservations of Authority, the rules, regulations and official policies governing permitted uses of the Property, the density and intensity of use of the Property, the maximum height and size of proposed buildings, and the design, improvement and construction standards and specifications applicable to development of the Property shall be the Existing Land Use Regulations. In connection with any Subsequent Development Approval, CITY shall exercise discretion in accordance with the same manner as it exercises its discretion under its police powers, including the Reservations of Authority set forth herein; provided however, that such discretion shall not prevent development of the Property for the uses and to the density or intensity of development set forth in this Agreement.

3.3 Timing of Development. The parties acknowledge that OWNER cannot at this time predict when or the rate at which phases of the Property will be developed. Such decisions depend upon numerous factors which are not within the control of OWNER, such as market orientation and demand, interest rates, absorption, completion and other similar factors. Since the California Supreme Court held in Pardee Construction Co. v. City of Camarillo (1984) 37 Ca1. 3d 465, that the failure of the parties therein to provide for the timing of development resulted in a later adopted initiative restricting the timing of development to prevail over such parties' agreement, it is the parties' intent to cure that deficiency by acknowledging and providing that OWNER shall have the right to develop the Property in such order and at such rate and at such times as OWNER deems appropriate within the exercise of its subjective business judgment.

3.4 Requirement for Public Infrastructure Improvements. Development of the Property is contingent in part on the phasing of area-wide infrastructure improvements over which the OWNER has control. The issuance of building permits by CITY for Model Units and Production Units is, in general, contingent on OWNER's completion of needed infrastructure improvements and the availability of improvements and services to serve the Property.

3.4.1 Attached hereto as Exhibit "F" is a description of the infrastructure improvements needed for the development of the Property ("the Infrastructure Improvement Exhibit").

3.4.2 Construction of Model Units, private common recreation facilities, and sales facilities is subject to plan submittal by OWNER and approval by CITY. Said plan shall illustrate that adequate public infrastructure is available to serve these uses, and shall describe the utilities and other infrastructure necessary to provide sufficient fire protection and other public health and safety requirements.

3.5 Changes and Amendments. The parties acknowledge that refinement and further development of the Project will require Subsequent Development Approvals and

may demonstrate that changes are appropriate and mutually desirable in the Existing Development Approvals. In the event OWNER finds that a change in the Existing Development Approvals is necessary or appropriate, OWNER shall apply for a Subsequent Development Approval to effectuate such change, and CITY shall process and act on such application in accordance with the Existing Land Use Regulations, except as otherwise provided by this Agreement including the Reservations of Authority. If approved, any such change in the Existing Development Approvals shall be incorporated herein as an addendum to Exhibit "C" and may be further changed from time to time as provided in this Section. Unless otherwise required by law, as determined in CITY's reasonable discretion, a change to the Existing Development Approvals shall be deemed "minor" and not require an amendment to this Agreement provided such change does not:

(a) Alter the permitted uses of the Property as a whole; or,

(b) Increase the density or intensity of use of the Property as a whole; or,

(c) Increase the maximum height and size of permitted buildings; or,

(d) Delete a requirement for the reservation or dedication of land for public purposes within the Property as a whole; or,

(e) Constitute a project requiring a subsequent or supplemental environmental impact report pursuant to Section 21166 of the Public Resources Code.

3.6 Reservations of Authority.

3.6.1 Limitations, Reservations and Exceptions. Notwithstanding any other provision of this Agreement, the CITY shall not be prevented from applying new rules, regulations and policies upon the OWNER, nor shall a development agreement prevent the CITY from denying or conditionally approving any subsequent development project application on the basis of such new rules, regulations and policies where the new rules, regulations and policies consist of the following:

(a) Processing fees by CITY to cover costs of processing applications for development approvals or for monitoring compliance with any development approvals;

(b) Procedural regulations relating to hearing bodies, petitions, applications, notices, findings, records and any other matter of procedure;

(c) Regulations, policies and rules governing engineering and construction standards and specifications applicable to public and private improvements, including all uniform codes adopted by the

CITY and any local amendments to those codes adopted by the CITY; provided however that, OWNER shall have a vested right to develop the Property in accordance with, and to the extent of, the standards and specifications that are expressly identified in the Specific Plan;

(d) Regulations that may conflict with this Agreement and the Development Plan but that are reasonably necessary to protect the residents of the project and/or of the immediate community from a condition perilous to their health or safety;

(e) Regulations that do not conflict with those rules, regulations and policies set forth in this Agreement or the Development Plan;

(f) Regulations that may conflict but to which the OWNER consents.

3.6.2 Subsequent Development Approvals. This Agreement shall not prevent CITY, in acting on Subsequent Development Approvals, from applying Subsequent Land Use Regulations that do not conflict with the Development Plan, nor shall this Agreement prevent CITY from denying or conditionally approving any Subsequent Development Approval on the basis of the Existing Land Use Regulations or any Subsequent Land Use Regulation not in conflict with the Development Plan.

3.6.3 Modification or Suspension by State or Federal Law. In the event that State or Federal laws or regulations, enacted after the Effective Date of this Agreement, prevent or preclude compliance with one or more of the provisions of this Agreement, such provisions of this Agreement shall be modified or suspended as may be necessary to comply with such State or Federal laws or regulations, provided, however, that this Agreement shall remain in full force and effect to the extent it is not inconsistent with such laws or regulations and to the extent such laws or regulations do not render such remaining provisions impractical to enforce. In the event OWNER alleges that such State or Federal laws or regulations preclude or prevent compliance with one or more provisions of this Agreement, and the CITY does not agree, the OWNER may, at its sole cost and expense, seek declaratory relief (or other similar non-monetary remedies); provided however, that nothing contained in this Section 3.6.3 shall impose on CITY any monetary liability for contesting such declaratory relief (or other similar non-monetary relief).

3.6.4 Intent. The parties acknowledge and agree that CITY is restricted in its authority to limit its police power by contract and that the foregoing limitations, reservations and exceptions are intended to reserve to CITY all of its police power which cannot be so limited. This Agreement shall be construed, contrary to its stated terms if necessary, to reserve to CITY all such power and authority which cannot be restricted by contract.

3.7 Public Works; Utilities. If OWNER is required by this Agreement to construct any public works facilities which will be dedicated to CITY or any other public agency upon completion, and if required by applicable laws to do so, OWNER shall perform such work in the same manner and subject to the same requirements as would be applicable to CITY or such other public agency should it have undertaken such construction. As a condition of development approval, OWNER shall connect the Project to all utilities necessary to provide adequate water, recycled water, sewer, gas, electric, and other utility service to the Project. As a further condition of development approval, OWNER shall contract with the CITY for CITY-owned or operated utilities for this purpose, for such price and on such terms as may be available to similarly situated customers in the CITY.

3.7.1 OWNER agrees that development of the Project shall require the construction of Storm Drain facilities as described in Exhibit E and depicted in Exhibit F. OWNER shall be responsible for the construction of the necessary extension of master planned Storm Drain facilities.

3.7.2 OWNER agrees that development of the Project shall require the construction of street improvements as described in Exhibit E and depicted in Exhibit F.

3.7.3 OWNER agrees that development of the Property shall require the extension of permanent planned water and recycled water utility infrastructure as described in Exhibit E and depicted in Exhibit F consisting generally of the construction of the extension of permanent water and recycled water utility improvements to serve the Property. OWNER agrees that no building permits shall be issued by CITY for Production Units within a development phase prior to completion of the water and recycled water Improvements as described in Exhibit E and depicted in Exhibit F. OWNER also agrees that recycled water shall be available and utilized by OWNER for all construction-related water uses including prior to, and during, any grading of the Property.

3.7.4 OWNER agrees that development of the Property shall require the extension of permanent sewer improvements, at OWNER's sole cost and expense, as described in the attached Exhibit F consisting generally of the construction of the extension of sewer infrastructure to serve the Property.

3.7.5 OWNER agrees that development of the Property shall require the extension of permanent master planned fiber optic communications infrastructure, at OWNER's sole cost and expense, as described in the attached Exhibit F consisting generally of the construction of the extension of fiber optic communications infrastructure to serve the Property.

3.7.6 OWNER agrees that development of the project shall require the design and construction of three (3) non-DIF traffic signals at Haven Avenue and "Future Street", Haven Avenue and Street "B", and Bethany Way and Mill Creek Avenue; and one (1) DIF credit eligible traffic signal at Haven Avenue and Chino Avenue.

Modification of one (1) existing DIF credit eligible traffic signals at Haven Avenue and Riverside Drive, as described in the attached Exhibit E and depicted in Exhibit F consisting generally of the construction of the signal modifications to serve the Property. OWNER shall complete traffic signals prior to the fiftieth (50^{th}) percentile building permit within a development phase in which the signal is required.

3.8 Acquisition of Offsite Provision of Real Property Interests. In any instance where OWNER is required by any Development Approval or Land Use Regulation and the Construction Agreement to construct any public improvement on land not owned by OWNER ("Offsite Improvements"), the CITY and OWNER shall cooperate in acquiring the necessary legal interest ("Offsite Property") in accordance with the procedures set forth in Section 2.4 of the Construction Agreement. This section 3.8 is not intended by the parties to impose upon the OWNER an enforceable duty to acquire land or construct any public improvements on land not owned by OWNER, except to the extent that the OWNER elects to proceed with the development of the Project, and then only in accordance with valid conditions imposed by the CITY upon the development of the Project under the Subdivision Map Act or other legal authority.

3.8.1 CITY Acquisition of Non-Construction Agreement Offsite Property. In the event OWNER is required to construct any public improvements on land not owned by OWNER, but such requirement is not based upon the Construction Agreement, Sections 3.8.1 and 3.8.2 shall control the acquisition of the necessary property interest(s) ("Non-Construction Agreement Offsite Property"). If the OWNER is unable to acquire such Non-Construction Agreement Offsite Property and following the written request from the OWNER to CITY, CITY agrees to use reasonable and diligent good faith efforts to acquire the Non-Construction Agreement Offsite Property from the owner or owners of record by negotiation to the extent permitted by law and consistent with this Agreement. If CITY is unable to acquire the Non-Construction Agreement Offsite Property by negotiation within thirty (30) days after OWNER'S written request, CITY shall, initiate proceedings utilizing its power of eminent domain to acquire that Non-Construction Agreement Subject Property at a public hearing noticed and conducted in accordance with California Code of Civil Procedure Section 1245.235 for the purpose of considering the adoption of a resolution of necessity concerning the Non-Construction Agreement Offsite Property, subject to the conditions set forth in this Section 3.8. The CITY and OWNER acknowledge that the timelines set forth in this Section 3.8.1 represent the maximum time periods which CITY and OWNER reasonably believe will be necessary to complete the acquisition of any Non-Construction Agreement Offsite Property. CITY agrees to use reasonable good faith efforts to complete the actions described within lesser time periods, to the extent that it is reasonably able to do so, consistent with the legal constraints imposed upon CITY.

3.8.2 Owner's Option to Terminate Proceedings. CITY shall provide written notice to OWNER no later than fifteen (15) days prior to making an offer to the owner of the Non-Construction Agreement Offsite Property. At any time within that fifteen (15) day period, OWNER may, at its option, notify CITY that it wants CITY to cease all acquisition proceedings with respect to that Non-Construction

Agreement Offsite Property, whereupon CITY shall cease such proceedings. CITY shall provide written notice to OWNER no later than fifteen (15) days prior to the date of the hearing on CITY'S intent to consider the adoption of a resolution of necessity as to any Non-Construction Agreement Offsite Property. At any time within that fifteen (15) day period, OWNER may, at its option, notify CITY that it wants CITY to cease condemnation proceedings, whereupon CITY shall cease such proceedings. If OWNER does not notify CITY to cease condemnation proceedings within said fifteen (15) day period, then the CITY may proceed to consider and act upon the Non-Construction Agreement Offsite Property resolution of necessity. If CITY adopts such resolution of necessity, then CITY shall diligently institute condemnation proceedings and file a complaint in condemnation and seek an order of immediate possession with respect to the Non-Construction Agreement Offsite Property.

3.9 Regulation by Other Public Agencies. It is acknowledged by the parties that other public agencies not within the control of CITY possess authority to regulate aspects of the development of the Property separately from or jointly with CITY and this Agreement does not limit the authority of such other public agencies. CITY agrees to cooperate fully, at no cost to CITY, with OWNER in obtaining any required permits or compliance with the regulations of other public agencies provided such cooperation is not in conflict with any laws, regulations or policies of the CITY.

3.10 Tentative Tract Maps; Extension. With respect to applications by OWNER for tentative subdivision maps for portions of the Property, CITY agrees that OWNER may file and process tentative maps in accordance with Chapter 4.5 (commencing with Section 66498.1) of Division 2 of Title 7 of the California Government Code and the applicable provisions of CITY's subdivision ordinance, as the same may be amended from time to time. In accordance with the provisions of Section 66452.6 of the Government Code, each tentative subdivision map or tentative parcel map, heretofore or hereafter approved in connection with development of the Property, shall be deemed to have been granted an extension of time to and until the date that is five (5) years following the Effective Date of this Agreement.; The CITY's City Council may, in its discretion, extend any such map for an additional period of up to five (5) years beyond its original term, so long as the subdivider files a written request for an extension with the City prior to the expiration of the initial five (5) year term.

4. PUBLIC BENEFITS.

4.1 Intent. The parties acknowledge and agree that development of the Property will result in substantial public needs that will not be fully met by the Development Plan and further acknowledge and agree that this Agreement confers substantial private benefits on OWNER that should be balanced by commensurate public benefits. Accordingly, the parties intend to provide consideration to the public to balance the private benefits conferred on OWNER by providing more fully for the satisfaction of the public needs resulting from the Project.

4.2 Development Impact Fees.

4.2.1 Amount of Development Impact Fee. Development Impact Fees (DIF) shall be paid by OWNER. The Development Impact Fee amounts to be paid by OWNER shall be the amounts that are in effect at the time such amounts are due. Nothing contained in this Agreement shall affect the ability of the CITY to impose new Development Impact Fees or amend the amounts of existing Development Impact Fees. Additionally, nothing contained in this Agreement shall affect the ability of other public agencies that are not controlled by CITY to impose and amend, from time to time, Development Impact Fees established or imposed by such other public agencies, even though such Development Impact Fees may be collected by CITY.

4.2.2 Time of Payment. The Development Impact Fees required pursuant to Subsection 4.2.1 shall be paid to CITY prior to the issuance of building permit for each applicable residential or other unit, except for the Open Space and Habitat Acquisition Development Impact fee, which shall be paid by OWNER to CITY prior to the issuance of a grading permit. Deferral of the payment of Development Impact Fees may be granted pursuant to a separate agreement approved by City pursuant to City policy.

4.2.3 Parkland and Quimby Act Fees. Pursuant to the General Plan (Ontario Plan) Goal PR1, Policy PR1-5 (achievement of a park standard of 5 acres of parkland per 1,000 residents) OWNER shall provide improved parks, developed in accordance with the City's park standards in an amount equal to two (2) acres per 1,000 of projected population without credit, reimbursement, offset or consideration from City. Such areas shall either be dedicated to the City or transferred to a homeowners' association. If approved by the City Manager, OWNER may satisfy this requirement through the development of non-public recreation facilities such as private recreational clubhouses or pool facilities. Credit for such private recreational facilities areas shall be limited to a maximum of 50% of the foregoing park development requirement. If OWNER's Project does not provide dedicated and developed park acreage equal to two (2) acres per 1,000 projected population, OWNER shall pay a fee in-lieu equal to the per acre estimated costs of acquisition and development of parkland in the City's Development Impact Fee for the calculated park acreage deficiency. Such in-lieu fee shall be due and payable prior to the issuance of the first building permit for Production Units issued to OWNER. Any park dedication and/or improvements in excess of such two (2) acres per thousand standard, provided such park has been developed in accordance with the City's park standards and is open to the public generally, shall entitle OWNER to a credit toward its obligations under the Quimby Act (Gov. Code, § 64477) and the City's implementing ordinance and/or resolution (collectively "**Quimby Act Obligations**"), and to the extent OWNER's Quimby Act Obligations are satisfied, OWNER shall be entitled to have the City acquire such developed and publicly available parks as Non-Program Interests in accordance with Section 4.3.3 below. **(Other provisions will be added that are Project-specific, if applicable).**

4.2.4 Additional Parkland Development Requirements. OWNER is responsible for construction of the 2.20-acre and 2.53-acre parks designated as Lots A and B, respectively, of Tentative Tract Map No. 20526, including any related recreational facilities to be provided therein. OWNER shall submit the design of the park for approval along with the first B-map entitlement within the A-map area. OWNER shall begin construction of the park no later than the issuance of the 315th production building permit for occupancy within the A-map area; and (iii) complete construction prior to issuance of the 500th production building permit for occupancy within the A-map area. The above thresholds are based on current density projections and may be adjusted proportionally upon approval of subsequent B-maps, considering actual densities and phasing. Any modifications to these milestones must be mutually agreed upon by CITY and OWNER and documented in subsequent written agreements or entitlements.

4.3 Responsibility for Construction of Public Improvements.

4.3.1 Timely Construction of Public Infrastructure. The phasing of the areawide infrastructure construction within the New Model Colony will be as approved by the CITY. OWNER shall be responsible for the timely construction and completion of all public infrastructure required for the Project as shown on the attached Exhibit "F" and any and all tentative tract map conditions. Unless otherwise specified in the Subdivision Agreement/Tract Map conditions, all other required Improvements for each Tract Map, shall be completed and operational prior to, and as a condition precedent to, OWNER requesting and CITY's granting of the first building permit for production units for each such Tract Map. All Infrastructure and Improvements shall be completed as required by the Subdivision Agreement/Tract Map conditions for Tract No. 20526**.**

4.3.2 Construction of DIF Program Infrastructure (Construction Agreement). To the extent OWNER is required to construct and completes construction of public improvements that are included in CITY's Development Impact Fee Program and the Construction Agreement between CITY and NMC Builders LLC, CITY agrees that CITY shall issue DIF Credit in accordance with the provisions of the Construction Agreement and any amendments thereto. Use of DIF Credit issued to OWNER as a member of NMC Builders LLC to offset OWNER's DIF payment obligations shall also be subject to the provisions of the Construction Agreement and any amendments thereto.

4.3.3 Construction of DIF Program Infrastructure (Non-Construction Agreement). To the extent OWNER is required to construct and completes construction of public improvements that are included in CITY's Development Impact Fee Program and such public improvements are not included the Construction Agreement between CITY and NMC Builders LLC, CITY agrees that CITY shall issue DIF Credit and DIF Reimbursement in accordance with the provisions of a separate Fee Credit Agreement between CITY and OWNER. Limitation on the use of DIF Credit issued to OWNER to offset OWNER's DIF payment obligations shall also be subject to the provisions of a separate Fee Credit Agreement. OWNER may also be eligible

to receive reimbursement from DIF collected by CITY and paid by other development that benefits from OWNER's construction of DIF Program Infrastructure. Any such DIF Reimbursement shall be subject to a Fee Credit Agreement between CITY and OWNER. CITY and OWNER agree that the Fee Credit Agreement between CITY and OWNER shall comply with CITY's adopted policies applicable to such agreements.

4.3.4 Availability and use of Recycled Water. OWNER agrees that recycled water shall be available and utilized by OWNER for all construction-related water uses including prior to, and during, any grading of the Property.

4.4 Affordable Housing Requirement.

4.4.1 Affordable Housing- Number of Units. OWNER shall provide a minimum number of affordable housing units, equivalent to 10% of the OWNER's total approved residential units within the Project, that are affordable to very low-, low- and moderate-income households. Such requirement for affordable housing shall be met through one, or a combination of one or more, of the options provided in the following Sections 4.3.2.1 through 4.3.2.1. For the purposes of this Section, any term not defined in this Agreement shall be as defined by California Community Redevelopment Law (California Health and Safety Code Section 33000 et seq.).

4.4.2 Affordability Spread. Of the total number of residential dwelling units specified in Section 4.4.1, to be constructed or rehabilitated pursuant to Sections 4.4.2.1 or 4.4.2.2 respectively, thirty percent (30%) shall be available to very low income, thirty percent (30%) shall be available to low income and forty percent (40%) shall be available to moderate income households. "**Households**" shall be as defined by California Health and Safety Code Section 50053.

4.4.2.1 New Construction. If OWNER elects to fully or partially satisfy the affordable housing requirement by the construction of new residential units, it shall construct and restrict the affordability of residential dwelling units within its Project or, at OWNER's option and with the approval of the City, within another project elsewhere within the City. The affordable units constructed shall be intermingled with other units as part of the Project, and shall be built to the same construction, design and aesthetic standards, as well as number of rooms, as other units constructed as part of that OWNER's Project. In addition, the percentage ratio of affordable units offered for sale versus those offered for rent shall equal the percentage ratio of other units offered for sale versus for rent within OWNER's Project. Such construction shall be completed no later than the date that is five (5) years following the issuance of the first building permit for OWNER's Project; provided however that to the extent OWNER has not constructed the required percentage of units, based on the number of building permits for non-restricted units, OWNER shall, prior to the issuance of such building permits, provide security

(in the form and substance approved by the City Manager and City Attorney) to City in order to ensure the faithful completion of such required percentage of construction of affordable units. If OWNER elects the option of constructing new affordable units, a detailed Affordable Housing Agreement specifying terms for the allowable monthly housing costs or rents (as applicable) and maintenance and occupancy standards shall be prepared, executed and recorded against such units as a condition to the issuance of a building permit. The Affordable Housing Agreement shall hold a recorded priority position senior to any other non-statutory lien or encumbrance affecting the unit.

4.4.2.2 Rehabilitation. If OWNER elects to fully or partially satisfy the affordable housing requirement by the substantial rehabilitation of existing residential units in the City, it shall substantially rehabilitate and restrict the affordability of the number of residential units specified in Section 4.4.1, provided that such units shall be provided elsewhere within the City. The rehabilitation work shall be substantial and of high quality and shall also address any deferred property maintenance issues on the property. "**Substantial rehabilitation**" shall mean rehabilitated multi-family rented dwelling units with three or more units and the value of the rehabilitation constitutes 25 percent of the after rehabilitation value of the dwelling, inclusive of land value pursuant to Health and Safety Code Section 33413(b)(2)(A)(iii-iv) as such section exists as of the Effective Date of this Agreement. If OWNER chooses the option of rehabilitation of existing housing units within the City, a detailed Affordable Housing Agreement specifying the terms for the allowable month housing costs or rents (as applicable) and maintenance and occupancy standards shall be prepared, executed and recorded against such units as a condition to the issuance of a building permit. Such rehabilitation shall be completed no later than the date that is five (5) years following the issuance of the first building permit for OWNER's Project; provided however that to the extent OWNER has not rehabilitated the required percentage of units, based on the number of building permits, OWNER shall, prior to the issuance of such building permits, provide security (in the form and substance approved by the City Manager and City Attorney) to the City in order to ensure the faithful completion of such required percentage of rehabilitation.

4.4.2.3 In-Lieu Fee. If OWNER has not fully complied with the requirements of Section 4.4.1 by providing the minimum number of affordable units through the construction of new affordable units or by the substantial rehabilitation of existing units, shall pay an "**Affordability In-Lieu Fee**". If OWNER has not provided any affordable residential units by construction or rehabilitation, the Affordability In-Lieu fee shall be equal to Three Dollars Thirty-Seven Cents ($3.37) per square foot of residential development within OWNER's Project or, if pre-paid as set forth below, Two Dollars Ninety-Six ($2.96) per square foot of residential development within OWNER's Project. If OWNER has partially complied with the requirements of Section 4.4.1 by

construction or rehabilitation of less than the minimum number of units, then the Affordability In-lieu Fee shall be recalculated and reduced in consideration of the number and type of affordable units provided. The Affordability In-Lieu Fee shall be paid by OWNER to City no later than prior to the issuance of each building permit within OWNER's Project based on the square footage of the residential unit for which such building permit is sought; provided however that OWNER may, at OWNER's election, pre-pay such Affordability In-Lieu Fee by paying such Affordability In-Lieu Fee within thirty (30) days following the earliest discretionary approval by the City for OWNER's Project, including, but not limited to, any general plan amendment, specific plan adoption, development agreement, tentative map approval, variance, conditional use permit, or resolution of intention to form any public financing mechanism. The Three Dollars Thirty-Seven Cents ($3.37 Two Dollars Ninety-Six ($2.96) per square foot amounts shall automatically be increased annually, commencing on July 1, 2024, and automatically each July 1 thereafter. Such adjustment shall be based on the percentage increase (but no decrease) in the Consumer Price Index (Riverside - San Bernardino - Ontario, CA) (December 2017=100) over the preceding year. The pre-paid Affordability In-Lieu Fee shall be calculated based on the maximum floor area ratio (FAR) permitted within the General Plan and any applicable FAR contained within the applicable specific plan, whichever is greater, and the Maximum Development Density. For purposes of this Agreement, "**Maximum Development Density**" shall be determined by multiplying the OWNER's Project's density for residential development potential as set forth in the General Plan or the applicable Specific Plan, whichever is less, by the net acreage of land within OWNER's Project. All "Affordability In-Lieu Fees" collected by the City shall be used to promote the construction of affordable housing within the City.

4.4.2.4 Affordability Covenants. Prior to the issuance of the first building permit for any affordable unit, the City and OWNER shall enter into an Affordable Housing Agreement Affordability shall be assured for a period of forty-five (45) years for for-sale units and fifty-five (55) years for rentals. For rental units, base rents shall be established by the City and rental adjustments required by the City shall be performed on an annual basis. In addition, the Affordable Housing Agreement shall impose maximum occupancy limits of 2 occupants per bedroom plus 1 additional occupant per dwelling unit, and a requirement for the owner or tenant to properly maintain each dwelling unit.

4.4.2.5 Transfer of Affordable Project. No transfer of title to any affordable housing project shall occur without the prior written consent of the City. In the event OWNER transfers title to any affordable housing project required to be constructed pursuant to this Agreement to a non-profit entity, or other entity, that receives an exemption from ad valorem real property taxes, the City shall be required to assure payment of an annual in lieu fee to the City on July 1 of each year equal to one-tenth of one percent (0.1%) of the

assessed value of such project. The City may permit OWNER to satisfy this obligation by recorded covenants against the property and enforceable against said entity by the City. Any such covenants shall be approved by the Planning Director and the City Attorney.

4.5 Schools Obligations.

4.5.1 Written Evidence of Compliance with Schools Obligations. OWNER shall, either through joint or individual agreements between OWNER and the applicable school district(s), shall satisfy its new school obligations. The new school obligations for the Mountain View School District in the Ontario Ranch area have been projected to include the acquisition or dedication of school sites for, and construction of, up to eight (8) schools. Of these eight (8) schools, six (6) are to be elementary (K-5) grade schools and two (2) are to be middle grade schools. The new school obligations for the Chaffey Joint Union High School District in the Ontario Ranch area have been projected to include the dedication of a school site for, and construction of, an additional high school. The new school obligations for the applicable school district shall be met by a combination of the following: (1) designating and dedicating school site(s) within the Property as set forth in the General Plan, and/or (2) paying school impact fees, (3) entering into a joint mitigation agreement or individual mitigation agreements, or (4) any combination of the foregoing. Written evidence of approval by the applicable school district that OWNER has met their school obligations may be required by the City as the condition to the issuance by the City of any entitlements for OWNER's Project. In the event OWNER is unable to provide such written evidence from the applicable school district(s), the City shall have the right to decline to honor any DIF Credit, Certificates of MDD Availability, Certificates of Storm Water Treatment Capacity Availability, or any combination thereof, presented by such OWNER, without liability to the City. To the extent that a joint mitigation agreement is approved by the applicable school district(s), and OWNER is a participant in good standing in such mitigation agreement, OWNER shall be deemed to have mitigated its new school obligations under this Section 4.4.1.

4.6 Net MDD/Water Availability Equivalents.

4.6.1 Effectiveness of Agreement. Notwithstanding anything else set forth in this Agreement, CITY and OWNER each acknowledge, confirm, and agree, that (i) the City approval of this Agreement and (ii) the effectiveness of this Agreement, in each case, is conditioned upon OWNER's admission to NMC Builders as a "Member" thereof pursuant to the terms and conditions of the operating agreement of NMC Builders. OWNER and CITY agree that OWNER shall become a Member of NMC Builders within 30 days of the effective date of this Agreement.

4.6.1 Assigned Net MDD/Water Availability Equivalents. The City has agreed with NMC Builders LLC to reserve exclusively for Members of NMC Builders, including OWNER, Net MDD made available through the construction of water system improvements funded by NMC Builders LLC. NMC Builders has assigned

to OWNER its allocable share of the Net MDD issued by City. The provisions of the Construction Agreement Amendment requires that the City shall not approval a final tract map or issue building permits or certificates of occupancy for the area of development within the New Model Colony served by the water system improvements funded by NMC Builders LLC, except to the bearer of an Assignment of Net MDD Water Availability.

4.6.2 Requirement of NMC Builders, LLC Membership as a Phase 2 Water Member. OWNER and CITY agree that OWNER's' payment to CITY required by Section 4.6.3 below represents OWNER's contribution to the funding required for the future construction of the Phase 2 Water Improvements and the availability of additional Net MDD Water Availability required for the development of the Property described in Exhibit A of this Agreement.

4.6.3 CITY issuance of Water Availability Equivalents. Within 30 days after the effectiveness of this Development Agreement OWNER shall pay or have paid to City the applicable Phase 2 Water Participation Fee. The Phase 2 Water Participation Fee shall be the calculated based on the amount of the Regional Water DIF for the applicable land use category and the square footage of the applicable buildings. The calculated amount of the Phase 2 Water Participation Fee shall be paid to City within 30 days after the effective date of this Agreement or, at OWNER's option, the Phase 2 Water Participation Fee may be paid to City in two (2) installments. The first installment shall be fifty percent (50%) of the total Phase 2 Water Participation Fee and such first installment shall be due and payable to City within 30 days after the effective date of this Development Agreement. The second installment shall be the remaining amount of the Phase 2 Water Participation Fee and such second installment shall be due and payable to City within one (1) year after the payment of the first installment, or prior to, and as a condition precedent to, the recording of any final Parcel Map for the Project, whichever occurs first. Upon OWNER's complete payment to CITY of the Phase 2 Water Participation Fee CITY shall issue a Certificate of Water Availability Equivalents in the form attached hereto as Exhibit G. Such Water Availability Equivalents Certificate shall be issued by CITY within thirty (30) days of the receipt of such required payment. CITY and OWNER agree that the amount of Water Availability Equivalents issued to OWNER shall be based on the maximum projected need for Water Availability Equivalents required for the Property based upon water demand factors and assumptions listed in Exhibit C-2R of the Phase 2 Water Amendment to the Construction Agreement "Water Demand Equivalents by Land Use" for each land use category. Additionally, within five (5) business days of CITY's receipt of OWNER's payment as required under this Section 4.6.3, CITY shall issue a certificate of DIF Credit against OWNER's DIF obligations in the Regional Water DIF Category.

4.6.2 Use of Assigned Net MDD Water Availability. OWNER shall provide evidence of sufficient Net MDD Water Availability Equivalents (or portions thereof) prior to and as a condition precedent to, the City's approval of any and all tract maps for the Property. The amount of Net MDD Water Availability Equivalents

required for City's approval of a tract map shall be based upon water demand factors and assumptions listed in Exhibit C-2R of the Construction Agreement Amendment as "Water Demand Equivalents by Land Use" for each land use category.

4.6.3 Requirement for other Water System Improvements. A Certificate of Net MDD Availability is evidence only of available water capacity and does not satisfy any other conditions applicable to an OWNER's Project, including those relating to design and construction of planned potable water and recycled water transmission and distribution system for the respective pressure zone and other public infrastructure requirements.

4.7 Storm Water Capacity Availability.

4.7.1 Requirement for Storm Water Treatment Capacity Availability. OWNER shall provide evidence of sufficient Storm Water Treatment Capacity Availability as reserved in a Certificate of Storm Water Treatment Capacity Availability the same manner and subject to the same limitations as provided for the assignment of Certificates of Net MDD Availability in Section 4.7 of this Agreement.

4.7.2 Use of Storm Water Treatment Capacity Availability. The amount of Storm Water Treatment Capacity Availability required for the issuance of a grading permit to OWNER shall be based upon the Net Residential Acreage of the area to be graded regardless of the corresponding use.

4.7.3 Requirement for other Storm Water Improvements. The Certificate of Storm Water Treatment Capacity Availability is evidence only of available storm water treatment capacity and does not satisfy any other conditions applicable to a particular development project, including those relating to on-site water treatment, water quality, connection to the storm water collection system, or other public infrastructure requirements.

4.8 Maintenance of Open Space. OWNER shall provide for the ongoing maintenance of all park, common areas and open space areas within the Project as more particularly set forth in the Specific Plan, through a homeowners' association as approved by the CITY. Covenants, conditions and restrictions establishing any homeowners' association shall be approved by the Planning Director and City Attorney.

4.9 Compliance with Public Benefits Requirements.

4.9.1 Failure to Provide Public Benefits. In the event OWNER fails or refuses to comply with any condition referenced in Section 4.1 through 4.9, or challenges (whether administratively or through legal proceedings) the imposition of such conditions, OWNER shall be deemed in default of this Agreement pursuant to Section 8.4 hereof, thereby entitling the City to any and all remedies available to it, including, without limitation, the right of the City to withhold OWNER's Project-

related building permits, certificates of occupancy, or discretionary approvals, without liability.

5. FINANCING OF PUBLIC IMPROVEMENTS.

5.1 Financing Mechanism(s). In accordance with the Memorandum of Agreement between the CITY and NMC Builders, CITY will cooperate with OWNER in the formation of a CFD, or CFDs, to include all of the Project, to provide a financing mechanism to reimburse the OWNER for funds paid to NMC Builders LLC for OWNER's share of the costs of public infrastructure pursuant to the Construction Agreement and to acquire other public facilities constructed by OWNER subject to the provisions of the Memorandum of Agreement between CITY and NMC Builders LLC. Notwithstanding such reimbursements and acquisitions, OWNER shall remain entitled to DIF Credits as provided for in Article 3 of the Construction Agreement and/or as provided for in a separate Fee Credit Agreement between CITY and OWNER. OWNER agrees that, prior to the recordation of any Tract Map for the Property, the Property shall be included in a CFD to finance City services through annual special taxes that will initially be $1,371.52 per Single Family Detached Dwelling Unit, $1,188.58 per Multiple-Family Dwelling Unit, $996.75 per Gated Apartment Community Dwelling Unit, and $.25 per square foot for Non-Residential buildings. These amounts shall be subject to an automatic increase at a rate not to exceed four (4%) percent per year, unless modified by CITY. CITY shall be the sole and exclusive lead agency in the formation of any CFD, assessment district or other public financing mechanism within the Property; provided however, that the proceeds of any such CFD, assessment district, or financing mechanism may be used, subject to restrictions that may be imposed by applicable law, for the purposes of acquiring, constructing or maintaining public facilities to be owned or operated by other public agencies, including, without limitation those facilities owned or operated by a school district. In addition to the rights of the CITY pursuant to section 5.2 hereof, CITY shall have the right, but not the obligation, to condition the formation of any CFD, assessment district or other public financing mechanism within the Property on the OWNER mitigating all Project-related impacts to the applicable school district(s) as required by such school district(s). Written evidence by such school district(s) may be required by the CITY as the condition to the formation of any CFD, assessment district or other public financing mechanism within the Property, or any steps preliminary thereto, including, without limitation, the adoption of any resolution of intention to form such CFD, assessment district or other public financing mechanism within the Property. It is not the intent of the parties hereto, by this provision, to prohibit or otherwise limit the City's ability to take any and all necessary steps requisite to the formation of the CFD to finance City services through annual special taxes as set forth in this Section 5.1. Formation of any CFD, assessment district or other public financing mechanism within the Property, shall be subject to CITY's ability to make all findings required by applicable law and complying with all applicable legal procedures and requirements including, without limitation, CITY's public financing district policies as such policies may be amended from time to time. Notwithstanding the foregoing, it is acknowledged and agreed by the parties that nothing contained in this Agreement shall be construed as requiring CITY or the City Council to form any such district or to issue and sell bonds.

6. REVIEW FOR COMPLIANCE.

6.1 Periodic and Special Reviews.

6.1.1 Time for and Initiation of Periodic Review. The CITY shall review this Agreement every twelve (12) months from the Effective Date in order to ascertain the good faith compliance by the OWNER with the terms of this Agreement. The OWNER shall submit an Annual Monitoring Report to CITY, in a form acceptable to the City Manager, along with any applicable processing charge within ten (10) days after each anniversary date of the Effective Date of this Agreement. Within fifteen (15) days after the receipt of the Annual Monitoring Report, CITY shall review the Annual Monitoring Report. Prior to the expiration of the fifteen (15) day review period, CITY shall either issue a notice of continuing compliance or a notice of non-compliance and a notice of CITY's intent to conduct a Special Review pursuant to Sections 6.1.2 through 6.1.6. Issuance of a notice of continuing compliance may be issued by the City Manager or his designee.

6.1.2 Initiation of Special Review. A special review may be called either by agreement between the parties or by initiation in one or more of the following ways:

(1) Recommendation of the Planning staff;

(2) Affirmative vote of at least four (4) members of the Planning Commission; or

(3) Affirmative vote of at least three (3) members of the City Council.

6.1.3 Notice of Special Review. The City Manager shall begin the special review proceeding by giving notice that the CITY intends to undertake a special review of this Agreement to the OWNER. Such notice shall be given at least ten (10) days in advance of the time at which the matter will be considered by the Planning Commission.

6.1.4 Public Hearing. The Planning Commission shall conduct a hearing at which the OWNER must demonstrate good faith compliance with the terms of this Agreement. The burden of proof on this issue is upon the OWNER.

6.1.5 Findings Upon Public Hearing. The Planning Commission shall determine upon the basis of substantial evidence whether or not the OWNER has, for the period under review, complied in good faith with the terms and conditions of this Agreement.

6.1.6 Procedure Upon Findings.

(a) If the Planning Commission finds and determines on the basis of substantial evidence that the OWNER has complied in good faith with the terms and conditions of this Agreement during the period under review, the review for that period is concluded.

(b) If the Planning Commission finds and determines on the basis of substantial evidence that the OWNER has not complied in good faith with the terms and conditions of this Agreement during the period under review, the Planning Commission may recommend to the City Council to modify or terminate this Agreement.

(c) The OWNER may appeal a determination pursuant to paragraph (b) to the City Council in accordance with the CITY's rule for consideration of appeals in zoning matters generally.

6.2 Proceedings Upon Modification or Termination. If, upon a finding under Section 6.1.6(b), the CITY determines to proceed with modification or termination of this Agreement, the CITY shall give notice to the property OWNER of its intention so to do. The notice shall contain:

(a) The time and place of the hearing;

(b) A statement as to whether or not the CITY proposes to terminate or to modify this Agreement; and

(c) Other information that the CITY considers necessary to inform the OWNER of the nature of the proceeding.

6.3 Hearing on Modification or Termination. At the time and place set for the hearing on modification or termination, the OWNER shall be given an opportunity to be heard. The OWNER shall be required to demonstrate good faith compliance with the terms and conditions of this Agreement. The burden of proof on this issue shall be on the OWNER. If the City Council finds, based upon substantial evidence in the administrative record, that the OWNER has not complied in good faith with the terms and conditions of the agreement, the City Council may terminate or modify this Agreement and impose those conditions to the action it takes as it considers necessary to protect the interests of the CITY. The decision of the City Council shall be final, subject only to judicial review pursuant to Section 1094.5 of the Code of Civil Procedure.

6.4 Certificate of Agreement Compliance. If, at the conclusion of a Periodic or Special Review, OWNER is found to be in compliance with this Agreement, CITY shall, upon written request by OWNER, issue a Certificate of Agreement Compliance ("Certificate") to OWNER stating that after the most recent Periodic or Special Review and based upon the information known or made known to the Planning Director and City Council that (1) this Agreement remains in effect and (2) OWNER is not in default. The Certificate shall be in recordable form, shall contain information necessary to communicate constructive record notice of the finding of compliance, shall state whether the Certificate is issued after a Periodic or Special Review and shall state the anticipated date of commencement of the next Periodic Review. OWNER may record the Certificate

with the County Recorder. Whether or not the Certificate is relied upon by assignees or other transferees or OWNER, CITY shall not be bound by a Certificate if a default existed at the time of the Periodic or Special Review, but was concealed from or otherwise not known to the Planning Director or City Council.

7. [RESERVED]

8. DEFAULT AND REMEDIES.

8.1 Remedies in General. It is acknowledged by the parties that CITY would not have entered into this Agreement if it were to be liable in damages under this Agreement, or with respect to this Agreement or the application thereof.

In general, each of the parties hereto may pursue any remedy at law or equity available for the breach of any provision of this Agreement, except that CITY shall not be liable in damages to OWNER, or to any successor in interest of OWNER, or to any other person, and OWNER covenants not to sue for damages or claim any damages:

(a) For any breach of this Agreement or for any cause of action which arises out of this Agreement; or

(b) For the taking, impairment or restriction of any right or interest conveyed or provided under or pursuant to this Agreement; or

(c) Arising out of or connected with any dispute, controversy or issue regarding the application or interpretation or effect of the provisions of this Agreement.

8.2 Specific Performance. The parties acknowledge that money damages and remedies at law generally are inadequate and specific performance and other non-monetary relief are particularly appropriate remedies for the enforcement of this Agreement and should be available to all parties for the following reasons:

(a) Money damages are unavailable against CITY as provided in Section 8.1 above.

(b) Due to the size, nature and scope of the project, it may not be practical or possible to restore the Property to its natural condition once implementation of this Agreement has begun. After such implementation, OWNER may be foreclosed from other choices it may have had to utilize the Property or portions thereof. OWNER has invested significant time and resources and performed extensive planning and processing of the Project in agreeing to the terms of this Agreement and will be investing even more significant time and resources in implementing the Project in reliance upon the terms of this Agreement, and it is not possible to determine the sum of money which would adequately compensate OWNER for such efforts.

8.3 Release. Except for nondamaged remedies, including the remedy of specific performance and judicial review as provided for in Section 6.5, OWNER, for itself, its successors and assignees, hereby releases the CITY, its officers, agents and

employees from any and all claims, demands, actions, or suits of any kind or nature arising out of any liability, known or unknown, present or future, including, but not limited to, any claim or liability, based or asserted, pursuant to Article I, Section 19 of the California Constitution, the Fifth Amendment of the United States Constitution, or any other law or ordinance which seeks to impose any other liability or damage, whatsoever, upon the CITY because it entered into this Agreement or because of the terms of this Agreement.

8.4 Termination or Modification of Agreement for Default of OWNER. Subject to the provisions contained in Subsection 6.3 herein, CITY may terminate or modify this Agreement for any failure of OWNER to perform any material duty or obligation of OWNER under this Agreement, or to comply in good faith with the terms of this Agreement (hereinafter referred to as "default"); provided, however, CITY may terminate or modify this Agreement pursuant to this Section only after providing written notice to OWNER of default setting forth the nature of the default and the actions, if any, required by OWNER to cure such default and, where the default can be cured, OWNER has failed to take such actions and cure such default within 60 days after the effective date of such notice or, in the event that such default cannot be cured within such 60 day period but can be cured within a longer time, has failed to commence the actions necessary to cure such default within such 60 day period and to diligently proceed to complete such actions and cure such default.

8.5 Termination of Agreement for Default of CITY. OWNER may terminate this Agreement only in the event of a default by CITY in the performance of a material term of this Agreement and only after providing written notice to CITY of default setting forth the nature of the default and the actions, if any, required by CITY to cure such default and, where the default can be cured, CITY has failed to take such actions and cure such default within 60 days after the effective date of such notice or, in the event that such default cannot be cured within such 60 day period but can be cured within a longer time, has failed to commence the actions necessary to cure such default within such 60 day period and to diligently proceed to complete such actions and cure such default.

9. THIRD PARTY LITIGATION.

9.1 General Plan Litigation. CITY has determined that this Agreement is consistent with its Comprehensive General Plan, as such General Plan exists as of the Effective Date ("General Plan"), and that the General Plan meets all requirements of law. OWNER has reviewed the General Plan and concurs with CITY's determination. CITY shall have no liability in damages under this Agreement for any failure of CITY to perform under this Agreement or the inability of OWNER to develop the Property as contemplated by the Development Plan of this Agreement as the result of a judicial determination that on the Effective Date, or at any time thereafter, the General Plan, or portions thereof, are invalid or inadequate or not in compliance with law.

9.2 Third Party Litigation Concerning Agreement. OWNER shall defend, at its expense, including attorneys' fees, indemnify, and hold harmless CITY, its agents, officers and employees from any claim, action or proceeding against CITY, its agents,

officers, or employees to attack, set aside, void, or annul the approval of this Agreement or the approval of any permit granted pursuant to this Agreement. CITY shall promptly notify OWNER of any such claim, action or proceeding, and CITY shall cooperate in the defense. If CITY fails to promptly notify OWNER of any such claim, action or proceeding, or if CITY fails to cooperate in the defense, OWNER shall not thereafter be responsible to defend, indemnify, or hold harmless CITY. CITY may in its discretion participate in the defense of any such claim, action or proceeding.

9.3 Indemnity. In addition to the provisions of 9.2 above, OWNER shall indemnify and hold CITY, its officers, agents, employees and independent contractors free and harmless from any liability whatsoever, based or asserted upon any act or omission of OWNER, its officers, agents, employees, subcontractors and independent contractors, for property damage, bodily injury, or death (OWNER's employees included) or any other element of damage of any kind or nature, relating to or in any way connected with or arising from the activities contemplated hereunder, including, but not limited to, the study, design, engineering, construction, completion, failure and conveyance of the public improvements, save and except claims for damages arising through the sole active negligence or sole willful misconduct of CITY. OWNER shall defend, at its expense, including attorneys' fees, CITY, its officers, agents, employees and independent contractors in any legal action based upon such alleged acts or omissions. CITY may in its discretion participate in the defense of any such legal action.

9.4 Environment Assurances. OWNER shall indemnify and hold CITY, its officers, agents, and employees free and harmless from any liability, based or asserted, upon any act or omission of OWNER, its officers, agents, employees, subcontractors, predecessors in interest, successors, assigns and independent contractors for any violation of any federal, state or local law, ordinance or regulation relating to industrial hygiene or to environmental conditions on, under or about the Property, including, but not limited to, soil and groundwater conditions, and OWNER shall defend, at its expense, including attorneys' fees, CITY, its officers, agents and employees in any action based or asserted upon any such alleged act or omission. CITY may in its discretion participate in the defense of any such action.

9.5 Reservation of Rights. With respect to Sections 9.2, 9.3 and 9.4 herein, CITY reserves the right to either (1) approve the attorney(s) which OWNER selects, hires or otherwise engages to defend CITY hereunder, which approval shall not be unreasonably withheld, or (2) conduct its own defense, provided, however, that OWNER shall reimburse CITY forthwith for any and all reasonable expenses incurred for such defense, including attorneys' fees, upon billing and accounting therefor.

9.6 Survival. The provisions of this Sections 9.1 through 9.6, inclusive, shall survive the termination of this Agreement.

10. MORTGAGEE PROTECTION.

The parties hereto agree that this Agreement shall not prevent or limit OWNER, in any manner, at OWNER's sole discretion, from encumbering the Property or any portion

thereof or any improvement thereon by any mortgage, deed of trust or other security device securing financing with respect to the Property. CITY acknowledges that the lenders providing such financing may require certain Agreement interpretations and modifications and agrees upon request, from time to time, to meet with OWNER and representatives of such lenders to negotiate in good faith any such request for interpretation or modification. CITY will not unreasonably withhold its consent to any such requested interpretation or modification provided such interpretation or modification is consistent with the intent and purposes of this Agreement. Any Mortgagee of the Property shall be entitled to the following rights and privileges:

(a) Neither entering into this Agreement nor a breach of this Agreement shall defeat, render invalid, diminish or impair the lien of any mortgage on the Property made in good faith and for value, unless otherwise required by law.

(b) The Mortgagee of any mortgage or deed of trust encumbering the Property, or any part thereof, which Mortgagee, has submitted a request in writing to the CITY in the manner specified herein for giving notices, shall be entitled to receive written notification from CITY of any default by OWNER in the performance of OWNER's obligations under this Agreement.

(c) If CITY timely receives a request from a Mortgagee requesting a copy of any notice of default given to OWNER under the terms of this Agreement, CITY shall provide a copy of that notice to the Mortgagee within ten (10) days of sending the notice of default to OWNER. The Mortgagee shall have the right, but not the obligation, to cure the default during the remaining cure period allowed such party under this Agreement.

(d) Any Mortgagee who comes into possession of the Property, or any part thereof, pursuant to foreclosure of the mortgage or deed of trust, or deed in lieu of such foreclosure, shall take the Property, or part thereof, subject to the terms of this Agreement. Notwithstanding any other provision of this Agreement to the contrary, no Mortgagee shall have an obligation or duty under this Agreement to perform any of OWNER's obligations or other affirmative covenants of OWNER hereunder, or to guarantee such performance; provided, however, that to the extent that any covenant to be performed by OWNER is a condition precedent to the performance of a covenant by CITY, the performance thereof shall continue to be a condition precedent to CITY's performance hereunder, and further provided that any sale, transfer or assignment by any Mortgagee in possession shall be subject to the provisions of Section 2.4 of this Agreement.

11. MISCELLANEOUS PROVISIONS.

11.1 Recordation of Agreement. This Agreement and any amendment or cancellation thereof shall be recorded with the San Bernardino County Recorder by the City Clerk within the ten (10) days after the CITY executes this Agreement, as required by Section 65868.5 of the Government Code. If the parties to this Agreement or their successors in interest amend or cancel this Agreement as provided for herein and in Government Code Section 65868, or if the CITY terminates or modifies the agreement as provided for herein and in Government Code Section 65865.1 for failure of the applicant

to comply in good faith with the terms or conditions of this Agreement, the City Clerk shall have notice of such action recorded with the San Bernardino County Recorder.

11.2 Entire Agreement. This Agreement sets forth and contains the entire understanding and agreement of the parties, and there are no oral or written representations, understandings or ancillary covenants, undertakings or agreements which are not contained or expressly referred to herein. No testimony or evidence of any such representations, understandings or covenants shall be admissible in any proceeding of any kind or nature to interpret or determine the terms or conditions of this Agreement.

11.3 Severability. If any term, provision, covenant or condition of this Agreement shall be determined invalid, void or unenforceable, the remainder of this Agreement shall not be affected thereby to the extent such remaining provisions are not rendered impractical to perform taking into consideration the purposes of this Agreement. Notwithstanding the foregoing, the provision of the Public Benefits set forth in Section 4 of this Agreement, including the payment of the fees set forth therein, are essential elements of this Agreement and CITY would not have entered into this Agreement but for such provisions, and therefore in the event such provisions are determined to be invalid, void or unenforceable, this entire Agreement shall be null and void and of no force and effect whatsoever.

11.4 Interpretation and Governing Law. This Agreement and any dispute arising hereunder shall be governed and interpreted in accordance with the laws of the State of California. This Agreement shall be construed as a whole according to its fair language and common meaning to achieve the objectives and purposes of the parties hereto, and the rule of construction to the effect that ambiguities are to be resolved against the drafting party shall not be employed in interpreting this Agreement, all parties having been represented by counsel in the negotiation and preparation hereof.

11.5 Section Headings. All section headings and subheadings are inserted for convenience only and shall not affect any construction or interpretation of this Agreement.

11.6 Singular and Plural. As used herein, the singular of any word includes the plural.

11.7 Joint and Several Obligations. Subject to section 2.4, if at any time during the term of this Agreement the Property is owned, in whole or in part, by more than one owner, all obligations of such owners under this Agreement shall be joint and several, and the default of any such owner shall be the default of all such owners. Notwithstanding the foregoing, no owner of a single lot which has been finally subdivided and sold to such owner as a member of the general public or otherwise as an ultimate user shall have any obligation under this Agreement except as provided under Section 4 hereof.

11.8 Time of Essence. Time is of the essence in the performance of the provisions of this Agreement as to which time is an element.

11.9 Waiver. Failure by a party to insist upon the strict performance of any of the provisions of this Agreement by the other party, or the failure by a party to exercise its

rights upon the default of the other party, shall not constitute a waiver of such party's right to insist and demand strict compliance by the other party with the terms of this Agreement thereafter.

11.10 No Third Party Beneficiaries. This Agreement is made and entered into for the sole protection and benefit of the parties and their successors and assigns. No other person shall have any right of action based upon any provision of this Agreement.

11.11 Force Majeure. Neither party shall be deemed to be in default where failure or delay in performance of any of its obligations under this Agreement is caused by floods, earthquakes, other Acts of God, fires, wars, riots or similar hostilities, strikes and other labor difficulties beyond the party's control, (including the party's employment force), government regulations, court actions (such as restraining orders or injunctions), or other causes beyond the party's control. If any such events shall occur, the term of this Agreement and the time for performance by either party of any of its obligations hereunder may be extended by the written agreement of the parties for the period of time that such events prevented such performance, provided that the term of this Agreement shall not be extended under any circumstances for more than five (5) years.

11.12 Mutual Covenants. The covenants contained herein are mutual covenants and also constitute conditions to the concurrent or subsequent performance by the party benefited thereby of the covenants to be performed hereunder by such benefited party.

11.13 Successors in Interest. The burdens of this Agreement shall be binding upon, and the benefits of this Agreement shall inure to, all successors in interest to the parties to this Agreement. All provisions of this Agreement shall be enforceable as equitable servitudes and constitute covenants running with the land. Each covenant to do or refrain from doing some act hereunder with regard to development of the Property: (a) is for the benefit of and is a burden upon every portion of the Property; (b) runs with the Property and each portion thereof; and, (c) is binding upon each party and each successor in interest during ownership of the Property or any portion thereof.

11.14 Counterparts. This Agreement may be executed by the parties in counterparts, which counterparts shall be construed together and have the same effect as if all of the parties had executed the same instrument.

11.15 Jurisdiction and Venue. Any action at law or in equity arising under this Agreement or brought by a party hereto for the purpose of enforcing, construing or determining the validity of any provision of this Agreement shall be filed and tried in the Superior Court of the County of San Bernardino, State of California, and the parties hereto waive all provisions of law providing for the filing, removal or change of venue to any other court.

11.16 Project as a Private Undertaking. It is specifically understood and agreed by and between the parties hereto that the development of the Project is a private development, that neither party is acting as the agent of the other in any respect hereunder, and that each party is an independent contracting entity with respect to the

terms, covenants and conditions contained in this Agreement. No partnership, joint venture or other association of any kind is formed by this Agreement. The only relationship between CITY and OWNER is that of a government entity regulating the development of private property and the owner of such property.

11.17 Further Actions and Instruments. Each of the parties shall cooperate with and provide reasonable assistance to the other to the extent contemplated hereunder in the performance of all obligations under this Agreement and the satisfaction of the conditions of this Agreement. Upon the request of either party at any time, the other party shall promptly execute, with acknowledgment or affidavit if reasonably required, and file or record such required instruments and writings and take any actions as may be reasonably necessary under the terms of this Agreement to carry out the intent and to fulfill the provisions of this Agreement or to evidence or consummate the transactions contemplated by this Agreement. The City Manager may delegate his powers and duties under this Agreement to an Assistant City Manager or other management level employee of the CITY.

11.18 Eminent Domain. No provision of this Agreement shall be construed to limit or restrict the exercise by CITY of its power of eminent domain.

11.19 Agent for Service of Process. In the event OWNER is not a resident of the State of California or it is an association, partnership or joint venture without a member, partner or joint venturer resident of the State of California, or it is a foreign corporation, then in any such event, OWNER shall file with the Planning Director, upon its execution of this Agreement, a designation of a natural person residing in the State of California, giving his or her name, residence and business addresses, as its agent for the purpose of service of process in any court action arising out of or based upon this Agreement, and the delivery to such agent of a copy of any process in any such action shall constitute valid service upon OWNER. If for any reason service of such process upon such agent is not feasible, then in such event OWNER may be personally served with such process out of this County and such service shall constitute valid service upon OWNER. OWNER is amenable to the process so served, submits to the jurisdiction of the Court so obtained and waives any and all objections and protests thereto. OWNER for itself, assigns and successors hereby waives the provisions of the Hague Convention (Convention on the Service Abroad of Judicial and Extra Judicial Documents in Civil or Commercial Matters, 20 U.S.T. 361, T.I.A.S. No. 6638).

11.20 Estoppel Certificate. Within thirty (30) business days following a written request by any of the parties, the other party shall execute and deliver to the requesting party a statement certifying that (i) either this Agreement is unmodified and in full force and effect or there have been specified (date and nature) modifications to the Agreement, but it remains in full force and effect as modified; and (ii) either there are no known current uncured defaults under this Agreement or that the responding party alleges that specified (date and nature) defaults exist. The statement shall also provide any other reasonable information requested. The failure to timely deliver this statement shall constitute a conclusive presumption that this Agreement is in full force and effect without modification except as may be represented by the requesting party and that there are no uncured

defaults in the performance of the requesting party, except as may be represented by the requesting party. OWNER shall pay to CITY all costs incurred by CITY in connection with the issuance of estoppel certificates under this Section 11.20 prior to CITY's issuance of such certificates.

11.21 Authority to Execute. The person or persons executing this Agreement on behalf of OWNER warrants and represents that he or she/they have the authority to execute this Agreement on behalf of his or her/their corporation, partnership or business entity and warrants and represents that he or she/they has/have the authority to bind OWNER to the performance of its obligations hereunder.

11.22 Prevailing Wage. OWNER, for itself, its successors, and assigns, agrees, covenants, and warrants that the development of the Property, if any, shall comply with all applicable federal and state labor laws (including, without limitation, the requirement under California law to pay prevailing wages and hire apprentices), and all obligations as set forth herein.

11.22.1 CITY makes no representations concerning prevailing wages in compliance with California Labor Code Section 1770 et seq.

11.22.2 OWNER acknowledges and agrees that it shall be independently responsible for reviewing the applicable laws and regulations with respect to the payment of prevailing wages and complying therewith. OWNER shall bear all risks of payment or non-payment of prevailing wages under California law and/or the implementation of Labor Code Section 1781, as the same may be amended from time to time, and/or any other similar law.

11.22.3 The foregoing indemnity shall survive termination of this Agreement and shall continue after completion of the construction and development of the Property by OWNER, its successors or assigns. OWNER shall be solely responsible for determining and effectuating compliance with such laws.

11.22.4 OWNER, ON BEHALF OF ITSELF, ITS SUCCESSORS, AND ASSIGNS, WAIVES AND RELEASES CITY FROM ANY RIGHT OF ACTION THAT MAY BE AVAILABLE TO OWNER PURSUANT TO LABOR CODE SECTION 1781 OR THE DAVIS BACON ACT. RELATIVE TO THE WAIVER AND RELEASE CONTAINED IN THIS SECTION 11.22, OWNER ACKNOWLEDGES THE PROTECTIONS OF CIVIL CODE SECTION 1542, WHICH READS AS FOLLOWS: A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS THAT THE CREDITOR OR RELEASING PARTY DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM OR HER MUST HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR OR RELEASED PARTY.

INITIALS. BY INITIALING BELOW, OWNER KNOWINGLY AND VOLUNTARILY WAIVES THE PROVISIONS OF SECTION 1542 SOLELY WITH THE MATTERS WHICH ARE THE SUBJECT OF THE FOREGOING WAIVERS AND RELEASES:

_____
(Owner's Initials)

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day and year set forth below.

[SIGNATURES CONTAINED ON FOLLOWING PAGE]

SIGNATURE PAGE
TO DEVELOPMENT AGREEMENT FILE NO. PDA22=004

"OWNER"
American Superior Land, LLC
a Delaware limited liability company

By: _____
John Troutman
Vice President
Date: _____

Roseville Investments, LLC
a Florida limited liability company

By: _____
John Troutman
Vice President
Date: _____

"CITY"

CITY OF ONTARIO

By:_____
Scott Ochoa
City Manager

Date: _____

ATTEST:

_____
City Clerk, Ontario

APPROVED AS TO FORM:

BEST BEST KRIEGER, LLP

_____
City Attorney

ACKNOWLEDGEMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA)
COUNTY OF_____)

On _____, 20_____, before me,_____,
Date *Insert Name and Title of the Officer*

personally appeared _____
Name(s) of Signer(s)
_____, who proved to me on the basis of satisfactory evidence to be the person whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity, and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature_____
Signature of Notary Public

Place Notary Seal Above

ACKNOWLEDGEMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA)
COUNTY OF_____)

On _____, 20_____, before
me_____,
Date *Insert Name and Title of the Officer*

personally appeared
_____
Name(s) of Signer(s)
_____
_____, who proved to me on the basis of satisfactory evidence to be the person whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity, and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature_____
Signature of Notary Public

Place Notary Seal Above

EXHIBIT "A"
TO DEVELOPMENT AGREEMENT

Legal Description of Property

Real property in the City of Ontario, County of San Bernardino, State of California, described as follows:

PARCEL 1: (APN: 0218-161-11-0-000)

The East 35 acres of the South one-half of the Northwest one-quarter of Section 12, Township 2 South, Range 7 West, San Bernardino Meridian, in the County of San Bernardino, State of California, according to the official plat thereof.
Except any portion within the North 10 acres of the Southeast 1/4 of the Northwest 1/4 of said section conveyed to Chaffey Joint Union High School District, a political subdivision of State of California in grant deed recorded January 6, 2000 as Instrument No. 2000-0005735 of Official Records.
Also excepting therefrom that portion of the land described in the grant deed to City of Ontario, a municipal corporation recorded July 24, 2008 as Instrument No. 2008- 0338801 of Official Records.

PARCEL 2: (APN: 0218-161-04-0-000)

The West one-half of the Northwest one-quarter of the Northwest one-quarter of Section 12, Township 2 South, Range 7 West, San Bernardino Meridian, in the County of San Bernardino, State of California, according to the official plat thereof.

Except therefrom all public streets and highways.
Also excepting therefrom that portion of the land described in the grant deed to City of Ontario, a municipal corporation recorded July 24, 2008 as Instrument No. 2008- 0338803 of Official Records.

PARCEL 3: (APN: 0218-161-05-0-000)

The East one-half of the Northwest one-quarter of the Northwest one-quarter of Section 12, Township 2 South, Range 7 West, San Bernardino Meridian, in the County of San Bernardino, State of California, according to the official plat thereof. Except therefrom all public streets and highways.
Also excepting therefrom that portion of the land described in the grant deed to City of Ontario, a municipal corporation recorded July 24, 2008 as Instrument No. 2008- 0338803 of Official Records.

PARCEL 3A: (APN: PORTION OF 0218-171-22-0-000)

An undivided 1/3rd interest in the well-site described as the West 5.00 feet of the South
8.00 feet of the North 72.50 feet of the Northeast one-quarter of the Northeast one- quarter of Section 12, Township 2 South, Range 7 West, San Bernardino Meridian and the East 5.00 feet of the South 8.00 feet of the North 72.50 feet of the Northwest one- quarter of the Northeast one-quarter of Section 12, Township 2 South, Range 7 West, San Bernardino Meridian, in the County of San Bernardino, State of California, according to the official plat thereof.

PARCEL 3B:

A non-exclusive easement right-of-way per that document recorded March 10, 1976 in Book 8880, page 113 of Official Records to construct, maintain, operate, remove, replace and repair water pipeline together with valves and other equipment over, under, along and across the certain strip of land located within the lines of the property described as follows:
The South 4 feet of the North 34 feet of the Northwest one-quarter of the Northeast one- quarter and the Northeast one-quarter of the Northwest one-quarter of Section 12, Township 2 South, Range 7 West, San Bernardino Meridian, also the South 48.50 feet of the North 82.50 feet of the East 30.00 feet of the Northwest one-quarter of the Northeast one-quarter of Section 12, Township 2 South, Range 7 West, San Bernardino Meridian, in the County of San Bernardino, according to the official plat thereof.

PARCEL 4: (APN: 0218-161-10-0-000 AND PORTION OF 0218-171-22-0-000)

The Southwest one-quarter of the Northwest one-quarter and the West 5 acres of the Southeast one-quarter of the Northwest one-quarter of Section 12, Township 2 South, Range 7 West, San Bernardino Meridian, in the County of San Bernardino, State of California, according to the official plat thereof.
Together with an undivided 1/6 interest in the well-site described as the West 5.00 feet of the South 8.00 feet of the North 72.50 feet of the Northeast one-quarter of the Northeast one-quarter of Section 12, Township 2 South, Range 7 West San Bernardino Meridian and the East 5.00 feet of the South 8.00 feet of the North 72.50 feet of the Northwest one-quarter of the Northeast one-quarter of Section 12, Township 2 South, Range 7 West, San Bernardino Meridian, in the County of San Bernardino, State of California, according to the official plat thereof. Except any portion within the North 10 acres of the Southeast 1/4 of the Northwest 1/4 of said section.

EXHIBIT "B"
TO DEVELOPMENT AGREEMENT

Map showing Property and its location

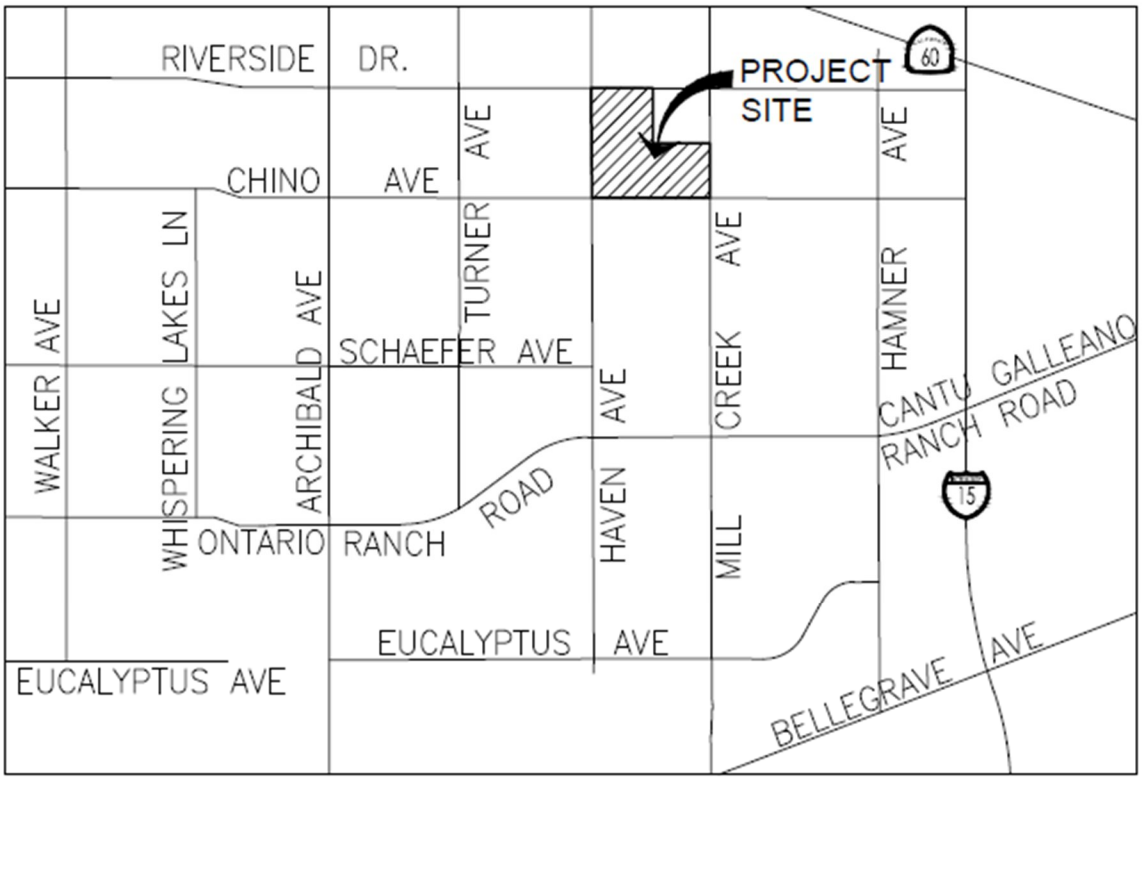


EXHIBIT "C"
TO DEVELOPMENT AGREEMENT

Existing Development Approvals

On October 23, 2007 the Planning Commission:

a) Issued Resolution No. PC07-125 recommending City Council certification of the Rich-Haven Specific Plan EIR (SCH#2006051081).
b) Issued Resolution No. PC07-127 recommending to City Council approval of the Rich-Haven Specific Plan (File No. PSP05-004).

On December 4, 2007, the City Council:

a) Issued Resolution No. 2007-145 certifying the Rich-Haven Specific Plan EIR (SCH#2006051081).
b) Adopted Ordinance No. 2884 approving the Rich-Haven Specific Plan.

On February 23, 2016, the Planning Commission:

a) Issued Resolution No. PC16-003 recommending City Council adoption of an Addendum to the Rich-Haven EIR.
b) Issued Resolution PC16-004 recommending approval of the Rich-Haven Specific Plan Amendment (File No. PSPA16-001).

On March 15, 2016, the City Council:

a) Issued Resolution No. 2016-024 for the adoption of an Addendum (File No. PSPA16-001) to the Rich-Haven Specific Plan EIR.
b) Issued Resolution No. 2016-025 approving an Amendment (File No. PSPA16-001) to the Rich-Haven Specific Plan.

On January 23, 2018, the Planning Commission:

a) Issued Resolution No. PC18-014 recommending City Council adoption of an Addendum to the Rich-haven EIR.
b) Issued Resolution No. PC18-015 recommending to City Council adoption of the Rich-Haven Specific Plan Amendment (File No. PSPA16-005).

On February 20, 2018, the City Council:

a) Issued Resolution No. 2018-017 for the adoption of an Addendum (File No. PSPA16-005) to the Rich-Haven Specific Plan EIR.
b) Issued Resolution No. 2018-018 approving an Amendment (File No. PSPA16-005) to the Rich-Haven Specific Plan.

EXHIBIT "D"
TO DEVELOPMENT AGREEMENT

Existing Land Use Regulations

These documents are listed for reference only:

1. The Rich-Haven Specific Plan (File No. PSP05-004) Environmental Impact Report, Resolution No. 2007-145.

2. The Rich-Haven Specific Plan (File No. PSP05-004), Ordinance No. 2884.

3. Addendum to the Rich-Haven Specific Plan (File No. PSPA16-001) Environmental Impact Report, Resolution No. 2016-024.

4. Amendment to the Rich-Haven Specific Plan (File No. PSPA16-001), Resolution No. 2016-025.

5. Addendum to the Rich-Haven Specific Plan (File No. PSPA16-005) Environmental Impact Report, Resolution No. 2018-017.

6. Amendment to the Rich-Haven Specific Plan (File No. PSPA16-005), Resolution No. 2018-018.

7. City of Ontario Municipal Code
    a. Six – Sanitation & Health
    b. Seven – Public Works
    c. Eight – Building Regulations
    d. Nine – Development Code
    e. Ten – Parks & Recreation

EXHIBIT "E"
TO DEVELOPMENT AGREEMENT

Description of Required Infrastructure Improvements

PHASE 1 IMPROVEMENTS

1. SW on Haven Avenue, between Riverside Drive and North of Nelson Drive.
2. SW on Twinkle Avenue, between Street “G” and Chino Avenue.
3. SW on Chino Avenue, between Haven Avenue and Twinkle Avenue.
4. SW on Chino Avenue, between Lots 1 and 2 and Mill Creek Avenue.
5. SW within Lots 1 and 2 between
6. SW on Streets “A”, “B”, “D”, “E”, “F”, “G”, and “H”.
7. PW on Streets “A”, “B”, “D”, “E”, “F”, “G”, and “H”.
8. RW on Chino Avenue, between Haven Avenue to Mill Creek Avenue.
9. RW on Streets “A”, “B”, “D”, and “H”.
10. SD on Haven Avenue, between Future Street and South of Chino Avenue.
11. SD on Twinkle Avenue, between Street “G” and South of Chino Avenue.
12. SD on Streets “A”, “B”, “D”, “E”, “F”, “G”, and “H”.
13. SD within Lots 1 and 2 between Street “A” and Chino Avenue.
14. SD on Chino Avenue between Lot 1 and Mill Creek Avenue to POC
15. SD within Lots 2 and 4 between Street “A” and Twinkle Ave.
16. FO on Haven Avenue, between Riverside Drive and Street “B”.
17. FO on Twinkle Avenue, between Street “G” and Chino Avenue.
18. FO on Chino Avenue, between Haven Avenue and Mill Creek Avenue.
19. FO on Streets “A”, “B”, “D”, “E”, “F”, “G”, and “H”.
20. ST improvements on Haven Avenue, between Riverside Drive and Chino Avenue.
21. ST improvements on Twinkle Avenue between Street “G” and Chino Avenue.
22. ST improvements on Chino Avenue, between Haven Avenue and Mill Creek Avenue.
23. ST improvements on Mill Creek Avenue between Bethany Way and Chino Avenue.
24. ST improvements on Streets “A”, “B”, “D”, “E”, “F”, “G”, and “H”.
25. Traffic Signal at Haven Avenue and Street “B”.
26. Traffic Signal at Haven Avenue and Chino Avenue.
27. Traffic Signal Modification at Haven Avenue and Riverside Drive.
28. Traffic Signal at Bethany Way and Mill Creek Avenue.

PHASE 2 IMPROVEMENTS

1. SW on Street “G”, between Street “D” and Street “E”.
2. PW on Streets “D” and “G”.
3. SD on Street “G”, between Street “D” and Street “E”.
4. SD within Lot 12 between Street “G” and Chino Ave.
5. SD on Chino Avenue between Lot 12 and Haven Avenue.
6. FO on Streets “D” and “G”.
7. ST improvements on Street “D” and “G”.

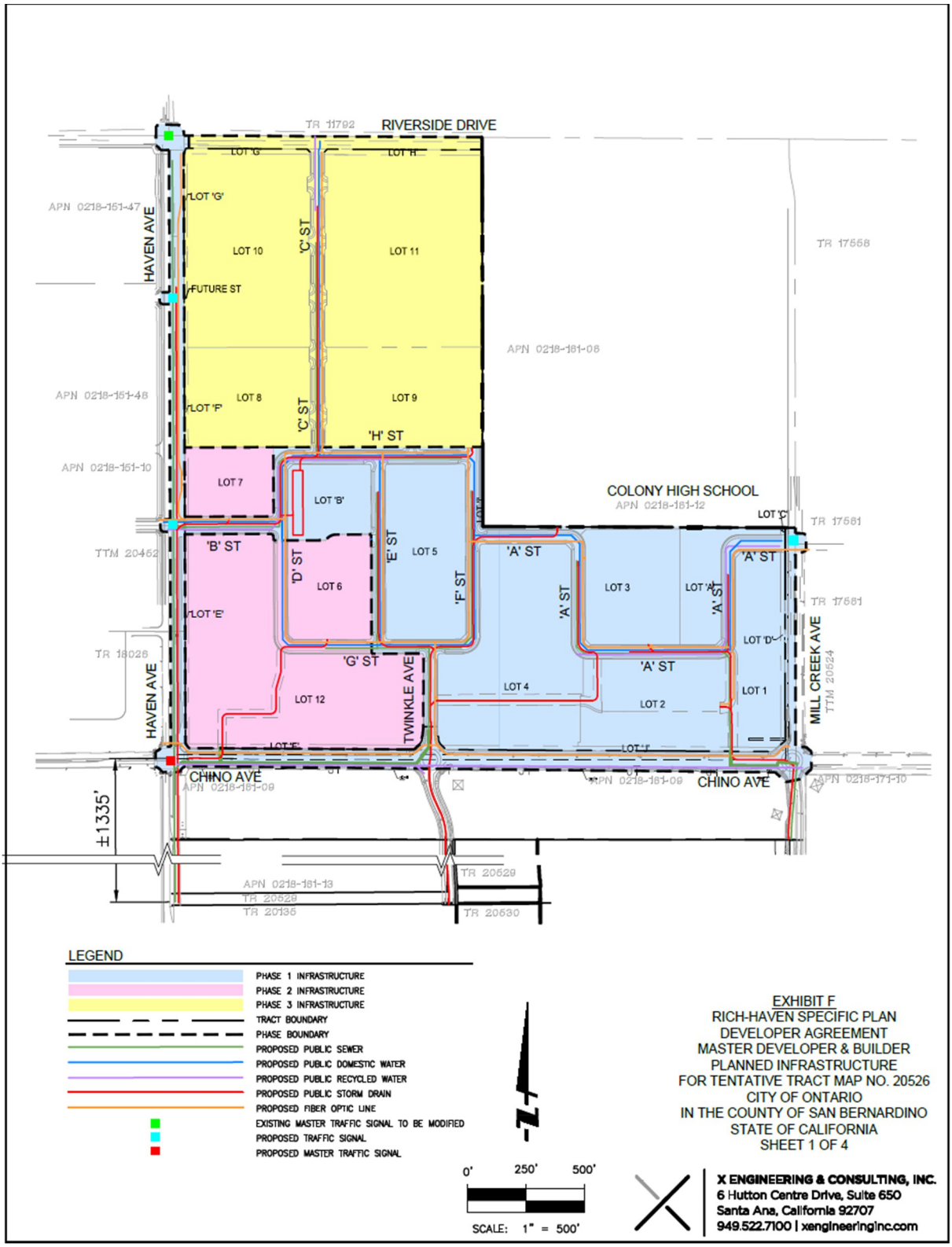
PHASE 3 IMPROVEMENTS

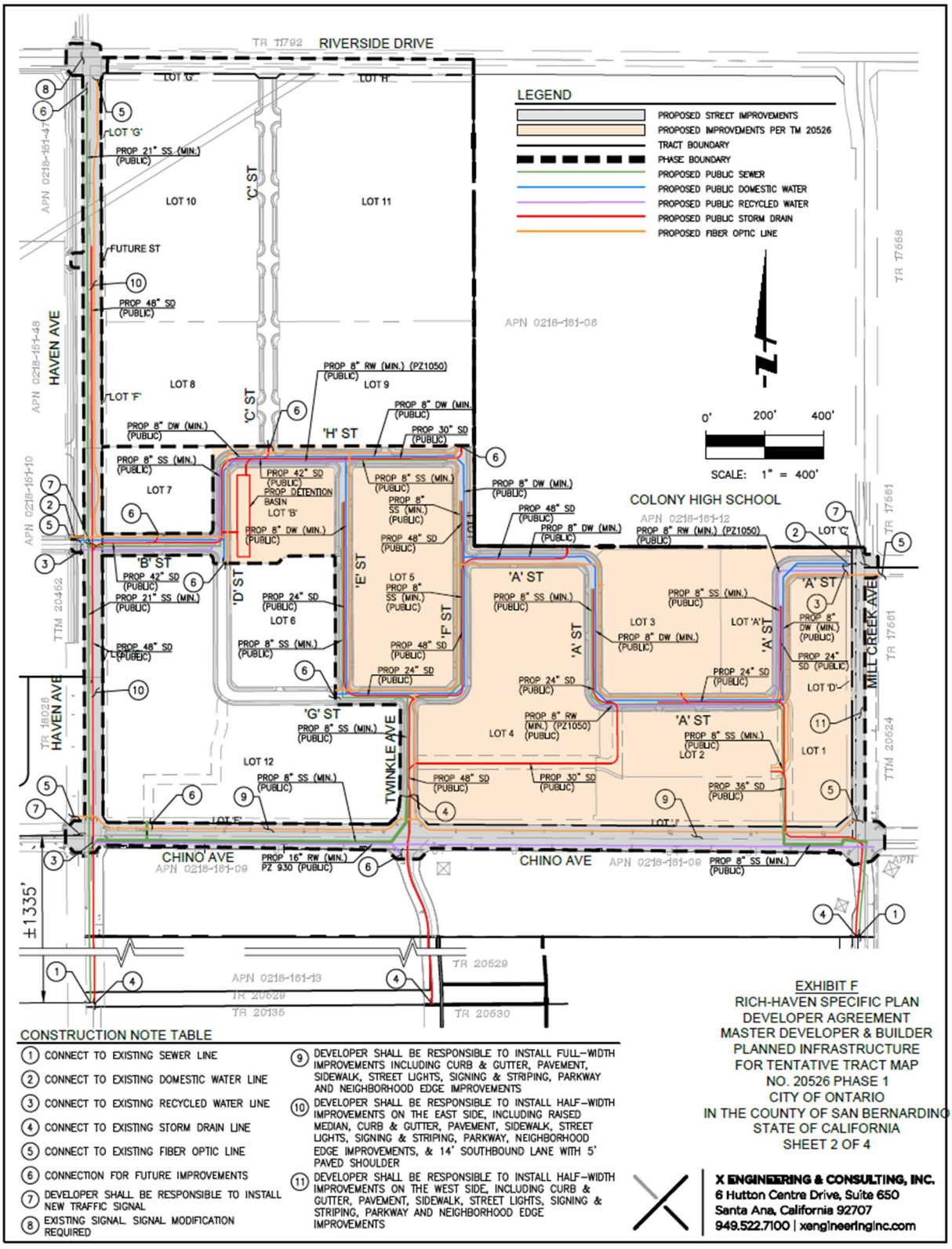
1. SW on Street “C”, between Riverside Drive and Street “H”.
2. PW on Street “C”, between Riverside Drive and Street “H”.
3. RW on Street “C”, between Riverside Drive and Street “H”.
4. SD on Street “C”, between Riverside Drive and Street “H”.
5. FO on Street “C” between Riverside Drive and Street “H”.
6. ST improvements on Riverside Drive, between Haven Avenue and easterly tract boundary.
7. ST improvements on Street “C”, between Riverside Drive and Street “H”.
8. Traffic Signal at Haven Avenue and Future Street.

EXHIBIT “F”
TO DEVELOPMENT AGREEMENT

Depiction of Required Infrastructure Improvements

(SEE ATTACHED EXHBITS)


RIVERSIDE DRIVE
TR 11792
LOT 'G'
LOT H
'LOT 'G'
LOT 10
'C' ST
LOT 11
FUTURE ST
APN 0218-161-47
HAVEN AVE
APN 0218-161-08
TR 17558
APN 0218-161-48
'LOT 'F'
LOT 8
'C' ST
LOT 9
'H' ST
APN 0218-161-10
LOT 7
LOT 'B'
COLONY HIGH SCHOOL
APN 0218-161-12
LOT 'C'
TR 17581
'B' ST
'D' ST
LOT 6
'E' ST
LOT 5
'F' ST
'A' ST
LOT 3
LOT 'A'
TTM 20452
'LOT 'E'
TR 17581
LOT 'D'
TR 18026
'G' ST
'A' ST
MILL CREEK AVE
TTM 20524
LOT 12
TWINKLE AVE
LOT 4
LOT 2
LOT 1
HAVEN AVE
CHINO AVE
APN 0218-161-09
CHINO AVE
APN 0218-171-10
±1335'
APN 0218-161-13
TR 20529
TR 20135
TR 20530
LEGEND
PHASE 1 INFRASTRUCTURE
PHASE 2 INFRASTRUCTURE
PHASE 3 INFRASTRUCTURE
TRACT BOUNDARY
PHASE BOUNDARY
PROPOSED PUBLIC SEWER
PROPOSED PUBLIC DOMESTIC WATER
PROPOSED PUBLIC RECYCLED WATER
PROPOSED PUBLIC STORM DRAIN
PROPOSED FIBER OPTIC LINE
EXISTING MASTER TRAFFIC SIGNAL TO BE MODIFIED
PROPOSED TRAFFIC SIGNAL
PROPOSED MASTER TRAFFIC SIGNAL
0'
250'
500'
SCALE: 1" = 500'
EXHIBIT F
RICH-HAVEN SPECIFIC PLAN
DEVELOPER AGREEMENT
MASTER DEVELOPER & BUILDER
PLANNED INFRASTRUCTURE
FOR TENTATIVE TRACT MAP NO. 20526
CITY OF ONTARIO
IN THE COUNTY OF SAN BERNARDINO
STATE OF CALIFORNIA
SHEET 1 OF 4
X ENGINEERING & CONSULTING, INC.
6 Hutton Centre Drive, Suite 650
Santa Ana, California 92707
949.522.7100 | xengineeringinc.com

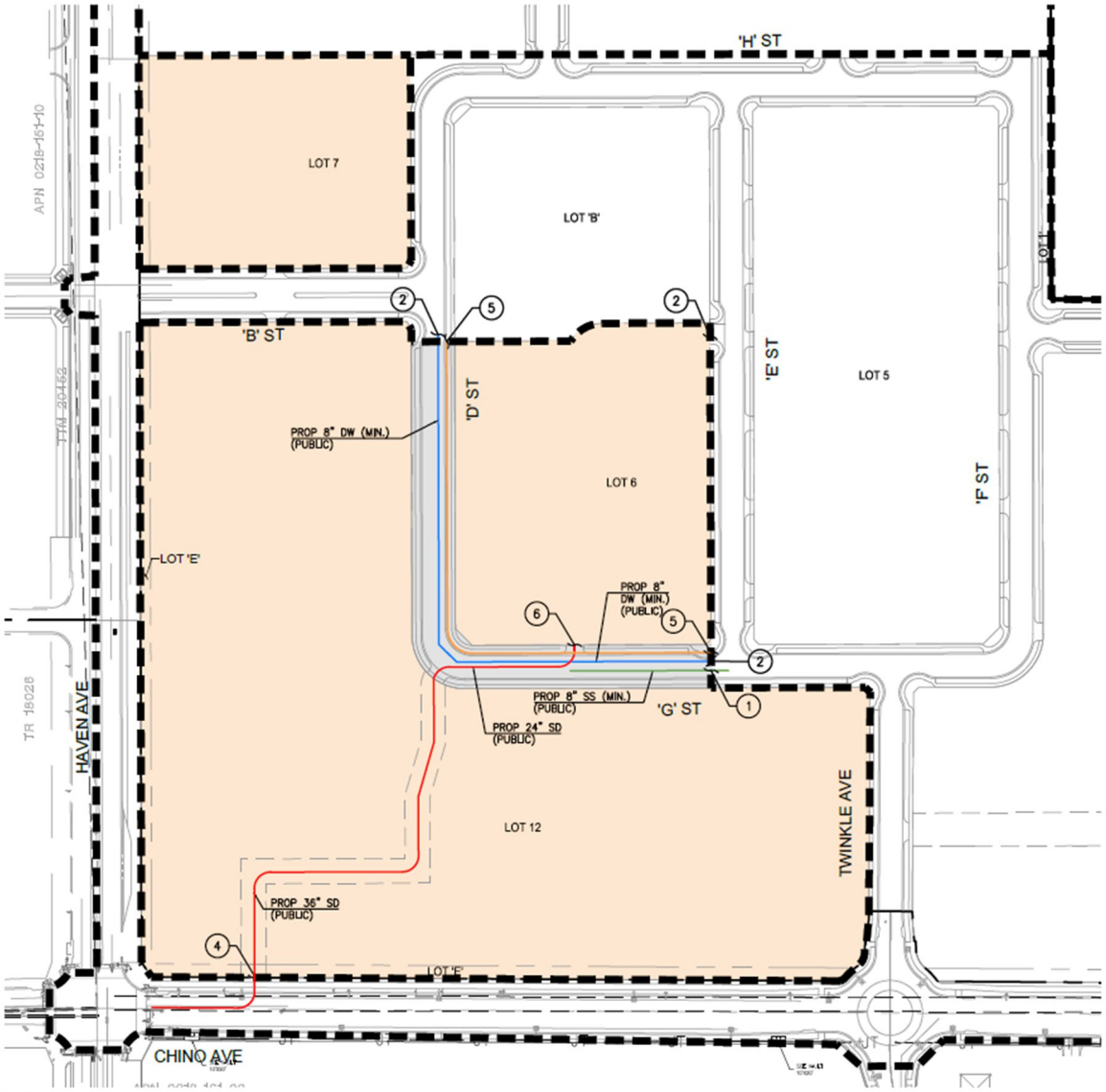


CONSTRUCTION NOTE TABLE

1. CONNECT TO EXISTING SEWER LINE
2. CONNECT TO EXISTING DOMESTIC WATER LINE
3. CONNECT TO EXISTING RECYCLED WATER LINE
4. CONNECT TO EXISTING STORM DRAIN LINE
5. CONNECT TO EXISTING FIBER OPTIC LINE
6. CONNECTION FOR FUTURE IMPROVEMENTS
7. DEVELOPER SHALL BE RESPONSIBLE TO INSTALL NEW TRAFFIC SIGNAL
8. EXISTING SIGNAL. SIGNAL MODIFICATION REQUIRED
9. DEVELOPER SHALL BE RESPONSIBLE TO INSTALL FULL-WIDTH IMPROVEMENTS INCLUDING CURB & GUTTER, PAVEMENT, SIDEWALK, STREET LIGHTS, SIGNING & STRIPING, PARKWAY AND NEIGHBORHOOD EDGE IMPROVEMENTS
10. DEVELOPER SHALL BE RESPONSIBLE TO INSTALL HALF-WIDTH IMPROVEMENTS ON THE EAST SIDE, INCLUDING RAISED MEDIAN, CURB & GUTTER, PAVEMENT, SIDEWALK, STREET LIGHTS, SIGNING & STRIPING, PARKWAY, NEIGHBORHOOD EDGE IMPROVEMENTS, & 14' SOUTHBOUND LANE WITH 5' PAVED SHOULDER
11. DEVELOPER SHALL BE RESPONSIBLE TO INSTALL HALF-WIDTH IMPROVEMENTS ON THE WEST SIDE, INCLUDING CURB & GUTTER, PAVEMENT, SIDEWALK, STREET LIGHTS, SIGNING & STRIPING, PARKWAY AND NEIGHBORHOOD EDGE IMPROVEMENTS

EXHIBIT F
RICH-HAVEN SPECIFIC PLAN
DEVELOPER AGREEMENT
MASTER DEVELOPER & BUILDER
PLANNED INFRASTRUCTURE
FOR TENTATIVE TRACT MAP
NO. 20526 PHASE 1
CITY OF ONTARIO
IN THE COUNTY OF SAN BERNARDINO
STATE OF CALIFORNIA
SHEET 2 OF 4

X ENGINEERING & CONSULTING, INC.
6 Hutton Centre Drive, Suite 650
Santa Ana, California 92707
949.522.7100 | xengineeringinc.com



LEGEND

- PROPOSED STREET IMPROVEMENTS
- PROPOSED IMPROVEMENTS PER TM 20526
- TRACT BOUNDARY
- PHASE BOUNDARY
- PROPOSED PUBLIC SEWER
- PROPOSED PUBLIC DOMESTIC WATER
- PROPOSED PUBLIC RECYCLED WATER
- PROPOSED PUBLIC STORM DRAIN
- PROPOSED FIBER OPTIC LINE

CONSTRUCTION NOTE TABLE

1. CONNECT TO EXISTING SEWER LINE
2. CONNECT TO EXISTING DOMESTIC WATER LINE
3. CONNECT TO EXISTING RECYCLED WATER LINE
4. CONNECT TO EXISTING STORM DRAIN LINE
5. CONNECT TO EXISTING FIBER OPTIC LINE
6. CONNECTION FOR FUTURE IMPROVEMENTS

0' 100' 200'

SCALE: 1" = 200'

EXHIBIT F
RICH-HAVEN SPECIFIC PLAN
DEVELOPER AGREEMENT
MASTER DEVELOPER & BUILDER
PLANNED INFRASTRUCTURE
FOR TENTATIVE TRACT MAP NO. 20526 PHASE 2
CITY OF ONTARIO
IN THE COUNTY OF SAN BERNARDINO
STATE OF CALIFORNIA
SHEET 3 OF 4

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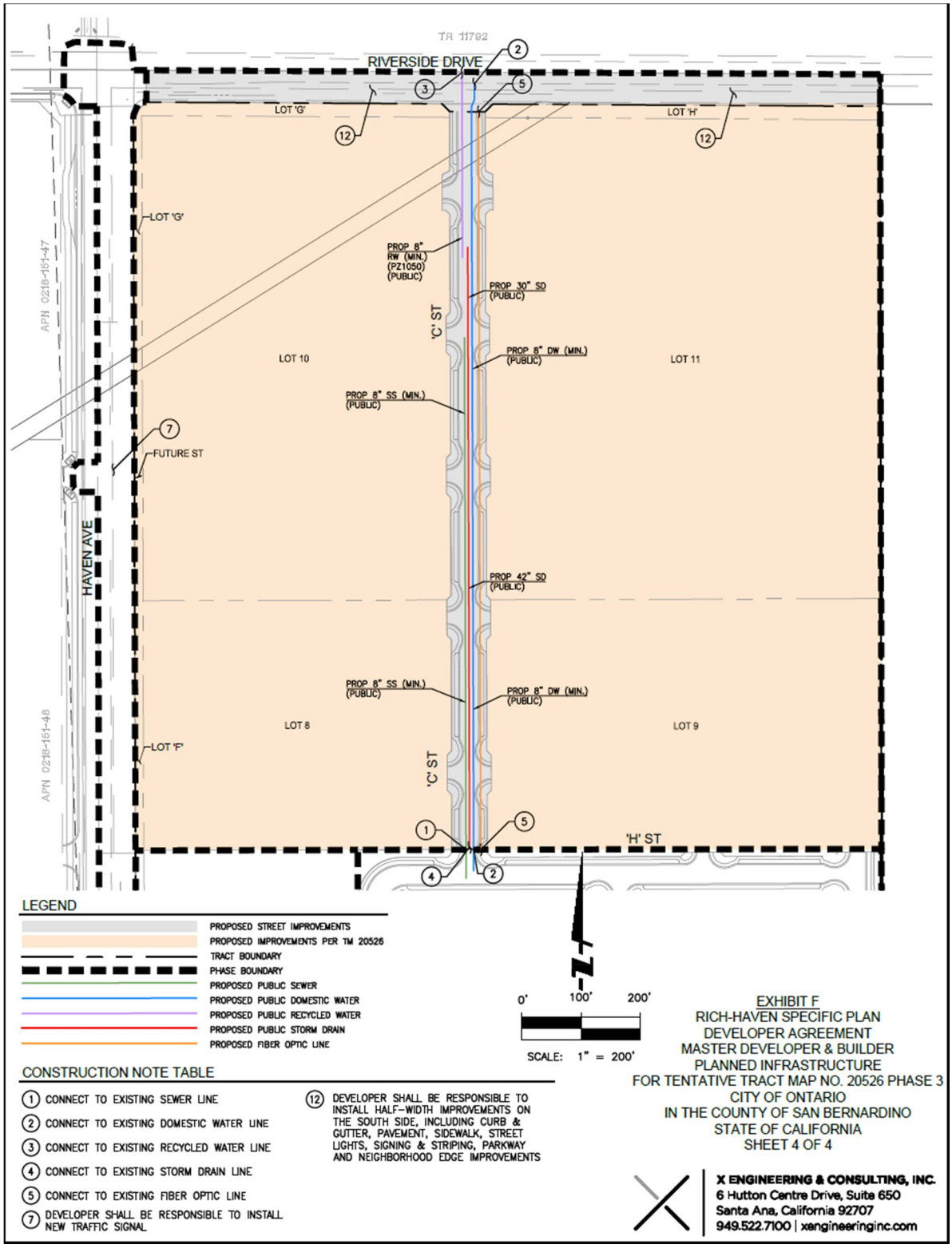

TR 11792
RIVERSIDE DRIVE
LOT 'G'
LOT 'H'
LOT 'G'
PROP 8" RW (MIN.) (PZ1050) (PUBLIC)
PROP 30" SD (PUBLIC)
'C' ST
LOT 10
LOT 11
PROP 8" DW (MIN.) (PUBLIC)
PROP 8" SS (MIN.) (PUBLIC)
FUTURE ST
HAVEN AVE
PROP 42" SD (PUBLIC)
PROP 8" SS (MIN.) (PUBLIC)
PROP 8" DW (MIN.) (PUBLIC)
LOT 8
LOT 9
LOT 'F'
'C' ST
'H' ST
APN 0218-151-47
APN 0218-151-48
LEGEND
PROPOSED STREET IMPROVEMENTS
PROPOSED IMPROVEMENTS PER TM 20526
TRACT BOUNDARY
PHASE BOUNDARY
PROPOSED PUBLIC SEWER
PROPOSED PUBLIC DOMESTIC WATER
PROPOSED PUBLIC RECYCLED WATER
PROPOSED PUBLIC STORM DRAIN
PROPOSED FIBER OPTIC LINE
0' 100' 200'
SCALE: 1" = 200'
CONSTRUCTION NOTE TABLE
(1) CONNECT TO EXISTING SEWER LINE
(2) CONNECT TO EXISTING DOMESTIC WATER LINE
(3) CONNECT TO EXISTING RECYCLED WATER LINE
(4) CONNECT TO EXISTING STORM DRAIN LINE
(5) CONNECT TO EXISTING FIBER OPTIC LINE
(7) DEVELOPER SHALL BE RESPONSIBLE TO INSTALL NEW TRAFFIC SIGNAL
(12) DEVELOPER SHALL BE RESPONSIBLE TO INSTALL HALF-WIDTH IMPROVEMENTS ON THE SOUTH SIDE, INCLUDING CURB & GUTTER, PAVEMENT, SIDEWALK, STREET LIGHTS, SIGNING & STRIPING, PARKWAY AND NEIGHBORHOOD EDGE IMPROVEMENTS
EXHIBIT F
RICH-HAVEN SPECIFIC PLAN
DEVELOPER AGREEMENT
MASTER DEVELOPER & BUILDER
PLANNED INFRASTRUCTURE
FOR TENTATIVE TRACT MAP NO. 20526 PHASE 3
CITY OF ONTARIO
IN THE COUNTY OF SAN BERNARDINO
STATE OF CALIFORNIA
SHEET 4 OF 4
X ENGINEERING & CONSULTING, INC.
6 Hutton Centre Drive, Suite 650
Santa Ana, California 92707
949.522.7100 | xengineeringinc.com

EXHIBIT "G"
TO DEVELOPMENT AGREEMENT

FORM OF CERTIFICATE OF NET MDD AVAILABILITY

Pursuant to Section ___ of this Agreement between the City of Ontario, a California municipal corporation, and _____, a _____ company, hereinafter called "OWNER", the terms and definitions of which are hereby incorporated herein by this reference and hereinafter called "Agreement", the City of Ontario hereby certifies based on CITY receipt of payment of OWNER's share of the funding for the Phase 2 Water Improvements, that OWNER is entitled to the following Net MDD Water Availability.

Amount of Net MDD _____ gpm

_____
Scott Ochoa, City Manager

Dated:_____

EXHIBIT "H"
TO DEVELOPMENT AGREEMENT

FORM OF CERTIFICATE OF REGIONAL DIF CREDIT

Pursuant to Section 4.5.2 of this Agreement by and between the City of Ontario and _____, dated _____, 201_, the terms and definitions of which are hereby incorporated herein by this reference and hereinafter called the "Development Agreement', the City of Ontario hereby certifies that OWNER is entitled to the following amount and nature of DIF Credits in the Regional Water DIF Infrastructure Category:

Amount of Credit: $_____

_____
Scott Ochoa, City Manager

Dated: _____

Exhibit "I-1"

ONTARIO RANCH
WATER SUPPLY PHASING PLAN

Phase 2	Water Availability Equivalency	Estimated Net MDD Available[1]
Phase 2 A		
Supply & Storage		
1. 1 - Additional Ground Water Well and Collection lines - Design and Construction	8,250 gpm[2]	**7,750 gpm**[2]
Pipelines (Transmission & Distribution)[2]		
2. 925 Zone Transmission lines – Design and Construction		
3. Temporary Pressure Reducing Station[3] – Design and Construction		
Phase 2B		
Supply & Storage		
4. 1 – Additional Ground Water Well and Collection lines – Design and Construction	10,500 gpm[2]	**9,860 gpm[2]**
5. 1 – 6 million gallon Reservoir – 925 Zone – Design and Construction		

(1) Upon Completion of the construction of all of the improvements described for each Phase a Certificate of Net MDD Availability shall be issued to Developer for the corresponding amount of Net MDD. Net MDD means the maximum daily demand on the potable water supply, net of the water requirements for public schools and parks. The Water Availability Equivalency includes the estimated requirements for public schools and parks. The amount of Net MDD specified is the cumulative amount for which building permits may be issued upon funding of the corresponding and all preceding Phases of improvements.

(2) The ability of a particular development to utilize Net MDD assigned to it by the Developer will require the completion of design and construction of Master-planned potable and recycled water transmission and distribution pipelines for the respective pressure zone. Other factors may include its location, the particular land use and Water Availability Equivalents assigned to it as specified in Exhibit C-2.

(3) Pressure reducing stations are a component of the pipeline transmission and distribution system.

EXHIBIT "I-2"

Available Water Supply - See Exhibit C-1R for Net MDD Available

Table A - Water Demand Equivalents By Land Use

The Ontario Plan	Potable Water			Recycled Water	
Land Use	Water Demand Factor (ADD)		Water Demand Equivalents (WDE)[2]	Recycled Water Demand Factor[1] (ADD)	Recycled Water Demand Of Total Water Demand
	(gpd/du)	(gpd/ac)	(gpm/unit)	(gpd/ac)	(%)
Detached Dwellings (less than 5 units per acre)	544		0.57	900	28%
Detached or Attached Dwellings (between 5 and 11 units per acre)	464		0.48	1,000	21%
Attached Dwellings (between 11 and 25 units per acre)	323		0.34	1,500	18%
High Density Dwellings (25+ units per acre)	152		0.16	1,500	27%
Commercial Lodging	150		0.16	1,700	50%
Retail/Services Uses		2,200	2.29	2,300	51%
Office Uses		3,400	3.54	2,300	40%
Business Park Uses		2,200	2.29	2,200	50%
Industrial Uses		2,000	2.08	2,200	52%
Institutional Use		2,200	2.29	1,600	42%
Parks		1,000	1.04	1,400	58%
Schools		3,500	3.65	1,600	31%

[1]Recycled Water Demands include irrigation for right-of-way (medians and parkways), neighborhood edge, pocket parks, and common areas.

[2] The WDE is based on the Maximum Day Demand (MDD) with a peaking factor of 1.5 in the NMC for all land use categories.

Table B - Example Water Supply Calculation

Land Use	Acres[1] (gross)	Residential Units	WDE Factor (gpm)	Potable MDD (gpm)	Recycled Water ADD (gpm)
Development					
Detached Dwellings (less than 5 units per acre)	1,284	5,061	0.57	2,868	803
Detached or Attached Dwellings (between 5 and 11 units per acre)	369	2,530	0.48	1,223	256
Attached Dwellings (between 11 and 25 units per acre)	194	3,410	0.34	1,147	202
Retail/Services Uses (per acre)[2]	104		2.29	239	166
TOTAL	**1,950**	**11,001**		**5,477**	**1,428**

Three (3) Wells Are required to Support this example, assuming each well produces 2,000 gpm and connection to the Recycled Water System maximizing Recycled Water Use.

[1] Residential Acres are estimated based on the weighted average derived from the average number of units per land use category.

[2] Commercial acreage is calculated from a total square footage of 1,361,000 SF with an average Floor to Area Ratio (FAR) of 0.30 for commercial services in The Ontario Plan.

Exhibit "J"

Form of Plume Disclosure Letter

CITY OF ONTARIO

ONTARIO MUNICIPAL UTILITIES COMPANY

PAUL S. LEON
MAYOR

DEBRA DORST-PORADA
MAYOR PRO TEM

ALAN D. WAPNER
JIM W. BOWMAN
RUBEN VALENCIA
COUNCIL MEMBERS

AL C. BOLING
CITY MANAGER

SHEILA MAUTZ
CITY CLERK

JAMES R. MILHISER
TREASURER

SCOTT BURTON
UTILITIES GENERAL MANAGER

March 2017

DISCLOSURE NOTICE
SOUTH ARCHIBALD TRICHLOROETHYLENE PLUME

Dear Property Owner/Developer/Applicant:

The City of Ontario ("City") has approved or will be approving development in the Ontario Ranch area in the next few years, subject to the appropriate and required statutory process. This letter is intended to serve as notice to all potential property owners of the existence of a groundwater plume, known as the South Archibald Trichloroethylene (TCE) Plume which may exist in, under or near owner's property.

The groundwater plume is in an area in the central Chino Basin south of the Pomona Freeway, west of Turner Avenue, east of Grove Avenue, and north of Kimball Avenue. The plume primarily consists of TCE, a discontinued industrial solvent, and is subject to a clean-up under the oversight and direction of the Santa Ana Regional Water Quality Control Board ("Regional Board").

The Regional Board's approved clean-up procedure involves the removal and treatment of groundwater containing TCE via groundwater wells to reduce the plume concentrations and control its migration. In addition, the City is providing potable water supplies for domestic purposes to residences with private domestic wells affected by the plume. Finally, the Regional Board will continue to monitor all impacted areas and private domestic wells to ensure that residents' health and the environment are properly safeguarded. These remedial actions are documented in a Remedial Action Plan approved by the Regional Board in September 2016.

Further and current information may be found on the Regional Board's Geotracker website at https://geotracker.waterboards.ca.gov/profile_report?global_id=T10000004658.

Property owners may wish to include this letter as a part of a Real Estate Transfer Disclosure under California Civil Code Section 1102 et seq.

1425 SOUTH BON VIEW - ONTARIO, CALIFORNIA 91761-4406 - (909) 395-2605 - FAX (909) 395-2601

CITY OF ONTARIO PLANNING DEPARTMENT

PLANNING COMMISSION STAFF REPORT

February 25, 2025

303 East B Street, Ontario, California 91764 Phone: 909.395.2036 / Fax: 909.395.2420

FILE NO: PDA22-004

SUBJECT: A public hearing to consider a Development Agreement between the City of Ontario and Roseville Investments, LLC and American Superior Land, LLC, to establish the terms and conditions associated with Tentative Tract Map 20526 (File No. PMTT22-012), located at the southeast corner of Haven Avenue and Riverside Drive, within Planning Areas 1A, 1B, and 1C of the Rich-Haven Specific Plan (File No. PSP05-004). (APNs: 0218-161-11, 0218-161-04, 0218-161-05, and 0218-161-10); **submitted by Richland Developers, Inc. City Council action is required.**

PROPERTY OWNER: Roseville Investments, LLC and American Superior Land, LLC.

RECOMMENDED ACTION: That the Planning Commission consider and recommend City Council adopt an Ordinance approving the Development Agreement (File No. PDA22-004) between the City of Ontario and Roseville Investments, LLC and American Superior Land, LLC, pursuant to the facts and reasons contained in the staff report and attached Resolution.

BACKGROUND: On January 27, 2010, the Ontario City Council certified The Ontario Plan Environmental Impact Report in conjunction with File No. PGPA06-001 (City Council Resolution No. 2010-006), and on August 16, 2022, the Ontario City Council certified The Ontario Plan 2050 Update Supplemental Environmental Impact Report in conjunction with File No. PGPA20-002 (City Council Resolution No. 2022-129). The Ontario Plan and associated Environmental Impact Report analyzed the Project site and established guidelines for development, including but not limited to, general land use: Low Density Residential (LDR) – 2.1-5.0 du/ac; Low-Medium Density Residential (LMDR) – 5.1-11.0 du/ac; and Medium Density Residential (MDR) – 11.1-25.0 du/ac).

On March 4, 2022, the Applicant applied for Tentative Tract Map No. 20526 (File No. PMTT22-012) to subdivide106.1 gross acres of land into 12 numbered lots and 10 lettered lots to facilitate future residential development.

The Ontario Ranch financial commitments required for construction of properties within a specific plan are substantial. Therefore, to adequately forecast these costs and gain assurance that the project may proceed under the existing policies, rules, and regulations, Roseville Investments, LLC and American Superior Land, LLC ("Owner"), have

Case Planner:	Pablo De Lara – Project Manager
Planning Director Approval:	
Submittal Date:	2/6/2025

Hearing Body	*Date*	*Decision*	*Action*
DAB	N/A	N/A	N/A
PC	2/25/2025	Approval	Recommend
CC	4/1/2025		Final

requested that the City enter into negotiations to create a Development Agreement ("Agreement").

In accordance with California Government Code Section 65865, which in part states that any city… may enter into a Development Agreement with any person having a legal or equitable interest in real property for the development of such property…" and California Government Code Section 65865.52, which in part states that "a Development Agreement shall specify the duration of the Agreement, the permitted uses of the property… and may include conditions, terms, restrictions…," the City of Ontario adopted Resolution No. 2002-100 setting forth the procedures and requirements for consideration of Development Agreements. Pursuant to these procedures and requirements, staff entered into negotiations with the Applicant to create a Development Agreement for consideration by the Planning Commission and City Council.

The proposed Agreement is based on the model Development Agreement that was developed in coordination with the City Attorney and legal counsel for NMC Builders. This model Development Agreement is consistent with the provisions of the Construction Agreement. The terms of the agreement between NMC Builders' members requires that members of the LLC enter into Development Agreements that are consistent with the provisions of the Construction Agreement and are consistent with the commitments to assure that adequate public infrastructure improvements are constructed by the Owner.

PROJECT SETTING: The project site is located at the southeast corner of Haven Avenue and Riverside Drive, within Planning Areas 1A, 1B, and 1C of the Rich-Haven Specific Plan and is depicted in Figure 1: Project Location.

PROJECT ANALYSIS: The Agreement proposes to include 106.1 gross acres of land within Planning Areas 1A, 1B, and 1C land use districts of the Rich-Haven Specific Plan, as shown on the attached Exhibit A. The Agreement grants the Applicant a vested right to develop Tentative Tract Map 20526 (the "Map"), provided that the Owner complies with the terms and conditions of the Specific Plan and related EIR.

The Map (see attached Exhibit B) is located at the southeast corner of Haven Avenue and Riverside Drive and proposes to subdivide 106.1 gross acres of land into 12 numbered lots and 10 lettered lots for residential uses, a public school, private drives, landscape edges, and common open space purposes.

The term of the Agreement is for 10 years, with a 5-year option to renew. The main points of the Agreement address funding for all new City expenses created by the project, which includes: Development Impact Fees ("DIF") for construction of public improvements (i.e. streets and bridges, sewer, water, storm drain and fiber); Public Service Funding to ensure adequate provisions of public services (police, fire and other public services); and the creation of a Community Facilities District ("CFD") for the maintenance of public facilities.

Staff finds that the Agreement is consistent with State law, The Ontario Plan, and the City's Development Agreement policies. As a result, staff is recommending approval of the application to the Planning Commission. If the Planning Commission finds the Agreement is acceptable, a recommendation of approval to the City Council would be appropriate.

PUBLIC NOTIFICATION: The subject Agreement was advertised as a public hearing in at least one newspaper of general circulation in the City of Ontario (the Inland Valley Daily Bulletin newspaper). In addition, notices were mailed to all owners of real property located within a minimum of 300 feet of the exterior boundaries of the property that is the subject of the hearing, as shown on the records of the County Assessor.

CORRESPONDENCE: As of the preparation of this Resolution, Planning Department staff has not received any written or verbal communications from the owners or occupants of properties surrounding the Project site or from the public in general, regarding the subject Agreement.

AGENCY/DEPARTMENT REVIEWS: Each City agency/department has been provided the opportunity to review and comment on the subject Agreement and recommend requirements to be imposed upon the Project. At the time of the Resolution preparation, infrastructure requirements were provided and are included within the subject Agreement to the attached Resolution as "Attachment A."

AIRPORT LAND USE COMPATIBILITY PLAN (ALUCP) COMPLIANCE: The California State Aeronautics Act (Public Utilities Code Section 21670 et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

On April 19, 2011, the City Council of the City of Ontario approved and adopted the ONT ALUCP, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the recommending body for the Project, the Planning Commission has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the Planning Commission, therefore, finds and determines that the Project, is consistent with the policies and criteria set forth within the ONT ALUCP.

On August 2, 2022, the City Council of the City of Ontario approved and adopted a Development Code Amendment to establish the Chino Airport ("CNO") Overlay Zoning District ("OZD") and Reference I, Chino Airport Land Use Compatibility Plan ("CNO

ALUCP"). The CNO OZD and CNO ALUCP established the Airport Influence Area for Chino Airport, solely within the City of Ontario, and limits future land uses and development within the Airport Influence Area, as they relate to safety, airspace protection, and overflight impacts of current and future airport activity. The CNO ALUCP is consistent with policies and criteria set forth within the Caltrans 2011 California Airport Land Use Planning Handbook. The proposed Project is located within the Airport Influence Area of Chino Airport and was evaluated and found to be consistent with the California Airport Land Use Planning Handbook and the CNO ALUCP. As the recommending body for the Project, the Planning Commission has reviewed and considered the facts and information contained in the Application and supporting documentation against the CNO ALUCP compatibility factors, including Safety, Airspace Protection, Overflight. As a result, the Planning Commission, therefore, finds and determines that the Project is consistent with the policies and criteria set forth within the California Airport Land Use Planning Handbook and the Chino ALUCP.

COMPLIANCE WITH THE ONTARIO PLAN: The proposed Project is consistent with the principles, goals and policies contained within the Vision, Governance, Policy Plan (general plan), and City Council Priorities components of The Ontario Plan ("TOP"). More specifically, the goals and policies of TOP that are furthered by the proposed Project are as follows:

(1) City Council Goals.

- Invest in the Growth and Evolution of the City's Economy
- Operate in a Businesslike Manner
- Focus Resources in Ontario's Commercial and Residential Neighborhoods
- Invest in the City's Infrastructure (Water, Streets, Sewers, Parks, Storm Drains and Public Facilities)
- Ensure the Development of a Well Planned, Balanced, and Self-Sustaining Community in the New Model Colony

(2) Vision.

Distinctive Development:

- Commercial and Residential Development

➢ Development quality that is broadly recognized as distinctive and not exclusively tied to the general suburban character typical of much of Southern California.

(3) Governance.

Decision Making:

- Goal G1: Sustained decision-making that consistently moves Ontario towards its Vision by using The Ontario Plan as a framework for assessing choices.

➢ G 1-2. Long-term Benefit. We require decisions to demonstrate and document how they add value to the community and support the Ontario Vision.

(4) Policy Plan (General Plan)

Land Use Element:

- Goal LU-1 Balance: A community that has a spectrum of housing types and price ranges that match the jobs in the City and that make it possible for people to live and work in Ontario and maintain a quality of life.

➢ LU-1.1 Strategic Growth. We concentrate growth in strategic locations that help create place and identity, maximize available and planned infrastructure, foster the development of transit, and support the expansion of the active and multimodal transportation networks throughout the City.

➢ LU-1.6 Complete Community. We incorporate a variety of land uses and building types in our land use planning efforts that result in a complete community where residents at all stages of life, employers, workers, and visitors have a wide spectrum of choices of where they can live, work, shop and recreate within Ontario.

- Goal LU-2 Compatibility: Compatibility between a wide range of uses and a resultant urban patterns and forms.

➢ LU-2.6 Infrastructure Compatibility. We require infrastructure to be aesthetically pleasing and in context with the community character.

Housing Element:

- Goal H-2 Housing Supply & Diversity: Diversity of types of quality housing that are affordable to a range of household income levels, accommodate changing demographics, and support and reinforce the economic sustainability of Ontario.

➢ H-2.4 Ontario Ranch. We support a premier lifestyle community in the Ontario Ranch, distinguished by diverse housing, highest design quality, and cohesive and highly amenitized neighborhoods.

➢ H-2.5 Housing Design. We require architectural excellence through adherence to City design guidelines, thoughtful site planning, environmentally sustainable practices, and other best practices.

Community Economics Element:

- Goal CE-1 Complete Community: A complete community that provides for all incomes and stages of life.

- CE-1.6 Diversity of Housing. We collaborate with residents, housing providers, and the development community to provide housing opportunities for every stage of life; we plan for a variety of housing types and price points to encourage the development of housing supportive of our efforts to attract business in growing sectors of the community while being respectful of existing viable uses.

- Goal CE-2 Placemaking: A City of distinctive neighborhoods, districts, corridors, and centers where people choose to be.

- CE-2.1 *Development Projects*. We require new development and redevelopment to create unique, high-quality places that add value to the community.

- CE-2.2 *Development Review*. We require those proposing new development and redevelopment to demonstrate how their projects will create appropriately unique, functional, and sustainable places that will compete well with their competition within the region.

- CE-2.4 *Protection of Investment*. We require that new development and redevelopment protect existing investment by providing architecture and urban design of equal or greater quality.

- CE-2.5 *Private Maintenance*. We require adequate maintenance, upkeep, and investment in private property because proper maintenance on private property protects property values.

Community Design Element:

- Goal CD-2 Design Quality: A high level of design quality resulting in neighborhoods, public spaces, parks, and streetscapes that are attractive, safe, functional, human-scale, and distinct.

- CD-2.7 *Sustainability*. We collaborate with the development community to design and build neighborhoods, streetscapes, sites, outdoor spaces, landscaping, and buildings to reduce energy demand through solar orientation, maximum use of natural daylight, passive solar and natural ventilation, building form, mechanical and structural systems, building materials, and construction techniques.

- CD-2.13 *Entitlement Process*. We work collaboratively with all stakeholders to ensure a high degree of certainty in the efficient review and timely processing of all development plans and permits.

- Goal CD-5 Protection of Investment: A sustained level of maintenance and improvement of properties, buildings, and infrastructure that protects the property values and encourages additional public and private investments.

- CD-5.1 *Maintenance of Buildings and Property*. We require all public and privately-owned buildings and property (including trails and easements) to be properly and consistently maintained.

- CD-5.2 *Maintenance of Infrastructure*. We require the continual maintenance of infrastructure.

HOUSING ELEMENT COMPLIANCE: The Project is consistent with the Housing Element of the Policy Plan (general plan) component of The Ontario Plan, as the Project site is not one of the properties in the Housing Element Sites contained in Tables B-1 and B-2 (Housing Element Sites Inventory) of the Housing Element Technical Report.

ENVIRONMENTAL REVIEW: The environmental impacts of this Project were previously reviewed in conjunction with File No. PSP05-004, the Rich-Haven Specific Plan for which an Environmental Impact Report (SCH# 2006051081) was previously adopted by the City Council on December 4, 2007. This Application introduces no new significant environmental impacts. All previously adopted mitigation measures are a condition of Project approval and are incorporated herein by this reference.

Exhibit A:
RICH-HAVEN SPECIFIC PLAN LAND USE MAP (File No. PSP05-004)

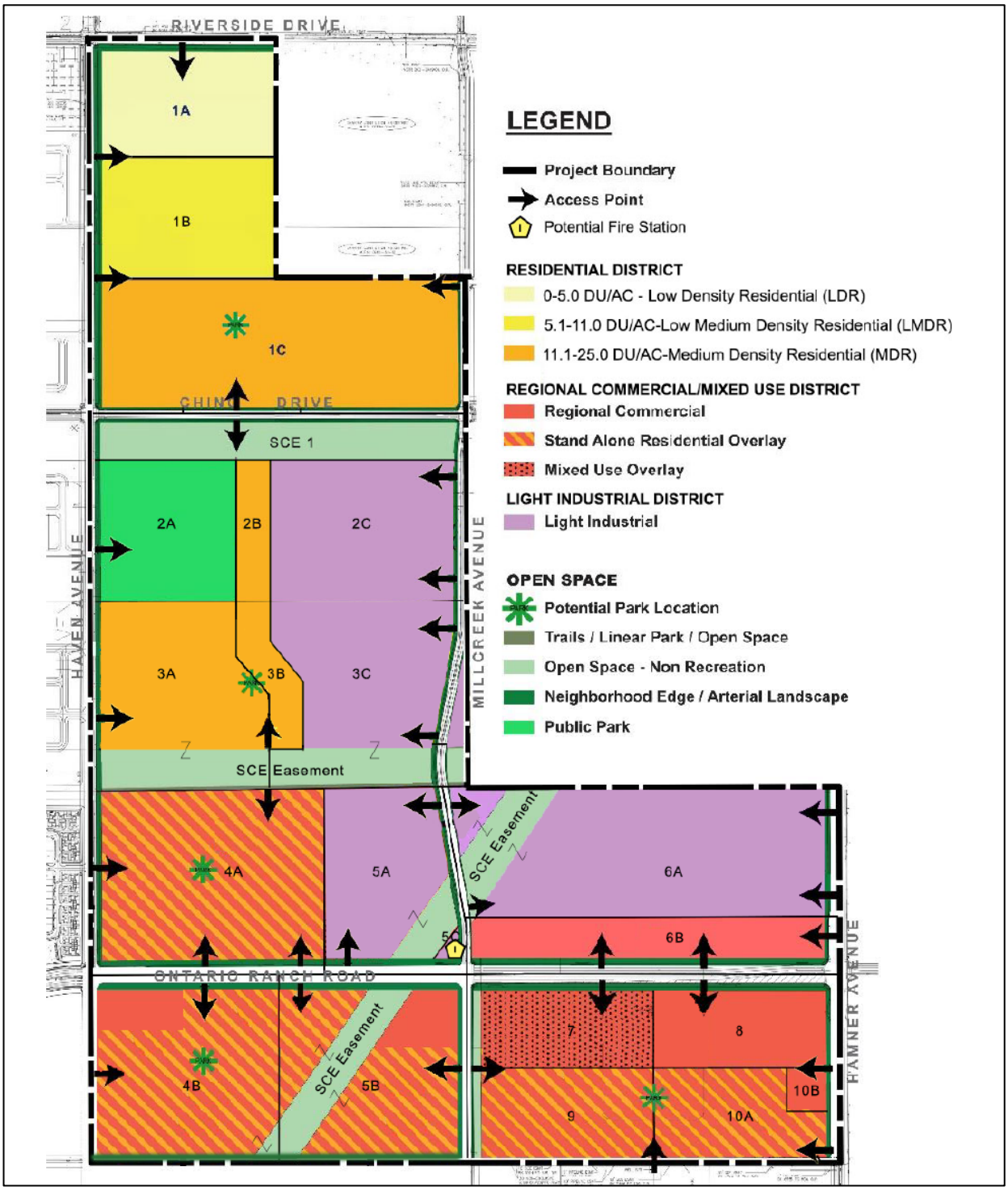
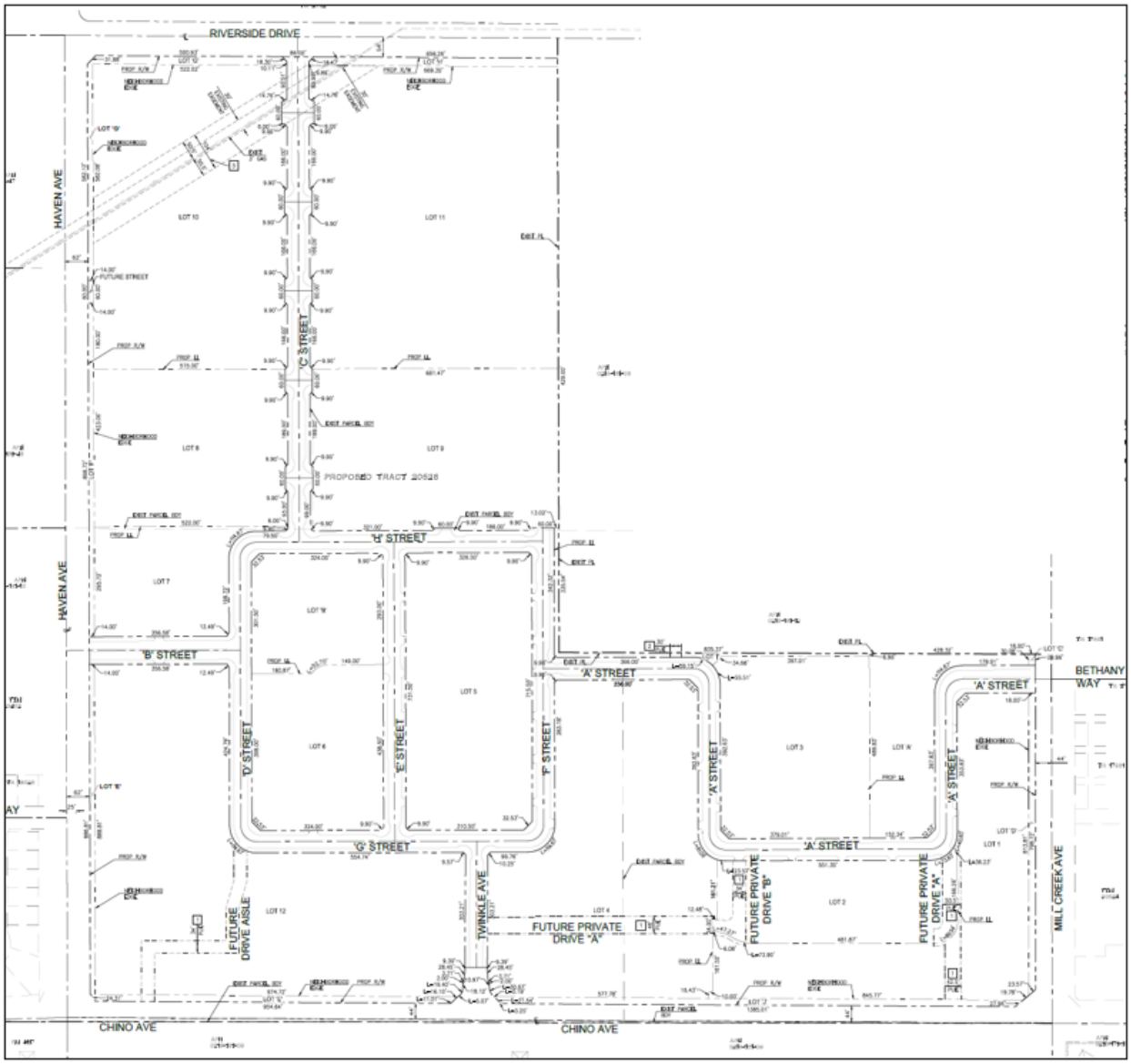


Exhibit B:
TENTATIVE TRACT MAP NO. 20526



RESOLUTION NO. PC25-010

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ONTARIO, CALIFORNIA, RECOMMENDING CITY COUNCIL APPROVE FILE NO. PDA22-004, A DEVELOPMENT AGREEMENT BETWEEN THE CITY OF ONTARIO AND, ROSEVILLE INVESTMENTS, LLC AND AMERICAN SUPERIOR LAND, LLC, TO ESTABLISH THE TERMS AND CONDITIONS ASSOCIATED WITH TENTATIVE TRACT MAP 20526 (FILE NO. PMTT22-012), LOCATED AT THE SOUTHEAST CORNER OF HAVEN AVENUE AND RIVERSIDE DRIVE, WITHIN PLANNING AREAS 1A, 1B, AND 1C OF THE RICH-HAVEN SPECIFIC PLAN (FILE NO. PSP05-004). (APNS: 0218-161-11, 0218-161-04, 0218-161-05, AND 0218-161-10).

WHEREAS, Richland Developers, Inc ("Applicant") has filed an Application for the approval of a Development Agreement, File No. PDA22-004, as described in the title of this Resolution (hereinafter referred to as "Application" or "Project"); and

WHEREAS, the Application applies to 106.1 gross acres of land, located at the southeast corner of Haven Avenue and Riverside Drive, within Planning Areas 1A, 1B, and 1C of the Rich-Haven Specific Plan (File No. PSP05-004); and

WHEREAS, the Applicant submitted Tentative Tract Map No. 20526 (File No. PMTT22-012), subdividing 106.1 gross acres of land into 12 numbered lots and 10 lettered lots for residential uses, a public school, private drives, landscape edges, and common open space purposes; and

WHEREAS, the environmental impacts of this Project were previously reviewed in conjunction with File No. PSP05-004, the Rich-Haven Specific Plan for which an Environmental Impact Report (SCH# 2006051081) was previously adopted by the City Council on December 4, 2007. This Application introduces no new significant environmental impacts; and

WHEREAS, the City's "Local Guidelines for the Implementation of the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed; and

WHEREAS, Ontario Development Code Table 2.02-1 (Review Matrix) grants the Planning Commission the responsibility and authority to review and make recommendations to the City Council on the subject Application; and

WHEREAS, the Project has been reviewed for consistency with the Housing Element of the Policy Plan component of The Ontario Plan, as State Housing Element

law (as prescribed in Government Code Sections 65580 through 65589.8) requires that development projects must be consistent with the Housing Element, if upon consideration of all its aspects, it is found to further the purposes, principals, goals, and policies of the Housing Element; and

WHEREAS, the Project is located within the Airport Influence Area of Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and is subject to, and must be consistent with, the policies and criteria set forth in the Ontario International Airport Land Use Compatibility Plan (hereinafter referred to as "ALUCP"), which applies only to jurisdictions within San Bernardino County, and addresses the noise, safety, airspace protection, and overflight impacts of current and future airport activity; and

WHEREAS, City of Ontario Development Code Division 2.03 (Public Hearings) prescribes the manner in which public notification shall be provided and hearing procedures to be followed, and all such notifications and procedures have been completed; and

WHEREAS, on February 25, 2025, the Planning Commission of the City of Ontario conducted a hearing to consider the Project, and concluded said hearing on that date; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED, AND RESOLVED by the Planning Commission of the City of Ontario, as follows:

SECTION 1: ***Environmental Determination and Findings.*** As the recommending authority for the Project, the Planning Commission has reviewed and considered the information contained in the previous Certified EIR and supporting documentation. Based upon the facts and information contained in the previous Certified EIR and supporting documentation, the Planning Commission finds as follows:

(1) the environmental impacts of this Project were previously reviewed in conjunction with File No. PSP05-004, the Rich-Haven Specific Plan for which an Environmental Impact Report (SCH# 2006051081) was previously adopted by the City Council on December 4, 2007. This Application introduces no new significant environmental impacts; and

(2) The previous Certified EIR contains a complete and accurate reporting of the environmental impacts associated with the Project; and

(3) The previous Certified EIR was completed in compliance with CEQA and the Guidelines promulgated thereunder; and

(4) The previous Certified EIR reflects the independent judgment of the Planning Commission; and

(5) The proposed project will introduce no new significant environmental impacts beyond those previously analyzed in the previous Certified EIR, and all mitigation measures previously adopted with the Certified EIR, are incorporated herein by this reference.

SECTION 2: ***Subsequent or Supplemental Environmental Review Not Required.*** Based on the information presented to the Planning Commission, and the specific findings set forth in Section 1, above, the Planning Commission finds that the preparation of a subsequent or supplemental Certified EIR is not required for the Project, as the Project:

(1) Does not constitute substantial changes to the Certified EIR that will require major revisions to the Certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and

(2) Does not constitute substantial changes with respect to the circumstances under which the Certified EIR was prepared, that will require major revisions to the Certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of the previously identified significant effects; and

(3) Does not contain new information of substantial importance that was not known and could not have been known with the exercise of reasonable diligence at the time the Certified EIR was certified/adopted, that shows any of the following:

(a) The project will have one or more significant effects not discussed in the Certified EIR; or

(b) Significant effects previously examined will be substantially more severe than shown in the Certified EIR; or

(c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the City declined to adopt such measures; or

(d) Mitigation measures or alternatives considerably different from those analyzed in the Certified EIR would substantially reduce one or more significant effects on the environment, but which the City declined to adopt.

SECTION 3: ***Housing Element Compliance.*** Pursuant to the requirements of California Government Code Chapter 3, Article 10.6, commencing with Section 65580, as the recommending authority for the Project, the Planning Commission finds that based on the facts and information contained in the Application and supporting documentation, at the time of Project implementation, the project is consistent with the Housing Element of the Policy Plan (General Plan) component of The Ontario Plan. The project site is not one of the properties in the Housing Element Sites contained in Tables B-1 and B-2 (Housing Element Sites Inventory) of the Housing Element Technical Report.

SECTION 4: ***Airport Land Use Compatibility Plan ("ALUCP") Compliance.*** The California State Aeronautics Act (Public Utilities Code Section 21670 et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

(1) On April 19, 2011, the City Council of the City of Ontario approved and adopted the Ontario International Airport Land use Compatibility Plan, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the recommending authority for the Project, the Planning Commission has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the PLANNING COMMISSION, therefore, finds and determines that the Project, is will be consistent with the policies and criteria set forth within the ONT ALUCP; and

(2) On August 2, 2022, the City Council of the City of Ontario approved and adopted a Development Code Amendment to establish the Chino Airport ("CNO") Overlay Zoning District ("OZD") and Reference I, Chino Airport Land Use Compatibility Plan ("CNO ALUCP"). The CNO OZD and CNO ALUCP established the Airport Influence Area for Chino Airport, solely within the City of Ontario, and limits future land uses and development within the Airport Influence Area, as they relate to safety, airspace protection, and overflight impacts of current and future airport activity. The CNO ALUCP

is consistent with policies and criteria set forth within the Caltrans 2011 California Airport Land Use Planning Handbook. The proposed Project is located within the Airport Influence Area of Chino Airport and was evaluated and found to be consistent with the California Airport Land Use Planning Handbook and the CNO ALUCP. As the recommending authority for the Project, the Planning Commission has reviewed and considered the facts and information contained in the Application and supporting documentation against the CNO ALUCP compatibility factors, including Safety, Airspace Protection, Overflight. As a result, the Planning Commission, therefore, finds and determines that the Project is consistent with the policies and criteria set forth within the California Airport Land Use Planning Handbook and the Chino ALUCP.

SECTION 5: ***Concluding Facts and Reasons.*** Based upon the substantial evidence presented to the Planning Commission during the above-referenced hearing, and upon the specific findings set forth in Section 1 through 4, above, the Planning Commission hereby concludes as follows:

(1) The Development Agreement applies to approximately 106.1 gross acres of land located at the southeast corner of Haven Avenue and Riverside Drive, within Planning Areas 1A, 1B, and 1C of the Rich-Haven Specific Plan (File No. PSP05-004); and

(2) The Development Agreement establishes parameters for the development of land within the Rich-Haven Specific Plan. The Development Agreement also grants the Applicant, the right to develop, the ability to quantify the fees; and establish the terms and conditions that apply to those projects. These terms and conditions are consistent with The Ontario Plan Policy Plan (General Plan), design guidelines and development standards for the Rich-Haven Specific Plan; and

(3) The Development Agreement grants the Applicant a vested right to develop Tentative Tract Map 20526 (File No. PMTT22-012) as long as the Applicant complies with the terms and conditions of the Rich-Haven Specific Plan and EIR. Tentative Tract Map 20526 is located at the southeast corner of Haven Avenue and Riverside Drive, within Planning Areas 1A, 1B, and 1C of the Rich-Haven Specific Plan, and proposes to subdivide 106.1 gross acres of land into 12 numbered lots and 10 lettered lots for residential uses, a public school, private drives, landscape edges, and common open space purposes; and

(4) The Development Agreement has been prepared in conformance with the goals and policies of The Ontario Plan Policy Plan (General Plan); and

(5) The Development Agreement does not conflict with the Land Use Policies of The Ontario Plan Policy Plan (General Plan) and will provide for development, within

the district, in a manner consistent with the Policy Plan and with related development; and

(6) This Development Agreement will promote the goals and objectives of the Land Use Element of the Policy Plan; and

(7) This Development Agreement will not be materially injurious or detrimental to the adjacent properties and will not have a significant impact on the environment or the surrounding properties for which a Subsequent Environmental Impact Report (SCH# 2006051081) was previously adopted by the City Council on December 4, 2007; and

(8) This Application introduces no new significant environmental impacts. All previously adopted mitigation measures are a condition of project approval and are incorporated herein by this reference.

SECTION 6: ***Planning Commission Action.*** Based upon the findings and conclusions set forth in Sections 1 through 5, above, the Planning Commission hereby RECOMMENDS THE CITY COUNCIL APPROVE the herein described Application, subject to each and every condition set forth in the Development Agreement (File No. PDA22-004 attached hereto as "Attachment A," and incorporated herein by this reference.

SECTION 7: ***Indemnification.*** The Applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void, or annul this approval. The City of Ontario shall promptly notify the applicant of any such claim, action, or proceeding, and the City of Ontario shall cooperate fully in the defense.

SECTION 8: ***Custodian of Records.*** The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East "B" Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario.

SECTION 9: ***Certification to Adoption.*** The Secretary shall certify to the adoption of the Resolution.

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The Secretary Pro Tempore for the Planning Commission of the City of Ontario shall certify as to the adoption of this Resolution.

I hereby certify that the foregoing Resolution was duly and regularly introduced, passed and adopted by the Planning Commission of the City of Ontario at a special meeting thereof held on the 25th of February, 2025, and the foregoing is a full, true and correct copy of said Resolution, and has not been amended or repealed.

Nicola Ricci
Planning Commission Chairperson

ATTEST:

Henry K. Noh
Planning Director and
Secretary to the Planning Commission

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO)
CITY OF ONTARIO)

I, Gwen Berendsen, Secretary Pro Tempore of the Planning Commission of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. PC25-010, was duly passed and adopted by the Planning Commission of the City of Ontario at their regular meeting held on February 25, 2025, by the following roll call vote, to wit:

AYES: DeDiemar, Gage, Lampkin, Ricci

NOES: None

ABSENT: Anderson

ABSTAIN: None

Gwen Berendsen
Secretary Pro Tempore

ATTACHMENT A:

FILE NO. PDA22-004

DEVELOPMENT AGREEMENT

By and Between

City of Ontario
a California municipal corporation

and

Roseville Investments, LLC
a Delaware limited liability company

and

American Superior Land, LLC
a Florida limited liability company

(Development Agreement to follow this page)

RECORDING REQUESTED BY AND
WHEN RECORDED MAIL TO:

CITY OF ONTARIO
CITY CLERK / RECORDS MANAGEMENT
303 EAST "B" STREET
ONTARIO, CA 91764-4196

Exempt from Fees Per Gov. Code § 6103

Space above this line for Recorder's Use Only

FILE NO. PDA22-004

DEVELOPMENT AGREEMENT

By and Between

City of Ontario
a California municipal corporation

and

Roseville Investments, LLC
a Delaware limited liability company

and

American Superior Land, LLC
a Florida limited liability company

_____, 2025

San Bernardino County, California

DEVELOPMENT AGREEMENT PDA22-004

This Development Agreement (hereinafter "Agreement") is entered into effective as of the ____ day of _____, 2025 by and among the City of Ontario, a California municipal corporation (hereinafter "CITY"), and, Roseville Investments, LLC, American Superior Land, LLC, (hereinafter "OWNER"):

RECITALS

WHEREAS, CITY is authorized to enter into binding development agreements with persons having legal or equitable interests in real property for the development of such property, pursuant to Section 65864, et seq. of the Government Code; and

WHEREAS, OWNER has requested CITY to enter into a development agreement and proceedings have been taken in accordance with the rules and regulations of CITY; and

WHEREAS, by electing to enter into this Agreement, CITY shall bind future City Councils of CITY by the obligations specified herein and limit the future exercise of certain governmental and proprietary powers of CITY; and

WHEREAS, the terms and conditions of this Agreement have undergone extensive review by CITY and the City Council and have been found to be fair, just and reasonable; and

WHEREAS, the best interests of the citizens of the CITY and the public health, safety and welfare will be served by entering into this Agreement; and

WHEREAS, all of the procedures of the California Environmental Quality Act have been met with respect to the Project and the Agreement in that Rich Haven Specific Plan (State Clearinghouse No. 2006051081 (the "FEIR"). The City Council found and determined that the FEIR was prepared in accordance with the requirements of the California Environmental Quality Act and adequately describes the impacts of the project described in the FEIR, which included consideration of this Agreement; and

WHEREAS, this Agreement and the Project are consistent with the CITY's Comprehensive General Plan and the Rich Haven Specific Plan; and

WHEREAS, all actions taken and approvals given by CITY have been duly taken or approved in accordance with all applicable legal requirements for notice, public hearings, findings, votes, and other procedural matters; and

WHEREAS, development of the Property in accordance with this Agreement will provide substantial benefits to CITY and will further important policies and goals of CITY; and

WHEREAS, this Agreement will eliminate uncertainty in planning and provide for the orderly development of the Property, ensure progressive installation of necessary

improvements, provide for public services appropriate to the development of the Project, and generally serve the purposes for which development agreements under Sections 65864 et seq. of the Government Code are intended; and

WHEREAS, OWNER has incurred and will in the future incur substantial costs in excess of the generally applicable requirements in order to assure vesting of legal rights to develop the Property in accordance with this Agreement.

WHEREAS, the Property is located in an area of the City of Ontario that has been known as the "New Model Colony" area and the New Model Colony area has now been renamed as "Ontario Ranch."

COVENANTS

NOW, THEREFORE, in consideration of the above recitals and of the mutual covenants hereinafter contained and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. DEFINITIONS AND EXHIBITS.

1.1 Definitions. The following terms when used in this Agreement shall be defined as follows:

1.1.1 "Agreement" means this Development Agreement.

1.1.2 "CITY" means the City of Ontario, California, a California municipal corporation.

1.1.3 "Construction Agreement" means that certain Agreement for the Financing and Construction of Phases I and II Infrastructure Improvements to Serve an Easterly Portion of the New Model Colony, entered into between the CITY and NMC Builders as of the 4th day of October, 2005, and all amendments thereto and "Construction Agreement Amendment" means that First Amended and Restated Agreement for the Financing and Construction of Limited Infrastructure Improvements to Serve and Easterly Portion of the New Model Colony entered into between the CITY and NMC Builders as of the 21st day of August 2012.

1.1.4 "Development" means the improvement of the Property for the purposes of completing the structures, improvements and facilities comprising the Project including, but not limited to: grading; the construction of public infrastructure and public facilities related to the Project whether located within or outside the Property; the construction of buildings and structures; and the installation of landscaping. "Development" does not include the maintenance, repair, reconstruction or redevelopment of any building, structure, improvement or facility after the construction and completion thereof.

1.1.5 "Development Approvals" means all permits and other entitlements for use subject to approval or issuance by CITY in connection with development of the Property including, but not limited to:

(a) specific plans and specific plan amendments;

(b) tentative and final subdivision and parcel maps;

(c) development plan review;

(d) conditional use permits (including model home use permits), public use permits and plot plans;

(e) zoning;

(f) grading and building permits.

1.1.6 "Development Exaction" means any requirement of CITY in connection with or pursuant to any Land Use Regulation or Development Approval for the dedication of land, the construction of improvements or public facilities, or the payment of fees in order to lessen, offset, mitigate or compensate for the impacts of development on the environment or other public interests.

1.1.7 "Development Impact Fee" means a monetary exaction, other than a tax or special assessment, whether characterized as a fee or a tax and whether established for a broad class of projects by legislation of general applicability or imposed on a specific project on an ad hoc basis, that is charged by a local agency to the applicant in connection with approval of a development project for the purpose of defraying all or a portion of the cost of public facilities related to the development project, and, for purposes of this Agreement only, includes fees collected under development agreements adopted pursuant to Article 2.5 of the Government Code (commencing with Section 65864) of Chapter 4, For purposes of this Agreement only, "Development Impact Fee" shall not include processing fees and charges imposed by CITY to cover the estimated actual costs to CITY of processing applications for Development Approvals or for monitoring compliance with any Development Approvals granted or issued, including, without limitation, fees for zoning variances; zoning changes; use permits; building inspections; building permits; filing and processing applications and petitions filed with the local agency formation commission or conducting preliminary proceedings or proceedings under the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000, Division 3 (commencing with Section 56000) of Title 5 of the Government Code; the processing of maps under the provisions of the Subdivision Map Act, Division 2 (commencing with Section 66410) of Title 7 of the Government Code; or planning services under the authority of Chapter 3 (commencing with Section 65100) of Division 1 of Title 7 of the Government Code, fees and charges as described in Sections 51287, 56383, 57004, 65104, 65456, 65863.7, 65909.5, 66013, 66014, and 66451.2 of the Government Code, Sections 17951, 19132.3, and 19852 of the Health and Safety Code, Section 41901 of the Public Resources Code, and Section 21671.5 of the Public Utilities Code, as such codes may be amended or superceded, including by amendment or replacement.

1.1.8 "Development Plan" means the Existing Development Approvals and the Existing Land Use Regulations applicable to development of the Property.

1.1.9 “Effective Date” means the date that the ordinance approving this Agreement goes into effect.

1.1.10 “Existing Development Approvals” means all Development Approvals approved or issued prior to the Effective Date. Existing Development Approvals includes the Approvals incorporated herein as Exhibit “C” and all other Approvals which are a matter of public record on the Effective Date.

1.1.11 “Existing Land Use Regulations” means all Land Use Regulations in effect on the Effective Date. Existing Land Use Regulations includes the Regulations incorporated herein as Exhibit “D” and all other Land Use Regulations that are in effect and a matter of public record on the Effective Date.

1.1.12 “General Plan” means the General Plan adopted on August 16, 2022.

1.1.13 “Improvement” or “Improvements” means those public improvements required to support the development of the Project as described in the Tract Map conditions for Tract No.20526 as further described in Exhibit “F” (the “Infrastructure Improvements Exhibit”).

1.1.14 “Land Use Regulations” means all ordinances, resolutions, codes, rules, regulations and official policies of CITY governing the development and use of land, including, without limitation, the permitted use of land, the density or intensity of use, subdivision requirements, timing and phasing of development, the maximum height and size of buildings, the provisions for reservation or dedication of land for public purposes, and the design, improvement and construction standards and specifications applicable to the development of the Property. “Land Use Regulations” does not include any CITY ordinance, resolution, code, rule, regulation or official policy, governing:

(a) the conduct of businesses, professions, and occupations;

(b) taxes and assessments;

(c) the control and abatement of nuisances;

(d) the granting of encroachment permits and the conveyance of similar rights and interests that provide for the use of or the entry upon public property;

(e) the exercise of the power of eminent domain.

1.1.15 “Mortgagee” means a mortgagee of a mortgage, a beneficiary under a deed of trust or any other security-device lender, and their successors and assigns.

1.1.16 “Model Units” includes model units, private common recreation facilities and sales facilities constructed by OWNER prior to the construction of any Production units and not offered for sale and occupancy for a period of time after the issuance of permits for Production Units.

1.1.17 “Net MDD” means net maximum daily water demand.

1.1.18 “NMC Builders” means the consortium of investors and developers responsible for the construction of infrastructure within the New Model Colony incorporated as NMC Builders, LLC.

1.1.19 “OWNER” means the persons and entities listed as owner on page 1 of this Agreement and their permitted successors in interest to all or any part of the Property.

1.1.20 “Phase 2 Water EDUs” means the number of equivalent dwelling units or non-residential square footage assigned to OWERN upon payment to CITY of the Phase 2 Water Participation Fee for the Project and evidenced by the issuance by CITY of a Certificate of Phase 2 Net MDD Availability in the form attached as Exhibit “G”. 1.1.21 “Phase 2 Water Improvements” means the future water infrastructure Improvements required for the issuance by CITY of the “Water Availability Equivalents” (WAE) for the Project.

1.1.21 “Phase 2 Water Participation Fee” means the fee paid to City upon City approval of the first Development Entitlement for the Project, to fund the Property’s respective share of the projected costs of the design and construction of the Phase 2 Water Improvements by City. The Phase 2 Water Participation Fee shall be the calculated amount of the Regional Water DIF for the Project based upon the number of units, and land use category for residential units or the number of square feet, and land use category for non-residential square footage of the Project.

1.1.22 “Production Unit(s)” means all units constructed for sale and occupancy by OWNER and excludes the specified number of Model Units constructed by OWNER for promotion of sales.

1.1.23 “Project” means the development of the Property contemplated by the Development Plan, as such Plan may be further defined, enhanced or modified pursuant to the provisions of this Agreement.

1.1.24 “Property” means the real property described on Exhibit “A” and shown on Exhibit “B” to this Agreement.

1.1.25 “Reservations of Authority” means the rights and authority excepted from the assurances and rights provided to OWNER under this Agreement and reserved to CITY under Section 3.6 of this Agreement.

1.1.26 “Specific Plan” means that certain specific plan adopted by the City Council, and entitled, “Rich Haven Specific Plan.”

1.1.27 "Storm Water Treatment Capacity Availability” means a designated portion of the total Storm Water Treatment Capacity Availability made available through the completion of construction of a Phase of regional storm water treatment facilities by the NMC Builders LLC as described in the Construction Agreement Amendment. The amount, in acres, of Storm Water Treatment Capacity Availability required for the

issuance of a grading permit shall be based upon the factors and assumptions listed in the Construction Agreement Amendment.

1.1.28 "Subsequent Development Approvals" means all Development Approvals required subsequent to the Effective Date in connection with development of the Property.

1.1.29 "Subsequent Land Use Regulations" means any Land Use Regulations adopted and effective after the Effective Date of this Agreement.

1.1.30 "Water Availability Equivalent (WAE)" means a designated portion of the total Net MDD made available through the construction of each Phase described in the Water Phasing Plan of the Construction Agreement. The number of Water Availability Equivalents (of portions thereof) required for the issuance of each building permit shall be based upon water demand factors and assumptions listed in the Construction Agreement and Construction Agreement Amendment as "Water Availability Equivalents by Land Use" for each land use category.

1.1.31 "Amendment to the Construction Agreement" means the amendment to the Construction Agreement modifying the boundaries of the property in Exhibit A of such Construction Agreement to include the Property covered by this Agreement and to provide for the additional funds required for CITY's future construction of the "Phase 2 Water Improvements" described in a modification to Exhibit C-3 of the Construction Agreement.

1.2 Exhibits. The following documents are attached to, and by this reference made a part of, this Agreement:

Exhibit "A" — Legal Description of the Property.

Exhibit "B" — Map showing Property and its location.

Exhibit "C" — Existing Development Approvals.

Exhibit "D" — Existing Land Use Regulations.

Exhibit "E" — Description of Required Infrastructure Improvements

Exhibit "F" — Depiction of Required Infrastructure Improvements and Phasing

Exhibit "G" - Form of Certificate of Net MDD to be issued by CITY

Exhibit "H" – Form of Certificate of DIF Credit to be issued by CITY

Exhibit "I-1" – Ontario Ranch Water Supply Phasing Plan

Exhibit "I-2" - Water Demand Equivalents by Land Use

Exhibit "J" - Form of Plume Disclosure Letter

2. GENERAL PROVISIONS.

2.1 Binding Effect of Agreement. The Property is hereby made subject to this Agreement. Development of the Property is hereby authorized and shall be carried out only in accordance with the terms of this Agreement.

2.2 Ownership of Property. OWNER represents and covenants that it is the owner of the fee simple title to the Property or a portion thereof, or has the right to acquire fee simple title to the Property or a portion thereof from the current owner(s) thereof. To the extent OWNER does not own fee simple title to the Property, OWNER shall obtain written consent from the current fee owner of the Property agreeing to the terms of this Agreement and the recordation thereof.

2.3 Term. The term of this Agreement shall commence on the Effective Date and shall continue for an initial term of ten (10) years thereafter unless this term is modified or extended pursuant to the provisions of this Agreement. The term of this Agreement may be extended for an additional five (5) years following expiration of the initial ten (10) year term, provided the following have occurred:

(a) OWNER provides at least 180 days written notice to CITY prior to expiration of the initial term; and

(b) In non-mixed use and residential use only projects, the OWNER shall have obtained, as applicable, building permits for at least seventy percent (70%) of the actual number of residential units permitted under this Agreement; and

(c) OWNER is not then in uncured default of this Agreement.

2.4 Assignment.

2.4.1 Right to Assign. OWNER shall have the right to sell, transfer or assign the Property in whole or in part (provided that no such partial transfer shall violate the Subdivision Map Act, Government Code Section 66410, et seq.), to any person, partnership, limited liability company, joint venture, firm or corporation at any time during the term of this Agreement; provided, however, that any such sale, transfer or assignment shall include the assignment and assumption of the rights, duties and obligations arising under or from this Agreement and be made in strict compliance with the following:

(a) No sale, transfer or assignment of any right or interest under this Agreement shall be made unless made together with the sale, transfer or assignment of all or a part of the Property. OWNER may be required to provide disclosure that the Property is within the South Archibald Trichloroethylene (TCE) Plume. OWNER may wish to provide the attached Disclosure Letter (Exhibit G) as part of the Real Estate Transfer Disclosure requirements under California Civil Code Section 1102 et seq.(b)

(b) Concurrent with any such sale, transfer or assignment, or within fifteen (15) business days thereafter, OWNER shall notify CITY's City Manager, in writing, of such sale, transfer or assignment and shall provide CITY with: (1) an executed

agreement, in a form reasonably acceptable to CITY, by the purchaser, transferee or assignee and providing therein that the purchaser, transferee or assignee expressly and unconditionally assumes all the duties and obligations of OWNER under this Agreement with respect to the portion of the Property so sold, transferred or assigned; and (2) the payment of the applicable processing charge to cover the CITY's review and consideration of such sale, transfer or assignment.

(c) Any sale, transfer or assignment not made in strict compliance with the foregoing conditions shall constitute a default by OWNER under this Agreement. Notwithstanding the failure of any purchaser, transferee or assignee to execute the agreement required by Paragraph (b) of this Subsection 2.4.1, the burdens of this Agreement shall be binding upon such purchaser, transferee or assignee, but the benefits of this Agreement shall not inure to such purchaser, transferee or assignee until and unless such agreement is executed. The City Manager shall have the authority to review, consider and either approve, conditionally approve, or deny any proposed sale, transfer or assignment that is not made in compliance with this section 2.4.

2.4.2 Release of Transferring Owner. Notwithstanding any sale, transfer or assignment, a transferring OWNER shall continue to be obligated under this Agreement unless such transferring owner is given a release in writing by CITY, which release shall be provided by CITY upon the full satisfaction by such transferring owner of the following conditions:

(a) OWNER no longer has a legal or equitable interest in all or any part of the portion of the Property sold, transferred or assigned.

(b) OWNER is not then in default under this Agreement.

(c) OWNER has provided CITY with the notice and executed agreement required under Paragraph (b) of Subsection 2.4.1 above.

(d) The purchaser, transferee or assignee provides CITY with security equivalent to any security previously provided by OWNER to secure performance of its obligations hereunder.

2.4.3 Effect of Assignment and Release of Obligations. In the event of a sale, transfer or assignment pursuant to the provisions of Section 2.4.2 above:

(a) The assignee shall be liable for the performance of all obligations of OWNER with respect to transferred property, but shall have no obligations with respect to the portions of the Property, if any, not transferred (the "Retained Property").

(b) The owner of the Retained Property shall be liable for the performance of all obligations of OWNER with respect to Retained Property, but shall have no further obligations with respect to the transferred property.

(c) The assignee's exercise, use and enjoyment of the Property or portion thereof shall be subject to the terms of this Agreement to the same extent as if the assignee were the OWNER.

2.4.4 Subsequent Assignment. Any subsequent sale, transfer or assignment after an initial sale, transfer or assignment shall be made only in accordance with and subject to the terms and conditions of this Section 2.4.

2.4.5 Termination of Agreement with Respect to Individual Lots Upon Sale to Public and Completion of Construction. The provisions of Subsection 2.4.1 shall not apply to the sale or lease (for a period longer than one year) of any lot which has been finally subdivided and is individually (and not in "bulk") sold or leased to a member of the public or other ultimate user. Notwithstanding any other provisions of this Agreement, this Agreement shall terminate with respect to any lot and such lot shall be released and no longer be subject to this Agreement without the execution or recordation of any further document upon satisfaction of both of the following conditions:

(a) The lot has been finally subdivided and individually (and not in "bulk") sold or leased (for a period longer than one year) to a member of the public or other ultimate user; and,

(b) A certificate of occupancy has been issued for a building on the lot, and the fees set forth under Section 4 of this Agreement have been paid.

2.4.6 Partial Assignment and Assumption. CITY and OWNER agree OWNER may partially assign its obligations and rights under this Agreement, and all amendments hereto, to a purchaser, transferee or assignee of a lot, which has been subdivided subject to provisions of a partial assignment and assumption agreement in a form approved by CITY. Any such complete and executed partial assignment and assumption of this Agreement shall be submitted to CITY for approval pursuant to Section 2.4.1 of this Agreement. CITY shall review, and if the above conditions, including but not limited to, those conditions in Section 2.4.2, are satisfied, CITY may approve the partial assignment and release and notify the purchaser, transferee or assignee in writing thereof. No such release approved pursuant to this Subsection 2.4.6 shall cause, or otherwise affect, a release of OWNER from the duties and obligations under this Agreement that are retained by OWNER and excluded from the transfer or assignment.

2.5 Amendment or Cancellation of Agreement. This Agreement may be amended or cancelled in whole or in part only in the manner provided for in Government Code Section 65868.1. Any amendment of this Agreement, which amendment has been requested by OWNER, shall be considered by the CITY only upon the payment of the applicable processing charge. This provision shall not limit any remedy of CITY or OWNER as provided by this Agreement. Either Party or successor in interest, may propose an amendment to or cancellation, in whole or in part, of this Agreement. Any amendment or cancellation shall be by mutual consent of the parties or their successors in interest except as provided otherwise in this Agreement or in Government Code Section 65865.1. For purposes of this section, the term "successor in interest" shall mean

any person having a legal or equitable interest in the whole of the Property, or any portion thereof as to which such person wishes to amend or cancel this Agreement. The procedure for proposing and adopting an amendment to, or cancellation of, in whole or in part, this Agreement shall be the same as the procedure for adopting and entering into this Agreement in the first instance. Notwithstanding the foregoing sentence, if the CITY initiates the proposed amendment to, or cancellation of, in whole or in part, this Agreement, CITY shall first give notice to the OWNER of its intention to initiate such proceedings at least sixty (60) days in advance of the giving the public notice of intention to consider the amendment or cancellation.

2.5.1 Amendment to Reflect Consistency With Future Amendments to the Construction Agreement. To the extent any future amendment to the Construction Agreement provides for modifications to rights or obligations that differ from or alter the same or similar rights or obligations contained in this Development Agreement, OWNER reserves the right to request an amendment to the Development Agreement to reflect any or all of such modifications.

2.5.2 Minor Modification. Upon the written application of OWNER, minor modifications and changes to the Development Plan including modifications to building design or footprint (not affecting minimum setbacks), parking layout and design, and landscape area design may be approved by the Director of the Planning Department without the need to amend this Development Agreement. Other changes in the Development Plan shall be processed pursuant to the City Zoning Ordinance. It is also contemplated by CITY and OWNER that OWNER may, from time to time, seek amendments to one or more of the Development Approvals. Any such amendments are contemplated by CITY and OWNER as being within the scope of this Agreement as long as they are consistent with the Land Use Regulations and shall, upon approval by CITY, continue to constitute the Development Approvals as referenced herein. The parties agree that any such modifications or amendments shall not constitute an amendment to this Agreement nor require an amendment to this Agreement.

2.6 Termination. This Agreement shall be deemed terminated and of no further effect upon the occurrence of any of the following events:

(a) Expiration of the stated term of this Agreement as set forth in Section 2.3. (b) Entry of a final judgment setting aside, voiding or annulling the adoption of the ordinance approving this Agreement.

(c) The adoption of a referendum measure overriding or repealing the ordinance approving this Agreement.

(d) Completion of the Project in accordance with the terms of this Agreement including issuance of all required occupancy permits and acceptance by CITY or applicable public agency of all required dedications.

Termination of this Agreement shall not constitute termination of any other land use entitlements approved for the Property. Upon the termination of this Agreement,

no party shall have any further right or obligation hereunder except with respect to any obligation to have been performed prior to such termination or with respect to any default in the performance of the provisions of this Agreement which has occurred prior to such termination or with respect to any obligations which are specifically set forth as surviving this Agreement. Upon such termination, any public facilities and services mitigation fees paid pursuant to Section 4.2 of this Agreement by OWNER to CITY for residential units on which construction has not yet begun shall be refunded to OWNER by CITY.

2.7 Notices.

(a) As used in this Agreement, "notice" includes, but is not limited to, the communication of notice, request, demand, approval, statement, report, acceptance, consent, waiver, appointment or other communication required or permitted hereunder.

(b) All notices shall be in writing and shall be considered given either: (i) when delivered in person, including, without limitation, by courier, to the recipient named below; or (ii) on the date of delivery shown on the return receipt, after deposit in the United States mail in a sealed envelope as either registered or certified mail with return receipt requested, and postage and postal charges prepaid, and addressed to the recipient named below. All notices shall be addressed as follows:

If to CITY:
Scott Ochoa, City Manager
City of Ontario
303 East "B" Street
Ontario, CA 91764

with a copy to:
Ruben Duran, City Attorney
Best Best & Krieger, LLP
2855 E Guasti Road
Ontario, CA 91761

If to OWNER:
Richland
Attn: Craig Cristina, Vice President
3161 Michelson Drive, Suite 425
Irvine, CA 92612

with a copy to:
Richland
Attn: Legal Department
3161 Michelson Drive, Suite 425
Irvine, CA 92612

(c) Either party may, by notice given at any time, require subsequent notices to be given to another person or entity, whether a party or an officer or representative of a party, or to a different address, or both. Notices given before actual receipt of notice of change shall not be invalidated by the change.

3. DEVELOPMENT OF THE PROPERTY.

3.1 Rights to Develop. Subject to the terms of this Agreement including the Reservations of Authority, OWNER shall have a vested right to develop the Property in accordance with, and to the extent of, the Development Plan. The Project shall remain subject to all Subsequent Development Approvals required to complete the Project as contemplated by the Development Plan. Except as otherwise provided in this Agreement,

the permitted uses of the Property, the density and intensity of use, the maximum height and size of proposed buildings, and provisions for reservation and dedication of land for public purposes shall be those set forth in the Development Plan.

3.2 Effect of Agreement on Land Use Regulations. Except as otherwise provided under the terms of this Agreement including the Reservations of Authority, the rules, regulations and official policies governing permitted uses of the Property, the density and intensity of use of the Property, the maximum height and size of proposed buildings, and the design, improvement and construction standards and specifications applicable to development of the Property shall be the Existing Land Use Regulations. In connection with any Subsequent Development Approval, CITY shall exercise discretion in accordance with the same manner as it exercises its discretion under its police powers, including the Reservations of Authority set forth herein; provided however, that such discretion shall not prevent development of the Property for the uses and to the density or intensity of development set forth in this Agreement.

3.3 Timing of Development. The parties acknowledge that OWNER cannot at this time predict when or the rate at which phases of the Property will be developed. Such decisions depend upon numerous factors which are not within the control of OWNER, such as market orientation and demand, interest rates, absorption, completion and other similar factors. Since the California Supreme Court held in Pardee Construction Co. v. City of Camarillo (1984) 37 Ca1. 3d 465, that the failure of the parties therein to provide for the timing of development resulted in a later adopted initiative restricting the timing of development to prevail over such parties' agreement, it is the parties' intent to cure that deficiency by acknowledging and providing that OWNER shall have the right to develop the Property in such order and at such rate and at such times as OWNER deems appropriate within the exercise of its subjective business judgment.

3.4 Requirement for Public Infrastructure Improvements. Development of the Property is contingent in part on the phasing of area-wide infrastructure improvements over which the OWNER has control. The issuance of building permits by CITY for Model Units and Production Units is, in general, contingent on OWNER's completion of needed infrastructure improvements and the availability of improvements and services to serve the Property.

3.4.1 Attached hereto as Exhibit "F" is a description of the infrastructure improvements needed for the development of the Property ("the Infrastructure Improvement Exhibit").

3.4.2 Construction of Model Units, private common recreation facilities, and sales facilities is subject to plan submittal by OWNER and approval by CITY. Said plan shall illustrate that adequate public infrastructure is available to serve these uses, and shall describe the utilities and other infrastructure necessary to provide sufficient fire protection and other public health and safety requirements.

3.5 Changes and Amendments. The parties acknowledge that refinement and further development of the Project will require Subsequent Development Approvals and

may demonstrate that changes are appropriate and mutually desirable in the Existing Development Approvals. In the event OWNER finds that a change in the Existing Development Approvals is necessary or appropriate, OWNER shall apply for a Subsequent Development Approval to effectuate such change, and CITY shall process and act on such application in accordance with the Existing Land Use Regulations, except as otherwise provided by this Agreement including the Reservations of Authority. If approved, any such change in the Existing Development Approvals shall be incorporated herein as an addendum to Exhibit "C" and may be further changed from time to time as provided in this Section. Unless otherwise required by law, as determined in CITY's reasonable discretion, a change to the Existing Development Approvals shall be deemed "minor" and not require an amendment to this Agreement provided such change does not:

(a) Alter the permitted uses of the Property as a whole; or,

(b) Increase the density or intensity of use of the Property as a whole; or,

(c) Increase the maximum height and size of permitted buildings; or,

(d) Delete a requirement for the reservation or dedication of land for public purposes within the Property as a whole; or,

(e) Constitute a project requiring a subsequent or supplemental environmental impact report pursuant to Section 21166 of the Public Resources Code.

3.6 Reservations of Authority.

3.6.1 Limitations, Reservations and Exceptions. Notwithstanding any other provision of this Agreement, the CITY shall not be prevented from applying new rules, regulations and policies upon the OWNER, nor shall a development agreement prevent the CITY from denying or conditionally approving any subsequent development project application on the basis of such new rules, regulations and policies where the new rules, regulations and policies consist of the following:

(a) Processing fees by CITY to cover costs of processing applications for development approvals or for monitoring compliance with any development approvals;

(b) Procedural regulations relating to hearing bodies, petitions, applications, notices, findings, records and any other matter of procedure;

(c) Regulations, policies and rules governing engineering and construction standards and specifications applicable to public and private improvements, including all uniform codes adopted by the

CITY and any local amendments to those codes adopted by the CITY; provided however that, OWNER shall have a vested right to develop the Property in accordance with, and to the extent of, the standards and specifications that are expressly identified in the Specific Plan;

(d) Regulations that may conflict with this Agreement and the Development Plan but that are reasonably necessary to protect the residents of the project and/or of the immediate community from a condition perilous to their health or safety;

(e) Regulations that do not conflict with those rules, regulations and policies set forth in this Agreement or the Development Plan;

(f) Regulations that may conflict but to which the OWNER consents.

3.6.2 Subsequent Development Approvals. This Agreement shall not prevent CITY, in acting on Subsequent Development Approvals, from applying Subsequent Land Use Regulations that do not conflict with the Development Plan, nor shall this Agreement prevent CITY from denying or conditionally approving any Subsequent Development Approval on the basis of the Existing Land Use Regulations or any Subsequent Land Use Regulation not in conflict with the Development Plan.

3.6.3 Modification or Suspension by State or Federal Law. In the event that State or Federal laws or regulations, enacted after the Effective Date of this Agreement, prevent or preclude compliance with one or more of the provisions of this Agreement, such provisions of this Agreement shall be modified or suspended as may be necessary to comply with such State or Federal laws or regulations, provided, however, that this Agreement shall remain in full force and effect to the extent it is not inconsistent with such laws or regulations and to the extent such laws or regulations do not render such remaining provisions impractical to enforce. In the event OWNER alleges that such State or Federal laws or regulations preclude or prevent compliance with one or more provisions of this Agreement, and the CITY does not agree, the OWNER may, at its sole cost and expense, seek declaratory relief (or other similar non-monetary remedies); provided however, that nothing contained in this Section 3.6.3 shall impose on CITY any monetary liability for contesting such declaratory relief (or other similar non-monetary relief).

3.6.4 Intent. The parties acknowledge and agree that CITY is restricted in its authority to limit its police power by contract and that the foregoing limitations, reservations and exceptions are intended to reserve to CITY all of its police power which cannot be so limited. This Agreement shall be construed, contrary to its stated terms if necessary, to reserve to CITY all such power and authority which cannot be restricted by contract.

3.7 Public Works; Utilities. If OWNER is required by this Agreement to construct any public works facilities which will be dedicated to CITY or any other public agency upon completion, and if required by applicable laws to do so, OWNER shall perform such work in the same manner and subject to the same requirements as would be applicable to CITY or such other public agency should it have undertaken such construction. As a condition of development approval, OWNER shall connect the Project to all utilities necessary to provide adequate water, recycled water, sewer, gas, electric, and other utility service to the Project. As a further condition of development approval, OWNER shall contract with the CITY for CITY-owned or operated utilities for this purpose, for such price and on such terms as may be available to similarly situated customers in the CITY.

3.7.1 OWNER agrees that development of the Project shall require the construction of Storm Drain facilities as described in Exhibit E and depicted in Exhibit F. OWNER shall be responsible for the construction of the necessary extension of master planned Storm Drain facilities.

3.7.2 OWNER agrees that development of the Project shall require the construction of street improvements as described in Exhibit E and depicted in Exhibit F.

3.7.3 OWNER agrees that development of the Property shall require the extension of permanent planned water and recycled water utility infrastructure as described in Exhibit E and depicted in Exhibit F consisting generally of the construction of the extension of permanent water and recycled water utility improvements to serve the Property. OWNER agrees that no building permits shall be issued by CITY for Production Units within a development phase prior to completion of the water and recycled water Improvements as described in Exhibit E and depicted in Exhibit F. OWNER also agrees that recycled water shall be available and utilized by OWNER for all construction-related water uses including prior to, and during, any grading of the Property.

3.7.4 OWNER agrees that development of the Property shall require the extension of permanent sewer improvements, at OWNER's sole cost and expense, as described in the attached Exhibit F consisting generally of the construction of the extension of sewer infrastructure to serve the Property.

3.7.5 OWNER agrees that development of the Property shall require the extension of permanent master planned fiber optic communications infrastructure, at OWNER's sole cost and expense, as described in the attached Exhibit F consisting generally of the construction of the extension of fiber optic communications infrastructure to serve the Property.

3.7.6 OWNER agrees that development of the project shall require the design and construction of three (3) non-DIF traffic signals at Haven Avenue and "Future Street", Haven Avenue and Street "B", and Bethany Way and Mill Creek Avenue; and one (1) DIF credit eligible traffic signal at Haven Avenue and Chino Avenue.

Modification of one (1) existing DIF credit eligible traffic signals at Haven Avenue and Riverside Drive, as described in the attached Exhibit E and depicted in Exhibit F consisting generally of the construction of the signal modifications to serve the Property. OWNER shall complete traffic signals prior to the fiftieth (50^{th}) percentile building permit within a development phase in which the signal is required.

3.8 Acquisition of Offsite Provision of Real Property Interests. In any instance where OWNER is required by any Development Approval or Land Use Regulation and the Construction Agreement to construct any public improvement on land not owned by OWNER ("Offsite Improvements"), the CITY and OWNER shall cooperate in acquiring the necessary legal interest ("Offsite Property") in accordance with the procedures set forth in Section 2.4 of the Construction Agreement. This section 3.8 is not intended by the parties to impose upon the OWNER an enforceable duty to acquire land or construct any public improvements on land not owned by OWNER, except to the extent that the OWNER elects to proceed with the development of the Project, and then only in accordance with valid conditions imposed by the CITY upon the development of the Project under the Subdivision Map Act or other legal authority.

3.8.1 CITY Acquisition of Non-Construction Agreement Offsite Property. In the event OWNER is required to construct any public improvements on land not owned by OWNER, but such requirement is not based upon the Construction Agreement, Sections 3.8.1 and 3.8.2 shall control the acquisition of the necessary property interest(s) ("Non-Construction Agreement Offsite Property"). If the OWNER is unable to acquire such Non-Construction Agreement Offsite Property and following the written request from the OWNER to CITY, CITY agrees to use reasonable and diligent good faith efforts to acquire the Non-Construction Agreement Offsite Property from the owner or owners of record by negotiation to the extent permitted by law and consistent with this Agreement. If CITY is unable to acquire the Non-Construction Agreement Offsite Property by negotiation within thirty (30) days after OWNER'S written request, CITY shall, initiate proceedings utilizing its power of eminent domain to acquire that Non-Construction Agreement Subject Property at a public hearing noticed and conducted in accordance with California Code of Civil Procedure Section 1245.235 for the purpose of considering the adoption of a resolution of necessity concerning the Non-Construction Agreement Offsite Property, subject to the conditions set forth in this Section 3.8. The CITY and OWNER acknowledge that the timelines set forth in this Section 3.8.1 represent the maximum time periods which CITY and OWNER reasonably believe will be necessary to complete the acquisition of any Non-Construction Agreement Offsite Property. CITY agrees to use reasonable good faith efforts to complete the actions described within lesser time periods, to the extent that it is reasonably able to do so, consistent with the legal constraints imposed upon CITY.

3.8.2 Owner's Option to Terminate Proceedings. CITY shall provide written notice to OWNER no later than fifteen (15) days prior to making an offer to the owner of the Non-Construction Agreement Offsite Property. At any time within that fifteen (15) day period, OWNER may, at its option, notify CITY that it wants CITY to cease all acquisition proceedings with respect to that Non-Construction

Agreement Offsite Property, whereupon CITY shall cease such proceedings. CITY shall provide written notice to OWNER no later than fifteen (15) days prior to the date of the hearing on CITY'S intent to consider the adoption of a resolution of necessity as to any Non-Construction Agreement Offsite Property. At any time within that fifteen (15) day period, OWNER may, at its option, notify CITY that it wants CITY to cease condemnation proceedings, whereupon CITY shall cease such proceedings. If OWNER does not notify CITY to cease condemnation proceedings within said fifteen (15) day period, then the CITY may proceed to consider and act upon the Non-Construction Agreement Offsite Property resolution of necessity. If CITY adopts such resolution of necessity, then CITY shall diligently institute condemnation proceedings and file a complaint in condemnation and seek an order of immediate possession with respect to the Non-Construction Agreement Offsite Property.

3.9 Regulation by Other Public Agencies. It is acknowledged by the parties that other public agencies not within the control of CITY possess authority to regulate aspects of the development of the Property separately from or jointly with CITY and this Agreement does not limit the authority of such other public agencies. CITY agrees to cooperate fully, at no cost to CITY, with OWNER in obtaining any required permits or compliance with the regulations of other public agencies provided such cooperation is not in conflict with any laws, regulations or policies of the CITY.

3.10 Tentative Tract Maps; Extension. With respect to applications by OWNER for tentative subdivision maps for portions of the Property, CITY agrees that OWNER may file and process tentative maps in accordance with Chapter 4.5 (commencing with Section 66498.1) of Division 2 of Title 7 of the California Government Code and the applicable provisions of CITY's subdivision ordinance, as the same may be amended from time to time. In accordance with the provisions of Section 66452.6 of the Government Code, each tentative subdivision map or tentative parcel map, heretofore or hereafter approved in connection with development of the Property, shall be deemed to have been granted an extension of time to and until the date that is five (5) years following the Effective Date of this Agreement.; The CITY's City Council may, in its discretion, extend any such map for an additional period of up to five (5) years beyond its original term, so long as the subdivider files a written request for an extension with the City prior to the expiration of the initial five (5) year term.

4. PUBLIC BENEFITS.

4.1 Intent. The parties acknowledge and agree that development of the Property will result in substantial public needs that will not be fully met by the Development Plan and further acknowledge and agree that this Agreement confers substantial private benefits on OWNER that should be balanced by commensurate public benefits. Accordingly, the parties intend to provide consideration to the public to balance the private benefits conferred on OWNER by providing more fully for the satisfaction of the public needs resulting from the Project.

4.2 Development Impact Fees.

4.2.1 Amount of Development Impact Fee. Development Impact Fees (DIF) shall be paid by OWNER. The Development Impact Fee amounts to be paid by OWNER shall be the amounts that are in effect at the time such amounts are due. Nothing contained in this Agreement shall affect the ability of the CITY to impose new Development Impact Fees or amend the amounts of existing Development Impact Fees. Additionally, nothing contained in this Agreement shall affect the ability of other public agencies that are not controlled by CITY to impose and amend, from time to time, Development Impact Fees established or imposed by such other public agencies, even though such Development Impact Fees may be collected by CITY.

4.2.2 Time of Payment. The Development Impact Fees required pursuant to Subsection 4.2.1 shall be paid to CITY prior to the issuance of building permit for each applicable residential or other unit, except for the Open Space and Habitat Acquisition Development Impact fee, which shall be paid by OWNER to CITY prior to the issuance of a grading permit. Deferral of the payment of Development Impact Fees may be granted pursuant to a separate agreement approved by City pursuant to City policy.

4.2.3 Parkland and Quimby Act Fees. Pursuant to the General Plan (Ontario Plan) Goal PR1, Policy PR1-5 (achievement of a park standard of 5 acres of parkland per 1,000 residents) OWNER shall provide improved parks, developed in accordance with the City's park standards in an amount equal to two (2) acres per 1,000 of projected population without credit, reimbursement, offset or consideration from City. Such areas shall either be dedicated to the City or transferred to a homeowners' association. If approved by the City Manager, OWNER may satisfy this requirement through the development of non-public recreation facilities such as private recreational clubhouses or pool facilities. Credit for such private recreational facilities areas shall be limited to a maximum of 50% of the foregoing park development requirement. If OWNER's Project does not provide dedicated and developed park acreage equal to two (2) acres per 1,000 projected population, OWNER shall pay a fee in-lieu equal to the per acre estimated costs of acquisition and development of parkland in the City's Development Impact Fee for the calculated park acreage deficiency. Such in-lieu fee shall be due and payable prior to the issuance of the first building permit for Production Units issued to OWNER. Any park dedication and/or improvements in excess of such two (2) acres per thousand standard, provided such park has been developed in accordance with the City's park standards and is open to the public generally, shall entitle OWNER to a credit toward its obligations under the Quimby Act (Gov. Code, § 64477) and the City's implementing ordinance and/or resolution (collectively "**Quimby Act Obligations**"), and to the extent OWNER's Quimby Act Obligations are satisfied, OWNER shall be entitled to have the City acquire such developed and publicly available parks as Non-Program Interests in accordance with Section 4.3.3 below. **(Other provisions will be added that are Project-specific, if applicable).**

4.2.4 Additional Parkland Development Requirements. OWNER is responsible for construction of the 2.20-acre and 2.53-acre parks designated as Lots A and B, respectively, of Tentative Tract Map No. 20526, including any related recreational facilities to be provided therein. OWNER shall submit the design of the park for approval along with the first B-map entitlement within the A-map area. OWNER shall begin construction of the park no later than the issuance of the 315th production building permit for occupancy within the A-map area; and (iii) complete construction prior to issuance of the 500th production building permit for occupancy within the A-map area. The above thresholds are based on current density projections and may be adjusted proportionally upon approval of subsequent B-maps, considering actual densities and phasing. Any modifications to these milestones must be mutually agreed upon by CITY and OWNER and documented in subsequent written agreements or entitlements.

4.3 Responsibility for Construction of Public Improvements.

4.3.1 Timely Construction of Public Infrastructure. The phasing of the areawide infrastructure construction within the New Model Colony will be as approved by the CITY. OWNER shall be responsible for the timely construction and completion of all public infrastructure required for the Project as shown on the attached Exhibit "F" and any and all tentative tract map conditions. Unless otherwise specified in the Subdivision Agreement/Tract Map conditions, all other required Improvements for each Tract Map, shall be completed and operational prior to, and as a condition precedent to, OWNER requesting and CITY's granting of the first building permit for production units for each such Tract Map. All Infrastructure and Improvements shall be completed as required by the Subdivision Agreement/Tract Map conditions for Tract No. 20526.

4.3.2 Construction of DIF Program Infrastructure (Construction Agreement). To the extent OWNER is required to construct and completes construction of public improvements that are included in CITY's Development Impact Fee Program and the Construction Agreement between CITY and NMC Builders LLC, CITY agrees that CITY shall issue DIF Credit in accordance with the provisions of the Construction Agreement and any amendments thereto. Use of DIF Credit issued to OWNER as a member of NMC Builders LLC to offset OWNER's DIF payment obligations shall also be subject to the provisions of the Construction Agreement and any amendments thereto.

4.3.3 Construction of DIF Program Infrastructure (Non-Construction Agreement). To the extent OWNER is required to construct and completes construction of public improvements that are included in CITY's Development Impact Fee Program and such public improvements are not included the Construction Agreement between CITY and NMC Builders LLC, CITY agrees that CITY shall issue DIF Credit and DIF Reimbursement in accordance with the provisions of a separate Fee Credit Agreement between CITY and OWNER. Limitation on the use of DIF Credit issued to OWNER to offset OWNER's DIF payment obligations shall also be subject to the provisions of a separate Fee Credit Agreement. OWNER may also be eligible

to receive reimbursement from DIF collected by CITY and paid by other development that benefits from OWNER's construction of DIF Program Infrastructure. Any such DIF Reimbursement shall be subject to a Fee Credit Agreement between CITY and OWNER. CITY and OWNER agree that the Fee Credit Agreement between CITY and OWNER shall comply with CITY's adopted policies applicable to such agreements.

4.3.4 Availability and use of Recycled Water. OWNER agrees that recycled water shall be available and utilized by OWNER for all construction-related water uses including prior to, and during, any grading of the Property.

4.4 Affordable Housing Requirement.

4.4.1 Affordable Housing- Number of Units. OWNER shall provide a minimum number of affordable housing units, equivalent to 10% of the OWNER's total approved residential units within the Project, that are affordable to very low-, low- and moderate-income households. Such requirement for affordable housing shall be met through one, or a combination of one or more, of the options provided in the following Sections 4.3.2.1 through 4.3.2.1. For the purposes of this Section, any term not defined in this Agreement shall be as defined by California Community Redevelopment Law (California Health and Safety Code Section 33000 et seq.).

4.4.2 Affordability Spread. Of the total number of residential dwelling units specified in Section 4.4.1, to be constructed or rehabilitated pursuant to Sections 4.4.2.1 or 4.4.2.2 respectively, thirty percent (30%) shall be available to very low income, thirty percent (30%) shall be available to low income and forty percent (40%) shall be available to moderate income households. "**Households**" shall be as defined by California Health and Safety Code Section 50053.

4.4.2.1 New Construction. If OWNER elects to fully or partially satisfy the affordable housing requirement by the construction of new residential units, it shall construct and restrict the affordability of residential dwelling units within its Project or, at OWNER's option and with the approval of the City, within another project elsewhere within the City. The affordable units constructed shall be intermingled with other units as part of the Project, and shall be built to the same construction, design and aesthetic standards, as well as number of rooms, as other units constructed as part of that OWNER's Project. In addition, the percentage ratio of affordable units offered for sale versus those offered for rent shall equal the percentage ratio of other units offered for sale versus for rent within OWNER's Project. Such construction shall be completed no later than the date that is five (5) years following the issuance of the first building permit for OWNER's Project; provided however that to the extent OWNER has not constructed the required percentage of units, based on the number of building permits for non-restricted units, OWNER shall, prior to the issuance of such building permits, provide security

(in the form and substance approved by the City Manager and City Attorney) to City in order to ensure the faithful completion of such required percentage of construction of affordable units. If OWNER elects the option of constructing new affordable units, a detailed Affordable Housing Agreement specifying terms for the allowable monthly housing costs or rents (as applicable) and maintenance and occupancy standards shall be prepared, executed and recorded against such units as a condition to the issuance of a building permit. The Affordable Housing Agreement shall hold a recorded priority position senior to any other non-statutory lien or encumbrance affecting the unit.

4.4.2.2 Rehabilitation. If OWNER elects to fully or partially satisfy the affordable housing requirement by the substantial rehabilitation of existing residential units in the City, it shall substantially rehabilitate and restrict the affordability of the number of residential units specified in Section 4.4.1, provided that such units shall be provided elsewhere within the City. The rehabilitation work shall be substantial and of high quality and shall also address any deferred property maintenance issues on the property. "**Substantial rehabilitation**" shall mean rehabilitated multi-family rented dwelling units with three or more units and the value of the rehabilitation constitutes 25 percent of the after rehabilitation value of the dwelling, inclusive of land value pursuant to Health and Safety Code Section 33413(b)(2)(A)(iii-iv) as such section exists as of the Effective Date of this Agreement. If OWNER chooses the option of rehabilitation of existing housing units within the City, a detailed Affordable Housing Agreement specifying the terms for the allowable month housing costs or rents (as applicable) and maintenance and occupancy standards shall be prepared, executed and recorded against such units as a condition to the issuance of a building permit. Such rehabilitation shall be completed no later than the date that is five (5) years following the issuance of the first building permit for OWNER's Project; provided however that to the extent OWNER has not rehabilitated the required percentage of units, based on the number of building permits, OWNER shall, prior to the issuance of such building permits, provide security (in the form and substance approved by the City Manager and City Attorney) to the City in order to ensure the faithful completion of such required percentage of rehabilitation.

4.4.2.3 In-Lieu Fee. If OWNER has not fully complied with the requirements of Section 4.4.1 by providing the minimum number of affordable units through the construction of new affordable units or by the substantial rehabilitation of existing units, shall pay an "**Affordability In-Lieu Fee**". If OWNER has not provided any affordable residential units by construction or rehabilitation, the Affordability In-Lieu fee shall be equal to Three Dollars Thirty-Seven Cents ($3.37) per square foot of residential development within OWNER's Project or, if pre-paid as set forth below, Two Dollars Ninety-Six ($2.96) per square foot of residential development within OWNER's Project. If OWNER has partially complied with the requirements of Section 4.4.1 by

construction or rehabilitation of less than the minimum number of units, then the Affordability In-lieu Fee shall be recalculated and reduced in consideration of the number and type of affordable units provided. The Affordability In-Lieu Fee shall be paid by OWNER to City no later than prior to the issuance of each building permit within OWNER's Project based on the square footage of the residential unit for which such building permit is sought; provided however that OWNER may, at OWNER's election, pre-pay such Affordability In-Lieu Fee by paying such Affordability In-Lieu Fee within thirty (30) days following the earliest discretionary approval by the City for OWNER's Project, including, but not limited to, any general plan amendment, specific plan adoption, development agreement, tentative map approval, variance, conditional use permit, or resolution of intention to form any public financing mechanism. The Three Dollars Thirty-Seven Cents ($3.37 Two Dollars Ninety-Six ($2.96) per square foot amounts shall automatically be increased annually, commencing on July 1, 2024, and automatically each July 1 thereafter. Such adjustment shall be based on the percentage increase (but no decrease) in the Consumer Price Index (Riverside - San Bernardino - Ontario, CA) (December 2017=100) over the preceding year. The pre-paid Affordability In-Lieu Fee shall be calculated based on the maximum floor area ratio (FAR) permitted within the General Plan and any applicable FAR contained within the applicable specific plan, whichever is greater, and the Maximum Development Density. For purposes of this Agreement, "**Maximum Development Density**" shall be determined by multiplying the OWNER's Project's density for residential development potential as set forth in the General Plan or the applicable Specific Plan, whichever is less, by the net acreage of land within OWNER's Project. All "Affordability In-Lieu Fees" collected by the City shall be used to promote the construction of affordable housing within the City.

4.4.2.4 Affordability Covenants. Prior to the issuance of the first building permit for any affordable unit, the City and OWNER shall enter into an Affordable Housing Agreement Affordability shall be assured for a period of forty-five (45) years for for-sale units and fifty-five (55) years for rentals. For rental units, base rents shall be established by the City and rental adjustments required by the City shall be performed on an annual basis. In addition, the Affordable Housing Agreement shall impose maximum occupancy limits of 2 occupants per bedroom plus 1 additional occupant per dwelling unit, and a requirement for the owner or tenant to properly maintain each dwelling unit.

4.4.2.5 Transfer of Affordable Project. No transfer of title to any affordable housing project shall occur without the prior written consent of the City. In the event OWNER transfers title to any affordable housing project required to be constructed pursuant to this Agreement to a non-profit entity, or other entity, that receives an exemption from ad valorem real property taxes, the City shall be required to assure payment of an annual in lieu fee to the City on July 1 of each year equal to one-tenth of one percent (0.1%) of the

assessed value of such project. The City may permit OWNER to satisfy this obligation by recorded covenants against the property and enforceable against said entity by the City. Any such covenants shall be approved by the Planning Director and the City Attorney.

4.5 Schools Obligations.

4.5.1 Written Evidence of Compliance with Schools Obligations. OWNER shall, either through joint or individual agreements between OWNER and the applicable school district(s), shall satisfy its new school obligations. The new school obligations for the Mountain View School District in the Ontario Ranch area have been projected to include the acquisition or dedication of school sites for, and construction of, up to eight (8) schools. Of these eight (8) schools, six (6) are to be elementary (K-5) grade schools and two (2) are to be middle grade schools. The new school obligations for the Chaffey Joint Union High School District in the Ontario Ranch area have been projected to include the dedication of a school site for, and construction of, an additional high school. The new school obligations for the applicable school district shall be met by a combination of the following: (1) designating and dedicating school site(s) within the Property as set forth in the General Plan, and/or (2) paying school impact fees, (3) entering into a joint mitigation agreement or individual mitigation agreements, or (4) any combination of the foregoing. Written evidence of approval by the applicable school district that OWNER has met their school obligations may be required by the City as the condition to the issuance by the City of any entitlements for OWNER's Project. In the event OWNER is unable to provide such written evidence from the applicable school district(s), the City shall have the right to decline to honor any DIF Credit, Certificates of MDD Availability, Certificates of Storm Water Treatment Capacity Availability, or any combination thereof, presented by such OWNER, without liability to the City. To the extent that a joint mitigation agreement is approved by the applicable school district(s), and OWNER is a participant in good standing in such mitigation agreement, OWNER shall be deemed to have mitigated its new school obligations under this Section 4.4.1.

4.6 Net MDD/Water Availability Equivalents.

4.6.1 Effectiveness of Agreement. Notwithstanding anything else set forth in this Agreement, CITY and OWNER each acknowledge, confirm, and agree, that (i) the City approval of this Agreement and (ii) the effectiveness of this Agreement, in each case, is conditioned upon OWNER's admission to NMC Builders as a "Member" thereof pursuant to the terms and conditions of the operating agreement of NMC Builders. OWNER and CITY agree that OWNER shall become a Member of NMC Builders within 30 days of the effective date of this Agreement.

4.6.1 Assigned Net MDD/Water Availability Equivalents. The City has agreed with NMC Builders LLC to reserve exclusively for Members of NMC Builders, including OWNER, Net MDD made available through the construction of water system improvements funded by NMC Builders LLC. NMC Builders has assigned

to OWNER its allocable share of the Net MDD issued by City. The provisions of the Construction Agreement Amendment requires that the City shall not approval a final tract map or issue building permits or certificates of occupancy for the area of development within the New Model Colony served by the water system improvements funded by NMC Builders LLC, except to the bearer of an Assignment of Net MDD Water Availability.

4.6.2 Requirement of NMC Builders, LLC Membership as a Phase 2 Water Member. OWNER and CITY agree that OWNER's' payment to CITY required by Section 4.6.3 below represents OWNER's contribution to the funding required for the future construction of the Phase 2 Water Improvements and the availability of additional Net MDD Water Availability required for the development of the Property described in Exhibit A of this Agreement.

4.6.3 CITY issuance of Water Availability Equivalents. Within 30 days after the effectiveness of this Development Agreement OWNER shall pay or have paid to City the applicable Phase 2 Water Participation Fee. The Phase 2 Water Participation Fee shall be the calculated based on the amount of the Regional Water DIF for the applicable land use category and the square footage of the applicable buildings. The calculated amount of the Phase 2 Water Participation Fee shall be paid to City within 30 days after the effective date of this Agreement or, at OWNER's option, the Phase 2 Water Participation Fee may be paid to City in two (2) installments. The first installment shall be fifty percent (50%) of the total Phase 2 Water Participation Fee and such first installment shall be due and payable to City within 30 days after the effective date of this Development Agreement. The second installment shall be the remaining amount of the Phase 2 Water Participation Fee and such second installment shall be due and payable to City within one (1) year after the payment of the first installment, or prior to, and as a condition precedent to, the recording of any final Parcel Map for the Project, whichever occurs first. Upon OWNER's complete payment to CITY of the Phase 2 Water Participation Fee CITY shall issue a Certificate of Water Availability Equivalents in the form attached hereto as Exhibit G. Such Water Availability Equivalents Certificate shall be issued by CITY within thirty (30) days of the receipt of such required payment. CITY and OWNER agree that the amount of Water Availability Equivalents issued to OWNER shall be based on the maximum projected need for Water Availability Equivalents required for the Property based upon water demand factors and assumptions listed in Exhibit C-2R of the Phase 2 Water Amendment to the Construction Agreement "Water Demand Equivalents by Land Use" for each land use category. Additionally, within five (5) business days of CITY's receipt of OWNER's payment as required under this Section 4.6.3, CITY shall issue a certificate of DIF Credit against OWNER's DIF obligations in the Regional Water DIF Category.

4.6.2 Use of Assigned Net MDD Water Availability. OWNER shall provide evidence of sufficient Net MDD Water Availability Equivalents (or portions thereof) prior to and as a condition precedent to, the City's approval of any and all tract maps for the Property. The amount of Net MDD Water Availability Equivalents

required for City's approval of a tract map shall be based upon water demand factors and assumptions listed in Exhibit C-2R of the Construction Agreement Amendment as "Water Demand Equivalents by Land Use" for each land use category.

4.6.3 Requirement for other Water System Improvements. A Certificate of Net MDD Availability is evidence only of available water capacity and does not satisfy any other conditions applicable to an OWNER's Project, including those relating to design and construction of planned potable water and recycled water transmission and distribution system for the respective pressure zone and other public infrastructure requirements.

4.7 Storm Water Capacity Availability.

4.7.1 Requirement for Storm Water Treatment Capacity Availability. OWNER shall provide evidence of sufficient Storm Water Treatment Capacity Availability as reserved in a Certificate of Storm Water Treatment Capacity Availability the same manner and subject to the same limitations as provided for the assignment of Certificates of Net MDD Availability in Section 4.7 of this Agreement.

4.7.2 Use of Storm Water Treatment Capacity Availability. The amount of Storm Water Treatment Capacity Availability required for the issuance of a grading permit to OWNER shall be based upon the Net Residential Acreage of the area to be graded regardless of the corresponding use.

4.7.3 Requirement for other Storm Water Improvements. The Certificate of Storm Water Treatment Capacity Availability is evidence only of available storm water treatment capacity and does not satisfy any other conditions applicable to a particular development project, including those relating to on-site water treatment, water quality, connection to the storm water collection system, or other public infrastructure requirements.

4.8 Maintenance of Open Space. OWNER shall provide for the ongoing maintenance of all park, common areas and open space areas within the Project as more particularly set forth in the Specific Plan, through a homeowners' association as approved by the CITY. Covenants, conditions and restrictions establishing any homeowners' association shall be approved by the Planning Director and City Attorney.

4.9 Compliance with Public Benefits Requirements.

4.9.1 Failure to Provide Public Benefits. In the event OWNER fails or refuses to comply with any condition referenced in Section 4.1 through 4.9, or challenges (whether administratively or through legal proceedings) the imposition of such conditions, OWNER shall be deemed in default of this Agreement pursuant to Section 8.4 hereof, thereby entitling the City to any and all remedies available to it, including, without limitation, the right of the City to withhold OWNER's Project-

related building permits, certificates of occupancy, or discretionary approvals, without liability.

5. FINANCING OF PUBLIC IMPROVEMENTS.

5.1 Financing Mechanism(s). In accordance with the Memorandum of Agreement between the CITY and NMC Builders, CITY will cooperate with OWNER in the formation of a CFD, or CFDs, to include all of the Project, to provide a financing mechanism to reimburse the OWNER for funds paid to NMC Builders LLC for OWNER's share of the costs of public infrastructure pursuant to the Construction Agreement and to acquire other public facilities constructed by OWNER subject to the provisions of the Memorandum of Agreement between CITY and NMC Builders LLC. Notwithstanding such reimbursements and acquisitions, OWNER shall remain entitled to DIF Credits as provided for in Article 3 of the Construction Agreement and/or as provided for in a separate Fee Credit Agreement between CITY and OWNER. OWNER agrees that, prior to the recordation of any Tract Map for the Property, the Property shall be included in a CFD to finance City services through annual special taxes that will initially be $1,371.52 per Single Family Detached Dwelling Unit, $1,188.58 per Multiple-Family Dwelling Unit, $996.75 per Gated Apartment Community Dwelling Unit, and $.25 per square foot for Non-Residential buildings. These amounts shall be subject to an automatic increase at a rate not to exceed four (4%) percent per year, unless modified by CITY. CITY shall be the sole and exclusive lead agency in the formation of any CFD, assessment district or other public financing mechanism within the Property; provided however, that the proceeds of any such CFD, assessment district, or financing mechanism may be used, subject to restrictions that may be imposed by applicable law, for the purposes of acquiring, constructing or maintaining public facilities to be owned or operated by other public agencies, including, without limitation those facilities owned or operated by a school district. In addition to the rights of the CITY pursuant to section 5.2 hereof, CITY shall have the right, but not the obligation, to condition the formation of any CFD, assessment district or other public financing mechanism within the Property on the OWNER mitigating all Project-related impacts to the applicable school district(s) as required by such school district(s). Written evidence by such school district(s) may be required by the CITY as the condition to the formation of any CFD, assessment district or other public financing mechanism within the Property, or any steps preliminary thereto, including, without limitation, the adoption of any resolution of intention to form such CFD, assessment district or other public financing mechanism within the Property. It is not the intent of the parties hereto, by this provision, to prohibit or otherwise limit the City's ability to take any and all necessary steps requisite to the formation of the CFD to finance City services through annual special taxes as set forth in this Section 5.1. Formation of any CFD, assessment district or other public financing mechanism within the Property, shall be subject to CITY's ability to make all findings required by applicable law and complying with all applicable legal procedures and requirements including, without limitation, CITY's public financing district policies as such policies may be amended from time to time. Notwithstanding the foregoing, it is acknowledged and agreed by the parties that nothing contained in this Agreement shall be construed as requiring CITY or the City Council to form any such district or to issue and sell bonds.

6. REVIEW FOR COMPLIANCE.

6.1 Periodic and Special Reviews.

6.1.1 Time for and Initiation of Periodic Review. The CITY shall review this Agreement every twelve (12) months from the Effective Date in order to ascertain the good faith compliance by the OWNER with the terms of this Agreement. The OWNER shall submit an Annual Monitoring Report to CITY, in a form acceptable to the City Manager, along with any applicable processing charge within ten (10) days after each anniversary date of the Effective Date of this Agreement. Within fifteen (15) days after the receipt of the Annual Monitoring Report, CITY shall review the Annual Monitoring Report. Prior to the expiration of the fifteen (15) day review period, CITY shall either issue a notice of continuing compliance or a notice of non-compliance and a notice of CITY's intent to conduct a Special Review pursuant to Sections 6.1.2 through 6.1.6. Issuance of a notice of continuing compliance may be issued by the City Manager or his designee.

6.1.2 Initiation of Special Review. A special review may be called either by agreement between the parties or by initiation in one or more of the following ways:

(1) Recommendation of the Planning staff;

(2) Affirmative vote of at least four (4) members of the Planning Commission; or

(3) Affirmative vote of at least three (3) members of the City Council.

6.1.3 Notice of Special Review. The City Manager shall begin the special review proceeding by giving notice that the CITY intends to undertake a special review of this Agreement to the OWNER. Such notice shall be given at least ten (10) days in advance of the time at which the matter will be considered by the Planning Commission.

6.1.4 Public Hearing. The Planning Commission shall conduct a hearing at which the OWNER must demonstrate good faith compliance with the terms of this Agreement. The burden of proof on this issue is upon the OWNER.

6.1.5 Findings Upon Public Hearing. The Planning Commission shall determine upon the basis of substantial evidence whether or not the OWNER has, for the period under review, complied in good faith with the terms and conditions of this Agreement.

6.1.6 Procedure Upon Findings.

(a) If the Planning Commission finds and determines on the basis of substantial evidence that the OWNER has complied in good faith with the terms and conditions of this Agreement during the period under review, the review for that period is concluded.

(b) If the Planning Commission finds and determines on the basis of substantial evidence that the OWNER has not complied in good faith with the terms and conditions of this Agreement during the period under review, the Planning Commission may recommend to the City Council to modify or terminate this Agreement.

(c) The OWNER may appeal a determination pursuant to paragraph (b) to the City Council in accordance with the CITY's rule for consideration of appeals in zoning matters generally.

6.2 Proceedings Upon Modification or Termination. If, upon a finding under Section 6.1.6(b), the CITY determines to proceed with modification or termination of this Agreement, the CITY shall give notice to the property OWNER of its intention so to do. The notice shall contain:

(a) The time and place of the hearing;

(b) A statement as to whether or not the CITY proposes to terminate or to modify this Agreement; and

(c) Other information that the CITY considers necessary to inform the OWNER of the nature of the proceeding.

6.3 Hearing on Modification or Termination. At the time and place set for the hearing on modification or termination, the OWNER shall be given an opportunity to be heard. The OWNER shall be required to demonstrate good faith compliance with the terms and conditions of this Agreement. The burden of proof on this issue shall be on the OWNER. If the City Council finds, based upon substantial evidence in the administrative record, that the OWNER has not complied in good faith with the terms and conditions of the agreement, the City Council may terminate or modify this Agreement and impose those conditions to the action it takes as it considers necessary to protect the interests of the CITY. The decision of the City Council shall be final, subject only to judicial review pursuant to Section 1094.5 of the Code of Civil Procedure.

6.4 Certificate of Agreement Compliance. If, at the conclusion of a Periodic or Special Review, OWNER is found to be in compliance with this Agreement, CITY shall, upon written request by OWNER, issue a Certificate of Agreement Compliance ("Certificate") to OWNER stating that after the most recent Periodic or Special Review and based upon the information known or made known to the Planning Director and City Council that (1) this Agreement remains in effect and (2) OWNER is not in default. The Certificate shall be in recordable form, shall contain information necessary to communicate constructive record notice of the finding of compliance, shall state whether the Certificate is issued after a Periodic or Special Review and shall state the anticipated date of commencement of the next Periodic Review. OWNER may record the Certificate

with the County Recorder. Whether or not the Certificate is relied upon by assignees or other transferees or OWNER, CITY shall not be bound by a Certificate if a default existed at the time of the Periodic or Special Review, but was concealed from or otherwise not known to the Planning Director or City Council.

7. [RESERVED]

8. DEFAULT AND REMEDIES.

8.1 Remedies in General. It is acknowledged by the parties that CITY would not have entered into this Agreement if it were to be liable in damages under this Agreement, or with respect to this Agreement or the application thereof.

In general, each of the parties hereto may pursue any remedy at law or equity available for the breach of any provision of this Agreement, except that CITY shall not be liable in damages to OWNER, or to any successor in interest of OWNER, or to any other person, and OWNER covenants not to sue for damages or claim any damages:

(a) For any breach of this Agreement or for any cause of action which arises out of this Agreement; or

(b) For the taking, impairment or restriction of any right or interest conveyed or provided under or pursuant to this Agreement; or

(c) Arising out of or connected with any dispute, controversy or issue regarding the application or interpretation or effect of the provisions of this Agreement.

8.2 Specific Performance. The parties acknowledge that money damages and remedies at law generally are inadequate and specific performance and other non-monetary relief are particularly appropriate remedies for the enforcement of this Agreement and should be available to all parties for the following reasons:

(a) Money damages are unavailable against CITY as provided in Section 8.1 above.

(b) Due to the size, nature and scope of the project, it may not be practical or possible to restore the Property to its natural condition once implementation of this Agreement has begun. After such implementation, OWNER may be foreclosed from other choices it may have had to utilize the Property or portions thereof. OWNER has invested significant time and resources and performed extensive planning and processing of the Project in agreeing to the terms of this Agreement and will be investing even more significant time and resources in implementing the Project in reliance upon the terms of this Agreement, and it is not possible to determine the sum of money which would adequately compensate OWNER for such efforts.

8.3 Release. Except for nondamaged remedies, including the remedy of specific performance and judicial review as provided for in Section 6.5, OWNER, for itself, its successors and assignees, hereby releases the CITY, its officers, agents and

employees from any and all claims, demands, actions, or suits of any kind or nature arising out of any liability, known or unknown, present or future, including, but not limited to, any claim or liability, based or asserted, pursuant to Article I, Section 19 of the California Constitution, the Fifth Amendment of the United States Constitution, or any other law or ordinance which seeks to impose any other liability or damage, whatsoever, upon the CITY because it entered into this Agreement or because of the terms of this Agreement.

8.4 Termination or Modification of Agreement for Default of OWNER. Subject to the provisions contained in Subsection 6.3 herein, CITY may terminate or modify this Agreement for any failure of OWNER to perform any material duty or obligation of OWNER under this Agreement, or to comply in good faith with the terms of this Agreement (hereinafter referred to as "default"); provided, however, CITY may terminate or modify this Agreement pursuant to this Section only after providing written notice to OWNER of default setting forth the nature of the default and the actions, if any, required by OWNER to cure such default and, where the default can be cured, OWNER has failed to take such actions and cure such default within 60 days after the effective date of such notice or, in the event that such default cannot be cured within such 60 day period but can be cured within a longer time, has failed to commence the actions necessary to cure such default within such 60 day period and to diligently proceed to complete such actions and cure such default.

8.5 Termination of Agreement for Default of CITY. OWNER may terminate this Agreement only in the event of a default by CITY in the performance of a material term of this Agreement and only after providing written notice to CITY of default setting forth the nature of the default and the actions, if any, required by CITY to cure such default and, where the default can be cured, CITY has failed to take such actions and cure such default within 60 days after the effective date of such notice or, in the event that such default cannot be cured within such 60 day period but can be cured within a longer time, has failed to commence the actions necessary to cure such default within such 60 day period and to diligently proceed to complete such actions and cure such default.

9. THIRD PARTY LITIGATION.

9.1 General Plan Litigation. CITY has determined that this Agreement is consistent with its Comprehensive General Plan, as such General Plan exists as of the Effective Date ("General Plan"), and that the General Plan meets all requirements of law. OWNER has reviewed the General Plan and concurs with CITY's determination. CITY shall have no liability in damages under this Agreement for any failure of CITY to perform under this Agreement or the inability of OWNER to develop the Property as contemplated by the Development Plan of this Agreement as the result of a judicial determination that on the Effective Date, or at any time thereafter, the General Plan, or portions thereof, are invalid or inadequate or not in compliance with law.

9.2 Third Party Litigation Concerning Agreement. OWNER shall defend, at its expense, including attorneys' fees, indemnify, and hold harmless CITY, its agents, officers and employees from any claim, action or proceeding against CITY, its agents,

officers, or employees to attack, set aside, void, or annul the approval of this Agreement or the approval of any permit granted pursuant to this Agreement. CITY shall promptly notify OWNER of any such claim, action or proceeding, and CITY shall cooperate in the defense. If CITY fails to promptly notify OWNER of any such claim, action or proceeding, or if CITY fails to cooperate in the defense, OWNER shall not thereafter be responsible to defend, indemnify, or hold harmless CITY. CITY may in its discretion participate in the defense of any such claim, action or proceeding.

9.3 Indemnity. In addition to the provisions of 9.2 above, OWNER shall indemnify and hold CITY, its officers, agents, employees and independent contractors free and harmless from any liability whatsoever, based or asserted upon any act or omission of OWNER, its officers, agents, employees, subcontractors and independent contractors, for property damage, bodily injury, or death (OWNER's employees included) or any other element of damage of any kind or nature, relating to or in any way connected with or arising from the activities contemplated hereunder, including, but not limited to, the study, design, engineering, construction, completion, failure and conveyance of the public improvements, save and except claims for damages arising through the sole active negligence or sole willful misconduct of CITY. OWNER shall defend, at its expense, including attorneys' fees, CITY, its officers, agents, employees and independent contractors in any legal action based upon such alleged acts or omissions. CITY may in its discretion participate in the defense of any such legal action.

9.4 Environment Assurances. OWNER shall indemnify and hold CITY, its officers, agents, and employees free and harmless from any liability, based or asserted, upon any act or omission of OWNER, its officers, agents, employees, subcontractors, predecessors in interest, successors, assigns and independent contractors for any violation of any federal, state or local law, ordinance or regulation relating to industrial hygiene or to environmental conditions on, under or about the Property, including, but not limited to, soil and groundwater conditions, and OWNER shall defend, at its expense, including attorneys' fees, CITY, its officers, agents and employees in any action based or asserted upon any such alleged act or omission. CITY may in its discretion participate in the defense of any such action.

9.5 Reservation of Rights. With respect to Sections 9.2, 9.3 and 9.4 herein, CITY reserves the right to either (1) approve the attorney(s) which OWNER selects, hires or otherwise engages to defend CITY hereunder, which approval shall not be unreasonably withheld, or (2) conduct its own defense, provided, however, that OWNER shall reimburse CITY forthwith for any and all reasonable expenses incurred for such defense, including attorneys' fees, upon billing and accounting therefor.

9.6 Survival. The provisions of this Sections 9.1 through 9.6, inclusive, shall survive the termination of this Agreement.

10. MORTGAGEE PROTECTION.

The parties hereto agree that this Agreement shall not prevent or limit OWNER, in any manner, at OWNER's sole discretion, from encumbering the Property or any portion

thereof or any improvement thereon by any mortgage, deed of trust or other security device securing financing with respect to the Property. CITY acknowledges that the lenders providing such financing may require certain Agreement interpretations and modifications and agrees upon request, from time to time, to meet with OWNER and representatives of such lenders to negotiate in good faith any such request for interpretation or modification. CITY will not unreasonably withhold its consent to any such requested interpretation or modification provided such interpretation or modification is consistent with the intent and purposes of this Agreement. Any Mortgagee of the Property shall be entitled to the following rights and privileges:

(a) Neither entering into this Agreement nor a breach of this Agreement shall defeat, render invalid, diminish or impair the lien of any mortgage on the Property made in good faith and for value, unless otherwise required by law.

(b) The Mortgagee of any mortgage or deed of trust encumbering the Property, or any part thereof, which Mortgagee, has submitted a request in writing to the CITY in the manner specified herein for giving notices, shall be entitled to receive written notification from CITY of any default by OWNER in the performance of OWNER's obligations under this Agreement.

(c) If CITY timely receives a request from a Mortgagee requesting a copy of any notice of default given to OWNER under the terms of this Agreement, CITY shall provide a copy of that notice to the Mortgagee within ten (10) days of sending the notice of default to OWNER. The Mortgagee shall have the right, but not the obligation, to cure the default during the remaining cure period allowed such party under this Agreement.

(d) Any Mortgagee who comes into possession of the Property, or any part thereof, pursuant to foreclosure of the mortgage or deed of trust, or deed in lieu of such foreclosure, shall take the Property, or part thereof, subject to the terms of this Agreement. Notwithstanding any other provision of this Agreement to the contrary, no Mortgagee shall have an obligation or duty under this Agreement to perform any of OWNER's obligations or other affirmative covenants of OWNER hereunder, or to guarantee such performance; provided, however, that to the extent that any covenant to be performed by OWNER is a condition precedent to the performance of a covenant by CITY, the performance thereof shall continue to be a condition precedent to CITY's performance hereunder, and further provided that any sale, transfer or assignment by any Mortgagee in possession shall be subject to the provisions of Section 2.4 of this Agreement.

11. MISCELLANEOUS PROVISIONS.

11.1 Recordation of Agreement. This Agreement and any amendment or cancellation thereof shall be recorded with the San Bernardino County Recorder by the City Clerk within the ten (10) days after the CITY executes this Agreement, as required by Section 65868.5 of the Government Code. If the parties to this Agreement or their successors in interest amend or cancel this Agreement as provided for herein and in Government Code Section 65868, or if the CITY terminates or modifies the agreement as provided for herein and in Government Code Section 65865.1 for failure of the applicant

to comply in good faith with the terms or conditions of this Agreement, the City Clerk shall have notice of such action recorded with the San Bernardino County Recorder.

11.2 Entire Agreement. This Agreement sets forth and contains the entire understanding and agreement of the parties, and there are no oral or written representations, understandings or ancillary covenants, undertakings or agreements which are not contained or expressly referred to herein. No testimony or evidence of any such representations, understandings or covenants shall be admissible in any proceeding of any kind or nature to interpret or determine the terms or conditions of this Agreement.

11.3 Severability. If any term, provision, covenant or condition of this Agreement shall be determined invalid, void or unenforceable, the remainder of this Agreement shall not be affected thereby to the extent such remaining provisions are not rendered impractical to perform taking into consideration the purposes of this Agreement. Notwithstanding the foregoing, the provision of the Public Benefits set forth in Section 4 of this Agreement, including the payment of the fees set forth therein, are essential elements of this Agreement and CITY would not have entered into this Agreement but for such provisions, and therefore in the event such provisions are determined to be invalid, void or unenforceable, this entire Agreement shall be null and void and of no force and effect whatsoever.

11.4 Interpretation and Governing Law. This Agreement and any dispute arising hereunder shall be governed and interpreted in accordance with the laws of the State of California. This Agreement shall be construed as a whole according to its fair language and common meaning to achieve the objectives and purposes of the parties hereto, and the rule of construction to the effect that ambiguities are to be resolved against the drafting party shall not be employed in interpreting this Agreement, all parties having been represented by counsel in the negotiation and preparation hereof.

11.5 Section Headings. All section headings and subheadings are inserted for convenience only and shall not affect any construction or interpretation of this Agreement.

11.6 Singular and Plural. As used herein, the singular of any word includes the plural.

11.7 Joint and Several Obligations. Subject to section 2.4, if at any time during the term of this Agreement the Property is owned, in whole or in part, by more than one owner, all obligations of such owners under this Agreement shall be joint and several, and the default of any such owner shall be the default of all such owners. Notwithstanding the foregoing, no owner of a single lot which has been finally subdivided and sold to such owner as a member of the general public or otherwise as an ultimate user shall have any obligation under this Agreement except as provided under Section 4 hereof.

11.8 Time of Essence. Time is of the essence in the performance of the provisions of this Agreement as to which time is an element.

11.9 Waiver. Failure by a party to insist upon the strict performance of any of the provisions of this Agreement by the other party, or the failure by a party to exercise its

rights upon the default of the other party, shall not constitute a waiver of such party's right to insist and demand strict compliance by the other party with the terms of this Agreement thereafter.

11.10 No Third Party Beneficiaries. This Agreement is made and entered into for the sole protection and benefit of the parties and their successors and assigns. No other person shall have any right of action based upon any provision of this Agreement.

11.11 Force Majeure. Neither party shall be deemed to be in default where failure or delay in performance of any of its obligations under this Agreement is caused by floods, earthquakes, other Acts of God, fires, wars, riots or similar hostilities, strikes and other labor difficulties beyond the party's control, (including the party's employment force), government regulations, court actions (such as restraining orders or injunctions), or other causes beyond the party's control. If any such events shall occur, the term of this Agreement and the time for performance by either party of any of its obligations hereunder may be extended by the written agreement of the parties for the period of time that such events prevented such performance, provided that the term of this Agreement shall not be extended under any circumstances for more than five (5) years.

11.12 Mutual Covenants. The covenants contained herein are mutual covenants and also constitute conditions to the concurrent or subsequent performance by the party benefited thereby of the covenants to be performed hereunder by such benefited party.

11.13 Successors in Interest. The burdens of this Agreement shall be binding upon, and the benefits of this Agreement shall inure to, all successors in interest to the parties to this Agreement. All provisions of this Agreement shall be enforceable as equitable servitudes and constitute covenants running with the land. Each covenant to do or refrain from doing some act hereunder with regard to development of the Property: (a) is for the benefit of and is a burden upon every portion of the Property; (b) runs with the Property and each portion thereof; and, (c) is binding upon each party and each successor in interest during ownership of the Property or any portion thereof.

11.14 Counterparts. This Agreement may be executed by the parties in counterparts, which counterparts shall be construed together and have the same effect as if all of the parties had executed the same instrument.

11.15 Jurisdiction and Venue. Any action at law or in equity arising under this Agreement or brought by a party hereto for the purpose of enforcing, construing or determining the validity of any provision of this Agreement shall be filed and tried in the Superior Court of the County of San Bernardino, State of California, and the parties hereto waive all provisions of law providing for the filing, removal or change of venue to any other court.

11.16 Project as a Private Undertaking. It is specifically understood and agreed by and between the parties hereto that the development of the Project is a private development, that neither party is acting as the agent of the other in any respect hereunder, and that each party is an independent contracting entity with respect to the

terms, covenants and conditions contained in this Agreement. No partnership, joint venture or other association of any kind is formed by this Agreement. The only relationship between CITY and OWNER is that of a government entity regulating the development of private property and the owner of such property.

11.17 Further Actions and Instruments. Each of the parties shall cooperate with and provide reasonable assistance to the other to the extent contemplated hereunder in the performance of all obligations under this Agreement and the satisfaction of the conditions of this Agreement. Upon the request of either party at any time, the other party shall promptly execute, with acknowledgment or affidavit if reasonably required, and file or record such required instruments and writings and take any actions as may be reasonably necessary under the terms of this Agreement to carry out the intent and to fulfill the provisions of this Agreement or to evidence or consummate the transactions contemplated by this Agreement. The City Manager may delegate his powers and duties under this Agreement to an Assistant City Manager or other management level employee of the CITY.

11.18 Eminent Domain. No provision of this Agreement shall be construed to limit or restrict the exercise by CITY of its power of eminent domain.

11.19 Agent for Service of Process. In the event OWNER is not a resident of the State of California or it is an association, partnership or joint venture without a member, partner or joint venturer resident of the State of California, or it is a foreign corporation, then in any such event, OWNER shall file with the Planning Director, upon its execution of this Agreement, a designation of a natural person residing in the State of California, giving his or her name, residence and business addresses, as its agent for the purpose of service of process in any court action arising out of or based upon this Agreement, and the delivery to such agent of a copy of any process in any such action shall constitute valid service upon OWNER. If for any reason service of such process upon such agent is not feasible, then in such event OWNER may be personally served with such process out of this County and such service shall constitute valid service upon OWNER. OWNER is amenable to the process so served, submits to the jurisdiction of the Court so obtained and waives any and all objections and protests thereto. OWNER for itself, assigns and successors hereby waives the provisions of the Hague Convention (Convention on the Service Abroad of Judicial and Extra Judicial Documents in Civil or Commercial Matters, 20 U.S.T. 361, T.I.A.S. No. 6638).

11.20 Estoppel Certificate. Within thirty (30) business days following a written request by any of the parties, the other party shall execute and deliver to the requesting party a statement certifying that (i) either this Agreement is unmodified and in full force and effect or there have been specified (date and nature) modifications to the Agreement, but it remains in full force and effect as modified; and (ii) either there are no known current uncured defaults under this Agreement or that the responding party alleges that specified (date and nature) defaults exist. The statement shall also provide any other reasonable information requested. The failure to timely deliver this statement shall constitute a conclusive presumption that this Agreement is in full force and effect without modification except as may be represented by the requesting party and that there are no uncured

defaults in the performance of the requesting party, except as may be represented by the requesting party. OWNER shall pay to CITY all costs incurred by CITY in connection with the issuance of estoppel certificates under this Section 11.20 prior to CITY's issuance of such certificates.

11.21 Authority to Execute. The person or persons executing this Agreement on behalf of OWNER warrants and represents that he or she/they have the authority to execute this Agreement on behalf of his or her/their corporation, partnership or business entity and warrants and represents that he or she/they has/have the authority to bind OWNER to the performance of its obligations hereunder.

11.22 Prevailing Wage. OWNER, for itself, its successors, and assigns, agrees, covenants, and warrants that the development of the Property, if any, shall comply with all applicable federal and state labor laws (including, without limitation, the requirement under California law to pay prevailing wages and hire apprentices), and all obligations as set forth herein.

11.22.1 CITY makes no representations concerning prevailing wages in compliance with California Labor Code Section 1770 et seq.

11.22.2 OWNER acknowledges and agrees that it shall be independently responsible for reviewing the applicable laws and regulations with respect to the payment of prevailing wages and complying therewith. OWNER shall bear all risks of payment or non-payment of prevailing wages under California law and/or the implementation of Labor Code Section 1781, as the same may be amended from time to time, and/or any other similar law.

11.22.3 The foregoing indemnity shall survive termination of this Agreement and shall continue after completion of the construction and development of the Property by OWNER, its successors or assigns. OWNER shall be solely responsible for determining and effectuating compliance with such laws.

11.22.4 OWNER, ON BEHALF OF ITSELF, ITS SUCCESSORS, AND ASSIGNS, WAIVES AND RELEASES CITY FROM ANY RIGHT OF ACTION THAT MAY BE AVAILABLE TO OWNER PURSUANT TO LABOR CODE SECTION 1781 OR THE DAVIS BACON ACT. RELATIVE TO THE WAIVER AND RELEASE CONTAINED IN THIS SECTION 11.22, OWNER ACKNOWLEDGES THE PROTECTIONS OF CIVIL CODE SECTION 1542, WHICH READS AS FOLLOWS: A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS THAT THE CREDITOR OR RELEASING PARTY DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM OR HER MUST HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR OR RELEASED PARTY.

INITIALS. BY INITIALING BELOW, OWNER KNOWINGLY AND VOLUNTARILY WAIVES THE PROVISIONS OF SECTION 1542 SOLELY WITH THE MATTERS WHICH ARE THE SUBJECT OF THE FOREGOING WAIVERS AND RELEASES:

_____
(Owner's Initials)

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day and year set forth below.

[SIGNATURES CONTAINED ON FOLLOWING PAGE]

SIGNATURE PAGE
TO DEVELOPMENT AGREEMENT FILE NO. PDA22=004

"OWNER"
American Superior Land, LLC
a Delaware limited liability company

By: _____
John Troutman
Vice President
Date: _____

Roseville Investments, LLC
a Florida limited liability company

By: _____
John Troutman
Vice President
Date: _____

"CITY"

CITY OF ONTARIO

By:_____
Scott Ochoa
City Manager

Date: _____

ATTEST:

_____
City Clerk, Ontario

APPROVED AS TO FORM:

BEST BEST KRIEGER, LLP

_____
City Attorney

ACKNOWLEDGEMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA)
COUNTY OF_____)

On _____, 20_____, before me,_____,
Date *Insert Name and Title of the Officer*

personally appeared _____
Name(s) of Signer(s)
_____, who proved to me on the basis of satisfactory evidence to be the person whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity, and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature_____
Signature of Notary Public

Place Notary Seal Above

ACKNOWLEDGEMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA)
COUNTY OF_____)

On _____, 20_____, before
me_____,
Date *Insert Name and Title of the Officer*

personally appeared
_____
Name(s) of Signer(s)
_____
_____, who proved to me on the basis of satisfactory evidence to be the person whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity, and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature_____
Signature of Notary Public

Place Notary Seal Above

EXHIBIT "A"
TO DEVELOPMENT AGREEMENT

Legal Description of Property

Real property in the City of Ontario, County of San Bernardino, State of California, described as follows:

PARCEL 1: (APN: 0218-161-11-0-000)

The East 35 acres of the South one-half of the Northwest one-quarter of Section 12, Township 2 South, Range 7 West, San Bernardino Meridian, in the County of San Bernardino, State of California, according to the official plat thereof.
Except any portion within the North 10 acres of the Southeast 1/4 of the Northwest 1/4 of said section conveyed to Chaffey Joint Union High School District, a political subdivision of State of California in grant deed recorded January 6, 2000 as Instrument No. 2000-0005735 of Official Records.
Also excepting therefrom that portion of the land described in the grant deed to City of Ontario, a municipal corporation recorded July 24, 2008 as Instrument No. 2008- 0338801 of Official Records.

PARCEL 2: (APN: 0218-161-04-0-000)

The West one-half of the Northwest one-quarter of the Northwest one-quarter of Section 12, Township 2 South, Range 7 West, San Bernardino Meridian, in the County of San Bernardino, State of California, according to the official plat thereof.

Except therefrom all public streets and highways.
Also excepting therefrom that portion of the land described in the grant deed to City of Ontario, a municipal corporation recorded July 24, 2008 as Instrument No. 2008- 0338803 of Official Records.

PARCEL 3: (APN: 0218-161-05-0-000)

The East one-half of the Northwest one-quarter of the Northwest one-quarter of Section 12, Township 2 South, Range 7 West, San Bernardino Meridian, in the County of San Bernardino, State of California, according to the official plat thereof. Except therefrom all public streets and highways.
Also excepting therefrom that portion of the land described in the grant deed to City of Ontario, a municipal corporation recorded July 24, 2008 as Instrument No. 2008- 0338803 of Official Records.

PARCEL 3A: (APN: PORTION OF 0218-171-22-0-000)

An undivided 1/3rd interest in the well-site described as the West 5.00 feet of the South
8.00 feet of the North 72.50 feet of the Northeast one-quarter of the Northeast one- quarter of Section 12, Township 2 South, Range 7 West, San Bernardino Meridian and the East 5.00 feet of the South 8.00 feet of the North 72.50 feet of the Northwest one- quarter of the Northeast one-quarter of Section 12, Township 2 South, Range 7 West, San Bernardino Meridian, in the County of San Bernardino, State of California, according to the official plat thereof.

PARCEL 3B:

A non-exclusive easement right-of-way per that document recorded March 10, 1976 in Book 8880, page 113 of Official Records to construct, maintain, operate, remove, replace and repair water pipeline together with valves and other equipment over, under, along and across the certain strip of land located within the lines of the property described as follows:
The South 4 feet of the North 34 feet of the Northwest one-quarter of the Northeast one- quarter and the Northeast one-quarter of the Northwest one-quarter of Section 12, Township 2 South, Range 7 West, San Bernardino Meridian, also the South 48.50 feet of the North 82.50 feet of the East 30.00 feet of the Northwest one-quarter of the Northeast one-quarter of Section 12, Township 2 South, Range 7 West, San Bernardino Meridian, in the County of San Bernardino, according to the official plat thereof.

PARCEL 4: (APN: 0218-161-10-0-000 AND PORTION OF 0218-171-22-0-000)

The Southwest one-quarter of the Northwest one-quarter and the West 5 acres of the Southeast one-quarter of the Northwest one-quarter of Section 12, Township 2 South, Range 7 West, San Bernardino Meridian, in the County of San Bernardino, State of California, according to the official plat thereof.
Together with an undivided 1/6 interest in the well-site described as the West 5.00 feet of the South 8.00 feet of the North 72.50 feet of the Northeast one-quarter of the Northeast one-quarter of Section 12, Township 2 South, Range 7 West San Bernardino Meridian and the East 5.00 feet of the South 8.00 feet of the North 72.50 feet of the Northwest one-quarter of the Northeast one-quarter of Section 12, Township 2 South, Range 7 West, San Bernardino Meridian, in the County of San Bernardino, State of California, according to the official plat thereof. Except any portion within the North 10 acres of the Southeast 1/4 of the Northwest 1/4 of said section.

EXHIBIT "B"
TO DEVELOPMENT AGREEMENT

Map showing Property and its location

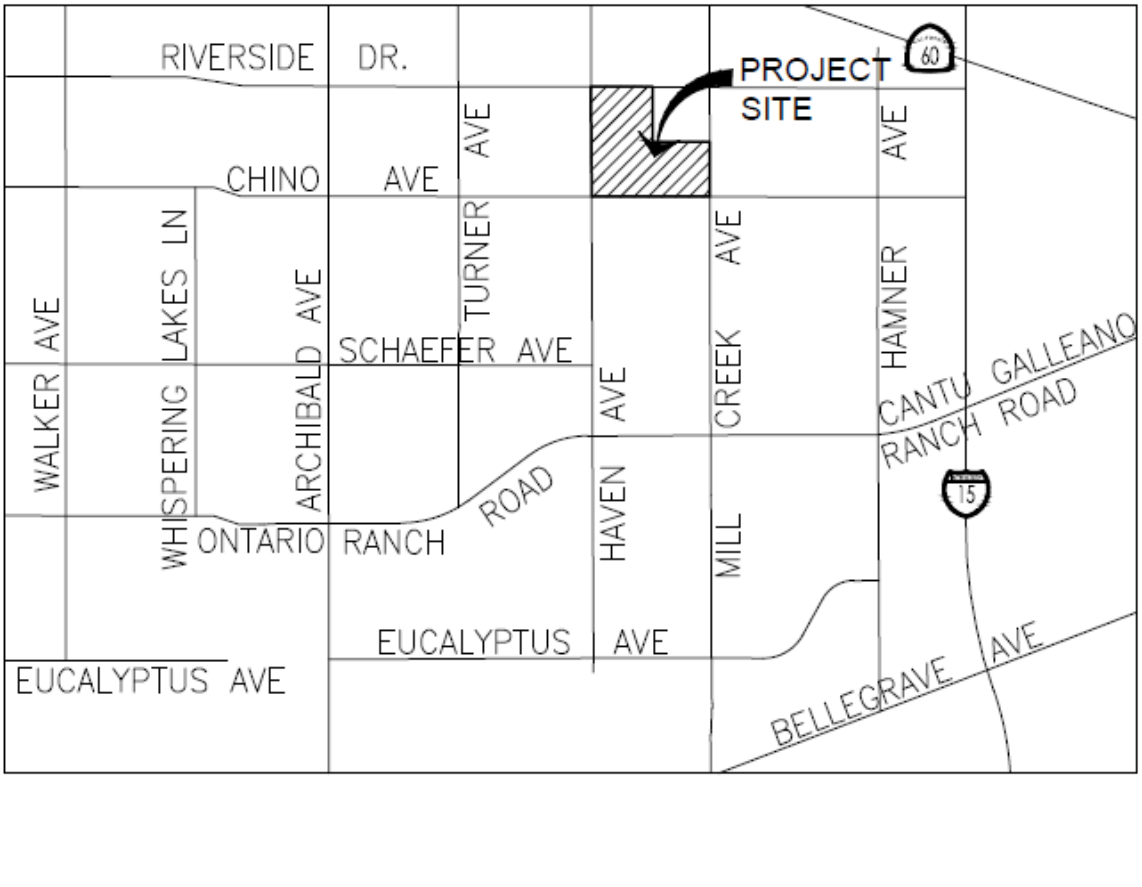


EXHIBIT "C"
TO DEVELOPMENT AGREEMENT

Existing Development Approvals

On October 23, 2007 the Planning Commission:

a) Issued Resolution No. PC07-125 recommending City Council certification of the Rich-Haven Specific Plan EIR (SCH#2006051081).
b) Issued Resolution No. PC07-127 recommending to City Council approval of the Rich-Haven Specific Plan (File No. PSP05-004).

On December 4, 2007, the City Council:

a) Issued Resolution No. 2007-145 certifying the Rich-Haven Specific Plan EIR (SCH#2006051081).
b) Adopted Ordinance No. 2884 approving the Rich-Haven Specific Plan.

On February 23, 2016, the Planning Commission:

a) Issued Resolution No. PC16-003 recommending City Council adoption of an Addendum to the Rich-Haven EIR.
b) Issued Resolution PC16-004 recommending approval of the Rich-Haven Specific Plan Amendment (File No. PSPA16-001).

On March 15, 2016, the City Council:

a) Issued Resolution No. 2016-024 for the adoption of an Addendum (File No. PSPA16-001) to the Rich-Haven Specific Plan EIR.
b) Issued Resolution No. 2016-025 approving an Amendment (File No. PSPA16-001) to the Rich-Haven Specific Plan.

On January 23, 2018, the Planning Commission:

a) Issued Resolution No. PC18-014 recommending City Council adoption of an Addendum to the Rich-haven EIR.
b) Issued Resolution No. PC18-015 recommending to City Council adoption of the Rich-Haven Specific Plan Amendment (File No. PSPA16-005).

On February 20, 2018, the City Council:

a) Issued Resolution No. 2018-017 for the adoption of an Addendum (File No. PSPA16-005) to the Rich-Haven Specific Plan EIR.
b) Issued Resolution No. 2018-018 approving an Amendment (File No. PSPA16-005) to the Rich-Haven Specific Plan.

EXHIBIT "D"
TO DEVELOPMENT AGREEMENT

Existing Land Use Regulations

These documents are listed for reference only:

1. The Rich-Haven Specific Plan (File No. PSP05-004) Environmental Impact Report, Resolution No. 2007-145.

2. The Rich-Haven Specific Plan (File No. PSP05-004), Ordinance No. 2884.

3. Addendum to the Rich-Haven Specific Plan (File No. PSPA16-001) Environmental Impact Report, Resolution No. 2016-024.

4. Amendment to the Rich-Haven Specific Plan (File No. PSPA16-001), Resolution No. 2016-025.

5. Addendum to the Rich-Haven Specific Plan (File No. PSPA16-005) Environmental Impact Report, Resolution No. 2018-017.

6. Amendment to the Rich-Haven Specific Plan (File No. PSPA16-005), Resolution No. 2018-018.

7. City of Ontario Municipal Code
    a. Six – Sanitation & Health
    b. Seven – Public Works
    c. Eight – Building Regulations
    d. Nine – Development Code
    e. Ten – Parks & Recreation

EXHIBIT "E"
TO DEVELOPMENT AGREEMENT

Description of Required Infrastructure Improvements

PHASE 1 IMPROVEMENTS

1. SW on Haven Avenue, between Riverside Drive and North of Nelson Drive.
2. SW on Twinkle Avenue, between Street “G” and Chino Avenue.
3. SW on Chino Avenue, between Haven Avenue and Twinkle Avenue.
4. SW on Chino Avenue, between Lots 1 and 2 and Mill Creek Avenue.
5. SW within Lots 1 and 2 between
6. SW on Streets “A”, “B”, “D”, “E”, “F”, “G”, and “H”.
7. PW on Streets “A”, “B”, “D”, “E”, “F”, “G”, and “H”.
8. RW on Chino Avenue, between Haven Avenue to Mill Creek Avenue.
9. RW on Streets “A”, “B”, “D”, and “H”.
10. SD on Haven Avenue, between Future Street and South of Chino Avenue.
11. SD on Twinkle Avenue, between Street “G” and South of Chino Avenue.
12. SD on Streets “A”, “B”, “D”, “E”, “F”, “G”, and “H”.
13. SD within Lots 1 and 2 between Street “A” and Chino Avenue.
14. SD on Chino Avenue between Lot 1 and Mill Creek Avenue to POC
15. SD within Lots 2 and 4 between Street “A” and Twinkle Ave.
16. FO on Haven Avenue, between Riverside Drive and Street “B”.
17. FO on Twinkle Avenue, between Street “G” and Chino Avenue.
18. FO on Chino Avenue, between Haven Avenue and Mill Creek Avenue.
19. FO on Streets “A”, “B”, “D”, “E”, “F”, “G”, and “H”.
20. ST improvements on Haven Avenue, between Riverside Drive and Chino Avenue.
21. ST improvements on Twinkle Avenue between Street “G” and Chino Avenue.
22. ST improvements on Chino Avenue, between Haven Avenue and Mill Creek Avenue.
23. ST improvements on Mill Creek Avenue between Bethany Way and Chino Avenue.
24. ST improvements on Streets “A”, “B”, “D”, “E”, “F”, “G”, and “H”.
25. Traffic Signal at Haven Avenue and Street “B”.
26. Traffic Signal at Haven Avenue and Chino Avenue.
27. Traffic Signal Modification at Haven Avenue and Riverside Drive.
28. Traffic Signal at Bethany Way and Mill Creek Avenue.

PHASE 2 IMPROVEMENTS

1. SW on Street “G”, between Street “D” and Street “E”.
2. PW on Streets “D” and “G”.
3. SD on Street “G”, between Street “D” and Street “E”.
4. SD within Lot 12 between Street “G” and Chino Ave.
5. SD on Chino Avenue between Lot 12 and Haven Avenue.
6. FO on Streets “D” and “G”.
7. ST improvements on Street “D” and “G”.

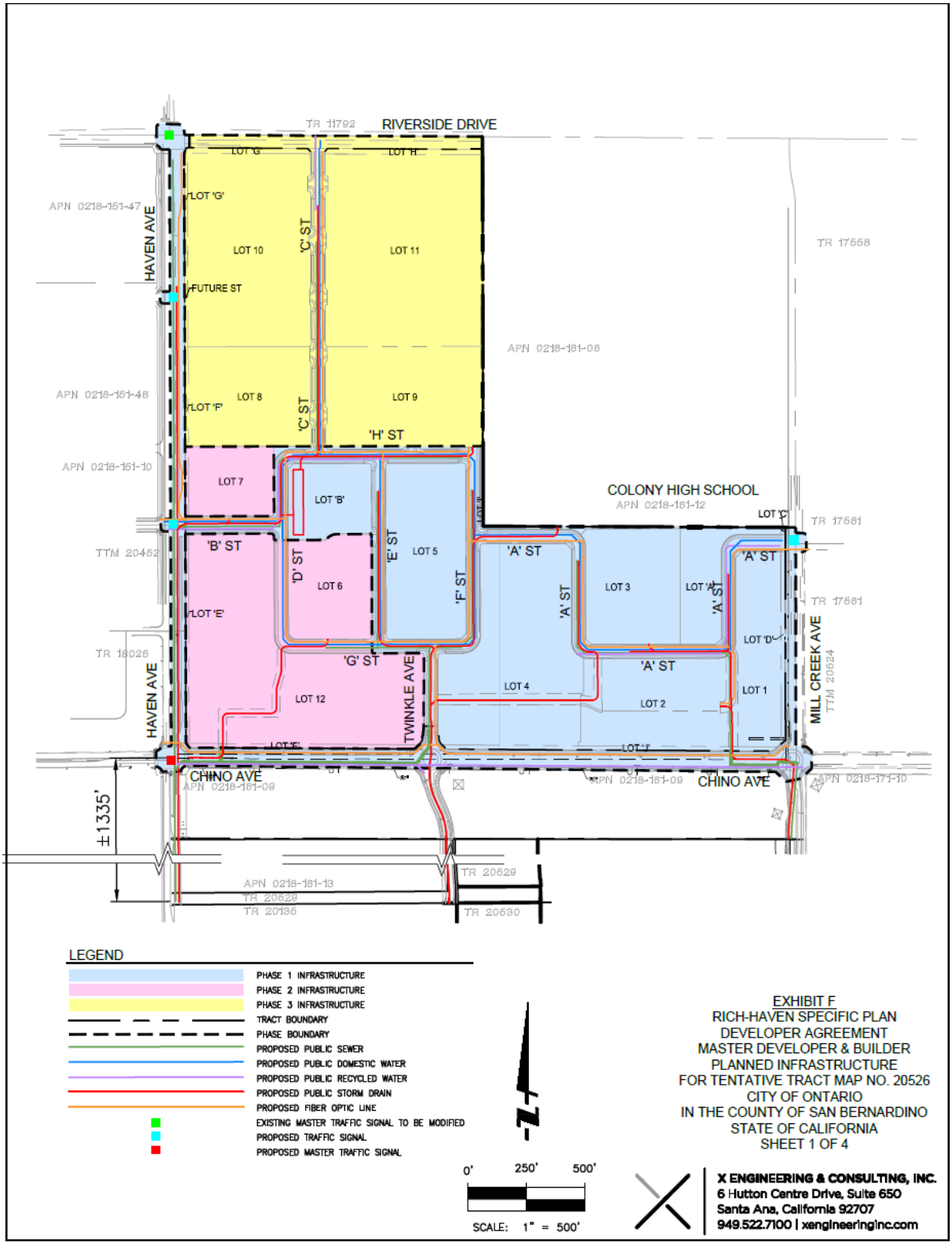
PHASE 3 IMPROVEMENTS

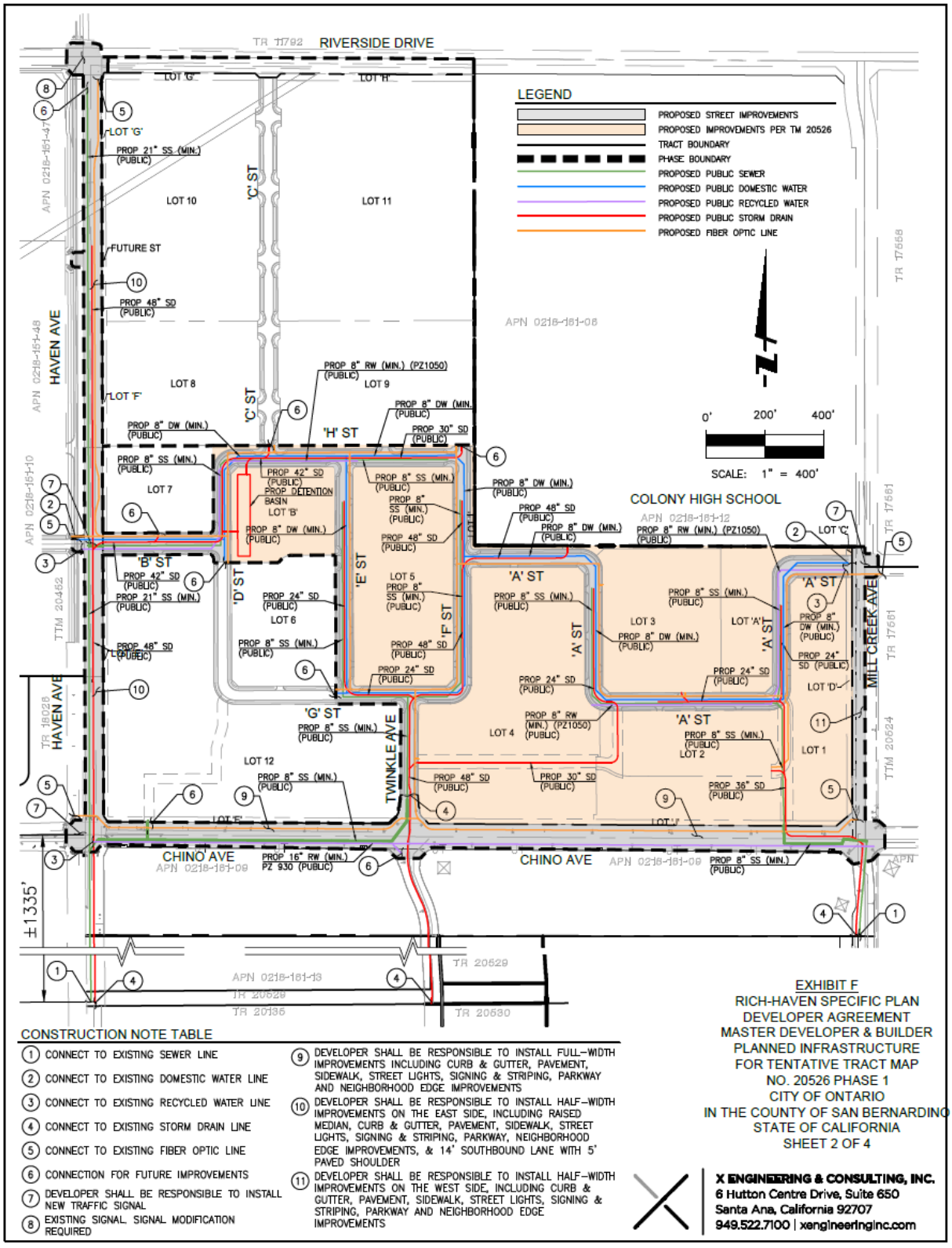
1. SW on Street “C”, between Riverside Drive and Street “H”.
2. PW on Street “C”, between Riverside Drive and Street “H”.
3. RW on Street “C”, between Riverside Drive and Street “H”.
4. SD on Street “C”, between Riverside Drive and Street “H”.
5. FO on Street “C” between Riverside Drive and Street “H”.
6. ST improvements on Riverside Drive, between Haven Avenue and easterly tract boundary.
7. ST improvements on Street “C”, between Riverside Drive and Street “H”.
8. Traffic Signal at Haven Avenue and Future Street.

EXHIBIT "F"
TO DEVELOPMENT AGREEMENT

Depiction of Required Infrastructure Improvements

(SEE ATTACHED EXHBITS)


RIVERSIDE DRIVE
TR 11792
APN 0218-161-47
HAVEN AVE
LOT 'G'
LOT 'H'
LOT 10
'C' ST
LOT 11
FUTURE ST
APN 0218-161-08
TR 17558
APN 0218-161-48
LOT 'F'
LOT 8
LOT 9
'H' ST
APN 0218-161-10
LOT 7
LOT 'B'
COLONY HIGH SCHOOL
APN 0218-161-12
LOT 'C'
TR 17561
TTM 20452
'B' ST
'D' ST
'E' ST
LOT 5
'F' ST
'A' ST
LOT 3
LOT 'A'
LOT 'E'
LOT 6
TR 18026
'G' ST
LOT 'D'
MILL CREEK AVE
TTM 20524
LOT 4
LOT 12
TWINKLE AVE
LOT 2
LOT 1
LOT 'F'
CHINO AVE
APN 0218-161-09
APN 0218-171-10
±1335'
APN 0218-161-13
TR 20529
TR 20136
TR 20530
LEGEND
PHASE 1 INFRASTRUCTURE
PHASE 2 INFRASTRUCTURE
PHASE 3 INFRASTRUCTURE
TRACT BOUNDARY
PHASE BOUNDARY
PROPOSED PUBLIC SEWER
PROPOSED PUBLIC DOMESTIC WATER
PROPOSED PUBLIC RECYCLED WATER
PROPOSED PUBLIC STORM DRAIN
PROPOSED FIBER OPTIC LINE
EXISTING MASTER TRAFFIC SIGNAL TO BE MODIFIED
PROPOSED TRAFFIC SIGNAL
PROPOSED MASTER TRAFFIC SIGNAL
0'
250'
500'
SCALE: 1" = 500'
EXHIBIT F
RICH-HAVEN SPECIFIC PLAN
DEVELOPER AGREEMENT
MASTER DEVELOPER & BUILDER
PLANNED INFRASTRUCTURE
FOR TENTATIVE TRACT MAP NO. 20526
CITY OF ONTARIO
IN THE COUNTY OF SAN BERNARDINO
STATE OF CALIFORNIA
SHEET 1 OF 4
X ENGINEERING & CONSULTING, INC.
6 Hutton Centre Drive, Suite 650
Santa Ana, California 92707
949.522.7100 | xengineeringinc.com

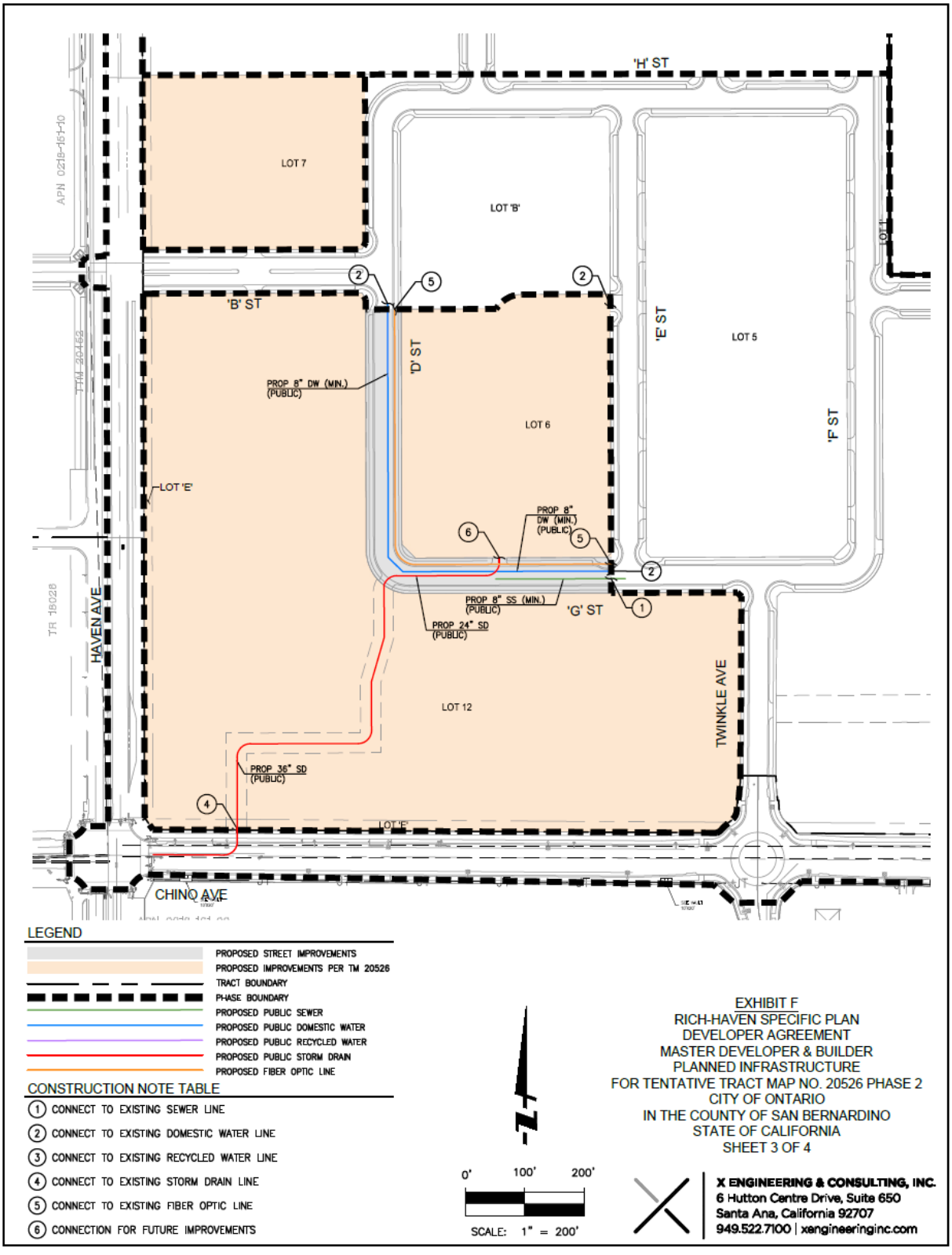


CONSTRUCTION NOTE TABLE

1. CONNECT TO EXISTING SEWER LINE
2. CONNECT TO EXISTING DOMESTIC WATER LINE
3. CONNECT TO EXISTING RECYCLED WATER LINE
4. CONNECT TO EXISTING STORM DRAIN LINE
5. CONNECT TO EXISTING FIBER OPTIC LINE
6. CONNECTION FOR FUTURE IMPROVEMENTS
7. DEVELOPER SHALL BE RESPONSIBLE TO INSTALL NEW TRAFFIC SIGNAL
8. EXISTING SIGNAL. SIGNAL MODIFICATION REQUIRED
9. DEVELOPER SHALL BE RESPONSIBLE TO INSTALL FULL-WIDTH IMPROVEMENTS INCLUDING CURB & GUTTER, PAVEMENT, SIDEWALK, STREET LIGHTS, SIGNING & STRIPING, PARKWAY AND NEIGHBORHOOD EDGE IMPROVEMENTS
10. DEVELOPER SHALL BE RESPONSIBLE TO INSTALL HALF-WIDTH IMPROVEMENTS ON THE EAST SIDE, INCLUDING RAISED MEDIAN, CURB & GUTTER, PAVEMENT, SIDEWALK, STREET LIGHTS, SIGNING & STRIPING, PARKWAY, NEIGHBORHOOD EDGE IMPROVEMENTS, & 14' SOUTHBOUND LANE WITH 5' PAVED SHOULDER
11. DEVELOPER SHALL BE RESPONSIBLE TO INSTALL HALF-WIDTH IMPROVEMENTS ON THE WEST SIDE, INCLUDING CURB & GUTTER, PAVEMENT, SIDEWALK, STREET LIGHTS, SIGNING & STRIPING, PARKWAY AND NEIGHBORHOOD EDGE IMPROVEMENTS

EXHIBIT F
RICH-HAVEN SPECIFIC PLAN
DEVELOPER AGREEMENT
MASTER DEVELOPER & BUILDER
PLANNED INFRASTRUCTURE
FOR TENTATIVE TRACT MAP
NO. 20526 PHASE 1
CITY OF ONTARIO
IN THE COUNTY OF SAN BERNARDINO
STATE OF CALIFORNIA
SHEET 2 OF 4

X ENGINEERING & CONSULTING, INC.
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Santa Ana, California 92707
949.522.7100 | xengineeringinc.com


'H' ST
LOT 7
LOT 'B'
LOT 1
APN 0218-161-10
'B' ST
'D' ST
'E' ST
LOT 5
'F' ST
TM 36452
PROP 8" DW (MIN.) (PUBLIC)
LOT 6
LOT 'E'
PROP 8" DW (MIN.) (PUBLIC)
PROP 8" SS (MIN.) (PUBLIC)
'G' ST
PROP 24" SD (PUBLIC)
TR 18028
HAVEN AVE
TWINKLE AVE
LOT 12
PROP 36" SD (PUBLIC)
LOT 'F'
CHINO AVE
LEGEND
PROPOSED STREET IMPROVEMENTS
PROPOSED IMPROVEMENTS PER TM 20526
TRACT BOUNDARY
PHASE BOUNDARY
PROPOSED PUBLIC SEWER
PROPOSED PUBLIC DOMESTIC WATER
PROPOSED PUBLIC RECYCLED WATER
PROPOSED PUBLIC STORM DRAIN
PROPOSED FIBER OPTIC LINE
CONSTRUCTION NOTE TABLE
1 CONNECT TO EXISTING SEWER LINE
2 CONNECT TO EXISTING DOMESTIC WATER LINE
3 CONNECT TO EXISTING RECYCLED WATER LINE
4 CONNECT TO EXISTING STORM DRAIN LINE
5 CONNECT TO EXISTING FIBER OPTIC LINE
6 CONNECTION FOR FUTURE IMPROVEMENTS
0' 100' 200'
SCALE: 1" = 200'
EXHIBIT F
RICH-HAVEN SPECIFIC PLAN
DEVELOPER AGREEMENT
MASTER DEVELOPER & BUILDER
PLANNED INFRASTRUCTURE
FOR TENTATIVE TRACT MAP NO. 20526 PHASE 2
CITY OF ONTARIO
IN THE COUNTY OF SAN BERNARDINO
STATE OF CALIFORNIA
SHEET 3 OF 4
X ENGINEERING & CONSULTING, INC.
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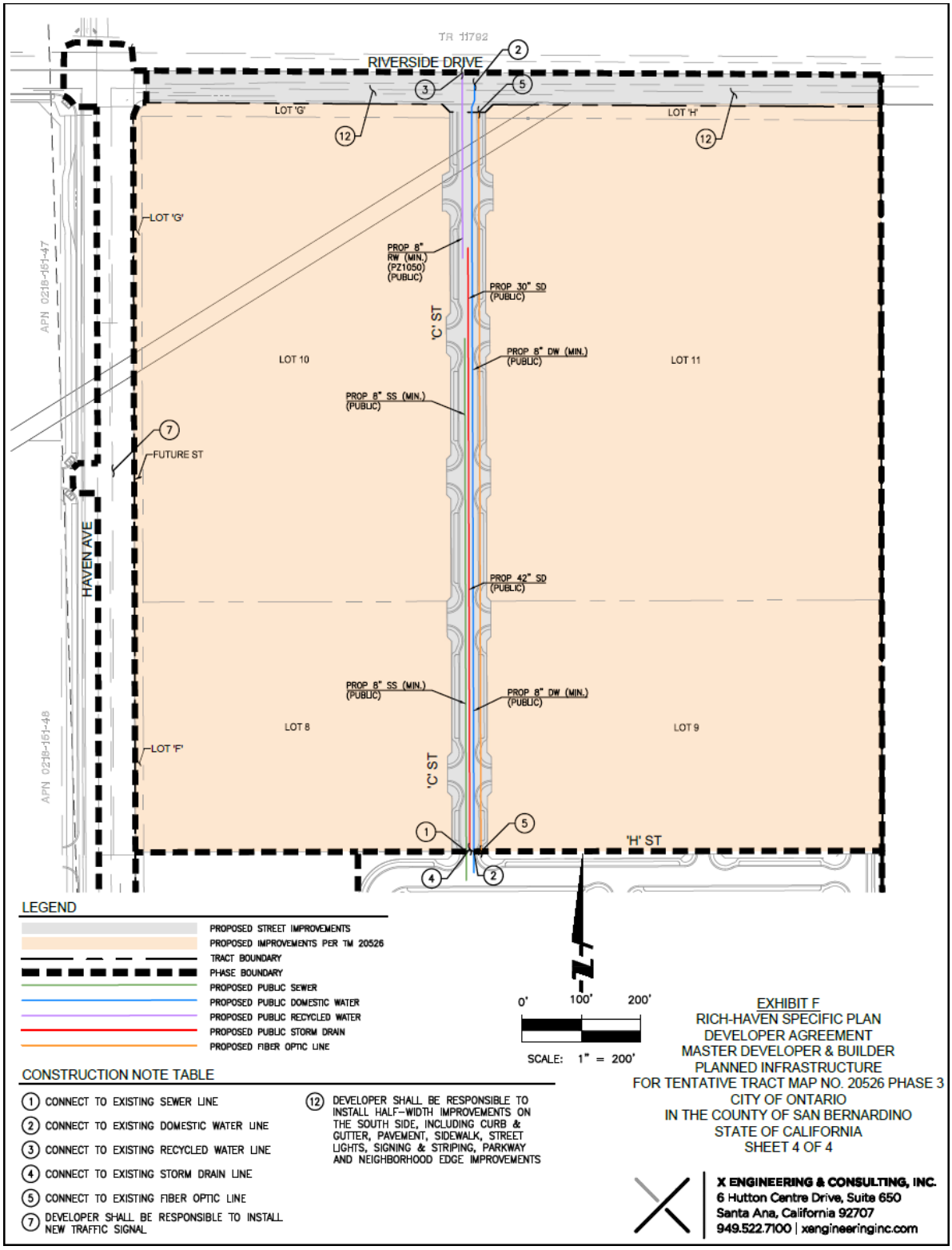

TR 11792
RIVERSIDE DRIVE
LOT 'G'
LOT 'H'
LOT 'G'
PROP 8" RW (MIN.) (PZ1050) (PUBLIC)
PROP 30" SD (PUBLIC)
'C' ST
PROP 8" DW (MIN.) (PUBLIC)
LOT 10
LOT 11
PROP 8" SS (MIN.) (PUBLIC)
FUTURE ST
HAVEN AVE
PROP 42" SD (PUBLIC)
PROP 8" SS (MIN.) (PUBLIC)
PROP 8" DW (MIN.) (PUBLIC)
LOT 8
LOT 9
LOT 'F'
'C' ST
'H' ST
APN 0218-151-47
APN 0218-151-48
LEGEND
PROPOSED STREET IMPROVEMENTS
PROPOSED IMPROVEMENTS PER TM 20526
TRACT BOUNDARY
PHASE BOUNDARY
PROPOSED PUBLIC SEWER
PROPOSED PUBLIC DOMESTIC WATER
PROPOSED PUBLIC RECYCLED WATER
PROPOSED PUBLIC STORM DRAIN
PROPOSED FIBER OPTIC LINE
0'
100'
200'
SCALE: 1" = 200'
CONSTRUCTION NOTE TABLE
1 CONNECT TO EXISTING SEWER LINE
2 CONNECT TO EXISTING DOMESTIC WATER LINE
3 CONNECT TO EXISTING RECYCLED WATER LINE
4 CONNECT TO EXISTING STORM DRAIN LINE
5 CONNECT TO EXISTING FIBER OPTIC LINE
7 DEVELOPER SHALL BE RESPONSIBLE TO INSTALL NEW TRAFFIC SIGNAL
12 DEVELOPER SHALL BE RESPONSIBLE TO INSTALL HALF-WIDTH IMPROVEMENTS ON THE SOUTH SIDE, INCLUDING CURB & GUTTER, PAVEMENT, SIDEWALK, STREET LIGHTS, SIGNING & STRIPING, PARKWAY AND NEIGHBORHOOD EDGE IMPROVEMENTS
EXHIBIT F
RICH-HAVEN SPECIFIC PLAN
DEVELOPER AGREEMENT
MASTER DEVELOPER & BUILDER
PLANNED INFRASTRUCTURE
FOR TENTATIVE TRACT MAP NO. 20526 PHASE 3
CITY OF ONTARIO
IN THE COUNTY OF SAN BERNARDINO
STATE OF CALIFORNIA
SHEET 4 OF 4
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EXHIBIT "G"
TO DEVELOPMENT AGREEMENT

FORM OF CERTIFICATE OF NET MDD AVAILABILITY

Pursuant to Section ___ of this Agreement between the City of Ontario, a California municipal corporation, and _____, a _____ company, hereinafter called "OWNER", the terms and definitions of which are hereby incorporated herein by this reference and hereinafter called "Agreement", the City of Ontario hereby certifies based on CITY receipt of payment of OWNER's share of the funding for the Phase 2 Water Improvements, that OWNER is entitled to the following Net MDD Water Availability.

Amount of Net MDD _____ gpm

_____
Scott Ochoa, City Manager

Dated:_____

EXHIBIT "H"
TO DEVELOPMENT AGREEMENT

FORM OF CERTIFICATE OF REGIONAL DIF CREDIT

Pursuant to Section 4.5.2 of this Agreement by and between the City of Ontario and _____, dated _____, 201_, the terms and definitions of which are hereby incorporated herein by this reference and hereinafter called the "Development Agreement', the City of Ontario hereby certifies that OWNER is entitled to the following amount and nature of DIF Credits in the Regional Water DIF Infrastructure Category:

Amount of Credit: $_____

_____
Scott Ochoa, City Manager

Dated: _____

Exhibit "I-1"

ONTARIO RANCH
WATER SUPPLY PHASING PLAN

Phase 2	Water Availability Equivalency	Estimated Net MDD Available[1]
Phase 2 A		
Supply & Storage		
1. 1 - Additional Ground Water Well and Collection lines - Design and Construction	8,250 gpm[2]	**7,750 gpm**[2]
Pipelines (Transmission & Distribution)[2]		
2. 925 Zone Transmission lines – Design and Construction		
3. Temporary Pressure Reducing Station[3] – Design and Construction		
Phase 2B		
Supply & Storage		
4. 1 – Additional Ground Water Well and Collection lines – Design and Construction	10,500 gpm[2]	**9,860 gpm**[2]
5. 1 – 6 million gallon Reservoir – 925 Zone – Design and Construction		

(1) Upon Completion of the construction of all of the improvements described for each Phase a Certificate of Net MDD Availability shall be issued to Developer for the corresponding amount of Net MDD. Net MDD means the maximum daily demand on the potable water supply, net of the water requirements for public schools and parks. The Water Availability Equivalency includes the estimated requirements for public schools and parks. The amount of Net MDD specified is the cumulative amount for which building permits may be issued upon funding of the corresponding and all preceding Phases of improvements.

(2) The ability of a particular development to utilize Net MDD assigned to it by the Developer will require the completion of design and construction of Master-planned potable and recycled water transmission and distribution pipelines for the respective pressure zone. Other factors may include its location, the particular land use and Water Availability Equivalents assigned to it as specified in Exhibit C-2.

(3) Pressure reducing stations are a component of the pipeline transmission and distribution system.

EXHIBIT "I-2"

Available Water Supply - See Exhibit C-1R for Net MDD Available

Table A - Water Demand Equivalents By Land Use

The Ontario Plan	Potable Water			Recycled Water	
Land Use	Water Demand Factor (ADD)		Water Demand Equivalents (WDE)[2]	Recycled Water Demand Factor[1] (ADD)	Recycled Water Demand Of Total Water Demand
	(gpd/du)	(gpd/ac)	(gpm/unit)	(gpd/ac)	(%)
Detached Dwellings (less than 5 units per acre)	544		0.57	900	28%
Detached or Attached Dwellings (between 5 and 11 units per acre)	464		0.48	1,000	21%
Attached Dwellings (between 11 and 25 units per acre)	323		0.34	1,500	18%
High Density Dwellings (25+ units per acre)	152		0.16	1,500	27%
Commercial Lodging	150		0.16	1,700	50%
Retail/Services Uses		2,200	2.29	2,300	51%
Office Uses		3,400	3.54	2,300	40%
Business Park Uses		2,200	2.29	2,200	50%
Industrial Uses		2,000	2.08	2,200	52%
Institutional Use		2,200	2.29	1,600	42%
Parks		1,000	1.04	1,400	58%
Schools		3,500	3.65	1,600	31%

[1]Recycled Water Demands include irrigation for right-of-way (medians and parkways), neighborhood edge, pocket parks, and common areas.

[2] The WDE is based on the Maximum Day Demand (MDD) with a peaking factor of 1.5 in the NMC for all land use categories.

Table B - Example Water Supply Calculation

Land Use	Acres[1] (gross)	Residential Units	WDE Factor (gpm)	Potable MDD (gpm)	Recycled Water ADD (gpm)
Development					
Detached Dwellings (less than 5 units per acre)	1,284	5,061	0.57	2,868	803
Detached or Attached Dwellings (between 5 and 11 units per acre)	369	2,530	0.48	1,223	256
Attached Dwellings (between 11 and 25 units per acre)	194	3,410	0.34	1,147	202
Retail/Services Uses (per acre)[2]	104		2.29	239	166
TOTAL	**1,950**	**11,001**		**5,477**	**1,428**

Three (3) Wells Are required to Support this example, assuming each well produces 2,000 gpm and connection to the Recycled Water System maximizing Recycled Water Use.

[1] Residential Acres are estimated based on the weighted average derived from the average number of units per land use category.

[2] Commercial acreage is calculated from a total square footage of 1,361,000 SF with an average Floor to Area Ratio (FAR) of 0.30 for commercial services in The Ontario Plan.

Exhibit "J"

Form of Plume Disclosure Letter

CITY OF ONTARIO

ONTARIO MUNICIPAL UTILITIES COMPANY

PAUL S. LEON
MAYOR

DEBRA DORST-PORADA
MAYOR PRO TEM

ALAN D. WAPNER
JIM W. BOWMAN
RUBEN VALENCIA
COUNCIL MEMBERS

AL C. BOLING
CITY MANAGER

SHEILA MAUTZ
CITY CLERK

JAMES R. MILHISER
TREASURER

SCOTT BURTON
UTILITIES GENERAL MANAGER

March 2017

DISCLOSURE NOTICE
SOUTH ARCHIBALD TRICHLOROETHYLENE PLUME

Dear Property Owner/Developer/Applicant:

The City of Ontario ("City") has approved or will be approving development in the Ontario Ranch area in the next few years, subject to the appropriate and required statutory process. This letter is intended to serve as notice to all potential property owners of the existence of a groundwater plume, known as the South Archibald Trichloroethylene (TCE) Plume which may exist in, under or near owner's property.

The groundwater plume is in an area in the central Chino Basin south of the Pomona Freeway, west of Turner Avenue, east of Grove Avenue, and north of Kimball Avenue. The plume primarily consists of TCE, a discontinued industrial solvent, and is subject to a clean-up under the oversight and direction of the Santa Ana Regional Water Quality Control Board ("Regional Board").

The Regional Board's approved clean-up procedure involves the removal and treatment of groundwater containing TCE via groundwater wells to reduce the plume concentrations and control its migration. In addition, the City is providing potable water supplies for domestic purposes to residences with private domestic wells affected by the plume. Finally, the Regional Board will continue to monitor all impacted areas and private domestic wells to ensure that residents' health and the environment are properly safeguarded. These remedial actions are documented in a Remedial Action Plan approved by the Regional Board in September 2016.

Further and current information may be found on the Regional Board's Geotracker website at https://geotracker.waterboards.ca.gov/profile_report?global_id=T10000004658.

Property owners may wish to include this letter as a part of a Real Estate Transfer Disclosure under California Civil Code Section 1102 et seq.

1425 SOUTH BON VIEW - ONTARIO, CALIFORNIA 91761-4406 - (909) 395-2605 - FAX (909) 395-2601

CITY OF ONTARIO *Agenda Report* **March 18, 2025**	**SECTION:** **PUBLIC HEARINGS**
Department: Planning Prepared By: Alexis Vaughn Staff Member Presenting: Rudy Zeledon, Executive Director Community Development Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 20

SUBJECT: A PUBLIC HEARING TO CONSIDER AN AMENDMENT TO THE AVENUE SPECIFIC PLAN, FILE NO. PSPA22-005

RECOMMENDATION: That the City Council consider and adopt:

A. Resolution approving the use of an Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report (TOP 2050 SEIR);
B. Resolution approving File No. PSPA22-005, an Amendment to the Avenue Specific Plan to: 1) modify the land use designation of Planning Area 4 and apply density modifications to Planning Areas 1B, 2A, 3B, and 5 for consistency with the Ontario Plan 2050 land use plan; 2) apply general modifications throughout the document for clarity; and 3) make exhibit and text updates throughout the document to support the project, for land located at the northwest corner of Archibald Avenue and Ontario Ranch Road.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Operate in a Businesslike Manner
Ensure the Development of a Well Planned, Balanced, and Self-Sustaining Community in Ontario Ranch

FISCAL IMPACT: There is not a direct fiscal impact associated with this action.

BACKGROUND & ANALYSIS: On February 16, 2007, the City Council approved The Avenue Specific Plan. On January 27, 2010, the Ontario City Council certified The Ontario Plan Environmental Impact Report in conjunction with File No. PGPA06-001 (City Council Resolution No. 2010-006), and on August 16, 2022, the Ontario City Council certified The Ontario Plan 2050 Update Supplemental Environmental Impact Report in conjunction with File No. PGPA20-002 (City Council Resolution No. 2022-129). The Ontario Plan 2050 and associated Environmental Impact Report analyzed the Project site and established guidelines for development, including but not limited to, general land use and intensity (Low-Density Residential – LDR, 2.1 to 5.0 du/ac, Medium-Density Residential – MDR, 11.1 to 25.0 du/ac, and Public School - PS).

On July 14, 2022, the Applicant submitted an application for an amendment to The Avenue Specific

Plan (File No. PSPA22-005), along with an Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report. The Addendum document is appended to Attachment B: Addendum Resolution, and the proposed amended Specific Plan is appended to Attachment C: Resolution for File No. PSPA22-005. Lastly, the redlined version of the amended Specific Plan is available for reference and is appended to Attachment D: Planning Commission Back-up.

On February 25, 2025, the Planning Commission conducted a public hearing regarding the Project and related Addendum, and recommended City Council approval by a vote of (4-0).

ANALYSIS: The Specific Plan Amendment consists of exhibit, text changes to accommodate land use and density modifications to Planning Areas 4, 1B, 2A, 3B, and 5, and to bring the Specific Plan's Land Use Plan into consistency with The Ontario Plan 2050 Land Use Plan (see Exhibit B: Existing and Proposed Specific Plan Land Use Plan, Exhibit C: Existing The Ontario Plan 2050 Land Use Plan, and Exhibit D: Proposed Specific Plan Land Use Table, appended to this report as Attachment A: Agenda Report Exhibits).

Major changes to the Specific Plan Land Use Table are summarized as follows:

- Total gross acreage will remain the same and the net acreage has been updated to more accurately reflect existing conditions.
- Total number of dwelling units will increase from 2,981 to 3,753 units and commercial square footage will increase from 130,680 to 335,176 square feet.
- For clarity, each land use within a Planning Area has been provided a designated line on the land use table, whereas previously, no such distinctions were made.
- Adjustments have been made throughout the table to accurately reflect existing conditions and development information for built-out Planning Areas.
- The Land Use Table footnotes have been revised to provide further clarification on certain conditions and restrictions for development of the Specific Plan area, including:
- The realignment of Schaefer Avenue, which creates the need for Planning Area C, as it is under separate ownership from Planning Area 1A.
- The requirement for all acreages to be further defined through tract map surveys.
- The potential need for additional studies to transfer dwelling units between Planning Areas.
- The requirements for and ultimate allowance of density blending between Planning Areas at a rate no higher than 15 percent. If units are blended within a Planning Area or moved between Planning Areas, then Technical Studies for impacts to the Water and Sewer Master Plan Systems will be required as part of the entitlement process.

While the main goal of the Specific Plan Amendment is to bring the Land Use Plan into consistency with The Ontario Plan 2050 Land Use Plan and to provide document clean-up, the Specific Plan Amendment will facilitate the future development of the Specific Plan Area.

COMPLIANCE WITH THE ONTARIO PLAN: The proposed Project is consistent with the principles, goals and policies contained within the Vision, Governance, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan 2050.

HOUSING ELEMENT COMPLIANCE: The Project is consistent with the Housing Element of the

Policy Plan (general plan) component of The Ontario Plan, as the Project site is not one of the properties in the Housing Element Sites contained in Tables B-1 and B-2 (Housing Element Sites Inventory) of the Housing Element Technical Report.

AIRPORT LAND USE COMPATIBILITY PLAN (ALUCP) COMPLIANCE: The California State Aeronautics Act (Public Utilities Code Section 21670 et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

On April 19, 2011, the City Council of the City of Ontario approved and adopted the ONT ALUCP, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the decision-making body for the Project, the City Council has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the City Council finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the ONT ALUCP.

On August 2, 2022, the City Council of the City of Ontario approved and adopted a Development Code Amendment to establish the Chino Airport (CNO) Overlay Zoning District (OZD) and Reference I, Chino Airport Land Use Compatibility Plan (CNO ALUCP). The CNO OZD and CNO ALUCP established the Airport Influence Area for Chino Airport, solely within the City of Ontario, and limits future land uses and development within the Airport Influence Area, as they relate to safety, airspace protection, and overflight impacts of current and future airport activity. The CNO ALUCP is consistent with policies and criteria set forth within the Caltrans 2011 California Airport Land Use Planning Handbook. The proposed Project is located within the Airport Influence Area of Chino Airport and was evaluated and found to be consistent with the California Airport Land Use Planning Handbook and the CNO ALUCP. As the decision-making body for the Project, the City Council has reviewed and considered the facts and information contained in the Application and supporting documentation against the CNO ALUCP compatibility factors, including Safety, Airspace Protection, Overflight. As a result, the City Council finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the California Airport Land Use Planning Handbook and the Chino ALUCP.

ENVIRONMENTAL REVIEW: The Application is a project pursuant to the California Environmental Quality Act (Public Resources Code Section 21000 et seq.) (CEQA) and an Addendum to The Ontario Plan 2050 Certified Subsequent Final Environmental Impact Report (SEIR, File No. PGPA) was prepared to determine possible environmental impacts. The addendum analyzed the following environmental categories: aesthetics, agriculture and forestry resources, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and

hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and service systems, wildfire, and mandatory findings of significance. The addendum compared Project impacts with those identified in the Certified SEIR and found that the Project would not result in: 1) substantially different or increased impacts when compared to those in the Certified SEIR; 2) any new significant impacts not already considered and addressed in the Certified SEIR; or 3) any substantial increase in the severity of, or substantial change in a previously-identified environmental impacts considered and addressed in the Certified SEIR. The Project was found to be consistent with the Certified SEIR and does not necessitate preparation of an additional subsequent or supplemental EIR.

The Addendum included an array of studies and assessments, including: air quality and energy assessment, greenhouse gas assessment, biological resources studies (vegetation, wildlife, Delhi Sands Fly), Phase 1 Environmental Site Assessment, noise analysis, traffic analysis, vehicle miles traveled analysis, and water supply assessment. These appendices are available for public review on the City website at https://www.ontarioca.gov/government/agendas/planning-commission

Attachment A: Agenda Report Exhibits

(Document to follow this page)

Exhibit A: PROJECT LOCATION MAP



Exhibit B: EXISTING AND PROPOSED SPECIFIC PLAN LAND USE PLAN

EXISTING



PROPOSED

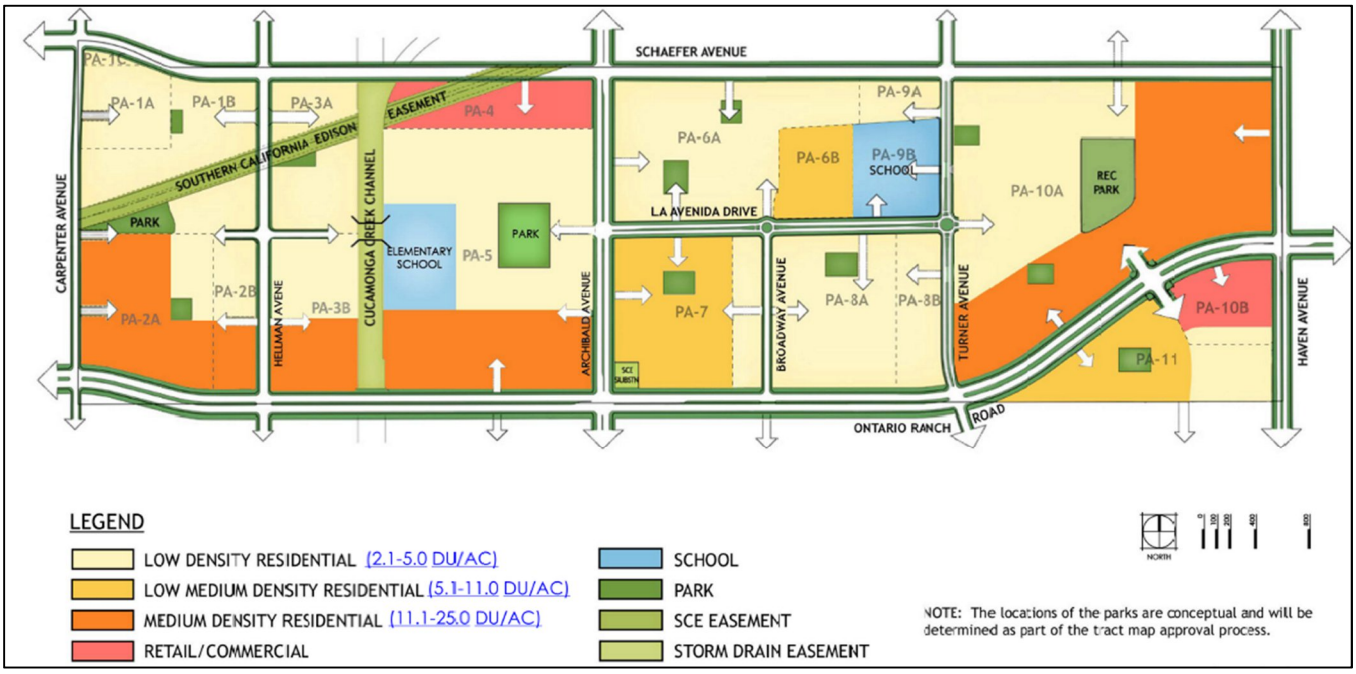
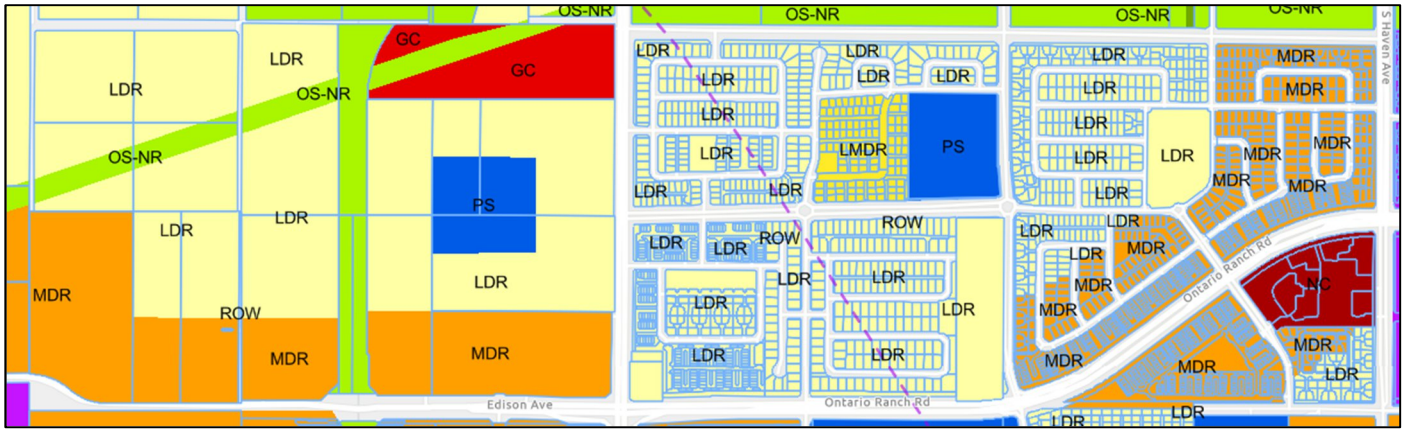


Exhibit C: EXISTING THE ONTARIO PLAN 2050 LAND USE PLAN



LDR Low Density Residential

LMDR Low Medium Density Residential

MDR Medium Density Residential

HDR High Density Residential

MU Mixed Use

NC Neighborhood Commercial

GC General Commercial

Exhibit D: PROPOSED SPECIFIC PLAN LAND USE TABLE

Table 2 - Statistical Analysis

~~Former Subarea~~	Planning Area	Gross Acres	Net Acres	Homes	Density	Commercial SF	Use
~~17~~	1A	11.1	9.20	~~51~~ 41	4.5		LDR
~~17~~	1B	33.5	24.54	~~127~~ 110	4.5		LDR
			5.40				SCE Easement
~~17~~	1C*	2.2	2.20	5	2.3		LDR
~~17~~	2A	32.0	5.00	~~147~~ 23	4.5		LDR
			25.05	~~58~~ 551	22.0		MDR
~~17~~	2B	12.5	6.64	~~86~~ 30	4.5		LDR
			5.43	~~97~~ 119	22.0		MDR
~~17~~	3A	21.7	19.15	~~218~~ 86	4.5		LDR
			2.60				SCE Easement
~~17~~	3B	21.5	12.22	~~334~~ 55	4.5		LDR
			8.59	189	22.0		MDR
~~18~~	4	19.9	15.04			204,496	Retail
			4.00				SCE Easement
~~18~~	5	82.6	46.85	211	4.5		LDR
			22.54	496	22.0		MDR
			10.89				Elementary School
~~18~~	6A	49.9	49.90	~~230~~ 229	4.6		LDR
~~18~~	6B	10.0	10.00	~~106~~ 110	11.0		LMDR
~~18~~	7	30.1	28.90	~~287~~ 265	9.2		LMDR
			1.20				SCE Substation
~~18~~	8A	39.9	39.90	~~180~~ 176	4.4		LDR
~~18~~	8B	9.7	9.70	44	4.5		LDR
~~18~~	9A	10.6	10.60	20	1.9		LDR
~~18~~	9B	10.0	10.00				School
~~12~~	10A	114.7	100.40	~~766~~ 452	4.5		LDR
			14.30	314	22.0		MDR
	10B	10.0	10.00			130,680	Retail
~~24~~	11	33.4	14.73	~~225~~ 67	4.5		LDR
			18.67	160	8.6		LMDR
~~Cucamonga Creek~~		12.8	12.80				Cucamonga Creek
~~Total~~	Total	568.1	556.44	~~2,981~~ 3,753	6.7	335,176	

Notes:
* Realignment of Schaeffer Ave creates the need for PA 1C (APN 021-812-201) as it is owned separately from PA 1A (APN 0218-181-126).
- All acreages approximate- exact acreages will be defined through tract map surveys. Additional studies may be required to transfer these units. See Section 3.1.1 for additional information.
- Density blending will be allowed within Planning Areas within one TOP land use step (i.e. from LDR to LMDR) and between Planning Areas at a rate no higher than 15%. If units are blended within a PA or moved between PA's, then Technical Studies for Impacts to the Water and Sewer Master Plan Systems will be required as part of the entitlement process.

CITY OF ONTARIO PLANNING DEPARTMENT

PLANNING COMMISSION AGENDA REPORT

February 25, 2025

303 East B Street, Ontario, California 91764 Phone: 909.395.2036 / Email: PlanningDirector@OntarioCA.gov

FILE NO: PSPA22-005

SUBJECT: An amendment to The Avenue Specific Plan to: 1) modify the land use designation of Planning Area 4 and apply density modifications to Planning Areas 1B, 2A, 3B, and 5 for consistency with The Ontario Plan 2050 Land Use Plan; 2) apply general modifications throughout the document for clarity; and, 3) make exhibit and text updates throughout the document to support the Project, for land located at the northwest corner of Archibald Avenue and Ontario Ranch Road; (APNs: 0218-191-04; 0218-191-14; 0218-191-15; 0218-191-16; 0218-191-05; 0218-191-22; 0218-191-20) **Submitted by Richland Communities. City Council action is required.**

PROPERTY OWNER: WSI Land Holdings LLC

RECOMMENDED ACTION: That the Planning Commission consider and adopt a Resolution recommending the City Council approve the use of an Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report (TOP 2050 SEIR) and adopt a Resolution recommending the City Council approve File No. PSPA22-005, pursuant to the facts and reasons contained in the staff report and attached Resolutions for the Addendum and the Specific Plan Amendment (Attachments A and B, respectively), and subject to the conditions of approval appended to the attached resolution for the Specific Plan Amendment as Attachment B.

BACKGROUND: On February 16, 2007, the City Council approved The Avenue Specific Plan. On January 27, 2010, the Ontario City Council certified The Ontario Plan Environmental Impact Report in conjunction with File No. PGPA06-001 (City Council Resolution No. 2010-006), and on August 16, 2022, the Ontario City Council certified The Ontario Plan 2050 Update Supplemental Environmental Impact Report in conjunction with File No. PGPA20-002 (City Council Resolution No. 2022-129). The Ontario Plan 2050 and associated Environmental Impact Report analyzed the Project site and established guidelines for development, including but not limited to, general land use and intensity (Low-Density Residential – LDR, 2.1 to 5.0 du/ac, Medium-Density Residential – MDR, 11.1 to 25.0 du/ac, and Public School - PS).

On July 14, 2022, the Applicant submitted an Application for an amendment to The Avenue Specific Plan (File No. PSPA22-005) to: 1) modify the land use designation of Planning Area 4 and apply density modifications to Planning Areas 1B, 2A, 3B, and 5 for consistency with The Ontario Plan 2050 Land Use Plan; 2) apply general modifications

Case Planner:	Alexis Vaughn
Planning Director Approval:	
Submittal Date:	07/14/2022

Hearing Body	*Date*	*Decision*	*Action*
DAB	N/A	N/A	
PC	02/25/2025	Approval	Recommend
CC	03/18/2025		Final

throughout the document for clarity; and, 3) make exhibit and text updates throughout the document to support the Project. The Specific Plan Amendment was submitted in association with Tentative Tract Map No. 20572 (File No. PMTT23-002) and a Development Agreement (File No. PDA23-003). The Tentative Tract Map and Development Agreement are currently under review and will be considered separately by the appropriate hearing bodies.

On November 18, 2024, the Development Advisory Board conducted a public hearing regarding the related Tentative Tract Map No. 20572 (File No. PMTT23-002) and recommended Planning Commission approval, subject to the added condition that the Applicant work with Staff on required revisions to the Map and Development Agreement prior to Planning Commission consideration.

PROJECT SETTING: The Project site consists of land located within The Avenue Specific Plan area, which is bound by Schaefer Avenue to the north, Carpenter Avenue to the west, Ontario Ranch Road and Old Edison Road to the south, and Haven Avenue to the east, which is depicted in Exhibit A: Project Location Map. The site is comprised of a mix of developed residential and commercial land uses, vacant and unimproved land, and agricultural dairy and plant nursery uses.

The Project site is surrounded by agricultural, dairy, and residential land uses and vacant land to the north, agricultural uses and vacant land to the west, residential land uses and vacant land to the east, and agricultural and residential land uses and vacant land to the south. The existing surrounding land uses, zoning, and Policy Plan (general plan) and specific plan land use designations are summarized in Table 1: Surrounding Zoning & Land Uses.

PROJECT ANALYSIS:

The Specific Plan Amendment consists of exhibit and text changes to accommodate land use and density modifications to Planning Areas 4, 1B, 2A, 3B, and 5, to bring the Specific Plan's Land Use Plan into consistency with The Ontario Plan 2050 Land Use Plan (see Exhibit B: Existing and Proposed Specific Plan Land Use Plan, Exhibit C: Existing The Ontario Plan 2050 Land Use Plan, and Exhibit D: Proposed Specific Plan Land Use Table). The proposed changes to the Specific Plan document are appended to Attachment B: Resolution for File No. PSPA22-005 of this agenda report as Attachment A: File No. PSPA22-005 Redlined Specific Plan Document.

Major changes to the Specific Plan Land Use Table are summarized as follows:

- Total gross acreage will remain the same and the net acreage has been updated to more accurately reflect existing conditions.
- Total number of dwelling units will increase from 2,981 to 3,753 units and commercial square footage will increase from 130,680 to 335,176 square feet.

- For clarity, each land use within a Planning Area has been provided a designated line on the land use table, whereas previously, no such distinctions were made.
- Adjustments have been made throughout the table to accurately reflect existing conditions and development information for built-out Planning Areas.
- The Land Use Table footnotes have been revised to provide further clarification on certain conditions and restrictions for development of the Specific Plan area, including:

    - The realignment of Schaefer Avenue, which creates the need for Planning Area C, as it is under separate ownership from Planning Area 1A.
    - The requirement for all acreages to be further defined through tract map surveys.
    - The potential need for additional studies to transfer dwelling units between Planning Areas.
    - The requirements for and ultimate allowance of density blending between Planning Areas at a rate no higher than 15 percent. If units are blended within a Planning Area or moved between Planning Areas, then Technical Studies for impacts to the Water and Sewer Master Plan Systems will be required as part of the entitlement process.

While the main goal of the Specific Plan Amendment is to bring the Land Use Plan into consistency with The Ontario Plan 2050 Land Use Plan and to provide document clean-up, the Amendment will facilitate future development through forthcoming Tentative Tract or Parcel Maps and Development Agreements. To date, the Applicant has submitted Tentative Tract Map No. 20572, an "A Map" to subdivide Planning Area 5 into seven numbered lots and fourteen lettered lots to facilitate future subdivision and development. The Applicant has requested additional time to work with staff to address outstanding issues with the proposed map.

PUBLIC NOTIFICATION: The subject Application was advertised as a public hearing in at least one newspaper of general circulation in the City of Ontario (the Inland Valley Daily Bulletin newspaper). In addition, notices were mailed to all owners of real property located within a minimum of 600 feet of the exterior boundaries of the Project site, as shown on the records of the County Assessor.

CORRESPONDENCE: As of the preparation of this Agenda Report, Planning Department staff has not received any written or verbal communications from the owners or occupants of properties surrounding the Project site or from the public in general, regarding the subject Application.

AGENCY/DEPARTMENT REVIEWS: Each City agency/department has been provided the opportunity to review and comment on the subject Application and recommend conditions of approval to be imposed upon the Application. At the time of the Resolution preparation, recommended conditions of approval were provided and are appended

to the attached Specific Plan Amendment (File No. PSPA22-005) Resolution as Attachment A.

AIRPORT LAND USE COMPATIBILITY PLAN (ALUCP) COMPLIANCE: The California State Aeronautics Act (Public Utilities Code Section 21670 et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

On April 19, 2011, the City Council of the City of Ontario approved and adopted the ONT ALUCP, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the recommending body for the Project, the Planning Commission has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the Planning Commission finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the ONT ALUCP.

On August 2, 2022, the City Council of the City of Ontario approved and adopted a Development Code Amendment to establish the Chino Airport (CNO) Overlay Zoning District (OZD) and Reference I, Chino Airport Land Use Compatibility Plan (CNO ALUCP). The CNO OZD and CNO ALUCP established the Airport Influence Area for Chino Airport, solely within the City of Ontario, and limits future land uses and development within the Airport Influence Area, as they relate to safety, airspace protection, and overflight impacts of current and future airport activity. The CNO ALUCP is consistent with policies and criteria set forth within the Caltrans 2011 California Airport Land Use Planning Handbook. The proposed Project is located within the Airport Influence Area of Chino Airport and was evaluated and found to be consistent with the California Airport Land Use Planning Handbook and the CNO ALUCP. As the recommending body for the Project, the Planning Commission has reviewed and considered the facts and information contained in the Application and supporting documentation against the CNO ALUCP compatibility factors, including Safety, Airspace Protection, Overflight. As a result, the Planning Commission finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the California Airport Land Use Planning Handbook and the Chino ALUCP.

COMPLIANCE WITH THE ONTARIO PLAN: The proposed Project is consistent with the principles, goals and policies contained within the Vision, Governance, Policy Plan

(General Plan), and City Council Priorities components of The Ontario Plan 2050 (TOP 2050). More specifically, the goals and policies of TOP 2050 that are furthered by the proposed Project are as follows:

(1) City Council Goals

- Operate in a Businesslike Manner
- Ensure the Development of a Well Planned, Balanced, and Self-Sustaining Community in Ontario Ranch

(2) Governance

Decision Making

Goal G1: Sustained decision-making that consistently moves Ontario towards its Vision by using The Ontario Plan as a framework for assessing choices.

- G1-1 Consistency with Policies. We require that staff recommendations to the City Council be consistent with adopted City Council Priorities (Goals and Objectives) and The Policy Pan.

- G1-2 Long-term Benefit. We require decisions to demonstrate and document how they add value to the community and support the Ontario Vision.

(3) Policy Plan (General Plan)

Land Use Element

Goal LU-1 Balance: A community that has a spectrum of housing types and price ranges that match the jobs in the City and that make it possible for people to live and work in Ontario and maintain a quality of life.

- LU-1.1 Strategic Growth. We concentrate growth in strategic locations that help create place and identity, maximize available and planned infrastructure, foster the development of transit, and support the expansion of the active and multimodal transportation networks throughout the City.

- LU-1.6 Complete Community. We incorporate a variety of land uses and building types in our land use planning efforts that result in a complete community where residents at all stages of life, employers, workers, and visitors have a wide spectrum of choices of where they can live, work, shop and recreate within Ontario.

Goal LU-2 Compatibility: Compatibility between a wide range of uses and a resultant urban patterns and forms.

- LU-2.1 Land Use Decisions. We minimize adverse impacts on adjacent properties when considering land use and zoning requests.

Housing Element

Goal H-2 Housing Supply & Diversity: Diversity of types of quality housing that are affordable to a range of household income levels, accommodate changing demographics, and support and reinforce the economic sustainability of Ontario.

- H-2.4 Ontario Ranch. We support a premier lifestyle community in the Ontario Ranch, distinguished by diverse housing, highest design quality, and cohesive and highly amenitized neighborhoods.

Community Design Element

Goal CD-2 Design Quality: A high level of design quality resulting in neighborhoods, public spaces, parks, and streetscapes that are attractive, safe, functional, human-scale, and distinct.

- CD-2.2 Neighborhood Design. We create distinct residential neighborhoods that promote a sense of community and identity by emphasizing access, connectivity, livability, and social interaction through such elements as:

    1. A pattern of smaller, walkable blocks that promote activity, safety, and access to nearby amenities and services;

    2. Varied parcel sizes and lot configurations to accommodate a diversity of housing types;

    3. Traffic calming measures to slow traffic and promote walkability while maintaining acceptable traffic flows and emergency evacuation access;

    4. Floor plans that encourage views onto the street and de-emphasize the visual and physical dominance of garages (introducing the front porch as the "outdoor living room"), as appropriate; and

    5. Landscaped parkways, with sidewalks separated from the curb and designed to maximize safety, comfort, and aesthetics for all users.

- CD-2.13 Entitlement Process. We work collaboratively with all stakeholders to ensure a high degree of certainty in the efficient review and timely processing of all development plans and permits.

HOUSING ELEMENT COMPLIANCE: The Project is consistent with the Housing Element of the Policy Plan (general plan) component of The Ontario Plan, as the Project site is not one of the properties in the Housing Element Sites contained in Tables B-1 and B-2 (Housing Element Sites Inventory) of the Housing Element Technical Report.

ENVIRONMENTAL REVIEW: The Application is a project pursuant to the California Environmental Quality Act (Public Resources Code Section 21000 et seq.) (CEQA) and an Addendum to The Ontario Plan 2050 Certified Subsequent Final Environmental Impact Report (SEIR, File No. PGPA) was prepared to determine possible environmental impacts. The addendum analyzed the following environmental categories: aesthetics, agriculture and forestry resources, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and service systems, wildfire, and mandatory findings of significance. The addendum compared Project impacts with those identified in the Certified SEIR and found that the Project would not result in: 1) substantially different or increased impacts when compared to those in the Certified SEIR; 2) any new significant impacts not already considered and addressed in the Certified SEIR; or 3) any substantial increase in the severity of, or substantial change in a previously-identified environmental impacts considered and addressed in the Certified SEIR. The Project was found to be consistent with the Certified SEIR and does not necessitate preparation of an additional subsequent or supplemental EIR.

The Addendum included an array of studies and assessments, including: air quality and energy assessment, greenhouse gas assessment, biological resources studies (vegetation, wildlife, Delhi Sands Fly), Phase 1 Environmental Site Assessment, noise analysis, traffic analysis, vehicle miles traveled analysis, and water supply assessment. These appendices are on available for public review on the City website at https://www.ontarioca.gov/government/agendas/planning-commission

TECHNICAL APPENDIX:

Table 1: Surrounding Zoning and Land Uses

	Existing Land Use	***Policy Plan Designation***	***Zoning Designation***	***Specific Plan Land Use***
Site	Residential, Commercial Agricultural, Dairy, Vacant Land	Low Density Residential (LDR, 2.1-5.0 du/ac), Low-Medum Density Residential (LMDR, 5.1-11 du/ac), Medium Density Residential (MDR, 11.1-25 du/ac), Public School (PS), General Commercial (GC), Neighborhood Commercial (NC), Open Space – Non Recreation (OS-NR)	The Avenue Specific Plan	Low Density Residential, Low Medium Density Residential, Medium Density Residential, Retail/Commercial, School, Park, SCE Easement, and Storm Drain Easement
North	Residential, Agricultural, Dairy, Vacant Land	Low Density Residential (LDR, 2.1-5.0 du/ac), Open Space – Non Recreation (OS-NR)	Specific Plan – Agricultural Overlay (SP-AG), Countryside Specific Plan, West Haven Specific Plan, and Utility Corridor (UC)	Cucamonga Basis, Deer Creek Channel, Neighborhood 8 (RD-5,500), and So. Cal. Edison Easement land use districts of the Countryside Specific Plan; SCE Easement land use district of the West Haven Specific Plan
South	Residential, Agricultural, Vacant Land	Low Density Residential (LDR, 2.1-5.0 du/ac), Medium Density Residential (MDR, 11.1-25 du/ac), Public School (PS), Open Space – Non Recreation (OS-NR), Mixed Use (MU)	Parkside Specific Plan and Grand Park Specific Plan	Planning Areas 12, 13, 15, 17 (Multi-Family Attached) and Planning Area 21 (Commercial) of the Parkside Specific Plan; High-Density Residential, High/Elementary School, and Low-Density Residential land use districts of the Grand Park Specific Plan
East	Residential, Vacant Land	Mixed Use (MU)	Rich-Haven Specific Plan	Regional Commercial and Stand Alone Residential Overlay
West	Agricultural, Vacant Land	Low Density Residential (LDR, 2.1-5.0 du/ac), Medium Density Residential (MDR, 11.1-25 du/ac), Open Space – Non Recreation (OS-NR)	Specific Plan – Agricultural Overlay (SP-AG)	N/A

Exhibit A: PROJECT LOCATION MAP



Exhibit B: EXISTING AND PROPOSED SPECIFIC PLAN LAND USE PLAN

EXISTING



PROPOSED

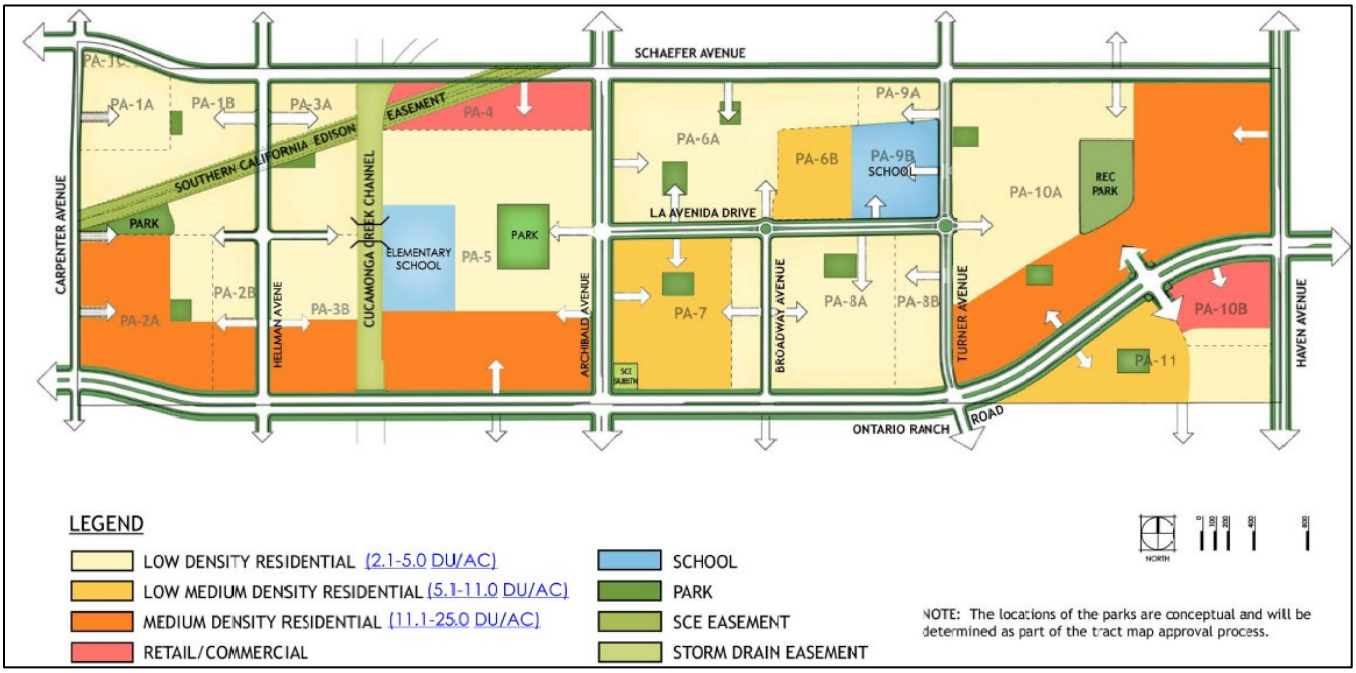


Exhibit C: EXISTING THE ONTARIO PLAN 2050 LAND USE PLAN

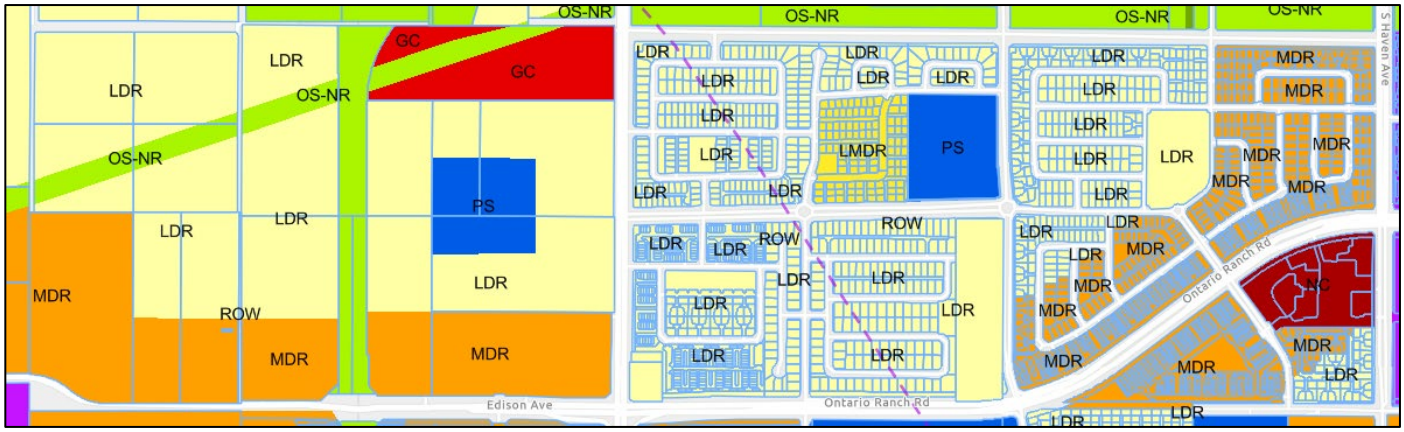




Exhibit D: PROPOSED SPECIFIC PLAN LAND USE TABLE

Table 2 - Statistical Analysis

~~Former Subarea~~	Planning Area	Gross Acres	Net Acres	Homes	Density	Commercial SF	Use
~~17~~	1A	11.1	9.20	~~51~~ 41	4.5		LDR
~~17~~	1B	33.5	24.54	~~127~~ 110	4.5		LDR
			5.40				SCE Easement
~~17~~	1C*	2.2	2.20	5	2.3		LDR
~~17~~	2A	32.0	5.00	~~147~~ 23	4.5		LDR
			25.05	~~58~~ 551	22.0		MDR
~~17~~	2B	12.5	6.64	~~86~~ 30	4.5		LDR
			5.43	~~97~~ 119	22.0		MDR
~~17~~	3A	21.7	19.15	~~218~~ 86	4.5		LDR
			2.60				SCE Easement
~~17~~	3B	21.5	12.22	~~334~~ 55	4.5		LDR
			8.59	189	22.0		MDR
~~18~~	4	19.9	15.04			204,496	Retail
			4.00				SCE Easement
~~18~~	5	82.6	46.85	211	4.5		LDR
			22.54	496	22.0		MDR
			10.89				Elementary School
~~18~~	6A	49.9	49.90	~~230~~ 229	4.6		LDR
~~18~~	6B	10.0	10.00	~~106~~ 110	11.0		LMDR
~~18~~	7	30.1	28.90	~~287~~ 265	9.2		LMDR
			1.20				SCE Substation
~~18~~	8A	39.9	39.90	~~180~~ 176	4.4		LDR
~~18~~	8B	9.7	9.70	44	4.5		LDR
~~18~~	9A	10.6	10.60	20	1.9		LDR
~~18~~	9B	10.0	10.00				School
~~12~~	10A	114.7	100.40	~~766~~ 452	4.5		LDR
			14.30	314	22.0		MDR
	10B	10.0	10.00			130,680	Retail
~~24~~	11	33.4	14.73	~~225~~ 67	4.5		LDR
			18.67	160	8.6		LMDR
~~Cucamonga Creek~~		12.8	12.80				Cucamonga Creek
~~Total~~	Total	568.1	556.44	~~2,981~~ 3,753	6.7	335,176	

Notes:
* Realignment of Schaeffer Ave creates the need for PA 1C (APN 021-812-201) as it is owned separately from PA 1A (APN 0218-181-126).
- All acreages approximate- exact acreages will be defined through tract map surveys. Additional studies may be required to transfer these units. See Section 3.1.1 for additional information.
- Density blending will be allowed within Planning Areas within one TOP land use step (i.e. from LDR to LMDR) and between Planning Areas at a rate no higher than 15%. If units are blended within a PA or moved between PA's, then Technical Studies for Impacts to the Water and Sewer Master Plan Systems will be required as part of the entitlement process.

Attachment A:
Resolution Recommending Approval of an Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report

(Document to follow this page)

Attachment B:
Resolution for File No. PSPA22-005

(Document to follow this page)

RESOLUTION NO. PC25-012

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ONTARIO RECOMMENDING THE CITY COUNCIL APPROVE THE USE OF AN ADDENDUM TO THE ONTARIO PLAN 2050 SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT, PURSUANT TO THE REQUIREMENTS OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT, AS AMENDED, FOR FILE NO. PSPA22-005.

WHEREAS, RICHLAND COMMUNITIES (hereinafter referred to as "Applicant") has filed an Application for the approval of a Specific Plan Amendment, File No. PSPA22-005, which consists of an amendment to The Avenue Specific Plan to: 1) modify the land use designation of Planning Area 4 and apply density modifications to Planning Areas 1B, 2A, 3B, and 5 for consistency with The Ontario Plan 2050 Land Use Plan; 2) apply general modifications throughout the document for clarity; and, 3) make exhibit and text updates throughout the document to support the Project, for land located at the northwest corner of Archibald Avenue and Ontario Ranch Road, in the City of Ontario, California (hereinafter referred to as "Application" or "Project"); and

WHEREAS, the City of Ontario certified the Environmental Impact Report prepared for The Ontario Plan and associated Statement of Overriding Considerations, and issued Resolution No. 2010-003; and

WHEREAS, the City of Ontario adopted the Policy Plan (General Plan) as part of the component framework for The Ontario Plan on January 27, 2010, and issued Resolution No. 2010-004; and

WHEREAS, the City of Ontario certified the Supplemental Environmental Impact Report (SEIR), for the General Plan Amendment for The Ontario Plan 2050 Technical Update on August 16, 2022; and

WHEREAS, the Planning Director of the City of Ontario has prepared and approved for attachment to the certified Supplemental Environmental Impact Report, an Addendum to the Certified SEIR (hereinafter referred to as "SEIR Addendum") in accordance with the requirements of the California Environmental Quality Act of 1970, together with State and local guidelines implementing said Act, all as amended to date (collectively referred to as "CEQA"); and

WHEREAS, the SEIR Addendum concluded that implementation of the Project could result in a number of significant effects on the environment that were previously analyzed in the Certified SEIR, and that the Certified SEIR identified mitigation measures that would reduce each of those significant effects to a less-than-significant level; and

WHEREAS, pursuant to State CEQA Guidelines Section 15164(a), a lead agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary to a project, but the preparation of a subsequent or supplemental EIR is not required; and

WHEREAS, the City determined that none of the conditions requiring preparation of a subsequent or supplemental EIR would occur from the Project, and that preparation of an Addendum to the Certified SEIR was appropriate; and

WHEREAS, the City of Ontario is the lead agency on the Project, and the Planning Commission is the recommending authority for the requested approval to construct and otherwise undertake the Project; and

WHEREAS, the Planning Commission has reviewed and considered the SEIR Addendum for the Project, has concluded that none of the conditions requiring preparation of a subsequent supplemental EIR have occurred, and intends to take actions on the Project in compliance with CEQA and state and local guidelines implementing CEQA; and

WHEREAS, the SEIR Addendum for the Project is on file in the Planning Department, located at 303 East B Street, Ontario, CA 91764, is available for inspection by any interested person at that location and is, by this reference, incorporated into this Resolution as if fully set forth herein; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED, AND RESOLVED by the Planning Commission of the City of Ontario, as follows:

SECTION 1: ***Environmental Determination and Findings.*** As the recommending authority for the Project, The Planning Commission has reviewed and considered the information contained in the administrative record for the Project. Based upon the facts and information contained in the administrative record, including all written and oral evidence presented to the Planning Commission, the Planning Commission finds as follows:

(1) The environmental impacts of this Project were reviewed in conjunction with an Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364), certified by the Ontario City Council on August 16, 2022, in conjunction with File No. PGPA20-002; and

(2) The EIR Addendum and administrative record have been completed in compliance with CEQA, the State CEQA Guidelines, and the City of Ontario Local CEQA Guidelines; and

(3) The City's "Guidelines for the Implementation of the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed. This Application introduces no new significant environmental impacts; and

(4) All previously adopted mitigation measures shall be a condition of Project approval, as they are applicable to the Project, and are incorporated herein by this reference; and

(5) The SEIR Addendum contains a complete and accurate reporting of the environmental impacts associated with the Project, and reflects the independent judgment of the Planning Commission; and

(6) There is no substantial evidence in the administrative record supporting a fair argument that the Project may result in significant environmental impacts.

SECTION 2: ***Additional Environmental Review Not Required.*** Based on the Addendum, all related information presented to the Planning Commission, and the specific findings set forth in Section 1, above, the Planning Commission finds that the preparation of a subsequent or supplemental Environmental Impact Report is not required for the Project, as the Project:

(1) Does not constitute substantial changes to the Certified SEIR that will require major revisions to the Certified SEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and

(2) Does not constitute substantial changes with respect to the circumstances under which the Certified SEIR was prepared, that will require major revisions to the Certified SEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of the previously identified significant effects; and

(3) Does not contain new information of substantial importance that was not known and could not have been known with the exercise of reasonable diligence at the time the Certified SEIR was certified/adopted, that shows any of the following:

(a) The Project will have one or more significant effects not discussed in the Certified SEIR; or

(b) Significant effects previously examined will be substantially more severe than shown in the Certified SEIR; or

(c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the City declined to adopt such measures; or

(d) Mitigation measures or alternatives considerably different from those analyzed in the Certified SEIR would substantially reduce one or more significant effects on the environment, but which the City declined to adopt.

SECTION 3: ***Planning Commission Action.*** Based upon the findings and conclusions set forth in Sections 1 and 2, above, the Planning Commission hereby recommends the City Council finds that based upon the entire record of proceedings before it, and all information received, that there is no substantial evidence that the Project will constitute substantial changes to the Certified SEIR, and does hereby approve the SEIR Addendum, attached hereto as "Attachment A," and incorporated herein by this reference.

SECTION 4: ***Indemnification.*** The Applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void, or annul this approval. The City of Ontario shall promptly notify the Applicant of any such claim, action, or proceeding, and the City of Ontario shall cooperate fully in the defense.

SECTION 5: ***Custodian of Records.*** The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East "B" Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario.

SECTION 6: ***Certification to Adoption.*** The Secretary shall certify to the adoption of the Resolution.

- - - - - - - - - - - - - -

The Secretary Pro Tempore for the Planning Commission of the City of Ontario shall certify as to the adoption of this Resolution.

I hereby certify that the foregoing Resolution was duly and regularly introduced, passed and adopted by the Planning Commission of the City of Ontario at a regular meeting thereof held on the 25th day of February 2025, and the foregoing is a full, true and correct copy of said Resolution, and has not been amended or repealed.

Nicola Ricci
Planning Commission Chairman

ATTEST:

Henry K. Noh
Planning Director and
Secretary to the Planning Commission

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO)
CITY OF ONTARIO)

I, Gwen Berendsen, Secretary Pro Tempore of the Planning Commission of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. PC25-012, was duly passed and adopted by the Planning Commission of the City of Ontario at their regular meeting held on February 25, 2025, by the following roll call vote, to wit:

AYES: DeDiemar, Gage, Lampkin, Ricci

NOES: None

ABSENT: Anderson

ABSTAIN: None

Gwen Berendsen
Secretary Pro Tempore

ATTACHMENT A:

Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report related to PSPA22-005

(Addendum to follow this page)

The Avenue Specific Plan
2024 Amendment

Addendum to The Ontario Plan Certified EIR
(SCH No. 2021070364)



Prepared for:
City of Ontario
303 East B Street
Ontario, CA 91764

Prepared by:
Applied Planning, Inc.
11762 De Palma Road
1C-310
Corona, CA 92883

May 2024

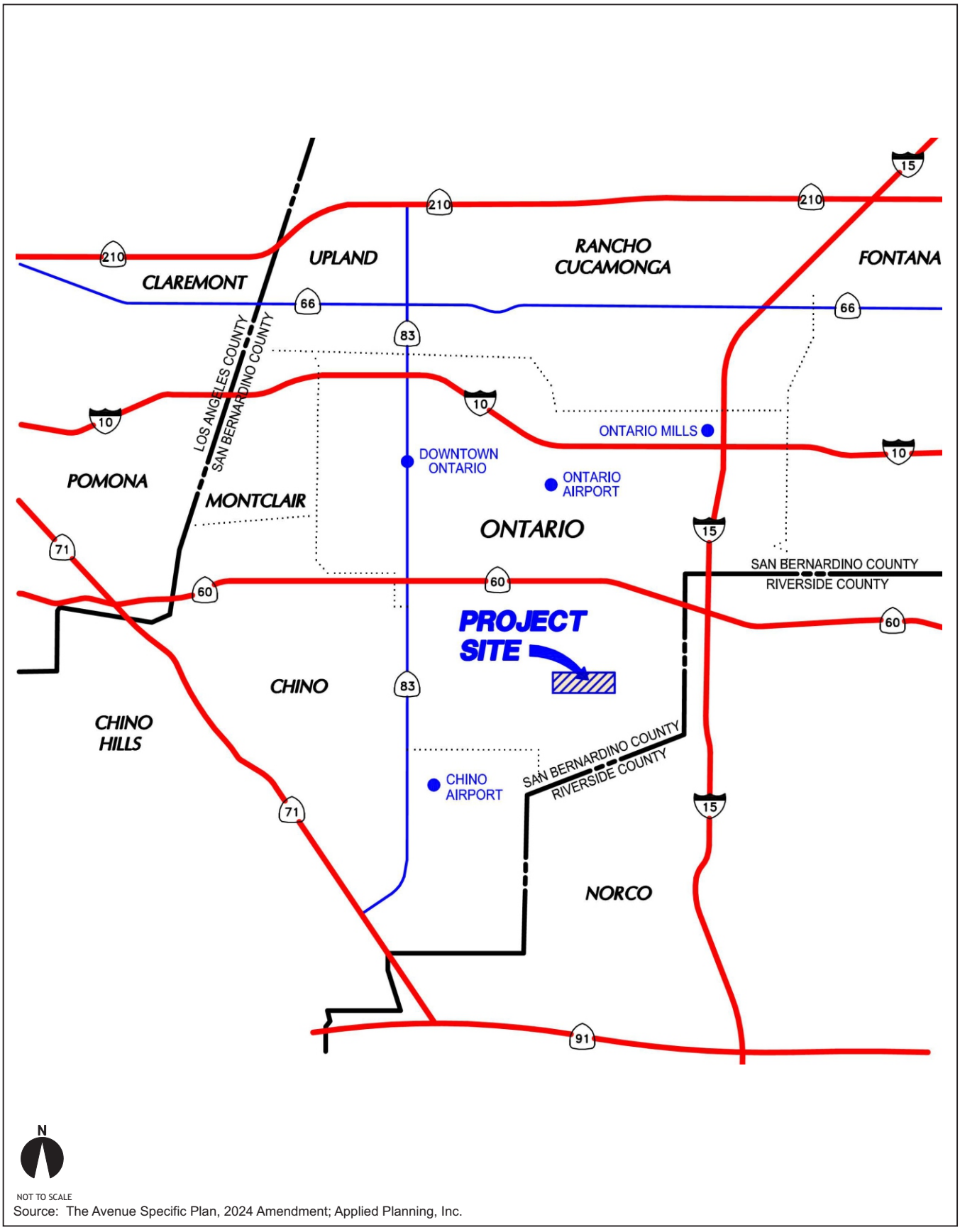
1.0 INTRODUCTION

1.0 INTRODUCTION

1.1 OVERVIEW

The Avenue Specific Plan was approved by the City of Ontario (City) in 2007, with subsequent Specific Plan Amendments approved in 2010, 2014, 2017, and 2020. The current (2020) The Avenue Specific Plan (2020 Specific Plan, Original Project) encompasses approximately 568.1 gross acres located within the City of Ontario. The Original Project site (the Specific Plan Area) is bound by Schaefer Avenue to the north, Haven Avenue to the east, Ontario Ranch Road to the south, and Carpenter Avenue to the west. Location and boundaries of the Original Project are presented at Figures 1.1-1 and 1.1-2, respectively.

Subsequent to approval of the Original Project, the City of Ontario adopted and implemented The Ontario Plan 2050 (TOP 2050) and TOP 2050 Policy Plan (the City General Plan). The Original Project Land Use designations are inconsistent with TOP 2050 Policy Plan Land Use designations for the subject site. The proposed Avenue Specific Plan, 2024 Amendment (Modified Project) evaluated herein brings the Original Project Land Uses into conformance with TOP 2050 Policy Plan Land Use Plan. Land Use designations for the subject site under the Original Project, TOP 2050 Policy Plan, and the proposed Modified Project are compared at Figure 1.1-3.



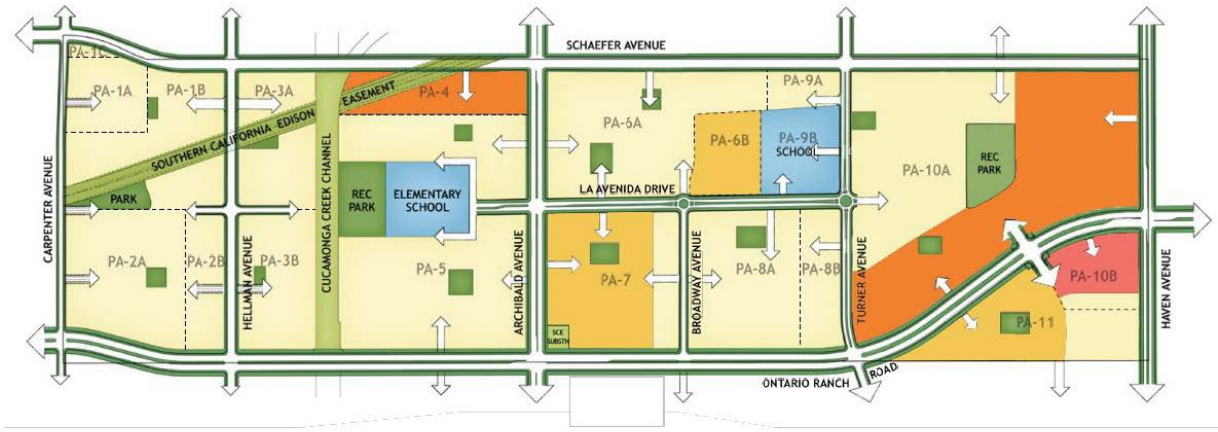
Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

Figure 1.1-1
Regional Location



Source: Google Earth; Applied Planning, Inc.

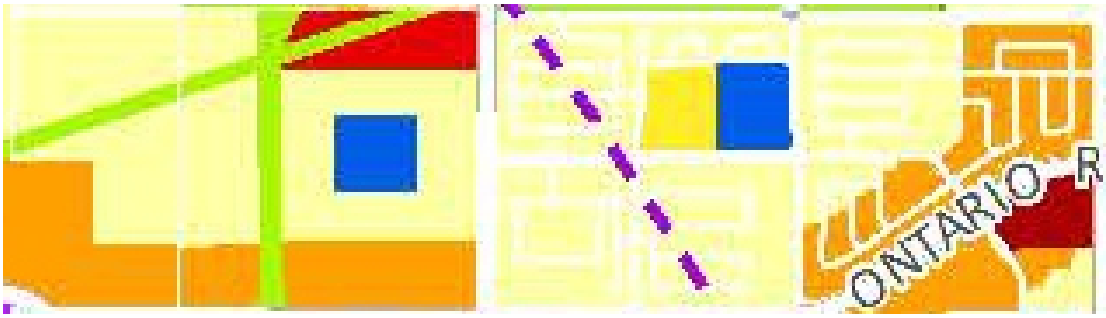
Figure 1.1-2
Location - Aerial View



2020 SPECIFIC PLAN

LEGEND

- LOW DENSITY RESIDENTIAL
- LOW MEDIUM DENSITY RESIDENTIAL
- MEDIUM DENSITY RESIDENTIAL
- RETAIL/COMMERCIAL
- SCHOOL
- PARK
- SCE EASEMENT
- STORM DRAIN EASEMENT

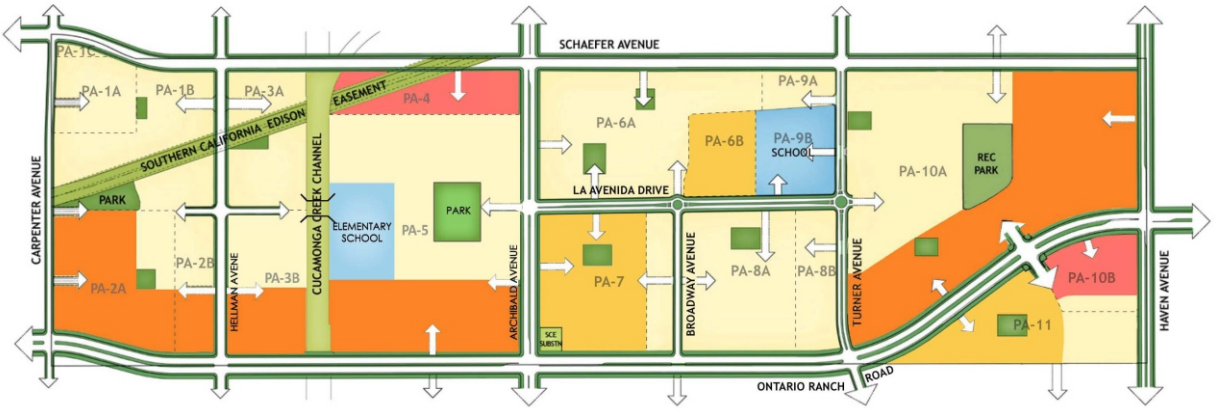


TOP 2050 POLICY PLAN

Residential
- LDR Low Density Residential
- LMDR Low Medium Density Residential
- MDR Medium Density Residential

Commercial
- NC Neighborhood Commercial
- GC General Commercial

Other
- OS-NR Open Space - Non-Rec
- PS Public School



2024 SPECIFIC PLAN AMENDMENT

LEGEND

- LOW DENSITY RESIDENTIAL (2.1-5.0 DU/AC)
- LOW MEDIUM DENSITY RESIDENTIAL (5.1-11.0 DU/AC)
- MEDIUM DENSITY RESIDENTIAL (11.1-25.0 DU/AC)
- RETAIL/COMMERCIAL
- SCHOOL
- PARK
- SCE EASEMENT
- STORM DRAIN EASEMENT

Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

appliedplanning inc

Figure 1.1-3
Land Use Plan Comparison

The Modified Project land uses and development concepts have been designed to be consistent with land uses and development concepts for the subject site reflected in TOP 2050. Impacts of TOP 2050 have been evaluated and addressed in *The Ontario Plan 2050 Certified SEIR* (TOP 2050 SEIR, Certified SEIR, SCH No. 2021070364). This Addendum compares and contrasts impacts of the Modified Project with impacts identified in the Certified SEIR. As substantiated herein, the Modified Project would not result in substantially different or substantially increased impacts when compared to impacts considered and addressed in the Certified SEIR.

This Addendum to the Certified SEIR substantiates that the proposed Modified Project evaluated herein would not result in any new significant impacts not considered and addressed in the Certified SEIR; nor would there be any substantial increase in the severity of, or substantial change in any previously-identified environmental impacts considered and addressed in the Certified SEIR.

1.1.2 Original Project and Modified Project Development Concepts Compared

The primary effect of the proposed Modified Project would be to increase the intensity, and total amount, of residential and commercial/retail development within the Specific Plan Area. More specifically:

- Under the Original Project, maximum residential development would total 2,981 dwelling units (all types). Under the Modified Project, maximum residential development would total 3,753 dwelling units[1] (all types), an increase of 772 dwelling units or approximately 26 percent.

- Under the Original Project, maximum commercial development would total 130,680 square feet (all types). Under the Modified Project, maximum commercial

[1] There is the potential for the 10.89-acre school site portion of Planning Area 5 to transition to residential uses, should the school district determine that this site is not needed for school development. If this is the case, these 10.89 acres would be developed with up to 50 residential units, bringing the total Specific Plan residential unit count to 3,803.

development would total 335,176 square feet (all types), an increase of 204,496 square feet or approximately 156 percent.[2]

It is noted here that the proposed Modified Project land use revisions and resulting residential and commercial development would affect only those portions of the Specific Plan Area located west of Archibald Avenue. East of Archibald Avenue, properties within the Specific Plan Area are fully developed or are currently under development.

Within this Addendum, the Modified Project is assumed to be completed and fully occupied by 2025 – the Modified Project Opening Year. This Addendum in all instances evaluates likely maximum impact scenarios. Should future development proposed within the Modified Project area differ substantially from the development concept analyzed herein, the Lead Agency would comply with CEQA in consideration of those proposals. Ultimate scope and configuration of the Modified Project uses would be as approved by the City.

1.2 CALIFORNIA ENVIRONMENTAL QUALITY ACT DOCUMENTATION

California Environmental Quality Act (CEQA) documentation for the Original Project is presented in *The Ontario Plan 2050* [TOP 2050] *Supplemental Environmental Impact Report,* State Clearinghouse No. 2021070364 (TOP 2050 SEIR, Certified SEIR). This Addendum to the Certified SEIR (Addendum) compares the impacts that were identified in the Certified SEIR with the anticipated impacts of the proposed Modified Project. This Addendum substantiates that the proposed Modified Project would not result in new significant impacts, substantially different impacts, or impacts that would be substantially more severe than those evaluated and addressed in the Certified SEIR.

1.3 ADDENDUM PURPOSE AND SUMMARY

The focus and purpose of this document is to determine if the Modified Project described herein would result in new or substantially different environmental impacts than those considered and addressed in the Certified SEIR. To these ends, this Addendum defines,

[2] For the purposes of analysis, all commercial uses are assumed to be operational 24 hours per day, 7 days per week.

describes, compares, and contrasts potential environmental impacts of the Modified Project in the context of the environmental impacts assessed in the Certified SEIR. In so doing, this Addendum substantiates consistency with applicable California Environmental Quality Act Guidelines (*CEQA Guidelines*) provisions addressing preparation of an Addendum to a previously-Certified EIR.

As presented at *CEQA Guidelines* Section 15164, an Addendum to a Certified EIR may be prepared if only minor technical changes or additions are necessary and none of the conditions described in Section 15162, calling for the preparation of a subsequent or supplemental EIR, have occurred. Further, Public Resources Code Section 21166 prohibits preparation of a subsequent or supplemental EIR for a Certified EIR unless substantial project changes are proposed requiring major revisions to the Certified EIR; a substantial change in circumstances has occurred requiring major revisions to the Certified EIR; or new information becomes available requiring major revisions to the Certified EIR. As supported by the information provided here, none of these conditions apply to the Modified Project. This Addendum to the Certified SEIR fulfills CEQA documentation requirements for the Modified Project.

1.4 INTENDED USE OF THIS ADDENDUM

The City of Ontario (City) is the Lead Agency for the purposes of CEQA because it has the principal responsibility and authority for consideration of discretionary actions and permitting for the Modified Project. As the Lead Agency, the City is also responsible for analyzing the Modified Project's potential environmental impacts.

The Lead Agency will employ this Addendum in its evaluation of potential environmental impacts resulting from, or associated with, approval and implementation of the Modified Project. This Addendum may also be used by various Responsible Agencies, e.g., Air Quality Management District(s), Regional Water Quality Control Board(s), *et al.*; as well as utilities and service providers when such entities issue discretionary permits necessary to carry out the Modified Project.

For example, if the Modified Project would require discretionary permits from the South Coast Air Quality Management District (SCAQMD), this Addendum would serve as the environmental assessment for such permits (please refer to California Code of Regulations, Section 15050).

This Addendum in all instances evaluates likely maximum impact scenarios. Should future development proposals within the Modified Project area differ substantially from the development concepts analyzed herein, the Lead Agency would comply with CEQA in consideration of those proposals. Ultimate scope and configuration of the Modified Project uses would be as approved by the City through the City development review processes.

1.5 DOCUMENT ORGANIZATION

This Addendum is presented in five sections, as follows:

- **Section 1.0**, *Introduction*, provides an overview of the Modified Project, its context, and environmental documentation applicable to the proposed development.

- **Section 2.0**, *Modified Project - Description*, presents the proposed Modified Project in greater detail.

- **Section 3.0**, *Environmental Checklist*, presents the analysis of potential environmental impacts of the Modified Project. The analysis considers potential environmental impacts of the Modified Project relative to impacts identified in the Certified SEIR.

- **Section 4.0**, *Determination*, presents the determination regarding the appropriate environmental document for the Modified Project.

- **Section 5.0**, *Mitigation Summary*, summarizes mitigation from the Certified SEIR, and presents any newly required mitigation or modified mitigation.

1.6 CONCLUSION

This Addendum substantiates that implementation and operation of the proposed Modified Project described and evaluated herein would not result in any significant new, different, additional, or substantially increased environmental impacts than were previously considered and addressed in the Certified SEIR.

2.0 MODIFIED PROJECT - DESCRIPTION

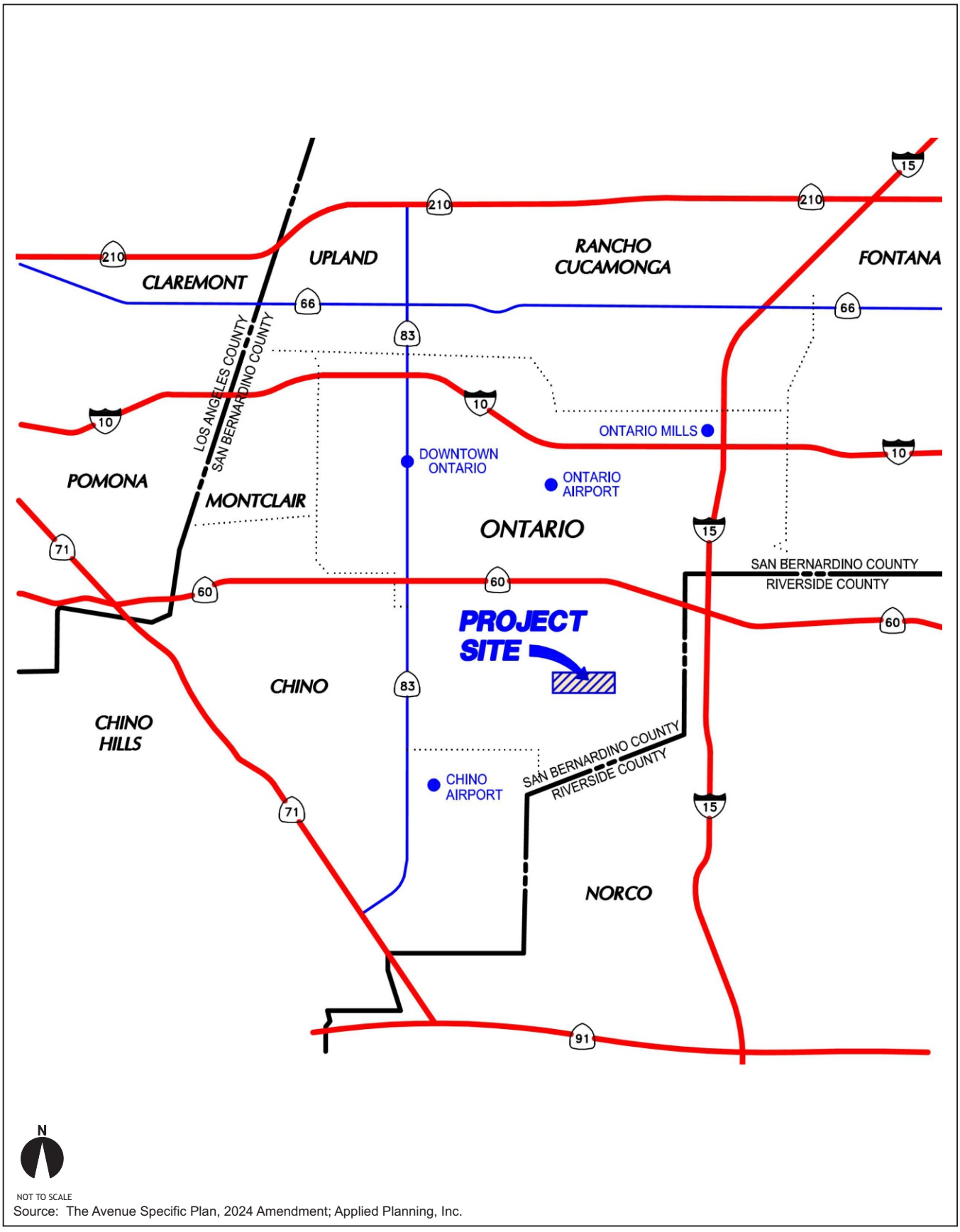
2.0 MODIFIED PROJECT - DESCRIPTION

2.1 OVERVIEW

2.1.1 Original Project, Modified Project, and TOP 2050

The Avenue Specific Plan was approved by the City of Ontario (City) in 2007, with subsequent Specific Plan Amendments approved in 2010, 2014, 2017, and 2020. The current (2020) The Avenue Specific Plan (2020 Specific Plan, Original Project) encompasses approximately 568.1 gross acres located within the City of Ontario. The Original Project site (the Specific Plan Area) is bound by Schaefer Avenue to the north, Haven Avenue to the east, Ontario Ranch Road to the south, and Carpenter Avenue to the west. Location and boundaries of the Project are presented at Figures 2.1-1 and 2.1-2, respectively.

Subsequent to approval of the Original Project, the City of Ontario adopted and implemented The Ontario Plan 2050 (TOP 2050) and TOP 2050 Policy Plan (the City General Plan). The Original Project Land Use designations are inconsistent with TOP 2050 Policy Plan Land Use designations for the subject site. The proposed Modified Project evaluated herein brings the Original Project Land Uses into conformance with TOP 2050 Policy Plan Land Use Plan. Land Use designations for the subject site under the Original Project, TOP 2050 Policy Plan, and the proposed Modified Project are compared at Figure 2.1-3.



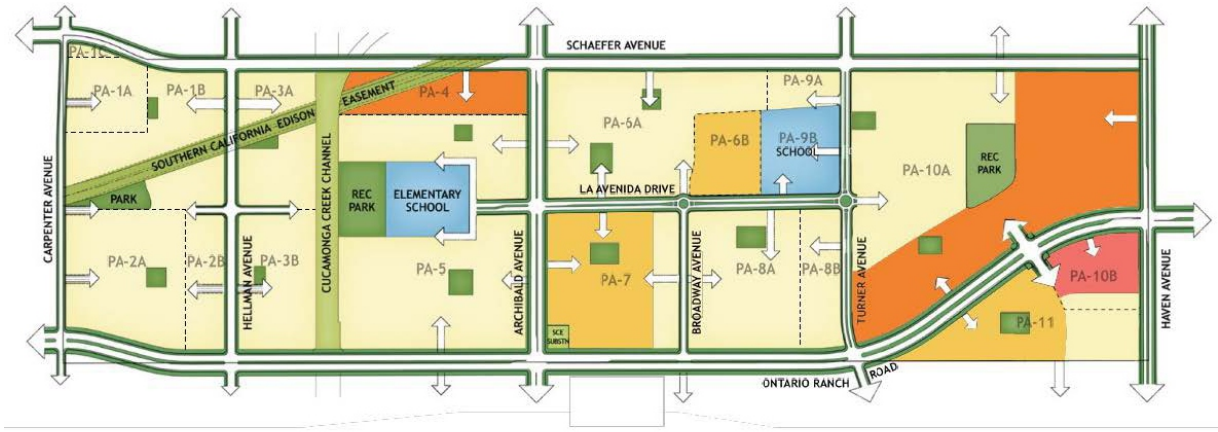
Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

Figure 2.1-1
Regional Location



Source: Google Earth; Applied Planning, Inc.

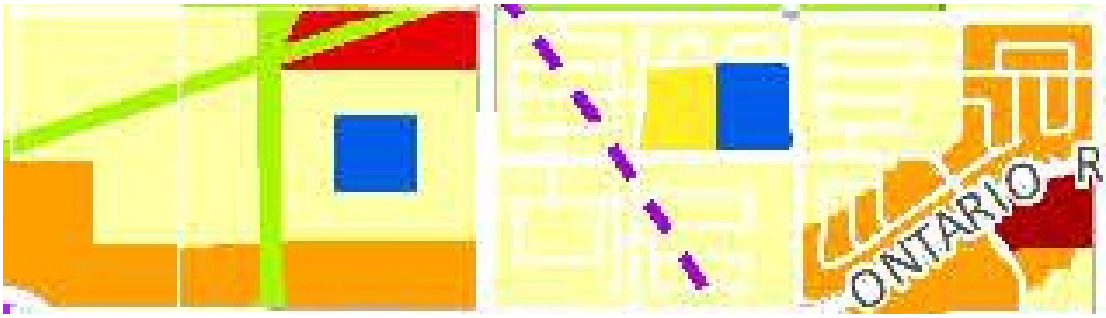
Figure 2.1-2
Location - Aerial View



2020 SPECIFIC PLAN

LEGEND

- LOW DENSITY RESIDENTIAL
- LOW MEDIUM DENSITY RESIDENTIAL
- MEDIUM DENSITY RESIDENTIAL
- RETAIL/COMMERCIAL
- SCHOOL
- PARK
- SCE EASEMENT
- STORM DRAIN EASEMENT

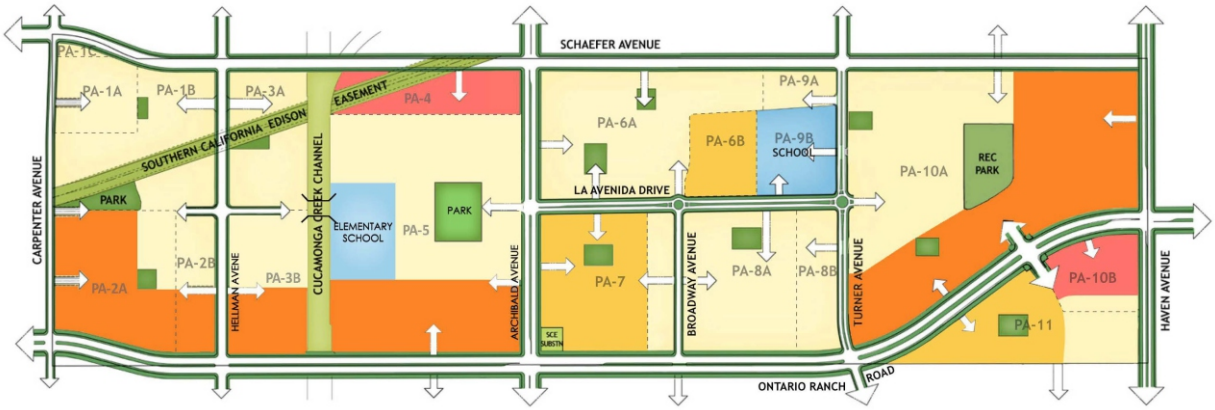


TOP 2050 POLICY PLAN

Residential
- LDR Low Density Residential
- LMDR Low Medium Density Residential
- MDR Medium Density Residential

Commercial
- NC Neighborhood Commercial
- GC General Commercial

Other
- OS-NR Open Space - Non-Rec
- PS Public School



2024 SPECIFIC PLAN AMENDMENT

LEGEND

- LOW DENSITY RESIDENTIAL (2.1-5.0 DU/AC)
- LOW MEDIUM DENSITY RESIDENTIAL (5.1-11.0 DU/AC)
- MEDIUM DENSITY RESIDENTIAL (11.1-25.0 DU/AC)
- RETAIL/COMMERCIAL
- SCHOOL
- PARK
- SCE EASEMENT
- STORM DRAIN EASEMENT

Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

Figure 2.1-3
Land Use Plan Comparison

2.1.2 Original Project and Modified Project Development Concepts Compared

A comparison of the Original Project and Modified Project development concepts is presented at subsequent Table 2.1-1. As indicated at Table 2.1-1, the primary effect of the proposed Modified Project would be to increase the intensity, and total amount, of residential and commercial/retail development within the Specific Plan Area. More specifically:

- Under the Original Project, maximum residential development would total 2,981 dwelling units (all types). Under the Modified Project, maximum residential development would total 3,753 dwelling units[1] (all types), an increase of 772 dwelling units or approximately 26 percent.

- Under the Original Project, maximum commercial development would total 130,680 square feet (all types). Under the Modified Project, maximum commercial development would total 335,176 square feet (all types), an increase of 204,496 square feet or approximately 156 percent.[2]

It is noted here that the proposed Modified Project land use revisions and resulting residential and commercial development would affect only those portions of the Specific Plan Area located west of Archibald Avenue. East of Archibald Avenue, properties within the Specific Plan Area are fully developed or are currently under development.

2.1.3 Opening Year

For the purposes of this analysis, buildout of the Modified Project is assumed to be completed and fully occupied by 2026 – the Modified Project Opening Year.

[1] There is the potential for the 10.89-acre school site portion of Planning Area 5 to transition to residential uses, should the school district determine that this site is not needed for school development. If this is the case, these 10.89 acres would be developed with up to 50 residential units, bringing the total Specific Plan residential unit count to 3,803.

[2] For the purposes of analysis, all commercial uses are assumed to be operational 24 hours per day, 7 days per week.

2.1.4 TOP 2050 SEIR as Basis for Addendum Analysis

The Modified Project land uses and development concepts have been designed to be consistent with land uses and development concepts for the subject site reflected in TOP 2050. Impacts of TOP 2050 have been evaluated and addressed in *The Ontario Plan 2050 Certified SEIR* (TOP 2050 SEIR, Certified SEIR, SCH No. 2021070364). By extension, impacts of The Avenue Specific Plan as amended under the Modified Project would be consistent with impacts considered and addressed in TOP 2050 SEIR. As substantiated herein, development of The Avenue Specific Plan as amended under the Modified Project would not result in substantially different or substantially increased impacts when compared to impacts considered addressed in TOP 2050 SEIR. This analysis of potential environmental impacts of The Avenue Specific Plan, 2024 Amendment appropriately comprises an Addendum to TOP 2050 SEIR.

This Addendum in all instances evaluates likely maximum impact scenarios. Should future development proposals within the Modified Project area differ substantially from the development concepts analyzed herein, the Lead Agency would comply with CEQA in consideration of those proposals. Ultimate scope and configuration of the Modified Project uses would be as approved by the City through the City development review processes.

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Table 2.1-1
Comparison of Original Project and Modified Project Development Concepts
(Revisions are Indicated in *Bold Red Italics*)

Planning Area Designation		Gross Acres		Net Acres		Dwelling Units		Density		Commercial Square Footage		Land Use	
Original Project	Modified Project	Original Project	Modified Project	Original Project	Modified Project	Original Project	Modified Project	Original Project	Modified Project	Original Project	Modified Project	Original Project	Modified Project
1A	1A	11.1	11.1	11.1	*9.2*	51	*41*	4.6	*4.5*	---	---	LDR	LDR
1B	1B	33.5	33.5	33.5	*24.54*	127	*110*	4.5	4.5	---	---	LDR	LDR
					5.4	*---*	*---*						*SCE Easement*
1C	1C	2.2	2.2	2.2	2.2	5	5	2.3	2.3	---	---	LDR	LDR
2A	2A	32.0	32.0	32.0	*5.00*	147	*23*	4.6	*4.5*	---	---	LDR	*LDR*
					25.06		*551*		*22.0*				*MDR*
2B	2B	12.5	12.5	12.5	*6.64*	58	*30*	4.6	*4.5*	---	---	LDR	*LDR*
					5.43		*119*		*22.0*				*MDR*
3A	3A	21.7	21.7	21.7	*19.15*	86	*86*	4.5	4.5	---	---	LDR	*LDR*
					2.60		*---*	*---*	*---*				*SCE Easement*
3B	3B	21.5	21.5	21.5	*12.22*	97	*55*	4.5	*4.5*	---	---	LDR	*LDR*
					8.59		*189*		*22.0*				*MDR*
4	4	19.9	19.9	19.9	*15.04*	218	*0*	11	*0*	0	*204,496*	LDR	*Retail*
					4.00						---		*SCE Easement*
5*	5	82.6	82.6	72.6	*46.85*	334	*211*	4.6	*4.5*	---	---	LDR/OS/ Elem. Sch.	*LDR*
					22.54		*496*		*22.0*				*MDR*
					10.89		---		---				*Elem. Sch.*
6A	6A	49.9	49.9	49.9	49.90	230	*229*	4.6	4.6	---	---	LDR	LDR
6B	6B	10.0	10.0	10.0	10.00	106	*110*	10.6	*11.0*	---	---	LMDR	LMDR
7	7	28.9	28.9	28.9	28.90	287	*265*	9.5	*9.2*	---	---	LMDR	LMDR

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Table 2.1-1
Comparison of Original Project and Modified Project Development Concepts
(Revisions are Indicated in *Bold Red Italics*)

Planning Area Designation		Gross Acres		Net Acres		Dwelling Units		Density		Commercial Square Footage		Land Use	
		1.2	1.2	1.2	1.20	---	---	---	---			SCE Substation	SCE Substation
8A	8A	39.9	39.9	39.9	39.90	180	***176***	4.5	***4.4***	---	---	LDR	LDR
8B	8B	9.7	9.7	9.7	9.70	44	44	4.5	4.5	---	---	LDR	LDR
9A	9A	10.6	10.6	10.6	10.60	20	20	2.0	***1.9***	---	---	LDR	LDR
9B	9B	10.0	10.0	10.00	10.00	0	0	---	---	---	---	School	School
10A	10A	114.7	114.7	114.7	***100.40***	766	***452***	6.7	***4.5***	---	---	LDR/MDR	***LDR***
					14.30		***314***		***22.0***				***MDR***
10B	10B	10.0	10.0	10.0	10.00	0	0	---	---	130,680	130,680	Retail	Retail
11	11	33.4	***14.73***	33.4	***14.73***	225	***67***	6.7	***4.5***	---	---	LDR/MDR	***LDR***
			18.67		***18.67***		***160***		***8.6***				***LMDR***
Cucamonga Creek		12.8	12.8	12.8	12.8	0	0	---	---	---	---	Non-Recreational Open Space	Non-Recreational Open Space
Totals		**568.1**	**568.1**	**558.1**	***556.44***	**2,981**	***3,753***	Not Quantified	***6.7***	**130,680**	***335,176***	---	---

Sources: *The Avenue Specific Plan, 2024 Amendment;* City of Ontario Planning Department.
Notes: * There is the potential for the 10.89-acre school site portion of Planning Area 5 to transition to residential uses, should the school district determine that this site is not needed for school development. If this is the case, these 10.89 acres would be developed with up to 50 residential units, bringing the total Specific Plan residential unit count to 3,803.

2.2 Existing Conditions

2.2.1 Existing Land Uses and Land Use Designations

Existing land uses and land use designations for the Modified Project site and adjacent properties are summarized at Table 2.2-1. Existing land uses are illustrated at Figure 2.2-1. Existing Policy Plan Land Use and Zoning designations are illustrated at Figures 2.2-2 and 2.2-3, respectively.

Table 2.2-1
Existing Land Uses and Land Use Designations

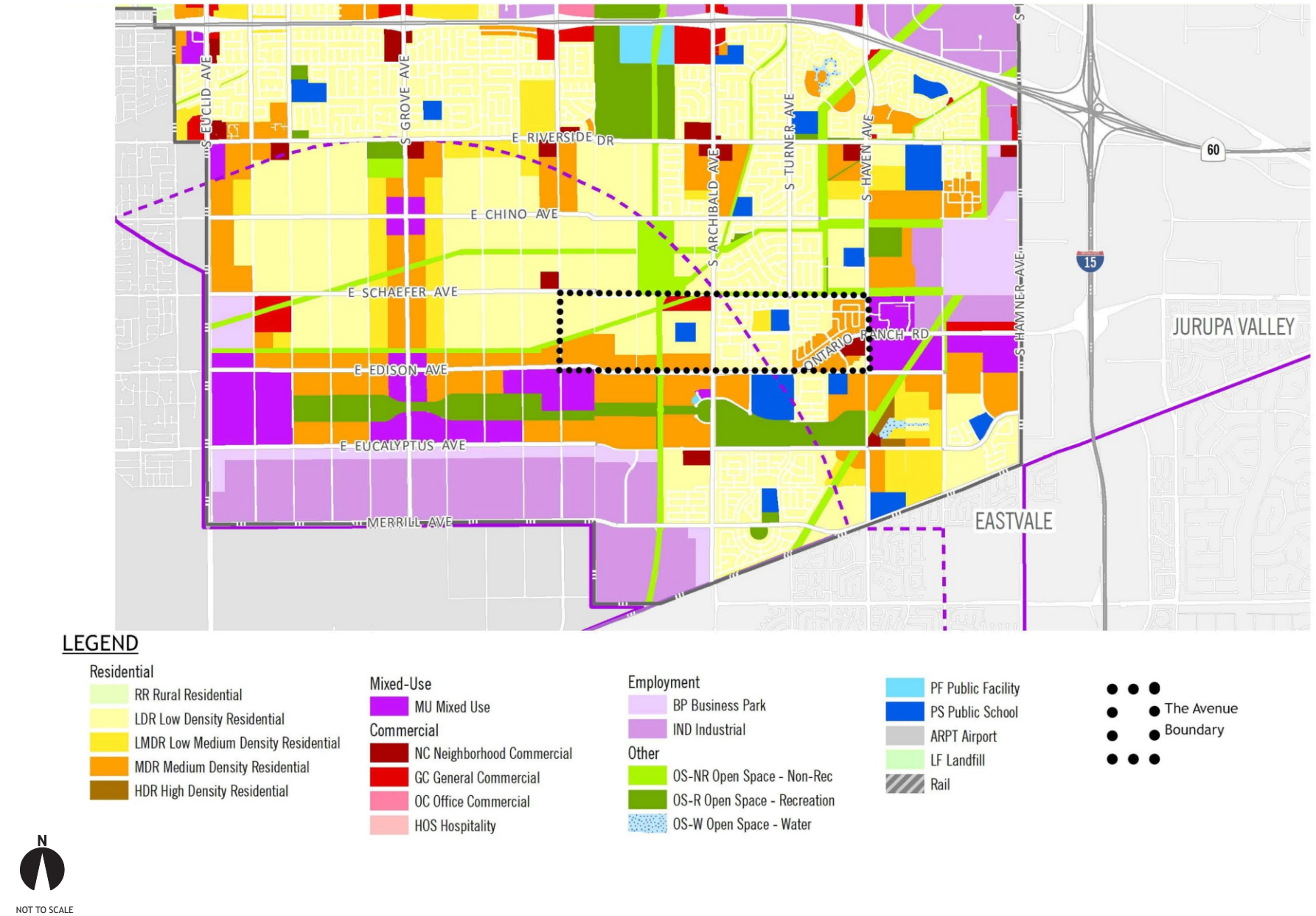
	Existing Land Use	Policy Plan Designation(s)	Zoning Designation
Modified Project Site	**East of Archibald Avenue:** Developed/developing Specific Plan residential uses. **West of Archibald Avenue:** Agricultural and dairy farming uses; vacant disturbed property. Additionally, this area is traversed by the Cucamonga Creek flood channel (N – S alignment) and a Southern California Edison (SCE) easement (NE – SW alignment).	Low Density Residential, Low Medium Density Residential, Medium Density Residential, Public School, Commercial, Open Space-Parkland, Open Space: Non-Recreation	The Avenue Specific Plan (November 2020)
North	**East of Archibald Avenue:** Developed/developing Specific Plan residential uses. **West of Archibald Avenue:** Stormwater detention/groundwater recharge basins; Industrial uses; Cucamonga Creek flood channel (N – S alignment), Deer Creek flood control channel (NE – SW).	Low Density Residential, Open Space: Non-Recreation	West Haven Specific Plan, Countryside Specific Plan
East	Residential uses (existing and under construction); vacant/disturbed properties.	Mixed-Use	Rich Haven Specific Plan
South	Residential uses (existing and under construction); vacant/disturbed properties.	Low Density Residential, Medium Density Residential, Public School, Open Space: Non-Recreation	Parkside Specific Plan, Grand Park Specific Plan
West	Agricultural, dairy farming, and vacant disturbed properties.	Low Density Residential, Medium Density Residential, Open Space: Non-Recreation	Specific Plan with Agricultural and Affordable Housing Overlays

Sources: The Avenue Specific Plan (2024), TOP 2050 Policy Plan, City of Ontario Zoning Map.



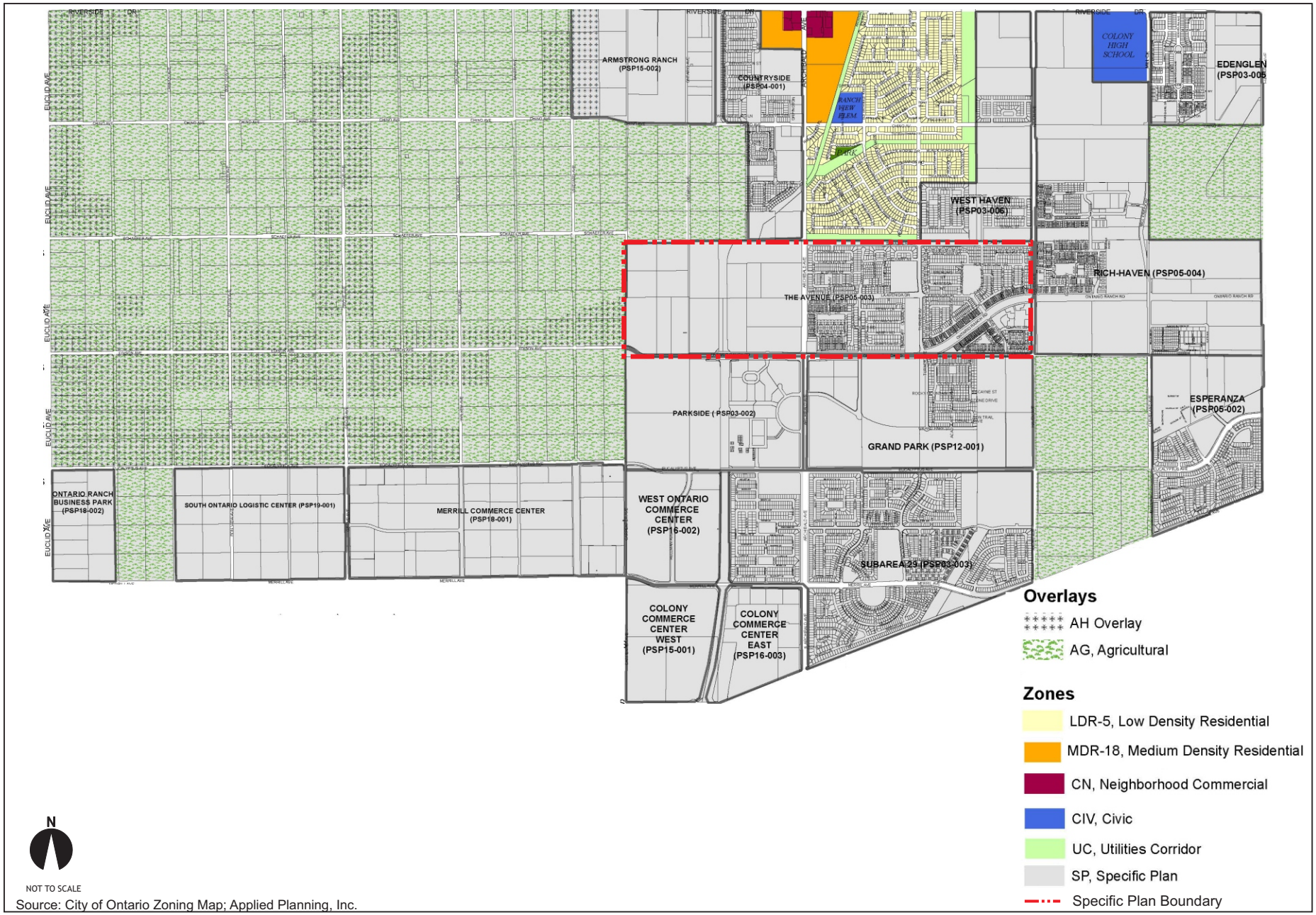
Source: Google Earth; Applied Planning, Inc.

Figure 2.2-1
Existing Land Uses



Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

Figure 2.2-2
Existing Policy Plan Land Use Designations



Source: City of Ontario Zoning Map; Applied Planning, Inc.

Figure 2.2-3
Existing Zoning Designations

2.3 DEVELOPMENT CONCEPT

Development implemented under the Modified Project would be required to conform to provisions of The Avenue Specific Plan, 2024 Amendment document (2024 SPA). The 2024 SPA is provided at Appendix A of this Addendum. In instances where the 2024 SPA is silent, development proposals would be required to conform to applicable provisions of the City Development Code.

2.3.1 Site Design/Architectural Concepts

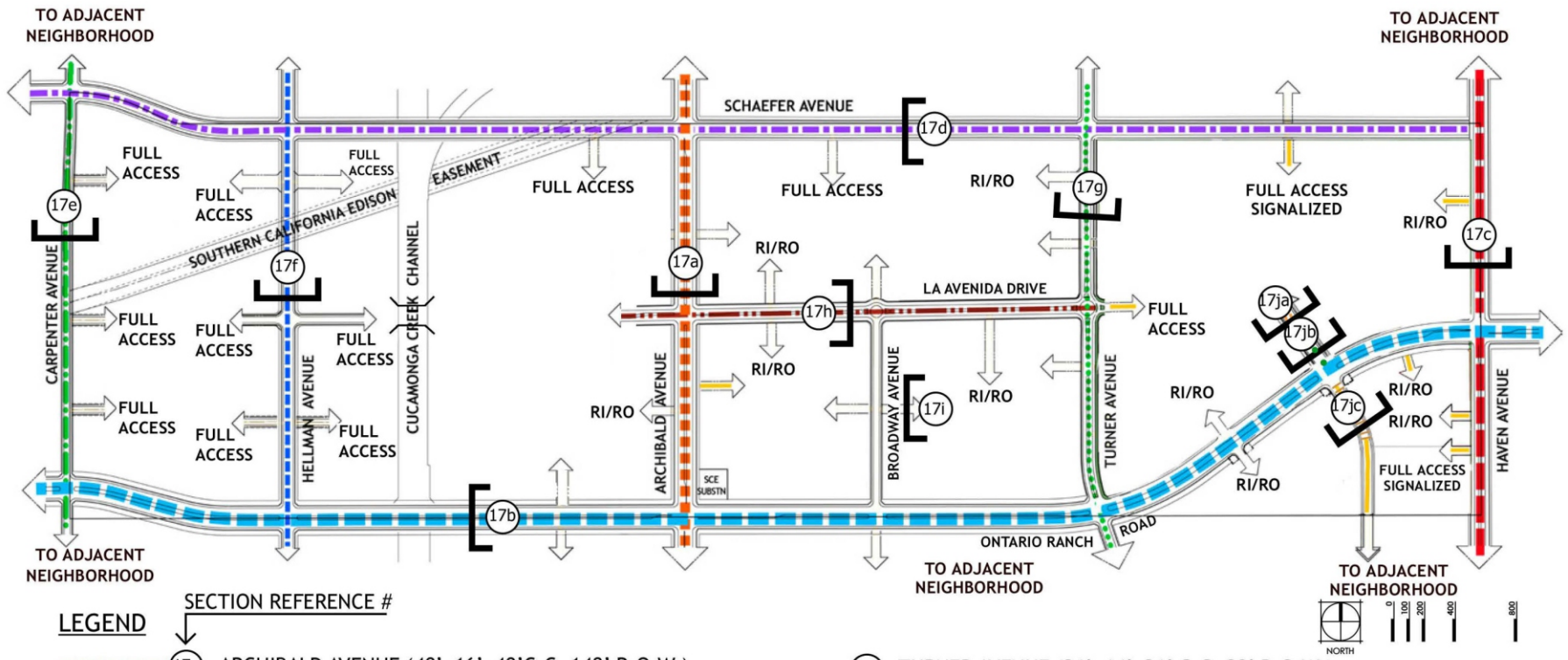
The Modified Project considered herein would implement residential, commercial/retail parks/open space, and public school uses. All Modified Project development proposals would be required to conform to requirements and implement guidance articulated at 2024 SPA Section 5, *Development Regulations*; and Section 6, *Design Guidelines*. All Modified Project final site plans and building designs would be subject to City review and approval, to include consistency analysis with applicable provisions of the 2024 SPA.

2.3.2 Access and Circulation

2.3.2.1 Area Roadways and Site Access

Regional access to the City and the Modified Project area is provided by State Route 60 (E – W) and Interstate 15 (N – S). State Route 60 (SR-60) interchanges with Interstate 15 (I-15) approximately 2.0 miles northeast of the Modified Project site. The Modified Project site is bounded by Schaefer Avenue to the north, Haven Avenue to the east, Ontario Ranch Road to the south, and Carpenter Avenue (alignment) to the west. Archibald Avenue traverses the western portion of the site along a north – south alignment.

Access within the Modified Project site would be provided by internal roads connecting the various land uses. Roadways providing access to and within the Modified Project would be constructed pursuant to the 2024 SPA specifications and consistent with City Conditions of Approval. The Modified Project Access and Circulation Concept is presented at Figure 2.3-1. For illustrative purposes, the Original Project and Modified Project Access and Circulation Concepts are compared at Figure 2.3-2. Please refer also to 2024 SPA Section 4.1, *Master Plan of Circulation*.



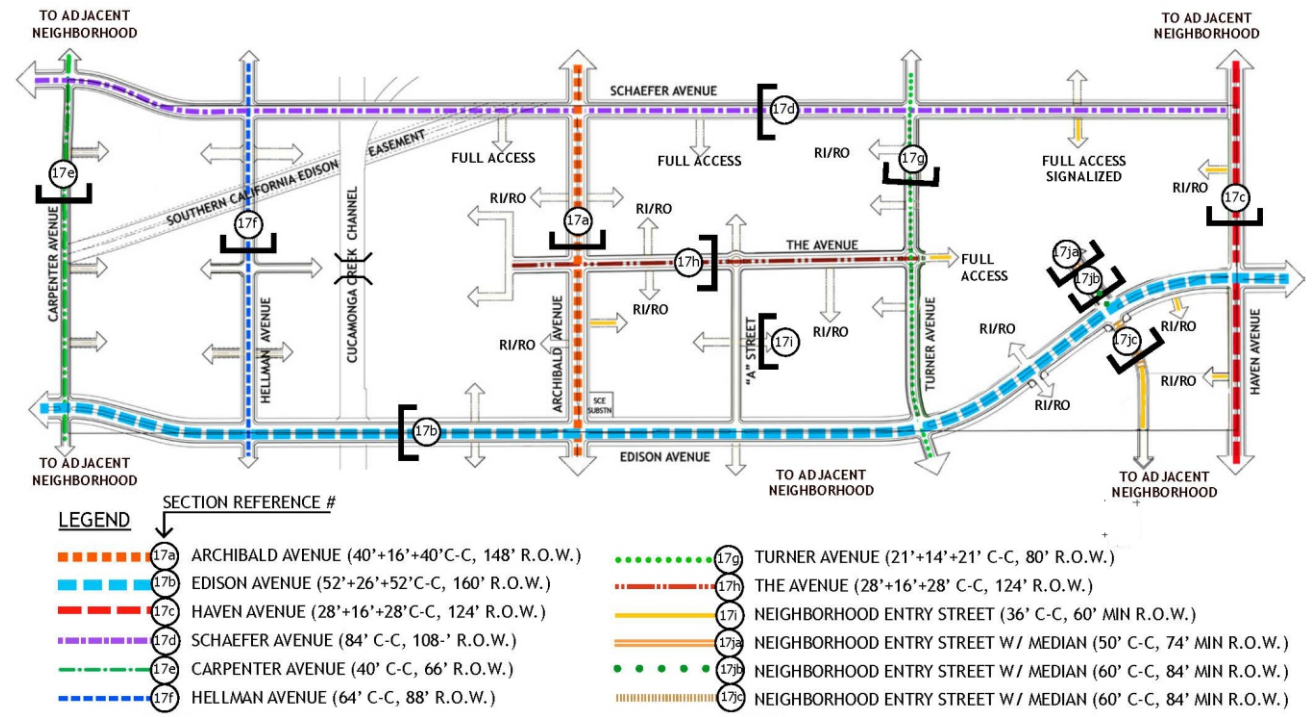
NOTE: C-C = Curb-to-Curb; R.O.W. = Right-of-Way; The location of access points is conceptual. Precise locations will be determined as part of the tract map process. The Neighborhood Entry Streets at the westerly termination of the Avenue adjacent to the school site shall be 40' C-C, 66' R.O.W. While the alignment of roads is conceptual, The Avenue shall maintain the straight, linear configuration. *The intersection legs to the north and south of Schaefer Avenue shall be aligned. Final location of the intersection shall be determined with approval of the maps for developments on the north and south of Schaefer Avenue. No sidewalk improvements on the north side of Schaefer Avenue between Haven Avenue and Hellman Avenue.

N

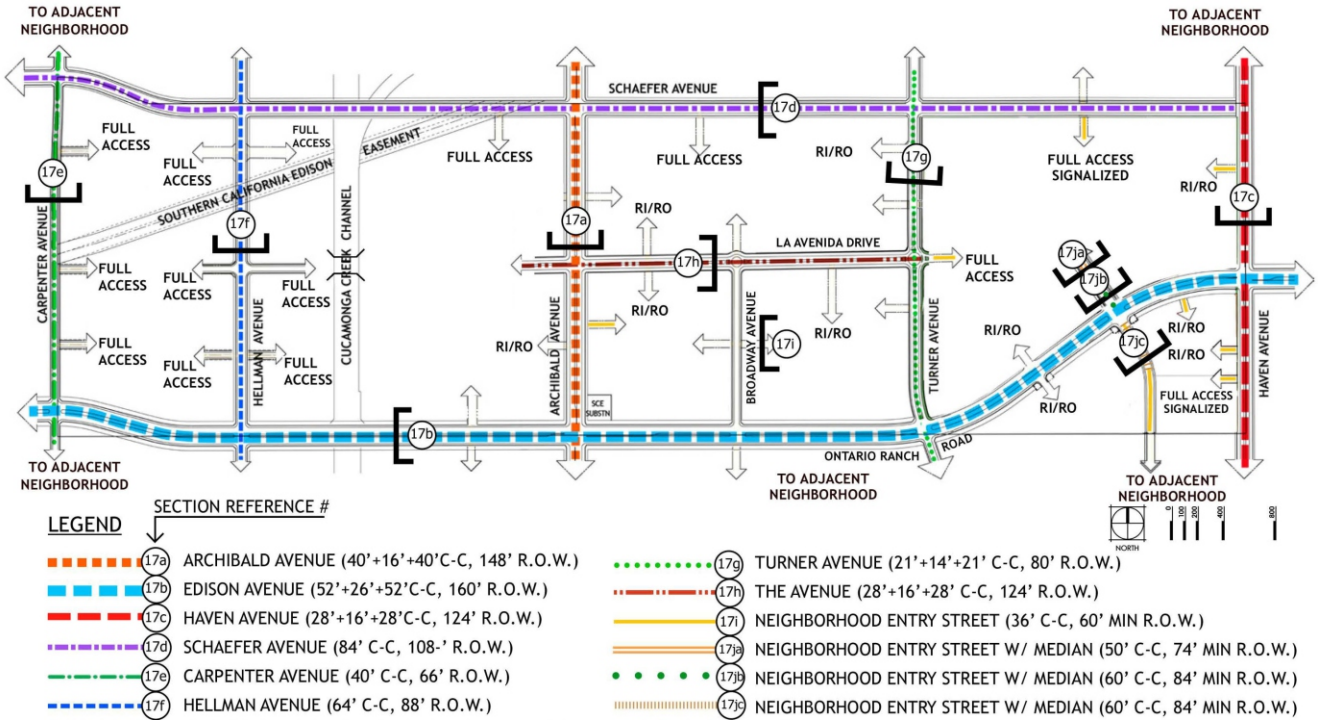
NOT TO SCALE

Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

Figure 2.3-1
Circulation Plan



2020 SPECIFIC PLAN



2024 SPECIFIC PLAN AMENDMENT

Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

Figure 2.3-2
Circulation Plan Comparison

2.3.2.2 Alternative Transportation Modes

Bicycle and Pedestrian Access

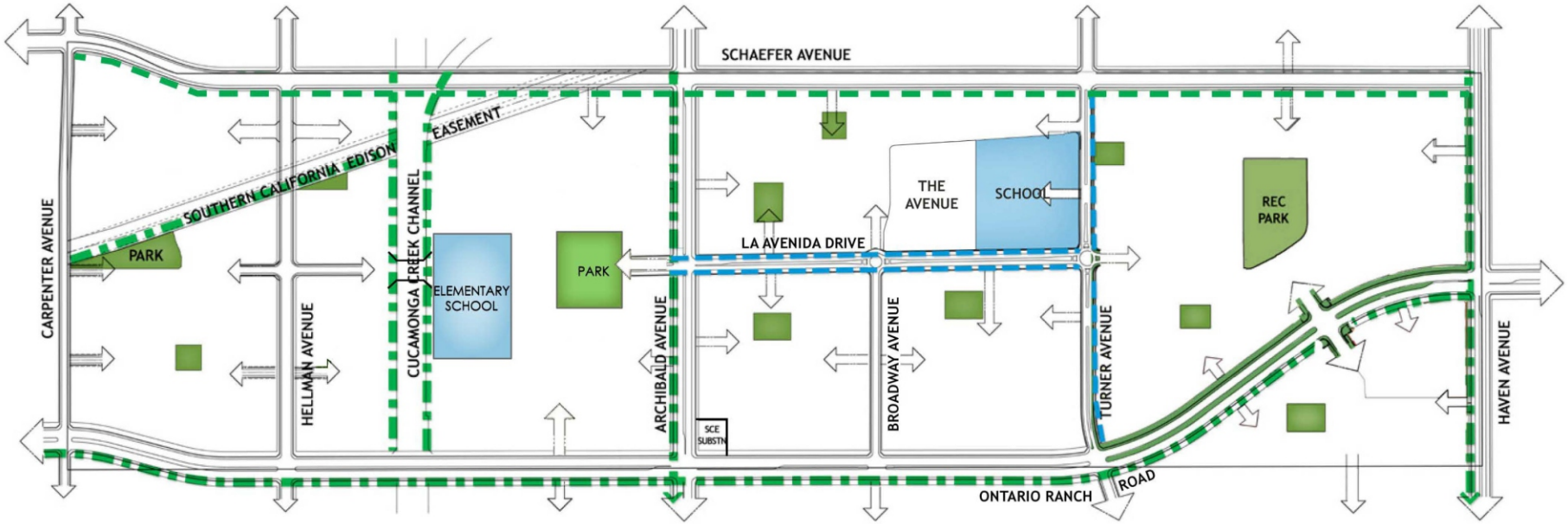
The Modified Project would construct multipurpose trail improvements consistent with improvements proposed under the City of Ontario Multipurpose Trails and Bikeway Corridor Plan (Multipurpose Trails Plan). The Modified Project improvements would connect with the encompassing Multipurpose Trails Plan system.

Within the Modified Project site, enhanced pedestrian sidewalks would provide internal connection between land uses. Additionally, streets would be constructed with sidewalks, facilitating pedestrian access and inter-connectivity between land uses. Trails and pedestrian access improvements that would be constructed by the Modified Project are illustrated at Figure 2.3-3. For illustrative purposes, the Original Project and Modified Project Multipurpose Trails and Pedestrian Access Plans are compared at Figure 2.3-4. Please refer also to 2024 SPA Section 4.1, *Pedestrian/Bicycle Trails Connectivity.*

Bus Service

Bus service is available to the City via Omnitrans and the Riverside Transit Authority (RTA). Bus routes currently do not provide proximate service (within one-quarter mile) of the Modified Project site.

Transit service providers periodically review and update schedules and routes to address ridership, budget, and community demands. The Applicant and City would coordinate Project final designs with Omnitrans and RTA to evaluate the potential for provision of bus services and bus amenities serving the Modified Project site. Omnitrans bus routes and schedules can be accessed at: https://omnitrans.org/plan-a-trip/routes-schedules. RTA bus routes and schedules can be accessed at: https://www.riversidetransit.com/index.php/riding-the-bus/maps-schedules.



LEGEND

- NMC MASTER PLAN MULTI-USE PATH
- PROPOSED MULTI-USE BRIDGE ACROSS CHANNEL
- ENHANCED PEDESTRIAN SIDEWALK PER SPECIFIC PLAN (SEE SECTIONS 17G AND 17H)

NOTE: The precise locations of the trails are conceptual and will be determined as part of the tract map approval process. The location of the proposed multi-purpose bridge is shown as conceptual and subject to Planning Department and Traffic Engineering Department review and approval.

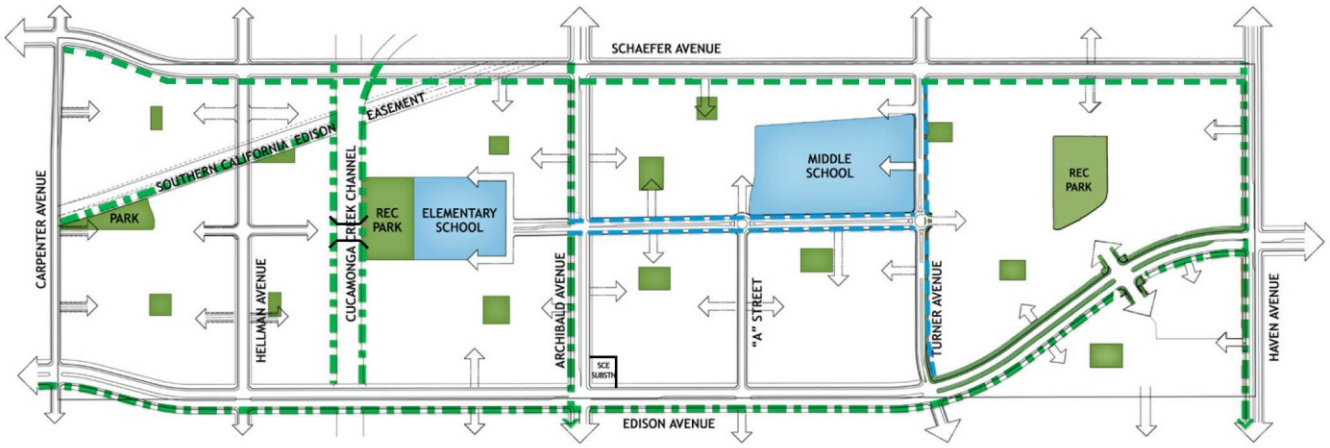
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NOT TO SCALE

Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

applied planning inc

Figure 2.3-3
Trail Master Plan



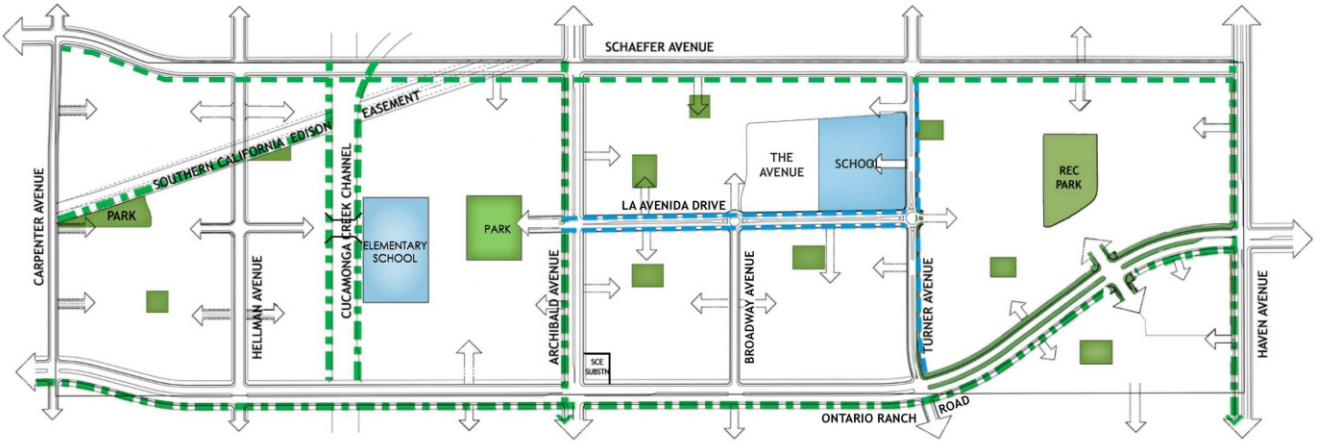
LEGEND

NMC MASTER PLAN MULTI-USE PATH

PROPOSED MULTI-USE BRIDGE ACROSS CHANNEL

NOTE: The precise locations of the trails are conceptual and will be determined as part of the tract map approval process. The location of the proposed multi-purpose bridge is shown as conceptual and subject to Planning Department and Traffic Engineering Department review and approval.

2020 SPECIFIC PLAN



LEGEND

NMC MASTER PLAN MULTI-USE PATH

PROPOSED MULTI-USE BRIDGE ACROSS CHANNEL

ENHANCED PEDESTRIAN SIDEWALK PER SPECIFIC PLAN
(SEE SECTIONS 17G AND 17H)

NOTE: The precise locations of the trails are conceptual and will be determined as part of the tract map approval process. The location of the proposed multi-purpose bridge is shown as conceptual and subject to Planning Department and Traffic Engineering Department review and approval.

2024 SPECIFIC PLAN AMENDMENT

N

NOT TO SCALE

Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

applied planning inc

Figure 2.3-4
Trail Master Plan Comparison

2.3.3 Parking

The Modified Project would be required to adhere to parking requirements established under the 2024 SPA and the City of Ontario Development Code. Parking assignments and design of parking areas within the site would be subject to City review and approval.

2.3.4 Landscape/Streetscape

All landscaping/streetscaping implemented under the Modified Project would be required to comply with applicable provisions of the 2024 SPA and the City Municipal Code. Landscape and streetscape elements would provide shade and visual interest, define entry/access points, and accentuate site and architectural features. Please refer also to 2024 SPA Section 6.6, *Landscape Design Guidelines*.

2.3.5 Infrastructure/Utilities

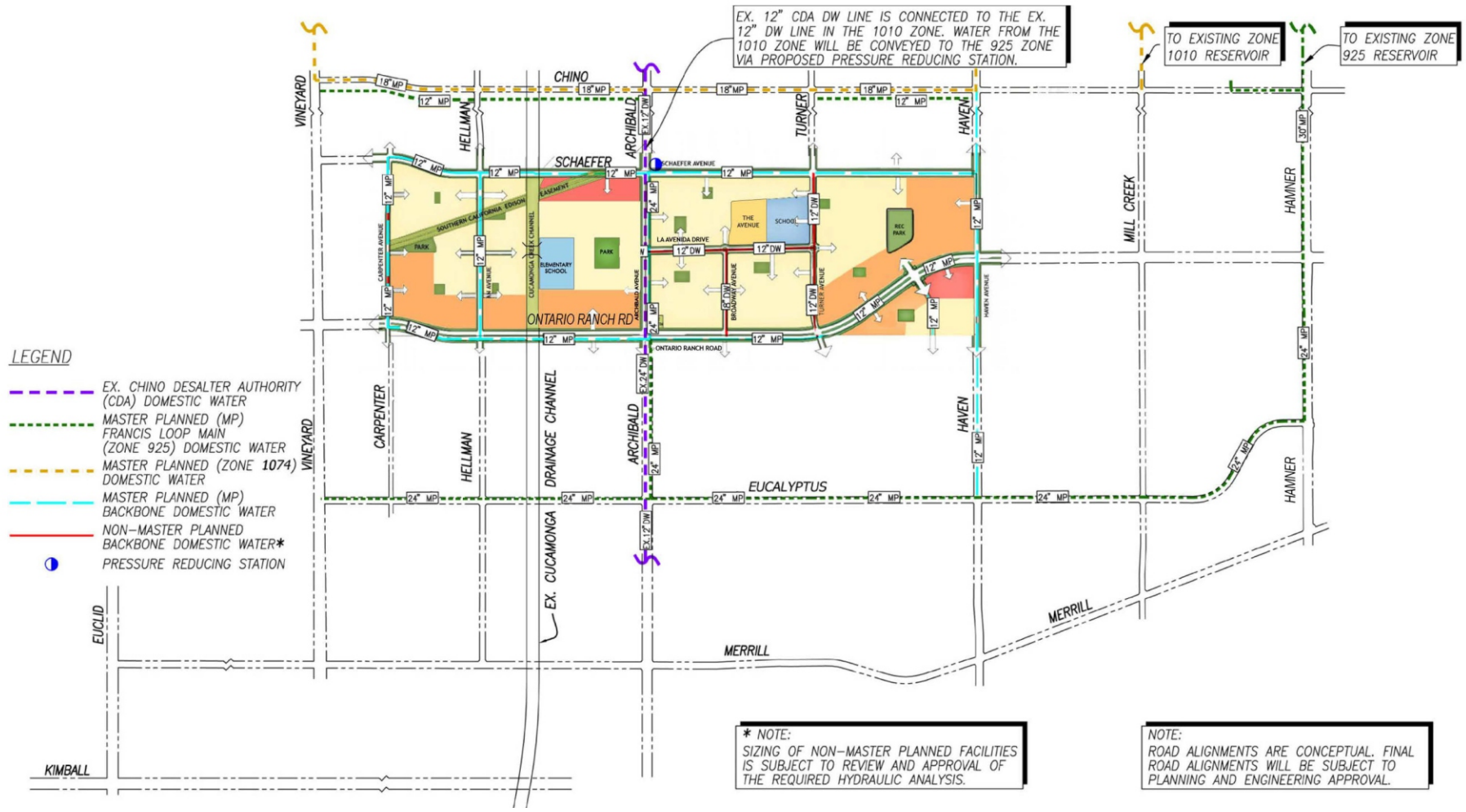
2.3.5.1 Water Service

Potable (Domestic) Water

Potable water would be provided by the Ontario Municipal Utilities Company (OMUC). The Modified Project would be served by existing and planned OMUC Master Planned domestic water system facilities.

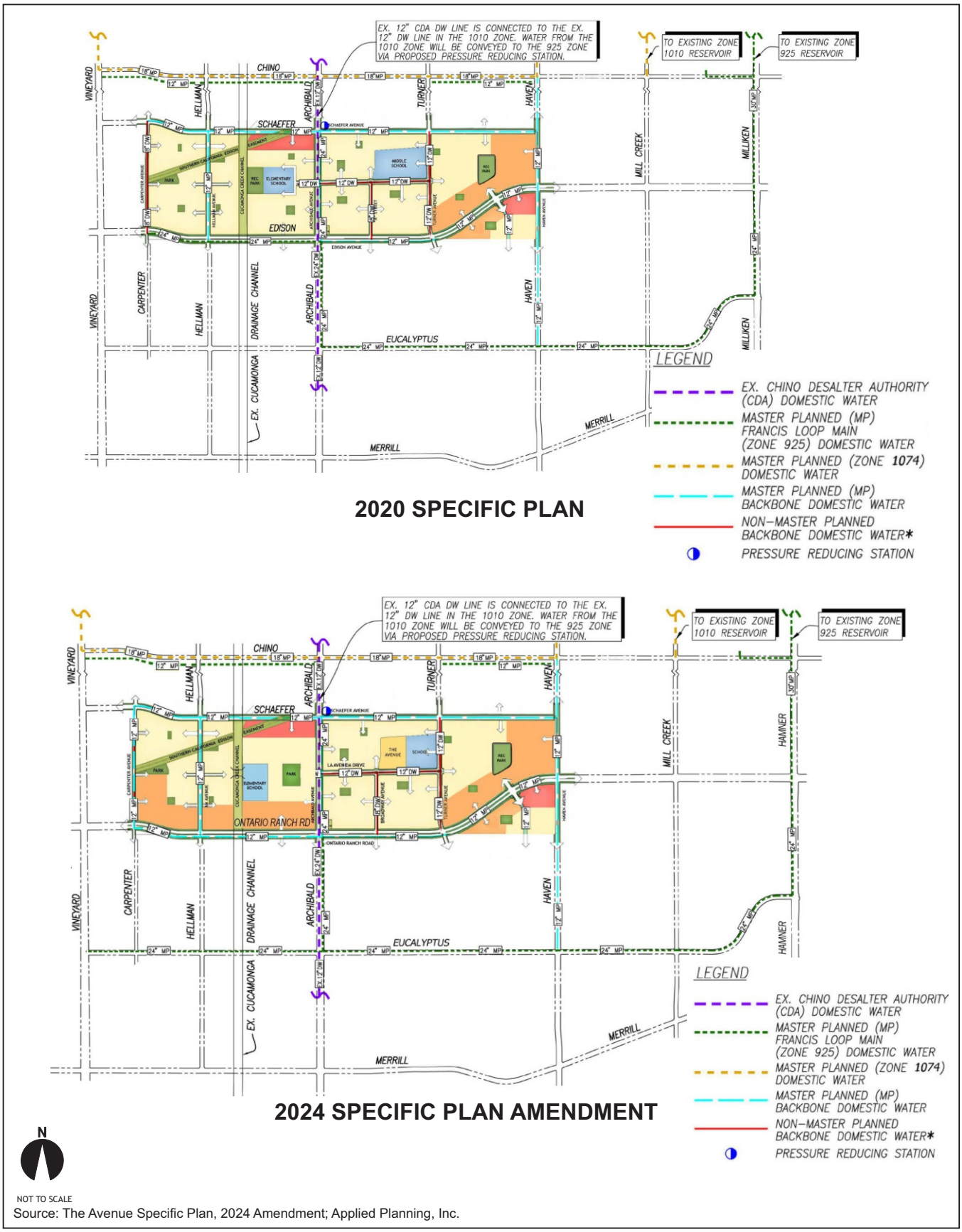
Within the Modified Project site, water service would be provided by a system of 8-inch to 12-inch water mains constructed within the backbone roadway system. The on-site public water system sizing would be required to comply with provisions of a City-approved hydraulic analysis to be conducted at the project-level design stage. The hydraulic analysis would be required to demonstrate that the proposed water system would meet peak demands including maximum day plus fire demand and peak hour demand.

The Modified Project Domestic Water Plan Concept is illustrated at Figure 2.3-5. For illustrative purposes, the Original Project and Modified Project Domestic Water Plan Concepts are compared at Figure 2.3-6. Please refer also to 2024 SPA Section 4.2.1, *Water*.



Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

Figure 2.3-5
Domestic Water Master Plan



NOT TO SCALE

Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

Figure 2.3-6
Domestic Water Master Plan Comparison

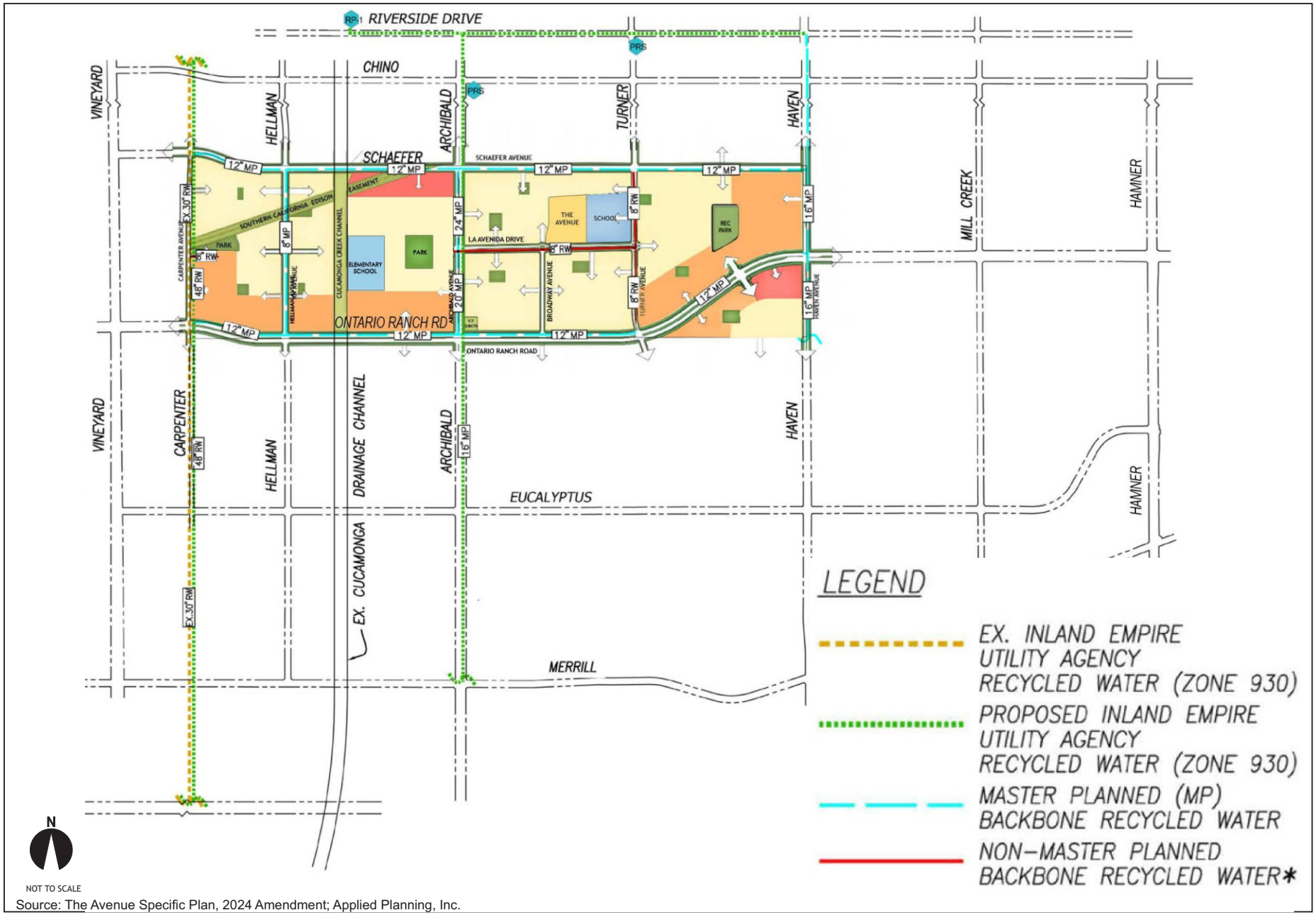
Recycled Water

Recycled water would be provided to the Modified Project by the Inland Empire Utility Agency (IEUA). The Modified Project would be required to comply with applicable provisions of City Municipal Code Chapter 8c: *Recycled Water Use*.[3] Recycled water would be used for all approved applications including, but not limited to, irrigation of parks, schools, street landscaping, recreational trails, HOA-maintained common areas, and landscaping. An engineering report approved by the City and the California Department of Public Health is required prior to the use of recycled water.

All recycled water improvements implemented to serve the Modified Project would be required to conform to the incumbent City Recycled Water Master Plan. Within the Modified Project site, the backbone recycled water system would comprise 8-inch lines and would be located in the backbone street system. In-tract recycled water system design would be provided at the time of subdivision.

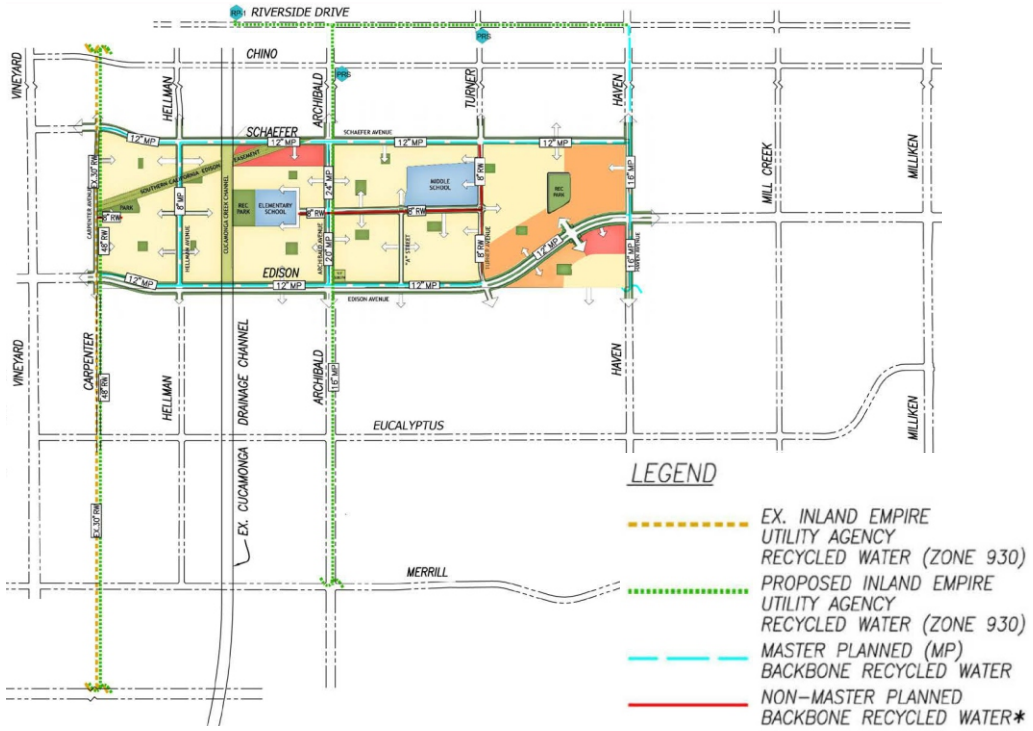
The Modified Project Recycled Water Plan Concept is illustrated at Figure 2.3-7. For illustrative purposes, the Original Project and Modified Project Recycled Water Plan Concepts are compared at Figure 2.3-8. Please refer also to 2024 SPA Section 4.2.2, *Recycled Water*.

[3] See also: https://codelibrary.amlegal.com/codes/ontarioca/latest/ontario_ca/0-0-0-44580#JD_6-8.714

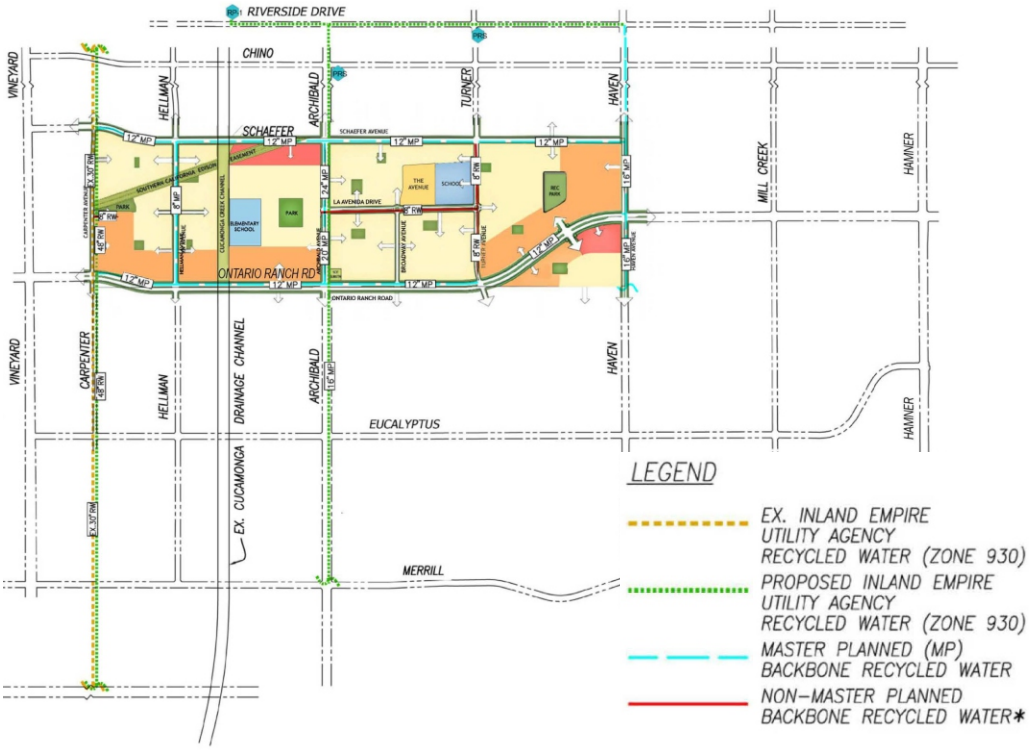


Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

Figure 2.3-7
Recycled Water Master Plan



2020 SPECIFIC PLAN



2024 SPECIFIC PLAN AMENDMENT

N

NOT TO SCALE

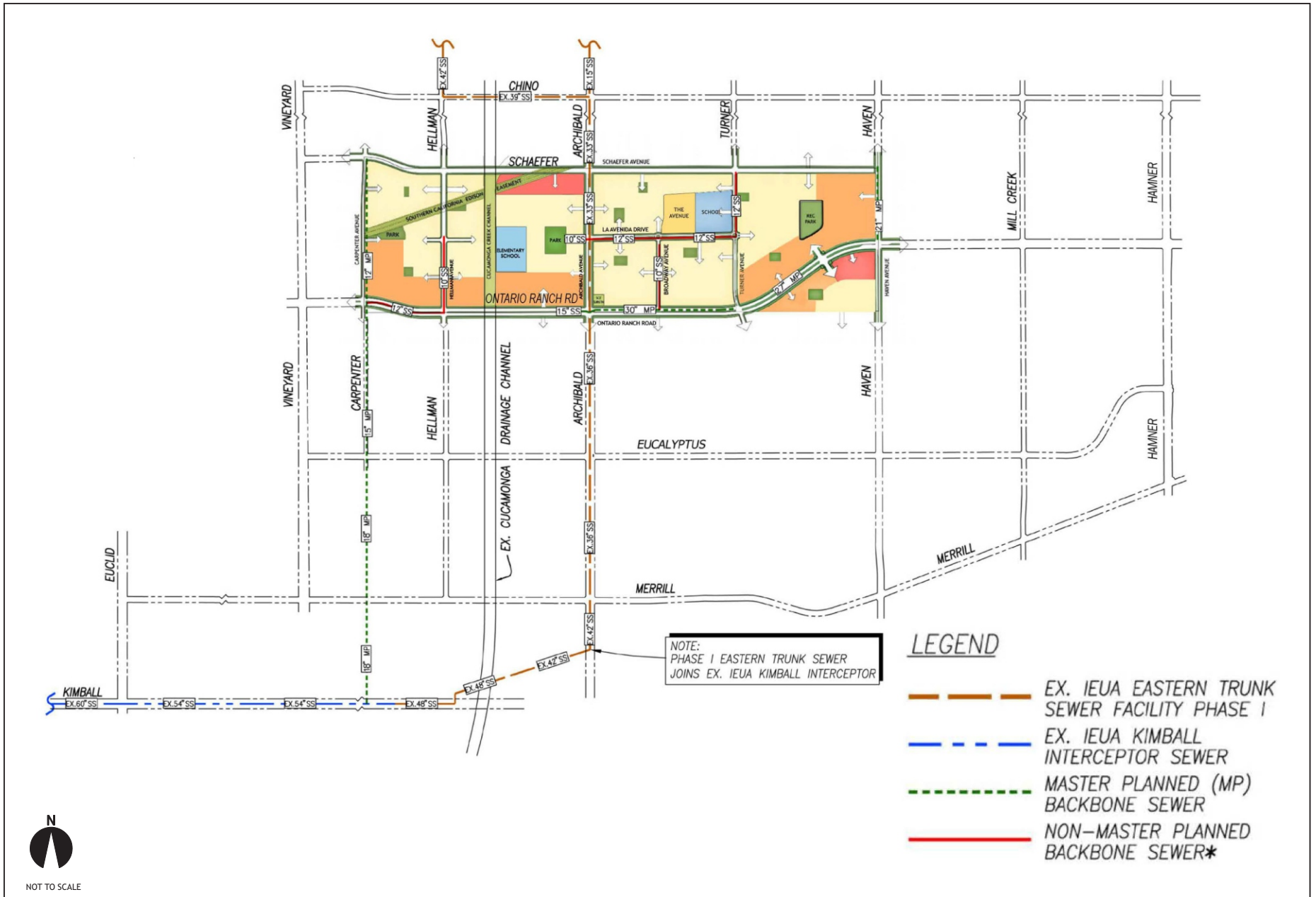
Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

Figure 2.3-8
Recycled Water Master Plan Comparison

2.3.5.2 Sewer Services

Sewer service to the Modified Project would be provided by the City of Ontario. All Master Plan sewer improvements implemented to serve the Modified Project would be required to conform to the incumbent City Sewer System Master Plan.

Within the Modified Project site, wastewater conveyance would be provided by a system of 10-inch to 12-inch sewer mains constructed within the backbone roadway system. Connecting service lines (minimum 8-inch) would be provided to individual developments. The on-site public sewer system sizing would be required to comply with provisions of a City-approved hydraulic analysis to be conducted at the project-level design stage. In-tract sewer system design would be provided at the time of subdivision. Final designs of sewer systems serving the Modified Project site would be required to conform to City and OMUC requirements. The Modified Project Sewer Plan Concept is presented at Figure 2.3-9. For illustrative purposes, the Original Project and Modified Project Sewer Plan Concepts are compared at Figure 2.3-10. Please refer also to 2024 SPA Section 4.2.3, *Sewer*.

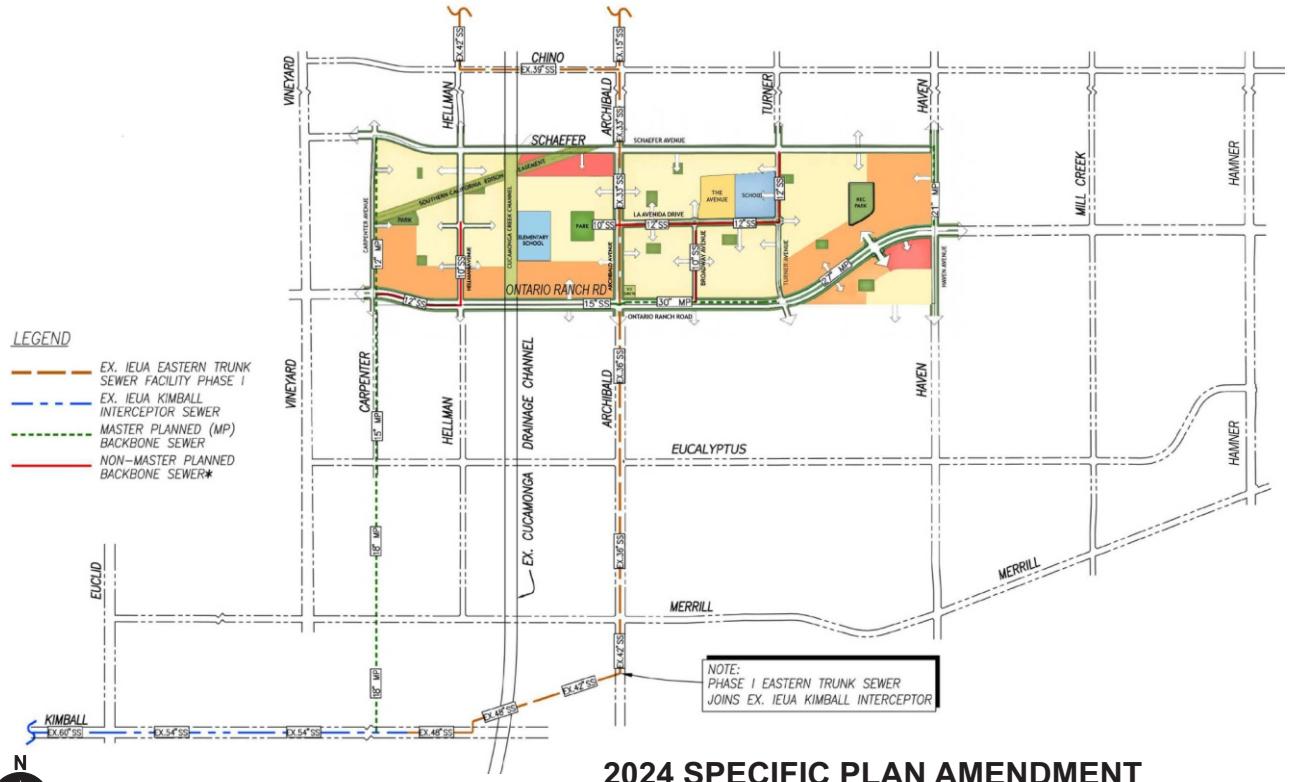


Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

Figure 2.3-9
Sewer Master Plan



2020 SPECIFIC PLAN



2024 SPECIFIC PLAN AMENDMENT

N

NOT TO SCALE

Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

Figure 2.3-10
Sewer Master Plan Comparison

2.3.5.3 Stormwater Management System

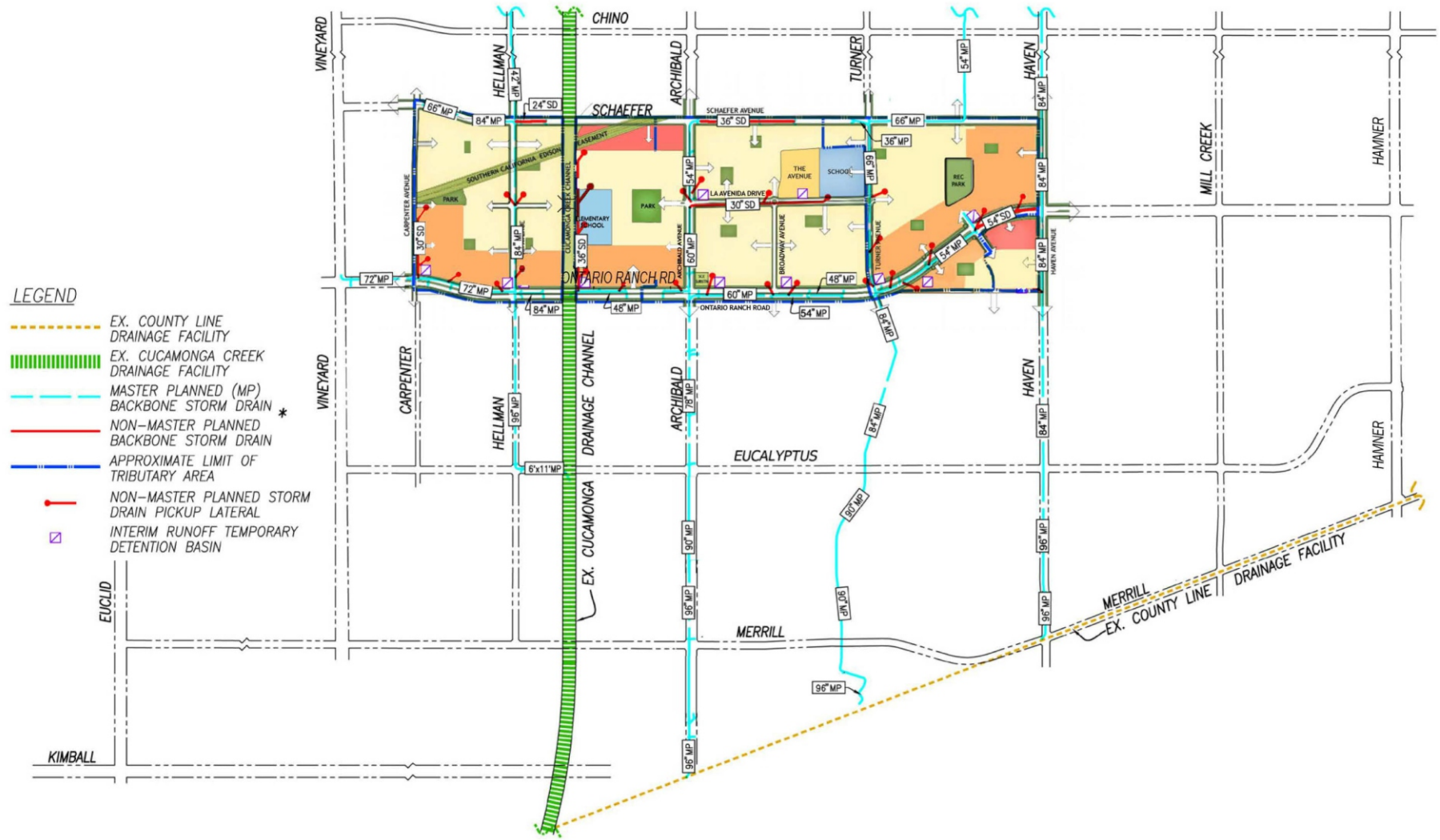
Storm Drains

Multiple City Master Plan of Drainage storm drain facilities would serve the Modified Project site. All Master Plan stormwater management system improvements implemented to serve the Modified Project would be required to conform to the incumbent City Master Plan of Drainage.

Under post-development conditions, existing southerly trending on-site drainage patterns would be maintained. Within the Modified Project site, minimum 18-inch storm drain laterals would be constructed to convey stormwater runoff from developed areas to the Master Plan storm drain system. In-tract storm drain system designs would be provided at the time of subdivision. Final designs of stormwater management systems serving the Modified Project would be required to conform to City requirements. The Modified Project Stormwater Management System Concept is presented at Figure 2.3-11. For illustrative purposes, the Original Project and Modified Project Storm Drain System Concepts are compared at Figure 2.3-12. Please refer also to 2024 SPA Section 4.2.4, *Drainage*.

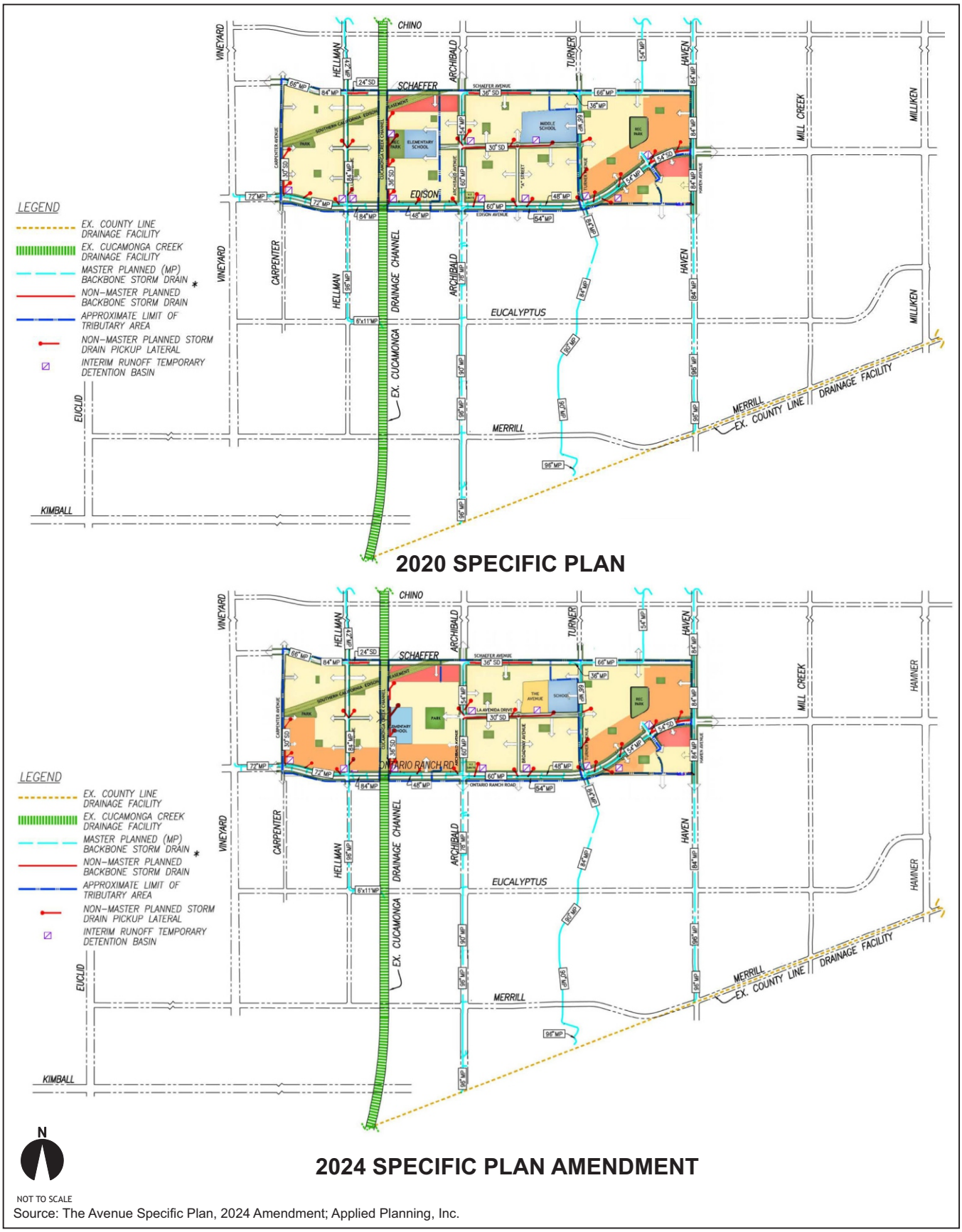
Water Quality Management Plan

The Modified Project would implement on-site stormwater management systems to detain and treat stormwater discharges. Stormwater discharges from the Modified Project would be required to comply with requirements and performance standards established under the incumbent San Bernardino County National Pollutant Discharge Elimination System (NPDES) Stormwater Program MS4 Permit and Water Quality Management Plan (WQMP). To these ends, developments within the Modified Project site would implement Low Impact Development (LID) Site Design Best Management Practices (BMPs) to reduce pollutant transport and increase on-site stormwater infiltration. Additionally, all Priority Land Use (PLU) areas within the Modified Project site would be required to comply with the statewide Trash Provisions adopted by the State Water Resources Control Board (SWRCB) and trash requirements in the most current San Bernardino County Area-Wide MS4 Permit.



Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

Figure 2.3-11
Storm Drain Master Plan



NOT TO SCALE

Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

Figure 2.3-12
Storm Drain Master Plan Comparison

Non-structural and structural Source Control BMPs would be documented in the Modified Project WQMPs. Final WQMPs, as approved by the City, would ensure that the Modified Project stormwater management systems have been designed to convey and treat stormwater discharges and limit the post-development peak flows consistent with available storm drain capacities.

Please refer also to 2024 SPA Section 4.2.6, *NPDES Compliance*.

2.3.5.4 Solid Waste Management

The City of Ontario provides solid waste collection services for the City and would service the Modified Project. Under the 2024 SPA, an integrated waste management plan for each subdivision is required prior to Development Advisory Board (DAB) approval. All developments within Modified Project would be required to comply with waste reduction and recycling standards and identified in the City Municipal Code and as specified in the incumbent *City of Ontario Solid Waste Department Refuse and Recycling Planning Manual*. Please refer also to 2024 SPA Section 4.2.7, *Solid Waste*.

2.3.5.5 Electricity

SCE would provide electricity to the site from existing vicinity facilities. Facilities less than 34.5kV would be located underground if they are located adjacent to any streets proposed to be improved in conjunction with site improvements. All proposed connections and modifications to SCE facilities would conform to SCE and City requirements.

2.3.5.6 Natural Gas

The Gas Company would provide natural gas service to the site. All proposed connections and modifications to Gas Company facilities would be required to conform to Gas Company and City requirements.

2.3.5.7 Fiber Optics System

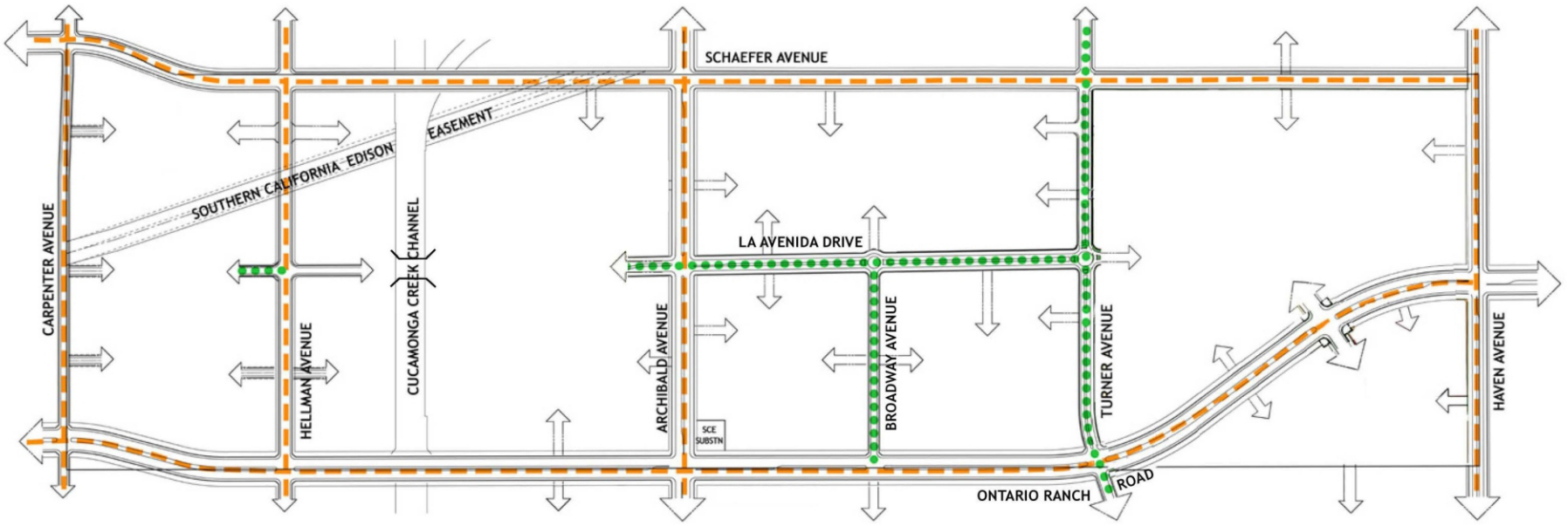
A backbone fiber optics system (conduits and fiber) would be constructed within the Modified Project street system. Backbone fiber optic components (conduits and fiber) would be placed underground within a duct and structure system to be installed in a joint trench. In-tract fiber and conduit would be installed per the City's in-tract fiber optic design guidelines (see: https://www.ontarioca.gov/sites/default/files/Ontario-Files/Information-Technology/2014-12-16_in-tract_designguidelines.pdf). The Modified Project Fiber Optic Plan is presented at Figure 2.3-13. For illustrative purposes, the Original Project and Modified Project Fiber Optic Plan Concepts are compared at Figure 2.3-14.

2.3.5.8 Communications Services

Communications services, including wired and wireless telephone and internet services, are available through numerous private providers and would be provided on an as-needed basis. To the extent practical and consistent with City Conditions of Approval, existing and proposed wires, conductors, conduits, raceways, and similar communications improvements within the Modified Project site would be installed underground. Any necessary surface-mounted equipment, e.g., terminal boxes, transformers, meters, service cabinets, etc., would be screened and would conform to City building setback requirements.

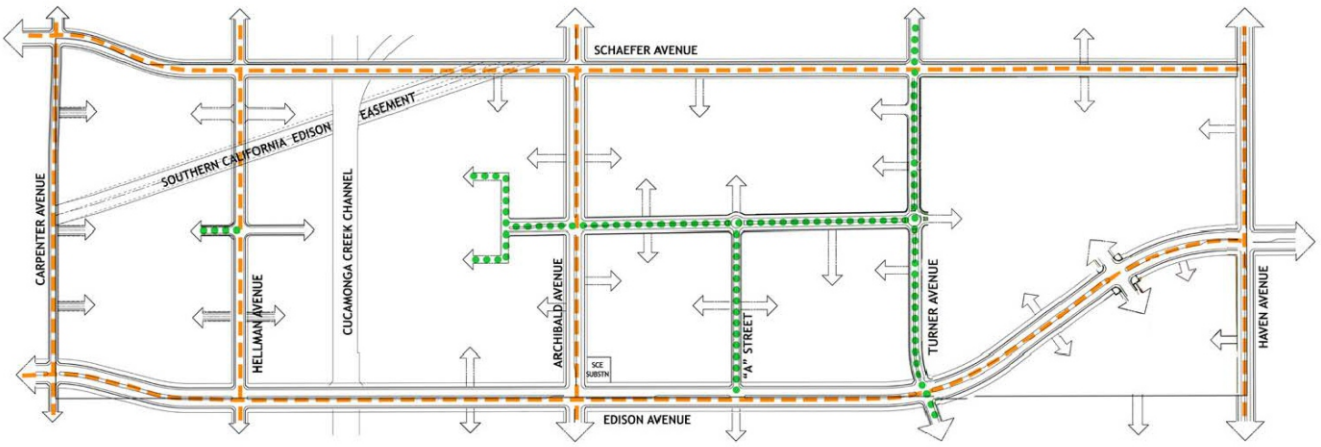
2.3.6 Energy Efficiency/Sustainability

Energy-saving and sustainable design features and operational programs would be incorporated in all facilities developed pursuant to the Modified Project. The Modified Project would be required to comply with incumbent energy efficiency and performance standards established under the CALGreen Code and the City of Ontario Community Climate Action Plan (CCAP).



Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

Figure 2.3-13
Fiber Optics

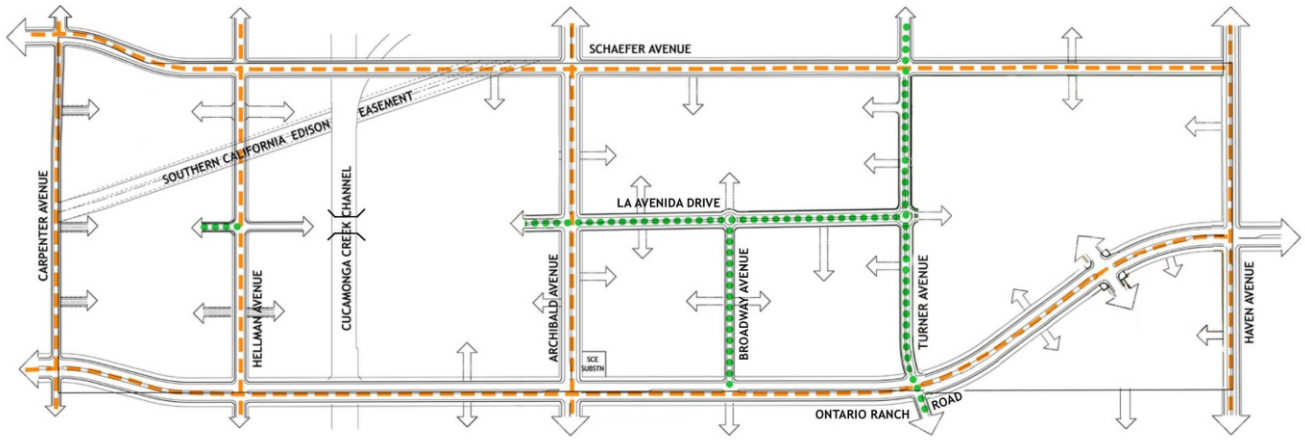


LEGEND

MASTER PLANNED (MP) INFRASTRUCTURE

CONSTRUCTED BY DEVELOPERS

2020 SPECIFIC PLAN



LEGEND

MASTER PLANNED (MP) INFRASTRUCTURE

CONSTRUCTED BY DEVELOPERS

2024 SPECIFIC PLAN AMENDMENT

N

NOT TO SCALE

Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

applied planning inc

Figure 2.3-14
Fiber Optics Comparison

2.3.7 Site Preparation

As an initial action, the Modified Project site would be cleared of vegetation and all on-site improvements associated with, or supporting, the existing on-site land uses would be demolished or removed. Debris generated by site preparation and demolition activities would be disposed of/recycled consistent with provisions of the California Integrated Waste Management Plan Act (AB 939) and the City's Integrated Waste Department *Refuse and Recycling Planning Manual*.[4]

Additionally, a total of 20 water wells are located within the Modified Project site. Locations of these wells are identified at Figure 2.3-15. All existing water wells within the Modified Project site would be destroyed consistent with San Bernardino County Health Department and California Department of Water Resources (DWR) requirements. See also: https://water.ca.gov/Programs/Groundwater-Management/Wells/Well-Standards/Combined-Well-Standards/Water-Destruction.

The natural topography of the Project site is relatively flat. No unusual grading conditions are present and substantial import or export of earth materials is not expected. Project grading would provide stable development pads for construction; balance cut and fill grading quantities on-site; and meet City of Ontario building standards and acceptable infrastructure gradient requirements.

2.3.8 Construction Area Traffic Management Plan

To avoid or minimize temporary construction-related traffic impacts throughout site preparation and construction activities, the Project Applicant would be required to prepare and implement a City-approved Construction Traffic Management Plan (Plan). Typical elements and information incorporated in the Plan would include, but not be limited to:

- **Name of on-site construction superintendent and contact phone number.**

[4] City of Ontario, California: *Solid Waste Department* [Integrated Waste Department] *Refuse and Recycling Manual*, Updated March 17, 2016. https://www.ontarioca.gov/omuc/integrated-waste.



Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

Figure 2.3-15
Existing Wells

- **Identification of Construction Contract Responsibilities** - For example, for excavation and grading activities, describe the approximate depth of excavation, and quantity of soil import/export (if any).

- **Identification and Description of Truck Routes** - to include the number of trucks and their staging location(s) (if any).

- **Identification and Description of Material Storage Locations (if any).**

- **Location and Description of Construction Trailer (if any).**

- **Identification and Description of Traffic Controls** - Traffic controls shall be provided per the Manual of Uniform Traffic Control Devices (MUTCD) if the occupation or closure of any traffic lanes, parking lanes, parkways or any other public right-of-way is required. If the right-of-way occupation requires configurations or controls not identified in the MUTCD, a separate traffic control plan must be submitted to the City for review and approval. All right-of-way encroachments would require permitting through the City.

- **Identification and Description of Parking** - Estimate the number of workers and identify parking areas for their vehicles.

- **Identification and Description of Maintenance Measures** - Identify and describe measures taken to ensure that the work site and public right-of-way would be maintained (including dust control).

The Plan would be reviewed and approved by the City prior to the issuance of the first building permit. The Plan and its requirements would also be required to be provided to all contractors as one component of building plan/contract document packages.

2.3.9 Opening Year

For the purposes of this analysis, the Project Opening Year is defined as 2026, by which time all proposed uses are assumed to be complete, occupied, and operational.

2.4 PROJECT OBJECTIVES

The stated vision of the 2024 SPA is to establish "a truly walkable community, featuring pedestrian amenities that encourage walking and biking to schools, parks and basic commercial needs—all within five minutes, for the majority of residents" (2024 SPA, p. 1-1.) Supporting 2024 Specific Plan Amendment Objectives are listed below.

General

- Implement TOP 2050 Policy Plan Land Use Plan.
- Support TOP 2050 vision for urbanization of the Ontario Ranch area of the City.
- Implement Specific Plan developments providing additional long-term employment opportunities.
- Implement Specific Plan developments providing additional construction employment opportunities.
- Establish new development that would further the City's near-term and long-range fiscal goals.

Residential Land Uses

- Development of a variety of housing types into the land use plan addressing a wide variety of lifestyles and economic segments.
- Provide for both single family attached and detached housing in low density and low medium density residential districts.
- Plan for seamless transitions between housing product types in order to create cohesive neighborhoods that include a range of types and styles.
- Plan residential neighborhoods around a series of parks and open space areas, promoting outdoor activity and interaction among neighbors.
- Provide for connectivity between residential neighborhoods, recreational areas, and adjacent commercial land uses, as well as to the schools, by means of pedestrian and bicycle trail linkages along The Avenue and trails incorporated into

both the Southern California Edison Easement and the Cucamonga Creek Channel. Create a strong functional relationship between homes and schools.
- Create a hierarchy of parks, providing for active and passive recreation.
- Create residential neighborhoods with diverse architectural styles and traditional design elements reflecting some of the characteristics of older established Ontario neighborhoods.

Commercial Land Uses

- Develop retail and commercial uses to meet the needs of the residential community and larger surrounding market area, as well as implement Policy Plan policies.
- Provide trails and sidewalks to connect the residential community with the retail and commercial area.
- Consider the development of plazas and other public space amenities within the retail and commercial area providing space for social interaction.
- Orient retail and commercial buildings to the street, wherever possible, to create an urban edge and sense of arrival.

2.5 DISCRETIONARY APPROVALS and PERMITS

Discretionary actions, permits, and related consultation(s) necessary to approve and implement the Project include, but are not limited to, the following.

2.5.1 Lead Agency Discretionary Actions and Permits

- CEQA Compliance;
- Adoption of this Addendum;
- Approval of a Specific Plan Amendment;
- Approval of Tentative Parcel Maps;
- Approval of a Development Agreement; and
- Approval of Development Plans.

2.5.2 Other Consultation and Permits

Anticipated consultation and permits necessary to realize the Modified Project would or may include the following:

- Permitting by/through the Regional Water Quality Control Board (RWQCB) pursuant to requirements of the City's National Pollutant Discharge Elimination System (NPDES) Permit.

- Permitting by/through the South Coast Air Quality Management District (SCAQMD) for certain equipment or land uses that may be implemented pursuant to the Modified Project.

- Permitting (i.e., utility construction and connection permits) from affected utility purveyors, notably the City of Ontario, IEUA, and SCE.

- Permitting for destruction of on-site wells per San Bernardino County Health Department and Department of Water Resources requirements.

- Other ministerial permits necessary to realize all on- and off-site improvements related to the development of the site.

3.0 ENVIRONMENTAL CHECKLIST

ENVIRONMENTAL CHECKLIST

The Avenue Specific Plan, 2024 Amendment

Addendum to The Ontario Plan 2050 Certified SEIR (SCH No. 2021070364)

General Notes: *The Avenue Specific Plan, 2024 Amendment* (Modified Project, Project) land uses and development concepts have been designed to be consistent with land uses and development concepts for the subject site reflected in The Ontario Plan 2050 (TOP 2050). Impacts of TOP 2050 have been evaluated and addressed in *The Ontario Plan 2050 Certified SEIR (*TOP 2050 SEIR, Certified SEIR). This Addendum compares and contrasts impacts of the Modified Project with impacts identified in the Certified SEIR. As substantiated herein, the Modified Project would not result in substantially different or substantially increased impacts when compared to impacts considered and addressed in the Certified SEIR. The CEQA Initial Study Checklist categories and topics presented below conform to the suggested content presented at *CEQA Guidelines*, Appendix G. Certain of the Addendum Technical Studies are dated 2023. These Studies were prepared prior to the latest refinements reflected in the 2024 Specific Plan Addendum (2024 SPA). Findings and conclusions of these Studies are not affected by the 2024 SPA refinements.

1. AESTHETICS

Except as provided in Public Resources Code Section 21099, would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Have a substantial adverse effect on a scenic vista?					X	
b) Substantially damage visible scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?					X	
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?					X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?					X	

Substantiation:

a-d) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR recognizes that buildout of the City would alter the visual character of the City. The Certified SEIR concludes that compliance with the City Municipal Code and applicable TOP 2050 Policies would ensure that potential aesthetics impacts of development anticipated under TOP 2050 would be less-than-significant (Certified SEIR, pp. 5.1-4 – 5.1-10).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. Final designs of the Modified Project facilities including, but not limited to, the proposed buildings, landscape/hardscape features, and lighting configurations would be required to conform to the 2024 Specific Plan Development Regulations and Design Guidelines,[1] and applicable provisions of the City Municipal Code. Final designs of all uses would be subject to City review and approval. Conformance with the 2024 Specific Plan Development Regulations and Design Guidelines and City Municipal Code requirements would ensure that the Modified Project would not substantially degrade scenic vistas, substantially degrade scenic resources, adversely alter the existing visual character or quality of the area, or create a new source of substantial light or glare which would adversely affect day or nighttime views. Impacts of the Modified Project in these regards would be less-than-significant. On this basis, when compared to the Certified SEIR findings, no new or substantially increased aesthetic impacts would result from the Modified Project.

Modified Project Conditions of Approval: None.

[1] The 2024 Specific Plan Development Regulations and Design Guidelines have been amended to address new or revised uses proposed by the Modified Project.

Summary

When compared to the impacts identified in the Certified SEIR, no new significant, substantially increased, or substantially different aesthetics or light/glare impacts would result from the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022*; *The Avenue Specific Plan, 2024 Amendment*.

2. AGRICULTURE AND FORESTRY RESOURCES

Would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?					X	
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?					X	
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 1220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?					X	
d) Result in the loss of forest land or conversion of forest land to non-forest use?					X	
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use, or conversion of forest land to non-forest use?					X	

Substantiation:

a) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: Under TOP 2050, the City Ontario no longer has land designated for agricultural uses. Because TOP 2050 is the baseline for the Certified SEIR, TOP 2050 would not result in the conversion of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance to nonagricultural uses. TOP 2050 would therefore have no impact on land zoned for agricultural purposes (Certified SEIR, p. 5.2-12).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. As noted above, TOP 2050 would have no impact on land zoned for agricultural purposes. Because the Modified Project Land Uses are consistent with TOP 2050 land use designations, by extension, the Modified Project would similarly have no impact on land zoned for agricultural purposes.

Modified Project Conditions of Approval: None.

b) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions:

Agricultural Zoning

The Certified SEIR concluded that implementation of the Land Use Plan would not adversely affect agriculturally-zoned properties (Certified SEIR, p. 5.2-12).

Williamson Act Contracts

Implementation of TOP 2050 would affect all active Williamson Act contracts within the City. The Certified SEIR concluded, however, that impacts to Williamson Act contract properties under TOP 2050 would not be greater than, or different than, would result

from TOP 2009. On this basis, the Certified SEIR concluded that TOP 2050 impacts to Williamson Act Contract properties would be less-than-significant (Certified SEIR, p. 5.2-13).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. Agricultural resources impacts discussed below are consistent with impacts of TOP 2050 as evaluated in the Certified SEIR.

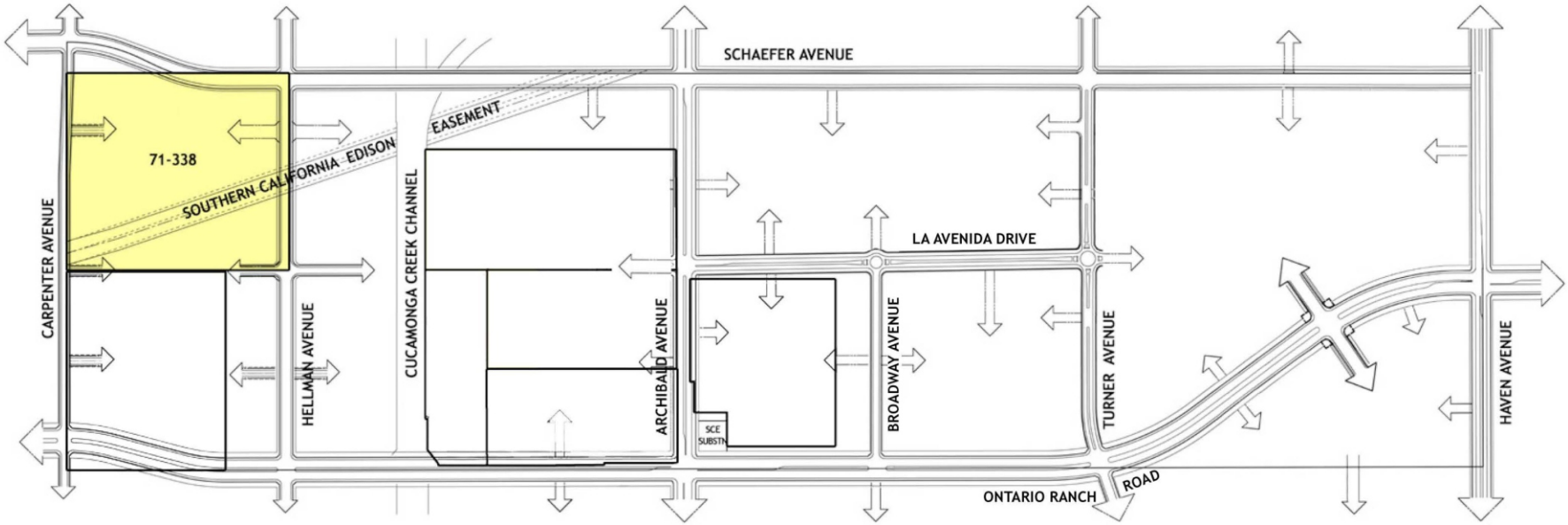
Agricultural Zoning

The Modified Project site is Zoned "Specific Plan." The Modified Project does not propose or require uses or activities that would result in potentially adverse effects at agriculturally-zoned properties. Based on the preceding, the Modified Project's potential impacts related to a conflict with agricultural zoning would be less-than-significant.

Williamson Act Contracts

The California Land Conservation Act of 1965 (the Williamson Act, Government Code Sections 51200 through 51297.4) encourages the preservation of agricultural lands through tax incentives due to the increasing trend toward the conversion of agricultural lands to urban uses. The Act enables counties and cities to designate agricultural preserves (Williamson Act lands) and within these preserves offer preferential taxation to agricultural landowners based on the agricultural income-producing value of the property.

One active Williamson Act Contract property (Williamson Act Contract No 71-338) is located within the Modified Project site. The location of the subject Williamson Act Contract property is indicated at Figure 2-1. Contract No 71-338 will expire in 2026 and will not be renewed or extended. No development of the subject property would occur prior to expiration of Contract No 71-338. As such, the Modified Project would have no impact on an active Williamson Act Contract property.



Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

Figure 2-1
Williamson Act Contracts

Under TOP 2050, the entire 2024 Specific Plan Area is anticipated to be developed with urban uses. The Certified SEIR concluded that under TOP 2050 buildout conditions, impacts to Williamson Act properties would be less-than-significant. The Modified Project land uses are consistent with TOP 2050 as evaluated in the Certified SEIR. Because the Modified Project Land Uses are consistent with TOP 2050 land use designations, by extension, the Modified Project would similarly have a less-than-significant impact on Williamson Act contract properties.

Based on the preceding, the potential for the Modified Project to conflict with a Williamson Act Contract would be less-than-significant.

Modified Project Conditions of Approval: None.

c) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: There are no City land uses zoned for forest land, timberland, or timberland zoned Timberland Production. There are no properties in the City considered to be forestland. As such, implementation of TOP 2050 would have no impact on land uses zoned for forest land, timberland, or timberland zoned Timberland Production; nor would TOP 2050 result in the loss or conversion of timberland or forest land to non-forest uses (Certified SEIR, p. 5.2-13).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. The Modified Project site is not zoned for forest land, timberland, or timberland zoned Timberland Production. There is no timberland or forest land within the Modified Project site. The Modified Project Land Uses are consistent with TOP 2050 land use designations. As noted above, TOP 2050 would have no impact on forest land, timberland, or timberland zoned Timberland Production; nor would TOP 2050 result in the loss or conversion of timberland or forest land to non-forest uses. Because the Modified Project Land Uses are consistent with TOP 2050 land use designations, by extension, the Modified Project

would similarly have no impact on forest land, timberland, or timberland zoned Timberland Production; nor would the Modified Project result in the loss or conversion of timberland or forest land to non-forest uses.

Modified Project Conditions of Approval: None.

d, e) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: Under TOP 2050, the City Ontario no longer has land designated for agricultural uses. Because TOP 2050 is the baseline for the Certified SEIR, TOP 2050 would not result in the conversion of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance to nonagricultural uses. TOP 2050 would therefore have no impact on land zoned for agricultural purposes (Certified SEIR, p. 5.2-12). See also Checklist Item 2 a.

There are no City land uses zoned for forest land, timberland, or timberland zoned Timberland Production. There are no properties in the City considered to be forestland. As such, implementation of TOP 2050 would have no impact on land uses zoned for forest land, timberland, or timberland zoned Timberland Production; nor would TOP 2050 result in the loss or conversion of timberland or forest land to non-forest uses (Certified SEIR, p. 5.2-13). See also Checklist Item 2 c.

TOP 2050 does not propose or require uses that would otherwise result in conversion of Farmland to nonagricultural use or conversion of forest land to non-forest use.

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. No forest land or farmland is located within the Modified Project site or in its vicinity. The Modified Project does not propose or require uses that would otherwise result in conversion of Farmland to nonagricultural use, or conversion of forest land to non-forest use. The Modified Project Land Uses are consistent with TOP 2050 land use designations. As noted above,

TOP 2050 would have no impact on forest land or farmland, nor would TOP 2050 result in the loss or conversion of timberland or forest land to non-forest uses. Because the Modified Project Land Uses are consistent with TOP 2050 land use designations, the Modified Project would similarly not result in the conversion of Farmland to nonagricultural use, or conversion of forest land to non-forest use.

Modified Project Conditions of Approval: None.

Summary

When compared to impacts considered and addressed in the Certified SEIR, no new significant, substantially increased, or substantially different agriculture and forestry resources impacts would result from the Modified Project. No changed or new information has been identified to indicate that any impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022*; *The Avenue Specific Plan, 2024 Amendment*.

3. AIR QUALITY

Would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?					X	
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?					X	
c) Expose sensitive receptors to substantial pollutant concentrations?					X	

Would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?					X	

Substantiation:

a) *No Changes or New Information Requiring Preparation of an MND or EIR.*

General Note: *The technical analyses referenced in this section reflect likely maximum impacts. Subsequent to preparation of these analyses, total residential development intensities allowed under the Modified Project have been reduced consistent with direction. Specifically, the technical analyses referenced herein assume residential development of the Modified Project totaling up to 3,807 dwelling units (see Project Traffic Analysis, p. 2 et al.). As subsequently modified, maximum allowed residential development under the Modified Project would not exceed 3,753 dwelling units (see Section 2.0, Project Description, Table 2.1-1).*

Certified SEIR Conclusions: Because air pollutant emissions associated with buildout of the City would cumulatively contribute to nonattainment conditions affecting the South Coast Air Basin (SoCAB), the Certified SEIR determined that TOP 2050 would be inconsistent with the Air Quality Management Plan (AQMP). For these reasons, the Certified SEIR concluded that TOP 2050 would result in significant AQMP consistency impacts (Certified SEIR, p. 5.3-40).

Certified SEIR Mitigation Measures: The Certified SEIR includes mitigation (listed below) that would generally reduce criteria pollutant emissions associated with buildout of TOP 2050. These measures include mitigation from the previous (2010) TOP EIR and new mitigation implemented under TOP 2050.

3-1 Prior to discretionary approval by the City of Ontario for development projects subject to CEQA (California Environmental Quality Act) review (i.e., nonexempt projects), project

applicants shall prepare and submit a technical assessment evaluating potential project construction-related air quality impacts to the City of Ontario Planning Department for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology for assessing air quality impacts. If construction-related criteria air pollutants are determined to have the potential to exceed the South Coast AQMD–adopted thresholds of significance, the City of Ontario building department shall require feasible mitigation measures to reduce air quality emissions. Potential measures shall be incorporated as conditions of approval for a project and may include:

- *Require fugitive dust control measures that exceed South Coast Air Quality Management District's Rule 403, such as:*
  - *Requiring use of nontoxic soil stabilizers to reduce wind erosion.*
  - *Applying water every four hours to active soil disturbing activities.*
  - *Tarping and/or maintaining a minimum of 24 inches of freeboard on trucks hauling dirt, sand, soil, or other loose materials.*
  - *Using construction equipment rated by the United States Environmental Protection Agency as having Tier 4 interim or higher exhaust emission limits.*
- *Ensuring construction equipment is properly serviced and maintained to the manufacturer's standards.*
- *Limiting nonessential idling of construction equipment to no more than five consecutive minutes.*
- *Using Super-Compliant VOC paints for coating architectural surfaces whenever possible. A list of Super-Compliant architectural coating manufactures can be found on the South Coast Air Quality Management District's website at: http://www.aqmd.gov/prdas/brochures/Super- Compliant_AIM.pdf.*

These identified measures shall be incorporated into all appropriate construction documents (e.g., construction management plans) submitted to the City and shall be verified by the City's Planning Department.

3-2 *The City of Ontario shall evaluate new development proposals within the City and require all developments to include access or linkages to alternative modes of transportation, such as transit stops, bike paths, and/or pedestrian paths (e.g., sidewalks).*

New Mitigation

AQ-1 Prior to discretionary approval by the City of Ontario for development projects subject to CEQA (California Environmental Quality Act) review (i.e., nonexempt projects), project applicants shall prepare and submit a technical assessment evaluating potential project operation-phase-related air quality impacts to the City of Ontario Planning Department for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology in assessing air quality impacts. If operation-related air pollutants are determined to have the potential to exceed the South Coast AQMD–adopted thresholds of significance, the City of Ontario Planning Department shall require that applicants for new development projects incorporate mitigation measures to reduce air pollutant emissions during operational activities. The identified measures shall be included as part of the conditions of approval. Possible mitigation measures to reduce long-term emissions could include, but are not limited to the following:

- *For site-specific development that requires refrigerated vehicles, the construction documents shall demonstrate an adequate number of electrical service connections at loading docks for plug-in of the anticipated number of refrigerated trailers to reduce idling time and emissions.*
- *Applicants for manufacturing and light industrial uses shall consider energy storage and combined heat and power in appropriate applications to optimize renewable energy generation systems and avoid peak energy use.*
- *Site-specific developments with truck delivery and loading areas and truck parking spaces shall include signage as a reminder to limit idling of vehicles while parked for loading/unloading in accordance with California Air Resources Board Rule 2845 (13 CCR Chapter 10 sec. 2485).*
- *Provide changing/shower facilities as specified in Section A5.106.4.3 of CALGreen (Nonresidential Voluntary Measures).*
- *Provide bicycle parking facilities per Section A4.106.9 of CALGreen (Residential Voluntary Measures).*
- *Provide preferential parking spaces for low-emitting, fuel-efficient, and carpool/van vehicles per Section A5.106.5.1 of CALGreen (Nonresidential Voluntary Measures).*
- *Provide facilities to support electric charging stations per Section A5.106.5.3 and*

Section A5.106.8.2 of CALGreen (Nonresidential Voluntary Measures; Residential Voluntary Measures).

Applicant-provided appliances shall be Energy Star-certified appliances or appliances of equivalent energy efficiency (e.g., dishwashers, refrigerators, clothes washers, and dryers). Installation of Energy Star-certified or equivalent appliances shall be verified by the City during plan check.

[TOP 2050] Policy ER4-9, Health Risk Assessments, would ensure mobile sources of TACs not covered under South Coast AQMD permits are considered during subsequent project-level environmental review by the City of Ontario; however, implementation of TOP 2050 would generate TACs that could contribute to elevated levels in the air basin (cumulative).

The Certified SEIR concluded however that no mitigation measures are available that would substantially reduce AQMP inconsistency impacts. On this basis, the Certified EIR concluded that even with application of mitigation, TOP 2050 inconsistency with the AQMP would be significant and unavoidable (Certified SEIR, p. 5.3-54).

Level of Significance After Mitigation: Significant and Unavoidable.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. In this respect, the Modified Project would not substantively increase aggregate development intensities beyond that currently anticipated for the subject site as reflected in the Certified SEIR analysis of AQMP consistency.

Based on the preceding, when compared to the Certified SEIR findings, no new or substantially increased AQMP consistency impacts would occur under the Modified Project.

Modified Project Conditions of Approval: The Modified Project would implement applicable Certified SEIR mitigation measures.

b) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR concluded that buildout of TOP 2050 would generate short-term and long-term air pollutant emissions exceeding SCAQMD regional significance thresholds for VOC, CO, NOx, PM_{10}, and $PM_{2.5}$. These exceedances would cumulatively contribute to the SCAB nonattainment designations for O_3, PM_{10} and $PM_{2.5}$. Even with the implementation of mitigation measures, nonattainment air quality impacts resulting from buildout of TOP 2050 would be significant and unavoidable (Certified SEIR, pp. 5.3-54 – 5.3-57).

Certified SEIR Mitigation Measures: Please refer to previous Certified SEIR air quality mitigation measures listed at Checklist item 3 a).

Modified Project:

Construction-Source Emissions

Construction-source emissions resulting from the Modified Project are quantified in *The Avenue Specific Plan, 2023 Amendment - Air Quality & Energy Assessment* (Urban Crossroads, Inc.) May 8, 2024 (Modified Project AQIA, Addendum Appendix B). Modified Project construction activities would comprise site preparation, grading, building construction, paving, and architectural coating. Construction-source emissions would also be generated by construction worker commutes, heavy equipment transport, and construction material(s) vendor trips. Modified Project construction activities would generate emissions of carbon monoxide (CO), Volatile Organic Compounds (VOCs), Nitrogen Oxides (NOX), Sulfur Oxides (SOX), particulate matter ≤ 10 microns (PM_{10}), and particulate matter ≤ 2.5 microns ($PM_{2.5}$). Table 3-1 summarizes Modified Project maximum daily construction-source emissions.

As presented at Table 3-1, with the exception of VOC emissions, Modified Project construction-source emissions would not exceed applicable SCAQMD regional thresholds. Project construction-source VOC exceedances would represent a cumulatively considerable net increase in SCAB nonattainment conditions for O_3 (VOC is an Ozone precursor). Because the Project is consistent with land uses and development

evaluated in the Certified SEIR, Project construction-source VOC exceedances are already acknowledged and accounted for in the Certified SEIR.

Table 3-1
Maximum Daily Construction-Source Emissions

Source	Emissions (lbs./day)					
	VOC	**NOx**	**CO**	**SOx**	**PM_{10}**	**$PM_{2.5}$**
Summer						
2024	7.04	39.79	140.03	0.13	19.75	4.92
2025	6.63	31.64	132.00	0.10	19.75	4.92
Winter						
2024	6.65	39.85	114.31	0.13	19.75	5.70
2025	119.91	51.12	148.37	0.13	23.90	6.07
Total Maximum Daily Emissions	**119.91**	**51.12**	**148.37**	**0.13**	**23.90**	**6.07**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	YES	NO	NO	NO	NO	NO

Source: *The Avenue Specific Plan, 2023 Amendment - Air Quality & Energy Assessment* (Urban Crossroads, Inc.) May 8, 2024.

Operational-Source Emissions

Modified Project operational-source emissions would derive primarily from site/building maintenance (area sources), building energy consumption, and traffic (mobile sources). Operational-source emissions generated by the Modified Project land are summarized at Table 3-2. As indicated at Table 3-2, Project maximum daily operational-source emissions would exceed SCAQMD Regional Thresholds for VOC, NOx, CO, and PM_{10}. Project operational-source VOC, NOx, and PM_{10} exceedances would represent a cumulatively considerable net increase in SCAB nonattainment conditions for O_3 and PM_{10} (VOC and NO_x are Ozone precursors).

Because the Project is consistent with land uses and development evaluated in the Certified SEIR, the Project operational-source VOC, NOx, CO, and PM_{10} exceedances are already acknowledged and accounted for in the Certified SEIR.

Table 3-2
Maximum Daily Operational-Source Emissions

Source	Emissions (lbs./day)					
	VOC	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Summer						
Mobile Source	89.78	76.69	729.57	1.77	154.87	40.15
Area Source	80.59	34.64	143.12	0.22	2.78	2.76
Energy Source	0.70	12.02	5.61	0.08	0.97	0.97
Total Max. Daily Emissions	**171.07**	**123.34**	**878.29**	**2.06**	**158.61**	**43.88**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**YES**	**YES**	**YES**	**NO**	**YES**	**NO**
Winter						
Mobile Source	83.39	82.34	615.71	1.66	154.87	40.15
Area Source	68.04	33.41	14.22	0.21	2.70	2.70
Energy Source	0.70	12.02	5.61	0.08	0.97	0.97
Total Max. Daily Emissions	**152.13**	**127.76**	**635.54**	**1.94**	**158.53**	**43.82**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**YES**	**YES**	**YES**	**NO**	**YES**	**NO**

Source: *The Avenue Specific Plan, 2023 Amendment - Air Quality & Energy Assessment* (Urban Crossroads, Inc.) May 8, 2024.

Modified Project Conditions of Approval: The Modified Project would implement applicable Certified SEIR mitigation measures.

Based on the preceding, when compared to the Certified SEIR findings, the Modified Project would not result in substantively different or substantively increased contributions to cumulative contributions to criteria pollutant non-attainment impacts.

c) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR notes that individual development projects within the City would be required to achieve the incremental risk thresholds established by SCAQMD, and on this basis, potential Toxic Air Contaminant (TAC) impacts from individual developments would be less-than-significant. TOP 2050 Policy ER4-9 *New Localized Air Pollution Sources Near Existing Sensitive Receptors*, ensures that mobile sources of TACs not covered under South Coast AQMD permits are considered

during subsequent project-level environmental review by the City of Ontario. Other air quality mitigation measures implemented under TOP 2050 would further reduce air pollutant emissions, thereby minimizing effects of pollutants at sensitive receptors.

The Certified SEIR nonetheless concludes that buildout of TOP 2050 would generate TACs that could contribute to elevated levels of TAC pollutants in the air basin. On this basis, the Certified SEIR concluded that TOP 2050 TAC emissions impacts at sensitive receptors would be cumulatively significant (Certified SEIR, p. 5.3-57).

Certified SEIR Mitigation Measures: Please refer to previous Certified SEIR air quality mitigation measures listed at Checklist item 3 a).

Modified Project: The Modified Project does not propose or require uses that would generate substantial levels of TACs. However, localized construction-source emissions generated by the Project have the potential to adversely affect proximate sensitive uses.[2] Accordingly, the potential for the Modified Project construction activities to generate or result in harmful concentrations of air pollutants at sensitive receptors is evaluated in the Modified Project AQIA.

LST Methodology

Localized construction-source impacts resulting from the Modified Project were evaluated consistent with methodologies and protocols presented in *Final Localized Significance Threshold Methodology* (SCAQMD) 2003 (LST Methodology). Per SCAQMD criteria, localized exceedances of the federal and/or state ambient air quality standards (NAAQS/CAAQS) would comprise potentially significant air quality impacts. Collectively, these are referred to as Localized Significance Thresholds (LSTs). LSTs represent the maximum localized emission concentrations that would not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard(s).

[2] LSTs would apply to the operational phase of a project, if that project includes stationary sources, or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., transfer facilities and warehouse buildings). The Project does not propose or require such uses. Due to the lack of significant stationary source emissions, an LST analysis for the Modified Project operations is not required.

Sensitive Receptors

Persons that are especially sensitive to air pollution are accorded special consideration when evaluating air quality impacts. Collectively, these persons collectively comprise sensitive receptors, and include: children, the elderly, and individuals with pre-existing respiratory or cardiovascular illness. Structures that house these persons or places where they gather are defined as sensitive receptor locations. Such structures typically include: residences, hotels, hospitals or similar occupancies. Consistent with the LST Methodology, the analysis presented here evaluates potential effects of localized construction-source emissions at the nearest sensitive receptor locations where an individual could remain for 24 hours or more.

Based on an aerial imagery, sensitive receptor residential land uses are located within 25 meters of the Project boundaries. Per the LST Methodology, a minimum separation of 25 meters between receptors and emission sources has been assumed within this analysis.

Thresholds

The LST Methodology provides "Look-up Tables" establishing screening-level thresholds. Emissions that do not exceed the Look-up Table thresholds are presumptively considered less-than-significant. Emissions exceeding Look-up Table thresholds warrant further detailed modeling and analysis. Look-up Table thresholds applicable to the Project are presented below.

Table 3-3
Localized Significance Thresholds

Activity	Emissions Thresholds (lbs./day)			
	VOC	NO_X	PM_{10}	$PM_{2.5}$
Demolition	270	2,193	16	9
Site Preparation				
Grading				

Source: *The Avenue Specific Plan, 2023 Amendment - Air Quality & Energy Assessment* (Urban Crossroads, Inc.) May 8, 2024.

Localized Emissions

Maximum construction-source localized emissions received at the nearest sensitive receptors are presented at Table 3-4.

Table 3-4
Maximum Received Localized Emissions

	Emissions (lbs./day)			
	NO_x	**CO**	**PM_{10}**	**$PM_{2.5}$**
Demolition				
Maximum Daily Emissions	23.81	36.35	0.40	0.38
SCAQMD Localized Threshold	270	2,193	16	9
Threshold Exceeded?	NO	NO	NO	NO
Site Preparation				
Maximum Daily Emissions	29.47	56.62	11.52	5.57
SCAQMD Localized Threshold	270	2,193	16	9
Threshold Exceeded?	NO	NO	NO	NO
Grading				
Maximum Daily Emissions	38.87	70.70	5.70	2.31
SCAQMD Localized Threshold	270	2,193	16	9
Threshold Exceeded?	NO	NO	NO	NO

Source: *The Avenue Specific Plan, 2023 Amendment - Air Quality & Energy Assessment* (Urban Crossroads, Inc.) May 8, 2024.

As presented at Table 3-4, maximum Project construction-source localized emissions received at area sensitive receptors would not exceed applicable SCAQMD LSTs. On this basis, the potential for the Project to expose sensitive receptors to substantial pollutant concentrations would be less-than-significant.

Modified Project Conditions of Approval: None.

d) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR notes that development pursuant to TOP 2050 would be required to comply with SCAQMD Rule 402. SCAQMD Rule 402 acts to generally control and regulate odors and odor sources, thereby minimizing potential

effects of construction-source and operational-source odors from other than industrial land uses (Certified SEIR, p. 5.3-46).

The Certified SEIR also acknowledges that certain types of industrial land uses (e.g., compost facilities, landfills, solid-waste transfer stations, fiberglass manufacturing facilities, paint/coating operations, asphalt batch manufacturing plants, chemical manufacturing, and food manufacturing facilities) warrant focused odor impact analyses. The City would require site- and development-specific analyses to ensure that any odors generated by these types of land uses would not adversely affect a substantial number of people (Certified SEIR, p. 5.3-46).

Based on the preceding, the Certified SEIR concluded that the potential for TOP 2050 to create or result in odors that would adversely affect a substantial number of people would be less-than-significant.

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. Construction-source and operational-source odor impacts that may result from the Modified Project are controlled as a byproduct of hazardous/potentially hazardous materials handling plans and Best Management Practices implemented under SCAQMD Rule 402 et al. The Modified Project would be required to comply with all SCAQMD Rules regulating and controlling odors and odor sources.

The Modified Project does not propose or require land uses (e.g., compost facilities, landfills, solid-waste transfer stations, fiberglass manufacturing facilities, paint/coating operations, asphalt batch manufacturing plants, chemical manufacturing, and food manufacturing facilities) that would be substantial odor sources. Moreover, the Modified Project would remove existing agricultural odor sources and would act generally to improve ambient conditions related to odors.

Construction-source and operational-source odor impacts that may result from the Modified Project are controlled as a byproduct of hazardous/potentially hazardous materials handling plans and Best Management Practices implemented under SCAQMD Rule 402[3] et al. The Modified Project would be required to comply with all SCAQMD Rules regulating and controlling odors and odor sources. The Modified Project would therefore not create objectionable odors affecting a substantial number of people. The Modified Project does not propose or require uses that would generate other emissions that could adversely affect a substantial number of people. On this basis, when compared to the Certified SEIR findings, no new or substantially increased "other emissions" impacts would occur under the Modified Project.

On this basis, when compared to the Certified SEIR findings, no new or substantially increased odor impacts would occur under the Modified Project.

Modified Project Conditions of Approval: None.

Summary

When compared to impacts considered and addressed in the Certified SEIR, no new significant, substantially increased, or substantially different air quality impacts would result from the Modified Project. No changed or new information has been identified to indicate that any impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022*; *The Avenue Specific Plan, 2023 Amendment - Air*

[3] SCAQMD **Rule 402. Nuisance.**
"A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals." http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-402.pdf

Quality & Energy Assessment (Urban Crossroads, Inc.) May 8, 2024; *The Avenue Specific Plan, 2024 Amendment*.

4. BIOLOGICAL RESOURCES

Would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?					X	
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies and regulations; or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?					X	
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?					X	
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?					X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?					X	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?					X	

Substantiation:

a) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR recognizes that development in accordance with TOP 2050 could impact sensitive species. Projects considered for approval under TOP 2050 would be subject to independent CEQA review to determine whether there is potential habitat on-site for sensitive species. The Certified SEIR did not identify any significant impacts in this regard (Certified SEIR, pp. 5.4-28 – 5.4-34).

Certified SEIR Mitigation Measures: None.

Modified Project: TOP 2050 SEIR (Section 5.4) concluded that the area encompassing The Avenue Specific Plan may function as potential habitat for the federally-listed Delhi Sands Flower Loving Fly (DSFLF) and Burrowing Owl. No other potentially significant impacts to candidate, sensitive, or special status species were identified in the SEIR.

Potential Impacts to DSFLF

Potential Project impacts to DSFLF are substantiated in *Habitat Suitability Evaluation* (EnviroPlus Consulting, LLC) October 30, 2023 (Project DSFLF Study). Findings and conclusions of the Project DSFLF Study are presented below.

The Project site was surveyed for evidence of DSFLF, potentially viable DSFLF habitat, and general presence/absence biologic resources by a qualified professional biologist[4] on October 22, 2023. The survey was conducted under clear skies with temperatures ranging from 60 to 72 °F. Winds were light at 1 to 3 mph from the west (Project DSFLF Study, p. 4).

The survey noted general site conditions, soils types, surface conditions, vegetation types and conditions, and presence or evidence of insects and wildlife. The survey also documented past and present on-site disturbances and ongoing urban development

[4] Biologist permitted by the U.S. Fish and Wildlife Service (Section 10 (a) (1) (A) permit number TE-837439-8 expiring 6/24/2024).

affecting the site's potential suitability as habitat for biological resources (Project DSFLF Study, pp. 2 – 4).

The survey results indicate that although the survey area is in part mapped as Delhi series soils, "anthropogenic disturbances over decades have altered the natural topography, aeolian processes, vegetation and soil characteristics such that the site does not now meet the USFWS baseline requirement for conducting focused surveys, the presence of Delhi series soils. Additionally, surrounding areas are similarly highly disturbed and/or developed, so it would be highly unlikely that any dispersing DSFLF from a nearby DSFLF-occupied site would temporarily utilize the subject property for foraging or reproduction purposes. Since suitable Delhi series soils were not found, the site does not meet the baseline criterion to be considered for focused surveys as per the USFWS protocol (1996) and does not appear suitable for DSFLF occupation" (Project DSFLF Study, pp. 4, 5). Based on the preceding, the Project's potential impact to DSFLF and DSFLF habitat would be less-than-significant. **Note:** The January 2024 biological resources assessment update prepared for the Project confirms the above findings and conclusions. Please refer to *Biological Update for The Avenue Specific Plan (Planning Area 5) Project; City of Ontario, County of San Bernardino, California* (January 2024 Biological Update, VCS Environmental) January 16, 2024, Addendum Appendix C.

Potential Impacts to Burrowing Owl

During the October 2023 site DSFLF surveys, the presence of burrowing owl individuals and evidence of burrowing owl occupation within the site were also noted (Project DSFLF Study, p. 4). The January 2024 Biological Resources Update indicates that burrowing owl individuals were no longer present during a subsequent January 2024 site visit. As such, these individuals are deemed migrant and the site is not considered to be occupied by BUOW (January 2024 Biological Update, p. 5).

The Project site does however evidence burrows suitable for BUOW and suitable BUOW foraging habitat. A BUOW pre-construction survey is therefore required to ensure that potential impacts to BUOW are maintained at levels that would be less-than-significant. Please refer to Condition of Approval BIO-1.

Other Considerations

The Modified Project site serves generally as potential habitat for migratory birds. Development of the site could therefore result in impacts to any nesting migratory birds that may be present. Consistent with California Department of Fish and Wildlife requirements, Condition of Approval BIO-2 is included to ensure that impacts to nesting birds are maintained at levels that would be less-than-significant.

Additionally, areas of the Modified Project site not specifically addressed in the Project DSFLF Study and/or January 2024 Biological Update may warrant updated biological resources assessments to ensure that potential impacts to biological resources for these areas are maintained at levels that would be less-than-significant (please refer to Condition of Approval BIO-3).

Modified Project Conditions of Approval:

BIO-1 Avoidance of Nesting Burrowing Owls: No more than 72 hours prior to any site disturbances, focused surveys for the burrowing owl shall be conducted. If absence of this species is confirmed, project work can proceed. If, however, burrowing owl is located on site, the appropriate resource agencies (CDFW and USFWS) shall be contacted. The Applicant shall consult with the wildlife agencies regarding the most appropriate methods and timing for removal of owls. As necessary, owls will be actively evicted following agency approved protocols (i.e., placing a one-way door at the burrow entrance to ensure that owls cannot access the burrow once they leave). Any such active eviction shall occur outside of the breeding/nesting season. That is, if active eviction is required, eviction shall be accomplished between September 1 and February 15. If more than 30 days have elapsed between owl eviction and completion of clearing and grubbing activities, a subsequent survey for the burrowing owl shall be conducted to ensure that owls have not re-populated the site. Any reoccupation by owls will require subsequent protocol active eviction.

BIO-2 Avoidance of Nesting Migratory Birds: If possible, all vegetation removal activities shall be scheduled from August 1 to February 1, which is outside the general avian nesting season. This would ensure that no active nests would be disturbed, and that removal could proceed rapidly. If vegetation is to be cleared during the nesting season, all suitable habitat

will be thoroughly surveyed within 72 hours prior to clearing for the presence of nesting birds by a qualified biologist (Biologist). The Biologist shall be approved by the City and retained by the Applicant. The survey results shall be submitted by the Applicant to the City Planning Department. If any active nests are detected, the area of nesting shall be flagged and mapped on the construction plans along with a minimum 300-foot buffer, with the final buffer distance to be determined by the Project Biologist. The buffer area shall be avoided until, as determined by the Biologist, the nesting cycle is complete, or it is concluded that the nest has failed. In addition, the Biologist shall be present on the site to monitor the vegetation removal to ensure that any nests, which were not detected during the initial survey, are not disturbed.

BIO-3 To the extent not considered and addressed in prior biological resources assessments, the Project DSFLF Study, or the January 2024 Biological Update, and to properly assess and address potential biological resources impacts, Biological Resources surveys shall be prepared prior to approval of Tentative Tract Maps within the Modified Project site. If suitable habitat is determined present onsite, subsequent focused surveys shall be completed and no "take" of any protected species and/or their habitat shall occur without obtaining the requisite regulatory permits from State and Federal agencies.

b, c) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR concluded that individual projects subject to CEQA environmental review would be required to determine whether there is potential habitat onsite for sensitive species. The Certified SEIR did not identify any significant impacts in this regard (Certified SEIR, p. 5.4-28).

Certified SEIR Mitigation Measures: None.

Modified Project: TOP 2050 SEIR (Section 5.4) concluded that the area encompassing The Avenue Specific Plan may function as potential habitat for the federally-listed Delhi DSFLF and Burrowing Owl. No other potentially significant impacts to candidate, sensitive, or special status species or their habitats were identified.

Consistent with SEIR requirements, the Project site has been evaluated for the presence of potential habitat for sensitive species. The Project DSFLF Study substantiates that the Project site and surrounding areas are extensively disturbed as the result of current and historic human activities. Surveys conducted as part of the Project DSFLF did not indicate presence or potential presence of riparian habitat, other sensitive natural community, or protected wetlands. The Project does not propose or require facilities or activities that would result in potential adverse effects to off-site riparian habitat, other sensitive natural community, or protected wetlands. Project potential impacts to riparian habitat, sensitive natural communities, and protected wetlands is therefore considered less-than-significant.

Modified Project Conditions of Approval: None.

d) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR states that no regional wildlife movement corridors have been identified in the City, and most of the City is ill-suited for the purposes of wildlife movement. Additionally, compliance with existing policies and regulations ensures impacts in this regard would be maintained at levels that would be less-than-significant (Certified SEIR, p. 5.4-30).

Certified SEIR Mitigation Measures: None.

Modified Project: No wildlife corridors or linkages are located onsite. Further, the site is bounded on all sides by roads and/or urban development, diminishing its potential to function as a wildlife movement corridor. Consistent with the conclusion of the Certified SEIR, the Modified Project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

Modified Project Conditions of Approval: None.

e, f) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR did not identify any conflicts with any local policies or ordinances protecting biological resources, adopted Habitat Conservation Plan, Natural Community Plan, or other approved local, regional, or state habitat conservation plan (Certified SEIR, pp. 5.4-30 – 5.4-31).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project would be required to comply with local policies and ordinances protecting biological resources. The Modified Project does propose or require development or activities that would conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Modified Project Conditions of Approval: None.

Summary

When compared to impacts considered and addressed in the Certified SEIR, no new significant, substantially increased, or substantially different biological resources impacts would result from the Modified Project. No changed or new information has been identified to indicate that any impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022*; *Habitat Suitability Evaluation* (EnviroPlus Consulting, LLC) October 30, 2023; *Biological Update for The Avenue Specific Plan (Planning Area 5) Project; City of Ontario, County of San Bernardino, California* (VCS Environmental) January 16, 2024; *The Avenue Specific Plan, 2024 Amendment*.

5. CULTURAL RESOURCES

Would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?					X	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?					X	
c) Disturb any human remains, including those interred outside of formal cemeteries?					X	

Substantiation:

a) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: Historic resources in the City include historic districts, historic landmarks or points of historical interest, and other buildings, structures, objects, and sites that appear eligible for listing on the National, California, or Local Registers of Historic Places. The Certified SEIR concluded that adoption of TOP 2050 would not itself directly affect any historical structures; however, identified and potential historic structures and sites may be vulnerable as development occurs. The Certified SEIR concluded this was a potentially significant impact (Certified SEIR, pp. 5.5-18 – 5.5-19).

Certified SEIR Mitigation Measure:

5-1 Historic or potentially historic resources in the City shall be evaluated for historic significance through the City's tier system prior to the issuance of plan or development approvals. Pursuant to City's Development Code (Chapter 7, Historic Preservation), each historic resource shall be fully documented and cataloged pursuant to Historic American Building Survey/Historic American Engineering Record (HABS/HAER) standards, to provide a record of the resource, including, but not limited to: [i] the preparation of site

plans, floor plans, exterior and interior elevations, and detail drawings of character defining features (such as moldings, stairs, etc.); and [ii] photographs of the resource, including the exterior, interior, and interior and exterior character defining features (such as moldings, light fixtures, trim patterns, etc.).

Even with the implementation of Mitigation Measure 5-1, the Certified SEIR concluded that impacts to historical resources would be significant and unavoidable (Certified SEIR, p. 5.5-23).

Modified Project: The Specific Plan area has been surveyed at least five times between 2004 and 2006, as follows.

- Stantec Consulting, Inc., *A Phase I Cultural Resources Inventory and Paleontological Assessment for the 111-Acre Avenue Specific Plan Project, City of Ontario, County of San Bernardino, California*, April 19, 2006.
- Chambers Group, Inc., *Phase I and II Cultural Resources Survey of a 169-Acre Former Dairy Farm, Ontario, San Bernardino County, California*, October 2005.
- Chambers Group, Inc., *Cultural Resources Survey of 13 Parcels Consisting of 173-Acres, Ontario, San Bernardino County, California*, October 2005.
- Chambers Group, Inc., *Cultural Resources Survey of a 58-Acres Former Dairy Farm, Ontario, San Bernardino County, California*, August 2004.
- Chambers Group, Inc., *Cultural Resources Survey of a 163-Acre Former Dairy Farm, Ontario, San Bernardino, California*, September 2005.

Additionally, a cultural resources records search of the City was completed in December 2021. No historical resources have been identified within the Specific Plan area.

The Modified Project would be required to conform to City Conditions of Approval providing for protection of potentially significant historic resources, and would implement above-noted Certified SEIR Mitigation Measure 5-1. No additional measures are required or proposed for the Modified Project.

With conformance to City Conditions of Approval, and implementation of mitigation, the potential for the Modified Project to adversely to result in cause a substantial adverse change in the significance of a historical resource would be less-than-significant. When compared to the Certified SEIR findings, no new or substantially increased impacts to paleontological resources would result from the Modified Project.

Modified Project Conditions of Approval: The Modified Project would implement applicable Certified SEIR mitigation measures.

b) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: Adoption of TOP 2050 would not of itself directly affect archaeological resources. However, buildout of TOP 2050 land use plan would allow development activities and ground disturbance affecting known and potential areas of archaeological sensitivity. These activities could potentially cause the disturbance of archeological resources. Therefore, future development that would be accommodated by TOP 2050 could potentially unearth previously unrecorded resources (Certified SEIR, p. 5.5-19).

Certified SEIR Mitigation Measure:

5-2 *In areas of documented or inferred from evident archaeological and/or paleontological resource presence, City staff shall require applicants for development permits to provide studies to document the presence/absence of such resources. On properties where resources are identified, such studies shall provide a detailed mitigation plan, including a monitoring program and recovery and/or in situ preservation plan, based on the recommendations of a qualified cultural preservation expert. The mitigation plan shall include the following requirements:*

a) Archaeologists and/or paleontologist shall be retained for the project and will be on call during grading and other significant ground-disturbing activities.

b) Should any cultural/scientific resources be discovered, no further grading shall occur in the area of the discovery until the Planning Director is satisfied that adequate provisions are in place to protect these resources.

c) Unanticipated discoveries shall be evaluated for significance by a San Bernardino County Certified Professional Archaeologist/Paleontologist. If significance criteria are met, then the project shall be required to perform data recovery, professional identification, radiocarbon dates, and other special studies; submit materials to a museum for permanent curation; and provide a comprehensive final report including catalog with museum numbers.

With the implementation of Mitigation Measure 5-2, the Certified SEIR concluded that impacts to archaeological and/or paleontological resources would be less-than-significant. (Certified SEIR, p. 5.5-22).

Modified Project: No archeological resources have been identified within the Specific Plan area as part of the previously-listed archeological surveys or records search. The Modified Project would be required to conform to City Conditions of Approval providing for protection of potentially significant archeological resources, and would implement above-noted Certified SEIR Mitigation Measure 5-2.

With conformance to City Conditions of Approval, and implementation of mitigation, the potential for the Modified Project to adversely to result in cause a substantial adverse change in the significance of a historical resource would be less-than-significant. When compared to the Certified SEIR findings, no new or substantially increased impacts to archeological resources would result from the Modified Project.

Modified Project Conditions of Approval: The Modified Project would implement applicable Certified SEIR mitigation measures. Please refer also to Conditions of Approval that would be implemented under the topical heading "Tribal Cultural Resources."

c) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR concluded that compliance with existing regulations would ensure that the potential for TOP 2050 to disturb any human remains, including those interred outside of formal cemeteries was less-than-significant (Certified SEIR, p. 5.5-21).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project would be required to comply with all existing regulations, including the California Public Resources Code Section 5097.98, which would afford protection for any human remains discovered during development activities. On this basis, the potential for the Modified Project to result in disturbance of any human remains, including those interred outside of formal cemeteries would be less-than-significant. When compared to the Certified SEIR findings, no new or substantially increased impacts related to potential disturbance of human remains would result from the Modified Project.

Modified Project Conditions of Approval: None.

Summary

When compared to impacts considered and addressed in the Certified SEIR, no new significant, substantially increased, or substantially different impacts to unique cultural resources would occur as a result of the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364* (Placeworks) August 2022*; Addendum to The Ontario Plan Environmental Impact Report, File Nos.: PGPA19-008, PSPA19-011, and PMTT19-015* (City of Ontario) 2020; *The Avenue Specific Plan, 2024 Amendment*.

6. ENERGY

Would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?					X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?					X	

Substantiation:

a) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR concluded that regulatory compliance under TOP 2050 buildout conditions would promote building energy efficiency and vehicle fuel efficiency and reduce building energy demand and transportation-related fuel usage. Additionally, TOP 2050 includes policies related to land use and transportation planning and design, energy efficiency, public and active transit, and renewable energy generation that would contribute to enhanced building and transportation-related energy efficiencies and thereby reduce demands on nonrenewable sources of energy. Implementation of TOP 2050 Policies, energy efficiency and conservation measures articulated in the Community Climate Action Plan (CCAP), and compliance with regulatory requirements would ensure that energy consumption resulting from TOP 2050 buildout would not be inefficient, wasteful, or unnecessary. On this basis, the potential for TOP 2050 to result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources would be less-than-significant (Certified SEIR, pp. 5.6-9 – 5.6-12).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. The Modified Project in total would be required to comply with incumbent performance standards established under the Building Energy Efficiency Standards contained in the California Code of Regulations (CCR), Title 24, Part 6 (Title 24, Energy Efficiency Standards). The Modified Project would be required to conform to applicable CALGreen provisions (CCR, Title 24, Part 11 – CALGreen). CALGreen supports the goals of the State's greenhouse gas reduction and building energy efficiency programs. The Modified Project would also implement applicable efficiency/conservation measures provisions of the CCAP and applicable CCAP updates.

Based on the preceding, the Modified Project would not result in or cause wasteful, inefficient, and unnecessary consumption of energy; and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. When compared to impacts addressed in the Certified SEIR, no new or substantially increased energy impacts would occur under the Modified Project.

Modified Project Conditions of Approval: None.

b) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR notes that TOP 2050 would comply with applicable provisions of the California Renewables Portfolio Standard Program (RPS); and current and future iterations of CALGreen. Additionally TOP 2050 includes policies supporting statewide goals to transition the electricity grid to renewable sources. Mandated compliance with the CCAP and its updates would also be required for all new development under TOP 2050. On this basis, the Certified SEIR concluded that the potential for TOP 2050 to conflict with or obstruct a state or local plan for renewable energy or energy efficiency would be less-than-significant (Certified SEIR, pp. 5.6-13, 5.6-14).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. The Modified Project would be required to comply with incumbent Building Energy Efficiency Standards contained in the California Code of Regulations (CCR), Title 24, Part 6, Energy Efficiency Standards including applicable CALGreen provisions. CALGreen supports the goals of the State's greenhouse gas reduction and building energy efficiency programs. The Modified Project would also be required to implement applicable energy efficiency/conservation measures of the CCAP and its updates.

Based on the preceding, the Modified Project would not result in or cause wasteful, inefficient, and unnecessary consumption of energy; and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Modified Project Conditions of Approval: None.

Summary

When compared to impacts considered and addressed in the Certified SEIR, no new significant, substantially increased, or substantially different energy impacts would occur as a result of the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; The Avenue Specific Plan, 2024 Amendment*.

7. GEOLOGY AND SOILS

Would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:						
(i) rupture of a known earthquake fault;					X	
(ii) strong seismic ground shaking;					X	
(iii) seismic-related ground failure, including liquefaction; or					X	
(iv) landslides?					X	
b) Result in substantial soil erosion or the loss of topsoil?					X	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?					X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?					X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?					X	
f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?					X	

Substantiation:

a – d) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR recognizes existing geological conditions and location of the City within a seismically active area. The Certified SEIR concludes that compliance with California Building Code (CBC) regulations and standard City Conditions of Approval would ensure that potential geology/soils impacts related to earthquakes, seismic hazards, erosion, and adverse soils conditions, would be maintained at levels that would be less-than-significant (Certified SEIR, pp. 5.7-18 – 5.7-21).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. All development proposals within the Modified Project site would be required to comply with CBC regulations and standard City Conditions of Approval, acting to preclude potentially significant geology/soils impacts. All potential geology and soils impacts associated with development of the subject site would be less-than-significant based on compliance with the Uniform Building Code, California Building Code, the Ontario Municipal Code, and applicable TOP 2050 Policies.

There are no known or suspected faults or other adverse geology/soils conditions affecting the subject site (Certified SEIR, pp. 5.7-4 – 5.7-16).[5] As part of the City's standard review and approval processes, the Modified Project would be required to comply with provisions of Final City-approved geotechnical report(s). Design of the Modified Project facilities would also be required to comply with applicable provisions of the Uniform Building Code (UBC), California Building Code (CBC), City Municipal Code, and would be required to implement applicable Ontario Plan strategies. Compliance with these measures would ensure that potential geology and soils impacts remain at levels that would be less-than-significant. The Modified Project would therefore not result in new, additional, or different geological/soils impacts not considered and addressed in the Certified SEIR.

[5] This is also consistent with previous analysis prepared for the Project site. See: *The Avenue 2020 Addendum to the Ontario Plan Environmental Impact Report* [City File Nos. PGPA19-008, PSPA19-011, PMTT19-015] pp. 23 – 260).

Modified Project Conditions of Approval: None.

e) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: Wastewater generated by new development pursuant to buildout of TOP 2050 would be conveyed to and treated at wastewater treatment facilities owned and operated by the Inland Empire Utilities Agency (Regional Plant No. 1 in the City of Ontario and Regional Plant No. 5 in the City of Chino).

The use of septic tanks for new development would be restricted to areas not "in practical proximity existing sewer mains . . ." (Certified SEIR, p. 5.7-22).

Based on the preceding, the Certified SEIR concluded that TOP 2050 would not result in adverse impacts related to use of septic tanks or alternative wastewater disposal systems and ability of soils to accept these systems.

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. The Modified Project site is fully served by existing and planned sewer service. The Modified Project does not propose or require use of septic systems.

Based on the preceding, there is no potential for the Modified Project to result in adverse impacts related to use of septic tanks or alternative wastewater disposal systems and ability of soils to accept these systems.

Modified Project Conditions of Approval: None.

f) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The geology underlying the City is common and typical within the region and is not considered unique (Certified SEIR, p. 5.7-20).

Adoption of TOP 2050 in itself would not directly affect paleontological resources. However, implementation of TOP 2050 land use plan could allow development and redevelopment of potentially sensitive areas. The Certified SEIR concluded this was a potentially significant impact (Certified SEIR, pp. 5.7-20, 5.7-21).

Certified SEIR Mitigation Measures:

5-2 *In areas of documented or inferred archaeological and/or paleontological resource presence, City staff shall require applicants for development permits to provide studies to document the presence/absence of such resources. On properties where resources are identified, such studies shall provide a detailed mitigation plan, including a monitoring program and recovery and/or in situ preservation plan, based on the recommendations of a qualified cultural preservation expert. The mitigation plan shall include the following requirements:*

a. Archaeologists and/or paleontologist shall be retained for the project and will be on call during grading and other significant ground-disturbing activities.

b. Should any cultural resources be discovered no further grading shall occur in the area of the discovery until the Planning Director or designee is satisfied that adequate provisions are in place to protect these resources.

c. Unanticipated discoveries shall be evaluated for significance by a San Bernardino County Certified Professional Archaeologist/Paleontologist. If significance criteria are met, then the project shall be required to perform data recovery, professional identification, radiocarbon dates, and other special studies; submit materials to a museum for permanent curation; and provide a comprehensive final report including a catalog with museum numbers.

With application of mitigation, the Certified SEIR concluded that TOP 2050 impacts to paleontological resources would be less-than-significant (Certified SEIR, p. 5.7-25).

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. The Certified SEIR indicates that there is a possibility of finding paleontological resources within the City boundaries at depths of 10 feet or more below ground surface (Certified SEIR, p. 5.7-22). No known paleontological resources exist within the subject site or its vicinity. Moreover,

soils underlying the site comprise younger Quaternary Alluvium sediments. These soils typically do not contain significant vertebrate fossils (The Avenue 2020 Addendum, p. 25). Additionally, per City Conditions of Approval, should any unanticipated paleontological resources be encountered during excavation, construction activities would be halted or would be relocated to other unaffected areas of the subject site. Under such circumstances, a qualified paleontologist would be retained to evaluate any encountered find. If the find is determined to be significant, avoidance or other appropriate measures shall be implemented.

Modified Project Conditions of Approval: The Modified Project would be required to conform to City Conditions of Approval providing for protection of potentially significant paleontological resources, and would implement above-noted Certified SEIR Mitigation Measure 5-2. No additional measures are required or proposed for the Modified Project.

With conformance to City Conditions of Approval, and implementation of mitigation, the potential for the Modified Project to adversely to result in cause a substantial adverse change in the significance of a paleontological resource would be less-than-significant. When compared to the Certified SEIR findings, no new or substantially increased impacts to paleontological resources would result from the Modified Project.

Summary

When compared to impacts considered and addressed in the Certified SEIR, no new significant, substantially increased, or substantially different geology and soils impacts would occur as a result of the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; The Avenue Specific Plan, 2024 Amendment*.

8. GREENHOUSE GAS EMISSIONS

Would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?					X	
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?					X	

Substantiation:

a, b) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR substantiates that TOP 2050 would yield a net decrease in GHG emission when compared to the previous General Plan (TOP 2009) GHG emissions forecasts. Further, under TOP 2050 and the CCAP, the City would achieve State emissions reductions targets and would progress toward attainment of the State's carbon neutrality goals. On this basis, the Certified SEIR concluded that the potential for TOP 2050 to generate greenhouse gas emissions, either directly or indirectly, that may have an adverse impact on the environment would be less-than-significant (Certified SEIR, pp. 5.8-25, 5.8-26).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. GHGs generated by the Modified Project are consistent with GHG emissions estimates reflected in the Certified EIR. For informational purposes, estimated GHGs generated by the Modified Project are presented at Table 8-1.

Table 8-1
Modified Project GHG Emissions

GHG Emissions Sources	Emission (lbs./day)				
	CO_2	CH_4	N_2O	R	Total CO_2e
Mobile Source	48,509.00	2.54	2.45	75.33	49,376.80
Area Source	983.99	0.02	0.00	0.00	985.20
Energy Source	9,705.56	0.89	0.06	0.00	9,745.98
Water	665.34	6.15	0.15	0.00	864.42
Waste	351.51	35.13	0.00	0.00	1,229.82
Refrigerants	0.00	0.00	0.00	6.34	6.34
Total CO_2e (All Sources)	62,208.56				

Source: *The Avenue Specific Plan, 2023 Amendment - Greenhouse Gas Assessment* (Urban Crossroads, Inc.) May 8, 2024.

The Modified Project would be required to implement applicable provisions of the incumbent City CAP, to include measures and design features necessary to achieve applicable CAP GHG emissions reduction performance standards. The City CAP supports and complies with state and regional plans, policies, and regulations adopted for the purpose of reducing GHGs. On this basis, the Modified Project would not conflict with plans, policies, and regulations adopted for the purpose of reducing GHGs. The Modified Project would therefore not result in new, additional, or different impacts regarding consistency with applicable GHG emissions reduction plans, policies, and regulations not considered and addressed in the Certified SEIR.

Modified Project Conditions of Approval: None.

Summary

When compared to impacts considered and addressed in the Certified SEIR, no new significant, substantially increased, or substantially different GHG impacts would occur as a result of the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022*; *The Avenue Specific Plan, 2023 Amendment -*

Greenhouse Gas Assessment (Urban Crossroads, Inc.) May 8, 2024; *The Avenue Specific Plan, 2024 Amendment*.

9. HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?					X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?					X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school?					X	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?					X	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?					X	
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?					X	
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?					X	

Substantiation:

a, b) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR determined that buildout in accordance with TOP 2050 would involve the transport, use, and/or disposal of hazardous materials. However, federal and state regulations, City ordinances, and TOP 2050 Policies would appropriately control handling of hazardous substances to reduce potential releases; exposure; and risks of transporting, storing, treating, and disposing of hazardous materials and wastes. On this basis, the Certified SEIR concluded that the potential for TOP 2050 to result in adverse impacts related to transport, use, and/or disposal of hazardous materials; creation of significant hazards, or result in hazardous emissions affecting schools, would be less-than-significant (Certified SEIR, pp. 5.1-4 – 5.1-10).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. The Modified Project would not result in or cause exposure(s) to hazards or potentially hazardous conditions. That is, uses proposed by the Modified Project are not considered hazardous. Nor does the Modified Project propose or require facilities or operations involving inherent substantial hazards.

During the normal course of construction and operation activities, there would be limited transport of potentially hazardous materials (e.g., gasoline, diesel fuel, paints, solvents, fertilizer, etc.) to and from the Modified Project site. However, as presented within the Certified SEIR, the Modified Project would be required to comply with all City and County Hazardous Materials Management Plans and regulations addressing transport, use, storage and disposal of these materials. The Modified Project does not propose or require uses or activities that would result in atypical transportation, use, storage, or disposal of hazardous or potentially hazardous materials not addressed under current regulations and policies.

Further, any commercial/retail occupancies within the Modified Project that would store or use hazardous materials would be required to comply with California Hazardous Materials Business Plan (HMBP) requirements (*California Health & Safety Code*, Division 20, Chapter 6.95). The HMBP contains detailed information on the storage of hazardous materials at regulated facilities. The purpose of the HMBP is to prevent or minimize damage to public health, safety, and the environment, from a release or threatened release of a hazardous material. The HMBP also provides emergency response personnel with adequate information to help them better prepare and respond to chemical-related incidents at regulated facilities.

Existing Hazards/Hazardous Conditions

Previous Analyses

Hazardous or potentially hazardous conditions affecting the subject site have been extensively evaluated previously in Phase I/II Environmental Site Assessments (Phase I/II ESAs) as well as Methane Gas Investigation prepared in support of the Certified 2007 EIR for The Avenue Specific Plan (Certified 2007 EIR, SCH No. 2005071109). These Phase I/II ESAs and Methane Gas Investigation Studies are listed below and are incorporated here by reference. All of the listed documents are available through the City of Ontario.

Phase I Environmental Site Assessments

- Blasland, Bouck & Lee, Inc. *Phase I Environmental Site Assessment and Shallow Soil Sampling, Anderson Property APN No. 218-181-17 and 218-181-21 Ontario, California*, March 2001.
- Carlin Environmental Consulting, *Environmental Site Assessment of The Vander Eyk Dairy 13750 S. Haven Avenue Ontario, California,* September 29, 2004.
- Geokinetics, *Phase I Environmental Site Assessment Koopman Property Ontario, California,* October 3, 2002.
- Geokinetics, *Phase I Environmental Site Assessment Schoneveld Property Ontario, California,* November 25, 2002.
- Geokinetics, *Phase I Environmental Site Assessment Harada Property Ontario California,* January 3, 2003.

- Geokinetics, *Phase I Environmental Site Assessment Jongsma Property Ontario, California,* August 29, 2003.
- Geokinetics, *Phase I Environmental Site Assessment Hettinga Property Ontario, California*, June 5, 2004.
- Geokinetics, *Phase I Environmental Site Assessment Ferreira Property 13950 Haven Avenue Chino, California,* February 17, 2005.
- Geokinetics, *Phase I Environmental Site Assessment DeGroot Property 14080 Haven Avenue Ontario, California,* February 28, 2005.
- Geokinetics, *Phase I Environmental Site Assessment Kaplan Property 13923 Archibald Avenue Ontario, California,* March 16, 2005.
- Geokinetics, *Phase I Environmental Site Assessment Anderson-Dotson Property Ontario, California,* November 25, 2002.
- Lawson & Associates, *Phase I Environmental Site Assessment Approximate 58-Acre Dairy Property 13737 South Archibald Avenue San Bernardino County, California*, December 19, 2003.
- Lawson & Associates, *Phase I Environmental Site Assessment Dykstra Dairy, 10129 Schaefer Avenue City of Ontario,* San Bernardino County California, February 8, 2005.
- Lawson & Associates, *Phase I Environmental Site Assessment Ferreira Dairy*, 13950 Haven Avenue City of Ontario, San Bernardino County California, March 15, 2005.
- LGC Inland, INC, *Phase I Environmental Site Assessment DeGroot Dairy, 14080 Haven Avenue City of Ontario, San Bernardino County California*, February 7, 2005.
- Stantec, *Phase I Environmental Site Assessment L & M Dairy #2 Parentex Property, City of Ontario, California*, April 10, 2006.

Phase II Environmental Site Assessment

- Lawson & Associates, *Phase II Soil Sampling Investigation, Del Amo Dairy, 13737 South Archibald Avenue, City of Ontario, San Bernardino County, California*, January 21, 2004.

Methane Gas Investigations

- Geokinetics, *Subsurface Methane Gas Investigation for The Koopman Property Ontario, California,* October 11, 2002.

- Geokinetics, Subsurface *Methane Gas Investigation for Schoneveld Property Ontario, California*, November 25, 2002.
- Geokinetics, *Subsurface Methane Gas Investigation for Harada Property Ontario, California*, January 3, 2003.
- Geokinetics, *Subsurface Methane Gas Investigation for Jongsma Property Ontario, California*, August 29, 2003.
- Geokinetics, *Subsurface Methane Gas Investigation for Hettinga Property Ontario, California,* June 5, 2004.
- Geokinetics, *Subsurface Methane Gas Investigation DeGroot Property 14080 Haven Avenue Ontario, California*, March 1, 2005.
- Geokinetics, *Preliminary Subsurface Methane Gas Investigation Kaplan Property 13923 Archibald Avenue Ontario*, California, March 16, 2005.
- Geokinetics, *Subsurface Methane Gas Investigation for Anderson-Dotson Property Ontario, California,* November 25, 2002.
- Lawson & Associates. *Preliminary Subsurface Methane Gas Investigation Ferreira Property Ontario, California,* February 18, 2005.
- Lawson & Associates. *Preliminary Methane Site Assessment, Proposed Residential Development, Dykstra Parcel, City of Ontario, California*, October 24, 2005.
- Petra Environmental Division, *Report of the Site History Relative to The Potential for Methane Generation, 60-Acre Parcel, Designated as (APN 0218-201-44 and 15) Located in the City of Ontario, County of San Bernardino, California*, August 9, 2004.

Modified Project Phase I ESA

Complementing the above-cited Phase I/II ESAs, a focused updated Phase I ESA (*Phase I Environmental Site Assessment - 13838, 13898, 14058 S. Archibald Avenue* [Hillmann Consulting] June 30, 2023, 2023 Phase I ESA) has been prepared in support of this Addendum. The 2023 Phase I ESA concluded that the evaluated properties are not adversely affected by any recognized environmental conditions (RECs), controlled recognized environmental conditions (CRECs) and/or significant data gaps (SDGs) (2023 Phase I ESA, p. 3).

Modified Project Conditions of Approval: The Modified Project would be required to implement federal and state regulations, City ordinances, and TOP 2050 Policies

addressing potential hazards or hazardous conditions that could result from construction and operation of the Project uses. Additionally, the Modified Project would be required to implement federal and state regulations, City ordinances, and TOP 2050 Policies. To ensure compliance with applicable regulations, ordinances, and policies, the following measures are included as Project Conditions of Approval.

HM-1 *Removal of structures, including, but limited to, under- and aboveground storage tanks, septic systems, and water wells shall conform to all Federal, State, and local agency regulations (specifically with those required by the City Building and Safety Department and the Hazardous Materials Division of the San Bernardino County Fire Department). Due to the extensive disposal requirements and protocols contained within these regulatory schemes, implementation and adherence to these various regulatory requirements will ensure that no significant impacts occur.*

HM-2 *Prior to grading activities for any areas not previously tested, a methane gas assessment shall be prepared by a licensed professional with expertise in soil gas assessments for subdivisions proposed on former dairies, poultry ranches, hog ranches, livestock feed operations and similar facilities to determine the presence of methane gas within the project boundary. The methane gas assessment shall identify monitoring and mitigation strategies and approaches. All mitigation measures/plans and specifications shall be reviewed and approved by the City of Ontario.*

Such an assessment may take two steps. A preliminary assessment will be done prior to grading to determine exactly where dairies have existed in the past so that the post grading assessment/mitigation measures can be focused on the portions of the Planning Areas that have included former agricultural activities. The second step will include actual testing of graded pads no sooner than 30 days after construction to determine if methane is detected above 5,000 ppm.

The following grading guidelines shall also be adhered to:

- *Careful clearing, grubbing, segregation, and stockpiling or disposal near surface, of organics-rich soils at the site prior to the initiation of mass grading activities.*

- *The identification and segregation/stockpiling or disposal of deeper soils which contain elevated levels of organic material. Soils with an organic content of 0.4% or higher shall be segregated for controlled placement that ensures that methane levels are below 5,000 ppm.*

- *Soils with organic content in excess of 0.4% shall not be placed as "deep" fill. Soils with organic contents in excess of this amount shall be placed in open areas within approximately two feet of the finished ground surface.*

HM-3 *To eliminate the risk of ground cracking, manure shall be removed from the site, such that the organic matter content of onsite soils shall not exceed 2% (a 2% total organic content is allowed, of which no more than 1% can be manure) in the building foundation areas when mixed with underlying clean soils and imported fill.*

HM-4 *To the extent not previously prepared and to properly assess and address potential hazardous materials, a Phase I Environmental Site Assessment (ESA) shall be performed by a registered environmental assessor (REA) prior to the approval of the Tentative Tract Map, site plan or other discretionary approval for a given phase of development. If potential hazardous materials or conditions are identified in the Phase I report, the recommendations of the ESA shall be implemented. Such recommendations shall include surficial sampling and chemical analysis within agricultural areas or where soil staining was observed. The Phase I ESA shall be provided to the City and shall be included in any CEQA analysis prepared in connection with the consideration of the discretionary approval for development.*

HM-5 *If, while performing any excavation as part of Project construction, material that is believed to be hazardous waste as defined in Section 25117 of the California Health and Safety Code is discovered, the developer shall contact the City Fire Department and the County of San Bernardino Fire Department Hazardous Materials Division. Excavation shall be stopped until the material has been tested and the absence of hazardous waste has been confirmed. If hazardous waste is determined to be present, the California Department of Toxic Substances control shall be contacted and the material shall be removed and disposed of pursuant to applicable provisions of California law.*

Conditions of Approval identified herein, implementation of federal and state regulations, compliance with City ordinances, and TOP 2050 Policies act to maintain potential hazards/hazardous materials impacts at levels that would be less-than-significant. On this basis, the potential for the Modified Project to adversely to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; or create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment would be less-than-significant.

c) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: The Certified SEIR determined that buildout in accordance with TOP 2050 would involve the transport, use, and/or disposal of hazardous materials. However, federal and state regulations, City ordinances, and TOP 2050 Policies would appropriately control handling of hazardous substances to reduce potential releases; exposure; and risks of transporting, storing, treating, and disposing of hazardous materials and wastes. On this basis, the Certified SEIR concluded that the potential for TOP 2050 to result in adverse impacts related to transport, use, and/or disposal of hazardous materials; creation of significant hazards, or result in hazardous emissions affecting schools, would be less-than-significant (Certified SEIR, pp. 5.1-4 – 5.1-10).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project does not propose or require uses that would handle hazardous or acutely hazardous materials, substances, or waste. The Modified Project would not result in potentially significant hazardous impacts at existing or proposed vicinity schools.[6]

Modified Project Conditions of Approval: None.

[6] Note: Any occupation of the potential school site within the SPA would occur subsequent to development of the SPA uses generally. As such, school occupants would not be subject to any SPA construction-source impacts.

d) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: Development in accordance with TOP 2050 would involve redevelopment and reuse of some sites listed as hazardous materials sites on environmental databases. The environmental databases document the presence of hazardous materials on those sites, but do not document hazardous releases. Redevelopment of the affected sites could potentially expose future residents and workers to hazards from known hazardous materials releases on and near the sites. Should environmental database listed sites be proposed for development, site assessments for hazardous materials and remediation of hazardous materials releases would be required in accordance with TOP 2050 Policies, federal, state, and local regulations. On this basis, the Certified SEIR concluded that the potential for development pursuant to TOP 2050 to be located on hazardous materials sites, and thereby create adverse hazard impacts affecting the public or environment would be less-than-significant (Certified SEIR, pp. 5.9-38, 5.9-39).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. The Modified Project site is not affected by any recognized environmental conditions (RECs), controlled recognized environmental conditions (CRECs) and/or significant data gaps (SDGs). This would include potential listing as a hazardous material site pursuant to Government Code Section 65962.5. Additionally, as discussed in the Certified SEIR, the Modified Project would be required to comply with applicable TOP 2050 Policies, federal, state, and local regulations, ensuring that hazards/hazardous materials impacts are maintained at levels that would be less-than-significant. Therefore, the Modified Project would not create a hazard to the public or the environment and no impact is anticipated.

On this basis, there is no potential for the Modified Project to be located on a Government Code Section 65962.5-listed site, and thereby would not create adverse hazard impacts affecting the public or environment. When compared to the Certified SEIR findings, no

new or substantially increased impacts related to development affecting Government Code Section 65962.5-listed sites would result from the Modified Project.

Modified Project Conditions of Approval: None.

e) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: Ontario International Airport (ONT), as well as a small portion of the Chino Airport property, is located within the City of Ontario. The Certified SEIR determined that TOP 2050 Policies and established processes for consistency reviews of new development with the appropriate Airport Land Use Compatibility Plan (ALUCP) would be sufficient to prevent significant impacts (Certified SEIR, p. 5.8-27).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. Location of area airports relative to the Modified Project site has not changed since preparation of the Certified SEIR – the site remains more than two miles distant from the nearest airport; the nearest airport is ONT, located approximately 3.3 miles north of the Modified Project site.

The Modified Project site is located within the area subject to provisions of The ONT Airport Land Use Compatibility Plan, ALUCP (July 2018). The ALUCP defines the ONT Airport Influence Area (AIA) as an area in which current and future airport-related noise, overflight, safety, and airspace protection factors may significantly affect land uses or necessitate restriction on those uses. The Modified Project site is located outside the ONT safety zones (see: TOP 2050 Policy Plan Figure LU-06, *Airport Safety Zones & Influence Areas*). As with the development anticipated under the Original Project and evaluated in the Certified SEIR, development implemented pursuant to the Modified Project would comply with all requirements set forth within the ALUCP. Based on the preceding, the potential for the Modified Project to result in airport-related safety hazard impacts or excessive noise impacts would be less-than-significant.

Modified Project Conditions of Approval: None.

f) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: In 2018, the City of Ontario prepared a Local Hazard Mitigation Plan (LHMP) to identify the City's hazards, review and assess past disaster occurrences, estimate the probability of future occurrences, and set goals to reduce or eliminate long-term risk to people and property from natural and man-made hazards. Wildfire hazard is rated the highest risk of the 23 hazards evaluated, followed by flooding. Under the LHMP, interstate highways would serve as major emergency response and evacuation routes. TOP 2050 Policies and local roadways are designed and constructed so as to facilitate access under normal and emergency conditions.

A review of emergency access is included as part of the standard City's Design Review process. Additionally, the Ontario Fire Department reviews development applications to ensure that adequate emergency accessibility is provided based on local and state guidance.

Based on the preceding, the Certified SEIR concluded that buildout of the City in accordance with TOP 2050 would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. Impacts in these regards would be less-than-significant (Certified SEIR, p. 5.9-41).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. The Modified Project does not propose or require permanent alteration of vehicle circulation routes, and would not interfere with any identified emergency response or emergency evacuation plan. Standard City design review processes include coordination with fire and police departments during pre-construction review of plans to ensure that potential interference with emergency response plans and evacuation plans are avoided. Based on the preceding, the Modified Project would not impair implementation of, or physically

interfere with, an adopted emergency response plan or emergency evacuation plan. Impacts in these regards would be less-than-significant.

Modified Project Conditions of Approval: None.

g) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR identifies available resources addressing wildland fires and associated potential impacts. These resources include: CAL FIRE *2019 Strategic Fire Plan for California*, the California Fire Code, County of San Bernardino Multi-jurisdiction Hazard Management Plan, the Ontario LHMP, and fire services from the Ontario Fire Department. The Certified SEIR determined that adherence to existing regulations and review of building plans by the Ontario Fire Department, development and infrastructure associated with TOP 2050 would not exacerbate risk or result in post-wildfire hazards. No significant impacts were identified (Certified SEIR, p. 5.9-41).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. The Modified Project site is located in an urbanized area, and no wildlands are located in the vicinity of the site. Fire protection services are provided by the Ontario Fire Department. Pre-construction coordination with Ontario Fire Department staff and adherence to local fire department regulations during construction and operation of the Modified Project would be required. As such, no new or substantially increased impacts related to wildland fire impacts would result from the Modified Project.

Modified Project Conditions of Approval: None.

Summary

When compared to the Certified SEIR findings, no new or substantially increased hazards or hazardous emission impacts would result from the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from

the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; Phase I Environmental Site Assessment - 13838, 13898, 14058 S. Archibald Avenue* (Hillmann Consulting) June 30, 2023; *The Avenue Specific Plan, 2024 Amendment*.

10. HYDROLOGY AND WATER QUALITY

Would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?					X	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?					X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:					X	
(i) result in substantial erosion or siltation on- or off-site?					X	
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?					X	
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?					X	

Would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
(iv) impede or redirect flood flows?					X	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?					X	
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?					X	

Substantiation:

a) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR recognizes that buildout of the City pursuant to TOP 2050 would increase concentrations of pollutants during construction and post-construction activities. To address potential water quality impacts resulting from project construction and operations, projects are required to comply with provisions of the City's National Pollutant Discharge Elimination System (NPDES) permit. NPDES permit requirements include, but are not limited to, mandated preparation of a Stormwater Pollution Prevention Plan (SWPPP) and Water Quality Management Plan (WQMP). Mandated SWPPPs and WQMPs are required to develop and implement Best Management Practices (BMPs) to reduce construction-source and operational-source stormwater pollutant discharges. Based on compliance with the City NPDES Permit and implementation of required SWPPPs and WQMPs, the Certified SEIR did not identify any significant water quality impacts (Certified SEIR, p. 5.10-21).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. Consistent with City

requirements, a WQMP and SWPPP would be prepared for development proposals under the Modified Project. City review and approval of these documents is required prior to issuance of Grading Permits. As with the Original Project, implementation of an approved SWPPP and WQMP would reduce the potential for the development under the Modified Project to violate water quality standards or otherwise adversely affect water quality to levels that would be less-than-significant.

Based on the preceding, the Modified Project's potential to violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality is considered less-than-significant. When compared to the Certified SEIR findings, no new or substantially increased water quality impacts would result from the Modified Project.

Modified Project Conditions of Approval: None.

b) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: As discussed in the Certified SEIR, "[a]pproximately 46 percent of the City's water supply is groundwater pumped by the City from the Chino Groundwater Basin; groundwater pumping is managed by OMUC so that domestic demands do not exceed the safe yield for the basin, consistent with the Chino Basin Watermaster's Optimum Basin Management Program, commonly called the 'OBMP Peace Agreement'" (Certified SEIR, p. 5.10-22). The Certified SEIR notes further "the Chino Groundwater Basin is adjudicated and is considered by DWR to be a very low priority groundwater basin. Each water purveyor has an allotted amount of water that can be pumped from the basin so that the safe yield is not exceeded. The City has access to additional water supplies that can accommodate the proposed increase in growth with buildout of [TOP 2050] and would not interfere with sustainable management of the groundwater basin" (Certified SEIR, p. 5.10-22).

The Certified SEIR recognizes that development pursuant to TOP 2050 would increase the amount of impervious surface within the City. However, groundwater recharge efforts would not be hindered. To these ends, all development projects within the City

would be required to prepare project-specific hydrology studies, implement low impact development BMPs and comply with NPDES regulations supporting TOP 2050 Policies promoting infiltration of runoff and groundwater recharge.

Based on the preceding, TOP 2050 would not result in substantial adverse impacts affecting groundwater supplies, groundwater recharge, or groundwater sustainability (Certified SEIR, p. 5.10-23).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. Direct additions to or withdrawals of groundwater are not proposed or required by the Modified Project. Construction proposed by the Modified Project would not involve massive substructures at depths that would significantly impair or alter the direction or rate of flow of groundwater. The Modified Project does not propose or require uses or facilities that would affect designated groundwater recharge areas. All development proposals under the Modified Project would be required to prepare development-specific hydrology studies, implement low impact development BMPs and comply with NPDES regulations supporting TOP 2050 Policies promoting infiltration of runoff and groundwater recharge.

Based on the preceding, the Modified Project would not result in substantial adverse impacts affecting groundwater supplies, groundwater recharge, or groundwater sustainability.

Modified Project Conditions of Approval: None.

c) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: Consistent with NPDES requirements, runoff quantities would not be permitted to substantially increase as a result of a development under TOP 2050. In this regard, projects would be required to prepare project-specific hydrology studies. Further, existing City policies encourage the use of low impact development

strategies to intercept runoff, reduce stormwater discharge rates, increase infiltration and ultimately reduce discharge volumes to traditional storm drain systems.

The Certified SEIR notes that while the amount of impervious surfaces would be increased under TOP 2050 (and thus surface water flows into drainage systems), existing City and County requirements would ensure significant impacts related to alteration of drainage patterns do not occur. Additionally, City policies and regulations act to minimize or avoid development or other actions that would potentially result in impedance or redirection of flood flows (Certified SEIR, pp. 5.10-23 – 5.10-27).

Based on the preceding, the potential for development under TOP 2050 to substantially alter existing drainage patterns resulting in erosion, flooding, polluted runoff, or impeded or redirected flood flows would be less-than-significant.

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. Per requirements of *The Avenue Specific Plan, 2024 Amendment*:

> The grading and drainage of The Avenue Specific Plan area shall be designed to detain, filter and treat surface runoff, in a manner and combination which is practical, to comply with the most recent requirements of the San Bernardino County NPDES Stormwater Program's Water Quality Management (WQMP) for significant new development projects. The objective of the WQMP for this project is to minimize the detrimental effects of urbanization on the beneficial uses of receiving waters, including effects caused by increased pollutants and changes in hydrology. These effects may be minimized through the implementation of site designs that reduce runoff and pollutant transport by minimizing impervious surfaces and maximizing on-site infiltration, Source Control Best Management Practices (BMPs) and/or either on-site structural Treatment Control BMPs, or participation in regional or watershed-based

Treatment Control BMPs. An alternative to the implementation of on-site Low Impact Development (LID) BMPs to retain/infilter and treat stormwater runoff is the utilization of the off-site, regional Mill Creek Wetland facility for accomplishing water quality improvements in residential project runoff from this master planned community. All non-residential planning area projects within The Avenue will incorporate all required on-site LID BMPs, pursuant to the requirements of the current San Bernardino County Water Quality Management Plan.

Prior to the issuance of a grading or construction permit, all projects greater than 1-acre in size shall apply for coverage under the California General Permit To Discharge Storm Water Associated with Construction Activity, obtain a WDID# from the State Water Resources Control Board and prepare a Stormwater Pollution Prevention Plan (SWPPP) on the CASQA 2009 Template form and upload it to the State SMART database system. A copy of each SWPPP document and [Waste Discharger Identification Number] WDID# Certification shall also be provided to the City of Ontario, prior to any construction permit issuance. The SWPPP will identify and detail all appropriate Best Management Practices (BMPs) to be implemented or installed during construction of the project.

In addition to the preparation of a SWPPP for construction-related activities, and as part of the approval of any grading plans within the Specific Plan Area, the applicant will be required to submit a Water Quality Management Plan (WQMP) on the regional model form provided by the City. The WQMP shall identify and detail all Site Design BMPs, Source

> Control BMPs and Treatment Control BMPs to be implemented or installed at this site in order to reduce storm water pollutants and site runoff.[7]
>
> All Priority Land Use (PLU) areas within the Specific Plan Area shall comply with the statewide Trash Provisions adopted by the State Water Resources Control Board (SWRCB) and trash requirements in the most current San Bernardino County Area-Wide MS4 Permit.
>
> [*The Avenue Specific Plan, 2024 Amendment*, pp. 4-29, 4-30]

Requirements of the Specific Plan Amendment outlined above in combination with City Conditions of Approval would ensure that the potential for development pursuant to the Modified Project to alter drainage patterns in a manner that would result in adverse erosion, siltation, flooding/flood flow or stormwater system capacity impacts would remain at levels that would be less-than-significant.

Modified Project Conditions of Approval: None.

d) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: As discussed in the Certified SEIR, "there are no large bodies of water that would result in a seiche during seismic activity. Additionally, the reservoirs/aboveground water tanks within the City are enclosed, thereby minimizing the possibility of a seiche. The [City] is inland and approximately 30 miles from the ocean and is not at risk of flooding due to tsunamis. Based on the preceding, the Certified SEIR concluded that TOP 2050 would not result in adverse impacts related to flood hazard, tsunami, or seiche zones, risk release of pollutants due to inundation (Certified SEIR, pp. 5.10-26, 5.10-27).

7 The Mill Creek Wetland Facility (Facility) has been constructed and functional since June 2014. The Facility serves as an alternative to on-site LID BMP implementation for residential tract developers that are members of the Ontario Ranch Builders, LLC consortium and which have adequate reserved capacity in the regional facility for those planning areas. Portions of the Project site acres developed by non-members, would be required to make other arrangements or utilize another, future regional water quality facility. All non-residential planning area projects within The Avenue, including Public Schools, will incorporate on-site LID BMPs, in accordance with the regional NPDES Permit and the current San Bernardino County Water Quality Management Plan, and shall not rely on the regional wetlands facility for retention and treatment of runoff water.

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. Conditions at the Modified Project site as regards flood hazard impacts, tsunami hazard impacts, or seiche hazard impacts have not changed since preparation of the Certified SEIR – the site remains unaffected by substantial potential flood hazards, tsunami hazards, or seiche hazards.

Further, any commercial/retail occupancies within the Modified Project that would store or use hazardous materials would be required to comply with California Hazardous Materials Business Plan (HMBP) requirements (*California Health & Safety Code*, Division 20, Chapter 6.95) The HMBP contains detailed information on the storage of hazardous materials at regulated facilities. The purpose of the HMBP is to prevent or minimize damage to public health, safety, and the environment, from a release or threatened release of a hazardous material, including potential release of materials in a flood event.

Based on the preceding the potential for the Modified Project to result in release of pollutants due to an inundation event would be less-than-significant.

Modified Project Conditions of Approval: None.

e) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: As discussed in the Certified EIR, "[p]rojects approved under TOP 2050 would be required to comply with the Santa Ana River Basin Plan and to control pollutants in discharges of stormwater from postconstruction activities under NPDES Permit No. CAS618036 through preparation of a WQMP identifying BMPs for prevention of stormwater pollution during the post-construction phase, including site-design, source-control, and/or treatment BMPs. Therefore, [TOP 2050] would not obstruct or conflict with the RWQCB's Basin Plan or any groundwater management plan, and impacts would be less than significant" (Certified SEIR, p. 5.10-27).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. The Modified Project does not propose or require uses or facilities that would conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. The Modified Project would have no impacts in these regards.

Modified Project Conditions of Approval: None.

Summary

When compared to the Certified SEIR findings, no new or substantially increased hydrology or water quality impacts would result from the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; The Avenue Specific Plan, 2024 Amendment*.

11. LAND USE AND PLANNING

Would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Physically divide an established community?					X	
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?					X	

***Substantiation*:**

a) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR concluded that implementation of TOP 2050 would not result in result in the physical division of an established community (Certified SEIR, p. 5.11-6).

Certified SEIR Mitigation Measures: None.

Modified Project: No established community is located within the Modified Project site. The Modified Project would not otherwise result in potential division of an established community. The Modified Project would have no impacts in these regards.

Modified Project Conditions of Approval: None.

b) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: The Certified SEIR concluded that implementation of TOP 2050 would not result in significant land use impacts (Certified SEIR, p. 5.11-11).

Certified SEIR Mitigation Measures: None.

Modified Project: Land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating environmental effects are established under the TOP 2050. The Modified Project amends the site's current land use designations to conform to TOP 2050 land use designations.

The Modified Project would be required to comply with applicable TOP 2050 Policies, applicable requirements of *The Avenue Specific Plan, 2024 Amend*ment and provisions of the City Development Code. Collectively, TOP 2050 Policies, the City Development Code, and *The Avenue Specific Plan, 2024 Amendment,* and act to minimize potential environmental effects that may result from the land uses implemented under the Modified Project. On this basis, the potential for the Modified Project to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect is considered less-than-significant.

Modified Project Conditions of Approval: None.

Summary

When compared to the Certified SEIR findings, no new or substantially increased land use and planning impacts would result from the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; The Avenue Specific Plan, 2024 Amendment*.

12. MINERAL RESOURCES

Would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?					X	
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?					X	

***Substantiation*:**

a, b) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR concluded that implementation of TOP 2050 would have no potential to result in the loss of a known mineral resource of value to the region or the state; or result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan (Certified SEIR, p. 5.12-6).

Certified SEIR Mitigation Measures: None.

Modified Project: Underlying conditions at the subject site have not changed since preparation of the Certified SEIR, and the site remains devoid of any potentially valuable or locally-important mineral resources. On this basis, the Modified Project would have no potential to result in the loss of a known mineral resource of value to the region or the state; or result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. No new or substantially increased mineral resources impacts would result from the Modified Project.

Modified Project Conditions of Approval: None.

Summary

Based on the preceding, when compared to impacts identified in the Certified SEIR, no new or substantially increased mineral resources impacts would result from the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; The Avenue Specific Plan, 2024 Amendment*.

13. NOISE

Would the project result in:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?					X	
b) Generation of excessive groundborne vibration or groundborne noise levels?					X	
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?					X	

General Note: *The technical analyses referenced in this section reflect likely maximum impacts. Subsequent to preparation of these analyses, total residential development intensities allowed under the Modified Project have been reduced consistent with direction. Specifically, the technical analyses referenced herein assume residential development of the Modified Project totaling up to 3,807 dwelling units (see Project Traffic Analysis, p. 2 et al.). As subsequently modified, maximum allowed residential development under the Modified Project would not exceed 3,753 dwelling units (see Section 2.0, Project Description, Table 2.1-1).*

***Substantiation*:**

a) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR determined that new development implemented pursuant to TOP 2050 would result in temporary noise increases at sensitive receptors during construction activities (Certified SEIR, p. 5.13-28). Certified

SEIR Mitigation Measure 12-4, below, would reduce construction noise but would not avoid this impact or reduce the impact to levels that would be less-than-significant.

Certified SEIR Mitigation Measure:

12-4 Construction activities associated with new development that occurs near sensitive receptors shall be evaluated for potential noise impacts. Construction contractors shall implement the following measures for construction activities in the City of Ontario. Construction plans submitted to the City shall identify these measures on demolition, grading, and construction plans. The City of Ontario Planning and Building Departments shall verify that grading, demolition, and/or construction plans submitted include these notations prior to issuance of demolition, grading, and/or building permits.

- *Construction activity is limited to the hours between 7:00 am and 6:00 pm Monday through Friday and 9:00 am to 6:00 pm Saturdays and Sundays, as prescribed in Municipal Code Section 5-29.09.*
- *During the entire active construction period, equipment and trucks used for project construction shall use the best-available noise control techniques wherever feasible (e.g., improved mufflers, equipment re-design, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds).*
- *Impact tools (e.g., jack hammers and hoe rams) shall be hydraulically or electrically powered wherever possible. Where the use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used along with external noise jackets on the tools.*
- *Stationary equipment such as generators and air compressors shall be located as far as feasible from nearby noise-sensitive uses.*
- *Stockpiling shall be located as far as feasible from nearby noise-sensitive receptors.*
- *Construction traffic shall be limited, to the extent feasible, to approved haul routes established by the City Planning and Building Agency.*
- *At least 10 days prior to the start of construction activities, a sign shall be posted at the entrance(s) to the job site, clearly visible to the public, that includes permitted construction days and hours as well as the telephone numbers of the City's and contractor's authorized representatives that are assigned to respond in the event of a noise or vibration complaint.*

If the authorized contractor's representative receives a complaint, he/she shall investigate, take appropriate corrective action, and report the action to the City.

- *Signs shall be posted at the job site entrance(s), within the on-site construction zones, and along queueing lanes (if any) to reinforce the prohibition of unnecessary engine idling. All other equipment shall be turned off if not in use for more than 5 minutes.*
- *During the entire active construction period and to the extent feasible, the use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only. The construction manager shall use smart back-up alarms, which automatically adjust the alarm level based on the background noise level or switch off back-up alarms and replace with human spotters in compliance with all safety requirements and laws.*
- *Erect temporary noise barriers (at least as high as the exhaust of equipment and breaking line-of-sight between noise sources and sensitive receptors), as necessary and feasible, to maintain construction noise levels at or below the performance standard of 80 dBA Leq. Barriers shall be constructed with a solid material that has a density of at least 1.5 pounds per square foot with no gaps from the ground to the top of the barrier and may be lined on the construction side with an acoustical blanket, curtain, or equivalent absorptive material.*

Modified Project: Potential noise impacts of the Modified Project are evaluated in *The Avenue Specific Plan, 2023 Amendment - Noise Impact Analysis* (Urban Crossroads, Inc.) May 8, 2024 (Noise Impact Analysis, Addendum Appendix E). Analysis and conclusions of the Noise Impact Analysis are summarized below.

Noise Standards

Noise impacts would be considered significant if any of the following criteria are exceeded, as shown in Table 13-1.

Table 13-1
Significance Criteria Summary

Analysis	Receiving Land Use	Condition(s)	Significance Criteria	
			Daytime	Nighttime
Off-Site Traffic	All	If ambient is < 60 dBA CNEL	≥ 5 dBA CNEL Project increase	
		If ambient is 60 - 64 dBA CNEL	≥ 3 dBA CNEL Project increase	

Table 13-1
Significance Criteria Summary

Analysis	Receiving Land Use	Condition(s)	Significance Criteria	
			Daytime	Nighttime
		If ambient is >= 65 dBA CNEL	≥ 1.5 dBA CNEL Project increase	
On-Site Traffic	All	See Exhibit 3-A of the Noise Impact Analysis.		
Operational	Noise-Sensitive	Exterior Noise Level Standards	65 dBA L_{eq}	45 dBA L_{eq}
		if ambient is < 60 dBA L_{eq}	≥ 5 dBA L_{eq} Project increase	
		if ambient is 60 - 65 dBA L_{eq}	≥ 3 dBA L_{eq} Project increase	
		if ambient is > 65 dBA L_{eq}	≥ 1.5 dBA L_{eq} Project increase	
Construction	Noise-Sensitive	Noise Level Threshold	80 dBA L_{eq}	
		Vibration Level Threshold	0.3 PPV (in/sec)	

Source: *The Avenue Specific Plan, 2023 Amendment - Noise Impact Analysis* (Urban Crossroads, Inc.) May 8, 2024.

Sensitive Receivers

The following receiver locations, shown at Noise Impact Analysis Exhibit 8-A, *Receiver Locations*, were identified as representative noise impact analysis locations.

R1: Location R1 represents the existing residence at 3141 E. Mt. Rainier Drive, approximately 1,523 feet southeast of the Project site. Receptor R1 is placed at the private outdoor living areas (backyards) facing the Project site.

R2: Location R2 represents the existing residence at 3970 S. Oasis Paseo, approximately 2,763 feet east of the Project site. Receptor R2 is placed at the private outdoor living areas (backyards) facing the Project site.

R3: Location R3 represents the existing residence at 3712 Ironwood Avenue, approximately 1,818 feet northeast of the Project site. Since there is no outdoor use area facing the Project site, Receptor R3 is placed at the nearest building façade facing the Project site.

R4: Location R4 represents the existing residence at 3092 East Wing Street, approximately 1,218 feet northeast of the Project site. Receptor R4 is placed at the private outdoor living areas (backyards) facing the Project site.

R5: Location R5 represents the existing residence at South Wangler Place, approximately 631 feet northeast of the Project site. Receptor R5 is placed at the private outdoor living areas (backyards) facing the Project site.

R6: Location R6 represents the existing residence at 9029 Schaefer Avenue, approximately 375 feet west of the Project site. Receptor R6 is placed at the private outdoor living areas (backyards) facing the Project site.

R7: Location R7 represents the existing residence at 9060 Edison Avenue, approximately 48 feet west of the Project site. Receptor R7 is placed at the private outdoor living areas (backyards) facing the Project site.

Construction-Source Noise Impacts

In the evaluation of construction-source noise impacts, the Noise Impact Analysis employs empirical reference noise measurements obtained from similar construction activities. Based on the reference construction noise levels, maximum received noise levels attributable to the Modified Project construction activities were calculated, and are summarized at Table 13-2. Compliance with applicable significance thresholds is also presented.

Table 13-2
Maximum Received Construction-Source Noise Levels

Receiver Location	Maximum Received Noise Level (dBA Leq)	Threshold (dBA Leq)	Threshold Exceeded?
R1	49.6	80	No
R2	45.1	80	No
R3	47.8	80	No
R4	50.3	80	No
R5	55.2	80	No
R6	54.8	80	No
R7	60.1	80	No

Source: *The Avenue Specific Plan, 2023 Amendment - Noise Impact Analysis* (Urban Crossroads, Inc.) May 8, 2024.

As shown at Table 13-2, received construction-source noise levels would not exceed the applicable threshold and would therefore be less-than-significant.

Operational-Source Noise Impacts

The Modified Project has not been designed at this stage of project development. The Avenue Specific Plan, 2024 Amendment development is not expected to include any

specific type of operational noise levels beyond the typical noise sources associated with similar residential and educational land uses in the Project study area, such as people and children, parking lot activity, garage doors, small air conditioners, and trash collection. The proposed residential uses would also be considered a noise-sensitive receiving land use.

The City would require future development within the Specific Plan area to conduct design-specific noise analyses to determine the precise operational noise impacts of each development project and identify any necessary noise abatement measures, if necessary.

Vehicular-Source Noise Impacts

Off-Site Vehicular-Source Noise

To assess the off-site transportation CNEL noise level impacts associated with development of the proposed Project, noise contours were developed based on the Modified Project Traffic Analysis. Noise contour boundaries represent the equal levels of noise exposure and are measured in CNEL from the center of the roadway. Noise contours were developed for the following traffic scenarios:

- Existing Conditions Without Project: This scenario refers to the existing present-day noise conditions without the proposed Project.
- Existing With Project: This scenario refers to the existing present-day noise conditions with the proposed Project.
- Opening Year 2026 Without the Project: This scenario refers to existing plus cumulative growth through 2026 noise conditions without the proposed Project.
- Opening Year 2026 Year With Project: This scenario includes existing plus cumulative growth through 2026 plus the proposed Project traffic volumes identified in the Traffic Impact Analysis.

Using the noise contours presented at Noise Impact Analysis Table 6-1 through 6-4, the following Tables 13-3 and 13-4 present the Project traffic noise level contributions under the Existing and Opening Year scenarios.

Table 13-3
Existing With Project Traffic Noise Level Increases

ID	Road	Segment	Receiving Land Use	CNEL at Receiving Land Use (dBA)			Incremental Noise Level Increase Threshold	
				No Project	With Project	Project Addition	Limit	Exceeded?
1	Haven Ave	n/o Commercial Dwy	Residential	67.4	67.4	0.0	5.0	No
2	Haven Ave	n/o Ontario Ranch Rd	Residential	68.9	69.4	0.5	5.0	No
3	Haven Ave	n/o Chino Ave	Residential	67.8	67.9	0.1	5.0	No
4	Haven Ave	n/o Riverside Dr	Residential	67.5	67.6	0.1	5.0	No
5	Haven Ave	n/o Creekside Dr	Residential	68.9	68.9	0.0	5.0	No
6	Haven Ave	n/o SR-60	Residential	70.9	70.9	0.0	3.0	No
7	Archibald Ave	s/o Limonite Ave	Residential	68.9	68.9	0.0	5.0	No
8	Archibald Ave	n/o Limonite Ave	Residential	69.9	69.9	0.0	5.0	No
9	Archibald Ave	n/o Merrill Ave	Residential	68.5	68.9	0.4	5.0	No
10	Archibald Ave	n/o Edison Ave	Residential	68.2	68.8	0.6	5.0	No
11	Archibald Ave	n/o Avenida Dr	Residential	68.7	69.5	0.8	5.0	No
12	Archibald Ave	n/o Schaefer Ave	Residential	68.7	70.0	1.3	5.0	No
13	Archibald Ave	n/o Chino Ave	Residential	69.0	70.2	1.2	5.0	No
14	Archibald Ave	n/o Riverside Dr	Residential	69.3	69.8	0.5	5.0	No
15	Archibald Ave	n/o SR-60	Residential	68.9	69.3	0.4	5.0	No
16	Vineyard Ave	n/o Riverside Dr	Residential	68.4	69.5	1.1	5.0	No
17	Vineyard Ave	n/o Walnut Ave	Residential	69.7	70.4	0.7	5.0	No
18	Vineyard Ave	n/o SR-60	Residential	70.5	70.6	0.1	3.0	No
19	Limonite Ave	e/o Archibald Ave	Residential	68.7	68.9	0.2	5.0	No
20	Merrill Ave	w/o Archibald Ave	Residential	67.6	67.8	0.2	5.0	No
21	Edison Ave	w/o Euclid Ave	Residential	69.6	70.0	0.4	5.0	No
22	Edison Ave	e/o Euclid Ave	Residential	68.6	69.4	0.8	5.0	No
23	Edison Ave	e/o Grove Ave	Residential	68.7	70.0	1.3	5.0	No
24	Edison Ave	e/o Vineyard Ave	Residential	70.6	71.5	0.9	3.0	No
25	Edison Ave	e/o Carpenter Ave	Residential	70.6	71.4	0.8	3.0	No
26	Edison Ave	e/o Ontario Ave	Residential	70.6	71.8	1.2	3.0	No
27	Edison Ave	e/o Future Tract Dwy.	Residential	70.6	71.8	1.2	3.0	No
28	Edison Ave	e/o Archibald Ave	Residential	71.4	72.1	0.7	3.0	No
29	Ontario Ranch Rd	e/o Broadway Ave	Residential	71.7	72.0	0.3	3.0	No
30	Ontario Ranch Rd	e/o Turner Ave	Residential	71.9	72.8	0.9	3.0	No
31	Ontario Ranch Rd	w/o New Haven Dr	Residential	71.9	72.8	0.9	3.0	No
32	Ontario Ranch Rd	e/o Haven Ave	Residential	73.0	74.0	1.0	3.0	No
33	Ontario Ranch Rd	e/o Hamner Ave	Residential	73.6	74.2	0.6	3.0	No
34	Ontario Ranch Rd	e/o I-15	Residential	71.4	71.8	0.4	3.0	No
35	Schaefer Ave	e/o Archibald Ave	Residential	59.7	62.3	2.6	5.0	No
36	Schaefer Ave	e/o Turner Ave	Residential	61.3	63.0	1.7	5.0	No

Table 13-3
Existing With Project Traffic Noise Level Increases

ID	Road	Segment	Receiving Land Use	CNEL at Receiving Land Use (dBA)			Incremental Noise Level Increase Threshold	
				No Project	With Project	Project Addition	Limit	Exceeded?
37	Schaefer Ave	e/o Oakville Ave	Residential	61.1	62.9	1.8	5.0	No
38	Chino Ave	w/o Archibald Ave	Residential	65.6	65.7	0.1	5.0	No
39	Chino Ave	e/o Archibald Ave	Residential	63.5	63.8	0.3	5.0	No
40	Riverside Dr	w/o Vineyard Ave	Residential	68.1	68.2	0.1	5.0	No
41	Riverside Dr	e/o Vineyard Ave	Residential	70.7	71.5	0.8	3.0	No
42	Riverside Dr	e/o Archibald Ave	Residential	70.1	70.3	0.2	3.0	No
43	Riverside Dr	e/o Haven Ave	Residential	67.9	67.9	0.0	5.0	No

Source: *The Avenue Specific Plan, 2023 Amendment - Noise Impact Analysis* (Urban Crossroads, Inc.) May 8, 2024.

Table 13-4
Opening Year 2026 With Project Traffic Noise Level Increases

ID	Road	Segment	Receiving Land Use	CNEL at Receiving Land Use (dBA)			Incremental Noise Level Increase Threshold	
				No Project	With Project	Project Addition	Limit	Exceeded?
1	Haven Ave	n/o Commercial Dwy	Residential	67.9	67.9	0.0	5.0	No
2	Haven Ave	n/o Ontario Ranch Rd	Residential	70.1	70.5	0.4	5.0	No
3	Haven Ave	n/o Chino Ave	Residential	70.7	70.7	0.0	3.0	No
4	Haven Ave	n/o Riverside Dr	Residential	69.0	69.0	0.0	5.0	No
5	Haven Ave	n/o Creekside Dr	Residential	69.5	69.5	0.0	5.0	No
6	Haven Ave	n/o SR-60	Residential	71.6	71.6	0.0	3.0	No
7	Archibald Ave	s/o Limonite Ave	Residential	70.0	70.0	0.0	5.0	No
8	Archibald Ave	n/o Limonite Ave	Residential	70.7	70.7	0.0	3.0	No
9	Archibald Ave	n/o Merrill Ave	Residential	69.9	70.3	0.4	5.0	No
10	Archibald Ave	n/o Edison Ave	Residential	68.8	69.4	0.6	5.0	No
11	Archibald Ave	n/o Avenida Dr	Residential	69.5	70.1	0.6	5.0	No
12	Archibald Ave	n/o Schaefer Ave	Residential	69.5	70.6	1.1	5.0	No
13	Archibald Ave	n/o Chino Ave	Residential	69.5	70.6	1.1	5.0	No
14	Archibald Ave	n/o Riverside Dr	Residential	70.1	70.5	0.4	5.0	No
15	Archibald Ave	n/o SR-60	Residential	69.4	69.7	0.3	5.0	No
16	Vineyard Ave	n/o Riverside Dr	Residential	68.9	69.9	1.0	5.0	No
17	Vineyard Ave	n/o Walnut Ave	Residential	70.2	70.8	0.6	3.0	No
18	Vineyard Ave	n/o SR-60	Residential	70.8	70.9	0.1	3.0	No

Table 13-4

Opening Year 2026 With Project Traffic Noise Level Increases

ID	Road	Segment	Receiving Land Use	CNEL at Receiving Land Use (dBA)			Incremental Noise Level Increase Threshold	
				No Project	With Project	Project Addition	Limit	Exceeded?
19	Limonite Ave	e/o Archibald Ave	Residential	70.6	70.8	0.2	3.0	No
20	Merrill Ave	w/o Archibald Ave	Residential	70.2	70.3	0.1	3.0	No
21	Edison Ave	w/o Euclid Ave	Residential	71.5	71.8	0.3	3.0	No
22	Edison Ave	e/o Euclid Ave	Residential	71.2	71.6	0.4	3.0	No
23	Edison Ave	e/o Grove Ave	Residential	69.3	70.5	1.2	5.0	No
24	Edison Ave	e/o Vineyard Ave	Residential	73.1	73.6	0.5	3.0	No
25	Edison Ave	e/o Carpenter Ave	Residential	71.4	72.0	0.6	3.0	No
26	Edison Ave	e/o Ontario Ave	Residential	71.4	72.4	1.0	3.0	No
27	Edison Ave	e/o Future Tract Dwy.	Residential	71.4	72.4	1.0	3.0	No
28	Edison Ave	e/o Archibald Ave	Residential	72.1	72.7	0.6	3.0	No
29	Ontario Ranch Rd	e/o Broadway Ave	Residential	72.3	72.7	0.4	3.0	No
30	Ontario Ranch Rd	e/o Turner Ave	Residential	72.6	73.3	0.7	3.0	No
31	Ontario Ranch Rd	w/o New Haven Dr	Residential	72.4	73.2	0.8	3.0	No
32	Ontario Ranch Rd	e/o Haven Ave	Residential	73.5	74.3	0.8	3.0	No
33	Ontario Ranch Rd	e/o Hamner Ave	Residential	74.9	75.4	0.5	3.0	No
34	Ontario Ranch Rd	e/o I-15	Residential	72.0	72.4	0.4	3.0	No
35	Schaefer Ave	e/o Archibald Ave	Residential	62.6	64.2	1.6	5.0	No
36	Schaefer Ave	e/o Turner Ave	Residential	62.6	64.0	1.4	5.0	No
37	Schaefer Ave	e/o Oakville Ave	Residential	64.0	65.0	1.0	5.0	No
38	Chino Ave	w/o Archibald Ave	Residential	66.4	66.5	0.1	5.0	No
39	Chino Ave	e/o Archibald Ave	Residential	65.6	65.8	0.2	5.0	No
40	Riverside Dr	w/o Vineyard Ave	Residential	68.7	68.8	0.1	5.0	No
41	Riverside Dr	e/o Vineyard Ave	Residential	71.4	72.0	0.6	3.0	No
42	Riverside Dr	e/o Archibald Ave	Residential	71.1	71.2	0.1	3.0	No
43	Riverside Dr	e/o Haven Ave	Residential	69.5	69.5	0.0	5.0	No

Source: *The Avenue Specific Plan, 2023 Amendment - Noise Impact Analysis* (Urban Crossroads, Inc.) May 8, 2024.

As shown above, based on the significance criteria for off-site traffic noise, land uses adjacent to the study area roadway segments would not be subjected to significant noise level increases due to Project-related traffic.

On-Site Vehicular-Source Noise

An on-site exterior noise impact analysis has been completed to determine the noise exposure levels that would result from adjacent transportation noise sources in the Project study area, and to identify potential noise attenuation measures that would achieve acceptable Project exterior and interior noise levels. The primary sources of transportation noise affecting the Modified Project site are anticipated to be from Archibald Avenue, Ontario Ranch Road/Edison Road, and Schaefer Avenue.

The expected future noise levels for the on-site land uses have been estimated, and are presented at Table 13-5.

Table 13-5
Exterior Noise Levels

On-Site Receiver Location	Roadway	Unmitigated Exterior Noise Level (dBA CNEL)		Land Use Compatibility
		Exterior without Wall	Exterior with Wall	
PA-1A	Schaefer Ave	64.8	58.7	*Clearly Acceptable*
PA-1B	Schaefer Ave	64.8	58.7	*Clearly Acceptable*
PA-3A	Schaefer Ave	64.8	58.7	*Clearly Acceptable*
PA-4	Schaefer Ave	64.8	58.7	*Clearly Acceptable*
PA-8B	Ontario Ranch Road/Edison Ave	68.5	63.6	*Normally Acceptable*
PA-5	Ontario Ranch Road/Edison Ave	68.5	63.6	*Normally Acceptable*
PA-3B	Ontario Ranch Road/Edison Ave	68.5	63.6	*Normally Acceptable*
PA-2B	Ontario Ranch Road/Edison Ave	68.5	63.6	*Normally Acceptable*
PA-2A	Ontario Ranch Road/Edison Ave	68.5	63.6	*Normally Acceptable*
PA-5	Archibald Ave	68.1	63.0	*Normally Acceptable*

Source: *The Avenue Specific Plan, 2023 Amendment - Noise Impact Analysis* (Urban Crossroads, Inc.) May 8, 2024.

Table 13-5 shows that traffic noise levels received at the Project land uses would not exceed the City of Ontario 65 dBA CNEL exterior noise level standards for the noise sensitive residential land uses or schools.

For informational purposes, and to ensure that the interior noise levels comply with the interior noise level standards, future exterior noise levels were calculated at the estimated at the first and second floor building façade locations with planned residential areas

surrounding roadways. The interior noise level is the difference between the predicted exterior noise level at the building façade and the noise reduction of the structure. Typical building construction will provide a Noise Reduction (NR) of approximately 12 dBA with "windows open" and a minimum 25 dBA noise reduction with "windows closed." Tables 13-6 and 13-7 provide the first and second floor interior noise levels that can be expected within the planned residential areas.

Table 13-6
First Floor Interior Noise Levels (CNEL)

Receiver Location	Roadway	Noise Level at Façade	Required Interior NR	Minimum Calculated Interior NR	Upgraded Windows	Interior Noise Level	Threshold	Threshold Exceeded?
PA-1A	Schaefer Ave	58.7	13.7	25.0	No	33.7	45	No
PA-1B	Schaefer Ave	58.7	13.7	25.0	No	33.7	45	No
PA-3A	Schaefer Ave	58.7	13.7	25.0	No	33.7	45	No
PA-4	Schaefer Ave	58.7	13.7	25.0	No	33.7	45	No
PA-8B	Ontario Ranch Road/ Edison Ave	63.6	18.6	25.0	No	38.6	45	No
PA-5	Ontario Ranch Road/ Edison Ave	63.6	18.6	25.0	No	38.6	45	No
PA-3B	Ontario Ranch Road/ Edison Ave	63.6	18.6	25.0	No	38.6	45	No
PA-2B	Ontario Ranch Road/ Edison Ave	63.6	18.6	25.0	No	38.6	45	No
PA-2A	Ontario Ranch Road/ Edison Ave	63.6	18.6	25.0	No	38.6	45	No
PA-5	Archibald Ave	63.0	18.0	25.0	No	38.0	45	No

Source: *The Avenue Specific Plan, 2023 Amendment - Noise Impact Analysis* (Urban Crossroads, Inc.) May 8, 2024.

Table 13-7
Second Floor Interior Noise Levels (CNEL)

Receiver Location	Roadway	Noise Level at Façade	Required Interior NR	Minimum Calculated Interior NR	Upgraded Windows	Interior Noise Level	Threshold	Threshold Exceeded?
PA-1A	Schaefer Ave	64.7	19.7	25.0	No	39.7	45	No
PA-1B	Schaefer Ave	64.7	19.7	25.0	No	39.7	45	No
PA-3A	Schaefer Ave	64.7	19.7	25.0	No	39.7	45	No
PA-4	Schaefer Ave	64.7	19.7	25.0	No	39.7	45	No
PA-8B	Ontario Ranch Road/ Edison Ave	68.4	23.4	25.0	No	43.4	45	No

Table 13-7
Second Floor Interior Noise Levels (CNEL)

Receiver Location	Roadway	Noise Level at Façade	Required Interior NR	Minimum Calculated Interior NR	Upgraded Windows	Interior Noise Level	Threshold	Threshold Exceeded?
PA-5	Ontario Ranch Road/ Edison Ave	68.4	23.4	25.0	No	43.4	45	No
PA-3B	Ontario Ranch Road/ Edison Ave	68.4	23.4	25.0	No	43.4	45	No
PA-2B	Ontario Ranch Road/ Edison Ave	68.4	23.4	25.0	No	43.4	45	No
PA-2A	Ontario Ranch Road/ Edison Ave	68.4	23.4	25.0	No	43.4	45	No
PA-5	Archibald Ave	68.1	23.1	25.0	No	43.1	45	No

Source: *The Avenue Specific Plan, 2023 Amendment - Noise Impact Analysis* (Urban Crossroads, Inc.) May 8, 2024.

Tables 13-6 and 13-7 show that on-site interior traffic noise levels will not exceed the City of Ontario 45 dBA CNEL interior noise level standard for residential development under a windows-closed condition and a means of mechanical ventilation (e.g., air conditioning).

Although no significant on-site exterior or interior noise impacts are expected, the City will require use-specific noise studies for implementing projects within the Specific Plan area. These final noise studies would utilize any recommendations identified herein in combination with precise grading plans and actual building design specifications to identify any additional noise abatement measures, such as exterior noise barriers and/or building materials (e.g., sound transmission class ratings for windows and doors), if necessary.

Modified Project Conditions of Approval: None.

b) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR determined that mobile-source and stationary/area-source vibration impacts associated with buildout of TOP 2050 would be less-than-significant. However, construction activities associated with buildout of the

individual land uses could expose sensitive uses to strong levels of groundborne vibration and would therefore be a potentially significant impact (Certified SEIR, pp. 5.13-38 – 5.13-41).

Certified SEIR Mitigation Measure:

12-2 *Prior to issuance of a building permit, individual projects that involve vibration-intensive construction activities, such as pile drivers, jack hammers, and vibratory rollers near sensitive receptors shall be evaluated for potential vibration impacts. For construction within 135 feet of fragile structures, such as historical resources, within 100 feet of nonengineered timber and masonry buildings (e.g., most residential buildings), or within 75 feet of engineered concrete and masonry (no plaster); or a vibratory roller within 25 feet of any structure, the project applicant shall prepare a noise and vibration analysis to assess and mitigate potential noise and vibration impacts related to these activities. This noise and vibration analysis shall be conducted by a qualified and experienced acoustical consultant or engineer. The vibration levels shall not exceed Federal Transit Administration (FTA) architectural damage thresholds (e.g., 0.12 inches per second [in/sec] peak particle velocity [PPV] for fragile or historical resources, 0.2 in/sec PPV for nonengineered timber and masonry buildings, and 0.3 in/sec PPV for engineered concrete and masonry). If vibration levels would exceed this threshold, alternative uses shall be used, such as drilling piles as opposed to pile driving and static rollers as opposed to vibratory rollers. If necessary, construction vibration monitoring shall be conducted to ensure vibration thresholds are not exceeded.*

The Certified SEIR concluded even with the implementation of Mitigation Measure 12-2, construction-source groundborne vibration impacts would be significant and unavoidable (Certified SEIR, p. 5.13-41).

Modified Project:

Construction activities can result in varying degrees of ground vibration, depending on the equipment and methods used, distance to the affected structures and soil type. Groundborne vibration from construction activities would cause only intermittent, localized intrusion.

In the evaluation of construction-source vibration impacts, the Noise Impact Analysis employs reference construction-source vibration data published by the Federal Transit Administration (FTA). Maximum received construction-source vibration levels are summarized at Table 13-8.

Table 13-8
Maximum Received Construction-Source Vibration Levels

Receiver Location	Maximum Received Vibration Level PPV (in/sec)	Threshold PPV (in/sec)	Threshold Exceeded?
R1	0.000	0.30	No
R2	0.000	0.30	No
R3	0.000	0.30	No
R4	0.000	0.30	No
R5	0.002	0.30	No
R6	0.002	0.30	No
R7	0.033	0.30	No

Source: *The Avenue Specific Plan, 2023 Amendment - Noise Impact Analysis* (Urban Crossroads, Inc.) May 8, 2024.

Table 13-8 shows the maximum received construction-source vibration levels would not exceed the acceptable 0.20 PPV (in/sec) criteria established by the FTA. Moreover, received vibration levels are unlikely to be sustained during the entire construction period. Rather, maximum vibration levels would be received only during times that heavy construction equipment is operating at the site perimeter. Based on the preceding, construction-source vibration impacts would be less-than-significant.

Modified Project Conditions of Approval: None.

c) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR concluded that Chino Airport does not significantly affect sensitive receptors within the City of Ontario. However, sensitive land uses within the 65 dBA CNEL noise contour of the Ontario International Airport would be exposed to substantial levels of airport-related noise. Even with the implementation

of Mitigation Measure 12-1, airport-related noise was deemed a significant and unavoidable impact of TOP 2050 (Certified SEIR, pp. 5.13-38 – 5.13-41).

Certified SEIR Mitigation Measure:

12-1 *Prior to the issuance of building permits for any project that involves a noise-sensitive use within the 65 dBA CNEL contour of the Ontario International Airport, the project property owner/developers shall retain an acoustical engineer to conduct an acoustic analysis and identify, where appropriate, site design features and/or required building acoustical improvements (e.g., sound transmission class rated windows, doors, and attic baffling), to ensure compliance with the City's Noise Compatibility Criteria and the California State Building Code and California Noise Insulation Standards (Titles 24 and 21 of the California Code of Regulations).*

Modified Project: The Modified Project site is located approximately 2.2 miles south of the Ontario International Airport (ONT). The Ontario International Airport Land Use Compatibility Plan was adopted by Ontario City Council on April 19, 2011 (amended 2018) to promote compatibility between the airport and the land uses that surround it. The Modified Project site is located within the ONT airport influence area, but is not located within a designated noise impact zone. The Modified Project would therefore not be exposed to excessive airport/airfield-source noise levels associated with ONT operations.

The Project site is located approximately 1.2 miles east of the Chino Airport (CNO). The Modified Project site is located within the CNO airport influence area, but is not located within a designated noise impact zone. At this distance, airport noise level impacts would be less-than-significant.

The Modified Project would not otherwise be exposed to potentially adverse airport/airfield-source noise levels, nor does the Modified Project propose or require uses that would contribute to or exacerbate airport-source noise impacts.

Based on the preceding, the Modified Project would not be adversely affected by airport/airfield noise, nor would the Modified Project contribute to or result in adverse airport/airfield noise impacts. When compared to the Certified SEIR findings, no new or substantially increased airport/airfield noise impacts would result from the Modified Project.

Modified Project Conditions of Approval: None.

Summary

When compared to the impacts identified in the Certified SEIR, no new significant, substantially increased, or substantially different noise impacts would result from the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; The Avenue Specific Plan, 2023 Amendment - Noise Impact Analysis* (Urban Crossroads, Inc.) May 8, 2024; *The Avenue Specific Plan, 2024 Amendment*.

14. POPULATION AND HOUSING

Would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?					X	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?					X	

***Substantiation*:**

a, b) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR concluded that, while development of the City pursuant to TOP 2050 would increase population, housing, and employment, it also would improve the job-housing balance and impacts would be less-than-significant (Certified SEIR, pp. 5.14-9 – 5.14-12).

Certified SEIR Mitigation Measures: None.

Modified Project:

Direct Population Growth Inducement

The Modified Project amends the site's current land use designations to conform to TOP 2050 land use designations. Under the Modified Project, maximum residential development would total 3,753 dwelling units[8] (all types). Because the Project land uses and residential development are consistent with buildout of the City anticipated and planned for under TOP 2050, the Project would not result in direct population growth not previously considered and addressed in the Certified SEIR.

Indirect Growth Inducement

Indirect population growth inducement could result from creation of additional jobs and the extension of infrastructure and services to areas not currently served, or substantial capacity/capability upgrades to existing systems and services.

In general terms, job creation furthers growth via wages, salaries and general fiscal benefits; increased demands for housing; and increased demand for consumer goods and services. Jobs created by or resulting from the Modified Project would be typical of area

[8] There is the potential for the 10.89-acre school site portion of Planning Area 5 to transition to residential uses, should the school district determine that this site is not needed for school development. If this is the case, these 10.89 acres would be developed with up to 50 residential units, bringing the total Specific Plan residential unit count to 3,803.

employment opportunities, and would be filled by the local residents with no substantial increase in population.

The Modified Project would implement infrastructure improvements that are consistent with the City and purveyor master plans. Because the Project land uses and development are consistent with buildout of the City anticipated and planned for under TOP 2050, the Project would not result in indirect growth not previously considered and addressed in the Certified SEIR.

Consistency with Regional Population Growth Projections

Regional population projections developed by SCAG reflect assumptions and development scenarios incorporated in local plans including City general plans. As demonstrated in the preceding discussions, the Modified Project would not induce or generate growth beyond that reflected in TOP 2050 and evaluated in the Certified SEIR. Accordingly, the Modified Project would not result in growth not already anticipated within SCAG population growth projections for the region.

As supported by the preceding discussions, the Modified Project would not induce substantial population growth; displace substantial numbers of existing housing; or displace substantial numbers of people. When compared to the Certified SEIR findings, no new or substantially increased population and housing impacts would result from the Modified Project.

The Modified Project would increase housing availability. The Modified Project does not propose or require uses or operations that would displace substantial numbers of existing people or housing. The potential for the Modified Project to displace substantial numbers of existing people or housing would be less-than-significant.

Modified Project Conditions of Approval: None.

Summary

Based on the preceding, when compared to impacts identified in the Certified SEIR, no new or substantially increased population and housing impacts would result from the

Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; The Avenue Specific Plan, 2024 Amendment*.

15. PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any public service:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Fire protection?					X	
b) Police protection?					X	
c) Schools?					X	
d) Parks?					X	
e) Other public facilities?					X	

***Substantiation*:**

a – e) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: Certified SEIR Section 5.15, *Public Services*, concluded that implementation of TOP 2050 would not result in potentially significant public services impacts (Certified SEIR, pp. 5.15-1 – 5.15-18).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project amends the site's current land use designations to conform to TOP 2050 land use designations. Uses proposed by the Modified Project

would not create substantive additional demands for school or park facilities beyond those reflected in TOP 2050 and evaluated in TOP 2050 SEIR. The Modified Project would be constructed within an already-developed urban environment. Fire protection and police protection services are currently available to the subject site via existing facilities. Development impact fees and sales tax revenues generated by the Modified Project would provide funding sources available for support and enhancement of public services commensurate with incremental demands of the development. By law, the Modified Project would be required to remit school impact fees.

Modified Project Conditions of Approval: None.

Summary

Based on the preceding, when compared to impacts identified in the Certified SEIR, no new or substantially increased public services impacts would result from the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; The Avenue Specific Plan, 2024 Amendment*.

16. RECREATION

Would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?					X	
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?					X	

***Substantiation*:**

a, b) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR determined that because new development would be required to provide sufficient public parkland or pay in-lieu fees, impacts to recreational facilities would be less-than-significant (Certified SEIR, pp. 5.16-12 – 5.16-14).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project amends the site's current land use designations to conform to TOP 2050 land use designations. Proposed residential and commercial uses implemented under the Modified Project would not increase demands on recreational facilities beyond those reflected in TOP 2050 and evaluated in TOP 2050 SEIR. When compared to the Certified SEIR findings, no new or substantially increased recreation impacts would result from the Modified Project.

Modified Project Conditions of Approval: None.

Summary

Based on the preceding, when compared to impacts identified in the Certified SEIR, no new or substantially increased recreational services or recreational facilities impacts would result from the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; The Avenue Specific Plan, 2024 Amendment*.

17. TRANSPORTATION

Would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?					X	
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?					X	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?					X	
d) Result in inadequate emergency access?					X	

General Note:

The technical analyses referenced in this section reflect likely maximum impacts. Subsequent to preparation of these analyses, total residential development intensities allowed under the Modified Project have been reduced consistent with direction. Specifically, the technical analyses referenced herein assume residential development of the Modified Project totaling up to 3,807 dwelling units (see Project Traffic Analysis, p. 2 et al.). As subsequently modified, maximum allowed residential development under the Modified Project would not exceed 3,753 dwelling units (see Section 2.0, Project Description, Table 2.1-1).

***Substantiation*:**

Transportation impact analyses of the Modified Project presented here are summarized in part from: *The Avenue Specific Plan Traffic Analysis* (Urban Crossroads, Inc.) April 19, 2024 (Modified Project Traffic Analysis, Traffic Analysis); and *The Avenue Specific Plan Amendment Vehicle Miles Traveled (VMT)* Analysis (Modified Project VMT Analysis, VMT Analysis) (Urban Crossroads, Inc.) March 17, 2024. The Modified Project Traffic Analysis and VMT Analysis are presented at Addendum Appendix F.

a) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: Certified SEIR Section 5.17, *Transportation*, concluded that implementation of TOP 2050 would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities (Certified SEIR, pp. 5.17-18 – 5.17-23).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project does not propose elements or aspects that would conflict with adopted alternative transportation policies. Transit services are currently provided to the City and the Modified Project vicinity by Omnitrans. On a long-term basis, the Modified Project may result in increased demand for public transportation as increased employment opportunities become available onsite. Transit agencies routinely review and adjust their ridership schedules to accommodate shifts in demand for services. As part of the City's standard development review processes, the need for transit-related facilities, bicycle, and pedestrian access would be coordinated between the City and the Applicant.

The Modified Project would accommodate and would not interfere with the City *Multipurpose Trails and Bikeway Corridor Plan*. The Modified Project would provide internal and perimeter pedestrian and bicycle amenities consistent with provisions of *The Avenue Specific Plan, 2024 Amendment* and City Conditions of Approval.

Modified Project Conditions of Approval: None.

b) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: *CEQA Guidelines* Section 15064.3, subdivision (b) was added to the *CEQA Guidelines* in 2019. The Vehicle Miles Traveled (VMT) metric established under Section 15064.3 is recognized. The VMT metric became effective in July 2020. The Certified SEIR concluded that even with application of mitigation VMT impacts of TOP 2050 would be significant and unavoidable (Certified SEIR, p. 5.17-34).

Certified SEIR Mitigation Measures:

New Mitigation

T-1 Prior to approval of discretionary projects subject to VMT reduction analysis, applicants shall demonstrate compliance with the City's VMT Guidelines for CEQA assessment of VMT impacts. For projects with VMT per Service Population exceeding the County's significance threshold, a mitigation plan shall be developed and implemented. Mitigation should consist of Transportation Demand Management (TDM) measures analyzed under a VMT-reduction methodology consistent with the California Air Pollution Control Officers Association's (CAPCOA) Final Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (2021) and approved by the City of Ontario (if applicable). Examples of measures include but are not limited to:

- *Pedestrian Network Improvements: constructing new sidewalks and/or improving damaged or substandard sidewalks that connect to a larger pedestrian network.*
- *Construct or Improve Bike Facilities: constructing new or enhancing a single existing Class I, II or IV bike facility that connects to a larger bike network.*
- *Construct or Improve Bike Boulevards: implementing a Class III bike boulevard on a local or collector street that is one travel lane in each direction, has a design speed of 25 mph or less and a design volume of 5,000 ADT or less.*
- *Expand Bikeway Networks: constructing a network of interconnected new Class I, II, or IV bike facilities.*
- *Provide End of Trip Bicycle Facilities: constructing facilities that support cyclists such as bike parking, lockers, and showers.*
- *Implement Transit-Supportive Roadway Treatments: funding infrastructure improvements such as traffic signal modifications and roadway signing and striping that are dedicated to improving transit travel times and reliability.*
- *Transit Passes: proving discounted or free transit fare to a specific geographic area, population group, or to the general public.*
- *Vanpool Program: providing groups of 5 to 15 people with direct shuttle service between their workplace and residence.*
- *Carshare Program (conventional or EV): providing access to a shared fleet of on-demand vehicles for short-term use/rental. Best practice is to discount carshare*

membership and provide priority parking for carshare vehicles to encourage use of the service.

- *Bikeshare Program (conventional or EV): providing access to a shared fleet of on-demand bicycles for short-term use/rental. Best practice is to discount bikeshare membership and dedicate bikeshare parking to encourage use of the service.*
- *Rideshare Program: providing access to and encouraging the use of a ridesharing platform or service. This could be an app, website, or other service that provides ride-matching coordination services.*
- *Community-Based Travel Planning (CBTP): CBTP is a residential based approach to outreach, performed by trained advisors, that provides households within a targeted geographic area with customized information, incentives, and support to encourage the use of transportation alternatives in place of single occupancy vehicles.*
- *Commute Trip Reduction (CTR) Program: CTR programs can be mandatory or voluntary, and involve providing information, coordination, services, infrastructure, and/or incentives for alternative modes such as ridesharing, vanpool, transit passes, and cycling.*

Modified Project: The California Environmental Quality Act (CEQA) requires all lead agencies to adopt VMT as the measure for identifying transportation impacts for land use projects. To comply with CEQA, in June of 2020 the City of Ontario developed and adopted their own VMT methodologies and thresholds (Resolution No. 2020-071) (City Guidelines). The VMT analysis presented here conforms to adopted City Guidelines. Projects that do not result in significant VMT impacts per City Guidelines would not conflict or be inconsistent with *CEQA Guidelines* Section 15064.3, subdivision (b).

Project generated VMT has been estimated using the origin/destination method and boundary method. Consistent with City Guidelines, VMT has been presented as total VMT and total VMT per Service Population (i.e., population and employees). Total VMT represents all VMT generated in the City of Ontario on a typical weekday. Total VMT per service population is an efficiency metric representing VMT generated on a typical weekday per person who lives and/or works in the City or travels to the City for another purpose (Project VMT Analysis, p. 2).

City Guidelines identifies the efficiency based metric VMT per Service Population (SP) (i.e., population and employees) is to be used to conduct project-level VMT analyses for land use projects in the City of Ontario. City Guidelines also identifies the following impact threshold for project-level VMT analyses:

- A significant impact would occur if the Project VMT per SP exceeds the Citywide average VMT per SP under General Plan Buildout Conditions.

The City of Ontario's average VMT per SP under General Plan Buildout conditions has been calculated using the TOP General Plan Buildout (2050) model. Table 17-1 presents the City of Ontario's Citywide average VMT per SP for General Plan Buildout (2050) conditions. As presented at Table 17-1, the City of Ontario's VMT per SP under General Plan Buildout (2050) conditions is estimated at 30.70 VMT per SP.

Table 17-1
TOP 2050 Buildout
Citywide VMT Per Service Population

Service Population	706,494
VMT	21,689,573
VMT per SP	30.70

Source: *The Avenue Specific Plan Amendment Vehicle Miles Traveled (VMT)* Analysis (Urban Crossroads, Inc.) March 17, 2024.

VMT impacts of the Project were evaluated employing both the Origin/Destination VMT Methodology and the Boundary VMT Methodology. Methodology details are presented at Project VMT Analysis pp. 3, 4.

VMT impacts of the Project employing the Origin/Destination VMT Methodology are presented at Table 17-2.

Table 17-2
Project VMT Impacts
Origin/Destination VMT Methodology

	Baseline	General Plan Buildout Year (2050)
Households	3,807	3,807
Population	13,325	13,325
Employment	957	957
Service Population	14,282	14,282
Total OD VMT	139,550	245,044
OD VMT/SP	19.4	17.2
City Threshold	30.7	30.7
Threshold Exceeded	No	No

Source: *The Avenue Specific Plan Amendment Vehicle Miles Traveled (VMT)* Analysis (Urban Crossroads, Inc.) March 17, 2024.

VMT impacts of the Project employing the Boundary VMT Methodology are presented at Table 17-3.

Table 17-3
Project VMT Impacts
Boundary VMT Methodology

	City Boundary		10-Mile Boundary	
Scenario	No Project	With Project	No Project	With Project
Service Population	706,494	708,515	2,172,176	2,174,197
Boundary VMT	9,602,250	9,600,990	34,288,519	34,291,339
VMT per SP	13.6	13.6	15.8	15.8
Change in VMT	0.0		0.00	
Threshold Exceeded	No		No	

Source: *The Avenue Specific Plan Amendment Vehicle Miles Traveled (VMT)* Analysis (Urban Crossroads, Inc.) March 17, 2024.

The analysis presented here supports the following findings:

- Consistent with City Guidelines, VMT estimates were prepared measuring both Project generated VMT per service population and Citywide boundary VMT.

- Project generated VMT per service population would not exceed City's adopted impact threshold of Citywide average VMT per SP under General Plan Buildout Conditions.

- Citywide boundary VMT was found to remain unchanged with the addition of the proposed Project.

Based on the preceding, the Modified Project VMT would not exceed applicable City VMT impact significance thresholds. On this basis, the potential for the Modified Project to conflict or be inconsistent with *CEQA Guidelines* Section 15064.3, subdivision (b) would be less-than-significant.

Modified Project Conditions of Approval: None.

c, d) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR concluded that buildout of the City pursuant to TOP 2050 would result in changes to the circulation network. Such changes would however be implemented consistent with City roadway classification and roadway design standards, acting to preclude potential design hazards. Additionally, City Design Review processes ensure that adequate emergency access is provided for all new development projects. On this basis, there would be no impacts related to hazardous design features, or emergency access provisions (Certified SEIR, pp. 5.17-25, 5.17-26).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project does not propose elements or aspects that would substantially increase transportation/traffic hazards. Moreover, all improvements under the Modified Project would be designed and implemented consistent with recommendations of the Traffic Analysis (see: Traffic Analysis Section 1.6, *Recommendations*; and *The Avenue Specific Plan, 2024 Amendment*, Section 4.1, *Master Plan of Circulation*), and City traffic engineering and safety standards, thereby minimizing the potential to result in or cause hazardous traffic/transportation conditions.

The Modified Project would generate urban traffic comparable to and compatible with the vehicle mix and vehicle categories present within the area roadway system. The Modified Project uses would therefore not cause or result in incompatible vehicle

movements or traffic that would substantively increase hazards. Further, based on the projected net decrease in trip generation under the Modified Project, the potential for the Modified Project to result in potential traffic hazards would likely be reduced when compared to the uses entitled under the Original Project and assumed within the Certified SEIR.

Additionally, pursuant to the Modified Project Construction Traffic Management Plan (please refer to Addendum Section 2, *Project Description*, 2.3.8 C*onstruction Area Traffic Management Plan*), the Modified Project would be required to maintain appropriate access during construction activities.

Modified Project Conditions of Approval: None.

Summary

Based on the preceding, when compared to impacts identified in the Certified SEIR, no new or substantially increased transportation impacts would result from the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; The Avenue Specific Plan Traffic Analysis* (Urban Crossroads, Inc.) April 19, 2024; *The Avenue Specific Plan Amendment Vehicle Miles Traveled (VMT) Analysis* (Urban Crossroads, Inc.) March 17, 2024; *The Avenue Specific Plan, 2024 Amendment*.

18. TRIBAL CULTURAL RESOURCES

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or					X	
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.					X	

***Substantiation*:**

a, b) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: With the implementation of mitigation, the Certified SEIR concluded that impacts to prehistoric archeological resources, which include TCRs, would be less-than-significant (Certified SEIR, pp. 5.18-8 – 5.18-11).

Certified SEIR Mitigation Measures:

5-3 Upon receipt of an application for a proposed project subject to CEQA and within the City's jurisdiction, the City's representative shall consult with the relevant tribe(s)' representative(s) to determine if the proposed project is within a culturally sensitive area

to the tribe. If sufficient evidence is provided to reasonably ascertain that the site is within a tribal culturally sensitive area, an archaeologist shall prepare a cultural resources assessment. The findings of the cultural resources assessment shall be incorporated into the CEQA documentation. A copy of the report shall be forwarded to the tribe(s). If mitigation is recommended in the CEQA document, the procedure described in Mitigation Measure 5-4 shall be followed.

5-4 *Prior to the issuance of grading permits for a proposed project for which the CEQA document defines cultural resource mitigation for potential tribal resources, the project applicant shall contact the designated tribe(s) to notify them of the grading, excavation, and monitoring program. The applicant shall coordinate with the City of Ontario and the tribal representative(s) to develop mitigation measures that address the designation, responsibilities, and participation of tribal monitors during grading, excavation, and ground-disturbing activities; scheduling; terms of compensation; and treatment and final disposition of any cultural resources, sacred sites, and human remains discovered on the site. The City of Ontario shall be the final arbiter of the conditions for projects within the City's jurisdiction.*

TCR-1 *Tribal Cultural Resources Monitoring. The project archaeologist, in consultation with interested tribes, the developer, and the City of Ontario, shall develop an archaeological monitoring plan (AMP) to address the details, timing, and responsibility of archaeological and cultural activities that will occur on the project site. Details in the AMP shall include:*

1. *Project-related ground disturbance (including, but not limited to, brush clearing, grading, trenching, etc.) and development scheduling;*

2. *The development of a rotating or simultaneous schedule in coordination with the developer and the project archeologist for designated Native American Tribal Monitors from the consulting tribes during grading, excavation and ground disturbing activities on the site: including the scheduling, safety requirements, duties, scope of work, and Native American Tribal Monitors' authority to stop and redirect grading activities in coordination with all project archaeologists (if the tribes cannot come to an agreement on the rotating or simultaneous schedule of tribal monitoring, the Native American*

Heritage Commission shall designate the schedule for the onsite Native American Tribal Monitor for the proposed project);

3. *The protocols and stipulations that the developer, City, Tribes, and project archaeologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits that shall be subject to a cultural resources evaluation.*

At least 30 days prior to application for a grading permit and before any brush clearance, grading, excavation, and/or ground disturbing activities on the site, the developer shall retain a tribal cultural monitor to monitor all ground-disturbing activities in an effort to identify any unknown archaeological resources.

Pursuant to the AMP, a tribal monitor from the consulting tribe shall be present during the initial grading activities. If tribal resources are found during grubbing activities, the tribal monitoring shall be present during site grading activities.

TCR-2 Treatment and Disposition of Cultural Resources. In the event that Native American cultural resources are inadvertently discovered during the course of any ground-disturbing activities, including but not limited to brush clearance, grading, trenching, etc., for the proposed project, the following procedures will be carried out for treatment and disposition of the discoveries:

1. *Temporary Curation and Storage: During the course of construction, all discovered resources shall be temporarily curated in a secure location on-site or at the offices of the project archaeologist. The removal of any artifacts from the project site will need to be thoroughly inventoried with tribal monitor oversight of the process;*

2. *Treatment and Final Disposition: The landowner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and nonhuman remains as part of the required mitigation for impacts to cultural resources. The applicant shall relinquish the artifacts through one or more of the following methods and provide the City of Ontario with evidence of same:*

a. *Accommodate the process for on-site reburial of the discovered items with the consulting Native American tribes or bands. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloging, basic analysis, other analyses as recommended by the project archaeologist and approved by consulting tribes, and basic recordation have been completed; all documentation should be at a level of standard professional practice to allow the writing of a report of professional quality;*

b. *A curation agreement with an appropriate qualified repository in San Bernardino County that meets federal standards per 36 CFR Part 79, and therefore the resource would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility in San Bernardino County, to be accompanied by payment of the fees necessary for permanent curation;*

c. *For purposes of conflict resolution, if more than one Native American tribe or band is involved with the project and cannot come to an agreement as to the disposition of cultural materials, materials shall be curated at the San Bernardino County Museum by default;*

d. *At the completion of grading, excavation, and ground-disturbing activities on the site, a Phase IV Monitoring Report shall be submitted to the City documenting monitoring activities conducted by the project archaeologist and Native Tribal Monitors within 60 days of completion of grading. This report shall document the impacts to the known resources on the property; describe how each mitigation measure was fulfilled; document the type of cultural resources recovered and the disposition of such resources; provide evidence of the required cultural sensitivity training for the construction staff held during the required pregrade meeting; and, in a confidential appendix, include the daily/weekly monitoring notes from the archaeologist. All reports produced will be submitted to the City, County Museum, and consulting tribes.*

Modified Project: Tribal scoping and outreach was previously undertaken for The Avenue Specific Plan in July 2021. At that time, responses from Agua Caliente Band of Cahuilla Indians, the Gabrieleno Band of Mission Indians – Kizh Nation, Quechan Tribe of the Fort Yuma Reservation, and the San Manuel Yuhaaviatam Band of Mission Indians were received, but no consultation was requested for the Specific Plan. The Kizh Nation and San Manuel Band requested consultation if/when a specific development project was to be built. Additionally, the Gabrieleno Band of Mission Indians – Kizh Nation provided a series of measures to be included as conditions of approval for future development projects. (see Conditions of Approval TR-1 through TR-3, below). These Conditions will apply to future project approvals within the Specific Plan Area.

Outreach for this Project occurred again in December 2022 with SB-18 notifications sent. Responses were received from San Manuel Band of Mission Indians - Serrano Nation, Gabrieleno Band of Mission Indians - Kizh Nation, Quechan Tribe of the Fort Yuma Reservation, Gabrieleno Band of Mission Indians - Tongva Tribe, Agua Caliente Band of Cahuilla Indians, Morongo Band of Mission Indians, and the San Manuel Yuhaaviatam Band of Mission Indians. Out of those responses, San Manuel Band of Mission Indians - Serrano Nation and Gabrieleno Band of Mission Indians - Kizh Nation provided comments, with both requesting consultation on future development projects.

With the implementation of the mitigation presented in the Certified SEIR, in addition to the Conditions of Approval listed below, the potential for the Modified Project to cause a substantial adverse change in the significance of a tribal cultural resource would be less-than-significant. When compared to the Certified SEIR findings, no new or substantially increased impacts to tribal cultural resources would result from the Modified Project.

Modified Project Conditions of Approval:

TR-1 Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities:

A. The project applicant/lead agency shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation. The monitor

shall be retained prior to the commencement of any "ground-disturbing activity" for the subject project at all project locations (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). "Ground-disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching.[9]

B. *A copy of the executed monitoring agreement shall be submitted to the lead agency prior to the earlier of the commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity.*[10]

C. *The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or "TCR"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the project applicant/lead agency upon written request to the Tribe.*

D. *On-site tribal monitoring shall conclude upon the latter of the following (1) written confirmation to the Kizh from a designated point of contact for the project applicant/lead agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the Kizh to the project applicant/lead agency that no future, planned construction activity and/or development/construction phase at the project site possesses the potential to impact Kizh TCRs.*

[9] Tribal monitoring shall cease once all ground disturbance activities have been completed with respect to the property or portion thereof. Example: Once excavation, grading, trenching, etc. have occurred tribal monitoring shall cease.

[10] The extent of necessary manpower and hourly wage shall be subject to commercially reasonable standards. If there is a dispute as to scope of the necessary labor needs or wage rates, the City shall arbitrate any such disputes in accordance with commercially reasonable standards.

E. Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Kizh monitor and/or Kizh archaeologist. The Kizh will recover and retain all discovered TCRs in the form and/or manner the Tribe deems appropriate, in the Tribe's sole discretion, and for any purpose the Tribe deems appropriate, including for educational, cultural and/or historic purposes.

TR-2 Unanticipated Discovery of Human Remains and Associated Funerary Objects:

A. Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute.

B. If Native American human remains and/or grave goods discovered or recognized on the project site, then all construction activities shall immediately cease. Health and Safety Code Section 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and all ground-disturbing activities shall immediately halt and shall remain halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe they are Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission, and Public Resources Code Section 5097.98 shall be followed.

C. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2).

D. Construction activities may resume in other parts of the project site at a minimum of 200 feet away from discovered human remains and/or burial goods, if the Kizh determines in its sole discretion that resuming construction activities at that distance is acceptable and provides the project manager express consent of that determination (along with any other mitigation measures the Kizh monitor and/or archaeologist deems necessary). (CEQA Guidelines Section 15064.5(f).)

E. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods. Any historic archaeological material that is not Native American in origin (non-TCR) shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, it shall be offered to a local school or historical society in the area for educational purposes.

F. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.

TR-3 Procedures for Burials and Funerary Remains:

A. As the Most Likely Descendant ("MLD"), the Koo-nas-gna Burial Policy shall be implemented. To the Tribe, the term "human remains" encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the preparation of the soil for burial, the burial of funerary objects with the deceased, and the ceremonial burning of human remains.

B. If the discovery of human remains includes four or more burials, the discovery location shall be treated as a cemetery and a separate treatment plan shall be created.

C. The prepared soil and cremation soils are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects. Cremations will either be removed in bulk or by means as necessary to ensure complete recovery of all sacred materials.

D. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to

recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed.

E. In the event preservation in place is not possible despite good faith efforts by the project applicant/developer and/or landowner, before ground-disturbing activities may resume on the project site, the landowner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects.

F. Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location agreed upon between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.

G. The Tribe will work closely with the project's qualified archaeologist to ensure that the excavation is treated carefully, ethically, and respectfully. If data recovery is approved by the Tribe, documentation shall be prepared and shall include (at a minimum) detailed descriptive notes and sketches. All data recovery data recovery-related forms of documentation shall be approved in advance by the Tribe. If any data recovery is performed, once complete, a final report shall be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive and/or destructive diagnostics on human remains.

Summary

When compared to impacts considered and addressed in the Certified SEIR, no new significant, substantially increased, or substantially different impacts to tribal cultural resources would occur as a result of the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022*; *The Avenue Specific Plan, 2024 Amendment*.

19. UTILITIES AND SERVICE SYSTEMS

Would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?					X	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?					X	
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?					X	
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?					X	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?					X	

***Substantiation*:**

a) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR concluded that, although buildout of TOP 2050 would generate additional wastewater, it would be adequately treated in accordance with Regional Water Quality Control Board and California Department of

Public Health requirements. City sanitary sewer systems, and stormwater management would be expanded to accommodate growth associated with the buildout of TOP 2050.

Other utilities systems would be extended and improved consistent with purveyor master plans and as warranted by market conditions. Compliance with regulatory requirements and standard conditions of approval acts to reduce impacts on utilities systems generally, improve system efficiencies, and reduce system maintenance requirements. Collectively, this diminishes the requirement to construct new systems or replace existing systems.

Construction of utilities systems serving the City under TOP 2050 buildout conditions would not result in substantially different impacts than would result from development of TOP 2050 land uses generally.

The Certified SEIR concluded that with implementation of regulatory requirements and standard conditions of approval, the potential for TOP 2050 to require or result in the relocation or construction of new or expanded utilities systems, the construction or relocation of which would result in adverse environmental impacts would be less-than-significant (Certified SEIR, p. 5.19-11).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project amends the site's current land use designations to conform to TOP 2050 land use designations. Proposed residential and commercial uses implemented under the Modified Project would not increase demands on utilities systems beyond those reflected in TOP 2050 and evaluated in TOP 2050 SEIR.

The Modified Project is fully-served by utilities and services systems including: water, wastewater treatment, storm water drainage, electric power, natural gas, and telecommunication facilities. Any localized modification of or connections to serving utilities systems implemented by the Modified Project would not result in substantially different impacts than would result from development of the Modified Project land uses

generally. These impacts would be no greater than or different than impacts considered and addressed in the Certified SEIR.

Modified Project Conditions of Approval: None.

b) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: A foundational document for compliance with both SB 610 and SB 221 is the Urban Water Management Plan (UWMP). Both of these statutes repeatedly identify the UWMP as a planning document that, if properly prepared, can be used by a water supplier to meet the standards set forth in both statutes. Thorough and complete UWMPs will allow water suppliers to use UWMPs as a foundation to fulfill the specific requirements of these two statutes. Cities, counties, water districts, property owners, and developers will all be able to utilize this document when planning for and proposing new projects (Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001).

The City of Ontario 2020 Urban Water Management Plan (UWMP) substantiates that there would be sufficient and reliable water supplies available to the City through 2045. The Certified SEIR concludes that buildout of the City under TOP 2050 would incrementally increase water demands. However, water demands of the City would remain below 2020 UWMP water demand projections. On this basis, there would be sufficient water supplies available to the City under TOP 2050 buildout conditions. The potential for there to be insufficient water supplies available to serve the City and reasonably foreseeable future development during normal, dry and multiple dry years is therefore considered less-than-significant (Certified SEIR, pp. 5.19-30, 5.19-31).

Certified SEIR Mitigation Measures: None.

Modified Project: Consistent with SB610 requirements, a Water Supply Assessment (WSA) has been prepared for the Modified Project (see: *Water Supply Assessment and Written Verification of Sufficient Water Supply, The Avenue Specific Plan, City Of Ontario* [Albert A. Webb Associates] January 24, 2024; Project WSA, Addendum Appendix G).

The Project WSA concludes that water demand of the Modified Project was not fully accounted for in the 2020 UWMP (Project WSA, p. 25). The WSA also concludes that "water supplies available to OMUC [Ontario Municipal Utilities Company] currently meet and exceed citywide water demands. Groundwater production by OMUC is currently less than their existing rights and within their production capacity. Regardless, OMUC has the means and right to exceed their groundwater allocation in the Chino Basin when required to meet demand pursuant to the Judgment. Further, OMUC has rights to water held in storage that would supply all City demands for more than two years. In addition to groundwater, OMUC can supply water to the Project purchased from the WFA that is within their existing entitlements and capacities" (Project WSA, p. 64). On this basis, the potential for the Modified Project to result in insufficient water supplies available to serve the City and reasonably foreseeable future development during normal, dry and multiple dry years would be less-than-significant.

Modified Project Conditions of Approval: None.

c) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified EIR Conclusions: The Certified EIR recognizes that buildout of the City under TOP 2050 would result in increased wastewater treatment demands. However, existing wastewater treatment plants have excess capacity sufficient to meet these increased demands. Planned wastewater treatment plant expansion would provide additional capacity available to serve the City under TOP 2050 buildout conditions. Treated wastewater meets or exceeds RWQCB and NPDES standards and requirements. On this basis, the Certified EIR concluded that the potential for buildout of City under TOP 2050 to result in or cause insufficient or inadequate wastewater treatment would be less-than-significant.

Certified EIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. By extension, the Modified Project wastewater treatment demand is reflected in wastewater treatment

demand of the City under TOP 2050, as considered and addressed in the Certified SEIR. The Project proposes conventional urban residential/commercial development. Wastewater generated by the Modified Project would not require special or atypical treatment. Based on the preceding, the potential for the Modified Project to result in or cause insufficient or inadequate wastewater treatment would be less-than-significant.

Modified Project Conditions of Approval: None.

d, e) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR concluded that buildout of TOP 2050 would be served by landfills with sufficient permitted capacities to accommodate all solid waste disposal needs. Additionally, no conflicts with federal, state, and local management and reduction statutes and regulations related to solid waste were identified. The Certified SEIR determined that impacts related to solid waste would be less-than-significant (Certified SEIR, p. 5.17-31).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. By extension, the Modified Project solid waste management demand is reflected in solid waste management demand of the City under TOP 2050, as considered and addressed in the Certified SEIR. Moreover, the Modified Project would comply with applicable solid waste management and reduction statutes and regulations (summarized below), acting to further reduce solid waste management impacts of the Modified Project.

City of Ontario Construction & Demolition Recycling Plan (CDRP)

Pursuant to Ontario Municipal Ordinance (OMC) Sec. 6-3.602 *Construction & Demolition Recycling Plan* and the 2016 California Green Building Standards Code (CALGreen), all building and demolition permit applicants are required to prepare and submit a Construction & Demolition Recycling Plan (CDRP) and a CDRP Summary Report. OMC Sec. 6-3.602 and CALGreen require all construction and qualifying renovation and

demolition projects to divert at least 65% of all generated waste materials. The Modified Project would be subject to (OMC) Sec. 6-3.602 and CALGreen construction waste diversion mandates. The City oversees compliance with OMC Sec. 6-3.602 and CALGreen construction waste diversion mandates.

AB 939 - California Integrated Waste Management Act of 1989

Solid waste management is guided by the California Integrated Waste Management Act of 1989 (AB 939), which emphasizes resource conservation through reduction, recycling, and reuse of solid waste. AB 939 requires that localities conduct a Solid Waste Generation Study (SWGS) and develop a Source Reduction Recycling Element (SRRE), providing for a minimum 50 percent reduction in waste sent to landfills. Diversion rates are calculated and tracked by the California Integrated Waste Management Board (Board). Alternatively, the Board can determine that a jurisdiction's "good faith efforts" to implement comprehensive diversion programs have satisfied the requirement even if diversion levels are below 50 percent.

To reduce waste disposal, AB 939 requires every California city and county to divert 50 percent of its waste from landfills. Residential, commercial and governmental waste recycling programs in support of the SRRE have been implemented by the City.

The City is currently meeting or exceeding all AB 939 solid waste diversion targets. The Modified Project would be required to comply with AB 939 as implemented by the City.

AB 341 - Commercial Recycling

Assembly Bill 341 mandates recycling for businesses producing four or more cubic yards of solid waste per week, and multifamily dwellings of five units or more. Under the law, business must separate recyclables from trash and then either subscribe to City of Ontario recycling services, self-haul their recyclables, or contract with a permitted private recycler. The Modified Project would be subject to Assembly Bill 341 mandates.

AB 1826 - Commercial Organics Recycling

Under Assembly Bill 1826, businesses are required to arrange for organic recycling services. The Modified Project would be subject to Assembly Bill 1826 mandates.

The California Department of Resources Recycling and Recovery (CalRecycle) oversees both the mandatory commercial recycling program and the mandatory commercial organics recycling program. The City of Ontario supports both bills through public outreach, monitoring of recycling efforts, providing notification to non-compliant businesses, and periodic State reporting.

The Modified Project would be required to comply with the above solid waste management statutes and regulations. The City and CalRecycle would oversee and monitor compliance with applicable solid waste management statutes and regulations.

SB 1383 - Organic Waste Management Requirements

SB 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The law grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that not less than 20 percent of currently disposed edible food is recovered for human consumption by 2025.

The City is currently developing programs and strategies to address the requirements of SB 1383, the Modified Project would be required to ultimately abide by those requirements.

As stated in the Certified SEIR, impacts to solid waste services and facilities from new development are addressed through the payment of development impact fees as outlined in the City of Ontario Development Impact Fee Calculation and Nexus Fee Schedules. With the payment of required development impact fees and compliance with existing solid waste regulations, the Modified Project would not result in any new or substantially increased solid waste impacts not previously identified within the Certified SEIR.

Based on the preceding, the Modified Project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals would be less-than-significant. Additionally, the Modified Project would comply with applicable solid waste

management and reduction statutes and regulations. On this basis, the Modified Project would result in less-than-significant solid waste management impacts. The Modified Project would not result in solid waste management impacts substantially greater than or substantially than solid waste management impacts considered and addressed in the Certified SEIR.

Modified Project Conditions of Approval: None.

When compared to impacts considered and addressed in the Certified SEIR, no new significant, substantially increased, or substantially different utilities and service systems impacts would result from the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; Water Supply Assessment and Written Verification of Sufficient Water Supply, The Avenue Specific Plan, City Of Ontario* (Albert A. Webb Associates) January 24, 2024*; The Avenue Specific Plan, 2024 Amendment*.

20. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?					X	
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?					X	

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?					X	
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?					X	

***Substantiation*:**

a – d) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: As discussed in the Certified SEIR, CAL FIRE has determined that the City contains no areas subject to very high wildfire risk. However, the City recognizes that even though fuel loading is light in Ontario and fire risk comes primarily from urban fires, not wildfires, there is some risk related to wildfires. There are many resources available to address wildland fires should they arise - CAL FIRE's *2019 Strategic Fire Plan for California*, the CFC, County of San Bernardino MJHMP, City of Ontario LHMP, and fire services from the City of Ontario Fire Department. With adherence to these building practices, development and infrastructure associated with TOP 2050 would not exacerbate risk or result in post-wildfire hazards (e.g., landslides, mudflows, and flooding). In addition, TOP 2050 incorporates policies to prevent wildfire hazards and support the community during wildfire events (Certified SEIR, pp. 5.20-15, 5.20-16). On this basis, the Certified SEIR concluded that potential wildfire impacts resulting from TOP 2050 would be less-than-significant.

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. By extension, potential wildfire impacts affecting the Modified Project are reflected in the assessment of wildfire impacts affecting the City under TOP 2050, as considered and addressed in the Certified SEIR. Per CAL FIRE "Fire Hazard Severity Zone Maps," the City and the Modified Project site are not located within or near a state responsibility area, or within an area classified as a very high fire hazard severity zone.

Fire protection services for the Modified Project site and vicinity are currently provided by the Ontario Fire Department (Fire Department). Adherence to Fire Department building and site design requirements, and compliance with codified fire protection and prevention measures during construction and operation of the Modified Project are required. On this basis, when compared to the Certified SEIR findings, no new or substantially increased wildfire impacts would result from the Modified Project.

Modified Project Conditions of Approval: None.

Summary

When compared to impacts considered and addressed in the Certified SEIR, no new significant, substantially increased, or substantially different wildfire impacts would result from the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; SW San Bernardino County, Fire Hazard Severity Zones in SRA* (November 7, 2007); https://osfm.fire.ca.gov/media/6781/fhszs_map62.pdf; *The Avenue Specific Plan, 2024 Amendment.*

21. MANDATORY FINDINGS OF SIGNIFICANCE

Does the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?					X	
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of the past projects, the effects of other current projects, and the effects of probable future projects.)					X	
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?					X	

***Substantiation*:**

a – c) *No Changes or New Information Requiring Preparation of an MND or EIR.*

This Addendum defines, describes, compares, and contrasts potential environmental impacts of the Modified Project in the context of the environmental impacts assessed in the Certified SEIR. In so doing, this Addendum substantiates consistency with applicable *CEQA Guidelines* provisions addressing preparation of an Addendum to a previously-Certified SEIR.

As supported by the discussions presented herein, the Modified Project would not result in or cause any new significant impacts, substantively increased impacts, or substantively different environmental impacts than those previously considered and addressed in the Certified SEIR. Analysis beyond that presented in this Addendum is not required or warranted.

4.0 DETERMINATION

4.0 DETERMINATION

As supported by the analysis presented herein, the potential environmental effects of the development allowed by the Modified Project, and associated required discretionary actions, have been adequately addressed in the Certified EIR. As such, the development of any further information and analysis is not warranted. Pursuant to the requirements of *CEQA Guidelines* Section 15162 and 15164, the following determinations have been made.

Major Revisions to the Certified EIR Not Required

Based on the preceding analysis and information, there is no evidence that major changes to the Certified EIR are required. This Addendum indicates that there is no new significant or more severe environmental impact, and that the development of the Modified Project described herein would essentially have the same, or reduced, impacts as those considered and addressed in the Certified EIR.

No Substantial Change in Circumstances Requiring Major Revisions to the Certified EIR

No information exists in the record, or is otherwise available that indicates that there are substantial changes in circumstances that would require major changes to the Certified EIR.

No New Information Showing Greater Significant Effects than Identified in the Certified EIR

This Addendum has considered all available relevant information to determine whether there is new information, which was not available at the time the Certified EIR was prepared, that may indicate that a new significant effect may occur that was not reported in the Certified EIR. As supported by the analysis presented in this

Addendum, there is no substantial new information that was not available at the time of the Certified EIR, indicating that there would be a new, significant impact requiring major revisions of the Certified EIR.

No New Information Showing Ability to Reduce Significant Effects Identified in the Certified EIR

The Addendum analysis substantiates that there are no significant impacts requiring identification of alternatives to the Modified Project. The continued implementation of applicable mitigation from previous relevant CEQA documents, as incorporated in this Addendum, reduce the Project's potentially significant impacts to levels that are less-than-significant.

Summary

The analysis presented in this document substantiates that the analysis presented in the Certified EIR is sufficient to satisfy CEQA requirements for the proposed Modified Project. That is, with incorporation of mitigation, implementation of the Modified Project described and evaluated herein would not result in any significant new, different, additional, or substantially increased environmental impacts than were previously considered and addressed in the Certified EIR. As such, environmental assessment of the Modified Project does not require any major revision of the previously-approved Certified EIR, nor would development allowed by the Modified Project result in conditions that would require preparation of further analysis as described in the *CEQA Guidelines*.

5.0 MITIGATION SUMMARY

5.0 MITIGATION SUMMARY

5.1 OVERVIEW

The following Table 5.1-1, *Mitigation Summary Matrix*, presents relevant mitigation measures incorporated in the Certified SEIR, and Conditions of Approval proposed by the Modified Project described herein.

Certified SEIR mitigation measures that are no longer required are indicated by ~~strikeout font~~. New Conditions of Approval to be implemented under the Modified Project are indicated by ***bold italic text***. The "Remarks" column identifies status and applicability of all Mitigation Measures/Conditions of Approval. Required measures presented at Table 5.1-1 will be implemented through the Modified Project Conditions of Approval or as otherwise deemed appropriate by the City.

At the discretion of the City, any of the mitigation measures/conditions of approval identified at Table 5.1-1 may be modified to respond to incumbent conditions and context as they may apply to development proposed by the Modified Project. Any such modifications shall not result in any new significant environmental impacts. Rather, modifications (if any) would ensure compliance and consistency with current City goals, policies, regulations, and development programs/plans.

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	**Remarks**
Aesthetics	
N/A	Mitigation is not identified in the Certified SEIR. As substantiated in this Addendum, all aesthetics impacts of the Modified Project would be less-than-significant, or no impacts would result from the Modified Project. No mitigation is required of the Modified Project.
Agriculture and Forestry Resources	
N/A	Mitigation is not identified in the Certified SEIR. As substantiated in this Addendum, all agriculture and forestry resources impacts of the Modified Project would be less-than-significant, or no impacts would result from the Modified Project. No mitigation is required of the Modified Project.
Air Quality	
3-1 Prior to discretionary approval by the City of Ontario for development projects subject to CEQA (California Environmental Quality Act) review (i.e., nonexempt projects), project applicants shall prepare and submit a technical assessment evaluating potential project construction-related air quality impacts to the City of Ontario Planning Department for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology for assessing air quality impacts. If construction-related criteria air pollutants are determined to have the potential to exceed the South Coast AQMD–adopted thresholds of significance, the City of Ontario building department shall require feasible mitigation measures to reduce air quality emissions. Potential measures shall be incorporated as conditions of approval for a project and may include:	Applicable. This Measure is carried forward from the Certified SEIR and would be implemented by the Modified Project. Consistent with this measure, a development-specific air quality impact analysis has been prepared for the Modified Project. Please refer to the Modified Project AQIA, Addendum Appendix B. The Modified Project would implement MM 3-1 emissions reductions/emissions control measures per City Conditions of Approval.

Table 5.1-1
Mitigation Summary Matrix

Mitigation Measures	Remarks

• Require fugitive dust control measures that exceed South Coast Air Quality Management District's Rule 403, such as:
  ○ Requiring use of nontoxic soil stabilizers to reduce wind erosion.
  ○ Applying water every four hours to active soil disturbing activities.
  ○ Tarping and/or maintaining a minimum of 24 inches of freeboard on trucks hauling dirt, sand, soil, or other loose materials.
  ○ Using construction equipment rated by the United States Environmental Protection Agency as having Tier 4 interim or higher exhaust emission limits.
• Ensuring construction equipment is properly serviced and maintained to the manufacturer's standards.
• Limiting nonessential idling of construction equipment to no more than five consecutive minutes.
• Using Super-Compliant VOC paints for coating architectural surfaces whenever possible. A list of Super-Compliant architectural coating manufactures can be found on the South Coast Air Quality Management District's website at: http://www.aqmd.gov/prdas/brochures/Super-Compliant_AIM.pdf.
These identified measures shall be incorporated into all appropriate construction documents (e.g., construction management plans) submitted to the City and shall be verified by the City's Planning Department.	

3-2 The City of Ontario shall evaluate new development proposals within the City and require all developments to include access or linkages to alternative modes of transportation, such as transit stops, bike paths, and/or pedestrian paths (e.g., sidewalks).	Applicable. This Measure is carried forward from the Certified SEIR and shall be implemented by the Modified Project.

Table 5.1-1
Mitigation Summary Matrix

Mitigation Measures	Remarks
AQ-1 Prior to discretionary approval by the City of Ontario for development projects subject to CEQA (California Environmental Quality Act) review (i.e., nonexempt projects), project applicants shall prepare and submit a technical assessment evaluating potential project operation-phase-related air quality impacts to the City of Ontario Planning Department for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology in assessing air quality impacts. If operation-related air pollutants are determined to have the potential to exceed the South Coast AQMD–adopted thresholds of significance, the City of Ontario Planning Department shall require that applicants for new development projects incorporate mitigation measures to reduce air pollutant emissions during operational activities. The identified measures shall be included as part of the conditions of approval. Possible mitigation measures to reduce long-term emissions could include, but are not limited to the following: • For site-specific development that requires refrigerated vehicles, the construction documents shall demonstrate an adequate number of electrical service connections at loading docks for plug-in of the anticipated number of refrigerated trailers to reduce idling time and emissions. • Applicants for manufacturing and light industrial uses shall consider energy storage and combined heat and power in appropriate applications to optimize renewable energy generation systems and avoid peak energy use. • Site-specific developments with truck delivery and loading areas and truck parking spaces shall include signage as a reminder to limit idling of vehicles while parked for	Applicable. This Measure is carried forward from the Certified SEIR and would be implemented by the Modified Project. Consistent with this measure, a development-specific air quality impact analysis has been prepared for the Modified Project. Please refer to the Modified Project AQIA, Addendum Appendix B. The Modified Project would implement MM AQ-1 emissions reductions/emissions control measures per City Conditions of Approval.

Table 5.1-1
Mitigation Summary Matrix

Mitigation Measures	Remarks
loading/unloading in accordance with California Air Resources Board Rule 2845 (13 CCR Chapter 10 sec. 2485). • Provide changing/shower facilities as specified in Section A5.106.4.3 of CALGreen (Nonresidential Voluntary Measures). • Provide bicycle parking facilities per Section A4.106.9 of CALGreen (Residential Voluntary Measures). • Provide preferential parking spaces for low-emitting, fuel-efficient, and carpool/van vehicles per Section A5.106.5.1 of CALGreen (Nonresidential Voluntary Measures). • Provide facilities to support electric charging stations per Section A5.106.5.3 and Section A5.106.8.2 of CALGreen (Nonresidential Voluntary Measures; Residential Voluntary Measures). Applicant-provided appliances shall be Energy Star-certified appliances or appliances of equivalent energy efficiency (e.g., dishwashers, refrigerators, clothes washers, and dryers). Installation of Energy Star-certified or equivalent appliances shall be verified by the City during plan check.	
Biological Resources	
BIO-1 Avoidance of Nesting Burrowing Owls: No more than 72 hours prior to any site disturbances, focused surveys for the burrowing owl shall be conducted. If absence of this species is confirmed, project work can proceed. If, however, burrowing owl is located on site, the appropriate resource agencies (CDFW and USFWS) shall be contacted. The Applicant shall consult with the wildlife agencies regarding the most appropriate methods and timing for removal of owls. As necessary, owls will be actively evicted following agency approved protocols (i.e., placing a one-way door at the burrow	Mitigation is not identified in the Certified SEIR. Condition of Approval BIO-1 is incorporated to ensure that impacts to the burrowing owl are maintained at levels that would be less-than-significant.

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	**Remarks**
entrance to ensure that owls cannot access the burrow once they leave). Any such active eviction shall occur outside of the breeding/nesting season. That is, if active eviction is required, eviction shall be accomplished between September 1 and February 15. If more than 30 days have elapsed between owl eviction and completion of clearing and grubbing activities, a subsequent survey for the burrowing owl shall be conducted to ensure that owls have not re-populated the site. Any reoccupation by owls will require subsequent protocol active eviction.	
BIO-2 Avoidance of Nesting Migratory Birds: If possible, all vegetation removal activities shall be scheduled from August 1 to February 1, which is outside the general avian nesting season. This would ensure that no active nests would be disturbed, and that removal could proceed rapidly. If vegetation is to be cleared during the nesting season, all suitable habitat will be thoroughly surveyed within 72 hours prior to clearing for the presence of nesting birds by a qualified biologist (Biologist). The Biologist shall be approved by the City and retained by the Applicant. The survey results shall be submitted by the Applicant to the City Planning Department. If any active nests are detected, the area of nesting shall be flagged and mapped on the construction plans along with a minimum 300-foot buffer, with the final buffer distance to be determined by the Project Biologist. The buffer area shall be avoided until, as determined by the Biologist, the nesting cycle is complete, or it is concluded that the nest has failed. In addition, the Biologist shall be present on the site to monitor the vegetation removal to ensure that any nests, which were not detected during the initial survey, are not disturbed.	Mitigation is not identified in the Certified SEIR. Condition of Approval BIO-2 is incorporated to ensure that impacts to the nesting migratory birds are maintained at levels that would be less-than-significant.

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	**Remarks**
BIO-3 To the extent not considered and addressed in prior biological resources assessments, the Project DSFLF Study, or the January 2024 Biological Update, and to properly assess and address potential biological resources impacts, Biological Resources surveys shall be prepared prior to approval of Tentative Tract Maps within the Modified Project site. If suitable habitat is determined present onsite, subsequent focused surveys shall be completed and no "take" of any protected species and/or their habitat shall occur without obtaining the requisite regulatory permits from State and Federal agencies.	Mitigation is not identified in the Certified SEIR. Condition of Approval BIO-3 is incorporated to ensure that impacts affecting areas of the Specific Plan that may not have been previously identified are resolved prior to the approval of Tentative Tract Maps for the affected areas.
Cultural Resources	
5-1 Historic or potentially historic resources in the City shall be evaluated for historic significance through the City's tier system prior to the issuance of plan or development approvals. Pursuant to City's Development Code (Chapter 7, Historic Preservation), each historic resource shall be fully documented and cataloged pursuant to Historic American Building Survey/Historic American Engineering Record (HABS/HAER) standards, to provide a record of the resource, including, but not limited to: [i] the preparation of site plans, floor plans, exterior and interior elevations, and detail drawings of character defining features (such as moldings, stairs, etc.); and [ii] photographs of the resource, including the exterior, interior, and interior and exterior character defining features (such as moldings, light fixtures, trim patterns, etc.).	Applicable. This Measure is carried forward from the Certified SEIR and shall be implemented by the Modified Project. Note: Previous surveys indicate there are no known or probable historic resources within the Modified Project site.
5-2 In areas of documented or inferred from evident archaeological and/or paleontological resource presence, City staff shall require applicants for development permits to provide studies to document the presence/absence of such resources. On properties where resources are identified, such studies shall provide a detailed	Applicable. This Measure is carried forward from the Certified SEIR and shall be implemented by the Modified Project. Note: Previous surveys indicate there are no known or probable archaeological and/or paleontological resources within the Modified Project site. The Modified Project would implement MM 5-2 measures providing for

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	**Remarks**
mitigation plan, including a monitoring program and recovery and/or in situ preservation plan, based on the recommendations of a qualified cultural preservation expert. The mitigation plan shall include the following requirements: a) Archaeologists and/or paleontologist shall be retained for the project and will be on call during grading and other significant ground-disturbing activities. b) Should any cultural/scientific resources be discovered, no further grading shall occur in the area of the discovery until the Planning Director is satisfied that adequate provisions are in place to protect these resources. c) Unanticipated discoveries shall be evaluated for significance by a San Bernardino County Certified Professional Archaeologist/Paleontologist. If significance criteria are met, then the project shall be required to perform data recovery, professional identification, radiocarbon dates, and other special studies; submit materials to a museum for permanent curation; and provide a comprehensive final report including catalog with museum numbers.	protection of unknown resources that may exist in a buried context. Please refer also to Conditions of Approval that would be implemented under the topical heading "Tribal Cultural Resources."
Energy	
N/A	Mitigation is not identified in the Certified SEIR. As substantiated in this Addendum, all energy impacts of the Modified Project would be less-than-significant, or no impacts would result from the Modified Project. No mitigation is required of the Modified Project.
Geology and Soils	
Please refer to Mitigation Measure 5-2, presented previously.	Applicable. Mitigation is carried forward from the Certified EIR and shall be implemented by the Modified Project.

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	**Remarks**
Greenhouse Gas Emissions	
N/A	Mitigation is not identified in the Certified SEIR. As substantiated in this Addendum, all GHG impacts of the Modified Project would be less-than-significant, or no impacts would result from the Modified Project. No mitigation is required of the Modified Project.
Hazards and Hazardous Materials	
HM-1 Removal of structures, including, but limited to, under- and aboveground storage tanks, septic systems, and water wells shall conform to all Federal, State, and local agency regulations (specifically with those required by the City Building and Safety Department and the Hazardous Materials Division of the San Bernardino County Fire Department). Due to the extensive disposal requirements and protocols contained within these regulatory schemes, implementation and adherence to these various regulatory requirements will ensure that no significant impacts occur.	Mitigation is not identified in the Certified SEIR. Condition of Approval HM-1 is incorporated to ensure compliance with applicable regulations, ordinances, and policies.
HM-2 Prior to grading activities for any areas not previously tested, a methane gas assessment shall be prepared by a licensed professional with expertise in soil gas assessments for subdivisions proposed on former dairies, poultry ranches, hog ranches, livestock feed operations and similar facilities to determine the presence of methane gas within the project boundary. The methane gas assessment shall identify monitoring and mitigation strategies and approaches. All mitigation measures/plans and specifications shall be reviewed and approved by the City of Ontario. ***Such an assessment may take two steps. A preliminary assessment will be done prior to grading to determine exactly where dairies have existed in the past so that the post grading***	Mitigation is not identified in the Certified SEIR. Condition of Approval HM-2 is incorporated to ensure compliance with applicable regulations, ordinances, and policies.

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	**Remarks**
assessment/mitigation measures can be focused on the portions of the Planning Areas that have included former agricultural activities. The second step will include actual testing of graded pads no sooner than 30 days after construction to determine if methane is detected above 5,000 ppm. ***The following grading guidelines shall also be adhered to:*** • ***Careful clearing, grubbing, segregation, and stockpiling or disposal near surface, of organics-rich soils at the site prior to the initiation of mass grading activities.*** • ***The identification and segregation/stockpiling or disposal of deeper soils which contain elevated levels of organic material. Soils with an organic content of 0.4% or higher shall be segregated for controlled placement that ensures that methane levels are below 5,000 ppm.*** • ***Soils with organic content in excess of 0.4% shall not be placed as "deep" fill. Soils with organic contents in excess of this amount shall be placed in open areas within approximately two feet of the finished ground surface.***	
HM-3 To eliminate the risk of ground cracking, manure shall be removed from the site, such that the organic matter content of onsite soils shall not exceed 2% (a 2% total organic content is allowed, of which no more than 1% can be manure) in the building foundation areas when mixed with underlying clean soils and imported fill.	Mitigation is not identified in the Certified SEIR. Condition of Approval HM-3 is incorporated to ensure compliance with applicable regulations, ordinances, and policies.

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	**Remarks**
HM-4 To the extent not previously prepared and to properly assess and address potential hazardous materials, a Phase I Environmental Site Assessment (ESA) shall be performed by a registered environmental assessor (REA) prior to the approval of the Tentative Tract Map, site plan or other discretionary approval for a given phase of development. If potential hazardous materials or conditions are identified in the Phase I report, the recommendations of the ESA shall be implemented. Such recommendations shall include surficial sampling and chemical analysis within agricultural areas or where soil staining was observed. The Phase I ESA shall be provided to the City and shall be included in any CEQA analysis prepared in connection with the consideration of the discretionary approval for development.	Mitigation is not identified in the Certified SEIR. Condition of Approval HM-4 is incorporated to ensure compliance with applicable regulations, ordinances, and policies.
HM-5 If, while performing any excavation as part of Project construction, material that is believed to be hazardous waste as defined in Section 25117 of the California Health and Safety Code is discovered, the developer shall contact the City Fire Department and the County of San Bernardino Fire Department Hazardous Materials Division. Excavation shall be stopped until the material has been tested and the absence of hazardous waste has been confirmed. If hazardous waste is determined to be present, the California Department of Toxic Substances control shall be contacted and the material shall be removed and disposed of pursuant to applicable provisions of California law.	Mitigation is not identified in the Certified SEIR. Condition of Approval HM-5 is incorporated to ensure compliance with applicable regulations, ordinances, and policies.
Hydrology and Water Quality	
N/A	Mitigation is not identified in the Certified SEIR. As substantiated in this Addendum, all hydrology and water quality impacts of the Modified Project would be less-than-significant, or no impacts would result from the Modified Project. No mitigation is required of the

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	**Remarks**
	Modified Project.
Land Use and Planning	
N/A	Mitigation is not identified in the Certified SEIR. As substantiated in this Addendum, all land use and planning impacts of the Modified Project would be less-than-significant, or no impacts would result from the Modified Project. No mitigation is required of the Modified Project.
Mineral Resources	
N/A	Mitigation is not identified in the Certified SEIR. As substantiated in this Addendum, all mineral resources impacts of the Modified Project would be less-than-significant, or no impacts would result from the Modified Project. No mitigation is required of the Modified Project.
Noise	
~~12-1 Prior to the issuance of building permits for any project that involves a noise sensitive use within the 65 dBA CNEL contour of the Ontario International Airport, the project property owner/developers shall retain an acoustical engineer to conduct an acoustic analysis and identify, where appropriate, site design features and/or required building acoustical improvements (e.g., sound transmission class rated windows, doors, and attic baffling), to ensure compliance with the City's Noise Compatibility Criteria and the California State Building Code and California Noise Insulation Standards (Titles 24 and 21 of the California Code of Regulations).~~	Airport noise level impacts affecting the Modified Project site have been evaluated in this Addendum and are substantiated to be less-than-significant. Please refer also to the Modified Project Noise Impact Analysis presented at Addendum Appendix E.
~~12-2 Prior to issuance of a building permit, individual projects that involve vibration intensive construction activities, such as pile drivers, jack hammers, and vibratory rollers near sensitive receptors shall be evaluated for potential vibration impacts. For construction~~	Construction-source vibration impacts of the Modified Project have been evaluated in this Addendum and are substantiated to be less-than-significant. Please refer also to the Modified Project Noise Impact Analysis presented at Addendum Appendix E.

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	**Remarks**
~~within 135 feet of fragile structures, such as historical resources, within 100 feet of nonengineered timber and masonry buildings (e.g., most residential buildings), or within 75 feet of engineered concrete and masonry (no plaster); or a vibratory roller within 25 feet of any structure, the project applicant shall prepare a noise and vibration analysis to assess and mitigate potential noise and vibration impacts related to these activities. This noise and vibration analysis shall be conducted by a qualified and experienced acoustical consultant or engineer. The vibration levels shall not exceed Federal Transit Administration (FTA) architectural damage thresholds (e.g., 0.12 inches per second [in/sec] peak particle velocity [PPV] for fragile or historical resources, 0.2 in/sec PPV for nonengineered timber and masonry buildings, and 0.3 in/sec PPV for engineered concrete and masonry). If vibration levels would exceed this threshold, alternative uses shall be used, such as drilling piles as opposed to pile driving and static rollers as opposed to vibratory rollers. If necessary, construction vibration monitoring shall be conducted to ensure vibration thresholds are not exceeded.~~	
~~12-4 Construction activities associated with new development that occurs near sensitive receptors shall be evaluated for potential noise impacts. Construction contractors shall implement the following measures for construction activities in the City of Ontario. Construction plans submitted to the City shall identify these measures on demolition, grading, and construction plans. The City of Ontario Planning and Building Departments shall verify that grading, demolition, and/or construction plans submitted include these notations prior to issuance of demolition, grading, and/or building permits.~~ ~~• Construction activity is limited to the hours between 7:00 am~~	Construction-source noise impacts of the Modified Project have been evaluated in this Addendum and are substantiated to be less-than-significant. Please refer also to the Modified Project Noise Impact Analysis presented at Addendum Appendix E.

Table 5.1-1
Mitigation Summary Matrix

Mitigation Measures	Remarks
~~and 6:00 pm Monday through Friday and 9:00 am to 6:00 pm Saturdays and Sundays, as prescribed in Municipal Code Section 5.29.09.~~ ~~• During the entire active construction period, equipment and trucks used for project construction shall use the best available noise control techniques wherever feasible (e.g., improved mufflers, equipment re-design, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds).~~ ~~• Impact tools (e.g., jack hammers and hoe rams) shall be hydraulically or electrically powered wherever possible. Where the use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used along with external noise jackets on the tools.~~ ~~• Stationary equipment such as generators and air compressors shall be located as far as feasible from nearby noise sensitive uses.~~ ~~• Stockpiling shall be located as far as feasible from nearby noise sensitive receptors.~~ ~~• Construction traffic shall be limited, to the extent feasible, to approved haul routes established by the City Planning and Building Agency.~~ ~~• At least 10 days prior to the start of construction activities, a sign shall be posted at the entrance(s) to the job site, clearly visible to the public, that includes permitted construction days and hours as well as the telephone numbers of the City's and contractor's authorized representatives that are assigned to respond in the event of a noise or vibration complaint. If the authorized contractor's representative receives a complaint, he/she shall investigate, take appropriate corrective action, and report the action to the City.~~ ~~• Signs shall be posted at the job site entrance(s), within the on site construction zones, and along queueing lanes (if any) to~~	

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	**Remarks**
~~reinforce the prohibition of unnecessary engine idling. All other equipment shall be turned off if not in use for more than 5 minutes.~~ ~~• During the entire active construction period and to the extent feasible, the use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only. The construction manager shall use smart back-up alarms, which automatically adjust the alarm level based on the background noise level or switch off back-up alarms and replace with human spotters in compliance with all safety requirements and laws.~~ ~~• Erect temporary noise barriers (at least as high as the exhaust of equipment and breaking line of sight between noise sources and sensitive receptors), as necessary and feasible, to maintain construction noise levels at or below the performance standard of 80 dBA Leq. Barriers shall be constructed with a solid material that has a density of at least 1.5 pounds per square foot with no gaps from the ground to the top of the barrier and may be lined on the construction side with an acoustical blanket, curtain, or equivalent absorptive material.~~	
Population and Housing	
N/A	Mitigation is not identified in the Certified SEIR. As substantiated in this Addendum, all population and housing impacts of the Modified Project would be less-than-significant, or no impacts would result from the Modified Project. No mitigation is required of the Modified Project.
Public Services	
N/A	Mitigation is not identified in the Certified SEIR. As substantiated in this Addendum, all public services impacts of the Modified Project would be less-than-significant, or no impacts would result from the Modified Project. No mitigation is required of the Modified Project.

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	**Remarks**
Recreation	
N/A	Mitigation is not identified in the Certified SEIR. As substantiated in this Addendum, all recreation impacts of the Modified Project would be less-than-significant. No mitigation is required of the Modified Project.
Transportation	
~~T-1 Prior to approval of discretionary projects subject to VMT reduction analysis, applicants shall demonstrate compliance with the City's VMT Guidelines for CEQA assessment of VMT impacts. For projects with VMT per Service Population exceeding the County's significance threshold, a mitigation plan shall be developed and implemented. Mitigation should consist of Transportation Demand Management (TDM) measures analyzed under a VMT-reduction methodology consistent with the California Air Pollution Control Officers Association's (CAPCOA) Final Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (2021) and approved by the City of Ontario (if applicable). Examples of measures include but are not limited to:~~ ~~• Pedestrian Network Improvements: constructing new sidewalks and/or improving damaged or substandard sidewalks that connect to a larger pedestrian network.~~ ~~• Construct or Improve Bike Facilities: constructing new or enhancing a single existing Class I, II or IV bike facility that connects to a larger bike network.~~ ~~• Construct or Improve Bike Boulevards: implementing a Class III bike boulevard on a local or collector street that is one travel lane in each direction, has a design speed of 25 mph or less and a design~~	Modified Project VMT impacts have been evaluated in this Addendum and are substantiated to be less-than-significant. Please refer also to the Modified Project VMT Analysis presented at Addendum Appendix F.

Table 5.1-1
Mitigation Summary Matrix

Mitigation Measures	Remarks
~~volume of 5,000 ADT or less.~~ ~~• Expand Bikeway Networks: constructing a network of interconnected new Class I, II, or IV bike facilities.~~ ~~• Provide End of Trip Bicycle Facilities: constructing facilities that support cyclists such as bike parking, lockers, and showers.~~ ~~• Implement Transit-Supportive Roadway Treatments: funding infrastructure improvements such as traffic signal modifications and roadway signing and striping that are dedicated to improving transit travel times and reliability.~~ ~~• Transit Passes: proving discounted or free transit fare to a specific geographic area, population group, or to the general public.~~ ~~• Vanpool Program: providing groups of 5 to 15 people with direct shuttle service between their workplace and residence.~~ ~~• Carshare Program (conventional or EV): providing access to a shared fleet of on-demand vehicles for short term use/rental. Best practice is to discount carshare membership and provide priority parking for carshare vehicles to encourage use of the service.~~ ~~• Bikeshare Program (conventional or EV): providing access to a shared fleet of on-demand bicycles for short term use/rental. Best practice is to discount bikeshare membership and dedicate bikeshare parking to encourage use of the service.~~ ~~• Rideshare Program: providing access to and encouraging the use of a ridesharing platform or service. This could be an app, website, or other service that provides ride matching coordination services.~~ ~~• Community Based Travel Planning (CBTP): CBTP is a residential based approach to outreach, performed by trained advisors, that provides households within a targeted geographic area with customized information, incentives, and support to encourage the use of transportation alternatives in place of single~~	

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	**Remarks**
~~occupancy vehicles.~~ ~~• Commute Trip Reduction (CTR) Program: CTR programs can be mandatory or voluntary, and involve providing information, coordination, services, infrastructure, and/or incentives for alternative modes such as ridesharing, vanpool, transit passes, and cycling.~~	
Tribal Cultural Resources	
5-3 Upon receipt of an application for a proposed project subject to CEQA and within the City's jurisdiction, the City's representative shall consult with the relevant tribe(s)' representative(s) to determine if the proposed project is within a culturally sensitive area to the tribe. If sufficient evidence is provided to reasonably ascertain that the site is within a tribal culturally sensitive area, an archaeologist shall prepare a cultural resources assessment. The findings of the cultural resources assessment shall be incorporated into the CEQA documentation. A copy of the report shall be forwarded to the tribe(s). If mitigation is recommended in the CEQA document, the procedure described in Mitigation Measure 5-4 shall be followed.	Applicable. This Measure is carried forward from the Certified SEIR and shall be implemented by the Modified Project.
5-4 Prior to the issuance of grading permits for a proposed project for which the CEQA document defines cultural resource mitigation for potential tribal resources, the project applicant shall contact the designated tribe(s) to notify them of the grading, excavation, and monitoring program. The applicant shall coordinate with the City of Ontario and the tribal representative(s) to develop mitigation measures that address the designation, responsibilities, and participation of tribal monitors during grading, excavation, and ground-disturbing activities; scheduling; terms of compensation; and treatment and final disposition of any cultural resources, sacred	Applicable. This Measure is carried forward from the Certified SEIR and shall be implemented by the Modified Project.

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	**Remarks**
sites, and human remains discovered on the site. The City of Ontario shall be the final arbiter of the conditions for projects within the City's jurisdiction.	
TCR-1 Tribal Cultural Resources Monitoring. The project archaeologist, in consultation with interested tribes, the developer, and the City of Ontario, shall develop an archaeological monitoring plan (AMP) to address the details, timing, and responsibility of archaeological and cultural activities that will occur on the project site. Details in the AMP shall include: 1. Project-related ground disturbance (including, but not limited to, brush clearing, grading, trenching, etc.) and development scheduling; 2. The development of a rotating or simultaneous schedule in coordination with the developer and the project archeologist for designated Native American Tribal Monitors from the consulting tribes during grading, excavation and ground disturbing activities on the site: including the scheduling, safety requirements, duties, scope of work, and Native American Tribal Monitors' authority to stop and redirect grading activities in coordination with all project archaeologists (if the tribes cannot come to an agreement on the rotating or simultaneous schedule of tribal monitoring, the Native American Heritage Commission shall designate the schedule for the onsite Native American Tribal Monitor for the proposed project); 3. The protocols and stipulations that the developer, City, Tribes, and project archaeologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits that shall be subject to a cultural resources	Applicable. This Measure is carried forward from the Certified SEIR and shall be implemented by the Modified Project.

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	**Remarks**
evaluation. At least 30 days prior to application for a grading permit and before any brush clearance, grading, excavation, and/or ground disturbing activities on the site, the developer shall retain a tribal cultural monitor to monitor all ground-disturbing activities in an effort to identify any unknown archaeological resources. Pursuant to the AMP, a tribal monitor from the consulting tribe shall be present during the initial grading activities. If tribal resources are found during grubbing activities, the tribal monitoring shall be present during site grading activities.	
TCR-2 Treatment and Disposition of Cultural Resources. In the event that Native American cultural resources are inadvertently discovered during the course of any ground-disturbing activities, including but not limited to brush clearance, grading, trenching, etc., for the proposed project, the following procedures will be carried out for treatment and disposition of the discoveries: 1. Temporary Curation and Storage: During the course of construction, all discovered resources shall be temporarily curated in a secure location on-site or at the offices of the project archaeologist. The removal of any artifacts from the project site will need to be thoroughly inventoried with tribal monitor oversight of the process; 2. Treatment and Final Disposition: The landowner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and nonhuman	Applicable. This Measure is carried forward from the Certified SEIR and shall be implemented by the Modified Project.

Table 5.1-1
Mitigation Summary Matrix

Mitigation Measures	Remarks
remains as part of the required mitigation for impacts to cultural resources. The applicant shall relinquish the artifacts through one or more of the following methods and provide the City of Ontario with evidence of same: a. Accommodate the process for on-site reburial of the discovered items with the consulting Native American tribes or bands. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloging, basic analysis, other analyses as recommended by the project archaeologist and approved by consulting tribes, and basic recordation have been completed; all documentation should be at a level of standard professional practice to allow the writing of a report of professional quality; b. A curation agreement with an appropriate qualified repository in San Bernardino County that meets federal standards per 36 CFR Part 79, and therefore the resource would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility in San Bernardino County, to be accompanied by payment of the fees necessary for permanent curation; c. For purposes of conflict resolution, if more than one Native American tribe or band is involved with the project and cannot come to an agreement as to the disposition of cultural materials, materials shall be curated at the San Bernardino County Museum by default;	

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	**Remarks**
d. At the completion of grading, excavation, and ground-disturbing activities on the site, a Phase IV Monitoring Report shall be submitted to the City documenting monitoring activities conducted by the project archaeologist and Native Tribal Monitors within 60 days of completion of grading. This report shall document the impacts to the known resources on the property; describe how each mitigation measure was fulfilled; document the type of cultural resources recovered and the disposition of such resources; provide evidence of the required cultural sensitivity training for the construction staff held during the required pregrade meeting; and, in a confidential appendix, include the daily/weekly monitoring notes from the archaeologist. All reports produced will be submitted to the City, County Museum, and consulting tribes.	
TR-1 Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities: ***A. The project applicant/lead agency shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation. The monitor shall be retained prior to the commencement of any "ground-disturbing activity" for the subject project at all project locations (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). "Ground-disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching.*** ***B. A copy of the executed monitoring agreement shall be submitted to the lead agency prior to the earlier of the commencement of any***	In addition to mitigation carried forward as noted above, Condition of Approval TR-1 is incorporated to ensure that tribal cultural resource impacts are maintained at levels that would be less-than-significant.

Table 5.1-1
Mitigation Summary Matrix

Mitigation Measures	Remarks
ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity. ***C. The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or "TCR"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the project applicant/lead agency upon written request to the Tribe.*** ***D. On-site tribal monitoring shall conclude upon the latter of the following (1) written confirmation to the Kizh from a designated point of contact for the project applicant/lead agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the Kizh to the project applicant/lead agency that no future, planned construction activity and/or development/construction phase at the project site possesses the potential to impact Kizh TCRs.*** ***E. Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered***	

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	**Remarks**
TCR has been fully assessed by the Kizh monitor and/or Kizh archaeologist. The Kizh will recover and retain all discovered TCRs in the form and/or manner the Tribe deems appropriate, in the Tribe's sole discretion, and for any purpose the Tribe deems appropriate, including for educational, cultural and/or historic purposes.	
TR-2 Unanticipated Discovery of Human Remains and Associated Funerary Objects: ***A. Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute.*** ***B. If Native American human remains and/or grave goods discovered or recognized on the project site, then all construction activities shall immediately cease. Health and Safety Code Section 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and all ground- disturbing activities shall immediately halt and shall remain halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe they are Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission, and Public Resources Code Section 5097.98 shall be followed.*** ***C. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2).***	In addition to mitigation carried forward as noted above, Condition of Approval TR-2 is incorporated to ensure that tribal cultural resource impacts are maintained at levels that would be less-than-significant.

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	**Remarks**
D. Construction activities may resume in other parts of the project site at a minimum of 200 feet away from discovered human remains and/or burial goods, if the Kizh determines in its sole discretion that resuming construction activities at that distance is acceptable and provides the project manager express consent of that determination (along with any other mitigation measures the Kizh monitor and/or archaeologist deems necessary). (CEQA Guidelines Section 15064.5(f).) ***E. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods. Any historic archaeological material that is not Native American in origin (non-TCR) shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, it shall be offered to a local school or historical society in the area for educational purposes.*** ***F. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.***	
TR-3 Procedures for Burials and Funerary Remains: ***A. As the Most Likely Descendant ("MLD"), the Koo-nas-gna Burial Policy shall be implemented. To the Tribe, the term "human remains" encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the preparation of the soil for burial, the burial of funerary objects with the deceased, and the ceremonial burning of human remains.***	In addition to mitigation carried forward as noted above, Condition of Approval TR-3 is incorporated to ensure that tribal cultural resource impacts are maintained at levels that would be less-than-significant.

Table 5.1-1
Mitigation Summary Matrix

Mitigation Measures	Remarks
B. If the discovery of human remains includes four or more burials, the discovery location shall be treated as a cemetery and a separate treatment plan shall be created.	
C. The prepared soil and cremation soils are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects. Cremations will either be removed in bulk or by means as necessary to ensure complete recovery of all sacred materials.	
D. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed.	
E. In the event preservation in place is not possible despite good faith efforts by the project applicant/developer and/or landowner, before ground-disturbing activities may resume on the project site, the landowner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human	

Table 5.1-1
Mitigation Summary Matrix

Mitigation Measures	Remarks
remains and/or ceremonial objects. ***F. Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location agreed upon between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.*** ***G. The Tribe will work closely with the project's qualified archaeologist to ensure that the excavation is treated carefully, ethically, and respectfully. If data recovery is approved by the Tribe, documentation shall be prepared and shall include (at a minimum) detailed descriptive notes and sketches. All data recovery data recovery-related forms of documentation shall be approved in advance by the Tribe. If any data recovery is performed, once complete, a final report shall be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive and/or destructive diagnostics on human remains.***	
Utilities and Service Systems	
N/A	Mitigation is not identified in the Certified SEIR. As substantiated in this Addendum, all utilities and service systems impacts of the Modified Project would be less-than-significant, or no impacts would result from the Modified Project. No mitigation is required of the Modified Project.

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	**Remarks**
Wildfire	
N/A	Mitigation is not identified in the Certified SEIR. As substantiated in this Addendum, all wildfire impacts of the Modified Project would be less-than-significant, or no impacts would result from the Modified Project. No mitigation is required of the Modified Project.

RESOLUTION NO. PC25-013

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ONTARIO, CALIFORNIA, RECOMMENDING THE CITY COUNCIL APPROVE FILE NO. PSPA22-005, AN AMENDMENT TO THE AVENUE SPECIFIC PLAN TO: 1) MODIFY THE LAND USE DESIGNATION OF PLANNING AREA 4 AND APPLY DENSITY MODIFICATIONS TO PLANNING AREAS 1B, 2A, 3B, AND 5 FOR CONSISTENCY WITH THE ONTARIO PLAN 2050 LAND USE PLAN; 2) APPLY GENERAL MODIFICATIONS THROUGHOUT THE DOCUMENT FOR CLARITY; AND, 3) MAKE EXHIBIT AND TEXT UPDATES THROUGHOUT THE DOCUMENT TO SUPPORT THE PROJECT, FOR LAND LOCATED AT THE NORTHWEST CORNER OF ARCHIBALD AVENUE AND ONTARIO RANCH ROAD, AND MAKING FINDINGS IN SUPPORT THEREOF—APNS: 0218-191-04; 0218-191-14; 0218-191-15; 0218-191-16; 0218-191-05; 0218-191-22; 0218-191-20

WHEREAS, RICHLAND COMMUNITIES (hereinafter referred to as "Applicant") has filed an Application for the approval of a Specific Plan Amendment, File No. PSPA22-005, as described in the title of this Resolution (hereinafter referred to as "Application" or "Project"). The full, redlined Specific Plan Amendment document is attached to this Resolution as “Attachment A: File No. PSPA22-005 Redlined Specific Plan Document”; and

WHEREAS, the Application applies to land located within The Avenue Specific Plan area, which is bound by Schaefer Avenue to the north, Carpenter Avenue to the west, Ontario Ranch Road and Old Edison Road to the south, and Haven Avenue to the east, and is presently improved with a mix of developed residential and commercial land uses, vacant and unimproved land, and agricultural dairy and nursery uses; and

WHEREAS, the property to the north of the Project site is within the Specific Plan – Agricultural Overlay (SP-AG), Countryside Specific Plan, West Haven Specific Plan, and Utility Corridor (UC) zoning district, and is developed with agricultural, dairy, and residential land uses and vacant land. The property to the east is within the Rich-Haven Specific Plan, and is developed with residential land uses and vacant land. The property to the south is within the Parkside and Grand Park Specific Plans, and is developed with agricultural and residential land uses and vacant land. The property to the west is within the Specific Plan – Agricultural Overlay (SP-AG) zoning district, and is developed with agricultural uses and vacant land; and

WHEREAS, the Specific Plan Amendment consists of various map and text changes to accommodate land use and density modifications to Planning Areas 4, 1B, 2A, 3B, and 5, to bring the Specific Plan’s Land Use Plan into consistency with The Ontario Plan 2050 Land Use Plan (see Exhibit A: Existing and Proposed Specific Plan

Land Use Plan and Exhibit B: Proposed Specific Plan Land Use Table, appended to this Resolution). Textual changes are summarized as follows:

- The net acreage has been updated to more accurately reflect existing conditions.

- The total number of dwelling units will increase from 2,981 to 3,753 units and commercial square footage will increase from 130,680 to 335,176 square feet.

- Each land use within a Planning Area has been provided a designated line on the land use table, whereas previously, no such distinctions were made.

- Adjustments have been made throughout the table to accurately reflect existing conditions and accurate development information for built-out Planning Areas.

- The following notes have been introduced to the table for further clarification:

    - Realignment of Schaefer Avenue creates the need for Planning Area C, as it is owned separately from Planning Area 1A.
    - All acreages are approximate – exact acreages will be defined through tract map surveys. Additional studies may be required to transfer these units. See Section 3.1.1 for additional information.
    - Density blending will be allowed within Planning Areas within one TOP land use step (i.e. from LDR to LMDR) and between Planning Areas at a rate no higher than 15 percent. If units are blended within a Planning area or moved between Planning Areas, then Technical Studies for impacts to the Water and Sewer Master Plan Systems will be required as part of the entitlement process; and

WHEREAS, the Specific Plan Amendment will facilitate future development through forthcoming Tentative Tract or Parcel Maps and Development Agreements, which shall be reviewed by the appropriate hearing bodies once deemed ready for public hearing; and

WHEREAS, The Ontario Plan 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364) was certified on August 16, 2022 (hereinafter referred to as "Certified SEIR"), in which development and use of the Project site was discussed; and

WHEREAS, the Planning Director of the City of Ontario prepared and approved for attachment to the certified Environmental Impact Report, an Addendum to the Certified SEIR (hereinafter referred to as "SEIR Addendum") in accordance with the requirements of the California Environmental Quality Act of 1970, together with State and local

guidelines implementing said Act, all as amended to date (collectively referred to as "CEQA"); and

WHEREAS, the environmental impacts of this Project were thoroughly analyzed in the SEIR Addendum, which concluded that implementation of the Project could result in a number of significant effects on the environment that were previously analyzed in the Certified SEIR, and that the Certified SEIR identified mitigation measures that would reduce each of those significant effects to a less-than-significant level; and

WHEREAS, the City's "Local Guidelines for the Implementation of the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed; and

WHEREAS, the Application is a project pursuant to the California Environmental Quality Act — Public Resources Code Section 21000 et seq. — (hereinafter referred to as "CEQA") and an EIR Addendum has been prepared to determine possible environmental impacts; and

WHEREAS, Ontario Development Code Table 2.02-1 (Review Matrix) grants the Planning Commission the responsibility and authority to review and make recommendation to the City Council on the subject Application; and

WHEREAS, the Project has been reviewed for consistency with the Housing Element of the Policy Plan component of The Ontario Plan 2050, as State Housing Element law (as prescribed in Government Code Sections 65580 through 65589.8) requires that development projects must be consistent with the Housing Element, if upon consideration of all its aspects, it is found to further the purposes, principals, goals, and policies of the Housing Element; and

WHEREAS, the Project is located within the Airport Influence Area of Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and is subject to, and must be consistent with, the policies and criteria set forth in the Ontario International Airport Land Use Compatibility Plan (hereinafter referred to as "ALUCP"), which applies only to jurisdictions within San Bernardino County, and addresses the noise, safety, airspace protection, and overflight impacts of current and future airport activity; and

WHEREAS, the proposed Project is located within the Airport Influence Area of Chino Airport, within the City of Ontario boundary, and is subject to, and must be consistent with, the policies criteria set forth in Reference I, Chino Airport Land Use Compatibility Plan (CNO ALUCP), which applies only to jurisdictions within City of

Ontario, and addresses the safety, airspace protection, and overflight impacts of current and future airport activity; and

WHEREAS, City of Ontario Development Code Division 2.03 (Public Hearings) prescribes the manner in which public notification shall be provided and hearing procedures to be followed, and all such notifications and procedures have been completed; and

WHEREAS, as the first action on the Project, on February 25, 2025, the Planning Commission issued a Resolution recommending the City Council approve the use of the SEIR Addendum, finding that the proposed Project introduces no new significant environmental impacts and applying all previously adopted mitigation measures to the Project, which were incorporated by reference; and

WHEREAS, on February 25, 2025, the Planning Commission of the City of Ontario conducted a hearing to consider the Project, and concluded said hearing on that date; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED, AND RESOLVED by the Planning Commission of the City of Ontario, as follows:

SECTION 1: ***Environmental Determination and Findings.*** As the recommending body for the Project, the Planning Commission has reviewed and considered the information contained in the Addendum and the administrative record for the Project, including all written and oral evidence provided during the comment period. Based upon the facts and information contained in the Addendum and the administrative record, including all written and oral evidence presented to the Planning Commission, the Planning Commission finds as follows:

(1) The environmental impacts of the Project were reviewed in conjunction with an Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364), certified by the Ontario City Council on August 16, 2022, in conjunction with File No. PGPA20-002; and

(2) The SEIR Addendum and administrative record have been completed in compliance with CEQA, the State CEQA Guidelines, and the City of Ontario Local CEQA Guidelines; and

(3) The City's "Guidelines for the Implementation of the California Environmental Quality Act (CEQA)" provide for the use of a single environmental

assessment in situations where the impacts of subsequent projects are adequately analyzed. This Application introduces no new significant environmental impacts; and

(4) All previously adopted mitigation measures shall be a condition of Project approval, as they are applicable to the Project, and are incorporated herein by this reference; and

(5) The SEIR Addendum contains a complete and accurate reporting of the environmental impacts associated with the Project, and reflects the independent judgment of the Planning Commission; and

(6) There is no substantial evidence in the administrative record supporting a fair argument that the Project may result in significant environmental impacts.

SECTION 2: ***Subsequent or Supplemental Environmental Review Not Required.*** Based on the SEIR Addendum, all related information presented to the Planning Commission, and the specific findings set forth in Section 1, above, the Planning Commission finds that the preparation of a subsequent or supplemental Certified SEIR is not required for the Project, as the Project:

(1) Does not constitute substantial changes to the Certified SEIR that will require major revisions to the Certified SEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and

(2) Does not constitute substantial changes with respect to the circumstances under which the Certified SEIR was prepared that will require major revisions to the Certified SEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of the previously identified significant effects; and

(3) Does not contain new information of substantial importance that was not known and could not have been known with the exercise of reasonable diligence at the time the Certified SEIR was certified/adopted, that shows any of the following:

(a) The Project will have one or more significant effects not discussed in the Certified SEIR; or

(b) Significant effects previously examined will be substantially more severe than shown in the Certified SEIR; or

(c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the City declined to adopt such measures; or

(d) Mitigation measures or alternatives considerably different from those analyzed in the Certified SEIR would substantially reduce one or more significant effects on the environment, but which the City declined to adopt.

SECTION 3: ***Housing Element Compliance.*** Pursuant to the requirements of California Government Code Chapter 3, Article 10.6, commencing with Section 65580, as the recommending body for the Project, the Planning Commission finds that based upon the facts and information contained in the Application and supporting documentation, at the time of Project implementation, the Project is consistent with the Housing Element of the Policy Plan (General Plan) component of The Ontario Plan 2050, as the Project site is not one of the properties in the Housing Element Sites Inventory contained in Tables B-1 and B-2 of the Housing Element Technical Report.

SECTION 4: ***Airport Land Use Compatibility Plan ("ALUCP") Compliance.*** The California State Aeronautics Act (Public Utilities Code Section 21670 et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

(1) On April 19, 2011, the City Council of the City of Ontario approved and adopted the Ontario International Airport Land use Compatibility Plan, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the recommending body for the Project, the Planning Commission has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the Planning Commission therefore finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the ONT ALUCP; and

(2) On August 2, 2022, the City Council of the City of Ontario approved and adopted a Development Code Amendment to establish the Chino Airport (“CNO”) Overlay Zoning District (“OZD”) and Reference I, Chino Airport Land Use Compatibility Plan (“CNO ALUCP”). The CNO OZD and CNO ALUCP established the Airport Influence Area for Chino Airport, solely within the City of Ontario, and limits future land uses and development within the Airport Influence Area, as they relate to safety, airspace protection, and overflight impacts of current and future airport activity. The CNO ALUCP

is consistent with policies and criteria set forth within the Caltrans 2011 California Airport Land Use Planning Handbook. The proposed Project is located within the Airport Influence Area of Chino Airport and was evaluated and found to be consistent with the California Airport Land Use Planning Handbook and the CNO ALUCP. As the recommending body for the Project, the Planning Commission has reviewed and considered the facts and information contained in the Application and supporting documentation against the CNO ALUCP compatibility factors, including Safety, Airspace Protection, Overflight. As a result, the Planning Commission therefore finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the California Airport Land Use Planning Handbook and the Chino ALUCP.

SECTION 5: ***Concluding Facts and Reasons.*** Based upon the substantial evidence presented to the Planning Commission during the above-referenced hearing, and upon the specific findings set forth in the Sections above, the Planning Commission hereby concludes as follows:

(1) ***The proposed Specific Plan, or amendment thereto, is consistent with the goals, policies, plans and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan 2050.*** The Specific Plan Amendment is intended to bring The Avenue Specific Plan's land use plan into consistency with The Ontario Plan 2050's land use plan and therefore will enable the Specific Plan to be consistent with and further implement the goals, policies, plans, and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan 2050.

(2) ***The proposed Specific Plan, or amendment thereto, would not be detrimental to the public interest, health, safety, convenience, or general welfare of the City.*** The Specific Plan Amendment is intended to bring The Avenue Specific Plan's land use plan into consistency with The Ontario Plan 2050's land use plan. The Ontario Plan 2050's land use plan was established to promote the public interest, safety, convenience, and general welfare of the City. The proposed Specific Plan land use plan modifications will be in keeping with the existing and anticipated land use patterns in and around the Specific Plan area.

(3) ***In the case of an application affecting specific property(ies), the proposed Specific Plan, or amendment thereto, will not adversely affect the harmonious relationship with adjacent properties and land uses.*** The Specific Plan Amendment is intended to bring The Avenue Specific Plan's land use plan into consistency with The Ontario Plan 2050's land use plan and the proposed modifications will be in keeping with the existing and anticipated land use patterns in and around the Specific Plan area. The proposed amendment will thus remain harmonious with the

surrounding residential, agricultural, and commercial land uses and will not adversely affect the adjacent properties and land uses.

(4) ***In the case of an application affecting specific property(ies), the subject site is physically suitable, including, but not limited to, parcel size, shape, access, and availability of utilities, for the request and anticipated development.*** The Specific Plan Amendment is intended to bring The Avenue Specific Plan's land use plan into consistency with The Ontario Plan 2050's land use plan, and no modifications are proposed that will impact property development regulations. The Ontario Plan 2050 analyzed potential impacts to utilities, and the Project Addendum found that there would be no additional impact as a result of this Project. Any future development shall be reviewed and approved through subsequent entitlements that will ensure that adequate parcel size, shape and access will be provided. Further, additional studies ensuring the adequate availability of utilities shall be required, should any future development deviate from the standards established by this Specific Plan Amendment.

SECTION 6: ***Planning Commission Action.*** Based upon the findings and conclusions set forth in the Sections above, the Planning Commission hereby RECOMMENDS THE CITY COUNCIL APPROVES the herein described Application, subject to each and every condition set forth in the Department reports attached hereto as "Attachment B," and incorporated herein by this reference.

SECTION 7: ***Indemnification.*** The Applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void, or annul this approval. The City of Ontario shall promptly notify the Applicant of any such claim, action, or proceeding, and the City of Ontario shall cooperate fully in the defense.

SECTION 8: ***Custodian of Records.*** The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East "B" Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario.

SECTION 9: ***Certification to Adoption.*** The Secretary shall certify to the adoption of the Resolution.

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The Secretary Pro Tempore for the Planning Commission of the City of Ontario shall certify as to the adoption of this Resolution.

I hereby certify that the foregoing Resolution was duly and regularly introduced, passed and adopted by the Planning Commission of the City of Ontario at a regular meeting thereof held on the 25th day of February 2025, and the foregoing is a full, true and correct copy of said Resolution, and has not been amended or repealed.

Nicola Ricci
Planning Commission Chairman

ATTEST:

Henry K. Noh
Planning Director and
Secretary to the Planning Commission

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO)
CITY OF ONTARIO)

I, Gwen Berendsen, Secretary Pro Tempore of the Planning Commission of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. PC25-013, was duly passed and adopted by the Planning Commission of the City of Ontario at their regular meeting held on February 25, 2025, by the following roll call vote, to wit:

AYES: DeDiemar, Gage, Lampkin, Ricci

NOES: None

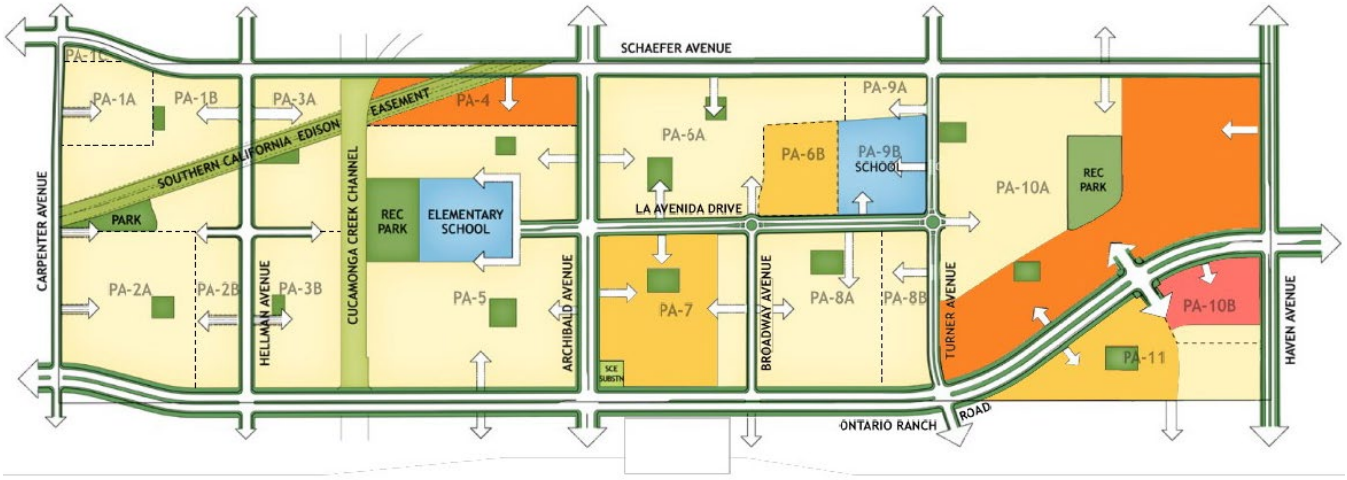
ABSENT: Anderson

ABSTAIN: None

Gwen Berendsen
Secretary Pro Tempore

Exhibit A: EXISTING AND PROPOSED SPECIFIC PLAN LAND USE PLAN

EXISTING

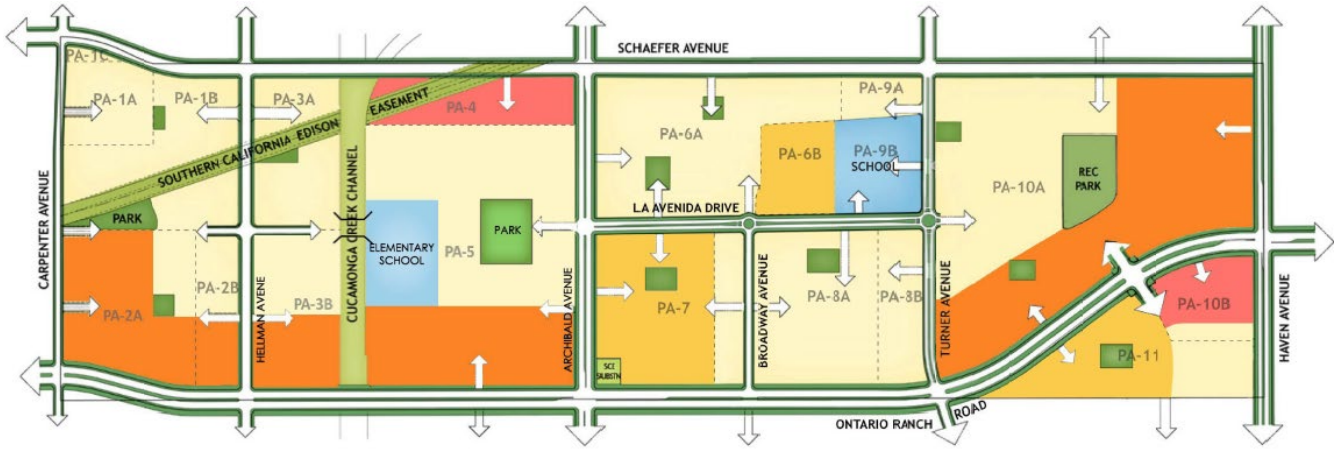


LEGEND

- LOW DENSITY RESIDENTIAL
- LOW MEDIUM DENSITY RESIDENTIAL
- MEDIUM DENSITY RESIDENTIAL
- RETAIL/COMMERCIAL
- SCHOOL
- PARK
- SCE EASEMENT
- STORM DRAIN EASEMENT

NOTE: The locations of the parks are conceptual and will be determined as part of the tract map approval process.

PROPOSED



LEGEND

- LOW DENSITY RESIDENTIAL (2.1-5.0 DU/AC)
- LOW MEDIUM DENSITY RESIDENTIAL (5.1-11.0 DU/AC)
- MEDIUM DENSITY RESIDENTIAL (11.1-25.0 DU/AC)
- RETAIL/COMMERCIAL
- SCHOOL
- PARK
- SCE EASEMENT
- STORM DRAIN EASEMENT

NOTE: The locations of the parks are conceptual and will be determined as part of the tract map approval process.

Exhibit B: PROPOSED SPECIFIC PLAN LAND USE TABLE

Table 2 - Statistical Analysis

~~Former Subarea~~	Planning Area	Gross Acres	Net Acres	Homes	Density	Commercial SF	Use
~~17~~	1A	11.1	9.20	~~51~~ 41	4.5		LDR
~~17~~	1B	33.5	24.54	~~127~~ 110	4.5		LDR
			5.40				SCE Easement
~~17~~	1C*	2.2	2.20	5	2.3		LDR
~~17~~	2A	32.0	5.00	~~147~~ 23	4.5		LDR
			25.05	~~58~~ 551	22.0		MDR
~~17~~	2B	12.5	6.64	~~86~~ 30	4.5		LDR
			5.43	~~97~~ 119	22.0		MDR
~~17~~	3A	21.7	19.15	~~218~~ 86	4.5		LDR
			2.60				SCE Easement
~~17~~	3B	21.5	12.22	~~334~~ 55	4.5		LDR
			8.59	189	22.0		MDR
~~18~~	4	19.9	15.04			204,496	Retail
			4.00				SCE Easement
~~18~~	5	82.6	46.85	211	4.5		LDR
			22.54	496	22.0		MDR
			10.89				Elementary School
~~18~~	6A	49.9	49.90	~~230~~ 229	4.6		LDR
~~18~~	6B	10.0	10.00	~~106~~ 110	11.0		LMDR
~~18~~	7	30.1	28.90	~~287~~ 265	9.2		LMDR
			1.20				SCE Substation
~~18~~	8A	39.9	39.90	~~180~~ 176	4.4		LDR
~~18~~	8B	9.7	9.70	44	4.5		LDR
~~18~~	9A	10.6	10.60	20	1.9		LDR
~~18~~	9B	10.0	10.00				School
~~12~~	10A	114.7	100.40	~~786~~ 452	4.5		LDR
			14.30	314	22.0		MDR
	10B	10.0	10.00			130,680	Retail
~~24~~	11	33.4	14.73	~~225~~ 67	4.5		LDR
			18.67	160	8.6		LMDR
~~Cucamonga Creek~~		12.8	12.80				Cucamonga Creek
~~Total~~	Total	**568.1**	556.44	~~2,981~~ 3,753	**6.7**	**335,176**	

Notes:
* Realignment of Schaeffer Ave creates the need for PA 1C (APN 021-812-201) as it is owned separately from PA 1A (APN 0218-181-126).
- All acreages approximate- exact acreages will be defined through tract map surveys. Additional studies may be required to transfer these units. See Section 3.1.1 for additional information.
- Density blending will be allowed within Planning Areas within one TOP land use step (i.e. from LDR to LMDR) and between Planning Areas at a rate no higher than 15%. If units are blended within a PA or moved between PA's, then Technical Studies for Impacts to the Water and Sewer Master Plan Systems will be required as part of the entitlement process.

ATTACHMENT A:

File No. PSPA22-005
Redlined Specific Plan Document

(Departmental conditions of approval to follow this page)

ATTACHMENT B:

File No. PSPA22-005
Departmental Conditions of Approval

(Departmental conditions of approval to follow this page)

The Avenue

SPECIFIC PLAN



DECEMBER 2006

2024 AMENDMENT DRAFT dated xx-xx-24

Proposed additions in blue underline

Proposed deletions in ~~red strike through~~

ONTARIO, CALIFORNIA

Ontario Ranch

"Good fortune is what happens
when opportunity meets with planning."

--Thomas Alva Edison, American Inventor



City Council approved February 16, 2007
Ordinance No. 2851
Amended version approved February 2, 2010
Resolution No. 2010-011
Second amended version approved June 17, 2014
Resolution No. 2014-069
Third amended version approved March 21, 2017
Resolution No. 2017-017
Fourth amended version approved November 17, 2020
Resolution No. 2020-190000-000
Fifth amendment version approved Date, 2024
Resolution No.xxx

The Avenue

SPECIFIC PLAN

~~City Council approved February 16, 2007~~
~~Amended version approved February 2, 2010~~
~~Second Amended version approved June 17, 2014~~ -

~~The New Model Colony~~ Ontario Ranch

City of Ontario
303 East B Street
Ontario, California 91764

The Avenue Planning and Development Coalition Team:

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Parentex Enterprises

The Avenue Consultant Team:

JZMK Partners - Planning, Design
Hunsaker & Associates - Planning, Engineering, Surveying
Clark & Green Associates - Landscape Architecture L.D.
King, Inc. - Engineering Consultant
Danielian Associates - Specific Plan Amendment
The Galloway Group - Specific Plan Amendment

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Example of California Ranch style architecture

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Typical residential streetscene

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Typical residential streetscene

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Section 1 - Introduction/Overview

1.1 Vision of The Avenue

The Avenue will be a truly walkable community, featuring pedestrian amenities that encourage walking and biking to schools, parks and basic commercial needs—all within five minutes, for the majority of residents. The Avenue is named after the central La Avenida Drive, a tree-lined street with one-way traffic on each side, and a continuous 13' parkway and 8' sidewalk on both sides without curb cuts or driveways to create an uninterrupted path. The Avenue will provide a connection from Archibald Avenue to the Recreation Area, Active Recreation Park, Schools, and adjacent neighborhood and pocket parks. With a diversity of housing types and styles, The Avenue will have something for everyone—providing a place for everyone to live, learn, play and shop.

1.2 Project Location

The Avenue Specific Plan is comprised of approximately 568.1 gross acres. The project site is bounded by Schaefer Avenue to the north, Ontario Ranch Road to the south, Haven Avenue to the east, Carpenter Avenue to the west as illustrated in Exhibit 1, "Regional Map" and Exhibit 2, "Project Location".



The Avenue will offer a variety of residential housing types and neighborhoods within walking distance to parks, schools, and recreation facilities. The Land Use Plan, as illustrated in Exhibit 8, "Land Use Plan" is consistent with the goals and policies of ~~the New Model Colony~~ Ontario Ranch General Plan Amendment, combining walkable residential neighborhoods served by recreational spaces that offer opportunities for social interaction among residents. A Planned retail and commercial area is located within La Avenida Drive at Ontario Ranch Road and Haven Avenues to serve the commercial needs of the residents of The Avenue as well as surrounding neighborhoods.

The regional context and local setting of The Avenue (the Project Site) are illustrated in Exhibit 1, "Regional Map", and Exhibit 2, "Project Location Map".

Exhibit 1 - Regional Map

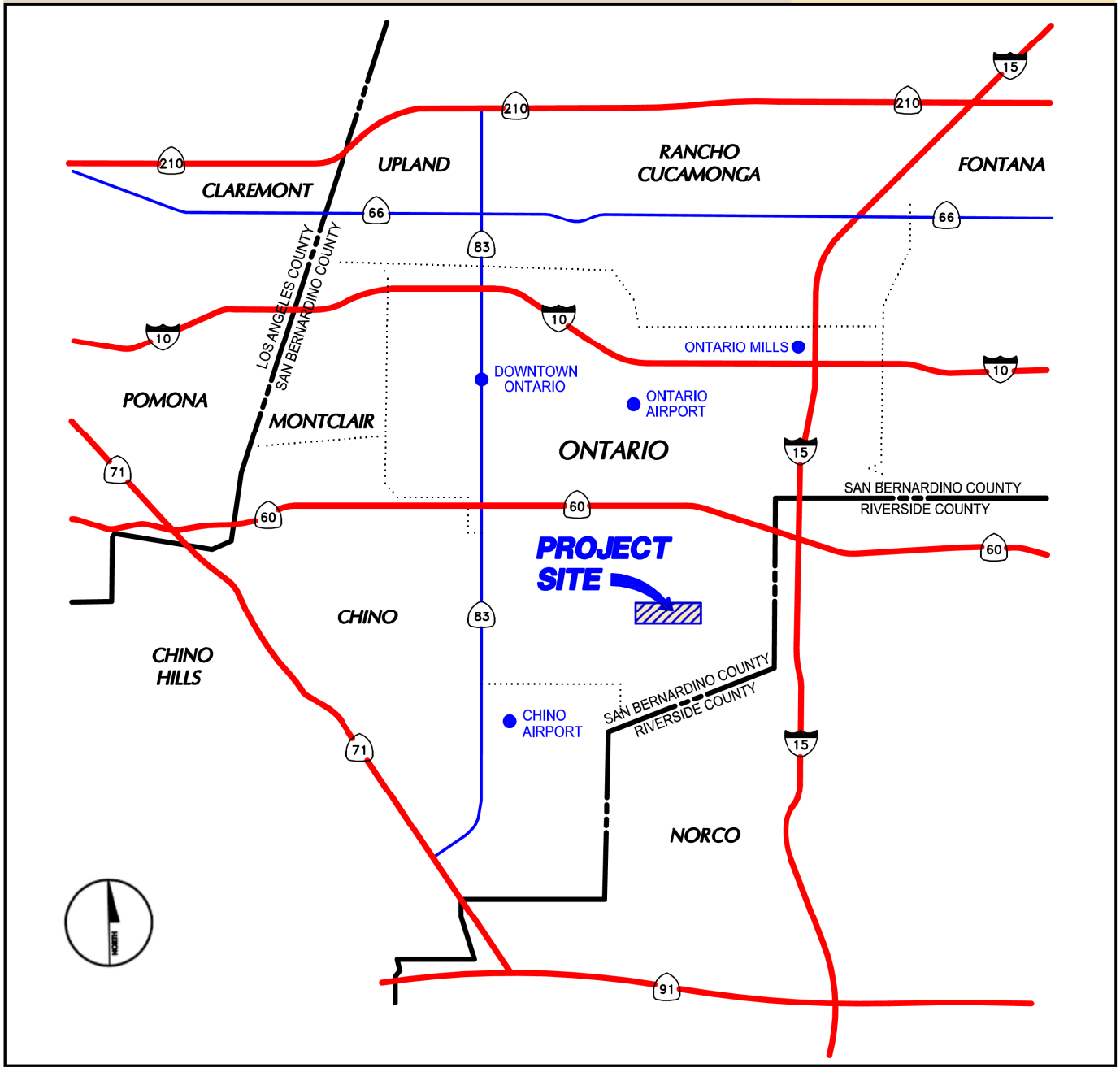
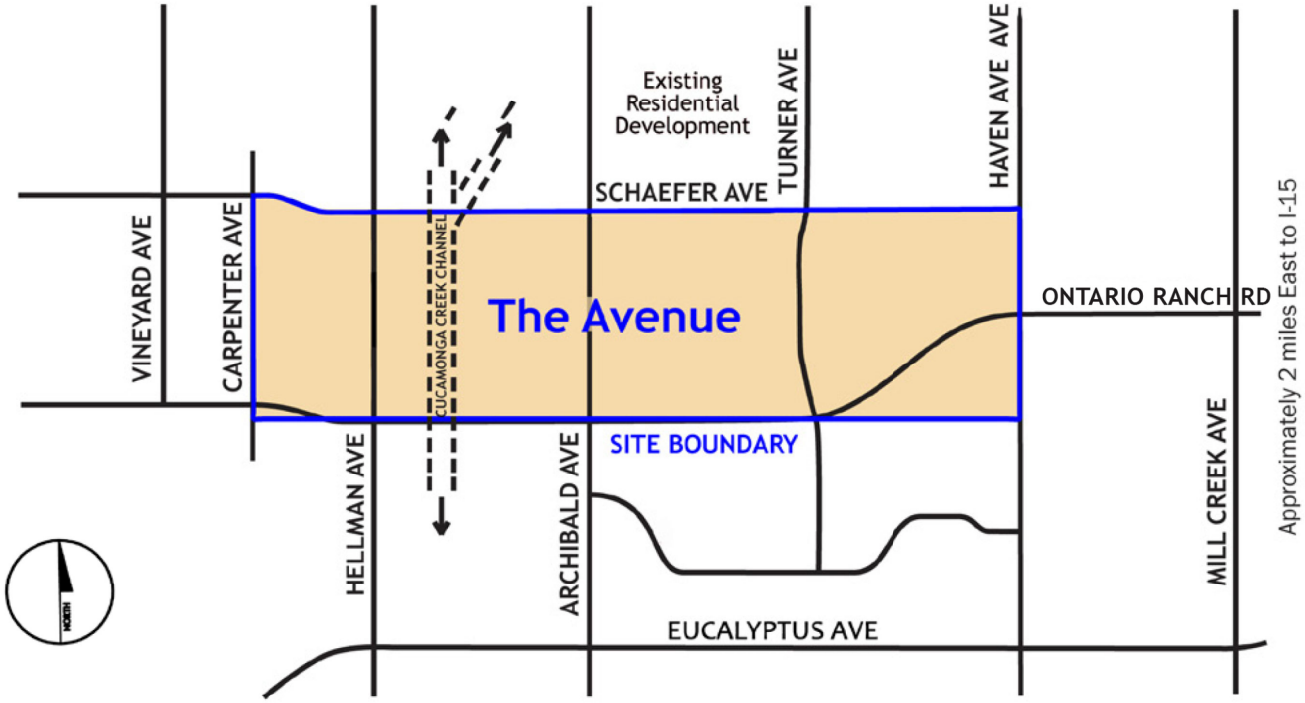


Exhibit 2 - Project Location Map



1.3 Project History and Background

After an extensive public participation program, the Ontario City Council adopted the Sphere of Influence General Plan Amendment for the 8,069 acre area known as the "The New Model Colony, now known as Ontario Ranch, on January 7, 1998. On November 30, 1999, the area was annexed into the City of Ontario. ~~The New Model Colony~~ Ontario Ranch General Plan provides the framework to create a high quality environment where residents will live, work and play. The area was divided into 30 subareas, each requiring the preparation of a specific plan reflecting the unique goals and qualities of each area. In this way, each subarea could be part of the overall ~~New Model Colony~~ Ontario Ranch, but retain a sense of individuality. The Avenue site has historically been used for agricultural operations, primarily dairy use. Those areas not in active agricultural production are occupied by rural residential housing, farm buildings, and other ancillary agricultural facilities. The natural vegetation and soil conditions that once occurred throughout La Avenida Drive have been significantly altered through agricultural uses, leaving little or no native vegetation.

On January 26th, 2010, the City of Ontario adopted The Ontario Plan (TOP) which serves as the City's new business plan and includes a long term Vision and a principle based Policy Plan (General Plan). The city's Policy Plan, which acts as the City's General Plan, designates (Policy Plan Exhibit LU-1 -Land Use Plan) the project site for development of Low Density Residential (2.1 -5.0 dwelling units per acre), Low Medium Residential (5.1 - 11 .0 dwelling units per acre), Medium Density Residential (11.1 - 25.0 dwelling units per acre), Neighborhood Commercial, Public Schools, and Open Space- Parkland.

The Avenue Specific Plan was amended on February 2, 2010, June 17, 2104, ~~and~~ March 21, 2017, and Novermber 17, 2020 to modify the Land Use Plan. The city of Ontario General Plan (The Ontario Plan – TOP) and The Avenue Specific Plan was amended concurrently and reflects the final language to convert a 10 acre portion of the 20 acre school site located west of Turner Road; identified as PA 6B to Low Medium Density Residential (5.1 – 11.0 dwelling units per acre).

1.4 Specific Plan Purpose

The Avenue Specific Plan serves to implement the City's Policy Plan for the project site and provides zoning regulations for development of the project site by establishing permitted land use, development standards, infrastructure requirements, and implementation requirements for development. A comprehensive set of design guidelines and development regulations are included to guide and regulate site planning, landscape and architectural character within the community ensuring that excellence in community design is achieved during project development. The Avenue Specific Plan establishes the procedures and requirements to approve new development within the project site.



Typical neighborhood pocket park

1.5 Specific Plan Objectives

The following objectives are established for The Avenue Specific Plan:

Residential Areas

1. Development of a variety of housing types into the land use plan addressing a wide variety of lifestyles and economic segments
2. Provide for both single family attached and detached housing in low density and low medium density residential districts
3. Plan for seamless transitions between housing product types in order to create cohesive neighborhoods that include a range of types and styles
4. Plan residential neighborhoods around a series of parks and open space areas, promoting outdoor activity and interaction among neighbors
5. Provide for connectivity between residential neighborhoods, recreational areas, and adjacent commercial land uses, as well as to the schools, by means of pedestrian and bicycle trail linkages along the Avenue and trails incorporated into both the Southern California Edison Easement and the Cucamonga Creek Channel

6. Create a strong functional relationship between homes and schools
7. Create an hierarchy of parks, providing for active and passive recreation
8. Create residential neighborhoods with diverse architectural styles and traditional design elements reflecting some of the characteristics of older established Ontario neighborhoods

Commercial Area

1. Develop retail and commercial uses to meet the needs of the residential community and larger surrounding market area, as well as implement Policy Plan Policies
2. Provide trails and sidewalks to connect the residential community with the retail and commercial area
3. Consider the development of plazas and other public space amenities within the retail and commercial area providing space for social interaction
4. Orient retail and commercial buildings to the street, wherever possible, to create an urban edge and sense of arrival



Commercial entry concept from adjacent neighborhood

1.6 Development Approval Components

The components of the development approval process for The Avenue are discussed below.

General Plan

The Ontario Plan establishes the direction and vision for the City of Ontario providing a single guidance system that will shape the Ontario community for the future. The Plan provides for policies to accommodate change over a 30 year period commencing in 2010, the beginning of the planning period. The Ontario Plan consists of a six part Component Framework: 1) Vision, 2) Governance Manual, 3) Policy Plan, 4) City Council Priorities, 5) Implementation, and 6) Tracking and Feedback.

Specific Plan

The Policy Plan requires the approval of a Specific Plans for development of the project site to ensure that sufficient land area is included to achieve unified districts and neighborhoods. The City of Ontario has zoned the project site as AG-Specific Plan. The zoning designation of AG-Specific Plan requires that a Specific Plan be approved to guide development of the project site and to implement the goals and policies of the Policy Plan. The Specific Plan provides the zoning regulations to govern development of the project

site. The requirements of the Specific Plan shall take precedence over the City of Ontario Development Code. In instances where the Specific Plan is silent, the City of Ontario Development Code shall prevail.

Subdivision Maps

Tentative tract maps will be approved by the City of Ontario for the residential portion of The Avenue indicating the approximate location of lot lines, streets, and proposed grading. Following approval by the City of the tentative tract maps, final maps will be prepared. The final maps become legal documents that are recorded and define legal parcels and lots that can be sold for development. Parcel maps may be approved by the City of Ontario for development proposed within the commercial and business park/light industrial portions of The Avenue.

Development Plan Review

Following the approval of The Avenue Specific Plan, all development proposals for individual neighborhoods or product areas within the Specific Plan will be subject to the Development Plan Review process pursuant to Article 8 of the City's Development Code.

Development Agreement(s) Required

Unless done in a coordinated manner and with adequate fiscal planning, development projects within ~~the New Model Colony~~ Ontario Ranch are likely to present a challenge in their implementation because of the lack of existing public facilities including streets, sewerage, transportation, drinking water, school, and utility facilities. California law has established a mechanism for ensuring the adequate provision of such facilities, while at the same time providing assurances to applicants that, upon approval of the project, the applicants can proceed with their projects. Approval of this Specific Plan without development agreements may result in a waste of resources, escalate the cost of housing to the consumer, and discourage investment in and commitment to comprehensive planning, as envisioned by the City, which seeks to make maximum efficient utilization of resources at the least economic cost to the public.

Therefore, a single statutory development agreement, or multiple agreements, authorized pursuant to California Government Code sections 65864 et seq., shall be required as part of the approval of this Specific Plan. For the above-mentioned reasons, the development agreement(s) for this Specific Plan shall include, among other things, methods for financing acquisition and construction of infrastructure, acquisition and development of adequate levels of parkland, and schools, as well as the provision of adequate housing opportunities for various segments of the community consistent with the regional housing needs assessment. Such development agreements shall have been fully approved before the issuance of building permits for plans within this project.

1.7 Specific Plan Authority and Requirements

State of California Government Code, Title 7, Division 1, Chapter 3, Article 8, Section 65450-57 grants authority to cities to adopt Specific Plans for purposes of implementing the goals and policies of their

General Plans. The Government Code specifies that Specific Plans will be adopted by ordinance, and that the Specific Plan is required to be consistent with the General Plan. The City of Ontario will be adopting this Specific Plan, as with other ~~New Model Colony~~ Ontario Ranch Specific Plans, by ordinance, thereby establishing the zoning regulations for the development of The Avenue. The standards set by The Avenue Specific Plan shall take precedence over the City of Ontario Development Code, and in instances where The Avenue Specific Plan is silent, the City of Ontario Development Code shall prevail. California Government Code Section 65451 sets forth the minimum requirements and review procedures for specific plans as follows:

A Specific Plan shall include a text and a diagram or diagrams, which specify all of the following in detail:

1. The distribution, location, and extent of the uses of land, including open space, within the area covered by the plan;
2. The proposed distribution, location, and extent and intensity of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy, and other essential facilities proposed to be located within the area covered by the plan and needed to support the land uses described in the plan;



Typical outdoor eating area - School

3. Standards and criteria by which improvements will proceed, and standards for the conservation, development, and utilization of natural resources, where applicable, and a program of implementation measures including regulations, programs, public works projects and the financing measures necessary to carry out paragraphs 1 and 2 above. The Specific Plan shall include a statement of the relationship of the Specific Plan to the General Plan.

1.8 Relationship to General Plan, Airport Land Use Compatibility and Zoning

The City's Policy Plan, which acts as the City's General Plan, designates the project site for development as follows:

- Low Density Residential (2.1 -5.0 dwelling units per acre)
- Low Medium Residential (5.1 - 11 .0 dwelling units per acre)
- Medium Density Residential (11.1 - 25.0 dwelling units per acre)
- Neighborhood Commercial
- General Commercial
- Public Schools
- Open Space- Parkland.
- Open Space - Non-Recreation

On August 16, 2022, TOP was amended to accommodate the TOP 2050 Update, which made modifications to the Vision, Governance Manual, and Policy Plan components of TOP and established a General Commercial land use within PA-4 and Medium Density Residential land use areas within PAs 2A, 3B and 5. The Policy Plan (General Plan) establishes a development capacity of ~~4,010~~3,739 dwelling units and a maximum FAR of 0.40 for Neighborhood Commercial for a total of up to ~~172,240~~436,297 square feet of commercial uses for the Specific Plan Area. The Policy Plan residential capacity is further broken down as follows:

~~Gross~~ Net Acres	TOP Land Use Designation	Maximum Permitted Dwelling Units
~~391.72~~351.0	Low Density Residential	~~1,763~~ 1,580
~~29.9~~57.6	Low Medium Density Residential	~~254~~489
~~94.97~~75.9	Medium Density Residential	~~2,078~~1,670
Total ~~516.59~~484.5		~~4,095*~~3,739*

**Densities do not reflect maximum allowable densities by the Policy Plan and are based on TOP EIR densities (average) of 4.5 du/ac for Low Density, 8.5 du/ac for Low Medium Density and 22 du/ac for Medium Density.*

California Government Code (Title 7, Division 1, Chapter 3, Article 8, Section 65450-65457) permits the adoption and administration of specific plans as an implementation tool for elements contained in the local general plan. Specific plans must demonstrate consistency in regulations, guidelines, and programs with the goals and policies set forth in the general plan. The A venue Specific Plan has been prepared in conformance with the goals and policies of the City of Ontario Policy Plan (General Plan). The policy analysis in located in the Appendix of this document, describes the manner in which the A venue Specific Plan complies with the Policy Plan policies applicable to the project.

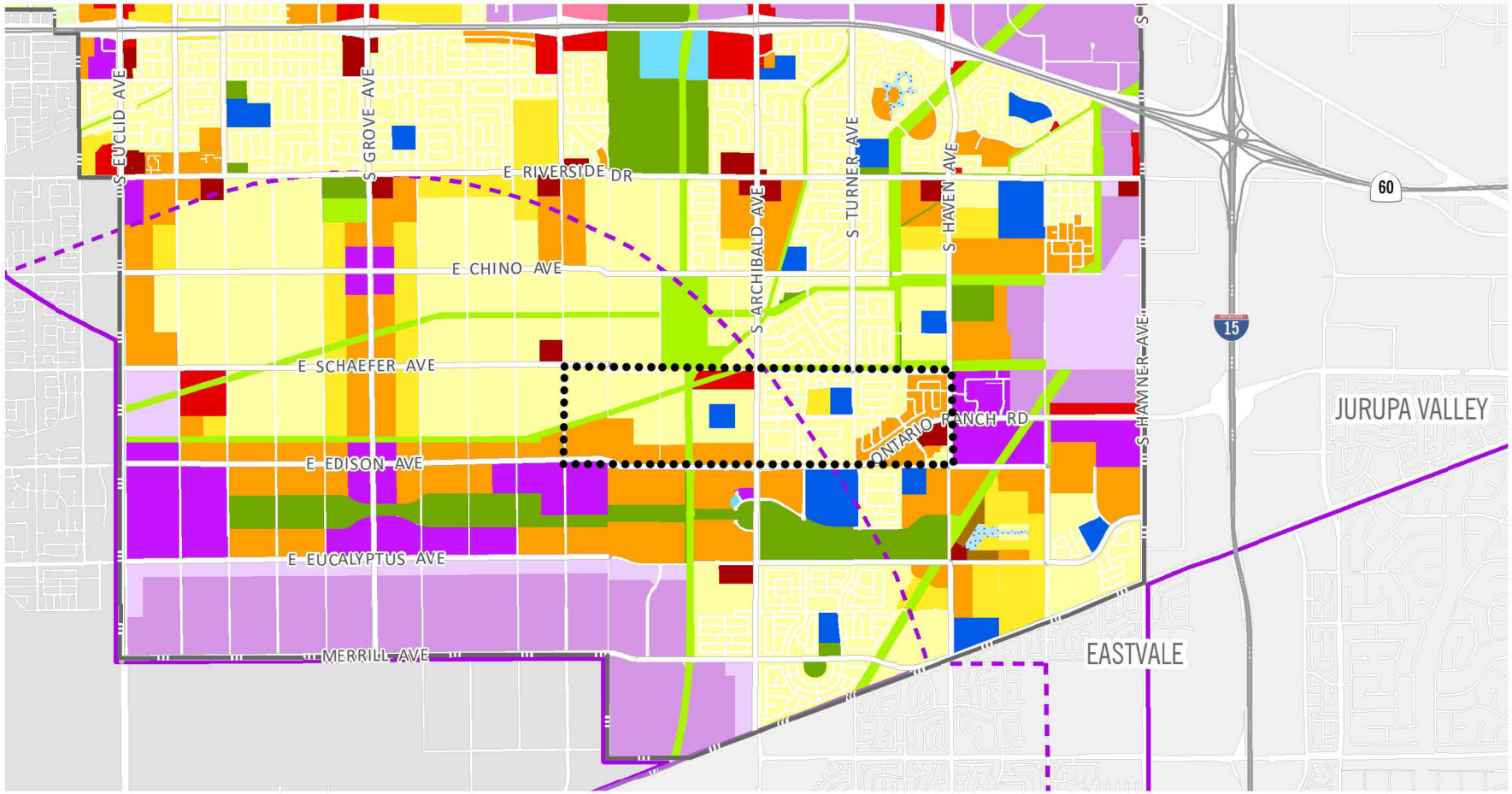
The Avenue Specific Plan is located within the Airport Influence Area (AIA) of Chino Airport and Ontario International Airport and is required to be consistent with both Airport Land Use Compatibility Plans.

1.9 CEQA Compliance

An Environmental Impact Report (EIR) was prepared by the City of Ontario for The Avenue Specific Plan in accordance with the California Environmental Quality Act (CEQA), to address impacts associated with the Specific Plan. The EIR was prepared as a basis for the environmental review for all subsequent discretionary and ministerial actions. On December 19, 2006, the City Council certified the EIR for The Avenue Specific Plan.



Updated Exhibit



LEGEND

Residential
- RR Rural Residential
- LDR Low Density Residential
- LMDR Low Medium Density Residential
- MDR Medium Density Residential
- HDR High Density Residential

Mixed-Use
- MU Mixed Use

Commercial
- NC Neighborhood Commercial
- GC General Commercial
- OC Office Commercial
- HOS Hospitality

Employment
- BP Business Park
- IND Industrial

Other
- OS-NR Open Space - Non-Rec
- OS-R Open Space - Recreation
- OS-W Open Space - Water

- PF Public Facility
- PS Public School
- ARPT Airport
- LF Landfill
- Rail

- The Avenue
- Boundary

Updated Exhibit
Policy Plan Land Use Map

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Section 2 - Existing Conditions

2.1 Site History

The Avenue site has previously been extensively used for agricultural operations, including dairy use. Those areas not in active agricultural production are occupied by rural residential housing, farm buildings and other ancillary facilities. The natural vegetation and soils conditions that once occurred throughout the project area have been significantly altered through agricultural uses, leaving little or no native vegetation. Though still currently in the transitioning phase for development from agricultural uses, the Zoning Classification for parts of the site were once considered as (AG) Specific Plan Ag Preserve.

2.2 Existing Site Conditions

The Avenue has undergone a significant change in land use patterns replacing what was historically undeveloped, with agricultural operations scattered throughout the area with lower density urban land uses. Historically, improvements within The Avenue included single-family residences, feed storage areas, and various other farming or cattle raising facilities. Other agricultural-related facilities, such as above ground tanks and modular structures, were scattered throughout, and a commercial nursery was located on the easterly portion of the site. These agricultural uses are transitioning to residential uses, parks and recreational areas and neighborhood commercial development since the Avenue Specific Plan has been approved and has been implemented over the plan area.

Exhibit 4 - Site Aerial Photo



2.2.1 Site Area

The Avenue Specific Plan is approximately 568.1 gross acres in size. This includes street right-of-ways and all utility easements.

2.2.2 Topography

The Project Site is located on gently sloping undeveloped terrain with a relatively uniform slope as illustrated in Exhibit 5, “Existing Topography”. The existing ground on the site slopes southerly away from Schaefer Avenue at an approximately 1% grade.

2.2.3 Existing On-site Land Use

The Avenue Specific Plan currently comprises agricultural, dairy, farming, and other agricultural related land uses. There are utility uses such as the Cucamonga Creek flood control channel and the Southern California Edison utility easement traversing the site, as well as a one-acre Southern California Edison substation.



View of Dairy Farm that existed on the Project Site prior to the adoption of the original Avenue Specific Plan



Historic agricultural uses on the Project Site circa 2004



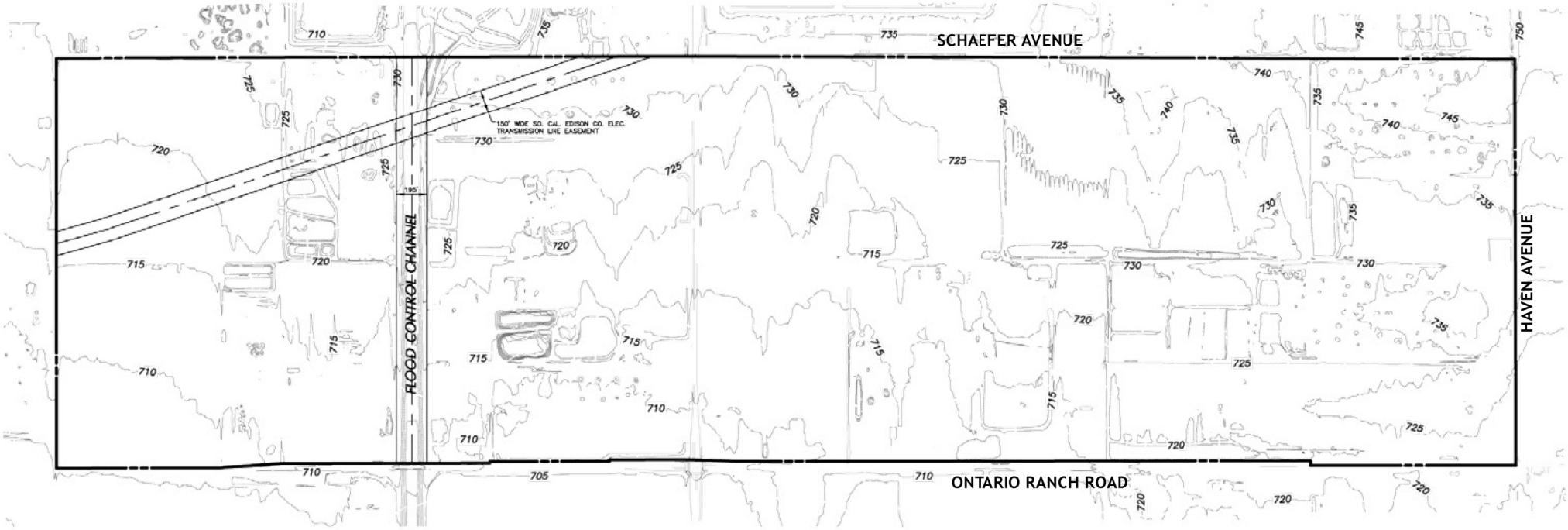
Street scene along La Avenida Drive



Turner Avenue and La Avenida Drive Intersection



VIEW OF THE AVENUE SPECIFIC PLAN AREA LOOKING WEST



Note: The existing site slopes southerly at approximately 2% grade.

2.2.4 Surrounding Land Use

Land uses adjacent to The Avenue Specific Plan area include:

North: Existing residential community and SCE Easement.
East: New residential community, low and medium density developments, farm land and vacant land.
South: Existing residential community is currently under construction and future mixed use/residential development.
West: Farm land and vacant land.

~~The New Model Colony~~ Ontario Ranch General Plan designates the surrounding areas as:

North: Low Density Residential, Elementary School, Flood Control and Green Belt (Subareas 5 and 12)
East: Low Density Residential and Green Belt (Subarea 12)
South: Low, Medium and High Density Residential, Flood Control and Green Belt (Subarea 23)
West: Medium Density Residential, High Density Residential and Green Belt (Subarea 17)

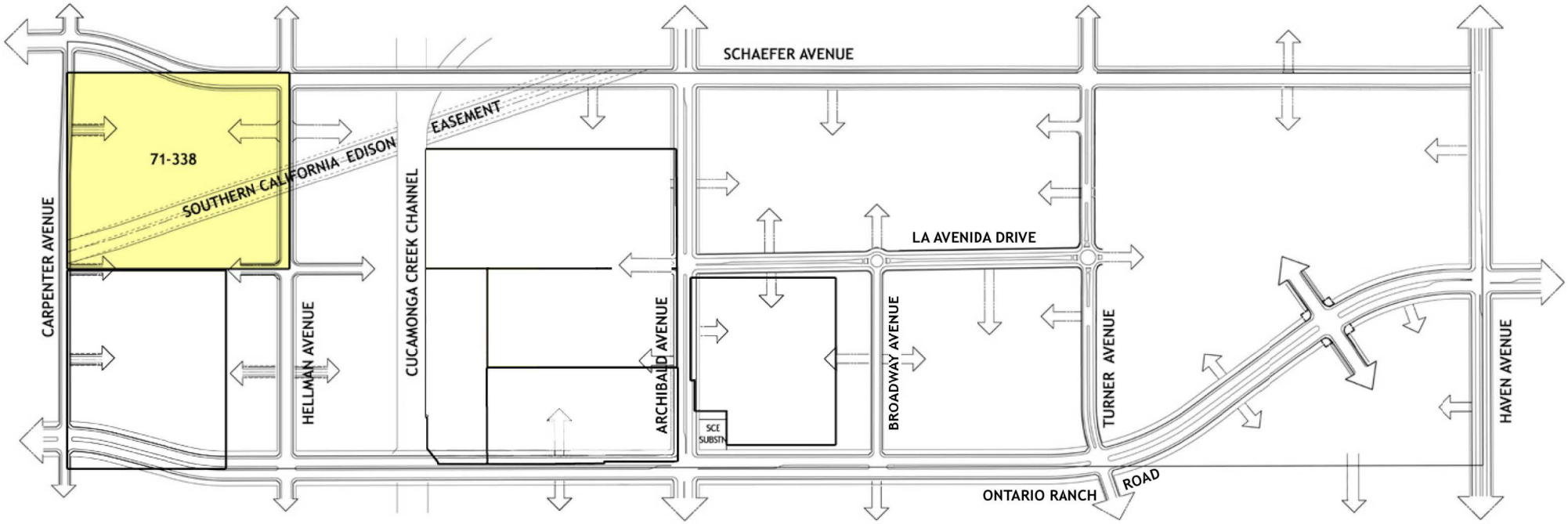


La Avenida as viewed from Archibald looking East

2.2.5 Williamson Act Contracts

There ~~are~~ is currently ~~3~~ one Williamson Act Contract~~s~~ within the Specific Plan Area as shown in Exhibit 6, “Williamson Act Contracts”.

Revised Exhibit



Revised Exhibit

Williamson Act Contracts

2.3 Property Ownership

The Avenue Specific Plan has several landowners or interests controlling or sharing control of the identified planning areas. Table 1 below, and Exhibit 7, “Assessors Parcel Numbers” indicates the ownership of parcels within The Avenue Specific Plan area.

Table 1 - Assessors Parcel Numbers

Planning Area	APN	Current Property Owner
1C	218-122-01	Peter and Henrietta Bosch Trust
1B	218-181-23	John and Lorraine Anderson
1B	218-181-24	Jimmie Anderson
1B	218-181-25	John and Lorraine Anderson
1A	218-181-26	Tony and Rickey Anderson
2A	218-181-17	Parkside West Holding Company, LLC
n/a	218-181-19	Unknown
2B	218-181-20	Miguel and Graciela Gomez
2A	218-181-21	Parkside West Holding Company, LLC
2B	218-181-22	Miguel and Graciela Gomez
3A	218-191-19	Parente R/E Inv Mgmt Co.
3B	218-191-24	GH Dairy
4	218-191-20	Parente R/E Inv Mgmt Co.
5	218-191-04	Richland Communities
5	218-191-05	Richland Communities
5	218-191-14	Richland Communities
5	218-191-15	Richland Communities
5	218-191-16	Richland Communities
5	218-191-22	Harada Trust
6A	218-201-15	Distinguished Homes
6A & 6B	218-201-44	Distinguished Homes
7	218-201-18	BrookCal Ontario LLC
8A	218-201-26	Distinguished Homes
8A	218-201-27	Distinguished Homes
10A	218-201-05	Dick Dykstra Dairies
9A & 9B	218-201-45	Dick Dykstra Dairies
10A, 10B & 11	218-201-42	BrookCal Ontario LLC
10A & 11	218-201-43	BrookCal Ontario LLC
10A &10B	218-201-30	BrookCal Ontario LLC
11	218-201-39	BrookCal Ontario LLC
n/a	218-191-09	San Bernardino County Flood Control
n/a	218-191-18	San Bernardino County Flood Control
n/a	218-191-21	San Bernardino County Flood Control
n/a	218-191-23	San Bernardino County Flood Control
n/a	218-201-17	SCE
8B	218-201-19	Distinguished Homes
n/a	218-201-20	Abandoned well site

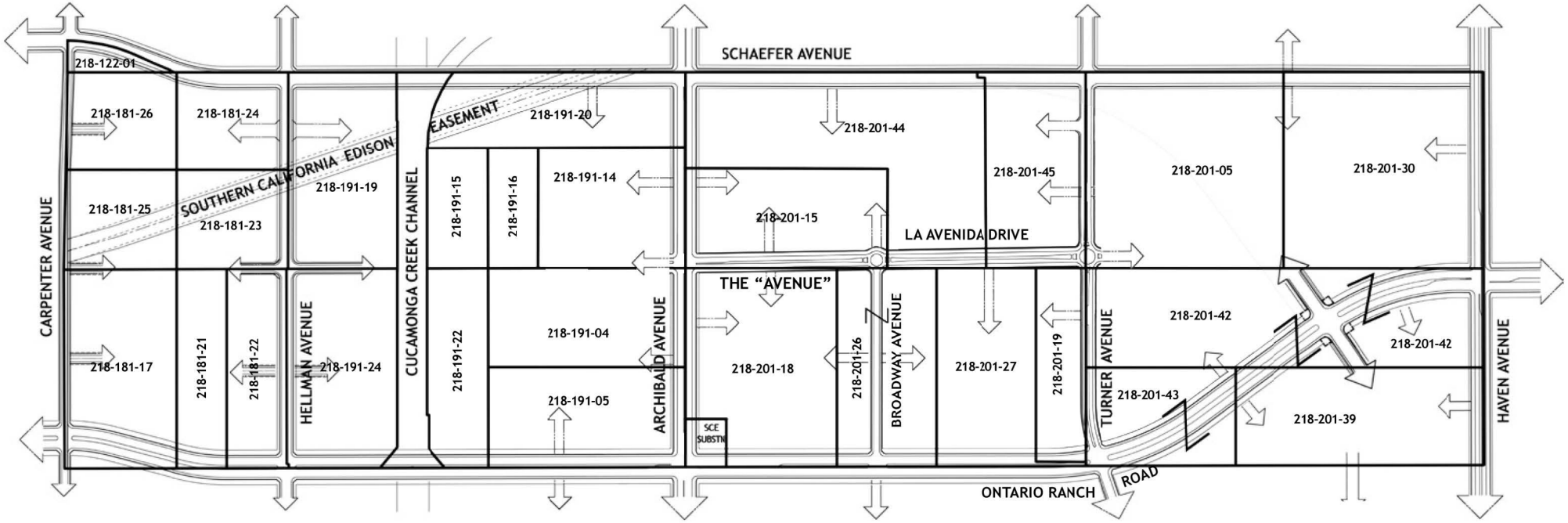
2.4 Existing Circulation

Access to The Avenue Specific Plan is currently provided from newly constructed arterial and collector roadways that are developed adjacent to and within The Avenue Specific Plan area. Ontario Ranch Road abuts the plan area on the south and is currently being improved in a phased manner from Haven Avenue westerly towards Carpenter Avenue.

Archibald Avenue has partially been improved to its ultimate condition and bisects the plan area through the center of the project. Schaefer Avenue has been fully constructed from Haven Avenue to Archibald Avenue. Haven Avenue has been fully constructed between Schaefer Avenue and Ontario Ranch Road (formerly Edison Avenue).



Existing intersection at Archibald and Ontario Ranch Road



LEGEND



Revised Exhibit

Assessors Parcel Numbers

2.5 Existing Infrastructure and Utilities

2.5.1 Water

There is an existing 12-inch main within Archibald. This is a Chino Desalter Authority (CDA) line which extends through La Avenida Drive. The source is well water, the zone is elevation 1010 and the line usage is for dairy lands in this vicinity. The private wells currently in use for this main will eventually be destroyed per DHS standards upon development of this Specific Plan. The location of existing wells are shown in Exhibit 24, "Existing Wells". Per the ~~NMC~~ Ontario Ranch Water Master Plan, new domestic facilities will be required to serve The Avenue Specific Plan area. Existing water facilities are shown on Exhibit 20, "Domestic Water Master Plan".

In compliance with the Chino Basin Water Master's Well Procedure for Developers, a well use/destruction plan and schedule for all existing private/agricultural wells shall be submitted to the City of Ontario for approval prior to the issuance of permits for any construction activity. If a private well is actively used for water supply, the Developer shall submit a plan to abandon such well and connect users to the City's water system (residential to the domestic water system and agricultural to the recycled water system) when available. Wells shall be destroyed/abandoned per the California Water Resource Guidelines and require permitting from County Health Department. The location of existing wells are shown in Exhibit 24, "Existing Wells". A copy of such permit and Form DWR 188 Well Completion Form shall be provided to the Engineering and Public Works Agency prior to issuance of grading and/or building permits. If the Developer proposes temporary use of an existing agricultural well for purposes other than agriculture, such as grading, dust control, etc., the developer shall make a formal request to the City of Ontario for such use prior to issuance of permits for any construction activity. Upon approval, the Developer shall enter into an agreement with the City of Ontario and pay any applicable fees as set forth by the agreement.

2.5.2 Recycled Water

There is an existing Chino Basin Municipal Water District 30-inch main within La Avenida Drive. The main is located within the existing and proposed alignment of Carpenter Street extending northerly and southerly of this Specific Plan area. This main will serve The Avenue project along with proposed ~~NMC~~ Ontario Ranch Master Plan facilities connecting to this 30-inch line as the source of recycled water. Existing recycled water facilities are shown on Exhibit 21, "Recycled Water Master Plan".

2.5.3 Sewer

Existing recently constructed IEUA 33-inch and 36-inch Eastern Trunk Sewer mains are located within Archibald Avenue. The Archibald trunk reach eventually joins the existing Kimball 54-inch Interceptor Trunk Sewer to the south of La Avenida Drive. The existing Archibald IEUA sewer will serve the easterly side of The Avenue Specific Plan via proposed ~~NMC~~ Ontario Ranch Master Plan facilities which will connect to it. La Avenida Drive west of the Cucamonga Flood Channel currently has no gravity sewer service. All other existing septic systems will be destroyed per DHS standards with the development of the Specific Plan. Existing sewer facilities are shown on Exhibit 23, "Sewer Master Plan".

2.5.4 Storm Drainage

The Avenue is presently in agricultural use; therefore, only a limited portion of the site is covered with impervious surfaces. Normal rainfall to the area is able to percolate through on-site soils and does not result in high volumes of surface runoff, as typically associated with urban areas. During periods of heavy rainfall when ground surfaces are saturated, surface runoff is collected in the existing drainage ditches and retention basins located within the site. Off-site flows are then directed into the existing storm drain system surrounding The Avenue which is generally unimproved and consists primarily of open earthen swales along area roadways or curbed roadway surfaces.



Cucamonga Creek Channel

An existing drainage channel bisects the site but does not collect off-site flows from La Avenida Drive. The channel is a major flood control facility that conveys water from much of the urbanized area located to the north of La Avenida Drive through the site and then to the Prado Basin in the south. Existing storm drain facilities are shown on Exhibit 22 “Storm Drain Master Plan”.
Master planned storm drain facilities have been installed along with development/implementation of the Specific Plan since it was originally approved.

2.5.5 Solid Waste

Solid Waste service is provided by the City of Ontario.

2.5.6 Gas

No gas is currently available within The Avenue. Individual propane units are currently being used.

2.5.7 Electric

Electricity is available from Southern California Edison.

2.5.8 Telephone

Telephone is currently available from Verizon.

2.5.9 Cable Television

Cable is available in the newly developed areas of The Avenue.



Schaefer Avenue looking west between Archibald and Haven



Ontario Ranch Road looking west

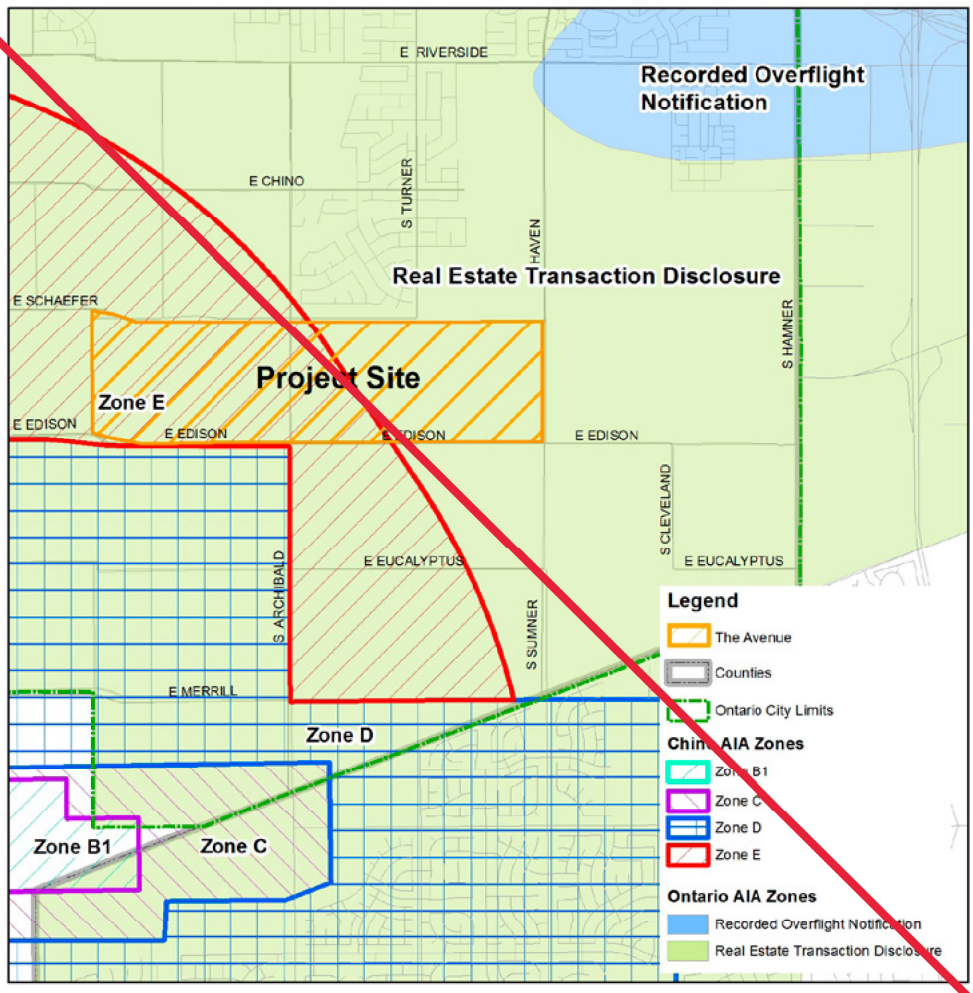


Northerly site boundary along Schaefer Avenue

2.6 Airport Influence Areas

The Avenue Specific Plan is located within the Airport Influence Areas of Chino Airport and Ontario International Airport. All development proposals or Specific Plan Amendments must be consistent with the Airport Land Use Compatibility Plans for both airports.

Delete Exhibit



Chino Airport Influence Zone E

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Section 3 - Land Use Plan

3.1 Land Use Concept

The proposed ~~569~~568.1-acre Avenue Specific Plan offers a traditional neighborhood lifestyle featuring a variety of residential housing types designed within easy walking distance to recreational amenities, retail and commercial uses, and school sites. Connectivity within The Avenue Specific Plan is provided through a system of pedestrian and bicycle trails linking residential neighborhood parks to the retail and commercial land use areas within the plan area.

The Avenue lies between two tree-lined avenues - Ontario Ranch Road to the south and Schaefer to the north. These arterials converge on one another at the eastern portion of the project. There are two additional dramatic tree-lined arterials, Archibald and Haven, that take advantage of the views of the San Bernardino Mountains to the north and the Santa Ana Mountains to the south. The vehicular circulation through the community provides a significantly different experience at each point of entry into the Colony. The Avenue's central element emphasizes pedestrian and recreational movement with wide sidewalks, tree-lined parkways and planted vehicular medians. The unifying elements include tree-lined streets and entry monuments coupled with drought tolerant flowering plant material.

Several key issues have been addressed in the design concept for The Avenue. They include the following:

- Development of an elegant, traditional style of landscape theming with generously landscaped common areas and strong, rich landscape materials that may include river rock, stone, brick, groves of trees, tree-lined streets, earth tone colors, and a diversity of other materials appropriate to the design theme
- Incorporation of a residential village and park program which is clear, identifiable and properly serves the needs of the community
- Pedestrian and non-motorized circulation throughout the community between recreational and educational elements
- Consideration of resources and long term maintenance efficiency in the selection of plant materials and placement helps create a strong "sense of community" through landscape design elements

Notable features of the proposed The Avenue Land Use Plan include the following:

- A variety of attached and detached housing opportunities
- Neighborhoods that serve retail and commercial locations
- Recreation Areas may feature shade trees, barbeques and turf play areas that may include pools, and tot lots



- Neighborhood pocket parks that will serve to integrate the neighborhoods
- Enhanced Roadways - La Avenida Drive and Turner Avenue - roadway, pedestrian and multi-use corridors linking each of the recreational sites and schools—providing connection between neighborhoods, featuring enhanced setbacks, multi-use paths, divided landscape medians, and front-on architecture
- Schools - One Elementary School (10 acres) ~~with an attached five-acre park~~ and one additional school site (10 acres) that will be pedestrian-accessible from all neighborhoods
- Trails - 5 to 10 minute walk or bike to community amenities

Residential development is designed to address a variety of lifestyles, such as singles, families, executives and "empty nesters". Housing types will include a variety of single family detached and attached homes. Attached housing may include duplex, triplex, row townhomes, senior and court-style residential.
Retail and commercial land uses are provided for in The Avenue Specific Plan for the development of one commercial site totaling 10 acres. The commercial site is located on the southwest corner of Haven Avenue and Ontario Ranch Road.

3.1.1 Residential Planning Areas/Housing Types

The Specific Plan will provide for development of a variety of residential housing types oriented toward open space amenities and designed to promote walkability and interaction among residents. Residential development on approximately ~~506~~ 484.5 net acres of the plan area will contain up to ~~2,875~~3,753 dwelling units, providing a mix of single family detached, single family attached and multifamily attached housing types. In determining the number of residential units for The Avenue Specific Plan area, SCE easements, schools and commercial areas have been removed from the gross in order to determine net acres as shown on Table 2, "Statistical Analysis".

A. Transferring or removing units within the Specific Plan Area are subject to the following requirements:

1. Water and Sewer Technical Studies shall be prepared to study how the transfers change the quantity and locations of sewer and water demands and how those changes impact the Water and Sewer Master Plan Systems and local sewer and water systems."
2. If unit transfers result in net changes to the overall projected water demands or the water demands are transferred between the 1010PZ and 925PZ, then the initializing project shall be responsible for processing an Amendment to the Water Master Plan as part of the entitlement process of Implementation."
3. If unit transfers result in net changes to the overall projected sewer demands or the sewer demands are transferred between different Master Plan Truck Sewer Tributary Areas, then the initializing project shall be responsible for processing an Amendment to the Sewer Master Plan as part of the entitlement process of Implementation."

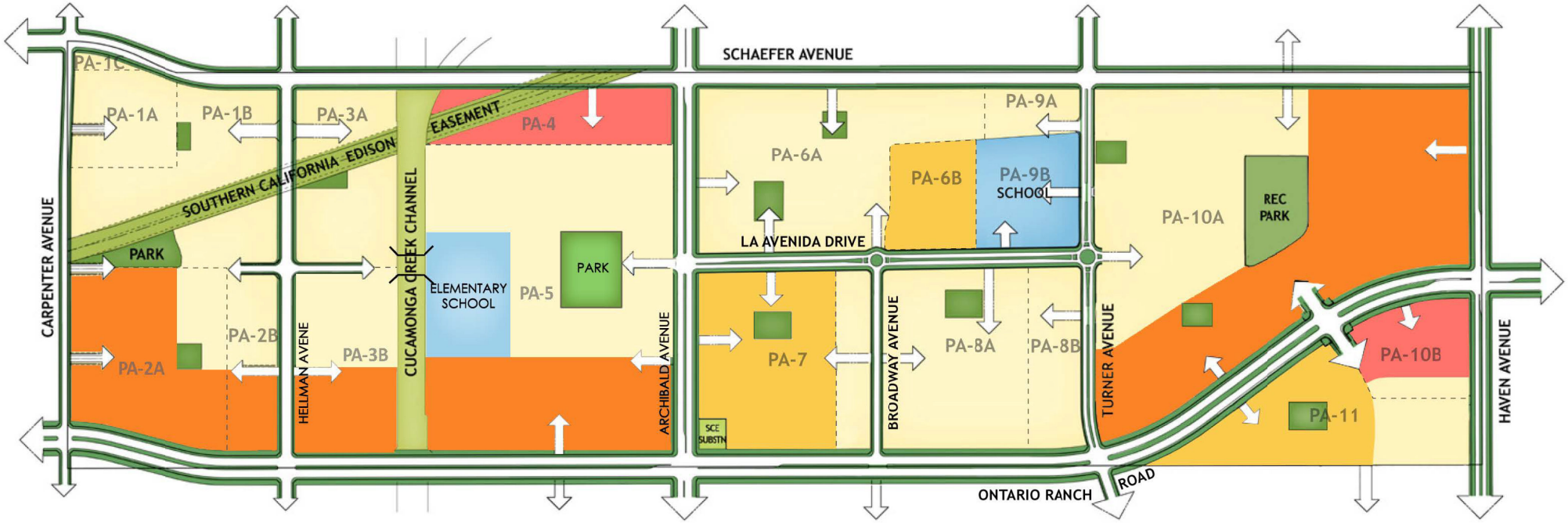
3.1.2 Parks and Open Spaces

~~The Avenue Specific Plan will provides approximately 21.6 acres of parkland in a diverse hierarchy of evenly distributed parks. The maximum parkland dedication requirement for single family homes, based on 2,875 households at 3.997 persons per household, yields a parkland requirement of approximately 20 acres at 2 acres per 1,000 population. The city standard of 3.347 persons per household will be used in calculating park demand for Multi-family housing. Approximately twelve (12) Neighborhood Parks are evenly dispersed throughout the neighborhoods. A Recreation Area is also proposed as part of the project.~~

The Avenue Specific Plan will provide parkland in a diverse hierarchy of evenly distributed parks. Per city standard The Avenue Specific Plan will require a parkland dedication of 2 acres per 1,000 population The city standard of 3.997 persons per household for single family homes and 3.347 persons per household for multi-family homes will be use in calculating park demand. Per this Specific Plan each individual parcel will meet its park requirement based on standards mentioned above.

~~A five-acre Active Recreation Park is to be located adjacent to the ten (10) acre elementary school site to provide an extra play field during school hours and recreational opportunities to the residents after school hours~~

Approximately 14 acres of Southern California Edison (SCE) easement, located in the northwest portion of the plan area will be utilized for passive recreation and a trail, to the extent permitted by SCE. The multi-use path is designed to connect the regional trail in the SCE easement, Active Recreation Park, Schools, The Avenue and Recreation Area. The conceptual locations of parks are shown in Exhibit 10, the “Parks and Open Space” plan.



LEGEND

- LOW DENSITY RESIDENTIAL (2.1-5.0 DU/AC)
- LOW MEDIUM DENSITY RESIDENTIAL (5.1-11.0 DU/AC)
- MEDIUM DENSITY RESIDENTIAL (11.1-25.0 DU/AC)
- RETAIL/COMMERCIAL
- SCHOOL
- PARK
- SCE EASEMENT
- STORM DRAIN EASEMENT

NORTH

0 100 200 400 800

NOTE: The locations of the parks are conceptual and will be determined as part of the tract map approval process.

Revised Exhibit
Land Use Plan

The Avenue
SPECIFIC PLAN

Ontario Ranch ▪ Ontario, California

Exhibit 8 - Land Use Plan

Delete Page

Table 2 - Statistical Analysis

Former Subarea	Planning Area	Gross Acres	Excluded from Gross	Net Res. Acres	Homes	Density (4)	Comm. SF	Use
17	1A	11.1	-	11.1	51	4.6		LDR
17	1B	33.5	5.4 (1)	28.1	127	4.5		LDR
17	1C	2.2	-	2.2	5	2.3		LDR
17	2A	32.0	-	32.0	147	4.6		LDR
17	2B	12.5	-	12.5	58	4.6		LDR
17	3A	21.7	2.6 (1)	19.1	86	4.5		LDR
17	3B	21.5	-	21.5	97	4.5		LDR
18	4	19.9	-	19.9	218	11		MDR
18	5	82.6	10.0 (3)	72.6	334	4.6		LDR/O.S./ Elem. School
18	6A	49.9	-	49.9	230	4.6		LDR
18	6B	10.0	-	10.0	106	10.6		LMDR
18	7	28.9	-	28.9	287	9.5		LMDR
18	8A	39.9	-	39.9	180	4.5		LDR
18	8B	9.7	-	9.7	44	4.5		LDR
18	9A	10.6	-	10.6	20	2.0		LDR
18	9B	10.0	10.0	n/a				School
12	10A	114.7	-	114.7	766	6.7		LDR/MDR
	10B	10.0 (2)	10.0 (2)	n/a			130,680	Retail
24	11	33.4	-	33.4	225	6.7		LDR/LMDR
Cucamonga Creek		12.8	12.8	n/a				
SCE	7	1.2	1.2	n/a				
Total		**568.1**	**52.0**	**516.1**	**2,981**		**130,680**	

(1) SCE Easement
(2) Retail Site
(3) Elementary School
(4) Density is measured to C/L of arterial streets per City standard for NMC entitlements

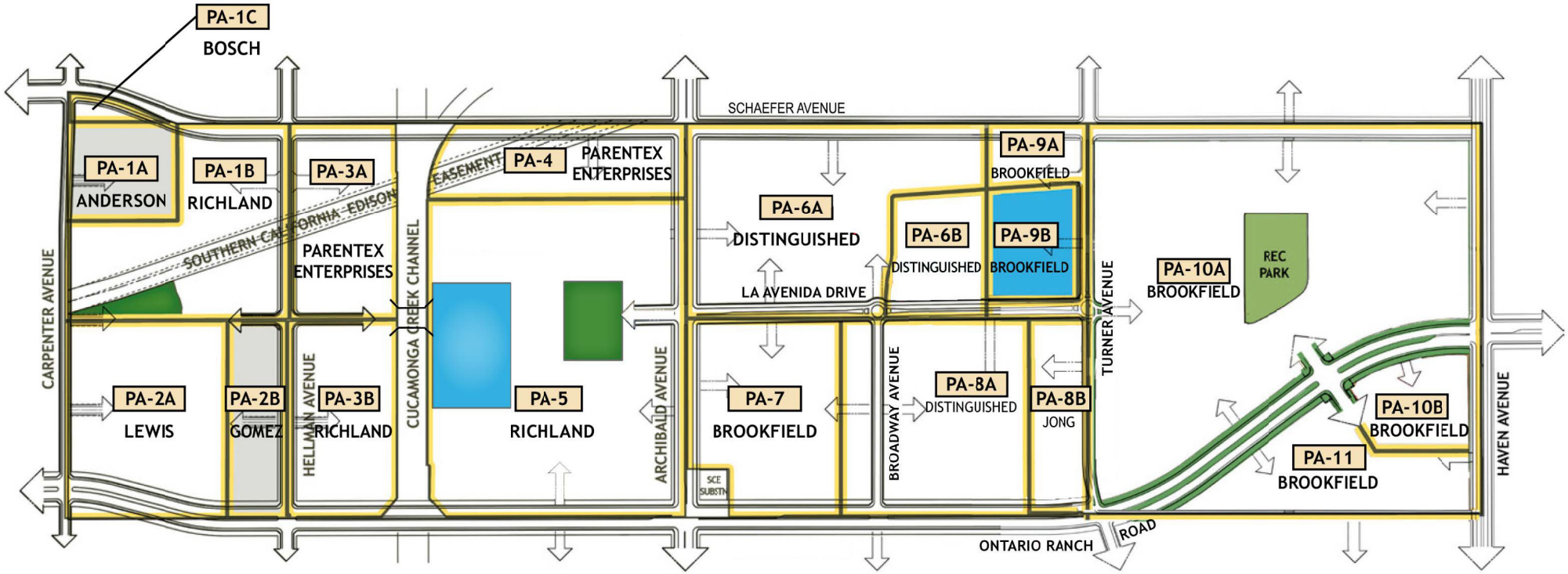
Notes:
All acreages approximate - exact acreages will be defined through tract map surveys. Additional studies may be required to transfer these units. See Section 3.1.1 for additional information.

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Table 2 - Statistical Analysis

~~Former Subarea~~	Planning Area	Gross Acres	Net Acres	Homes	Density	Commercial SF	Use
~~17~~	1A	11.1	9.20	~~51~~ 41	4.5		LDR
~~17~~	1B	33.5	24.54	~~127~~ 110	4.5		LDR
			5.40				SCE Easement
~~17~~	1C*	2.2	2.20	5	2.3		LDR
~~17~~	2A	32.0	5.00	~~147~~ 23	4.5		LDR
			25.05	~~58~~ 551	22.0		MDR
~~17~~	2B	12.5	6.64	~~86~~ 30	4.5		LDR
			5.43	~~97~~ 119	22.0		MDR
~~17~~	3A	21.7	19.15	~~218~~ 86	4.5		LDR
			2.60				SCE Easement
~~17~~	3B	21.5	12.22	~~334~~ 55	4.5		LDR
			8.59	189	22.0		MDR
~~18~~	4	19.9	15.04			204,496	Retail
			4.00				SCE Easement
~~18~~	5	82.6	46.85	211	4.5		LDR
			22.54	496	22.0		MDR
			10.89				Elementary School
~~18~~	6A	49.9	49.90	~~230~~ 229	4.6		LDR
~~18~~	6B	10.0	10.00	~~106~~ 110	11.0		LMDR
~~18~~	7	30.1	28.90	~~287~~ 265	9.2		LMDR
			1.20				SCE Substation
~~18~~	8A	39.9	39.90	~~180~~ 176	4.4		LDR
~~18~~	8B	9.7	9.70	44	4.5		LDR
~~18~~	9A	10.6	10.60	20	1.9		LDR
~~18~~	9B	10.0	10.00				School
~~12~~	10A	114.7	100.40	~~766~~ 452	4.5		LDR
			14.30	314	22.0		MDR
	10B	10.0	10.00			130,680	Retail
~~24~~	11	33.4	14.73	~~225~~ 67	4.5		LDR
			18.67	160	8.6		LMDR
~~Cucamonga Creek~~		12.8	12.80				Cucamonga Creek
~~Total~~	Total	**568.1**	556.44	~~2,981~~ 3,753	**6.7**	**335,176**	

Notes:
* Realignment of Schaeffer Ave creates the need for PA 1C (APN 021-812-201) as it is owned separately from PA 1A (APN 0218-181-126).
- All acreages approximate- exact acreages will be defined through tract map surveys. Additional studies may be required to transfer these units. See Section 3.1.1 for additional information.
- Density blending will be allowed within Planning Areas within one TOP land use step (i.e. from LDR to LMDR) and between Planning Areas at a rate no higher than 15%. If units are blended within a PA or moved between PA's, then Technical Studies for Impacts to the Water and Sewer Master Plan Systems will be required as part of the entitlement process.

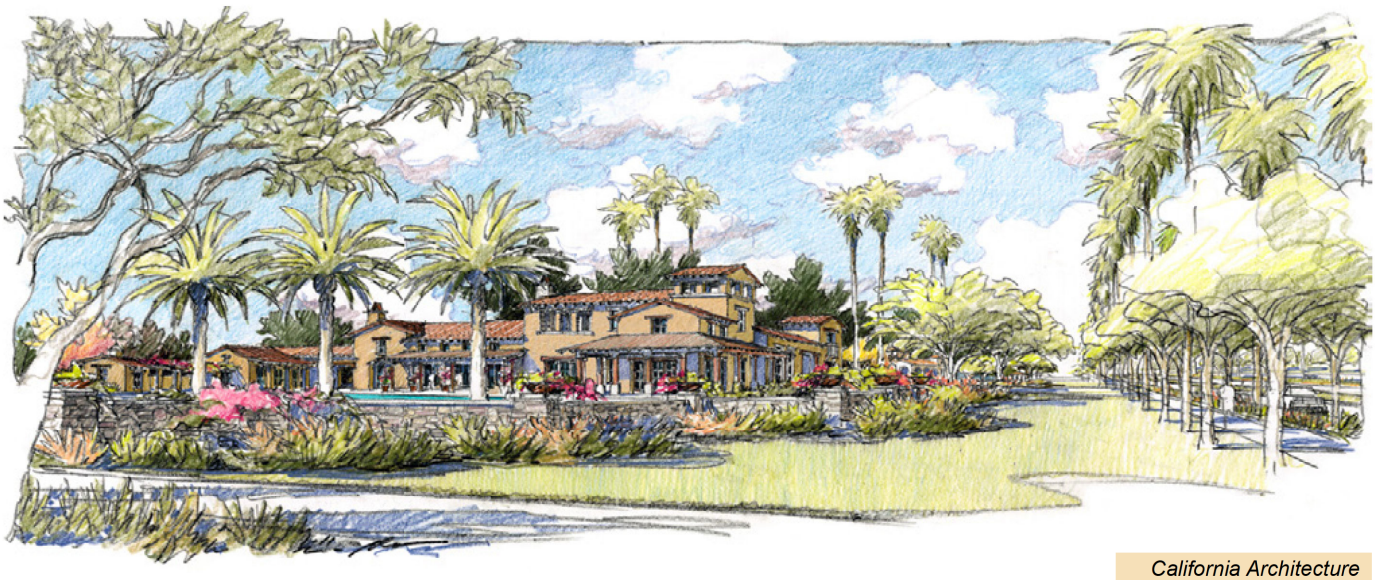


Revised Exhibit

Planning Areas/Developer Controlled/Ownership

Critical to the success of any community is the quality of the community spaces and proper integration into the community fabric. The Avenue's land plan is developed around a theme of recreation and open space amenities to enhance the quality of life. All parks (including the pool and splash play area) will be designed to meet all ADA and City accessibility standards. The Active Recreation Park site and recreation amenities will become more valuable in combination with the school sites as the synergy of active recreational, social and educational opportunities will address the diverse and changing needs of the community. The park and recreation design program has several major elements including multi use park sites, a recreation trail system and an aquatic sports facility.

The Avenue enjoys a well balanced plan of park locations interconnected by a clear pedestrian system. A majority of the residents can access the community parks and school sites with minimal vehicular road interface by utilizing the Avenue's pedestrian paths and parkways, the SCE easement, and flood control channel trails.

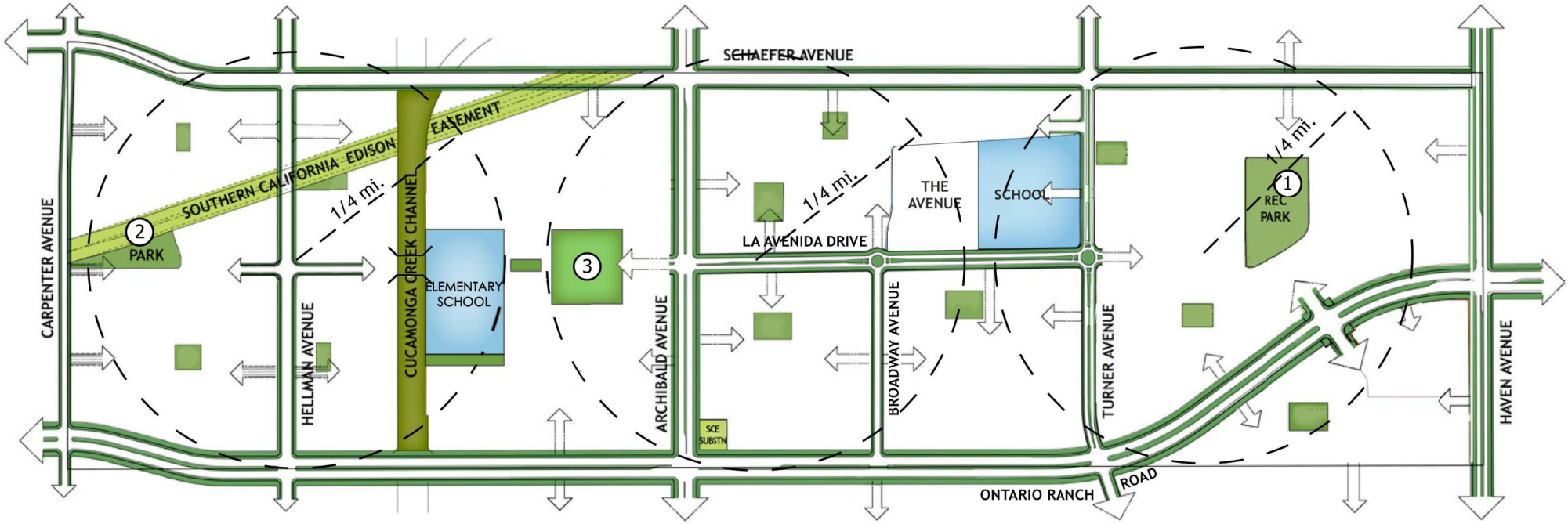


California Architecture

Neighborhood Park Sites

The park system includes approximately ~~twelve (12)~~Thirteen (13) Neighborhood Parks that range in size. These are private parks and conceptual designs may include the following elements:

- Restrooms
- Picnic facilities
- Barbecues
- Basketball courts
- Sand volleyball courts
- Tot lot and pre-teen areas
- Gazebo and/or trellis structures
- Shade tree plantings with open turf areas for informal sport activities
- Drinking fountains



LEGEND

- ACTIVE RECREATION PARK
- NEIGHBORHOOD PARKS
- SCHOOLS
- 1/4 MILE (5-MINUTE WALK)
- DRAINAGE EASEMENT
- SCE EASEMENT
- STREETSCAPES
- EDGE OPEN SPACE

PARK AND RECREATION PROGRAM

1	RECREATION AREA:	7.0 AC
2	WESTERLY PARK:	1.5 AC
3	ACTIVE RECREATION PARK:	~~5.0 AC~~ 4.2 AC
	NEIGHBORHOOD PARKS:*	~~8.1 AC~~
	~~TOTAL PARKS:~~	~~21.6 AC~~

* Per this Specific Plan each individual parcel will meet its park requirement based on City standards.

NORTH

0 100 200 400 800

NOTE: The size and location of the parks are conceptual and will be determined as part of the tract map approval process.

Revised Exhibit

Parks and Open Space

Exhibit 11 - Typical Neighborhood Park 1

Conceptual Plan

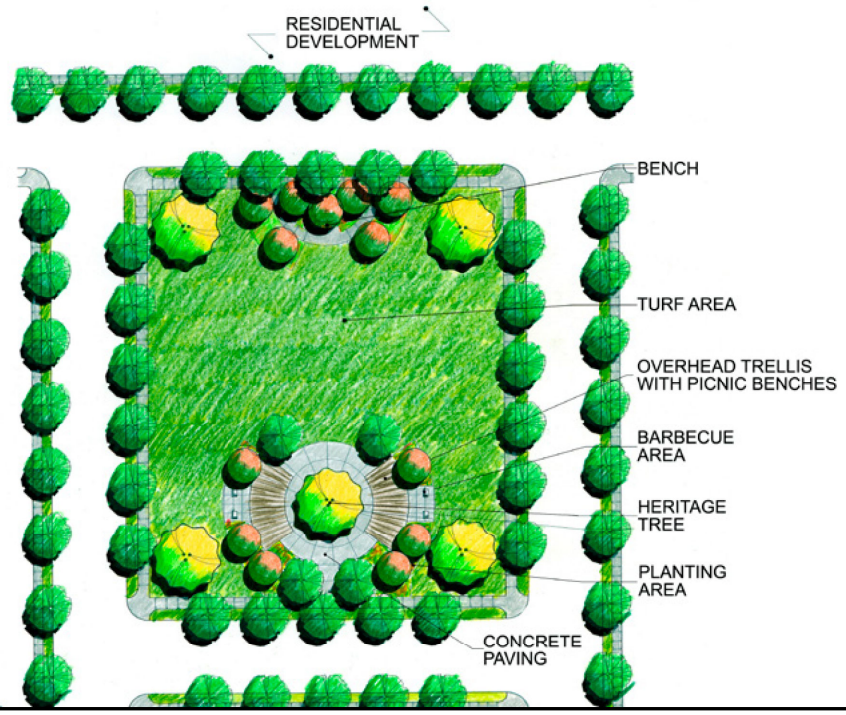
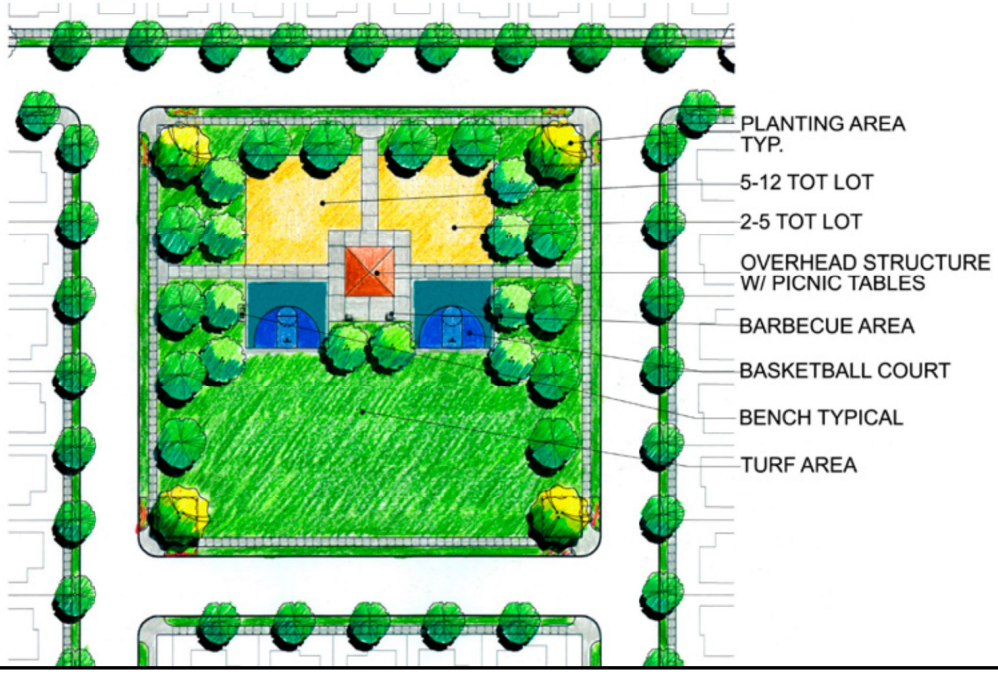


Exhibit 12 - Typical Neighborhood Park 2

Conceptual Plan

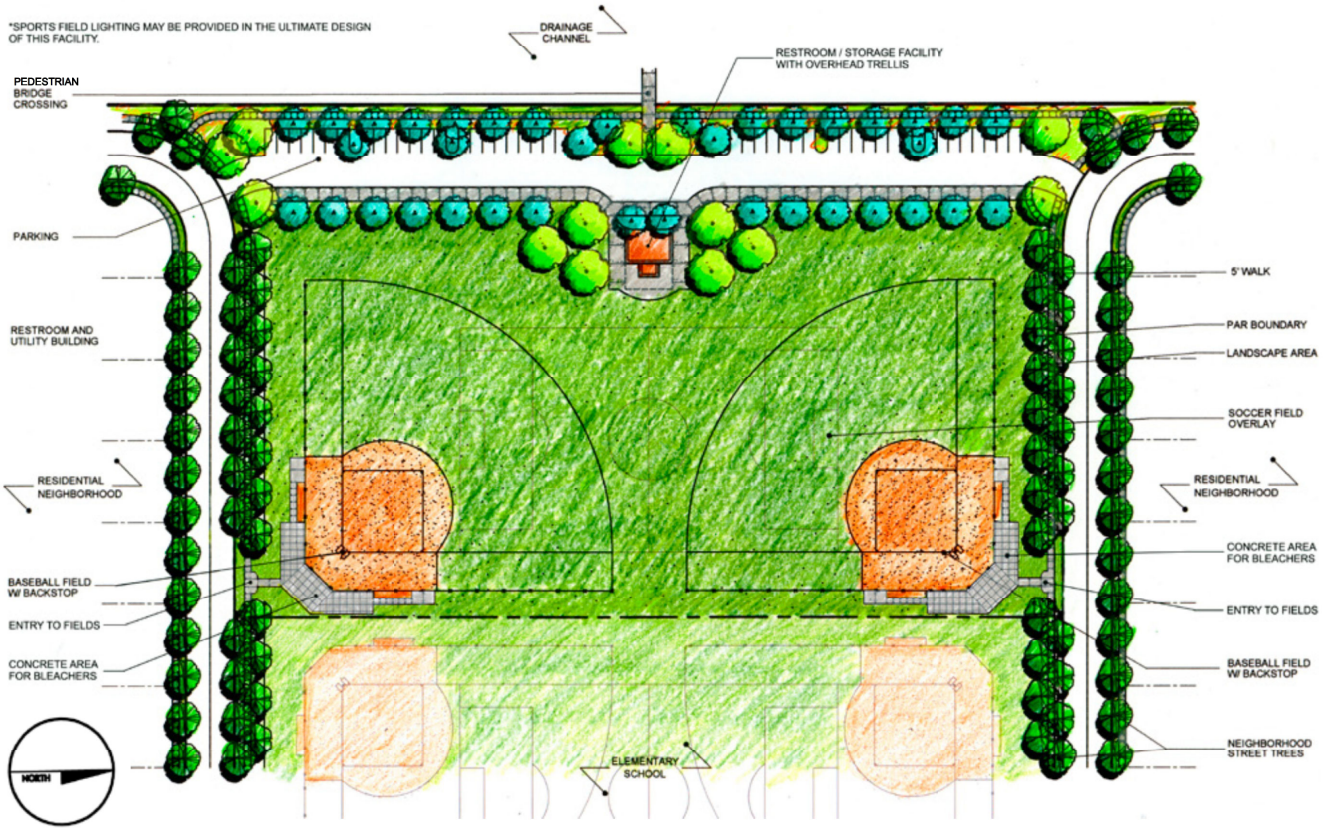


Active Recreation Park Site

The design maximizes the efficiency of organized sport league management by focusing, if feasible, on a particular field sport entity. As a public park, the school district will be encouraged to design site plans that complement park development to better meet community needs. The specific specialty sport uses provided in the park include a soccer/football field and baseball/softball fields that will be lit for security and evening use. Basketball and volleyball uses can be best accommodated on the school sites due to the large number of courts available.

Exhibit 13 - Typical Active Recreation Park

Conceptual Plan



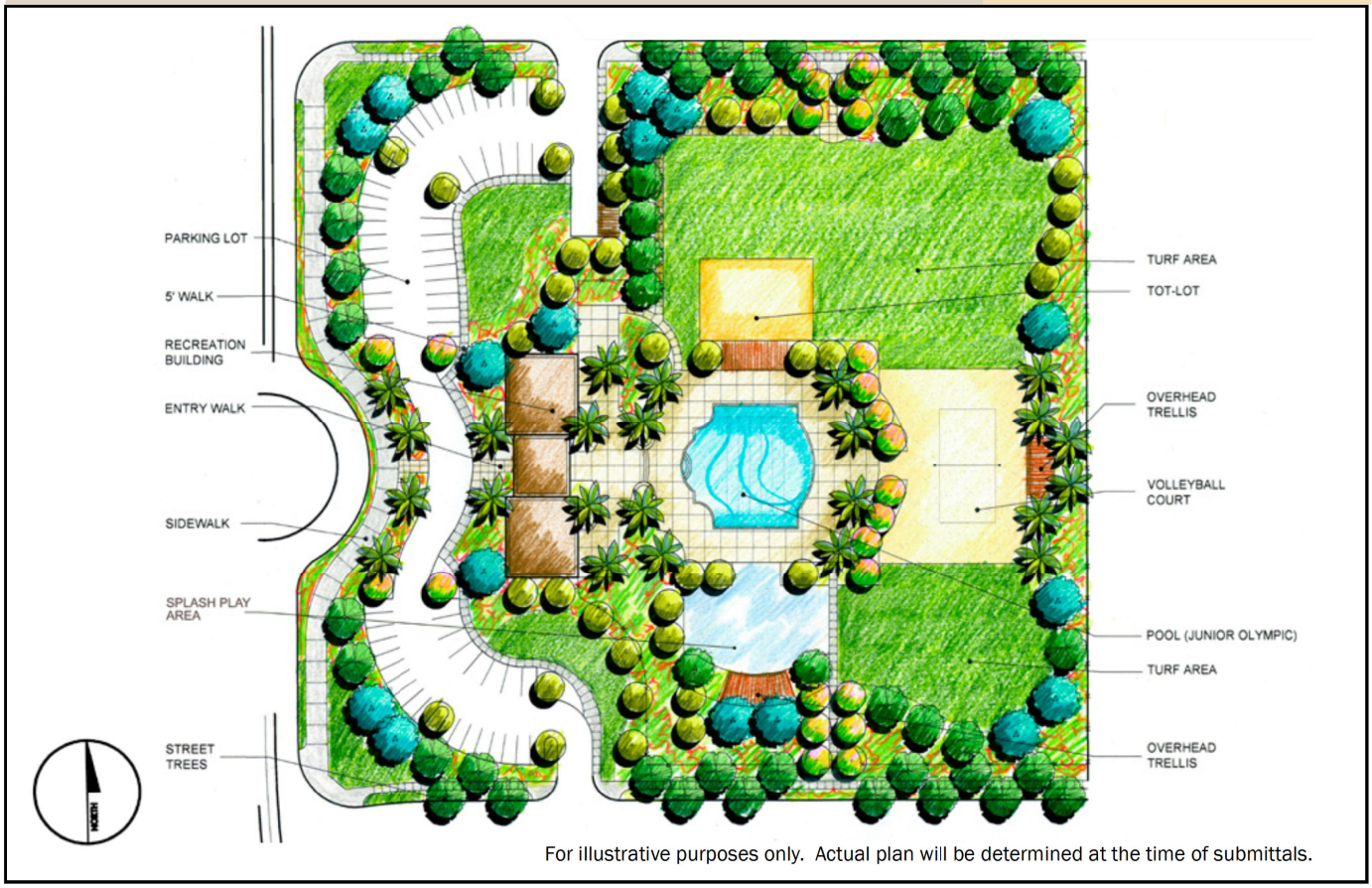
Recreation Areas

Opportunities for recreation centers will be provided within the Avenue. These recreation centers will be developed and maintained by the Homeowners Association, boundaries and location of which have yet to be determined.

The recreation centers may include, but not limited to, the following amenities:

- Clubhouse with Picnic facilities
- Gazebo and/or trellis structures
- Basketball courts
- Tot lot and pre-teen areas
- Shade tree plantings with open turf area for additional recreational activities
- Barbecues
- Swimming pool and splash park
- Sand volleyball courts
- Open play area
- Drinking fountains

Exhibit 14 - Typical Recreation Area



For illustrative purposes only. Actual plan will be determined at the time of submittals.

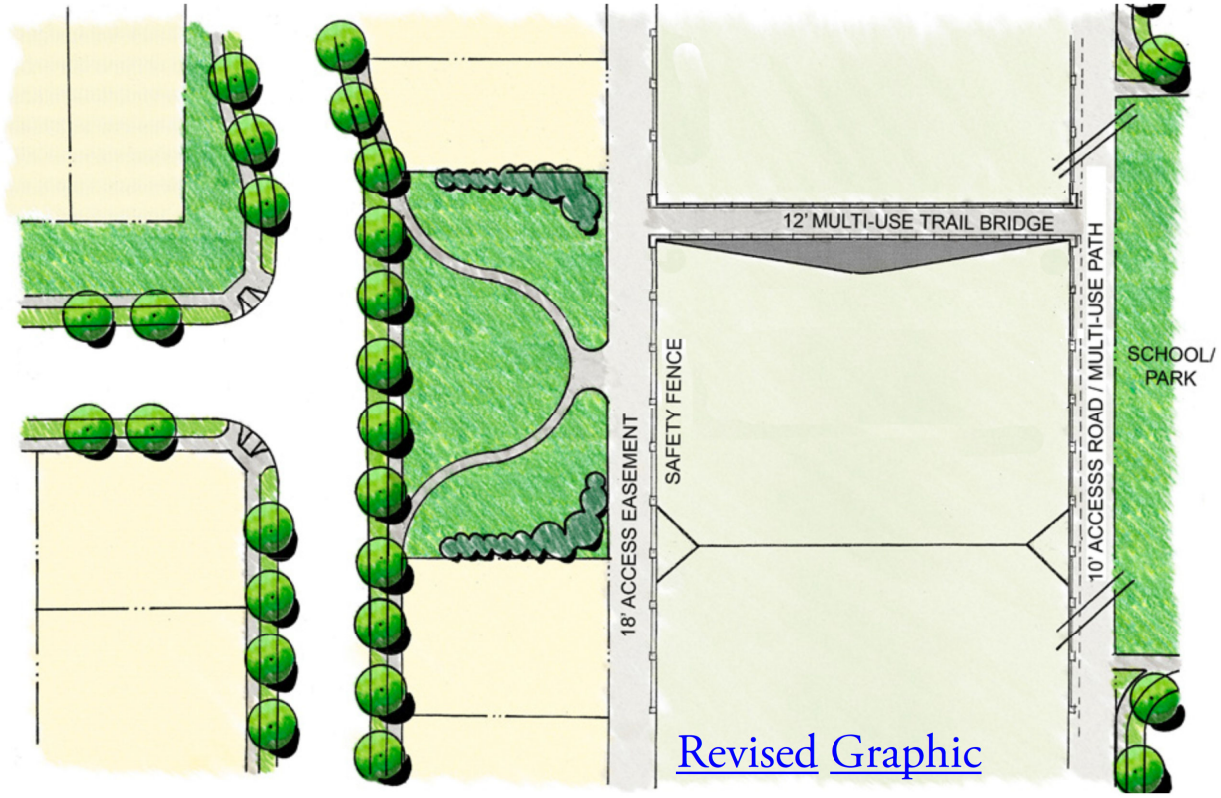
3.1.3 Schools

The Avenue Specific Plan provides two (2) school sites within the plan area to serve students both within the plan area and surrounding areas. A ten (10) acre elementary school site is centrally located west of Archibald Avenue in the western portion of the plan area ~~and adjacent to a neighborhood park~~. An additional ten (10) acre school site is located on the west side of Turner Avenue, south of Schaefer Avenue in the central portion of the plan area. Both school sites are easily accessible by multi-purpose path, sidewalks and interior roadways. The site plan will be determined by Mountain View School District. The school locations are shown in Exhibit 10, "Parks and Open Space" and in Exhibit 8, "Land Use Plan".

In the event that the Mountain View School District chooses to build an elementary school at a different location outside of Planning Area 5, the designated school site in Planning Area 5 may be developed with residential uses. An SPA and GPA will need to be filed, and appropriate CEQA action undertaken if and at such time that the school decides to sell off the property. Upon this occurring, the total number of dwelling units will be increased for the specific plan with the approval of a Specific Plan Amendment (SPA).

In order to develop residential uses in lieu of a school in Planning Area 5, the developer shall be required to obtain a written confirmation from the Mountain View School District that it will not utilize the school site in Planning Area 5 for development of a school. The written confirmation will be submitted to the City of Ontario Planning Department along with any development application for the school site, which would require an amendment to the Specific Plan and General Plan, in addition to appropriate CEQA review.

A multi-use bridge for crossing Cucamonga Creek is conceptually located near the school to facilitate non-vehicular access from the neighborhoods west of Cucamonga Creek to the school. Lots will be pulled back away from the trail landing on the west side of the bridge to allow for good visibility and, therefore, safety and security of trail users. The graphic on this page is a conceptual layout to show a potential method of access and can be relocated or incorporated into another bridge crossing. Final location and design will be subject to ~~City review~~ approval by Planning Director.



Conceptual layout for the bike and pedestrian access to the multi-use path over Cucamonga Creek

3.1.4 Commercial/Retail

The Avenue Specific Plan will provide for the development of a 10 acre and a 15.04 acre commercial sites totaling ~~130,682~~ 335,176 s.f. of commercial squarefootage. The 10 acre site is located on the southwest corner of Ontario Ranch Road and Haven Avenue. The 15.04 acre commercial site is located at the southwest corner of Schaefer Avenue and Archibald Avenue. The commercial sites have ~~has~~ been located to provide vehicular access off the major arterial streets, minimizing traffic through the residential neighborhoods. The commercial sites will include a mix of retail and high density residential in order to locate a high number of residents within a short walk of retail services.

The Avenue Main Street District Concept

The commercial center at The Avenue is located at the southwest corner of Ontario Ranch Road and Haven. It is envisioned as an inviting suburban destination, not your typical neighborhood center or strip mall. The idea behind this commercial center is to provide a memorable and walkable center with strong architectural elements, public spaces and a complementary and diverse mix of residential uses surrounding the site.

The Experience – Main Street

The Main Street is envisioned to have a traditional feel with storefronts adjacent to wide sidewalks, plenty of on-street parking and inviting outdoor plazas. The shops along Main Street will provide an eclectic mix of smaller retail stores, coffee houses and restaurants. There are also pad buildings proposed near the major arterials to provide opportunities for other uses including but not limited to larger restaurants, drug store, in-line shops or a bank.

The Residential Program



The residential areas adjacent to the commercial center will play a crucial role in the vitality of the center. An intensification of the residential density surrounding the commercial area will provide a strong local consumer base to support the commercial uses. The Ontario Ranch Road corridor east of Turner is envisioned by the city as a mixed-use, higher intensity corridor that will provide employment and shopping among typically higher residential densities than found elsewhere at The Avenue. The Main Street District is a complementary use to the higher density residential and the District's pedestrian environment encourages residents to walk, therefore reducing vehicle trips.

Potential Residential Uses:

- Townhomes & Flats
- Apartments
- Senior Housing

Section 4 - Infrastructure and Services

4.1 Master Plan of Circulation

The proposed circulation plan for The Avenue Specific Plan provides for safe and efficient movement of vehicular traffic through the project, while also providing a safe environment for pedestrian movement and bicycle traffic, reducing the reliance on the automobile as a means of travel.

Access to The Avenue Specific Plan from surrounding areas is provided by Archibald Avenue bisecting the site in a north and south direction; also running in a north to south direction is Haven Avenue on the eastern boundary and Carpenter Avenue on the western boundary; running in an east to west direction is Ontario Ranch Road on the southern boundary and Schaefer Avenue on the northern boundary. Hellman Avenue bisects the site in a north to south direction between Archibald and Carpenter in the western portion of the plan area. Bus turnouts will be provided on Ontario Ranch Road, Schaefer Avenue, Haven Avenue, and Archibald Avenue to the satisfaction of the City Engineer and Omnitrans.

A primary interior circulation element for The Avenue Specific Plan is the central “La Avenida Drive” which features enhanced setbacks and travel lanes to allow for vehicle, bicycle, and pedestrian access linking residential areas with retail and commercial, recreational, and the school sites within the plan area. Improvements to non-~~NMC~~ Ontario Ranch streets will be made by the developer/applicant based on the data from the Environmental Impact Report and traffic study. The traffic study will also determine the additional right of way that may be needed at critical intersections to accommodate additional right and left turn lanes. The “Circulation Plan”, Exhibit 15, establishes the hierarchy and general location of these roadways within the plan area.

Streetscapes within The Avenue are critical in maintaining the perception of community theming, unification and quality. These common landscape areas link vehicular and pedestrian traffic to neighborhoods and community elements.

The streetscapes in The Avenue are treated as critical community spaces providing quality pedestrian and vehicular circulation ways including jogging and bicycle paths and well-buffered pedestrian walks. For pedestrian and vehicle safety, reflective street signs will be provided on all proposed streets within the City. Shrubs and low groundcovers from ~~the New Model Colony~~ Ontario Ranch Streetscape Master Plan will be used to the greatest extent feasible to reduce maintenance, conserve resources and provide a buffered separation between pedestrian and vehicular traffic. The 8’ expanded sidewalks, at an enlarged width, are designed to provide a better travel way along La Avenida Drive.

Streetscape landscape treatments were developed to form a hierarchy of community importance and use characteristics. Landscaped parkways are enlarged beyond the city street right-of-way to reinforce this hierarchy consistent with the pathway system, residential orientation, and traffic volumes. These “landscape edges” are indicated on the streetscape sections.

La Avenida Drive's design concept is focused on the use of earth tone materials and colors, meandering drifts and groves of plant material and trees and the limited but appropriate use of turf. Soldiered trees are at a uniform spacing reinforcing the linear design of the vehicular circulation system to provide a welcoming feel to those entering the community.

The unique and vital streetscape concept for La Avenida Drive is focused on the treatment of the divided collector streetscape cross section. The design of the streetscape provides a strong and significant landscape while providing pedestrian pathway choices for residents.

Although The Avenue is designed for maximum benefit of the community residents, the overall plan provides convenient access points to allow vehicles to maximize road travel on the perimeter urban arterials and neighborhood collectors instead of La Avenida Drive. This is intended to reduce interior traffic and maximize resident, pedestrian, and bicycle enjoyment of the streetscapes.

Ontario Ranch Road, Schaefer Avenue, Haven Avenue, and Archibald Avenue streetscapes are designed to provide additional landscape area beyond the street right-of-way. The Avenue is planned to focus internally. These perimeter streetscapes will allow reasonable buffering along with the appropriate landscape treatments to properly introduce the community while maintaining consistency along the overall arterial streetscape.

Carpenter Avenue and Hellman Avenues are north/south trending collectors while Turner Avenue is a north/ south trending divided collector all which contain relatively balanced landscape zones beyond their respective right-of-ways. These collectors provide access to community facilities, recreation areas, school sites, the retail center and the arterial avenues of Schaefer, Ontario Ranch Road, Haven, and Archibald.

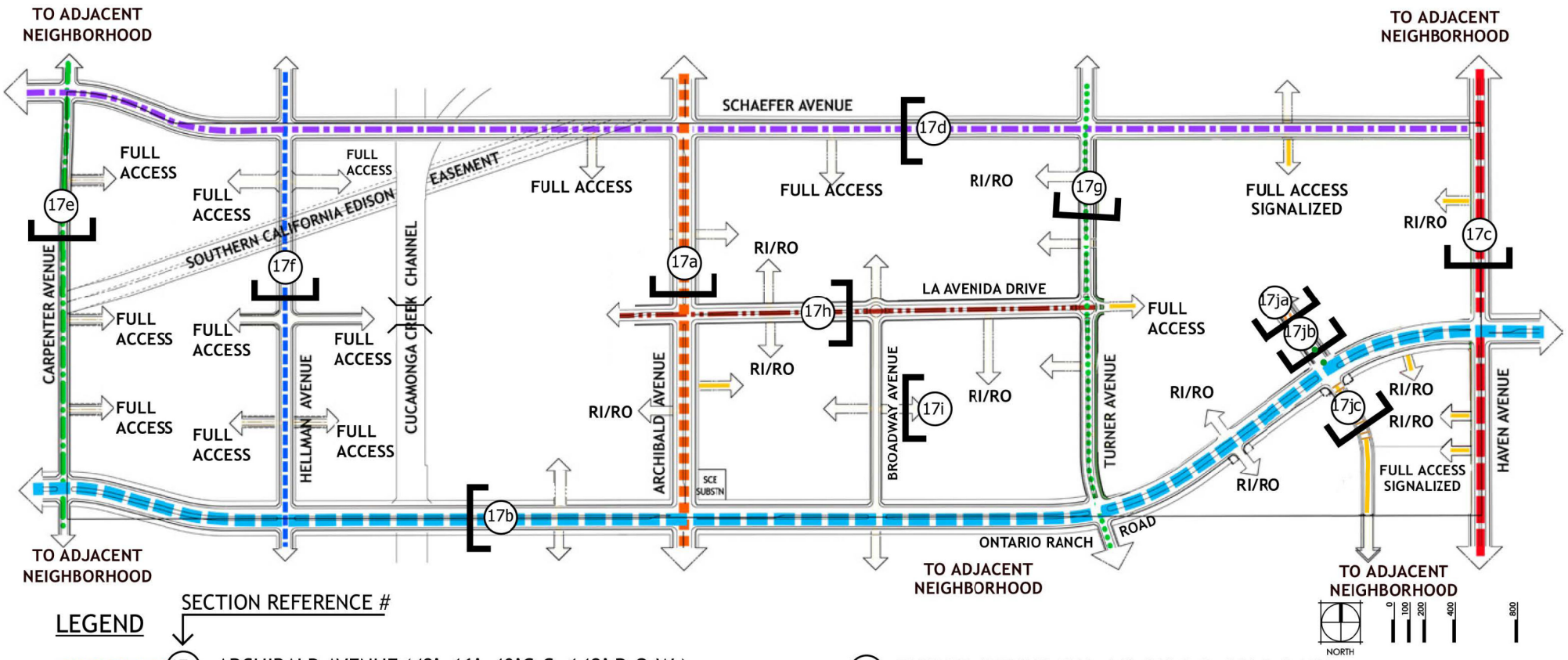
4.1.1 Street Plans and Sections

Primary access to The Avenue Specific Plan is provided by seven (7) major Avenues: Ontario Ranch Road, Haven, Schaefer, Turner, Hellman, Carpenter and Archibald Avenues. Within the plan area public streets of varying design will provide access to the residential, commercial, school, and park areas.



Pedestrians on The Avenue

Revised Exhibit



SECTION REFERENCE #

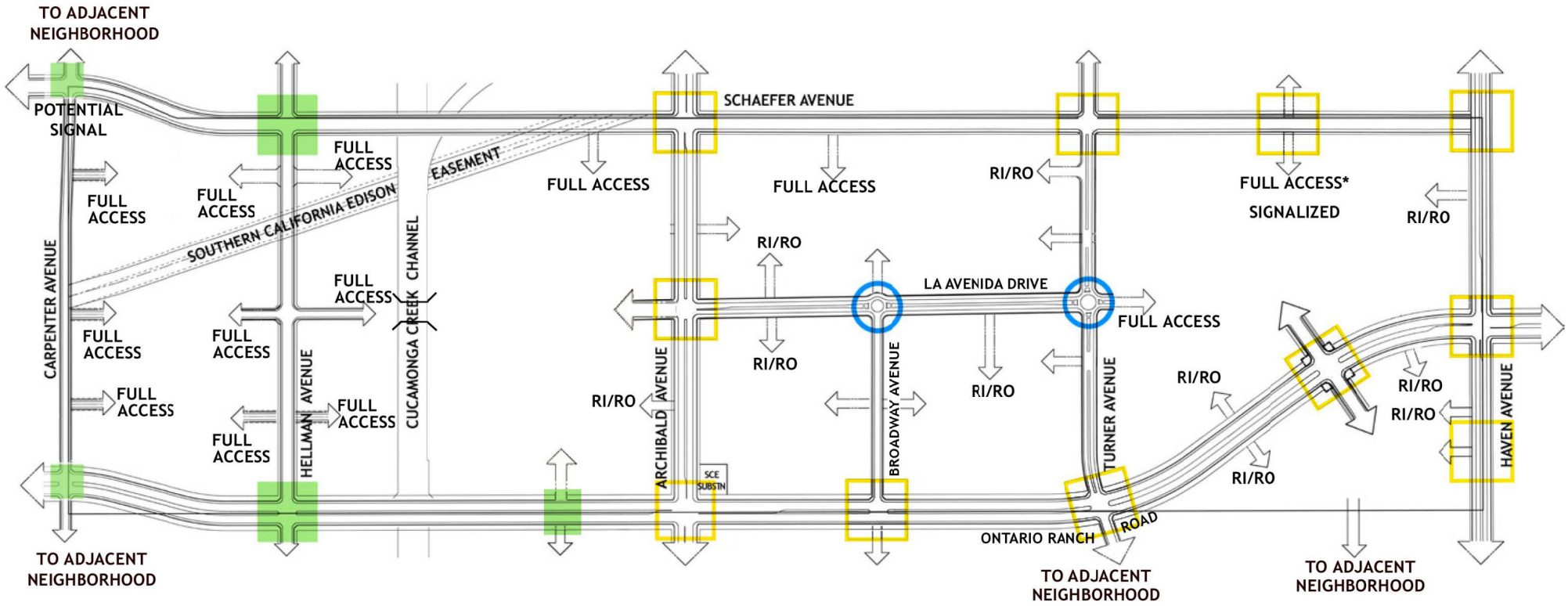
LEGEND

- 17a ARCHIBALD AVENUE (40'+16'+40'C-C, 148' R.O.W.)
- 17b EDISON AVENUE (52'+26'+52'C-C, 160' R.O.W.)
- 17c HAVEN AVENUE (28'+16'+28'C-C, 124' R.O.W.)
- 17d SCHAEFER AVENUE (84' C-C, 108-' R.O.W.)
- 17e CARPENTER AVENUE (40' C-C, 66' R.O.W.)
- 17f HELLMAN AVENUE (64' C-C, 88' R.O.W.)
- 17g TURNER AVENUE (21'+14'+21' C-C, 80' R.O.W.)
- 17h THE AVENUE (28'+16'+28' C-C, 124' R.O.W.)
- 17i NEIGHBORHOOD ENTRY STREET (36' C-C, 60' MIN R.O.W.)
- 17ja NEIGHBORHOOD ENTRY STREET W/ MEDIAN (50' C-C, 74' MIN R.O.W.)
- 17jb NEIGHBORHOOD ENTRY STREET W/ MEDIAN (60' C-C, 84' MIN R.O.W.)
- 17jc NEIGHBORHOOD ENTRY STREET W/ MEDIAN (60' C-C, 84' MIN R.O.W.)

NOTE: C-C = Curb-to-Curb; R.O.W. = Right-of-Way; The location of access points is conceptual. Precise locations will be determined as part of the tract map process. The Neighborhood Entry Streets at the westerly termination of the Avenue adjacent to the school site shall be 40' C-C, 66' R.O.W. While the alignment of roads is conceptual, The Avenue shall maintain the straight, linear configuration. *The intersection legs to the north and south of Schaefer Avenue shall be aligned. Final location of the intersection shall be determined with approval of the maps for developments on the north and south of Schaefer Avenue. No sidewalk improvements on the north side of Schaefer Avenue between Haven Avenue and Hellman Avenue.

The Avenue SPECIFIC PLAN

Revised Exhibit Circulation Plan



LEGEND

- ROUNDABOUT
- NEW SIGNALIZED INTERSECTION
- EXISTING SIGNALIZED INTERSECTION (TO BE MODIFIED)

NORTH

0 100 200 400 800

NOTE: The locations of entry points is conceptual. Precise locations will be determined as part of the tract map process.
*The intersection legs to the north and south of Schaefer Avenue shall be aligned. Final location of the intersection shall be determined with approval of the maps for developments on the north and south of Schaefer Avenue.

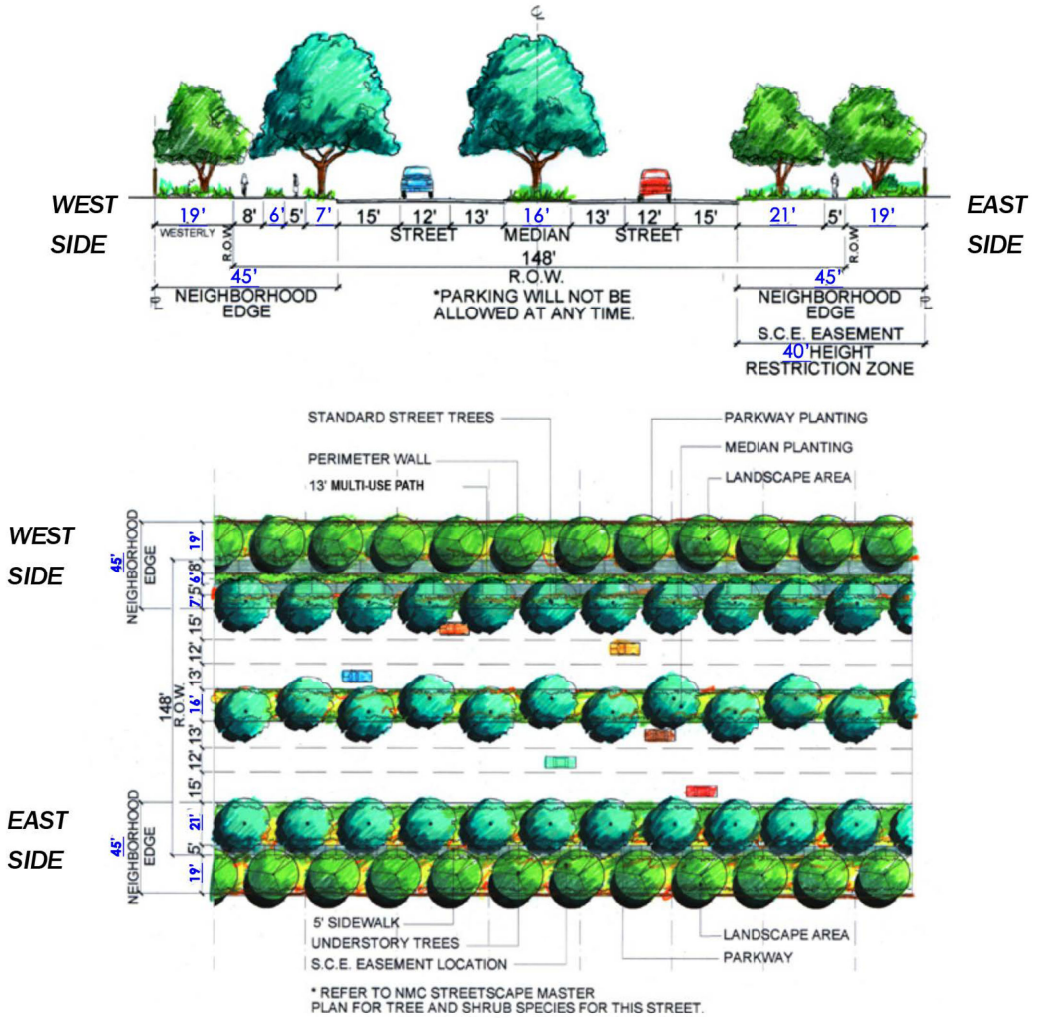
Revised Exhibit

Entries and Signalization

Archibald Avenue

Archibald Avenue bisects The Avenue Specific Plan in a north/south direction in the central portion of the plan area. Archibald Avenue is designated as a "Principal Arterial" with a total right of way of 148 feet with 80 feet of paved travel area separated by a 16-foot wide raised median. There are 19-foot wide landscape lots on both sides of the street serving as a buffer between homes and the right-of-way. The west side of the street has a 13-foot multi-use path (5' sidewalk may be divided from the 8' expanded sidewalk at the discretion of the City) separated from the street by a 13-foot landscaped parkway. The east side of the street has a 5-foot sidewalk separated from the street by a 21-foot landscaped parkway. Along Archibald Avenue, bus turnouts will be located to the satisfaction of the City Engineer and Omnitrans. The developer will be responsible for those improvements to Archibald Avenue as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project. The Archibald Avenue cross-section is illustrated below:

Exhibit 17a - Archibald Avenue - Principal Arterial



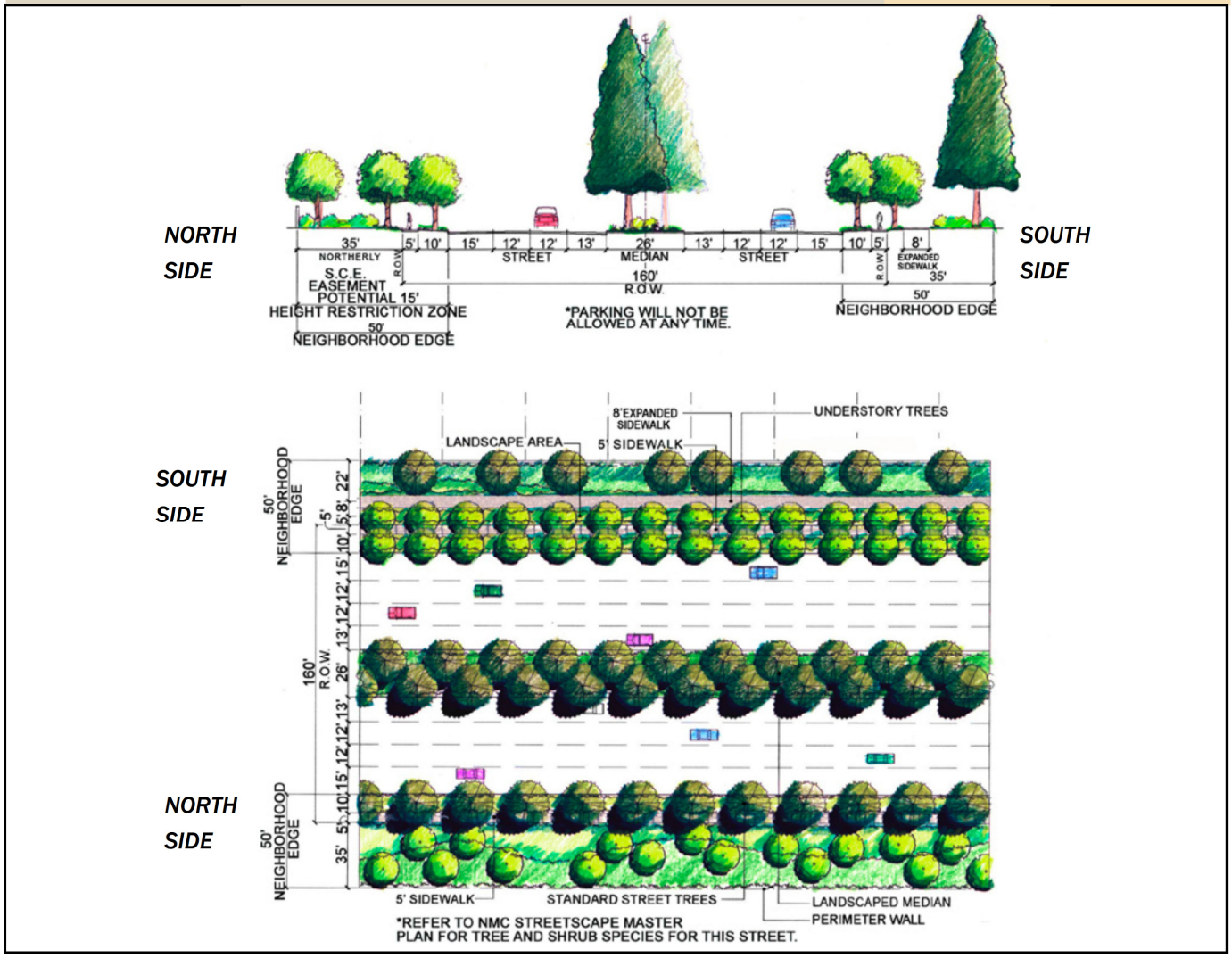
Note: This section and the 45' neighborhood edge for Archibald Avenue is applicable North of Ontario Ranch Road within the Avenue Specific Plan frontage only and neighborhood edge to the South of Ontario Ranch Road will remain at 50'

Ontario Ranch Road

Ontario Ranch Road is designated as "Principal Arterial" and borders the plan area on the south. Ontario Ranch Road has a total right-of-way of 160 feet with 104 feet of paved travel area separated by a 26-foot wide raised median.

Along Ontario Ranch Road, bus turnouts will be located to the satisfaction of the City Engineer and Omnitrans. A 50-foot landscape edge on both sides of the street contains a 35-foot landscape buffer with a 5-foot sidewalk separated from the street by a 10-foot landscaped parkway and a multi-use path on the south. The S.C.E. Easement exists within the northerly 50-foot Landscape Edge and may be relocated within the Landscape Edge in the future. The developer will be responsible for those improvements to Ontario Ranch Road as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project. The Ontario Ranch Road cross-section is illustrated below:

Exhibit 17b - Ontario Ranch Road - Principal Arterial

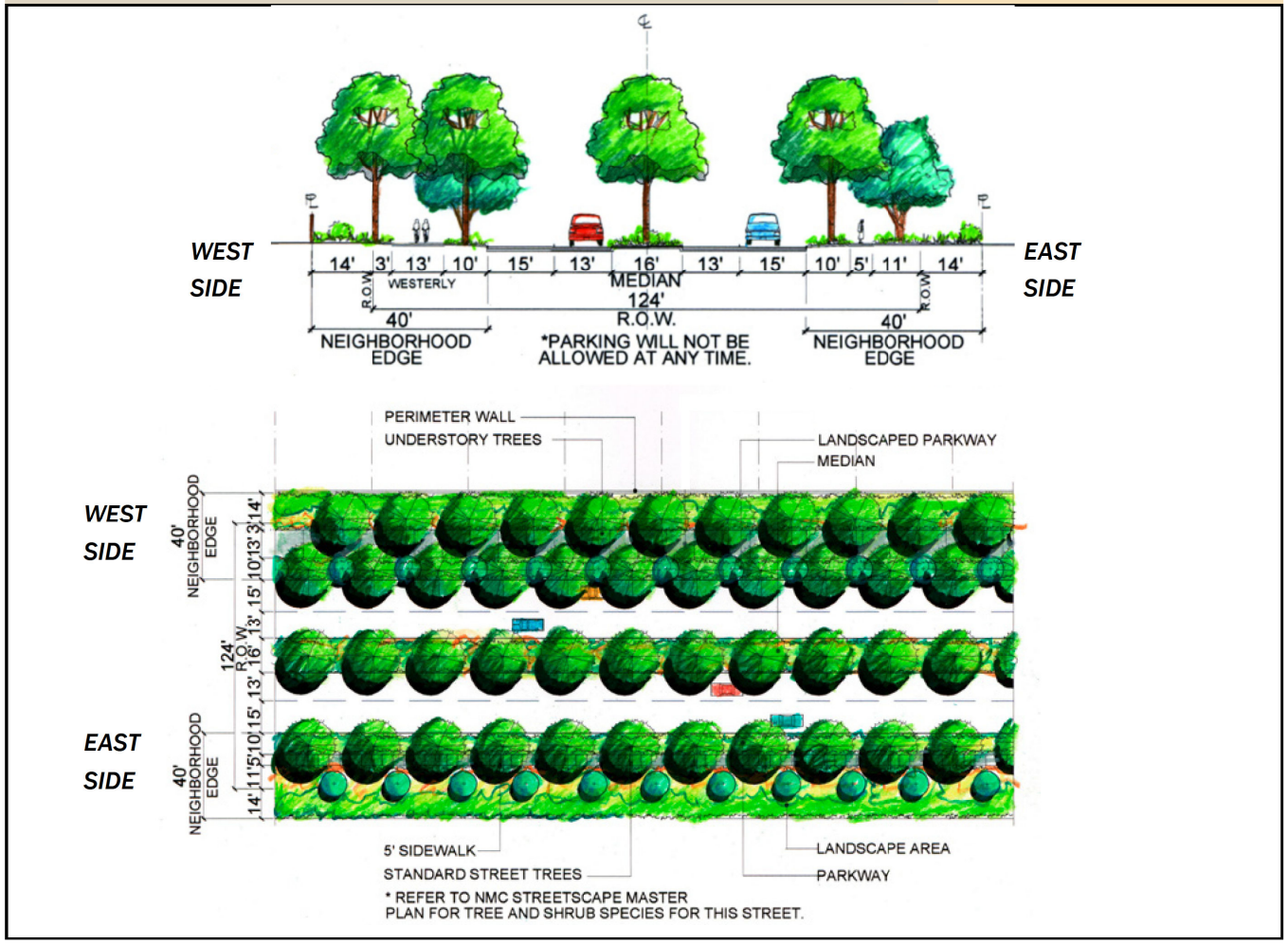


Haven Avenue

Haven Avenue is designated as "Principal Arterial" and borders the plan area on the east. Haven Avenue has a total right-of-way of 124 feet, with 56 feet of paved travel area separated by a 16-foot wide raised median.

The west side of the street has a 40-foot Neighborhood Edge with 14 feet of landscape buffer between the property line and the right-of-way. Along Haven Avenue, bus turnouts will be located to the satisfaction of the City Engineer and Omnitrans. A 13-foot multi-use path (5' sidewalk may be divided from the 8' expanded sidewalk at the discretion of the City) that is separated from the street by a 10-foot parkway and an additional 3 feet of landscape to the right-of-way edge. The east side of the street also has a 40-foot landscape edge with 14 feet of landscape buffer to the right-of-way. A 5-foot sidewalk is separated from the street by a 10-foot parkway and the right-of-way by an additional 11 feet of landscape. The developer will be responsible for those improvements to Haven Avenue as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project. The Haven Avenue cross-section is illustrated below:

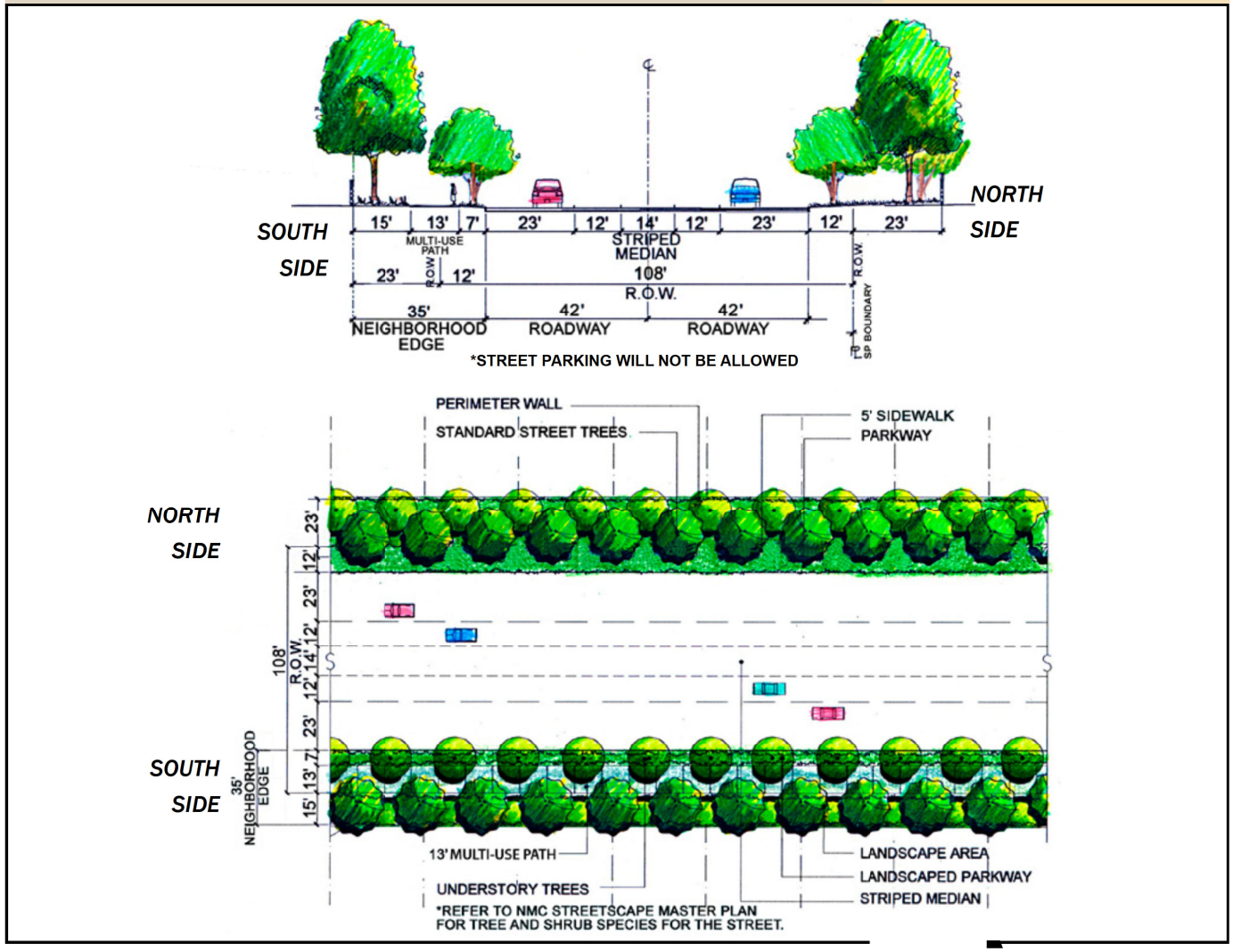
Exhibit 17c - Haven Avenue - Principal Arterial



Schaefer Avenue

Schaefer Avenue is designated as "Collector" and borders the plan area on the north. Schaefer Avenue has a total right-of-way of 108 feet with 84 feet of paved travel area. Along Schaefer Avenue, bus pads will be located to the satisfaction of the City Engineer and Omnitrans. The south side of Schaefer has a 35-foot neighborhood edge. The Neighborhood Edge is comprised of 12 feet of street right-of-way and an adjacent 23-foot wide landscape lot. The Neighborhood Edge includes a 13-foot multi-use path, including 5-foot sidewalk, separated from the street by a 7-foot parkway. The north side of Schaefer will have a 23 -foot wide landscape lot adjacent to a 12-foot parkway. The dedication and improvements of the 23 -foot wide landscape lot to the north of the Project boundary is not a part of The Avenue Specific Plan Requirements. The developer will be responsible for those improvements to Schaefer Avenue as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project. The Schaefer Avenue cross-section is illustrated below:

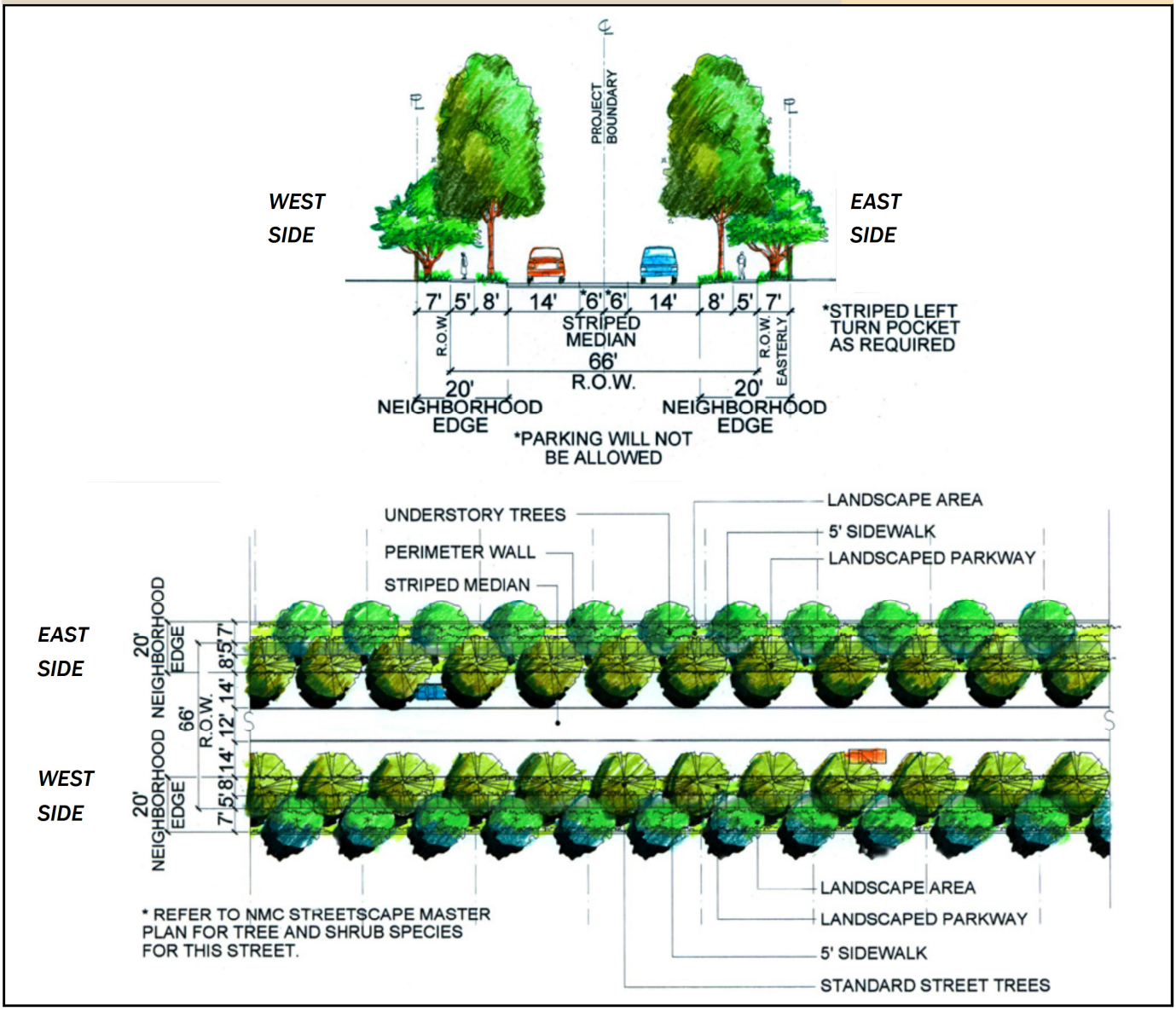
Exhibit 17d - Schaefer Avenue - Collector



Carpenter Avenue

Carpenter Avenue is designated as a "Primary Local Street" running in a north/south direction whose centerline forms the western project boundary. It has a total right-of-way of 66 feet with 40 feet of paved travel area. There is a 5-foot sidewalk separated from the street by a 8-foot landscaped parkway on each side of the street. In addition, there is an 7-foot wide landscape lot adjacent to both sides of the street. The developer will be responsible for those improvements to Carpenter Avenue as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project. The Carpenter Avenue cross-section is illustrated below:

Exhibit 17e - Carpenter Avenue - Primary Local Street

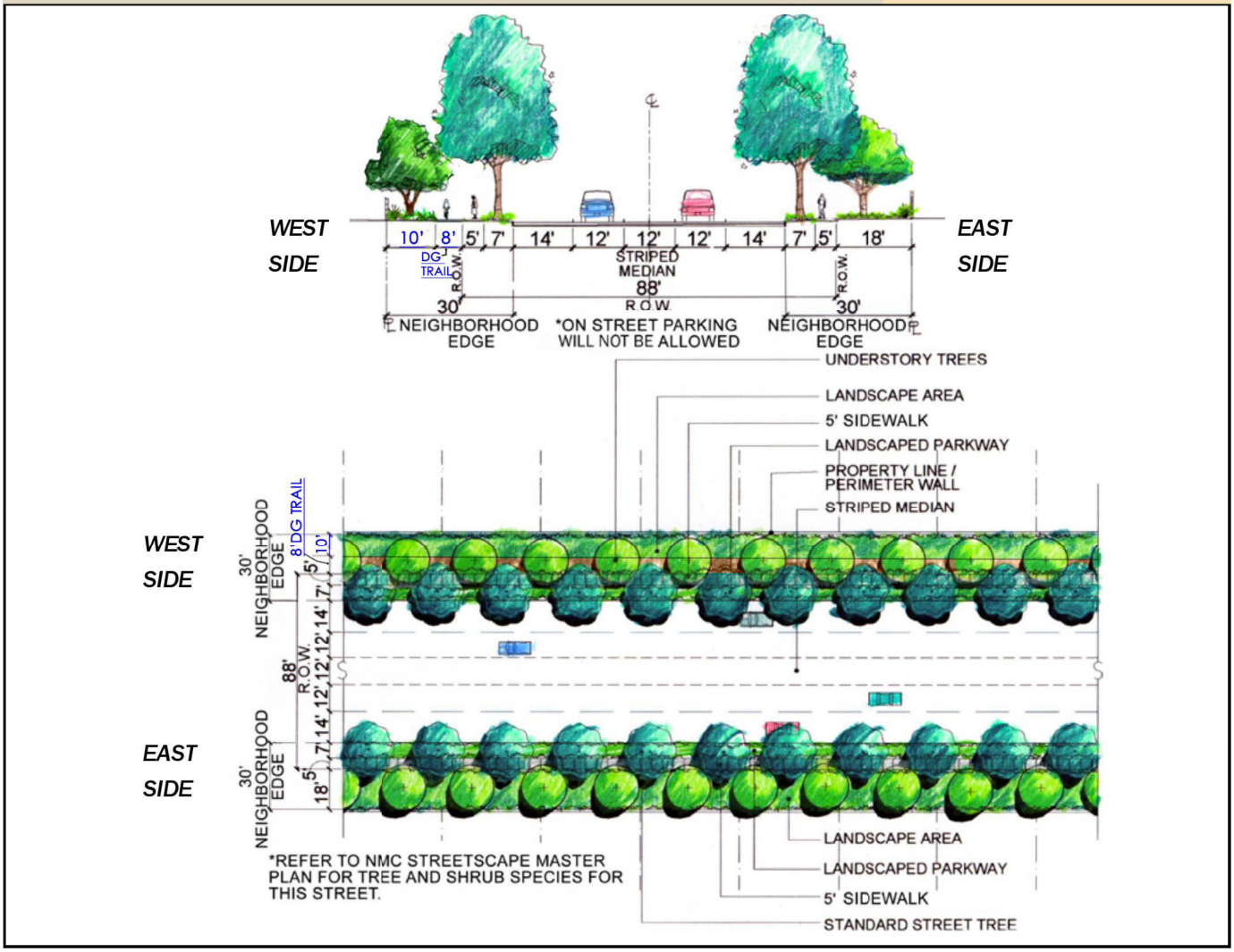


Hellman Avenue

Hellman Avenue is designated as "Collector: and bisects the plan area in a north/south direction in the western portion. Hellman Avenue has a total right-of-way of 88 feet with 64 feet of paved travel area. There is a 12-foot parkway on each side of the street which includes a 5-foot sidewalk separated from the street by a 7-foot landscaped parkway. In addition, there is an 18-foot wide “landscaped lot” adjacent to both sides of the street. The "landscape lot" to the west side of Hellman Avenue will include a 8-foot decomposed granite trail.

The developer will be responsible for those improvements to Hellman Avenue as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project. The developer will be responsible for those improvements to Hellman Avenue as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project. The Hellman Avenue cross-section is illustrated below:

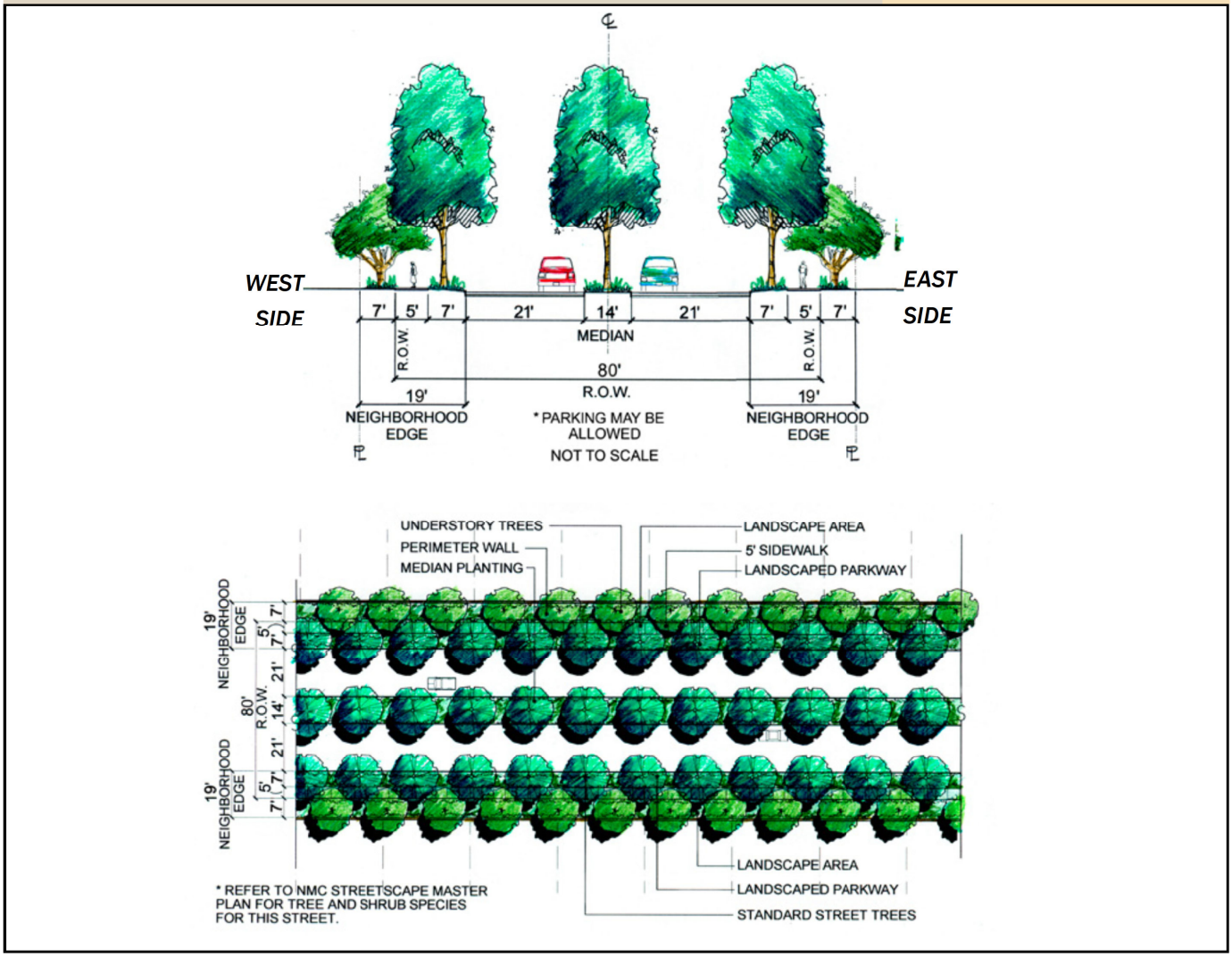
Exhibit 17f - Hellman Avenue - Collector



Turner Avenue

Turner Avenue is designated as "Divided Primary Local Street" and bisects the plan area in a north/south direction in the eastern portion. Turner Avenue has a total right-of-way of 80 feet through the Specific Plan Area, with a 14-foot landscaped median separating two paved 21-foot travel lanes. The east and west sides of the street includes a 5-foot sidewalk separated from the street by a 7-foot landscaped parkway. The final roadway section will be determined by the City Engineer. The developer will be responsible for those improvements to Turner Avenue as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project. Turner Avenue shall be constructed such that the westerly curb and gutter shall be located completely off Assessor's Parcel Number 218-201-19 with the parkway and neighborhood edge on the west side to be deferred until such time APN: 218-201-19 develops in accordance with The Avenue Specific Plan.

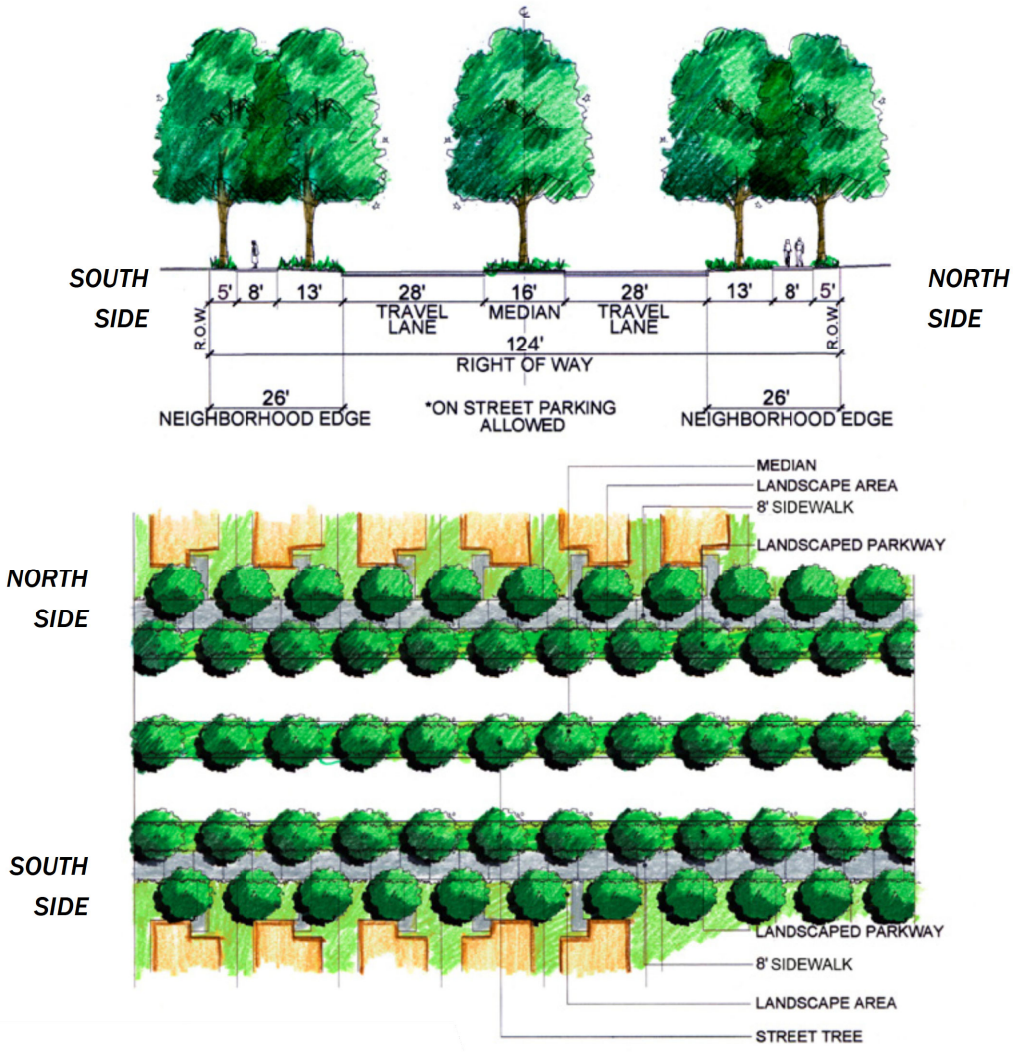
Exhibit 17g - Turner Avenue - Divided Primary Local Street



La Avenida Drive

La Avenida Drive, designated as a "Divided Primary Local Street", is a centrally-located avenue connecting community amenities to the residential neighborhoods. La Avenida Drive has a total right-of-way of 124 feet with two 28-foot one-way avenues with on-street parking, separated by a 16-foot wide raised median. This pedestrian oriented street, with generously landscaped median and parkways, links the recreation areas, schools and parks. La Avenida Drive presents a strong image, emphasizing homes fronting along the street with an 8-foot expanded sidewalk on both sides of the street separated by 13-foot landscaped parkways and 5-foot landscape lots. The developer will be responsible for those improvements to La Avenida Drive as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project. No portion of La Avenida Drive right of way or neighborhood edge shall be located on the property identified as Assessor's Parcel Number 218-201-19.

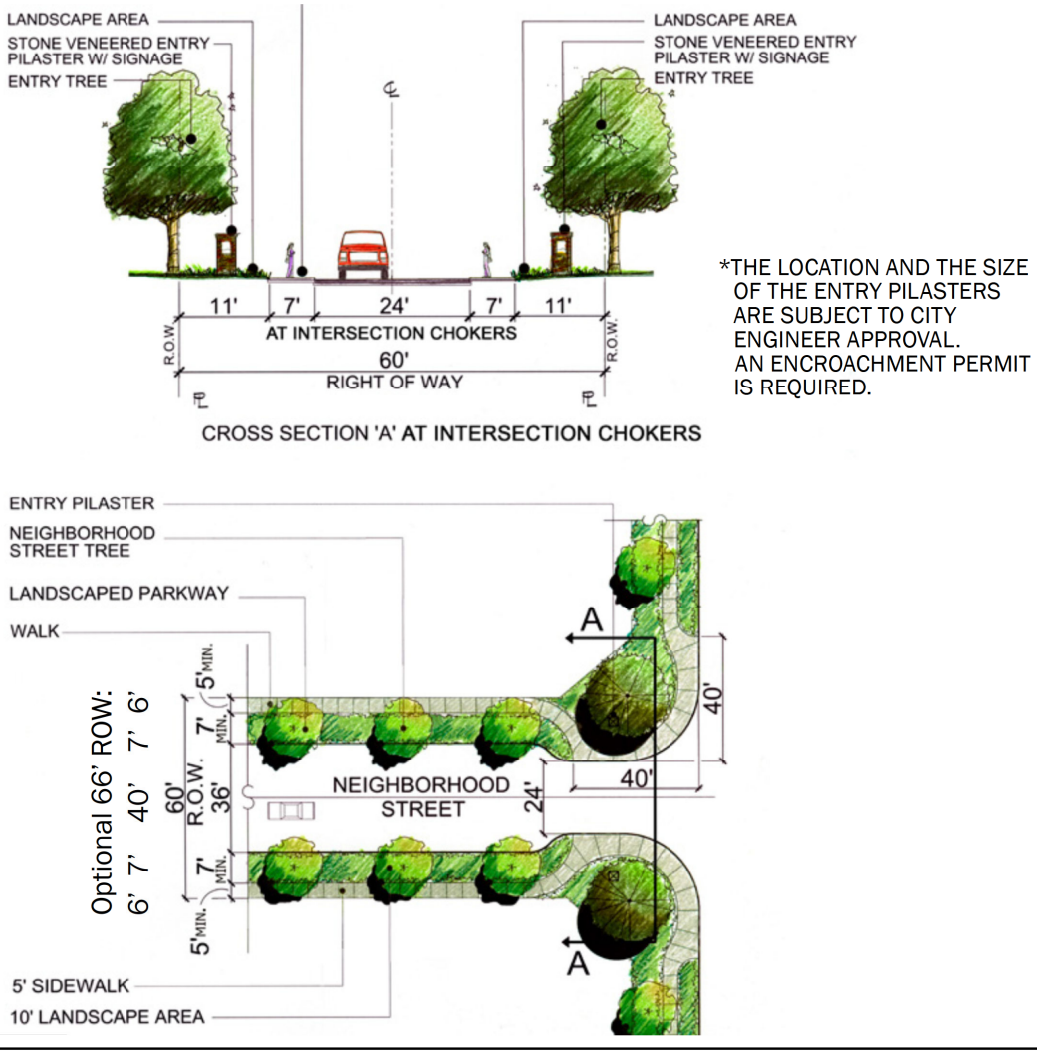
Exhibit 17h - La Avenida Drive - Divided Primary Local Street



Neighborhood Entry Street

Neighborhood Entry Streets are designed to distribute vehicular traffic from the arterial and collector streets into the residential neighborhoods. These streets have a 60 foot minimum total right-of-way with 36 feet of paved travel area. There is a 12-foot wide parkway within the right-of-way which provides for a minimum 5-foot wide sidewalk separated from the street by a minimum 7-foot wide landscaped area. The developer will be responsible for those improvements to Neighborhood Entry Streets as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project. The Neighborhood Entry Street cross-section is illustrated below:

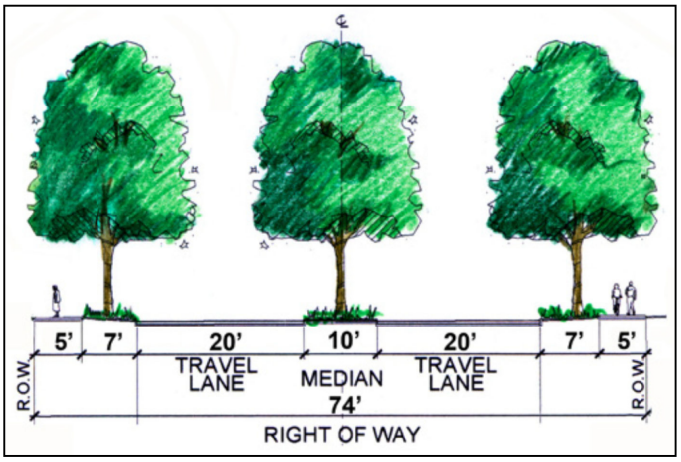
Exhibit 17i - Neighborhood Entry Street

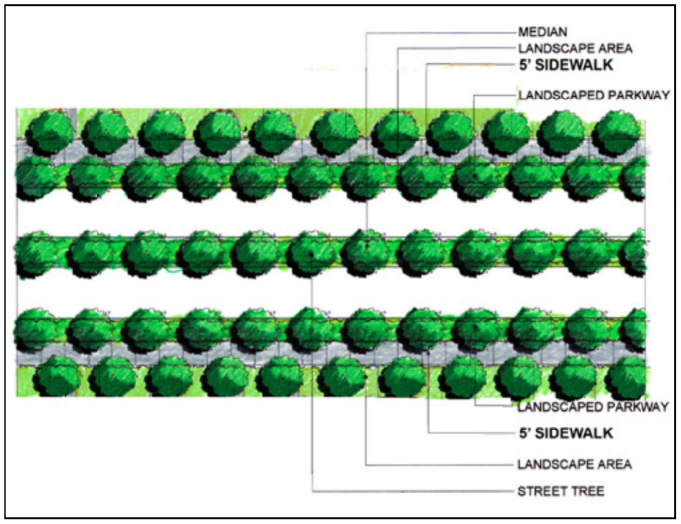


Neighborhood Entry Street With Median

The Neighborhood Entry Street With Median is designed to distribute vehicular traffic from Ontario Ranch Road into the residential neighborhood. Section 17ja has a 74 foot minimum total right-of-way with 40 feet of paved travel area split by a 10-foot landscaped median. There is a 12-foot wide parkway within the right-of-way which provides for a 5-foot wide sidewalk separated from the street by a 7-foot wide landscaped area. Section 17jb has an 84-foot right-of-way with two 20 foot travel lanes, split by a 10' landscaped median and 10 foot turn lane for southbound motorists wishing to turn left onto Ontario Ranch Road. Each side of Section 17jb contains a 5 foot sidewalk and 7 foot parkway. Section 17jc also has an 84 foot right-of-way containing two 20 foot travel lanes. There is a 10 foot turn lane for northbound motorist wishing to turn left onto Ontario Ranch Road. This 10 foot turn lane is flanked by a 4 foot landscape median and a 6 foot striped zone. Each side of Section 17jc also contains a 5 foot sidewalk and 7 foot parkway.

Exhibit 17ja - Neighborhood Entry Street with Median





The final roadway section widths will be determined by the City Engineer based on the need for intersection left and/or right turn lanes. The developer will be responsible for those improvements to Neighborhood Entries as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project. The Neighborhood Entry Street with Median cross-section is illustrated below:

Exhibit 17jb - Neighborhood Entry Street with Median - Southbound

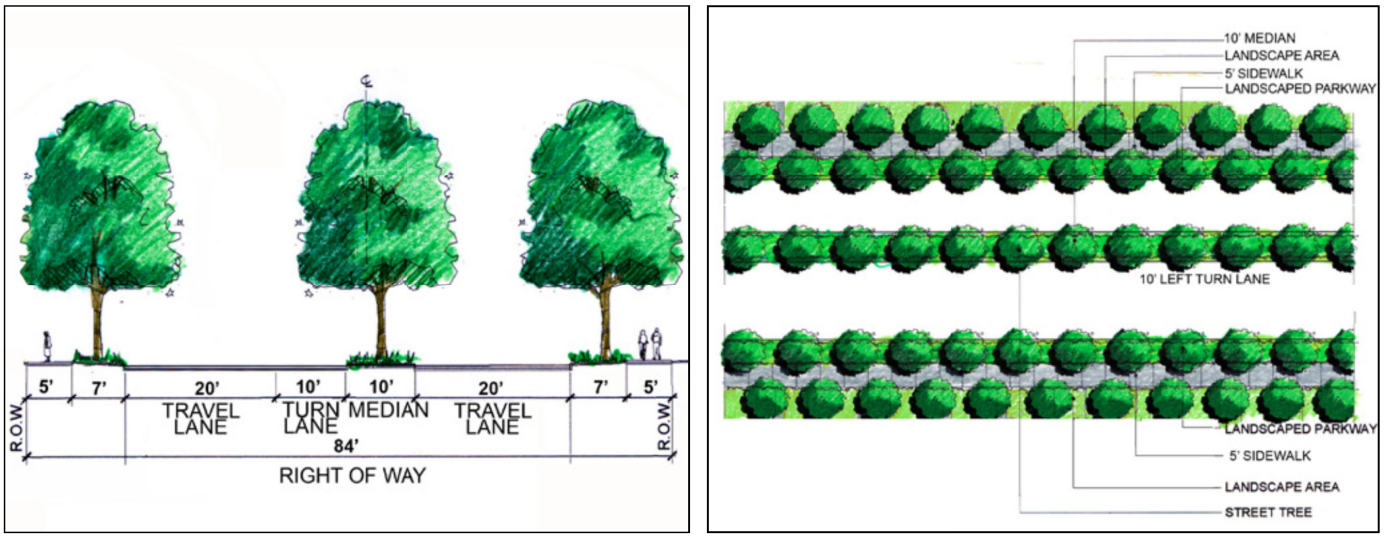
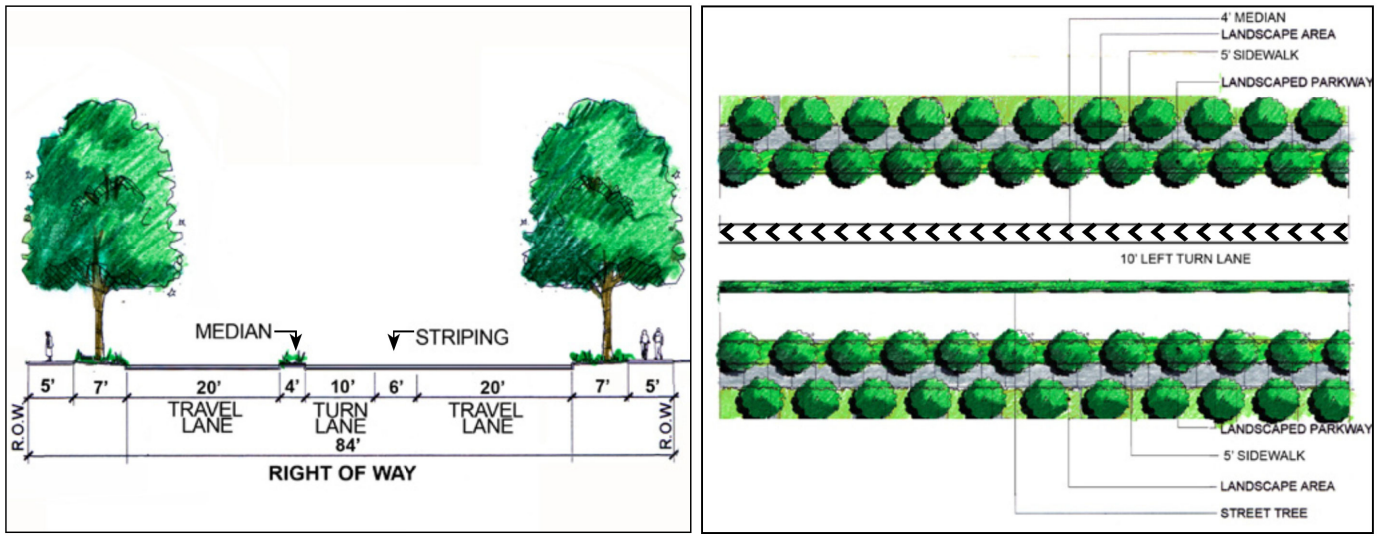


Exhibit 17jc - Neighborhood Entry Street with Median - Northbound *(South of Ontario Ranch Road)*

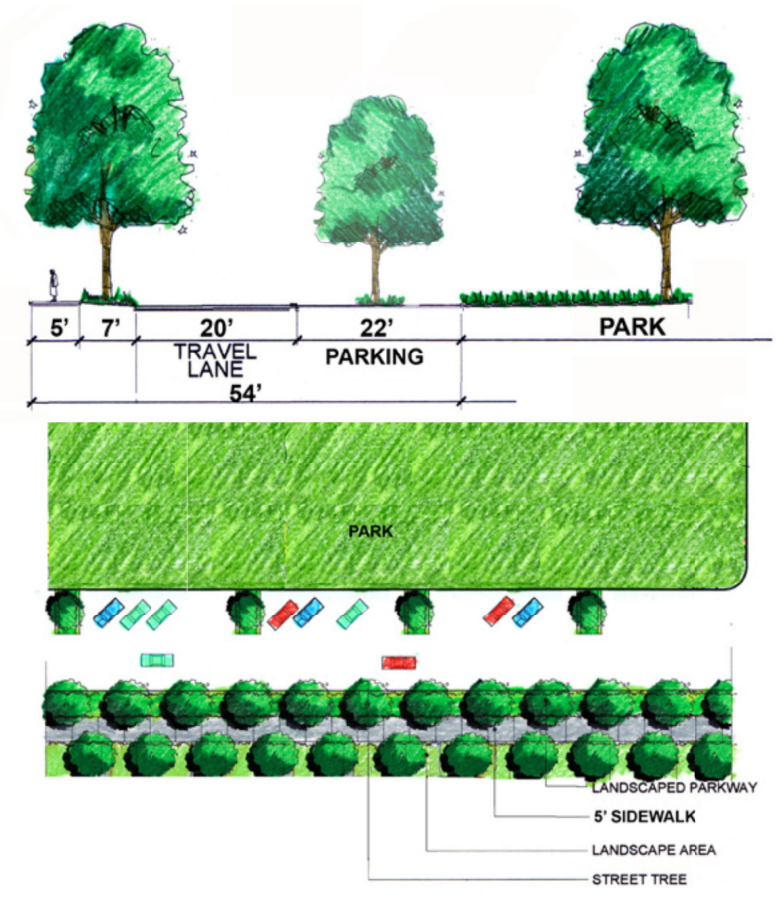


Neighborhood Park Adjacent Street

The Park adjacent street is a 20-foot clear paveway and 3-foot concrete gutter for one-way circulation around the park. This narrow section does not allow on-street parking in order to allow a clearer view from the homes to the park, better visibility of pedestrians and a minimum 20-foot clear for emergency vehicles. On the park side of the street angled parking is provided outside of the 20-foot right of way between the corners of the park.

Within each row of parking spaces, landscape islands shall be placed to prevent more than 10 vehicles from being parked side-by-side in an abutting configuration. Planter islands for a single row of parking spaces shall be landscaped with at least one (1) tree and vegetative groundcover. The side of the street adjacent to homes will have a 7-foot landscaped area and 5-foot sidewalk as indicated below and the developer will be responsible for those improvements to Neighborhood Streets as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project. This street type applies to Planning Area 10A only. The Neighborhood Park Adjacent Street is illustrated below:

Exhibit 17k - Neighborhood Park Adjacent Street

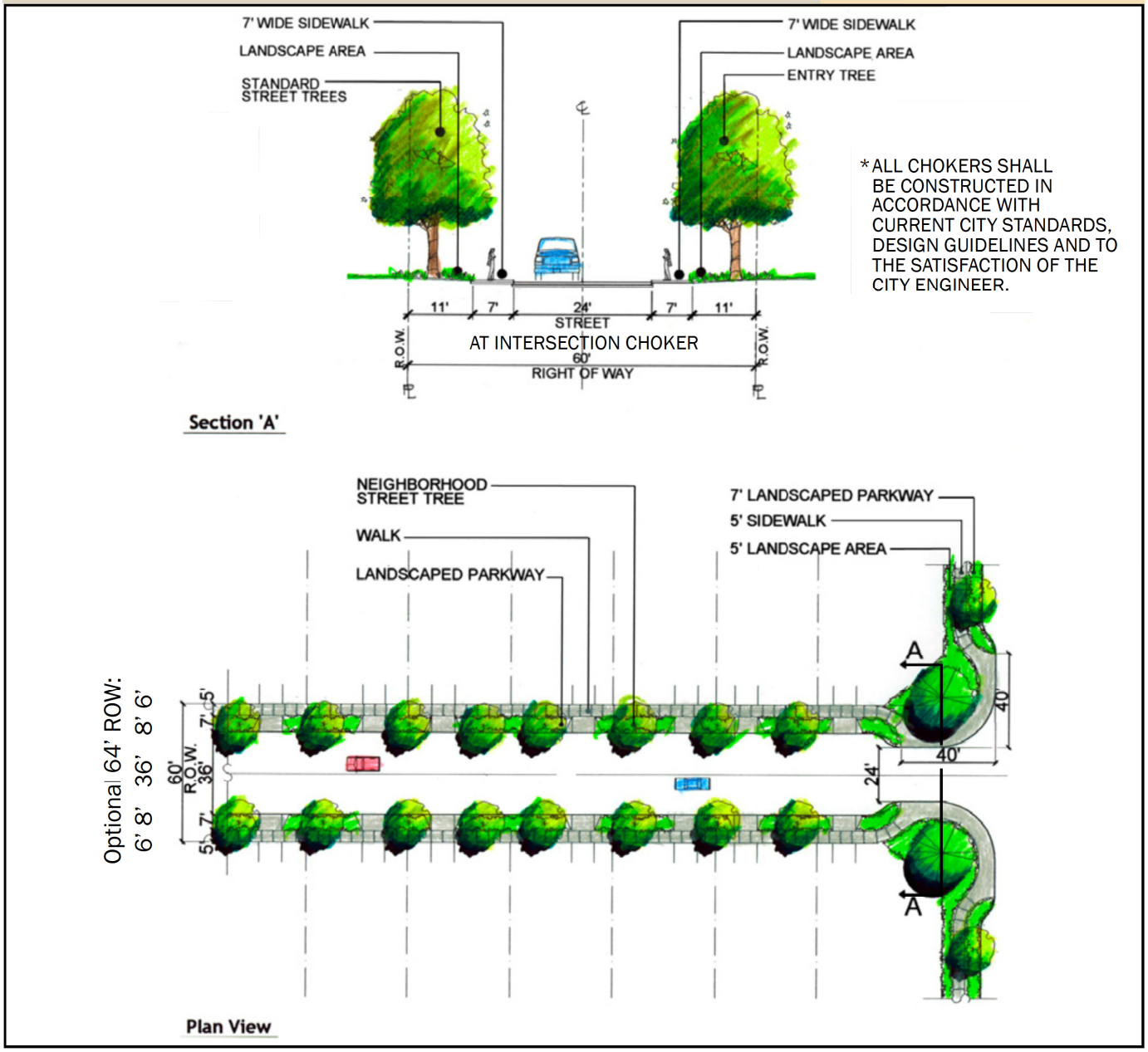


NOTE: This concept applies to PA 10A only.

Neighborhood Streets With Intersection Chokers

Neighborhood intersection chokers are traffic calming devices to slow down vehicles when they reach the neighborhood street level. They also facilitate pedestrian crossings by shortening the crossing distance and make them safer. The developer will be responsible for those improvements to Neighborhood intersection chokers as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project.

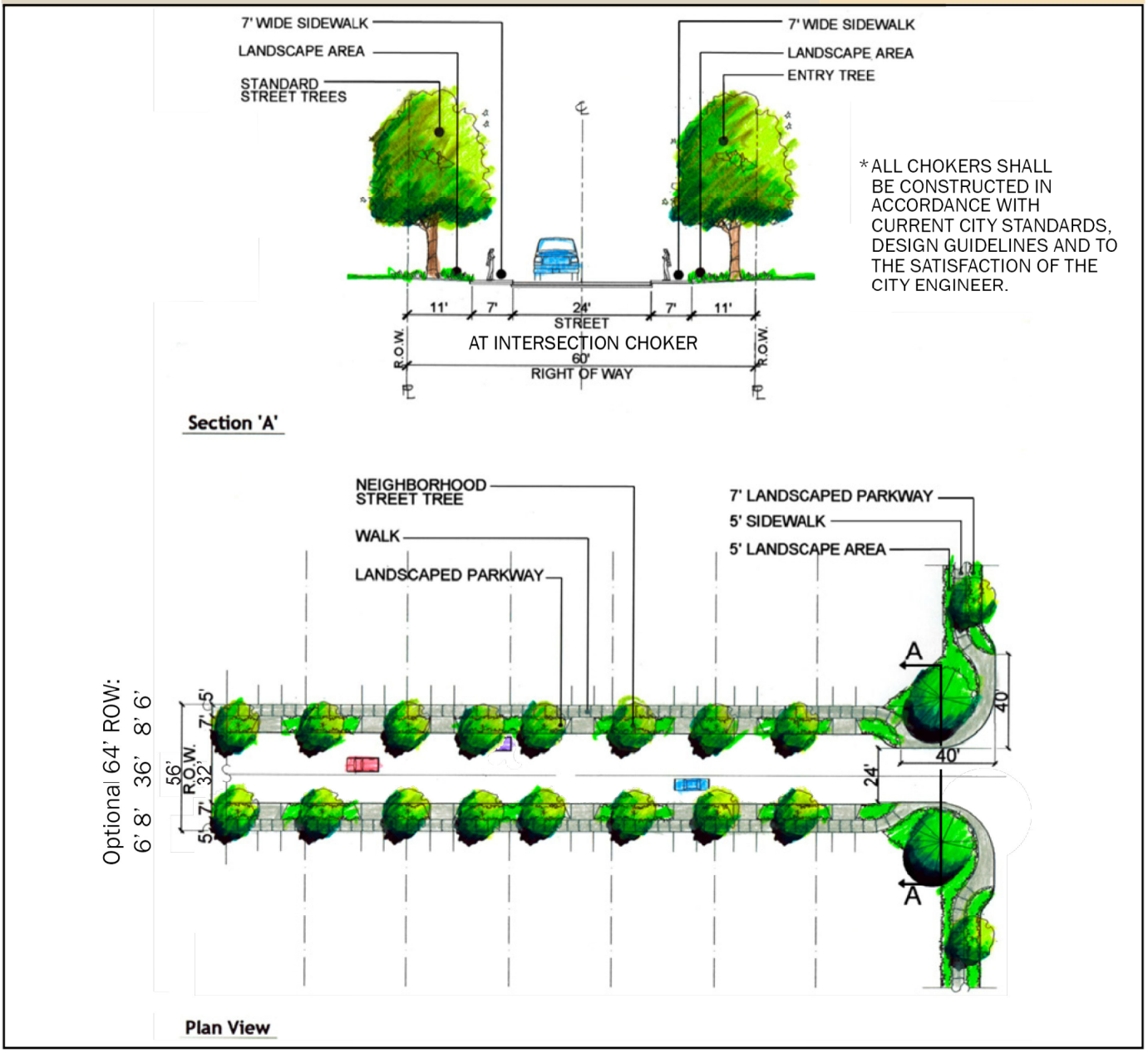
Exhibit 17I-1 - Neighborhood Streets With Intersection Chokers



Private Streets With Intersection Chokers

Private Street intersection chokers are traffic calming devices to slow down vehicles when they reach the neighborhood street level. They also facilitate pedestrian crossings by shortening the crossing distance and make them safer. The developer will be responsible for those improvements to private Street intersection chokers as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project.

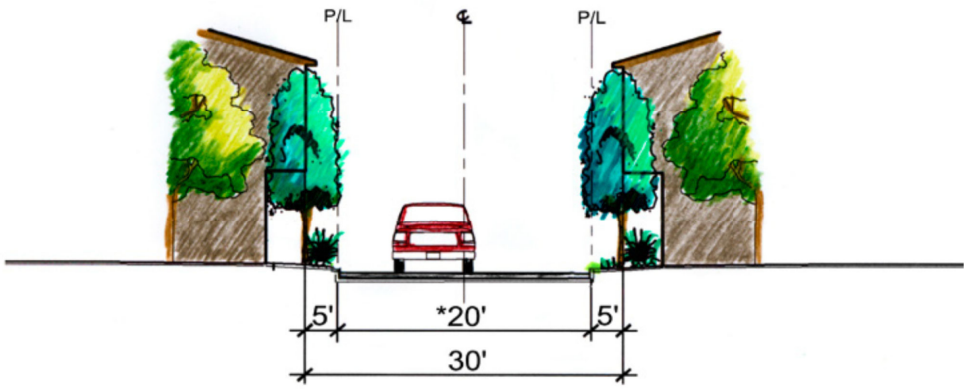
Exhibit 17I-2 - Private Streets With Intersection Chokers



Alley

Alleys within the plan area will consist of 20 feet of paved travel area with 5 feet of landscape and apron on each side. The alleys will incorporate tapers at the entrance to alleys to slow traffic in these areas and to provide a visual element to discourage drivers from using alleys as a through street. Pavement may expand to 24 feet for Fire use with 3' landscape and apron on each side to maintain a 30' building separation. Final alley design shall be subject to review and approval by the Planning, Engineering, and Fire Departments. The developer will be responsible for those improvements to alleys as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project.

Exhibit 17m-1 - Alley (Cross-Section and Plan)



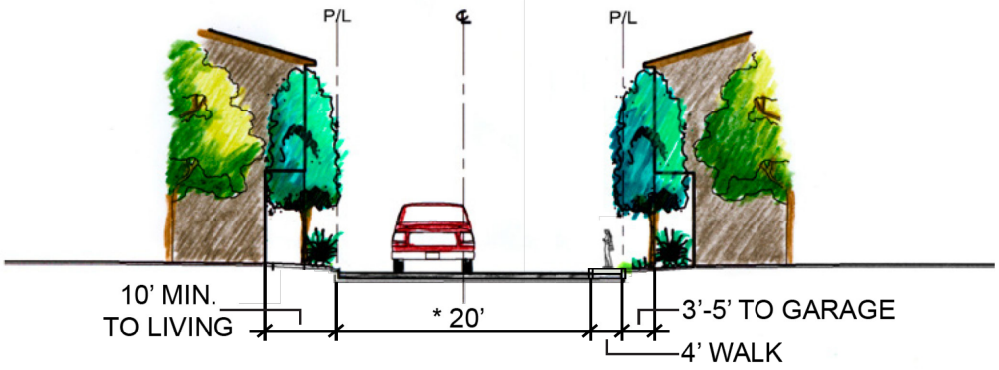
*PAVEMENT MAY EXPAND TO 24' FOR FIRE USES WITH 3' LANDSCAPE AND APRON EDGES ON BOTH SIDES TO MAINTAIN 30' BUILDING SEPARATION. FINAL PRIVATE DRIVE DESIGN SHALL BE SUBJECT TO REVIEW AND APPROVAL BY THE PLANNING, ENGINEERING AND FIRE DEPARTMENTS.



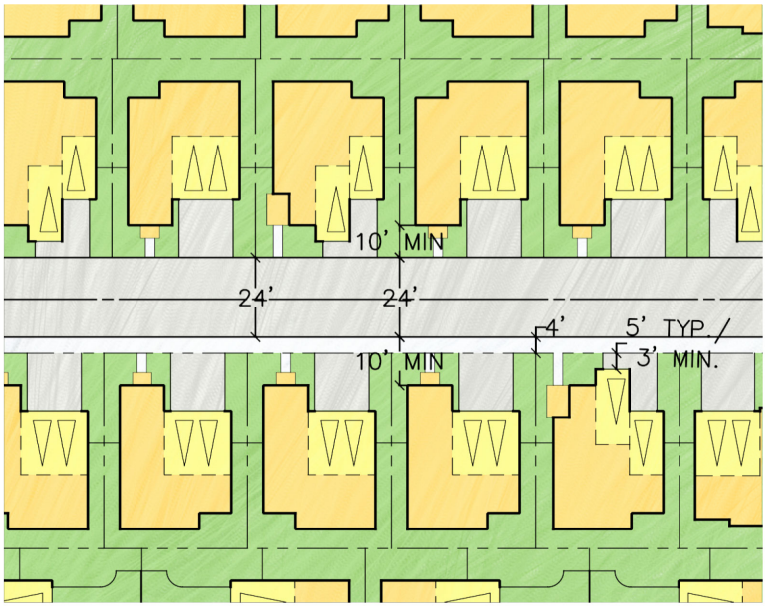
Private Alley

Private alleys within the plan area will consist of 20 feet of paved travel area with 5 feet minimum driveway aprons on each side. The private alleys will be paved per City Standards to encourage a street-like character. Pavement may expand to 24 feet for Fire use with 3' landscape and apron on each side. Final private alley design shall be subject to review and approval by the Planning, Engineering, and Fire Departments.The developer will be responsible for those improvements to Private Alleys as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project.

Exhibit 17m-2 - Private Drive (Cross-Section and Plan)



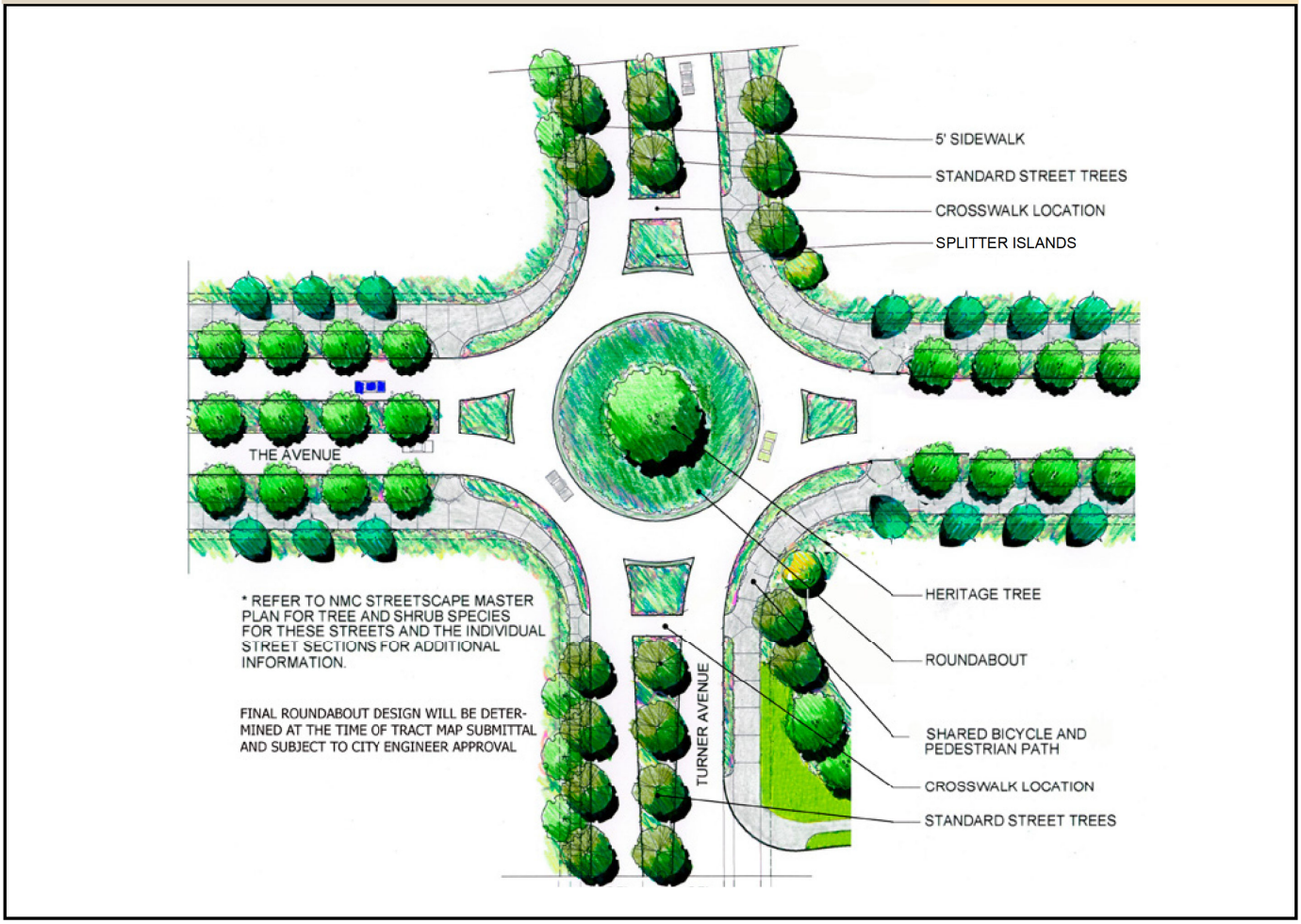
*PAVEMENT MAY EXPAND TO 24' FOR FIRE USES WITH 3' LANDSCAPE AND APRON EDGES ON BOTH SIDES TO MAINTAIN 30' BUILDING SEPARATION. FINAL PRIVATE DRIVE DESIGN SHALL BE SUBJECT TO REVIEW AND APPROVAL BY THE PLANNING, ENGINEERING AND FIRE DEPARTMENTS.



Typical Roundabout

Roundabouts have been strategically located throughout the plan to calm traffic through the center of the project, facilitate traffic movement and reduce air pollution by avoiding mandatory stops from all directions at the conceptual locations shown in Exhibit 17n, "Typical Roundabout". These roundabouts will follow the City adopted guidelines/standards and their final design will require City planning and engineering department approval as part of the tentative tract map review process. Utilities shall not be located under roundabouts. The developer will be responsible for those improvements to Roundabouts as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project.

Exhibit 17n - Typical Roundabout (La Avenida Drive and Turner Avenue)



* ROUNDABOUTS ARE ONLY ALLOWED ON SINGLE LANE APPROACHES.
IF IT IS INTENDED THAT LA AVENIDA DRIVE OR TURNER AVENUE EVER BECOME A 4 LANE ROADWAY (2 APPROACH LANES) THE PROPOSED ROUNDABOUT AT THIS LOCATION SHALL BE REMOVED.

4.1.2 Traffic Calming

The Avenue Specific Plan provides for traffic calming within residential neighborhoods to contribute to safer and more livable neighborhoods in which to walk, bike and drive. According to the Federal Highway Administration (FHWA) document FHWA-HRT-06-047 HRTC-01/01-06(1M)E, Roundabouts Safety and Design, 2006 some of the benefits of roundabouts are:

- Crashes are less severe than other intersection crashes.
- Safer than traditional intersections.
- Cost-effective way to improve intersection safety.
- Increased traffic capacity and improved traffic flow.
- No signal equipment to maintain.
- Aesthetic benefits.



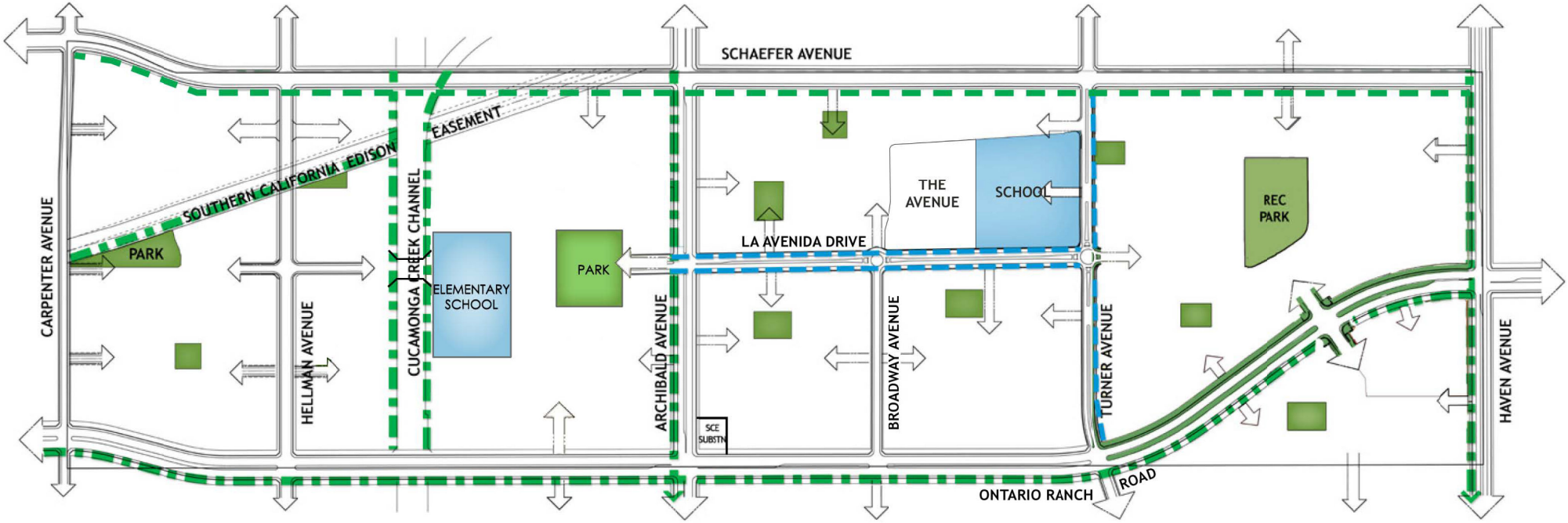
There are also environmental benefits to roundabouts. The FHWA Publication FHWA-RD-00-067 Roundabouts, An Informational Guide, June 2000 states that "The environmental benefits of a project are most readily quantified in terms of reduced fuel consumption and improved air quality. Of these, reductions in fuel consumption and the benefits associated with those reductions are typically the simplest to determine."

4.1.3 Pedestrian/Bicycle Trails and Connectivity

A primary recreational trail will be provided through the improvement of a portion of the SCE owned property (SCE Corridor) within the plan area as shown on Exhibit 18b, "SCE Easement Trail". The developers of the Specific Plan Area will be responsible for the construction of this trail. These improvements represent a part of the City's Master Planned multi-use path system planned for ~~the New Model Colony~~ Ontario Ranch. This SCE trail will extend from Vineyard Avenue, located west of the plan area to the Cucamonga Creek Channel. The trail will then head north along the west side of the Channel, where it will meet the Multi-Use path on Schaefer Avenue. This series of trails will provide access to Archibald Avenue and the trail on the East side of the Channel, which also runs north-south within the flood control right of way connecting Schaefer to Ontario Ranch Road. The trail also provides points of connection to parks, La Avenida Drive corridor, residential neighborhoods and the retail center.

The Specific Plan proposes a steel truss bicycle/pedestrian bridge crossing over the Cucamonga Creek Channel to connect the east and west sides of the channel and encourage school children west of the Channel to walk or bike to school. The Specific Plan shows a potential location for the bicycle/pedestrian bridge that may be relocated or incorporated into another bridge crossing. Final location and design will be subject to approval by Planning Director. The developer will be required to pay for the bridge and its construction. An encroachment permit will be needed from San Bernardino County Flood Control to construct the bridge crossing. A minimum 12-foot easement will need to be recorded to the City of Ontario in order to maintain the pedestrian bridge and provide public access across the channel. The SCE and flood control channel trails are important components in the overall trail system design of ~~the New Model Colony~~ Ontario Ranch and are an important component of the city's master plan trail system. The residential users will find that the trail is useful in reaching many of The Avenue's amenities, as well as the surrounding community. The improved trails will be landscaped with approved evergreen, deciduous, and flowering plant material. There will be several points in the trail system linking to secondary paths that will lead to The Avenue's retail/commercial areas, as well as to the neighborhoods.

Revised Exhibit



LEGEND

- NMC MASTER PLAN MULTI-USE PATH
- PROPOSED MULTI-USE BRIDGE ACROSS CHANNEL
- ENHANCED PEDESTRIAN SIDEWALK PER SPECIFIC PLAN (SEE SECTIONS 17G AND 17H)

NORTH

0 100 200 400 800

NOTE: The precise locations of the trails are conceptual and will be determined as part of the tract map approval process. The location of the proposed multi-purpose bridge is shown as conceptual and subject to Planning Department and Traffic Engineering Department review and approval.

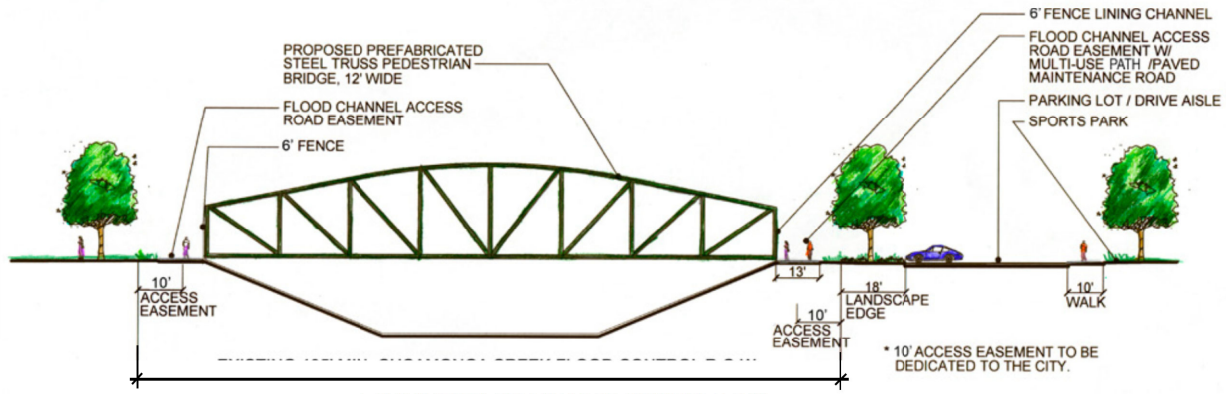
Revised Exhibit Trail Master Plan

Multi-use paths are provided within the plan area along Archibald, Haven, Ontario Ranch Road and Schaefer Avenues. These paths are provided adjacent to the major drainage easement, along Hellman Avenue, and along the spine road (The "Avenue") which traverses the center of the plan area in an east-west direction.

Multi-use paths shall provide benches/seatwalls along path at appropriate locations with adequate lighting and trash receptacles at seating areas. In addition, these paths should provide clear directional signage (subject to Engineering and Planning Department approval) to facilitate movement to and from crosswalks and entry points.

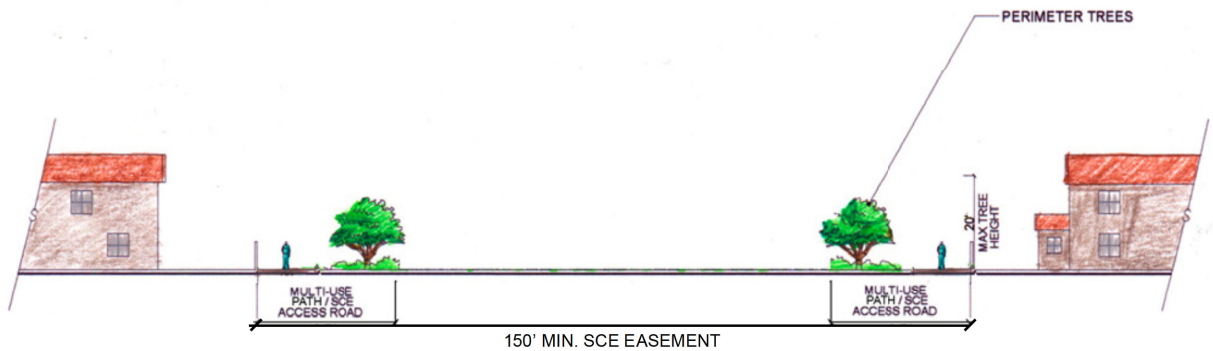
Bike racks at destination locations serving as a point of departure to and from bike path will also be available on Class I bike paths. The bicycle trail system provides access and connectivity to the various land use components of the plan area (parks, schools, retail and commercial center, and residential neighborhoods) as shown in Exhibit 18, "Trail Master Plan". Class II on-street striped bike lanes shall be provided on roadways within The Avenue Specific Plan area as determined by the City Engineer.

Exhibit 18a - Cucamonga Creek Channel Trail



NOTE: The design and location of bridge is shown as conceptual and subject to Planning Department and Engineering Department review and approval.

Exhibit 18b - SCE Easement Trail



NOTE: The Landscape and Trail Design of the SCE Easement Trail shall comply with the landscape and trail design standards of NMC Streetscape Master Plan.

4.2 Infrastructure Plans

The improvement plans for the various infrastructure facilities, including water, recycled water, sewer, and storm drainage are intended to provide The Avenue Specific Plan with essential services in a safe and efficient manner. Infrastructure facilities shall comply with the latest approved Master Plans. The current ~~2012~~ Water Master Plan~~s~~ shall be referenced for design standards, sizing, alignment, etc. Water, recycled water and sewer utilities may be designated as "public utilities" if located within public or private streets. All public utilities within private streets shall be designed and constructed per City standards and contained within easements acceptable to the City. The CC&RS shall contain language that requires all proposed work by the HOA within said easements to be plan checked and inspected by the City, including applicable fees. Generally, utilities will not be accepted as public within alleys, parking areas or driveways.

Utilities within commercial and industrial parking lots and loading areas shall be designated as private. The extent to which said utilities will be accepted as public utilities for maintenance shall be determined, at the full discretion of the City, during final design plan review. The following sections describe each of the infrastructure facilities in detail.

4.2.1 Water

Domestic water will be provided by the City of Ontario. The Master Planned (MP) programs new potable water facilities to include: 30 and 24-inch Francis loop main extension from existing Zone 925 reservoir facilities within Milliken, Eucalyptus, and Archibald ~~and Ontario Ranch Road~~ Streets. The remainder of The Avenue will be served by a series of new Master Planned 12-inch mains as follows: Ontario Ranch Road extending to Haven, Schaefer from Carpenter to Haven, Haven from Eucalyptus to Schaefer, Turner from Ontario Ranch Road to Schaefer and Hellman from Ontario Ranch Road to Schaefer. Construction of the Master Planned water mains service network improvements is required prior to issuance of project related building permits for The Avenue. Master Planned domestic and recycled water main lines serving, surrounding and within the Specific Plan, as identified in the ~~2012~~ current Water Master Plan, shall be constructed prior to issuance of first occupancy. Sizing of non-master planned facilities is subject to City review and approval of the required Hydraulic Analysis. Requirements for Master Plan backbone water improvements for Phase 1A, 1B and 2 are subject to the NMC Builders' agreement.

New domestic water mains to be constructed as part of the development of The Avenue will include: 12-inch 925PZ mains within Carpenter Avenue, Hellman Avenue and Turner Avenue from Ontario Ranch Road to Schaefer, ~~and~~ within La Avenida Drive street from the proposed Elementary school site easterly of Archibald extending to Turner Avenue, within Ontario Ranch Road and Schaefer Avenue from Haven to Carpenter. These ~~two~~ 12-inch mains form the interior backbone loops connecting to Master Planned potable water facilities. The remainder of all interior streets within The Avenue project, ~~including Carpenter~~ and "A" Street located between Archibald and Turner will have 8-inch domestic mains. The construction on dead end water mains shall be avoided.

Higher fire flow demands for medium to high density residential and non-residential projects should be identified in accordance with the ~~2012~~ current Water Master Plan. Fire flow demands in excess of 1500 gpm for single family residential may require upsizing certain distribution to 12-inch pipelines as shown in Exhibit 20, "Domestic Water Master Plan". A hydraulic modeling analysis report is required to demonstrate that the proposed water system will meet peak demands including maximum day plus fire demand and peak hour demand.

4.2.2 Recycled Water

The ultimate sizing and alignment shall follow the most currently approved Master Plan. In order to assure conformance with Master Plan Design Criteria during the Implementation process: a Conceptual Technical Study shall be prepared and approved by the City prior to or concurrently with the entitlement submittal; and, a Final Technical Study shall be prepared and approved by the City prior to approval of Construction Drawings and Permits.

All new Master Planned recycled water mains will have the potential to interconnect to the proposed future 48-inch transmission facility within Carpenter. New recycled water facilities to be constructed as part of The Avenue will include: a 8-inch main within Turner from Ontario Ranch Road to Schaefer; a 8-inch main within La Avenida Drive from Archibald westerly to the Elementary school site and from Archibald to Turner. All remaining interior streets built with The Avenue project will connect to the Master Planned recycled water facilities and The Avenue backbone facilities to serve the project landscape edges, parkways, neighborhood, parks, street medians, etc. via 8-inch mains within the interior streets, as required, and irrigation sleeving at intersections and appropriate mid-block crossings to serve The Avenue landscaping improvements irrigation needs. Sizing of non-master planned facilities is subject to review and approval of the required Hydraulic Analysis. An initial Master Plan construction of recycled water improvements will be the construction of the 930 pressure zone (PZ) recycled water system in Archibald Avenue from southerly project limits to Riverside Drive, the Pressure Reducing Station (PRS) at Archibald & Chino Avenue, 1050 PZ pipes in Archibald, 1050 PZ pipes in Riverside Drive and on into RP-1. This above mentioned series of piping will tie into The Avenue via Schaefer, Ontario Ranch Road, etc. A recycled water loop must also be constructed in Haven Ave. from the southerly project limits to Riverside Dr. and in Riverside Dr. from Haven Ave, to RP-1 including the PRS stations per the Recycled Water Master Plan.

The Avenue (Subarea 18) Specific Plan shall comply with City Ordinance 2689 and make use of recycled water for all approved uses, including but not limited to irrigation of parks, schools, street landscaping, recreational trails, HOA maintained on-site common areas and commercial/industrial landscaping. An Engineering Report approved by the City and the California Department of Public Health is required prior to the use of recycled water.

4.2.3 Sewer

The ultimate sizing and alignment shall follow the most currently approved Master Plan. In order to assure conformance with Master Plan Design Criteria during the Implementation process: a Conceptual Technical Study shall be prepared and approved by the City prior to or concurrently with the entitlement submittal; and, a Final Technical Study shall be prepared and approved by the City prior to approval of Construction Drawings and Permits.

The 21-inch Haven Avenue Trunk Sewer line runs in Haven Avenue begins north of the Ontario Ranch Road intersection. The Ontario Ranch Road Trunk Sewer line (27-inch and 30-inch) runs in Ontario Ranch Road between Archibald Avenue and Haven Avenue. There is also a sewer line (21-inch and 24-inch) to be located within Carpenter Avenue which will connect to the Kimball Interceptor at the County line. The Carpenter Avenue Trunk Sewer will extend northerly to Schaefer Avenue and will serve the Avenue project development area from midway to Hellman to the east and Carpenter Avenue to the west ~~westerly of Cucamonga Channel and easterly of Vineyard Avenue~~. Sewer in Hellman Avenue will extend northerly to Chino Avenue and will serve areas to the Cucamonga Creek Channel to the west and midway to Carpenter Avenue to the east.

New sewer facilities to be constructed as part of The Avenue will include: 12-inch sewer in La Avenida Drive from Archibald easterly to Turner; 10-inch sewer in La Avenida Drive from Archibald westerly to the Elementary school site; 10 inch sewer in Broadway Avenue from Ontario Ranch Road terminating near La Avenida Drive intersection; 12-inch sewer in Turner from La Avenida Drive intersection northerly to Schaefer.

A 12-inch sewer will be constructed in Ontario Ranch Road from Hellman westerly to join the master plan sewer in Carpenter Avenue and 10 inch sewer in Hellman Avenue from Ontario Ranch Road terminating in Chino Avenue. All remaining interior streets within The Avenue, when developed, will have 8-inch minimum sewer main lines as shown in Exhibit 23, “Sewer Master Plan.” Master planned sewer main lines serving and surrounding the development shall be constructed prior to issuance of first occupancy. Initial sewer improvements shall be constructed between IEUA’s Archibald Trunk and the development limits, including constructing that portion of Ontario Ranch Road sewer between Archibald and Haven.

4.2.4 Drainage

~~The New Model Colony~~ Ontario Ranch Master Plan of Storm Drains report, prepared by LD King Engineers and updated ~~NMC~~ Ontario Ranch Improvements Hydrology Analysis provided by Stantec Engineers considered the entire Master Plan zoning area drainage analysis of which The Avenue (Planning Area 18) is included. The City of Ontario will be the maintenance agency for Master Planned and The Avenue storm drainage system facilities.

All Avenue drainage will eventually discharge into the existing Bellegrave County Line Drainage Channel facility located approximately 7,000-feet south of La Avenida Drive. The Master Planned improvements will utilize the existing Cucamonga Channel County of San Bernardino Flood Control facility, which drains north to south and joins the east-west Bellegrave County Line Drainage Channel. The Master Planned Storm Drain Improvements will construct a new network of storm drain lines within existing and proposed north-south streets extending northerly from the Bellegrave County Line Flood Control facility. Also, east-west storm drain lines will be built periodically joining the existing Cucamonga Channel Flood Channel facility. The Master Planned Storm Drain Improvements will include the following: an 84-inch storm drain

within Haven fronting the easterly edge of La Avenida Drive and extending southerly joining the Bellegrave Flood Channel with a 96-inch line; a 66-inch storm drain within Turner, the Turner storm drain will extend southerly eventually joining the Bellegrave Flood Channel with a 96-inch line; Archibald Avenue accepts flows from a 36-inch line within Schaefer easterly of the Archibald intersection.

The Archibald main extends southerly eventually joining the Bellegrave Flood Channel with a 96-inch line. The Hellman storm drain accepts flows from a 42-inch line north of Schaefer.

The Hellman storm drain extends southerly through The Avenue as an 42-inch line and joins an 84-inch line within Ontario Ranch Road. The Hellman storm drain extends southerly to future Eucalyptus Street as a 96-inch line, then travels easterly on Eucalyptus as a 6' x 11' box culvert to join the existing Cucamonga Flood Channel. Ontario Ranch Road west of the Cucamonga Flood Channel has an 84-inch storm drain easterly of the Hellman intersection and 72-inch lines extending from west to east from Vineyard to Hellman. Ontario Ranch Road, between Archibald Avenue and Turner Avenue, contains 60-inch, 54-inch and 48-inch storm drain. A 48-inch storm drain extends easterly from the existing Cucamonga Channel within Ontario Ranch Road terminating mid-block between the channel and Archibald intersection.



Cucamonga Creek Channel

Storm drain facilities to be constructed as part of The Avenue will include: a 30-inch line in Carpenter from Ontario Ranch Road northerly to mid-block between Schaefer; a 36-inch line paralleling the easterly side of the existing Cucamonga Flood Channel to serve the Park/Elementary school sites and extending northerly to serve the future retail site adjacent and southerly of Schaefer; a 30-inch line within La Avenida Drive– between Archibald and Turner to provide service to the 10 acre School site; the individual planning areas within The Avenue will have storm drain pick-up laterals (18-inch minimum) joining Master Planned Improvements and The Avenue backbone storm drain facilities.

Ultimate development of The Avenue requires construction of all proposed Master Planned Storm Drain Improvements. The existing Avenue site generally sheet flows form north to south. It is not anticipated that Grading of individual planning areas will be permitted, prior to completion of Master Planned Storm Drain Improvements due to the fact that the City of Ontario will not allow temporary stormwater runoff detention basins to be constructed for individual planning areas in The Avenue until downstream Master Planned storm drain facilities are constructed and functioning to provide necessary flood control for that tract map area.

4.2.5 Grading


Landscape Setback Swale System

The Avenue existing topography may be described as flatland terrain which gently slopes to the south varying from 0.6% to 1.1% across the site as shown in Exhibit 5, "Existing Topography". The high elevation is elevation 750 at the northeast corner of the site. The low elevation is 706 located at the intersection of Archibald and Ontario Ranch Road Streets. Existing land uses vary from vacant land to agricultural with the majority of land being existing or vacated dairy farm operation. The dairy farm operations contain many ponding areas for acceptance/ filtration of dairy livestock excrement runoff. The dairy farms on the site have varying thickness layers of manure which will require off-site disposal from The Avenue project. Due to the varied number of development ownership of The Avenue planning areas, it is anticipated that mass grading of the entire site will not occur. Individual planning area owners will be responsible for obtaining any rough grading and precise grading permits along with remedial grading, removal of manure deposits and dairy bog pond sediments disposal. If the Developer proposes temporary use of an existing agricultural well for purposes other than agriculture, such as grading, dust control, etc., the developer shall make a formal request to the City of Ontario for such use prior to issuance of permits for any construction activity. Upon approval, the Developer shall enter into an agreement with the City of Ontario and pay any applicable fees as set forth by the agreement.

4.2.6 NPDES Compliance

The grading and drainage of The Avenue Specific Plan area shall be designed to detain, filter and treat surface runoff, in a manner and combination which is practical, to comply with the most recent requirements of the San Bernardino County NPDES Stormwater Program's Water Quality Management (WQMP) for significant new development projects. The objective of the WQMP for this project is to minimize the detrimental effects of urbanization on the beneficial uses of receiving waters, including effects caused by increased pollutants and changes in hydrology. These effects may be minimized through the implementation of site designs that reduce runoff and pollutant transport by minimizing impervious surfaces and maximizing on-site infiltration, Source Control Best Management Practices (BMP's) and/or either on-site structural Treatment Control BMP's, or participation in regional or watershed-based Treatment Control BMP's. An alternative to the implementation of on-site Low Impact Development (LID) BMPs to retain/infilter and treat stormwater runoff is the utilization of the off-site, regional Mill Creek Wetland facility for accomplishing water quality improvements in residential project runoff from this master planned community. All non-residential planning area projects within The Avenue will incorporate all required on-site LID BMPs, pursuant to the requirements of the current San Bernardino County Water Quality Management Plan.

Prior to the issuance of a grading or construction permit, all projects greater than 1 acre in size shall apply for coverage under the California General Permit To Discharge Storm Water Associated with Construction

Activity, obtain a WDID# from the State Water Resources Control Board and prepare a Stormwater Pollution Prevention Plan (SWPPP) on the CASQA 2009 Template form and upload it to the State's SMART database system. A copy of each SWPPP document and WDID# Certification shall also be provided to the City of Ontario, prior to any construction permit issuance. The SWPPP will identify and detail all appropriate Best Management Practices (BMPs) to be implemented or installed during construction of the project.

In addition to the preparation of a SWPPP for construction-related activities, and as part of the approval of any grading plans within the Specific Plan Area, the applicant will be required to submit a Water Quality Management Plan (WQMP) on the regional model form provided by the City. The WQMP shall identify and detail all Site Design BMPs, Source Control BMPs and Treatment Control BMPs to be implemented or installed at this site in order to reduce storm water pollutants and site runoff.

The Mill Creek Wetland facility has been constructed and will be on line and functioning in June, 2014. The facility will serve as an alternative to on-site LID BMP implementation for residential tract developers that are members of the ~~NMC~~ Ontario Ranch Builders, LLC consortium and which have adequate reserved capacity in the regional facility for those planning areas. Out of a proposed 425 acres of residential development in The Avenue, 288 acres will be developed by ~~NMC~~ Ontario Ranch Builders members, 20 acres of land will be utilized for public schools and 107 acres will developed by non-members, who will be required to make other arrangements or utilize another, future regional water quality facility, downstream of the project area. All non-residential planning area projects within The Avenue, including Public Schools, will incorporate on-site LID BMPs, in accordance with the regional NPDES Permit and the current San Bernardino County Water Quality Management Plan, and shall not rely on the regional wetlands facility for retention and treatment of runoff water.

All Priority Land Use (PLU) areas within the Specific Plan Area shall comply with the statewide Trash Provisions adopted by the State Water Resources Control Board (SWRCB) and trash requirements in the most current San Bernardino County Area-Wide MS4 Permit.

4.2.7 Solid Waste

The City of Ontario will provide solid waste collection services to The Avenue Specific Plan area. The following addresses additional solid waste issues:

- An integrated waste management plan is required and shall be submitted prior to DAB approval of each subdivision.
- Commercial – Developer shall comply with Municipal Code Sec. 6-3.314 Commercial Storage Standards, and Sec. 6-3.601 Business Recycling Plan.
- Apartment – For apartments using commercial bin service developer shall comply with Municipal Code Sec. 6-3.314 Commercial Storage Standards and Sec. 6-3.601 Business Recycling Plan.
- Residential – For curbside automated container service developer shall comply with Municipal Code Sec. 6-3.308.9(a) and (d), Residential Receptacles, Placement.

- Recycling Requirements – Developer shall comply with Municipal Code Article 6. Recycling Requirements for Specified Business Activity, Sec. 6-3.601 Business Recycling Plan, and Sec. 6-3.602 Construction and Demolition Recycling Plan.
- All project sites shall be designed to meet all the Integrated Waste Department's requirements, including the requirements for Sizing of Storage, Location of Collection Area, Accessibility for Collection Vehicles, and Collection of Sorted/Diverted Waste Types.
- Project shall follow the City of Ontario's latest "Solid Waste Department Refuse and Recycling Planning Manual".

4.2.8 Gas

The Gas Company will provide natural gas to the Project Site. Gas mains will be installed to the Project Site by the Gas Company, as necessary.

4.2.9 Electric

Southern California Edison will provide electricity to the plan area from existing facilities in the vicinity. Proposed new facilities to serve the project will be owned and operated by the City of Ontario and located underground.

4.2.10 Telephone

Verizon will provide telephone service to the plan area. The City will provide a fiberoptic network to the home, accommodating voice mail data, cable and video on demand. Proposed on-site facilities will be placed underground.

4.2.11 Cable Television

Adelphia will provide cable television service to the plan area. The City will provide coaxial/fiber cable to the home, accommodating cable television, internet services, voice mail data, cable and video on demand. Proposed on-site facilities will be placed underground.

4.2.12 Fiber Optics

Proposed Fiber Optics (conduits and fiber) will be placed underground within a duct and structure system to be installed by the Developer, as illustrated in Exhibit 19. The fiber and conduits along the backbone streets shall be installed in a joint trench by each Developer as the last lane improvements are completed. In-tract fiber and conduit shall be installed by the Developer in joint trenches where possible. Maintenance of the installed system will be the responsibility of the City/Special District. Development of the Project requires the installation by the Developer of all fiber optic infrastructure necessary to service the Project as a standalone Development.

4.3 Community Facilities

4.3.1 Schools

The Mountain View School District serves the K-8 school's needs of the proposed The Avenue Specific Plan. The Chaffey Etiwanda Joint Union School District serves the school needs of grades 9-12 within the plan area. Colony High School is located to the north of the plan, for the high school students living in the plan area. In addition, the proposed The Avenue Specific Plan is providing sites for a ten (10) acre elementary school and an additional ten (10) acre school.

4.3.2 Library

The City of Ontario will provide library services to The Avenue Specific Plan area.

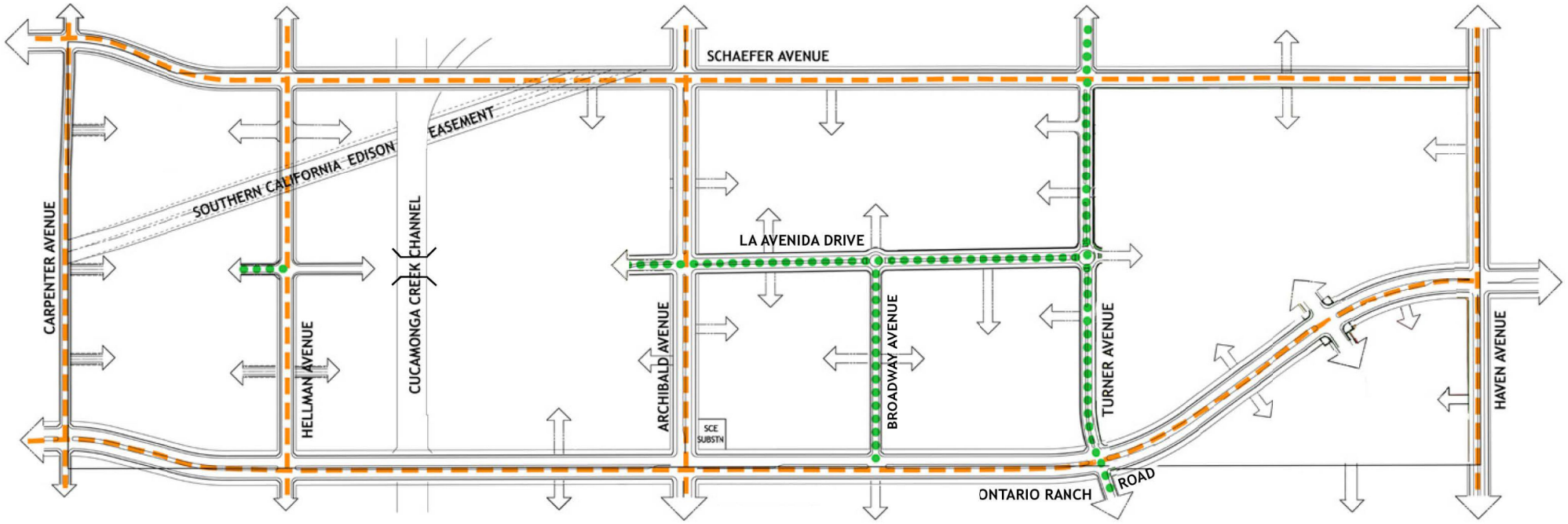
4.3.3 Fire

The City of Ontario will provide fire protection services to The Avenue Specific Plan area.

4.3.4 Police

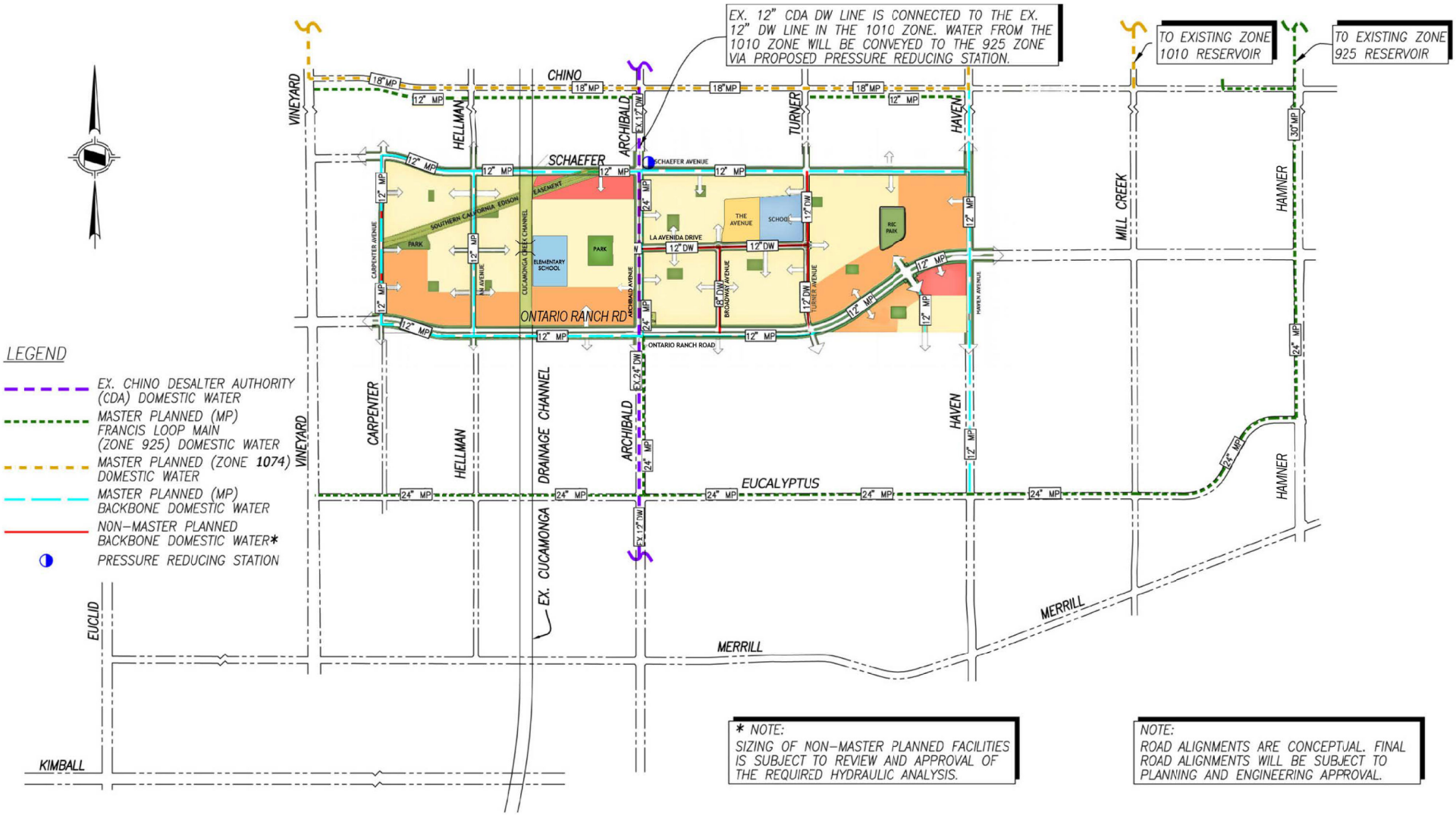
The City of Ontario will provide police services to The Avenue Specific Plan area.

Revised Exhibit



Revised Exhibit

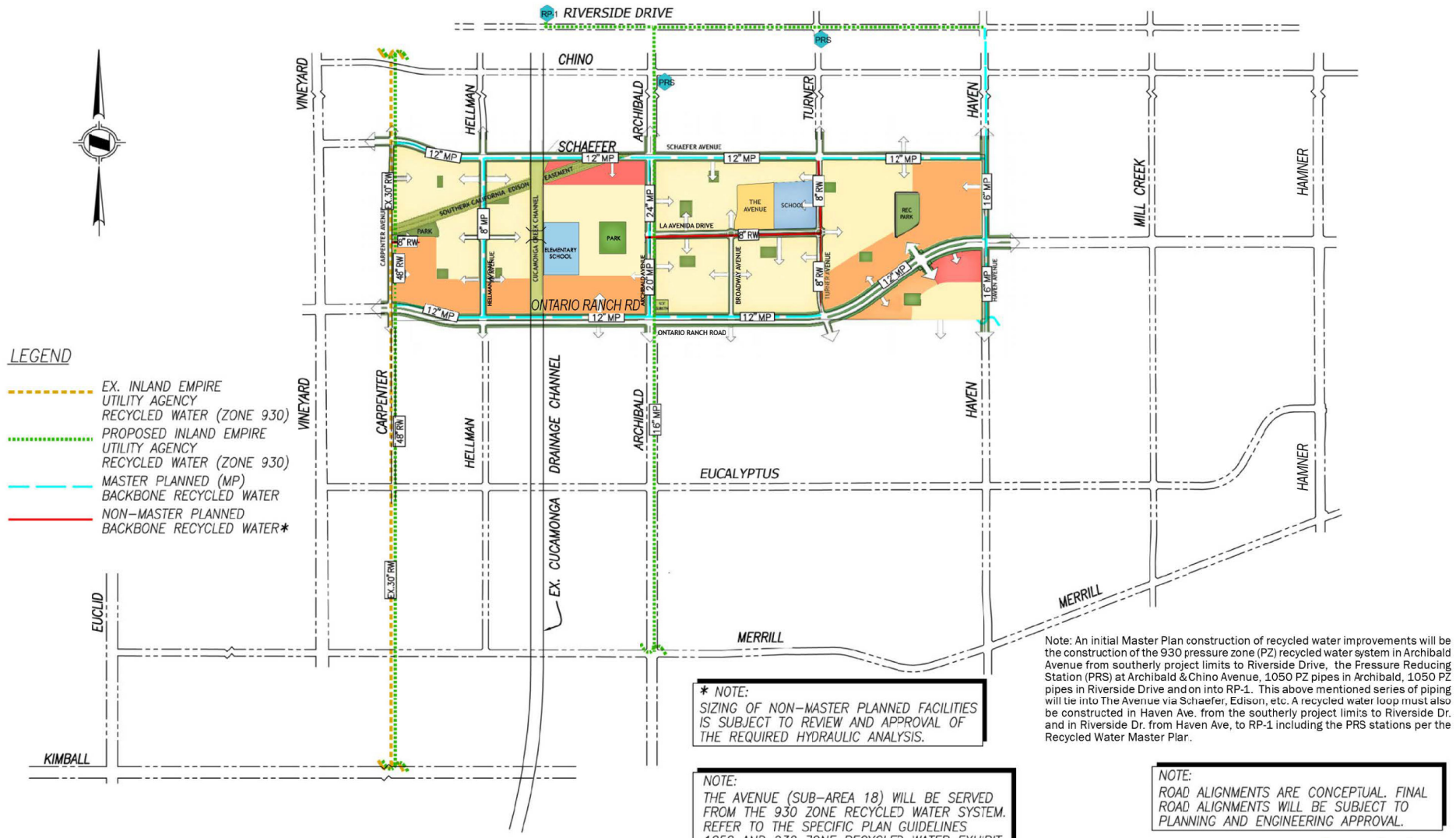
Fiber Optics



Revised Exhibit

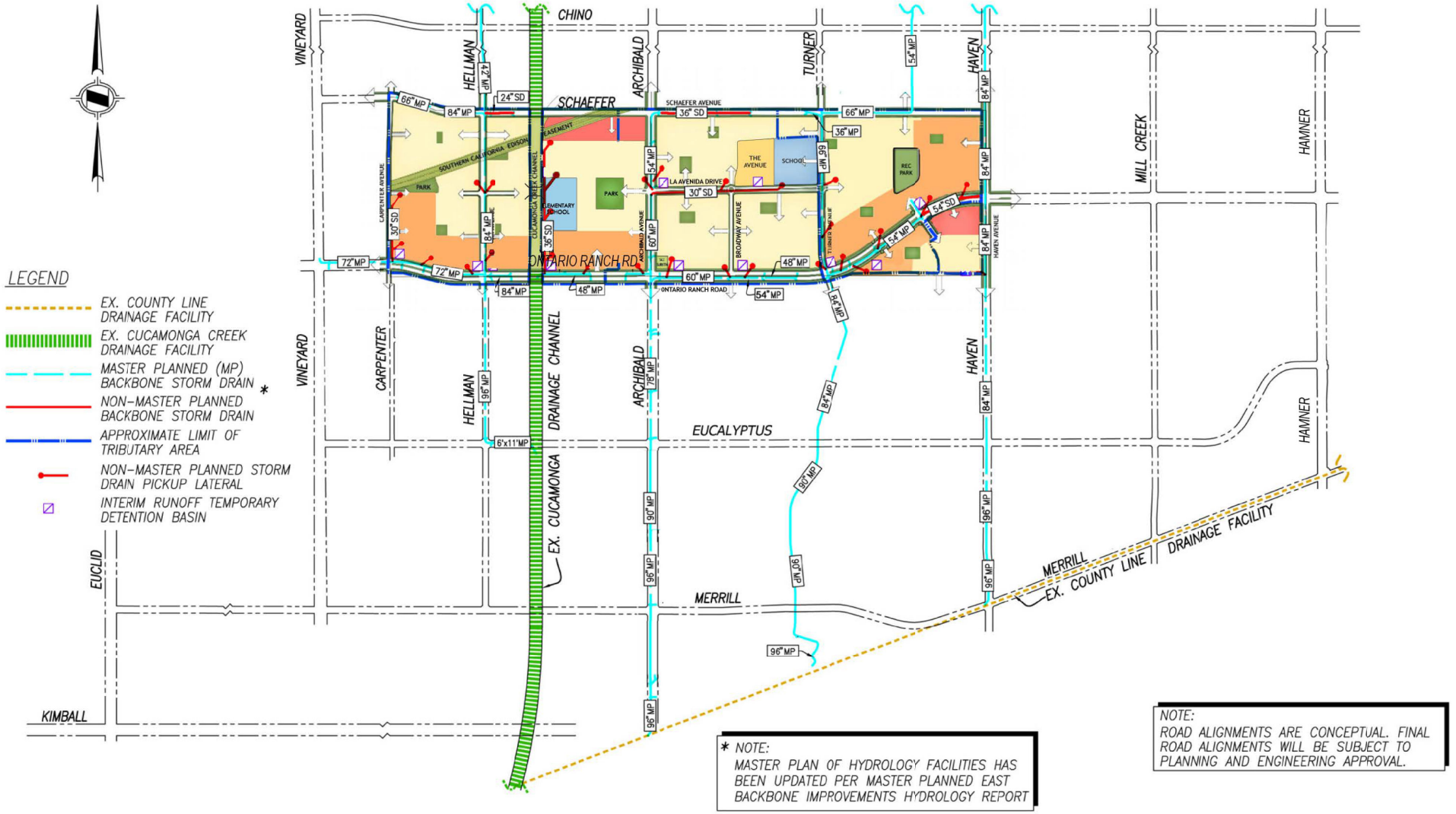
Domestic Water Master Plan

Revised Exhibit



Revised Exhibit

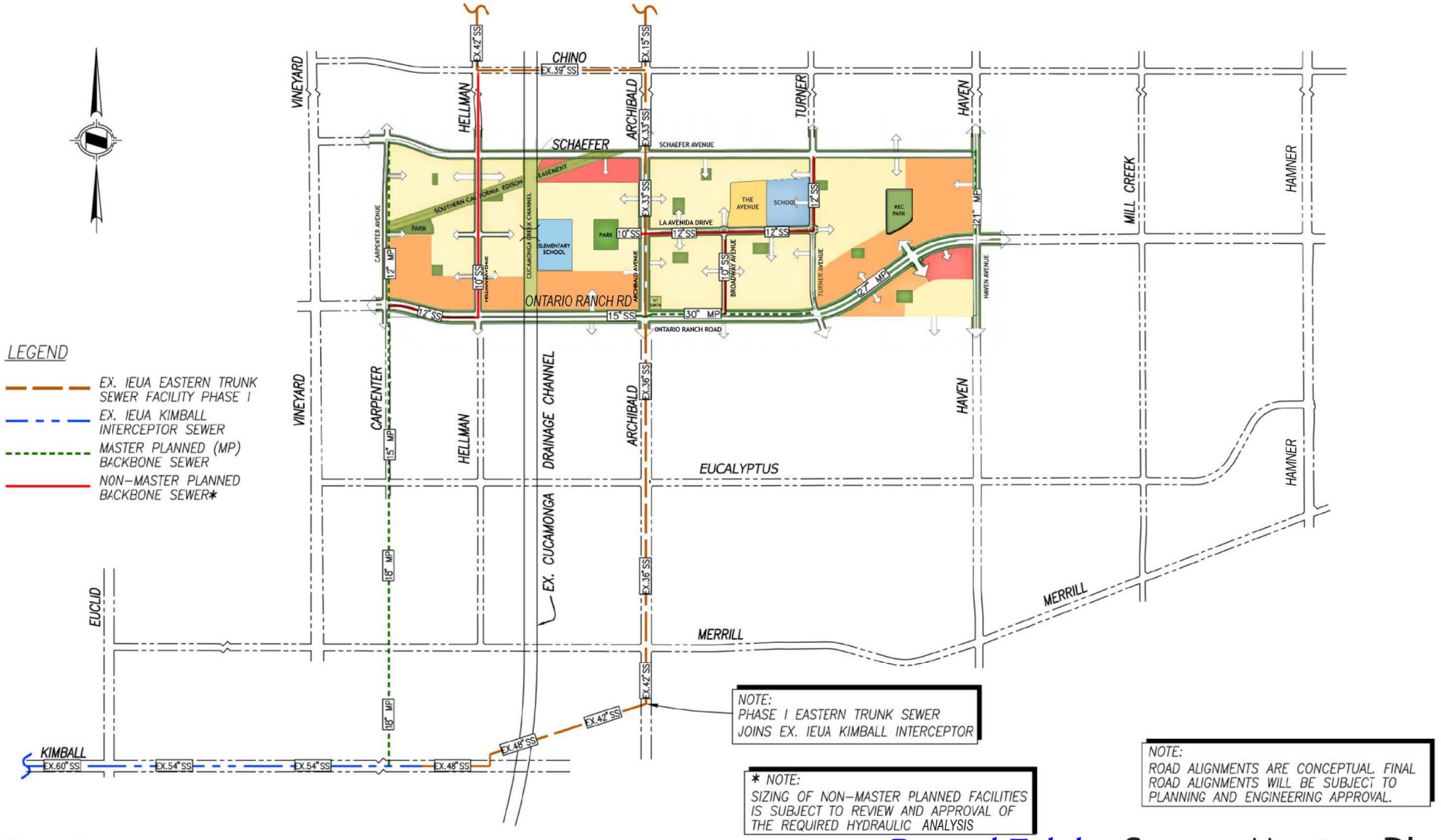
Recycled Water Master Plan



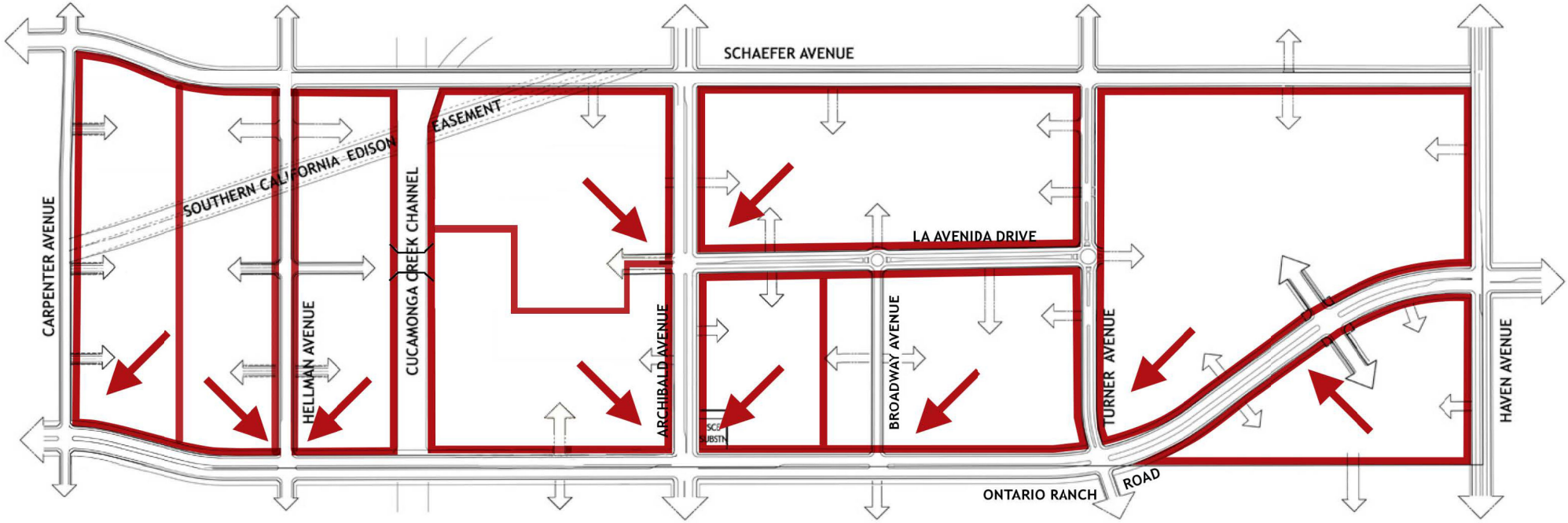
Revised Exhibit

Storm Drain Master Plan

Revised Exhibit



Revised Exhibit Sewer Master Plan



LEGEND

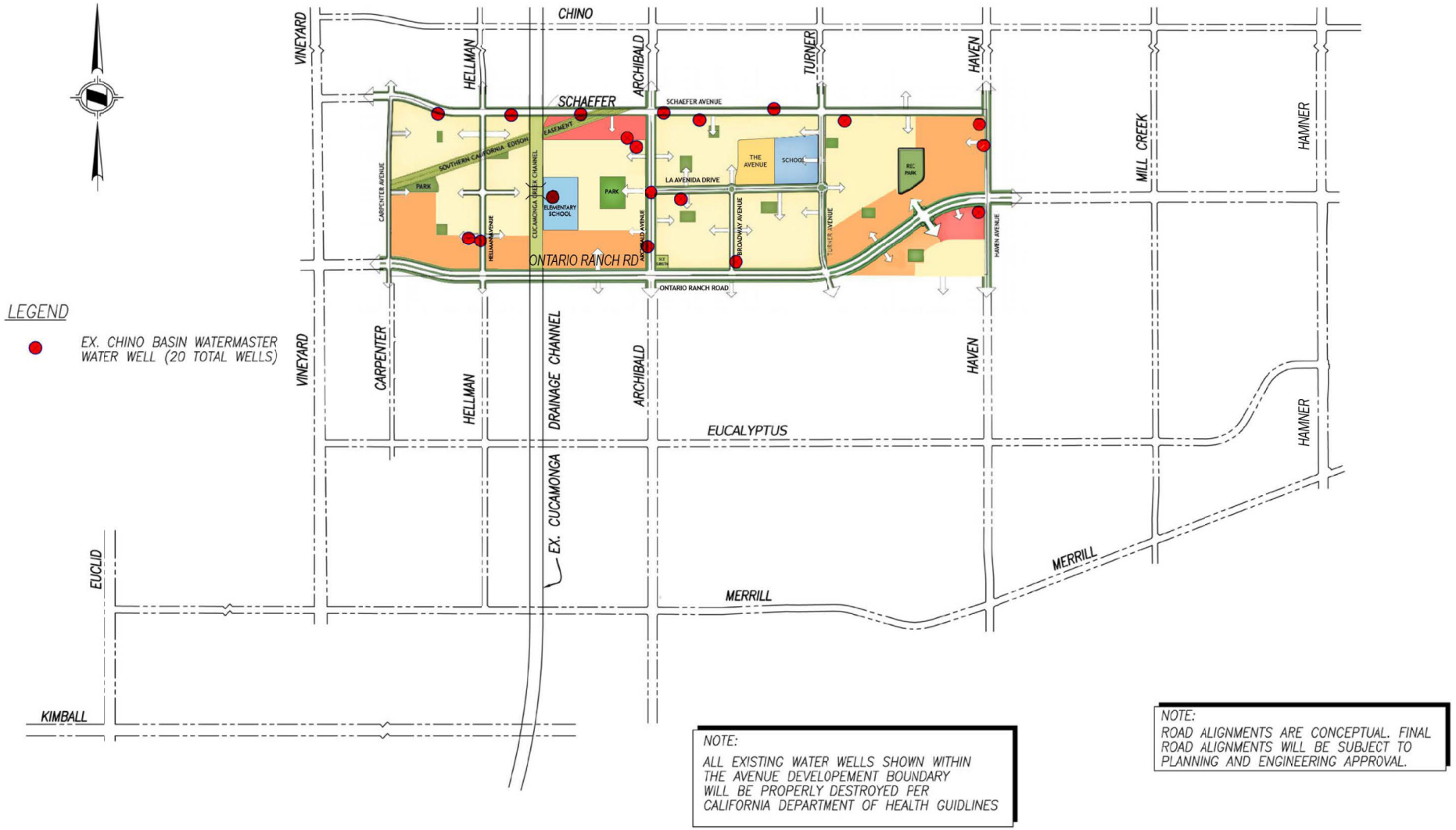
SEWER TRIBUTARY AREAS

DIRECTION OF FLOW

Revised Exhibit

Sewer Tributary Areas

Revised Exhibit



Revised Exhibit
Existing Wells

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Section 5 - Development Regulations

5.1 General Provisions

A. Development proposals within The Avenue Specific Plan shall be subject to the implementation procedures established herein. Whenever the provisions and development standards contained herein conflict with those contained in the City of Ontario Development Code, the provisions of The Avenue Specific Plan shall take precedence. On issues where the Specific Plan is silent the City of Ontario Development Code shall prevail.

B. Severability - If any portion of these regulations is declared to be invalid or ineffective in whole or in part, such decision shall not affect the validity of the remaining portions thereof. The legislative body hereby declares that they would have enacted these regulations and each portion thereof irrespective of the fact that any one or more portions be declared invalid or ineffective.

C. Unless otherwise provided, any ambiguity concerning the content or application of The Avenue Specific Plan shall be resolved by the Planning Director or his/her designee, hereinafter referred to as Director, in a manner consistent with the goals, policies, purpose and intent established in The Avenue Specific Plan.

D. Any major deviation from the Design Guidelines (Section 6) within The Avenue Specific Plan shall require a Specific Plan Amendment. The Director shall determine whether a proposed change constitutes a major deviation.

E. The meaning and construction of words, phrases, titles, and terms shall be the same as provided in the City of Ontario Development Code Article 2, “Definitions”, unless otherwise specifically provided herein.

5.2 Applicability

The development regulations contained herein provide specific standards for land use development within the proposed The Avenue Specific Plan. Regulations address residential, retail and commercial and open space land uses. General landscaping regulations are also provided. Application of the following regulations is intended to encourage the most appropriate use of the land, ensure the highest quality of development, and protect the public health, safety, and general welfare. The adoption of The Avenue Specific Plan by ordinance will supercede otherwise applicable City of Ontario zoning regulations unless stated herein to the contrary. Whenever the provisions and development standards contained herein conflict with those contained in the City of Ontario Development Code, the provisions of The Avenue Specific Plan shall take precedence. Where The Avenue Specific Plan is silent, City codes shall apply.

5.3 Development Review Process

All development projects within the proposed The Avenue Specific Plan shall be subject to the Development Plan Review Process as established in Article 8 of the City's Development Code. Adoption of The Avenue Specific Plan by the City includes adoption of the Design Guidelines contained within Section 6 of The Avenue Specific Plan and which provide direction for the design of development projects within the plan area. Where the Design Guidelines are silent, the applicable design guidelines contained within the City's Development Code shall apply. The Design Guidelines are intended to be flexible in nature while establishing basic evaluation criteria for the review by the City of developer projects during design review.

Pursuant to these provisions, the Development Permit process constitutes a design review of project architecture, site plans, and landscape plans. All development project applications shall include a landscape and irrigation plan describing plant materials and their growth habits, plant size and spacing, methods of irrigation and landscaping maintenance, site plans, architectural elevations, floor plans, grading plans and other requirements as specified by the City. Development permits are approved with conditions of approval.

As the Specific Plan is Phased, the following minimum criteria shall be met for each Subdivision and Development of each Phase:

- For Domestic Water, all the Master Plan, Regional and Local Infrastructure identified in Section 4 and the Conceptual Domestic Water Plan for the Water Pressure Zone that the Phase is within shall be completed as part of the Phase's infrastructure requirements. Also, any domestic water infrastructure necessary to provide primary looping, secondary looping, and meet all hydraulic criteria and fire flow shall be completed as part of the Phase's infrastructure requirements.
- For Recycled Water, all the Master Plan, Regional and Local Infrastructure identified in Section 4 and the Conceptual Recycled Water Plan for the Recycled Water Pressure Zone that the Phase is within shall be completed as part of the Phase's infrastructure requirements. Also, any recycled water infrastructure necessary to provide primary looping, secondary looping, and meet all hydraulic criteria shall be completed as part of the Phase's infrastructure requirements.
- For Sewer, all the Master Plan, Regional and Local Infrastructure identified in Section 4 and the Conceptual Sewer Plan for the Master Plan Sewer Tributary Area that the Phase is within and upstream of shall be completed as part of the Phase's infrastructure requirements. Also, any sewer infrastructure necessary to meet all hydraulic criteria shall be completed as part of the Phase's infrastructure requirements.

5.3.1 Additional Entitlement Requirements

In order to ensure orderly expansion of the City Utility Systems and other City Infrastructure, the following Additional Entitlement Requirements are imposed upon all Subdivision Maps and Developments within the Specific Plan area.

5.3.1.1 Conceptual Design Report:

Prior to approval of any entitlement application (subdivision maps, Development Plan Reviews, etc.), a conceptual design report shall be prepared and submitted to the Development Agency Engineering Department and the Utilities Engineering Department for review and approval for the established extent of all public improvements required for the project. The study shall identify existing and future rights-of-ways (ROW) and infrastructure improvements and establish all vertical and horizontal alignments for each utility. The report shall include cross-sections, profiles, and any supporting details needed to demonstrate that utilities can be adequately accommodated in the public ROW. The study shall account for all utility conflicts, right-of-way variations, existing obstructions, and the timing of utility installation. This shall also include Water Sub-Area Master Plans (WSAMP) and Sewer Sub-Area Master Plans (SSAMP) to assure compliance with all Master Plan Design Criteria, including Hydraulic Design Criteria. Utilities cannot be located along an alignment that conflicts with existing conditions (e.g. electrical poles, private property, etc.) unless that applicant is accepting the responsibility of modifying the existing conditions (e.g. undergrounding, relocation, ROW acquisition, etc.).

5.3.1.2 Preliminary Design Report:

As a condition of entitlements (subdivision maps, Development Plan Reviews, etc.) within the Specific Plan and prior to submittal of Infrastructure Improvements Plans, a Preliminary Design Report (PDR) for all public infrastructure shall be submitted and approved by the Development Agency Engineering Department and the Utilities Engineering Department. The PDR shall include the following:

Conceptual Design Compliance: A discussion modifying or confirming the conceptual design established with the Project's Conceptual Design Report. The study shall confirm all rights-of-ways (ROW), infrastructure improvements, and vertical and horizontal alignments for each utility.

Street Cross Sections and Profiles: Street Cross Sections and Profiles shall be provided for each public street, private street and Public Utility Easement (PUE) containing a public utility and at any points along the alignments where the ROW varies. The cross sections shall show the location and size of each utility and shall annotate the property/ROW lines, the type of finished surface material, the distance of each utility from centerline, the depth from finished surface to top of pipe, and the distance between utilities (outside wall to outside wall).

Constructability Review: The report shall include a discussion of the constructability issues along the proposed alignment and identify the recommended construction methods that may be utilized. The study shall perform field investigation (field survey and potholing) in order to identify potential utility conflicts, right-of-way variations, existing obstructions, and constructability issues created by the timing of utility installation.

Supporting Details: The PDR shall include any supporting details needed to demonstrate that utilities can be adequately accommodated in the public ROW, including the placement of large appurtenances, clearance from existing obstructions, etc.

30% Design Drawings: The PDR findings shall be incorporated into a 30% design plan set and included in the PDR.

5.3.1.3 Utilities Systems Map (USM):

Prior to approval of any entitlement application (subdivision maps, Development Plan Reviews, etc.), as part of the entitlement application a Conceptual Utilities Systems Map (USM) shall be prepared and submitted to the Development Agency Engineering Department and the Utilities Engineering Department for review and approval. The USM is a summary plan sheet exhibit that shows all the public off-site infrastructure requirements and demands for the Development Project (and/or Subdivision), the on-site private infrastructure improvements, and the interaction between the public and private utilities systems. As a Condition of Approval for the Development Project (and/or Subdivision), the Conceptual Utilities Systems Map shall be updated into a Final Utilities Systems Map to reflect the changes that occur between entitlement and Final Plan and Permit Approval. Reference the Ontario Municipal Utilities Company Utilities Engineering Department's Utilities Systems Map (USM) Requirements for details.

5.3.1.4 Integrated Waste Management Report (IWMR) and Solid Waste Handling Plan (SWHP):

Prior to approval of any entitlement application (subdivision maps, Development Plan Reviews, etc.), as part of the entitlement application a Conceptual Integrated Waste Management Report (IWMR) and a Conceptual Solid Waste Handling Plan (SWHP) shall be prepared and submitted to the Development Agency Engineering Department and the Utilities Engineering Department for review and approval. The SWHP summary plan sheet exhibit that demonstrates the project site's design conformance with the Integrated Waste Department's requirements, including the requirements for Sizing of Storage, Location of Collection Areas, Accessibility for Collection Vehicles, and Collection of Sorted/Diverted Waste Types. The IWMR is a report that presents project specific information that is not able to be demonstrated within the Solid Waste Handling Plan, including discussions on: project solid waste operations; project compliance with all applicable laws, statues, policies, and requirements; and, conformance with all the Integrated Waste Department's requirements, including the requirements for Sizing of Storage, Location of Collection Areas, Accessibility for Collection Vehicles, and Collection of Sorted/Diverted Waste Types. As a Condition of Approval for the Development Project (and/or Subdivision), the Conceptual SWHP and the a Conceptual IWMR shall be updated into a Final SWHP and Final IWMR to reflect the changes that occur between entitlement and Final Plan and Permit Approval. The SWHP and IWMR may be required to be updated from whenever there are new occupants, new uses or changes to existing uses, Tenant Improvements, Business Licenses, and Certificates of Occupancy. Reference the Ontario Municipal Utilities Company Utilities Engineering Department's Integrated Waste Management Report (IWMR) and Solid Waste Handling Plan (SWHP) Requirements for details.

5.4 Development Regulations

The Avenue Specific Plan is adopted by ordinance and will serve as the implementation tool for the General Plan as well as the zoning for the Project Site. The Avenue Specific Plan Development Regulations address general provisions, permitted uses, and development standards for the plan area.

5.4.1 General Site Development Standards

The following general site development criteria shall apply to all land development proposed in The Avenue Specific Plan.

A. Gross Acres - Except as otherwise indicated, gross acres for all development areas are measured to the centerline of streets.

B. Grading - Development within the plan area shall utilize grading techniques as approved by the City of Ontario. Grading concepts shall respond to the Design Guidelines included in The Avenue Specific Plan which guide the development of land use toward the goal of providing for a livable community with streets and entries designed for walking and resident interaction. Additionally, the grading concepts should adhere to the following:

   1. Where slope conditions are present, the property shall be located at the top of a slope

   2. In areas adjacent to a ridge line or in moderate slope areas, dwelling units and structures should be sited to:
      a. Use the natural ridge line as a backdrop for structures
      b. Use landscape plant materials as a backdrop
      c. Use structure to maximize concealment of cut slope

C. Building Modification - Additions and/or projections into setback areas permitted by The Avenue Specific Plan shall match the architectural style of the primary unit and shall be constructed of the same materials and colors as the primary unit.

D. Utilities - All new and existing public utility distribution lines of 34.5 kV or less shall be subsurface throughout the plan area.

E. Technology - All homes and businesses shall accommodate the most modern technology for computer internet access, phone, fax, and television. Broadband fiber optics cable will be installed on all peripheral streets per the approved Master Plan.

F. Density - The Avenue Specific Plan Land Use Plan establishes a maximum gross density average for each residential land use designation as indicated in Table 2 “Statistical Analysis”. These densities are ~~4.6~~4.5 dwelling units per gross acres for the Low Density Residential designation, ~~10.25~~8.5 dwelling units per gross acres for the Low Medium Density Residential designation and ~~12.0~~ 22.0 dwelling units per gross acre for the Medium Density Residential designation.

G. Maximum Number of Dwelling Units - The maximum number of residential dwelling units permitted within The Avenue Specific Plan shall be ~~2,875~~3,753 dwelling units.

H. Retaining walls - Exposed walls and fences facing roadways shall be no greater than six feet in height, except as necessary for acoustical purposes to satisfy the intent of the noise ordinance. Where retaining walls or fences face roadways, they shall be built, when feasible, of decorative materials consistent with the wall theme of the neighborhood.



Northerly Site Boundary along Schaefer Avenue, looking east

I. Temporary Uses - Temporary Uses shall be consistent with the Development Code requirements of Article 13 (page 13-46).

J. Satellite Dishes - Freestanding satellite dish antennas shall be in compliance with Article 32, Section 9.1.3289 of the Development Code.

K. Recreational Vehicle Storage - No recreational vehicle (RV) storage in front or corner side yards and no RV street parking for a period of more than 72 hours.

L. Dairy Separation Requirement for Residential District Development Standards Section – The following separation requirements from existing dairies/feed lots shall apply to new residential development or structures used for public assembly purposes from existing dairies/feed lots. A minimum 100' separation shall be required between new residential, commercial, or industrial development or structure used for public assembly and an existing animal feed trough, corral/pen or an existing dairy/feed lot including manure stockpiles and related wastewater detention basins. The 100-foot separation requirement may be satisfied by an off-site easement acceptable to the Planning Director with adjacent properties, submitted with the initial final map and recorded prior to or concurrent with the final map.



Typical single family detached residences

M. Product distribution requirements within Zones 1-~~5~~8 (as shown on Exhibit 26, "Conceptual Product Distribution") - Minimum number of product types per zone: 2. The following details the limitations on unit counts for products within a single zone or in a contiguous area of the same product(1). A contiguous area of one product type can not continue into an adjacent zone unless the unit count for that contiguous area conforms to the following limitations.

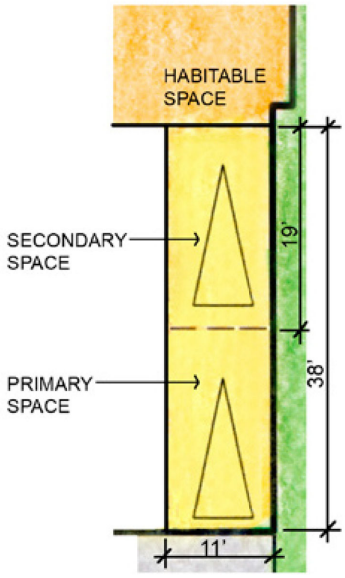
1. Single Family Detached (SFD):
   a. Minimum number of dwelling units per product: 25
   b. Maximum number of dwelling units per Product: 125

2. Single Family Attached (SFA):
   a. Minimum number of dwelling units per product: 36
   b. Maximum number of dwelling units per Product: 250

3. Multi-Family:
   a. Minimum number of dwelling units: 200(2)
   b. Maximum number of dwelling units: 400

N. Tandem Parking:

1. All vehicles must be registered with the HOA or management company. A copy of the registration for each vehicle showing the address, make model, vehicle year and color will be required upon registration.
2. No garage may be separately sold or assigned by an owner. A garage may be rented or leased to a non-owner solely in connection with the rental or lease of the respective unit.
3. All residents are required to use their garage space for parking their vehicles. Residents with more than two vehicles must register two vehicles for the garage spaces before a parking permit will be considered allowing parking on the private streets or parking bays within the project.
4. Anyone requesting a parking permit must also demonstrate that his/her garage is not being used for storage, or being used as a workshop or for any other purpose which would prevent the garage from being used to park two vehicles.



Tandem Parking

5. The secondary space (adjacent to habitable space) will be given 25% credit towards parking requirement.
6. Minimum size of tandem parking: 11'x38'.

O. Multi-family projects proposed within a gated neighborhood, may be subject to the following open space requirement, subject to review and approval of the Planning Department:

1. Ground Floor: A minimum contiguous area of 150 sq. ft. in area with no dimension less than 10 feet in any direction.
2. Balconies and Decks: Must have a minimum contiguous area of 50 sq. ft. in area with no dimension less than 5 feet in any direction.
3. Common Open Space: A minimum of 250 sq. ft. of common open space shall be provided per each unit. Common open space shall require a minimum contiguous area of 300 sq. ft. with no dimension less than 15 feet in any direction.

5.4.2 Residential Development Standards Tables

The development standards for proposed residential products at The Avenue are shown on the following pages (Table 3a-3~~n~~ l).

(2) Units of less than 200 may be approved with the review and approval of the Planning Director.

Table 3a - Product Type 1A Development Standards [11]

Typical lot sizes: 55'x105', 60'x100', 60'x110' (5,500+ SF Lots)

Lot Criteria

Min. Lot Width at Front PL for Standard Lot	55'
Min. Lot Width on Corner	65'
Min. Lot Depth on Standard Lot	100'
Min. Lot Depth on Corner Lot	100'
Min. Lot Size	5,500 S.F.

NOTE: Lots within cul-de-sacs, standard knuckles or modified knuckle configurations shall provide a minimum 35-foot lot width at front property line and shall meet the minimum lot width established for the Planning Area at the building setback. All minimum side and rear yard setbacks shall be maintained at all times.

Minimum Setbacks

All front and corner side setbacks are measured from the property line at back of sidewalk.
All other setbacks are measured from property line unless otherwise noted.

Front Setbacks

Living Area	20'
Porch with Single Story Plate Line [2]	12'
Front Entry Garage [3]	18'
Turn In Garage with Single Story Plate Line	10' (Street Facing 18')

Side Setbacks [4]

From Interior PL [1]	5'
From Residential Street - First Story [6]	10'
From Residential Street - Porch	8'
Side for Garages (Min. 10' Between Garages)	3'
Garage to Back-of-Sidewalk	18'
Patio Cover	3'

Rear Setbacks

Main Structure	15'
Garage (Single Story Plate Line)	5'
Patio Cover	5'
Second Story Deck	10'
Accessory Structure	3'

Lot Coverage

Maximum Coverage	55%

Maximum Building Height

Main Structure	35'
Accessory Structures	14'

Walls, Fences and Hedges

Maximum Height in "The Avenue" and/or front or corner side yard areas	3'
Maximum Height at all other Locations	6'
Maximum Height of Retaining Walls	3'
Maximum Height Solid Rear Yard Property Walls adjacent to Pocket Parks	3'

Parking Minimum Number of Parking Spaces Required: 2 Garage Spaces

Recreational Vehicle (RV) storage is prohibited in front or corner side yards. RV Street parking, over 72 hours, is prohibited.

Table 3b - Product Type 1B Development Standards[11]

Typical lot sizes: 60'x85', 50'x110', 55'X90', 50'/55'x100', 55'x105' (4,250 - 5,775 SF Lots)

Lot Criteria

Min. Lot Width at Front PL for Standard Lot	50'
Min. Lot Width on Corner	55'
Min. Lot Depth on Standard Lot	85'
Min. Lot Depth on Corner Lot	85'
Min. Lot Size	4,250 S.F.

NOTE: Lots within cul-de-sacs, standard knuckles or modified knuckle configurations shall provide a minimum 35-foot lot width at front property line and shall meet the minimum lot width established for the Planning Area at the building setback. All minimum side and rear yard setbacks shall be maintained at all times.

Minimum Setbacks

All front and corner side setbacks are measured from the property line at back of sidewalk.
All other setbacks are measured from property line unless otherwise noted.

Front Setbacks

Living Area	12'
Porch with Single Story Plate Line (2)	8'
Front Entry Garage (3)	18'
Turn In Garage with Single Story Plate Line	10' (Street Facing 18')

Side Setbacks (4)

From Interior PL (1)	5'
From Residential Street - First Story (6), (7)	10'
From Residential Street - Porch	8'
Side for Garages (Min. 10' Between Garages)	3'
Garage to Back-of-Sidewalk	18'
Patio Cover	3'

Rear Setbacks

Main Structure	10'-15'	Max. 50% of the facade may be at 10'
Garage (Single Story Plate Line)	5'	
Patio Cover	5'	
Second Story Deck	10'	
Accessory Structure	3'	

Lot Coverage

Maximum Coverage	55%

Maximum Building Height

Main Structure	35'
Accessory Structures	14'

Walls, Fences and Hedges

Maximum Height in "The Avenue" and/or front or corner side yard areas	3'
Maximum Height at all other Locations	6'
Maximum Height of Retaining Walls	3'
Maximum Height Solid Rear Yard Property Walls adjacent to Pocket Parks	3'

Parking Minimum Number of Parking Spaces Required 2 Garage Spaces

Recreational Vehicle (RV) storage is prohibited in front or corner side yards. RV Street parking over 72 hours is prohibited.

Table 3c - Product Type 1C Development Standards[11]

Typical lot sizes: 40'x80', 45'x80', 50'/70'x80', 50'x85', 45'/50'x90', 40x100' (3,200 - 5,600 SF Lots)

Lot Criteria

Min. Lot Width at Front PL for Standard Lot	40'
Min. Lot Width on Corner	45'
Min. Lot Depth on Standard Lot	80'
Min. Lot Depth on Corner Lot	80'
Min. Lot Size	3,200 S.F.

NOTE: Lots within cul-de-sacs, standard knuckles or modified knuckle configurations shall provide a minimum 35-foot lot width at front property line and shall meet the minimum lot width established for the Planning Area at the building setback. All minimum side and rear yard setbacks shall be maintained at all times.

Minimum Setbacks

All front and corner side setbacks are measured from the property line at back of sidewalk.
All other setbacks are measured from property line unless otherwise noted.

Front Setbacks

Living Area	12'	
Porch with Single Story Plate Line (2)	8'	
Front Entry Garage (3)	18'	
Turn In Garage with Single Story Plate Line	10'	

Side Setbacks (4)

From Interior PL (1)	5'	
From Residential Street - First Story (6), (7)	10'	
From Residential Street - Porch	8'	
Side for Garages (Min. 10' Between Garages)	3'	
Garage to Back-of-Sidewalk	18'	
Patio Cover	3'	

Rear Setbacks

Main Structure	10'-15'	Max. 50% of the facade may be at 10',
Garage (Single Story Plate Line)	5'	
Patio Cover	5'	
Second Story Deck	10'	
Accessory Structure	3'	

Lot Coverage

Maximum Coverage	55%

Maximum Building Height

Main Structure	35'
Accessory Structures	14'

Walls, Fences and Hedges

Maximum Height in "The Avenue" and/or front or corner side yard areas	3'
Maximum Height at all other Locations	6'
Maximum Height of Retaining Walls	3'
Maximum Height Solid Rear Yard Property Walls adjacent to Pocket Parks	3'

Parking Minimum Number of Parking Spaces Required: 2 Garage Spaces

Recreational Vehicle (RV) storage is prohibited in front or corner side yards. RV Street parking, over 72 hours, is prohibited.

Table 3d - Product Type 1D Development Standards[11]

Typical lot sizes: 45'/50'x60'/70' (2,700 - 3,500 S.F. Lots)

Lot Criteria

Min. Lot Width at Front PL for Standard Lot	45'
Min. Lot Width on Corner	50'
Min. Lot Depth on Standard Lot	60'
Min. Lot Depth on Corner Lot	60'
Min. Lot Size	2,700 S.F.

NOTE: Lots within cul-de-sacs, standard knuckles or modified knuckle configurations shall provide a minimum 35-foot lot width at front property line and shall meet the minimum lot width established for the Planning Area at the building setback. All minimum side and rear yard setbacks shall be maintained at all times.

Minimum Setbacks (1)

All front and corner side setbacks are measured from the property line at back of sidewalk.
All other setbacks are measured from property line unless otherwise noted.

Front Setbacks (1)

Living Area	10'
Porch with Single Plate Line	8'
Front Entry Garage	18'
Turn in Garage with Single Story Plate Line	10'

Side Setbacks (1)

From Interior PL (1)	5'
From Residential Street (6)	10'
From Residential Street - Porch	8'
Side for Garage (Min. 10' Between Garages)	3'
Garage to Back-of-Sidewalk	18'
Patio Cover	3'

Rear Setbacks (1)

Main Structure	5'
Garage (Single Story Plate Line)	5'
Patio Cover	5'
Second Story Deck	5'
Accessory Structure	3'

Lot Coverage

Maximum Coverage	65%

Maximum Building Height

Main Structure	35'
Accessory Structure	14'

Walls, Fences and Hedges

Maximum Height in Traffic Safety-Site Areas and/or front or corner side yard areas	3'
Maximum Height at all other Locations	6'
Maximum Height of Retaining Walls	3'
Maximum Height of Solid Rear Yard Property Walls adjacent to Pocket Parks	3'

Parking

Minimum Resident Parking Required	2 Garage Spaces

Recreational Vehicle (RV) storage is prohibited in front or corner side yards. RV Street Parking, over 72 hours, is prohibited.

Table 3e - Product Type 2 Development Standards[11]

Typical lot sizes: 40'x70', 35'/40'x75', 34'x78' (2,380 - 3,600 SF alley loaded lots)

Lot Criteria

Min. Lot Width at Front PL for Standard Lot	34'
Min. Lot Width on Corner	39'
Min. Lot Depth on Standard Lot	70'
Min. Lot Depth on Corner Lot	70'
Min. Lot Size	2,380 S.F.

NOTE: Lots within cul-de-sacs, standard knuckles or modified knuckles configurations shall provide a minimum 35-foot lot width at front property line. Lots shall meet the minimum lot width established for the Planning Area at the building setback. All minimum side and rear yard setbacks shall be maintained at all times.

Minimum Setbacks (1)

All front and corner side setbacks are measured from the property line at back of sidewalk.
All other setbacks are measured from property line unless otherwise noted.

Front Setbacks

Living Area	10'
Porch with Single Story Plate Line (2)	8'
Front Entry Garage (3)	NA for Alley, 18' other
Turn In Garage with Single Story Plate Line	NA

Side Setbacks (4)

From Interior PL (1)	5'
From Residential Street (5), (6)	10'
Side for Garages	5'
Garage to Back-of-Sidewalk	18'
Patio Cover	3'

Rear Setbacks (8)

Main Structure (from Alley R/W)	3'
Garage (single story plate line, from alley R/W)	3'
Patio Cover	5'
Accessory Structures	3'
Garage Door to Garage Door	30'

Lot Coverage

Maximum Coverage	55%

Maximum Building Height

Main Structure	35'
Accessory Structure	14'

Walls, Fences and Hedges

Maximum Height in Traffic Safety-Site Areas and/or front or corner side yard areas	3'
Maximum Height at all other Locations on Lot	6'
Maximum Height of Retaining Walls	3'

Parking Minimum No. of Parking Spaces Required — 2 Garage Spaces

Recreational Vehicle (RV) storage is prohibited in front or corner side yards. RV Street parking, over 72 hours, is prohibited.

Table 3f - Product Type 3 Development Standards[11]

Typical product types: SFD 4 to 8 units Cluster/Mews (Common Lot and Single Lot Subdivisions)

Lot Criteria

Min. Lot Size	2,000 S.F. (assumes single unit built where unique site constraints exist)

Minimum Setbacks [1]

Setbacks for Common Lot and Single Lot Subdivision conditions are shown graphically in Section 6, Design Guideline and below. These standards will apply to situations where the Cluster is plotted with less than 4, 6 or 8 typical units including, but not limited to, 2 or 3 unit plots of the 4-unit cluster, 3, 4 or 5 unit plots of the 6-unit cluster, or 4, 5, 6 or 7 unit plots of the 8 unit cluster.

Front Setbacks

Living Area	10’
Porch with Single Plate Line [2]	8’

Side Setbacks

To Interior Property Line	4’
From Residential Street [6]	10’
Building to Building	8’
Garage to Garage (across drive)	30’
Building to Building (across drive)	28’
Patio Cover	3’

Rear Setbacks

To Property Line	5’
Building to Building	10’

Lot Coverage

Maximum Coverage	65%
Maximum Dwelling Units Per Cluster	8

Maximum Building Height

Main Structure	35’

Walls, Fences and Hedges

Maximum Height in Traffic Safety-Site Areas and/or front or corner side yard areas	3’
Maximum Height at all other Locations	6’
Maximum Height of Retaining Walls	3’

Parking

Minimum Resident Parking Required	2 Spaces within a Garage

Driveways may be <5’ or >18’. No driveway between 5 feet and 18 feet is allowed.

Recreational Vehicle (RV) storage is prohibited in front or corner side yards. RV Street Parking, over 72 hours, is prohibited.

Drives

Private lanes shall be enhanced with a combination of pavers, colored concrete or similar decorative material, subject to the review of and approval by the Planning Director.

Table 3g - Product Type 4 Development Standards[11]

Typical product type: Duplex

Lot Criteria

Min. Lot Size	5,000 S.F.

Minimum Setbacks (1)

All front and corner side setbacks are measured from the property line at back of sidewalk.
All other setbacks are measured from property line unless otherwise noted.

Front Setbacks

Living Area	10’
Porch with Single Story Plate Line (2)	8’
Front Entry Garage	NA
Turn In Garage with Single Story Plate Line	NA

Side Setbacks (4)

From Interior PL (1)	5’
From Residential Street (6)	10’
Side for Garages (9)	3’
Garage to Back-of-Sidewalk	18’
Patio Cover	3’

Rear Setbacks (8)

Main Structure (from Alley R/W)	5’
Garage (single story plate line, from alley R/W)	5’
Patio Cover	3’
Accessory Structures	3’
Garage Door to Garage Door	30’

Lot Coverage

Maximum Coverage	60%

Maximum Building Height

Main Structure	35’
Accessory Structure	14’

Walls, Fences and Hedges

Maximum Height in Traffic Safety-Site Areas and/or front or corner side yard areas	3’
Maximum Height at all other Locations on Lot	6’
Maximum Height of Retaining Walls	3’

Parking Minimum No. of Resident Parking Spaces Required

1.75 spaces per one-bedroom unit including 1 in a garage, 2 spaces per two-bedroom unit, including 1 in a garage and 2.5 spaces per 3 or more bedroom unit, including 1 in a garage. Minimum Guest Parking Requirement is 1 space for each 4 units under 50 on a building lot. 1 space for every 5 units between 51-100 units on a building lot. Public on-street parking may be counted toward the guest parking requirement. Recreational Vehicle (RV) storage is prohibited in front or corner side yards. RV Street parking, over 72 hours, is prohibited.

Table 3h - Product Type 5 Development Standards[11]

Typical product type: Triplex

Lot Criteria		
	Min. Lot Size	5,700 S.F.
Minimum Setbacks (1)		
	All front and corner side setbacks are measured from the property line at back of sidewalk. All other setbacks are measured from property line unless otherwise noted.	
Front Setbacks		
	Living Area	12’
	Porch with Single Story Plate Line (2)	8’
	Front Entry Garage	NA
	Turn In Garage with Single Story Plate Line	NA
Side Setbacks (4)		
	From Interior PL (1)	5’
	From Residential Street (6)	13’
	Side for Garages (9)	3’
	Garage to Back-of-Sidewalk	18’
	Patio Cover	3’
Rear Setbacks (8)		
	Main Structure (from Alley R/W)	3’
	Garage (single story plate line, from alley R/W)	5’
	Patio Cover	3’
	Accessory Structures	3’
	Garage Door to Garage Door	30’
Lot Coverage		
	Maximum Coverage	65%
Maximum Building Height		
	Main Structure	35’
	Accessory Structure	14’
Walls, Fences and Hedges		
	Maximum Height in Traffic Safety-Site Areas and/or front or corner side yard areas	3’
	Maximum Height at all other Locations on Lot	6’
	Maximum Height of Retaining Walls	3’

Parking Minimum No. of Resident Parking Spaces Required

1.75 spaces per one-bedroom unit including 1 in a garage, 2 spaces per two-bedroom unit, including 1 in a garage and 2.5 spaces per 3 or more bedroom unit, including 1 in a garage. Minimum Guest Parking Requirement is 1 space for each 4 units under 50 on a building lot. 1 space for every 5 units between 51-100 units on a building lot. Public on-street parking may be counted toward the guest parking requirement. Recreational Vehicle (RV) storage is prohibited in front or corner side yards. RV Street parking, over 72 hours, is prohibited.

Table 3i - Product Type 6 Development Standards[11]

Typical product type: Rowtown

Lot Criteria

Min. Lot Size	1,300 S.F./unit

Minimum Setbacks (1)

All front and corner side setbacks are measured from the property line at back of sidewalk. All other setbacks are measured from property line unless otherwise noted.

Front Setbacks

Living Area	10’
Porch with Single Story Plate Line (2)	8’
Front Entry Garage	NA
Turn In Garage with Single Story Plate Line	NA

Side Setbacks (4)

From Interior PL (1)	5’
From Residential Street (6)	10’
Side for Garages (9)	3’
Garage to Back-of-Sidewalk	18’
Patio Cover	3’

Rear Setbacks (8)

Main Structure (from Alley R/W)	5’
Garage (single story plate line, from alley R/W)	5’
Patio Cover	3’
Accessory Structures	3’
Garage Door to Garage Door	30’

Lot Coverage

Maximum Coverage	60%

Maximum Building Height

Main Structure	35’
Accessory Structure	14’

Walls, Fences and Hedges

Maximum Height in Traffic Safety-Site Areas and/or front or corner side yard areas	3’
Maximum Height at all other Locations on Lot	6’
Maximum Height of Retaining Walls	3’

Parking Minimum No. of resident Parking Spaces Required

1.75 spaces per one-bedroom unit including 1 in a garage, 2 spaces per two-bedroom unit, including 1 in a garage and 2.5 spaces per 3 or more bedroom unit, including 1 in a garage. Minimum Guest Parking Requirement is 1 space for each 4 units under 50 on a building lot. 1 space for every 5 units between 51-100 units on a building lot. Public on-street parking may be counted toward the guest parking requirement. Recreational Vehicle (RV) storage is prohibited in front or corner side yards. RV Street parking, over 72 hours, is prohibited.

Table 3j - Product Type 7 Development Standards(11)

Typical product type: Autocourt
20 Du/Ac and under

Lot Criteria

Min. Lot Size	14,000 S.F. (7,000 S.F. for half courts)

Minimum Setbacks (1)

All front and corner setbacks are measured from the property line at back of sidewalk. All other setbacks are measured from property line unless otherwise noted.

Front Setbacks

Living Area	10’
Porch with Single Story Plate Line (2)	8’

Side Setbacks

From Residential Street	10’
From Any Exterior Property Line	10’

Rear Setbacks

From Alley R/W	5’

Minimum Building Separation 20’

Lot Coverage

Maximum Coverage	60%
Maximum Dwelling Units Per Building	10

Maximum Building Height

Main Structure	35’

Walls, Fences and Hedges

Maximum Height in Traffic Safety-Site Areas and/or front or corner side yard areas	3’
Maximum Height at all other Locations	6’
Maximum Height at Retaining Walls (10)	3’

Parking Minimum Resident Parking Required:

1.75 spaces per one-bedroom unit including 1 in a garage, 2 spaces per two-bedroom unit including 1 in a garage and 2.5 spaces per three or more bedroom unit including 1 in a garage.

Minimum Guest Parking Required:

1 Space for each 4 units under 50 on the building lot.

1 Space for every 5 units between 51-100 units on the building lot. Public on-street parking may be counted toward guest requirement. Recreational Vehicle (RV) storage is prohibited in front or corner side yards. RV Street parking, over 72 hours, is prohibited.

~~Footnotes:~~ New page added for all footnotes after Table 3l

~~(1) Architectural projections may encroach a maximum of 3’ into setbacks~~
~~(2) The minimum depth of a porch shall be 7 feet with a minimum area of 70 S.F.~~
~~(3) If front entry garages are adjacent there shall be a minimum of 3’ garage face offset with the adjacent garage~~
~~(4) Side yard slopes may not encroach more than 50% into side yard setback areas~~
~~(5) Minimum 8’ setback from the back of the sidewalk~~
~~(6) Side setback measured from the property line at back of sidewalk excluding corner intersection cutoffs~~
~~(7) Second story on corner lots is 15’ average~~
~~(8) Articulation on rear elevations of alley loaded projects to be City approved~~
~~(9) Except at corner lot~~
~~(10) Stepped walls allowed~~

Table 3k - Product Type 8 Development Standards[11]

Typical product type: Autocourt-Greater than 20 Du/Ac

Lot Criteria	
Min. Project Area	3 acres
Minimum Perimeter Setbacks	
From Neighborhood Edge	15’
Internal Setbacks	
From Residential Street R.O.W. or parking area	10’
Building to sidewalk	3’
Driveway Apron	3’ min.
Minimum Building Separation	
Front to Front	25’
Front to Side	25’
Side to Side	15’
Porch to Porch	15’
Rear to Rear	30’
Side to Drive Aisle	15’
Front to parking stall	10’
Lot Coverage	
Maximum Coverage	55%
Dwelling Units Per Building	10 min.-55 max.
Maximum Building Height	
Main Structure	45’
Walls, Fences and Hedges	
Maximum Height in Traffic Safety-Site Areas and/or front or corner side yard areas	3’
Maximum Height at all other Locations	6’
Maximum Height at Retaining Walls (10)	3’

Parking

1.75 spaces per one-bedroom unit including 1 in a garage, 2 spaces per two-bedroom unit including 1 in a garage and 2.5 spaces per three or more bedroom unit including 1 in a garage.
Minimum Guest Parking Required:
1 Space for each 4 units under 50 on the building lot.
1 Space for every 5 units between 51-100 units on the building lot. Public on-street parking may be counted toward guest requirement. Recreational Vehicle (RV) storage is prohibited in front or corner side yards. RV Street parking, over 72 hours, is prohibited.

Any public street parking can not be counted towards meeting the parking requirement.
See Section 5.4.1.N. for Tandem Parking.

Open Space

Private open space per unit in balcony or patio- ground floor 150 S.F. with min. 8’ dimension and all other floors 50 S.F. with min. 5’ dimension.
Common open space per unit - 250 S.F. with min. 15’ dimension.
See section 5.4.1.0. for open space requirement for a gated multi-family projects.

Table 3I - Product Type 9A and 9B Development Standards(11)

Typical product type: Apartments max. 25 Du/Ac

Lot Criteria	
Min. Project Area	3 acres
Minimum Perimeter Setbacks	
From Neighborhood Edge	15’
To Carport or Garage	5’
Internal Setbacks	
From Residential Street R.O.W. or parking area	10’
Building to sidewalk	3’
Minimum Building Separation	
Front to Front	25’
Front to Side	25’
Side to Side	20’
Porch to Porch	20’
Rear to Rear	30’
Side to Drive Aisle	10’
Front to parking stall	10’
To Carport or Garage	10’
Lot Coverage	
Maximum Coverage	55%
Dwelling Units Per Building	10 min.-55 max.
Maximum Building Height	
Main Structure	45’
Walls, Fences and Hedges	
Maximum Height in Traffic Safety-Site Areas and/or front or corner side yard areas	3’
Maximum Height at all other Locations	6’
Maximum Height at Retaining Walls (10)	3’
Parking	
Minimum Resident Parking Required:	
1 space per bedroom (1 in garage per unit)	
Minimum Guest Parking Required:	
0.25 space per unit	
A parking study shall be completed and approved by the city for each community.	
Any public street parking can not be counted towards meeting the parking requirement.	
See Section 5.4.1.N. for Tandem Parking.	
Open Space	
Private open space per unit in balcony or patio- ground floor 100 S.F. with min. 10’ dimension and all other floors 50 S.F. with min. 10’ dimension.	
Common open space per unit -250 S.F. with min. 15’ dimension.	
See Section 5.4.1.O. for open space requirement for a gated multi-family projects.	

Footnotes:

(1) Architectural projections may encroach a maximum of 3' into setbacks

(2) The minimum depth of a porch shall be 7 feet with a minimum area of 70 S.F.

(3) If front entry garages are adjacent there shall be a minimum of 3' garage face offset with the adjacent garage

(4) Side yard slopes may not encroach more than 50% into side yard setback areas

(5) Minimum 8' setback from the back of the sidewalk

(6) Side setback measured from the property line at back of sidewalk excluding corner intersection cutoffs

(7) Second story on corner lots is 15' average

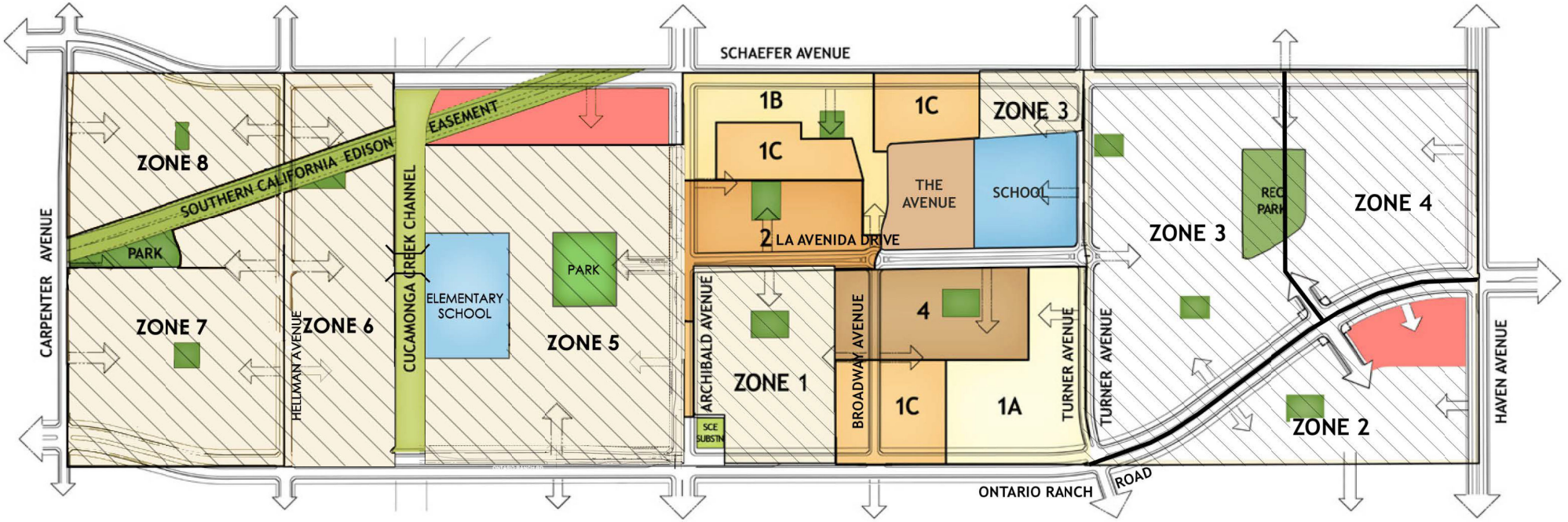
(8) Articulation on rear elevations of alley loaded projects to be City approved

(9) Except at corner lot

(10) Stepped walls allowed

(11) All new entitlements shall be subject to consultation with the Gabrieleno Band of Mission Indians – Kizh Nation and the San Manuel Band of Mission Indians - Serrano Nation

New Page



LEGEND

P	PARK
C	COMMERCIAL
D	DAYCARE

- PRODUCT 1A 5,500+ SF LOT
- PRODUCT 1B 4,250 - 5,775 SF LOT
- PRODUCT 1C 3,200 - 4,500 SF LOT
- PRODUCT 2 2,380 - 3,600 SF LOT
- PRODUCT 3 SFD 4/8 CLUSTER
- PRODUCT 4 DUPLEX
- PRODUCT 5 TRIPLEX
- PRODUCT 6 ROWTOWN
- PRODUCT 7 AUTOCOURT (20 Du/Ac and under)
- PRODUCT 8 AUTOCOURT (Greater than 20 Du/Ac)
- ZONES 1-~~4~~ 8 (Product Distribution Regulations in Section 5.4.1 M.)

NORTH 0 100 200 400 800

NOTE: Subject to change by each individual builder.

Revised Exhibit

Conceptual Product Distribution

The Avenue SPECIFIC PLAN

Ontario Ranch ▪ Ontario, California

Exhibit 26 - Conceptual Product Distribution

5.4.3 Low Density Residential Permitted and Conditional Uses

This category includes the development of single family detached dwelling units. The purpose of the residential standards for single family detached housing is to establish the minimum criteria for the development of these product types on individual lots within the neighborhoods specified within the plan area.

A. Permitted Uses

1. Single family detached dwellings including live/work units and their accessory uses
2. Single family attached dwellings
3. Public or private parks
4. Recreational buildings including swimming pool
5. Child day care facilities serving up to seven (7) children (per State guidelines)
6. Schools
7. Accessory uses to include the following:
    a. Garages
    b. Granny Flats (i.e. Second Dwelling Units, in accordance the City's Zoning Code)
    c. Home occupations
    d. Swimming pools, spas, sports courts, and other similar outdoor recreational amenities
    e. Patios and patio covers
    f. Storage, garden structures, cabanas, and greenhouses
    g. Monument signs
    h. Temporary uses such as model home and subdivision sales trailers, temporary construction parking, offices, and facilities, real estate signs, signage indicating future development and directional signage
    i. Second story additions to single family dwelling units

B. Conditionally Permitted Uses

1. Places of worship including but not limited to churches and synagogues
2. Child day care facilities serving eight (8) to 14 children (per State guidelines)

5.4.4 Low Medium Density Residential Permitted and Conditional Uses

This category includes the development of single-family and multi-family attached type dwelling units.

A. Permitted Uses

1. Single family detached dwellings including Cluster SFD and Mews SFD, single-family attached and multi-family attached dwellings
2. Public or private parks
3. Recreational buildings including swimming pool
4. Child day care facilities serving up to seven (7) children (per State guidelines)
5. Schools
6. Accessory uses to include the following:
    a. Garages
    b. Granny Flats (i.e. Second Dwelling Units, in accordance with City Zoning Code)
    c. Home occupations
    d. Swimming pools, spas, tennis courts, sports courts, and other similar outdoor recreational amenities
    e. Patios and patio covers
    f. Mailboxes
    g. Community center buildings
    h. Maintenance storage buildings
    i. Monument signage
    j. Temporary uses such as model units, sales offices, and subdivision sales trailers, temporary construction offices and facilities, real estate signs, signage indicating future
    k. Second story additions to single dwelling units

B. Conditionally Permitted Uses

1. Places of worship including but not limited to churches and synagogues
2. Child day care facilities serving eight (8) to 14 children (per State guidelines)

5.4.5 Medium Density Residential Permitted and Conditional Uses

This category includes the development of single-family and multi-family attached type dwelling units.

C. Permitted Uses

1. Single family attached and multi-family attached dwellings
2. Public or private parks
3. Recreational buildings including swimming pool
4. Child day care facilities serving up to seven (7) children (per State guidelines)
5. Schools
6. Accessory uses to include the following:
    a. Garages
    b. Home occupations
    c. Swimming pools, spas, tennis courts, sports courts, and other similar outdoor recreational amenities
    d. Patios and patio covers
    e. Mailboxes
    f. Community center buildings
    g. Maintenance storage buildings
    h. Monument signage
    i. Temporary uses such as model units, sales offices, and subdivision sales trailers, temporary construction offices and facilities, real estate signs, signage indicating future

B. Conditionally Permitted Uses

1. Places of worship including but not limited to churches and synagogues
2. Child day care facilities serving eight (8) to 14 children (per State guidelines)
3. Age-restricted/Senior Housing and apartments (MDR only)

5.4.6 Commercial Development Standards[(1)]

Minimum Lot Area

Minimum lot size shall be large enough to accommodate the proposed use and meet all Development Standards as specified within the Specific Plan. Minimum site area shall be 4 acres; however, the site area may be less when developed as part of an integrated commercial center.

Building Setbacks

Building setbacks shall be determined by the hierarchy of streets (major arterial and local streets) and measured from PL for local streets and RW for Major Arterials. All setback areas are to be landscaped. These landscape area setbacks are:

From Ontario Ranch Road Right-Of-Way	35 feet
From Haven Avenue Right-Of-Way	14 feet
Archibald Avenue Right-Of-Way	19 feet
Schaefer Avenue Right-Of-Way	10 feet
From Private or Local Street (from required 5' min. sidewalk)	10 feet
From Interior Property Line	0 feet
From Interior Property Line Adjacent to Residential District	25 feet ~~(if adjacent to loading areas)~~

Maximum Development Floor Area Ratio (FAR) shall be 0.35.
Maximum Height shall be 35 feet, excluding architectural projections and focal elements such as towers and cupolas.

Loading Areas

All loading areas shall be screened from adjacent public streets, residential and open space use through the use of landscaping, earthen berms, and/or decorative walls or fencing. All storage including cartons, containers, materials, or trash shall be shielded from view within a building or area enclosed by a solid fence or wall not less than six feet in height.

Parking Setbacks

All parking setback areas are to be landscaped as follows:

From Ontario Ranch Road Right-Of-Way	35 feet
From Haven Avenue Right-Of-Way	14 feet
Archibald Avenue Right-Of-Way	19 feet
Schaefer Avenue Right-Of-Way	10 feet
From Private or Local Street	10 feet
From Interior Property Line	5 feet
From Interior Property Line Adjacent to Residential District	5 feet

Footnote:
(1) All new entitlements shall be subject to consultation with the Gabrieleno Band of Mission Indians - Kizh Nation and the San Manuel Band of Mission Indians - Serrano Nation

Wall and Fences

When a non-residential use adjoins a residential district, a 6-foot high decorative masonry wall shall be required at the interior side and/or rear property lines. Proposed walls in excess of 6 feet in height shall be designed to retain up to a maximum of 3 feet of earth. In no case, however shall a wall exceed an overall height of 9 feet (maximum 6-foot high wall on top of a maximum 3-foot height retaining wall).

5.4.7 Commercial Permitted and Conditional Uses

List of Permitted uses in the Commercial Zone:

Administrative, Professional, and Other Offices

Advertising Agency

Animal Hospital/Veterinarian

Antique Stores

Art Galleries and Art Supply Store

Auditoriums and Other Public Assembly Facilities

Automotive Parts and Accessories Stores (Retail Sales Only)

Automotive Services (i.e. tune-up, emission tests, batteries, etc. — no use of impact wrenches or other equipment that could create noise impacts)



Bakery

Banks, Credit Unions and other Depository Institutions

Barber Shop and Beauty/Nail Salon

Beauty Supply Store

Book Stores

Camera and Photographic Supply Store

Catering establishments

Charitable, Philanthropic, Service and other Non-Profit Organization Offices

Cigar and other Tobacco Products Store

Clothing and Accessory Stores

Communications equipment — Refer to Development Code Section 9-1.3289

Computer and Home Electronic Stores

Computer, Home Electronics, and Small Home Appliances (when ancillary to another use)

Convenience Market (per Development Code Section 9-1.1305)

Dance/Studio (Instructional)



Delicatessen

Discount Variety Store

Dry Cleaners

Fast Food

Florist

General Merchandise Stores

Grocery Store/Supermarket

Hardware Store

Health Club/Gymnasium — less than 2,000 square feet

Hobby, Toy and Game Store

Jewelry and Watches/Clocks

Jewelry Store

Laundry Self Serve

Library Locksmith/Key Shop

Luggage and Leather Goods

Medical Office

Minor Auto Repair (i.e. brakes, tires, radiators, electrical, etc)

Money Transmitting

Music and Video Stores

Office Supply, Stationery and Gift Stores

Other Financial Services

Pet and Pet Supply Store

Pet Grooming — Commercial

Pharmacies and Drug Stores w/o drive thru facilities

Photocopying and Duplicating Services

Photography Studio

Police Storefront/Substation

Police/Fire Station

Restaurants (sit down/full service)

Shoe Repair or Shoe Store

Specialty Food Stores

Sporting Goods Store

Tailor

Thrift and Second Hand Store

Travel Agency

List of Conditionally-Permitted uses in the Commercial Zone:

Alcoholic Beverage Sales

Ambulance Service (Office Only — No Storage of Vehicles)

Assisted Living/Congregate Care

Banks, Credit Unions and other Depository Institutions (with drive thru, see Development Ordinance Section 9-101305 D)

Banquet Facilities

Bar/Cocktail Lounge

Billiard Parlor/Pool Hall

Bowling Alley

Building Materials and Garden Supply

Car Wash — Full

Car Wash Self Service (Ancillary)

Charitable Distribution Services (i.e. food banks, etc.)

Check Cashing, Check/Payday Advance

Church

Commercial Day care

Convalescent Care Facility (w/continuous skilled nursing care)

Exterminating Service per Development Ordinance Section 9-1.1305 E

Fast Food with Drive-through (per Development Code, Section 9-10305D) Funeral Parlor, Mortuary

Gas Stations (per Section 9-1.1305 G)

Health Club Gymnasium — over ~~2,000~~ 10,000 square feet

Home Appliance Store

Liquor Store

Live Entertainment

Pawnshop/Pawnbroker

Pharmacies and Drug Stores with drive thru facilities

Public Storage (PA-4 Only)

Simulated Shooting Games (Indoor)

Skating Rink

Substance Abuse Clinics/Facilities

Theater

Tire Stores

Video/Electronic Game Arcades (per Development Code Section 9-101305V)

Vocational/Trade Schools



5.5 Maintenance

The public and private improvements constructed within The Avenue Specific Plan will be maintained through a combination of public and private entities as described below and in Table 4, "Maintenance Responsibility Matrix".

5.5.1 Public Maintenance

1. All residential development areas will be dedicated as public streets (excluding private drive ways) to the City of Ontario and will be maintained by the City.
2. The SCE Corridor Trail within the SCE owned property will be constructed by the developers of the Specific Plan Area and maintained by the City.
3. The City will maintain landscaping of master-planned arterial streets and "curb-to-curb" on internal streets through the creation of an Operations and Maintenance Community Facilities District. Parkway improvements within the right-of-way of residential areas along interior streets and private drives shall be maintained by Homeowners Associations. Parkway improvements along interior streets and driveways within the retail and commercial center shall be maintained by the property owners of each respective center.
4. Public storm drain, sewer, and water easements shall be dedicated to the City as deemed necessary by the City.
5. All on-site water, sewer, and storm drains within public streets or easements dedicated to the City shall be constructed by the developer and, upon acceptance, shall be maintained by the City.
6. Off-site infrastructure improvements such as water, sewer and storm drain facilities, will be constructed/installed by the developer and maintained by the City.
7. During the course of maintenance of public utilities (including storm drain) within private and public streets, the City will pave the streets and restore landscaping per City standards. Restoration of any enhancements above and beyond City standards, including but not limited to architectural, hardscaping and landscaping enhancements shall be the responsibility of the HOA or other entity maintaining those enhancements. This applies to all areas where public utilities are located including but not limited to public and private streets, gated communities, private drives, etc.



8. Project Financing – The financing of construction, operation, and maintenance of public improvements and facilities ("the facilities"), and public services will include funding through a combination of financing mechanisms. Final determination as to the facilities to be constructed and as maintenance responsibilities, whether publicly or privately maintained, will be made prior to recordation of the final maps. In order for the project to be fiscally self-sufficient, the following financing options can be considered for implementation:

Facilities and Services

- Private capital investment for the construction of facilities.
- Community Facilities District (CFD) established pursuant to the Mello-Roos Community Facilities District Act of 1982, or other special district, to provide funding for the construction of a variety of public facilities and the provision of public services.

Operation and Maintenance

- By individual private property owner.
- By private, Property Owners or Home Owners Association.
- By Community Facilities District (CFD) established pursuant to the Mello-Roos Community Facilities District Act of 1982, or other special district.

5.5.2 Private Maintenance

A Master Homeowner association will be established for the maintenance of common area landscape improvements within the residential portion of The Avenue Specific Plan. Private improvements to be maintained by the homeowner association include:

- Private alleys and adjacent landscaping within the residential development areas
- Courts, parkways and landscaping within the residential areas
- Streets and Landscape areas that have architectural enhancements
- Walkways and common areas distinct to individual residential types and neighborhoods
- Recreational facilities including the country market
- Internal slopes fronting streets and slope areas in the rear of homes
- All internal open spaces, parks, and common areas at neighborhood entries
- Drives and on-site circulation within the retail and commercial areas

5.5.3 Maintenance Responsibility

Table 4 - Maintenance Responsibility Matrix

	City and/or Special District	Private Homeowners Association or Property Owners Association	Private Homeowners	Utility Entity
Master Plan Roadways (Ontario Ranch Road, Haven, Schaefer, Hellman, Archibald Avenue)	X			
Interior Public Streets - Curb to Curb (Primary Entry St., Secondary Entry Streets, Neighborhood Streets)	X			
Traffic Signals and Street Lights in the public street right-of-way	X			
Traffic Control Signs	X			
Alleys including pavement area improvements between curb improvements		X		
Interior public streets-behind the curb improvements (sidewalk, parkway and monument signs)		X		
Parkways and Neighborhood Edges of Master Plan Roadways	X			
Off-site and on-site public water, sewer and storm drain improvements (excluding laterals) (Only those facilities in public roads and those in private streets within public utilities easements that meet public improvement design criteria) (1)	X			
On-site water, sewer, and storm drain improvements (improvements that are: private, laterals, and lines behind meters and/or DCDAs, improvements serving only one lot/ parcel, not within public or private roads, not within public utility easements, or not meeting public improvement design criteria)		X	X	
Private Recreation Areas		X		
Pocket Parks		X		
Linear Parks		X		
Community Trail (SCE Corridor Trail)	X			
Front Yard/Corner Streetside Landscaping Areas (LDR)			X	
Front Yard/Corner Streetside Landscaping Areas (MDR)		X		
Private Interior Yard Walls		X	X	
Community Theme Wall (Outside Face for Graffiti Removal and Paint)	X			

Table 4 - Maintenance Responsibility Matrix (continued)

	City and/or Special District	Private Homeowners Association or Property Owners Association	Private Homeowners	Utility Entity
Community Theme Wall on Master Planned Roadways: Surface (interior) opposite streetside (Structural Integrity and Face Repair)		X		
Interior Tract Graffiti Removal		X		
Community/Neighborhood Entries (within the right-of-way)	X			
Parkways and Neighborhood Edge of all Master Plan Roadways	X			
Neighborhood Edge on all non-Master Plan Roadways		X		
Parkways of all Interior Project Streets (Including Landscaping, Medians, and Sidewalks) (2)		X		
Alley Landscaping and Lighting		X		
Monument Signs (within Neighborhood edges on Master Plan Roadways)		X		
Monument Signs within tract entry		X		
Electricity and Natural Gas				X
Communications Systems	X			X
Police and Fire	X			
Fiber Optic Conduit (in ~~NMC~~ Ontario Ranch streets)	X			
Fiber Optic Conduit (in-tract streets)	X			
NPDES Facilities (off-site)/W.Q.M.P (1)	X			

(1) Only those facilities in public roads or easements

(2) Only those facilities on private property

(3) Including restoration work following public street repairs

5.6 Modifications and Plan Amendment Process

5.6.1 Minor Modifications

The following constitute minor modifications to The Avenue Specific Plan, not requiring a Specific Plan Amendment, and are subject to review and approval by the Zoning Administrator. The Zoning Administrator shall have the discretion to refer any such request for modification to the Planning Commission or the City Council.

A. Change in utility and/or public service provider

B. Adjustment of a neighborhood boundary provided the total acreage of the affected area does not increase or decrease by more than 15% the total acreage stated in the approved The Avenue Specific Plan

C. Minor changes to landscape materials, wall materials, wall alignment, entry design, and streetscape design which are consistent with the conceptual design set forth in the design guidelines contained within The Avenue Specific Plan

D. Minor changes to the Design Guidelines, which are intended to be conceptual in nature only, and are intended to be flexible in implementation

E. Other modifications of a similar nature to those listed above, which are deemed minor by the Director, which are in keeping with the purpose and intent of the approved The Avenue Specific Plan and which are in conformance with the General Plan

F. The Avenue Specific Plan land use plan allocates density to each Planning Area. Variations in allocation of density between the Planning Areas of The Avenue Specific Plan is permitted provided the variation does not exceed a net of 15% and the maximum dwelling unit count of 2,875 units established for the Specific Plan is not exceeded.

5.6.2 Specific Plan Amendments

Amendments to The Avenue Specific Plan may be requested by the applicant or by the City at any time pursuant to Section 65453(a) of the Government Code. Amendments shall be processed pursuant to the provisions of the Government Code for Specific Plan Amendments. In the event the proposed amendment requires supplemental environmental analysis pursuant to the California Environmental Quality Act (CEQA), the applicant(s) will be responsible for preparing the necessary CEQA documentation.

5.7 Airport Land Use Compatibility Planning Consistency

All development proposals or Specific Plan Amendments are required to be consistent with the Airport Land Use Compatibility Plans of Chino Airport and Ontario International Airport. The Project Site is located within the Airport Influence Areas of Chino Airport and Ontario International Airport (ONT). The ALUCP for ONT was adopted in April of 20II and the project site is located outside noise and safety impact zones but is located within the Real Estate Transaction Disclosure zone due to overflight and does not place development restrictions on the property but does require disclosure to new property owners.

The Business and Professions Code Section II010 and Civil Code Sections 1102.6, 1103.4, and 1353 require that, as part of many residential real estate transactions, information be disclosed regarding whether the property is situated within an AIA. The Business and Professions Code applies the disclosure requirement to the sale or lease of newly subdivided lands and condominium conversions and to the sale of certain existing residential property. The Civil Code applies the disclosure requirement to existing residential property transfers only when certain natural conditions (earthquake, fire, or flood hazards) warrant disclosure. State Law provides the following disclosure language:

"NOTICE OF AIRPORT IN VICINITY: This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors).
Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you."

Section 6 - Design Guidelines

6.1 Introduction

All residential master planned communities seek to create a unique identity for their residents and the surrounding community. There are four main components in developing this character for The Avenue. These include:

- A strong, well defined and memorable site plan, emphasizing La Avenida Drive streetscape as a defining element
- Appropriate community amenities and facility design
- Attractive and timeless landscape architecture
- Complementary and purely themed residential architectural styles

In addition to quality site planning and facility design, the residential architectural design concept for The Avenue seeks to blend the traditional architectural styles found in the Pacific Southwest with contemporary lifestyles, building methods and technologies. The specific styles selected for this community include Spanish, Bungalow, California Ranch, Monterey and Cottage. The design aspects of each of these styles will be further described in the following guidelines.

As the individual architectural styles for each home are developed for the various neighborhoods, it is important that the underlying lifestyle defined by each architectural style is considered in the development of the floor plans to help maintain architectural authenticity. The creation of successful floor plans and elevations will always be a function of good design, coupled with the incorporation of contemporary lifestyles and building standards.
Builders may submit home designs using alternative architectural styles to those listed, provided they are consistent with the Specific Plan, and appropriate to the region, environment, and setting.

The architectural character of The Avenue should provide:

- A unique and interesting architectural heritage as the community develops
- Compatible and complementary styles, colors, materials and detailing
- Massing, setbacks and articulation which are appropriate and fundamentally sound
- Historical relevance and timelessness
- Adaptable and flexible to changing market desires

The following design guidelines address site design issues, and key elements of each architectural style.

6.2 Site Planning and Design

The first critical aspect of creating an attractive and successful residential community is proper site planning. Important components of site planning include building setbacks and plotting, architectural massing and articulation, roof forms and garage placement. These components must be successfully addressed regardless of the architectural styles selected

6.2.1 Setbacks and Plotting

The relationship of each building to the property lines, street frontages and to adjacent buildings should be carefully considered within each neighborhood. In addition to the minimum setback standards, variable front and rear setbacks should be incorporated into the plotting of each product type. Corner lots and critical edge conditions shall have increased setbacks to soften the impact of the architecture on the streetscape. These plot prototypes are for illustrative purposes. The Residential Development Standards (Table 3a-3j) will serve as zoning for the project upon adoption of The Avenue Specific Plan.

Lot Demonstration Plotting 5,500+ SF Lot (Product Type 1A)



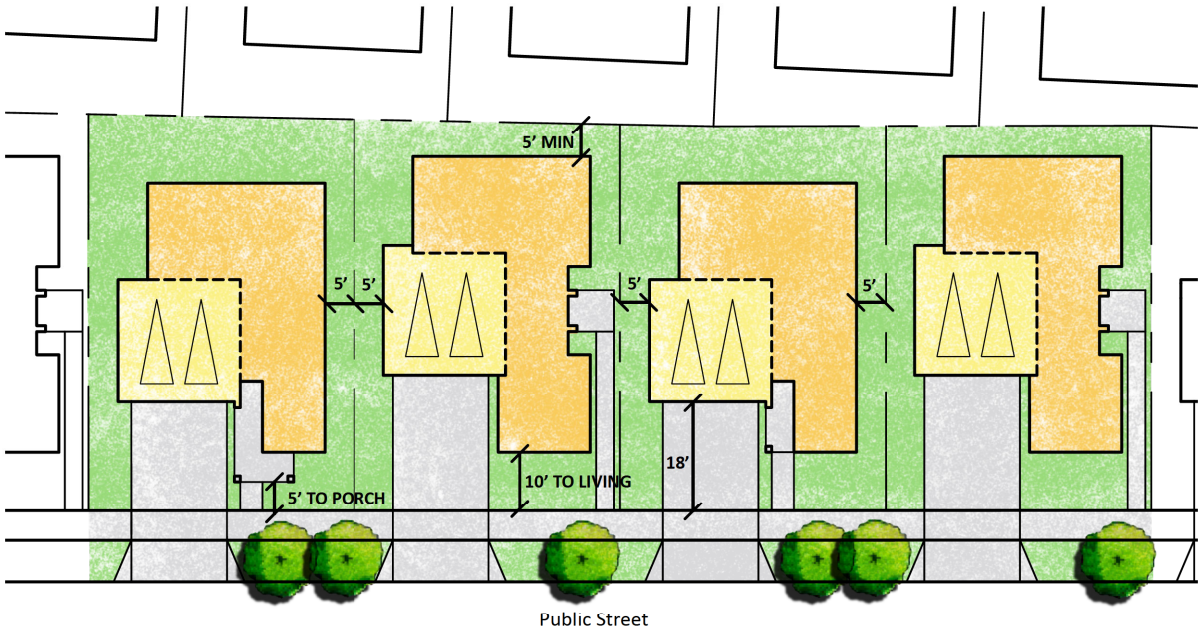
Lot Demonstration Plotting 4,250-5,775 SF Lot (Product Type 1B)



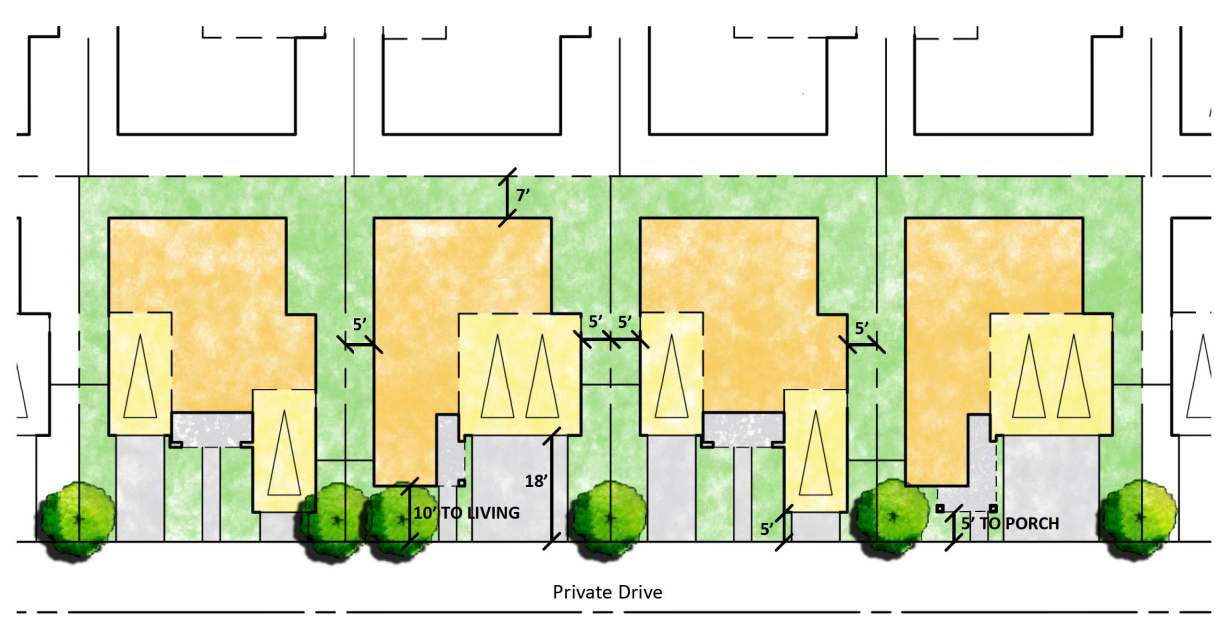
Lot Demonstration Plotting 3,200 - 5,600 SF Lot (Product Type 1C)



Lot Demonstration Plotting ~~0,000 - 0,000~~ 2,700 - 3,500 SF Lot (Product Type 1D) - Public Street



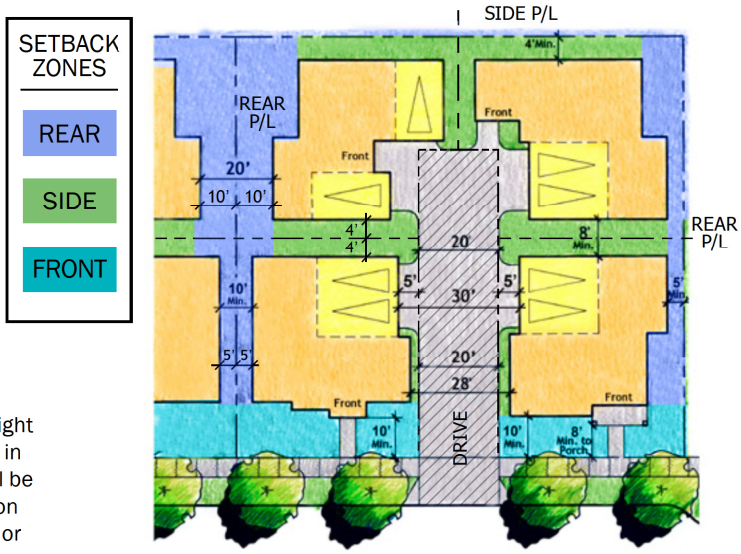
Lot Demonstration Plotting ~~0,000 - 0,000~~ 2,700 - 3,500 SF Lot (Product Type 1D) - Private Drive



Lot Demonstration Plotting 2,380 - 3,600 SF Lot (Product Type 2)



SFD 4/6 Cluster Demonstration Plotting (Product Type 3a)



NOTE: The setback zones shown in the Cluster Demonstration Plotting graphics above and to the right refer to the zones identified in Table 3e. Private lanes shall be enhanced with a combination of pavers, colored concrete or similar decorative material, subject to the review of and approval by the Planning Director.

SFD 4/6 Cluster Demonstration Plotting (Product Type 3b)

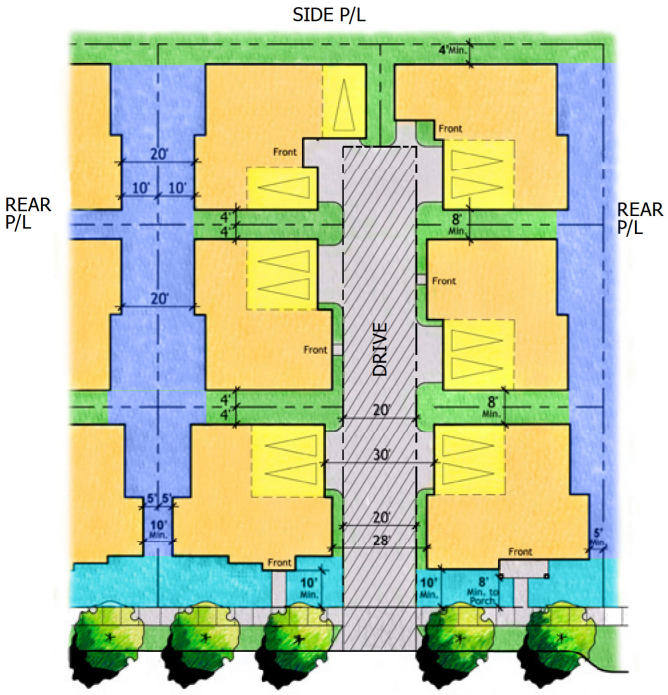
SETBACK ZONES

REAR

SIDE

FRONT

NOTE: The setback zones shown in the Cluster Demonstration Plotting graphics above and to the right refer to the zones identified in Table 3e. Private lanes shall be enhanced with a combination of pavers, colored concrete or similar decorative material, subject to the review of and approval by the Planning Director.



SFD 4/6 Mews/Cluster Demonstration Plotting (Product Type 3c)

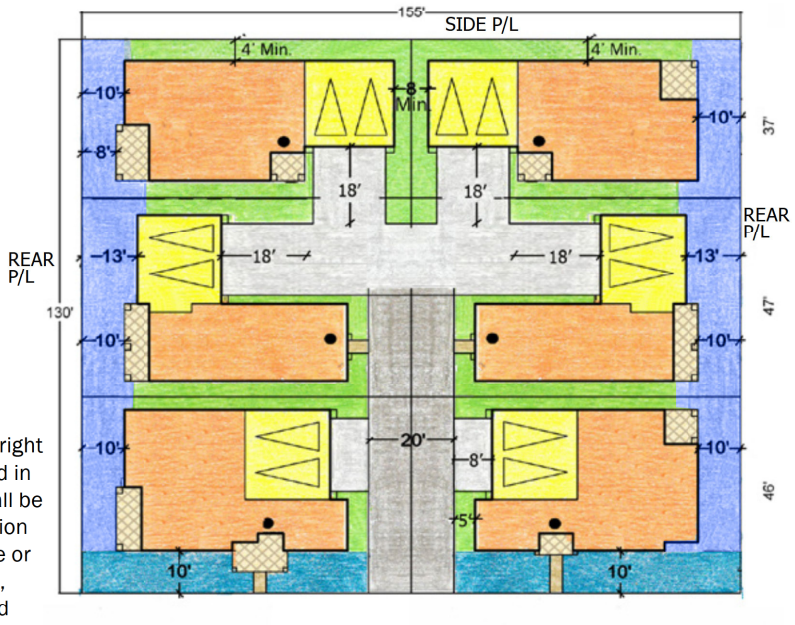
SETBACK ZONES

REAR

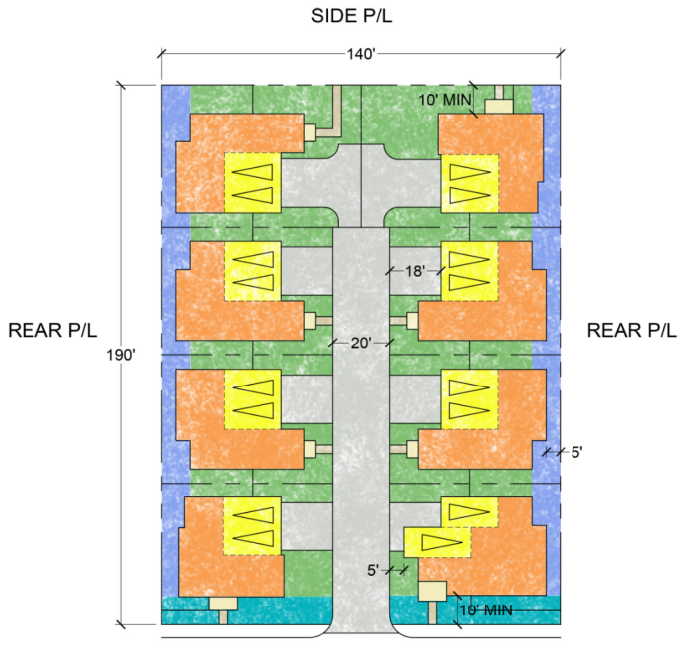
SIDE

FRONT

NOTE: The setback zones shown in the Cluster Demonstration Plotting graphics above and to the right refer to the zones identified in Table 3e. Private lanes shall be enhanced with a combination of pavers, colored concrete or similar decorative material, subject to the review of and approval by the Planning Director.



SFD 4/8 Mews Demonstration Plotting (Product Type 3d)



SETBACK ZONES

REAR

SIDE

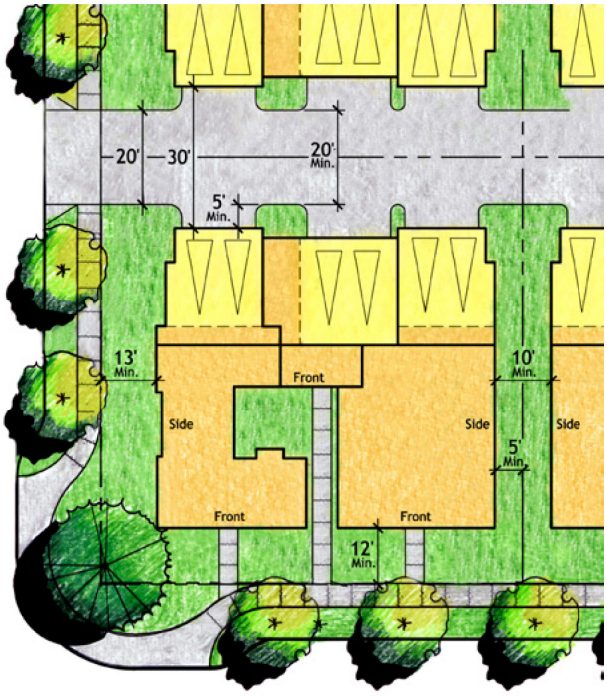
FRONT

NOTE: The setback zones shown in the Cluster Demonstration Plotting graphics above and to the right refer to the zones identified in Table 3e. Private lanes shall be enhanced with a combination of pavers, colored concrete or similar decorative material, subject to the review of and approval by the Planning Director.

Duplex Demonstration Plotting (Product Type 4)



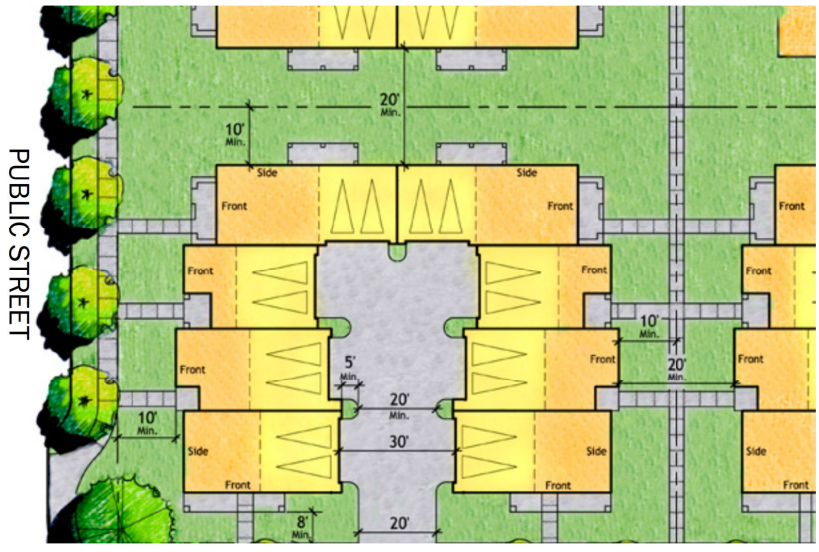
Triplex Demonstration Plotting (Product Type 5)



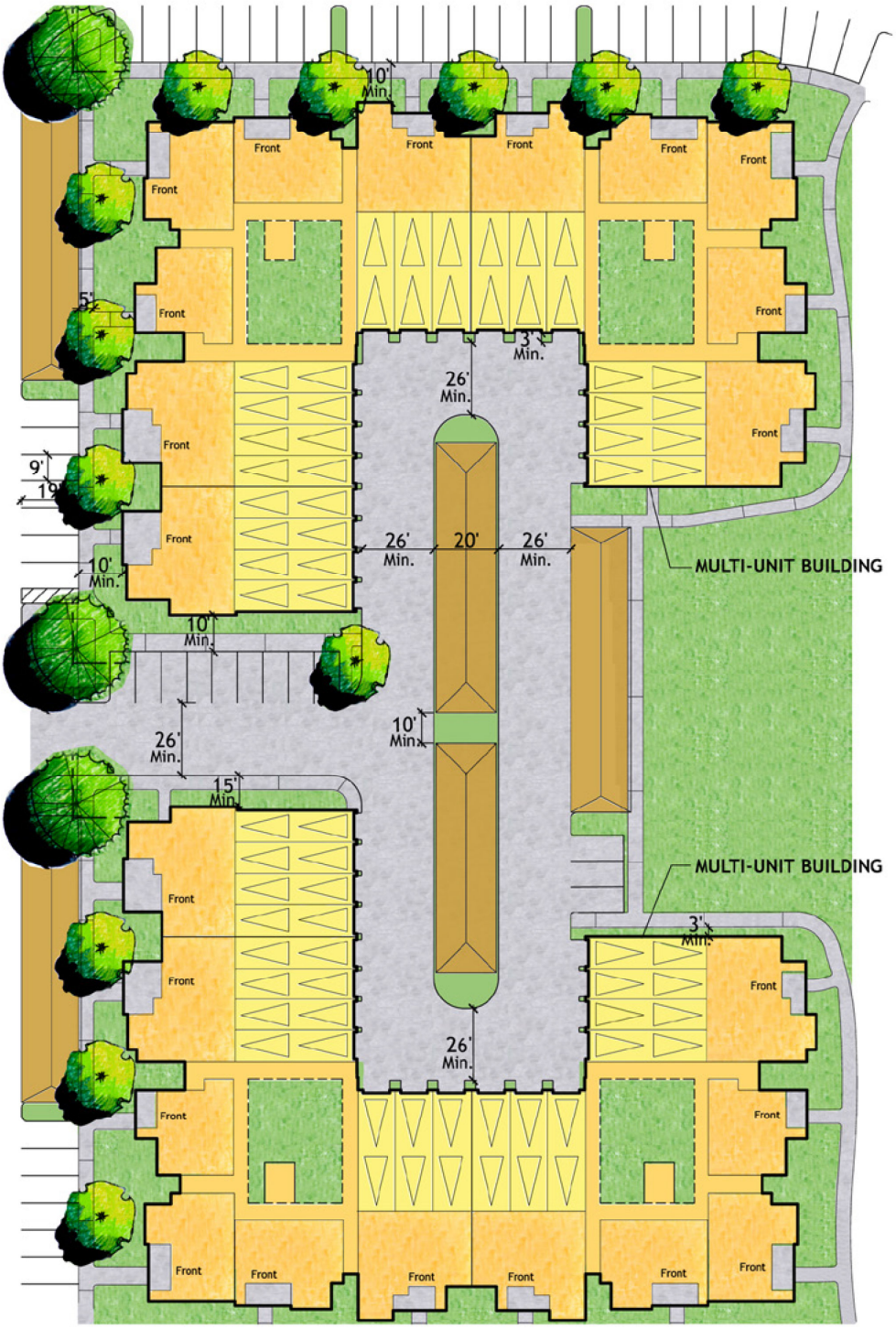
Rowtown Demonstration Plotting (Product Type 6)



Autocourt Demonstration Plotting (Product Type 7)

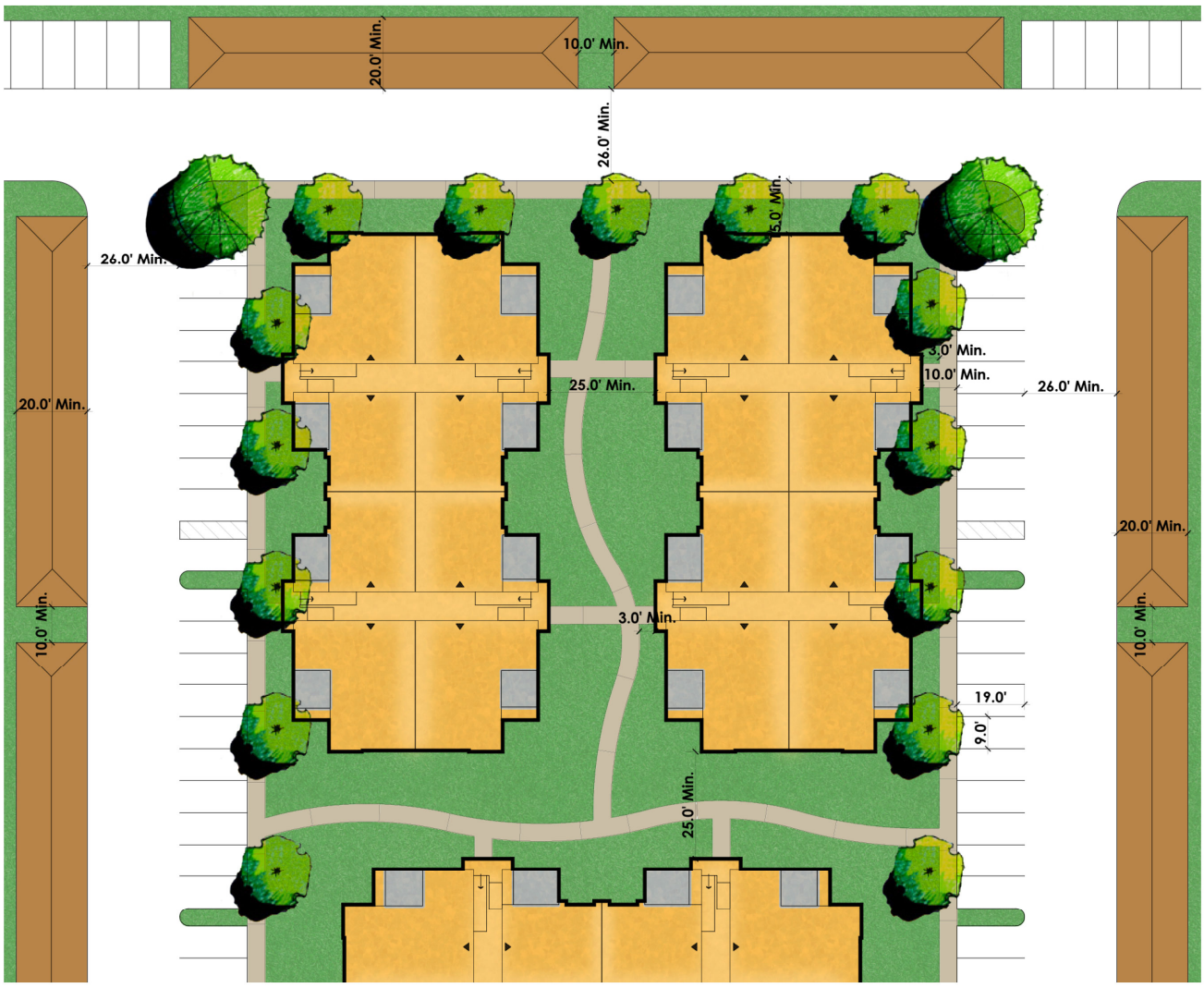


Autocourt (Greater than 20 DU/Ac) Demonstration Plotting (Product Type 8)



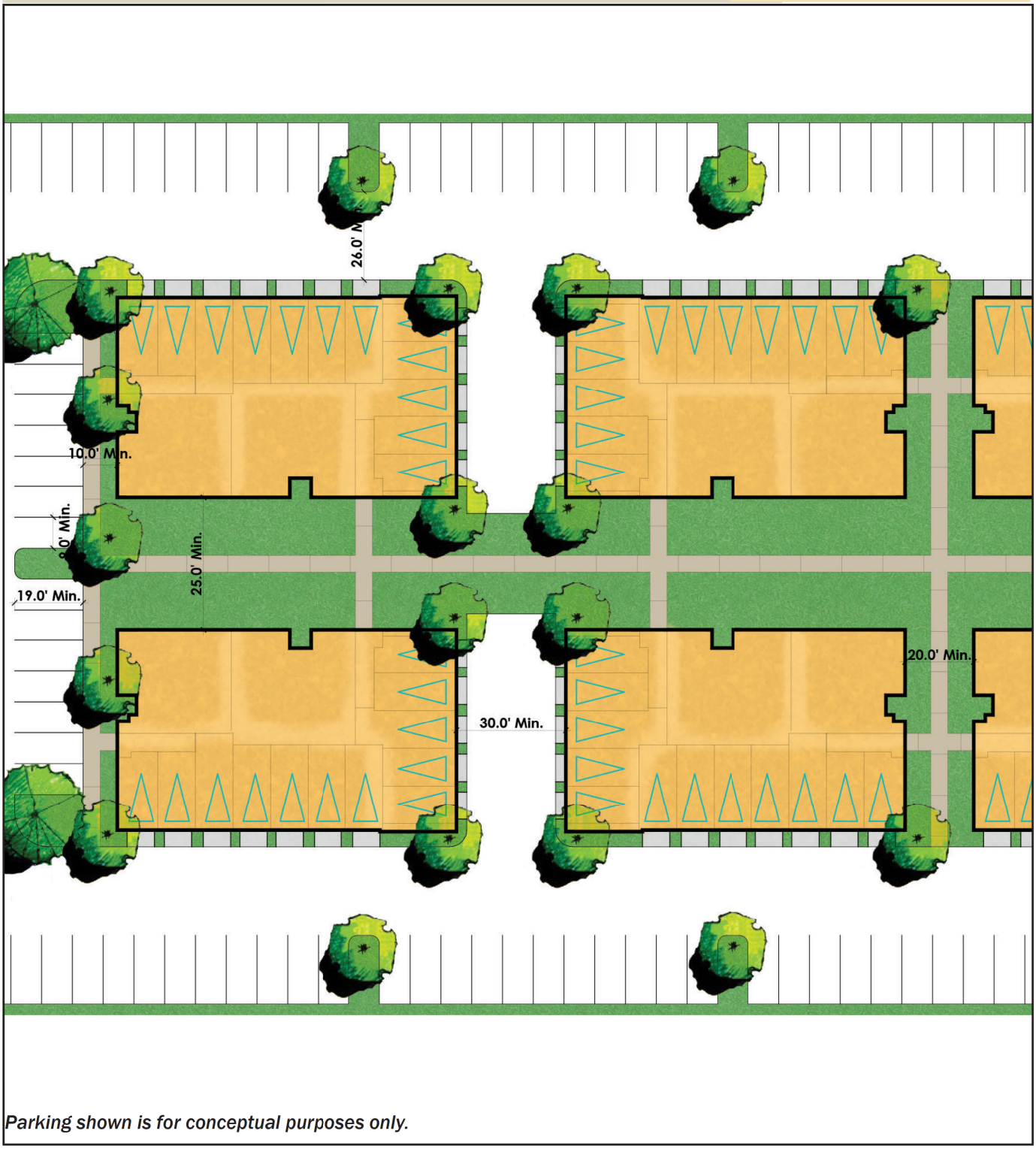
Parking shown is for conceptual purposes only. Tandem parking standards currently under review by the City of Ontario.

Apartments (Max. ~~30~~ 25 DU/Ac) Demonstration Plotting (Product Type 9A)



Parking shown is for conceptual purposes only.

Apartments (Max. ~~30~~ 25 DU/Ac) Demonstration Plotting (Product Type 9B)



Parking shown is for conceptual purposes only.

6.2.2 Architectural Massing

Building volumes shall be appropriately scaled to the individual lot sizes. The composition of the building mass shall include the incorporation of single- story elements into two-story buildings, variable setbacks along building elevations for porches, living and garage areas, the minimization of shear two- story façades, and the development of four-sided elevations through articulation and detailing.



Garage and Roof Articulation



Autocourt - Garage and Roof Articulation with Single Story Elements

6.2.3 Corner Home Placement

Special attention must be made to the treatment of architectural massing on corner lots and critical edge conditions.

Architectural elements such as porches, single story elevations, special façade materials and architectural fenestration should wrap around from front to side in these conditions whenever possible.



Wrap Around Porch and Architecture with Side Entry



Wrap Around Porch and Architecture with Side Entry

6.2.4 Roof Lines, Forms

Roof forms are critical in creating interest to the building mass. Roof forms and material finishes help blend the structures into the landscape through shadow patterns, texture, color variations and visual interruption of vertical walls and planes.

The roof forms, lines and ridges should be fenestrated and varied. Architectural features, roof intersections and roof pitches consistent with each style should be incorporated whenever possible.



Side Entry with Wrap Around Architecture



Side Entry with Wrap Around Architecture

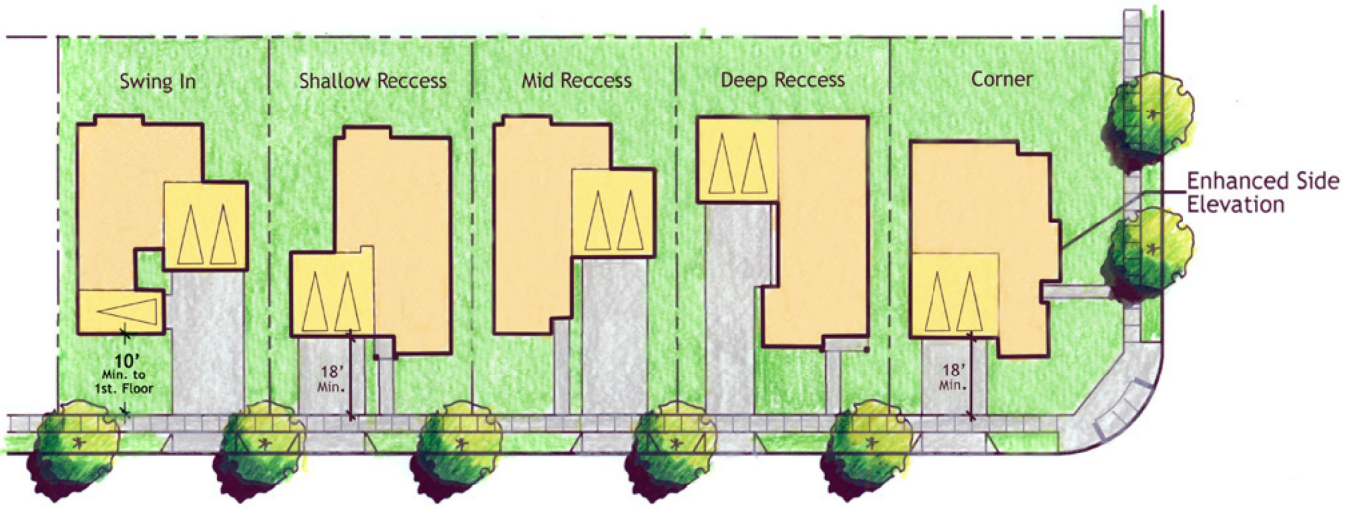
6.2.5 Garage Placement

The location, configuration and orientation of the garage on each lot are an important design element, both for the composition of the dwelling and its contribution to the streetscape.

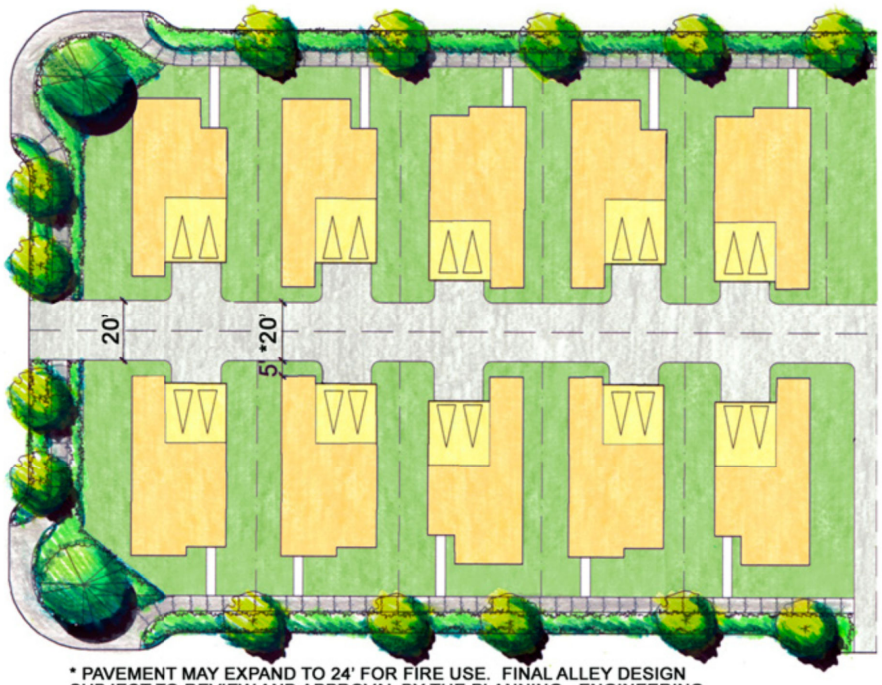
De-emphasizing the garage is important to community design. The goal is to emphasize the living areas of the home as they address the street. Placing living areas forward in lieu of a garage dominant front elevation encourages “eyes on the street” for neighborhood safety and security while establishing neighborhood orientation to the pedestrian as opposed to the automobile. Garage door patterns are encouraged to be varied among elevation types, and to reinforce the architectural theme of the dwelling.

The number of homes with the shallow recess garage condition should be limited to 25% of the total number of units in each builder’s plan package and shall be setback a minimum of 18-feet from property line.

Demonstration Plotting

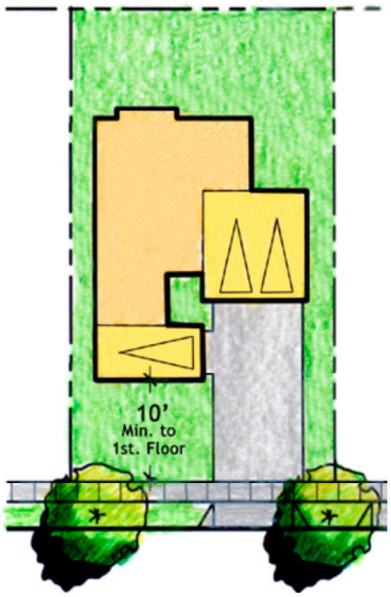


Alley Demonstration Plotting



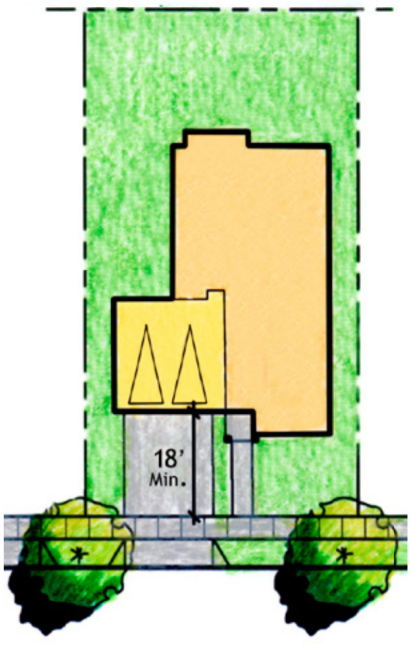
* PAVEMENT MAY EXPAND TO 24' FOR FIRE USE. FINAL ALLEY DESIGN SUBJECT TO REVIEW AND APPROVAL BY THE PLANNING , ENGINEERING, AND FIRE DEPARTMENTS.

Three Car Swing-In



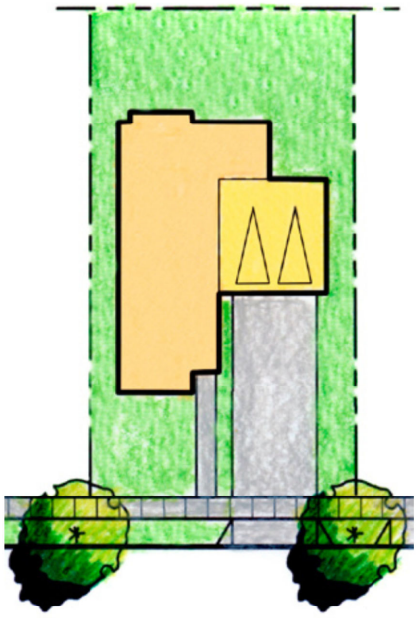


Shallow Recessed



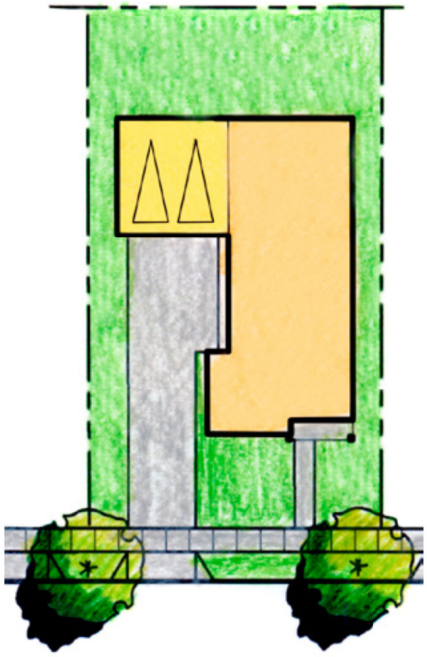


Mid Recessed



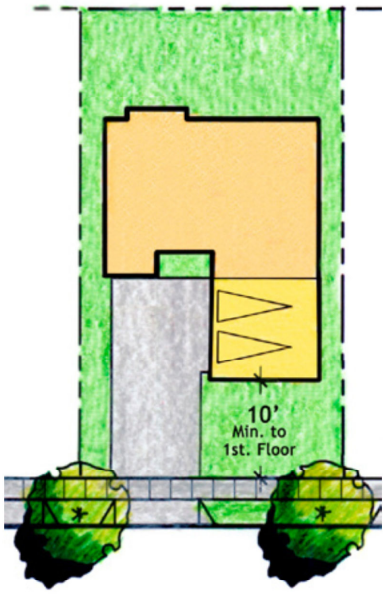


Deep Recessed





Two Car Swing-In





6.3 Miscellaneous Architectural Elements

Each selected style of architecture has attributes specific to that style. There are architectural features that are particularly important from both a standpoint of helping define the architectural style and from providing lifestyle benefits. These items include porches, trellises and arbors and balconies.



Wrap Around Style

6.3.1 Porches

Sufficiently sized porches (minimum depth: 7', minimum area: 70 square feet) become key elements in creating active, social neighborhood, through the visual and conversational interaction that occurs between these elements and the streetscape.

They provide interest, shadow lines and architectural fenestration to the building.

Porches should be provided for various homes in each product area whenever feasible and should have the following attributes:

- Porches should be integrated into the architectural elevation and floor plan consistent with the particular design style
- At corner conditions, porches should wrap around or be designed into two sides of the building
- Porches should be of sufficient depth to allow chair and table placement (seven foot minimum depth at ground level is preferred but can be modified if necessary at side elevations)
- Porches should relate to the streetscape consistent with traditional design aspects



Stucco Detailing



Wood Detailing

6.3.2 Balconies

Balconies are part of many styles of architecture and can range in size from small decorative balustrades to large inviting verandas. Balconies are more flexible in size than porches and can serve many uses from more decorative, offering visual detail and architectural fenestration to accessible congregation spaces which become important outdoor rooms and overlooks.

Balconies are encouraged elements of the architecture but should adhere to the following principals:

- Balcony design and detailing should be consistent with the architectural style
- Balcony placement is encouraged towards the front of homes whenever feasible
- Balcony placement at rear or sides of homes should consider site plan and adjacent lot privacy issues



Balcony on a Multi-Family Building



Wood Detailing

6.3.3 Window Treatments

Window treatment is an important element in defining architectural styles and providing detail to buildings. Whether it is recessed or protruding, multi-paned or single paned, rectangular or arched, framed or not, all make a difference in the building character. The window treatment should be consistent with the style of architecture.

Window sizing and scale must be consistent with the architectural enframement. Use of shutters as window detailing and design style elements is encouraged but shutters should be properly sized to the window opening for authenticity.



Iron Detailing



Recessed Window Detail



Window Surround

6.3.4 Trellises and Arbors

Trellises and arbors are valuable architectural features for softening building façades, extending indoor rooms into the exterior landscape, and creating shelter from harsh sun and glare. Trellises are also encouraged in the design of each building but must also be consistent with the architectural style, be appropriately sized and scaled, and be constructed of material that will survive the harsh inland sun and hot, dry wind conditions.



Wood Trellis Over Entry Drive

6.4 Architectural Styles and Elements

The architectural character of The Avenue shall consist of the traditional styles found in the Pacific Southwest. These styles were developed over time as reactions to prevailing climate, locally available material, historical tradition and/ or architectural trends of the early twentieth century. Over time, these styles have often become blended in part with new interpretations and in response to modern technologies. While the community infrastructure, architecture, site planning, land design, and landscape architecture are the key factors in creating a unique and special place for The Avenue, the interpretation and execution of the individual architectural styles and residential product types will provide lasting value.



Simple Iron Trellis of Driveway

Each style has aspects relating to massing, articulation, roof form, and garage placement. The development of these styles in an appropriate manner requires incorporation of specific elements of each style.

The chosen styles complement one another through overall scale, massing, proportions, details, and the ability to establish a charming architectural backdrop that will age gracefully over time. The materials and colors of these home styles shall complement the overall landscape design of the neighborhoods. Each style shall be developed appropriate to the region, and address the needs and lifestyles of the residents.

Acceptable architecture styles for The Avenue homes include:

- Monterey
- Bungalow
- Spanish
- California Ranch
- Cottage
- Farmhouse
- Transitional

Note: Additional styles proposed by the homebuilder may be deemed acceptable by the City and Community Design Team.

The following guidelines have been developed by The Avenue Community Design Team in order to create a community with an appropriate diversity of architectural styles and design:

- A variety of styles and plans is encouraged
- The adjacent plotting of the same plan, either standard or reverse, should be discouraged
- A variety of plan orientations is encouraged
- No two adjacent homes shall utilize the same architectural styles

The styles on the following pages will provide the builder and their design consultants the tools to create architectural designs appropriate and authentic to each style.

6.4.1 Monterey


Single Family

History and Character:

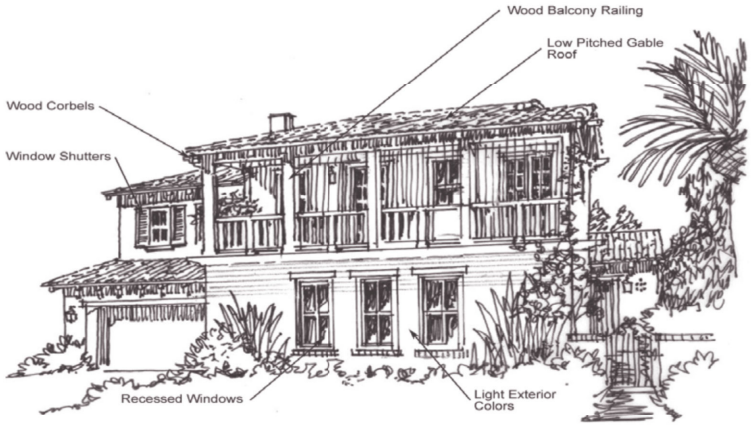
The Monterey style is a combination of Spanish Colonial construction methods and the basic two-story New England Colonial house.

Architects in the 1920's began to reintroduce the style and modify the elements to suit the period preferences. The signature cantilevered balcony on the front of the house may be a prelude to the porch that often surrounds or defines a private courtyard in the back of the house. The original houses used adobe wall construction. Detailing of the porches and the cornice is extremely simple. Rafters are often exposed, gable or hipped roofs are used, chimneys often anchor one end of the house, and flat paneled doors are used both on the ground floor and on the balcony, in addition to a more solid entry door.


Autocourt Example

General Attributes:

- Simple-box plan form
- Front-to-back gable roof
- Stucco finished walls
- Colonial-style windows with shutters and door trim
- Wrought iron or wood balcony railing
- Light exterior colors
- White or dark trim colors



6.4.2 Bungalow

History and Character:

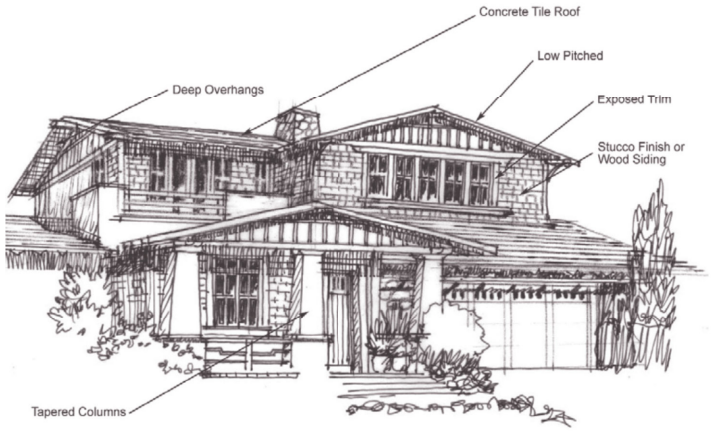
The Bungalow with its variations of the Craftsman style home evolved form the late 19th century American Arts and Crafts movement. These moderately detailed buildings are characterized by the use of hand-finished materials with a rusticated texture. Open porches, sloping roofs with deep overhangs, multiple gables, asymmetrical compositions, oversized first floor windows, expressive trim, rafters, brackets and porches characterize the Bungalow style.





General Attributes:

- Simple plan form massing and simple roof
- Intersecting gable roofs with overhang
- Stucco and/or horizontal siding
- Vertical multi-paned windows at front elevation
- Large picture window at front
- Porches with simple wood columns and railing
- Corbels
- White or dark stucco color
- White or dark color trim



6.4.3 Spanish





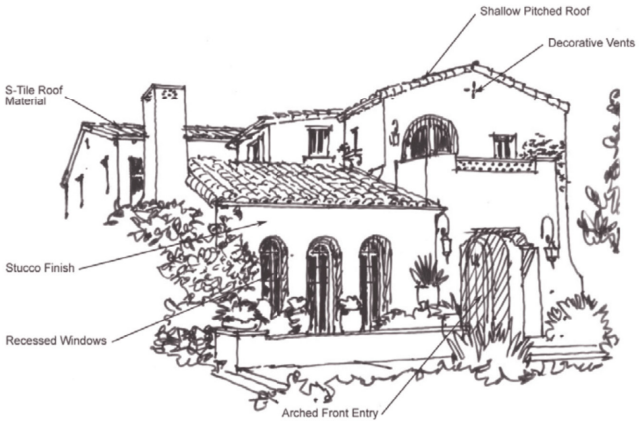
History and Character:

Spanish inspired homes began appearing at the turn of the 20th century in the form of the Mission Style, reflecting a loose adaptation of features often found in detailing from various influences, including Moorish and Spanish Colonial. Spanish Style is a catalog of styles unified by the order of arches, courtyards, strong form and mass, plain wall surfaces and tile roofs all derived from Mediterranean architectural styles. The Spanish style is most often characterized by an informal plan arrangement and massing. This informality reflects the natural composition of the farmhouses and small estates of Spain, which were not symmetrically composed.

General Attributes:

Some identifying features of this style are large distinctive (sometimes arched) windows on the front façade, red clay roofs and light colored stucco walls.

- Two story massing with one story element
- Simple hip or gable roof
- Barrel or 'S' shape concrete tile
- Stucco Finish
- Vertically hung multi-paned windows at front elevation
- Arched stucco column
- Light colors with dark trim
- Wrought iron accent



6.4.4 California Ranch

History and Character:

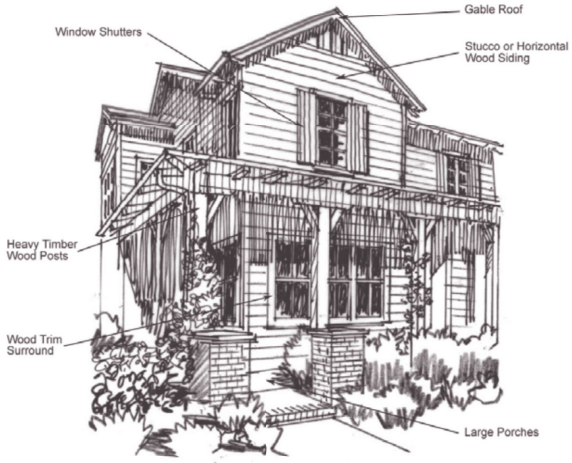
Reminiscent of the early ranchers and farmers of Southern California, the California Ranch Style was developed in response to their lifestyle, available materials and environmental considerations. The strong indoor/outdoor relationship is ideal for the temperature climate of the region and incorporates sliding glass doors, picture windows, terraces and secluded patios. These homes were influenced by Colonial, Spanish Colonial, Stick, Monterey, and Spanish Eclectic architecture; however, the detailing was simplified when adapted to the California Ranch Style.





General Attributes:

- Simple rectilinear form
- Gabled roof
- Long horizontal gable roofs
- Stucco or horizontal wood siding
- Simple column and railing at porches
- White or dark stucco colors
- White or dark color accent trim



6.4.5 Cottage



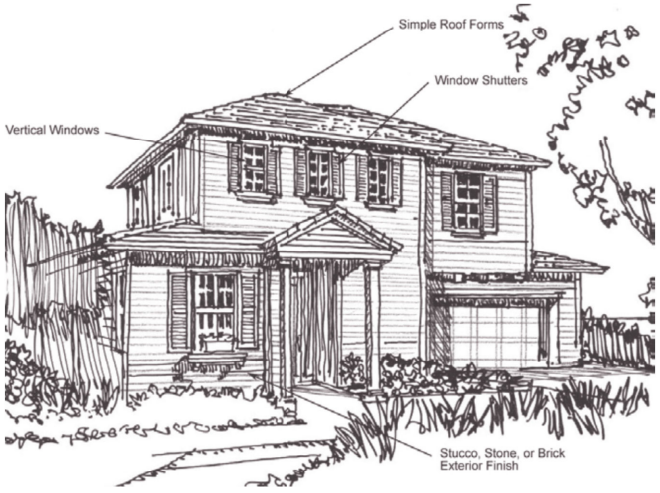
History and Character:

The Cottage style is based upon early twentieth century American interpretations of English architecture. The source for design originates from medieval English and French cottages, as well as from the country estates of Brittany and Normandy, larger manor homes, and rural village vernacular houses. The Cottage style captures a romantic and picturesque architecture, and American interpretations include houses with simple volumes most often with front facing gables that have steeply pitched roofs.



General Attributes:

- Asymmetrical massing
- Large simple roof planes
- Stucco finish
- Vertical windows
- Decorative stone or brick veneer
- White, off-white, light earth tone shades



6.4.6 Farmhouse



History and Character:

The Farmhouse style is based upon regional American interpretations of agrarian architecture. The source for design originates from rural residential homes in the early settlements in Midwestern and Southwestern areas of America. The Farmhouse style establishes a pastoral character, and recent interpretations include houses with simple building designs, gabled roof forms characterized by a moderate to steep pitch.



General Attributes:

- Simple rectangular massing
- Large simple roof planes
- Siding or Stucco building materials
- Vertical windows with decorative accent shutters
- Entry porches with low sloping shed roofs
- White or light earth tone shades with contrasting design elements



6.4.7 Transitional



History and Character:

The Transitional style is an interpretive style based upon historic European and American architecture. The design inspiration uses modern building forms and construction materials to develop more contemporary designs that reflect earlier period styles. The Transitional style incorporates clean lines and simplified architectural detailing to reinforce the intended character. This style includes interpretations of Spanish, Monterey, California Ranch and Farmhouse architecture.



General Attributes:

- Building massing to reinforce the intended period style
- Large simple roof planes, including asymmetrical roof forms and limited flat roofs.
- Horizontal siding or smooth stucco finish
- Square or vertically proportioned windows with simple or no trim details.
- Light exterior building shades with contrasting details such as wood trim/ fascias, window frames, doors and simple window shutters.



6.5 Commercial Design Guidelines

6.5.1 Introduction

The Avenue Specific Plan area includes one (1) neighborhood center. This 10-acre center is at the southwest corner of Ontario Ranch Road and Haven Avenues. A 15.04-acre self-storage is planned at the southwest corner of Archibald and Schaefer. ~~This~~The neighborhood center will allow the homeowners of The Avenue access to shopping and employment opportunities nearby. Residents will have the ability to access services by foot, or ride their bicycles to work via pedestrian trails connecting the community to the neighborhood center.

Throughout the neighborhood center, appropriate landscaping, site planning and architectural design should be considered to create friendly and welcoming places to shop and work and shall continue the vision established in the residential community, including integrating pedestrian-friendly design.

In order to maintain the character of The Avenue, the neighborhood center is expected to be developed with a compatible and harmonious quality. These Avenue Commercial Design Guidelines will help direct the development of the area to enhance the pedestrian experience that positively contributes to the character of The Avenue Specific Plan area. These guidelines are not intended to be strictly enforced rules, but a tool in aiding the design process and are therefore general in nature. Developers of the neighborhood center will be required to submit their own supplemental design guidelines for City approval. These commercial design guidelines are organized into the following:

- Site Planning
- Building Design
- Architectural Details
- Open Space and Landscaping



Pedestrian-friendly Commercial Retail

A. Guiding Principles

Guiding Principles for commercial design for The Avenue are:

Buildings should contribute to a qualitative nature of the overall neighborhood.

- Proper scale and proportions in massing and details should be used
- Pedestrian open spaces should be provided
- Massing and articulation should be varied
- Buildings shall be designed at a human-scale

Buildings should have an enduring quality.

- Design should draw inspiration from the rich and diverse Southern California architectural heritage
- Materials and colors typical to Southern California should be used
- Details and ornamentation should be authentic
- Design shall create an inviting place to shop and work

B. Review Process

The Commercial Design Guidelines are to be used as a general tool to guide the development of the neighborhood center within The Avenue. Final designs will be subject to the City of Ontario's approval. Additionally, more detailed design guidelines for each development will be required by the City prior to final approval. Refer to the City of Ontario Development Code or the Planning Department for further information regarding the review process.

6.5.2 Commercial Design Guidelines

C. Introduction

The Neighborhood Center within The Avenue is intended to continue the pedestrian-friendly character established in the residential community. Appropriate site planning can de-emphasize the vehicle, creating a safe outdoor environment without ignoring the necessary needs of vehicular circulation. Through well executed planning, architecture, and landscape design, the Neighborhood Center can complement and integrate the residential community. Images within this section are for illustrative purposes and final plans must be submitted to, and approved by, the City.



Design shall create an inviting place to shop and work

D. Site Planning

Orientation

Buildings should be oriented for optimal visibility from the street. Windows and entries should face the street avoiding blank walls dominating public views. Stores with entries not visible from the street may be oriented towards pedestrian open space and all primary entries should face onto a street or a connecting walkway.

Building clusterings are recommended to help define parking lot areas and encourage walking between stores. Building entries and storefronts should be positioned close to one another to reduce walking distances between them.

Driveways and Sidewalks

The site shall be provided with an adequate number of driveways to facilitate circulation and also reduce the traffic impact along the surrounding arterials. Pedestrian crossing distances should be minimized at driveways. All driveways and sidewalks shall be constructed per City Standards and to the satisfaction of the City Engineer. No decorative paving will be allowed in the public right of way unless otherwise approved by theCity Engineer.

Street Frontage and Buildings

Streetside buildings, or those with no parking separating them from the street, should use windows and entry features to soften the building's appearance to the street.

Streetside Setbacks and Buildings

The sides of buildings along street edges shall be landscaped within the setback to soften the building's appearance as well as designed with windows or design elements.
Refer to the City of Ontario Development Code for specific setback requirements.

Street Frontage and Parking Lots

Parking lots should generally be placed away from streets. Street frontages shall be broken up with buildings, landscaping, plazas, and other pedestrian features. Continuous parking lots along the street frontage should be avoided. Any parking along street edges shall be set back with a landscaped buffer which can be used to filter parking lot runoff. Continuous parking stalls shall be interrupted by landscaped islands no more than 10 stalls apart.
Parking lots are encouraged to be interconnected rather than separated for each building. Separated parking lots encourage customers to drive from store to store.



Retail Orientation to Vehicular Travel Lanes and Parking

Service and Storage Areas

Loading docks, garages and storage areas are to be located behind or to the side of buildings siting onto secondary access and not primary streets. These features must be screened with walls and landscaping as much as possible from public view of streets, residences, pedestrians walkways and connecting trails. Loading docks and storage areas should not conflict with pedestrian walkways.

Refuse Containers, Utility and Mechanical Equipment

Refuse containers and equipment shall be easily accessed by service vehicles. They shall be screened from view of the streets, parking lots, and connecting walkways through roof forms, walls and/or landscaping.
Screening details should incorporate elements that are compatible to the architecture style of the buildings. Proper landscaping, including trellises, may also help to screen these elements. Equipment and enclosures shall not be located near pedestrian walkways. Roof-mounted equipment shall be screened by the roof/ parapet.

Sidewalks

Sidewalks shall be located along natural pedestrian travel paths. Sidewalks should be a minimum of 6' wide along pedestrian pathways and a minimum of 8' wide along more heavily traveled commercial areas.

E. Building Design

Massing

With larger buildings, appropriate massing becomes more important to maintain the human-scale of the development and create a visually pleasing environment. Bay windows, stepped buildings, height changes and setback variations between stores help to break up large buildings as well as indicate entries and store locations to customers. Tower elements or monumental features are encouraged at focal points, such as corners, plazas, major entrances, or where walkways meet streets.



Architectural Massing and Materials

Varying setbacks along the front façade of buildings are recommended to create small outdoor public spaces for pedestrians to gather and sit.

Roof Forms

Hipped and gable roofs are encouraged. Roof pitches shall be compatible to the architectural style of the buildings. Flat roofs should vary in height and be accompanied by cornice, trim or other accent features.

Arcades and Awnings

Outdoor arcades along store fronts are encouraged over pedestrian walkways. Arcades may be used to connect separate buildings providing a more pleasing experience for pedestrians. Trellises or awnings may also be used to create a covered walkway to protect pedestrians from the sun and rain.

Entry Design

Building entries shall be prominent and easily identified. Various elements can be used to enhance the entry features including massing variation, materials and color change, change in roof form, and awnings. For smaller retail buildings, part of a cluster or strip, arcades, awnings and simple signage may be acceptable as entries.
No signs shall be placed in the public right-of-way and shall be in accordance with City standards regarding corner site distance.



Commercial Retail Massing, Material Change, Entry Design

Design Flexibility

Retail spaces exceeding 30,000 SF should be designed with the flexibility to be divisible into smaller retail spaces should future market demand change.

F. Architectural Details

Architectural Styles

A variety of compatible architectural styles should be used throughout the Neighborhood Center to create a sense of continuity and visual interest between the buildings. Related elements, such as trellises, planters, light-standards, windows, doors, etc. shall also adopt detailing that is compatible to the selected architectural styles. The selected styles of the Neighborhood Center do not necessarily need to be of any one of those specified for the residential community but shall be compatible with them.

Architectural styles shall derive from southern California and Ontario historic precedents. Modern and "high- tech" styles are not acceptable style choices. Acceptable styles generally respond to the region's climate including such features as outdoor circulation, outdoor courtyards or plazas, recessed window frames, awnings, arcades, loggias, and trellises.

Building Wall Treatment

No wall should have a blank, uninterrupted length exceeding 20 feet without including one of the following:

- Change in texture
- Change in material
- Change in plane
- Lattice
- A tree or equivalent element

Façades that are visible from adjacent streets or walkways should display even greater visual interest by using architectural elements that break up the massing of large buildings, such as windows, arcades, awnings, porticos, and other architectural features.

Base And Top Treatments

Base and top treatments help to balance the "weight" of the building visually. Bases should appear to "ground" the building, while tops create a defined edge to the roofline. Possible treatment techniques are as follows:

Base:

- Natural materials
- Pre-cast materials
- Thicker walls
- Enriched landscaping with a mature height of at least 18"
- Other decorative, durable materials as approved by the City

Special materials, such as ceramic tile, granite and marble are encouraged at major entries.
Tops:

- Cornice treatments
- Stepped parapets
- Roof overhangs with brackets
- Textured materials

Colored "stripes" are not acceptable as the only treatment.

Exterior Materials

Recommended materials include, but are not limited to stucco, exterior plaster, brick, wood siding, tile, pre-cast concrete or stone. Exterior materials that appear pre-fabricated are not recommended. Selected materials and detailing should have an enduring appearance. Foam products should be avoided at the pedestrian level.

Roof Materials

Roofing materials that are generally acceptable include standing metal seam, concrete tile, tile and slate or slate-like materials. Asphalt or wood shingles are prohibited.

Colors

Color selection shall be consistent with the selected architecture style.

G. Commercial Site Landscape Requirements

The Neighborhood Center site will be developed both architecturally and through landscape treatments as an extension of The Avenue. The land plan encourages integration of the Neighborhood Center by providing for frontage on Ontario Ranch Road and Haven Avenues, while also incorporating a major community entry. Commercial uses appropriate to and compatible with The Avenue's residential community will be encouraged.

Minimum Landscape Requirements

- Builder/developer shall refer to City of Ontario standards for the percentage of gross commercial site acreage required to be landscaped.
- All areas of the site not occupied by buildings, parking or otherwise utilized shall be landscaped with groundcover, turf or tree materials from the community plant list.
- Appropriate street trees should be utilized adjacent to street frontage integrating the site into the overall community setting.
- Side yard and rear service yard use areas should be screened with a combination of a six foot (6') wall and dense landscape buffer. Tubular steel fencing and gates should be used adjacent to interior residential streets to control access points.
- Accent tree entry planting should be incorporated at the site's vehicular access points.
- No shrubs higher than 3 feet and no tree canopy lower than 7 feet as to allow officers on patrol the ability to view the business, without obstructing their view.
- Plants by low-lying windows may have thorns as a deterrent.

Parking Areas

- Where a parking lot contains 10 or more parking spaces and is visible from a street, not less than 10-15% of the total area (excluding any perimeter landscaping), shall be landscaped. Such landscaping shall not be concentrated in any one location. A minimum of 50% of the plant material shall be canopy or shade trees and shrubs shall be 3' or less to provide clear visibility.
- All rows of parking spaces shall be provided with landscape islands at each row terminus to protect parked vehicles, ensure visibility, confine moving traffic to drive aisles and driveways, and provide space for landscaping. Within each row of parking spaces, landscape islands shall be placed to prevent more than 10 vehicles from being parked side-by-side in an abutting configuration. These landscape islands shall measure a minimum of five (5) feet in width, exclusive of curbs. Creation of large planting islands (tree groves) are encouraged as opposed to small pockets of individual trees.


Retail Plaza

- Planter islands for a single row of parking spaces shall be landscaped with at least one (1) tree and vegetative groundcover or turf. Planter islands for a double row of parking spaces shall contain not less than two (2) trees and vegetative groundcover or turf.
- Landscaped areas shall be delineated with a concrete curb which may have curb cuts to facilitate sheet flow runoff from parking lots to infiltrate the landscape planters.
- Parking area landscaping is required for the screening of large parking areas to limit their visual impact.
- When parking is located adjacent to a public street or interior residential street, a combination of landscaped berms and/or planting totaling three feet (3') high is to be used to screen views or parked cars.

- Wherever possible, pedestrian traffic should be separated from vehicular traffic by additional sidewalks. The parking lot should have crosswalks highlighted with decorative or varied texture paving.

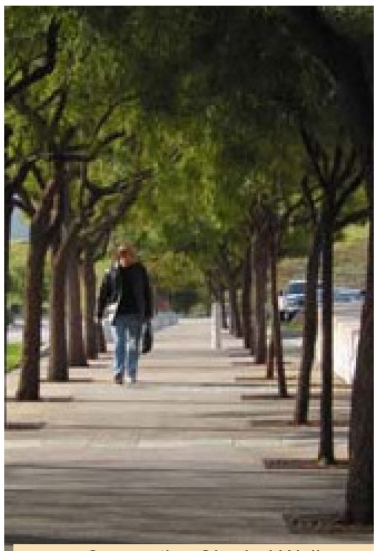
H. Open Space and Landscaping

Site Accessories

Site accessories, such as recycling bins, bike racks, litter cans, planters, benches and transit shelters, should use materials and have an architectural character consistent with the overall project. These accessories should be graffiti-resistant with materials that are easy to clean and paint.

Connecting Walkways

Walkways throughout The Avenue's neighborhood center shall connect the various buildings to each other and to the sidewalks along adjacent arterials. Use of trellises, landscaping, seating areas and building placement adjacent to one another will encourage pedestrian activity within the center. A typical walkway shall be a minimum of 6' wide. In large parking lots, pedestrian walkways shall be provided within the median of at least one parking aisle for eight aisles of 20 stalls or more.


Connecting Shaded Walkway

Pedestrian walkways that may also be used for emergency access must allow minimum clearance of 26' wide and 14' vertical clearance. Off-site connections will be provided from the neighborhood center to The Avenue's residential development.

Plazas

Plazas are encouraged to emphasize a pedestrian-friendly environment by creating locations within the Neighborhood Center that allow for people to gather. Plazas create a more inviting feeling for pedestrians, allowing them to feel safe from the vehicular-dominated parking lot. These outdoor places may include water features, landscaping, and other elements to create a comfortable place to sit. Plazas are encouraged where high levels of pedestrian activity are expected. Major entrances and nearby uses that allow for more interaction with the plaza such as delis, cafes, restaurants, bakeries and other food services are a few key examples.

Landscaping

Landscaping helps to soften the feel of the buildings and parking lot while enhancing the visual aspect of the site. The following landscaping techniques may be used:

1. Provide special landscaping treatment at all project and building entries.
2. Provide shade/canopy trees within parking areas.

3. Use plants to define outdoor spaces such as along edges, outdoor plazas, or pathways between parking and building entrances.
4. Plantings shall provide a continuity of form across the entire project.

Outdoor Storage Areas

Outdoor storage areas should be incorporated into the design of a project to avoid visual impacts on the site. Outdoor storage areas shall be located away from the street, behind or to the side of buildings. Walls and landscaping shall be used to screen stored materials. Materials placed on palettes in front of buildings are not permitted.

Transit Shelters

Transit shelters should be incorporated into the design of neighborhood center. The design of transit related structures shall be integrated architecturally with the project through its color, materials and architectural style. Walkways shall be provided for easy accessibility by pedestrians moving to and from transit stops to the Neighborhood Center.

Fence and Wall Design

Chain-link fencing, barbed wire, corrugated metal fencing and tennis windscreens are not permitted. Fences and walls should be built with attractive, durable materials, including (but not limited to) wrought iron, textured concrete block, or formed concrete with reveals. Fences or walls should be consistent with architectural style, materials and designs used throughout the project.

Adjacent to residential areas walls and fences should not exceed a height of six feet (6') without being made of textured concrete block, interlocking "diamond" blocks, formed concrete with reveals, or similar materials to a maximum of eight feet (8') from grade.

Along streets, walls and fences should not exceed 36" in height and long expanses of uninterrupted fences and walls should be avoided. Use of openings, planter boxes, material changes, pilasters or posts are acceptable. Openings shall be provided to connect walkways directly to the street avoiding long, inconvenient walking paths. These pedestrian portals should be announced by pilasters, trellis, special landscaping, or other features.

Lighting

On-site lighting standards shall provide adequate illumination throughout the site during the nighttime hours. Lighting fixtures shall be designed to be compatible with the architectural styles selected for the project. All light standards should have an attractive base and top; overhead "cobrahead" standards are not permitted.

Along pedestrian walks, lighting fixtures should not exceed 12' in height and may include lighting within bollards. Pedestrian lighting shall provide appropriate illumination at a human scale without too much glare. Lighting within larger parking lots shall not exceed 25' in height providing enough visibility for customers

and employees to walk safely to their vehicles. The same bulb type shall be used for all parking lot and pedestrian lighting fixtures within the development. Service area lighting should be positioned so no bulbs can be seen from public view. Any street light within the public right-of-way shall be per City standards and to the satisfaction of the City Engineer.

G. Main Street Design Guidelines

Building Form and Massing:

- Building heights shall consist of a mix of building heights to provide visual interest.
- Tower elements and other vertical/prominent building features should be used to accentuate key elements such as building entries, pedestrian nodes, plazas or courtyards.
- Modulation and variation of building masses between adjacent buildings. Three and four story elevations should have varied massing and architecture, both in height and depth along the façade.

Materials and Colors:

- Materials and colors should be applied to create obvious and identifiable delineation between uses.
- All materials shall wrap architectural elements in their entirety, on primary elevations and where exposed to public spaces.
- Materials applied to any elevations shall turn the corner of a minimum of 8 feet, or to a logical termination point in relation to architectural features or massing.
- Rough cut, rustic appearances through the use of stone, brick, or siding is encouraged. Only finished materials are allowed, no exposed or untreated concrete masonry materials, unless consistent with the architectural style.



Main Street architecture, walkway and outdoor seating

Exterior Design:

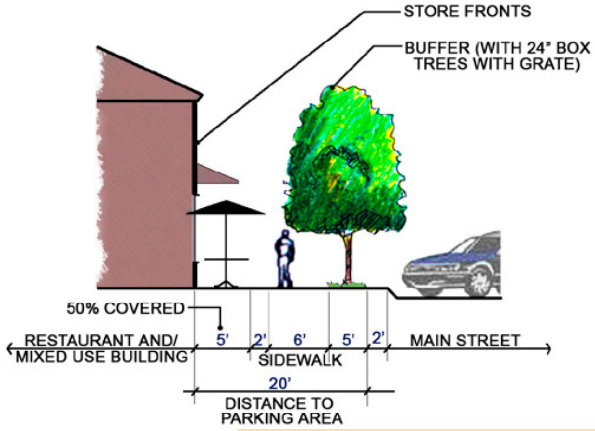
Building shall have articulation along auto and pedestrian corridors to generate pedestrian scaling and visual interest along the streetscape.

- No single building shall have a singular wall plane or building height on the primary elevation.
- Front wall planes of commercial/mixed-use buildings, including retail/shop space veneer configurations, shall be articulated.
- Articulation can include, but is not limited to: 1) Vertical and horizontal offsets, 2) Color blocking and 3) appropriate use of detail elements.

- Mixed-use buildings, multi-tenant shop buildings with more than one ground floor tenant: no more that 66% of the front elevation may consist of a single contiguous wall plane on a tenant by tenant basis.

Primary exposures/elevations shall be appropriately detailed and articulated consistent with the architectural style and character of the development, as established by these guidelines.

- First-story pedestrian scale character and commercial retail exposure is crucial to business viability. In-line retail/commercial/service space shall be designed to optimization of space, exposure and aesthetic articulation.
- No adjacent mixed-use buildings shall have identical architectural appearance, or use of materials, or color palette unless pairing is integral feature of the project design theme.
- Projections, overhangs and recesses may be used to provide shadow articulations and scale to building elevations.
- At least 40% of ground floor of the primary exposure of an in-line/shop-space/free standing show use, excluding restaurants pads, shall be devoted to transparent windows and/or doors.

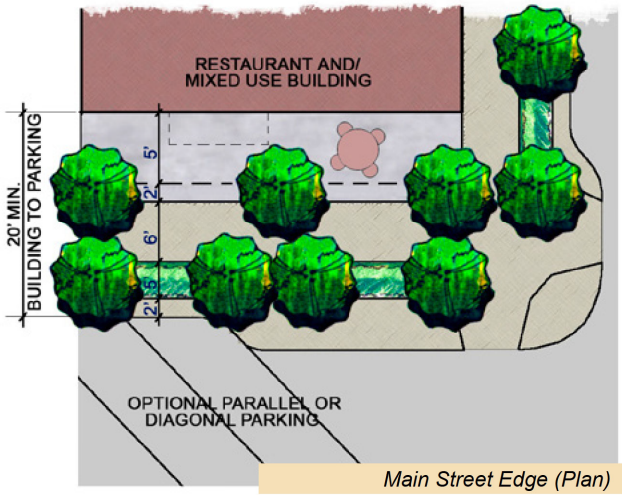


Main Street Edge (Section)

Roof Form and Slope:

Building height shall be varied to provide interest to the "Main Street" as viewed from community streets, open space, or other public spaces.

- Variety in roof forms, ridge heights and direction of gables is required.
- Although the majority of commercial roof area may be flat, visible elevations should be treated with sloping roof elements, including hips or gables forms (as appropriate to the primary architectural style) or parapet treatments.
- Architectural exposed roof materials shall be consist of flat, barrel, or "S" tile concrete or slate tiles or shakes. Metal roofs are permitted as feature elements consistent with the architectural style.



Main Street Edge (Plan)

Patio Dining:

Outdoor seating, in conjunction with business, shall be encouraged to enliven the street scene along commercial edges. Patio dining along retail storefronts have the dimensions:

- A minimum 20-foot area from building to parking area/drive aisle/interior Street. Patio seating area must have an internal minimum dimension of 5 feet clear, with an additional 2-foot buffer area (plant hedge or low fence.
- Minimum 6-foot sidewalk
- Minimum 5-foot landscape buffer or tree well
- Minimum 2-foot paving edge (Along parking area/drive aisle/interior Street).

Signage Guidelines:

A sign guideline section should be incorporated to promote an overall “sense of place” through signage that is architecturally integrated and visually interesting while conforming to applicable code requirements. The guidelines should include the following criteria:

- Signage Design Objectives
- General Sign Design and Limits
- Identity Signs
- Directional Signs
- Information Signs
- Regulation Signs
- Amenity Signs (Banners on light fixtures, etc..)
- Commercial, Retail and Residential Design Guidelines.
- Fabrication and Installation
- Sign Maintenance
- Sign Location
- Temporary Signs
- Sign Illumination

Landscape Design Guidelines:

To create a distinct and unified landscape character for “Main Street”, specific landscape design guidelines should be incorporated. The guidelines should include the flowing criteria:

- Parking/Shopping Interface: To provide a safe and comfortable pedestrian experience and reduce the presence of the parking area from shoppers with buffer planting.
- Retail Plazas: To provide active and passive pedestrian spaces that encourage user interaction; Fountains, stages, public art is encouraged for these spaces.
- To provide shaded and non shaded restaurant/outdoor eating and dining areas, use of awnings or umbrellas in west or south facing building exposures, planting as a way to provide a comfortable barrier and also allow for people watching (a 2-foot minimum plant barrier can be substituted for a rail.
- Building Edge/Retail Shops: Planting areas to create a buffer zone between the parking lot and promenade.

6.6 Landscape Design Guidelines

The Landscape Design Guidelines describe the key elements of the proposed landscape treatments within The Avenue Specific Plan area, which will develop over several years. These guidelines will help maintain a consistent design theme in a high quality, visually attractive and resource efficient framework.
The objectives of the Design Guidelines are:

- To provide guidance to developers and builders, as well as to engineers, architects, landscape architects and other professionals, as to the quality and character of the community and development of each planning area.
- To assure the City of Ontario that The Avenue will develop in accordance with the guidelines provided herein.
- To provide guidance to City decision makers in the review of future development projects in The Avenue.
- To provide guidance in formulating Covenants, Conditions and Restrictions.

These Landscape Design Guidelines are intended to be flexible and are, therefore, illustrative in nature. As a flexible document, the guidelines can, over time, accommodate changing community desires, economic conditions and the marketplace.

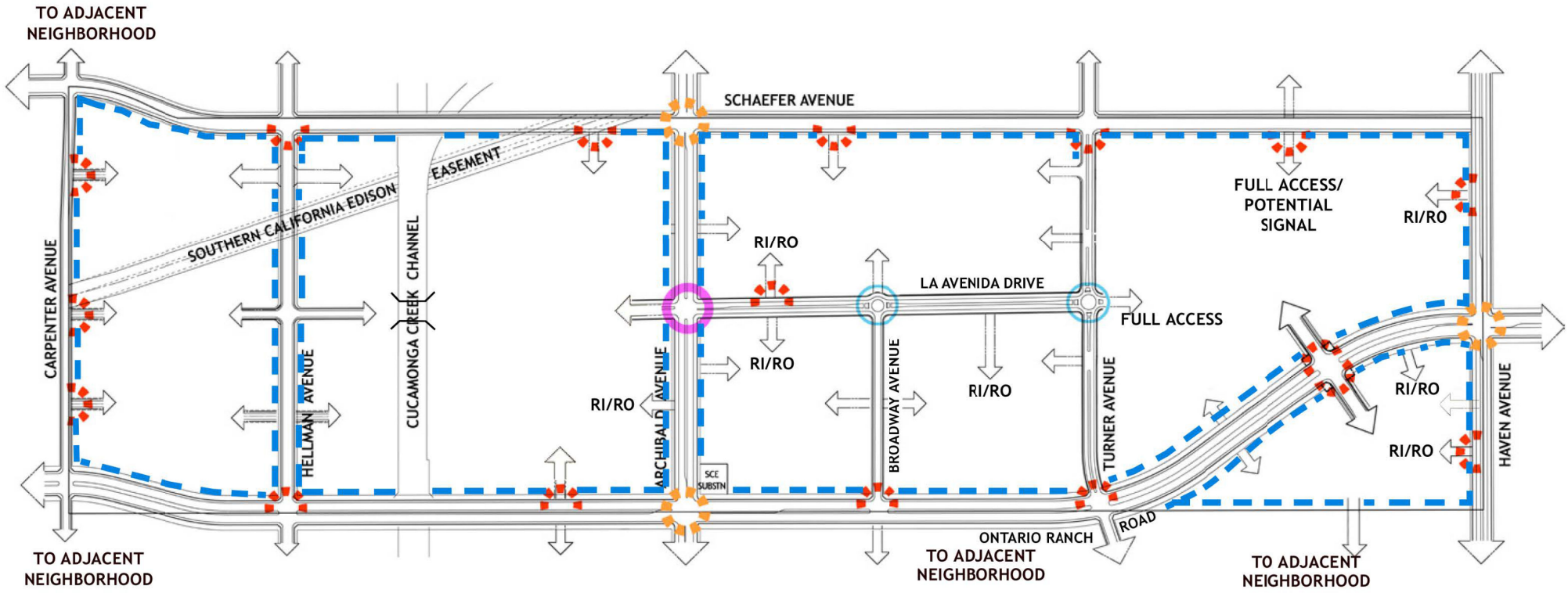
The General Landscape Guidelines address typical areas of importance and concern with regards to landscape architecture such as resource conservation, landscape lighting impacts and maintenance issues. The Plant Material Guidelines provide a specific list of plants compatible with the community design theme and ~~the New Model Colony~~ Ontario Ranch Streetscape Master Plan. The lists are organized by community elements and streetscape themes.

Although a great deal of specific design information is provided in these Landscape Design Guidelines, there will at times be a need for interpretation of the intent of the guidelines in keeping with the spirit of The Avenue's design theme. It is critical that these guidelines are followed in a manner consistent with this design theme, in order to create a unified landscape, while providing the opportunities for diversity and visual interest that are so apparent in the most successful residential communities in the City of Ontario.

6.6.1 Community Fences and Walls

Community fences and walls are a major visual element and help unify the appearance of the community. Community walls and fences have been carefully designed to complement the overall theme. They will be easy to maintain and provide a durable, long term edge enclosure defining "private" and "public" spaces. Community walls and fences shall not encroach into the public right-of-way unless permitted. The size and location of any monument, fence or wall that encroach into the public right-of-way shall require approval by the City Engineer.

An encroachment permit shall be obtained to construct any monument, fence or wall in the public right-of-way. Exhibit ~~26~~27, "Entries, Intersections, and Community Walls" shows the conceptual location of community walls.



LEGEND

- ROUNDABOUT
- MAIN ENTRY
- PRIMARY ENTRY
- SECONDARY ENTRY
- RI/RO — RIGHT IN/RIGHT OUT ONLY
- COMMUNITY WALL

NORTH

0 100 200 400 800

NOTE: The locations of entry points is conceptual. Precise locations will be determined as part of the tract map process.

NOTE: If a wall is proposed along the east side of Carpenter Avenue where the homes are plotted to rear onto Carpenter Avenue, a 10-foot wide landscape buffer shall be incorporated along the street frontage. The 10-foot landscape buffer shall be measured from back of sidewalk (ROW) (13-foot parkway + 10 foot landscape buffer = total 23-foot edge measured from curb face).

NOTE: No monuments or walls will be allowed in the public street right-of-way along backbone streets.

Revised Exhibit

Entries, Intersections and Community Walls

6.6.2 Entries

The entries and intersections within The Avenue establish the design theme for the community while reinforcing the design hierarchy and providing a reassurance of the community areas and boundaries. These features are created through a thematic blend of hardscape and planting schemes, and become the first impressions on all visitors and residents entering the colony. No monuments or walls will be allowed in the public street right-of-way along backbone streets. See Exhibit 27, "Entries, Intersections, and Community Walls" for specific locations of monumentation.

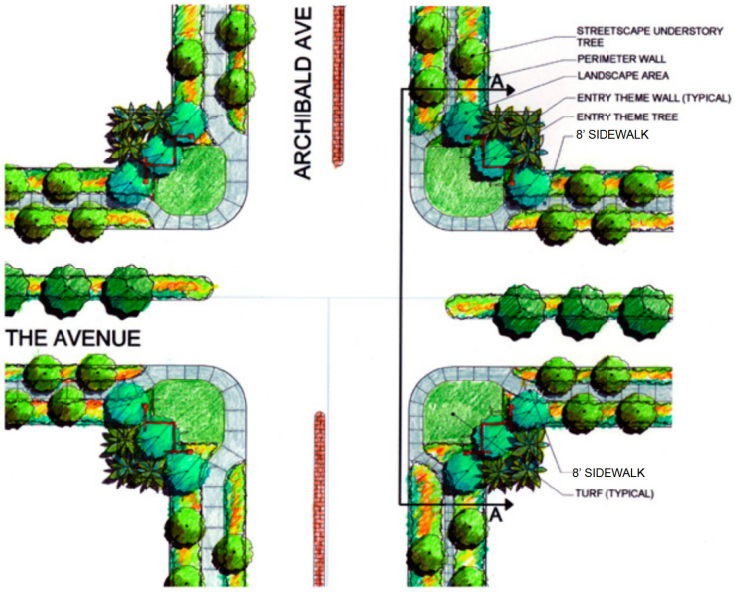
Main Entry

The Avenue is bordered by urban arterials on three sides. This allows easy access to neighborhoods throughout the community but also requires a carefully considered hierarchy and treatment of colony entries. The Main Entry provides a relaxed but strong sense of arrival and identity by utilizing soft open turf leading to stone veneered pilasters and a low planter wall. Clustered palms mixed with evergreen foliage trees and flowering shrubs will evoke the image of a classic Ontario community scene. The developer will be responsible for those improvements to the Main Entry as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project.

Exhibit 27a - Main Entry



Main Entry Section View

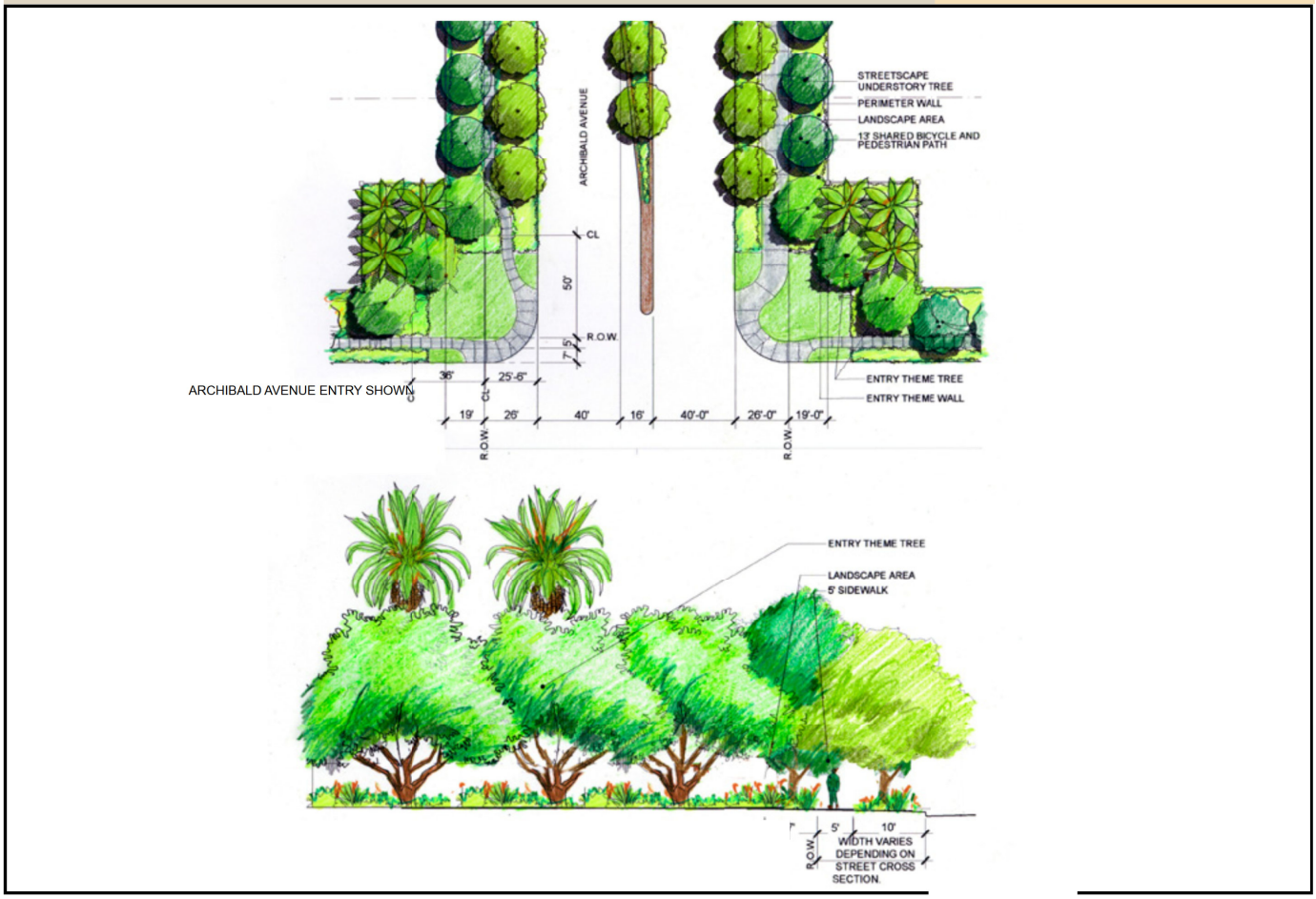


Main Entry Plan View

Primary Entries

These entries occur along the urban arterial and collectors throughout the community as shown in Exhibit 27, “Entries, Intersections and Community Walls”. They will be smaller scale versions of the main entry and will contain minor sign monuments, theme walls and pilasters, simple attractive evergreen and deciduous tree planting and accent shrubs set behind a simple turf area. These entries will provide an important outlet and inlet for colony traffic to most efficiently access residential enclaves and other community elements. The developer will be responsible for those improvements to the Primary Entries as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project.

Exhibit 27b - Primary Entries



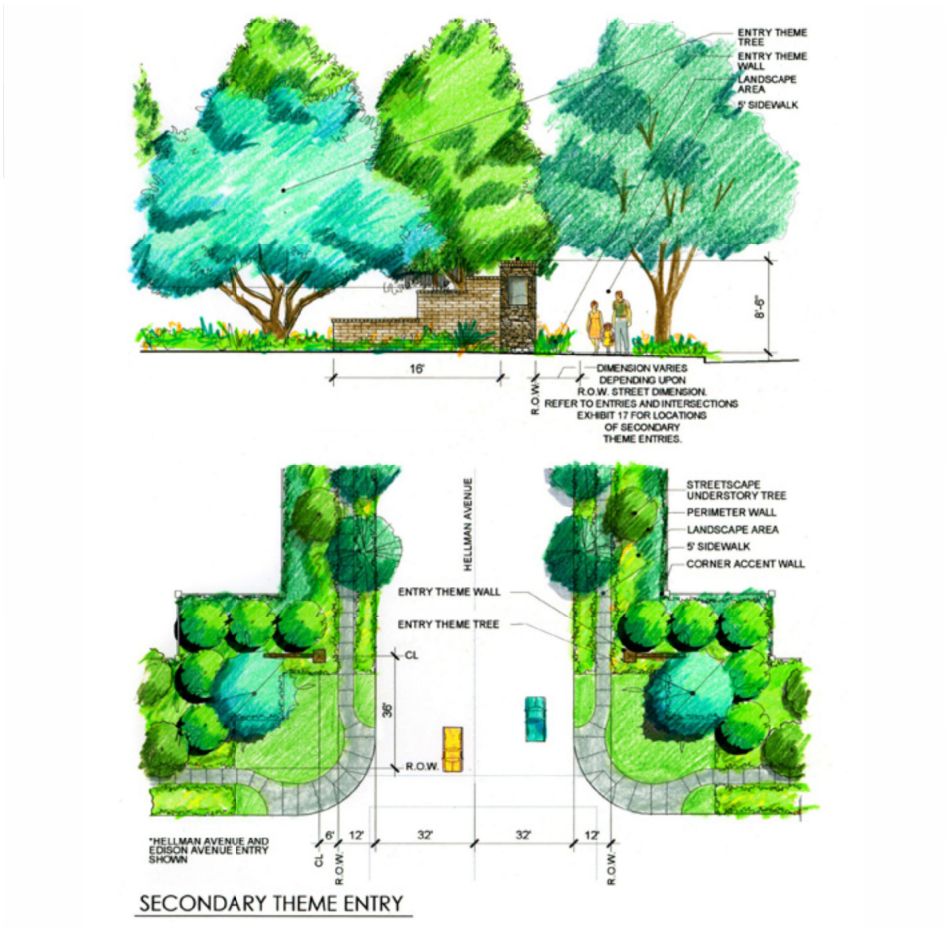
Secondary Entries

These entries will be the primary marketing and residential enclave access for the separate residential products within The Avenue as shown in Exhibit 27, “Entries, Intersections and Community Walls”. These entries occur from the internal road system and will be determined through the separate future planning of each enclave per the City of Ontario’s planning design standards and this Specific Plan document.

Simple identification signage and individualized landscape theming will be allowed. Signage may be permanent or temporary and is subject to review and approval by the master community developer. The signage and landscape materials must be compatible and complementary to The Avenue’s landscape design theme. Flexibility within this framework will allow visual diversity and individualization of the residential neighborhoods.

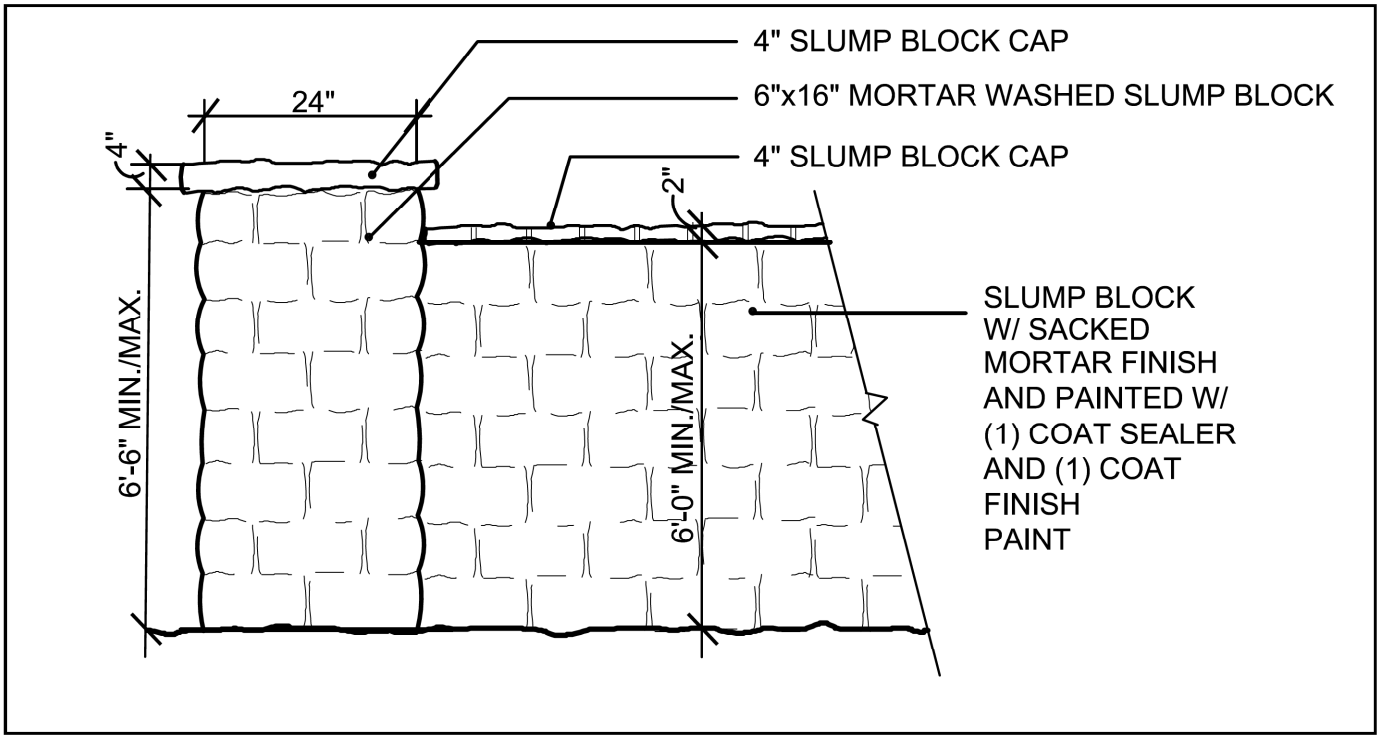
The developer will be responsible for those improvements to Archibald Avenue as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project.

Exhibit 27c - Secondary Entries



Solid Masonry Theme Wall

Solid masonry walls will be provided as rear and side yard enclosures where privacy is desired such as adjacent to streetscapes. The solid theme wall used within The Avenue will be a mortar washed painted slump block masonry unit. Pilasters will be placed at wall terminus points and as determined to be necessary for visual benefit.

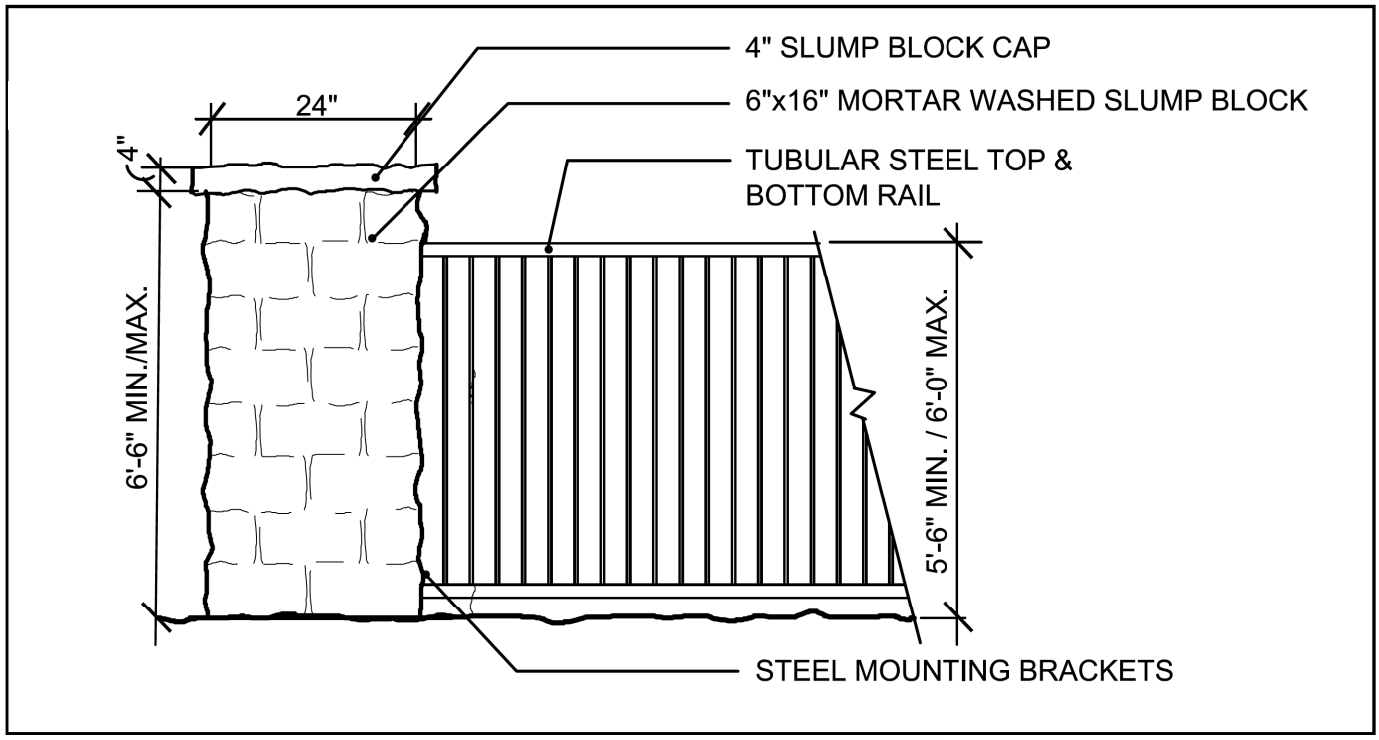




Open Tubular Steel Fence

Tubular steel fencing will be used at residential interfaces to allow maximum view retention. Tubular steel fencing may also be used where an attractive open enclosure is necessary at park sites or recreation facilities.

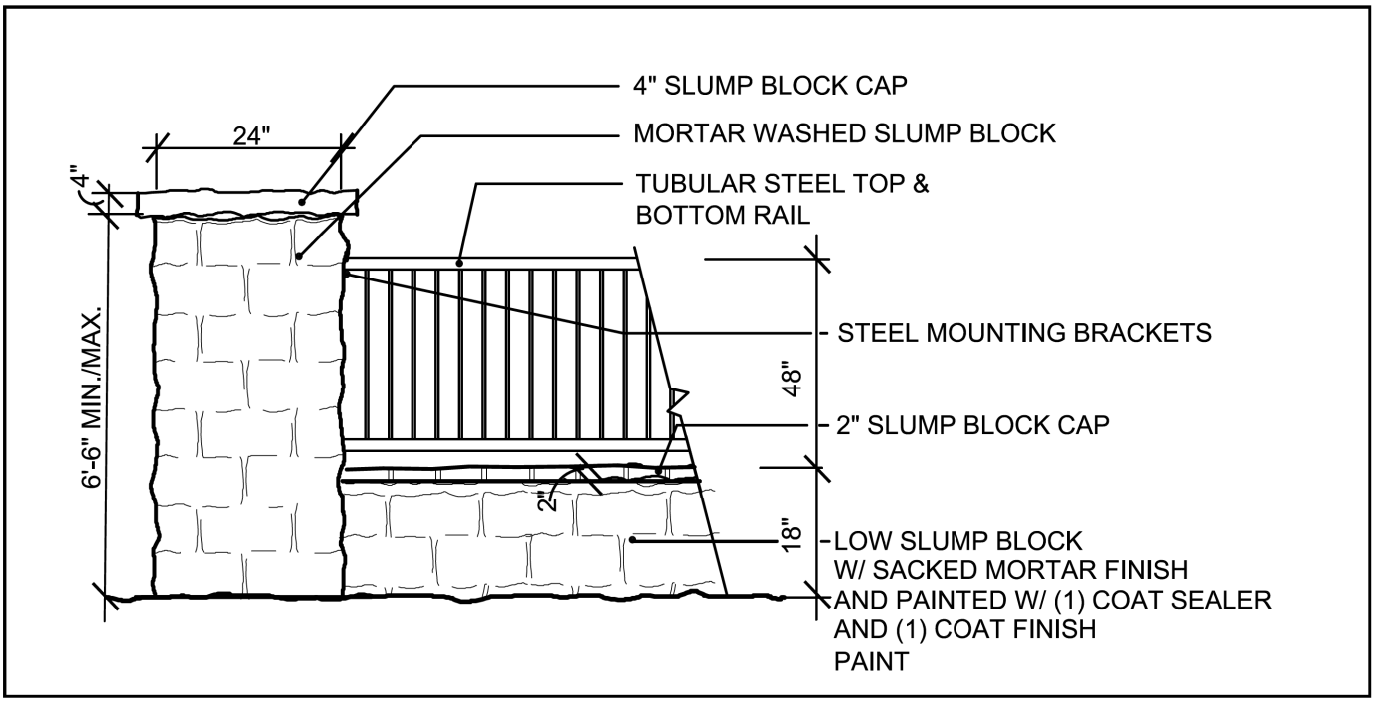
Where feasible, the tubular steel fence will be interspersed with thematic community stone or masonry pilasters.





Combination Fence/Wall

This combination enclosure of a tubular steel fence mounted on a low solid masonry theme wall occurs where partial privacy is necessary, but permits some view opportunity. Pilasters shall occur at the intersections of rear and side property lines and shall be constructed of solid masonry theme wall materials.



Community Wood Fence

Wood fencing is acceptable when not adjacent to common open spaces such as school sites, parks or commercial sites. Wood fencing is allowed for front yard low (3'-6" high max.) decorative fencing. Wood fencing will not be permitted in rear or sides (masonry block only). Wood fence materials must be of sufficient quality to accept solid and semi-transparent stains required to help prevent rotting and weathering. No transparent stains will be allowed.

Interior Neighborhood Streetscene Walls

- Walls adjoining any interior neighborhood streetscene shall have a perimeter streetscene solid community theme treatment.
- The community solid theme wall shall be utilized at all residential corner lot side yards which parallel or are viewed from public streets.
- Wood fencing is permitted within the individual neighborhood provided the fencing is not readily visible from the community streetscenes, except as located behind the front yard setback.

Commercial, Institutional and Other Uses

Screen and security fences and walls are encouraged only in rear or side yards. Trash deposit areas shall be enclosed within a six foot (6') high gated trash enclosure wherever located.

Wall and Fence Heights

Residential, Institutional and Commercial Uses:

- Front yard wall heights must be compatible with the visual appearance and integrity of the front yard streetscene. Fences and walls in the front setback and street side setback shall not exceed three and one-half feet (3 ½') above grade. However, security fencing may be approved if there is a demonstrated need for security. The maximum height for this fencing shall be six feet (6') above grade. In this instance a combination wall/open fence enclosure shall be encouraged.
- Side and rear fences or walls shall not exceed a height of six feet (6').
- Pool Code: All fencing shall conform to the applicable City of Ontario pool code fencing requirements.

Wall and Fence Materials and Colors

All fences and walls within the private residential lots shall be designed and constructed as part of the overall architectural site design. All materials shall be durable and finished in textures and colors complementary to the overall architectural design.

- Permitted Wall Materials: Stone veneer, stucco (including stucco covered block), masonry, brick, slump block, block and wrought iron combination are acceptable.
- Conditionally Acceptable Wall and Fence Materials: Glass and/or heavy, break-resistant plastic are acceptable for use in fences and walls when necessary to preserve views while providing protection against winds, etc., if used in conjunction with the community solid theme wall.
- Prohibited Wall and Fence Materials: Barbed wire, wire, electrically charged fences, plain exposed precision block; plastic materials, corrugated metal, chain link and grape stake fencing are prohibited.
- Color and Special Wall and Fence Treatments: Walls may be left natural or covered with stucco, except plain precision block must be covered with stucco. Brick or slump block walls may be painted or covered with stucco, if desired. Stone surfaces shall remain natural or unpainted.
- Special Wall and Fence Regulations: A six foot (6') high minimum masonry wall shall be constructed on each property line prior to development of any commercial, industrial or business related use that adjoins any parcel specifically zoned for residential use or destined for open space or as a school site.

Special Wall and Fence Regulations

- A six foot (6') high masonry wall shall be constructed on each property line prior to development of any commercial/office related use that adjoins any parcel specifically zoned for residential use, or designed for open space or as a school site.
- All fences and walls connecting two (2) separate residential dwelling units shall be constructed of the same color and material and shall be compatible with the color and material of the architecture.
- Long walls should be broken up with landscaping, alignment offsets and material changes to relieve visual monotony. When possible, a three foot (3') minimum space should be left between paved areas and walls and fences to allow for vines and espaliers.
- All walls and/or fencing in commercial areas shall be planted with vines or screened by dense shrubbery.
- Brick walls or screening walls should have climbing plants or anti-graffiti elements such as anti-graffiti paint to prevent walls from being vandalized.
- If a wall is proposed along the east side of Carpenter Avenue where the homes are plotted to rear onto Carpenter Avenue, a 10-foot wide landscape buffer shall be incorporated along the street frontage. The 10-foot landscape buffer shall be measured from back of sidewalk (ROW) (13-foot parkway + 10 foot landscape buffer: Total 23-foot edge measured from curb face).



Typical residential streetscene

6.6.3 Local Streets/Residential Lot Frontage and Private Lot Landscaping

The local roads within The Avenue consist of private front or side yards of single family residences. Street trees and front and exterior side yards will be required to be installed by the residential enclave builder, however, the rear and interior side yards will be the responsibility of each individual homeowner.

Residential Lot Landscape Requirements

Each single-family dwelling/lot shall be provided with front yard landscaping and a permanent automatic irrigation in the front yard of each lot. At a minimum, a seeded turf lawn, appropriate shrubs and trees and an automatic irrigation system shall be provided. Furthermore, a variety of typical landscape designs shall be provided for use on each lot within the subdivision.

Multiple-family residential projects shall be provided with full landscape improvements throughout the development. At a minimum, a seeded turf lawn, appropriate shrubs and trees, and a permanent automatic irrigation system shall be provided.

Landscape and irrigation drawings of the entire project site must be submitted to the Building department in conjunction with construction plans. The plans shall be approved by the Planning Department and the ~~Public Facilities Development Department~~ Landscape Planning Division prior to the issuance of building permits.

Those portions of a property which are not used for drive entries, parking, or approved outdoor uses shall be fully landscaped; all unpaved areas shall be landscaped; and all future development phase areas shall be hydroseeded.

Per City of Ontario's landscape Development Standards, each residential lot shall receive minimum of one (1) - 24" box size street tree planted in the right-of-way. Corner lots shall receive two (2) -24" box size street trees also planted in the right-of-way. Street trees planted in the right-of-way shall be thirty feet (30') maximum on center. Tree varieties shall be chosen from The Avenue's Plant Palette contained herein. Trees should be clustered near property lines to maximize their buffering effect and streetscene impact. One (1) species of tree shall be selected and approved for each residential street to maximize visual neighborhood identity. Deciduous or flowering evergreen accent trees which contrast with the chosen street trees are encouraged at cul-de-sacs, knuckles and intersections to provide seasonal emphasis and interest.

Residential Front Yard Requirements

A maximum of ~~fifty~~ twenty five percent (~~50~~25%) of the front yard, excluding driveways and sidewalks may be seeded or sodded turf. A minimum of ten (10) 5 gallon shrubs, twenty (20) 1 gallon shrubs and an automatic irrigation system shall be installed by the builder/developer in the front yard of each residential lot. The turf, shrubs and irrigation shall be installed up to a property line from the curb face to the front of house and side yards. Side yard slopes over 3:1 surface gradient and three feet (3') in height should be planted with ground cover. Low slopes may be graded out to a less than 3:1 surface gradient and planted with turf.

A minimum of one (1) ~~15 gallon size~~ 24" box tree shall be planted in the front yard of each residential lot in addition to the required street tree. These trees may match the street trees planted in the right-of-way and be located in proximity to said street trees in order to create a more harmonious effect. The trees may also contrast with the street tree and form backdrop tree clusters. Overall, the front yard scheme shall create a streetscene appearance of tree clusters meandering through the project and across streets.

6.6.4 General Landscape Guidelines

Individual homeowners shall be responsible for the maintenance of public street landscape frontage or side of their property unless otherwise identified within their legal ownership documents. Private homeowners shall also be responsible for all maintenance within their private lot area as well as fences and wall faces on their internal boundaries. For public and common area landscape maintenance responsibility refer to Table 4, “Maintenance Responsibility Matrix”.

Outdoor Lighting

All street and commercial developments within The Avenue shall have uniform lighting standards with regard to style, materials and colors in order to ensure consistent design. Each residential development may develop its own lighting standards, provided that the selected lighting fixture style is used consistently throughout the project. Lighting fixtures shall be well integrated into the visual environment and the appropriate architectural theme. All lighting fixtures within The Avenue project area shall comply with the following regulations and provisions.



- All outdoor lighting, including spotlights, floodlights, electrical reflectors and other means of illumination for signs, structures, landscaping, parking, loading, unloading and similar areas shall be focused, directed and arranged to minimize glare and illumination of streets or adjoining property. Low intensity, energy conserving night lighting is preferred.
- Lights shall be unbreakable plastic, recessed or otherwise designed to reduce the problems associated with damage and replacement of fixtures. Fixtures shall be vandal proof.
- Neon and similar types of lighting are prohibited in all areas of The Avenue except in retail commercial developments.
- All exterior lighting designs should develop a sense of hierarchy by varying fixtures and illumination levels. Proper lighting helps to define the organization of streets and plazas; and also distinguishes vehicular and pedestrian circulation patterns. Community entry areas (both pedestrian and vehicular), public plazas, community facilities and highly used recreation areas shall be creatively lit to develop a sense of place and arrival.
- All exterior lighting designs shall address the issue of security. Parking lots, pedestrian walkways and building entrances shall be well lighted for security reasons.

- Street lighting should be metal halide to project true colors and clear visibility for safety and security reasons.
- All lighting is required to have anti-vandalism fixtures.
- Residential units will be required to have their addresses illuminated on their home as close to the front door as possible. In addition, an illuminated address on the garage door should be present if the garage door faces a private drive. Also, the address numbers should be painted on the curb with white reflective paint on a black background. Each homeowner will be responsible for the maintenance of these numbers.
- All exterior lights should be shielded where feasible and focused to minimize spill light into the night sky or adjacent properties.
- No freestanding lighting fixtures shall exceed twenty-five feet (25') in height.
- Service area lighting shall be contained within the service yard boundaries and enclosure walls.
- The lighting concept of the entry monumentation features is to illuminate the sign graphics and to gently wash the walls and pilasters with light. Trees and other landscape features should be illuminated by concealed uplight fixtures.
- All electrical meter pedestals and light switch/control equipment shall be located with minimum public visibility if possible or shall be screened with appropriate plant materials.
- The level of on-site lighting as well as lighting fixtures, shall comply with any and all applicable requirements and policies of the City of Ontario. Energy conservation, safety and security should be emphasized when designing any light system.
- All community landscape common areas, public facilities, commercial sites, streetscapes, parks, schools and other areas may, at the discretion of the project developer or builders, contain area, accent sports or other night lighting entities.

Irrigation

All landscaped areas shall be watered with a permanent underground irrigation system. Irrigation systems which adjoin a separate maintenance responsibility area shall be designed in a manner to ensure complete water coverage between the areas.

Proper consideration of irrigation system design and installation in the climate extremes of The Avenue area is critical to the success of the landscape investment. In particular, the combined summer elements of heat and wind must be carefully considered in proper irrigation design and equipment selection.

Overhead spray irrigation systems shall be designed with head to head 100 percent double coverage at a minimum. Native and drought tolerant shrub areas will use a combination of spray (temporary) and drip or bubbler irrigation to shrubs and trees. All trees shall have a bubbler or spray irrigation system separate from shrubs and groundcovers. In addition, all irrigation systems shall run by an automatic irrigation controller operated by a centralized computer system with manufacturer to be selected by the Parks and maintenance Department.

Irrigation backflow prevention devices and controllers shall be located with minimum public visibility or shall be screened with appropriate plant materials.

- Reclaimed Water: Irrigation systems designed for use with both domestic and reclaimed water are encouraged (Refer to the city's ~~New Model Colony~~ Ontario Ranch Recycled Water Master Plan for additional information). All irrigation systems shall be designed for the eventual use of reclaimed water and/or conversion when available per current applicable standards.

Water Conservation Measures

- Drip and/or bubbler irrigation will be used where appropriate.
- Use of moisture sensors and/or central control irrigation systems may be incorporated where appropriate and feasible.
- Irrigation systems will be designed per AB 325 guidelines and/or the City of Ontario's Water Conservation Ordinance.
- Irrigation systems and plans will be prepared per landscape maintenance district or the City of Ontario's Landscape Development Standards.



Farming next to Flood Control Channel

- Place plants in similar hydro zone groupings to maximize efficient water use. Do not mix drought tolerant or native plants with ornamental plants that have dissimilar water requirements

6.6.5 Plant Material Guidelines

The Avenue will have a vastly different appearance from initial planting to several years into development. The quality of that appearance will depend on many factors including the initial selection of the plant material palette, soil preparation and installation, irrigation management and care and maintenance. All of these issues have been addressed in the preparation of the planting design theme and plant palette selection. A brief discussion of the planting approach and key issues follows:

General Landscape Requirements

- All areas required to be landscaped shall be planted with turf, groundcover, shrub or tree materials selected from the plant palette contained in these guidelines or other drought-tolerant or regionally appropriate species subject to the approval of ~~Public Facilities Development~~ Landscape Planning Division.
- The owners of parcels which require landscape development shall consider any existing common landscape areas adjoining their property. Where feasible, landscape development shall reinforce or be compatible with such existing common area setting.

- Cut slopes equal to or greater than eight feet (8') in vertical height and fill slopes equal to or greater than five feet (5') in vertical height shall be planted with an erosion ground cover to protect the slope from erosion and instability. Slopes exceeding fifteen feet (15') in vertical height shall be planted with shrubs, spaced not more than ~~ten~~ seven feet (~~10'~~7') average on center or trees spaced not to exceed thirty feet (30') average on center or a combination of shrubs and trees at equivalent spacings, in addition to the groundcover. The plants selected and planting methods shall be suitable for the soil and climatic conditions.
- Reference should be made to the City of Ontario Landscape Development Standards for erosion control methods for slopes and other landscaped areas.
- Parkway Tree Planting: All street or parkway trees shall be planted so as to maintain adequate distance and shall maintain the following planting distances:
- Ten feet (10') from all water and sewer lines, fire hydrants, light standards and power poles.
- Five feet (5') from all flat hardscape (sidewalks, curbs, vaults, etc.) except as otherwise approved by the City.
- Twenty-five feet (25') from street intersection beginning of curb returns (BCR).

Climate Constraints

Plant material palettes for The Avenue contained herein are compatible with the climatic setting of the area. The utilization of some materials, depending upon their site location, exposure and relationship to other influential factors may not be appropriate.

Planting Time

Due to the climate extremes of the area, the installation of plant materials during the coldest winter months (December through March) and the hottest summer/fall months (July through September) can be difficult. Container plant materials not acclimated to the area can easily suffer from damage or sun/heat exposure resulting in partial or entire foliage loss even through such materials are perfectly suited to the temperature ranges once established. If planting must be done during these difficult periods, plant establishment may be difficult and require a prolonged period of time, as well as additional replacement plants.

Horticultural Soils Test Requirements

Soil characteristics within The Avenue project may be variable. The owners of parcels which require landscape development shall procure a horticultural soils report in order to determine proper planting and maintenance requirements for proposed plant materials. Such a soils test shall be performed by a qualified agricultural laboratory and shall include a soil fertility and agricultural suitability analysis with pre-planting and post-planting recommendations.

Topography

The Avenue lies across a flat plain. There may be extreme cold conditions occurring during winter months. This will be affected by the development patterns of the community and are difficult to predict. The plant palette proposed may, on occasion, suffer adverse affects in certain areas of the community. Adjustments may need to be made at that time and other drought-tolerant or regionally appropriate species may be substituted subject to the approval of ~~Public Facilities Development~~ Landscape Planning Division.

Drought Tolerance/Water Conserving Plant Material

Although a plant may be considered as drought tolerant or water conserving, that plant requires proper care, installation, watering and maintenance to maintain an optimum healthy condition.

- Degrees of Drought Tolerance/Water Conservation: There are degrees of drought tolerance with some plants able to withstand or go without water for a greater period of time than others. Water conserving plant material may not be drought tolerant but can thrive on low water amounts throughout the year once established.


Deer Grass

- Plant Installation Water Demand: Drought tolerant plants like other plants, require more watering during the initial installation period and for at least a three month maintenance period following to become established. Therefore, if drought tolerant plants are installed in the warmer months more supplemental water will be required until the plant is established.


Manzanita

- Deep Watering Practices: Drought tolerant plants like most plants need the proper deep watering practices to encourage deep root system development. Drought tolerant plants with a shallow root system resulting from frequent light applications of water will not be drought tolerant. Checking the depth of water penetration into the soil with a soil probe or spade and adjusting irrigation run times enhance plant vigor and prevents plant loss from drought stress over saturation.

- Warmer Months Water Application: Although a plant is labeled drought tolerant, that does not necessarily mean it can survive without summer water, the plant may have low water requirements. Depending upon the plant, drought tolerant plants will have a better appearance and health during the warmer months with infrequent deep watering. Do not water during the heat of the day and avoid overhead watering; prolonged leaf wetting can promote disease.

- Full Season Plant Water Requirements: After drought tolerant plants have grown a full season, the water application rate should be diminished and the drought tolerant plant allowed to survive on less water.

- Maintenance: Drought tolerant and California native plants still need regular maintenance such as pruning, fertilizing, deep watering and checking for pests and diseases.

Invasive Species

Non-native invasive plant species shall not be used in landscape plans. Controlled invasive non-native species shall include the following:

Non-native Acacia's (Acacia spp.)
Tree of Heaven (Ailanthus altissima)
Giant reed (Arundo donax)*
Hottentot-fig (Carpobrotus edulis)
Garland chyrsanthemum (Chrysanthemum coronarium)*
Pampas grass (Cortaderia atacamensis)*
French broom (Cytisus monspessulans)
Scotch broom (Cytisus scoparius)
Crystal ice plant (Mesembryanthemum crystallinum)
Small-flowered ice plant (Mesembryanthemum nodiflorum)
Bermuda buttercup (Oxalis pes-caprae)*
German ivy (Senecio mikanoides)
Pink periwinkle (Vinca major)
Tamarisk (Tamarix spp.)*
Gorse (Ulex europaeus)


Ailanthus altissima

** Indicates a species that may not be used in any plant palettes, regardless of location in the development, due to its ability to readily spread via airborne seeds, rather than vegetatively.*

Plant Pest and Disease Control

A consistent problem in ornamental and native planting schemes is the disease and pests which have affected trees and shrubs often in significant visual patterns through a community. Recent well documented problems include oleander scorch blight and several eucalyptus and olive problems, however, a series of other problems have occurred on an annual basis. There is no way to predict the occurrence of new pests or diseases, however, there are useful methods to limit the impact of outbreaks. These include the following:

- Maintain optimum plant health through soil preparation, water management and nutrient monitoring.
- Review community plant material on a regular basis to observe health problems due to disease or pest infestation and take appropriate action.
- Place plant material in appropriate planting areas and provide proper spacing consistent with the requirements of the plant species.
- Provide good cultural practices to maintain plant health and disease resistance with adequate mulch, sufficient air circulation and protection from mechanical injury from mowers and edgers.

The following Plant List is to provide design guidance and intent. While this list is not a comprehensive list of suitable plants for The Avenue, other drought-tolerant or regionally appropriate species, preferably from the low and moderate species of the WUCOLS (Water Use Classification of Landscape Species) classification system, may be substituted subject to the approval of ~~Public Facilities Development~~ Landscape Planning Division.

Table 5 - Plant List

Trees		Archibald Avenue	Hellman Avenue	Haven Avenue	SCE Corridor	Edison Avenue	Schaefer Avenue	Turner Avenue	The Avenue	Neighborhood Streets	Alleys	Residential Street Trees	Accent Trees	Primary Entries	Secondary Entries	Residential Entry	Typ. Neighb. Park 1 & 2	Sports Park	Retail/Commercial Area
Botanical Name	**Common Name**	Per ~~NMC~~ Ontario Ranch Streetscape Plan																	
Acacia subporosa	Weeping Acacia																		x
Agonis flexuosa	Peppermint Tree									x									
Albizia julibrissin 'Rosa'	Silk Tree																		
~~*Arbutusunedo*~~	~~Strawberry Tree~~											~~x~~				~~x~~			
Bauhinia variegata	Purple Orchid Tree												x				x		
Cassia leptophylla	Gold Medallion Tree																		x
Cedrus deodara	Deodar Cedar												x	x	x	x			
Chamaerops humilis	Mediterranean Fan Palm													x	x				
Chionanthus retusus	Chinese Fringe Tree							x											
Cinnamonum camphora	Camphor Tree													x	x				
Citrus spp.	Citrus												x				x	x	
Cupaneopsis anacardioides	Cottonwood									x		x					x	x	x
~~*Eriobotrya deflexa*~~	~~Loquat~~								~~x~~	~~x~~	~~x~~								
Eucalyptus spp.	Eucalyptus									x									
Fraxinus spp.	Ash													x	x		x	x	
Geijera parviflora	Austraillian Willow											x					x		x
Gleditsia triacanthos	Honey Locust									x							x	x	x

Trees	Archibald Avenue	Hellman Avenue	Haven Avenue	SCE Corridor	Edison Avenue	Schaefer Avenue	Turner Avenue	The Avenue	Neighborhood Streets	Alleys	Residential Street Trees	Accent Trees	Primary Entries	Secondary Entries	Residential Entry	Typ. Neighb. Park 1 & 2	Sports Park	Retail/Commercial Area
Botanical Name	**Common Name**																	
Jacaranda mimosifolia	Jacaranda							x					x	x				
Koelreuteria bipinnata	Chinese Flame Tree								x			x			x		x	x
Lagerstroemia indica	Crape Myrtle							x		x		x	x			x	x	x
~~*Liquidamber styraciflua*~~	~~SweetGum~~														~~x~~			
Liriodendron tulipifera	Tulip Tree						x					x	x	x	x	x	x	x
~~*Magnolia grandiflora*~~	~~Southern Magnolia~~												~~x~~	~~x~~				
Melaleuca linariifolia	Flaxleaf Paperbark																x	x
Melaleuca nesophila	Pink Melaleuca												x	x				
Melaleuca quinquenervia	Cajuput Tree							x										
Michelia champaca	Michelia																	
Olea europea	Olive												x	x		x	x	
Phoenix dactylifera	Date Palm												x	x		x	x	x
Pinus spp.	Pine											x	x	x	x	x	x	x
Pistacia chinensis	Chinese Pistache							x			x				x	x	x	x
Plantanus acerifolia	London Plane Tree								x		x					x		
Plantanus racemosa	California Sycamore							x								x	x	
~~*Prunus spp.*~~	~~Plum~~									~~x~~		~~x~~						
~~*Pyrus spp.*~~	~~Pear~~								~~x~~		~~x~~	~~x~~						
Quercus agifolia	Coast Live Oak												x	x	x	x	x	
Quercus ilex	Cork Oak												x	x	x	x	x	
Podocarpus gracilior	Fern Pine										x				x	x		x
Rhaphiolepis 'Magestic Beauty'	N.C.N.									x						x		x
Rhus lancea	African Sumac															x	x	x
Robinia Pseudoacacia	Locust																	x
Schinus molle	California Pepper						x						x	x	x	x	x	
Sequoia sempervirens	Aptos Blue Redwood												x	x				
Sophora japonica	Japanese Pagoda						x											
Trachycarpus fortunei	Windmill Palm															x	x	
Tristania conferta	Brisbane Box						x		x		x							x
Tristania laurina	N.C.N.								x	x								x
Ulmus parvifolia	Evergreen Elm										x					x	x	x

Per ~~NMC~~ Ontario Ranch Streetscape Plan

Shrubs		Archibald Avenue	Hellman Avenue	Haven Avenue	SCE Corridor	Edison Avenue	Schaefer Avenue	Turner Avenue	The Avenue	Neighborhood Streets	Alleys	Primary Entries	Secondary Entries	Residential Entry	Typ. Neighb. Park 1 & 2	Sports Park	Retail/Commercial Area
Botanical Name	**Common Name**	Per ~~NMC~~ Ontario Ranch Streetscape Plan															
Acacia 'Desert Carpet'	Acacia							x				x	x	x	x	x	x
Agave attenuata	Foxtail Agave								x			x	x	x	x	x	
Aloe species	Aloe								x			x	x	x	x	x	x
Alyogene huegelii	Blue Hibiscus											x	x	x	x	x	x
Arctostaphyllos 'Howard McMinn'	Sur Manzanita																
Baccharis 'spp	Coyote Bush														x	x	
~~*Bougainvillea Species*~~	~~Bougainvillea~~											~~x~~	~~x~~	~~x~~	~~x~~		~~x~~
Buxus m. japonica	Japanese Boxwood									x	x	x	x	x	x	x	x
~~*Ceanothus concha*~~	~~California Lilac~~																
Cistus spp.	Rock Rose							x				x	x	x	x		
Coprosma kirkii	Cooprosma													x	x	x	x
Cotoneaster spp.	Cotoneaster							x				x	x		x	x	
Dietes Bicolor	African Iris									x	x	x	x	x	x	x	x
Echium fastuosum	Pride of Madiera											x	x	x	x	x	
Eleagnus pungens	Silberberry							x								x	x
Encelia farinosa	Encelia																
~~*Escallonia fradesii*~~	~~Escallonia~~											~~x~~	~~x~~	~~x~~	~~x~~	~~x~~	
Festuca californica	California Fescue																
~~*Fremontodendron californica*~~	~~Flannel Bush~~																
Grewia caffra	Lavender Star Flower											x	x				x
Hemerocallis species	Day Lily							x	x			x	x	x	x		x
Hesperaloe spp.	Hesperaloe							x	x	x	x	x	x	x	x	x	x
Heteromeles arbutifolia	Toyon														x		x
~~*Hibiscus rosa-sinensis*~~	~~Golden Dust Hibiscus~~														~~x~~	~~x~~	
Ilex vomitoria 'Nana'	Holly																x
Lantana montevidensis	Lantana								x			x	x	x	x	x	x
Lavandula species	Lavender								x			x	x	x	x		
Lavatera bicolor	N.C.N.																
Leptospermum scoparium	New Zealand Tea Tree																

Shrubs		Archibald Avenue	Hellman Avenue	Haven Avenue	SCE Corridor	Edison Avenue	Schaefer Avenue	Turner Avenue	The Avenue	Neighborhood Streets	Alleys	Primary Entries	Secondary Entries	Residential Entry	Typ. Neighb. Park 1 & 2	Sports Park	Retail/Commercial Area
Botanical Name	**Common Name**	Per ~~NMC~~ Ontario Ranch Streetscape Plan															
Ligustrum japonicum 'Texanum'	Glossy Privet									x		x	x	x	x	x	x
Muhlenbergia 'Regal Mist'	Deer Grass											x	x	x	x	x	x
Myoporum parvifolium	N.C.N.									x						x	x
Phlomis fruticosa	Jerusalem Sage																
~~*Phormium spp.*~~	~~New Zealand Flax~~											~~x~~	~~x~~	~~x~~	~~x~~		~~x~~
Pittosporum spp.	Mock Orange									x	x	x	x	x	x	x	x
Plumbago auriculata	Cape Plumbago							x			x				x	x	x
~~*Pyracantha species*~~	~~Fire Thorn~~							~~x~~									~~x~~
Rhamnus spp.	Coffee													x	x		x
Rhaphiolepis indica	India Hawthorne							x	x		x	x	x	x	x	x	x
Rhus integrifolia	Lemonade Berry																
Rosa species	Rose							x				x	x	x		x	x
Rosemarinus spp.	Rosemary							x	x			x	x	x	x		
Salvia spp.	Sage								x			x	x	x	x	x	x
Salvia spathacea	Hummingbird Sage								x			x			x	x	x
Tagetes lemmonii	Bush Marigold											x	x				
Trachelospermum spp.	Star Jasmine											x	x	x	x		x
Xylosma congestum	Shing Xylosma							x					x	x	x	x	x



Ceanothus



Bougainvillea

Vines		Archibald Avenue	Hellman Avenue	Haven Avenue	SCE Corridor	Edison Avenue	Schaefer Avenue	Turner Avenue	The Avenue	Neighborhood Streets	Alleys	Primary Entries	Secondary Entries	Residential Entry	Typ. Neighb. Park 1 & 2	Sports Park	Retail/Commercial Area
Botanical Name	**Common Name**	Per ~~NMC~~ Ontario Ranch Streetscape Plan															
Bougainvillea species	Bougainvillea							x	x			x	x	x	x	x	x
Distictus buccinatoria	Blood Red Trumpet Vine											x	x	x	x	x	x
Gelsemium sempervirens	Carolina Jessamine											x	x	x			x
Grewia caffra	Lavender Star Flower								x			x	x				
Macfadyana unguis-cati	Cat's Claw											x	x		x	x	x
Pandorea jasminoides	Bower Vine											x	x	x	x	x	x
Parthenocissus tricuspidata	Boston Ivy								x			x	x	x	x	x	x
Rosa banksiae	Lady Bank's Rose																
Wisteria sinensis	Chinese Wisteria								x						x	x	x

Groundcovers		Archibald Avenue	Hellman Avenue	Haven Avenue	SCE Corridor	Edison Avenue	Schaefer Avenue	Turner Avenue	The Avenue	Neighborhood Streets	Alleys	Primary Entries	Secondary Entries	Residential Entry	Typ. Neighb. Park 1 & 2	Sports Park	Retail/Commercial Area
Botanical Name	**Common Name**	Per ~~NMC~~ Ontario Ranch Streetscape Plan															
Acacia 'Desert Carpet'	Dwarf Trailing Acacia														x	x	x
Arctostaphylos 'John Dourley'	Manzanita							x	x			x	x	x			x
Carex spp.	Carex							x	x	x	x	x	x	x	x	x	x
Ceanothus griseus Hor. 'Yankee Point'	California Lilac							x	x								
Coprosma kirkii	Coprosma							x	x			x	x	x	x	x	x
Cotneaster spp.	Cotoneaster							x	x	x	x	x	x	x	x	x	x
Festuca spp.	Fescue							x	x	x	x	x	x	x	x	x	x
Juncus spp.	Rushes							x	x	x	x	x	x	x	x	x	x
Lonicera japonica	Japanese Honeysuckle							x	x	x	x	x	x	x	x	x	x
Myoporum parvifolium	Myoporum																
Myoporum pacificum	Pacific Myoporum								x		x				x	x	x
Rosmarinus prostratus	Prostratus Rosemary								x		x	x	x	x	x	x	x
~~*StipaPulchra*~~	~~Purple Needlegrass~~							~~x~~	~~x~~	~~x~~	~~x~~	~~x~~	~~x~~	~~x~~	~~x~~	~~x~~	~~x~~
Trachelospermum asiaticum	Asiatic Jasmine								x		x	x	x	x	x	x	x

Turfgrass and Seed:

Year round turf grass mixes as follows:

General turf areas:

100% Dwarf tall fescue blend - 10 lbs. per 1,000 s.f.

Park Site and Athletic areas:

Hybrid bermuda (seeded or stolonized)

Bermuda grass must be planted and mature prior to the dormant season.



General Plan Consistency

California Government Code (Title 7, Division 1, Chapter 3, Article 8, Section 65450-65457) permits the adoption and administration of specific plans as an implementation tool for elements contained in the local general plan. Policy plans must demonstrate consistency in regulations, guidelines, and programs with the goals and policies set forth in the general plan. The Avenue Specific Plan has been prepared in conformance with the goals and policies of the City of Ontario Policy Plan. The policy analysis in Table 7-1, "Policy Plan Consistency," describes the manner in which the Avenue Specific Plan complies with The Ontario Plan (TOP) policies applicable to the project.

Plan Policy	Specific Plan Consistency
Land Use Element	
GOAL LU-1: A community that has a spectrum of housing types and price ranges that match the jobs in the City and that make it possible for people to live and work in Ontario and maintain a quality of life.	
LU-1.1 Strategic Growth. We concentrate growth in strategic locations that help create place and identity, maximize available and planned infrastructure, foster the development of transit, and support the expansion of the active and multimodal transportation networks throughout the City.	The Specific Plan outlines pedestrian sidewalk and multi-use trail network connecting neighborhoods to open space, schools and future commercial land use.
LU-1.2 Sustainable Community Strategy. We integrate state, regional, and local Sustainable Community/Smart Growth principles into the development and entitlement process.	Sustainable Community/Smart Growth principles are incorporated into the Avenue Land Use Plan. Pedestrian sidewalks and bicycle paths to be constructed as part of the project throughout the community provide connectivity among residential planning areas and schools to help reduce vehicle trips and miles traveled. The design of residential areas incorporates tree-lined parkways providing shade for pedestrians and parked cars. Safe and efficient pedestrian and bicycle connectivity is provided throughout the project. The Avenue architectural design guidelines allow for a variety of architectural styles that respond to local climate conditions. Some styles allow the incorporation of flat roofs that facilitate the use of solar collectors. All new construction will utilize design features, fixtures, appliances, and heating and cooling controls to conserve energy and water. The landscape concept for The Avenue incorporates a plant palette of drought tolerant materials and requirements that the development implement planting and irrigation systems designed to conserve water. Park and recreation areas will include shaded areas, bicycle racks, and other amenity features to encourage pedestrian and other non-vehicular activities.

Plan Policy	Specific Plan Consistency
LU-1.3 Adequate Capacity. We require adequate infrastructure and services for all development.	The Avenue Specific Plan establishes an infrastructure and public facilities plan to ensure that adequate roadways and public utilities including sewer, water, and drainage facilities along with schools, parks, and other public facilities are provided to serve the project.
LU-1.4 Multimodal Mobility. We require development and urban design, where appropriate, that reduces reliance on the automobile and capitalizes on active transportation, transit, electric vehicles, and multimodal transportation opportunities	The Avenue Specific Plan requires the construction of Class 1 Bike Paths, which are an integral element to creating accessibility and mobility and Class II on-street striped bike lanes shall be provided on roadways within The Avenue Specific Plan area as determined by the City Engineer. Bus turnouts will be provided on Ontario Ranch Road, Schaefer Avenue, Haven Avenue, and Archibald Avenue to the satisfaction of the City Engineer and Omnitrans.
LU-1.6 Complete Community. We incorporate a variety of land uses and building types in our land use planning efforts that result in a complete community where residents at all stages of life, employers, workers, and visitors have a wide spectrum of choices of where they can live, work, shop and recreate within Ontario.	The Avenue provides for development of up to 3,753 residential dwelling units in a variety of residential single-family detached and multi-family attached housing types oriented toward open space amenities.
GOAL LU-2: Compatibility between a wide range of uses and resultant urban patterns and forms.	
LU-2.6 Infrastructure Compatibility. We require infrastructure to be aesthetically pleasing and in context with the community character.	Arterial streets within Avenue will be uniformly landscaped in an aesthetically pleasing manner with 8-10-foot wide landscaped parkways on each side of the street and 16-26 foot wide landscaped medians in each street. A planting buffer area varying in width from 40-50 feet in width will be provided adjacent to sidewalks within the project adjacent to all arterial roadways. Decorative project monuments will be constructed at key project entries providing community identification and establishing a sense of arrival and a welcoming feeling for the community.
LU-2.9 Methane Gas Sites. We require sensitive land uses and new uses on former dairy farms or other methane-producing sites be designed to minimize health risks.	The project will comply with appropriate mitigation measures identified in the project EIR for soil remediation and proper venting to address the potential existence of methane gases within the project.

Plan Policy	Specific Plan Consistency
GOAL LU-4: Development that provides short-term value only when the opportunity to achieve our Vision can be preserved.	
LU-4.3 Infrastructure Timing. We require that the necessary infrastructure and services be in place prior to or concurrently with development.	Approval of the Avenue Specific Plan is accompanied by an application for approval of a development agreement. The development agreement shall include, but not be limited to, methods for financing, acquisition, and construction of infrastructure, acquisition, and development of adequate levels of parkland and schools, as well as the provision of adequate housing opportunities for various segments of the community consistent with the City's regional housing needs assessment. The Avenue development agreement shall be fully approved before the issuance of the first building permits for the project.
GOAL LU-5: Integrated airport systems and facilities that minimize negative impacts to the community and maximize economic benefits.	
LU-5.2 Airport Planning Consistency. We coordinate with airport authorities to ensure The Ontario Plan is consistent with state law, federal regulations, and/or adopted master plans, and airport land use compatibility plans for ONT and Chino Airport.	The Specific Plan will comply with the ALUCP requirements for Ontario Airport (ONT) and Chino Airport as outlined in The Avenue Specific Plan Section 2-6.
LU-5.7 ALUCP Consistency with Land Use Regulations. We comply with state law that requires general plans, specific plans, and all new development to be consistent with the policies and criteria set forth within an Airport Land Use Compatibility Plan for any public-use airport.	The Specific Plan will comply with the ALUCP requirements for Ontario Airport (ONT) and Chino Airport as outlined in The Avenue Specific Plan Section 2-6.
Housing Element	
GOAL H-2 Diversity of types of quality housing that are affordable to a range of household income levels, accommodate changing demographics, and support and reinforce the economic sustainability of Ontario.	

Plan Policy	Specific Plan Consistency
H-2.4 Ontario Ranch. We support a premier lifestyle community in the Ontario Ranch, distinguished by diverse housing, highest design quality, and cohesive and highly amenitized neighborhoods.	The Avenue Specific Plan allows for the development of up to 3,753 residential dwelling units comprised of a variety of single-family detached and multi-family attached homes. Residential land use areas are linked by a network of street- separated sidewalks and bicycle trails connecting all neighborhoods to parks and schools. Residential development is designed to address a variety of lifestyles and economic segments of the marketplace, such as singles, families, executives and "empty nesters."
H-2.5 Housing Design. We require architectural excellence through adherence to City design guidelines, thoughtful site planning, environmentally sustainable practices, and other best practices.	The Specific Plan includes architectural design guidelines to encourage development of diverse neighborhoods with the use of varied architectural styles articulated with elements true to the architectural characteristics of each style.
GOAL H-5 A full range of housing types and community services that meet the special housing needs for all individuals and families in Ontario, regardless of income level, age, or other status.	
H-5.2 Family Housing. We support the development of larger rental apartments that are appropriate for families with children, including, as feasible, the provision of services, recreation, and other amenities.	The Specific Plan allows for the development of condominium and multi-family home types designed to accommodate families with children. The Specific Plan requires that all condominium and multi-family developments within the project provide private recreational areas and/or pocket parks for residents of the development.
Parks & Recreation Element	
GOAL PR-1: A system of safe and accessible parks that meets the needs of the community.	
PR-1.5 Acreage Standard. We strive to provide 5 acres of parkland (public and private) per 1,000 residents.	The project will comply with the City requirement for the payment of an in-lieu fee in amount equivalent to three acres of parkland per 1,000 residents to fund the development of public parks and the requirement that each new development provide park acreage on-site equivalent to 2 acres per 1,000 residents. The Specific Plan includes the provision of private pocket parks in each Planning Area.

Plan Policy	Specific Plan Consistency
PR-1.6 Private Parks. We expect development to provide a minimum of 2 acres of developed private park space per 1,000 residents.	The Specific Plan includes the provision of private pocket parks in each Planning Area with a total acreage provided equivalent to 2 acres of developed private park per 1,000 residents.
PR-1.9 Phased Development. We require parks be built in new communities before a significant proportion of residents move in.	Development within the Specific Plan is required to be reviewed and approved pursuant to the City's Subdivision Ordinance, which requires the approval of tentative and final subdivision maps for the project. Conditions of approval associated with the City's approval of tentative subdivision maps will provide for the timing of construction of parks as part of the development.
PR-1.11 Environmental Function of Parks. We require new parks to meet environmental management objectives.	The Specific Plan requires all new development to be reviewed and approved pursuant to the provisions of the City's Subdivision Ordinance and Development Plan Review process, which provides for review by the City's Planning Department which may require the development to incorporate environmental management objectives into the design of parks.
PR-1.12 Trails. We promote connections between parks and local trails including those managed by other public agencies.	The Specific Plan is designed for bicycle and pedestrian accessibility provided throughout the community through a network of off-street bike and pedestrian trails within the plan area along Archibald, Haven, Ontario Ranch Road and Schaefer Avenues. Connectivity to this network of off-street trails from all residential Planning Areas is provided through the local street system.
PR-1.14 Multi-family Residential Developments. We require that new multi-family residential developments of five or more units provide recreational facilities or open space, in addition to paying adopted impact fees.	The Specific Plan requires that all condominium and multi-family developments within the project provide private recreational areas and/or pocket parks for residents of the development in addition to the payment by the developer of adopted impact fees.
Environmental Resources Element	
GOAL ER-1: A reliable and cost-effective system that permits the City to manage its diverse water resources and needs.	

Plan Policy	Specific Plan Consistency
ER-1.3 Conservation and Sustainable Water Supply. We work with regional water providers and users to conserve water and ensure sustainable local water supplies as more frequent droughts reduce long term local and regional water availability.	The Specific Plan requires all public and common area landscaping within the project to utilize plant materials listed on the approved Specific Plan Landscape Plant Matrix, which is comprised of drought tolerant and California Friendly plant materials. The Specific Plan requires that irrigation systems for both public and private landscaped areas be designed to be as water-efficient as possible and includes the following minimum requirements. • Use of moisture sensors and/or central control irrigation systems may be incorporated where appropriate and feasible. • Drip and/or bubbler irrigation will be used where appropriate. • Irrigation systems will be designed per AB325 guidelines and/or the City of Ontario's Water Conservation Ordinance. • Irrigation systems and plans will be prepared per landscape maintenance district or the City of Ontario's Landscape Development Standards. • Place plants in similar hydro zone groupings to maximize efficient water use. Do not mix drought tolerant or native plants with ornamental plants that have dissimilar water requirements.
ER-1.5 Water Resource Management. Environmental justice areas are prioritized as we coordinate with local agencies to protect water quality, prevent pollution, address existing contamination, and remediate contaminated surface water and groundwater.	The Avenue Specific Plan requires that the developer obtain approval of a Strom Water Pollution Prevention Plan (SWPPP) prior to issuance of grading or construction permits. All projects greater than 1 acre in size shall apply for coverage under the California General Permit To Discharge Storm Water Associated with construction activity, obtain a WDID# from the State Water Resources Control Board and prepare a Stormwater Pollution Prevention Plan (SWPPP) on the CASQA 2009 Template form and upload it to the State's SMART database system.

Plan Policy	Specific Plan Consistency
	In addition to the preparation of a SWPPP for construction-related activities, and as part of the approval of any grading plans for the project, the developer is required to submit a Water Quality Management Plan (WQMP) on the regional model form provided by the City. The WQMP shall identify and detail all Site Design BMP's, Source Control BMP's and Treatment Control BMP's to be implemented or installed as part of the project in order to reduce storm water pollutants and site runoff.
ER-1.6 Urban Run-off Quantity. We encourage the use of low impact development strategies, including green infrastructure, to intercept run-off, slow the discharge rate, increase infiltration, and ultimately reduce discharge volumes to traditional storm drain systems.	The Specific Plan requires that grading and drainage for the project be designed to retain, filter, and/or treat surface runoff to the maximum extent practicable, to comply with the requirements of the current San Bernardino County NPDES Stormwater Program's MS4 Permit and Water Quality Management Plan (WQMP) for significant new development projects. These effects may be minimized through the implementation of site designs that reduce runoff and pollutant transport by minimizing impervious surfaces and maximizing on-site infiltration, Source Control Best Management Practices (BMP's) and/or either on-site structural Treatment Control BMP's, or participation in regional or watershed-based Treatment Control BMP's. An alternative to the implementation of on-site Low Impact Development (LID) BMPs to retain/infilter and treat stormwater runoff is the utilization of the off-site, regional Mill Creek Wetland facility for accomplishing water quality improvements in residential project runoff from this master planned community. All non-residential planning area projects within The Avenue will incorporate all required on-site LID BMPs, pursuant to the requirements of the current San Bernardino County Water Quality Management Plan.

Plan Policy	Specific Plan Consistency
ER-1.7 Urban Run-off Quality. We require the control and management of urban run-off, consistent with Regional Water Quality Control Board regulations.	The Specific Plan requires that the project comply with the most recent requirements of the San Bernardino County NPDES Storm Water Program's Quality Management (WQMP) for significant new development projects. A final WQMP is required to be submitted by the developer for approval by the City prior to the issuance of any grading and construction permits for the project.
ER-1.8 Wastewater Management. We require the management of wastewater discharge and collection consistent with waste discharge requirements adopted by the Regional Water Quality Control Board.	The Specific Plan requires the construction of a wastewater system consistent with City requirements and also requires that the project obtain approval of a WQMP for the project prior to the issuance of any grading or construction permit.
Community Economics Element	
GOAL ER-3: Cost-effective and reliable energy system sustained through a combination of low impact buildings, site and neighborhood energy conservation, and diverse sources of energy generation that collectively helps to minimize the region's carbon footprint.	
ER-3.1 Conservation Strategy. We require conservation as the first strategy to be employed to meet applicable energy-saving standards.	The Specific Plan requires all public and common area landscaping within the project to utilize plant materials listed on the approved Specific Plan Landscape Plant Matrix, which is comprised of drought tolerant and California Friendly plant materials. The Specific Plan requires that irrigation systems for both public and private landscaped areas be designed to be as water-efficient as possible. The Specific Plan requires the construction of separate water mains for the use of recycled water in public and common areas of the project. The Specific Plan includes architectural styles that respond to local climate conditions and allow for the incorporation of flat roofs that facilitate the use of solar collectors. All new construction will utilize fixtures, appliances, and heating and cooling controls to conserve water and energy.

Plan Policy	Specific Plan Consistency
ER-3.2 Green Development– Communities. We encourage the use of the LEED Neighborhood Development rating system, or similar mechanism, to guide the planning and development of all new communities.	The Specific Plan includes architectural guidelines, which allow for a variety of styles that respond to local climate conditions. Some styles allow the incorporation of flat roofs that facilitate the use of solar collectors. All new construction will utilize design features, fixtures, appliances, and heating and cooling controls to conserve energy and water. The landscape concept for The Avenue incorporates a plant palette and a planting and irrigation system designed to conserve water. Park and recreation areas will include shaded areas, bicycle racks, and other amenity features to encourage pedestrian and other non-vehicular activities.
ER-3.3 Building and Site Design. We require new construction to incorporate energy efficient building and site design strategies, which could include appropriate solar orientation, maximum use of natural daylight, passive solar, and natural ventilation.	The Specific Plan includes architectural design guidelines, which allow for styles that respond to local climate conditions. Some styles allow for flat roofs that facilitate the use of solar collectors.
GOAL ER-4: Improved indoor and outdoor air quality and reduced locally generated pollutant emissions.	
ER-4.4 Indoor Air Quality. We will comply with State Green Building Codes relative to indoor air quality. We seek funding to improve indoor air quality for households with poor indoor air quality, with priority for lower income households in environmental justice areas.	All development within the Specific Plan will be required to comply with the State Green Building Code as implemented by the City.
GOAL ER-5 Protected high value habitat and farming and mineral resource extraction activities that are compatible with adjacent development.	
ER-5.2 Entitlement and Permitting Process. We comply with state and federal regulations regarding protected species.	The project will comply with all mitigation measures identified in the project EIR with regard to biological resources.
ER-5.3 Right to Farm. We support the right of existing farms to continue their operations within the Ontario Ranch.	The Specific Plan requires a minimum 100-foot wide agricultural buffer be provided by the development between any new residential structure and any existing animal feed trough, corral/pen or an existing dairy/feed lot.

Plan Policy	Specific Plan Consistency
ER-5.4 Transition of Farms. We protect both existing farms and sensitive uses around them as agricultural areas transition to urban uses.	The Specific Plan requires a minimum 100-foot wide agricultural buffer be provided by the development between any new residential structure and any existing animal feed trough, corral/pen or an existing dairy/feed lot.
Community Economics Element	
GOAL CE-1: A complete community that provides for all incomes and stages of life.	
CE-1.6 Diversity of Housing. We collaborate with residents, housing providers, and the development community to provide housing opportunities for every stage of life; we plan for a variety of housing types and price points to encourage the development of housing supportive of our efforts to attract business in growing sectors of the community while being respectful of existing viable uses.	The Specific Plan allows for the development of 3,753 residential dwelling units comprised of single-family detached and multi-family attached homes. A network of street-separated sidewalks and Multipurpose Trails connecting all neighborhoods to parks and schools links residential land use areas. Residential development is designed to address a variety of lifestyles and economic segments of the marketplace, such as singles, families, executives and "empty nesters."
GOAL CE-2: A City of distinctive neighborhoods, districts, corridors, and centers where people choose to be.	
CE-2.1 Development Projects. We require new development and redevelopment to create unique, high-quality places that add value to the community.	The Specific Plan includes architectural and landscape design guidelines.
CE-2.2 Development Review. We require those proposing new development and redevelopment to demonstrate how their projects will create appropriately unique, functional, and sustainable places that will compete well with their competition within the region.	The Specific Plan requires all new development to be reviewed and approved pursuant to the provisions of the City's Subdivision Ordinance and Development Plan Review process which provides for review by the City's Planning Department which may require the development to demonstrate how the project will create appropriately unique, functional and sustainable places.
CE-2.5 Private Maintenance. We require adequate maintenance, upkeep, and investment in private property because proper maintenance on private property protects property values.	The Specific Plan includes a Maintenance Responsibility Matrix defining the private responsibilities for maintenance of private roadways, parkways, trails, common areas, parks, yards, walls, and monuments within the project.

Plan Policy	Specific Plan Consistency
CE-2.6 Public Maintenance. We require the establishment and operation of maintenance districts or other vehicles to fund the long-term operation and maintenance of the public realm whether on private land, in rights-of-way, or on publicly-owned property.	The Specific Plan includes a Maintenance Responsibility Matrix defining the responsible public entities, including special districts, for maintenance of roadways, sidewalks, traffic signals, off site and on site public water, sewer, and storm drain infrastructure facilities.
Safety Element	
GOAL S-1: Minimized risk of injury, loss of life, property damage, and economic and social disruption caused by earthquake-induced and other geologic hazards.	
S-1.1 Implementation of Regulations and Standards. We require that all new habitable structures be designed in accordance with the most recent California Building Code adopted by the City, including provisions regarding lateral forces and grading.	All development within the Specific Plan will be required to comply with the State of California Building Code as adopted and implemented by the City.
GOAL S-3: Reduced risk of death, injury, property damage and economic loss due to fires, accidents and normal everyday occurrences through prompt and capable emergency response.	
S-3.8 Fire Prevention through Environmental Design. We require new development to incorporate fire prevention consideration in the design of streetscapes, sites, open spaces, and buildings.	The Specific Plan requires new development to be reviewed and approved pursuant to the City's Subdivision Ordinance and Development Plan Review process, allowing for the Fire Department review, and requiring the incorporation of any required fire prevention design elements in streetscapes, open spaces and buildings.
GOAL S-4: An environment where noise does not adversely affect the public's health, safety, and welfare.	
S-4.1 Noise Mitigation. We utilize the City's Noise Ordinance, building codes, and subdivision and development codes to mitigate noise impacts.	All development within the Specific Plan will be required to comply with City's Noise Ordinance, building codes, and subdivision and development codes to mitigate noise impacts.
GOAL S-5: Minimize the risk of injury, property damage, and economic loss resulting from windstorms and wind-related hazards.	
S-5.1 Dust Control Measures. We require the implementation of Best Management Practices for dust control at all excavation and grading projects.	Construction within the Specific Plan will comply with a City approved construction management plan and all mitigation measures identified in the project EIR with regard to dust control.

Plan Policy	Specific Plan Consistency
GOAL S-6: Reduced potential for hazardous materials exposure and contamination.	
S-6.9 Remediation of Methane. We require development to assess and mitigate the presence of methane, per regulatory standards and guidelines.	The project will comply with all mitigation measures identified as part of the project EIR for soil remediation and proper venting to address the potential existence of methane gases within the project.
GOAL S-7: Residential neighborhoods, commercial areas, and industrial districts that are kept safe through a multi-faceted approach of prevention, suppression, and community involvement in public safety.	
S-7.4 Crime Prevention through Environmental Design (CPTED). We require new development to incorporate CPTED in the design of streetscapes, sites, open spaces, and buildings.	The Specific Plan requires all new development to be reviewed and approved pursuant to the provisions of the City's Subdivision Ordinance and Development Plan Review process which provides for review by the City's Police Department, which may require the development to incorporate CPTED in the design of streetscapes, sites, open spaces and buildings.
Mobility Element	
GOAL M-1: A system of roadways that meets the mobility needs of a dynamic and prosperous Ontario.	
M-1.1 Roadway Design and Maintenance. We require our roadways to: • Comply with federal, state, and local design and safety standards; • Meet the needs of multiple transportation modes and users; • Handle the capacity envisioned in the City of Ontario Master Plan of Streets and Highways; • Be maintained in accordance with best practices; • Be compatible with the streetscape and surrounding land uses; and • Promote the efficient flow of all modes of traffic through the implementation of intelligent transportation systems and travel demand management strategies	The Specific Plan requires the construction of a network of Master Plan Roadways designed consistent with the requirements of the City's Functional Roadway Classification Plan and the New Model Colony Streetscape Master Plan. The roadway system is designed to maintain a peak hour Level of Service (LOS) E or better at all intersections as discussed in the project EIR. Site design, source control, and treatment BMP's for the project are required to be submitted by the developer for approval by the City prior to issuance of permits for the project.

Plan Policy	Specific Plan Consistency
GOAL M-2: A system of trails and corridors that facilitate and encourage active modes of transportation.	
M-2.3 Pedestrian Walkways. We require streets to include sidewalks and visible crosswalks at major intersections where necessary to promote safe and comfortable mobility between residential areas, businesses, schools, parks, recreation areas, and other key destination points.	The Specific Plan requires the developer of the project to coordinate with the local mass transit provider, Omnitrans, to accommodate adequate area for any bus turnouts within the Master Plan Roadways as required by Omnitrans.
Community Design Element	
GOAL CD-1: A dynamic, progressive city containing distinct and complete places that foster a positive sense of identity and belonging among residents, visitors, and businesses.	
CD-1.2 Place Types. We establish Place Types in urban, mixed use, and transit-oriented areas to foster the City's identity as a premier community and require new development within each Place Type to incorporate prescribed urban patterns, forms, and placemaking priorities.	The Specific Plan includes design guidelines to guide the physical character of all future residential development and all community and neighborhood features, including the overall landscape treatment within the project. The proposed community character establishes a unified aesthetic treatment and design theme. The community vision for The Avenue is based upon the architectural and landscape influences found in Ontario and throughout Southern California. The architectural styles and landscape concept chosen for the community have been selected in order to be reflective of older neighborhoods of historic Ontario as well as to accommodate innovative transitional influences. Together, the architectural styles and landscape concept are designed to create a neighborhood character for The Avenue that will be sustainable over time.
CD-1.5 View Corridors. We require all major north-south streets be designed and redeveloped to feature views of the San Gabriel Mountains, which are part of the City's visual identity and a key to geographic orientation. Such views should be free of visual clutter, including billboards and may be enhanced by framing with trees.	The major north south streets in The Avenue are designed to frame the views of the San Gabriel Mountains. The Specific Plan requires the construction of extensive landscaping on both sides of each street and in the median of each street. All new utility lines will be placed underground.

Plan Policy	Specific Plan Consistency
GOAL CD-2: A high level of design quality resulting in neighborhoods, commercial areas, public spaces, parks, and streetscapes that are attractive, safe, functional, human- scale, and distinct	
CD-2.1 Quality Building Design and Architecture. We encourage all development projects to convey visual interest and character through: • Building volume, massing, and height to provide context-appropriate scale and proportion; • A true architectural style which is carried out in plan, section, and elevation through all aspects of the building and site design and appropriate for its setting; and • Exterior building materials that are articulated, high quality, durable, and appropriate for the architectural style.	The Specific Plan includes design guidelines to guide the construction of the project by requiring building massing to address the street and the pedestrian experience, the use of selected architectural styles to be implemented in a comprehensive manner throughout each neighborhood around all building elevations, and the use of building materials and architectural features and elements which are true to each selected style.
CD-2.2 Neighborhood Design. We create distinct residential neighborhoods that promote a sense of community and identity by emphasizing access, connectivity, livability, and social interaction through such elements as: • A pattern of smaller, walkable blocks that promote activity, safety, and access to nearby amenities and services; • Varied parcel sizes and lot configurations to accommodate a diversity of housing types; • Traffic calming measures to slow traffic and promote walkability while maintaining acceptable traffic flows and emergency evacuation access; • Floor plans that encourage views onto the street and de-emphasize the visual and physical dominance of garages (introducing the front porch as the "outdoor living room"), as appropriate; and • Landscaped parkways, with sidewalks separated from the curb and designed to maximize safety, comfort, and aesthetics for all users.	The Avenue is designed as a walkable community of traditional residential neighborhoods organized around a simple grid street system offering a variety of home types within an open space setting. Residents can walk or bike to parks and schools via an interconnected network of sidewalks and trails throughout the community. Traditional site planning elements, varied residential product design and architecture, well-landscaped streets and enhanced entries combine to create welcoming neighborhoods within the community with aesthetic and functional harmony. Streets are linked together in a grid pattern with sidewalks separated from the street by landscaped parkways providing a simple and understandable system for pedestrian and vehicular travel connecting neighborhoods, open space amenities, public facilities, and recreational areas. A variety of housing types, including detached single-family homes, attached single-family homes, and multifamily homes are planned for Avenue, all of which are located close to schools, parks, and open space amenities.

Plan Policy	Specific Plan Consistency
	Residential development standards and design guidelines contained in the Specific Plan ensure that homes are designed at a human scale emphasizing architecture fronting the street. Residential development standards are designed to minimize views of garage doors through use of alternating garage configurations. Traffic calming features incorporated into neighborhood streets include a traditional grid pattern with sidewalks separated by landscaping on either side of the street, and the use of intersection chokers and roundabouts where appropriate.
CD-2.5 Streetscapes. We design new and, when necessary, retrofit existing streets to improve walkability, bicycling and transit integration, strengthen connectivity, and enhance community identity through improvements to the public right-of-way such as sidewalks, street trees, parkways, curbs, street lighting and street furniture.	The Specific Plan is designed with a comprehensive street system to accommodate the safe and efficient movement of automobiles as well as bike trails and a multi-purpose trail to accommodate bicycle and pedestrian mobility and connectivity throughout the community. Streets are designed as a grid system of short blocks allowing for various access points and travel routes. Streets are designed with sidewalks separated from the street to create an inviting environment for walking. Streets connect neighborhoods, parks and schools through a variety of travel paths. There will be several points in the trail system linking to secondary paths that will lead to The Avenue's retail/commercial areas, as well as to the neighborhoods. Multi-use paths are provided within the plan area along Archibald, Haven, Ontario Ranch Road and Schaefer Avenues. These paths are provided adjacent to the major drainage easement, along Hellman Avenue, and along the spine road which traverses the center of the plan area in an east-west direction. Connectivity to this network of off street bike trails from all residential Planning Areas is provided through the local street system.

Plan Policy	Specific Plan Consistency
CD-2.6 Connectivity. We promote development of local street patterns, multimodal networks, and connected public spaces that create and unify neighborhoods, rather than divide them, and create cohesive and continuous corridors, rather than independent "islands" through the following means: • Local street networks that provide access both between subdivisions and within neighborhoods and discourage through traffic; • A local street system that is logical and understandable for the user. A grid system is preferred to avoid circuitous and confusing travel paths between internal neighborhood areas and adjacent arterials and to provide adequate emergency and evacuation access; and • Pedestrian and bicycle networks that provide convenient access to neighborhoods and nearby destinations, such as schools, parks, other public spaces, commercial areas, and transit stops.	Off-street pedestrian circulation is available throughout The Avenue by means of the interconnected, paved sidewalk system within the roadway right-of-way, separated from travel lanes by a landscaped parkway and within off-street Multipurpose Trails. The Project pedestrian system provides connectivity among residential neighborhoods to pocket parks and the schools within The Avenue. Streets are designed in a simple grid system with short blocks promoting a sense of small neighborhoods.
CD-2.8 Safe Design. We incorporate defensible space design into new and existing developments to ensure the maximum safe travel and visibility on pathways, corridors, and open space and at building entrances and parking areas by avoiding physically and visually isolated spaces, maintaining visibility and accessibility, and using lighting.	Residential development standards and design guidelines contained within the Specific Plan require home designs with fronts of homes, not garages, oriented toward the street to ensure that "eyes are on the street" in each neighborhood. Residences are oriented around open space, parks, and trails. Parking areas and garages are located to the rear of residences to avoid dominance of the streetscape by automobiles and to enhance a pedestrian environment on all streets.
CD-2.9 Landscape Design. We encourage durable, sustainable, and drought-tolerant landscaping materials and designs that enhance the aesthetics of structures, create and define public and private spaces, and provide shade and environmental benefits.	The landscape concept for The Avenue incorporates the use of durable landscaping materials, a drought tolerant plant palette, and a planting and irrigation system designed to conserve water. Park and recreation areas will include shaded areas, bicycle racks, and other amenity features to encourage pedestrian and other non-vehicular activities. All materials utilized in private and public common areas will be durable landscaping materials.

Plan Policy	Specific Plan Consistency
CD-2.11 Entry Statements. We encourage the inclusion of amenities, signage, and landscaping at the entry to neighborhoods, commercial centers, mixed use areas, industrial developments, and public places that reinforce them as uniquely identifiable places.	Signage and landscaping will be provided at neighborhood entries within The Avenue. Community and neighborhood entry monumentation is required by the Specific Plan and is designed to establish a hierarchy for each Planning Area of the community. At key entries a monumentation program will be utilized to help identify the community as well as convey a sense of arrival and a welcoming feel for both vehicular and pedestrian traffic. These monuments and "gateways" are to be designed with durable, lasting materials approved by the City of Ontario.
CD-2.12 Site and Building Signage. We encourage the use of sign programs that utilize complementary materials, colors, and themes. Project signage should be designed to effectively communicate and direct users to various aspects of the development and complement the character of the structures.	The Avenue Specific Plan requires identification signage and individualized landscape theming. Signage may be permanent or temporary and will be subject to review and approval by the master community developer. The signage and landscape materials must be compatible and complementary to The Avenue's landscape design theme.
GOAL CD-3: Vibrant urban environments that are organized around intense buildings, pedestrian and transit areas, public plazas, and linkages between and within developments that are conveniently located, visually appealing and safe during all hours.	
CD-3.1 Unique Identity. We promote development that heightens the unique character and identity of each Place Type by requiring compatible land uses and land planning, site design, and building design that promotes an active public realm.	The Specific Plan includes architecture and landscape design guidelines to enrich the community landscape and architectural style for The Avenue. The design guidelines are organized to define the basic landscape design principles for the project, to guide the implementation of the "design vision," and to ensure the design integrity of the project. All landscape plans, streetscape plans, and graphic designs with regard to community identity, neighborhood identity, or entry monumentation within the project are required to conform to the landscape design guidelines as set forth in the Specific Plan and are subject to review and approval by the City of Ontario.

Plan Policy	Specific Plan Consistency
CD-3.3 Complete and Connected Network. We require that pedestrian, vehicular, and bicycle circulation on both public and private property be coordinated to provide connections internally and externally to adjacent neighborhoods and properties (existing and planned) through a system of local roads and trails that promote walking and biking to nearby destinations (including existing and planned parks, commercial areas, and transit stops) and are designed to maximize safety, comfort, and aesthetics.	The Specific Plan is designed for bicycle and pedestrian accessibility throughout the community through a network of off-street bike and pedestrian trails or multi-use paths within Ontario Ranch Road, Archibald, Haven, Schaefer and Hellman Avenues. Connectivity to this network of off street trails from all residential Planning Areas is provided through the local street system.
CD-3.5 Active Frontages. We create lively pedestrian streetscapes by requiring primary building, business, and residential entrances, outdoor dining, and storefronts be located on ground floors adjacent to sidewalks or public spaces and designed to maximize safety, comfort, aesthetics, and the intended functionality (as defined by the Place Type).	The Specific Plan includes architectural design guidelines, which promote street facing front entries and architectural elements visible from adjacent streets, sidewalks, and parks within the project.
GOAL CD-5: A sustained level of maintenance and improvement of properties, buildings, and infrastructure that protects the property values and encourages additional public and private investments.	
CD-5.1 Maintenance of Buildings and Property. We require all public and privately-owned buildings and property (including trails and easements) to be properly and consistently maintained.	The Specific Plan includes a Maintenance Responsibility Matrix defining the public, private, and utility entities responsible for maintenance of roadways, parkways, trails, sidewalks, common areas, parks, yards, walls and monuments, traffic signals, infrastructure, and utilities within the project.
CD-5.2 Maintenance of Infrastructure. We require the continual maintenance of infrastructure.	The Specific Plan includes a Maintenance Responsibility Matrix defining the responsible entities for continual maintenance of roadways, sidewalks, traffic signals, off site and on site public water, sewer, and storm drain infrastructure facilities.

Plan Policy	Specific Plan Consistency
Social Resources Element	
GOAL SR-2: A range of educational and training opportunities for residents and workers of all ages and abilities that improves their life choices and provides a skilled workforce for our businesses.	
SR-2.4 Access to Schools. We work with local and regional partners to improve the safety in and around schools and to improve access for citizens of all ages and abilities to schools and community services, such as after school and other programs.	The Avenue Specific Plan lists creating a strong functional relationship between homes and schools and providing for connectivity between residential neighborhoods, recreational areas, and to the schools, by means of pedestrian and bicycle trail linkages, as part of the Specific Plan Objectives.
GOAL SR-5: Local heritage, entertainment, and cultural experiences that enrich the lives of Ontario's residents, workers, and visitors and serve to attract residents and businesses to the City.	
SR-5.3 Public Art. We encourage public art in buildings, parks, open spaces, and other public and private spaces.	The Avenue Specific Plan Landscape Design Guidelines includes provision of active and passive pedestrian spaces that encourage user interaction; Fountains, stages, public art is encouraged for these spaces.

LAND DEVELOPMENT DIVISION CONDITIONS OF APPROVAL

303 East B Street, Ontario, California 91764 Phone: 909.395.2036 / Fax: 909.395.2420

Date Prepared: 1/2/2025

File No: PSPA22-005

Related Files: PMTT23-002

Project Description: An amendment to The Avenue Specific Plan to: 1) modify the land use designation of Planning Area 4 and apply density modifications to Planning Areas 1B, 2A, 3B, and 5 for consistency with The Ontario Plan 2050 Land Use Plan; 2) apply general modifications throughout the document for clarity; and, 3) make exhibit and text updates throughout the document to support the Project, for land located at the northwest corner of Archibald Avenue and Ontario Ranch Road**;** (APNs: 0218-191-04; 0218-191-14; 0218-191-15; 0218-191-16; 0218-191-05; 0218-191-22; 0218-191-20); **submitted by Richland Communities.**

Prepared By: Alexis Vaughn, Associate Planner
Phone: 909.395.2416 (direct)
Email: avaughn@ontarioca.gov

The Planning Department, Land Development Section, conditions of approval applicable to the above-described Project are listed below. The Project shall comply with each condition of approval as listed:

1.0 Standard Conditions of Approval. The project shall comply with the *Standard Conditions for New Development*, adopted by City Council Resolution No. 2017-027 on April 18, 2017. A copy of the *Standard Conditions for New Development* may be obtained from the Planning Department or City Clerk/Records Management Department.

2.0 Special Conditions of Approval. In addition to the *Standard Conditions for New Development* identified in condition no. 1.0, above, the project shall comply with the following special conditions of approval:

2.1 Specific Plan Amendment. The following shall be submitted to the Planning Department within 30 days following City Council approval of the Specific Plan Amendment:

(a) Two hard copies of the final Specific Plan document (bound, double-sided, color);

(b) One flash drive containing:

(i) A complete Microsoft Word or equivalent copy of the final Specific Plan document, including all required revisions;

(ii) A complete PDF copy of the final Specific Plan document, including all required revisions; and

(iii) A complete electronic website version (PDF, reduced size, OCR) of the final Specific Plan document, including all required revisions.

2.2 Signs.

(a) All Project signage shall comply with the requirements of Ontario Development Code Division 8.1 (Sign Regulations).

(b) On-site posting of public noticing shall be provided pursuant to Code Section 2.03.010.C.4, which consists of one or more large, 6-foot-tall, freestanding public notification signs. The sign face shall measure 4 feet tall by 8 feet wide, in a format approved by the Planning Director. The sign shall be posted no later than ten calendar days prior to the Planning Commission hearing date and removed no later than fourteen calendar days following the City Council hearing date, unless otherwise required by the Planning Director. The format is available on the City's website.

2.3 Additional Fees.

(a) Within 5 days following final application approval, the Notice of Determination ("NOD") filing fee shall be provided to the Planning Department. The fee shall be paid by check, made payable to the "Clerk of the Board of Supervisors", which shall be forwarded to the San Bernardino County Clerk of the Board of Supervisors, along with all applicable environmental forms/notices, pursuant to the requirements of the California Environmental Quality Act ("CEQA"). Failure to provide said fee within the time specified will result in the extension of the statute of limitations for the filing of a CEQA lawsuit from 30 days to 180 days.

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING AN ADDENDUM TO THE ONTARIO PLAN 2050 SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT, PURSUANT TO THE REQUIREMENTS OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT, AS AMENDED, FOR FILE NO. PSPA22-005.

WHEREAS, RICHLAND COMMUNITIES (hereinafter referred to as "Applicant") has filed an Application for the approval of a Specific Plan Amendment, File No. PSPA22-005, which consists of an amendment to The Avenue Specific Plan to: 1) modify the land use designation of Planning Area 4 and apply density modifications to Planning Areas 1B, 2A, 3B, and 5 for consistency with The Ontario Plan 2050 Land Use Plan; 2) apply general modifications throughout the document for clarity; and, 3) make exhibit and text updates throughout the document to support the Project, for land located at the northwest corner of Archibald Avenue and Ontario Ranch Road, in the City of Ontario, California (hereinafter referred to as "Application" or "Project"); and

WHEREAS, the City of Ontario certified the Environmental Impact Report prepared for The Ontario Plan and associated Statement of Overriding Considerations, and issued Resolution No. 2010-003; and

WHEREAS, the City of Ontario adopted the Policy Plan (General Plan) as part of the component framework for The Ontario Plan on January 27, 2010, and issued Resolution No. 2010-004; and

WHEREAS, the City of Ontario certified the Supplemental Environmental Impact Report (SEIR), for the General Plan Amendment for The Ontario Plan 2050 Technical Update on August 16, 2022; and

WHEREAS, the Planning Director of the City of Ontario has prepared and approved for attachment to the certified Supplemental Environmental Impact Report, an Addendum to the Certified SEIR (hereinafter referred to as "SEIR Addendum") in accordance with the requirements of the California Environmental Quality Act of 1970, together with State and local guidelines implementing said Act, all as amended to date (collectively referred to as "CEQA"); and

WHEREAS, the SEIR Addendum concluded that implementation of the Project could result in a number of significant effects on the environment that were previously analyzed in the Certified SEIR, and that the Certified SEIR identified mitigation measures that would reduce each of those significant effects to a less-than-significant level; and

WHEREAS, pursuant to State CEQA Guidelines Section 15164(a), a lead agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary to a project, but the preparation of a subsequent or supplemental EIR is not required; and

WHEREAS, the City determined that none of the conditions requiring preparation of a subsequent or supplemental EIR would occur from the Project, and that preparation of an Addendum to the Certified SEIR was appropriate; and

WHEREAS, on February 25, 2025, the Planning Commission of the City of Ontario conducted a hearing to consider the Addendum and concluded said hearing on that date, voting to issue Resolution No. PC25-012, recommending that the City Council concluded that none of the conditions requiring preparation of a subsequent or supplemental EIR have occurred, and further recommending that the City Council take actions on the Project in compliance with CEQA and state and local guidelines implementing CEQA; and

WHEREAS, the City of Ontario is the lead agency on the Project, and the City Council is the decision-making body for the requested approval to construct and otherwise undertake the Project; and

WHEREAS, the City Council has reviewed and considered the EIR Addendum for the Project, has concluded that none of the conditions requiring preparation of a subsequent or supplemental EIR have occurred, and intends to take actions on the Project in compliance with CEQA and state and local guidelines implementing CEQA; and

WHEREAS, the EIR Addendum for the Project are on file in the Planning Department, located at 303 East B Street, Ontario, CA 91764, are available for inspection by any interested person at that location and are, by this reference, incorporated into this Resolution as if fully set forth herein; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED, AND RESOLVED by the City Council of the City of Ontario, as follows:

SECTION 1: ***Environmental Determination and Findings.*** As the decision-making body for the Project, the City Council has reviewed and considered the information contained in the administrative record for the Project. Based upon the facts and information contained in the administrative record, including all written and oral evidence presented to the City Council, the City Council finds as follows:

(1) The environmental impacts of this Project were reviewed in conjunction with an Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364), certified by the Ontario City Council on August 16, 2022, in conjunction with File No. PGPA20-002; and

(2) The EIR Addendum and administrative record have been completed in compliance with CEQA, the State CEQA Guidelines, and the City of Ontario Local CEQA Guidelines; and

(3) The City's "Guidelines for the Implementation of the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed. This Application introduces no new significant environmental impacts; and

(4) All previously adopted mitigation measures shall be a condition of Project approval, as they are applicable to the Project, and are incorporated herein by this reference; and

(5) The SEIR Addendum contains a complete and accurate reporting of the environmental impacts associated with the Project, and reflects the independent judgment of the City Council; and

(6) There is no substantial evidence in the administrative record supporting a fair argument that the Project may result in significant environmental impacts.

SECTION 2: ***Additional Environmental Review Not Required.*** Based on the Addendum, all related information presented to the City Council, and the specific findings set forth in Section 1, above, the City Council finds that the preparation of a subsequent or supplemental Environmental Impact Report is not required for the Project, as the Project:

(1) Does not constitute substantial changes to the Certified SEIR that will require major revisions to the Certified SEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and

(2) Does not constitute substantial changes with respect to the circumstances under which the Certified SEIR was prepared, that will require major revisions to the Certified SEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of the previously identified significant effects; and

(3) Does not contain new information of substantial importance that was not known and could not have been known with the exercise of reasonable diligence at the time the Certified SEIR was certified/adopted, that shows any of the following:

(a) The Project will have one or more significant effects not discussed in the Certified SEIR; or

(b) Significant effects previously examined will be substantially more severe than shown in the Certified SEIR; or

(c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the City declined to adopt such measures; or

(d) Mitigation measures or alternatives considerably different from those analyzed in the Certified SEIR would substantially reduce one or more significant effects on the environment, but which the City declined to adopt.

SECTION 3: ***City Council Action.*** Based upon the findings and conclusions set forth in Sections 1 and 2, above, the City Council hereby finds that based upon the entire record of proceedings before it, and all information received, that there is no substantial evidence that the Project will constitute substantial changes to the Certified SEIR, and does hereby approve the SEIR Addendum, attached hereto as "Attachment A," and incorporated herein by this reference.

SECTION 4: ***Indemnification.*** The Applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void, or annul this approval. The City of Ontario shall promptly notify the applicant of any such claim, action, or proceeding, and the City of Ontario shall cooperate fully in the defense.

SECTION 5: ***Custodian of Records.*** The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East "B" Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario.

The City Clerk of the City of Ontario shall certify as to the adoption of this Resolution.

PASSED, APPROVED, AND ADOPTED this 18th day of March, 2025.

_____
PAUL S. LEON, MAYOR

ATTEST:

_____
SHEILA MAUTZ, CITY CLERK

APPROVED AS TO FORM:

_____
BEST BEST & KRIEGER LLP
CITY ATTORNEY

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO)
CITY OF ONTARIO)

I, SHEILA MAUTZ, City Clerk of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. 2025- was duly passed and adopted by the City Council of the City of Ontario at their regular meeting held March 18, 2025 by the following roll call vote, to wit:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

The foregoing is the original of Resolution No. 2025- duly passed and adopted by the Ontario City Council at their regular meeting held March 18, 2025.

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

ATTACHMENT A:

Addendum to The Ontario Plan 2050
Supplemental Environmental Impact Report
Related to PSPA22-005

(Addendum to follow this page)

The Avenue Specific Plan
2024 Amendment

Addendum to The Ontario Plan Certified EIR
(SCH No. 2021070364)



Prepared for:
City of Ontario
303 East B Street
Ontario, CA 91764

Prepared by:
Applied Planning, Inc.
11762 De Palma Road
1C-310
Corona, CA 92883

May 2024

appliedplanning inc

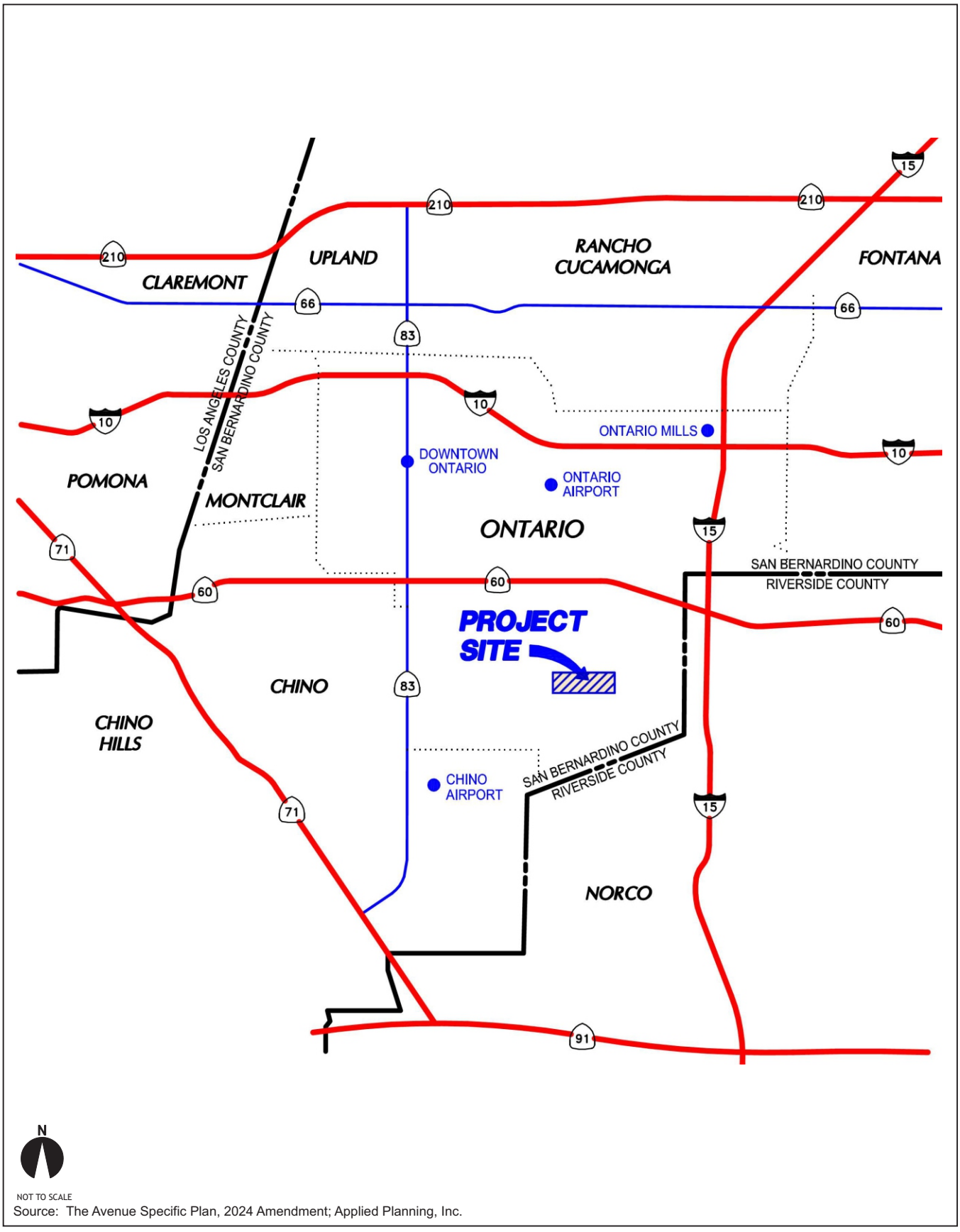
1.0 INTRODUCTION

1.0 INTRODUCTION

1.1 OVERVIEW

The Avenue Specific Plan was approved by the City of Ontario (City) in 2007, with subsequent Specific Plan Amendments approved in 2010, 2014, 2017, and 2020. The current (2020) The Avenue Specific Plan (2020 Specific Plan, Original Project) encompasses approximately 568.1 gross acres located within the City of Ontario. The Original Project site (the Specific Plan Area) is bound by Schaefer Avenue to the north, Haven Avenue to the east, Ontario Ranch Road to the south, and Carpenter Avenue to the west. Location and boundaries of the Original Project are presented at Figures 1.1-1 and 1.1-2, respectively.

Subsequent to approval of the Original Project, the City of Ontario adopted and implemented The Ontario Plan 2050 (TOP 2050) and TOP 2050 Policy Plan (the City General Plan). The Original Project Land Use designations are inconsistent with TOP 2050 Policy Plan Land Use designations for the subject site. The proposed Avenue Specific Plan, 2024 Amendment (Modified Project) evaluated herein brings the Original Project Land Uses into conformance with TOP 2050 Policy Plan Land Use Plan. Land Use designations for the subject site under the Original Project, TOP 2050 Policy Plan, and the proposed Modified Project are compared at Figure 1.1-3.



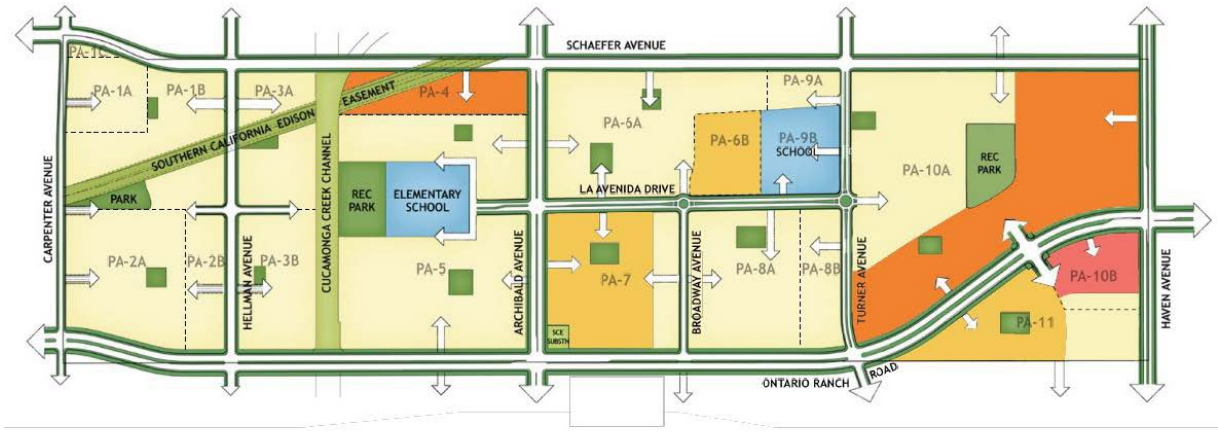
Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

Figure 1.1-1
Regional Location



Source: Google Earth; Applied Planning, Inc.

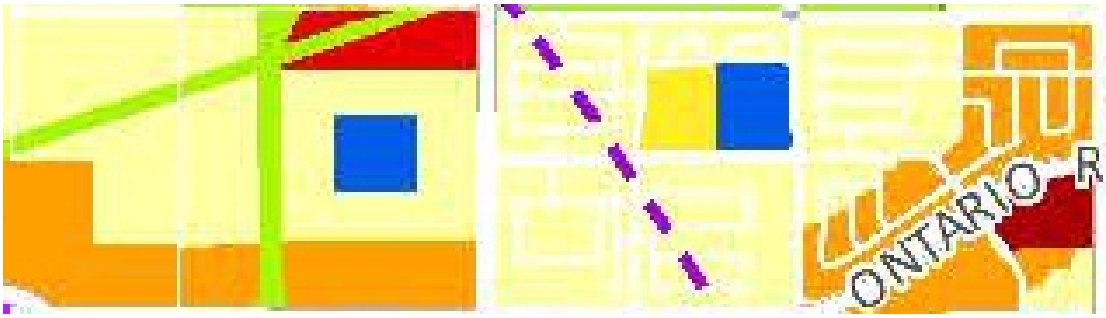
Figure 1.1-2
Location - Aerial View



2020 SPECIFIC PLAN

LEGEND

- LOW DENSITY RESIDENTIAL
- LOW MEDIUM DENSITY RESIDENTIAL
- MEDIUM DENSITY RESIDENTIAL
- RETAIL/COMMERCIAL
- SCHOOL
- PARK
- SCE EASEMENT
- STORM DRAIN EASEMENT

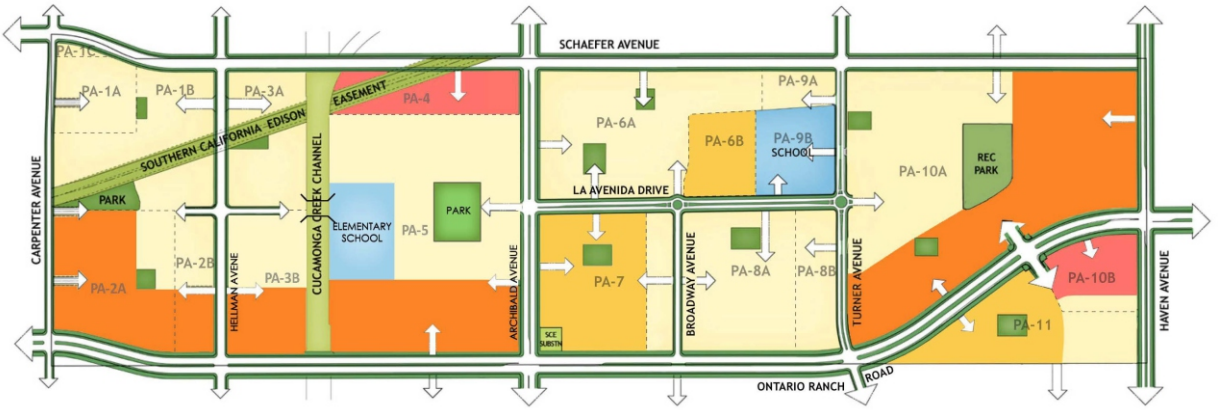


TOP 2050 POLICY PLAN

Residential
- LDR Low Density Residential
- LMDR Low Medium Density Residential
- MDR Medium Density Residential

Commercial
- NC Neighborhood Commercial
- GC General Commercial

Other
- OS-NR Open Space - Non-Rec
- PS Public School



2024 SPECIFIC PLAN AMENDMENT

LEGEND

- LOW DENSITY RESIDENTIAL (2.1-5.0 DU/AC)
- LOW MEDIUM DENSITY RESIDENTIAL (5.1-11.0 DU/AC)
- MEDIUM DENSITY RESIDENTIAL (11.1-25.0 DU/AC)
- RETAIL/COMMERCIAL
- SCHOOL
- PARK
- SCE EASEMENT
- STORM DRAIN EASEMENT

Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

Figure 1.1-3
Land Use Plan Comparison

The Modified Project land uses and development concepts have been designed to be consistent with land uses and development concepts for the subject site reflected in TOP 2050. Impacts of TOP 2050 have been evaluated and addressed in *The Ontario Plan 2050 Certified SEIR* (TOP 2050 SEIR, Certified SEIR, SCH No. 2021070364). This Addendum compares and contrasts impacts of the Modified Project with impacts identified in the Certified SEIR. As substantiated herein, the Modified Project would not result in substantially different or substantially increased impacts when compared to impacts considered and addressed in the Certified SEIR.

This Addendum to the Certified SEIR substantiates that the proposed Modified Project evaluated herein would not result in any new significant impacts not considered and addressed in the Certified SEIR; nor would there be any substantial increase in the severity of, or substantial change in any previously-identified environmental impacts considered and addressed in the Certified SEIR.

1.1.2 Original Project and Modified Project Development Concepts Compared

The primary effect of the proposed Modified Project would be to increase the intensity, and total amount, of residential and commercial/retail development within the Specific Plan Area. More specifically:

- Under the Original Project, maximum residential development would total 2,981 dwelling units (all types). Under the Modified Project, maximum residential development would total 3,753 dwelling units[1] (all types), an increase of 772 dwelling units or approximately 26 percent.

- Under the Original Project, maximum commercial development would total 130,680 square feet (all types). Under the Modified Project, maximum commercial

[1] There is the potential for the 10.89-acre school site portion of Planning Area 5 to transition to residential uses, should the school district determine that this site is not needed for school development. If this is the case, these 10.89 acres would be developed with up to 50 residential units, bringing the total Specific Plan residential unit count to 3,803.

development would total 335,176 square feet (all types), an increase of 204,496 square feet or approximately 156 percent.[2]

It is noted here that the proposed Modified Project land use revisions and resulting residential and commercial development would affect only those portions of the Specific Plan Area located west of Archibald Avenue. East of Archibald Avenue, properties within the Specific Plan Area are fully developed or are currently under development.

Within this Addendum, the Modified Project is assumed to be completed and fully occupied by 2025 – the Modified Project Opening Year. This Addendum in all instances evaluates likely maximum impact scenarios. Should future development proposed within the Modified Project area differ substantially from the development concept analyzed herein, the Lead Agency would comply with CEQA in consideration of those proposals. Ultimate scope and configuration of the Modified Project uses would be as approved by the City.

1.2 CALIFORNIA ENVIRONMENTAL QUALITY ACT DOCUMENTATION

California Environmental Quality Act (CEQA) documentation for the Original Project is presented in *The Ontario Plan 2050* [TOP 2050] *Supplemental Environmental Impact Report,* State Clearinghouse No. 2021070364 (TOP 2050 SEIR, Certified SEIR). This Addendum to the Certified SEIR (Addendum) compares the impacts that were identified in the Certified SEIR with the anticipated impacts of the proposed Modified Project. This Addendum substantiates that the proposed Modified Project would not result in new significant impacts, substantially different impacts, or impacts that would be substantially more severe than those evaluated and addressed in the Certified SEIR.

1.3 ADDENDUM PURPOSE AND SUMMARY

The focus and purpose of this document is to determine if the Modified Project described herein would result in new or substantially different environmental impacts than those considered and addressed in the Certified SEIR. To these ends, this Addendum defines,

[2] For the purposes of analysis, all commercial uses are assumed to be operational 24 hours per day, 7 days per week.

describes, compares, and contrasts potential environmental impacts of the Modified Project in the context of the environmental impacts assessed in the Certified SEIR. In so doing, this Addendum substantiates consistency with applicable California Environmental Quality Act Guidelines (*CEQA Guidelines*) provisions addressing preparation of an Addendum to a previously-Certified EIR.

As presented at *CEQA Guidelines* Section 15164, an Addendum to a Certified EIR may be prepared if only minor technical changes or additions are necessary and none of the conditions described in Section 15162, calling for the preparation of a subsequent or supplemental EIR, have occurred. Further, Public Resources Code Section 21166 prohibits preparation of a subsequent or supplemental EIR for a Certified EIR unless substantial project changes are proposed requiring major revisions to the Certified EIR; a substantial change in circumstances has occurred requiring major revisions to the Certified EIR; or new information becomes available requiring major revisions to the Certified EIR. As supported by the information provided here, none of these conditions apply to the Modified Project. This Addendum to the Certified SEIR fulfills CEQA documentation requirements for the Modified Project.

1.4 INTENDED USE OF THIS ADDENDUM

The City of Ontario (City) is the Lead Agency for the purposes of CEQA because it has the principal responsibility and authority for consideration of discretionary actions and permitting for the Modified Project. As the Lead Agency, the City is also responsible for analyzing the Modified Project's potential environmental impacts.

The Lead Agency will employ this Addendum in its evaluation of potential environmental impacts resulting from, or associated with, approval and implementation of the Modified Project. This Addendum may also be used by various Responsible Agencies, e.g., Air Quality Management District(s), Regional Water Quality Control Board(s), *et al.*; as well as utilities and service providers when such entities issue discretionary permits necessary to carry out the Modified Project.

For example, if the Modified Project would require discretionary permits from the South Coast Air Quality Management District (SCAQMD), this Addendum would serve as the environmental assessment for such permits (please refer to California Code of Regulations, Section 15050).

This Addendum in all instances evaluates likely maximum impact scenarios. Should future development proposals within the Modified Project area differ substantially from the development concepts analyzed herein, the Lead Agency would comply with CEQA in consideration of those proposals. Ultimate scope and configuration of the Modified Project uses would be as approved by the City through the City development review processes.

1.5 DOCUMENT ORGANIZATION

This Addendum is presented in five sections, as follows:

- **Section 1.0**, *Introduction*, provides an overview of the Modified Project, its context, and environmental documentation applicable to the proposed development.

- **Section 2.0**, *Modified Project - Description*, presents the proposed Modified Project in greater detail.

- **Section 3.0**, *Environmental Checklist*, presents the analysis of potential environmental impacts of the Modified Project. The analysis considers potential environmental impacts of the Modified Project relative to impacts identified in the Certified SEIR.

- **Section 4.0**, *Determination*, presents the determination regarding the appropriate environmental document for the Modified Project.

- **Section 5.0**, *Mitigation Summary*, summarizes mitigation from the Certified SEIR, and presents any newly required mitigation or modified mitigation.

1.6 CONCLUSION

This Addendum substantiates that implementation and operation of the proposed Modified Project described and evaluated herein would not result in any significant new, different, additional, or substantially increased environmental impacts than were previously considered and addressed in the Certified SEIR.

2.0 MODIFIED PROJECT - DESCRIPTION

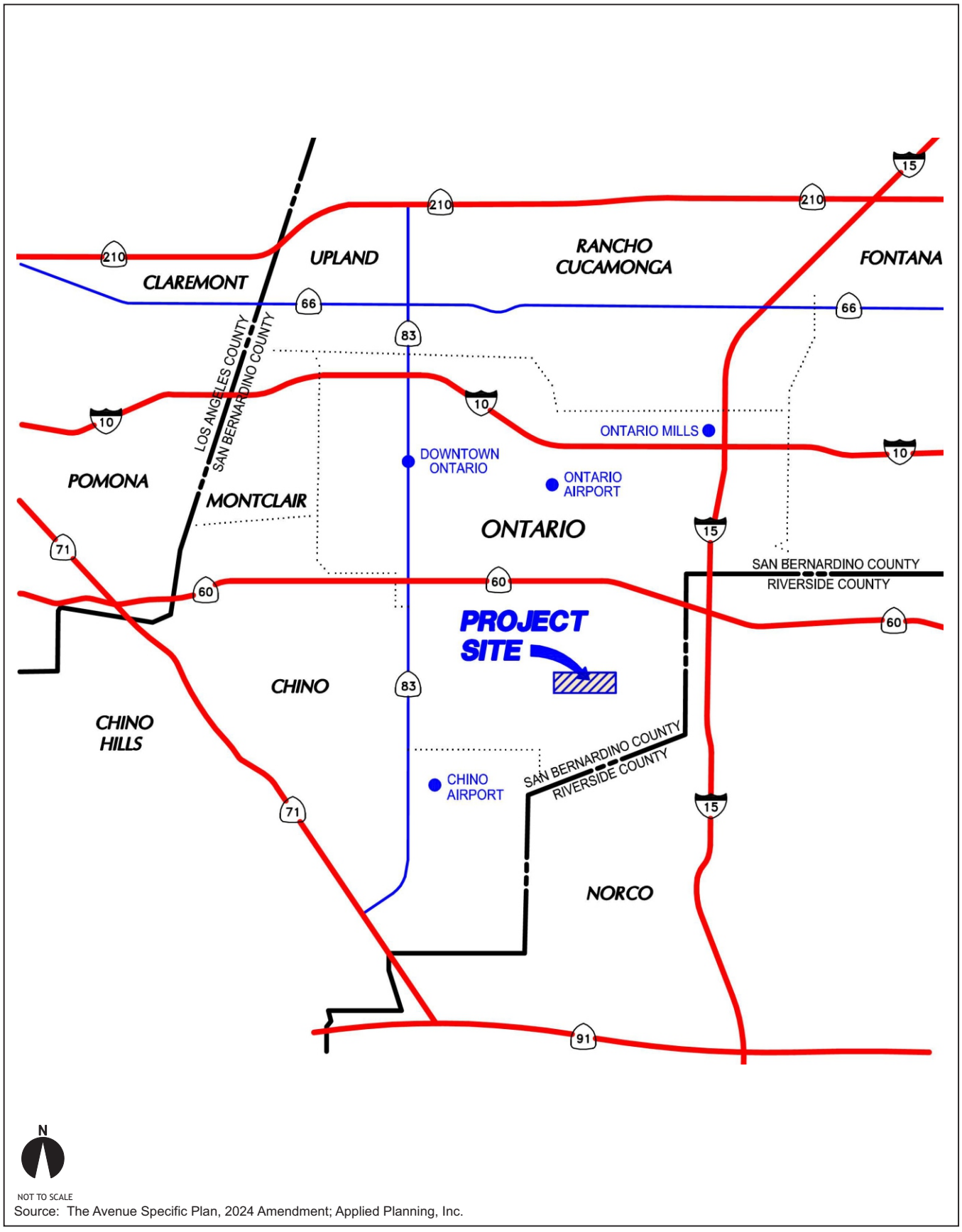
2.0 MODIFIED PROJECT - DESCRIPTION

2.1 OVERVIEW

2.1.1 Original Project, Modified Project, and TOP 2050

The Avenue Specific Plan was approved by the City of Ontario (City) in 2007, with subsequent Specific Plan Amendments approved in 2010, 2014, 2017, and 2020. The current (2020) The Avenue Specific Plan (2020 Specific Plan, Original Project) encompasses approximately 568.1 gross acres located within the City of Ontario. The Original Project site (the Specific Plan Area) is bound by Schaefer Avenue to the north, Haven Avenue to the east, Ontario Ranch Road to the south, and Carpenter Avenue to the west. Location and boundaries of the Project are presented at Figures 2.1-1 and 2.1-2, respectively.

Subsequent to approval of the Original Project, the City of Ontario adopted and implemented The Ontario Plan 2050 (TOP 2050) and TOP 2050 Policy Plan (the City General Plan). The Original Project Land Use designations are inconsistent with TOP 2050 Policy Plan Land Use designations for the subject site. The proposed Modified Project evaluated herein brings the Original Project Land Uses into conformance with TOP 2050 Policy Plan Land Use Plan. Land Use designations for the subject site under the Original Project, TOP 2050 Policy Plan, and the proposed Modified Project are compared at Figure 2.1-3.



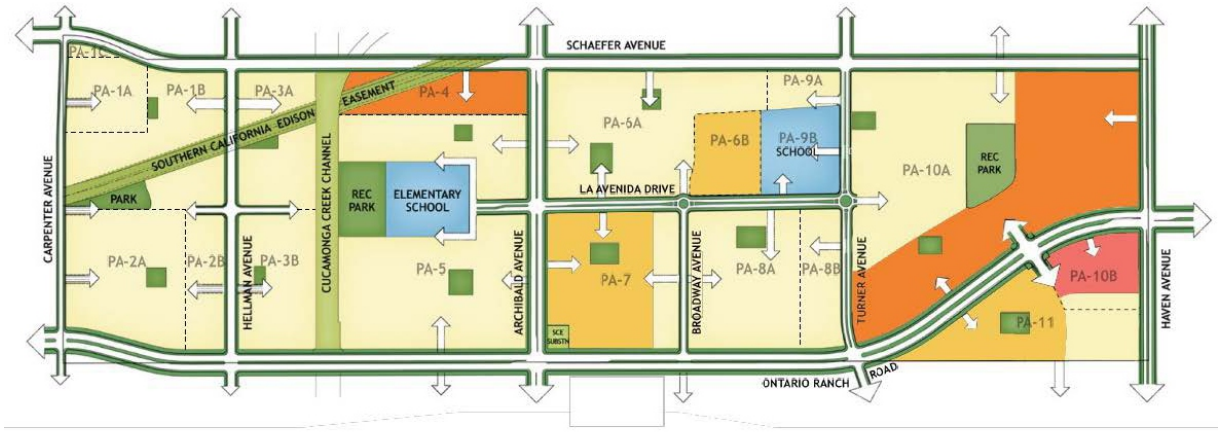
Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

Figure 2.1-1
Regional Location



Source: Google Earth; Applied Planning, Inc.

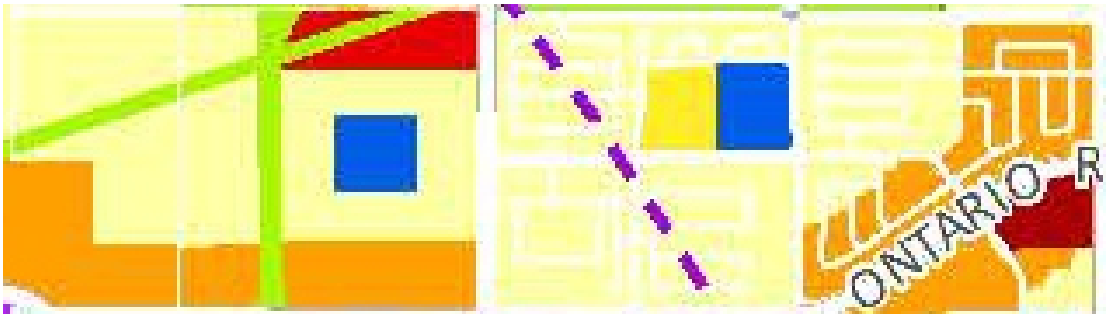
Figure 2.1-2
Location - Aerial View



2020 SPECIFIC PLAN

LEGEND

- LOW DENSITY RESIDENTIAL
- LOW MEDIUM DENSITY RESIDENTIAL
- MEDIUM DENSITY RESIDENTIAL
- RETAIL/COMMERCIAL
- SCHOOL
- PARK
- SCE EASEMENT
- STORM DRAIN EASEMENT

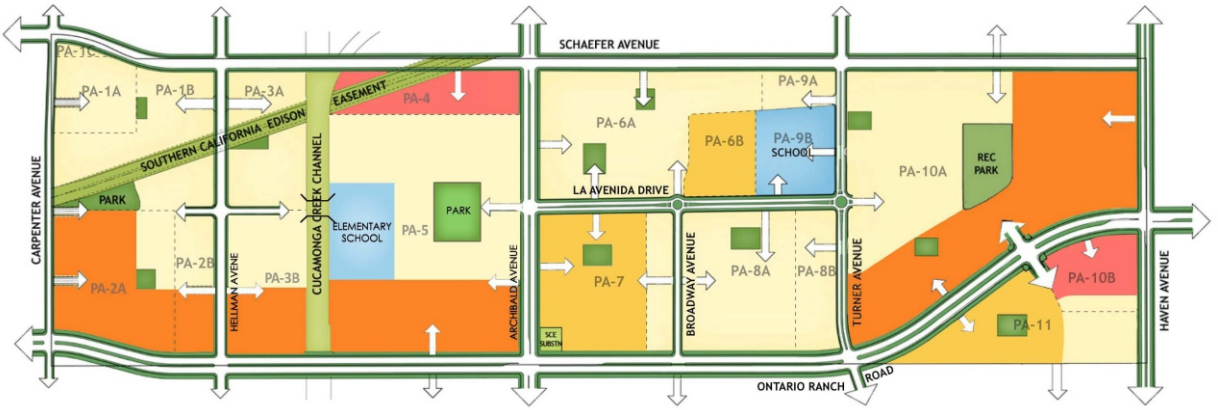


TOP 2050 POLICY PLAN

Residential
- LDR Low Density Residential
- LMDR Low Medium Density Residential
- MDR Medium Density Residential

Commercial
- NC Neighborhood Commercial
- GC General Commercial

Other
- OS-NR Open Space - Non-Rec
- PS Public School



2024 SPECIFIC PLAN AMENDMENT

LEGEND

- LOW DENSITY RESIDENTIAL (2.1-5.0 DU/AC)
- LOW MEDIUM DENSITY RESIDENTIAL (5.1-11.0 DU/AC)
- MEDIUM DENSITY RESIDENTIAL (11.1-25.0 DU/AC)
- RETAIL/COMMERCIAL
- SCHOOL
- PARK
- SCE EASEMENT
- STORM DRAIN EASEMENT

Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

Figure 2.1-3
Land Use Plan Comparison

2.1.2 Original Project and Modified Project Development Concepts Compared

A comparison of the Original Project and Modified Project development concepts is presented at subsequent Table 2.1-1. As indicated at Table 2.1-1, the primary effect of the proposed Modified Project would be to increase the intensity, and total amount, of residential and commercial/retail development within the Specific Plan Area. More specifically:

- Under the Original Project, maximum residential development would total 2,981 dwelling units (all types). Under the Modified Project, maximum residential development would total 3,753 dwelling units[1] (all types), an increase of 772 dwelling units or approximately 26 percent.

- Under the Original Project, maximum commercial development would total 130,680 square feet (all types). Under the Modified Project, maximum commercial development would total 335,176 square feet (all types), an increase of 204,496 square feet or approximately 156 percent.[2]

It is noted here that the proposed Modified Project land use revisions and resulting residential and commercial development would affect only those portions of the Specific Plan Area located west of Archibald Avenue. East of Archibald Avenue, properties within the Specific Plan Area are fully developed or are currently under development.

2.1.3 Opening Year

For the purposes of this analysis, buildout of the Modified Project is assumed to be completed and fully occupied by 2026 – the Modified Project Opening Year.

[1] There is the potential for the 10.89-acre school site portion of Planning Area 5 to transition to residential uses, should the school district determine that this site is not needed for school development. If this is the case, these 10.89 acres would be developed with up to 50 residential units, bringing the total Specific Plan residential unit count to 3,803.

[2] For the purposes of analysis, all commercial uses are assumed to be operational 24 hours per day, 7 days per week.

2.1.4 TOP 2050 SEIR as Basis for Addendum Analysis

The Modified Project land uses and development concepts have been designed to be consistent with land uses and development concepts for the subject site reflected in TOP 2050. Impacts of TOP 2050 have been evaluated and addressed in *The Ontario Plan 2050 Certified SEIR* (TOP 2050 SEIR, Certified SEIR, SCH No. 2021070364). By extension, impacts of The Avenue Specific Plan as amended under the Modified Project would be consistent with impacts considered and addressed in TOP 2050 SEIR. As substantiated herein, development of The Avenue Specific Plan as amended under the Modified Project would not result in substantially different or substantially increased impacts when compared to impacts considered addressed in TOP 2050 SEIR. This analysis of potential environmental impacts of The Avenue Specific Plan, 2024 Amendment appropriately comprises an Addendum to TOP 2050 SEIR.

This Addendum in all instances evaluates likely maximum impact scenarios. Should future development proposals within the Modified Project area differ substantially from the development concepts analyzed herein, the Lead Agency would comply with CEQA in consideration of those proposals. Ultimate scope and configuration of the Modified Project uses would be as approved by the City through the City development review processes.

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Table 2.1-1
Comparison of Original Project and Modified Project Development Concepts
(Revisions are Indicated in *Bold Red Italics*)

Planning Area Designation		Gross Acres		Net Acres		Dwelling Units		Density		Commercial Square Footage		Land Use	
Original Project	Modified Project	Original Project	Modified Project	Original Project	Modified Project	Original Project	Modified Project	Original Project	Modified Project	Original Project	Modified Project	Original Project	Modified Project
1A	1A	11.1	11.1	11.1	*9.2*	51	*41*	4.6	*4.5*	---	---	LDR	LDR
1B	1B	33.5	33.5	33.5	*24.54*	127	*110*	4.5	4.5	---	---	LDR	LDR
					5.4	*---*	*---*						*SCE Easement*
1C	1C	2.2	2.2	2.2	2.2	5	5	2.3	2.3	---	---	LDR	LDR
2A	2A	32.0	32.0	32.0	*5.00*	147	*23*	4.6	*4.5*	---	---	LDR	*LDR*
					25.06		*551*		*22.0*				*MDR*
2B	2B	12.5	12.5	12.5	*6.64*	58	*30*	4.6	*4.5*	---	---	LDR	*LDR*
					5.43		*119*		*22.0*				*MDR*
3A	3A	21.7	21.7	21.7	*19.15*	86	*86*	4.5	4.5	---	---	LDR	*LDR*
					2.60		*---*	*---*	*---*				*SCE Easement*
3B	3B	21.5	21.5	21.5	*12.22*	97	*55*	4.5	*4.5*	---	---	LDR	*LDR*
					8.59		*189*		*22.0*				*MDR*
4	4	19.9	19.9	19.9	*15.04*	218	*0*	11	*0*	0	*204,496*	LDR	*Retail*
					4.00						---		*SCE Easement*
5*	5	82.6	82.6	72.6	*46.85*	334	*211*	4.6	*4.5*	---	---	LDR/OS/ Elem. Sch.	*LDR*
					22.54		*496*		*22.0*				*MDR*
					10.89		---		---				*Elem. Sch.*
6A	6A	49.9	49.9	49.9	49.90	230	*229*	4.6	4.6	---	---	LDR	LDR
6B	6B	10.0	10.0	10.0	10.00	106	*110*	10.6	*11.0*	---	---	LMDR	LMDR
7	7	28.9	28.9	28.9	28.90	287	*265*	9.5	*9.2*	---	---	LMDR	LMDR

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Table 2.1-1
Comparison of Original Project and Modified Project Development Concepts
(Revisions are Indicated in *Bold Red Italics*)

Planning Area Designation		Gross Acres		Net Acres		Dwelling Units		Density		Commercial Square Footage		Land Use	
		1.2	1.2	1.2	1.20	---	---	---	---			SCE Substation	SCE Substation
8A	8A	39.9	39.9	39.9	39.90	180	***176***	4.5	***4.4***	---	---	LDR	LDR
8B	8B	9.7	9.7	9.7	9.70	44	44	4.5	4.5	---	---	LDR	LDR
9A	9A	10.6	10.6	10.6	10.60	20	20	2.0	***1.9***	---	---	LDR	LDR
9B	9B	10.0	10.0	10.00	10.00	0	0	---	---	---	---	School	School
10A	10A	114.7	114.7	114.7	***100.40***	766	***452***	6.7	***4.5***	---	---	LDR/MDR	***LDR***
					14.30		***314***		***22.0***				***MDR***
10B	10B	10.0	10.0	10.0	10.00	0	0	---	---	130,680	130,680	Retail	Retail
11	11	33.4	***14.73***	33.4	***14.73***	225	***67***	6.7	***4.5***	---	---	LDR/MDR	***LDR***
			18.67		***18.67***		***160***		***8.6***				***LMDR***
Cucamonga Creek		12.8	12.8	12.8	12.8	0	0	---	---	---	---	Non-Recreational Open Space	Non-Recreational Open Space
Totals		**568.1**	**568.1**	**558.1**	***556.44***	**2,981**	***3,753***	Not Quantified	***6.7***	**130,680**	***335,176***	---	---

Sources: *The Avenue Specific Plan, 2024 Amendment;* City of Ontario Planning Department.
Notes: * There is the potential for the 10.89-acre school site portion of Planning Area 5 to transition to residential uses, should the school district determine that this site is not needed for school development. If this is the case, these 10.89 acres would be developed with up to 50 residential units, bringing the total Specific Plan residential unit count to 3,803.

2.2 Existing Conditions

2.2.1 Existing Land Uses and Land Use Designations

Existing land uses and land use designations for the Modified Project site and adjacent properties are summarized at Table 2.2-1. Existing land uses are illustrated at Figure 2.2-1. Existing Policy Plan Land Use and Zoning designations are illustrated at Figures 2.2-2 and 2.2-3, respectively.

Table 2.2-1
Existing Land Uses and Land Use Designations

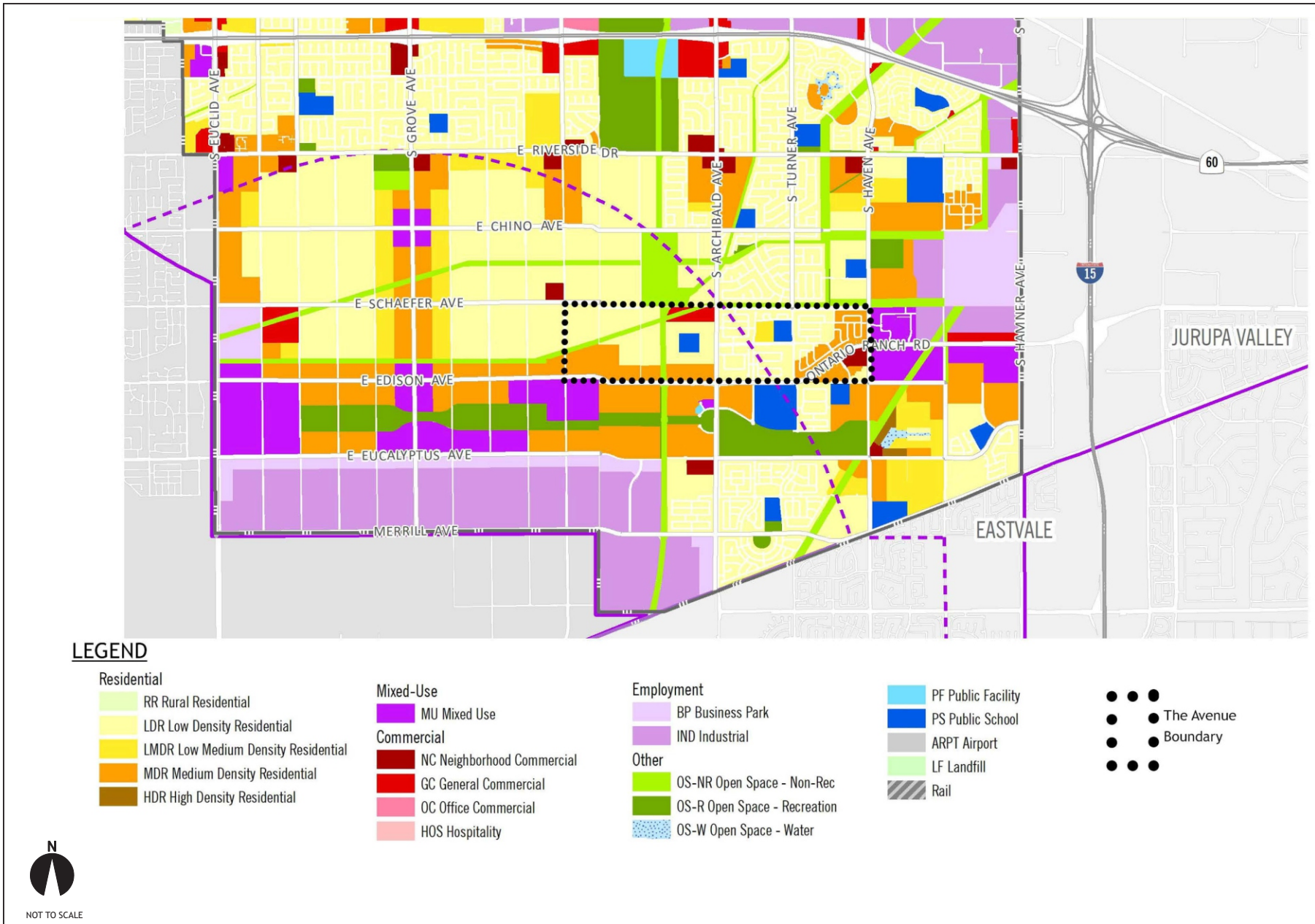
	Existing Land Use	Policy Plan Designation(s)	Zoning Designation
Modified Project Site	**East of Archibald Avenue:** Developed/developing Specific Plan residential uses. **West of Archibald Avenue:** Agricultural and dairy farming uses; vacant disturbed property. Additionally, this area is traversed by the Cucamonga Creek flood channel (N – S alignment) and a Southern California Edison (SCE) easement (NE – SW alignment).	Low Density Residential, Low Medium Density Residential, Medium Density Residential, Public School, Commercial, Open Space-Parkland, Open Space: Non-Recreation	The Avenue Specific Plan (November 2020)
North	**East of Archibald Avenue:** Developed/developing Specific Plan residential uses. **West of Archibald Avenue:** Stormwater detention/groundwater recharge basins; Industrial uses; Cucamonga Creek flood channel (N – S alignment), Deer Creek flood control channel (NE – SW).	Low Density Residential, Open Space: Non-Recreation	West Haven Specific Plan, Countryside Specific Plan
East	Residential uses (existing and under construction); vacant/disturbed properties.	Mixed-Use	Rich Haven Specific Plan
South	Residential uses (existing and under construction); vacant/disturbed properties.	Low Density Residential, Medium Density Residential, Public School, Open Space: Non-Recreation	Parkside Specific Plan, Grand Park Specific Plan
West	Agricultural, dairy farming, and vacant disturbed properties.	Low Density Residential, Medium Density Residential, Open Space: Non-Recreation	Specific Plan with Agricultural and Affordable Housing Overlays

Sources: The Avenue Specific Plan (2024), TOP 2050 Policy Plan, City of Ontario Zoning Map.



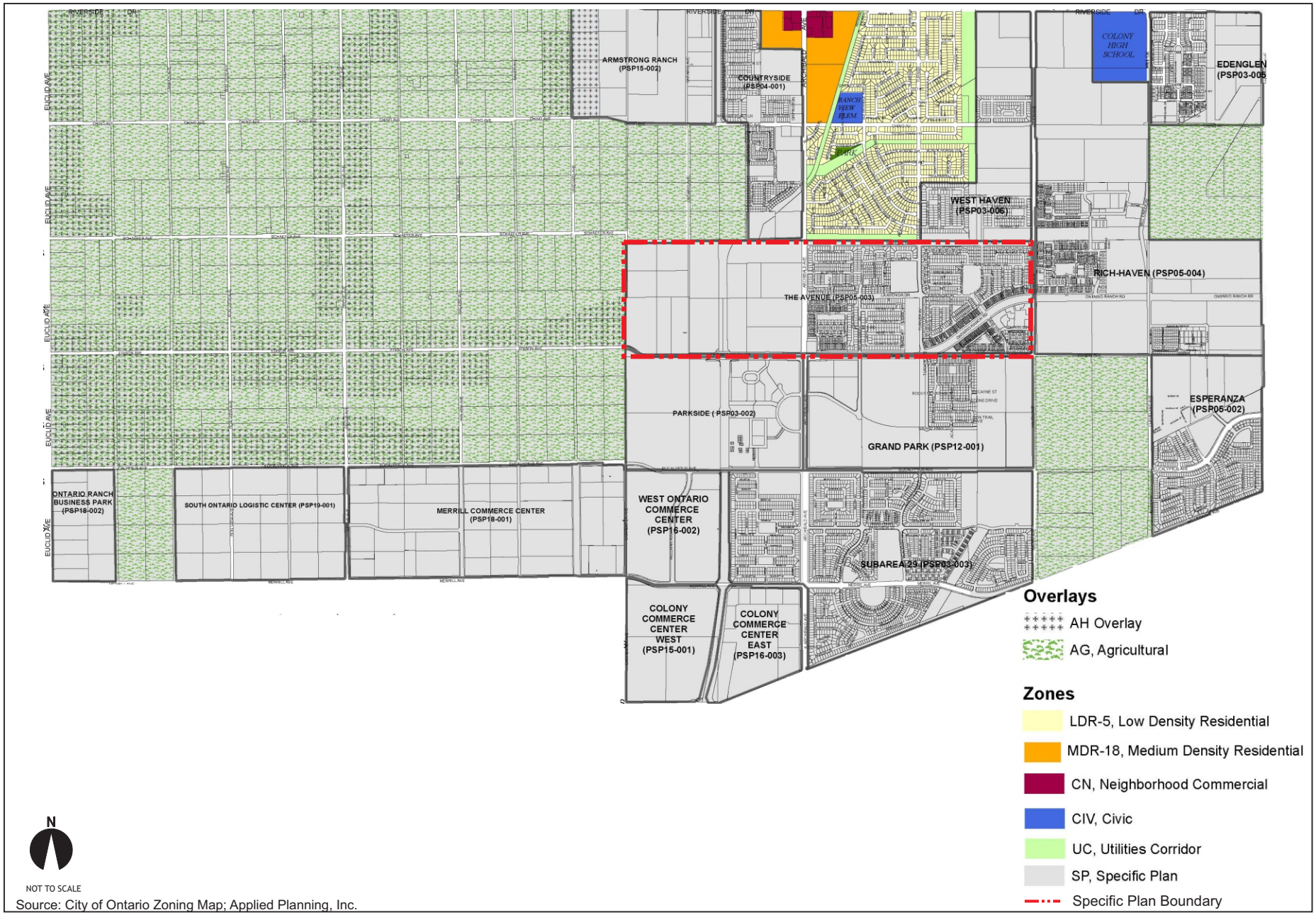
Source: Google Earth; Applied Planning, Inc.

Figure 2.2-1
Existing Land Uses



Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

Figure 2.2-2
Existing Policy Plan Land Use Designations



Source: City of Ontario Zoning Map; Applied Planning, Inc.

Figure 2.2-3
Existing Zoning Designations

2.3 DEVELOPMENT CONCEPT

Development implemented under the Modified Project would be required to conform to provisions of The Avenue Specific Plan, 2024 Amendment document (2024 SPA). The 2024 SPA is provided at Appendix A of this Addendum. In instances where the 2024 SPA is silent, development proposals would be required to conform to applicable provisions of the City Development Code.

2.3.1 Site Design/Architectural Concepts

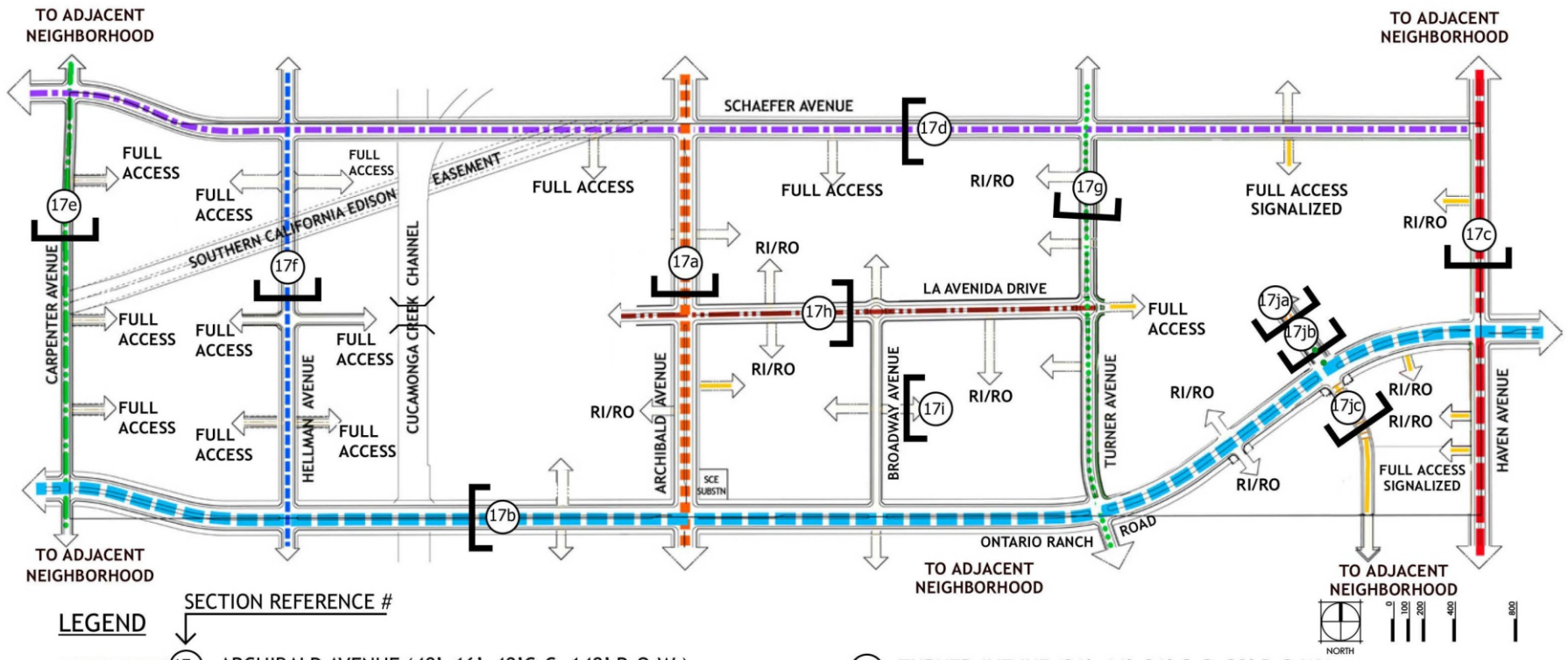
The Modified Project considered herein would implement residential, commercial/retail parks/open space, and public school uses. All Modified Project development proposals would be required to conform to requirements and implement guidance articulated at 2024 SPA Section 5, *Development Regulations*; and Section 6, *Design Guidelines*. All Modified Project final site plans and building designs would be subject to City review and approval, to include consistency analysis with applicable provisions of the 2024 SPA.

2.3.2 Access and Circulation

2.3.2.1 Area Roadways and Site Access

Regional access to the City and the Modified Project area is provided by State Route 60 (E – W) and Interstate 15 (N – S). State Route 60 (SR-60) interchanges with Interstate 15 (I-15) approximately 2.0 miles northeast of the Modified Project site. The Modified Project site is bounded by Schaefer Avenue to the north, Haven Avenue to the east, Ontario Ranch Road to the south, and Carpenter Avenue (alignment) to the west. Archibald Avenue traverses the western portion of the site along a north – south alignment.

Access within the Modified Project site would be provided by internal roads connecting the various land uses. Roadways providing access to and within the Modified Project would be constructed pursuant to the 2024 SPA specifications and consistent with City Conditions of Approval. The Modified Project Access and Circulation Concept is presented at Figure 2.3-1. For illustrative purposes, the Original Project and Modified Project Access and Circulation Concepts are compared at Figure 2.3-2. Please refer also to 2024 SPA Section 4.1, *Master Plan of Circulation*.



LEGEND

SECTION REFERENCE #

- 17a ARCHIBALD AVENUE (40'+16'+40'C-C, 148' R.O.W.)
- 17b EDISON AVENUE (52'+26'+52'C-C, 160' R.O.W.)
- 17c HAVEN AVENUE (28'+16'+28'C-C, 124' R.O.W.)
- 17d SCHAEFER AVENUE (84' C-C, 108-' R.O.W.)
- 17e CARPENTER AVENUE (40' C-C, 66' R.O.W.)
- 17f HELLMAN AVENUE (64' C-C, 88' R.O.W.)
- 17g TURNER AVENUE (21'+14'+21' C-C, 80' R.O.W.)
- 17h THE AVENUE (28'+16'+28' C-C, 124' R.O.W.)
- 17i NEIGHBORHOOD ENTRY STREET (36' C-C, 60' MIN R.O.W.)
- 17ja NEIGHBORHOOD ENTRY STREET W/ MEDIAN (50' C-C, 74' MIN R.O.W.)
- 17jb NEIGHBORHOOD ENTRY STREET W/ MEDIAN (60' C-C, 84' MIN R.O.W.)
- 17jc NEIGHBORHOOD ENTRY STREET W/ MEDIAN (60' C-C, 84' MIN R.O.W.)

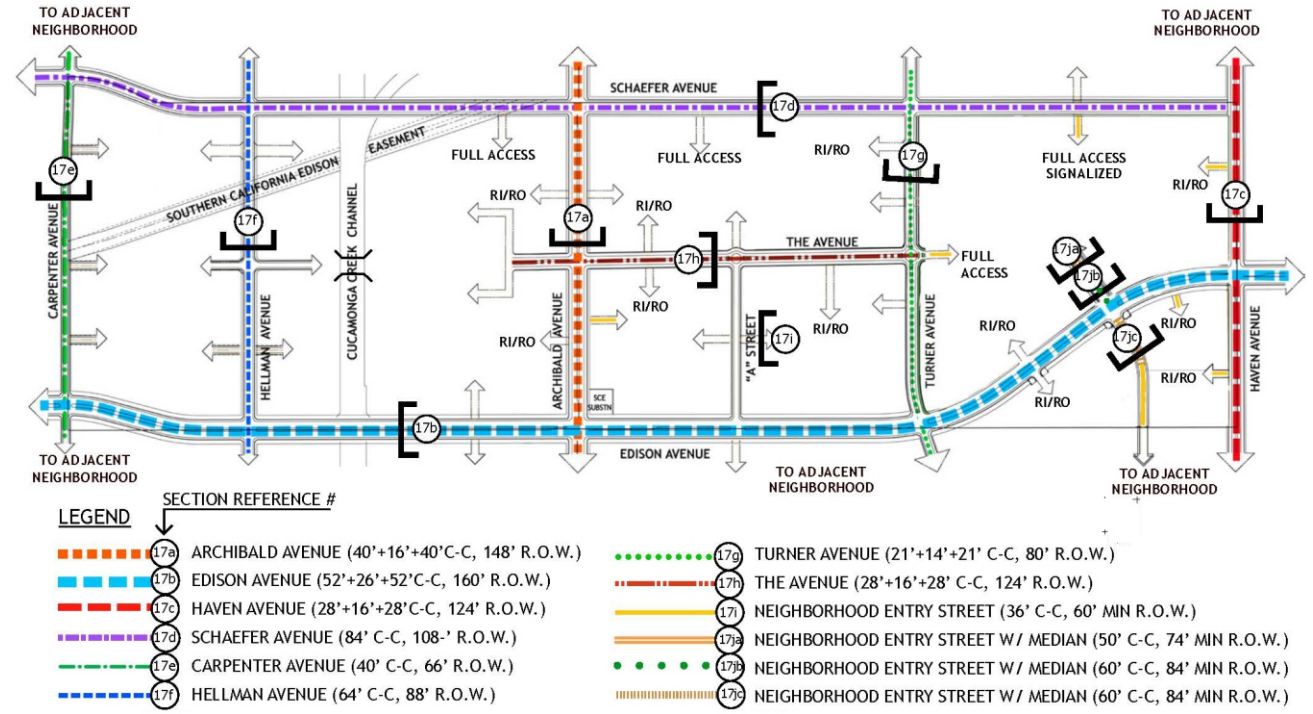
NOTE: C-C = Curb-to-Curb; R.O.W. = Right-of-Way; The location of access points is conceptual. Precise locations will be determined as part of the tract map process. The Neighborhood Entry Streets at the westerly termination of the Avenue adjacent to the school site shall be 40' C-C, 66' R.O.W. While the alignment of roads is conceptual, The Avenue shall maintain the straight, linear configuration. *The intersection legs to the north and south of Schaefer Avenue shall be aligned. Final location of the intersection shall be determined with approval of the maps for developments on the north and south of Schaefer Avenue. No sidewalk improvements on the north side of Schaefer Avenue between Haven Avenue and Hellman Avenue.

N

NOT TO SCALE

Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

Figure 2.3-1
Circulation Plan

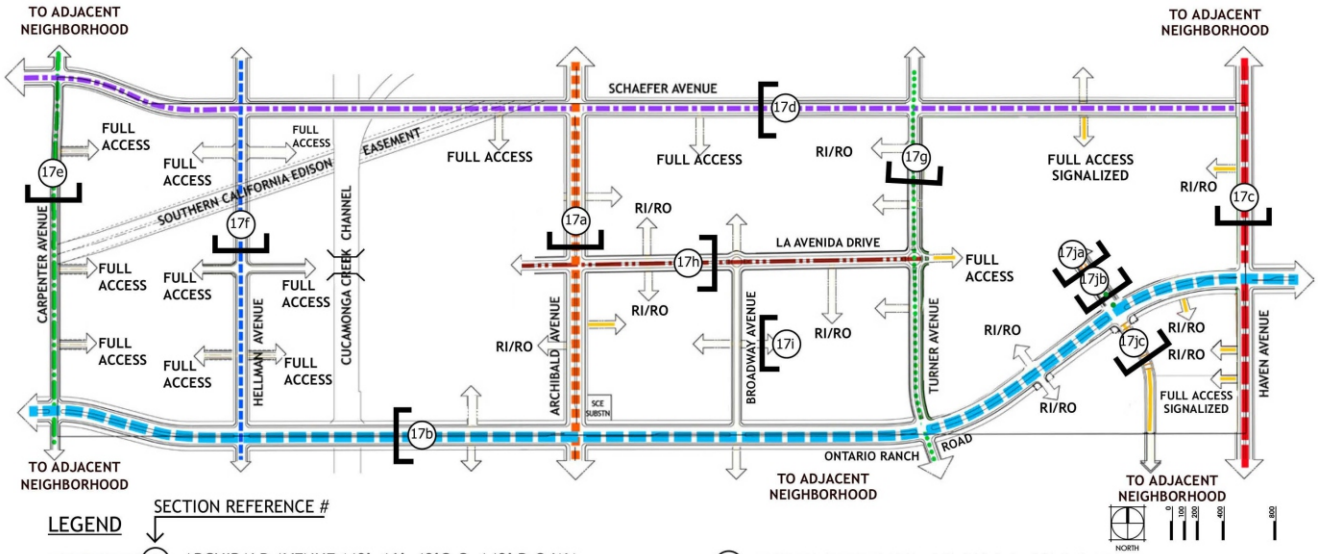


LEGEND

SECTION REFERENCE #

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- 17b EDISON AVENUE (52'+26'+52'C-C, 160' R.O.W.)
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2020 SPECIFIC PLAN



LEGEND

SECTION REFERENCE #

- 17a ARCHIBALD AVENUE (40'+16'+40'C-C, 148' R.O.W.)
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- 17jb NEIGHBORHOOD ENTRY STREET W/ MEDIAN (60' C-C, 84' MIN R.O.W.)
- 17jc NEIGHBORHOOD ENTRY STREET W/ MEDIAN (60' C-C, 84' MIN R.O.W.)

2024 SPECIFIC PLAN AMENDMENT

N

NOT TO SCALE

Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

Figure 2.3-2
Circulation Plan Comparison

2.3.2.2 Alternative Transportation Modes

Bicycle and Pedestrian Access

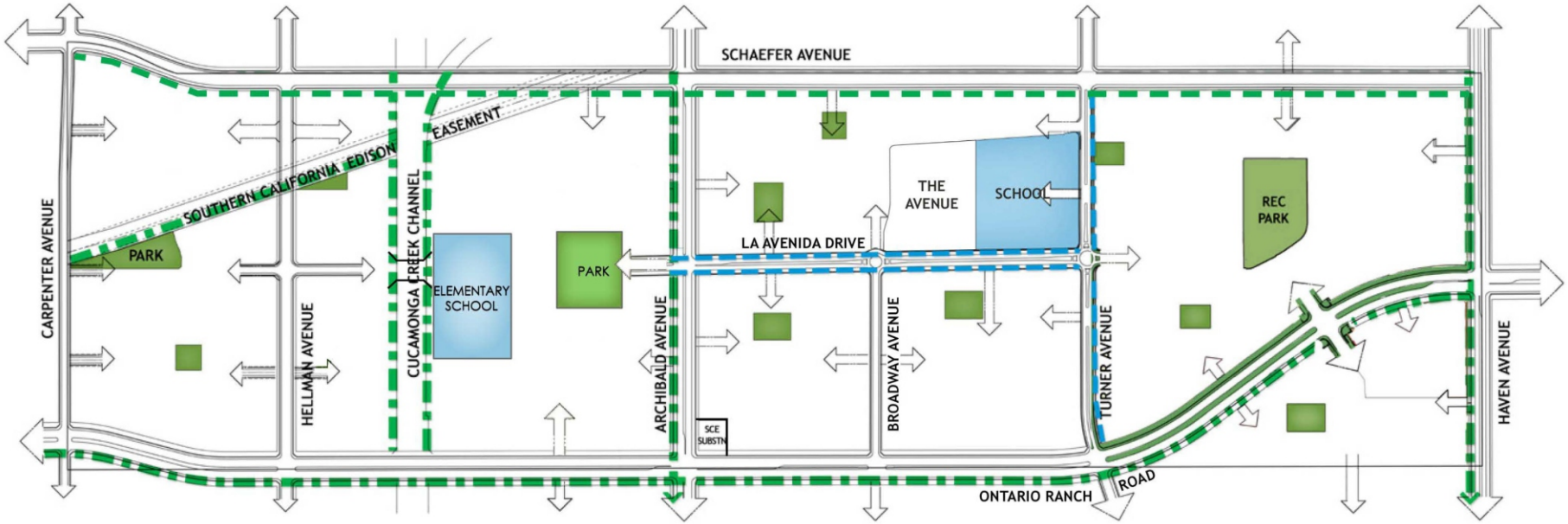
The Modified Project would construct multipurpose trail improvements consistent with improvements proposed under the City of Ontario Multipurpose Trails and Bikeway Corridor Plan (Multipurpose Trails Plan). The Modified Project improvements would connect with the encompassing Multipurpose Trails Plan system.

Within the Modified Project site, enhanced pedestrian sidewalks would provide internal connection between land uses. Additionally, streets would be constructed with sidewalks, facilitating pedestrian access and inter-connectivity between land uses. Trails and pedestrian access improvements that would be constructed by the Modified Project are illustrated at Figure 2.3-3. For illustrative purposes, the Original Project and Modified Project Multipurpose Trails and Pedestrian Access Plans are compared at Figure 2.3-4. Please refer also to 2024 SPA Section 4.1, *Pedestrian/Bicycle Trails Connectivity.*

Bus Service

Bus service is available to the City via Omnitrans and the Riverside Transit Authority (RTA). Bus routes currently do not provide proximate service (within one-quarter mile) of the Modified Project site.

Transit service providers periodically review and update schedules and routes to address ridership, budget, and community demands. The Applicant and City would coordinate Project final designs with Omnitrans and RTA to evaluate the potential for provision of bus services and bus amenities serving the Modified Project site. Omnitrans bus routes and schedules can be accessed at: https://omnitrans.org/plan-a-trip/routes-schedules. RTA bus routes and schedules can be accessed at: https://www.riversidetransit.com/index.php/riding-the-bus/maps-schedules.



LEGEND

NMC MASTER PLAN MULTI-USE PATH

PROPOSED MULTI-USE BRIDGE ACROSS CHANNEL

ENHANCED PEDESTRIAN SIDEWALK PER SPECIFIC PLAN
(SEE SECTIONS 17G AND 17H)

NOTE: The precise locations of the trails are conceptual and will be determined as part of the tract map approval process. The location of the proposed multi-purpose bridge is shown as conceptual and subject to Planning Department and Traffic Engineering Department review and approval.

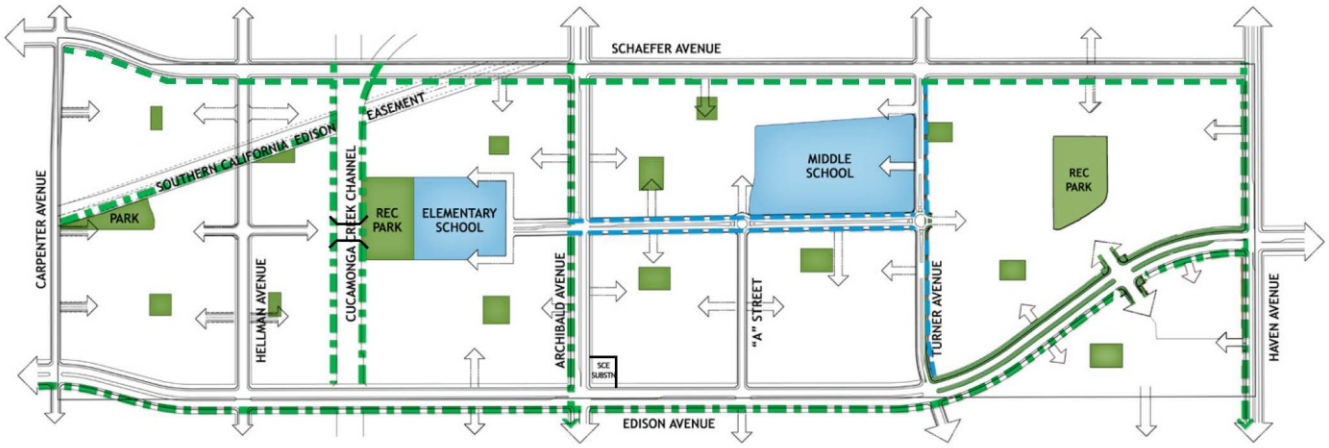
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NOT TO SCALE

Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

applied planning inc

Figure 2.3-3
Trail Master Plan



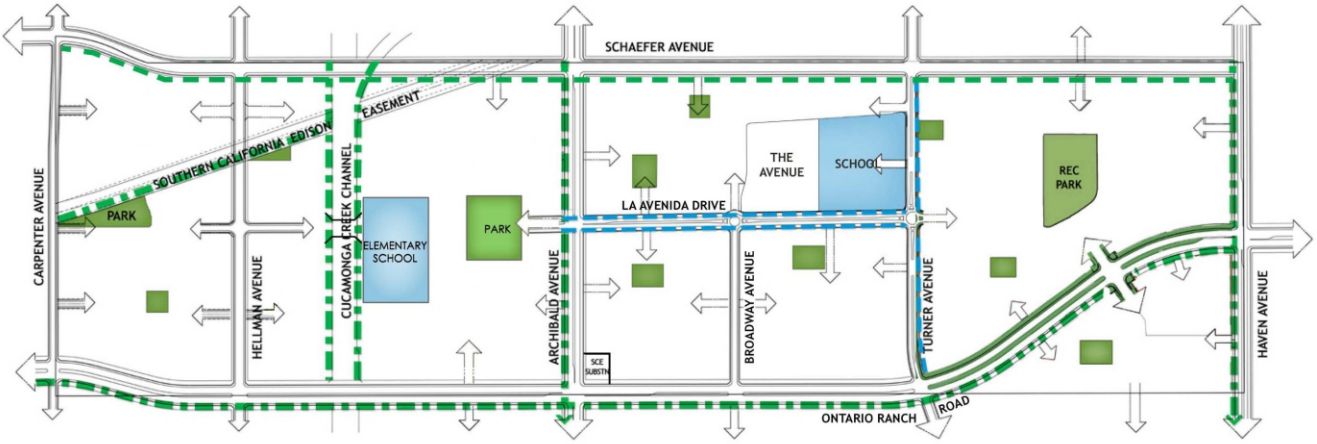
LEGEND

NMC MASTER PLAN MULTI-USE PATH

PROPOSED MULTI-USE BRIDGE ACROSS CHANNEL

NOTE: The precise locations of the trails are conceptual and will be determined as part of the tract map approval process. The location of the proposed multi-purpose bridge is shown as conceptual and subject to Planning Department and Traffic Engineering Department review and approval.

2020 SPECIFIC PLAN



LEGEND

NMC MASTER PLAN MULTI-USE PATH

PROPOSED MULTI-USE BRIDGE ACROSS CHANNEL

ENHANCED PEDESTRIAN SIDEWALK PER SPECIFIC PLAN
(SEE SECTIONS 17G AND 17H)

NOTE: The precise locations of the trails are conceptual and will be determined as part of the tract map approval process. The location of the proposed multi-purpose bridge is shown as conceptual and subject to Planning Department and Traffic Engineering Department review and approval.

2024 SPECIFIC PLAN AMENDMENT

N

NOT TO SCALE

Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

applied planning inc

Figure 2.3-4
Trail Master Plan Comparison

2.3.3 Parking

The Modified Project would be required to adhere to parking requirements established under the 2024 SPA and the City of Ontario Development Code. Parking assignments and design of parking areas within the site would be subject to City review and approval.

2.3.4 Landscape/Streetscape

All landscaping/streetscaping implemented under the Modified Project would be required to comply with applicable provisions of the 2024 SPA and the City Municipal Code. Landscape and streetscape elements would provide shade and visual interest, define entry/access points, and accentuate site and architectural features. Please refer also to 2024 SPA Section 6.6, *Landscape Design Guidelines*.

2.3.5 Infrastructure/Utilities

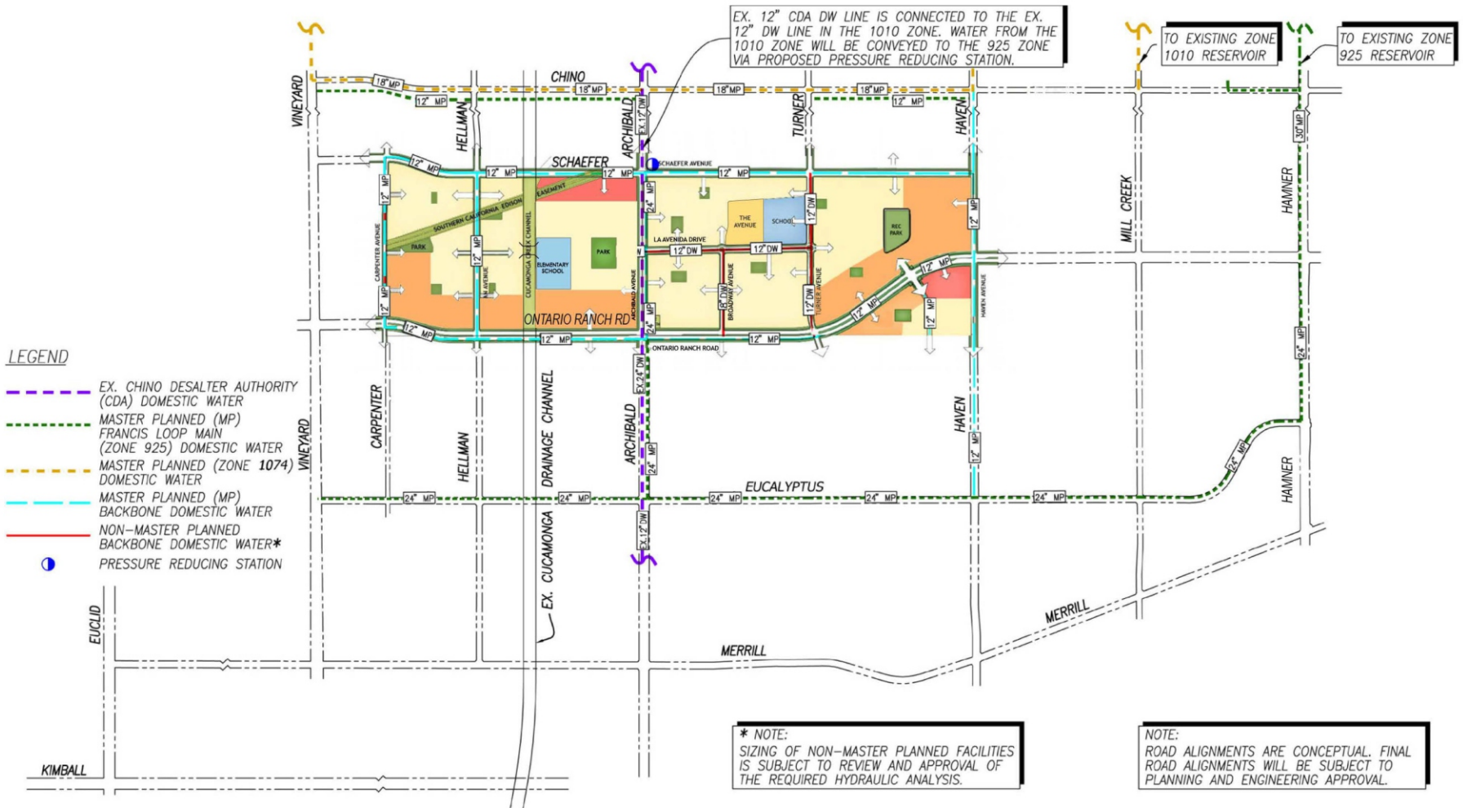
2.3.5.1 Water Service

Potable (Domestic) Water

Potable water would be provided by the Ontario Municipal Utilities Company (OMUC). The Modified Project would be served by existing and planned OMUC Master Planned domestic water system facilities.

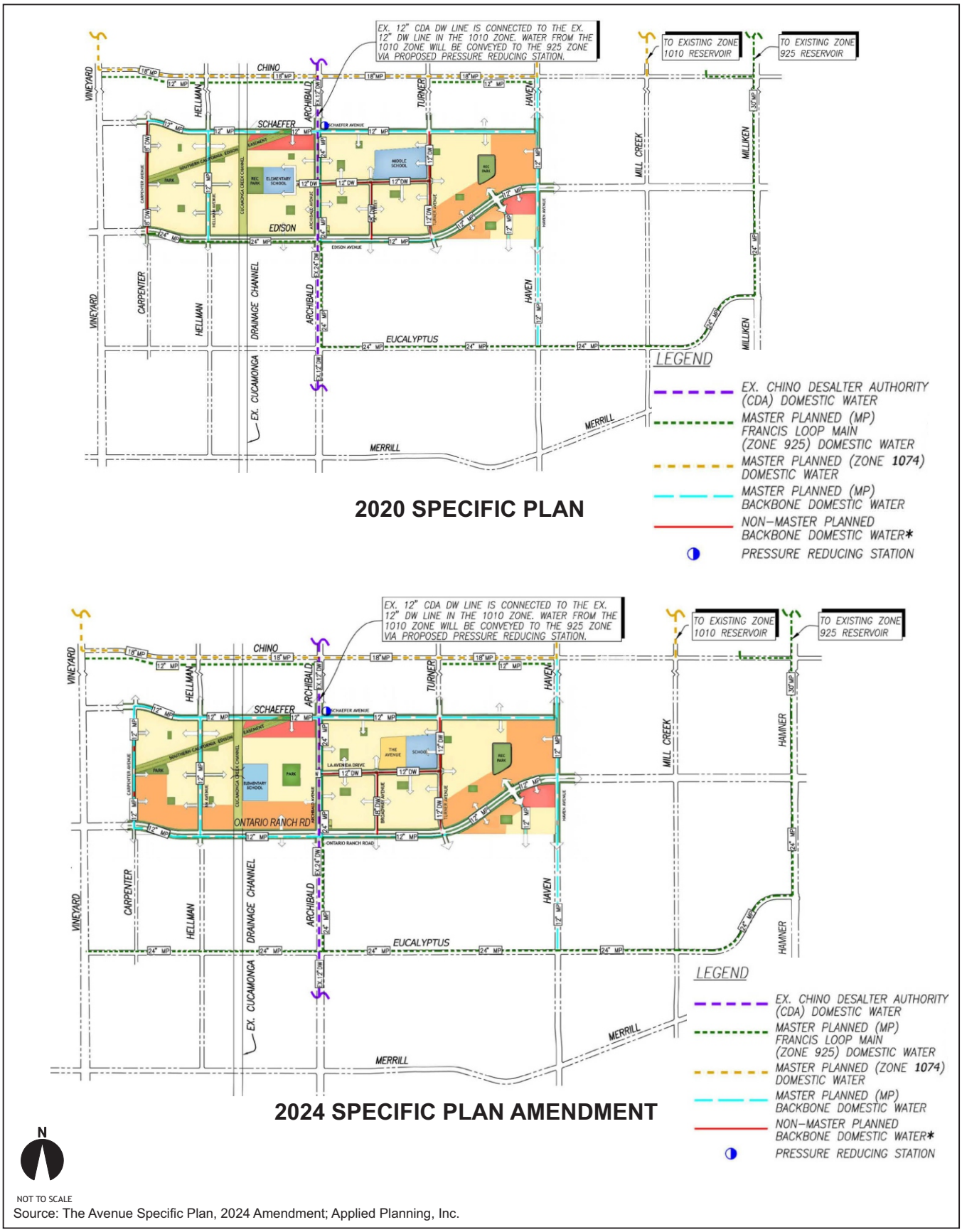
Within the Modified Project site, water service would be provided by a system of 8-inch to 12-inch water mains constructed within the backbone roadway system. The on-site public water system sizing would be required to comply with provisions of a City-approved hydraulic analysis to be conducted at the project-level design stage. The hydraulic analysis would be required to demonstrate that the proposed water system would meet peak demands including maximum day plus fire demand and peak hour demand.

The Modified Project Domestic Water Plan Concept is illustrated at Figure 2.3-5. For illustrative purposes, the Original Project and Modified Project Domestic Water Plan Concepts are compared at Figure 2.3-6. Please refer also to 2024 SPA Section 4.2.1, *Water*.



Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

Figure 2.3-5
Domestic Water Master Plan



Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

Figure 2.3-6
Domestic Water Master Plan Comparison

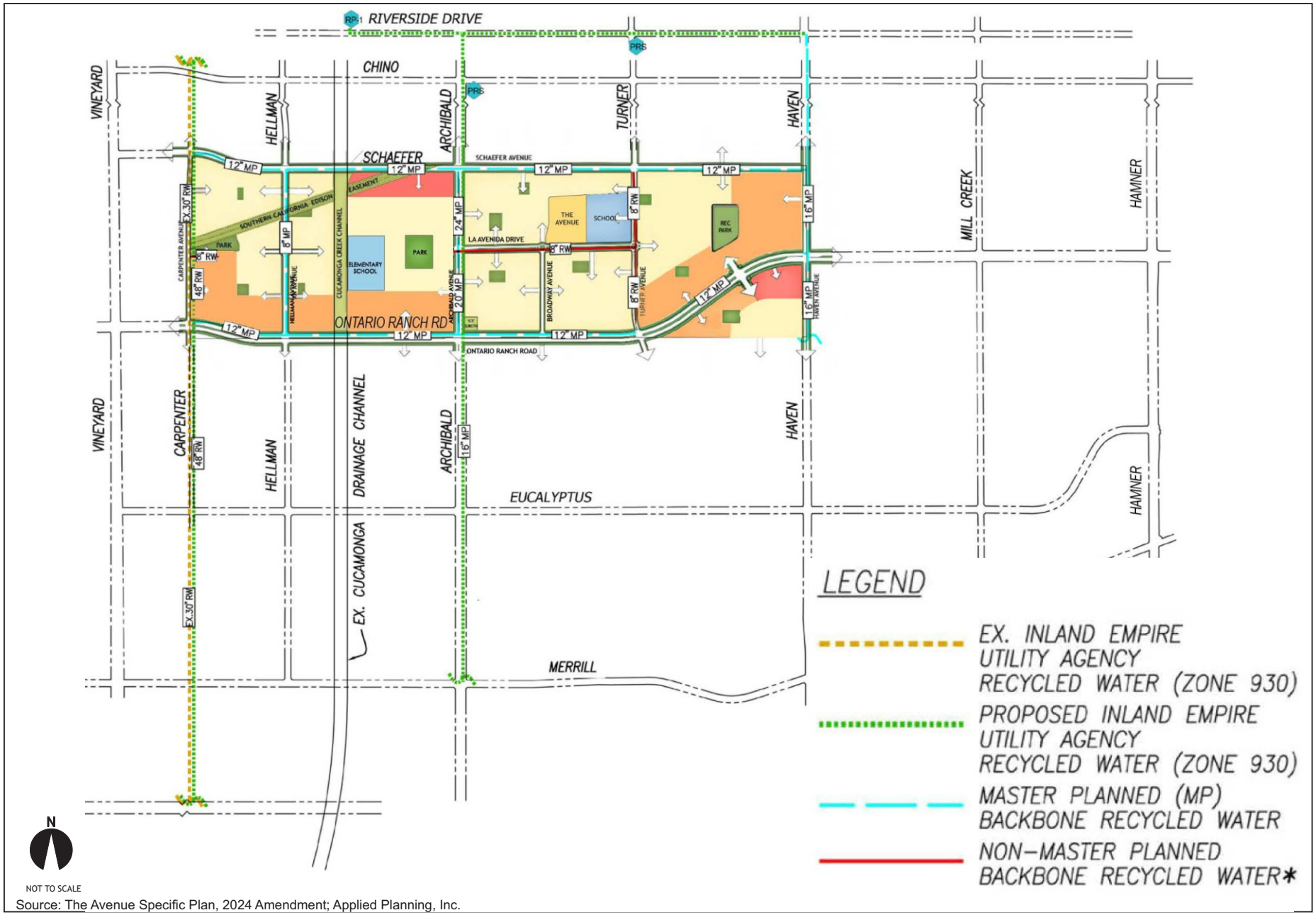
Recycled Water

Recycled water would be provided to the Modified Project by the Inland Empire Utility Agency (IEUA). The Modified Project would be required to comply with applicable provisions of City Municipal Code Chapter 8c: *Recycled Water Use*.[3] Recycled water would be used for all approved applications including, but not limited to, irrigation of parks, schools, street landscaping, recreational trails, HOA-maintained common areas, and landscaping. An engineering report approved by the City and the California Department of Public Health is required prior to the use of recycled water.

All recycled water improvements implemented to serve the Modified Project would be required to conform to the incumbent City Recycled Water Master Plan. Within the Modified Project site, the backbone recycled water system would comprise 8-inch lines and would be located in the backbone street system. In-tract recycled water system design would be provided at the time of subdivision.

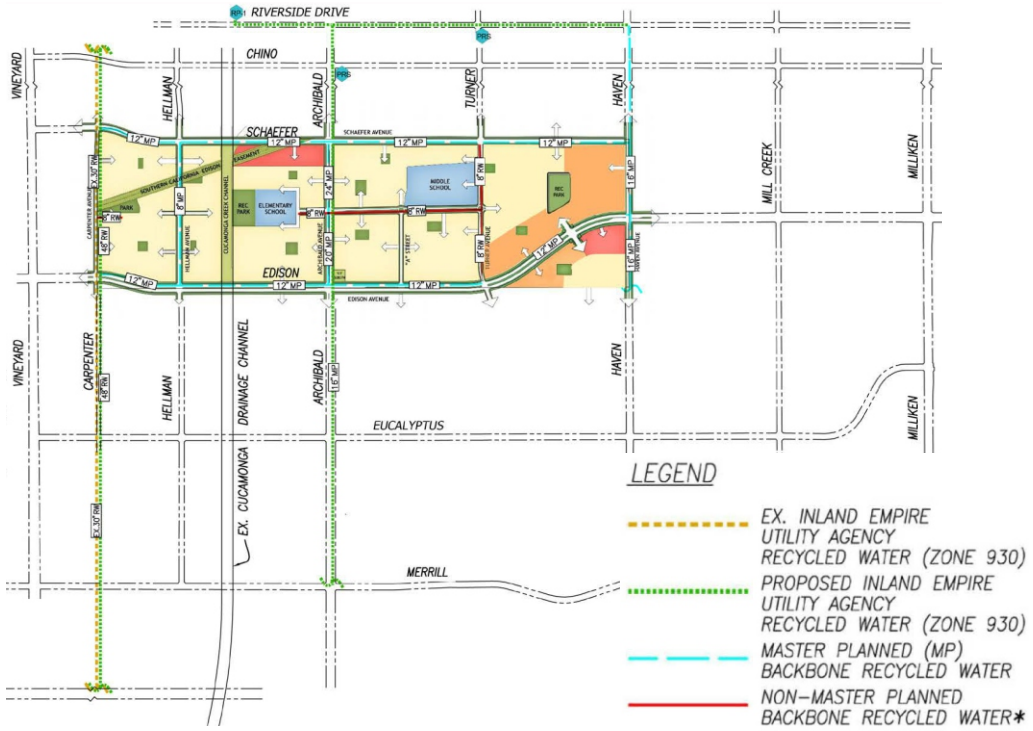
The Modified Project Recycled Water Plan Concept is illustrated at Figure 2.3-7. For illustrative purposes, the Original Project and Modified Project Recycled Water Plan Concepts are compared at Figure 2.3-8. Please refer also to 2024 SPA Section 4.2.2, *Recycled Water*.

[3] See also: https://codelibrary.amlegal.com/codes/ontarioca/latest/ontario_ca/0-0-0-44580#JD_6-8.714

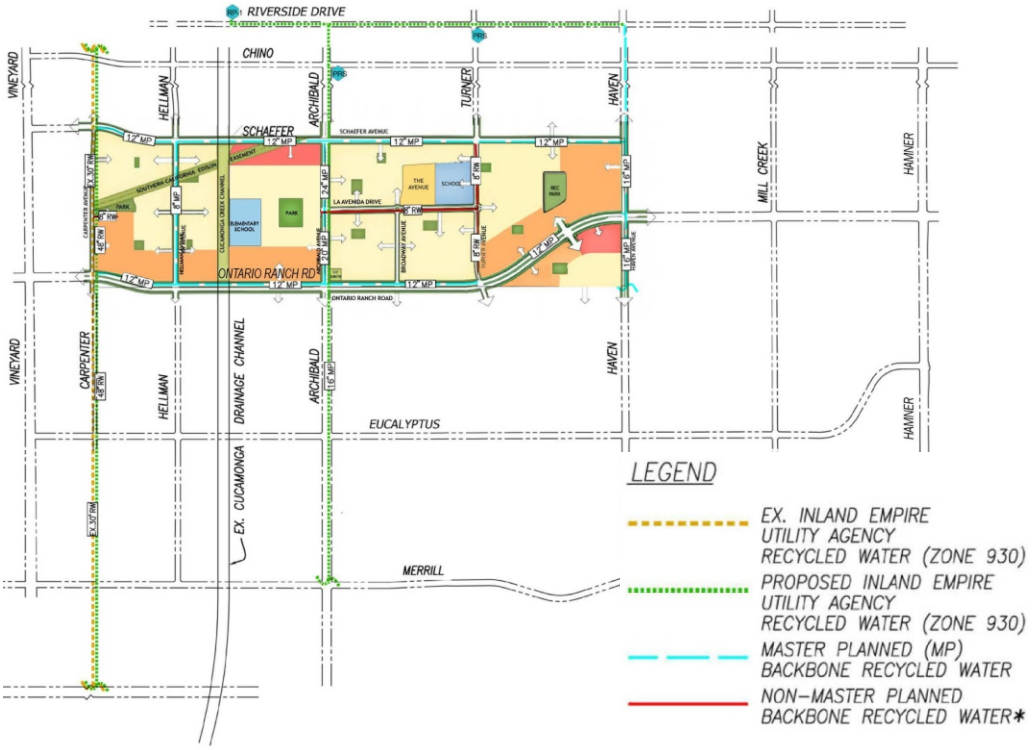


Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

Figure 2.3-7
Recycled Water Master Plan



2020 SPECIFIC PLAN



2024 SPECIFIC PLAN AMENDMENT

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NOT TO SCALE

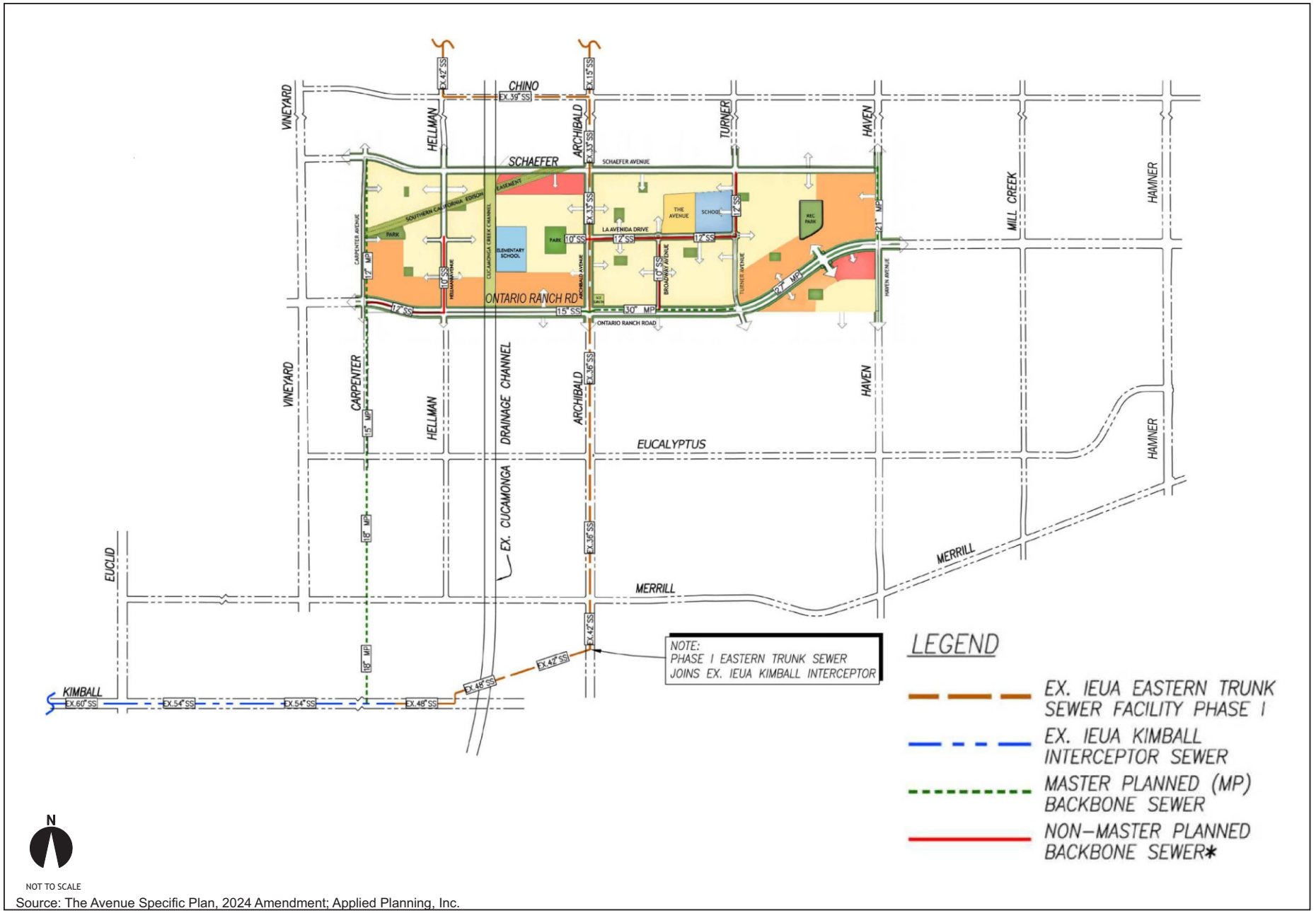
Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

Figure 2.3-8
Recycled Water Master Plan Comparison

2.3.5.2 Sewer Services

Sewer service to the Modified Project would be provided by the City of Ontario. All Master Plan sewer improvements implemented to serve the Modified Project would be required to conform to the incumbent City Sewer System Master Plan.

Within the Modified Project site, wastewater conveyance would be provided by a system of 10-inch to 12-inch sewer mains constructed within the backbone roadway system. Connecting service lines (minimum 8-inch) would be provided to individual developments. The on-site public sewer system sizing would be required to comply with provisions of a City-approved hydraulic analysis to be conducted at the project-level design stage. In-tract sewer system design would be provided at the time of subdivision. Final designs of sewer systems serving the Modified Project site would be required to conform to City and OMUC requirements. The Modified Project Sewer Plan Concept is presented at Figure 2.3-9. For illustrative purposes, the Original Project and Modified Project Sewer Plan Concepts are compared at Figure 2.3-10. Please refer also to 2024 SPA Section 4.2.3, *Sewer*.

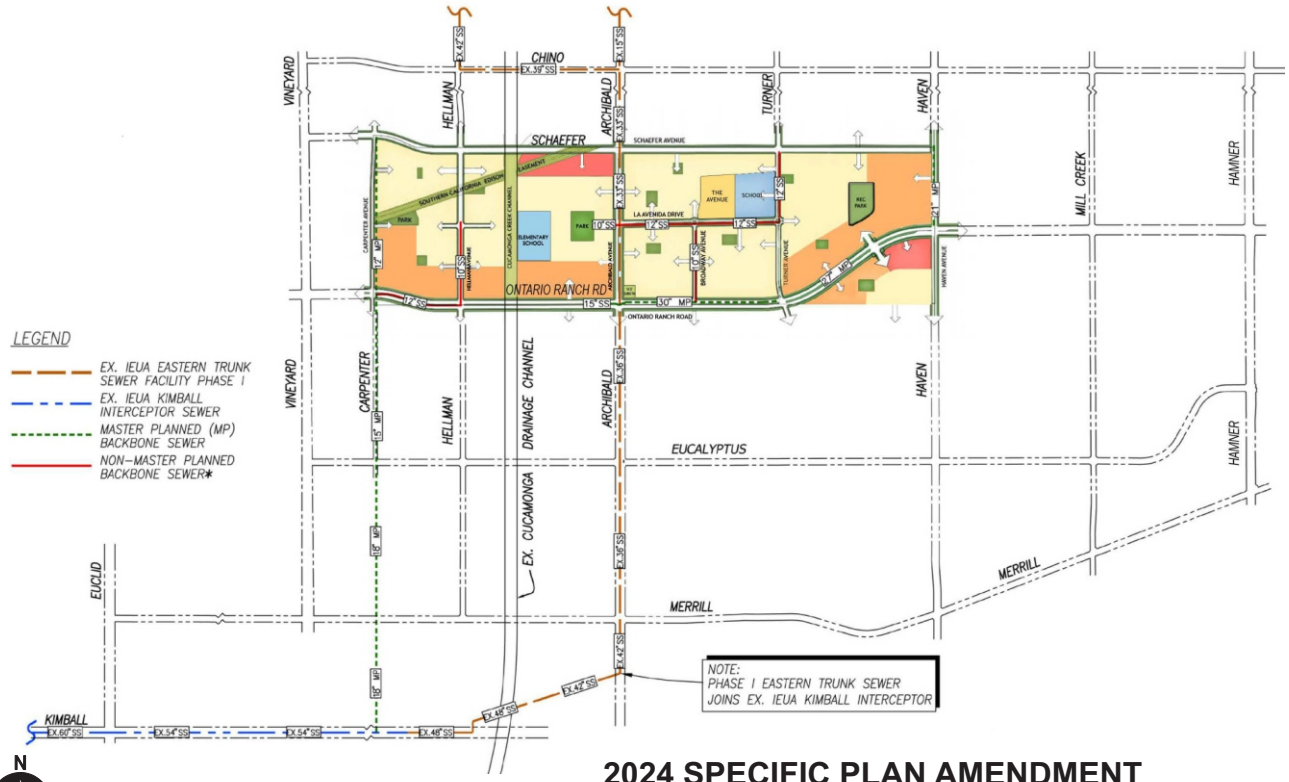


Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

Figure 2.3-9
Sewer Master Plan



2020 SPECIFIC PLAN



2024 SPECIFIC PLAN AMENDMENT

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NOT TO SCALE

Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

Figure 2.3-10
Sewer Master Plan Comparison

2.3.5.3 Stormwater Management System

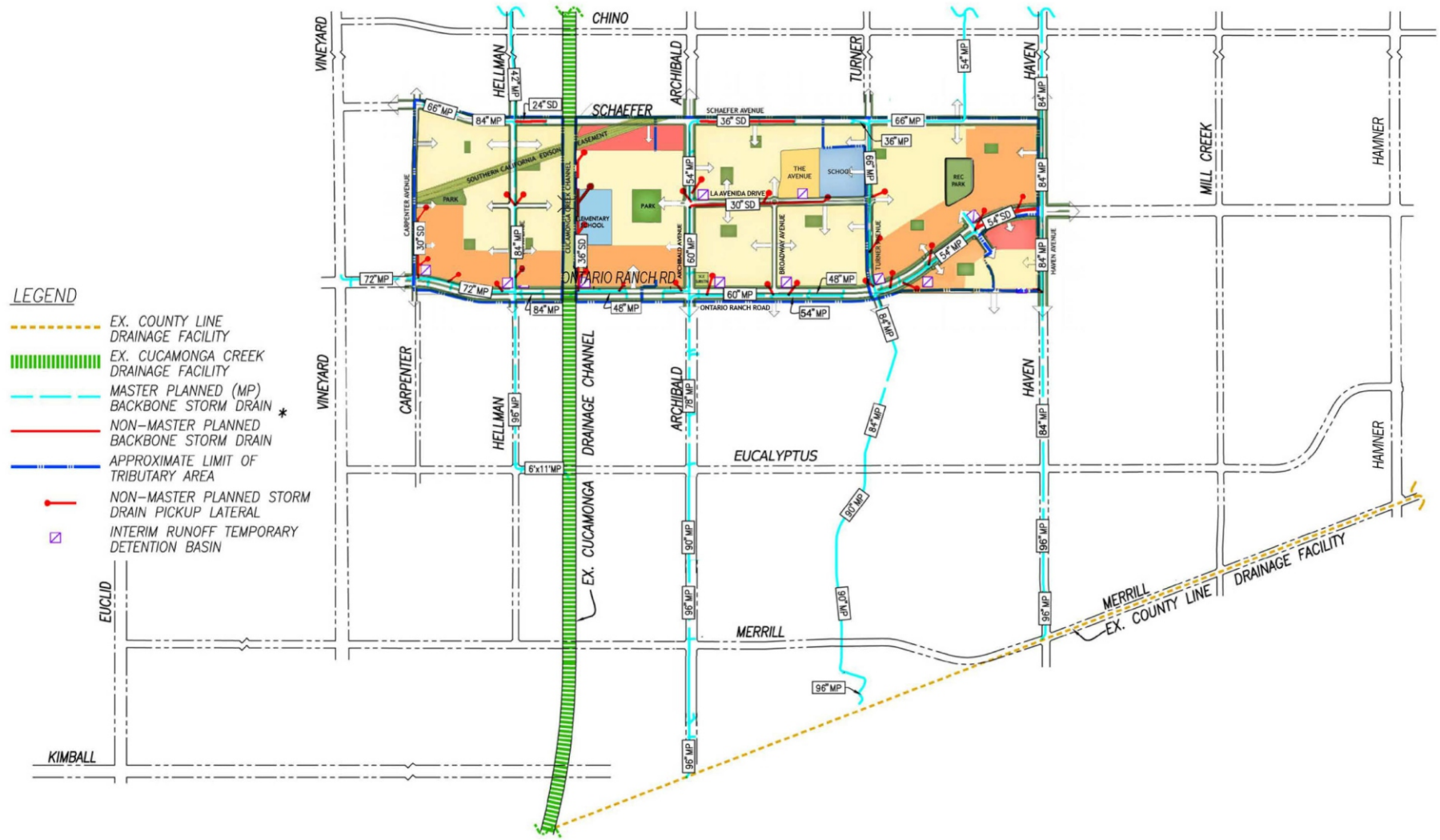
Storm Drains

Multiple City Master Plan of Drainage storm drain facilities would serve the Modified Project site. All Master Plan stormwater management system improvements implemented to serve the Modified Project would be required to conform to the incumbent City Master Plan of Drainage.

Under post-development conditions, existing southerly trending on-site drainage patterns would be maintained. Within the Modified Project site, minimum 18-inch storm drain laterals would be constructed to convey stormwater runoff from developed areas to the Master Plan storm drain system. In-tract storm drain system designs would be provided at the time of subdivision. Final designs of stormwater management systems serving the Modified Project would be required to conform to City requirements. The Modified Project Stormwater Management System Concept is presented at Figure 2.3-11. For illustrative purposes, the Original Project and Modified Project Storm Drain System Concepts are compared at Figure 2.3-12. Please refer also to 2024 SPA Section 4.2.4, *Drainage*.

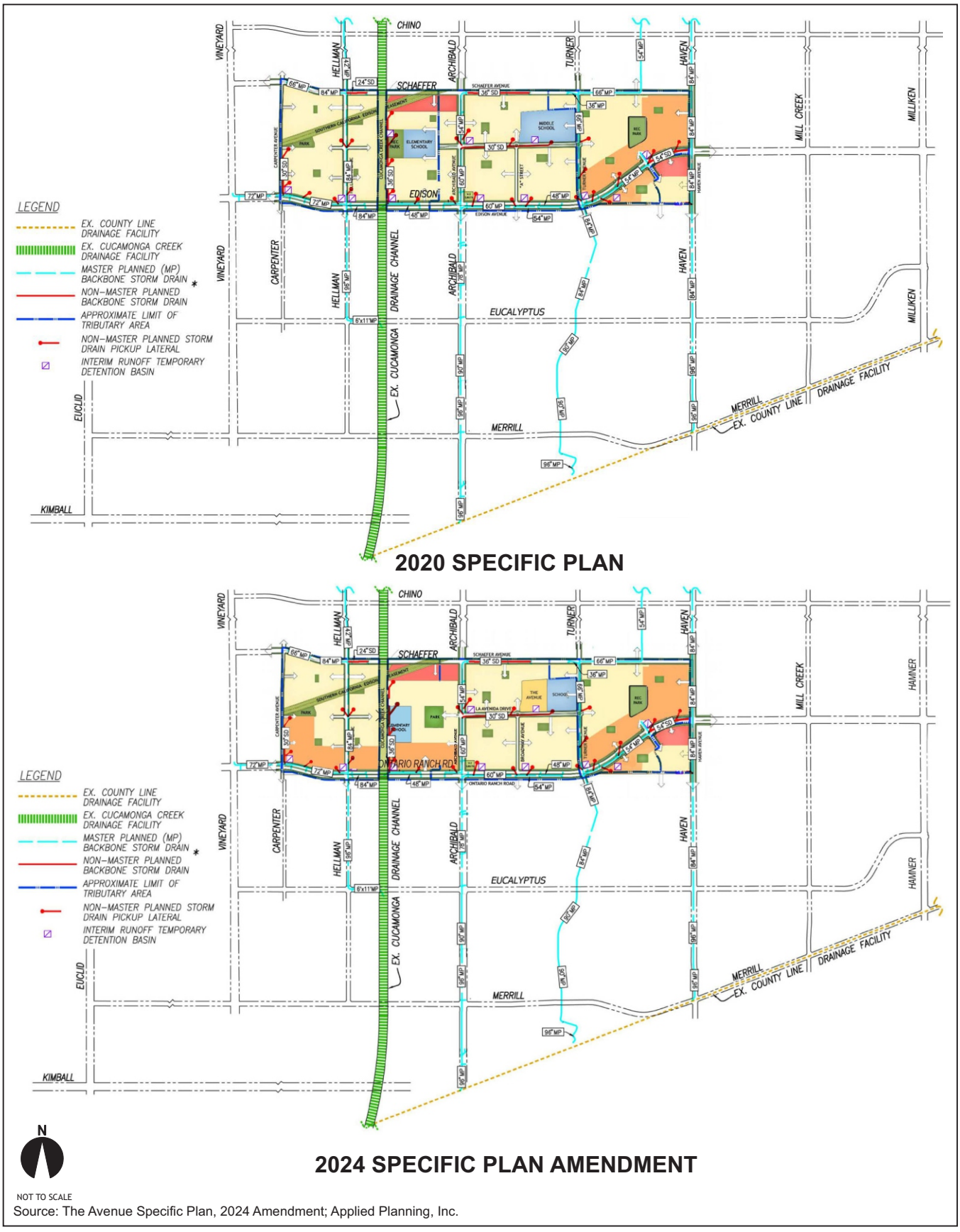
Water Quality Management Plan

The Modified Project would implement on-site stormwater management systems to detain and treat stormwater discharges. Stormwater discharges from the Modified Project would be required to comply with requirements and performance standards established under the incumbent San Bernardino County National Pollutant Discharge Elimination System (NPDES) Stormwater Program MS4 Permit and Water Quality Management Plan (WQMP). To these ends, developments within the Modified Project site would implement Low Impact Development (LID) Site Design Best Management Practices (BMPs) to reduce pollutant transport and increase on-site stormwater infiltration. Additionally, all Priority Land Use (PLU) areas within the Modified Project site would be required to comply with the statewide Trash Provisions adopted by the State Water Resources Control Board (SWRCB) and trash requirements in the most current San Bernardino County Area-Wide MS4 Permit.



Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

Figure 2.3-11
Storm Drain Master Plan



Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

Figure 2.3-12
Storm Drain Master Plan Comparison

Non-structural and structural Source Control BMPs would be documented in the Modified Project WQMPs. Final WQMPs, as approved by the City, would ensure that the Modified Project stormwater management systems have been designed to convey and treat stormwater discharges and limit the post-development peak flows consistent with available storm drain capacities.

Please refer also to 2024 SPA Section 4.2.6, *NPDES Compliance*.

2.3.5.4 Solid Waste Management

The City of Ontario provides solid waste collection services for the City and would service the Modified Project. Under the 2024 SPA, an integrated waste management plan for each subdivision is required prior to Development Advisory Board (DAB) approval. All developments within Modified Project would be required to comply with waste reduction and recycling standards and identified in the City Municipal Code and as specified in the incumbent *City of Ontario Solid Waste Department Refuse and Recycling Planning Manual*. Please refer also to 2024 SPA Section 4.2.7, *Solid Waste*.

2.3.5.5 Electricity

SCE would provide electricity to the site from existing vicinity facilities. Facilities less than 34.5kV would be located underground if they are located adjacent to any streets proposed to be improved in conjunction with site improvements. All proposed connections and modifications to SCE facilities would conform to SCE and City requirements.

2.3.5.6 Natural Gas

The Gas Company would provide natural gas service to the site. All proposed connections and modifications to Gas Company facilities would be required to conform to Gas Company and City requirements.

2.3.5.7 Fiber Optics System

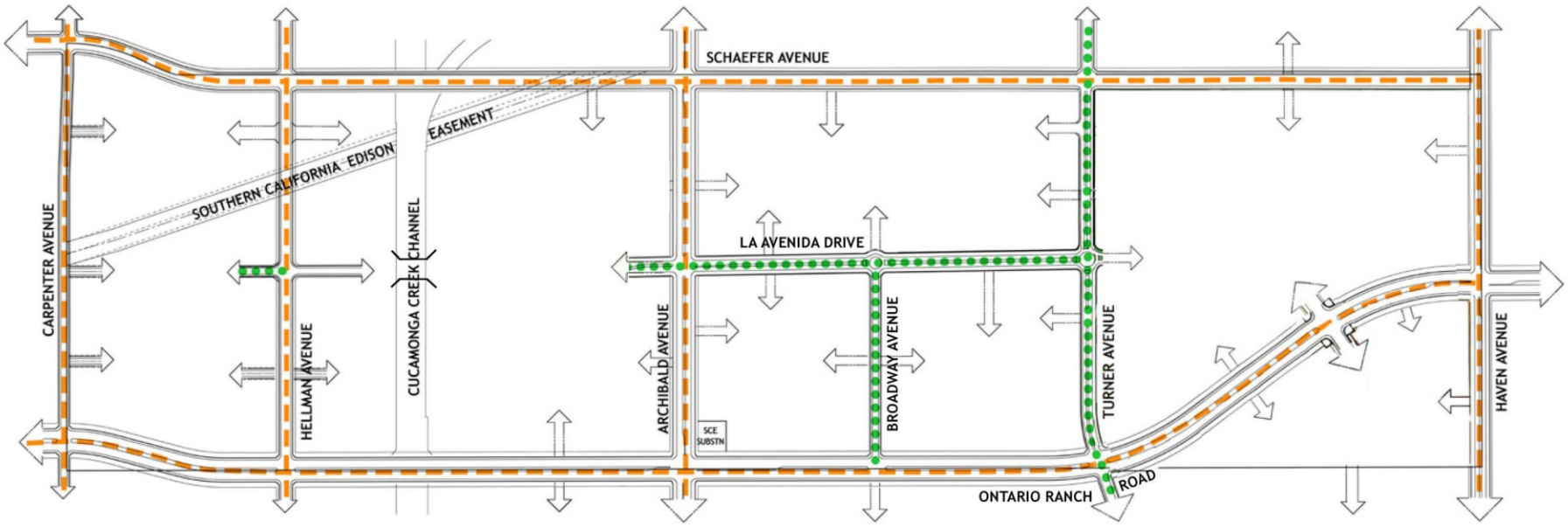
A backbone fiber optics system (conduits and fiber) would be constructed within the Modified Project street system. Backbone fiber optic components (conduits and fiber) would be placed underground within a duct and structure system to be installed in a joint trench. In-tract fiber and conduit would be installed per the City's in-tract fiber optic design guidelines (see: https://www.ontarioca.gov/sites/default/files/Ontario-Files/Information-Technology/2014-12-16_in-tract_designguidelines.pdf). The Modified Project Fiber Optic Plan is presented at Figure 2.3-13. For illustrative purposes, the Original Project and Modified Project Fiber Optic Plan Concepts are compared at Figure 2.3-14.

2.3.5.8 Communications Services

Communications services, including wired and wireless telephone and internet services, are available through numerous private providers and would be provided on an as-needed basis. To the extent practical and consistent with City Conditions of Approval, existing and proposed wires, conductors, conduits, raceways, and similar communications improvements within the Modified Project site would be installed underground. Any necessary surface-mounted equipment, e.g., terminal boxes, transformers, meters, service cabinets, etc., would be screened and would conform to City building setback requirements.

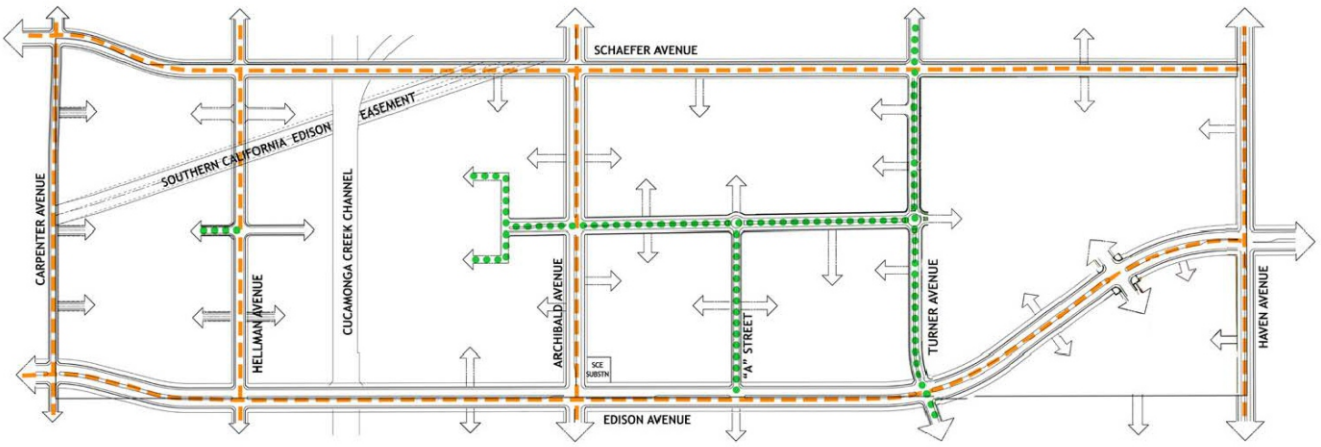
2.3.6 Energy Efficiency/Sustainability

Energy-saving and sustainable design features and operational programs would be incorporated in all facilities developed pursuant to the Modified Project. The Modified Project would be required to comply with incumbent energy efficiency and performance standards established under the CALGreen Code and the City of Ontario Community Climate Action Plan (CCAP).



Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

Figure 2.3-13
Fiber Optics

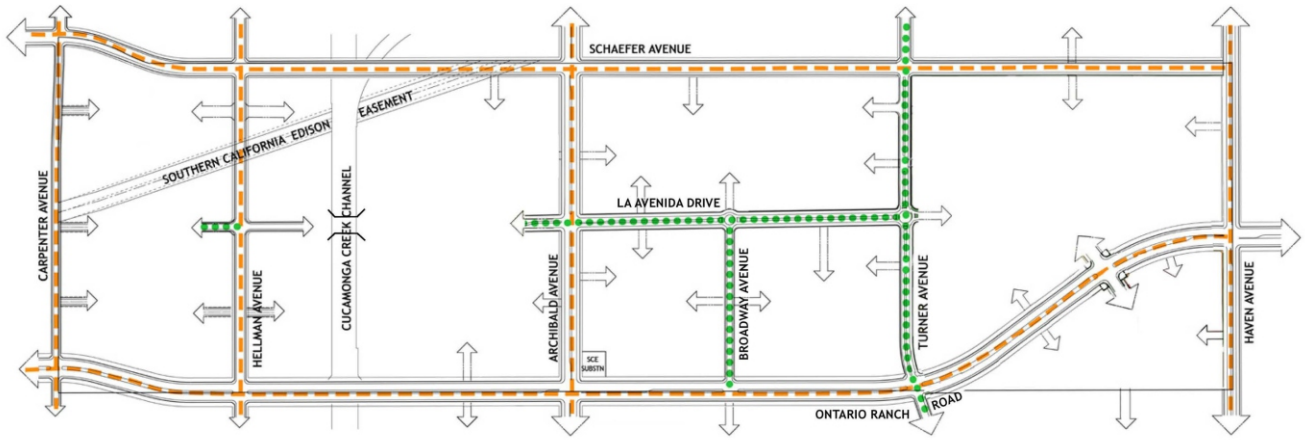


LEGEND

MASTER PLANNED (MP) INFRASTRUCTURE

CONSTRUCTED BY DEVELOPERS

2020 SPECIFIC PLAN



LEGEND

MASTER PLANNED (MP) INFRASTRUCTURE

CONSTRUCTED BY DEVELOPERS

2024 SPECIFIC PLAN AMENDMENT

N

NOT TO SCALE

Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

applied planning inc

Figure 2.3-14
Fiber Optics Comparison

2.3.7 Site Preparation

As an initial action, the Modified Project site would be cleared of vegetation and all on-site improvements associated with, or supporting, the existing on-site land uses would be demolished or removed. Debris generated by site preparation and demolition activities would be disposed of/recycled consistent with provisions of the California Integrated Waste Management Plan Act (AB 939) and the City's Integrated Waste Department *Refuse and Recycling Planning Manual*.[4]

Additionally, a total of 20 water wells are located within the Modified Project site. Locations of these wells are identified at Figure 2.3-15. All existing water wells within the Modified Project site would be destroyed consistent with San Bernardino County Health Department and California Department of Water Resources (DWR) requirements. See also: https://water.ca.gov/Programs/Groundwater-Management/Wells/Well-Standards/Combined-Well-Standards/Water-Destruction.

The natural topography of the Project site is relatively flat. No unusual grading conditions are present and substantial import or export of earth materials is not expected. Project grading would provide stable development pads for construction; balance cut and fill grading quantities on-site; and meet City of Ontario building standards and acceptable infrastructure gradient requirements.

2.3.8 Construction Area Traffic Management Plan

To avoid or minimize temporary construction-related traffic impacts throughout site preparation and construction activities, the Project Applicant would be required to prepare and implement a City-approved Construction Traffic Management Plan (Plan). Typical elements and information incorporated in the Plan would include, but not be limited to:

- **Name of on-site construction superintendent and contact phone number.**

[4] City of Ontario, California: *Solid Waste Department* [Integrated Waste Department] *Refuse and Recycling Manual*, Updated March 17, 2016. https://www.ontarioca.gov/omuc/integrated-waste.



Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

Figure 2.3-15
Existing Wells

- **Identification of Construction Contract Responsibilities** - For example, for excavation and grading activities, describe the approximate depth of excavation, and quantity of soil import/export (if any).

- **Identification and Description of Truck Routes** - to include the number of trucks and their staging location(s) (if any).

- **Identification and Description of Material Storage Locations (if any).**

- **Location and Description of Construction Trailer (if any).**

- **Identification and Description of Traffic Controls** - Traffic controls shall be provided per the Manual of Uniform Traffic Control Devices (MUTCD) if the occupation or closure of any traffic lanes, parking lanes, parkways or any other public right-of-way is required. If the right-of-way occupation requires configurations or controls not identified in the MUTCD, a separate traffic control plan must be submitted to the City for review and approval. All right-of-way encroachments would require permitting through the City.

- **Identification and Description of Parking** - Estimate the number of workers and identify parking areas for their vehicles.

- **Identification and Description of Maintenance Measures** - Identify and describe measures taken to ensure that the work site and public right-of-way would be maintained (including dust control).

The Plan would be reviewed and approved by the City prior to the issuance of the first building permit. The Plan and its requirements would also be required to be provided to all contractors as one component of building plan/contract document packages.

2.3.9 Opening Year

For the purposes of this analysis, the Project Opening Year is defined as 2026, by which time all proposed uses are assumed to be complete, occupied, and operational.

2.4 PROJECT OBJECTIVES

The stated vision of the 2024 SPA is to establish "a truly walkable community, featuring pedestrian amenities that encourage walking and biking to schools, parks and basic commercial needs—all within five minutes, for the majority of residents" (2024 SPA, p. 1-1.) Supporting 2024 Specific Plan Amendment Objectives are listed below.

General

- Implement TOP 2050 Policy Plan Land Use Plan.
- Support TOP 2050 vision for urbanization of the Ontario Ranch area of the City.
- Implement Specific Plan developments providing additional long-term employment opportunities.
- Implement Specific Plan developments providing additional construction employment opportunities.
- Establish new development that would further the City's near-term and long-range fiscal goals.

Residential Land Uses

- Development of a variety of housing types into the land use plan addressing a wide variety of lifestyles and economic segments.
- Provide for both single family attached and detached housing in low density and low medium density residential districts.
- Plan for seamless transitions between housing product types in order to create cohesive neighborhoods that include a range of types and styles.
- Plan residential neighborhoods around a series of parks and open space areas, promoting outdoor activity and interaction among neighbors.
- Provide for connectivity between residential neighborhoods, recreational areas, and adjacent commercial land uses, as well as to the schools, by means of pedestrian and bicycle trail linkages along The Avenue and trails incorporated into

both the Southern California Edison Easement and the Cucamonga Creek Channel. Create a strong functional relationship between homes and schools.
- Create a hierarchy of parks, providing for active and passive recreation.
- Create residential neighborhoods with diverse architectural styles and traditional design elements reflecting some of the characteristics of older established Ontario neighborhoods.

Commercial Land Uses

- Develop retail and commercial uses to meet the needs of the residential community and larger surrounding market area, as well as implement Policy Plan policies.
- Provide trails and sidewalks to connect the residential community with the retail and commercial area.
- Consider the development of plazas and other public space amenities within the retail and commercial area providing space for social interaction.
- Orient retail and commercial buildings to the street, wherever possible, to create an urban edge and sense of arrival.

2.5 DISCRETIONARY APPROVALS and PERMITS

Discretionary actions, permits, and related consultation(s) necessary to approve and implement the Project include, but are not limited to, the following.

2.5.1 Lead Agency Discretionary Actions and Permits

- CEQA Compliance;
- Adoption of this Addendum;
- Approval of a Specific Plan Amendment;
- Approval of Tentative Parcel Maps;
- Approval of a Development Agreement; and
- Approval of Development Plans.

2.5.2 Other Consultation and Permits

Anticipated consultation and permits necessary to realize the Modified Project would or may include the following:

- Permitting by/through the Regional Water Quality Control Board (RWQCB) pursuant to requirements of the City's National Pollutant Discharge Elimination System (NPDES) Permit.

- Permitting by/through the South Coast Air Quality Management District (SCAQMD) for certain equipment or land uses that may be implemented pursuant to the Modified Project.

- Permitting (i.e., utility construction and connection permits) from affected utility purveyors, notably the City of Ontario, IEUA, and SCE.

- Permitting for destruction of on-site wells per San Bernardino County Health Department and Department of Water Resources requirements.

- Other ministerial permits necessary to realize all on- and off-site improvements related to the development of the site.

3.0 ENVIRONMENTAL CHECKLIST

ENVIRONMENTAL CHECKLIST

The Avenue Specific Plan, 2024 Amendment

Addendum to The Ontario Plan 2050 Certified SEIR (SCH No. 2021070364)

General Notes: *The Avenue Specific Plan, 2024 Amendment* (Modified Project, Project) land uses and development concepts have been designed to be consistent with land uses and development concepts for the subject site reflected in The Ontario Plan 2050 (TOP 2050). Impacts of TOP 2050 have been evaluated and addressed in *The Ontario Plan 2050 Certified SEIR (*TOP 2050 SEIR, Certified SEIR). This Addendum compares and contrasts impacts of the Modified Project with impacts identified in the Certified SEIR. As substantiated herein, the Modified Project would not result in substantially different or substantially increased impacts when compared to impacts considered and addressed in the Certified SEIR. The CEQA Initial Study Checklist categories and topics presented below conform to the suggested content presented at *CEQA Guidelines*, Appendix G. Certain of the Addendum Technical Studies are dated 2023. These Studies were prepared prior to the latest refinements reflected in the 2024 Specific Plan Addendum (2024 SPA). Findings and conclusions of these Studies are not affected by the 2024 SPA refinements.

1. AESTHETICS

Except as provided in Public Resources Code Section 21099, would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Have a substantial adverse effect on a scenic vista?					X	
b) Substantially damage visible scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?					X	
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?					X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?					X	

Substantiation:

a-d) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR recognizes that buildout of the City would alter the visual character of the City. The Certified SEIR concludes that compliance with the City Municipal Code and applicable TOP 2050 Policies would ensure that potential aesthetics impacts of development anticipated under TOP 2050 would be less-than-significant (Certified SEIR, pp. 5.1-4 – 5.1-10).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. Final designs of the Modified Project facilities including, but not limited to, the proposed buildings, landscape/hardscape features, and lighting configurations would be required to conform to the 2024 Specific Plan Development Regulations and Design Guidelines,[1] and applicable provisions of the City Municipal Code. Final designs of all uses would be subject to City review and approval. Conformance with the 2024 Specific Plan Development Regulations and Design Guidelines and City Municipal Code requirements would ensure that the Modified Project would not substantially degrade scenic vistas, substantially degrade scenic resources, adversely alter the existing visual character or quality of the area, or create a new source of substantial light or glare which would adversely affect day or nighttime views. Impacts of the Modified Project in these regards would be less-than-significant. On this basis, when compared to the Certified SEIR findings, no new or substantially increased aesthetic impacts would result from the Modified Project.

Modified Project Conditions of Approval: None.

[1] The 2024 Specific Plan Development Regulations and Design Guidelines have been amended to address new or revised uses proposed by the Modified Project.

Summary

When compared to the impacts identified in the Certified SEIR, no new significant, substantially increased, or substantially different aesthetics or light/glare impacts would result from the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022*; *The Avenue Specific Plan, 2024 Amendment*.

2. AGRICULTURE AND FORESTRY RESOURCES

Would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?					X	
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?					X	
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 1220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?					X	
d) Result in the loss of forest land or conversion of forest land to non-forest use?					X	
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use, or conversion of forest land to non-forest use?					X	

Substantiation:

a) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: Under TOP 2050, the City Ontario no longer has land designated for agricultural uses. Because TOP 2050 is the baseline for the Certified SEIR, TOP 2050 would not result in the conversion of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance to nonagricultural uses. TOP 2050 would therefore have no impact on land zoned for agricultural purposes (Certified SEIR, p. 5.2-12).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. As noted above, TOP 2050 would have no impact on land zoned for agricultural purposes. Because the Modified Project Land Uses are consistent with TOP 2050 land use designations, by extension, the Modified Project would similarly have no impact on land zoned for agricultural purposes.

Modified Project Conditions of Approval: None.

b) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions:

Agricultural Zoning

The Certified SEIR concluded that implementation of the Land Use Plan would not adversely affect agriculturally-zoned properties (Certified SEIR, p. 5.2-12).

Williamson Act Contracts

Implementation of TOP 2050 would affect all active Williamson Act contracts within the City. The Certified SEIR concluded, however, that impacts to Williamson Act contract properties under TOP 2050 would not be greater than, or different than, would result

from TOP 2009. On this basis, the Certified SEIR concluded that TOP 2050 impacts to Williamson Act Contract properties would be less-than-significant (Certified SEIR, p. 5.2-13).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. Agricultural resources impacts discussed below are consistent with impacts of TOP 2050 as evaluated in the Certified SEIR.

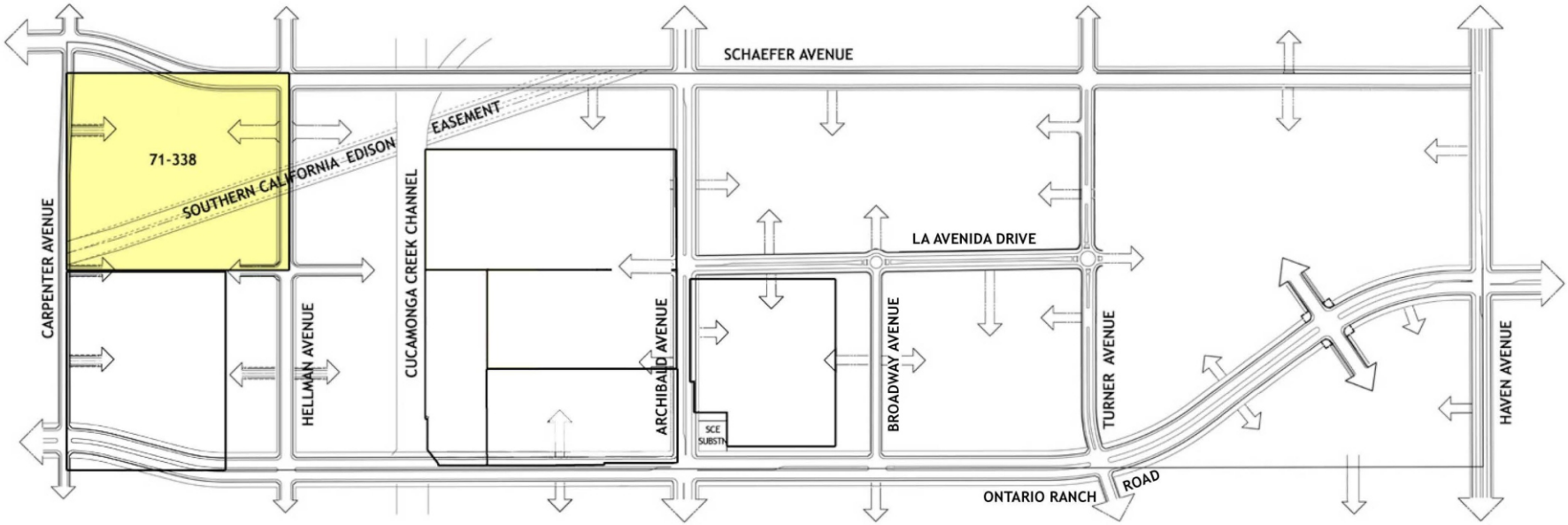
Agricultural Zoning

The Modified Project site is Zoned "Specific Plan." The Modified Project does not propose or require uses or activities that would result in potentially adverse effects at agriculturally-zoned properties. Based on the preceding, the Modified Project's potential impacts related to a conflict with agricultural zoning would be less-than-significant.

Williamson Act Contracts

The California Land Conservation Act of 1965 (the Williamson Act, Government Code Sections 51200 through 51297.4) encourages the preservation of agricultural lands through tax incentives due to the increasing trend toward the conversion of agricultural lands to urban uses. The Act enables counties and cities to designate agricultural preserves (Williamson Act lands) and within these preserves offer preferential taxation to agricultural landowners based on the agricultural income-producing value of the property.

One active Williamson Act Contract property (Williamson Act Contract No 71-338) is located within the Modified Project site. The location of the subject Williamson Act Contract property is indicated at Figure 2-1. Contract No 71-338 will expire in 2026 and will not be renewed or extended. No development of the subject property would occur prior to expiration of Contract No 71-338. As such, the Modified Project would have no impact on an active Williamson Act Contract property.



Source: The Avenue Specific Plan, 2024 Amendment; Applied Planning, Inc.

Figure 2-1
Williamson Act Contracts

Under TOP 2050, the entire 2024 Specific Plan Area is anticipated to be developed with urban uses. The Certified SEIR concluded that under TOP 2050 buildout conditions, impacts to Williamson Act properties would be less-than-significant. The Modified Project land uses are consistent with TOP 2050 as evaluated in the Certified SEIR. Because the Modified Project Land Uses are consistent with TOP 2050 land use designations, by extension, the Modified Project would similarly have a less-than-significant impact on Williamson Act contract properties.

Based on the preceding, the potential for the Modified Project to conflict with a Williamson Act Contract would be less-than-significant.

Modified Project Conditions of Approval: None.

c) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: There are no City land uses zoned for forest land, timberland, or timberland zoned Timberland Production. There are no properties in the City considered to be forestland. As such, implementation of TOP 2050 would have no impact on land uses zoned for forest land, timberland, or timberland zoned Timberland Production; nor would TOP 2050 result in the loss or conversion of timberland or forest land to non-forest uses (Certified SEIR, p. 5.2-13).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. The Modified Project site is not zoned for forest land, timberland, or timberland zoned Timberland Production. There is no timberland or forest land within the Modified Project site. The Modified Project Land Uses are consistent with TOP 2050 land use designations. As noted above, TOP 2050 would have no impact on forest land, timberland, or timberland zoned Timberland Production; nor would TOP 2050 result in the loss or conversion of timberland or forest land to non-forest uses. Because the Modified Project Land Uses are consistent with TOP 2050 land use designations, by extension, the Modified Project

would similarly have no impact on forest land, timberland, or timberland zoned Timberland Production; nor would the Modified Project result in the loss or conversion of timberland or forest land to non-forest uses.

Modified Project Conditions of Approval: None.

d, e) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: Under TOP 2050, the City Ontario no longer has land designated for agricultural uses. Because TOP 2050 is the baseline for the Certified SEIR, TOP 2050 would not result in the conversion of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance to nonagricultural uses. TOP 2050 would therefore have no impact on land zoned for agricultural purposes (Certified SEIR, p. 5.2-12). See also Checklist Item 2 a.

There are no City land uses zoned for forest land, timberland, or timberland zoned Timberland Production. There are no properties in the City considered to be forestland. As such, implementation of TOP 2050 would have no impact on land uses zoned for forest land, timberland, or timberland zoned Timberland Production; nor would TOP 2050 result in the loss or conversion of timberland or forest land to non-forest uses (Certified SEIR, p. 5.2-13). See also Checklist Item 2 c.

TOP 2050 does not propose or require uses that would otherwise result in conversion of Farmland to nonagricultural use or conversion of forest land to non-forest use.

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. No forest land or farmland is located within the Modified Project site or in its vicinity. The Modified Project does not propose or require uses that would otherwise result in conversion of Farmland to nonagricultural use, or conversion of forest land to non-forest use. The Modified Project Land Uses are consistent with TOP 2050 land use designations. As noted above,

TOP 2050 would have no impact on forest land or farmland, nor would TOP 2050 result in the loss or conversion of timberland or forest land to non-forest uses. Because the Modified Project Land Uses are consistent with TOP 2050 land use designations, the Modified Project would similarly not result in the conversion of Farmland to nonagricultural use, or conversion of forest land to non-forest use.

Modified Project Conditions of Approval: None.

Summary

When compared to impacts considered and addressed in the Certified SEIR, no new significant, substantially increased, or substantially different agriculture and forestry resources impacts would result from the Modified Project. No changed or new information has been identified to indicate that any impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022*; *The Avenue Specific Plan, 2024 Amendment*.

3. AIR QUALITY

Would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?					X	
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?					X	
c) Expose sensitive receptors to substantial pollutant concentrations?					X	

Would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?					X	

Substantiation:

a) *No Changes or New Information Requiring Preparation of an MND or EIR.*

General Note: *The technical analyses referenced in this section reflect likely maximum impacts. Subsequent to preparation of these analyses, total residential development intensities allowed under the Modified Project have been reduced consistent with direction. Specifically, the technical analyses referenced herein assume residential development of the Modified Project totaling up to 3,807 dwelling units (see Project Traffic Analysis, p. 2 et al.). As subsequently modified, maximum allowed residential development under the Modified Project would not exceed 3,753 dwelling units (see Section 2.0, Project Description, Table 2.1-1).*

Certified SEIR Conclusions: Because air pollutant emissions associated with buildout of the City would cumulatively contribute to nonattainment conditions affecting the South Coast Air Basin (SoCAB), the Certified SEIR determined that TOP 2050 would be inconsistent with the Air Quality Management Plan (AQMP). For these reasons, the Certified SEIR concluded that TOP 2050 would result in significant AQMP consistency impacts (Certified SEIR, p. 5.3-40).

Certified SEIR Mitigation Measures: The Certified SEIR includes mitigation (listed below) that would generally reduce criteria pollutant emissions associated with buildout of TOP 2050. These measures include mitigation from the previous (2010) TOP EIR and new mitigation implemented under TOP 2050.

3-1 Prior to discretionary approval by the City of Ontario for development projects subject to CEQA (California Environmental Quality Act) review (i.e., nonexempt projects), project

applicants shall prepare and submit a technical assessment evaluating potential project construction-related air quality impacts to the City of Ontario Planning Department for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology for assessing air quality impacts. If construction-related criteria air pollutants are determined to have the potential to exceed the South Coast AQMD–adopted thresholds of significance, the City of Ontario building department shall require feasible mitigation measures to reduce air quality emissions. Potential measures shall be incorporated as conditions of approval for a project and may include:

- *Require fugitive dust control measures that exceed South Coast Air Quality Management District's Rule 403, such as:*
  - *Requiring use of nontoxic soil stabilizers to reduce wind erosion.*
  - *Applying water every four hours to active soil disturbing activities.*
  - *Tarping and/or maintaining a minimum of 24 inches of freeboard on trucks hauling dirt, sand, soil, or other loose materials.*
  - *Using construction equipment rated by the United States Environmental Protection Agency as having Tier 4 interim or higher exhaust emission limits.*
- *Ensuring construction equipment is properly serviced and maintained to the manufacturer's standards.*
- *Limiting nonessential idling of construction equipment to no more than five consecutive minutes.*
- *Using Super-Compliant VOC paints for coating architectural surfaces whenever possible. A list of Super-Compliant architectural coating manufactures can be found on the South Coast Air Quality Management District's website at: http://www.aqmd.gov/prdas/brochures/Super- Compliant_AIM.pdf.*

These identified measures shall be incorporated into all appropriate construction documents (e.g., construction management plans) submitted to the City and shall be verified by the City's Planning Department.

3-2 *The City of Ontario shall evaluate new development proposals within the City and require all developments to include access or linkages to alternative modes of transportation, such as transit stops, bike paths, and/or pedestrian paths (e.g., sidewalks).*

New Mitigation

AQ-1 Prior to discretionary approval by the City of Ontario for development projects subject to CEQA (California Environmental Quality Act) review (i.e., nonexempt projects), project applicants shall prepare and submit a technical assessment evaluating potential project operation-phase-related air quality impacts to the City of Ontario Planning Department for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology in assessing air quality impacts. If operation-related air pollutants are determined to have the potential to exceed the South Coast AQMD–adopted thresholds of significance, the City of Ontario Planning Department shall require that applicants for new development projects incorporate mitigation measures to reduce air pollutant emissions during operational activities. The identified measures shall be included as part of the conditions of approval. Possible mitigation measures to reduce long-term emissions could include, but are not limited to the following:

- *For site-specific development that requires refrigerated vehicles, the construction documents shall demonstrate an adequate number of electrical service connections at loading docks for plug-in of the anticipated number of refrigerated trailers to reduce idling time and emissions.*
- *Applicants for manufacturing and light industrial uses shall consider energy storage and combined heat and power in appropriate applications to optimize renewable energy generation systems and avoid peak energy use.*
- *Site-specific developments with truck delivery and loading areas and truck parking spaces shall include signage as a reminder to limit idling of vehicles while parked for loading/unloading in accordance with California Air Resources Board Rule 2845 (13 CCR Chapter 10 sec. 2485).*
- *Provide changing/shower facilities as specified in Section A5.106.4.3 of CALGreen (Nonresidential Voluntary Measures).*
- *Provide bicycle parking facilities per Section A4.106.9 of CALGreen (Residential Voluntary Measures).*
- *Provide preferential parking spaces for low-emitting, fuel-efficient, and carpool/van vehicles per Section A5.106.5.1 of CALGreen (Nonresidential Voluntary Measures).*
- *Provide facilities to support electric charging stations per Section A5.106.5.3 and*

Section A5.106.8.2 of CALGreen (Nonresidential Voluntary Measures; Residential Voluntary Measures).

Applicant-provided appliances shall be Energy Star-certified appliances or appliances of equivalent energy efficiency (e.g., dishwashers, refrigerators, clothes washers, and dryers). Installation of Energy Star-certified or equivalent appliances shall be verified by the City during plan check.

[TOP 2050] Policy ER4-9, Health Risk Assessments, would ensure mobile sources of TACs not covered under South Coast AQMD permits are considered during subsequent project-level environmental review by the City of Ontario; however, implementation of TOP 2050 would generate TACs that could contribute to elevated levels in the air basin (cumulative).

The Certified SEIR concluded however that no mitigation measures are available that would substantially reduce AQMP inconsistency impacts. On this basis, the Certified EIR concluded that even with application of mitigation, TOP 2050 inconsistency with the AQMP would be significant and unavoidable (Certified SEIR, p. 5.3-54).

Level of Significance After Mitigation: Significant and Unavoidable.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. In this respect, the Modified Project would not substantively increase aggregate development intensities beyond that currently anticipated for the subject site as reflected in the Certified SEIR analysis of AQMP consistency.

Based on the preceding, when compared to the Certified SEIR findings, no new or substantially increased AQMP consistency impacts would occur under the Modified Project.

Modified Project Conditions of Approval: The Modified Project would implement applicable Certified SEIR mitigation measures.

b) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR concluded that buildout of TOP 2050 would generate short-term and long-term air pollutant emissions exceeding SCAQMD regional significance thresholds for VOC, CO, NOx, PM_{10}, and $PM_{2.5}$. These exceedances would cumulatively contribute to the SCAB nonattainment designations for O_3, PM_{10} and $PM_{2.5}$. Even with the implementation of mitigation measures, nonattainment air quality impacts resulting from buildout of TOP 2050 would be significant and unavoidable (Certified SEIR, pp. 5.3-54 – 5.3-57).

Certified SEIR Mitigation Measures: Please refer to previous Certified SEIR air quality mitigation measures listed at Checklist item 3 a).

Modified Project:

Construction-Source Emissions

Construction-source emissions resulting from the Modified Project are quantified in *The Avenue Specific Plan, 2023 Amendment - Air Quality & Energy Assessment* (Urban Crossroads, Inc.) May 8, 2024 (Modified Project AQIA, Addendum Appendix B). Modified Project construction activities would comprise site preparation, grading, building construction, paving, and architectural coating. Construction-source emissions would also be generated by construction worker commutes, heavy equipment transport, and construction material(s) vendor trips. Modified Project construction activities would generate emissions of carbon monoxide (CO), Volatile Organic Compounds (VOCs), Nitrogen Oxides (NOX), Sulfur Oxides (SOX), particulate matter ≤ 10 microns (PM_{10}), and particulate matter ≤ 2.5 microns ($PM_{2.5}$). Table 3-1 summarizes Modified Project maximum daily construction-source emissions.

As presented at Table 3-1, with the exception of VOC emissions, Modified Project construction-source emissions would not exceed applicable SCAQMD regional thresholds. Project construction-source VOC exceedances would represent a cumulatively considerable net increase in SCAB nonattainment conditions for O_3 (VOC is an Ozone precursor). Because the Project is consistent with land uses and development

evaluated in the Certified SEIR, Project construction-source VOC exceedances are already acknowledged and accounted for in the Certified SEIR.

Table 3-1
Maximum Daily Construction-Source Emissions

Source	Emissions (lbs./day)					
	VOC	**NOx**	**CO**	**SOx**	**PM_{10}**	**$PM_{2.5}$**
Summer						
2024	7.04	39.79	140.03	0.13	19.75	4.92
2025	6.63	31.64	132.00	0.10	19.75	4.92
Winter						
2024	6.65	39.85	114.31	0.13	19.75	5.70
2025	119.91	51.12	148.37	0.13	23.90	6.07
Total Maximum Daily Emissions	**119.91**	**51.12**	**148.37**	**0.13**	**23.90**	**6.07**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	YES	NO	NO	NO	NO	NO

Source: *The Avenue Specific Plan, 2023 Amendment - Air Quality & Energy Assessment* (Urban Crossroads, Inc.) May 8, 2024.

Operational-Source Emissions

Modified Project operational-source emissions would derive primarily from site/building maintenance (area sources), building energy consumption, and traffic (mobile sources). Operational-source emissions generated by the Modified Project land are summarized at Table 3-2. As indicated at Table 3-2, Project maximum daily operational-source emissions would exceed SCAQMD Regional Thresholds for VOC, NOx, CO, and PM_{10}. Project operational-source VOC, NOx, and PM_{10} exceedances would represent a cumulatively considerable net increase in SCAB nonattainment conditions for O_3 and PM_{10} (VOC and NO_x are Ozone precursors).

Because the Project is consistent with land uses and development evaluated in the Certified SEIR, the Project operational-source VOC, NOx, CO, and PM_{10} exceedances are already acknowledged and accounted for in the Certified SEIR.

Table 3-2
Maximum Daily Operational-Source Emissions

Source	Emissions (lbs./day)					
	VOC	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Summer						
Mobile Source	89.78	76.69	729.57	1.77	154.87	40.15
Area Source	80.59	34.64	143.12	0.22	2.78	2.76
Energy Source	0.70	12.02	5.61	0.08	0.97	0.97
Total Max. Daily Emissions	**171.07**	**123.34**	**878.29**	**2.06**	**158.61**	**43.88**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**YES**	**YES**	**YES**	**NO**	**YES**	**NO**
Winter						
Mobile Source	83.39	82.34	615.71	1.66	154.87	40.15
Area Source	68.04	33.41	14.22	0.21	2.70	2.70
Energy Source	0.70	12.02	5.61	0.08	0.97	0.97
Total Max. Daily Emissions	**152.13**	**127.76**	**635.54**	**1.94**	**158.53**	**43.82**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**YES**	**YES**	**YES**	**NO**	**YES**	**NO**

Source: *The Avenue Specific Plan, 2023 Amendment - Air Quality & Energy Assessment* (Urban Crossroads, Inc.) May 8, 2024.

Modified Project Conditions of Approval: The Modified Project would implement applicable Certified SEIR mitigation measures.

Based on the preceding, when compared to the Certified SEIR findings, the Modified Project would not result in substantively different or substantively increased contributions to cumulative contributions to criteria pollutant non-attainment impacts.

c) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR notes that individual development projects within the City would be required to achieve the incremental risk thresholds established by SCAQMD, and on this basis, potential Toxic Air Contaminant (TAC) impacts from individual developments would be less-than-significant. TOP 2050 Policy ER4-9 *New Localized Air Pollution Sources Near Existing Sensitive Receptors*, ensures that mobile sources of TACs not covered under South Coast AQMD permits are considered

during subsequent project-level environmental review by the City of Ontario. Other air quality mitigation measures implemented under TOP 2050 would further reduce air pollutant emissions, thereby minimizing effects of pollutants at sensitive receptors.

The Certified SEIR nonetheless concludes that buildout of TOP 2050 would generate TACs that could contribute to elevated levels of TAC pollutants in the air basin. On this basis, the Certified SEIR concluded that TOP 2050 TAC emissions impacts at sensitive receptors would be cumulatively significant (Certified SEIR, p. 5.3-57).

Certified SEIR Mitigation Measures: Please refer to previous Certified SEIR air quality mitigation measures listed at Checklist item 3 a).

Modified Project: The Modified Project does not propose or require uses that would generate substantial levels of TACs. However, localized construction-source emissions generated by the Project have the potential to adversely affect proximate sensitive uses.[2] Accordingly, the potential for the Modified Project construction activities to generate or result in harmful concentrations of air pollutants at sensitive receptors is evaluated in the Modified Project AQIA.

LST Methodology

Localized construction-source impacts resulting from the Modified Project were evaluated consistent with methodologies and protocols presented in *Final Localized Significance Threshold Methodology* (SCAQMD) 2003 (LST Methodology). Per SCAQMD criteria, localized exceedances of the federal and/or state ambient air quality standards (NAAQS/CAAQS) would comprise potentially significant air quality impacts. Collectively, these are referred to as Localized Significance Thresholds (LSTs). LSTs represent the maximum localized emission concentrations that would not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard(s).

[2] LSTs would apply to the operational phase of a project, if that project includes stationary sources, or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., transfer facilities and warehouse buildings). The Project does not propose or require such uses. Due to the lack of significant stationary source emissions, an LST analysis for the Modified Project operations is not required.

Sensitive Receptors

Persons that are especially sensitive to air pollution are accorded special consideration when evaluating air quality impacts. Collectively, these persons collectively comprise sensitive receptors, and include: children, the elderly, and individuals with pre-existing respiratory or cardiovascular illness. Structures that house these persons or places where they gather are defined as sensitive receptor locations. Such structures typically include: residences, hotels, hospitals or similar occupancies. Consistent with the LST Methodology, the analysis presented here evaluates potential effects of localized construction-source emissions at the nearest sensitive receptor locations where an individual could remain for 24 hours or more.

Based on an aerial imagery, sensitive receptor residential land uses are located within 25 meters of the Project boundaries. Per the LST Methodology, a minimum separation of 25 meters between receptors and emission sources has been assumed within this analysis.

Thresholds

The LST Methodology provides "Look-up Tables" establishing screening-level thresholds. Emissions that do not exceed the Look-up Table thresholds are presumptively considered less-than-significant. Emissions exceeding Look-up Table thresholds warrant further detailed modeling and analysis. Look-up Table thresholds applicable to the Project are presented below.

Table 3-3
Localized Significance Thresholds

Activity	Emissions Thresholds (lbs./day)			
	VOC	NO_X	PM_{10}	$PM_{2.5}$
Demolition	270	2,193	16	9
Site Preparation				
Grading				

Source: *The Avenue Specific Plan, 2023 Amendment - Air Quality & Energy Assessment* (Urban Crossroads, Inc.) May 8, 2024.

Localized Emissions

Maximum construction-source localized emissions received at the nearest sensitive receptors are presented at Table 3-4.

Table 3-4
Maximum Received Localized Emissions

	Emissions (lbs./day)			
	NO_x	**CO**	**PM_{10}**	**$PM_{2.5}$**
Demolition				
Maximum Daily Emissions	23.81	36.35	0.40	0.38
SCAQMD Localized Threshold	270	2,193	16	9
Threshold Exceeded?	NO	NO	NO	NO
Site Preparation				
Maximum Daily Emissions	29.47	56.62	11.52	5.57
SCAQMD Localized Threshold	270	2,193	16	9
Threshold Exceeded?	NO	NO	NO	NO
Grading				
Maximum Daily Emissions	38.87	70.70	5.70	2.31
SCAQMD Localized Threshold	270	2,193	16	9
Threshold Exceeded?	NO	NO	NO	NO

Source: *The Avenue Specific Plan, 2023 Amendment - Air Quality & Energy Assessment* (Urban Crossroads, Inc.) May 8, 2024.

As presented at Table 3-4, maximum Project construction-source localized emissions received at area sensitive receptors would not exceed applicable SCAQMD LSTs. On this basis, the potential for the Project to expose sensitive receptors to substantial pollutant concentrations would be less-than-significant.

Modified Project Conditions of Approval: None.

d) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR notes that development pursuant to TOP 2050 would be required to comply with SCAQMD Rule 402. SCAQMD Rule 402 acts to generally control and regulate odors and odor sources, thereby minimizing potential

effects of construction-source and operational-source odors from other than industrial land uses (Certified SEIR, p. 5.3-46).

The Certified SEIR also acknowledges that certain types of industrial land uses (e.g., compost facilities, landfills, solid-waste transfer stations, fiberglass manufacturing facilities, paint/coating operations, asphalt batch manufacturing plants, chemical manufacturing, and food manufacturing facilities) warrant focused odor impact analyses. The City would require site- and development-specific analyses to ensure that any odors generated by these types of land uses would not adversely affect a substantial number of people (Certified SEIR, p. 5.3-46).

Based on the preceding, the Certified SEIR concluded that the potential for TOP 2050 to create or result in odors that would adversely affect a substantial number of people would be less-than-significant.

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. Construction-source and operational-source odor impacts that may result from the Modified Project are controlled as a byproduct of hazardous/potentially hazardous materials handling plans and Best Management Practices implemented under SCAQMD Rule 402 et al. The Modified Project would be required to comply with all SCAQMD Rules regulating and controlling odors and odor sources.

The Modified Project does not propose or require land uses (e.g., compost facilities, landfills, solid-waste transfer stations, fiberglass manufacturing facilities, paint/coating operations, asphalt batch manufacturing plants, chemical manufacturing, and food manufacturing facilities) that would be substantial odor sources. Moreover, the Modified Project would remove existing agricultural odor sources and would act generally to improve ambient conditions related to odors.

Construction-source and operational-source odor impacts that may result from the Modified Project are controlled as a byproduct of hazardous/potentially hazardous materials handling plans and Best Management Practices implemented under SCAQMD Rule 402[3] et al. The Modified Project would be required to comply with all SCAQMD Rules regulating and controlling odors and odor sources. The Modified Project would therefore not create objectionable odors affecting a substantial number of people. The Modified Project does not propose or require uses that would generate other emissions that could adversely affect a substantial number of people. On this basis, when compared to the Certified SEIR findings, no new or substantially increased "other emissions" impacts would occur under the Modified Project.

On this basis, when compared to the Certified SEIR findings, no new or substantially increased odor impacts would occur under the Modified Project.

Modified Project Conditions of Approval: None.

Summary

When compared to impacts considered and addressed in the Certified SEIR, no new significant, substantially increased, or substantially different air quality impacts would result from the Modified Project. No changed or new information has been identified to indicate that any impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022*; *The Avenue Specific Plan, 2023 Amendment - Air*

[3] SCAQMD **Rule 402. Nuisance.**
"A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals." http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-402.pdf

Quality & Energy Assessment (Urban Crossroads, Inc.) May 8, 2024; *The Avenue Specific Plan, 2024 Amendment*.

4. BIOLOGICAL RESOURCES

Would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?					X	
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies and regulations; or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?					X	
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?					X	
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?					X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?					X	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?					X	

Substantiation:

a) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR recognizes that development in accordance with TOP 2050 could impact sensitive species. Projects considered for approval under TOP 2050 would be subject to independent CEQA review to determine whether there is potential habitat on-site for sensitive species. The Certified SEIR did not identify any significant impacts in this regard (Certified SEIR, pp. 5.4-28 – 5.4-34).

Certified SEIR Mitigation Measures: None.

Modified Project: TOP 2050 SEIR (Section 5.4) concluded that the area encompassing The Avenue Specific Plan may function as potential habitat for the federally-listed Delhi Sands Flower Loving Fly (DSFLF) and Burrowing Owl. No other potentially significant impacts to candidate, sensitive, or special status species were identified in the SEIR.

Potential Impacts to DSFLF

Potential Project impacts to DSFLF are substantiated in *Habitat Suitability Evaluation* (EnviroPlus Consulting, LLC) October 30, 2023 (Project DSFLF Study). Findings and conclusions of the Project DSFLF Study are presented below.

The Project site was surveyed for evidence of DSFLF, potentially viable DSFLF habitat, and general presence/absence biologic resources by a qualified professional biologist[4] on October 22, 2023. The survey was conducted under clear skies with temperatures ranging from 60 to 72 °F. Winds were light at 1 to 3 mph from the west (Project DSFLF Study, p. 4).

The survey noted general site conditions, soils types, surface conditions, vegetation types and conditions, and presence or evidence of insects and wildlife. The survey also documented past and present on-site disturbances and ongoing urban development

[4] Biologist permitted by the U.S. Fish and Wildlife Service (Section 10 (a) (1) (A) permit number TE-837439-8 expiring 6/24/2024).

affecting the site's potential suitability as habitat for biological resources (Project DSFLF Study, pp. 2 – 4).

The survey results indicate that although the survey area is in part mapped as Delhi series soils, "anthropogenic disturbances over decades have altered the natural topography, aeolian processes, vegetation and soil characteristics such that the site does not now meet the USFWS baseline requirement for conducting focused surveys, the presence of Delhi series soils. Additionally, surrounding areas are similarly highly disturbed and/or developed, so it would be highly unlikely that any dispersing DSFLF from a nearby DSFLF-occupied site would temporarily utilize the subject property for foraging or reproduction purposes. Since suitable Delhi series soils were not found, the site does not meet the baseline criterion to be considered for focused surveys as per the USFWS protocol (1996) and does not appear suitable for DSFLF occupation" (Project DSFLF Study, pp. 4, 5). Based on the preceding, the Project's potential impact to DSFLF and DSFLF habitat would be less-than-significant. **Note:** The January 2024 biological resources assessment update prepared for the Project confirms the above findings and conclusions. Please refer to *Biological Update for The Avenue Specific Plan (Planning Area 5) Project; City of Ontario, County of San Bernardino, California* (January 2024 Biological Update, VCS Environmental) January 16, 2024, Addendum Appendix C.

Potential Impacts to Burrowing Owl

During the October 2023 site DSFLF surveys, the presence of burrowing owl individuals and evidence of burrowing owl occupation within the site were also noted (Project DSFLF Study, p. 4). The January 2024 Biological Resources Update indicates that burrowing owl individuals were no longer present during a subsequent January 2024 site visit. As such, these individuals are deemed migrant and the site is not considered to be occupied by BUOW (January 2024 Biological Update, p. 5).

The Project site does however evidence burrows suitable for BUOW and suitable BUOW foraging habitat. A BUOW pre-construction survey is therefore required to ensure that potential impacts to BUOW are maintained at levels that would be less-than-significant. Please refer to Condition of Approval BIO-1.

Other Considerations

The Modified Project site serves generally as potential habitat for migratory birds. Development of the site could therefore result in impacts to any nesting migratory birds that may be present. Consistent with California Department of Fish and Wildlife requirements, Condition of Approval BIO-2 is included to ensure that impacts to nesting birds are maintained at levels that would be less-than-significant.

Additionally, areas of the Modified Project site not specifically addressed in the Project DSFLF Study and/or January 2024 Biological Update may warrant updated biological resources assessments to ensure that potential impacts to biological resources for these areas are maintained at levels that would be less-than-significant (please refer to Condition of Approval BIO-3).

Modified Project Conditions of Approval:

BIO-1 Avoidance of Nesting Burrowing Owls: No more than 72 hours prior to any site disturbances, focused surveys for the burrowing owl shall be conducted. If absence of this species is confirmed, project work can proceed. If, however, burrowing owl is located on site, the appropriate resource agencies (CDFW and USFWS) shall be contacted. The Applicant shall consult with the wildlife agencies regarding the most appropriate methods and timing for removal of owls. As necessary, owls will be actively evicted following agency approved protocols (i.e., placing a one-way door at the burrow entrance to ensure that owls cannot access the burrow once they leave). Any such active eviction shall occur outside of the breeding/nesting season. That is, if active eviction is required, eviction shall be accomplished between September 1 and February 15. If more than 30 days have elapsed between owl eviction and completion of clearing and grubbing activities, a subsequent survey for the burrowing owl shall be conducted to ensure that owls have not re-populated the site. Any reoccupation by owls will require subsequent protocol active eviction.

BIO-2 Avoidance of Nesting Migratory Birds: If possible, all vegetation removal activities shall be scheduled from August 1 to February 1, which is outside the general avian nesting season. This would ensure that no active nests would be disturbed, and that removal could proceed rapidly. If vegetation is to be cleared during the nesting season, all suitable habitat

will be thoroughly surveyed within 72 hours prior to clearing for the presence of nesting birds by a qualified biologist (Biologist). The Biologist shall be approved by the City and retained by the Applicant. The survey results shall be submitted by the Applicant to the City Planning Department. If any active nests are detected, the area of nesting shall be flagged and mapped on the construction plans along with a minimum 300-foot buffer, with the final buffer distance to be determined by the Project Biologist. The buffer area shall be avoided until, as determined by the Biologist, the nesting cycle is complete, or it is concluded that the nest has failed. In addition, the Biologist shall be present on the site to monitor the vegetation removal to ensure that any nests, which were not detected during the initial survey, are not disturbed.

BIO-3 To the extent not considered and addressed in prior biological resources assessments, the Project DSFLF Study, or the January 2024 Biological Update, and to properly assess and address potential biological resources impacts, Biological Resources surveys shall be prepared prior to approval of Tentative Tract Maps within the Modified Project site. If suitable habitat is determined present onsite, subsequent focused surveys shall be completed and no "take" of any protected species and/or their habitat shall occur without obtaining the requisite regulatory permits from State and Federal agencies.

b, c) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR concluded that individual projects subject to CEQA environmental review would be required to determine whether there is potential habitat onsite for sensitive species. The Certified SEIR did not identify any significant impacts in this regard (Certified SEIR, p. 5.4-28).

Certified SEIR Mitigation Measures: None.

Modified Project: TOP 2050 SEIR (Section 5.4) concluded that the area encompassing The Avenue Specific Plan may function as potential habitat for the federally-listed Delhi DSFLF and Burrowing Owl. No other potentially significant impacts to candidate, sensitive, or special status species or their habitats were identified.

Consistent with SEIR requirements, the Project site has been evaluated for the presence of potential habitat for sensitive species. The Project DSFLF Study substantiates that the Project site and surrounding areas are extensively disturbed as the result of current and historic human activities. Surveys conducted as part of the Project DSFLF did not indicate presence or potential presence of riparian habitat, other sensitive natural community, or protected wetlands. The Project does not propose or require facilities or activities that would result in potential adverse effects to off-site riparian habitat, other sensitive natural community, or protected wetlands. Project potential impacts to riparian habitat, sensitive natural communities, and protected wetlands is therefore considered less-than-significant.

Modified Project Conditions of Approval: None.

d) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR states that no regional wildlife movement corridors have been identified in the City, and most of the City is ill-suited for the purposes of wildlife movement. Additionally, compliance with existing policies and regulations ensures impacts in this regard would be maintained at levels that would be less-than-significant (Certified SEIR, p. 5.4-30).

Certified SEIR Mitigation Measures: None.

Modified Project: No wildlife corridors or linkages are located onsite. Further, the site is bounded on all sides by roads and/or urban development, diminishing its potential to function as a wildlife movement corridor. Consistent with the conclusion of the Certified SEIR, the Modified Project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

Modified Project Conditions of Approval: None.

e, f) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR did not identify any conflicts with any local policies or ordinances protecting biological resources, adopted Habitat Conservation Plan, Natural Community Plan, or other approved local, regional, or state habitat conservation plan (Certified SEIR, pp. 5.4-30 – 5.4-31).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project would be required to comply with local policies and ordinances protecting biological resources. The Modified Project does propose or require development or activities that would conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Modified Project Conditions of Approval: None.

Summary

When compared to impacts considered and addressed in the Certified SEIR, no new significant, substantially increased, or substantially different biological resources impacts would result from the Modified Project. No changed or new information has been identified to indicate that any impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022*; *Habitat Suitability Evaluation* (EnviroPlus Consulting, LLC) October 30, 2023; *Biological Update for The Avenue Specific Plan (Planning Area 5) Project; City of Ontario, County of San Bernardino, California* (VCS Environmental) January 16, 2024; *The Avenue Specific Plan, 2024 Amendment*.

5. CULTURAL RESOURCES

Would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?					X	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?					X	
c) Disturb any human remains, including those interred outside of formal cemeteries?					X	

Substantiation:

a) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: Historic resources in the City include historic districts, historic landmarks or points of historical interest, and other buildings, structures, objects, and sites that appear eligible for listing on the National, California, or Local Registers of Historic Places. The Certified SEIR concluded that adoption of TOP 2050 would not itself directly affect any historical structures; however, identified and potential historic structures and sites may be vulnerable as development occurs. The Certified SEIR concluded this was a potentially significant impact (Certified SEIR, pp. 5.5-18 – 5.5-19).

Certified SEIR Mitigation Measure:

5-1 Historic or potentially historic resources in the City shall be evaluated for historic significance through the City's tier system prior to the issuance of plan or development approvals. Pursuant to City's Development Code (Chapter 7, Historic Preservation), each historic resource shall be fully documented and cataloged pursuant to Historic American Building Survey/Historic American Engineering Record (HABS/HAER) standards, to provide a record of the resource, including, but not limited to: [i] the preparation of site

plans, floor plans, exterior and interior elevations, and detail drawings of character defining features (such as moldings, stairs, etc.); and [ii] photographs of the resource, including the exterior, interior, and interior and exterior character defining features (such as moldings, light fixtures, trim patterns, etc.).

Even with the implementation of Mitigation Measure 5-1, the Certified SEIR concluded that impacts to historical resources would be significant and unavoidable (Certified SEIR, p. 5.5-23).

Modified Project: The Specific Plan area has been surveyed at least five times between 2004 and 2006, as follows.

- Stantec Consulting, Inc., *A Phase I Cultural Resources Inventory and Paleontological Assessment for the 111-Acre Avenue Specific Plan Project, City of Ontario, County of San Bernardino, California*, April 19, 2006.
- Chambers Group, Inc., *Phase I and II Cultural Resources Survey of a 169-Acre Former Dairy Farm, Ontario, San Bernardino County, California*, October 2005.
- Chambers Group, Inc., *Cultural Resources Survey of 13 Parcels Consisting of 173-Acres, Ontario, San Bernardino County, California*, October 2005.
- Chambers Group, Inc., *Cultural Resources Survey of a 58-Acres Former Dairy Farm, Ontario, San Bernardino County, California*, August 2004.
- Chambers Group, Inc., *Cultural Resources Survey of a 163-Acre Former Dairy Farm, Ontario, San Bernardino, California*, September 2005.

Additionally, a cultural resources records search of the City was completed in December 2021. No historical resources have been identified within the Specific Plan area.

The Modified Project would be required to conform to City Conditions of Approval providing for protection of potentially significant historic resources, and would implement above-noted Certified SEIR Mitigation Measure 5-1. No additional measures are required or proposed for the Modified Project.

With conformance to City Conditions of Approval, and implementation of mitigation, the potential for the Modified Project to adversely to result in cause a substantial adverse change in the significance of a historical resource would be less-than-significant. When compared to the Certified SEIR findings, no new or substantially increased impacts to paleontological resources would result from the Modified Project.

Modified Project Conditions of Approval: The Modified Project would implement applicable Certified SEIR mitigation measures.

b) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: Adoption of TOP 2050 would not of itself directly affect archaeological resources. However, buildout of TOP 2050 land use plan would allow development activities and ground disturbance affecting known and potential areas of archaeological sensitivity. These activities could potentially cause the disturbance of archeological resources. Therefore, future development that would be accommodated by TOP 2050 could potentially unearth previously unrecorded resources (Certified SEIR, p. 5.5-19).

Certified SEIR Mitigation Measure:

5-2 *In areas of documented or inferred from evident archaeological and/or paleontological resource presence, City staff shall require applicants for development permits to provide studies to document the presence/absence of such resources. On properties where resources are identified, such studies shall provide a detailed mitigation plan, including a monitoring program and recovery and/or in situ preservation plan, based on the recommendations of a qualified cultural preservation expert. The mitigation plan shall include the following requirements:*

a) Archaeologists and/or paleontologist shall be retained for the project and will be on call during grading and other significant ground-disturbing activities.

b) Should any cultural/scientific resources be discovered, no further grading shall occur in the area of the discovery until the Planning Director is satisfied that adequate provisions are in place to protect these resources.

c) Unanticipated discoveries shall be evaluated for significance by a San Bernardino County Certified Professional Archaeologist/Paleontologist. If significance criteria are met, then the project shall be required to perform data recovery, professional identification, radiocarbon dates, and other special studies; submit materials to a museum for permanent curation; and provide a comprehensive final report including catalog with museum numbers.

With the implementation of Mitigation Measure 5-2, the Certified SEIR concluded that impacts to archaeological and/or paleontological resources would be less-than-significant. (Certified SEIR, p. 5.5-22).

Modified Project: No archeological resources have been identified within the Specific Plan area as part of the previously-listed archeological surveys or records search. The Modified Project would be required to conform to City Conditions of Approval providing for protection of potentially significant archeological resources, and would implement above-noted Certified SEIR Mitigation Measure 5-2.

With conformance to City Conditions of Approval, and implementation of mitigation, the potential for the Modified Project to adversely to result in cause a substantial adverse change in the significance of a historical resource would be less-than-significant. When compared to the Certified SEIR findings, no new or substantially increased impacts to archeological resources would result from the Modified Project.

Modified Project Conditions of Approval: The Modified Project would implement applicable Certified SEIR mitigation measures. Please refer also to Conditions of Approval that would be implemented under the topical heading "Tribal Cultural Resources."

c) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR concluded that compliance with existing regulations would ensure that the potential for TOP 2050 to disturb any human remains, including those interred outside of formal cemeteries was less-than-significant (Certified SEIR, p. 5.5-21).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project would be required to comply with all existing regulations, including the California Public Resources Code Section 5097.98, which would afford protection for any human remains discovered during development activities. On this basis, the potential for the Modified Project to result in disturbance of any human remains, including those interred outside of formal cemeteries would be less-than-significant. When compared to the Certified SEIR findings, no new or substantially increased impacts related to potential disturbance of human remains would result from the Modified Project.

Modified Project Conditions of Approval: None.

Summary

When compared to impacts considered and addressed in the Certified SEIR, no new significant, substantially increased, or substantially different impacts to unique cultural resources would occur as a result of the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364* (Placeworks) August 2022*; Addendum to The Ontario Plan Environmental Impact Report, File Nos.: PGPA19-008, PSPA19-011, and PMTT19-015* (City of Ontario) 2020; *The Avenue Specific Plan, 2024 Amendment*.

6. ENERGY

Would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?					X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?					X	

Substantiation:

a) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR concluded that regulatory compliance under TOP 2050 buildout conditions would promote building energy efficiency and vehicle fuel efficiency and reduce building energy demand and transportation-related fuel usage. Additionally, TOP 2050 includes policies related to land use and transportation planning and design, energy efficiency, public and active transit, and renewable energy generation that would contribute to enhanced building and transportation-related energy efficiencies and thereby reduce demands on nonrenewable sources of energy. Implementation of TOP 2050 Policies, energy efficiency and conservation measures articulated in the Community Climate Action Plan (CCAP), and compliance with regulatory requirements would ensure that energy consumption resulting from TOP 2050 buildout would not be inefficient, wasteful, or unnecessary. On this basis, the potential for TOP 2050 to result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources would be less-than-significant (Certified SEIR, pp. 5.6-9 – 5.6-12).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. The Modified Project in total would be required to comply with incumbent performance standards established under the Building Energy Efficiency Standards contained in the California Code of Regulations (CCR), Title 24, Part 6 (Title 24, Energy Efficiency Standards). The Modified Project would be required to conform to applicable CALGreen provisions (CCR, Title 24, Part 11 – CALGreen). CALGreen supports the goals of the State's greenhouse gas reduction and building energy efficiency programs. The Modified Project would also implement applicable efficiency/conservation measures provisions of the CCAP and applicable CCAP updates.

Based on the preceding, the Modified Project would not result in or cause wasteful, inefficient, and unnecessary consumption of energy; and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. When compared to impacts addressed in the Certified SEIR, no new or substantially increased energy impacts would occur under the Modified Project.

Modified Project Conditions of Approval: None.

b) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR notes that TOP 2050 would comply with applicable provisions of the California Renewables Portfolio Standard Program (RPS); and current and future iterations of CALGreen. Additionally TOP 2050 includes policies supporting statewide goals to transition the electricity grid to renewable sources. Mandated compliance with the CCAP and its updates would also be required for all new development under TOP 2050. On this basis, the Certified SEIR concluded that the potential for TOP 2050 to conflict with or obstruct a state or local plan for renewable energy or energy efficiency would be less-than-significant (Certified SEIR, pp. 5.6-13, 5.6-14).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. The Modified Project would be required to comply with incumbent Building Energy Efficiency Standards contained in the California Code of Regulations (CCR), Title 24, Part 6, Energy Efficiency Standards including applicable CALGreen provisions. CALGreen supports the goals of the State's greenhouse gas reduction and building energy efficiency programs. The Modified Project would also be required to implement applicable energy efficiency/conservation measures of the CCAP and its updates.

Based on the preceding, the Modified Project would not result in or cause wasteful, inefficient, and unnecessary consumption of energy; and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Modified Project Conditions of Approval: None.

Summary

When compared to impacts considered and addressed in the Certified SEIR, no new significant, substantially increased, or substantially different energy impacts would occur as a result of the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; The Avenue Specific Plan, 2024 Amendment*.

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7. GEOLOGY AND SOILS

Would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:						
(i) rupture of a known earthquake fault;					X	
(ii) strong seismic ground shaking;					X	
(iii) seismic-related ground failure, including liquefaction; or					X	
(iv) landslides?					X	
b) Result in substantial soil erosion or the loss of topsoil?					X	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?					X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?					X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?					X	
f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?					X	

Substantiation:

a – d) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR recognizes existing geological conditions and location of the City within a seismically active area. The Certified SEIR concludes that compliance with California Building Code (CBC) regulations and standard City Conditions of Approval would ensure that potential geology/soils impacts related to earthquakes, seismic hazards, erosion, and adverse soils conditions, would be maintained at levels that would be less-than-significant (Certified SEIR, pp. 5.7-18 – 5.7-21).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. All development proposals within the Modified Project site would be required to comply with CBC regulations and standard City Conditions of Approval, acting to preclude potentially significant geology/soils impacts. All potential geology and soils impacts associated with development of the subject site would be less-than-significant based on compliance with the Uniform Building Code, California Building Code, the Ontario Municipal Code, and applicable TOP 2050 Policies.

There are no known or suspected faults or other adverse geology/soils conditions affecting the subject site (Certified SEIR, pp. 5.7-4 – 5.7-16).[5] As part of the City's standard review and approval processes, the Modified Project would be required to comply with provisions of Final City-approved geotechnical report(s). Design of the Modified Project facilities would also be required to comply with applicable provisions of the Uniform Building Code (UBC), California Building Code (CBC), City Municipal Code, and would be required to implement applicable Ontario Plan strategies. Compliance with these measures would ensure that potential geology and soils impacts remain at levels that would be less-than-significant. The Modified Project would therefore not result in new, additional, or different geological/soils impacts not considered and addressed in the Certified SEIR.

[5] This is also consistent with previous analysis prepared for the Project site. See: *The Avenue 2020 Addendum to the Ontario Plan Environmental Impact Report* [City File Nos. PGPA19-008, PSPA19-011, PMTT19-015] pp. 23 – 260).

Modified Project Conditions of Approval: None.

e) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: Wastewater generated by new development pursuant to buildout of TOP 2050 would be conveyed to and treated at wastewater treatment facilities owned and operated by the Inland Empire Utilities Agency (Regional Plant No. 1 in the City of Ontario and Regional Plant No. 5 in the City of Chino).

The use of septic tanks for new development would be restricted to areas not "in practical proximity existing sewer mains . . ." (Certified SEIR, p. 5.7-22).

Based on the preceding, the Certified SEIR concluded that TOP 2050 would not result in adverse impacts related to use of septic tanks or alternative wastewater disposal systems and ability of soils to accept these systems.

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. The Modified Project site is fully served by existing and planned sewer service. The Modified Project does not propose or require use of septic systems.

Based on the preceding, there is no potential for the Modified Project to result in adverse impacts related to use of septic tanks or alternative wastewater disposal systems and ability of soils to accept these systems.

Modified Project Conditions of Approval: None.

f) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The geology underlying the City is common and typical within the region and is not considered unique (Certified SEIR, p. 5.7-20).

Adoption of TOP 2050 in itself would not directly affect paleontological resources. However, implementation of TOP 2050 land use plan could allow development and redevelopment of potentially sensitive areas. The Certified SEIR concluded this was a potentially significant impact (Certified SEIR, pp. 5.7-20, 5.7-21).

Certified SEIR Mitigation Measures:

5-2 *In areas of documented or inferred archaeological and/or paleontological resource presence, City staff shall require applicants for development permits to provide studies to document the presence/absence of such resources. On properties where resources are identified, such studies shall provide a detailed mitigation plan, including a monitoring program and recovery and/or in situ preservation plan, based on the recommendations of a qualified cultural preservation expert. The mitigation plan shall include the following requirements:*

a. Archaeologists and/or paleontologist shall be retained for the project and will be on call during grading and other significant ground-disturbing activities.

b. Should any cultural resources be discovered no further grading shall occur in the area of the discovery until the Planning Director or designee is satisfied that adequate provisions are in place to protect these resources.

c. Unanticipated discoveries shall be evaluated for significance by a San Bernardino County Certified Professional Archaeologist/Paleontologist. If significance criteria are met, then the project shall be required to perform data recovery, professional identification, radiocarbon dates, and other special studies; submit materials to a museum for permanent curation; and provide a comprehensive final report including a catalog with museum numbers.

With application of mitigation, the Certified SEIR concluded that TOP 2050 impacts to paleontological resources would be less-than-significant (Certified SEIR, p. 5.7-25).

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. The Certified SEIR indicates that there is a possibility of finding paleontological resources within the City boundaries at depths of 10 feet or more below ground surface (Certified SEIR, p. 5.7-22). No known paleontological resources exist within the subject site or its vicinity. Moreover,

soils underlying the site comprise younger Quaternary Alluvium sediments. These soils typically do not contain significant vertebrate fossils (The Avenue 2020 Addendum, p. 25). Additionally, per City Conditions of Approval, should any unanticipated paleontological resources be encountered during excavation, construction activities would be halted or would be relocated to other unaffected areas of the subject site. Under such circumstances, a qualified paleontologist would be retained to evaluate any encountered find. If the find is determined to be significant, avoidance or other appropriate measures shall be implemented.

Modified Project Conditions of Approval: The Modified Project would be required to conform to City Conditions of Approval providing for protection of potentially significant paleontological resources, and would implement above-noted Certified SEIR Mitigation Measure 5-2. No additional measures are required or proposed for the Modified Project.

With conformance to City Conditions of Approval, and implementation of mitigation, the potential for the Modified Project to adversely to result in cause a substantial adverse change in the significance of a paleontological resource would be less-than-significant. When compared to the Certified SEIR findings, no new or substantially increased impacts to paleontological resources would result from the Modified Project.

Summary

When compared to impacts considered and addressed in the Certified SEIR, no new significant, substantially increased, or substantially different geology and soils impacts would occur as a result of the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; The Avenue Specific Plan, 2024 Amendment*.

8. GREENHOUSE GAS EMISSIONS

Would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?					X	
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?					X	

Substantiation:

a, b) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR substantiates that TOP 2050 would yield a net decrease in GHG emission when compared to the previous General Plan (TOP 2009) GHG emissions forecasts. Further, under TOP 2050 and the CCAP, the City would achieve State emissions reductions targets and would progress toward attainment of the State's carbon neutrality goals. On this basis, the Certified SEIR concluded that the potential for TOP 2050 to generate greenhouse gas emissions, either directly or indirectly, that may have an adverse impact on the environment would be less-than-significant (Certified SEIR, pp. 5.8-25, 5.8-26).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. GHGs generated by the Modified Project are consistent with GHG emissions estimates reflected in the Certified EIR. For informational purposes, estimated GHGs generated by the Modified Project are presented at Table 8-1.

Table 8-1
Modified Project GHG Emissions

GHG Emissions Sources	Emission (lbs./day)				
	CO_2	CH_4	N_2O	R	Total CO_2e
Mobile Source	48,509.00	2.54	2.45	75.33	49,376.80
Area Source	983.99	0.02	0.00	0.00	985.20
Energy Source	9,705.56	0.89	0.06	0.00	9,745.98
Water	665.34	6.15	0.15	0.00	864.42
Waste	351.51	35.13	0.00	0.00	1,229.82
Refrigerants	0.00	0.00	0.00	6.34	6.34
Total CO_2e (All Sources)	62,208.56				

Source: *The Avenue Specific Plan, 2023 Amendment - Greenhouse Gas Assessment* (Urban Crossroads, Inc.) May 8, 2024.

The Modified Project would be required to implement applicable provisions of the incumbent City CAP, to include measures and design features necessary to achieve applicable CAP GHG emissions reduction performance standards. The City CAP supports and complies with state and regional plans, policies, and regulations adopted for the purpose of reducing GHGs. On this basis, the Modified Project would not conflict with plans, policies, and regulations adopted for the purpose of reducing GHGs. The Modified Project would therefore not result in new, additional, or different impacts regarding consistency with applicable GHG emissions reduction plans, policies, and regulations not considered and addressed in the Certified SEIR.

Modified Project Conditions of Approval: None.

Summary

When compared to impacts considered and addressed in the Certified SEIR, no new significant, substantially increased, or substantially different GHG impacts would occur as a result of the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022*; *The Avenue Specific Plan, 2023 Amendment -*

Greenhouse Gas Assessment (Urban Crossroads, Inc.) May 8, 2024; *The Avenue Specific Plan, 2024 Amendment*.

9. HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?					X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?					X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school?					X	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?					X	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?					X	
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?					X	
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?					X	

Substantiation:

a, b) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR determined that buildout in accordance with TOP 2050 would involve the transport, use, and/or disposal of hazardous materials. However, federal and state regulations, City ordinances, and TOP 2050 Policies would appropriately control handling of hazardous substances to reduce potential releases; exposure; and risks of transporting, storing, treating, and disposing of hazardous materials and wastes. On this basis, the Certified SEIR concluded that the potential for TOP 2050 to result in adverse impacts related to transport, use, and/or disposal of hazardous materials; creation of significant hazards, or result in hazardous emissions affecting schools, would be less-than-significant (Certified SEIR, pp. 5.1-4 – 5.1-10).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. The Modified Project would not result in or cause exposure(s) to hazards or potentially hazardous conditions. That is, uses proposed by the Modified Project are not considered hazardous. Nor does the Modified Project propose or require facilities or operations involving inherent substantial hazards.

During the normal course of construction and operation activities, there would be limited transport of potentially hazardous materials (e.g., gasoline, diesel fuel, paints, solvents, fertilizer, etc.) to and from the Modified Project site. However, as presented within the Certified SEIR, the Modified Project would be required to comply with all City and County Hazardous Materials Management Plans and regulations addressing transport, use, storage and disposal of these materials. The Modified Project does not propose or require uses or activities that would result in atypical transportation, use, storage, or disposal of hazardous or potentially hazardous materials not addressed under current regulations and policies.

Further, any commercial/retail occupancies within the Modified Project that would store or use hazardous materials would be required to comply with California Hazardous Materials Business Plan (HMBP) requirements (*California Health & Safety Code*, Division 20, Chapter 6.95). The HMBP contains detailed information on the storage of hazardous materials at regulated facilities. The purpose of the HMBP is to prevent or minimize damage to public health, safety, and the environment, from a release or threatened release of a hazardous material. The HMBP also provides emergency response personnel with adequate information to help them better prepare and respond to chemical-related incidents at regulated facilities.

Existing Hazards/Hazardous Conditions

Previous Analyses

Hazardous or potentially hazardous conditions affecting the subject site have been extensively evaluated previously in Phase I/II Environmental Site Assessments (Phase I/II ESAs) as well as Methane Gas Investigation prepared in support of the Certified 2007 EIR for The Avenue Specific Plan (Certified 2007 EIR, SCH No. 2005071109). These Phase I/II ESAs and Methane Gas Investigation Studies are listed below and are incorporated here by reference. All of the listed documents are available through the City of Ontario.

Phase I Environmental Site Assessments

- Blasland, Bouck & Lee, Inc. *Phase I Environmental Site Assessment and Shallow Soil Sampling, Anderson Property APN No. 218-181-17 and 218-181-21 Ontario, California*, March 2001.
- Carlin Environmental Consulting, *Environmental Site Assessment of The Vander Eyk Dairy 13750 S. Haven Avenue Ontario, California,* September 29, 2004.
- Geokinetics, *Phase I Environmental Site Assessment Koopman Property Ontario, California,* October 3, 2002.
- Geokinetics, *Phase I Environmental Site Assessment Schoneveld Property Ontario, California,* November 25, 2002.
- Geokinetics, *Phase I Environmental Site Assessment Harada Property Ontario California,* January 3, 2003.

- Geokinetics, *Phase I Environmental Site Assessment Jongsma Property Ontario, California,* August 29, 2003.
- Geokinetics, *Phase I Environmental Site Assessment Hettinga Property Ontario, California*, June 5, 2004.
- Geokinetics, *Phase I Environmental Site Assessment Ferreira Property 13950 Haven Avenue Chino, California,* February 17, 2005.
- Geokinetics, *Phase I Environmental Site Assessment DeGroot Property 14080 Haven Avenue Ontario, California,* February 28, 2005.
- Geokinetics, *Phase I Environmental Site Assessment Kaplan Property 13923 Archibald Avenue Ontario, California,* March 16, 2005.
- Geokinetics, *Phase I Environmental Site Assessment Anderson-Dotson Property Ontario, California,* November 25, 2002.
- Lawson & Associates, *Phase I Environmental Site Assessment Approximate 58-Acre Dairy Property 13737 South Archibald Avenue San Bernardino County, California*, December 19, 2003.
- Lawson & Associates, *Phase I Environmental Site Assessment Dykstra Dairy, 10129 Schaefer Avenue City of Ontario,* San Bernardino County California, February 8, 2005.
- Lawson & Associates, *Phase I Environmental Site Assessment Ferreira Dairy*, 13950 Haven Avenue City of Ontario, San Bernardino County California, March 15, 2005.
- LGC Inland, INC, *Phase I Environmental Site Assessment DeGroot Dairy, 14080 Haven Avenue City of Ontario, San Bernardino County California*, February 7, 2005.
- Stantec, *Phase I Environmental Site Assessment L & M Dairy #2 Parentex Property, City of Ontario, California*, April 10, 2006.

Phase II Environmental Site Assessment

- Lawson & Associates, *Phase II Soil Sampling Investigation, Del Amo Dairy, 13737 South Archibald Avenue, City of Ontario, San Bernardino County, California*, January 21, 2004.

Methane Gas Investigations

- Geokinetics, *Subsurface Methane Gas Investigation for The Koopman Property Ontario, California,* October 11, 2002.

- Geokinetics, Subsurface *Methane Gas Investigation for Schoneveld Property Ontario, California*, November 25, 2002.
- Geokinetics, *Subsurface Methane Gas Investigation for Harada Property Ontario, California*, January 3, 2003.
- Geokinetics, *Subsurface Methane Gas Investigation for Jongsma Property Ontario, California*, August 29, 2003.
- Geokinetics, *Subsurface Methane Gas Investigation for Hettinga Property Ontario, California,* June 5, 2004.
- Geokinetics, *Subsurface Methane Gas Investigation DeGroot Property 14080 Haven Avenue Ontario, California*, March 1, 2005.
- Geokinetics, *Preliminary Subsurface Methane Gas Investigation Kaplan Property 13923 Archibald Avenue Ontario*, California, March 16, 2005.
- Geokinetics, *Subsurface Methane Gas Investigation for Anderson-Dotson Property Ontario, California,* November 25, 2002.
- Lawson & Associates. *Preliminary Subsurface Methane Gas Investigation Ferreira Property Ontario, California,* February 18, 2005.
- Lawson & Associates. *Preliminary Methane Site Assessment, Proposed Residential Development, Dykstra Parcel, City of Ontario, California*, October 24, 2005.
- Petra Environmental Division, *Report of the Site History Relative to The Potential for Methane Generation, 60-Acre Parcel, Designated as (APN 0218-201-44 and 15) Located in the City of Ontario, County of San Bernardino, California*, August 9, 2004.

Modified Project Phase I ESA

Complementing the above-cited Phase I/II ESAs, a focused updated Phase I ESA (*Phase I Environmental Site Assessment - 13838, 13898, 14058 S. Archibald Avenue* [Hillmann Consulting] June 30, 2023, 2023 Phase I ESA) has been prepared in support of this Addendum. The 2023 Phase I ESA concluded that the evaluated properties are not adversely affected by any recognized environmental conditions (RECs), controlled recognized environmental conditions (CRECs) and/or significant data gaps (SDGs) (2023 Phase I ESA, p. 3).

Modified Project Conditions of Approval: The Modified Project would be required to implement federal and state regulations, City ordinances, and TOP 2050 Policies

addressing potential hazards or hazardous conditions that could result from construction and operation of the Project uses. Additionally, the Modified Project would be required to implement federal and state regulations, City ordinances, and TOP 2050 Policies. To ensure compliance with applicable regulations, ordinances, and policies, the following measures are included as Project Conditions of Approval.

HM-1 Removal of structures, including, but limited to, under- and aboveground storage tanks, septic systems, and water wells shall conform to all Federal, State, and local agency regulations (specifically with those required by the City Building and Safety Department and the Hazardous Materials Division of the San Bernardino County Fire Department). Due to the extensive disposal requirements and protocols contained within these regulatory schemes, implementation and adherence to these various regulatory requirements will ensure that no significant impacts occur.

HM-2 Prior to grading activities for any areas not previously tested, a methane gas assessment shall be prepared by a licensed professional with expertise in soil gas assessments for subdivisions proposed on former dairies, poultry ranches, hog ranches, livestock feed operations and similar facilities to determine the presence of methane gas within the project boundary. The methane gas assessment shall identify monitoring and mitigation strategies and approaches. All mitigation measures/plans and specifications shall be reviewed and approved by the City of Ontario.

Such an assessment may take two steps. A preliminary assessment will be done prior to grading to determine exactly where dairies have existed in the past so that the post grading assessment/mitigation measures can be focused on the portions of the Planning Areas that have included former agricultural activities. The second step will include actual testing of graded pads no sooner than 30 days after construction to determine if methane is detected above 5,000 ppm.

The following grading guidelines shall also be adhered to:

- *Careful clearing, grubbing, segregation, and stockpiling or disposal near surface, of organics-rich soils at the site prior to the initiation of mass grading activities.*

- *The identification and segregation/stockpiling or disposal of deeper soils which contain elevated levels of organic material. Soils with an organic content of 0.4% or higher shall be segregated for controlled placement that ensures that methane levels are below 5,000 ppm.*

- *Soils with organic content in excess of 0.4% shall not be placed as "deep" fill. Soils with organic contents in excess of this amount shall be placed in open areas within approximately two feet of the finished ground surface.*

HM-3 To eliminate the risk of ground cracking, manure shall be removed from the site, such that the organic matter content of onsite soils shall not exceed 2% (a 2% total organic content is allowed, of which no more than 1% can be manure) in the building foundation areas when mixed with underlying clean soils and imported fill.

HM-4 To the extent not previously prepared and to properly assess and address potential hazardous materials, a Phase I Environmental Site Assessment (ESA) shall be performed by a registered environmental assessor (REA) prior to the approval of the Tentative Tract Map, site plan or other discretionary approval for a given phase of development. If potential hazardous materials or conditions are identified in the Phase I report, the recommendations of the ESA shall be implemented. Such recommendations shall include surficial sampling and chemical analysis within agricultural areas or where soil staining was observed. The Phase I ESA shall be provided to the City and shall be included in any CEQA analysis prepared in connection with the consideration of the discretionary approval for development.

HM-5 If, while performing any excavation as part of Project construction, material that is believed to be hazardous waste as defined in Section 25117 of the California Health and Safety Code is discovered, the developer shall contact the City Fire Department and the County of San Bernardino Fire Department Hazardous Materials Division. Excavation shall be stopped until the material has been tested and the absence of hazardous waste has been confirmed. If hazardous waste is determined to be present, the California Department of Toxic Substances control shall be contacted and the material shall be removed and disposed of pursuant to applicable provisions of California law.

Conditions of Approval identified herein, implementation of federal and state regulations, compliance with City ordinances, and TOP 2050 Policies act to maintain potential hazards/hazardous materials impacts at levels that would be less-than-significant. On this basis, the potential for the Modified Project to adversely to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; or create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment would be less-than-significant.

c) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: The Certified SEIR determined that buildout in accordance with TOP 2050 would involve the transport, use, and/or disposal of hazardous materials. However, federal and state regulations, City ordinances, and TOP 2050 Policies would appropriately control handling of hazardous substances to reduce potential releases; exposure; and risks of transporting, storing, treating, and disposing of hazardous materials and wastes. On this basis, the Certified SEIR concluded that the potential for TOP 2050 to result in adverse impacts related to transport, use, and/or disposal of hazardous materials; creation of significant hazards, or result in hazardous emissions affecting schools, would be less-than-significant (Certified SEIR, pp. 5.1-4 – 5.1-10).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project does not propose or require uses that would handle hazardous or acutely hazardous materials, substances, or waste. The Modified Project would not result in potentially significant hazardous impacts at existing or proposed vicinity schools.[6]

Modified Project Conditions of Approval: None.

[6] Note: Any occupation of the potential school site within the SPA would occur subsequent to development of the SPA uses generally. As such, school occupants would not be subject to any SPA construction-source impacts.

d) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: Development in accordance with TOP 2050 would involve redevelopment and reuse of some sites listed as hazardous materials sites on environmental databases. The environmental databases document the presence of hazardous materials on those sites, but do not document hazardous releases. Redevelopment of the affected sites could potentially expose future residents and workers to hazards from known hazardous materials releases on and near the sites. Should environmental database listed sites be proposed for development, site assessments for hazardous materials and remediation of hazardous materials releases would be required in accordance with TOP 2050 Policies, federal, state, and local regulations. On this basis, the Certified SEIR concluded that the potential for development pursuant to TOP 2050 to be located on hazardous materials sites, and thereby create adverse hazard impacts affecting the public or environment would be less-than-significant (Certified SEIR, pp. 5.9-38, 5.9-39).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. The Modified Project site is not affected by any recognized environmental conditions (RECs), controlled recognized environmental conditions (CRECs) and/or significant data gaps (SDGs). This would include potential listing as a hazardous material site pursuant to Government Code Section 65962.5. Additionally, as discussed in the Certified SEIR, the Modified Project would be required to comply with applicable TOP 2050 Policies, federal, state, and local regulations, ensuring that hazards/hazardous materials impacts are maintained at levels that would be less-than-significant. Therefore, the Modified Project would not create a hazard to the public or the environment and no impact is anticipated.

On this basis, there is no potential for the Modified Project to be located on a Government Code Section 65962.5-listed site, and thereby would not create adverse hazard impacts affecting the public or environment. When compared to the Certified SEIR findings, no

new or substantially increased impacts related to development affecting Government Code Section 65962.5-listed sites would result from the Modified Project.

Modified Project Conditions of Approval: None.

e) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: Ontario International Airport (ONT), as well as a small portion of the Chino Airport property, is located within the City of Ontario. The Certified SEIR determined that TOP 2050 Policies and established processes for consistency reviews of new development with the appropriate Airport Land Use Compatibility Plan (ALUCP) would be sufficient to prevent significant impacts (Certified SEIR, p. 5.8-27).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. Location of area airports relative to the Modified Project site has not changed since preparation of the Certified SEIR – the site remains more than two miles distant from the nearest airport; the nearest airport is ONT, located approximately 3.3 miles north of the Modified Project site.

The Modified Project site is located within the area subject to provisions of The ONT Airport Land Use Compatibility Plan, ALUCP (July 2018). The ALUCP defines the ONT Airport Influence Area (AIA) as an area in which current and future airport-related noise, overflight, safety, and airspace protection factors may significantly affect land uses or necessitate restriction on those uses. The Modified Project site is located outside the ONT safety zones (see: TOP 2050 Policy Plan Figure LU-06, *Airport Safety Zones & Influence Areas*). As with the development anticipated under the Original Project and evaluated in the Certified SEIR, development implemented pursuant to the Modified Project would comply with all requirements set forth within the ALUCP. Based on the preceding, the potential for the Modified Project to result in airport-related safety hazard impacts or excessive noise impacts would be less-than-significant.

Modified Project Conditions of Approval: None.

f) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: In 2018, the City of Ontario prepared a Local Hazard Mitigation Plan (LHMP) to identify the City's hazards, review and assess past disaster occurrences, estimate the probability of future occurrences, and set goals to reduce or eliminate long-term risk to people and property from natural and man-made hazards. Wildfire hazard is rated the highest risk of the 23 hazards evaluated, followed by flooding. Under the LHMP, interstate highways would serve as major emergency response and evacuation routes. TOP 2050 Policies and local roadways are designed and constructed so as to facilitate access under normal and emergency conditions.

A review of emergency access is included as part of the standard City's Design Review process. Additionally, the Ontario Fire Department reviews development applications to ensure that adequate emergency accessibility is provided based on local and state guidance.

Based on the preceding, the Certified SEIR concluded that buildout of the City in accordance with TOP 2050 would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. Impacts in these regards would be less-than-significant (Certified SEIR, p. 5.9-41).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. The Modified Project does not propose or require permanent alteration of vehicle circulation routes, and would not interfere with any identified emergency response or emergency evacuation plan. Standard City design review processes include coordination with fire and police departments during pre-construction review of plans to ensure that potential interference with emergency response plans and evacuation plans are avoided. Based on the preceding, the Modified Project would not impair implementation of, or physically

interfere with, an adopted emergency response plan or emergency evacuation plan. Impacts in these regards would be less-than-significant.

Modified Project Conditions of Approval: None.

g) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR identifies available resources addressing wildland fires and associated potential impacts. These resources include: CAL FIRE *2019 Strategic Fire Plan for California*, the California Fire Code, County of San Bernardino Multi-jurisdiction Hazard Management Plan, the Ontario LHMP, and fire services from the Ontario Fire Department. The Certified SEIR determined that adherence to existing regulations and review of building plans by the Ontario Fire Department, development and infrastructure associated with TOP 2050 would not exacerbate risk or result in post-wildfire hazards. No significant impacts were identified (Certified SEIR, p. 5.9-41).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. The Modified Project site is located in an urbanized area, and no wildlands are located in the vicinity of the site. Fire protection services are provided by the Ontario Fire Department. Pre-construction coordination with Ontario Fire Department staff and adherence to local fire department regulations during construction and operation of the Modified Project would be required. As such, no new or substantially increased impacts related to wildland fire impacts would result from the Modified Project.

Modified Project Conditions of Approval: None.

Summary

When compared to the Certified SEIR findings, no new or substantially increased hazards or hazardous emission impacts would result from the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from

the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; Phase I Environmental Site Assessment - 13838, 13898, 14058 S. Archibald Avenue* (Hillmann Consulting) June 30, 2023; *The Avenue Specific Plan, 2024 Amendment*.

10. HYDROLOGY AND WATER QUALITY

Would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?					X	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?					X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:					X	
(i) result in substantial erosion or siltation on- or off-site?					X	
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?					X	
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?					X	

Would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
(iv) impede or redirect flood flows?					X	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?					X	
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?					X	

Substantiation:

a) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR recognizes that buildout of the City pursuant to TOP 2050 would increase concentrations of pollutants during construction and post-construction activities. To address potential water quality impacts resulting from project construction and operations, projects are required to comply with provisions of the City's National Pollutant Discharge Elimination System (NPDES) permit. NPDES permit requirements include, but are not limited to, mandated preparation of a Stormwater Pollution Prevention Plan (SWPPP) and Water Quality Management Plan (WQMP). Mandated SWPPPs and WQMPs are required to develop and implement Best Management Practices (BMPs) to reduce construction-source and operational-source stormwater pollutant discharges. Based on compliance with the City NPDES Permit and implementation of required SWPPPs and WQMPs, the Certified SEIR did not identify any significant water quality impacts (Certified SEIR, p. 5.10-21).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. Consistent with City

requirements, a WQMP and SWPPP would be prepared for development proposals under the Modified Project. City review and approval of these documents is required prior to issuance of Grading Permits. As with the Original Project, implementation of an approved SWPPP and WQMP would reduce the potential for the development under the Modified Project to violate water quality standards or otherwise adversely affect water quality to levels that would be less-than-significant.

Based on the preceding, the Modified Project's potential to violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality is considered less-than-significant. When compared to the Certified SEIR findings, no new or substantially increased water quality impacts would result from the Modified Project.

Modified Project Conditions of Approval: None.

b) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: As discussed in the Certified SEIR, "[a]pproximately 46 percent of the City's water supply is groundwater pumped by the City from the Chino Groundwater Basin; groundwater pumping is managed by OMUC so that domestic demands do not exceed the safe yield for the basin, consistent with the Chino Basin Watermaster's Optimum Basin Management Program, commonly called the 'OBMP Peace Agreement'" (Certified SEIR, p. 5.10-22). The Certified SEIR notes further "the Chino Groundwater Basin is adjudicated and is considered by DWR to be a very low priority groundwater basin. Each water purveyor has an allotted amount of water that can be pumped from the basin so that the safe yield is not exceeded. The City has access to additional water supplies that can accommodate the proposed increase in growth with buildout of [TOP 2050] and would not interfere with sustainable management of the groundwater basin" (Certified SEIR, p. 5.10-22).

The Certified SEIR recognizes that development pursuant to TOP 2050 would increase the amount of impervious surface within the City. However, groundwater recharge efforts would not be hindered. To these ends, all development projects within the City

would be required to prepare project-specific hydrology studies, implement low impact development BMPs and comply with NPDES regulations supporting TOP 2050 Policies promoting infiltration of runoff and groundwater recharge.

Based on the preceding, TOP 2050 would not result in substantial adverse impacts affecting groundwater supplies, groundwater recharge, or groundwater sustainability (Certified SEIR, p. 5.10-23).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. Direct additions to or withdrawals of groundwater are not proposed or required by the Modified Project. Construction proposed by the Modified Project would not involve massive substructures at depths that would significantly impair or alter the direction or rate of flow of groundwater. The Modified Project does not propose or require uses or facilities that would affect designated groundwater recharge areas. All development proposals under the Modified Project would be required to prepare development-specific hydrology studies, implement low impact development BMPs and comply with NPDES regulations supporting TOP 2050 Policies promoting infiltration of runoff and groundwater recharge.

Based on the preceding, the Modified Project would not result in substantial adverse impacts affecting groundwater supplies, groundwater recharge, or groundwater sustainability.

Modified Project Conditions of Approval: None.

c) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: Consistent with NPDES requirements, runoff quantities would not be permitted to substantially increase as a result of a development under TOP 2050. In this regard, projects would be required to prepare project-specific hydrology studies. Further, existing City policies encourage the use of low impact development

strategies to intercept runoff, reduce stormwater discharge rates, increase infiltration and ultimately reduce discharge volumes to traditional storm drain systems.

The Certified SEIR notes that while the amount of impervious surfaces would be increased under TOP 2050 (and thus surface water flows into drainage systems), existing City and County requirements would ensure significant impacts related to alteration of drainage patterns do not occur. Additionally, City policies and regulations act to minimize or avoid development or other actions that would potentially result in impedance or redirection of flood flows (Certified SEIR, pp. 5.10-23 – 5.10-27).

Based on the preceding, the potential for development under TOP 2050 to substantially alter existing drainage patterns resulting in erosion, flooding, polluted runoff, or impeded or redirected flood flows would be less-than-significant.

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. Per requirements of *The Avenue Specific Plan, 2024 Amendment*:

> The grading and drainage of The Avenue Specific Plan area shall be designed to detain, filter and treat surface runoff, in a manner and combination which is practical, to comply with the most recent requirements of the San Bernardino County NPDES Stormwater Program's Water Quality Management (WQMP) for significant new development projects. The objective of the WQMP for this project is to minimize the detrimental effects of urbanization on the beneficial uses of receiving waters, including effects caused by increased pollutants and changes in hydrology. These effects may be minimized through the implementation of site designs that reduce runoff and pollutant transport by minimizing impervious surfaces and maximizing on-site infiltration, Source Control Best Management Practices (BMPs) and/or either on-site structural Treatment Control BMPs, or participation in regional or watershed-based

Treatment Control BMPs. An alternative to the implementation of on-site Low Impact Development (LID) BMPs to retain/infilter and treat stormwater runoff is the utilization of the off-site, regional Mill Creek Wetland facility for accomplishing water quality improvements in residential project runoff from this master planned community. All non-residential planning area projects within The Avenue will incorporate all required on-site LID BMPs, pursuant to the requirements of the current San Bernardino County Water Quality Management Plan.

Prior to the issuance of a grading or construction permit, all projects greater than 1-acre in size shall apply for coverage under the California General Permit To Discharge Storm Water Associated with Construction Activity, obtain a WDID# from the State Water Resources Control Board and prepare a Stormwater Pollution Prevention Plan (SWPPP) on the CASQA 2009 Template form and upload it to the State SMART database system. A copy of each SWPPP document and [Waste Discharger Identification Number] WDID# Certification shall also be provided to the City of Ontario, prior to any construction permit issuance. The SWPPP will identify and detail all appropriate Best Management Practices (BMPs) to be implemented or installed during construction of the project.

In addition to the preparation of a SWPPP for construction-related activities, and as part of the approval of any grading plans within the Specific Plan Area, the applicant will be required to submit a Water Quality Management Plan (WQMP) on the regional model form provided by the City. The WQMP shall identify and detail all Site Design BMPs, Source

> Control BMPs and Treatment Control BMPs to be implemented or installed at this site in order to reduce storm water pollutants and site runoff.[7]
>
> All Priority Land Use (PLU) areas within the Specific Plan Area shall comply with the statewide Trash Provisions adopted by the State Water Resources Control Board (SWRCB) and trash requirements in the most current San Bernardino County Area-Wide MS4 Permit.
>
> [*The Avenue Specific Plan, 2024 Amendment*, pp. 4-29, 4-30]

Requirements of the Specific Plan Amendment outlined above in combination with City Conditions of Approval would ensure that the potential for development pursuant to the Modified Project to alter drainage patterns in a manner that would result in adverse erosion, siltation, flooding/flood flow or stormwater system capacity impacts would remain at levels that would be less-than-significant.

Modified Project Conditions of Approval: None.

d) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: As discussed in the Certified SEIR, "there are no large bodies of water that would result in a seiche during seismic activity. Additionally, the reservoirs/aboveground water tanks within the City are enclosed, thereby minimizing the possibility of a seiche. The [City] is inland and approximately 30 miles from the ocean and is not at risk of flooding due to tsunamis. Based on the preceding, the Certified SEIR concluded that TOP 2050 would not result in adverse impacts related to flood hazard, tsunami, or seiche zones, risk release of pollutants due to inundation (Certified SEIR, pp. 5.10-26, 5.10-27).

7 The Mill Creek Wetland Facility (Facility) has been constructed and functional since June 2014. The Facility serves as an alternative to on-site LID BMP implementation for residential tract developers that are members of the Ontario Ranch Builders, LLC consortium and which have adequate reserved capacity in the regional facility for those planning areas. Portions of the Project site acres developed by non-members, would be required to make other arrangements or utilize another, future regional water quality facility. All non-residential planning area projects within The Avenue, including Public Schools, will incorporate on-site LID BMPs, in accordance with the regional NPDES Permit and the current San Bernardino County Water Quality Management Plan, and shall not rely on the regional wetlands facility for retention and treatment of runoff water.

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. Conditions at the Modified Project site as regards flood hazard impacts, tsunami hazard impacts, or seiche hazard impacts have not changed since preparation of the Certified SEIR – the site remains unaffected by substantial potential flood hazards, tsunami hazards, or seiche hazards.

Further, any commercial/retail occupancies within the Modified Project that would store or use hazardous materials would be required to comply with California Hazardous Materials Business Plan (HMBP) requirements (*California Health & Safety Code*, Division 20, Chapter 6.95) The HMBP contains detailed information on the storage of hazardous materials at regulated facilities. The purpose of the HMBP is to prevent or minimize damage to public health, safety, and the environment, from a release or threatened release of a hazardous material, including potential release of materials in a flood event.

Based on the preceding the potential for the Modified Project to result in release of pollutants due to an inundation event would be less-than-significant.

Modified Project Conditions of Approval: None.

e) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: As discussed in the Certified EIR, "[p]rojects approved under TOP 2050 would be required to comply with the Santa Ana River Basin Plan and to control pollutants in discharges of stormwater from postconstruction activities under NPDES Permit No. CAS618036 through preparation of a WQMP identifying BMPs for prevention of stormwater pollution during the post-construction phase, including site-design, source-control, and/or treatment BMPs. Therefore, [TOP 2050] would not obstruct or conflict with the RWQCB's Basin Plan or any groundwater management plan, and impacts would be less than significant" (Certified SEIR, p. 5.10-27).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. The Modified Project does not propose or require uses or facilities that would conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. The Modified Project would have no impacts in these regards.

Modified Project Conditions of Approval: None.

Summary

When compared to the Certified SEIR findings, no new or substantially increased hydrology or water quality impacts would result from the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; The Avenue Specific Plan, 2024 Amendment*.

11. LAND USE AND PLANNING

Would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Physically divide an established community?					X	
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?					X	

***Substantiation*:**

a) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR concluded that implementation of TOP 2050 would not result in result in the physical division of an established community (Certified SEIR, p. 5.11-6).

Certified SEIR Mitigation Measures: None.

Modified Project: No established community is located within the Modified Project site. The Modified Project would not otherwise result in potential division of an established community. The Modified Project would have no impacts in these regards.

Modified Project Conditions of Approval: None.

b) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: The Certified SEIR concluded that implementation of TOP 2050 would not result in significant land use impacts (Certified SEIR, p. 5.11-11).

Certified SEIR Mitigation Measures: None.

Modified Project: Land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating environmental effects are established under the TOP 2050. The Modified Project amends the site's current land use designations to conform to TOP 2050 land use designations.

The Modified Project would be required to comply with applicable TOP 2050 Policies, applicable requirements of *The Avenue Specific Plan, 2024 Amend*ment and provisions of the City Development Code. Collectively, TOP 2050 Policies, the City Development Code, and *The Avenue Specific Plan, 2024 Amendment,* and act to minimize potential environmental effects that may result from the land uses implemented under the Modified Project. On this basis, the potential for the Modified Project to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect is considered less-than-significant.

Modified Project Conditions of Approval: None.

Summary

When compared to the Certified SEIR findings, no new or substantially increased land use and planning impacts would result from the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; The Avenue Specific Plan, 2024 Amendment*.

12. MINERAL RESOURCES

Would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?					X	
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?					X	

***Substantiation*:**

a, b) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR concluded that implementation of TOP 2050 would have no potential to result in the loss of a known mineral resource of value to the region or the state; or result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan (Certified SEIR, p. 5.12-6).

Certified SEIR Mitigation Measures: None.

Modified Project: Underlying conditions at the subject site have not changed since preparation of the Certified SEIR, and the site remains devoid of any potentially valuable or locally-important mineral resources. On this basis, the Modified Project would have no potential to result in the loss of a known mineral resource of value to the region or the state; or result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. No new or substantially increased mineral resources impacts would result from the Modified Project.

Modified Project Conditions of Approval: None.

Summary

Based on the preceding, when compared to impacts identified in the Certified SEIR, no new or substantially increased mineral resources impacts would result from the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; The Avenue Specific Plan, 2024 Amendment*.

13. NOISE

Would the project result in:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?					X	
b) Generation of excessive groundborne vibration or groundborne noise levels?					X	
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?					X	

General Note: *The technical analyses referenced in this section reflect likely maximum impacts. Subsequent to preparation of these analyses, total residential development intensities allowed under the Modified Project have been reduced consistent with direction. Specifically, the technical analyses referenced herein assume residential development of the Modified Project totaling up to 3,807 dwelling units (see Project Traffic Analysis, p. 2 et al.). As subsequently modified, maximum allowed residential development under the Modified Project would not exceed 3,753 dwelling units (see Section 2.0, Project Description, Table 2.1-1).*

***Substantiation*:**

a) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR determined that new development implemented pursuant to TOP 2050 would result in temporary noise increases at sensitive receptors during construction activities (Certified SEIR, p. 5.13-28). Certified

SEIR Mitigation Measure 12-4, below, would reduce construction noise but would not avoid this impact or reduce the impact to levels that would be less-than-significant.

Certified SEIR Mitigation Measure:

12-4 Construction activities associated with new development that occurs near sensitive receptors shall be evaluated for potential noise impacts. Construction contractors shall implement the following measures for construction activities in the City of Ontario. Construction plans submitted to the City shall identify these measures on demolition, grading, and construction plans. The City of Ontario Planning and Building Departments shall verify that grading, demolition, and/or construction plans submitted include these notations prior to issuance of demolition, grading, and/or building permits.

- *Construction activity is limited to the hours between 7:00 am and 6:00 pm Monday through Friday and 9:00 am to 6:00 pm Saturdays and Sundays, as prescribed in Municipal Code Section 5-29.09.*
- *During the entire active construction period, equipment and trucks used for project construction shall use the best-available noise control techniques wherever feasible (e.g., improved mufflers, equipment re-design, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds).*
- *Impact tools (e.g., jack hammers and hoe rams) shall be hydraulically or electrically powered wherever possible. Where the use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used along with external noise jackets on the tools.*
- *Stationary equipment such as generators and air compressors shall be located as far as feasible from nearby noise-sensitive uses.*
- *Stockpiling shall be located as far as feasible from nearby noise-sensitive receptors.*
- *Construction traffic shall be limited, to the extent feasible, to approved haul routes established by the City Planning and Building Agency.*
- *At least 10 days prior to the start of construction activities, a sign shall be posted at the entrance(s) to the job site, clearly visible to the public, that includes permitted construction days and hours as well as the telephone numbers of the City's and contractor's authorized representatives that are assigned to respond in the event of a noise or vibration complaint.*

If the authorized contractor's representative receives a complaint, he/she shall investigate, take appropriate corrective action, and report the action to the City.

- *Signs shall be posted at the job site entrance(s), within the on-site construction zones, and along queueing lanes (if any) to reinforce the prohibition of unnecessary engine idling. All other equipment shall be turned off if not in use for more than 5 minutes.*
- *During the entire active construction period and to the extent feasible, the use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only. The construction manager shall use smart back-up alarms, which automatically adjust the alarm level based on the background noise level or switch off back-up alarms and replace with human spotters in compliance with all safety requirements and laws.*
- *Erect temporary noise barriers (at least as high as the exhaust of equipment and breaking line-of-sight between noise sources and sensitive receptors), as necessary and feasible, to maintain construction noise levels at or below the performance standard of 80 dBA Leq. Barriers shall be constructed with a solid material that has a density of at least 1.5 pounds per square foot with no gaps from the ground to the top of the barrier and may be lined on the construction side with an acoustical blanket, curtain, or equivalent absorptive material.*

Modified Project: Potential noise impacts of the Modified Project are evaluated in *The Avenue Specific Plan, 2023 Amendment - Noise Impact Analysis* (Urban Crossroads, Inc.) May 8, 2024 (Noise Impact Analysis, Addendum Appendix E). Analysis and conclusions of the Noise Impact Analysis are summarized below.

Noise Standards

Noise impacts would be considered significant if any of the following criteria are exceeded, as shown in Table 13-1.

Table 13-1
Significance Criteria Summary

Analysis	Receiving Land Use	Condition(s)	Significance Criteria	
			Daytime	Nighttime
Off-Site Traffic	All	If ambient is < 60 dBA CNEL	≥ 5 dBA CNEL Project increase	
		If ambient is 60 - 64 dBA CNEL	≥ 3 dBA CNEL Project increase	

Table 13-1
Significance Criteria Summary

Analysis	Receiving Land Use	Condition(s)	Significance Criteria	
			Daytime	Nighttime
		If ambient is >= 65 dBA CNEL	≥ 1.5 dBA CNEL Project increase	
On-Site Traffic	All	See Exhibit 3-A of the Noise Impact Analysis.		
Operational	Noise-Sensitive	Exterior Noise Level Standards	65 dBA L_{eq}	45 dBA L_{eq}
		if ambient is < 60 dBA L_{eq}	≥ 5 dBA L_{eq} Project increase	
		if ambient is 60 - 65 dBA L_{eq}	≥ 3 dBA L_{eq} Project increase	
		if ambient is > 65 dBA L_{eq}	≥ 1.5 dBA L_{eq} Project increase	
Construction	Noise-Sensitive	Noise Level Threshold	80 dBA L_{eq}	
		Vibration Level Threshold	0.3 PPV (in/sec)	

Source: *The Avenue Specific Plan, 2023 Amendment - Noise Impact Analysis* (Urban Crossroads, Inc.) May 8, 2024.

Sensitive Receivers

The following receiver locations, shown at Noise Impact Analysis Exhibit 8-A, *Receiver Locations*, were identified as representative noise impact analysis locations.

R1: Location R1 represents the existing residence at 3141 E. Mt. Rainier Drive, approximately 1,523 feet southeast of the Project site. Receptor R1 is placed at the private outdoor living areas (backyards) facing the Project site.

R2: Location R2 represents the existing residence at 3970 S. Oasis Paseo, approximately 2,763 feet east of the Project site. Receptor R2 is placed at the private outdoor living areas (backyards) facing the Project site.

R3: Location R3 represents the existing residence at 3712 Ironwood Avenue, approximately 1,818 feet northeast of the Project site. Since there is no outdoor use area facing the Project site, Receptor R3 is placed at the nearest building façade facing the Project site.

R4: Location R4 represents the existing residence at 3092 East Wing Street, approximately 1,218 feet northeast of the Project site. Receptor R4 is placed at the private outdoor living areas (backyards) facing the Project site.

R5: Location R5 represents the existing residence at South Wangler Place, approximately 631 feet northeast of the Project site. Receptor R5 is placed at the private outdoor living areas (backyards) facing the Project site.

R6: Location R6 represents the existing residence at 9029 Schaefer Avenue, approximately 375 feet west of the Project site. Receptor R6 is placed at the private outdoor living areas (backyards) facing the Project site.

R7: Location R7 represents the existing residence at 9060 Edison Avenue, approximately 48 feet west of the Project site. Receptor R7 is placed at the private outdoor living areas (backyards) facing the Project site.

Construction-Source Noise Impacts

In the evaluation of construction-source noise impacts, the Noise Impact Analysis employs empirical reference noise measurements obtained from similar construction activities. Based on the reference construction noise levels, maximum received noise levels attributable to the Modified Project construction activities were calculated, and are summarized at Table 13-2. Compliance with applicable significance thresholds is also presented.

Table 13-2
Maximum Received Construction-Source Noise Levels

Receiver Location	Maximum Received Noise Level (dBA Leq)	Threshold (dBA Leq)	Threshold Exceeded?
R1	49.6	80	No
R2	45.1	80	No
R3	47.8	80	No
R4	50.3	80	No
R5	55.2	80	No
R6	54.8	80	No
R7	60.1	80	No

Source: *The Avenue Specific Plan, 2023 Amendment - Noise Impact Analysis* (Urban Crossroads, Inc.) May 8, 2024.

As shown at Table 13-2, received construction-source noise levels would not exceed the applicable threshold and would therefore be less-than-significant.

Operational-Source Noise Impacts

The Modified Project has not been designed at this stage of project development. The Avenue Specific Plan, 2024 Amendment development is not expected to include any

specific type of operational noise levels beyond the typical noise sources associated with similar residential and educational land uses in the Project study area, such as people and children, parking lot activity, garage doors, small air conditioners, and trash collection. The proposed residential uses would also be considered a noise-sensitive receiving land use.

The City would require future development within the Specific Plan area to conduct design-specific noise analyses to determine the precise operational noise impacts of each development project and identify any necessary noise abatement measures, if necessary.

Vehicular-Source Noise Impacts

Off-Site Vehicular-Source Noise

To assess the off-site transportation CNEL noise level impacts associated with development of the proposed Project, noise contours were developed based on the Modified Project Traffic Analysis. Noise contour boundaries represent the equal levels of noise exposure and are measured in CNEL from the center of the roadway. Noise contours were developed for the following traffic scenarios:

- Existing Conditions Without Project: This scenario refers to the existing present-day noise conditions without the proposed Project.
- Existing With Project: This scenario refers to the existing present-day noise conditions with the proposed Project.
- Opening Year 2026 Without the Project: This scenario refers to existing plus cumulative growth through 2026 noise conditions without the proposed Project.
- Opening Year 2026 Year With Project: This scenario includes existing plus cumulative growth through 2026 plus the proposed Project traffic volumes identified in the Traffic Impact Analysis.

Using the noise contours presented at Noise Impact Analysis Table 6-1 through 6-4, the following Tables 13-3 and 13-4 present the Project traffic noise level contributions under the Existing and Opening Year scenarios.

Table 13-3
Existing With Project Traffic Noise Level Increases

ID	Road	Segment	Receiving Land Use	CNEL at Receiving Land Use (dBA)			Incremental Noise Level Increase Threshold	
				No Project	With Project	Project Addition	Limit	Exceeded?
1	Haven Ave	n/o Commercial Dwy	Residential	67.4	67.4	0.0	5.0	No
2	Haven Ave	n/o Ontario Ranch Rd	Residential	68.9	69.4	0.5	5.0	No
3	Haven Ave	n/o Chino Ave	Residential	67.8	67.9	0.1	5.0	No
4	Haven Ave	n/o Riverside Dr	Residential	67.5	67.6	0.1	5.0	No
5	Haven Ave	n/o Creekside Dr	Residential	68.9	68.9	0.0	5.0	No
6	Haven Ave	n/o SR-60	Residential	70.9	70.9	0.0	3.0	No
7	Archibald Ave	s/o Limonite Ave	Residential	68.9	68.9	0.0	5.0	No
8	Archibald Ave	n/o Limonite Ave	Residential	69.9	69.9	0.0	5.0	No
9	Archibald Ave	n/o Merrill Ave	Residential	68.5	68.9	0.4	5.0	No
10	Archibald Ave	n/o Edison Ave	Residential	68.2	68.8	0.6	5.0	No
11	Archibald Ave	n/o Avenida Dr	Residential	68.7	69.5	0.8	5.0	No
12	Archibald Ave	n/o Schaefer Ave	Residential	68.7	70.0	1.3	5.0	No
13	Archibald Ave	n/o Chino Ave	Residential	69.0	70.2	1.2	5.0	No
14	Archibald Ave	n/o Riverside Dr	Residential	69.3	69.8	0.5	5.0	No
15	Archibald Ave	n/o SR-60	Residential	68.9	69.3	0.4	5.0	No
16	Vineyard Ave	n/o Riverside Dr	Residential	68.4	69.5	1.1	5.0	No
17	Vineyard Ave	n/o Walnut Ave	Residential	69.7	70.4	0.7	5.0	No
18	Vineyard Ave	n/o SR-60	Residential	70.5	70.6	0.1	3.0	No
19	Limonite Ave	e/o Archibald Ave	Residential	68.7	68.9	0.2	5.0	No
20	Merrill Ave	w/o Archibald Ave	Residential	67.6	67.8	0.2	5.0	No
21	Edison Ave	w/o Euclid Ave	Residential	69.6	70.0	0.4	5.0	No
22	Edison Ave	e/o Euclid Ave	Residential	68.6	69.4	0.8	5.0	No
23	Edison Ave	e/o Grove Ave	Residential	68.7	70.0	1.3	5.0	No
24	Edison Ave	e/o Vineyard Ave	Residential	70.6	71.5	0.9	3.0	No
25	Edison Ave	e/o Carpenter Ave	Residential	70.6	71.4	0.8	3.0	No
26	Edison Ave	e/o Ontario Ave	Residential	70.6	71.8	1.2	3.0	No
27	Edison Ave	e/o Future Tract Dwy.	Residential	70.6	71.8	1.2	3.0	No
28	Edison Ave	e/o Archibald Ave	Residential	71.4	72.1	0.7	3.0	No
29	Ontario Ranch Rd	e/o Broadway Ave	Residential	71.7	72.0	0.3	3.0	No
30	Ontario Ranch Rd	e/o Turner Ave	Residential	71.9	72.8	0.9	3.0	No
31	Ontario Ranch Rd	w/o New Haven Dr	Residential	71.9	72.8	0.9	3.0	No
32	Ontario Ranch Rd	e/o Haven Ave	Residential	73.0	74.0	1.0	3.0	No
33	Ontario Ranch Rd	e/o Hamner Ave	Residential	73.6	74.2	0.6	3.0	No
34	Ontario Ranch Rd	e/o I-15	Residential	71.4	71.8	0.4	3.0	No
35	Schaefer Ave	e/o Archibald Ave	Residential	59.7	62.3	2.6	5.0	No
36	Schaefer Ave	e/o Turner Ave	Residential	61.3	63.0	1.7	5.0	No

Table 13-3
Existing With Project Traffic Noise Level Increases

ID	Road	Segment	Receiving Land Use	CNEL at Receiving Land Use (dBA)			Incremental Noise Level Increase Threshold	
				No Project	With Project	Project Addition	Limit	Exceeded?
37	Schaefer Ave	e/o Oakville Ave	Residential	61.1	62.9	1.8	5.0	No
38	Chino Ave	w/o Archibald Ave	Residential	65.6	65.7	0.1	5.0	No
39	Chino Ave	e/o Archibald Ave	Residential	63.5	63.8	0.3	5.0	No
40	Riverside Dr	w/o Vineyard Ave	Residential	68.1	68.2	0.1	5.0	No
41	Riverside Dr	e/o Vineyard Ave	Residential	70.7	71.5	0.8	3.0	No
42	Riverside Dr	e/o Archibald Ave	Residential	70.1	70.3	0.2	3.0	No
43	Riverside Dr	e/o Haven Ave	Residential	67.9	67.9	0.0	5.0	No

Source: *The Avenue Specific Plan, 2023 Amendment - Noise Impact Analysis* (Urban Crossroads, Inc.) May 8, 2024.

Table 13-4
Opening Year 2026 With Project Traffic Noise Level Increases

ID	Road	Segment	Receiving Land Use	CNEL at Receiving Land Use (dBA)			Incremental Noise Level Increase Threshold	
				No Project	With Project	Project Addition	Limit	Exceeded?
1	Haven Ave	n/o Commercial Dwy	Residential	67.9	67.9	0.0	5.0	No
2	Haven Ave	n/o Ontario Ranch Rd	Residential	70.1	70.5	0.4	5.0	No
3	Haven Ave	n/o Chino Ave	Residential	70.7	70.7	0.0	3.0	No
4	Haven Ave	n/o Riverside Dr	Residential	69.0	69.0	0.0	5.0	No
5	Haven Ave	n/o Creekside Dr	Residential	69.5	69.5	0.0	5.0	No
6	Haven Ave	n/o SR-60	Residential	71.6	71.6	0.0	3.0	No
7	Archibald Ave	s/o Limonite Ave	Residential	70.0	70.0	0.0	5.0	No
8	Archibald Ave	n/o Limonite Ave	Residential	70.7	70.7	0.0	3.0	No
9	Archibald Ave	n/o Merrill Ave	Residential	69.9	70.3	0.4	5.0	No
10	Archibald Ave	n/o Edison Ave	Residential	68.8	69.4	0.6	5.0	No
11	Archibald Ave	n/o Avenida Dr	Residential	69.5	70.1	0.6	5.0	No
12	Archibald Ave	n/o Schaefer Ave	Residential	69.5	70.6	1.1	5.0	No
13	Archibald Ave	n/o Chino Ave	Residential	69.5	70.6	1.1	5.0	No
14	Archibald Ave	n/o Riverside Dr	Residential	70.1	70.5	0.4	5.0	No
15	Archibald Ave	n/o SR-60	Residential	69.4	69.7	0.3	5.0	No
16	Vineyard Ave	n/o Riverside Dr	Residential	68.9	69.9	1.0	5.0	No
17	Vineyard Ave	n/o Walnut Ave	Residential	70.2	70.8	0.6	3.0	No
18	Vineyard Ave	n/o SR-60	Residential	70.8	70.9	0.1	3.0	No

Table 13-4

Opening Year 2026 With Project Traffic Noise Level Increases

ID	Road	Segment	Receiving Land Use	CNEL at Receiving Land Use (dBA)			Incremental Noise Level Increase Threshold	
				No Project	With Project	Project Addition	Limit	Exceeded?
19	Limonite Ave	e/o Archibald Ave	Residential	70.6	70.8	0.2	3.0	No
20	Merrill Ave	w/o Archibald Ave	Residential	70.2	70.3	0.1	3.0	No
21	Edison Ave	w/o Euclid Ave	Residential	71.5	71.8	0.3	3.0	No
22	Edison Ave	e/o Euclid Ave	Residential	71.2	71.6	0.4	3.0	No
23	Edison Ave	e/o Grove Ave	Residential	69.3	70.5	1.2	5.0	No
24	Edison Ave	e/o Vineyard Ave	Residential	73.1	73.6	0.5	3.0	No
25	Edison Ave	e/o Carpenter Ave	Residential	71.4	72.0	0.6	3.0	No
26	Edison Ave	e/o Ontario Ave	Residential	71.4	72.4	1.0	3.0	No
27	Edison Ave	e/o Future Tract Dwy.	Residential	71.4	72.4	1.0	3.0	No
28	Edison Ave	e/o Archibald Ave	Residential	72.1	72.7	0.6	3.0	No
29	Ontario Ranch Rd	e/o Broadway Ave	Residential	72.3	72.7	0.4	3.0	No
30	Ontario Ranch Rd	e/o Turner Ave	Residential	72.6	73.3	0.7	3.0	No
31	Ontario Ranch Rd	w/o New Haven Dr	Residential	72.4	73.2	0.8	3.0	No
32	Ontario Ranch Rd	e/o Haven Ave	Residential	73.5	74.3	0.8	3.0	No
33	Ontario Ranch Rd	e/o Hamner Ave	Residential	74.9	75.4	0.5	3.0	No
34	Ontario Ranch Rd	e/o I-15	Residential	72.0	72.4	0.4	3.0	No
35	Schaefer Ave	e/o Archibald Ave	Residential	62.6	64.2	1.6	5.0	No
36	Schaefer Ave	e/o Turner Ave	Residential	62.6	64.0	1.4	5.0	No
37	Schaefer Ave	e/o Oakville Ave	Residential	64.0	65.0	1.0	5.0	No
38	Chino Ave	w/o Archibald Ave	Residential	66.4	66.5	0.1	5.0	No
39	Chino Ave	e/o Archibald Ave	Residential	65.6	65.8	0.2	5.0	No
40	Riverside Dr	w/o Vineyard Ave	Residential	68.7	68.8	0.1	5.0	No
41	Riverside Dr	e/o Vineyard Ave	Residential	71.4	72.0	0.6	3.0	No
42	Riverside Dr	e/o Archibald Ave	Residential	71.1	71.2	0.1	3.0	No
43	Riverside Dr	e/o Haven Ave	Residential	69.5	69.5	0.0	5.0	No

Source: *The Avenue Specific Plan, 2023 Amendment - Noise Impact Analysis* (Urban Crossroads, Inc.) May 8, 2024.

As shown above, based on the significance criteria for off-site traffic noise, land uses adjacent to the study area roadway segments would not be subjected to significant noise level increases due to Project-related traffic.

On-Site Vehicular-Source Noise

An on-site exterior noise impact analysis has been completed to determine the noise exposure levels that would result from adjacent transportation noise sources in the Project study area, and to identify potential noise attenuation measures that would achieve acceptable Project exterior and interior noise levels. The primary sources of transportation noise affecting the Modified Project site are anticipated to be from Archibald Avenue, Ontario Ranch Road/Edison Road, and Schaefer Avenue.

The expected future noise levels for the on-site land uses have been estimated, and are presented at Table 13-5.

Table 13-5
Exterior Noise Levels

On-Site Receiver Location	Roadway	Unmitigated Exterior Noise Level (dBA CNEL)		Land Use Compatibility
		Exterior without Wall	Exterior with Wall	
PA-1A	Schaefer Ave	64.8	58.7	*Clearly Acceptable*
PA-1B	Schaefer Ave	64.8	58.7	*Clearly Acceptable*
PA-3A	Schaefer Ave	64.8	58.7	*Clearly Acceptable*
PA-4	Schaefer Ave	64.8	58.7	*Clearly Acceptable*
PA-8B	Ontario Ranch Road/Edison Ave	68.5	63.6	*Normally Acceptable*
PA-5	Ontario Ranch Road/Edison Ave	68.5	63.6	*Normally Acceptable*
PA-3B	Ontario Ranch Road/Edison Ave	68.5	63.6	*Normally Acceptable*
PA-2B	Ontario Ranch Road/Edison Ave	68.5	63.6	*Normally Acceptable*
PA-2A	Ontario Ranch Road/Edison Ave	68.5	63.6	*Normally Acceptable*
PA-5	Archibald Ave	68.1	63.0	*Normally Acceptable*

Source: *The Avenue Specific Plan, 2023 Amendment - Noise Impact Analysis* (Urban Crossroads, Inc.) May 8, 2024.

Table 13-5 shows that traffic noise levels received at the Project land uses would not exceed the City of Ontario 65 dBA CNEL exterior noise level standards for the noise sensitive residential land uses or schools.

For informational purposes, and to ensure that the interior noise levels comply with the interior noise level standards, future exterior noise levels were calculated at the estimated at the first and second floor building façade locations with planned residential areas

surrounding roadways. The interior noise level is the difference between the predicted exterior noise level at the building façade and the noise reduction of the structure. Typical building construction will provide a Noise Reduction (NR) of approximately 12 dBA with "windows open" and a minimum 25 dBA noise reduction with "windows closed." Tables 13-6 and 13-7 provide the first and second floor interior noise levels that can be expected within the planned residential areas.

Table 13-6
First Floor Interior Noise Levels (CNEL)

Receiver Location	Roadway	Noise Level at Façade	Required Interior NR	Minimum Calculated Interior NR	Upgraded Windows	Interior Noise Level	Threshold	Threshold Exceeded?
PA-1A	Schaefer Ave	58.7	13.7	25.0	No	33.7	45	No
PA-1B	Schaefer Ave	58.7	13.7	25.0	No	33.7	45	No
PA-3A	Schaefer Ave	58.7	13.7	25.0	No	33.7	45	No
PA-4	Schaefer Ave	58.7	13.7	25.0	No	33.7	45	No
PA-8B	Ontario Ranch Road/ Edison Ave	63.6	18.6	25.0	No	38.6	45	No
PA-5	Ontario Ranch Road/ Edison Ave	63.6	18.6	25.0	No	38.6	45	No
PA-3B	Ontario Ranch Road/ Edison Ave	63.6	18.6	25.0	No	38.6	45	No
PA-2B	Ontario Ranch Road/ Edison Ave	63.6	18.6	25.0	No	38.6	45	No
PA-2A	Ontario Ranch Road/ Edison Ave	63.6	18.6	25.0	No	38.6	45	No
PA-5	Archibald Ave	63.0	18.0	25.0	No	38.0	45	No

Source: *The Avenue Specific Plan, 2023 Amendment - Noise Impact Analysis* (Urban Crossroads, Inc.) May 8, 2024.

Table 13-7
Second Floor Interior Noise Levels (CNEL)

Receiver Location	Roadway	Noise Level at Façade	Required Interior NR	Minimum Calculated Interior NR	Upgraded Windows	Interior Noise Level	Threshold	Threshold Exceeded?
PA-1A	Schaefer Ave	64.7	19.7	25.0	No	39.7	45	No
PA-1B	Schaefer Ave	64.7	19.7	25.0	No	39.7	45	No
PA-3A	Schaefer Ave	64.7	19.7	25.0	No	39.7	45	No
PA-4	Schaefer Ave	64.7	19.7	25.0	No	39.7	45	No
PA-8B	Ontario Ranch Road/ Edison Ave	68.4	23.4	25.0	No	43.4	45	No

Table 13-7
Second Floor Interior Noise Levels (CNEL)

Receiver Location	Roadway	Noise Level at Façade	Required Interior NR	Minimum Calculated Interior NR	Upgraded Windows	Interior Noise Level	Threshold	Threshold Exceeded?
PA-5	Ontario Ranch Road/ Edison Ave	68.4	23.4	25.0	No	43.4	45	No
PA-3B	Ontario Ranch Road/ Edison Ave	68.4	23.4	25.0	No	43.4	45	No
PA-2B	Ontario Ranch Road/ Edison Ave	68.4	23.4	25.0	No	43.4	45	No
PA-2A	Ontario Ranch Road/ Edison Ave	68.4	23.4	25.0	No	43.4	45	No
PA-5	Archibald Ave	68.1	23.1	25.0	No	43.1	45	No

Source: *The Avenue Specific Plan, 2023 Amendment - Noise Impact Analysis* (Urban Crossroads, Inc.) May 8, 2024.

Tables 13-6 and 13-7 show that on-site interior traffic noise levels will not exceed the City of Ontario 45 dBA CNEL interior noise level standard for residential development under a windows-closed condition and a means of mechanical ventilation (e.g., air conditioning).

Although no significant on-site exterior or interior noise impacts are expected, the City will require use-specific noise studies for implementing projects within the Specific Plan area. These final noise studies would utilize any recommendations identified herein in combination with precise grading plans and actual building design specifications to identify any additional noise abatement measures, such as exterior noise barriers and/or building materials (e.g., sound transmission class ratings for windows and doors), if necessary.

Modified Project Conditions of Approval: None.

b) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR determined that mobile-source and stationary/area-source vibration impacts associated with buildout of TOP 2050 would be less-than-significant. However, construction activities associated with buildout of the

individual land uses could expose sensitive uses to strong levels of groundborne vibration and would therefore be a potentially significant impact (Certified SEIR, pp. 5.13-38 – 5.13-41).

Certified SEIR Mitigation Measure:

12-2 *Prior to issuance of a building permit, individual projects that involve vibration-intensive construction activities, such as pile drivers, jack hammers, and vibratory rollers near sensitive receptors shall be evaluated for potential vibration impacts. For construction within 135 feet of fragile structures, such as historical resources, within 100 feet of nonengineered timber and masonry buildings (e.g., most residential buildings), or within 75 feet of engineered concrete and masonry (no plaster); or a vibratory roller within 25 feet of any structure, the project applicant shall prepare a noise and vibration analysis to assess and mitigate potential noise and vibration impacts related to these activities. This noise and vibration analysis shall be conducted by a qualified and experienced acoustical consultant or engineer. The vibration levels shall not exceed Federal Transit Administration (FTA) architectural damage thresholds (e.g., 0.12 inches per second [in/sec] peak particle velocity [PPV] for fragile or historical resources, 0.2 in/sec PPV for nonengineered timber and masonry buildings, and 0.3 in/sec PPV for engineered concrete and masonry). If vibration levels would exceed this threshold, alternative uses shall be used, such as drilling piles as opposed to pile driving and static rollers as opposed to vibratory rollers. If necessary, construction vibration monitoring shall be conducted to ensure vibration thresholds are not exceeded.*

The Certified SEIR concluded even with the implementation of Mitigation Measure 12-2, construction-source groundborne vibration impacts would be significant and unavoidable (Certified SEIR, p. 5.13-41).

Modified Project:

Construction activities can result in varying degrees of ground vibration, depending on the equipment and methods used, distance to the affected structures and soil type. Groundborne vibration from construction activities would cause only intermittent, localized intrusion.

In the evaluation of construction-source vibration impacts, the Noise Impact Analysis employs reference construction-source vibration data published by the Federal Transit Administration (FTA). Maximum received construction-source vibration levels are summarized at Table 13-8.

Table 13-8
Maximum Received Construction-Source Vibration Levels

Receiver Location	Maximum Received Vibration Level PPV (in/sec)	Threshold PPV (in/sec)	Threshold Exceeded?
R1	0.000	0.30	No
R2	0.000	0.30	No
R3	0.000	0.30	No
R4	0.000	0.30	No
R5	0.002	0.30	No
R6	0.002	0.30	No
R7	0.033	0.30	No

Source: *The Avenue Specific Plan, 2023 Amendment - Noise Impact Analysis* (Urban Crossroads, Inc.) May 8, 2024.

Table 13-8 shows the maximum received construction-source vibration levels would not exceed the acceptable 0.20 PPV (in/sec) criteria established by the FTA. Moreover, received vibration levels are unlikely to be sustained during the entire construction period. Rather, maximum vibration levels would be received only during times that heavy construction equipment is operating at the site perimeter. Based on the preceding, construction-source vibration impacts would be less-than-significant.

Modified Project Conditions of Approval: None.

c) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR concluded that Chino Airport does not significantly affect sensitive receptors within the City of Ontario. However, sensitive land uses within the 65 dBA CNEL noise contour of the Ontario International Airport would be exposed to substantial levels of airport-related noise. Even with the implementation

of Mitigation Measure 12-1, airport-related noise was deemed a significant and unavoidable impact of TOP 2050 (Certified SEIR, pp. 5.13-38 – 5.13-41).

Certified SEIR Mitigation Measure:

12-1 *Prior to the issuance of building permits for any project that involves a noise-sensitive use within the 65 dBA CNEL contour of the Ontario International Airport, the project property owner/developers shall retain an acoustical engineer to conduct an acoustic analysis and identify, where appropriate, site design features and/or required building acoustical improvements (e.g., sound transmission class rated windows, doors, and attic baffling), to ensure compliance with the City's Noise Compatibility Criteria and the California State Building Code and California Noise Insulation Standards (Titles 24 and 21 of the California Code of Regulations).*

Modified Project: The Modified Project site is located approximately 2.2 miles south of the Ontario International Airport (ONT). The Ontario International Airport Land Use Compatibility Plan was adopted by Ontario City Council on April 19, 2011 (amended 2018) to promote compatibility between the airport and the land uses that surround it. The Modified Project site is located within the ONT airport influence area, but is not located within a designated noise impact zone. The Modified Project would therefore not be exposed to excessive airport/airfield-source noise levels associated with ONT operations.

The Project site is located approximately 1.2 miles east of the Chino Airport (CNO). The Modified Project site is located within the CNO airport influence area, but is not located within a designated noise impact zone. At this distance, airport noise level impacts would be less-than-significant.

The Modified Project would not otherwise be exposed to potentially adverse airport/airfield-source noise levels, nor does the Modified Project propose or require uses that would contribute to or exacerbate airport-source noise impacts.

Based on the preceding, the Modified Project would not be adversely affected by airport/airfield noise, nor would the Modified Project contribute to or result in adverse airport/airfield noise impacts. When compared to the Certified SEIR findings, no new or substantially increased airport/airfield noise impacts would result from the Modified Project.

Modified Project Conditions of Approval: None.

Summary

When compared to the impacts identified in the Certified SEIR, no new significant, substantially increased, or substantially different noise impacts would result from the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; The Avenue Specific Plan, 2023 Amendment - Noise Impact Analysis* (Urban Crossroads, Inc.) May 8, 2024; *The Avenue Specific Plan, 2024 Amendment*.

14. POPULATION AND HOUSING

Would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?					X	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?					X	

***Substantiation*:**

a, b) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR concluded that, while development of the City pursuant to TOP 2050 would increase population, housing, and employment, it also would improve the job-housing balance and impacts would be less-than-significant (Certified SEIR, pp. 5.14-9 – 5.14-12).

Certified SEIR Mitigation Measures: None.

Modified Project:

Direct Population Growth Inducement

The Modified Project amends the site's current land use designations to conform to TOP 2050 land use designations. Under the Modified Project, maximum residential development would total 3,753 dwelling units[8] (all types). Because the Project land uses and residential development are consistent with buildout of the City anticipated and planned for under TOP 2050, the Project would not result in direct population growth not previously considered and addressed in the Certified SEIR.

Indirect Growth Inducement

Indirect population growth inducement could result from creation of additional jobs and the extension of infrastructure and services to areas not currently served, or substantial capacity/capability upgrades to existing systems and services.

In general terms, job creation furthers growth via wages, salaries and general fiscal benefits; increased demands for housing; and increased demand for consumer goods and services. Jobs created by or resulting from the Modified Project would be typical of area

[8] There is the potential for the 10.89-acre school site portion of Planning Area 5 to transition to residential uses, should the school district determine that this site is not needed for school development. If this is the case, these 10.89 acres would be developed with up to 50 residential units, bringing the total Specific Plan residential unit count to 3,803.

employment opportunities, and would be filled by the local residents with no substantial increase in population.

The Modified Project would implement infrastructure improvements that are consistent with the City and purveyor master plans. Because the Project land uses and development are consistent with buildout of the City anticipated and planned for under TOP 2050, the Project would not result in indirect growth not previously considered and addressed in the Certified SEIR.

Consistency with Regional Population Growth Projections

Regional population projections developed by SCAG reflect assumptions and development scenarios incorporated in local plans including City general plans. As demonstrated in the preceding discussions, the Modified Project would not induce or generate growth beyond that reflected in TOP 2050 and evaluated in the Certified SEIR. Accordingly, the Modified Project would not result in growth not already anticipated within SCAG population growth projections for the region.

As supported by the preceding discussions, the Modified Project would not induce substantial population growth; displace substantial numbers of existing housing; or displace substantial numbers of people. When compared to the Certified SEIR findings, no new or substantially increased population and housing impacts would result from the Modified Project.

The Modified Project would increase housing availability. The Modified Project does not propose or require uses or operations that would displace substantial numbers of existing people or housing. The potential for the Modified Project to displace substantial numbers of existing people or housing would be less-than-significant.

Modified Project Conditions of Approval: None.

Summary

Based on the preceding, when compared to impacts identified in the Certified SEIR, no new or substantially increased population and housing impacts would result from the

Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; The Avenue Specific Plan, 2024 Amendment*.

15. PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any public service:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Fire protection?					X	
b) Police protection?					X	
c) Schools?					X	
d) Parks?					X	
e) Other public facilities?					X	

***Substantiation*:**

a – e) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: Certified SEIR Section 5.15, *Public Services*, concluded that implementation of TOP 2050 would not result in potentially significant public services impacts (Certified SEIR, pp. 5.15-1 – 5.15-18).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project amends the site's current land use designations to conform to TOP 2050 land use designations. Uses proposed by the Modified Project

would not create substantive additional demands for school or park facilities beyond those reflected in TOP 2050 and evaluated in TOP 2050 SEIR. The Modified Project would be constructed within an already-developed urban environment. Fire protection and police protection services are currently available to the subject site via existing facilities. Development impact fees and sales tax revenues generated by the Modified Project would provide funding sources available for support and enhancement of public services commensurate with incremental demands of the development. By law, the Modified Project would be required to remit school impact fees.

Modified Project Conditions of Approval: None.

Summary

Based on the preceding, when compared to impacts identified in the Certified SEIR, no new or substantially increased public services impacts would result from the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; The Avenue Specific Plan, 2024 Amendment*.

16. RECREATION

Would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?					X	
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?					X	

***Substantiation*:**

a, b) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR determined that because new development would be required to provide sufficient public parkland or pay in-lieu fees, impacts to recreational facilities would be less-than-significant (Certified SEIR, pp. 5.16-12 – 5.16-14).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project amends the site's current land use designations to conform to TOP 2050 land use designations. Proposed residential and commercial uses implemented under the Modified Project would not increase demands on recreational facilities beyond those reflected in TOP 2050 and evaluated in TOP 2050 SEIR. When compared to the Certified SEIR findings, no new or substantially increased recreation impacts would result from the Modified Project.

Modified Project Conditions of Approval: None.

Summary

Based on the preceding, when compared to impacts identified in the Certified SEIR, no new or substantially increased recreational services or recreational facilities impacts would result from the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; The Avenue Specific Plan, 2024 Amendment*.

17. TRANSPORTATION

Would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?					X	
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?					X	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?					X	
d) Result in inadequate emergency access?					X	

General Note:

The technical analyses referenced in this section reflect likely maximum impacts. Subsequent to preparation of these analyses, total residential development intensities allowed under the Modified Project have been reduced consistent with direction. Specifically, the technical analyses referenced herein assume residential development of the Modified Project totaling up to 3,807 dwelling units (see Project Traffic Analysis, p. 2 et al.). As subsequently modified, maximum allowed residential development under the Modified Project would not exceed 3,753 dwelling units (see Section 2.0, Project Description, Table 2.1-1).

***Substantiation*:**

Transportation impact analyses of the Modified Project presented here are summarized in part from: *The Avenue Specific Plan Traffic Analysis* (Urban Crossroads, Inc.) April 19, 2024 (Modified Project Traffic Analysis, Traffic Analysis); and *The Avenue Specific Plan Amendment Vehicle Miles Traveled (VMT)* Analysis (Modified Project VMT Analysis, VMT Analysis) (Urban Crossroads, Inc.) March 17, 2024. The Modified Project Traffic Analysis and VMT Analysis are presented at Addendum Appendix F.

a) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: Certified SEIR Section 5.17, *Transportation*, concluded that implementation of TOP 2050 would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities (Certified SEIR, pp. 5.17-18 – 5.17-23).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project does not propose elements or aspects that would conflict with adopted alternative transportation policies. Transit services are currently provided to the City and the Modified Project vicinity by Omnitrans. On a long-term basis, the Modified Project may result in increased demand for public transportation as increased employment opportunities become available onsite. Transit agencies routinely review and adjust their ridership schedules to accommodate shifts in demand for services. As part of the City's standard development review processes, the need for transit-related facilities, bicycle, and pedestrian access would be coordinated between the City and the Applicant.

The Modified Project would accommodate and would not interfere with the City *Multipurpose Trails and Bikeway Corridor Plan*. The Modified Project would provide internal and perimeter pedestrian and bicycle amenities consistent with provisions of *The Avenue Specific Plan, 2024 Amendment* and City Conditions of Approval.

Modified Project Conditions of Approval: None.

b) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: *CEQA Guidelines* Section 15064.3, subdivision (b) was added to the *CEQA Guidelines* in 2019. The Vehicle Miles Traveled (VMT) metric established under Section 15064.3 is recognized. The VMT metric became effective in July 2020. The Certified SEIR concluded that even with application of mitigation VMT impacts of TOP 2050 would be significant and unavoidable (Certified SEIR, p. 5.17-34).

Certified SEIR Mitigation Measures:

New Mitigation

T-1 Prior to approval of discretionary projects subject to VMT reduction analysis, applicants shall demonstrate compliance with the City's VMT Guidelines for CEQA assessment of VMT impacts. For projects with VMT per Service Population exceeding the County's significance threshold, a mitigation plan shall be developed and implemented. Mitigation should consist of Transportation Demand Management (TDM) measures analyzed under a VMT-reduction methodology consistent with the California Air Pollution Control Officers Association's (CAPCOA) Final Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (2021) and approved by the City of Ontario (if applicable). Examples of measures include but are not limited to:

- *Pedestrian Network Improvements: constructing new sidewalks and/or improving damaged or substandard sidewalks that connect to a larger pedestrian network.*
- *Construct or Improve Bike Facilities: constructing new or enhancing a single existing Class I, II or IV bike facility that connects to a larger bike network.*
- *Construct or Improve Bike Boulevards: implementing a Class III bike boulevard on a local or collector street that is one travel lane in each direction, has a design speed of 25 mph or less and a design volume of 5,000 ADT or less.*
- *Expand Bikeway Networks: constructing a network of interconnected new Class I, II, or IV bike facilities.*
- *Provide End of Trip Bicycle Facilities: constructing facilities that support cyclists such as bike parking, lockers, and showers.*
- *Implement Transit-Supportive Roadway Treatments: funding infrastructure improvements such as traffic signal modifications and roadway signing and striping that are dedicated to improving transit travel times and reliability.*
- *Transit Passes: proving discounted or free transit fare to a specific geographic area, population group, or to the general public.*
- *Vanpool Program: providing groups of 5 to 15 people with direct shuttle service between their workplace and residence.*
- *Carshare Program (conventional or EV): providing access to a shared fleet of on-demand vehicles for short-term use/rental. Best practice is to discount carshare*

membership and provide priority parking for carshare vehicles to encourage use of the service.

- *Bikeshare Program (conventional or EV): providing access to a shared fleet of on-demand bicycles for short-term use/rental. Best practice is to discount bikeshare membership and dedicate bikeshare parking to encourage use of the service.*
- *Rideshare Program: providing access to and encouraging the use of a ridesharing platform or service. This could be an app, website, or other service that provides ride-matching coordination services.*
- *Community-Based Travel Planning (CBTP): CBTP is a residential based approach to outreach, performed by trained advisors, that provides households within a targeted geographic area with customized information, incentives, and support to encourage the use of transportation alternatives in place of single occupancy vehicles.*
- *Commute Trip Reduction (CTR) Program: CTR programs can be mandatory or voluntary, and involve providing information, coordination, services, infrastructure, and/or incentives for alternative modes such as ridesharing, vanpool, transit passes, and cycling.*

Modified Project: The California Environmental Quality Act (CEQA) requires all lead agencies to adopt VMT as the measure for identifying transportation impacts for land use projects. To comply with CEQA, in June of 2020 the City of Ontario developed and adopted their own VMT methodologies and thresholds (Resolution No. 2020-071) (City Guidelines). The VMT analysis presented here conforms to adopted City Guidelines. Projects that do not result in significant VMT impacts per City Guidelines would not conflict or be inconsistent with *CEQA Guidelines* Section 15064.3, subdivision (b).

Project generated VMT has been estimated using the origin/destination method and boundary method. Consistent with City Guidelines, VMT has been presented as total VMT and total VMT per Service Population (i.e., population and employees). Total VMT represents all VMT generated in the City of Ontario on a typical weekday. Total VMT per service population is an efficiency metric representing VMT generated on a typical weekday per person who lives and/or works in the City or travels to the City for another purpose (Project VMT Analysis, p. 2).

City Guidelines identifies the efficiency based metric VMT per Service Population (SP) (i.e., population and employees) is to be used to conduct project-level VMT analyses for land use projects in the City of Ontario. City Guidelines also identifies the following impact threshold for project-level VMT analyses:

- A significant impact would occur if the Project VMT per SP exceeds the Citywide average VMT per SP under General Plan Buildout Conditions.

The City of Ontario's average VMT per SP under General Plan Buildout conditions has been calculated using the TOP General Plan Buildout (2050) model. Table 17-1 presents the City of Ontario's Citywide average VMT per SP for General Plan Buildout (2050) conditions. As presented at Table 17-1, the City of Ontario's VMT per SP under General Plan Buildout (2050) conditions is estimated at 30.70 VMT per SP.

Table 17-1
TOP 2050 Buildout
Citywide VMT Per Service Population

Service Population	706,494
VMT	21,689,573
VMT per SP	30.70

Source: *The Avenue Specific Plan Amendment Vehicle Miles Traveled (VMT)* Analysis (Urban Crossroads, Inc.) March 17, 2024.

VMT impacts of the Project were evaluated employing both the Origin/Destination VMT Methodology and the Boundary VMT Methodology. Methodology details are presented at Project VMT Analysis pp. 3, 4.

VMT impacts of the Project employing the Origin/Destination VMT Methodology are presented at Table 17-2.

Table 17-2
Project VMT Impacts
Origin/Destination VMT Methodology

	Baseline	General Plan Buildout Year (2050)
Households	3,807	3,807
Population	13,325	13,325
Employment	957	957
Service Population	14,282	14,282
Total OD VMT	139,550	245,044
OD VMT/SP	19.4	17.2
City Threshold	30.7	30.7
Threshold Exceeded	No	No

Source: *The Avenue Specific Plan Amendment Vehicle Miles Traveled (VMT)* Analysis (Urban Crossroads, Inc.) March 17, 2024.

VMT impacts of the Project employing the Boundary VMT Methodology are presented at Table 17-3.

Table 17-3
Project VMT Impacts
Boundary VMT Methodology

	City Boundary		10-Mile Boundary	
Scenario	No Project	With Project	No Project	With Project
Service Population	706,494	708,515	2,172,176	2,174,197
Boundary VMT	9,602,250	9,600,990	34,288,519	34,291,339
VMT per SP	13.6	13.6	15.8	15.8
Change in VMT	0.0		0.00	
Threshold Exceeded	No		No	

Source: *The Avenue Specific Plan Amendment Vehicle Miles Traveled (VMT)* Analysis (Urban Crossroads, Inc.) March 17, 2024.

The analysis presented here supports the following findings:

- Consistent with City Guidelines, VMT estimates were prepared measuring both Project generated VMT per service population and Citywide boundary VMT.

- Project generated VMT per service population would not exceed City's adopted impact threshold of Citywide average VMT per SP under General Plan Buildout Conditions.

- Citywide boundary VMT was found to remain unchanged with the addition of the proposed Project.

Based on the preceding, the Modified Project VMT would not exceed applicable City VMT impact significance thresholds. On this basis, the potential for the Modified Project to conflict or be inconsistent with *CEQA Guidelines* Section 15064.3, subdivision (b) would be less-than-significant.

Modified Project Conditions of Approval: None.

c, d) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR concluded that buildout of the City pursuant to TOP 2050 would result in changes to the circulation network. Such changes would however be implemented consistent with City roadway classification and roadway design standards, acting to preclude potential design hazards. Additionally, City Design Review processes ensure that adequate emergency access is provided for all new development projects. On this basis, there would be no impacts related to hazardous design features, or emergency access provisions (Certified SEIR, pp. 5.17-25, 5.17-26).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project does not propose elements or aspects that would substantially increase transportation/traffic hazards. Moreover, all improvements under the Modified Project would be designed and implemented consistent with recommendations of the Traffic Analysis (see: Traffic Analysis Section 1.6, *Recommendations*; and *The Avenue Specific Plan, 2024 Amendment*, Section 4.1, *Master Plan of Circulation*), and City traffic engineering and safety standards, thereby minimizing the potential to result in or cause hazardous traffic/transportation conditions.

The Modified Project would generate urban traffic comparable to and compatible with the vehicle mix and vehicle categories present within the area roadway system. The Modified Project uses would therefore not cause or result in incompatible vehicle

movements or traffic that would substantively increase hazards. Further, based on the projected net decrease in trip generation under the Modified Project, the potential for the Modified Project to result in potential traffic hazards would likely be reduced when compared to the uses entitled under the Original Project and assumed within the Certified SEIR.

Additionally, pursuant to the Modified Project Construction Traffic Management Plan (please refer to Addendum Section 2, *Project Description*, 2.3.8 C*onstruction Area Traffic Management Plan*), the Modified Project would be required to maintain appropriate access during construction activities.

Modified Project Conditions of Approval: None.

Summary

Based on the preceding, when compared to impacts identified in the Certified SEIR, no new or substantially increased transportation impacts would result from the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; The Avenue Specific Plan Traffic Analysis* (Urban Crossroads, Inc.) April 19, 2024; *The Avenue Specific Plan Amendment Vehicle Miles Traveled (VMT) Analysis* (Urban Crossroads, Inc.) March 17, 2024; *The Avenue Specific Plan, 2024 Amendment*.

18. TRIBAL CULTURAL RESOURCES

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or					X	
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.					X	

***Substantiation*:**

a, b) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: With the implementation of mitigation, the Certified SEIR concluded that impacts to prehistoric archeological resources, which include TCRs, would be less-than-significant (Certified SEIR, pp. 5.18-8 – 5.18-11).

Certified SEIR Mitigation Measures:

5-3 Upon receipt of an application for a proposed project subject to CEQA and within the City's jurisdiction, the City's representative shall consult with the relevant tribe(s)' representative(s) to determine if the proposed project is within a culturally sensitive area

to the tribe. If sufficient evidence is provided to reasonably ascertain that the site is within a tribal culturally sensitive area, an archaeologist shall prepare a cultural resources assessment. The findings of the cultural resources assessment shall be incorporated into the CEQA documentation. A copy of the report shall be forwarded to the tribe(s). If mitigation is recommended in the CEQA document, the procedure described in Mitigation Measure 5-4 shall be followed.

5-4 *Prior to the issuance of grading permits for a proposed project for which the CEQA document defines cultural resource mitigation for potential tribal resources, the project applicant shall contact the designated tribe(s) to notify them of the grading, excavation, and monitoring program. The applicant shall coordinate with the City of Ontario and the tribal representative(s) to develop mitigation measures that address the designation, responsibilities, and participation of tribal monitors during grading, excavation, and ground-disturbing activities; scheduling; terms of compensation; and treatment and final disposition of any cultural resources, sacred sites, and human remains discovered on the site. The City of Ontario shall be the final arbiter of the conditions for projects within the City's jurisdiction.*

TCR-1 *Tribal Cultural Resources Monitoring. The project archaeologist, in consultation with interested tribes, the developer, and the City of Ontario, shall develop an archaeological monitoring plan (AMP) to address the details, timing, and responsibility of archaeological and cultural activities that will occur on the project site. Details in the AMP shall include:*

1. *Project-related ground disturbance (including, but not limited to, brush clearing, grading, trenching, etc.) and development scheduling;*

2. *The development of a rotating or simultaneous schedule in coordination with the developer and the project archeologist for designated Native American Tribal Monitors from the consulting tribes during grading, excavation and ground disturbing activities on the site: including the scheduling, safety requirements, duties, scope of work, and Native American Tribal Monitors' authority to stop and redirect grading activities in coordination with all project archaeologists (if the tribes cannot come to an agreement on the rotating or simultaneous schedule of tribal monitoring, the Native American*

Heritage Commission shall designate the schedule for the onsite Native American Tribal Monitor for the proposed project);

3. *The protocols and stipulations that the developer, City, Tribes, and project archaeologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits that shall be subject to a cultural resources evaluation.*

At least 30 days prior to application for a grading permit and before any brush clearance, grading, excavation, and/or ground disturbing activities on the site, the developer shall retain a tribal cultural monitor to monitor all ground-disturbing activities in an effort to identify any unknown archaeological resources.

Pursuant to the AMP, a tribal monitor from the consulting tribe shall be present during the initial grading activities. If tribal resources are found during grubbing activities, the tribal monitoring shall be present during site grading activities.

TCR-2 Treatment and Disposition of Cultural Resources. In the event that Native American cultural resources are inadvertently discovered during the course of any ground-disturbing activities, including but not limited to brush clearance, grading, trenching, etc., for the proposed project, the following procedures will be carried out for treatment and disposition of the discoveries:

1. *Temporary Curation and Storage: During the course of construction, all discovered resources shall be temporarily curated in a secure location on-site or at the offices of the project archaeologist. The removal of any artifacts from the project site will need to be thoroughly inventoried with tribal monitor oversight of the process;*

2. *Treatment and Final Disposition: The landowner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and nonhuman remains as part of the required mitigation for impacts to cultural resources. The applicant shall relinquish the artifacts through one or more of the following methods and provide the City of Ontario with evidence of same:*

a. *Accommodate the process for on-site reburial of the discovered items with the consulting Native American tribes or bands. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloging, basic analysis, other analyses as recommended by the project archaeologist and approved by consulting tribes, and basic recordation have been completed; all documentation should be at a level of standard professional practice to allow the writing of a report of professional quality;*

b. *A curation agreement with an appropriate qualified repository in San Bernardino County that meets federal standards per 36 CFR Part 79, and therefore the resource would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility in San Bernardino County, to be accompanied by payment of the fees necessary for permanent curation;*

c. *For purposes of conflict resolution, if more than one Native American tribe or band is involved with the project and cannot come to an agreement as to the disposition of cultural materials, materials shall be curated at the San Bernardino County Museum by default;*

d. *At the completion of grading, excavation, and ground-disturbing activities on the site, a Phase IV Monitoring Report shall be submitted to the City documenting monitoring activities conducted by the project archaeologist and Native Tribal Monitors within 60 days of completion of grading. This report shall document the impacts to the known resources on the property; describe how each mitigation measure was fulfilled; document the type of cultural resources recovered and the disposition of such resources; provide evidence of the required cultural sensitivity training for the construction staff held during the required pregrade meeting; and, in a confidential appendix, include the daily/weekly monitoring notes from the archaeologist. All reports produced will be submitted to the City, County Museum, and consulting tribes.*

Modified Project: Tribal scoping and outreach was previously undertaken for The Avenue Specific Plan in July 2021. At that time, responses from Agua Caliente Band of Cahuilla Indians, the Gabrieleno Band of Mission Indians – Kizh Nation, Quechan Tribe of the Fort Yuma Reservation, and the San Manuel Yuhaaviatam Band of Mission Indians were received, but no consultation was requested for the Specific Plan. The Kizh Nation and San Manuel Band requested consultation if/when a specific development project was to be built. Additionally, the Gabrieleno Band of Mission Indians – Kizh Nation provided a series of measures to be included as conditions of approval for future development projects. (see Conditions of Approval TR-1 through TR-3, below). These Conditions will apply to future project approvals within the Specific Plan Area.

Outreach for this Project occurred again in December 2022 with SB-18 notifications sent. Responses were received from San Manuel Band of Mission Indians - Serrano Nation, Gabrieleno Band of Mission Indians - Kizh Nation, Quechan Tribe of the Fort Yuma Reservation, Gabrieleno Band of Mission Indians - Tongva Tribe, Agua Caliente Band of Cahuilla Indians, Morongo Band of Mission Indians, and the San Manuel Yuhaaviatam Band of Mission Indians. Out of those responses, San Manuel Band of Mission Indians - Serrano Nation and Gabrieleno Band of Mission Indians - Kizh Nation provided comments, with both requesting consultation on future development projects.

With the implementation of the mitigation presented in the Certified SEIR, in addition to the Conditions of Approval listed below, the potential for the Modified Project to cause a substantial adverse change in the significance of a tribal cultural resource would be less-than-significant. When compared to the Certified SEIR findings, no new or substantially increased impacts to tribal cultural resources would result from the Modified Project.

Modified Project Conditions of Approval:

TR-1 Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities:

A. The project applicant/lead agency shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation. The monitor

shall be retained prior to the commencement of any "ground-disturbing activity" for the subject project at all project locations (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). "Ground-disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching.[9]

B. *A copy of the executed monitoring agreement shall be submitted to the lead agency prior to the earlier of the commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity.*[10]

C. *The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or "TCR"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the project applicant/lead agency upon written request to the Tribe.*

D. *On-site tribal monitoring shall conclude upon the latter of the following (1) written confirmation to the Kizh from a designated point of contact for the project applicant/lead agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the Kizh to the project applicant/lead agency that no future, planned construction activity and/or development/construction phase at the project site possesses the potential to impact Kizh TCRs.*

[9] Tribal monitoring shall cease once all ground disturbance activities have been completed with respect to the property or portion thereof. Example: Once excavation, grading, trenching, etc. have occurred tribal monitoring shall cease.

[10] The extent of necessary manpower and hourly wage shall be subject to commercially reasonable standards. If there is a dispute as to scope of the necessary labor needs or wage rates, the City shall arbitrate any such disputes in accordance with commercially reasonable standards.

E. Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Kizh monitor and/or Kizh archaeologist. The Kizh will recover and retain all discovered TCRs in the form and/or manner the Tribe deems appropriate, in the Tribe's sole discretion, and for any purpose the Tribe deems appropriate, including for educational, cultural and/or historic purposes.

TR-2 Unanticipated Discovery of Human Remains and Associated Funerary Objects:

A. Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute.

B. If Native American human remains and/or grave goods discovered or recognized on the project site, then all construction activities shall immediately cease. Health and Safety Code Section 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and all ground-disturbing activities shall immediately halt and shall remain halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe they are Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission, and Public Resources Code Section 5097.98 shall be followed.

C. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2).

D. Construction activities may resume in other parts of the project site at a minimum of 200 feet away from discovered human remains and/or burial goods, if the Kizh determines in its sole discretion that resuming construction activities at that distance is acceptable and provides the project manager express consent of that determination (along with any other mitigation measures the Kizh monitor and/or archaeologist deems necessary). (CEQA Guidelines Section 15064.5(f).)

E. *Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods. Any historic archaeological material that is not Native American in origin (non-TCR) shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, it shall be offered to a local school or historical society in the area for educational purposes.*

F. *Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.*

TR-3 *Procedures for Burials and Funerary Remains:*

A. *As the Most Likely Descendant ("MLD"), the Koo-nas-gna Burial Policy shall be implemented. To the Tribe, the term "human remains" encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the preparation of the soil for burial, the burial of funerary objects with the deceased, and the ceremonial burning of human remains.*

B. *If the discovery of human remains includes four or more burials, the discovery location shall be treated as a cemetery and a separate treatment plan shall be created.*

C. *The prepared soil and cremation soils are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects. Cremations will either be removed in bulk or by means as necessary to ensure complete recovery of all sacred materials.*

D. *In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to*

recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed.

E. *In the event preservation in place is not possible despite good faith efforts by the project applicant/developer and/or landowner, before ground-disturbing activities may resume on the project site, the landowner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects.*

F. *Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location agreed upon between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.*

G. *The Tribe will work closely with the project's qualified archaeologist to ensure that the excavation is treated carefully, ethically, and respectfully. If data recovery is approved by the Tribe, documentation shall be prepared and shall include (at a minimum) detailed descriptive notes and sketches. All data recovery data recovery-related forms of documentation shall be approved in advance by the Tribe. If any data recovery is performed, once complete, a final report shall be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive and/or destructive diagnostics on human remains.*

Summary

When compared to impacts considered and addressed in the Certified SEIR, no new significant, substantially increased, or substantially different impacts to tribal cultural resources would occur as a result of the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022*; *The Avenue Specific Plan, 2024 Amendment*.

19. UTILITIES AND SERVICE SYSTEMS

Would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?					X	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?					X	
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?					X	
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?					X	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?					X	

***Substantiation*:**

a) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR concluded that, although buildout of TOP 2050 would generate additional wastewater, it would be adequately treated in accordance with Regional Water Quality Control Board and California Department of

Public Health requirements. City sanitary sewer systems, and stormwater management would be expanded to accommodate growth associated with the buildout of TOP 2050.

Other utilities systems would be extended and improved consistent with purveyor master plans and as warranted by market conditions. Compliance with regulatory requirements and standard conditions of approval acts to reduce impacts on utilities systems generally, improve system efficiencies, and reduce system maintenance requirements. Collectively, this diminishes the requirement to construct new systems or replace existing systems.

Construction of utilities systems serving the City under TOP 2050 buildout conditions would not result in substantially different impacts than would result from development of TOP 2050 land uses generally.

The Certified SEIR concluded that with implementation of regulatory requirements and standard conditions of approval, the potential for TOP 2050 to require or result in the relocation or construction of new or expanded utilities systems, the construction or relocation of which would result in adverse environmental impacts would be less-than-significant (Certified SEIR, p. 5.19-11).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project amends the site's current land use designations to conform to TOP 2050 land use designations. Proposed residential and commercial uses implemented under the Modified Project would not increase demands on utilities systems beyond those reflected in TOP 2050 and evaluated in TOP 2050 SEIR.

The Modified Project is fully-served by utilities and services systems including: water, wastewater treatment, storm water drainage, electric power, natural gas, and telecommunication facilities. Any localized modification of or connections to serving utilities systems implemented by the Modified Project would not result in substantially different impacts than would result from development of the Modified Project land uses

generally. These impacts would be no greater than or different than impacts considered and addressed in the Certified SEIR.

Modified Project Conditions of Approval: None.

b) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: A foundational document for compliance with both SB 610 and SB 221 is the Urban Water Management Plan (UWMP). Both of these statutes repeatedly identify the UWMP as a planning document that, if properly prepared, can be used by a water supplier to meet the standards set forth in both statutes. Thorough and complete UWMPs will allow water suppliers to use UWMPs as a foundation to fulfill the specific requirements of these two statutes. Cities, counties, water districts, property owners, and developers will all be able to utilize this document when planning for and proposing new projects (Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001).

The City of Ontario 2020 Urban Water Management Plan (UWMP) substantiates that there would be sufficient and reliable water supplies available to the City through 2045. The Certified SEIR concludes that buildout of the City under TOP 2050 would incrementally increase water demands. However, water demands of the City would remain below 2020 UWMP water demand projections. On this basis, there would be sufficient water supplies available to the City under TOP 2050 buildout conditions. The potential for there to be insufficient water supplies available to serve the City and reasonably foreseeable future development during normal, dry and multiple dry years is therefore considered less-than-significant (Certified SEIR, pp. 5.19-30, 5.19-31).

Certified SEIR Mitigation Measures: None.

Modified Project: Consistent with SB610 requirements, a Water Supply Assessment (WSA) has been prepared for the Modified Project (see: *Water Supply Assessment and Written Verification of Sufficient Water Supply, The Avenue Specific Plan, City Of Ontario* [Albert A. Webb Associates] January 24, 2024; Project WSA, Addendum Appendix G).

The Project WSA concludes that water demand of the Modified Project was not fully accounted for in the 2020 UWMP (Project WSA, p. 25). The WSA also concludes that "water supplies available to OMUC [Ontario Municipal Utilities Company] currently meet and exceed citywide water demands. Groundwater production by OMUC is currently less than their existing rights and within their production capacity. Regardless, OMUC has the means and right to exceed their groundwater allocation in the Chino Basin when required to meet demand pursuant to the Judgment. Further, OMUC has rights to water held in storage that would supply all City demands for more than two years. In addition to groundwater, OMUC can supply water to the Project purchased from the WFA that is within their existing entitlements and capacities" (Project WSA, p. 64). On this basis, the potential for the Modified Project to result in insufficient water supplies available to serve the City and reasonably foreseeable future development during normal, dry and multiple dry years would be less-than-significant.

Modified Project Conditions of Approval: None.

c) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified EIR Conclusions: The Certified EIR recognizes that buildout of the City under TOP 2050 would result in increased wastewater treatment demands. However, existing wastewater treatment plants have excess capacity sufficient to meet these increased demands. Planned wastewater treatment plant expansion would provide additional capacity available to serve the City under TOP 2050 buildout conditions. Treated wastewater meets or exceeds RWQCB and NPDES standards and requirements. On this basis, the Certified EIR concluded that the potential for buildout of City under TOP 2050 to result in or cause insufficient or inadequate wastewater treatment would be less-than-significant.

Certified EIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. By extension, the Modified Project wastewater treatment demand is reflected in wastewater treatment

demand of the City under TOP 2050, as considered and addressed in the Certified SEIR. The Project proposes conventional urban residential/commercial development. Wastewater generated by the Modified Project would not require special or atypical treatment. Based on the preceding, the potential for the Modified Project to result in or cause insufficient or inadequate wastewater treatment would be less-than-significant.

Modified Project Conditions of Approval: None.

d, e) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: The Certified SEIR concluded that buildout of TOP 2050 would be served by landfills with sufficient permitted capacities to accommodate all solid waste disposal needs. Additionally, no conflicts with federal, state, and local management and reduction statutes and regulations related to solid waste were identified. The Certified SEIR determined that impacts related to solid waste would be less-than-significant (Certified SEIR, p. 5.17-31).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. By extension, the Modified Project solid waste management demand is reflected in solid waste management demand of the City under TOP 2050, as considered and addressed in the Certified SEIR. Moreover, the Modified Project would comply with applicable solid waste management and reduction statutes and regulations (summarized below), acting to further reduce solid waste management impacts of the Modified Project.

City of Ontario Construction & Demolition Recycling Plan (CDRP)

Pursuant to Ontario Municipal Ordinance (OMC) Sec. 6-3.602 *Construction & Demolition Recycling Plan* and the 2016 California Green Building Standards Code (CALGreen), all building and demolition permit applicants are required to prepare and submit a Construction & Demolition Recycling Plan (CDRP) and a CDRP Summary Report. OMC Sec. 6-3.602 and CALGreen require all construction and qualifying renovation and

demolition projects to divert at least 65% of all generated waste materials. The Modified Project would be subject to (OMC) Sec. 6-3.602 and CALGreen construction waste diversion mandates. The City oversees compliance with OMC Sec. 6-3.602 and CALGreen construction waste diversion mandates.

AB 939 - California Integrated Waste Management Act of 1989

Solid waste management is guided by the California Integrated Waste Management Act of 1989 (AB 939), which emphasizes resource conservation through reduction, recycling, and reuse of solid waste. AB 939 requires that localities conduct a Solid Waste Generation Study (SWGS) and develop a Source Reduction Recycling Element (SRRE), providing for a minimum 50 percent reduction in waste sent to landfills. Diversion rates are calculated and tracked by the California Integrated Waste Management Board (Board). Alternatively, the Board can determine that a jurisdiction's "good faith efforts" to implement comprehensive diversion programs have satisfied the requirement even if diversion levels are below 50 percent.

To reduce waste disposal, AB 939 requires every California city and county to divert 50 percent of its waste from landfills. Residential, commercial and governmental waste recycling programs in support of the SRRE have been implemented by the City.

The City is currently meeting or exceeding all AB 939 solid waste diversion targets. The Modified Project would be required to comply with AB 939 as implemented by the City.

AB 341 - Commercial Recycling

Assembly Bill 341 mandates recycling for businesses producing four or more cubic yards of solid waste per week, and multifamily dwellings of five units or more. Under the law, business must separate recyclables from trash and then either subscribe to City of Ontario recycling services, self-haul their recyclables, or contract with a permitted private recycler. The Modified Project would be subject to Assembly Bill 341 mandates.

AB 1826 - Commercial Organics Recycling

Under Assembly Bill 1826, businesses are required to arrange for organic recycling services. The Modified Project would be subject to Assembly Bill 1826 mandates.

The California Department of Resources Recycling and Recovery (CalRecycle) oversees both the mandatory commercial recycling program and the mandatory commercial organics recycling program. The City of Ontario supports both bills through public outreach, monitoring of recycling efforts, providing notification to non-compliant businesses, and periodic State reporting.

The Modified Project would be required to comply with the above solid waste management statutes and regulations. The City and CalRecycle would oversee and monitor compliance with applicable solid waste management statutes and regulations.

SB 1383 - Organic Waste Management Requirements

SB 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The law grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that not less than 20 percent of currently disposed edible food is recovered for human consumption by 2025.

The City is currently developing programs and strategies to address the requirements of SB 1383, the Modified Project would be required to ultimately abide by those requirements.

As stated in the Certified SEIR, impacts to solid waste services and facilities from new development are addressed through the payment of development impact fees as outlined in the City of Ontario Development Impact Fee Calculation and Nexus Fee Schedules. With the payment of required development impact fees and compliance with existing solid waste regulations, the Modified Project would not result in any new or substantially increased solid waste impacts not previously identified within the Certified SEIR.

Based on the preceding, the Modified Project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals would be less-than-significant. Additionally, the Modified Project would comply with applicable solid waste

management and reduction statutes and regulations. On this basis, the Modified Project would result in less-than-significant solid waste management impacts. The Modified Project would not result in solid waste management impacts substantially greater than or substantially than solid waste management impacts considered and addressed in the Certified SEIR.

Modified Project Conditions of Approval: None.

When compared to impacts considered and addressed in the Certified SEIR, no new significant, substantially increased, or substantially different utilities and service systems impacts would result from the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; Water Supply Assessment and Written Verification of Sufficient Water Supply, The Avenue Specific Plan, City Of Ontario* (Albert A. Webb Associates) January 24, 2024*; The Avenue Specific Plan, 2024 Amendment*.

20. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?					X	
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?					X	

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?					X	
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?					X	

***Substantiation*:**

a – d) *No Changes or New Information Requiring Preparation of an MND or EIR.*

Certified SEIR Conclusions: As discussed in the Certified SEIR, CAL FIRE has determined that the City contains no areas subject to very high wildfire risk. However, the City recognizes that even though fuel loading is light in Ontario and fire risk comes primarily from urban fires, not wildfires, there is some risk related to wildfires. There are many resources available to address wildland fires should they arise - CAL FIRE's *2019 Strategic Fire Plan for California*, the CFC, County of San Bernardino MJHMP, City of Ontario LHMP, and fire services from the City of Ontario Fire Department. With adherence to these building practices, development and infrastructure associated with TOP 2050 would not exacerbate risk or result in post-wildfire hazards (e.g., landslides, mudflows, and flooding). In addition, TOP 2050 incorporates policies to prevent wildfire hazards and support the community during wildfire events (Certified SEIR, pp. 5.20-15, 5.20-16). On this basis, the Certified SEIR concluded that potential wildfire impacts resulting from TOP 2050 would be less-than-significant.

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. By extension, potential wildfire impacts affecting the Modified Project are reflected in the assessment of wildfire impacts affecting the City under TOP 2050, as considered and addressed in the Certified SEIR. Per CAL FIRE "Fire Hazard Severity Zone Maps," the City and the Modified Project site are not located within or near a state responsibility area, or within an area classified as a very high fire hazard severity zone.

Fire protection services for the Modified Project site and vicinity are currently provided by the Ontario Fire Department (Fire Department). Adherence to Fire Department building and site design requirements, and compliance with codified fire protection and prevention measures during construction and operation of the Modified Project are required. On this basis, when compared to the Certified SEIR findings, no new or substantially increased wildfire impacts would result from the Modified Project.

Modified Project Conditions of Approval: None.

Summary

When compared to impacts considered and addressed in the Certified SEIR, no new significant, substantially increased, or substantially different wildfire impacts would result from the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: *The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; SW San Bernardino County, Fire Hazard Severity Zones in SRA* (November 7, 2007); https://osfm.fire.ca.gov/media/6781/fhszs_map62.pdf; *The Avenue Specific Plan, 2024 Amendment.*

21. MANDATORY FINDINGS OF SIGNIFICANCE

Does the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?					X	
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of the past projects, the effects of other current projects, and the effects of probable future projects.)					X	
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?					X	

***Substantiation*:**

a – c) *No Changes or New Information Requiring Preparation of an MND or EIR.*

This Addendum defines, describes, compares, and contrasts potential environmental impacts of the Modified Project in the context of the environmental impacts assessed in the Certified SEIR. In so doing, this Addendum substantiates consistency with applicable *CEQA Guidelines* provisions addressing preparation of an Addendum to a previously-Certified SEIR.

As supported by the discussions presented herein, the Modified Project would not result in or cause any new significant impacts, substantively increased impacts, or substantively different environmental impacts than those previously considered and addressed in the Certified SEIR. Analysis beyond that presented in this Addendum is not required or warranted.

4.0 DETERMINATION

4.0 DETERMINATION

As supported by the analysis presented herein, the potential environmental effects of the development allowed by the Modified Project, and associated required discretionary actions, have been adequately addressed in the Certified EIR. As such, the development of any further information and analysis is not warranted. Pursuant to the requirements of *CEQA Guidelines* Section 15162 and 15164, the following determinations have been made.

Major Revisions to the Certified EIR Not Required

Based on the preceding analysis and information, there is no evidence that major changes to the Certified EIR are required. This Addendum indicates that there is no new significant or more severe environmental impact, and that the development of the Modified Project described herein would essentially have the same, or reduced, impacts as those considered and addressed in the Certified EIR.

No Substantial Change in Circumstances Requiring Major Revisions to the Certified EIR

No information exists in the record, or is otherwise available that indicates that there are substantial changes in circumstances that would require major changes to the Certified EIR.

No New Information Showing Greater Significant Effects than Identified in the Certified EIR

This Addendum has considered all available relevant information to determine whether there is new information, which was not available at the time the Certified EIR was prepared, that may indicate that a new significant effect may occur that was not reported in the Certified EIR. As supported by the analysis presented in this

Addendum, there is no substantial new information that was not available at the time of the Certified EIR, indicating that there would be a new, significant impact requiring major revisions of the Certified EIR.

No New Information Showing Ability to Reduce Significant Effects Identified in the Certified EIR

The Addendum analysis substantiates that there are no significant impacts requiring identification of alternatives to the Modified Project. The continued implementation of applicable mitigation from previous relevant CEQA documents, as incorporated in this Addendum, reduce the Project's potentially significant impacts to levels that are less-than-significant.

Summary

The analysis presented in this document substantiates that the analysis presented in the Certified EIR is sufficient to satisfy CEQA requirements for the proposed Modified Project. That is, with incorporation of mitigation, implementation of the Modified Project described and evaluated herein would not result in any significant new, different, additional, or substantially increased environmental impacts than were previously considered and addressed in the Certified EIR. As such, environmental assessment of the Modified Project does not require any major revision of the previously-approved Certified EIR, nor would development allowed by the Modified Project result in conditions that would require preparation of further analysis as described in the *CEQA Guidelines*.

5.0 MITIGATION SUMMARY

5.0 MITIGATION SUMMARY

5.1 OVERVIEW

The following Table 5.1-1, *Mitigation Summary Matrix*, presents relevant mitigation measures incorporated in the Certified SEIR, and Conditions of Approval proposed by the Modified Project described herein.

Certified SEIR mitigation measures that are no longer required are indicated by ~~strikeout font~~. New Conditions of Approval to be implemented under the Modified Project are indicated by ***bold italic text***. The "Remarks" column identifies status and applicability of all Mitigation Measures/Conditions of Approval. Required measures presented at Table 5.1-1 will be implemented through the Modified Project Conditions of Approval or as otherwise deemed appropriate by the City.

At the discretion of the City, any of the mitigation measures/conditions of approval identified at Table 5.1-1 may be modified to respond to incumbent conditions and context as they may apply to development proposed by the Modified Project. Any such modifications shall not result in any new significant environmental impacts. Rather, modifications (if any) would ensure compliance and consistency with current City goals, policies, regulations, and development programs/plans.

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	**Remarks**
Aesthetics	
N/A	Mitigation is not identified in the Certified SEIR. As substantiated in this Addendum, all aesthetics impacts of the Modified Project would be less-than-significant, or no impacts would result from the Modified Project. No mitigation is required of the Modified Project.
Agriculture and Forestry Resources	
N/A	Mitigation is not identified in the Certified SEIR. As substantiated in this Addendum, all agriculture and forestry resources impacts of the Modified Project would be less-than-significant, or no impacts would result from the Modified Project. No mitigation is required of the Modified Project.
Air Quality	
3-1 Prior to discretionary approval by the City of Ontario for development projects subject to CEQA (California Environmental Quality Act) review (i.e., nonexempt projects), project applicants shall prepare and submit a technical assessment evaluating potential project construction-related air quality impacts to the City of Ontario Planning Department for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology for assessing air quality impacts. If construction-related criteria air pollutants are determined to have the potential to exceed the South Coast AQMD–adopted thresholds of significance, the City of Ontario building department shall require feasible mitigation measures to reduce air quality emissions. Potential measures shall be incorporated as conditions of approval for a project and may include:	Applicable. This Measure is carried forward from the Certified SEIR and would be implemented by the Modified Project. Consistent with this measure, a development-specific air quality impact analysis has been prepared for the Modified Project. Please refer to the Modified Project AQIA, Addendum Appendix B. The Modified Project would implement MM 3-1 emissions reductions/emissions control measures per City Conditions of Approval.

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	**Remarks**

• Require fugitive dust control measures that exceed South Coast Air Quality Management District's Rule 403, such as:
  ○ Requiring use of nontoxic soil stabilizers to reduce wind erosion.
  ○ Applying water every four hours to active soil disturbing activities.
  ○ Tarping and/or maintaining a minimum of 24 inches of freeboard on trucks hauling dirt, sand, soil, or other loose materials.
  ○ Using construction equipment rated by the United States Environmental Protection Agency as having Tier 4 interim or higher exhaust emission limits.
• Ensuring construction equipment is properly serviced and maintained to the manufacturer's standards.
• Limiting nonessential idling of construction equipment to no more than five consecutive minutes.
• Using Super-Compliant VOC paints for coating architectural surfaces whenever possible. A list of Super-Compliant architectural coating manufactures can be found on the South Coast Air Quality Management District's website at: http://www.aqmd.gov/prdas/brochures/Super-Compliant_AIM.pdf.
These identified measures shall be incorporated into all appropriate construction documents (e.g., construction management plans) submitted to the City and shall be verified by the City's Planning Department.	

3-2 The City of Ontario shall evaluate new development proposals within the City and require all developments to include access or linkages to alternative modes of transportation, such as transit stops, bike paths, and/or pedestrian paths (e.g., sidewalks).	Applicable. This Measure is carried forward from the Certified SEIR and shall be implemented by the Modified Project.

Table 5.1-1
Mitigation Summary Matrix

Mitigation Measures	Remarks
AQ-1 Prior to discretionary approval by the City of Ontario for development projects subject to CEQA (California Environmental Quality Act) review (i.e., nonexempt projects), project applicants shall prepare and submit a technical assessment evaluating potential project operation-phase-related air quality impacts to the City of Ontario Planning Department for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology in assessing air quality impacts. If operation-related air pollutants are determined to have the potential to exceed the South Coast AQMD–adopted thresholds of significance, the City of Ontario Planning Department shall require that applicants for new development projects incorporate mitigation measures to reduce air pollutant emissions during operational activities. The identified measures shall be included as part of the conditions of approval. Possible mitigation measures to reduce long-term emissions could include, but are not limited to the following: • For site-specific development that requires refrigerated vehicles, the construction documents shall demonstrate an adequate number of electrical service connections at loading docks for plug-in of the anticipated number of refrigerated trailers to reduce idling time and emissions. • Applicants for manufacturing and light industrial uses shall consider energy storage and combined heat and power in appropriate applications to optimize renewable energy generation systems and avoid peak energy use. • Site-specific developments with truck delivery and loading areas and truck parking spaces shall include signage as a reminder to limit idling of vehicles while parked for	Applicable. This Measure is carried forward from the Certified SEIR and would be implemented by the Modified Project. Consistent with this measure, a development-specific air quality impact analysis has been prepared for the Modified Project. Please refer to the Modified Project AQIA, Addendum Appendix B. The Modified Project would implement MM AQ-1 emissions reductions/emissions control measures per City Conditions of Approval.

Table 5.1-1
Mitigation Summary Matrix

Mitigation Measures	Remarks
loading/unloading in accordance with California Air Resources Board Rule 2845 (13 CCR Chapter 10 sec. 2485). • Provide changing/shower facilities as specified in Section A5.106.4.3 of CALGreen (Nonresidential Voluntary Measures). • Provide bicycle parking facilities per Section A4.106.9 of CALGreen (Residential Voluntary Measures). • Provide preferential parking spaces for low-emitting, fuel-efficient, and carpool/van vehicles per Section A5.106.5.1 of CALGreen (Nonresidential Voluntary Measures). • Provide facilities to support electric charging stations per Section A5.106.5.3 and Section A5.106.8.2 of CALGreen (Nonresidential Voluntary Measures; Residential Voluntary Measures). Applicant-provided appliances shall be Energy Star-certified appliances or appliances of equivalent energy efficiency (e.g., dishwashers, refrigerators, clothes washers, and dryers). Installation of Energy Star-certified or equivalent appliances shall be verified by the City during plan check.	
Biological Resources	
BIO-1 Avoidance of Nesting Burrowing Owls: No more than 72 hours prior to any site disturbances, focused surveys for the burrowing owl shall be conducted. If absence of this species is confirmed, project work can proceed. If, however, burrowing owl is located on site, the appropriate resource agencies (CDFW and USFWS) shall be contacted. The Applicant shall consult with the wildlife agencies regarding the most appropriate methods and timing for removal of owls. As necessary, owls will be actively evicted following agency approved protocols (i.e., placing a one-way door at the burrow	Mitigation is not identified in the Certified SEIR. Condition of Approval BIO-1 is incorporated to ensure that impacts to the burrowing owl are maintained at levels that would be less-than-significant.

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	**Remarks**
entrance to ensure that owls cannot access the burrow once they leave). Any such active eviction shall occur outside of the breeding/nesting season. That is, if active eviction is required, eviction shall be accomplished between September 1 and February 15. If more than 30 days have elapsed between owl eviction and completion of clearing and grubbing activities, a subsequent survey for the burrowing owl shall be conducted to ensure that owls have not re-populated the site. Any reoccupation by owls will require subsequent protocol active eviction.	
BIO-2 Avoidance of Nesting Migratory Birds: If possible, all vegetation removal activities shall be scheduled from August 1 to February 1, which is outside the general avian nesting season. This would ensure that no active nests would be disturbed, and that removal could proceed rapidly. If vegetation is to be cleared during the nesting season, all suitable habitat will be thoroughly surveyed within 72 hours prior to clearing for the presence of nesting birds by a qualified biologist (Biologist). The Biologist shall be approved by the City and retained by the Applicant. The survey results shall be submitted by the Applicant to the City Planning Department. If any active nests are detected, the area of nesting shall be flagged and mapped on the construction plans along with a minimum 300-foot buffer, with the final buffer distance to be determined by the Project Biologist. The buffer area shall be avoided until, as determined by the Biologist, the nesting cycle is complete, or it is concluded that the nest has failed. In addition, the Biologist shall be present on the site to monitor the vegetation removal to ensure that any nests, which were not detected during the initial survey, are not disturbed.	Mitigation is not identified in the Certified SEIR. Condition of Approval BIO-2 is incorporated to ensure that impacts to the nesting migratory birds are maintained at levels that would be less-than-significant.

Table 5.1-1
Mitigation Summary Matrix

Mitigation Measures	Remarks
BIO-3 To the extent not considered and addressed in prior biological resources assessments, the Project DSFLF Study, or the January 2024 Biological Update, and to properly assess and address potential biological resources impacts, Biological Resources surveys shall be prepared prior to approval of Tentative Tract Maps within the Modified Project site. If suitable habitat is determined present onsite, subsequent focused surveys shall be completed and no "take" of any protected species and/or their habitat shall occur without obtaining the requisite regulatory permits from State and Federal agencies.	Mitigation is not identified in the Certified SEIR. Condition of Approval BIO-3 is incorporated to ensure that impacts affecting areas of the Specific Plan that may not have been previously identified are resolved prior to the approval of Tentative Tract Maps for the affected areas.
Cultural Resources	
5-1 Historic or potentially historic resources in the City shall be evaluated for historic significance through the City's tier system prior to the issuance of plan or development approvals. Pursuant to City's Development Code (Chapter 7, Historic Preservation), each historic resource shall be fully documented and cataloged pursuant to Historic American Building Survey/Historic American Engineering Record (HABS/HAER) standards, to provide a record of the resource, including, but not limited to: [i] the preparation of site plans, floor plans, exterior and interior elevations, and detail drawings of character defining features (such as moldings, stairs, etc.); and [ii] photographs of the resource, including the exterior, interior, and interior and exterior character defining features (such as moldings, light fixtures, trim patterns, etc.).	Applicable. This Measure is carried forward from the Certified SEIR and shall be implemented by the Modified Project. Note: Previous surveys indicate there are no known or probable historic resources within the Modified Project site.
5-2 In areas of documented or inferred from evident archaeological and/or paleontological resource presence, City staff shall require applicants for development permits to provide studies to document the presence/absence of such resources. On properties where resources are identified, such studies shall provide a detailed	Applicable. This Measure is carried forward from the Certified SEIR and shall be implemented by the Modified Project. Note: Previous surveys indicate there are no known or probable archaeological and/or paleontological resources within the Modified Project site. The Modified Project would implement MM 5-2 measures providing for

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	**Remarks**
mitigation plan, including a monitoring program and recovery and/or in situ preservation plan, based on the recommendations of a qualified cultural preservation expert. The mitigation plan shall include the following requirements: a) Archaeologists and/or paleontologist shall be retained for the project and will be on call during grading and other significant ground-disturbing activities. b) Should any cultural/scientific resources be discovered, no further grading shall occur in the area of the discovery until the Planning Director is satisfied that adequate provisions are in place to protect these resources. c) Unanticipated discoveries shall be evaluated for significance by a San Bernardino County Certified Professional Archaeologist/Paleontologist. If significance criteria are met, then the project shall be required to perform data recovery, professional identification, radiocarbon dates, and other special studies; submit materials to a museum for permanent curation; and provide a comprehensive final report including catalog with museum numbers.	protection of unknown resources that may exist in a buried context. Please refer also to Conditions of Approval that would be implemented under the topical heading "Tribal Cultural Resources."
Energy	
N/A	Mitigation is not identified in the Certified SEIR. As substantiated in this Addendum, all energy impacts of the Modified Project would be less-than-significant, or no impacts would result from the Modified Project. No mitigation is required of the Modified Project.
Geology and Soils	
Please refer to Mitigation Measure 5-2, presented previously.	Applicable. Mitigation is carried forward from the Certified EIR and shall be implemented by the Modified Project.

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	**Remarks**
Greenhouse Gas Emissions	
N/A	Mitigation is not identified in the Certified SEIR. As substantiated in this Addendum, all GHG impacts of the Modified Project would be less-than-significant, or no impacts would result from the Modified Project. No mitigation is required of the Modified Project.
Hazards and Hazardous Materials	
HM-1 Removal of structures, including, but limited to, under- and aboveground storage tanks, septic systems, and water wells shall conform to all Federal, State, and local agency regulations (specifically with those required by the City Building and Safety Department and the Hazardous Materials Division of the San Bernardino County Fire Department). Due to the extensive disposal requirements and protocols contained within these regulatory schemes, implementation and adherence to these various regulatory requirements will ensure that no significant impacts occur.	Mitigation is not identified in the Certified SEIR. Condition of Approval HM-1 is incorporated to ensure compliance with applicable regulations, ordinances, and policies.
HM-2 Prior to grading activities for any areas not previously tested, a methane gas assessment shall be prepared by a licensed professional with expertise in soil gas assessments for subdivisions proposed on former dairies, poultry ranches, hog ranches, livestock feed operations and similar facilities to determine the presence of methane gas within the project boundary. The methane gas assessment shall identify monitoring and mitigation strategies and approaches. All mitigation measures/plans and specifications shall be reviewed and approved by the City of Ontario. ***Such an assessment may take two steps. A preliminary assessment will be done prior to grading to determine exactly where dairies have existed in the past so that the post grading***	Mitigation is not identified in the Certified SEIR. Condition of Approval HM-2 is incorporated to ensure compliance with applicable regulations, ordinances, and policies.

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	**Remarks**
assessment/mitigation measures can be focused on the portions of the Planning Areas that have included former agricultural activities. The second step will include actual testing of graded pads no sooner than 30 days after construction to determine if methane is detected above 5,000 ppm. ***The following grading guidelines shall also be adhered to:*** • ***Careful clearing, grubbing, segregation, and stockpiling or disposal near surface, of organics-rich soils at the site prior to the initiation of mass grading activities.*** • ***The identification and segregation/stockpiling or disposal of deeper soils which contain elevated levels of organic material. Soils with an organic content of 0.4% or higher shall be segregated for controlled placement that ensures that methane levels are below 5,000 ppm.*** • ***Soils with organic content in excess of 0.4% shall not be placed as "deep" fill. Soils with organic contents in excess of this amount shall be placed in open areas within approximately two feet of the finished ground surface.***	
HM-3 To eliminate the risk of ground cracking, manure shall be removed from the site, such that the organic matter content of onsite soils shall not exceed 2% (a 2% total organic content is allowed, of which no more than 1% can be manure) in the building foundation areas when mixed with underlying clean soils and imported fill.	Mitigation is not identified in the Certified SEIR. Condition of Approval HM-3 is incorporated to ensure compliance with applicable regulations, ordinances, and policies.

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	**Remarks**
HM-4 To the extent not previously prepared and to properly assess and address potential hazardous materials, a Phase I Environmental Site Assessment (ESA) shall be performed by a registered environmental assessor (REA) prior to the approval of the Tentative Tract Map, site plan or other discretionary approval for a given phase of development. If potential hazardous materials or conditions are identified in the Phase I report, the recommendations of the ESA shall be implemented. Such recommendations shall include surficial sampling and chemical analysis within agricultural areas or where soil staining was observed. The Phase I ESA shall be provided to the City and shall be included in any CEQA analysis prepared in connection with the consideration of the discretionary approval for development.	Mitigation is not identified in the Certified SEIR. Condition of Approval HM-4 is incorporated to ensure compliance with applicable regulations, ordinances, and policies.
HM-5 If, while performing any excavation as part of Project construction, material that is believed to be hazardous waste as defined in Section 25117 of the California Health and Safety Code is discovered, the developer shall contact the City Fire Department and the County of San Bernardino Fire Department Hazardous Materials Division. Excavation shall be stopped until the material has been tested and the absence of hazardous waste has been confirmed. If hazardous waste is determined to be present, the California Department of Toxic Substances control shall be contacted and the material shall be removed and disposed of pursuant to applicable provisions of California law.	Mitigation is not identified in the Certified SEIR. Condition of Approval HM-5 is incorporated to ensure compliance with applicable regulations, ordinances, and policies.
Hydrology and Water Quality	
N/A	Mitigation is not identified in the Certified SEIR. As substantiated in this Addendum, all hydrology and water quality impacts of the Modified Project would be less-than-significant, or no impacts would result from the Modified Project. No mitigation is required of the

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	**Remarks**
	Modified Project.
Land Use and Planning	
N/A	Mitigation is not identified in the Certified SEIR. As substantiated in this Addendum, all land use and planning impacts of the Modified Project would be less-than-significant, or no impacts would result from the Modified Project. No mitigation is required of the Modified Project.
Mineral Resources	
N/A	Mitigation is not identified in the Certified SEIR. As substantiated in this Addendum, all mineral resources impacts of the Modified Project would be less-than-significant, or no impacts would result from the Modified Project. No mitigation is required of the Modified Project.
Noise	
~~12-1 Prior to the issuance of building permits for any project that involves a noise sensitive use within the 65 dBA CNEL contour of the Ontario International Airport, the project property owner/developers shall retain an acoustical engineer to conduct an acoustic analysis and identify, where appropriate, site design features and/or required building acoustical improvements (e.g., sound transmission class rated windows, doors, and attic baffling), to ensure compliance with the City's Noise Compatibility Criteria and the California State Building Code and California Noise Insulation Standards (Titles 24 and 21 of the California Code of Regulations).~~	Airport noise level impacts affecting the Modified Project site have been evaluated in this Addendum and are substantiated to be less-than-significant. Please refer also to the Modified Project Noise Impact Analysis presented at Addendum Appendix E.
~~12-2 Prior to issuance of a building permit, individual projects that involve vibration intensive construction activities, such as pile drivers, jack hammers, and vibratory rollers near sensitive receptors shall be evaluated for potential vibration impacts. For construction~~	Construction-source vibration impacts of the Modified Project have been evaluated in this Addendum and are substantiated to be less-than-significant. Please refer also to the Modified Project Noise Impact Analysis presented at Addendum Appendix E.

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	**Remarks**
~~within 135 feet of fragile structures, such as historical resources, within 100 feet of nonengineered timber and masonry buildings (e.g., most residential buildings), or within 75 feet of engineered concrete and masonry (no plaster); or a vibratory roller within 25 feet of any structure, the project applicant shall prepare a noise and vibration analysis to assess and mitigate potential noise and vibration impacts related to these activities. This noise and vibration analysis shall be conducted by a qualified and experienced acoustical consultant or engineer. The vibration levels shall not exceed Federal Transit Administration (FTA) architectural damage thresholds (e.g., 0.12 inches per second [in/sec] peak particle velocity [PPV] for fragile or historical resources, 0.2 in/sec PPV for nonengineered timber and masonry buildings, and 0.3 in/sec PPV for engineered concrete and masonry). If vibration levels would exceed this threshold, alternative uses shall be used, such as drilling piles as opposed to pile driving and static rollers as opposed to vibratory rollers. If necessary, construction vibration monitoring shall be conducted to ensure vibration thresholds are not exceeded.~~	
~~12-4 Construction activities associated with new development that occurs near sensitive receptors shall be evaluated for potential noise impacts. Construction contractors shall implement the following measures for construction activities in the City of Ontario. Construction plans submitted to the City shall identify these measures on demolition, grading, and construction plans. The City of Ontario Planning and Building Departments shall verify that grading, demolition, and/or construction plans submitted include these notations prior to issuance of demolition, grading, and/or building permits.~~ ~~• Construction activity is limited to the hours between 7:00 am~~	Construction-source noise impacts of the Modified Project have been evaluated in this Addendum and are substantiated to be less-than-significant. Please refer also to the Modified Project Noise Impact Analysis presented at Addendum Appendix E.

Table 5.1-1
Mitigation Summary Matrix

Mitigation Measures	Remarks
~~and 6:00 pm Monday through Friday and 9:00 am to 6:00 pm Saturdays and Sundays, as prescribed in Municipal Code Section 5-29.09.~~ ~~• During the entire active construction period, equipment and trucks used for project construction shall use the best available noise control techniques wherever feasible (e.g., improved mufflers, equipment re-design, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds).~~ ~~• Impact tools (e.g., jack hammers and hoe rams) shall be hydraulically or electrically powered wherever possible. Where the use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used along with external noise jackets on the tools.~~ ~~• Stationary equipment such as generators and air compressors shall be located as far as feasible from nearby noise sensitive uses.~~ ~~• Stockpiling shall be located as far as feasible from nearby noise sensitive receptors.~~ ~~• Construction traffic shall be limited, to the extent feasible, to approved haul routes established by the City Planning and Building Agency.~~ ~~• At least 10 days prior to the start of construction activities, a sign shall be posted at the entrance(s) to the job site, clearly visible to the public, that includes permitted construction days and hours as well as the telephone numbers of the City's and contractor's authorized representatives that are assigned to respond in the event of a noise or vibration complaint. If the authorized contractor's representative receives a complaint, he/she shall investigate, take appropriate corrective action, and report the action to the City.~~ ~~• Signs shall be posted at the job site entrance(s), within the on-site construction zones, and along queueing lanes (if any) to~~	

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	**Remarks**
~~reinforce the prohibition of unnecessary engine idling. All other equipment shall be turned off if not in use for more than 5 minutes.~~ ~~• During the entire active construction period and to the extent feasible, the use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only. The construction manager shall use smart back-up alarms, which automatically adjust the alarm level based on the background noise level or switch off back-up alarms and replace with human spotters in compliance with all safety requirements and laws.~~ ~~• Erect temporary noise barriers (at least as high as the exhaust of equipment and breaking line of sight between noise sources and sensitive receptors), as necessary and feasible, to maintain construction noise levels at or below the performance standard of 80 dBA Leq. Barriers shall be constructed with a solid material that has a density of at least 1.5 pounds per square foot with no gaps from the ground to the top of the barrier and may be lined on the construction side with an acoustical blanket, curtain, or equivalent absorptive material.~~	
Population and Housing	
N/A	Mitigation is not identified in the Certified SEIR. As substantiated in this Addendum, all population and housing impacts of the Modified Project would be less-than-significant, or no impacts would result from the Modified Project. No mitigation is required of the Modified Project.
Public Services	
N/A	Mitigation is not identified in the Certified SEIR. As substantiated in this Addendum, all public services impacts of the Modified Project would be less-than-significant, or no impacts would result from the Modified Project. No mitigation is required of the Modified Project.

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	**Remarks**
Recreation	
N/A	Mitigation is not identified in the Certified SEIR. As substantiated in this Addendum, all recreation impacts of the Modified Project would be less-than-significant. No mitigation is required of the Modified Project.
Transportation	
~~T-1 Prior to approval of discretionary projects subject to VMT reduction analysis, applicants shall demonstrate compliance with the City's VMT Guidelines for CEQA assessment of VMT impacts. For projects with VMT per Service Population exceeding the County's significance threshold, a mitigation plan shall be developed and implemented. Mitigation should consist of Transportation Demand Management (TDM) measures analyzed under a VMT-reduction methodology consistent with the California Air Pollution Control Officers Association's (CAPCOA) Final Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (2021) and approved by the City of Ontario (if applicable). Examples of measures include but are not limited to:~~ ~~• Pedestrian Network Improvements: constructing new sidewalks and/or improving damaged or substandard sidewalks that connect to a larger pedestrian network.~~ ~~• Construct or Improve Bike Facilities: constructing new or enhancing a single existing Class I, II or IV bike facility that connects to a larger bike network.~~ ~~• Construct or Improve Bike Boulevards: implementing a Class III bike boulevard on a local or collector street that is one travel lane in each direction, has a design speed of 25 mph or less and a design~~	Modified Project VMT impacts have been evaluated in this Addendum and are substantiated to be less-than-significant. Please refer also to the Modified Project VMT Analysis presented at Addendum Appendix F.

Table 5.1-1
Mitigation Summary Matrix

Mitigation Measures	Remarks
~~volume of 5,000 ADT or less.~~ ~~• Expand Bikeway Networks: constructing a network of interconnected new Class I, II, or IV bike facilities.~~ ~~• Provide End of Trip Bicycle Facilities: constructing facilities that support cyclists such as bike parking, lockers, and showers.~~ ~~• Implement Transit-Supportive Roadway Treatments: funding infrastructure improvements such as traffic signal modifications and roadway signing and striping that are dedicated to improving transit travel times and reliability.~~ ~~• Transit Passes: proving discounted or free transit fare to a specific geographic area, population group, or to the general public.~~ ~~• Vanpool Program: providing groups of 5 to 15 people with direct shuttle service between their workplace and residence.~~ ~~• Carshare Program (conventional or EV): providing access to a shared fleet of on-demand vehicles for short term use/rental. Best practice is to discount carshare membership and provide priority parking for carshare vehicles to encourage use of the service.~~ ~~• Bikeshare Program (conventional or EV): providing access to a shared fleet of on-demand bicycles for short term use/rental. Best practice is to discount bikeshare membership and dedicate bikeshare parking to encourage use of the service.~~ ~~• Rideshare Program: providing access to and encouraging the use of a ridesharing platform or service. This could be an app, website, or other service that provides ride matching coordination services.~~ ~~• Community Based Travel Planning (CBTP): CBTP is a residential based approach to outreach, performed by trained advisors, that provides households within a targeted geographic area with customized information, incentives, and support to encourage the use of transportation alternatives in place of single~~	

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	**Remarks**
~~occupancy vehicles.~~ ~~• Commute Trip Reduction (CTR) Program: CTR programs can be mandatory or voluntary, and involve providing information, coordination, services, infrastructure, and/or incentives for alternative modes such as ridesharing, vanpool, transit passes, and cycling.~~	
Tribal Cultural Resources	
5-3 Upon receipt of an application for a proposed project subject to CEQA and within the City's jurisdiction, the City's representative shall consult with the relevant tribe(s)' representative(s) to determine if the proposed project is within a culturally sensitive area to the tribe. If sufficient evidence is provided to reasonably ascertain that the site is within a tribal culturally sensitive area, an archaeologist shall prepare a cultural resources assessment. The findings of the cultural resources assessment shall be incorporated into the CEQA documentation. A copy of the report shall be forwarded to the tribe(s). If mitigation is recommended in the CEQA document, the procedure described in Mitigation Measure 5-4 shall be followed.	Applicable. This Measure is carried forward from the Certified SEIR and shall be implemented by the Modified Project.
5-4 Prior to the issuance of grading permits for a proposed project for which the CEQA document defines cultural resource mitigation for potential tribal resources, the project applicant shall contact the designated tribe(s) to notify them of the grading, excavation, and monitoring program. The applicant shall coordinate with the City of Ontario and the tribal representative(s) to develop mitigation measures that address the designation, responsibilities, and participation of tribal monitors during grading, excavation, and ground-disturbing activities; scheduling; terms of compensation; and treatment and final disposition of any cultural resources, sacred	Applicable. This Measure is carried forward from the Certified SEIR and shall be implemented by the Modified Project.

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	**Remarks**
sites, and human remains discovered on the site. The City of Ontario shall be the final arbiter of the conditions for projects within the City's jurisdiction.	
TCR-1 Tribal Cultural Resources Monitoring. The project archaeologist, in consultation with interested tribes, the developer, and the City of Ontario, shall develop an archaeological monitoring plan (AMP) to address the details, timing, and responsibility of archaeological and cultural activities that will occur on the project site. Details in the AMP shall include: 1. Project-related ground disturbance (including, but not limited to, brush clearing, grading, trenching, etc.) and development scheduling; 2. The development of a rotating or simultaneous schedule in coordination with the developer and the project archeologist for designated Native American Tribal Monitors from the consulting tribes during grading, excavation and ground disturbing activities on the site: including the scheduling, safety requirements, duties, scope of work, and Native American Tribal Monitors' authority to stop and redirect grading activities in coordination with all project archaeologists (if the tribes cannot come to an agreement on the rotating or simultaneous schedule of tribal monitoring, the Native American Heritage Commission shall designate the schedule for the onsite Native American Tribal Monitor for the proposed project); 3. The protocols and stipulations that the developer, City, Tribes, and project archaeologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits that shall be subject to a cultural resources	Applicable. This Measure is carried forward from the Certified SEIR and shall be implemented by the Modified Project.

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	**Remarks**
evaluation. At least 30 days prior to application for a grading permit and before any brush clearance, grading, excavation, and/or ground disturbing activities on the site, the developer shall retain a tribal cultural monitor to monitor all ground-disturbing activities in an effort to identify any unknown archaeological resources. Pursuant to the AMP, a tribal monitor from the consulting tribe shall be present during the initial grading activities. If tribal resources are found during grubbing activities, the tribal monitoring shall be present during site grading activities.	
TCR-2 Treatment and Disposition of Cultural Resources. In the event that Native American cultural resources are inadvertently discovered during the course of any ground-disturbing activities, including but not limited to brush clearance, grading, trenching, etc., for the proposed project, the following procedures will be carried out for treatment and disposition of the discoveries: 1. Temporary Curation and Storage: During the course of construction, all discovered resources shall be temporarily curated in a secure location on-site or at the offices of the project archaeologist. The removal of any artifacts from the project site will need to be thoroughly inventoried with tribal monitor oversight of the process; 2. Treatment and Final Disposition: The landowner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and nonhuman	Applicable. This Measure is carried forward from the Certified SEIR and shall be implemented by the Modified Project.

Table 5.1-1
Mitigation Summary Matrix

Mitigation Measures	Remarks
remains as part of the required mitigation for impacts to cultural resources. The applicant shall relinquish the artifacts through one or more of the following methods and provide the City of Ontario with evidence of same: a. Accommodate the process for on-site reburial of the discovered items with the consulting Native American tribes or bands. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloging, basic analysis, other analyses as recommended by the project archaeologist and approved by consulting tribes, and basic recordation have been completed; all documentation should be at a level of standard professional practice to allow the writing of a report of professional quality; b. A curation agreement with an appropriate qualified repository in San Bernardino County that meets federal standards per 36 CFR Part 79, and therefore the resource would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility in San Bernardino County, to be accompanied by payment of the fees necessary for permanent curation; c. For purposes of conflict resolution, if more than one Native American tribe or band is involved with the project and cannot come to an agreement as to the disposition of cultural materials, materials shall be curated at the San Bernardino County Museum by default;	

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	**Remarks**
d. At the completion of grading, excavation, and ground-disturbing activities on the site, a Phase IV Monitoring Report shall be submitted to the City documenting monitoring activities conducted by the project archaeologist and Native Tribal Monitors within 60 days of completion of grading. This report shall document the impacts to the known resources on the property; describe how each mitigation measure was fulfilled; document the type of cultural resources recovered and the disposition of such resources; provide evidence of the required cultural sensitivity training for the construction staff held during the required pregrade meeting; and, in a confidential appendix, include the daily/weekly monitoring notes from the archaeologist. All reports produced will be submitted to the City, County Museum, and consulting tribes.	
TR-1 Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities: ***A. The project applicant/lead agency shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation. The monitor shall be retained prior to the commencement of any "ground-disturbing activity" for the subject project at all project locations (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). "Ground-disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching.*** ***B. A copy of the executed monitoring agreement shall be submitted to the lead agency prior to the earlier of the commencement of any***	In addition to mitigation carried forward as noted above, Condition of Approval TR-1 is incorporated to ensure that tribal cultural resource impacts are maintained at levels that would be less-than-significant.

Table 5.1-1
Mitigation Summary Matrix

Mitigation Measures	Remarks
ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity. ***C. The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or "TCR"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the project applicant/lead agency upon written request to the Tribe.*** ***D. On-site tribal monitoring shall conclude upon the latter of the following (1) written confirmation to the Kizh from a designated point of contact for the project applicant/lead agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the Kizh to the project applicant/lead agency that no future, planned construction activity and/or development/construction phase at the project site possesses the potential to impact Kizh TCRs.*** ***E. Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered***	

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	**Remarks**
TCR has been fully assessed by the Kizh monitor and/or Kizh archaeologist. The Kizh will recover and retain all discovered TCRs in the form and/or manner the Tribe deems appropriate, in the Tribe's sole discretion, and for any purpose the Tribe deems appropriate, including for educational, cultural and/or historic purposes.	
TR-2 Unanticipated Discovery of Human Remains and Associated Funerary Objects: ***A. Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute.*** ***B. If Native American human remains and/or grave goods discovered or recognized on the project site, then all construction activities shall immediately cease. Health and Safety Code Section 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and all ground- disturbing activities shall immediately halt and shall remain halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe they are Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission, and Public Resources Code Section 5097.98 shall be followed.*** ***C. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2).***	In addition to mitigation carried forward as noted above, Condition of Approval TR-2 is incorporated to ensure that tribal cultural resource impacts are maintained at levels that would be less-than-significant.

Table 5.1-1
Mitigation Summary Matrix

Mitigation Measures	Remarks
D. Construction activities may resume in other parts of the project site at a minimum of 200 feet away from discovered human remains and/or burial goods, if the Kizh determines in its sole discretion that resuming construction activities at that distance is acceptable and provides the project manager express consent of that determination (along with any other mitigation measures the Kizh monitor and/or archaeologist deems necessary). (CEQA Guidelines Section 15064.5(f).) ***E. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods. Any historic archaeological material that is not Native American in origin (non-TCR) shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, it shall be offered to a local school or historical society in the area for educational purposes.*** ***F. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.***	
TR-3 Procedures for Burials and Funerary Remains: ***A. As the Most Likely Descendant ("MLD"), the Koo-nas-gna Burial Policy shall be implemented. To the Tribe, the term "human remains" encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the preparation of the soil for burial, the burial of funerary objects with the deceased, and the ceremonial burning of human remains.***	In addition to mitigation carried forward as noted above, Condition of Approval TR-3 is incorporated to ensure that tribal cultural resource impacts are maintained at levels that would be less-than-significant.

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	**Remarks**
B. If the discovery of human remains includes four or more burials, the discovery location shall be treated as a cemetery and a separate treatment plan shall be created. ***C. The prepared soil and cremation soils are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects. Cremations will either be removed in bulk or by means as necessary to ensure complete recovery of all sacred materials.*** ***D. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed.*** ***E. In the event preservation in place is not possible despite good faith efforts by the project applicant/developer and/or landowner, before ground-disturbing activities may resume on the project site, the landowner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human***	

Table 5.1-1
Mitigation Summary Matrix

Mitigation Measures	Remarks
remains and/or ceremonial objects. ***F. Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location agreed upon between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.*** ***G. The Tribe will work closely with the project's qualified archaeologist to ensure that the excavation is treated carefully, ethically, and respectfully. If data recovery is approved by the Tribe, documentation shall be prepared and shall include (at a minimum) detailed descriptive notes and sketches. All data recovery data recovery-related forms of documentation shall be approved in advance by the Tribe. If any data recovery is performed, once complete, a final report shall be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive and/or destructive diagnostics on human remains.***	
Utilities and Service Systems	
N/A	Mitigation is not identified in the Certified SEIR. As substantiated in this Addendum, all utilities and service systems impacts of the Modified Project would be less-than-significant, or no impacts would result from the Modified Project. No mitigation is required of the Modified Project.

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	**Remarks**
Wildfire	
N/A	Mitigation is not identified in the Certified SEIR. As substantiated in this Addendum, all wildfire impacts of the Modified Project would be less-than-significant, or no impacts would result from the Modified Project. No mitigation is required of the Modified Project.

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING FILE NO. PSPA22-005, AN AMENDMENT TO THE AVENUE SPECIFIC PLAN TO: 1) MODIFY THE LAND USE DESIGNATION OF PLANNING AREA 4 AND APPLY DENSITY MODIFICATIONS TO PLANNING AREAS 1B, 2A, 3B, AND 5 FOR CONISTENCY WITH THE ONTARIO PLAN 2050 LAND USE PLAN; 2) APPLY GENERAL MODIFICATIONS THROUGHOUT THE DOCUMENT FOR CLARITY; AND, 3) MAKE EXHIBIT AND TEXT UPDATES THROUGHOUT THE DOCUMENT TO SUPPORT THE PROJECT, FOR LAND LOCATED AT THE NORTHWEST CORNER OF ARCHIBALD AVENUE AND ONTARIO RANCH ROAD, AND MAKING FINDINGS IN SUPPORT THEREOF—APNS: 0218-191-04; 0218-191-14; 0218-191-15; 0218-191-16; 0218-191-05; 0218-191-22; 0218-191-20.

WHEREAS, RICHLAND COMMUNITIES (hereinafter referred to as "Applicant") has filed an Application for the approval of a Specific Plan Amendment, File No. PSPA22-005, as described in the title of this Resolution (hereinafter referred to as "Application" or "Project"). The full Specific Plan Amendment document is attached to this Resolution as “Attachment A: File No. PSPA22-005 Amended Specific Plan Document”; and

WHEREAS, the Application applies to land located within The Avenue Specific Plan area, which is bound by Schaefer Avenue to the north, Carpenter Avenue to the west, Ontario Ranch Road and Old Edison Road to the south, and Haven Avenue to the east, and is presently improved with a mix of developed residential and commercial land uses, vacant and unimproved land, and agricultural dairy and nursery uses; and

WHEREAS, the property to the north of the Project site is within the Specific Plan – Agricultural Overlay (SP-AG), Countryside Specific Plan, West Haven Specific Plan, and Utility Corridor (UC) zoning district, and is developed with agricultural, dairy, and residential land uses and vacant land. The property to the east is within the Rich-Haven Specific Plan, and is developed with residential land uses and vacant land. The property to the south is within the Parkside and Grand Park Specific Plans, and is developed with agricultural and residential land uses and vacant land. The property to the west is within the Specific Plan – Agricultural Overlay (SP-AG) zoning district, and is developed with agricultural uses and vacant land; and

WHEREAS, the Specific Plan Amendment consists of various map and text changes to accommodate land use and density modifications to Planning Areas 4, 1B, 2A, 3B, and 5, to bring the Specific Plan’s Land Use Plan into consistency with The Ontario Plan 2050 Land Use Plan (see Exhibit A: Existing and Proposed Specific Plan Land Use Plan and Exhibit B: Proposed Specific Plan Land Use Table, appended to this Resolution). Textual changes are summarized as follows:

- The net acreage has been updated to more accurately reflect existing conditions.

- The total number of dwelling units will increase from 2,981 to 3,753 units and commercial square footage will increase from 130,680 to 335,176 square feet.

- Each land use within a Planning Area has been provided a designated line on the land use table, whereas previously, no such distinctions were made.

- Adjustments have been made throughout the table to accurately reflect existing conditions and accurate development information for built-out Planning Areas.

- The following notes have been introduced to the table for further clarification:

    - Realignment of Schaefer Avenue creates the need for Planning Area C, as it is owned separately from Planning Area 1A.

    - All acreages are approximate – exact acreages will be defined through tract map surveys. Additional studies may be required to transfer these units. See Section 3.1.1 for additional information.

    - Density blending will be allowed within Planning Areas within one TOP land use step (i.e. from LDR to LMDR) and between Planning Areas at a rate no higher than 15 percent. If units are blended within a Planning area or moved between Planning Areas, then Technical Studies for impacts to the Water and Sewer Master Plan Systems will be required as part of the entitlement process; and

WHEREAS, the Specific Plan Amendment will facilitate future development through forthcoming Tentative Tract or Parcel Maps and Development Agreements, which shall be reviewed by the appropriate hearing bodies once deemed ready for public hearing; and

WHEREAS, The Ontario Plan 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364) was certified on August 16, 2022 (hereinafter referred to as "Certified SEIR"), in which development and use of the Project site was discussed; and

WHEREAS, the Planning Director of the City of Ontario prepared and approved for attachment to the certified Environmental Impact Report, an Addendum to the Certified SEIR (hereinafter referred to as "SEIR Addendum") in accordance with the requirements of the California Environmental Quality Act of 1970, together with State and local guidelines implementing said Act, all as amended to date (collectively referred to as "CEQA"); and

WHEREAS, the environmental impacts of this project were thoroughly analyzed in the SEIR Addendum, which concluded that implementation of the Project could result in a number of significant effects on the environment that were previously analyzed in the Certified SEIR, and that the Certified SEIR identified mitigation measures that would reduce each of those significant effects to a less-than-significant level; and

WHEREAS, the City's "Local Guidelines for the Implementation of the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed; and

WHEREAS, the Application is a project pursuant to the California Environmental Quality Act — Public Resources Code Section 21000 et seq. — (hereinafter referred to as "CEQA") and an EIR Addendum has been prepared to determine possible environmental impacts; and

WHEREAS, Ontario Development Code Table 2.02-1 (Review Matrix) grants the City Council the responsibility and authority to review and act on the subject Application; and

WHEREAS, the Project has been reviewed for consistency with the Housing Element of the Policy Plan component of The Ontario Plan, as State Housing Element law (as prescribed in Government Code Sections 65580 through 65589.8) requires that development projects must be consistent with the Housing Element, if upon consideration of all its aspects, it is found to further the purposes, principals, goals, and policies of the Housing Element; and

WHEREAS, the Project is located within the Airport Influence Area of Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and is subject to, and must be consistent with, the policies and criteria set forth in the Ontario International Airport Land Use Compatibility Plan (hereinafter referred to as "ALUCP"), which applies only to jurisdictions within San Bernardino County, and addresses the noise, safety, airspace protection, and overflight impacts of current and future airport activity; and

WHEREAS, the proposed Project is located within the Airport Influence Area of Chino Airport, within the City of Ontario boundary, and is subject to, and must be consistent with, the policies criteria set forth in Reference I, Chino Airport Land Use Compatibility Plan (CNO ALUCP), which applies only to jurisdictions within City of Ontario, and addresses the safety, airspace protection, and overflight impacts of current and future airport activity; and

WHEREAS, City of Ontario Development Code Division 2.03 (Public Hearings) prescribes the manner in which public notification shall be provided and hearing procedures to be followed, and all such notifications and procedures have been completed; and

WHEREAS, on February 25, 2025, the Planning Commission of the City of Ontario conducted a hearing to consider the SEIR Addendum and the Project, and concluded said hearing on that date, voting to issue Resolution No. PC25-012, recommending the City Council adopt the EIR Addendum, and voting to issue Resolution No. PC25-013, recommending the City Council approve the Application; and

WHEREAS, as the first action on the Project, on March 18, 2025, the City Council issued a Resolution adopting the SEIR Addendum, finding that the proposed Project introduces no new significant environmental impacts and applying all previously adopted mitigation measures to the Project, which were incorporated by reference; and

WHEREAS, on March 18, 2025, the City Council of the City of Ontario conducted a hearing to consider the Project, and concluded said hearing on that date; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED, AND RESOLVED by the City Council of the City of Ontario, as follows:

SECTION 1: ***Environmental Determination and Findings.*** As the decision-making body for the Project, the City Council has reviewed and considered the information contained in the Addendum and the administrative record for the Project, including all written and oral evidence provided during the comment period. Based upon the facts and information contained in the Addendum and the administrative record, including all written and oral evidence presented to the City Council, the City Council finds as follows:

(1) The environmental impacts of the Project were reviewed in conjunction with an Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364), certified by the Ontario City Council on August 16, 2022, in conjunction with File No. PGPA20-002; and

(2) The SEIR Addendum and administrative record have been completed in compliance with CEQA, the State CEQA Guidelines, and the City of Ontario Local CEQA Guidelines; and

(3) The City's "Guidelines for the Implementation of the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed. This Application introduces no new significant environmental impacts; and

(4) All previously adopted mitigation measures shall be a condition of Project approval, as they are applicable to the Project, and are incorporated herein by this reference; and

(5) The SEIR Addendum contains a complete and accurate reporting of the environmental impacts associated with the Project, and reflects the independent judgment of the Planning Commission; and

(6) There is no substantial evidence in the administrative record supporting a fair argument that the Project may result in significant environmental impacts.

SECTION 2: ***Subsequent or Supplemental Environmental Review Not Required.*** Based on the SEIR Addendum, all related information presented to the City Council, and the specific findings set forth in Section 1, above, the City Council finds that the preparation of a subsequent or supplemental Certified SEIR is not required for the Project, as the Project:

(1) Does not constitute substantial changes to the Certified SEIR that will require major revisions to the Certified SEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and

(2) Does not constitute substantial changes with respect to the circumstances under which the Certified SEIR was prepared that will require major revisions to the Certified SEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of the previously identified significant effects; and

(3) Does not contain new information of substantial importance that was not known and could not have been known with the exercise of reasonable diligence at the time the Certified SEIR was certified/adopted, that shows any of the following:

a. The Project will have one or more significant effects not discussed in the Certified SEIR; or

b. Significant effects previously examined will be substantially more severe than shown in the Certified SEIR; or

c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the City declined to adopt such measures; or

d. Mitigation measures or alternatives considerably different from those analyzed in the Certified SEIR would substantially reduce one or more significant effects on the environment, but which the City declined to adopt.

SECTION 3: ***Housing Element Compliance.*** Pursuant to the requirements of California Government Code Chapter 3, Article 10.6, commencing with Section 65580, as the decision-making body for the Project, the City Council finds that based upon the facts and information contained in the Application and supporting documentation, at the time of Project implementation, the project is consistent with the Housing Element of the Policy Plan (General Plan) component of The Ontario Plan, as the project site is not one of the properties in the Housing Element Sites Inventory contained in Tables B-1 and B-2 of the Housing Element Technical Report.

SECTION 4: ***Airport Land Use Compatibility Plan ("ALUCP") Compliance.*** The California State Aeronautics Act (Public Utilities Code Section 21670 et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

(1) On April 19, 2011, the City Council of the City of Ontario approved and adopted the Ontario International Airport Land use Compatibility Plan, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the decision-making body for the Project, the City Council has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the City Council, therefore, finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the ONT ALUCP; and

(2) On August 2, 2022, the City Council of the City of Ontario approved and adopted a Development Code Amendment to establish the Chino Airport ("CNO") Overlay Zoning District ("OZD") and Reference I, Chino Airport Land Use Compatibility Plan ("CNO ALUCP"). The CNO OZD and CNO ALUCP established the Airport Influence Area for Chino Airport, solely within the City of Ontario, and limits future land uses and development within the Airport Influence Area, as they relate to safety, airspace protection, and overflight impacts of current and future airport activity. The CNO ALUCP is consistent with policies and criteria set forth within the Caltrans 2011 California Airport Land Use Planning Handbook. The proposed Project is located within the Airport Influence Area of Chino Airport and was evaluated and found to be consistent with the California Airport Land Use Planning Handbook and the CNO ALUCP. As the decision-making body for the Project, the City Council has reviewed and considered the facts and information contained in the Application and supporting documentation against the CNO ALUCP compatibility factors, including Safety, Airspace Protection, Overflight. As a result, the City Council, therefore, finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the California Airport Land Use Planning Handbook and the Chino ALUCP.

SECTION 5: ***Concluding Facts and Reasons.*** Based upon the substantial evidence presented to the City Council during the above-referenced hearing, and upon the specific findings set forth in Sections 1 through 4, above, the City Council hereby concludes as follows:

(1) ***The proposed Specific Plan, or amendment thereto, is consistent with the goals, policies, plans and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan 2050.*** The Specific Plan Amendment is intended to bring The Avenue Specific Plan's land use plan into consistency with The Ontario Plan 2050's land use plan and therefore will enable the Specific Plan to be consistent with and further implement the goals, policies, plans, and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan 2050.

(2) ***The proposed Specific Plan, or amendment thereto, would not be detrimental to the public interest, health, safety, convenience, or general welfare of the City.*** The Specific Plan Amendment is intended to bring The Avenue Specific Plan's land use plan into consistency with The Ontario Plan 2050's land use plan. The Ontario Plan 2050's land use plan was established to promote the public interest, safety, convenience, and general welfare of the City. The proposed Specific Plan land use plan modifications will be in keeping with the existing and anticipated land use patterns in and around the Specific Plan area.

(3) ***In the case of an application affecting specific property(ies), the proposed Specific Plan, or amendment thereto, will not adversely affect the harmonious relationship with adjacent properties and land uses.*** The Specific Plan Amendment is intended to bring The Avenue Specific Plan's land use plan into consistency with The Ontario Plan 2050's land use plan and the proposed modifications will be in keeping with the existing and anticipated land use patterns in and around the Specific Plan area. The proposed amendment will thus remain harmonious with the surrounding residential, agricultural, and commercial land uses and will not adversely affect the adjacent properties and land uses.

(4) ***In the case of an application affecting specific property(ies), the subject site is physically suitable, including, but not limited to, parcel size, shape, access, and availability of utilities, for the request and anticipated development.*** The Specific Plan Amendment is intended to bring The Avenue Specific Plan's land use plan into consistency with The Ontario Plan 2050's land use plan, and no modifications are proposed that will impact property development regulations. The Ontario Plan 2050 analyzed potential impacts to utilities, and the Project Addendum found that there would be no additional impact as a result of this Project. Any future development shall be reviewed and approved through subsequent entitlements that will ensure that adequate parcel size, shape and access will be provided. Further, additional studies ensuring the adequate

availability of utilities shall be required, should any future development deviate from the standards established by this Specific Plan Amendment.

SECTION 6: ***City Council Action.*** Based upon the findings and conclusions set forth in Sections 1 through 5, above, the City Council hereby APPROVES the herein described amendment to The Avenue Specific Plan (File No. PSPA22-005), attached hereto as "Attachment A," and incorporated herein by this reference.

SECTION 7: ***Indemnification.*** The Applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void, or annul this approval. The City of Ontario shall promptly notify the applicant of any such claim, action, or proceeding, and the City of Ontario shall cooperate fully in the defense.

SECTION 8: ***Custodian of Records.*** The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East "B" Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario.

The City Clerk of the City of Ontario shall certify as to the adoption of this Resolution.

PASSED, APPROVED, AND ADOPTED this 18th day of March, 2025.

_____
PAUL S. LEON, MAYOR

ATTEST:

_____
SHEILA MAUTZ, CITY CLERK

APPROVED AS TO FORM:

_____
BEST BEST & KRIEGER LLP
CITY ATTORNEY

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO)
CITY OF ONTARIO)

I, SHEILA MAUTZ, City Clerk of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. 2025- was duly passed and adopted by the City Council of the City of Ontario at their regular meeting held March 18, 2025 by the following roll call vote, to wit:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

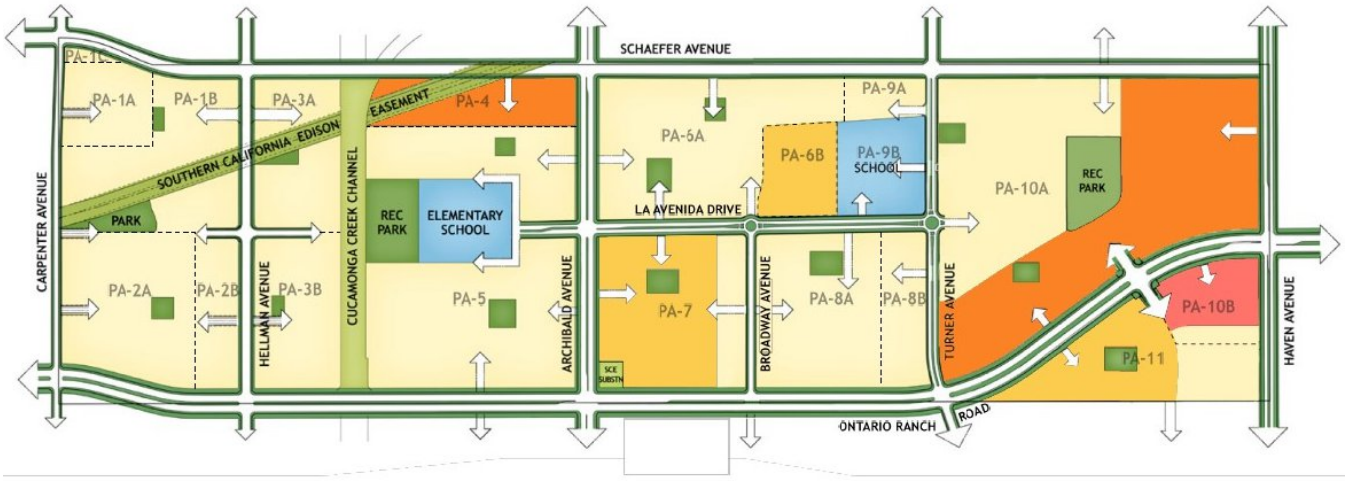
The foregoing is the original of Resolution No. 2025- duly passed and adopted by the Ontario City Council at their regular meeting held March 18, 2025.

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

Exhibit A: EXISTING AND PROPOSED SPECIFIC PLAN LAND USE PLAN

EXISTING

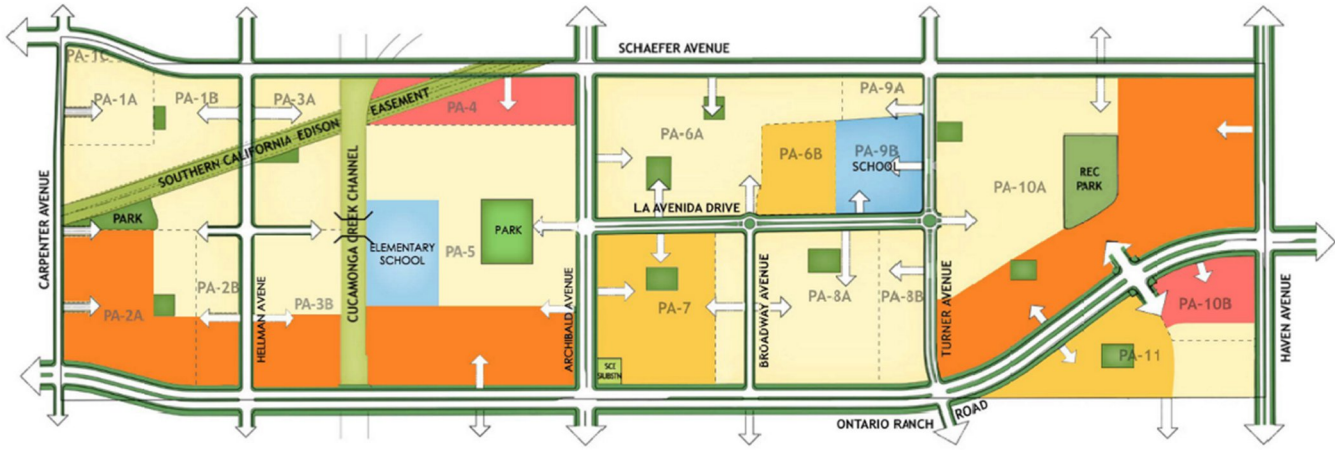


LEGEND

- LOW DENSITY RESIDENTIAL
- LOW MEDIUM DENSITY RESIDENTIAL
- MEDIUM DENSITY RESIDENTIAL
- RETAIL/COMMERCIAL
- SCHOOL
- PARK
- SCE EASEMENT
- STORM DRAIN EASEMENT

NOTE: The locations of the parks are conceptual and will be determined as part of the tract map approval process.

PROPOSED



LEGEND

- LOW DENSITY RESIDENTIAL (2.1-5.0 DU/AC)
- LOW MEDIUM DENSITY RESIDENTIAL (5.1-11.0 DU/AC)
- MEDIUM DENSITY RESIDENTIAL (11.1-25.0 DU/AC)
- RETAIL/COMMERCIAL
- SCHOOL
- PARK
- SCE EASEMENT
- STORM DRAIN EASEMENT

NOTE: The locations of the parks are conceptual and will be determined as part of the tract map approval process.

Exhibit B: PROPOSED SPECIFIC PLAN LAND USE TABLE

Table 2 - Statistical Analysis

~~Former Subarea~~	Planning Area	Gross Acres	Net Acres	Homes	Density	Commercial SF	Use
~~17~~	1A	11.1	9.20	~~51~~ 41	4.5		LDR
~~17~~	1B	33.5	24.54	~~127~~ 110	4.5		LDR
			5.40				SCE Easement
~~17~~	1C*	2.2	2.20	5	2.3		LDR
~~17~~	2A	32.0	5.00	~~147~~ 23	4.5		LDR
			25.05	~~58~~ 551	22.0		MDR
~~17~~	2B	12.5	6.64	~~86~~ 30	4.5		LDR
			5.43	~~97~~ 119	22.0		MDR
~~17~~	3A	21.7	19.15	~~218~~ 86	4.5		LDR
			2.60				SCE Easement
~~17~~	3B	21.5	12.22	~~334~~ 55	4.5		LDR
			8.59	189	22.0		MDR
~~18~~	4	19.9	15.04			204,496	Retail
			4.00				SCE Easement
~~18~~	5	82.6	46.85	211	4.5		LDR
			22.54	496	22.0		MDR
			10.89				Elementary School
~~18~~	6A	49.9	49.90	~~230~~ 229	4.6		LDR
~~18~~	6B	10.0	10.00	~~106~~ 110	11.0		LMDR
~~18~~	7	30.1	28.90	~~287~~ 265	9.2		LMDR
			1.20				SCE Substation
~~18~~	8A	39.9	39.90	~~180~~ 176	4.4		LDR
~~18~~	8B	9.7	9.70	44	4.5		LDR
~~18~~	9A	10.6	10.60	20	1.9		LDR
~~18~~	9B	10.0	10.00				School
~~12~~	10A	114.7	100.40	~~786~~ 452	4.5		LDR
			14.30	314	22.0		MDR
	10B	10.0	10.00			130,680	Retail
~~24~~	11	33.4	14.73	~~225~~ 67	4.5		LDR
			18.67	160	8.6		LMDR
~~Cucamonga Creek~~		12.8	12.80				Cucamonga Creek
~~Total~~	Total	568.1	556.44	~~2,981~~ 3,753	6.7	335,176	

Notes:
* Realignment of Schaeffer Ave creates the need for PA 1C (APN 021-812-201) as it is owned separately from PA 1A (APN 0218-181-126).
- All acreages approximate- exact acreages will be defined through tract map surveys. Additional studies may be required to transfer these units. See Section 3.1.1 for additional information.
- Density blending will be allowed within Planning Areas within one TOP land use step (i.e. from LDR to LMDR) and between Planning Areas at a rate no higher than 15%. If units are blended within a PA or moved between PA's, then Technical Studies for Impacts to the Water and Sewer Master Plan Systems will be required as part of the entitlement process.

ATTACHMENT A:

File No. PSPA22-005
Redlined Specific Plan Document

(Departmental conditions of approval to follow this page)

ATTACHMENT B:

File No. PSPA22-005
Departmental Conditions of Approval

(Departmental conditions of approval to follow this page)

The Avenue

SPECIFIC PLAN



DECEMBER 2006
AMENDED MARCH 2024

ONTARIO, CALIFORNIA
Ontario Ranch

1801

"Good fortune is what happens
when opportunity meets with planning."

--Thomas Alva Edison, American Inventor



City Council approved February 16, 2007
Ordinance No. 2851
Amended version approved February 2, 2010
Resolution No. 2010-011
Second amended version approved June 17, 2014
Resolution No. 2014-069
Third amended version approved March 21, 2017
Resolution No. 2017-017
Fourth amended version approved November 17, 2020
Resolution No. 2020-190000-000
Fifth amendment version approved Date, 2024
Resolution No.xxx

The Avenue

SPECIFIC PLAN

Ontario Ranch

City of Ontario
303 East B Street
Ontario, California 91764

The Avenue Planning and Development Coalition Team:

Brookfield Homes, David E. Bartlett, Vice President

Brookfield Homes, Derek Barbour, Project Manager

Standard Pacific

Distinguished Homes

Richland Communities

Lewis Community Developers

Parentex Enterprises

The Avenue Consultant Team:

JZMK Partners - Planning, Design

Hunsaker & Associates - Planning, Engineering, Surveying

Clark & Green Associates - Landscape Architecture L.D.

King, Inc. - Engineering Consultant

Danielian Associates - Specific Plan Amendment

The Galloway Group - Specific Plan Amendment

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Example of California Ranch style architecture

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Typical residential streetscene

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Typical residential streetscene

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Section 1 - Introduction/Overview

1.1 Vision of The Avenue

The Avenue will be a truly walkable community, featuring pedestrian amenities that encourage walking and biking to schools, parks and basic commercial needs—all within five minutes, for the majority of residents. The Avenue is named after the central La Avenida Drive, a tree-lined street with one-way traffic on each side, and a continuous 13' parkway and 8' sidewalk on both sides without curb cuts or driveways to create an uninterrupted path. The Avenue will provide a connection from Archibald Avenue to the Recreation Area, Active Recreation Park, Schools, and adjacent neighborhood and pocket parks. With a diversity of housing types and styles, The Avenue will have something for everyone—providing a place for everyone to live, learn, play and shop.

1.2 Project Location

The Avenue Specific Plan is comprised of approximately 568.1 gross acres. The project site is bounded by Schaefer Avenue to the north, Ontario Ranch Road to the south, Haven Avenue to the east, Carpenter Avenue to the west as illustrated in Exhibit 1, "Regional Map" and Exhibit 2, "Project Location".



The Avenue will offer a variety of residential housing types and neighborhoods within walking distance to parks, schools, and recreation facilities. The Land Use Plan, as illustrated in Exhibit 8, "Land Use Plan" is consistent with the goals and policies of Ontario Ranch General Plan Amendment, combining walkable residential neighborhoods served by recreational spaces that offer opportunities for social interaction among residents. A Planned retail and commercial area is located within La Avenida Drive at Ontario Ranch Road and Haven Avenues to serve the commercial needs of the residents of The Avenue as well as surrounding neighborhoods.

The regional context and local setting of The Avenue (the Project Site) are illustrated in Exhibit 1, "Regional Map", and Exhibit 2, "Project Location Map".

Exhibit 1 - Regional Map

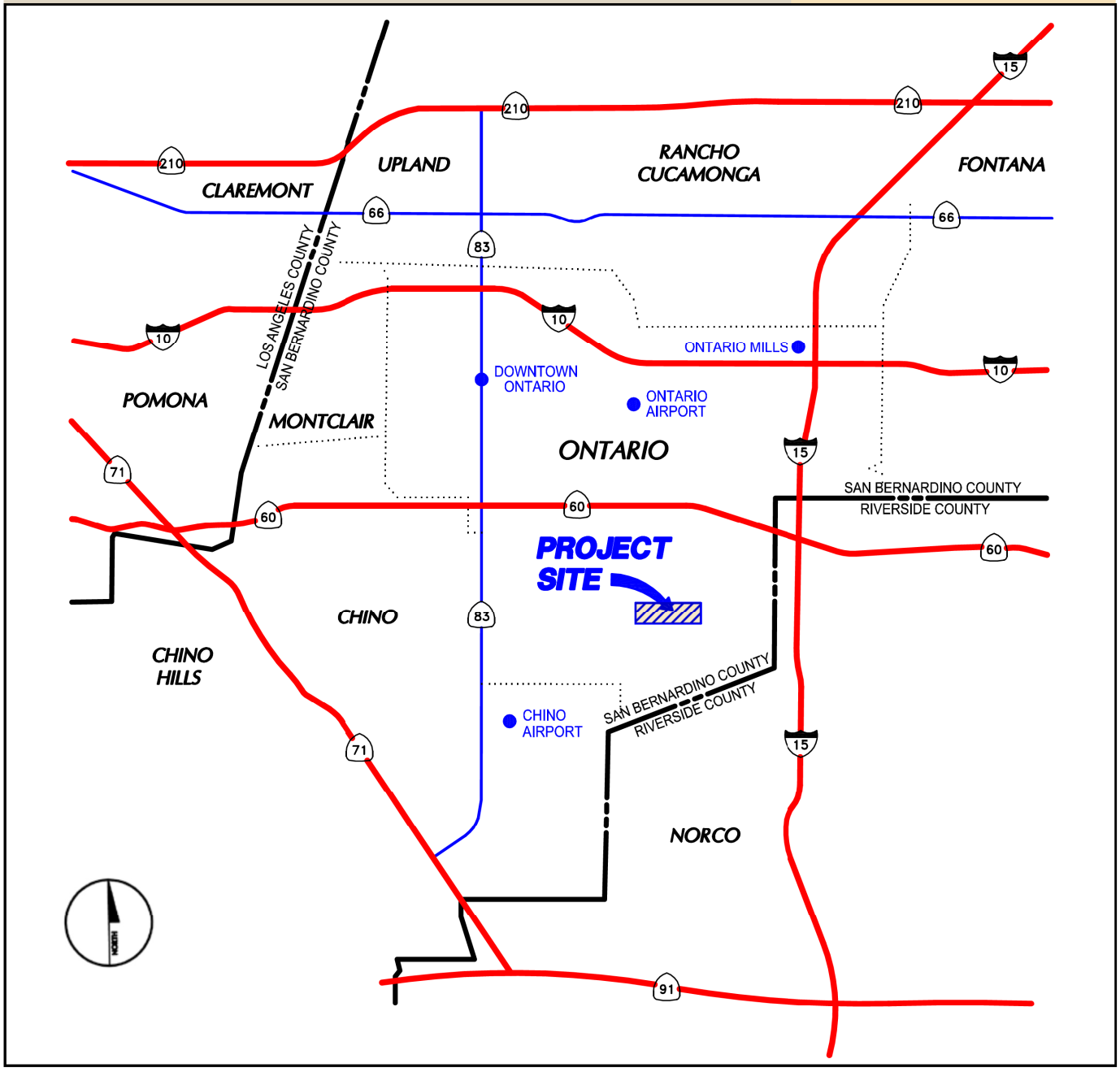
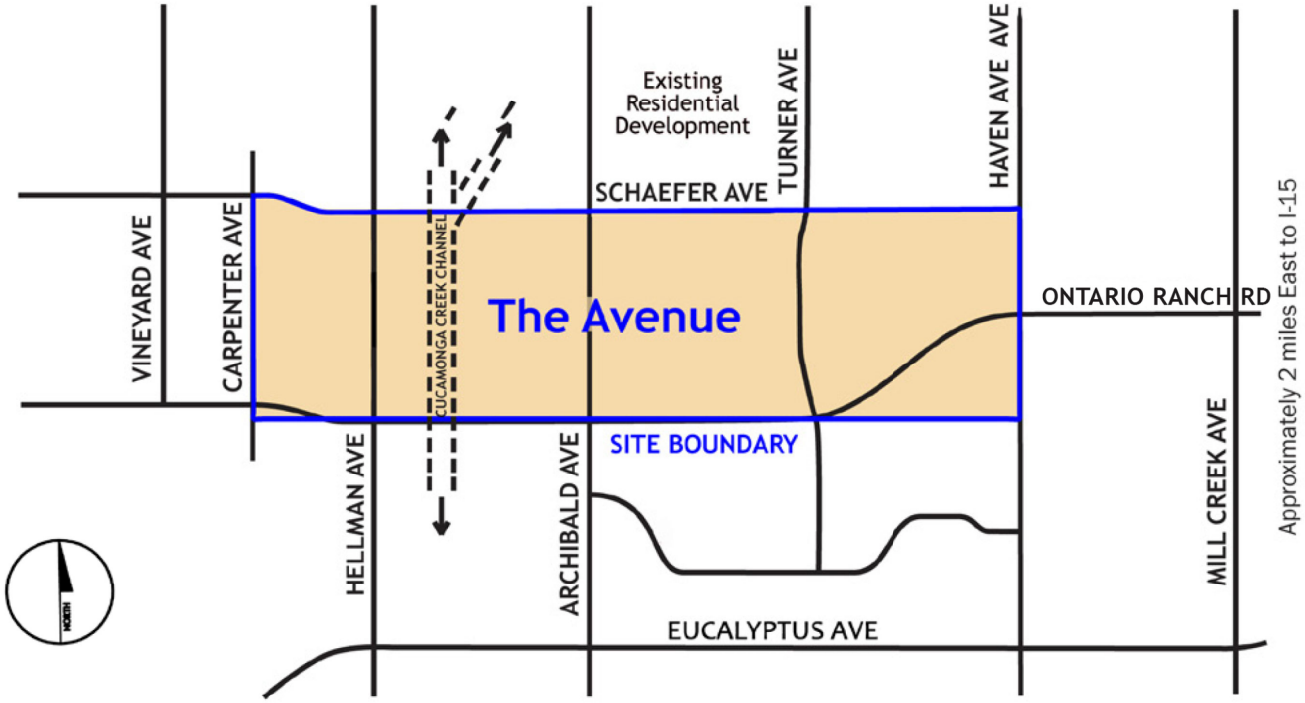


Exhibit 2 - Project Location Map



1.3 Project History and Background

After an extensive public participation program, the Ontario City Council adopted the Sphere of Influence General Plan Amendment for the 8,069 acre area known as the "The New Model Colony, now known as Ontario Ranch, on January 7, 1998. On November 30, 1999, the area was annexed into the City of Ontario. Ontario Ranch General Plan provides the framework to create a high quality environment where residents will live, work and play. The area was divided into 30 subareas, each requiring the preparation of a specific plan reflecting the unique goals and qualities of each area. In this way, each subarea could be part of the overall Ontario Ranch, but retain a sense of individuality. The Avenue site has historically been used for agricultural operations, primarily dairy use. Those areas not in active agricultural production are occupied by rural residential housing, farm buildings, and other ancillary agricultural facilities. The natural vegetation and soil conditions that once occurred throughout La Avenida Drive have been significantly altered through agricultural uses, leaving little or no native vegetation.

On January 26th, 2010, the City of Ontario adopted The Ontario Plan (TOP) which serves as the City's new business plan and includes a long term Vision and a principle based Policy Plan (General Plan). The city's Policy Plan, which acts as the City's General Plan, designates (Policy Plan Exhibit LU-1 -Land Use Plan) the project site for development of Low Density Residential (2.1 -5.0 dwelling units per acre), Low Medium Residential (5.1 - 11 .0 dwelling units per acre), Medium Density Residential (11.1 - 25.0 dwelling units per acre), Neighborhood Commercial, Public Schools, and Open Space- Parkland.

The Avenue Specific Plan was amended on February 2, 2010, June 17, 2104, March 21, 2017, and November 17, 2020 to modify the Land Use Plan. The city of Ontario General Plan (The Ontario Plan – TOP) and The Avenue Specific Plan was amended concurrently and reflects the final language to convert a 10 acre portion of the 20 acre school site located west of Turner Road; identified as PA 6B to Low Medium Density Residential (5.1 – 11.0 dwelling units per acre).

1.4 Specific Plan Purpose

The Avenue Specific Plan serves to implement the City's Policy Plan for the project site and provides zoning regulations for development of the project site by establishing permitted land use, development standards, infrastructure requirements, and implementation requirements for development. A comprehensive set of design guidelines and development regulations are included to guide and regulate site planning, landscape and architectural character within the community ensuring that excellence in community design is achieved during project development. The Avenue Specific Plan establishes the procedures and requirements to approve new development within the project site.



Typical neighborhood pocket park

1.5 Specific Plan Objectives

The following objectives are established for The Avenue Specific Plan:

Residential Areas

1. Development of a variety of housing types into the land use plan addressing a wide variety of lifestyles and economic segments
2. Provide for both single family attached and detached housing in low density and low medium density residential districts
3. Plan for seamless transitions between housing product types in order to create cohesive neighborhoods that include a range of types and styles
4. Plan residential neighborhoods around a series of parks and open space areas, promoting outdoor activity and interaction among neighbors
5. Provide for connectivity between residential neighborhoods, recreational areas, and adjacent commercial land uses, as well as to the schools, by means of pedestrian and bicycle trail linkages along the Avenue and trails incorporated into both the Southern California Edison Easement and the Cucamonga Creek Channel

6. Create a strong functional relationship between homes and schools
7. Create an hierarchy of parks, providing for active and passive recreation
8. Create residential neighborhoods with diverse architectural styles and traditional design elements reflecting some of the characteristics of older established Ontario neighborhoods

Commercial Area

1. Develop retail and commercial uses to meet the needs of the residential community and larger surrounding market area, as well as implement Policy Plan Policies
2. Provide trails and sidewalks to connect the residential community with the retail and commercial area
3. Consider the development of plazas and other public space amenities within the retail and commercial area providing space for social interaction
4. Orient retail and commercial buildings to the street, wherever possible, to create an urban edge and sense of arrival



Commercial entry concept from adjacent neighborhood

1.6 Development Approval Components

The components of the development approval process for The Avenue are discussed below.

General Plan

The Ontario Plan establishes the direction and vision for the City of Ontario providing a single guidance system that will shape the Ontario community for the future. The Plan provides for policies to accommodate change over a 30 year period commencing in 2010, the beginning of the planning period. The Ontario Plan consists of a six part Component Framework: 1) Vision, 2) Governance Manual, 3) Policy Plan, 4) City Council Priorities, 5) Implementation, and 6) Tracking and Feedback.

Specific Plan

The Policy Plan requires the approval of a Specific Plans for development of the project site to ensure that sufficient land area is included to achieve unified districts and neighborhoods. The City of Ontario has zoned the project site as AG-Specific Plan. The zoning designation of AG-Specific Plan requires that a Specific Plan be approved to guide development of the project site and to implement the goals and policies of the Policy Plan. The Specific Plan provides the zoning regulations to govern development of the project

site. The requirements of the Specific Plan shall take precedence over the City of Ontario Development Code. In instances where the Specific Plan is silent, the City of Ontario Development Code shall prevail.

Subdivision Maps

Tentative tract maps will be approved by the City of Ontario for the residential portion of The Avenue indicating the approximate location of lot lines, streets, and proposed grading. Following approval by the City of the tentative tract maps, final maps will be prepared. The final maps become legal documents that are recorded and define legal parcels and lots that can be sold for development. Parcel maps may be approved by the City of Ontario for development proposed within the commercial and business park/light industrial portions of The Avenue.

Development Plan Review

Following the approval of The Avenue Specific Plan, all development proposals for individual neighborhoods or product areas within the Specific Plan will be subject to the Development Plan Review process pursuant to Article 8 of the City's Development Code.

Development Agreement(s) Required

Unless done in a coordinated manner and with adequate fiscal planning, development projects within Ontario Ranch are likely to present a challenge in their implementation because of the lack of existing public facilities including streets, sewerage, transportation, drinking water, school, and utility facilities. California law has established a mechanism for ensuring the adequate provision of such facilities, while at the same time providing assurances to applicants that, upon approval of the project, the applicants can proceed with their projects. Approval of this Specific Plan without development agreements may result in a waste of resources, escalate the cost of housing to the consumer, and discourage investment in and commitment to comprehensive planning, as envisioned by the City, which seeks to make maximum efficient utilization of resources at the least economic cost to the public.

Therefore, a single statutory development agreement, or multiple agreements, authorized pursuant to California Government Code sections 65864 et seq., shall be required as part of the approval of this Specific Plan. For the above-mentioned reasons, the development agreement(s) for this Specific Plan shall include, among other things, methods for financing acquisition and construction of infrastructure, acquisition and development of adequate levels of parkland, and schools, as well as the provision of adequate housing opportunities for various segments of the community consistent with the regional housing needs assessment. Such development agreements shall have been fully approved before the issuance of building permits for plans within this project.

1.7 Specific Plan Authority and Requirements

State of California Government Code, Title 7, Division 1, Chapter 3, Article 8, Section 65450-57 grants authority to cities to adopt Specific Plans for purposes of implementing the goals and policies of their

General Plans. The Government Code specifies that Specific Plans will be adopted by ordinance, and that the Specific Plan is required to be consistent with the General Plan. The City of Ontario will be adopting this Specific Plan, as with other Ontario Ranch Specific Plans, by ordinance, thereby establishing the zoning regulations for the development of The Avenue. The standards set by The Avenue Specific Plan shall take precedence over the City of Ontario Development Code, and in instances where The Avenue Specific Plan is silent, the City of Ontario Development Code shall prevail. California Government Code Section 65451 sets forth the minimum requirements and review procedures for specific plans as follows:

A Specific Plan shall include a text and a diagram or diagrams, which specify all of the following in detail:

1. The distribution, location, and extent of the uses of land, including open space, within the area covered by the plan;
2. The proposed distribution, location, and extent and intensity of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy, and other essential facilities proposed to be located within the area covered by the plan and needed to support the land uses described in the plan;



Typical outdoor eating area - School

3. Standards and criteria by which improvements will proceed, and standards for the conservation, development, and utilization of natural resources, where applicable, and a program of implementation measures including regulations, programs, public works projects and the financing measures necessary to carry out paragraphs 1 and 2 above. The Specific Plan shall include a statement of the relationship of the Specific Plan to the General Plan.

1.8 Relationship to General Plan, Airport Land Use Compatibility and Zoning

The City's Policy Plan, which acts as the City's General Plan, designates the project site for development as follows:

- Low Density Residential (2.1 -5.0 dwelling units per acre)
- Low Medium Residential (5.1 - 11 .0 dwelling units per acre)
- Medium Density Residential (11.1 - 25.0 dwelling units per acre)
- Neighborhood Commercial
- General Commercial
- Public Schools
- Open Space- Parkland.
- Open Space - Non-Recreation

On August 16, 2022, TOP was amended to accommodate the TOP 2050 Update, which made modifications to the Vision, Governance Manual, and Policy Plan components of TOP and established a General Commercial land use within PA-4 and Medium Density Residential land use areas within PAs 2A, 3B and 5. The Policy Plan (General Plan) establishes a development capacity of 3,739 dwelling units and a maximum FAR of 0.40 for Neighborhood Commercial for a total of up to 436,297 square feet of commercial uses for the Specific Plan Area. The Policy Plan residential capacity is further broken down as follows:

Net Acres	TOP Land Use Designation	Maximum Permitted Dwelling Units
351.0	Low Density Residential	1,580
57.6	Low Medium Density Residential	489
75.9	Medium Density Residential	1,670
Total 484.5		3,739*

**Densities do not reflect maximum allowable densities by the Policy Plan and are based on TOP EIR densities (average) of 4.5 du/ac for Low Density, 8.5 du/ac for Low Medium Density and 22 du/ac for Medium Density.*

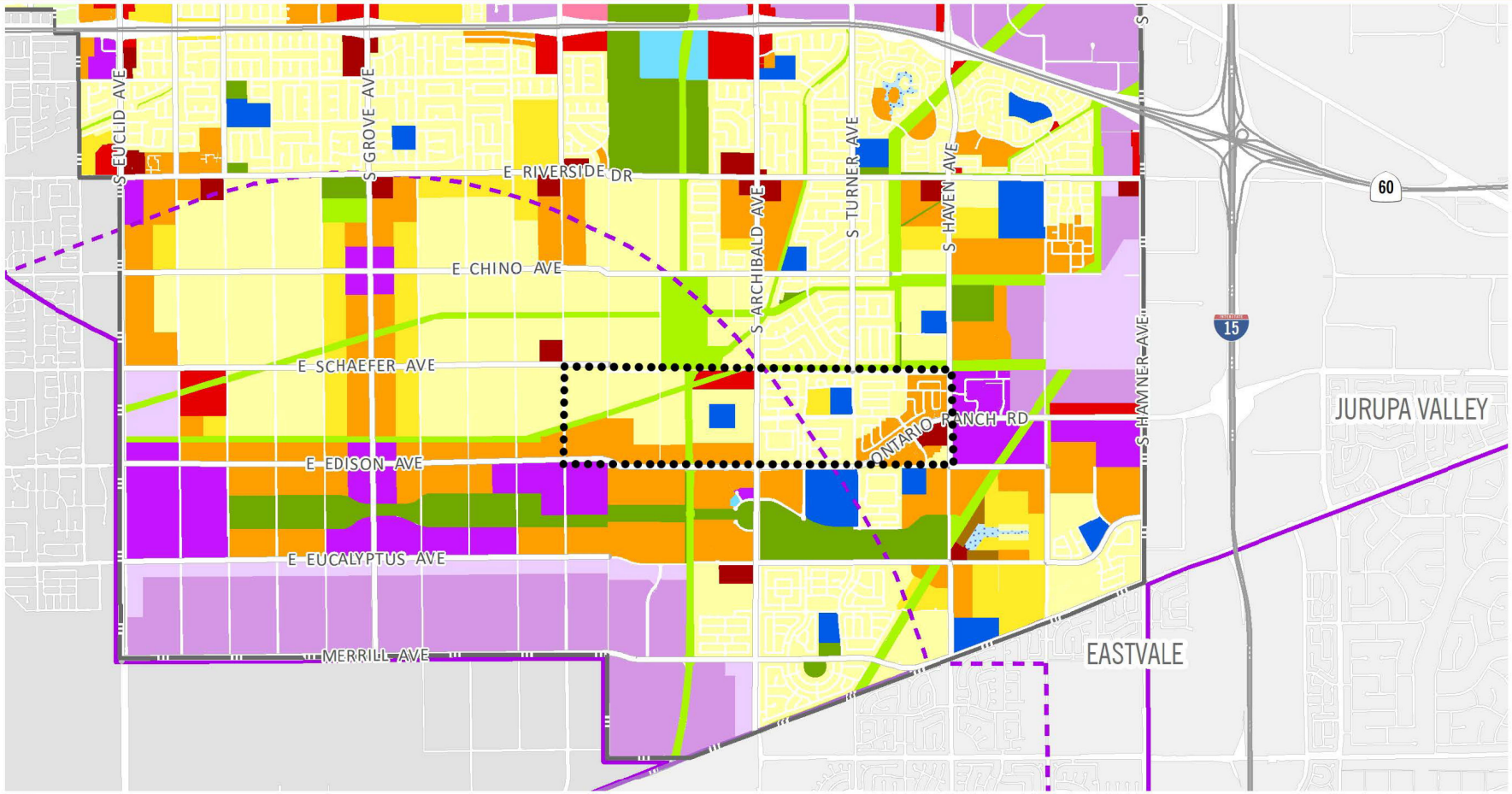
California Government Code (Title 7, Division 1, Chapter 3, Article 8, Section 65450-65457) permits the adoption and administration of specific plans as an implementation tool for elements contained in the local general plan. Specific plans must demonstrate consistency in regulations, guidelines, and programs with the goals and policies set forth in the general plan. The A venue Specific Plan has been prepared in conformance with the goals and policies of the City of Ontario Policy Plan (General Plan). The policy analysis in located in the Appendix of this document, describes the manner in which the A venue Specific Plan complies with the Policy Plan policies applicable to the project.

The Avenue Specific Plan is located within the Airport Influence Area (AIA) of Chino Airport and Ontario International Airport and is required to be consistent with both Airport Land Use Compatibility Plans.

1.9 CEQA Compliance

An Environmental Impact Report (EIR) was prepared by the City of Ontario for The Avenue Specific Plan in accordance with the California Environmental Quality Act (CEQA), to address impacts associated with the Specific Plan. The EIR was prepared as a basis for the environmental review for all subsequent discretionary and ministerial actions. On December 19, 2006, the City Council certified the EIR for The Avenue Specific Plan.





LEGEND

Residential
- RR Rural Residential
- LDR Low Density Residential
- LMDR Low Medium Density Residential
- MDR Medium Density Residential
- HDR High Density Residential

Mixed-Use
- MU Mixed Use

Commercial
- NC Neighborhood Commercial
- GC General Commercial
- OC Office Commercial
- HOS Hospitality

Employment
- BP Business Park
- IND Industrial

Other
- OS-NR Open Space - Non-Rec
- OS-R Open Space - Recreation
- OS-W Open Space - Water

- PF Public Facility
- PS Public School
- ARPT Airport
- LF Landfill
- Rail

- The Avenue Boundary

Policy Plan Land Use Map

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Section 2 - Existing Conditions

2.1 Site History

The Avenue site has previously been extensively used for agricultural operations, including dairy use. Those areas not in active agricultural production are occupied by rural residential housing, farm buildings and other ancillary facilities. The natural vegetation and soils conditions that once occurred throughout the project area have been significantly altered through agricultural uses, leaving little or no native vegetation. Though still currently in the transitioning phase for development from agricultural uses, the Zoning Classification for parts of the site were once considered as (AG) Specific Plan Ag Preserve.

2.2 Existing Site Conditions

The Avenue has undergone a significant change in land use patterns replacing what was historically undeveloped, with agricultural operations scattered throughout the area with lower density urban land uses. Historically, improvements within The Avenue included single-family residences, feed storage areas, and various other farming or cattle raising facilities. Other agricultural-related facilities, such as above ground tanks and modular structures, were scattered throughout, and a commercial nursery was located on the easterly portion of the site. These agricultural uses are transitioning to residential uses, parks and recreational areas and neighborhood commercial development since the Avenue Specific Plan has been approved and has been implemented over the plan area.

Exhibit 4 - Site Aerial Photo



2.2.1 Site Area

The Avenue Specific Plan is approximately 568.1 gross acres in size. This includes street right-of-ways and all utility easements.

2.2.2 Topography

The Project Site is located on gently sloping undeveloped terrain with a relatively uniform slope as illustrated in Exhibit 5, “Existing Topography”. The existing ground on the site slopes southerly away from Schaefer Avenue at an approximately 1% grade.

2.2.3 Existing On-site Land Use

The Avenue Specific Plan currently comprises agricultural, dairy, farming, and other agricultural related land uses. There are utility uses such as the Cucamonga Creek flood control channel and the Southern California Edison utility easement traversing the site, as well as a one-acre Southern California Edison substation.



View of Dairy Farm that existed on the Project Site prior to the adoption of the original Avenue Specific Plan



Historic agricultural uses on the Project Site circa 2004



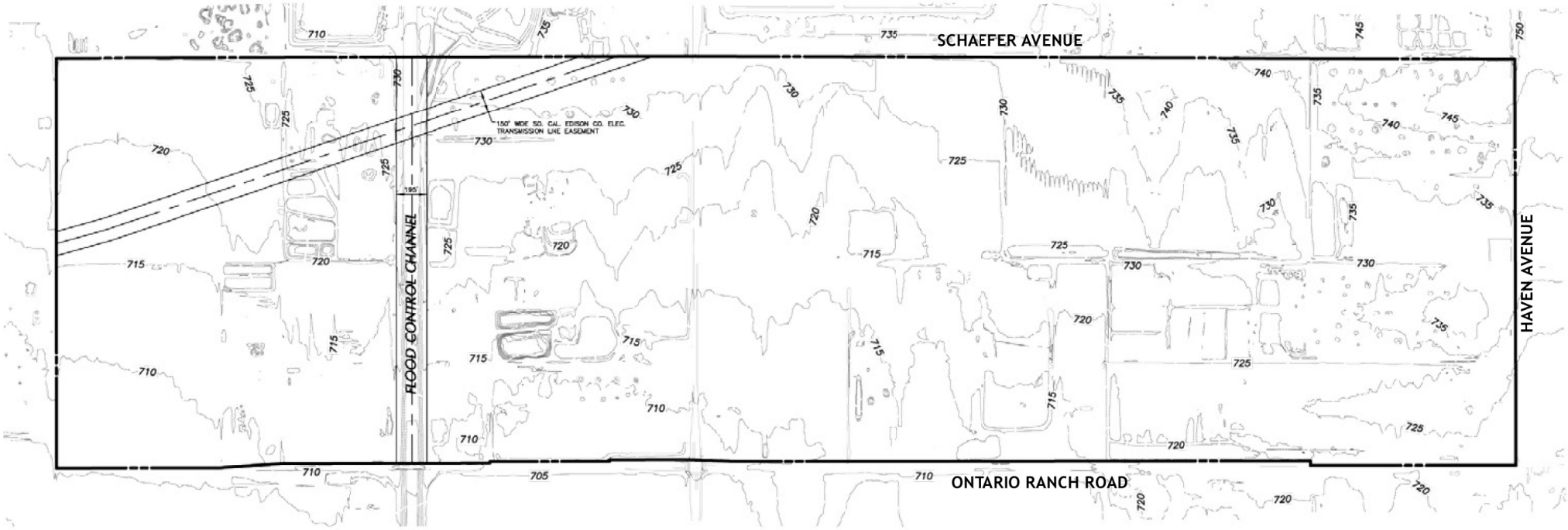
Street scene along La Avenida Drive



Turner Avenue and La Avenida Drive Intersection



VIEW OF THE AVENUE SPECIFIC PLAN AREA LOOKING WEST



Note: The existing site slopes southerly at approximately 2% grade.

2.2.4 Surrounding Land Use

Land uses adjacent to The Avenue Specific Plan area include:

North: Existing residential community and SCE Easement.
East: New residential community, low and medium density developments, farm land and vacant land.
South: Existing residential community is currently under construction and future mixed use/residential development.
West: Farm land and vacant land.

Ontario Ranch General Plan designates the surrounding areas as:

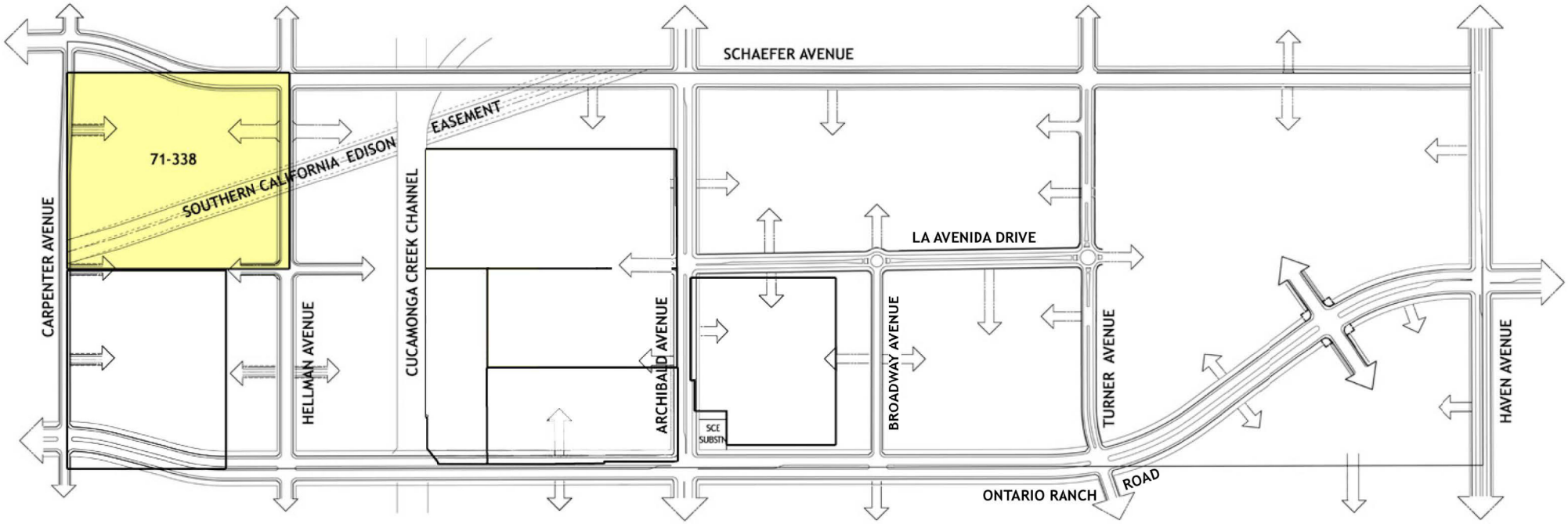
North: Low Density Residential, Elementary School, Flood Control and Green Belt (Subareas 5 and 12)
East: Low Density Residential and Green Belt (Subarea 12)
South: Low, Medium and High Density Residential, Flood Control and Green Belt (Subarea 23)
West: Medium Density Residential, High Density Residential and Green Belt (Subarea 17)



La Avenida as viewed from Archibald looking East

2.2.5 Williamson Act Contracts

There is currently one Williamson Act Contract within the Specific Plan Area as shown in Exhibit 6, “Williamson Act Contracts”.


SCHAEFER AVENUE
71-338
EASEMENT
SOUTHERN CALIFORNIA EDISON
CARPENTER AVENUE
HELLMAN AVENUE
CUCAMONGA CREEK CHANNEL
ARCHIBALD AVENUE
SCE SUBSTN
LA AVENIDA DRIVE
BROADWAY AVENUE
TURNER AVENUE
HAVEN AVENUE
ONTARIO RANCH ROAD
LEGEND
ACTIVE CONTRACT
NORTH
0
100
200
400
800

2.3 Property Ownership

The Avenue Specific Plan has several landowners or interests controlling or sharing control of the identified planning areas. Table 1 below, and Exhibit 7, “Assessors Parcel Numbers” indicates the ownership of parcels within The Avenue Specific Plan area.

Table 1 - Assessors Parcel Numbers

Planning Area	APN	Current Property Owner
1C	218-122-01	Peter and Henrietta Bosch Trust
1B	218-181-23	John and Lorraine Anderson
1B	218-181-24	Jimmie Anderson
1B	218-181-25	John and Lorraine Anderson
1A	218-181-26	Tony and Rickey Anderson
2A	218-181-17	Parkside West Holding Company, LLC
n/a	218-181-19	Unknown
2B	218-181-20	Miguel and Graciela Gomez
2A	218-181-21	Parkside West Holding Company, LLC
2B	218-181-22	Miguel and Graciela Gomez
3A	218-191-19	Parente R/E Inv Mgmt Co.
3B	218-191-24	GH Dairy
4	218-191-20	Parente R/E Inv Mgmt Co.
5	218-191-04	Richland Communities
5	218-191-05	Richland Communities
5	218-191-14	Richland Communities
5	218-191-15	Richland Communities
5	218-191-16	Richland Communities
5	218-191-22	Harada Trust
6A	218-201-15	Distinguished Homes
6A & 6B	218-201-44	Distinguished Homes
7	218-201-18	BrookCal Ontario LLC
8A	218-201-26	Distinguished Homes
8A	218-201-27	Distinguished Homes
10A	218-201-05	Dick Dykstra Dairies
9A & 9B	218-201-45	Dick Dykstra Dairies
10A, 10B & 11	218-201-42	BrookCal Ontario LLC
10A & 11	218-201-43	BrookCal Ontario LLC
10A &10B	218-201-30	BrookCal Ontario LLC
11	218-201-39	BrookCal Ontario LLC
n/a	218-191-09	San Bernardino County Flood Control
n/a	218-191-18	San Bernardino County Flood Control
n/a	218-191-21	San Bernardino County Flood Control
n/a	218-191-23	San Bernardino County Flood Control
n/a	218-201-17	SCE
8B	218-201-19	Distinguished Homes
n/a	218-201-20	Abandoned well site

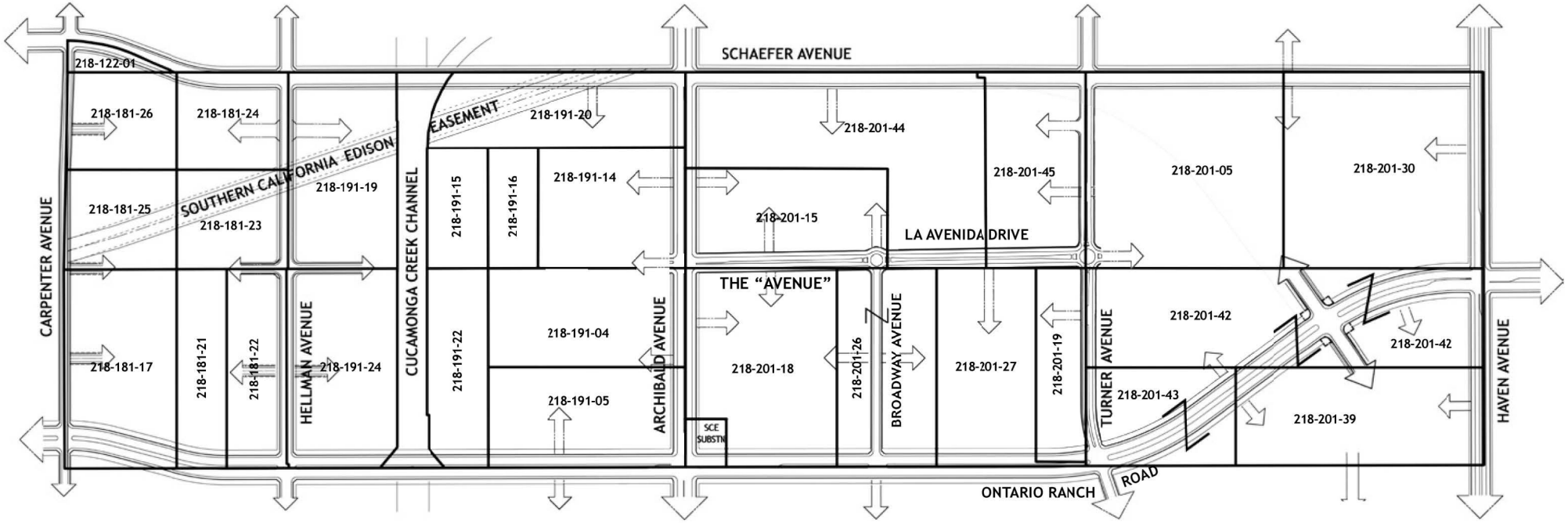
2.4 Existing Circulation

Access to The Avenue Specific Plan is currently provided from newly constructed arterial and collector roadways that are developed adjacent to and within The Avenue Specific Plan area. Ontario Ranch Road abuts the plan area on the south and is currently being improved in a phased manner from Haven Avenue westerly towards Carpenter Avenue.

Archibald Avenue has partially been improved to its ultimate condition and bisects the plan area through the center of the project. Schaefer Avenue has been fully constructed from Haven Avenue to Archibald Avenue. Haven Avenue has been fully constructed between Schaefer Avenue and Ontario Ranch Road (formerly Edison Avenue).



Existing intersection at Archibald and Ontario Ranch Road


SCHAEFER AVENUE
218-122-01
218-181-26
218-181-24
218-181-25
218-181-23
218-181-17
218-181-21
218-181-22
218-191-19
218-191-20
218-191-15
218-191-16
218-191-14
218-191-22
218-191-04
218-191-05
218-191-24
218-201-44
218-201-45
218-201-15
218-201-05
218-201-30
218-201-18
218-201-26
218-201-27
218-201-19
218-201-42
218-201-43
218-201-39
EASEMENT
SOUTHERN CALIFORNIA EDISON
CARPENTER AVENUE
HELLMAN AVENUE
CUCAMONGA CREEK CHANNEL
ARCHIBALD AVENUE
LA AVENIDA DRIVE
THE "AVENUE"
BROADWAY AVENUE
TURNER AVENUE
HAVEN AVENUE
SCE SUBSTN
ONTARIO RANCH ROAD

LEGEND


NORTH
0
100
200
400
800

2.5 Existing Infrastructure and Utilities

2.5.1 Water

There is an existing 12-inch main within Archibald. This is a Chino Desalter Authority (CDA) line which extends through La Avenida Drive. The source is well water, the zone is elevation 1010 and the line usage is for dairy lands in this vicinity. The private wells currently in use for this main will eventually be destroyed per DHS standards upon development of this Specific Plan. The location of existing wells are shown in Exhibit 24, "Existing Wells". Per the Ontario Ranch Water Master Plan, new domestic facilities will be required to serve The Avenue Specific Plan area. Existing water facilities are shown on Exhibit 20, "Domestic Water Master Plan".

In compliance with the Chino Basin Water Master's Well Procedure for Developers, a well use/destruction plan and schedule for all existing private/agricultural wells shall be submitted to the City of Ontario for approval prior to the issuance of permits for any construction activity. If a private well is actively used for water supply, the Developer shall submit a plan to abandon such well and connect users to the City's water system (residential to the domestic water system and agricultural to the recycled water system) when available. Wells shall be destroyed/abandoned per the California Water Resource Guidelines and require permitting from County Health Department. The location of existing wells are shown in Exhibit 24, "Existing Wells". A copy of such permit and Form DWR 188 Well Completion Form shall be provided to the Engineering and Public Works Agency prior to issuance of grading and/or building permits. If the Developer proposes temporary use of an existing agricultural well for purposes other than agriculture, such as grading, dust control, etc., the developer shall make a formal request to the City of Ontario for such use prior to issuance of permits for any construction activity. Upon approval, the Developer shall enter into an agreement with the City of Ontario and pay any applicable fees as set forth by the agreement.

2.5.2 Recycled Water

There is an existing Chino Basin Municipal Water District 30-inch main within La Avenida Drive. The main is located within the existing and proposed alignment of Carpenter Street extending northerly and southerly of this Specific Plan area. This main will serve The Avenue project along with proposed Ontario Ranch Master Plan facilities connecting to this 30-inch line as the source of recycled water. Existing recycled water facilities are shown on Exhibit 21, "Recycled Water Master Plan".

2.5.3 Sewer

Existing recently constructed IEUA 33-inch and 36-inch Eastern Trunk Sewer mains are located within Archibald Avenue. The Archibald trunk reach eventually joins the existing Kimball 54-inch Interceptor Trunk Sewer to the south of La Avenida Drive. The existing Archibald IEUA sewer will serve the easterly side of The Avenue Specific Plan via proposed Ontario Ranch Master Plan facilities which will connect to it. La Avenida Drive west of the Cucamonga Flood Channel currently has no gravity sewer service. All other existing septic systems will be destroyed per DHS standards with the development of the Specific Plan. Existing sewer facilities are shown on Exhibit 23, "Sewer Master Plan".

2.5.4 Storm Drainage

The Avenue is presently in agricultural use; therefore, only a limited portion of the site is covered with impervious surfaces. Normal rainfall to the area is able to percolate through on-site soils and does not result in high volumes of surface runoff, as typically associated with urban areas. During periods of heavy rainfall when ground surfaces are saturated, surface runoff is collected in the existing drainage ditches and retention basins located within the site. Off-site flows are then directed into the existing storm drain system surrounding The Avenue which is generally unimproved and consists primarily of open earthen swales along area roadways or curbed roadway surfaces.



Cucamonga Creek Channel

An existing drainage channel bisects the site but does not collect off-site flows from La Avenida Drive. The channel is a major flood control facility that conveys water from much of the urbanized area located to the north of La Avenida Drive through the site and then to the Prado Basin in the south. Existing storm drain facilities are shown on Exhibit 22 “Storm Drain Master Plan”.
Master planned storm drain facilities have been installed along with development/implementation of the Specific Plan since it was originally approved.

2.5.5 Solid Waste

Solid Waste service is provided by the City of Ontario.

2.5.6 Gas

No gas is currently available within The Avenue. Individual propane units are currently being used.

2.5.7 Electric

Electricity is available from Southern California Edison.

2.5.8 Telephone

Telephone is currently available from Verizon.

2.5.9 Cable Television

Cable is available in the newly developed areas of The Avenue.



Schaefer Avenue looking west between Archibald and Haven



Ontario Ranch Road looking west



Northerly site boundary along Schaefer Avenue

2.6 Airport Influence Areas

The Avenue Specific Plan is located within the Airport Influence Areas of Chino Airport and Ontario International Airport. All development proposals or Specific Plan Amendments must be consistent with the Airport Land Use Compatibility Plans for both airports.

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Section 3 - Land Use Plan

3.1 Land Use Concept

The proposed 568.1-acre Avenue Specific Plan offers a traditional neighborhood lifestyle featuring a variety of residential housing types designed within easy walking distance to recreational amenities, retail and commercial uses, and school sites. Connectivity within The Avenue Specific Plan is provided through a system of pedestrian and bicycle trails linking residential neighborhood parks to the retail and commercial land use areas within the plan area.

The Avenue lies between two tree-lined avenues - Ontario Ranch Road to the south and Schaefer to the north. These arterials converge on one another at the eastern portion of the project. There are two additional dramatic tree-lined arterials, Archibald and Haven, that take advantage of the views of the San Bernardino Mountains to the north and the Santa Ana Mountains to the south. The vehicular circulation through the community provides a significantly different experience at each point of entry into the Colony. The Avenue's central element emphasizes pedestrian and recreational movement with wide sidewalks, tree-lined parkways and planted vehicular medians. The unifying elements include tree-lined streets and entry monuments coupled with drought tolerant flowering plant material.

Several key issues have been addressed in the design concept for The Avenue. They include the following:

- Development of an elegant, traditional style of landscape theming with generously landscaped common areas and strong, rich landscape materials that may include river rock, stone, brick, groves of trees, tree-lined streets, earth tone colors, and a diversity of other materials appropriate to the design theme
- Incorporation of a residential village and park program which is clear, identifiable and properly serves the needs of the community
- Pedestrian and non-motorized circulation throughout the community between recreational and educational elements
- Consideration of resources and long term maintenance efficiency in the selection of plant materials and placement helps create a strong "sense of community" through landscape design elements

Notable features of the proposed The Avenue Land Use Plan include the following:

- A variety of attached and detached housing opportunities
- Neighborhoods that serve retail and commercial locations
- Recreation Areas may feature shade trees, barbeques and turf play areas that may include pools, and tot lots



- Neighborhood pocket parks that will serve to integrate the neighborhoods
- Enhanced Roadways - La Avenida Drive and Turner Avenue - roadway, pedestrian and multi-use corridors linking each of the recreational sites and schools—providing connection between neighborhoods, featuring enhanced setbacks, multi-use paths, divided landscape medians, and front-on architecture
- Schools - One Elementary School (10 acres) and one additional school site (10 acres) that will be pedestrian-accessible from all neighborhoods
- Trails - 5 to 10 minute walk or bike to community amenities

Residential development is designed to address a variety of lifestyles, such as singles, families, executives and "empty nesters". Housing types will include a variety of single family detached and attached homes. Attached housing may include duplex, triplex, row townhomes, senior and court-style residential.
Retail and commercial land uses are provided for in The Avenue Specific Plan for the development of one commercial site totaling 10 acres. The commercial site is located on the southwest corner of Haven Avenue and Ontario Ranch Road.

3.1.1 Residential Planning Areas/Housing Types

The Specific Plan will provide for development of a variety of residential housing types oriented toward open space amenities and designed to promote walkability and interaction among residents. Residential development on approximately 484.5 net acres of the plan area will contain up to 3,753 dwelling units, providing a mix of single family detached, single family attached and multifamily attached housing types. In determining the number of residential units for The Avenue Specific Plan area, SCE easements, schools and commercial areas have been removed from the gross in order to determine net acres as shown on Table 2, "Statistical Analysis".

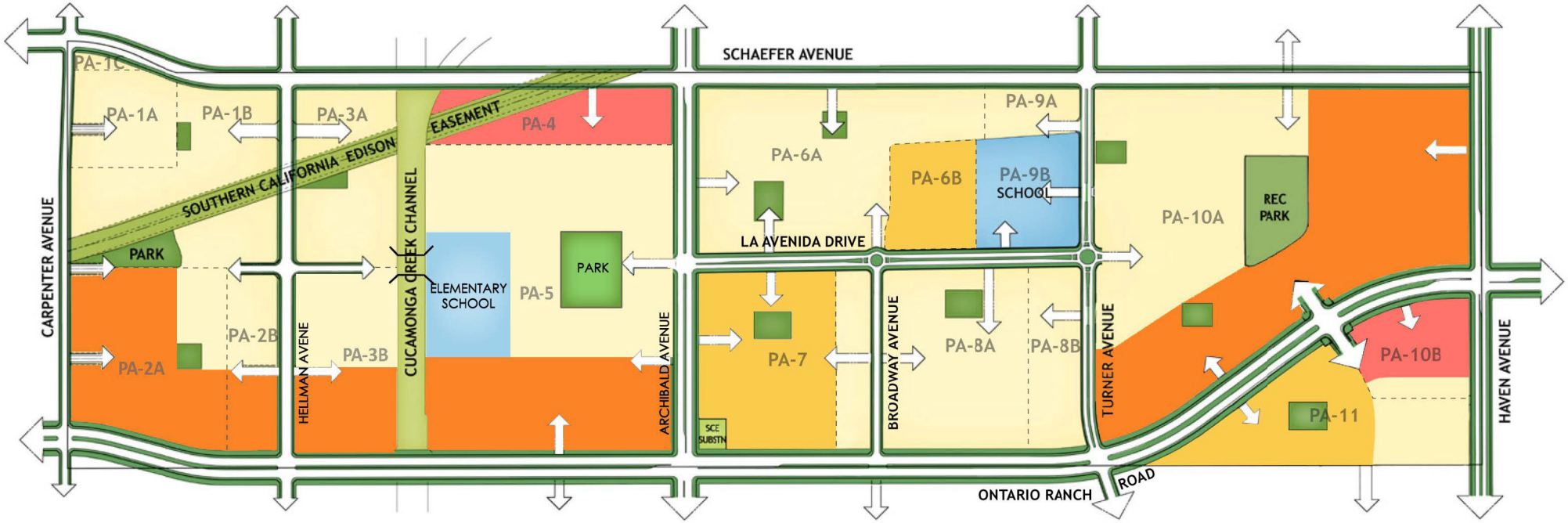
A. Transferring or removing units within the Specific Plan Area are subject to the following requirements:

1. Water and Sewer Technical Studies shall be prepared to study how the transfers change the quantity and locations of sewer and water demands and how those changes impact the Water and Sewer Master Plan Systems and local sewer and water systems."
2. If unit transfers result in net changes to the overall projected water demands or the water demands are transferred between the 1010PZ and 925PZ, then the initializing project shall be responsible for processing an Amendment to the Water Master Plan as part of the entitlement process of Implementation."
3. If unit transfers result in net changes to the overall projected sewer demands or the sewer demands are transferred between different Master Plan Truck Sewer Tributary Areas, then the initializing project shall be responsible for processing an Amendment to the Sewer Master Plan as part of the entitlement process of Implementation."

3.1.2 Parks and Open Spaces

The Avenue Specific Plan will provide parkland in a diverse hierarchy of evenly distributed parks. Per city standard The Avenue Specific Plan will require a parkland dedication of 2 acres per 1,000 population The city standard of 3.997 persons per household for single family homes and 3.347 persons per household for multi-family homes will be use in calculating park demand. Per this Specific Plan each individual parcel will meet its park requirement based on standards mentioned above.

Approximately 14 acres of Southern California Edison (SCE) easement, located in the northwest portion of the plan area will be utilized for passive recreation and a trail, to the extent permitted by SCE. The multi-use path is designed to connect the regional trail in the SCE easement, Active Recreation Park, Schools, The Avenue and Recreation Area. The conceptual locations of parks are shown in Exhibit 10, the “Parks and Open Space” plan.



LEGEND

- LOW DENSITY RESIDENTIAL (2.1-5.0 DU/AC)
- LOW MEDIUM DENSITY RESIDENTIAL (5.1-11.0 DU/AC)
- MEDIUM DENSITY RESIDENTIAL (11.1-25.0 DU/AC)
- RETAIL/COMMERCIAL
- SCHOOL
- PARK
- SCE EASEMENT
- STORM DRAIN EASEMENT

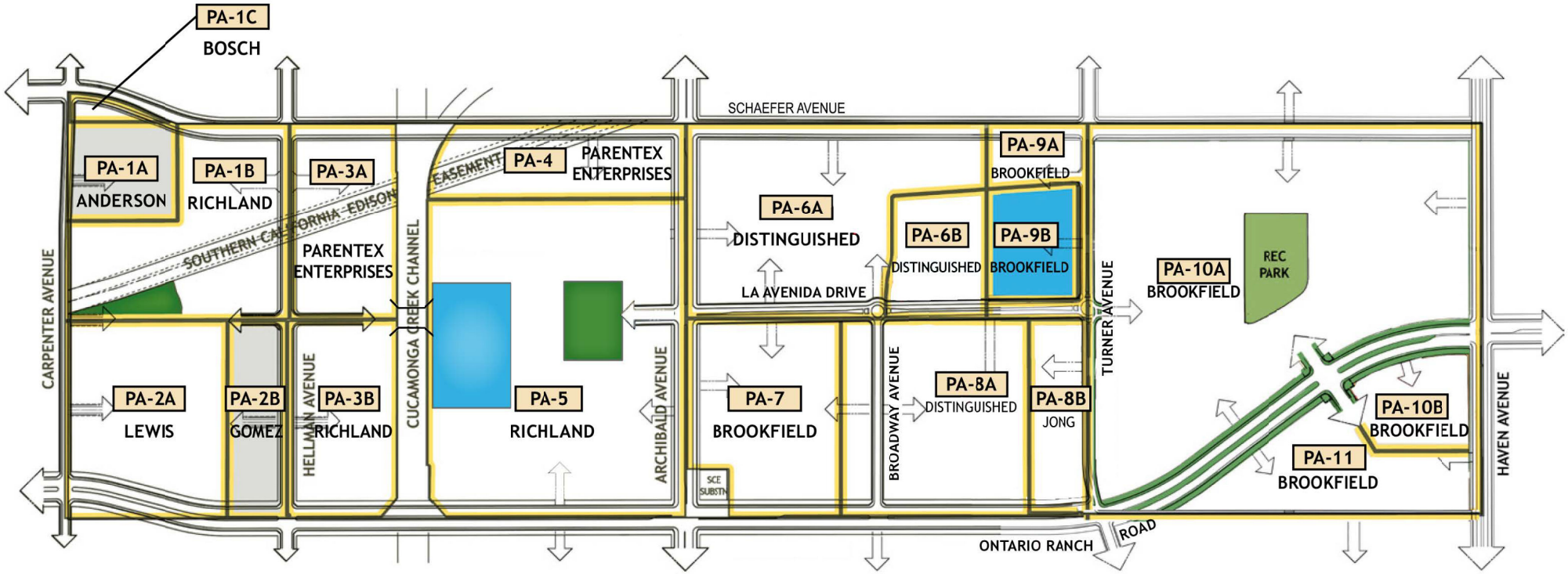
NORTH 0 100 200 400 800

NOTE: The locations of the parks are conceptual and will be determined as part of the tract map approval process.

Table 2 - Statistical Analysis

Planning Area	Gross Acres	Net Acres	Homes	Density	Commercial SF	Use
1A	11.1	9.20	41	4.5		LDR
1B	33.5	24.54	110	4.5		LDR
		5.40				SCE Easement
1C*	2.2	2.20	5	2.3		LDR
2A	32.0	5.00	23	4.5		LDR
		25.05	551	22.0		MDR
2B	12.5	6.64	30	4.5		LDR
		5.43	119	22.0		MDR
3A	21.7	19.15	86	4.5		LDR
		2.60				SCE Easement
3B	21.5	12.22	55	4.5		LDR
		8.59	189	22.0		MDR
4	19.9	15.04			204,496	Retail
		4.00				SCE Easement
5	82.6	46.85	211	4.5		LDR
		22.54	496	22.0		MDR
		10.89				Elementary School
6A	49.9	49.90	229	4.6		LDR
6B	10.0	10.00	110	11.0		LMDR
7	30.1	28.90	265	9.2		LMDR
		1.20				SCE Substation
8A	39.9	39.90	176	4.4		LDR
8B	9.7	9.70	44	4.5		LDR
9A	10.6	10.60	20	1.9		LDR
9B	10.0	10.00				School
10A	114.7	100.40	452	4.5		LDR
		14.30	314	22.0		MDR
10B	10.0	10.00			130,680	Retail
11	33.4	14.73	67	4.5		LDR
		18.67	160	8.6		LMDR
	12.8	12.80				Cucamonga Creek
Total	**568.1**	**556.44**	**3,753**	**6.7**	**335,176**	

Notes:
* Realignment of Schaeffer Ave creates the need for PA 1C (APN 021-812-201) as it is owned separately from PA 1A (APN 0218-181-126).
- All acreages approximate- exact acreages will be defined through tract map surveys. Additional studies may be required to transfer these units. See Section 3.1.1 for additional information.
- Density blending will be allowed within Planning Areas within one TOP land use step (i.e. from LDR to LMDR) and between Planning Areas at a rate no higher than 15%. If units are blended within a PA or moved between PA's, then Technical Studies for Impacts to the Water and Sewer Master Plan Systems will be required as part of the entitlement process.



LEGEND

NON-PARTICIPATING PARCELS

NORTH

0 100 200 400 800

Planning Areas/Developer Controlled/Ownership

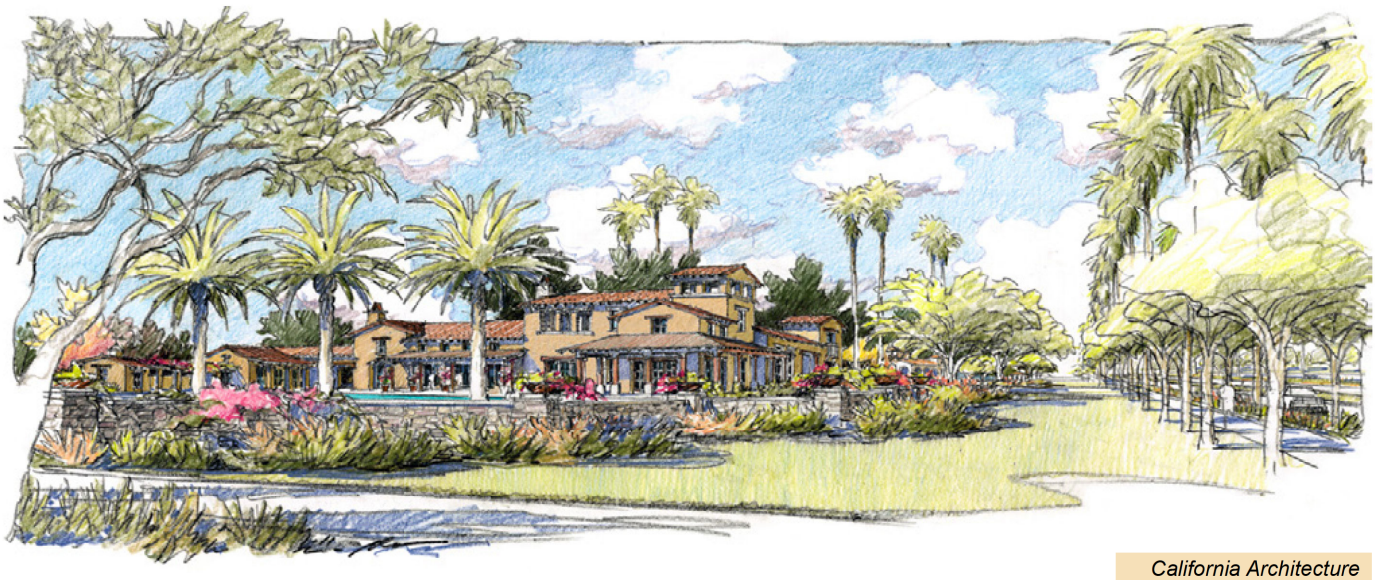
The Avenue SPECIFIC PLAN

Ontario Ranch ▪ Ontario, California

Exhibit 9 - Planning Areas/Developer Controlled/Ownership

Critical to the success of any community is the quality of the community spaces and proper integration into the community fabric. The Avenue's land plan is developed around a theme of recreation and open space amenities to enhance the quality of life. All parks (including the pool and splash play area) will be designed to meet all ADA and City accessibility standards. The Active Recreation Park site and recreation amenities will become more valuable in combination with the school sites as the synergy of active recreational, social and educational opportunities will address the diverse and changing needs of the community. The park and recreation design program has several major elements including multi use park sites, a recreation trail system and an aquatic sports facility.

The Avenue enjoys a well balanced plan of park locations interconnected by a clear pedestrian system. A majority of the residents can access the community parks and school sites with minimal vehicular road interface by utilizing the Avenue's pedestrian paths and parkways, the SCE easement, and flood control channel trails.

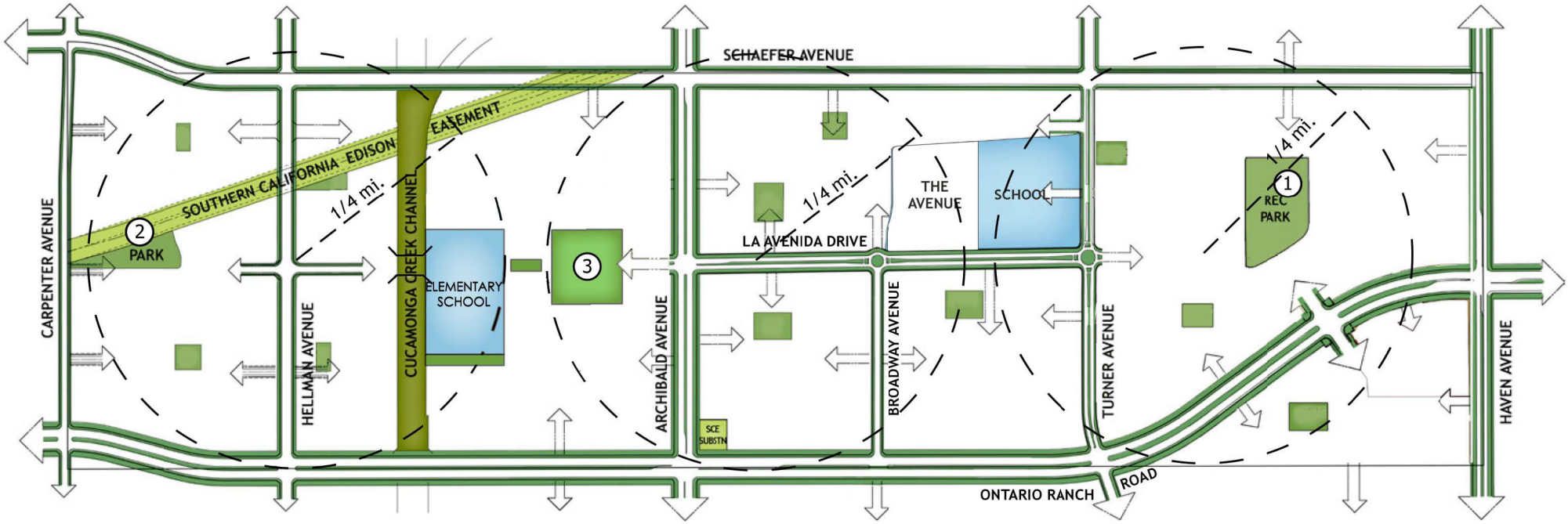


California Architecture

Neighborhood Park Sites

The park system includes approximately Thirteen (13) Neighborhood Parks that range in size. These are private parks and conceptual designs may include the following elements:

- Restrooms
- Picnic facilities
- Barbecues
- Basketball courts
- Sand volleyball courts
- Tot lot and pre-teen areas
- Gazebo and/or trellis structures
- Shade tree plantings with open turf areas for informal sport activities
- Drinking fountains



LEGEND

- ACTIVE RECREATION PARK
- NEIGHBORHOOD PARKS
- SCHOOLS
- 1/4 MILE (5-MINUTE WALK)
- DRAINAGE EASEMENT
- SCE EASEMENT
- STREETSCAPES
- EDGE OPEN SPACE

PARK AND RECREATION PROGRAM

1	RECREATION AREA:	7.0 AC
2	WESTERLY PARK:	1.5 AC
3	ACTIVE RECREATION PARK:	4.2 AC
	NEIGHBORHOOD PARKS:*	

NORTH

0 100 200 400 800

NOTE: The size and location of the parks are conceptual and will be determined as part of the tract map approval process.

* Per this Specific Plan each individual parcel will meet its park requirement based on City standards.

Parks and Open Space

Exhibit 11 - Typical Neighborhood Park 1

Conceptual Plan

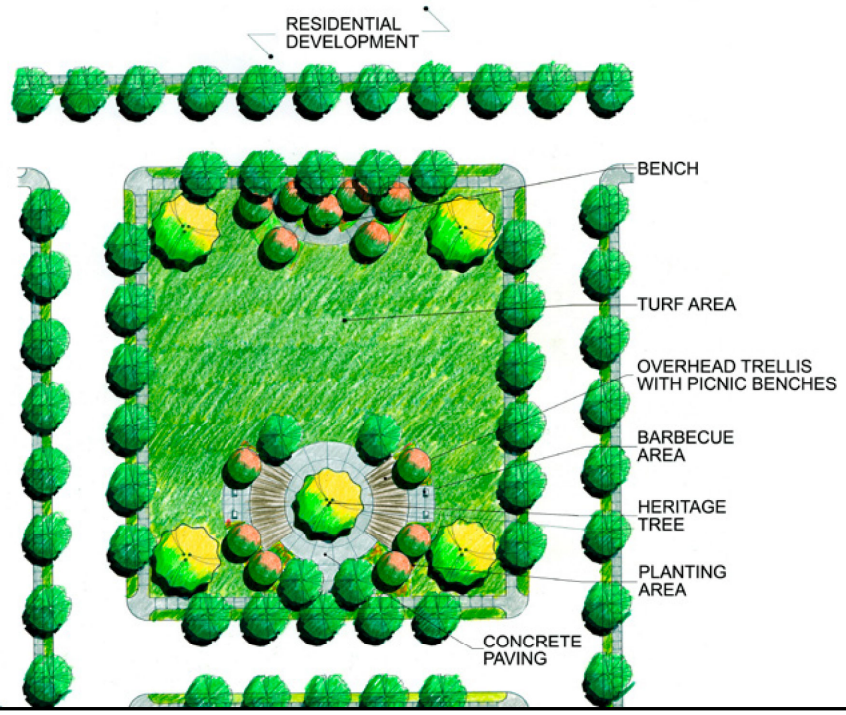
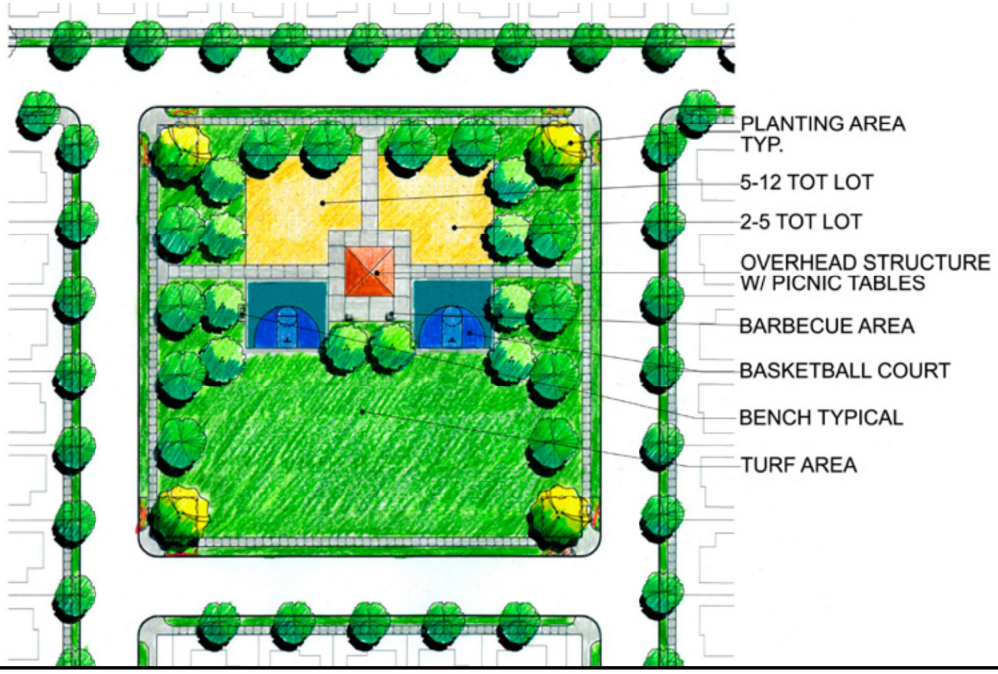


Exhibit 12 - Typical Neighborhood Park 2

Conceptual Plan

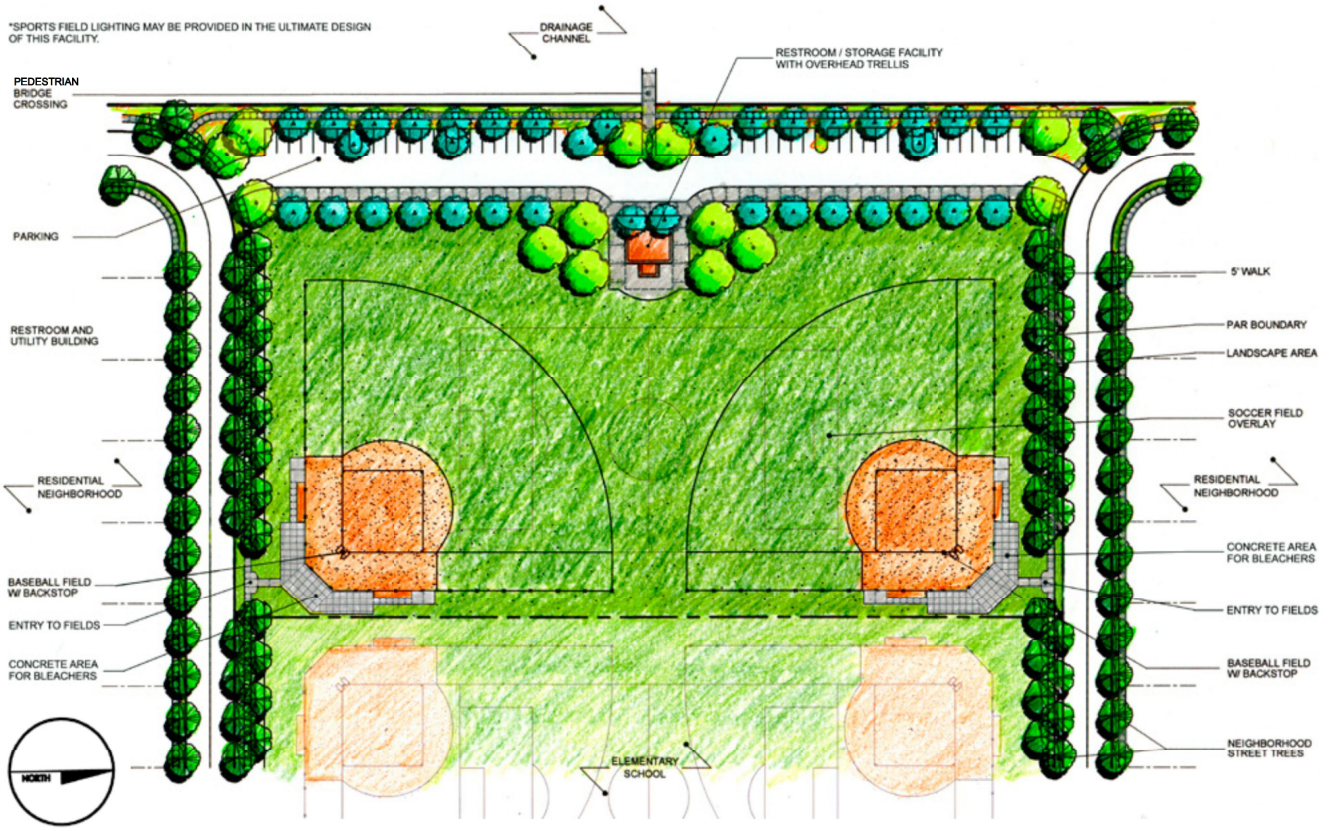


Active Recreation Park Site

The design maximizes the efficiency of organized sport league management by focusing, if feasible, on a particular field sport entity. As a public park, the school district will be encouraged to design site plans that complement park development to better meet community needs. The specific specialty sport uses provided in the park include a soccer/football field and baseball/softball fields that will be lit for security and evening use. Basketball and volleyball uses can be best accommodated on the school sites due to the large number of courts available.

Exhibit 13 - Typical Active Recreation Park

Conceptual Plan



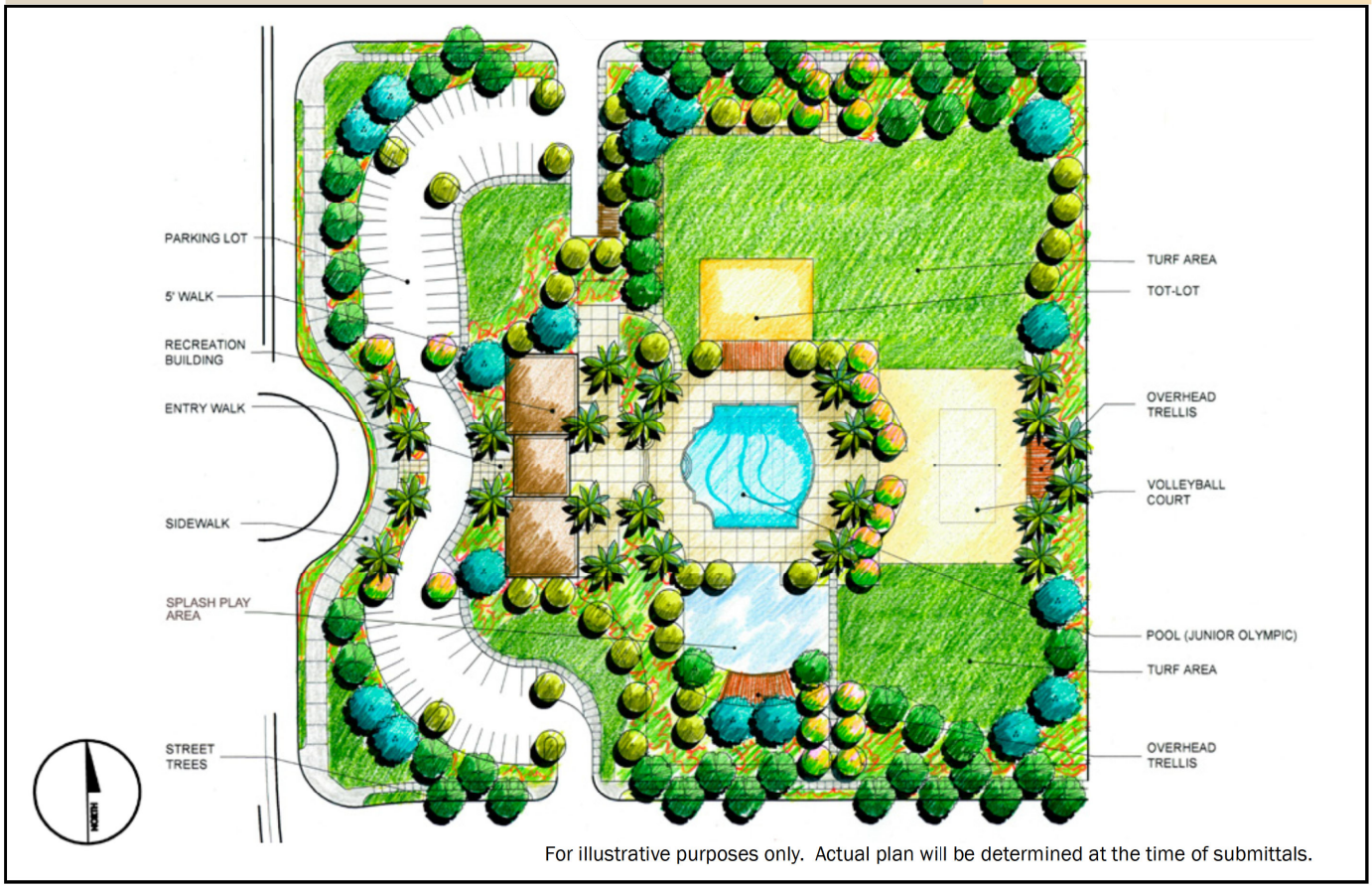
Recreation Areas

Opportunities for recreation centers will be provided within the Avenue. These recreation centers will be developed and maintained by the Homeowners Association, boundaries and location of which have yet to be determined.

The recreation centers may include, but not limited to, the following amenities:

- Clubhouse with Picnic facilities
- Gazebo and/or trellis structures
- Basketball courts
- Tot lot and pre-teen areas
- Shade tree plantings with open turf area for additional recreational activities
- Barbecues
- Swimming pool and splash park
- Sand volleyball courts
- Open play area
- Drinking fountains

Exhibit 14 - Typical Recreation Area



For illustrative purposes only. Actual plan will be determined at the time of submittals.

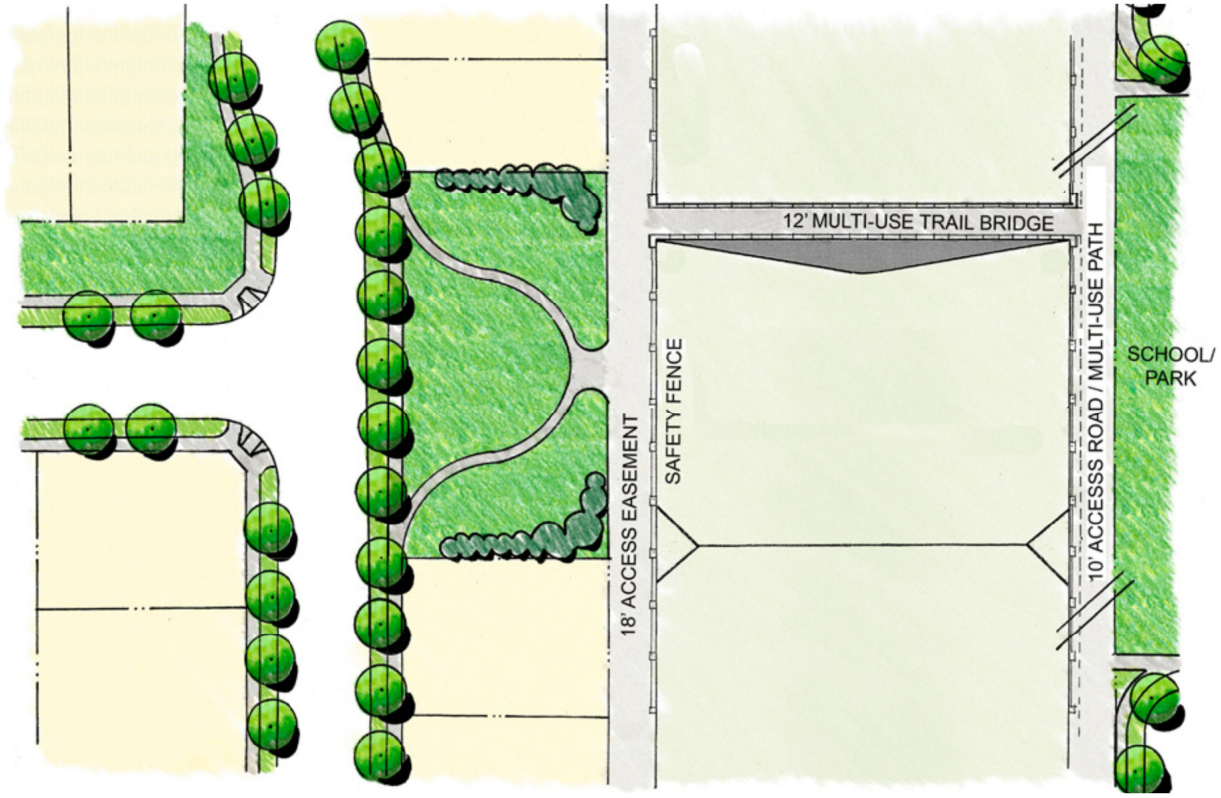
3.1.3 Schools

The Avenue Specific Plan provides two (2) school sites within the plan area to serve students both within the plan area and surrounding areas. A ten (10) acre elementary school site is centrally located west of Archibald Avenue in the western portion of the plan area. An additional ten (10) acre school site is located on the west side of Turner Avenue, south of Schaefer Avenue in the central portion of the plan area. Both school sites are easily accessible by multi-purpose path, sidewalks and interior roadways. The site plan will be determined by Mountain View School District. The school locations are shown in Exhibit 10, “Parks and Open Space” and in Exhibit 8, “Land Use Plan”.

In the event that the Mountain View School District chooses to build an elementary school at a different location outside of Planning Area 5, the designated school site in Planning Area 5 may be developed with residential uses. An SPA and GPA will need to be filed, and appropriate CEQA action undertaken if and at such time that the school decides to sell off the property. Upon this occurring, the total number of dwelling units will be increased for the specific plan with the approval of a Specific Plan Amendment (SPA).

In order to develop residential uses in lieu of a school in Planning Area 5, the developer shall be required to obtain a written confirmation from the Mountain View School District that it will not utilize the school site in Planning Area 5 for development of a school. The written confirmation will be submitted to the City of Ontario Planning Department along with any development application for the school site, which would require an amendment to the Specific Plan and General Plan, in addition to appropriate CEQA review.

A multi-use bridge for crossing Cucamonga Creek is conceptually located near the school to facilitate non-vehicular access from the neighborhoods west of Cucamonga Creek to the school. Lots will be pulled back away from the trail landing on the west side of the bridge to allow for good visibility and, therefore, safety and security of trail users. The graphic on this page is a conceptual layout to show a potential method of access and can be relocated or incorporated into another bridge crossing. Final location and design will be subject to approval by Planning Director.



Conceptual layout for the bike and pedestrian access to the multi-use path over Cucamonga Creek

3.1.4 Commercial/Retail

The Avenue Specific Plan will provide for the development of a 10 acre and a 15.04 acre commercial sites totaling 335,176 s.f. of commercial squarefootage. The 10 acre site is located on the southwest corner of Ontario Ranch Road and Haven Avenue. The 15.04 acre commercial site is located at the southwest corner of Schaefer Avenue and Archibald Avenue. The commercial sites have been located to provide vehicular access off the major arterial streets, minimizing traffic through the residential neighborhoods. The commercial sites will include a mix of retail and high density residential in order to locate a high number of residents within a short walk of retail services.

The Avenue Main Street District Concept

The commercial center at The Avenue is located at the southwest corner of Ontario Ranch Road and Haven. It is envisioned as an inviting suburban destination, not your typical neighborhood center or strip mall. The idea behind this commercial center is to provide a memorable and walkable center with strong architectural elements, public spaces and a complementary and diverse mix of residential uses surrounding the site.

The Experience – Main Street

The Main Street is envisioned to have a traditional feel with storefronts adjacent to wide sidewalks, plenty of on-street parking and inviting outdoor plazas. The shops along Main Street will provide an eclectic mix of smaller retail stores, coffee houses and restaurants. There are also pad buildings proposed near the major arterials to provide opportunities for other uses including but not limited to larger restaurants, drug store, in-line shops or a bank.

The Residential Program



The residential areas adjacent to the commercial center will play a crucial role in the vitality of the center. An intensification of the residential density surrounding the commercial area will provide a strong local consumer base to support the commercial uses. The Ontario Ranch Road corridor east of Turner is envisioned by the city as a mixed-use, higher intensity corridor that will provide employment and shopping among typically higher residential densities than found elsewhere at The Avenue. The Main Street District is a complementary use to the higher density residential and the District's pedestrian environment encourages residents to walk, therefore reducing vehicle trips.

Potential Residential Uses:

- Townhomes & Flats
- Apartments
- Senior Housing

Section 4 - Infrastructure and Services

4.1 Master Plan of Circulation

The proposed circulation plan for The Avenue Specific Plan provides for safe and efficient movement of vehicular traffic through the project, while also providing a safe environment for pedestrian movement and bicycle traffic, reducing the reliance on the automobile as a means of travel.

Access to The Avenue Specific Plan from surrounding areas is provided by Archibald Avenue bisecting the site in a north and south direction; also running in a north to south direction is Haven Avenue on the eastern boundary and Carpenter Avenue on the western boundary; running in an east to west direction is Ontario Ranch Road on the southern boundary and Schaefer Avenue on the northern boundary. Hellman Avenue bisects the site in a north to south direction between Archibald and Carpenter in the western portion of the plan area. Bus turnouts will be provided on Ontario Ranch Road, Schaefer Avenue, Haven Avenue, and Archibald Avenue to the satisfaction of the City Engineer and Omnitrans.

A primary interior circulation element for The Avenue Specific Plan is the central “La Avenida Drive” which features enhanced setbacks and travel lanes to allow for vehicle, bicycle, and pedestrian access linking residential areas with retail and commercial, recreational, and the school sites within the plan area. Improvements to non-Ontario Ranch streets will be made by the developer/applicant based on the data from the Environmental Impact Report and traffic study. The traffic study will also determine the additional right of way that may be needed at critical intersections to accommodate additional right and left turn lanes. The “Circulation Plan”, Exhibit 15, establishes the hierarchy and general location of these roadways within the plan area.

Streetscapes within The Avenue are critical in maintaining the perception of community theming, unification and quality. These common landscape areas link vehicular and pedestrian traffic to neighborhoods and community elements.

The streetscapes in The Avenue are treated as critical community spaces providing quality pedestrian and vehicular circulation ways including jogging and bicycle paths and well-buffered pedestrian walks. For pedestrian and vehicle safety, reflective street signs will be provided on all proposed streets within the City. Shrubs and low groundcovers from Ontario Ranch Streetscape Master Plan will be used to the greatest extent feasible to reduce maintenance, conserve resources and provide a buffered separation between pedestrian and vehicular traffic. The 8’ expanded sidewalks, at an enlarged width, are designed to provide a better travel way along La Avenida Drive.

Streetscape landscape treatments were developed to form a hierarchy of community importance and use characteristics. Landscaped parkways are enlarged beyond the city street right-of-way to reinforce this hierarchy consistent with the pathway system, residential orientation, and traffic volumes. These “landscape edges” are indicated on the streetscape sections.

La Avenida Drive's design concept is focused on the use of earth tone materials and colors, meandering drifts and groves of plant material and trees and the limited but appropriate use of turf. Soldiered trees are at a uniform spacing reinforcing the linear design of the vehicular circulation system to provide a welcoming feel to those entering the community.

The unique and vital streetscape concept for La Avenida Drive is focused on the treatment of the divided collector streetscape cross section. The design of the streetscape provides a strong and significant landscape while providing pedestrian pathway choices for residents.

Although The Avenue is designed for maximum benefit of the community residents, the overall plan provides convenient access points to allow vehicles to maximize road travel on the perimeter urban arterials and neighborhood collectors instead of La Avenida Drive. This is intended to reduce interior traffic and maximize resident, pedestrian, and bicycle enjoyment of the streetscapes.

Ontario Ranch Road, Schaefer Avenue, Haven Avenue, and Archibald Avenue streetscapes are designed to provide additional landscape area beyond the street right-of-way. The Avenue is planned to focus internally. These perimeter streetscapes will allow reasonable buffering along with the appropriate landscape treatments to properly introduce the community while maintaining consistency along the overall arterial streetscape.

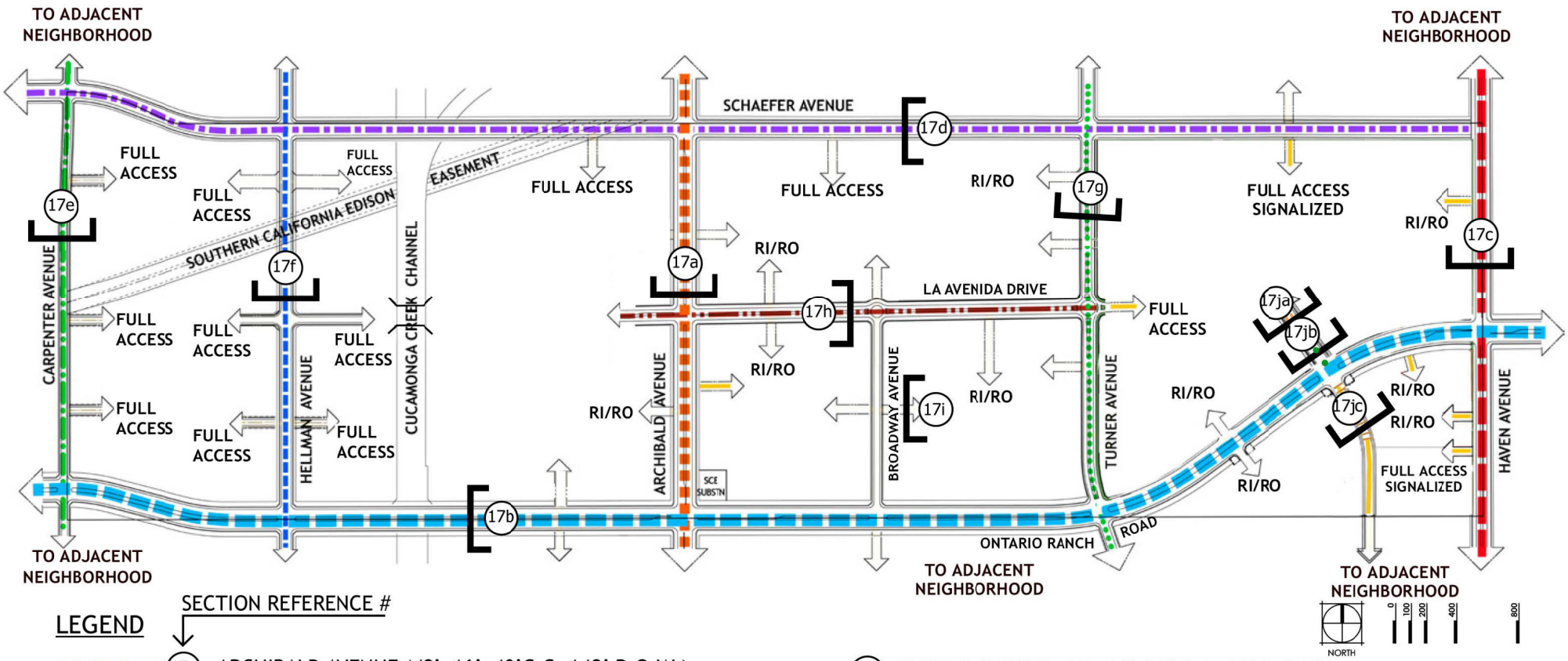
Carpenter Avenue and Hellman Avenues are north/south trending collectors while Turner Avenue is a north/ south trending divided collector all which contain relatively balanced landscape zones beyond their respective right-of-ways. These collectors provide access to community facilities, recreation areas, school sites, the retail center and the arterial avenues of Schaefer, Ontario Ranch Road, Haven, and Archibald.

4.1.1 Street Plans and Sections

Primary access to The Avenue Specific Plan is provided by seven (7) major Avenues: Ontario Ranch Road, Haven, Schaefer, Turner, Hellman, Carpenter and Archibald Avenues. Within the plan area public streets of varying design will provide access to the residential, commercial, school, and park areas.



Pedestrians on The Avenue



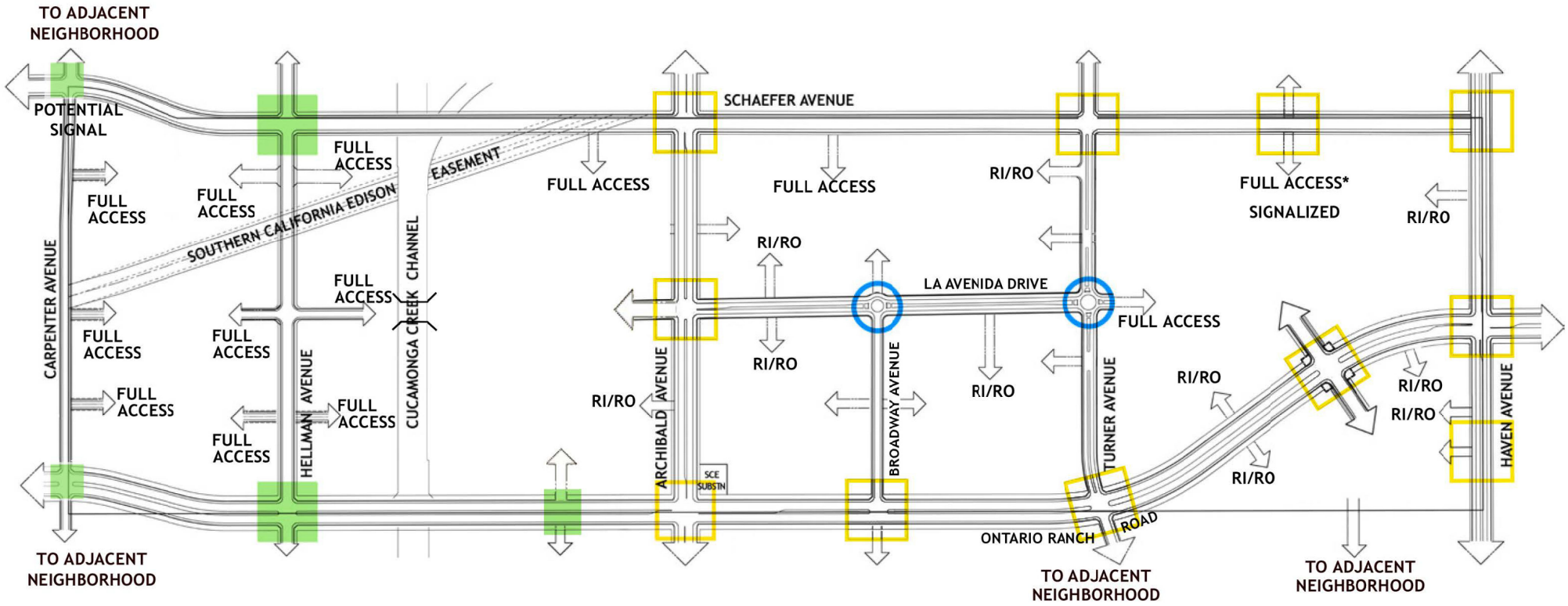
LEGEND

SECTION REFERENCE #

- 17a ARCHIBALD AVENUE (40'+16'+40'C-C, 148' R.O.W.)
- 17b EDISON AVENUE (52'+26'+52'C-C, 160' R.O.W.)
- 17c HAVEN AVENUE (28'+16'+28'C-C, 124' R.O.W.)
- 17d SCHAEFER AVENUE (84' C-C, 108-' R.O.W.)
- 17e CARPENTER AVENUE (40' C-C, 66' R.O.W.)
- 17f HELLMAN AVENUE (64' C-C, 88' R.O.W.)
- 17g TURNER AVENUE (21'+14'+21' C-C, 80' R.O.W.)
- 17h THE AVENUE (28'+16'+28' C-C, 124' R.O.W.)
- 17i NEIGHBORHOOD ENTRY STREET (36' C-C, 60' MIN R.O.W.)
- 17ja NEIGHBORHOOD ENTRY STREET W/ MEDIAN (50' C-C, 74' MIN R.O.W.)
- 17jb NEIGHBORHOOD ENTRY STREET W/ MEDIAN (60' C-C, 84' MIN R.O.W.)
- 17jc NEIGHBORHOOD ENTRY STREET W/ MEDIAN (60' C-C, 84' MIN R.O.W.)

NOTE: C-C = Curb-to-Curb; R.O.W. = Right-of-Way; The location of access points is conceptual. Precise locations will be determined as part of the tract map process. The Neighborhood Entry Streets at the westerly termination of the Avenue adjacent to the school site shall be 40' C-C, 66' R.O.W. While the alignment of roads is conceptual, The Avenue shall maintain the straight, linear configuration. *The intersection legs to the north and south of Schaefer Avenue shall be aligned. Final location of the intersection shall be determined with approval of the maps for developments on the north and south of Schaefer Avenue. No sidewalk improvements on the north side of Schaefer Avenue between Haven Avenue and Hellman Avenue.

Circulation Plan



LEGEND

- ROUNDABOUT
- NEW SIGNALIZED INTERSECTION
- EXISTING SIGNALIZED INTERSECTION (TO BE MODIFIED)

NORTH 0 100 200 400 800

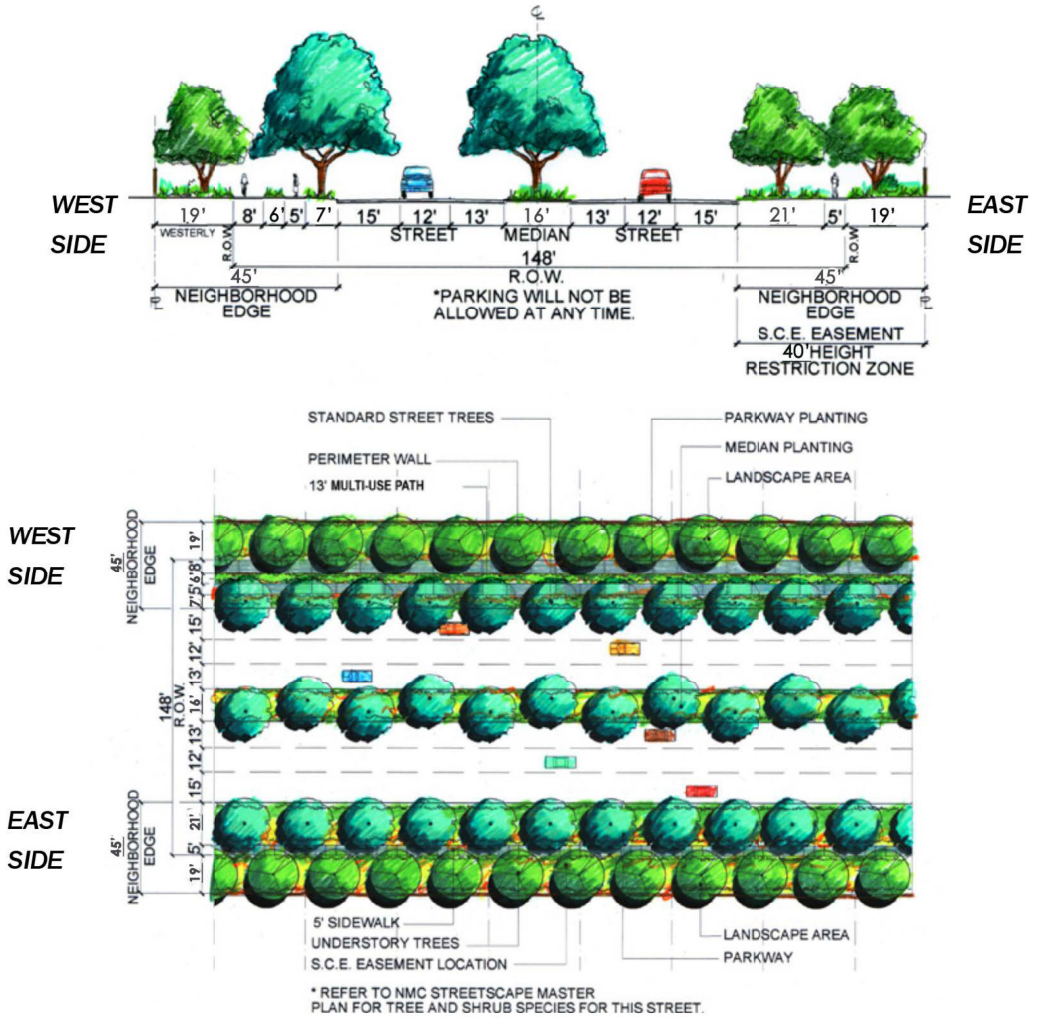
NOTE: The locations of entry points is conceptual. Precise locations will be determined as part of the tract map process.
*The intersection legs to the north and south of Schaefer Avenue shall be aligned. Final location of the intersection shall be determined with approval of the maps for developments on the north and south of Schaefer Avenue.

Entries and Signalization

Archibald Avenue

Archibald Avenue bisects The Avenue Specific Plan in a north/south direction in the central portion of the plan area. Archibald Avenue is designated as a "Principal Arterial" with a total right of way of 148 feet with 80 feet of paved travel area separated by a 16-foot wide raised median. There are 19-foot wide landscape lots on both sides of the street serving as a buffer between homes and the right-of-way. The west side of the street has a 13-foot multi-use path (5' sidewalk may be divided from the 8' expanded sidewalk at the discretion of the City) separated from the street by a 13-foot landscaped parkway. The east side of the street has a 5-foot sidewalk separated from the street by a 21-foot landscaped parkway. Along Archibald Avenue, bus turnouts will be located to the satisfaction of the City Engineer and Omnitrans. The developer will be responsible for those improvements to Archibald Avenue as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project. The Archibald Avenue cross-section is illustrated below:

Exhibit 17a - Archibald Avenue - Principal Arterial



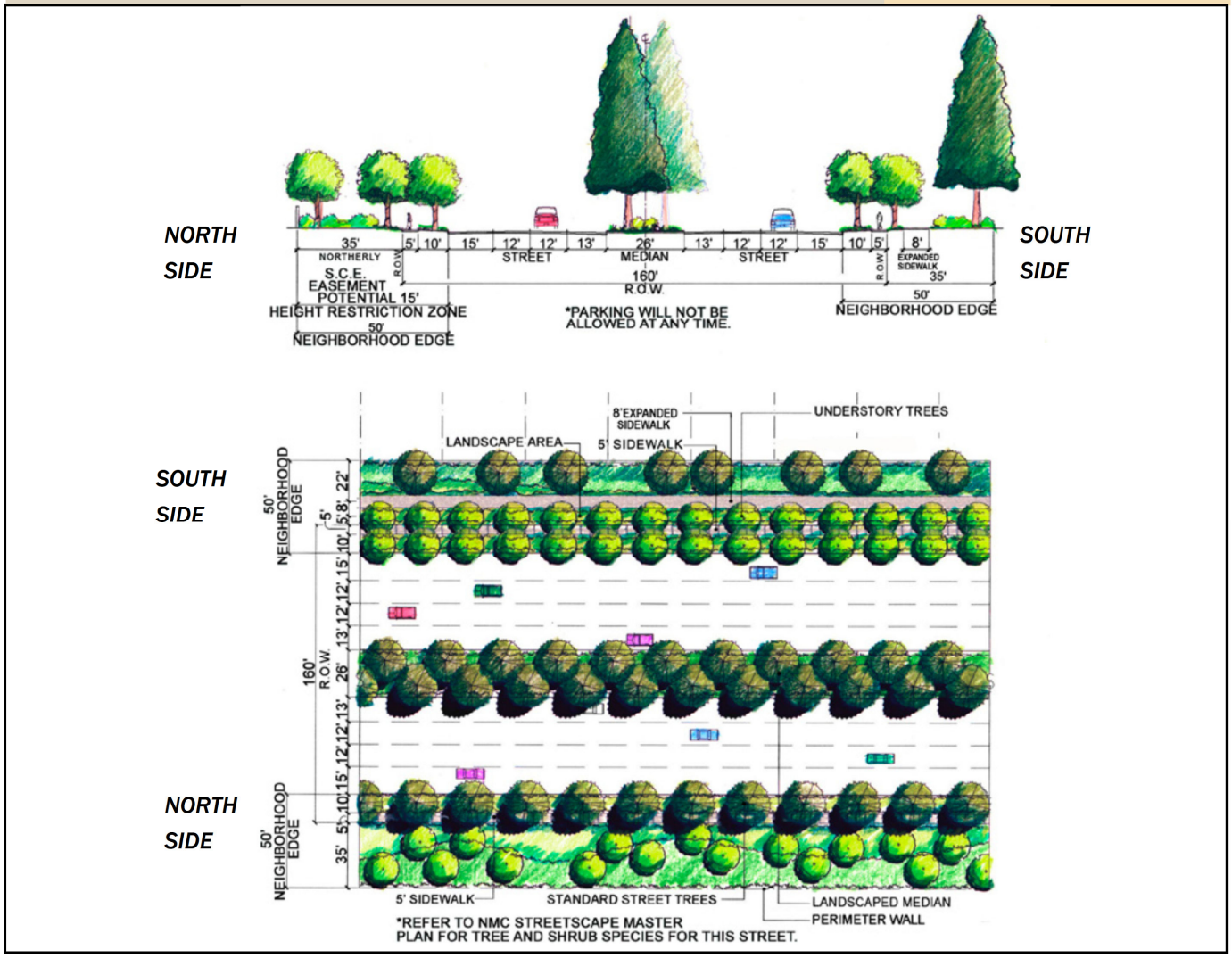
Note: This section and the 45' neighborhood edge for Archibald Avenue is applicable North of Ontario Ranch Road within the Avenue Specific Plan frontage only and neighborhood edge to the South of Ontario Ranch Road will remain at 50'

Ontario Ranch Road

Ontario Ranch Road is designated as "Principal Arterial" and borders the plan area on the south. Ontario Ranch Road has a total right-of-way of 160 feet with 104 feet of paved travel area separated by a 26-foot wide raised median.

Along Ontario Ranch Road, bus turnouts will be located to the satisfaction of the City Engineer and Omnitrans. A 50-foot landscape edge on both sides of the street contains a 35-foot landscape buffer with a 5-foot sidewalk separated from the street by a 10-foot landscaped parkway and a multi-use path on the south. The S.C.E. Easement exists within the northerly 50-foot Landscape Edge and may be relocated within the Landscape Edge in the future. The developer will be responsible for those improvements to Ontario Ranch Road as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project. The Ontario Ranch Road cross-section is illustrated below:

Exhibit 17b - Ontario Ranch Road - Principal Arterial

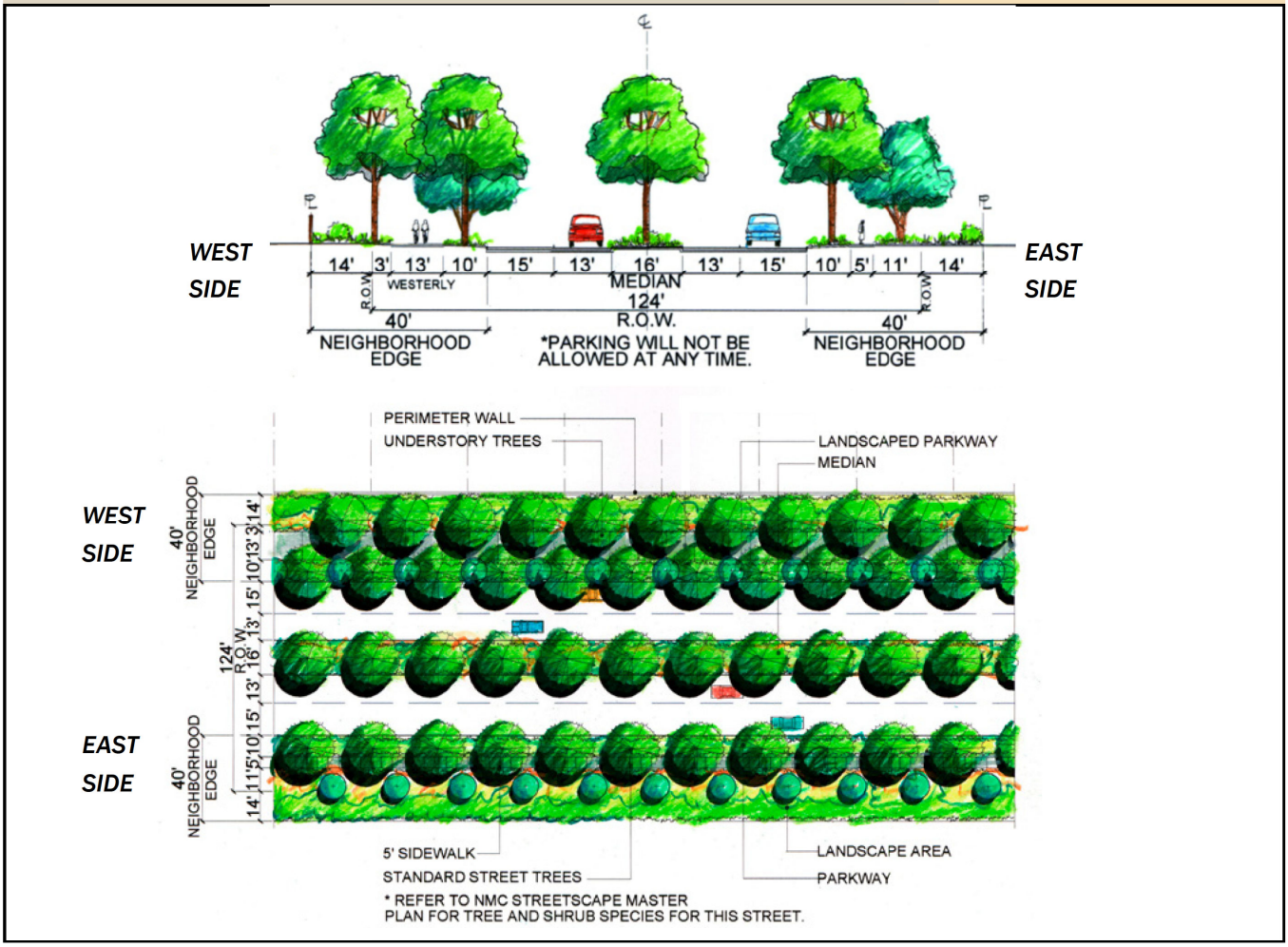


Haven Avenue

Haven Avenue is designated as "Principal Arterial" and borders the plan area on the east. Haven Avenue has a total right-of-way of 124 feet, with 56 feet of paved travel area separated by a 16-foot wide raised median.

The west side of the street has a 40-foot Neighborhood Edge with 14 feet of landscape buffer between the property line and the right-of-way. Along Haven Avenue, bus turnouts will be located to the satisfaction of the City Engineer and Omnitrans. A 13-foot multi-use path (5' sidewalk may be divided from the 8' expanded sidewalk at the discretion of the City) that is separated from the street by a 10-foot parkway and an additional 3 feet of landscape to the right-of-way edge. The east side of the street also has a 40-foot landscape edge with 14 feet of landscape buffer to the right-of-way. A 5-foot sidewalk is separated from the street by a 10-foot parkway and the right-of-way by an additional 11 feet of landscape. The developer will be responsible for those improvements to Haven Avenue as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project. The Haven Avenue cross-section is illustrated below:

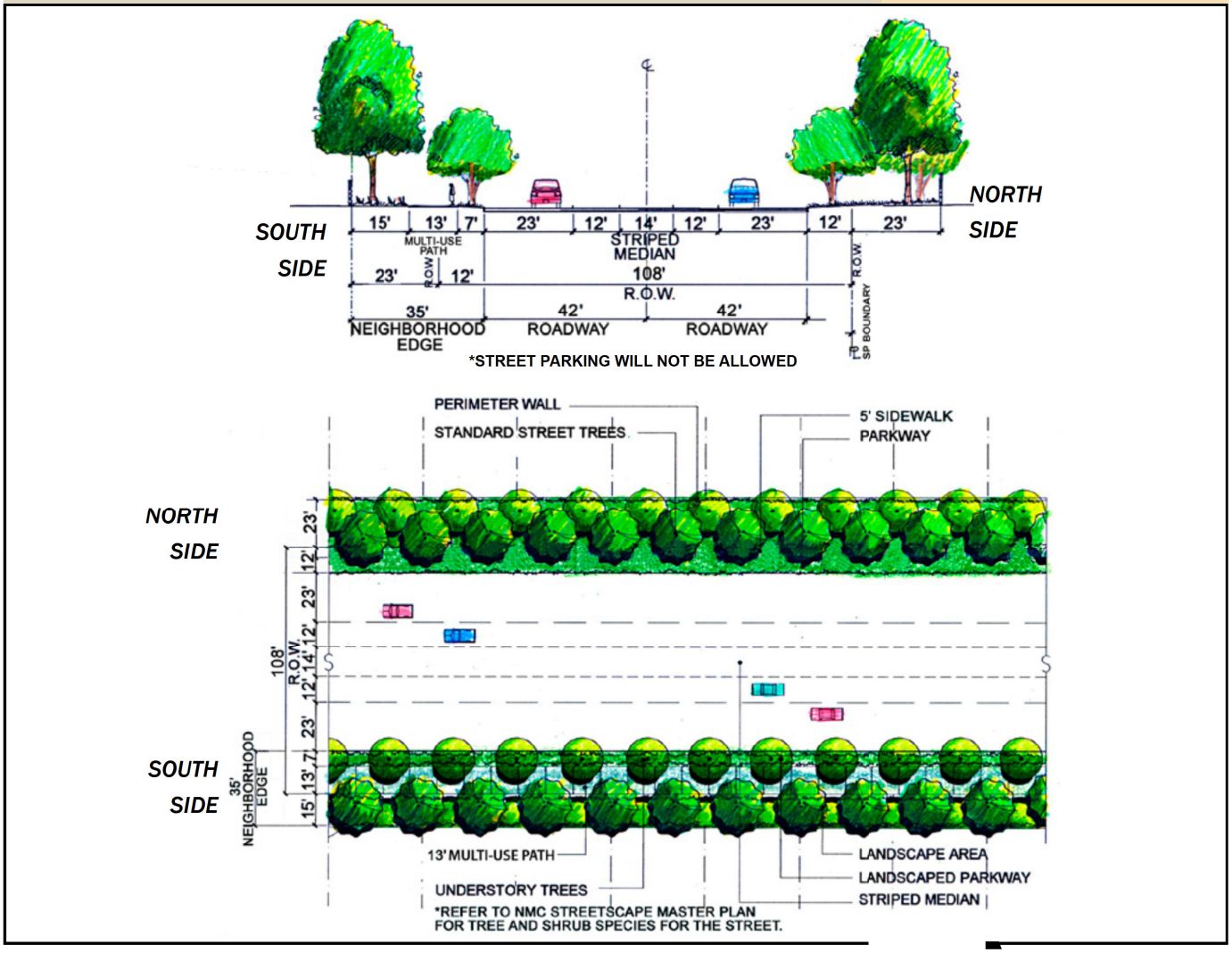
Exhibit 17c - Haven Avenue - Principal Arterial



Schaefer Avenue

Schaefer Avenue is designated as "Collector" and borders the plan area on the north. Schaefer Avenue has a total right-of-way of 108 feet with 84 feet of paved travel area. Along Schaefer Avenue, bus pads will be located to the satisfaction of the City Engineer and Omnitrans. The south side of Schaefer has a 35-foot neighborhood edge. The Neighborhood Edge is comprised of 12 feet of street right-of-way and an adjacent 23-foot wide landscape lot. The Neighborhood Edge includes a 13-foot multi-use path, including 5-foot sidewalk, separated from the street by a 7-foot parkway. The north side of Schaefer will have a 23 -foot wide landscape lot adjacent to a 12-foot parkway. The dedication and improvements of the 23 -foot wide landscape lot to the north of the Project boundary is not a part of The Avenue Specific Plan Requirements. The developer will be responsible for those improvements to Schaefer Avenue as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project. The Schaefer Avenue cross-section is illustrated below:

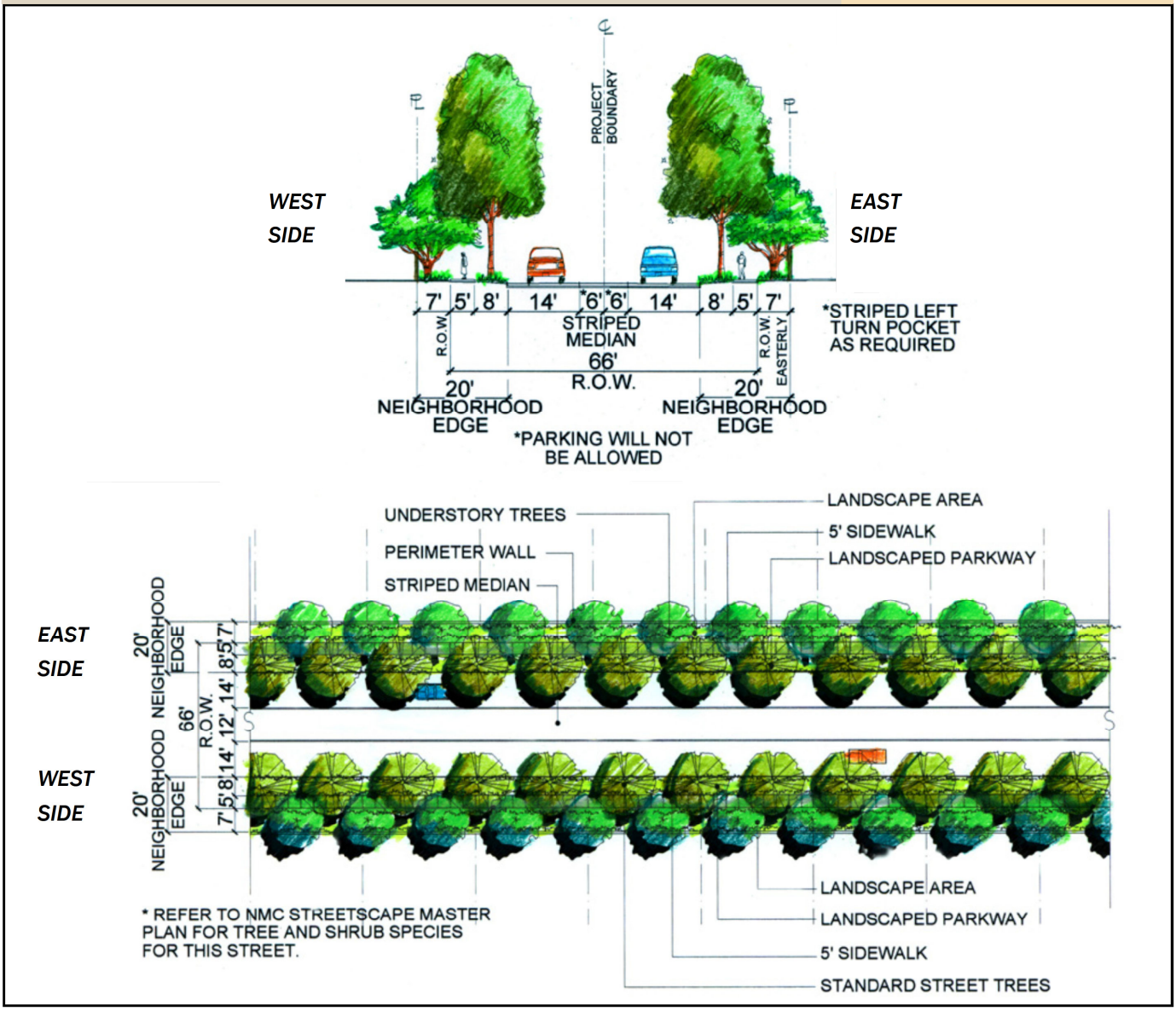
Exhibit 17d - Schaefer Avenue - Collector



Carpenter Avenue

Carpenter Avenue is designated as a "Primary Local Street" running in a north/south direction whose centerline forms the western project boundary. It has a total right-of-way of 66 feet with 40 feet of paved travel area. There is a 5-foot sidewalk separated from the street by a 8-foot landscaped parkway on each side of the street. In addition, there is an 7-foot wide landscape lot adjacent to both sides of the street. The developer will be responsible for those improvements to Carpenter Avenue as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project. The Carpenter Avenue cross-section is illustrated below:

Exhibit 17e - Carpenter Avenue - Primary Local Street

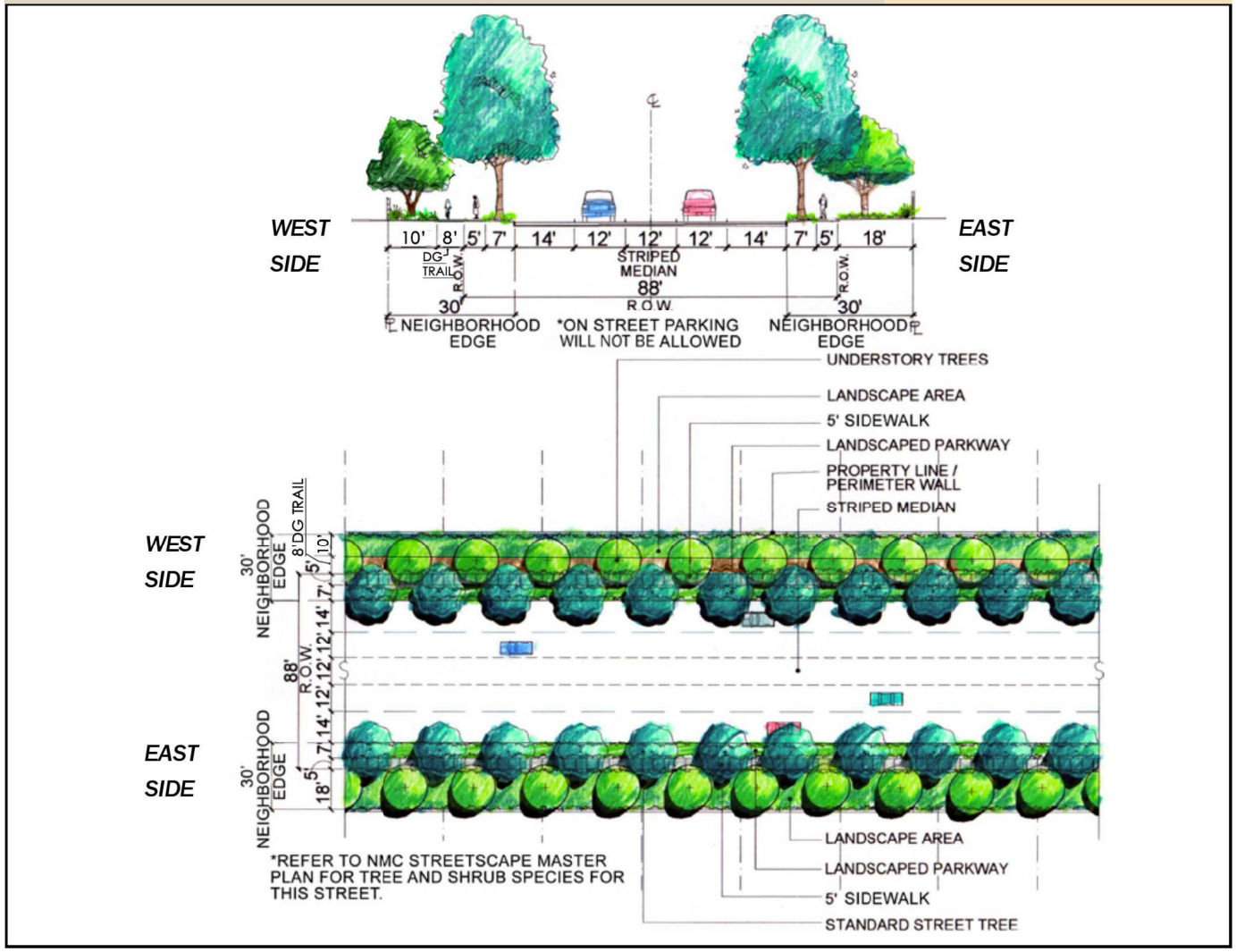


Hellman Avenue

Hellman Avenue is designated as "Collector: and bisects the plan area in a north/south direction in the western portion. Hellman Avenue has a total right-of-way of 88 feet with 64 feet of paved travel area. There is a 12-foot parkway on each side of the street which includes a 5-foot sidewalk separated from the street by a 7-foot landscaped parkway. In addition, there is an 18-foot wide “landscaped lot” adjacent to both sides of the street. The "landscape lot" to the west side of Hellman Avenue will include a 8-foot decomposed granite trail.

The developer will be responsible for those improvements to Hellman Avenue as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project. The developer will be responsible for those improvements to Hellman Avenue as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project. The Hellman Avenue cross-section is illustrated below:

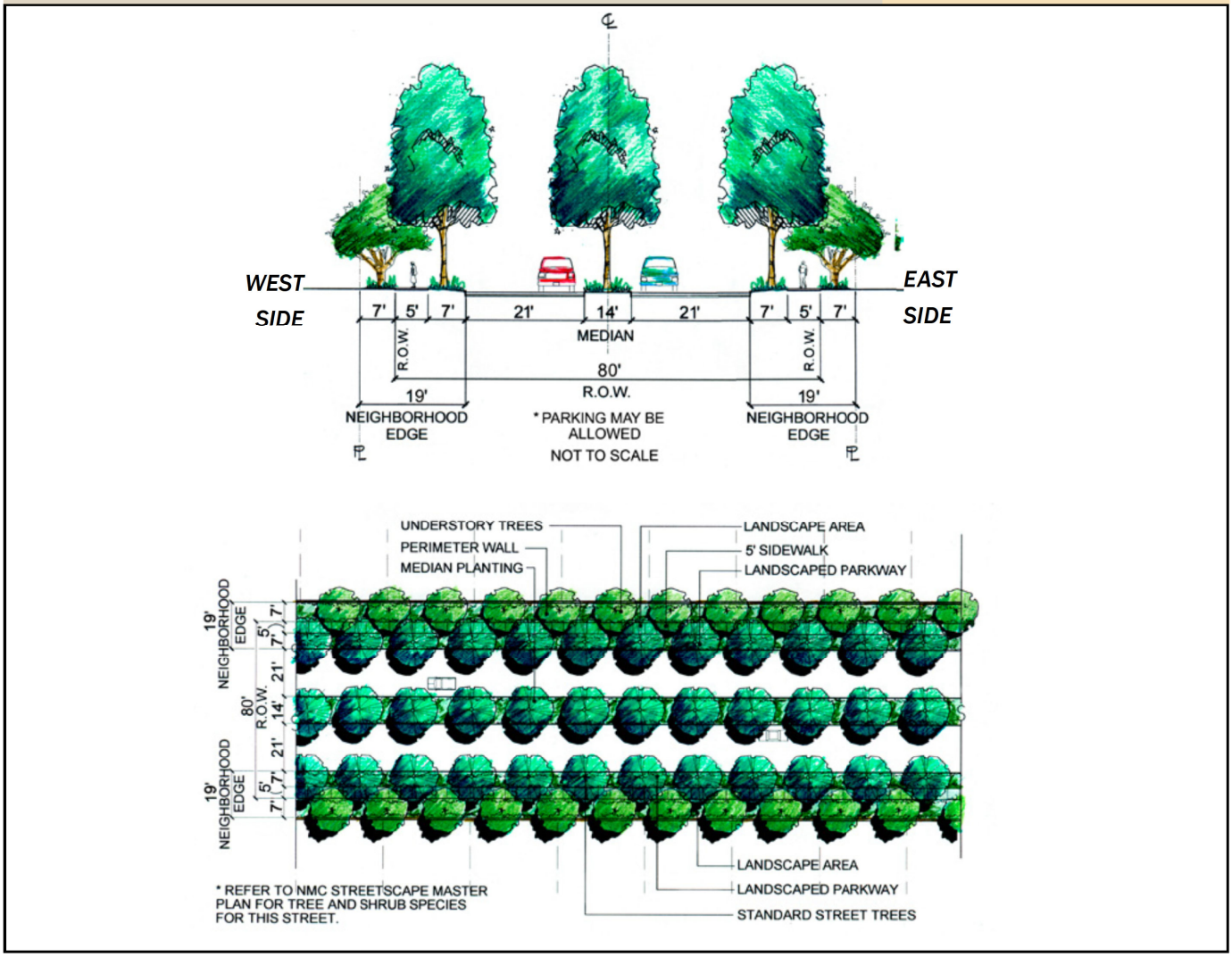
Exhibit 17f - Hellman Avenue - Collector



Turner Avenue

Turner Avenue is designated as "Divided Primary Local Street" and bisects the plan area in a north/south direction in the eastern portion. Turner Avenue has a total right-of-way of 80 feet through the Specific Plan Area, with a 14-foot landscaped median separating two paved 21-foot travel lanes. The east and west sides of the street includes a 5-foot sidewalk separated from the street by a 7-foot landscaped parkway. The final roadway section will be determined by the City Engineer. The developer will be responsible for those improvements to Turner Avenue as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project. Turner Avenue shall be constructed such that the westerly curb and gutter shall be located completely off Assessor's Parcel Number 218-201-19 with the parkway and neighborhood edge on the west side to be deferred until such time APN: 218-201-19 develops in accordance with The Avenue Specific Plan.

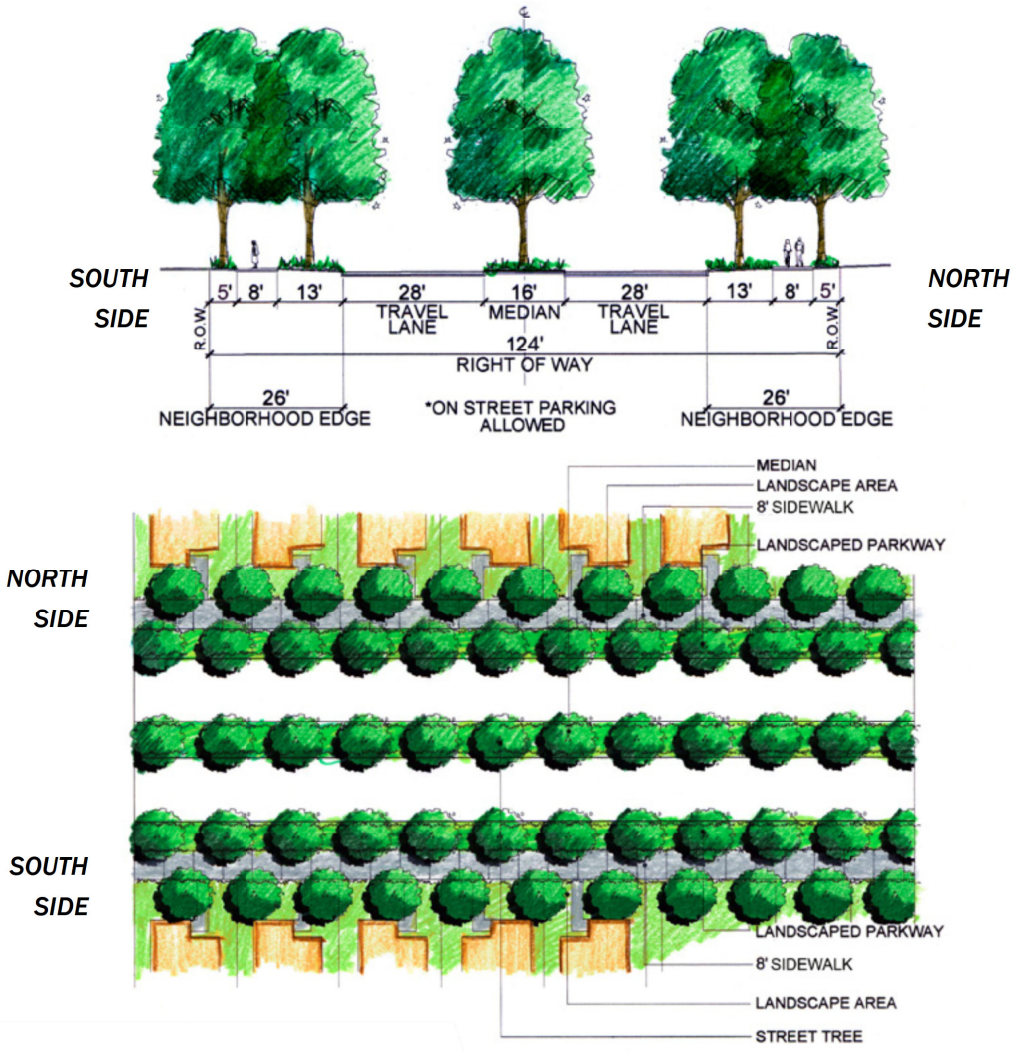
Exhibit 17g - Turner Avenue - Divided Primary Local Street



La Avenida Drive

La Avenida Drive, designated as a "Divided Primary Local Street", is a centrally-located avenue connecting community amenities to the residential neighborhoods. La Avenida Drive has a total right-of-way of 124 feet with two 28-foot one-way avenues with on-street parking, separated by a 16-foot wide raised median. This pedestrian oriented street, with generously landscaped median and parkways, links the recreation areas, schools and parks. La Avenida Drive presents a strong image, emphasizing homes fronting along the street with an 8-foot expanded sidewalk on both sides of the street separated by 13-foot landscaped parkways and 5-foot landscape lots. The developer will be responsible for those improvements to La Avenida Drive as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project. No portion of La Avenida Drive right of way or neighborhood edge shall be located on the property identified as Assessor's Parcel Number 218-201-19.

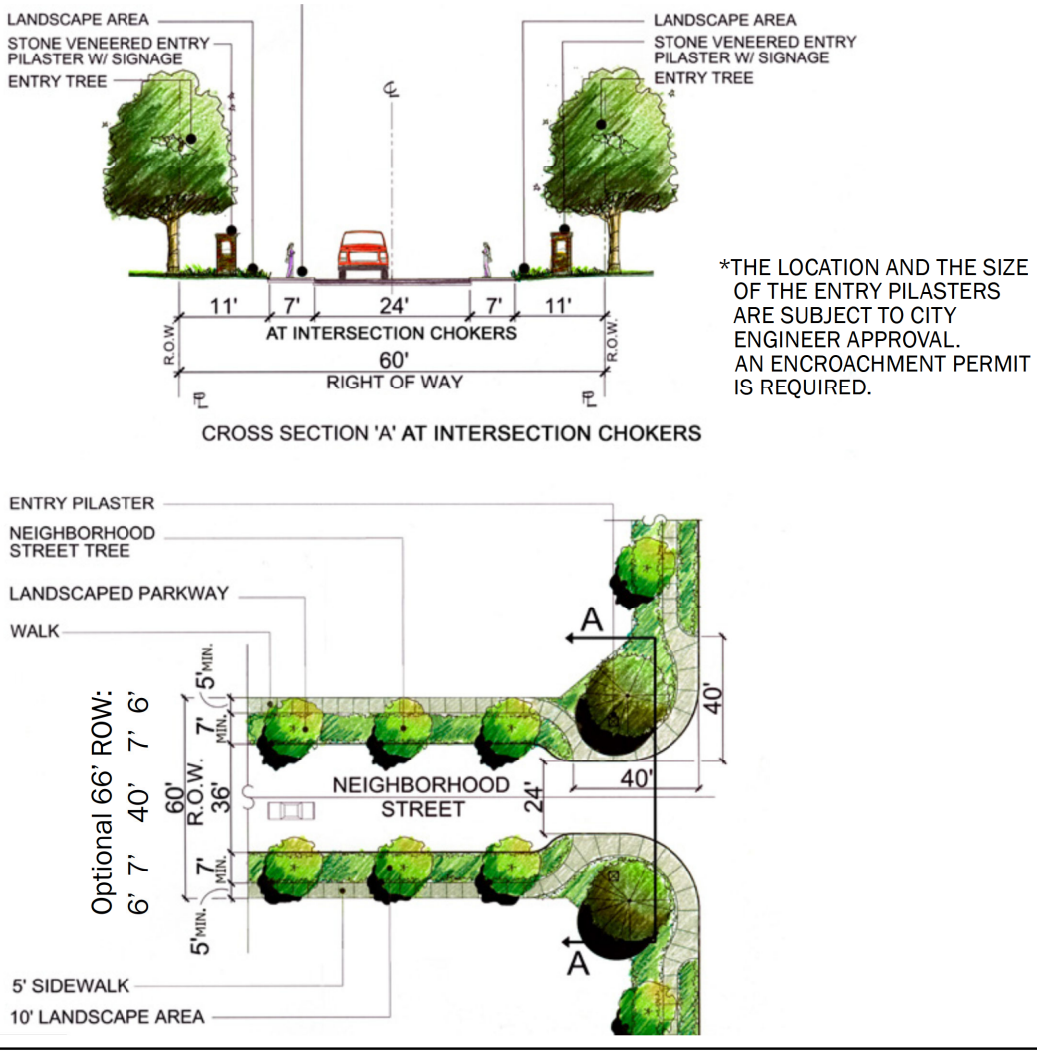
Exhibit 17h - La Avenida Drive - Divided Primary Local Street



Neighborhood Entry Street

Neighborhood Entry Streets are designed to distribute vehicular traffic from the arterial and collector streets into the residential neighborhoods. These streets have a 60 foot minimum total right-of-way with 36 feet of paved travel area. There is a 12-foot wide parkway within the right-of-way which provides for a minimum 5-foot wide sidewalk separated from the street by a minimum 7-foot wide landscaped area. The developer will be responsible for those improvements to Neighborhood Entry Streets as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project. The Neighborhood Entry Street cross-section is illustrated below:

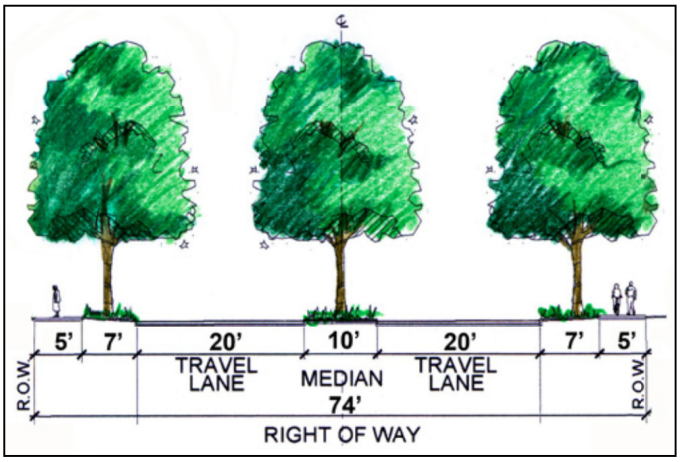
Exhibit 17i - Neighborhood Entry Street

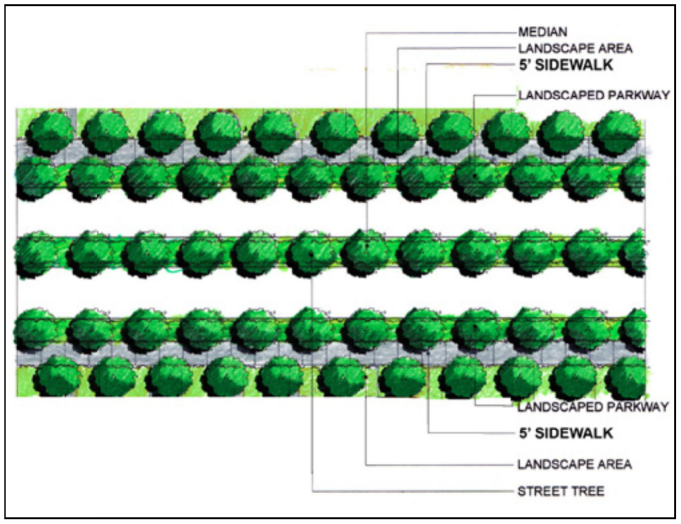


Neighborhood Entry Street With Median

The Neighborhood Entry Street With Median is designed to distribute vehicular traffic from Ontario Ranch Road into the residential neighborhood. Section 17ja has a 74 foot minimum total right-of-way with 40 feet of paved travel area split by a 10-foot landscaped median. There is a 12-foot wide parkway within the right-of-way which provides for a 5-foot wide sidewalk separated from the street by a 7-foot wide landscaped area. Section 17jb has an 84-foot right-of-way with two 20 foot travel lanes, split by a 10' landscaped median and 10 foot turn lane for southbound motorists wishing to turn left onto Ontario Ranch Road. Each side of Section 17jb contains a 5 foot sidewalk and 7 foot parkway. Section 17jc also has an 84 foot right-of-way containing two 20 foot travel lanes. There is a 10 foot turn lane for northbound motorist wishing to turn left onto Ontario Ranch Road. This 10 foot turn lane is flanked by a 4 foot landscape median and a 6 foot striped zone. Each side of Section 17jc also contains a 5 foot sidewalk and 7 foot parkway.

Exhibit 17ja - Neighborhood Entry Street with Median





The final roadway section widths will be determined by the City Engineer based on the need for intersection left and/or right turn lanes. The developer will be responsible for those improvements to Neighborhood Entries as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project. The Neighborhood Entry Street with Median cross-section is illustrated below:

Exhibit 17jb - Neighborhood Entry Street with Median - Southbound

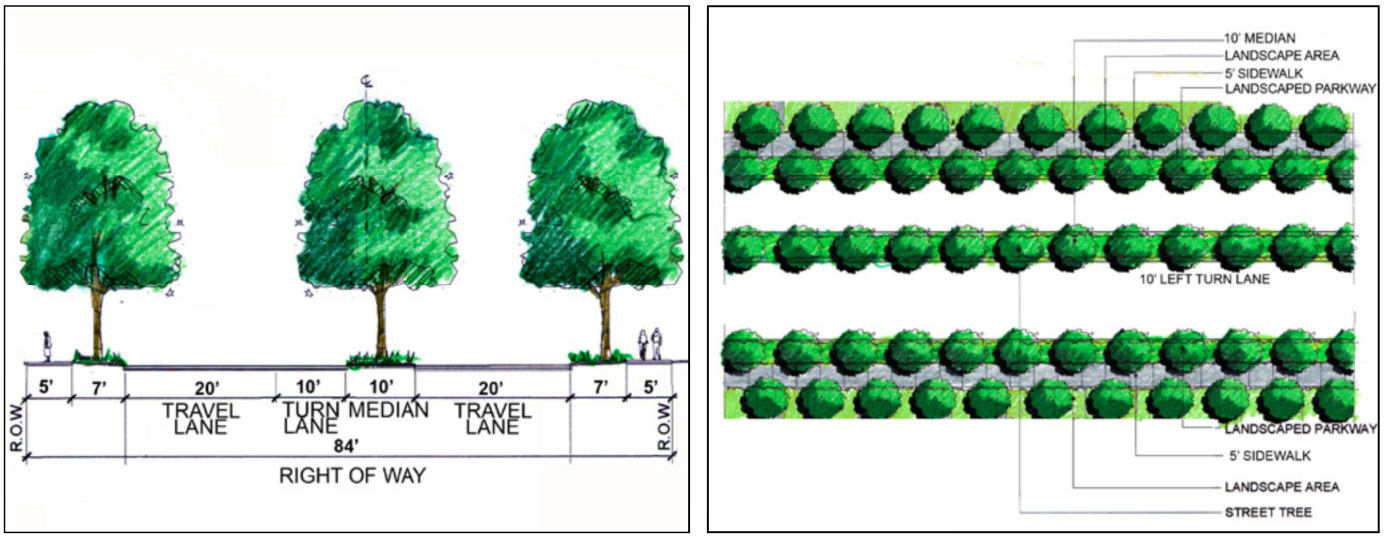
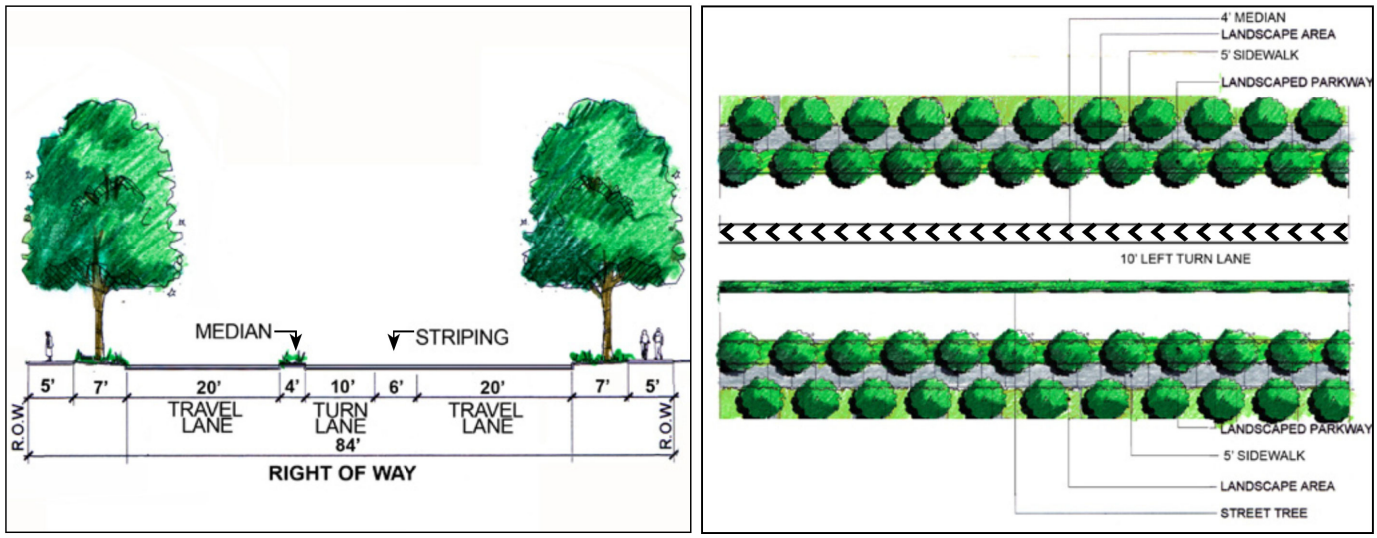


Exhibit 17jc - Neighborhood Entry Street with Median - Northbound *(South of Ontario Ranch Road)*

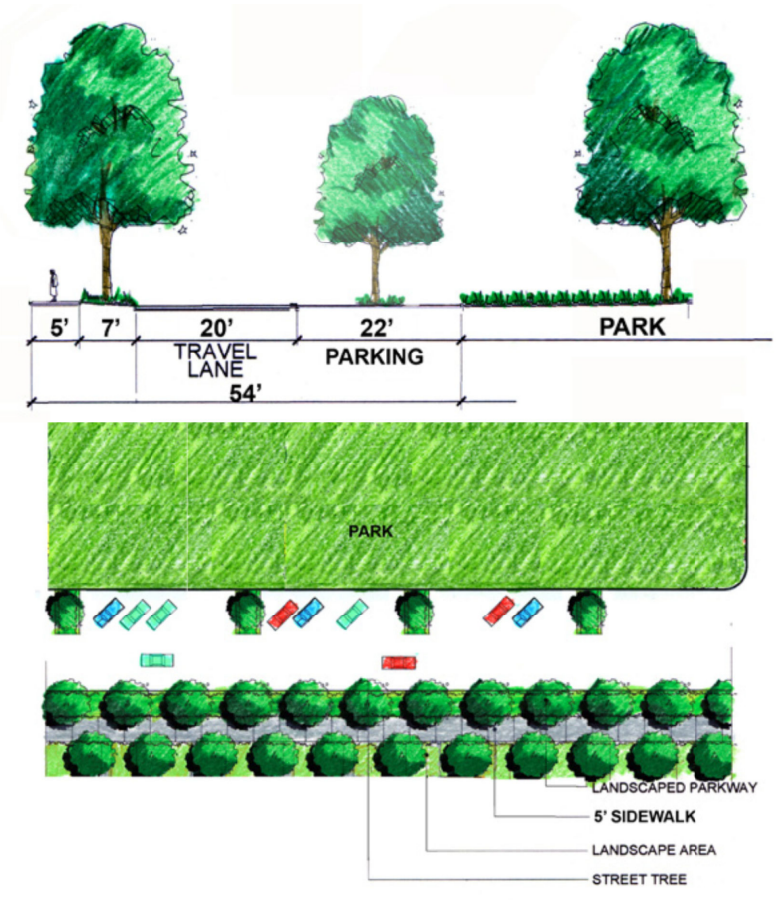


Neighborhood Park Adjacent Street

The Park adjacent street is a 20-foot clear paveway and 3-foot concrete gutter for one-way circulation around the park. This narrow section does not allow on-street parking in order to allow a clearer view from the homes to the park, better visibility of pedestrians and a minimum 20-foot clear for emergency vehicles. On the park side of the street angled parking is provided outside of the 20-foot right of way between the corners of the park.

Within each row of parking spaces, landscape islands shall be placed to prevent more than 10 vehicles from being parked side-by-side in an abutting configuration. Planter islands for a single row of parking spaces shall be landscaped with at least one (1) tree and vegetative groundcover. The side of the street adjacent to homes will have a 7-foot landscaped area and 5-foot sidewalk as indicated below and the developer will be responsible for those improvements to Neighborhood Streets as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project. This street type applies to Planning Area 10A only. The Neighborhood Park Adjacent Street is illustrated below:

Exhibit 17k - Neighborhood Park Adjacent Street

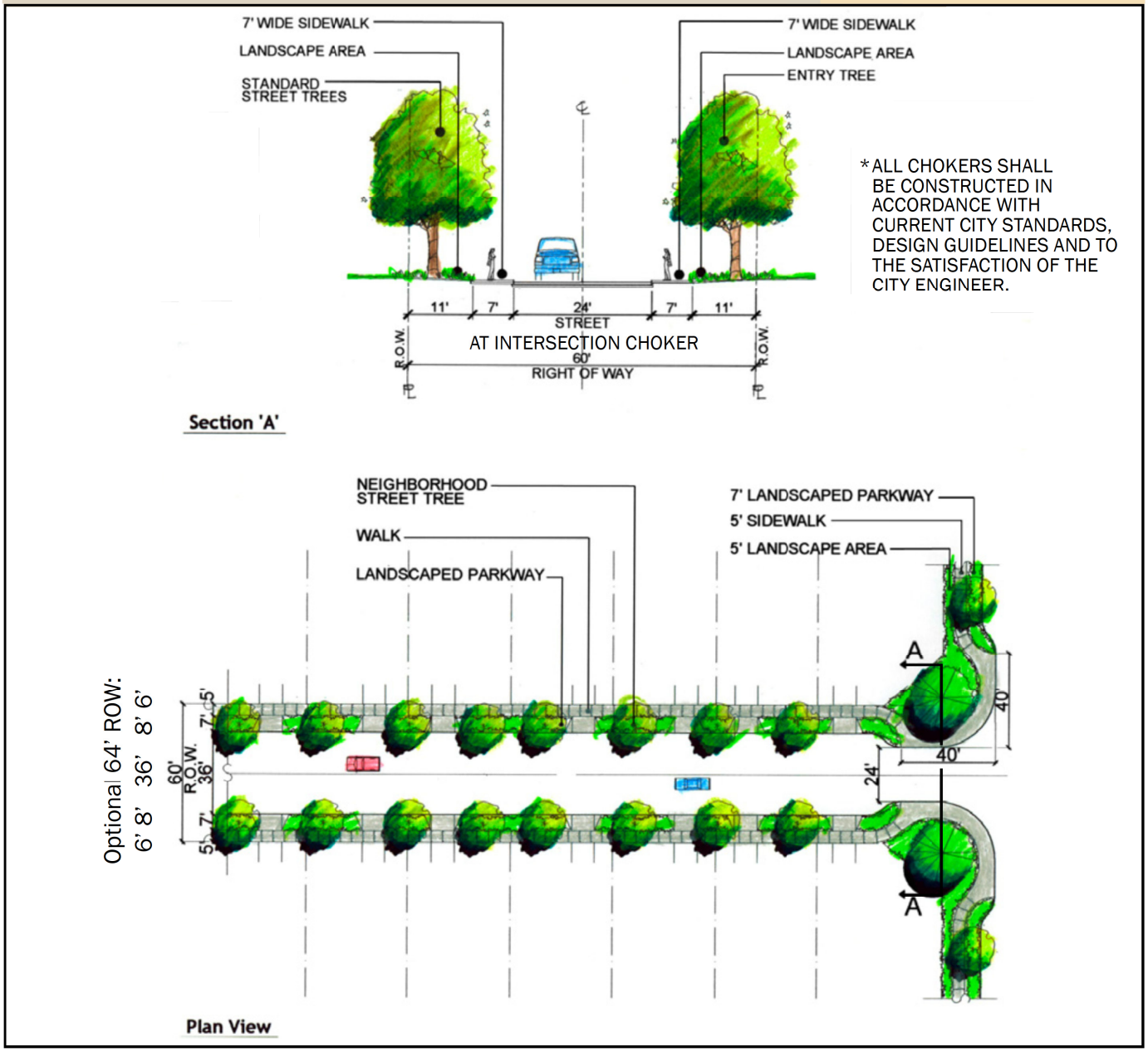


NOTE: This concept applies to PA 10A only.

Neighborhood Streets With Intersection Chokers

Neighborhood intersection chokers are traffic calming devices to slow down vehicles when they reach the neighborhood street level. They also facilitate pedestrian crossings by shortening the crossing distance and make them safer. The developer will be responsible for those improvements to Neighborhood intersection chokers as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project.

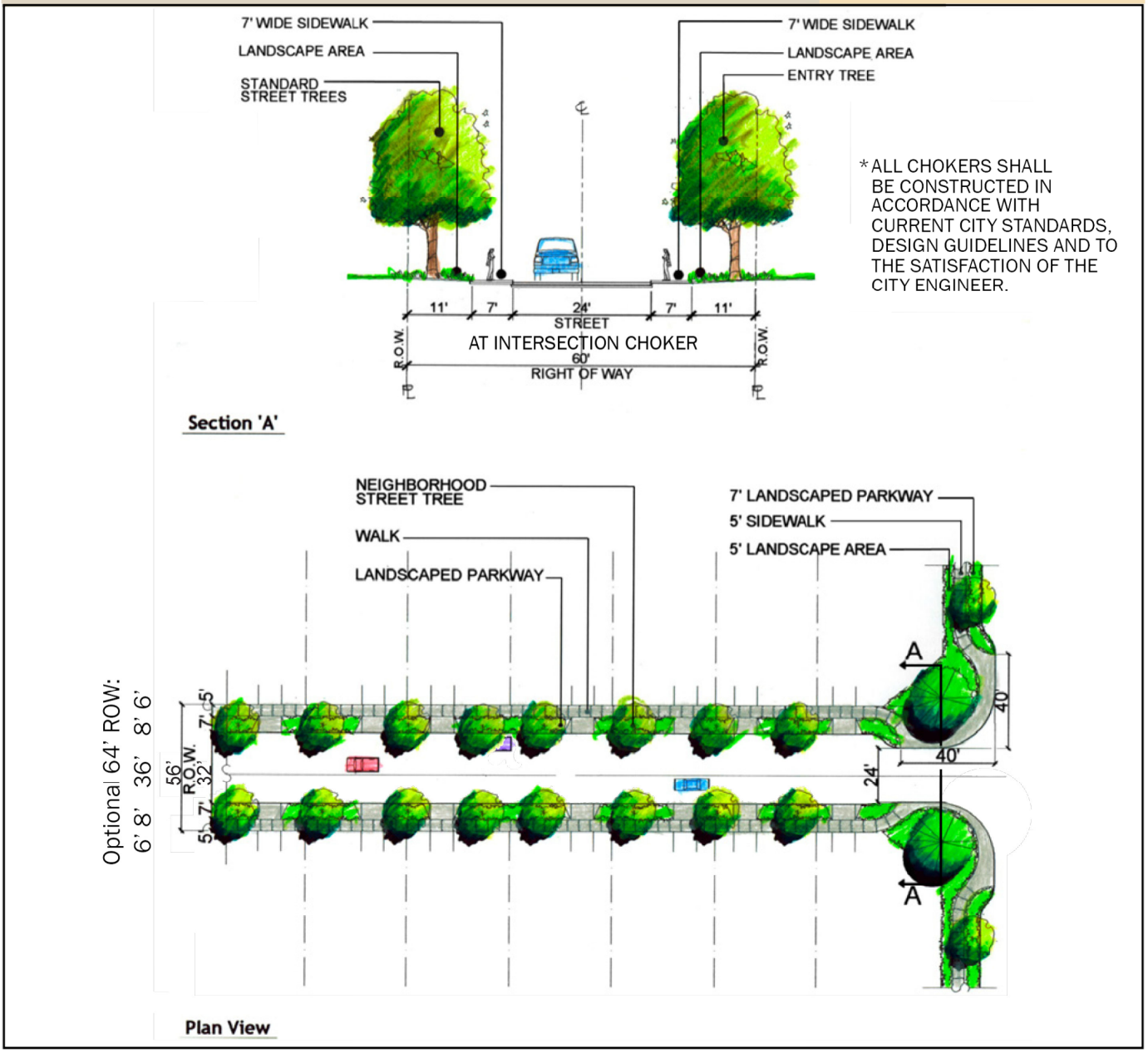
Exhibit 17I-1 - Neighborhood Streets With Intersection Chokers



Private Streets With Intersection Chokers

Private Street intersection chokers are traffic calming devices to slow down vehicles when they reach the neighborhood street level. They also facilitate pedestrian crossings by shortening the crossing distance and make them safer. The developer will be responsible for those improvements to private Street intersection chokers as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project.

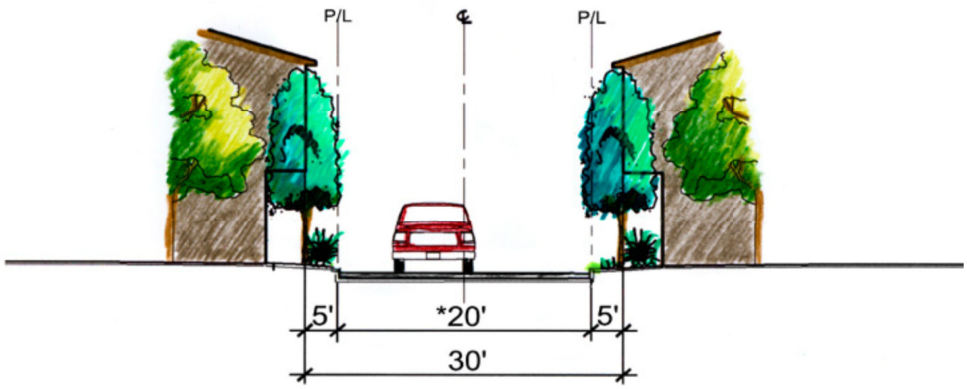
Exhibit 17I-2 - Private Streets With Intersection Chokers



Alley

Alleys within the plan area will consist of 20 feet of paved travel area with 5 feet of landscape and apron on each side. The alleys will incorporate tapers at the entrance to alleys to slow traffic in these areas and to provide a visual element to discourage drivers from using alleys as a through street. Pavement may expand to 24 feet for Fire use with 3' landscape and apron on each side to maintain a 30' building separation. Final alley design shall be subject to review and approval by the Planning, Engineering, and Fire Departments. The developer will be responsible for those improvements to alleys as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project.

Exhibit 17m-1 - Alley (Cross-Section and Plan)



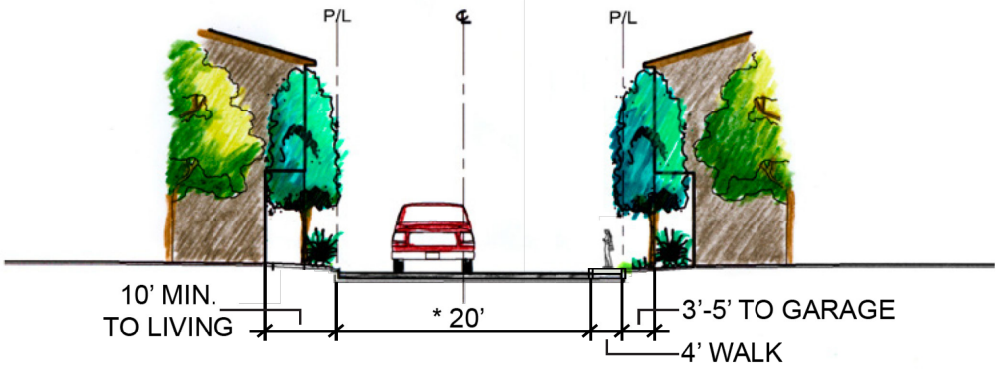
*PAVEMENT MAY EXPAND TO 24' FOR FIRE USES WITH 3' LANDSCAPE AND APRON EDGES ON BOTH SIDES TO MAINTAIN 30' BUILDING SEPARATION. FINAL PRIVATE DRIVE DESIGN SHALL BE SUBJECT TO REVIEW AND APPROVAL BY THE PLANNING, ENGINEERING AND FIRE DEPARTMENTS.



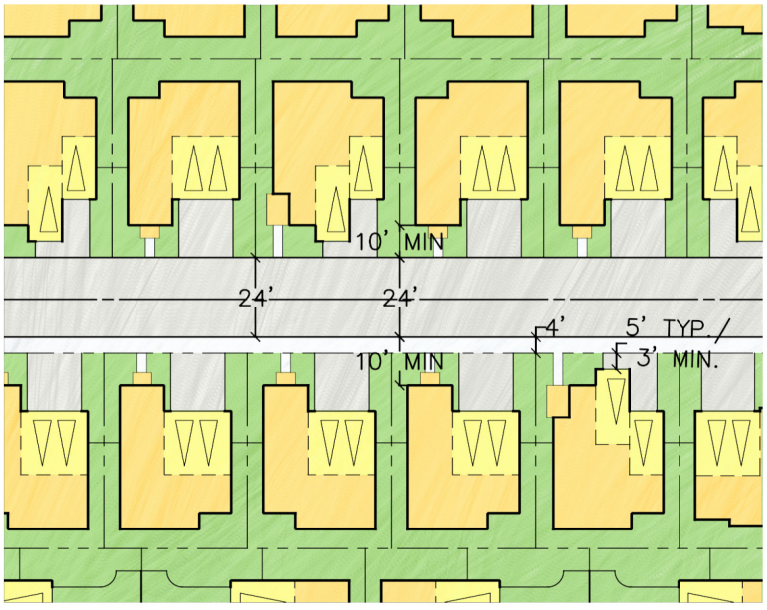
Private Alley

Private alleys within the plan area will consist of 20 feet of paved travel area with 5 feet minimum driveway aprons on each side. The private alleys will be paved per City Standards to encourage a street-like character. Pavement may expand to 24 feet for Fire use with 3' landscape and apron on each side. Final private alley design shall be subject to review and approval by the Planning, Engineering, and Fire Departments.The developer will be responsible for those improvements to Private Alleys as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project.

Exhibit 17m-2 - Private Drive (Cross-Section and Plan)



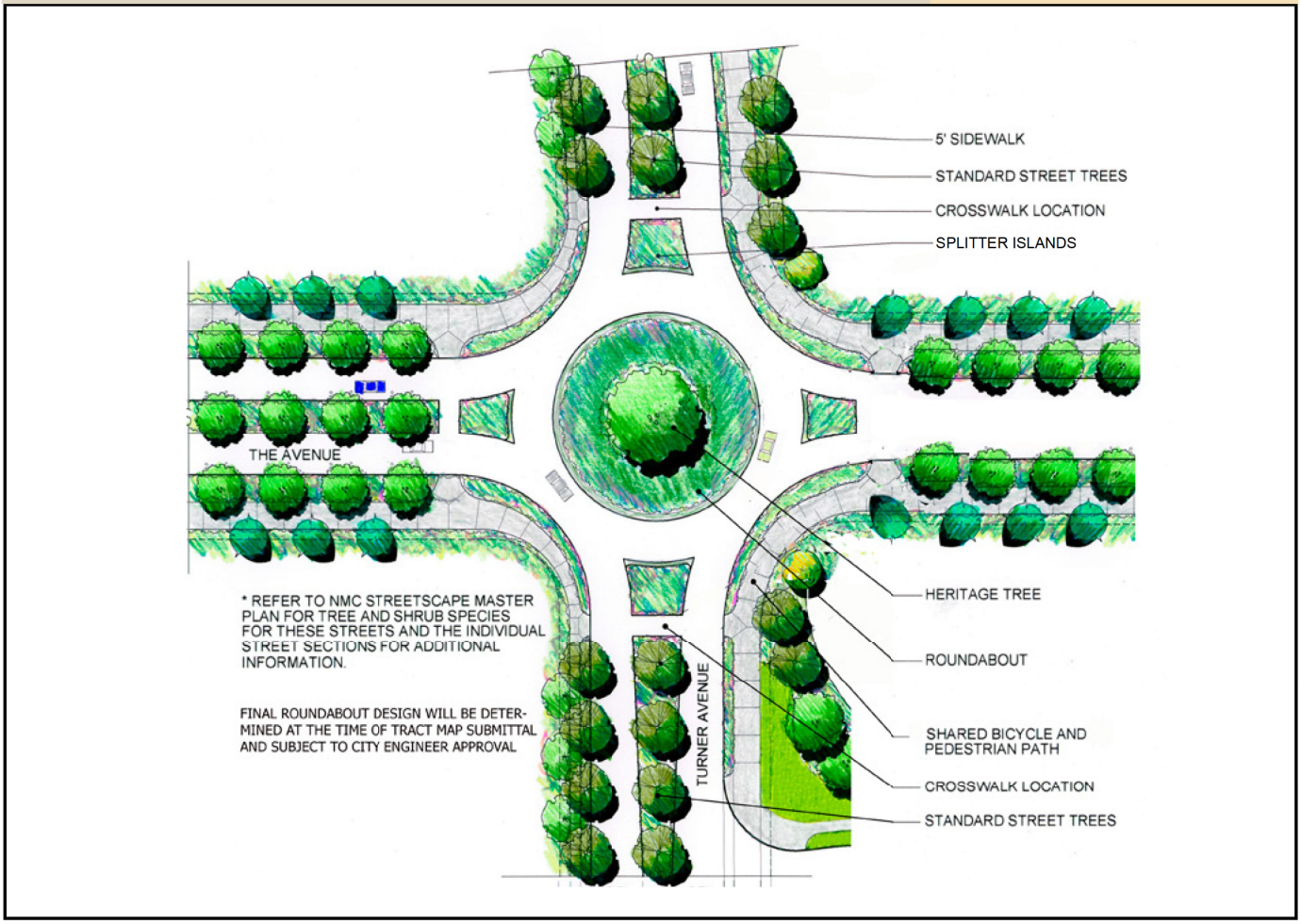
*PAVEMENT MAY EXPAND TO 24' FOR FIRE USES WITH 3' LANDSCAPE AND APRON EDGES ON BOTH SIDES TO MAINTAIN 30' BUILDING SEPARATION. FINAL PRIVATE DRIVE DESIGN SHALL BE SUBJECT TO REVIEW AND APPROVAL BY THE PLANNING, ENGINEERING AND FIRE DEPARTMENTS.



Typical Roundabout

Roundabouts have been strategically located throughout the plan to calm traffic through the center of the project, facilitate traffic movement and reduce air pollution by avoiding mandatory stops from all directions at the conceptual locations shown in Exhibit 17n, "Typical Roundabout". These roundabouts will follow the City adopted guidelines/standards and their final design will require City planning and engineering department approval as part of the tentative tract map review process. Utilities shall not be located under roundabouts. The developer will be responsible for those improvements to Roundabouts as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project.

Exhibit 17n - Typical Roundabout (La Avenida Drive and Turner Avenue)



* ROUNDABOUTS ARE ONLY ALLOWED ON SINGLE LANE APPROACHES.
IF IT IS INTENDED THAT LA AVENIDA DRIVE OR TURNER AVENUE EVER BECOME A 4 LANE ROADWAY (2 APPROACH LANES) THE PROPOSED ROUNDABOUT AT THIS LOCATION SHALL BE REMOVED.

4.1.2 Traffic Calming

The Avenue Specific Plan provides for traffic calming within residential neighborhoods to contribute to safer and more livable neighborhoods in which to walk, bike and drive. According to the Federal Highway Administration (FHWA) document FHWA-HRT-06-047 HRTC-01/01-06(1M)E, Roundabouts Safety and Design, 2006 some of the benefits of roundabouts are:

- Crashes are less severe than other intersection crashes.
- Safer than traditional intersections.
- Cost-effective way to improve intersection safety.
- Increased traffic capacity and improved traffic flow.
- No signal equipment to maintain.
- Aesthetic benefits.

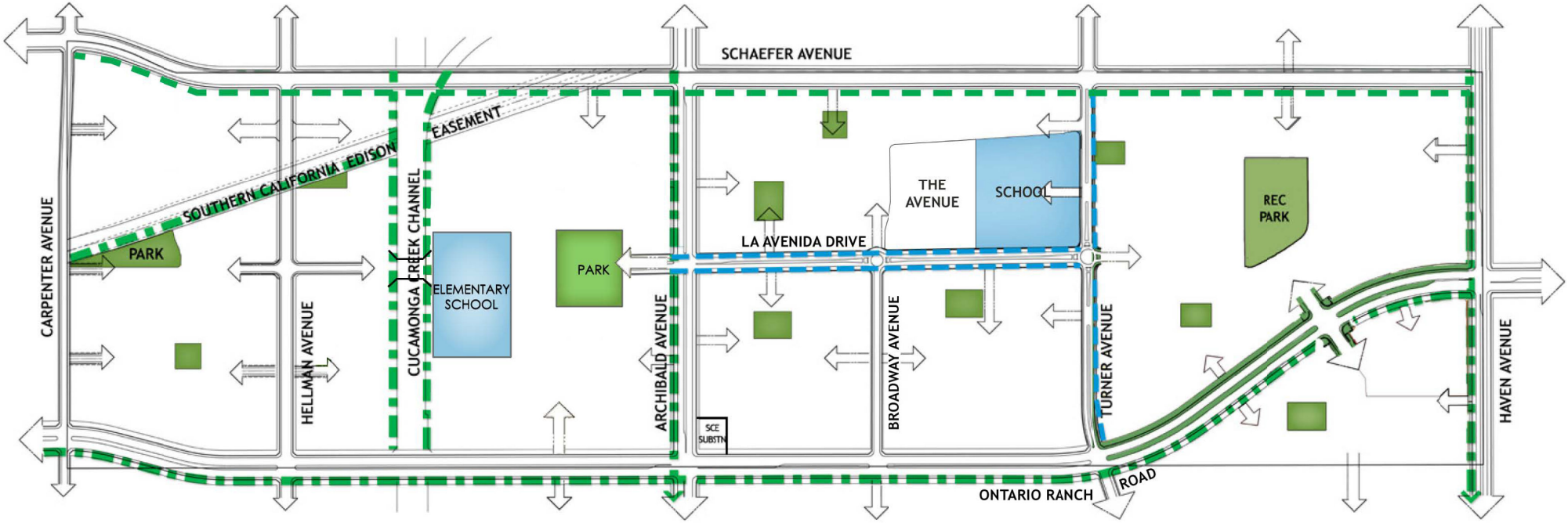


There are also environmental benefits to roundabouts. The FHWA Publication FHWA-RD-00-067 Roundabouts, An Informational Guide, June 2000 states that "The environmental benefits of a project are most readily quantified in terms of reduced fuel consumption and improved air quality. Of these, reductions in fuel consumption and the benefits associated with those reductions are typically the simplest to determine."

4.1.3 Pedestrian/Bicycle Trails and Connectivity

A primary recreational trail will be provided through the improvement of a portion of the SCE owned property (SCE Corridor) within the plan area as shown on Exhibit 18b, "SCE Easement Trail". The developers of the Specific Plan Area will be responsible for the construction of this trail. These improvements represent a part of the City's Master Planned multi-use path system planned for Ontario Ranch. This SCE trail will extend from Vineyard Avenue, located west of the plan area to the Cucamonga Creek Channel. The trail will then head north along the west side of the Channel, where it will meet the Multi-Use path on Schaefer Avenue. This series of trails will provide access to Archibald Avenue and the trail on the East side of the Channel, which also runs north-south within the flood control right of way connecting Schaefer to Ontario Ranch Road. The trail also provides points of connection to parks, LaAvenida Drive corridor, residential neighborhoods and the retail center.

The Specific Plan proposes a steel truss bicycle/pedestrian bridge crossing over the Cucamonga Creek Channel to connect the east and west sides of the channel and encourage school children west of the Channel to walk or bike to school. The Specific Plan shows a potential location for the bicycle/pedestrian bridge that may be relocated or incorporated into another bridge crossing. Final location and design will be subject to approval by Planning Director. The developer will be required to pay for the bridge and its construction. An encroachment permit will be needed from San Bernardino County Flood Control to construct the bridge crossing. A minimum 12-foot easement will need to be recorded to the City of Ontario in order to maintain the pedestrian bridge and provide public access across the channel. The SCE and flood control channel trails are important components in the overall trail system design of Ontario Ranch and are an important component of the city's master plan trail system. The residential users will find that the trail is useful in reaching many of The Avenue's amenities, as well as the surrounding community. The improved trails will be landscaped with approved evergreen, deciduous, and flowering plant material. There will be several points in the trail system linking to secondary paths that will lead to The Avenue's retail/commercial areas, as well as to the neighborhoods.



LEGEND

- NMC MASTER PLAN MULTI-USE PATH
- PROPOSED MULTI-USE BRIDGE ACROSS CHANNEL
- ENHANCED PEDESTRIAN SIDEWALK PER SPECIFIC PLAN (SEE SECTIONS 17G AND 17H)

NORTH

0 100 200 400 800

NOTE: The precise locations of the trails are conceptual and will be determined as part of the tract map approval process. The location of the proposed multi-purpose bridge is shown as conceptual and subject to Planning Department and Traffic Engineering Department review and approval.

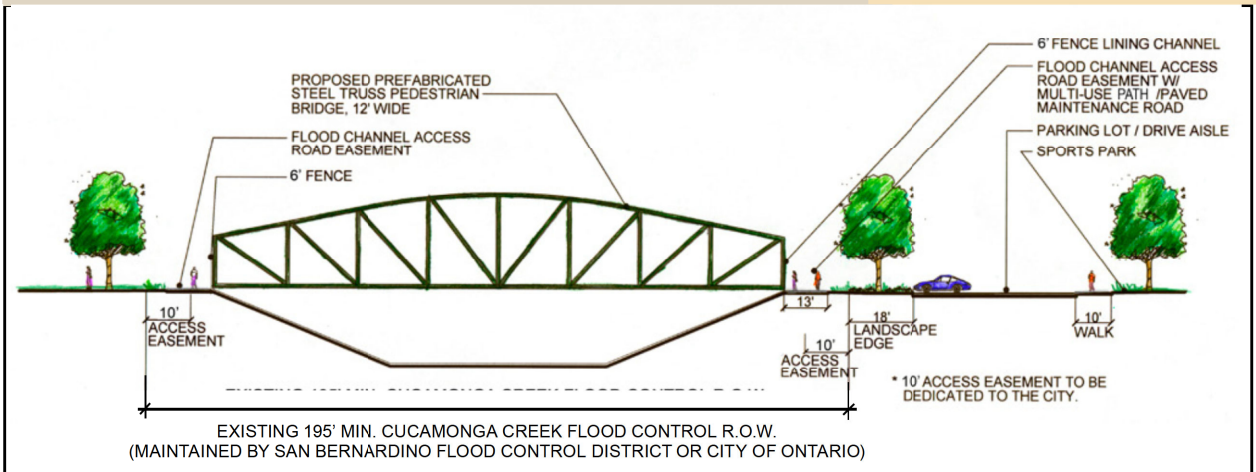
Trail Master Plan

Multi-use paths are provided within the plan area along Archibald, Haven, Ontario Ranch Road and Schaefer Avenues. These paths are provided adjacent to the major drainage easement, along Hellman Avenue, and along the spine road (The "Avenue") which traverses the center of the plan area in an east-west direction.

Multi-use paths shall provide benches/seatwalls along path at appropriate locations with adequate lighting and trash receptacles at seating areas. In addition, these paths should provide clear directional signage (subject to Engineering and Planning Department approval) to facilitate movement to and from crosswalks and entry points.

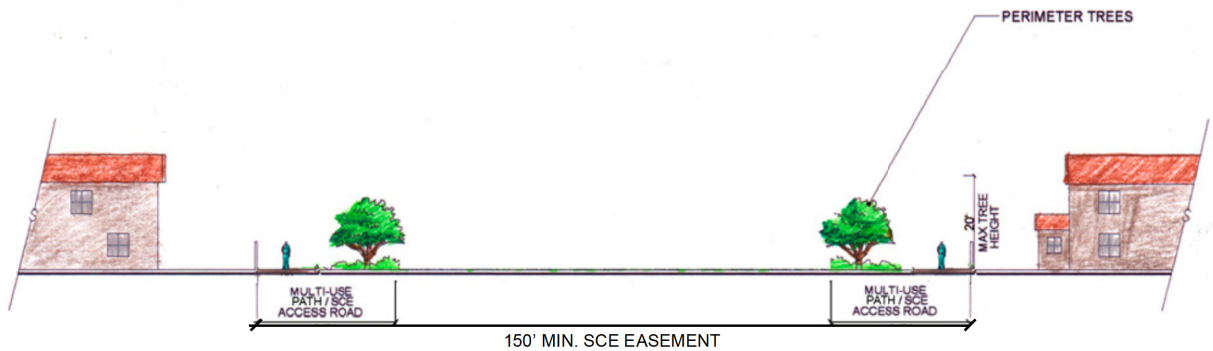
Bike racks at destination locations serving as a point of departure to and from bike path will also be available on Class I bike paths. The bicycle trail system provides access and connectivity to the various land use components of the plan area (parks, schools, retail and commercial center, and residential neighborhoods) as shown in Exhibit 18, "Trail Master Plan". Class II on-street striped bike lanes shall be provided on roadways within The Avenue Specific Plan area as determined by the City Engineer.

Exhibit 18a - Cucamonga Creek Channel Trail



NOTE: The design and location of bridge is shown as conceptual and subject to Planning Department and Engineering Department review and approval.

Exhibit 18b - SCE Easement Trail



NOTE: The Landscape and Trail Design of the SCE Easement Trail shall comply with the landscape and trail design standards of NMC Streetscape Master Plan.

4.2 Infrastructure Plans

The improvement plans for the various infrastructure facilities, including water, recycled water, sewer, and storm drainage are intended to provide The Avenue Specific Plan with essential services in a safe and efficient manner. Infrastructure facilities shall comply with the latest approved Master Plans. The current Water Master Plan shall be referenced for design standards, sizing, alignment, etc. Water, recycled water and sewer utilities may be designated as "public utilities" if located within public or private streets. All public utilities within private streets shall be designed and constructed per City standards and contained within easements acceptable to the City. The CC&RS shall contain language that requires all proposed work by the HOA within said easements to be plan checked and inspected by the City, including applicable fees. Generally, utilities will not be accepted as public within alleys, parking areas or driveways.

Utilities within commercial and industrial parking lots and loading areas shall be designated as private. The extent to which said utilities will be accepted as public utilities for maintenance shall be determined, at the full discretion of the City, during final design plan review. The following sections describe each of the infrastructure facilities in detail.

4.2.1 Water

Domestic water will be provided by the City of Ontario. The Master Planned (MP) programs new potable water facilities to include: 30 and 24-inch Francis loop main extension from existing Zone 925 reservoir facilities within Milliken, Eucalyptus, and Archibald Streets. The remainder of The Avenue will be served by a series of new Master Planned 12-inch mains as follows: Ontario Ranch Road extending to Haven, Schaefer from Carpenter to Haven, Haven from Eucalyptus to Schaefer, Turner from Ontario Ranch Road to Schaefer and Hellman from Ontario Ranch Road to Schaefer. Construction of the Master Planned water mains service network improvements is required prior to issuance of project related building permits for The Avenue. Master Planned domestic and recycled water main lines serving, surrounding and within the Specific Plan, as identified in the current Water Master Plan, shall be constructed prior to issuance of first occupancy. Sizing of non-master planned facilities is subject to City review and approval of the required Hydraulic Analysis. Requirements for Master Plan backbone water improvements for Phase 1A, 1B and 2 are subject to the NMC Builders' agreement.

New domestic water mains to be constructed as part of the development of The Avenue will include: 12-inch 925PZ mains within Carpenter Avenue, Hellman Avenue and Turner Avenue from Ontario Ranch Road to Schaefer, within La Avenida Drive street from the proposed Elementary school site easterly of Archibald extending to Turner Avenue, within Ontario Ranch Road and Schaefer Avenue from Haven to Carpenter. These 12-inch mains form the interior backbone loops connecting to Master Planned potable water facilities. The remainder of all interior streets within The Avenue project, and "A" Street located between Archibald and Turner will have 8-inch domestic mains. The construction on dead end water mains shall be avoided.

Higher fire flow demands for medium to high density residential and non-residential projects should be identified in accordance with the current Water Master Plan. Fire flow demands in excess of 1500 gpm for single family residential may require upsizing certain distribution to 12-inch pipelines as shown in Exhibit 20, "Domestic Water Master Plan". A hydraulic modeling analysis report is required to demonstrate that the proposed water system will meet peak demands including maximum day plus fire demand and peak hour demand.

4.2.2 Recycled Water

The ultimate sizing and alignment shall follow the most currently approved Master Plan. In order to assure conformance with Master Plan Design Criteria during the Implementation process: a Conceptual Technical Study shall be prepared and approved by the City prior to or concurrently with the entitlement submittal; and, a Final Technical Study shall be prepared and approved by the City prior to approval of Construction Drawings and Permits.

All new Master Planned recycled water mains will have the potential to interconnect to the proposed future 48-inch transmission facility within Carpenter. New recycled water facilities to be constructed as part of The Avenue will include: a 8-inch main within Turner from Ontario Ranch Road to Schaefer; a 8-inch main within La Avenida Drive from Archibald westerly to the Elementary school site and from Archibald to Turner. All remaining interior streets built with The Avenue project will connect to the Master Planned recycled water facilities and The Avenue backbone facilities to serve the project landscape edges, parkways, neighborhood, parks, street medians, etc. via 8-inch mains within the interior streets, as required, and irrigation sleeving at intersections and appropriate mid-block crossings to serve The Avenue landscaping improvements irrigation needs. Sizing of non-master planned facilities is subject to review and approval of the required Hydraulic Analysis. An initial Master Plan construction of recycled water improvements will be the construction of the 930 pressure zone (PZ) recycled water system in Archibald Avenue from southerly project limits to Riverside Drive, the Pressure Reducing Station (PRS) at Archibald & Chino Avenue, 1050 PZ pipes in Archibald, 1050 PZ pipes in Riverside Drive and on into RP-1. This above mentioned series of piping will tie into The Avenue via Schaefer, Ontario Ranch Road, etc. A recycled water loop must also be constructed in Haven Ave. from the southerly project limits to Riverside Dr. and in Riverside Dr. from Haven Ave, to RP-1 including the PRS stations per the Recycled Water Master Plan.

The Avenue (Subarea 18) Specific Plan shall comply with City Ordinance 2689 and make use of recycled water for all approved uses, including but not limited to irrigation of parks, schools, street landscaping, recreational trails, HOA maintained on-site common areas and commercial/industrial landscaping. An Engineering Report approved by the City and the California Department of Public Health is required prior to the use of recycled water.

4.2.3 Sewer

The ultimate sizing and alignment shall follow the most currently approved Master Plan. In order to assure conformance with Master Plan Design Criteria during the Implementation process: a Conceptual Technical Study shall be prepared and approved by the City prior to or concurrently with the entitlement submittal; and, a Final Technical Study shall be prepared and approved by the City prior to approval of Construction Drawings and Permits.

The 21-inch Haven Avenue Trunk Sewer line runs in Haven Avenue begins north of the Ontario Ranch Road intersection. The Ontario Ranch Road Trunk Sewer line (27-inch and 30-inch) runs in Ontario Ranch Road between Archibald Avenue and Haven Avenue. There is also a sewer line (21-inch and 24-inch) to be located within Carpenter Avenue which will connect to the Kimball Interceptor at the County line. The Carpenter Avenue Trunk Sewer will extend northerly to Schaefer Avenue and will serve the Avenue project development area from midway to Hellman to the east and Carpenter Avenue to the west. Sewer in Hellman Avenue will extend northerly to Chino Avenue and will serve areas to the Cucamonga Creek Channel to the west and midway to Carpenter Avenue to the east.

New sewer facilities to be constructed as part of The Avenue will include: 12-inch sewer in La Avenida Drive from Archibald easterly to Turner; 10-inch sewer in La Avenida Drive from Archibald westerly to the Elementary school site; 10 inch sewer in Broadway Avenue from Ontario Ranch Road terminating near La Avenida Drive intersection; 12-inch sewer in Turner from La Avenida Drive intersection northerly to Schaefer.

A 12-inch sewer will be constructed in Ontario Ranch Road from Hellman westerly to join the master plan sewer in Carpenter Avenue and 10 inch sewer in Hellman Avenue from Ontario Ranch Road terminating in Chino Avenue. All remaining interior streets within The Avenue, when developed, will have 8-inch minimum sewer main lines as shown in Exhibit 23, “Sewer Master Plan.” Master planned sewer main lines serving and surrounding the development shall be constructed prior to issuance of first occupancy. Initial sewer improvements shall be constructed between IEUA’s Archibald Trunk and the development limits, including constructing that portion of Ontario Ranch Road sewer between Archibald and Haven.

4.2.4 Drainage

Ontario Ranch Master Plan of Storm Drains report, prepared by LD King Engineers and updated Ontario Ranch Improvements Hydrology Analysis provided by Stantec Engineers considered the entire Master Plan zoning area drainage analysis of which The Avenue (Planning Area 18) is included. The City of Ontario will be the maintenance agency for Master Planned and The Avenue storm drainage system facilities.

All Avenue drainage will eventually discharge into the existing Bellegrave County Line Drainage Channel facility located approximately 7,000-feet south of La Avenida Drive. The Master Planned improvements will utilize the existing Cucamonga Channel County of San Bernardino Flood Control facility, which drains north to south and joins the east-west Bellegrave County Line Drainage Channel. The Master Planned Storm Drain Improvements will construct a new network of storm drain lines within existing and proposed north-south streets extending northerly from the Bellegrave County Line Flood Control facility. Also, east-west storm drain lines will be built periodically joining the existing Cucamonga Channel Flood Channel facility. The Master Planned Storm Drain Improvements will include the following: an 84-inch storm drain

within Haven fronting the easterly edge of La Avenida Drive and extending southerly joining the Bellegrave Flood Channel with a 96-inch line; a 66-inch storm drain within Turner, the Turner storm drain will extend southerly eventually joining the Bellegrave Flood Channel with a 96-inch line; Archibald Avenue accepts flows from a 36-inch line within Schaefer easterly of the Archibald intersection.

The Archibald main extends southerly eventually joining the Bellegrave Flood Channel with a 96-inch line. The Hellman storm drain accepts flows from a 42-inch line north of Schaefer.

The Hellman storm drain extends southerly through The Avenue as an 42-inch line and joins an 84-inch line within Ontario Ranch Road. The Hellman storm drain extends southerly to future Eucalyptus Street as a 96-inch line, then travels easterly on Eucalyptus as a 6' x 11' box culvert to join the existing Cucamonga Flood Channel. Ontario Ranch Road west of the Cucamonga Flood Channel has an 84-inch storm drain easterly of the Hellman intersection and 72-inch lines extending from west to east from Vineyard to Hellman. Ontario Ranch Road, between Archibald Avenue and Turner Avenue, contains 60-inch, 54-inch and 48-inch storm drain. A 48-inch storm drain extends easterly from the existing Cucamonga Channel within Ontario Ranch Road terminating mid-block between the channel and Archibald intersection.



Cucamonga Creek Channel

Storm drain facilities to be constructed as part of The Avenue will include: a 30-inch line in Carpenter from Ontario Ranch Road northerly to mid-block between Schaefer; a 36-inch line paralleling the easterly side of the existing Cucamonga Flood Channel to serve the Park/Elementary school sites and extending northerly to serve the future retail site adjacent and southerly of Schaefer; a 30-inch line within La Avenida Drive– between Archibald and Turner to provide service to the 10 acre School site; the individual planning areas within The Avenue will have storm drain pick-up laterals (18-inch minimum) joining Master Planned Improvements and The Avenue backbone storm drain facilities.

Ultimate development of The Avenue requires construction of all proposed Master Planned Storm Drain Improvements. The existing Avenue site generally sheet flows form north to south. It is not anticipated that Grading of individual planning areas will be permitted, prior to completion of Master Planned Storm Drain Improvements due to the fact that the City of Ontario will not allow temporary stormwater runoff detention basins to be constructed for individual planning areas in The Avenue until downstream Master Planned storm drain facilities are constructed and functioning to provide necessary flood control for that tract map area.

4.2.5 Grading


Landscape Setback Swale System

The Avenue existing topography may be described as flatland terrain which gently slopes to the south varying from 0.6% to 1.1% across the site as shown in Exhibit 5, "Existing Topography". The high elevation is elevation 750 at the northeast corner of the site. The low elevation is 706 located at the intersection of Archibald and Ontario Ranch Road Streets. Existing land uses vary from vacant land to agricultural with the majority of land being existing or vacated dairy farm operation. The dairy farm operations contain many ponding areas for acceptance/ filtration of dairy livestock excrement runoff. The dairy farms on the site have varying thickness layers of manure which will require off-site disposal from The Avenue project. Due to the varied number of development ownership of The Avenue planning areas, it is anticipated that mass grading of the entire site will not occur. Individual planning area owners will be responsible for obtaining any rough grading and precise grading permits along with remedial grading, removal of manure deposits and dairy bog pond sediments disposal. If the Developer proposes temporary use of an existing agricultural well for purposes other than agriculture, such as grading, dust control, etc., the developer shall make a formal request to the City of Ontario for such use prior to issuance of permits for any construction activity. Upon approval, the Developer shall enter into an agreement with the City of Ontario and pay any applicable fees as set forth by the agreement.

4.2.6 NPDES Compliance

The grading and drainage of The Avenue Specific Plan area shall be designed to detain, filter and treat surface runoff, in a manner and combination which is practical, to comply with the most recent requirements of the San Bernardino County NPDES Stormwater Program's Water Quality Management (WQMP) for significant new development projects. The objective of the WQMP for this project is to minimize the detrimental effects of urbanization on the beneficial uses of receiving waters, including effects caused by increased pollutants and changes in hydrology. These effects may be minimized through the implementation of site designs that reduce runoff and pollutant transport by minimizing impervious surfaces and maximizing on-site infiltration, Source Control Best Management Practices (BMP's) and/or either on-site structural Treatment Control BMP's, or participation in regional or watershed-based Treatment Control BMP's. An alternative to the implementation of on-site Low Impact Development (LID) BMPs to retain/infilter and treat stormwater runoff is the utilization of the off-site, regional Mill Creek Wetland facility for accomplishing water quality improvements in residential project runoff from this master planned community. All non-residential planning area projects within The Avenue will incorporate all required on-site LID BMPs, pursuant to the requirements of the current San Bernardino County Water Quality Management Plan.

Prior to the issuance of a grading or construction permit, all projects greater than 1 acre in size shall apply for coverage under the California General Permit To Discharge Storm Water Associated with Construction

Activity, obtain a WDID# from the State Water Resources Control Board and prepare a Stormwater Pollution Prevention Plan (SWPPP) on the CASQA 2009 Template form and upload it to the State's SMART database system. A copy of each SWPPP document and WDID# Certification shall also be provided to the City of Ontario, prior to any construction permit issuance. The SWPPP will identify and detail all appropriate Best Management Practices (BMPs) to be implemented or installed during construction of the project.

In addition to the preparation of a SWPPP for construction-related activities, and as part of the approval of any grading plans within the Specific Plan Area, the applicant will be required to submit a Water Quality Management Plan (WQMP) on the regional model form provided by the City. The WQMP shall identify and detail all Site Design BMPs, Source Control BMPs and Treatment Control BMPs to be implemented or installed at this site in order to reduce storm water pollutants and site runoff.

The Mill Creek Wetland facility has been constructed and will be on line and functioning in June, 2014. The facility will serve as an alternative to on-site LID BMP implementation for residential tract developers that are members of the Ontario Ranch Builders, LLC consortium and which have adequate reserved capacity in the regional facility for those planning areas. Out of a proposed 425 acres of residential development in The Avenue, 288 acres will be developed by Ontario Ranch Builders members, 20 acres of land will be utilized for public schools and 107 acres will developed by non-members, who will be required to make other arrangements or utilize another, future regional water quality facility, downstream of the project area. All non-residential planning area projects within The Avenue, including Public Schools, will incorporate on-site LID BMPs, in accordance with the regional NPDES Permit and the current San Bernardino County Water Quality Management Plan, and shall not rely on the regional wetlands facility for retention and treatment of runoff water.

All Priority Land Use (PLU) areas within the Specific Plan Area shall comply with the statewide Trash Provisions adopted by the State Water Resources Control Board (SWRCB) and trash requirements in the most current San Bernardino County Area-Wide MS4 Permit.

4.2.7 Solid Waste

The City of Ontario will provide solid waste collection services to The Avenue Specific Plan area. The following addresses additional solid waste issues:

- An integrated waste management plan is required and shall be submitted prior to DAB approval of each subdivision.
- Commercial – Developer shall comply with Municipal Code Sec. 6-3.314 Commercial Storage Standards, and Sec. 6-3.601 Business Recycling Plan.
- Apartment – For apartments using commercial bin service developer shall comply with Municipal Code Sec. 6-3.314 Commercial Storage Standards and Sec. 6-3.601 Business Recycling Plan.
- Residential – For curbside automated container service developer shall comply with Municipal Code Sec. 6-3.308.9(a) and (d), Residential Receptacles, Placement.

- Recycling Requirements – Developer shall comply with Municipal Code Article 6. Recycling Requirements for Specified Business Activity, Sec. 6-3.601 Business Recycling Plan, and Sec. 6-3.602 Construction and Demolition Recycling Plan.
- All project sites shall be designed to meet all the Integrated Waste Department's requirements, including the requirements for Sizing of Storage, Location of Collection Area, Accessibility for Collection Vehicles, and Collection of Sorted/Diverted Waste Types.
- Project shall follow the City of Ontario's latest "Solid Waste Department Refuse and Recycling Planning Manual".

4.2.8 Gas

The Gas Company will provide natural gas to the Project Site. Gas mains will be installed to the Project Site by the Gas Company, as necessary.

4.2.9 Electric

Southern California Edison will provide electricity to the plan area from existing facilities in the vicinity. Proposed new facilities to serve the project will be owned and operated by the City of Ontario and located underground.

4.2.10 Telephone

Verizon will provide telephone service to the plan area. The City will provide a fiberoptic network to the home, accommodating voice mail data, cable and video on demand. Proposed on-site facilities will be placed underground.

4.2.11 Cable Television

Adelphia will provide cable television service to the plan area. The City will provide coaxial/fiber cable to the home, accommodating cable television, internet services, voice mail data, cable and video on demand. Proposed on-site facilities will be placed underground.

4.2.12 Fiber Optics

Proposed Fiber Optics (conduits and fiber) will be placed underground within a duct and structure system to be installed by the Developer, as illustrated in Exhibit 19. The fiber and conduits along the backbone streets shall be installed in a joint trench by each Developer as the last lane improvements are completed. In-tract fiber and conduit shall be installed by the Developer in joint trenches where possible. Maintenance of the installed system will be the responsibility of the City/Special District. Development of the Project requires the installation by the Developer of all fiber optic infrastructure necessary to service the Project as a standalone Development.

4.3 Community Facilities

4.3.1 Schools

The Mountain View School District serves the K-8 school's needs of the proposed The Avenue Specific Plan. The Chaffey Etiwanda Joint Union School District serves the school needs of grades 9-12 within the plan area. Colony High School is located to the north of the plan, for the high school students living in the plan area. In addition, the proposed The Avenue Specific Plan is providing sites for a ten (10) acre elementary school and an additional ten (10) acre school.

4.3.2 Library

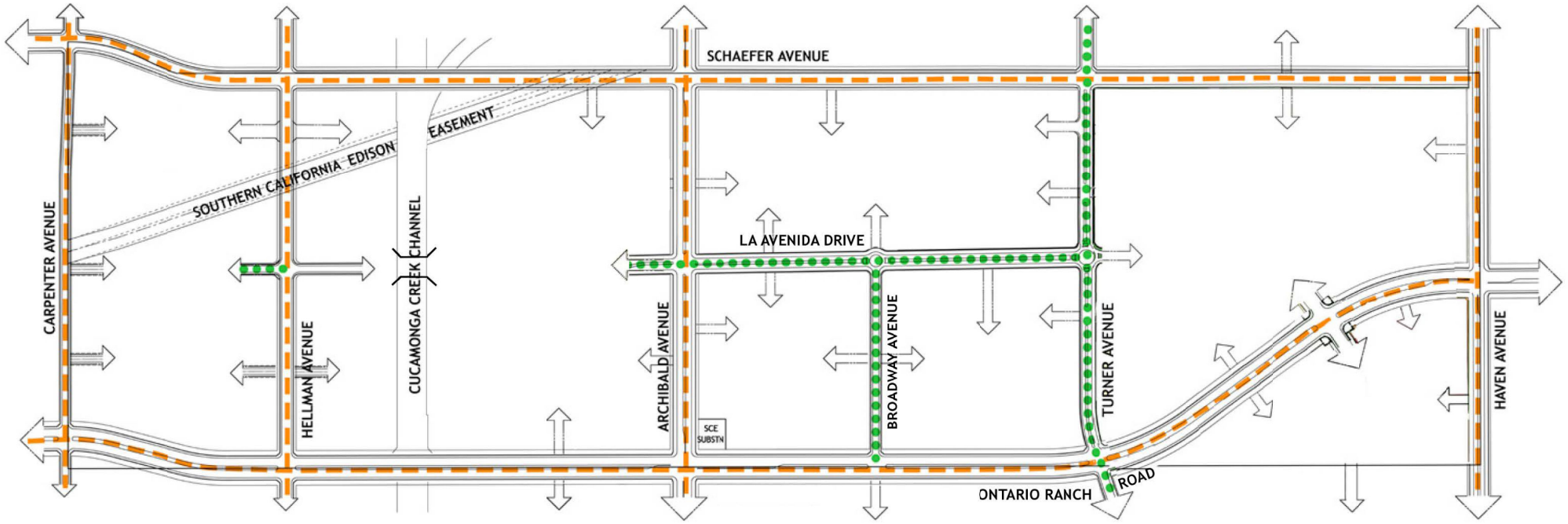
The City of Ontario will provide library services to The Avenue Specific Plan area.

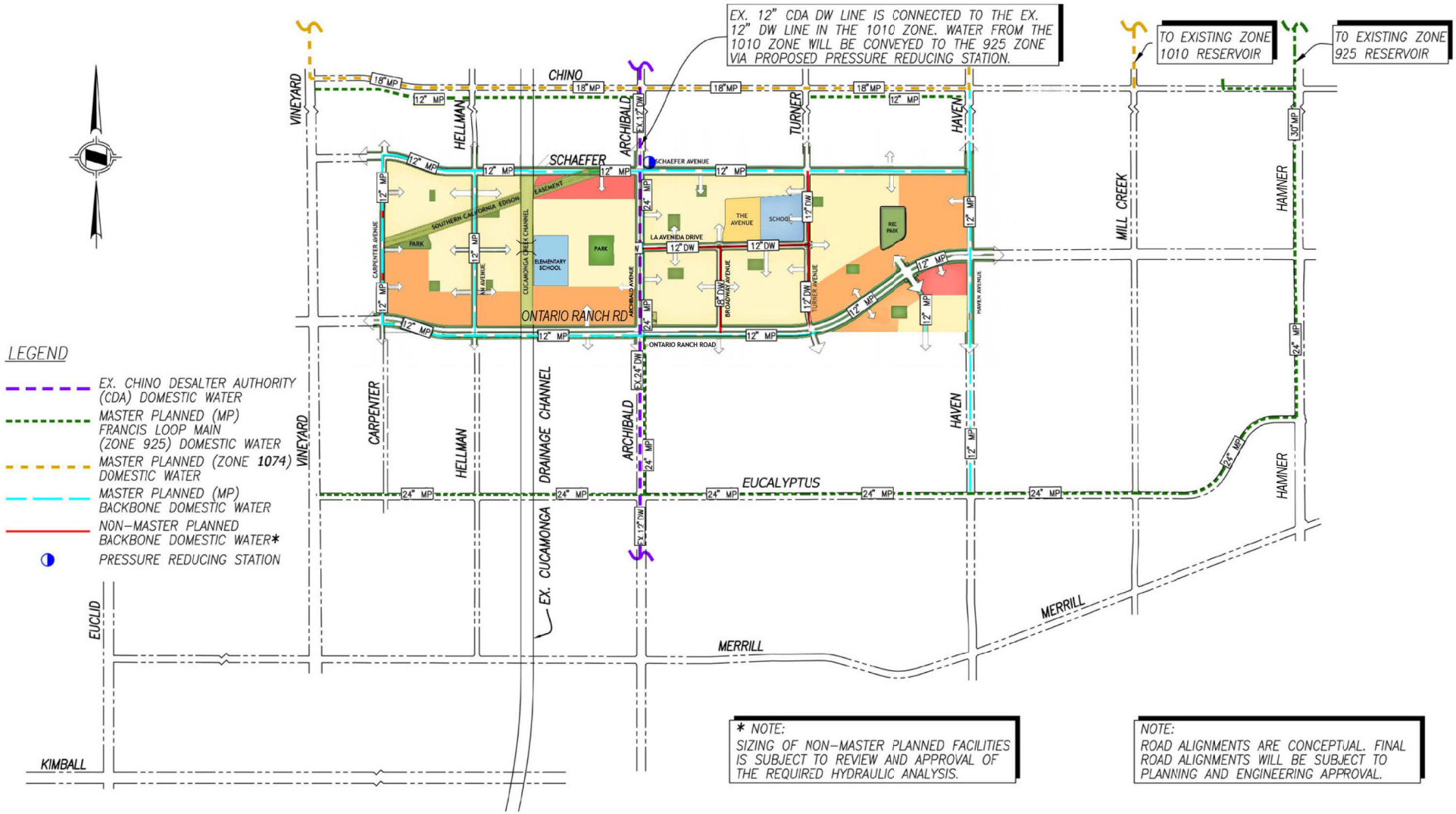
4.3.3 Fire

The City of Ontario will provide fire protection services to The Avenue Specific Plan area.

4.3.4 Police

The City of Ontario will provide police services to The Avenue Specific Plan area.

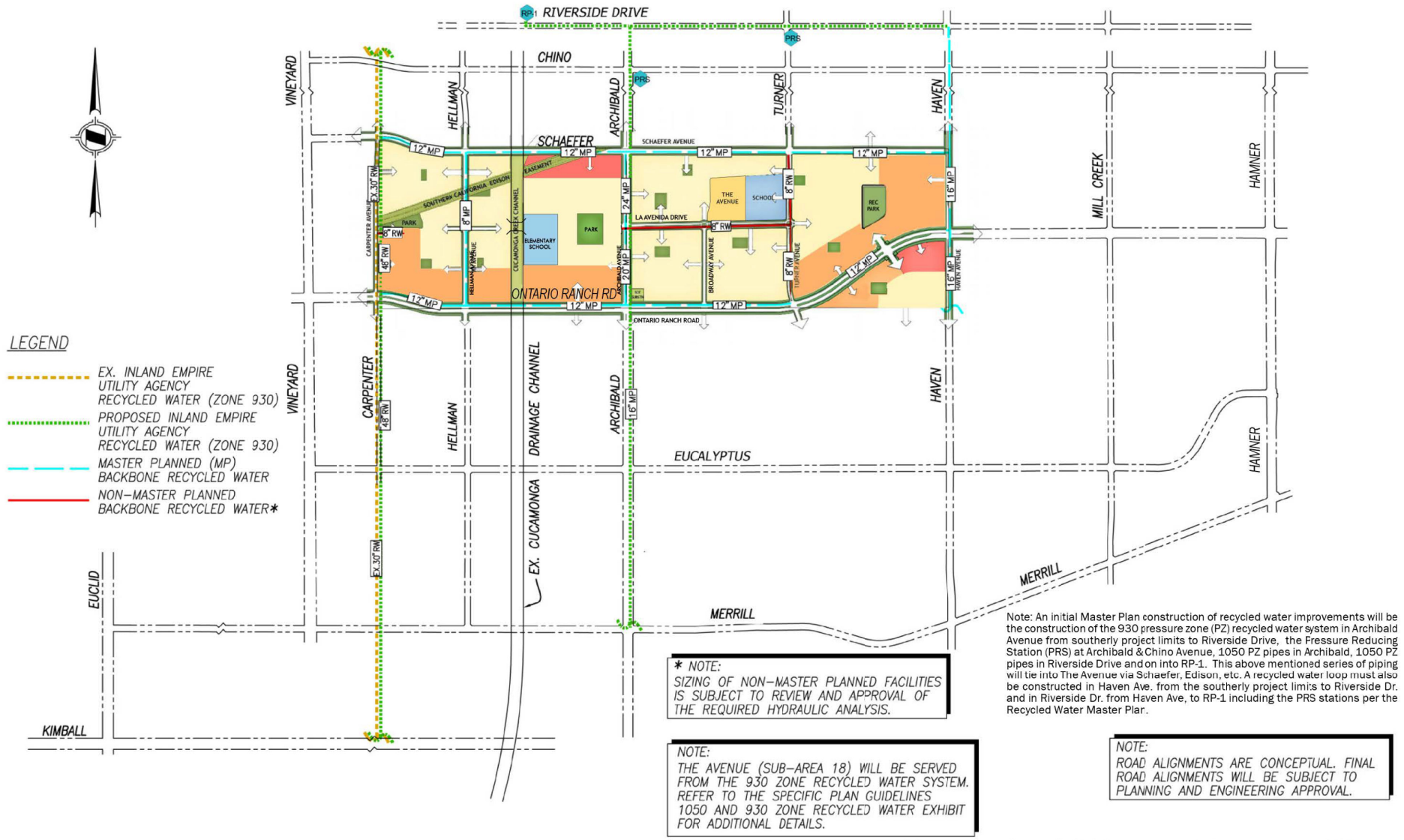

SCHAEFER AVENUE
EASEMENT
SOUTHERN CALIFORNIA EDISON
CARPENTER AVENUE
HELLMAN AVENUE
CUCAMONGA CREEK CHANNEL
ARCHIBALD AVENUE
LA AVENIDA DRIVE
BROADWAY AVENUE
TURNER AVENUE
HAVEN AVENUE
SCE SUBSTN
ONTARIO RANCH ROAD
LEGEND
MASTER PLANNED (MP) INFRASTRUCTURE
CONSTRUCTED BY DEVELOPERS
NORTH
0
100
200
400
800



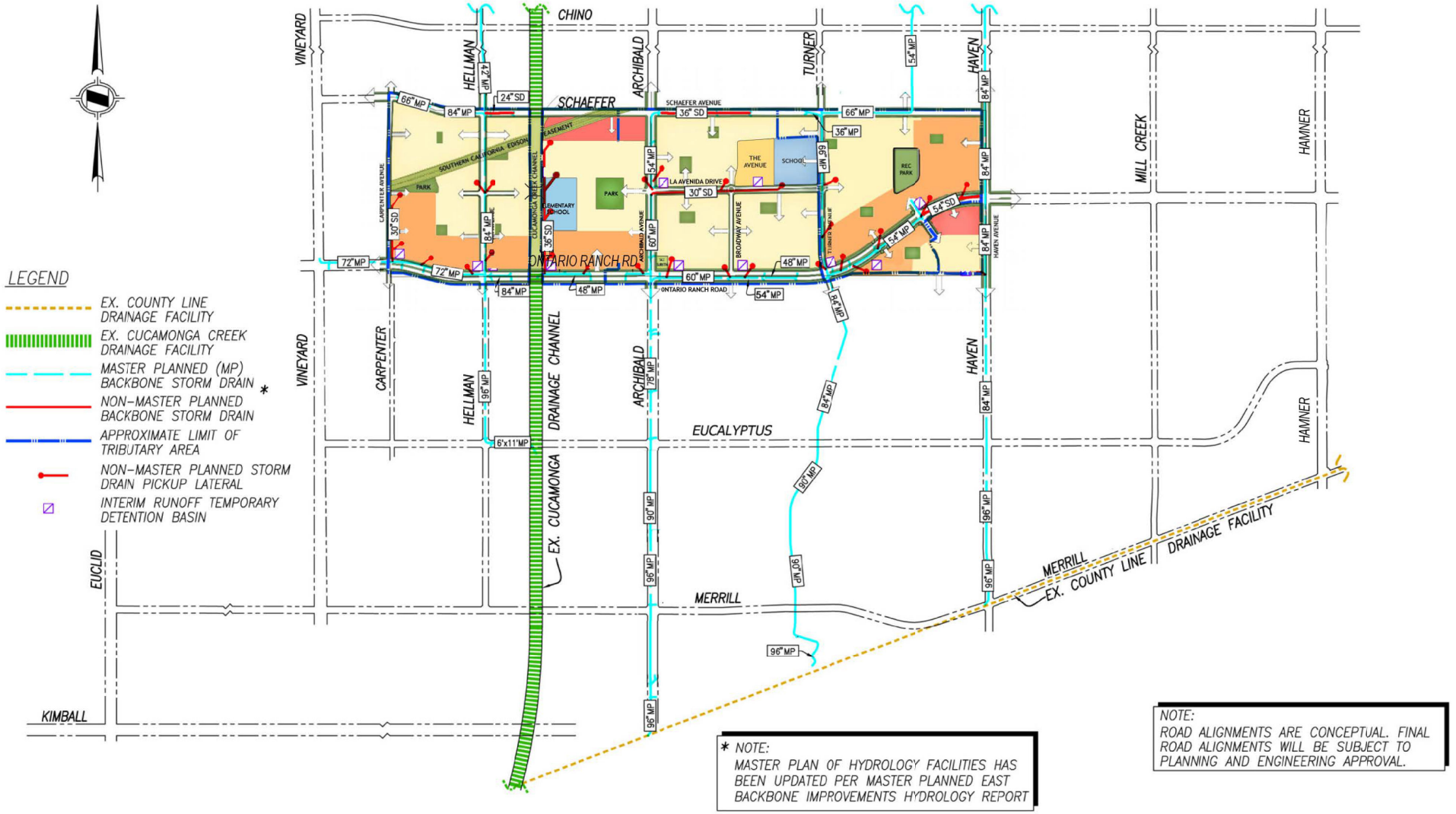
The Avenue SPECIFIC PLAN

Domestic Water Master Plan

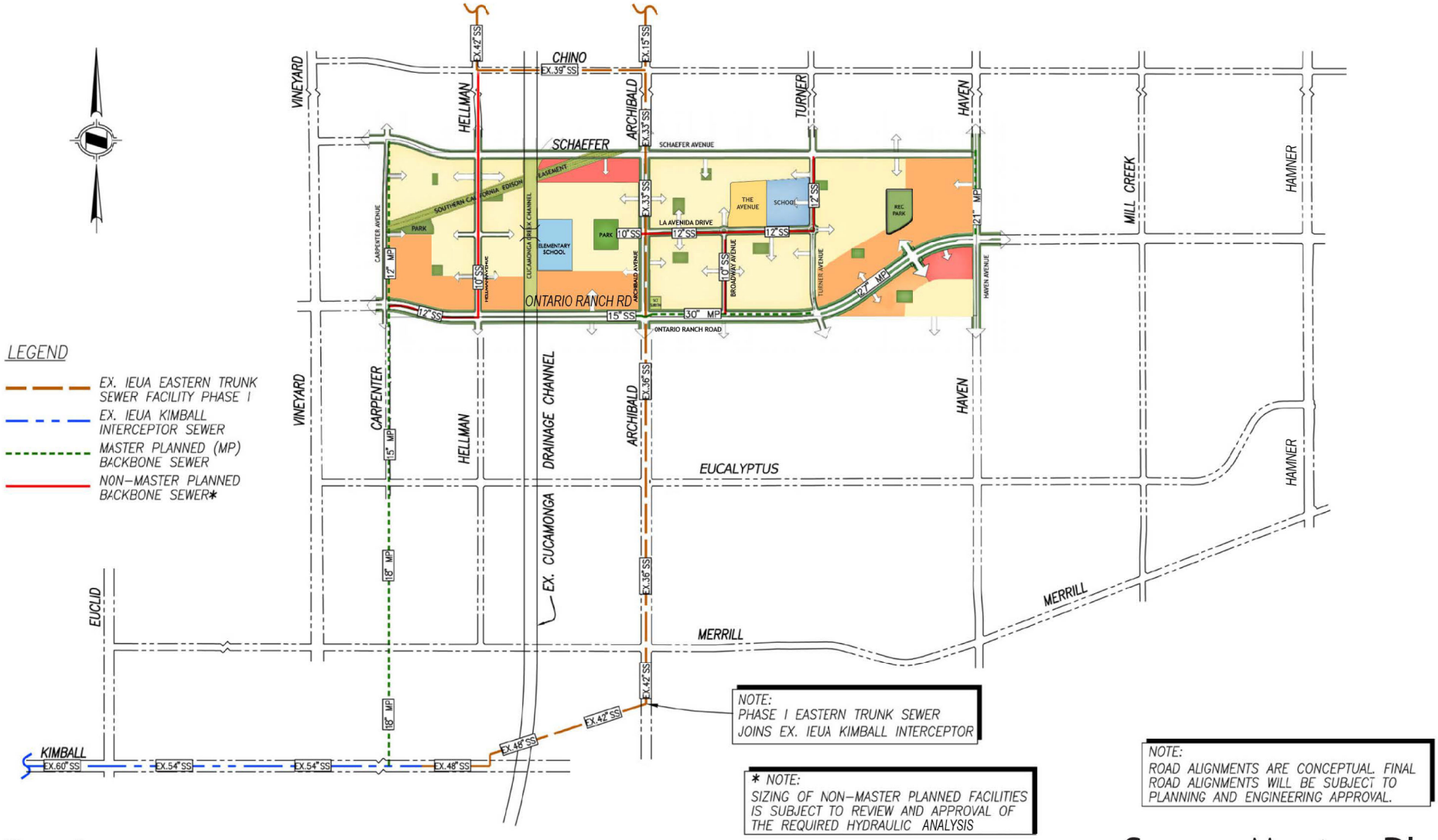
Ontario Ranch ▪ Ontario, California Exhibit 20 - Domestic Water Master Plan



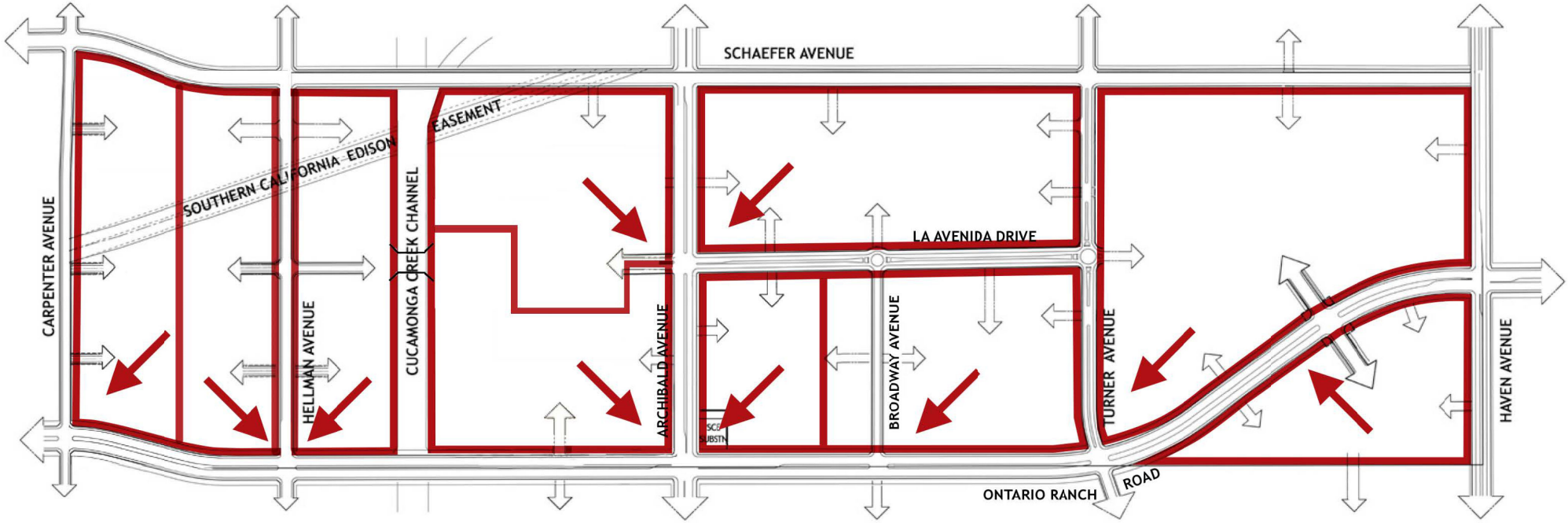
Recycled Water Master Plan



Storm Drain Master Plan



Sewer Master Plan



LEGEND

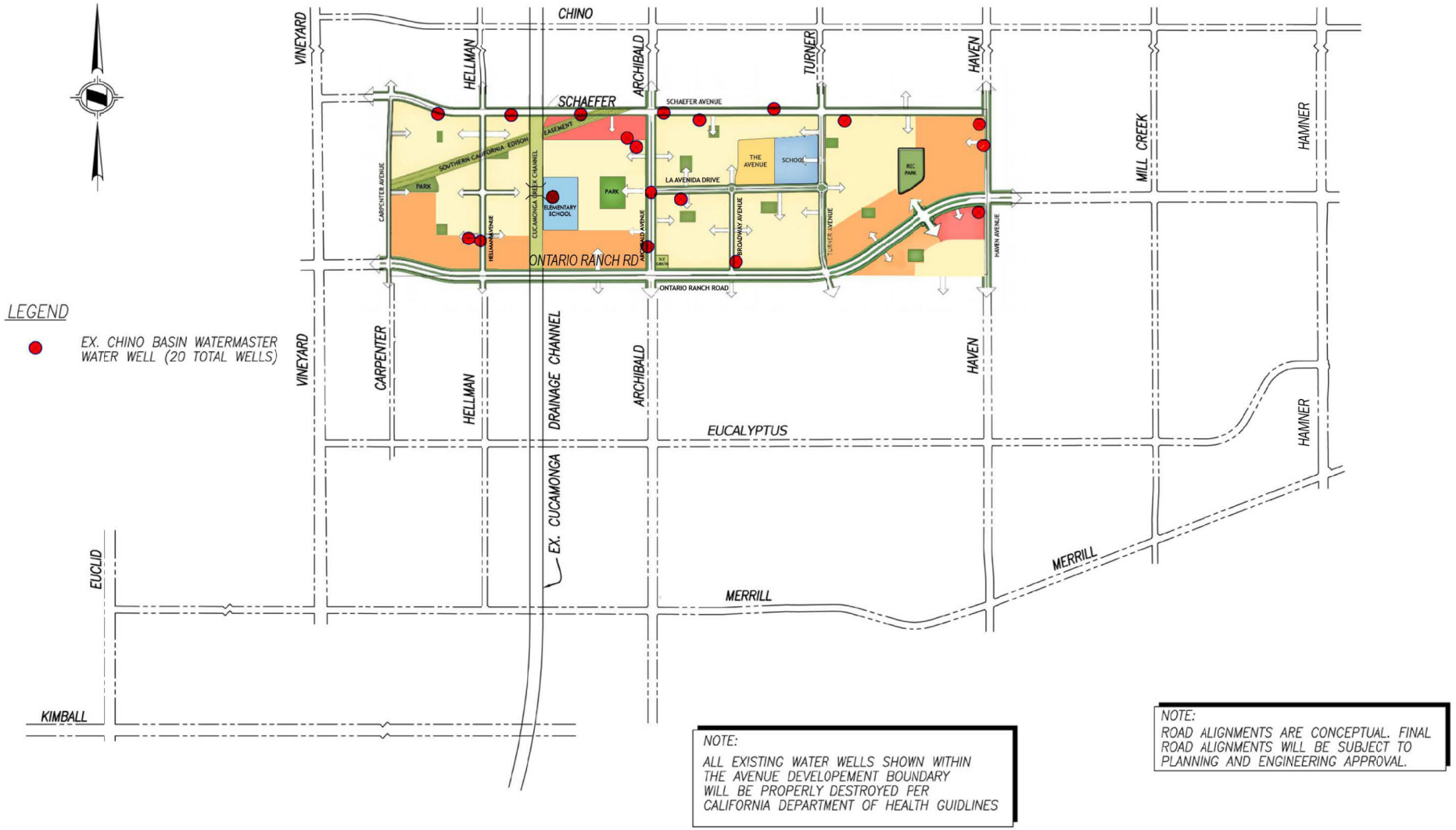
SEWER TRIBUTARY AREAS

DIRECTION OF FLOW

The Avenue SPECIFIC PLAN

Sewer Tributary Areas

Ontario Ranch ▪ Ontario, California Exhibit 24 - Sewer Tributary Areas



Existing Wells

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Section 5 - Development Regulations

5.1 General Provisions

A. Development proposals within The Avenue Specific Plan shall be subject to the implementation procedures established herein. Whenever the provisions and development standards contained herein conflict with those contained in the City of Ontario Development Code, the provisions of The Avenue Specific Plan shall take precedence. On issues where the Specific Plan is silent the City of Ontario Development Code shall prevail.

B. Severability - If any portion of these regulations is declared to be invalid or ineffective in whole or in part, such decision shall not affect the validity of the remaining portions thereof. The legislative body hereby declares that they would have enacted these regulations and each portion thereof irrespective of the fact that any one or more portions be declared invalid or ineffective.

C. Unless otherwise provided, any ambiguity concerning the content or application of The Avenue Specific Plan shall be resolved by the Planning Director or his/her designee, hereinafter referred to as Director, in a manner consistent with the goals, policies, purpose and intent established in The Avenue Specific Plan.

D. Any major deviation from the Design Guidelines (Section 6) within The Avenue Specific Plan shall require a Specific Plan Amendment. The Director shall determine whether a proposed change constitutes a major deviation.

E. The meaning and construction of words, phrases, titles, and terms shall be the same as provided in the City of Ontario Development Code Article 2, “Definitions”, unless otherwise specifically provided herein.

5.2 Applicability

The development regulations contained herein provide specific standards for land use development within the proposed The Avenue Specific Plan. Regulations address residential, retail and commercial and open space land uses. General landscaping regulations are also provided. Application of the following regulations is intended to encourage the most appropriate use of the land, ensure the highest quality of development, and protect the public health, safety, and general welfare. The adoption of The Avenue Specific Plan by ordinance will supercede otherwise applicable City of Ontario zoning regulations unless stated herein to the contrary. Whenever the provisions and development standards contained herein conflict with those contained in the City of Ontario Development Code, the provisions of The Avenue Specific Plan shall take precedence. Where The Avenue Specific Plan is silent, City codes shall apply.

5.3 Development Review Process

All development projects within the proposed The Avenue Specific Plan shall be subject to the Development Plan Review Process as established in Article 8 of the City's Development Code. Adoption of The Avenue Specific Plan by the City includes adoption of the Design Guidelines contained within Section 6 of The Avenue Specific Plan and which provide direction for the design of development projects within the plan area. Where the Design Guidelines are silent, the applicable design guidelines contained within the City's Development Code shall apply. The Design Guidelines are intended to be flexible in nature while establishing basic evaluation criteria for the review by the City of developer projects during design review.

Pursuant to these provisions, the Development Permit process constitutes a design review of project architecture, site plans, and landscape plans. All development project applications shall include a landscape and irrigation plan describing plant materials and their growth habits, plant size and spacing, methods of irrigation and landscaping maintenance, site plans, architectural elevations, floor plans, grading plans and other requirements as specified by the City. Development permits are approved with conditions of approval.

As the Specific Plan is Phased, the following minimum criteria shall be met for each Subdivision and Development of each Phase:

- For Domestic Water, all the Master Plan, Regional and Local Infrastructure identified in Section 4 and the Conceptual Domestic Water Plan for the Water Pressure Zone that the Phase is within shall be completed as part of the Phase's infrastructure requirements. Also, any domestic water infrastructure necessary to provide primary looping, secondary looping, and meet all hydraulic criteria and fire flow shall be completed as part of the Phase's infrastructure requirements.
- For Recycled Water, all the Master Plan, Regional and Local Infrastructure identified in Section 4 and the Conceptual Recycled Water Plan for the Recycled Water Pressure Zone that the Phase is within shall be completed as part of the Phase's infrastructure requirements. Also, any recycled water infrastructure necessary to provide primary looping, secondary looping, and meet all hydraulic criteria shall be completed as part of the Phase's infrastructure requirements.
- For Sewer, all the Master Plan, Regional and Local Infrastructure identified in Section 4 and the Conceptual Sewer Plan for the Master Plan Sewer Tributary Area that the Phase is within and upstream of shall be completed as part of the Phase's infrastructure requirements. Also, any sewer infrastructure necessary to meet all hydraulic criteria shall be completed as part of the Phase's infrastructure requirements.

5.3.1 Additional Entitlement Requirements

In order to ensure orderly expansion of the City Utility Systems and other City Infrastructure, the following Additional Entitlement Requirements are imposed upon all Subdivision Maps and Developments within the Specific Plan area.

5.3.1.1 Conceptual Design Report:

Prior to approval of any entitlement application (subdivision maps, Development Plan Reviews, etc.), a conceptual design report shall be prepared and submitted to the Development Agency Engineering Department and the Utilities Engineering Department for review and approval for the established extent of all public improvements required for the project. The study shall identify existing and future rights-of-ways (ROW) and infrastructure improvements and establish all vertical and horizontal alignments for each utility. The report shall include cross-sections, profiles, and any supporting details needed to demonstrate that utilities can be adequately accommodated in the public ROW. The study shall account for all utility conflicts, right-of-way variations, existing obstructions, and the timing of utility installation. This shall also include Water Sub-Area Master Plans (WSAMP) and Sewer Sub-Area Master Plans (SSAMP) to assure compliance with all Master Plan Design Criteria, including Hydraulic Design Criteria. Utilities cannot be located along an alignment that conflicts with existing conditions (e.g. electrical poles, private property, etc.) unless that applicant is accepting the responsibility of modifying the existing conditions (e.g. undergrounding, relocation, ROW acquisition, etc.).

5.3.1.2 Preliminary Design Report:

As a condition of entitlements (subdivision maps, Development Plan Reviews, etc.) within the Specific Plan and prior to submittal of Infrastructure Improvements Plans, a Preliminary Design Report (PDR) for all public infrastructure shall be submitted and approved by the Development Agency Engineering Department and the Utilities Engineering Department. The PDR shall include the following:

Conceptual Design Compliance: A discussion modifying or confirming the conceptual design established with the Project's Conceptual Design Report. The study shall confirm all rights-of-ways (ROW), infrastructure improvements, and vertical and horizontal alignments for each utility.

Street Cross Sections and Profiles: Street Cross Sections and Profiles shall be provided for each public street, private street and Public Utility Easement (PUE) containing a public utility and at any points along the alignments where the ROW varies. The cross sections shall show the location and size of each utility and shall annotate the property/ROW lines, the type of finished surface material, the distance of each utility from centerline, the depth from finished surface to top of pipe, and the distance between utilities (outside wall to outside wall).

Constructability Review: The report shall include a discussion of the constructability issues along the proposed alignment and identify the recommended construction methods that may be utilized. The study shall perform field investigation (field survey and potholing) in order to identify potential utility conflicts, right-of-way variations, existing obstructions, and constructability issues created by the timing of utility installation.

Supporting Details: The PDR shall include any supporting details needed to demonstrate that utilities can be adequately accommodated in the public ROW, including the placement of large appurtenances, clearance from existing obstructions, etc.

30% Design Drawings: The PDR findings shall be incorporated into a 30% design plan set and included in the PDR.

5.3.1.3 Utilities Systems Map (USM):

Prior to approval of any entitlement application (subdivision maps, Development Plan Reviews, etc.), as part of the entitlement application a Conceptual Utilities Systems Map (USM) shall be prepared and submitted to the Development Agency Engineering Department and the Utilities Engineering Department for review and approval. The USM is a summary plan sheet exhibit that shows all the public off-site infrastructure requirements and demands for the Development Project (and/or Subdivision), the on-site private infrastructure improvements, and the interaction between the public and private utilities systems. As a Condition of Approval for the Development Project (and/or Subdivision), the Conceptual Utilities Systems Map shall be updated into a Final Utilities Systems Map to reflect the changes that occur between entitlement and Final Plan and Permit Approval. Reference the Ontario Municipal Utilities Company Utilities Engineering Department's Utilities Systems Map (USM) Requirements for details.

5.3.1.4 Integrated Waste Management Report (IWMR) and Solid Waste Handling Plan (SWHP):

Prior to approval of any entitlement application (subdivision maps, Development Plan Reviews, etc.), as part of the entitlement application a Conceptual Integrated Waste Management Report (IWMR) and a Conceptual Solid Waste Handling Plan (SWHP) shall be prepared and submitted to the Development Agency Engineering Department and the Utilities Engineering Department for review and approval. The SWHP summary plan sheet exhibit that demonstrates the project site's design conformance with the Integrated Waste Department's requirements, including the requirements for Sizing of Storage, Location of Collection Areas, Accessibility for Collection Vehicles, and Collection of Sorted/Diverted Waste Types. The IWMR is a report that presents project specific information that is not able to be demonstrated within the Solid Waste Handling Plan, including discussions on: project solid waste operations; project compliance with all applicable laws, statues, policies, and requirements; and, conformance with all the Integrated Waste Department's requirements, including the requirements for Sizing of Storage, Location of Collection Areas, Accessibility for Collection Vehicles, and Collection of Sorted/Diverted Waste Types. As a Condition of Approval for the Development Project (and/or Subdivision), the Conceptual SWHP and the a Conceptual IWMR shall be updated into a Final SWHP and Final IWMR to reflect the changes that occur between entitlement and Final Plan and Permit Approval. The SWHP and IWMR may be required to be updated from whenever there are new occupants, new uses or changes to existing uses, Tenant Improvements, Business Licenses, and Certificates of Occupancy. Reference the Ontario Municipal Utilities Company Utilities Engineering Department's Integrated Waste Management Report (IWMR) and Solid Waste Handling Plan (SWHP) Requirements for details.

5.4 Development Regulations

The Avenue Specific Plan is adopted by ordinance and will serve as the implementation tool for the General Plan as well as the zoning for the Project Site. The Avenue Specific Plan Development Regulations address general provisions, permitted uses, and development standards for the plan area.

5.4.1 General Site Development Standards

The following general site development criteria shall apply to all land development proposed in The Avenue Specific Plan.

A. Gross Acres - Except as otherwise indicated, gross acres for all development areas are measured to the centerline of streets.

B. Grading - Development within the plan area shall utilize grading techniques as approved by the City of Ontario. Grading concepts shall respond to the Design Guidelines included in The Avenue Specific Plan which guide the development of land use toward the goal of providing for a livable community with streets and entries designed for walking and resident interaction. Additionally, the grading concepts should adhere to the following:

   1. Where slope conditions are present, the property shall be located at the top of a slope

   2. In areas adjacent to a ridge line or in moderate slope areas, dwelling units and structures should be sited to:
      a. Use the natural ridge line as a backdrop for structures
      b. Use landscape plant materials as a backdrop
      c. Use structure to maximize concealment of cut slope

C. Building Modification - Additions and/or projections into setback areas permitted by The Avenue Specific Plan shall match the architectural style of the primary unit and shall be constructed of the same materials and colors as the primary unit.

D. Utilities - All new and existing public utility distribution lines of 34.5 kV or less shall be subsurface throughout the plan area.

E. Technology - All homes and businesses shall accommodate the most modern technology for computer internet access, phone, fax, and television. Broadband fiber optics cable will be installed on all peripheral streets per the approved Master Plan.

F. Density - The Avenue Specific Plan Land Use Plan establishes a maximum gross density average for each residential land use designation as indicated in Table 2 “Statistical Analysis”. These densities are 4.5 dwelling units per gross acres for the Low Density Residential designation, 8.5 dwelling units per gross acres for the Low Medium Density Residential designation and 22.0 dwelling units per gross acre for the Medium Density Residential designation.

G. Maximum Number of Dwelling Units - The maximum number of residential dwelling units permitted within The Avenue Specific Plan shall be 3,753 dwelling units.

H. Retaining walls - Exposed walls and fences facing roadways shall be no greater than six feet in height, except as necessary for acoustical purposes to satisfy the intent of the noise ordinance. Where retaining walls or fences face roadways, they shall be built, when feasible, of decorative materials consistent with the wall theme of the neighborhood.



Northerly Site Boundary along Schaefer Avenue, looking east

I. Temporary Uses - Temporary Uses shall be consistent with the Development Code requirements of Article 13 (page 13-46).

J. Satellite Dishes - Freestanding satellite dish antennas shall be in compliance with Article 32, Section 9.1.3289 of the Development Code.

K. Recreational Vehicle Storage - No recreational vehicle (RV) storage in front or corner side yards and no RV street parking for a period of more than 72 hours.

L. Dairy Separation Requirement for Residential District Development Standards Section – The following separation requirements from existing dairies/feed lots shall apply to new residential development or structures used for public assembly purposes from existing dairies/feed lots. A minimum 100' separation shall be required between new residential, commercial, or industrial development or structure used for public assembly and an existing animal feed trough, corral/pen or an existing dairy/feed lot including manure stockpiles and related wastewater detention basins. The 100-foot separation requirement may be satisfied by an off-site easement acceptable to the Planning Director with adjacent properties, submitted with the initial final map and recorded prior to or concurrent with the final map.



Typical single family detached residences

M. Product distribution requirements within Zones 1-8 (as shown on Exhibit 26, "Conceptual Product Distribution") - Minimum number of product types per zone: 2. The following details the limitations on unit counts for products within a single zone or in a contiguous area of the same product(1). A contiguous area of one product type can not continue into an adjacent zone unless the unit count for that contiguous area conforms to the following limitations.

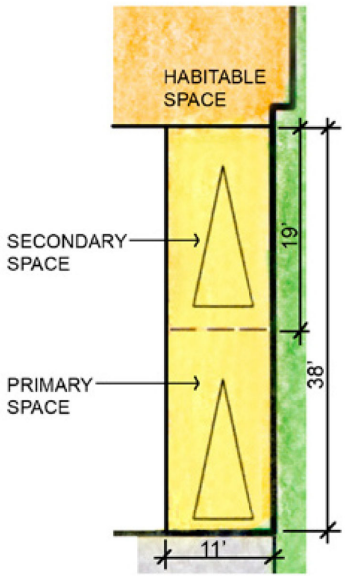
1. Single Family Detached (SFD):
   a. Minimum number of dwelling units per product: 25
   b. Maximum number of dwelling units per Product: 125

2. Single Family Attached (SFA):
   a. Minimum number of dwelling units per product: 36
   b. Maximum number of dwelling units per Product: 250

3. Multi-Family:
   a. Minimum number of dwelling units: 200(2)
   b. Maximum number of dwelling units: 400

N. Tandem Parking:

1. All vehicles must be registered with the HOA or management company. A copy of the registration for each vehicle showing the address, make model, vehicle year and color will be required upon registration.
2. No garage may be separately sold or assigned by an owner. A garage may be rented or leased to a non-owner solely in connection with the rental or lease of the respective unit.
3. All residents are required to use their garage space for parking their vehicles. Residents with more than two vehicles must register two vehicles for the garage spaces before a parking permit will be considered allowing parking on the private streets or parking bays within the project.
4. Anyone requesting a parking permit must also demonstrate that his/her garage is not being used for storage, or being used as a workshop or for any other purpose which would prevent the garage from being used to park two vehicles.



Tandem Parking

5. The secondary space (adjacent to habitable space) will be given 25% credit towards parking requirement.
6. Minimum size of tandem parking: 11'x38'.

O. Multi-family projects proposed within a gated neighborhood, may be subject to the following open space requirement, subject to review and approval of the Planning Department:

1. Ground Floor: A minimum contiguous area of 150 sq. ft. in area with no dimension less than 10 feet in any direction.
2. Balconies and Decks: Must have a minimum contiguous area of 50 sq. ft. in area with no dimension less than 5 feet in any direction.
3. Common Open Space: A minimum of 250 sq. ft. of common open space shall be provided per each unit. Common open space shall require a minimum contiguous area of 300 sq. ft. with no dimension less than 15 feet in any direction.

5.4.2 Residential Development Standards Tables

The development standards for proposed residential products at The Avenue are shown on the following pages (Table 3a-3l).

(2) Units of less than 200 may be approved with the review and approval of the Planning Director.

Table 3a - Product Type 1A Development Standards (11)

Typical lot sizes: 55'x105', 60'x100', 60'x110' (5,500+ SF Lots)

Lot Criteria

Min. Lot Width at Front PL for Standard Lot	55'
Min. Lot Width on Corner	65'
Min. Lot Depth on Standard Lot	100'
Min. Lot Depth on Corner Lot	100'
Min. Lot Size	5,500 S.F.

NOTE: Lots within cul-de-sacs, standard knuckles or modified knuckle configurations shall provide a minimum 35-foot lot width at front property line and shall meet the minimum lot width established for the Planning Area at the building setback. All minimum side and rear yard setbacks shall be maintained at all times.

Minimum Setbacks

All front and corner side setbacks are measured from the property line at back of sidewalk.
All other setbacks are measured from property line unless otherwise noted.

Front Setbacks

Living Area	20'
Porch with Single Story Plate Line (2)	12'
Front Entry Garage (3)	18'
Turn In Garage with Single Story Plate Line	10' (Street Facing 18')

Side Setbacks (4)

From Interior PL (1)	5'
From Residential Street - First Story (6)	10'
From Residential Street - Porch	8'
Side for Garages (Min. 10' Between Garages)	3'
Garage to Back-of-Sidewalk	18'
Patio Cover	3'

Rear Setbacks

Main Structure	15'
Garage (Single Story Plate Line)	5'
Patio Cover	5'
Second Story Deck	10'
Accessory Structure	3'

Lot Coverage

Maximum Coverage	55%

Maximum Building Height

Main Structure	35'
Accessory Structures	14'

Walls, Fences and Hedges

Maximum Height in "The Avenue" and/or front or corner side yard areas	3'
Maximum Height at all other Locations	6'
Maximum Height of Retaining Walls	3'
Maximum Height Solid Rear Yard Property Walls adjacent to Pocket Parks	3'

Parking Minimum Number of Parking Spaces Required: 2 Garage Spaces

Recreational Vehicle (RV) storage is prohibited in front or corner side yards. RV Street parking, over 72 hours, is prohibited.

Table 3b - Product Type 1B Development Standards[11]

Typical lot sizes: 60'x85', 50'x110', 55'X90', 50'/55'x100', 55'x105' (4,250 - 5,775 SF Lots)

Lot Criteria

Min. Lot Width at Front PL for Standard Lot	50'
Min. Lot Width on Corner	55'
Min. Lot Depth on Standard Lot	85'
Min. Lot Depth on Corner Lot	85'
Min. Lot Size	4,250 S.F.

NOTE: Lots within cul-de-sacs, standard knuckles or modified knuckle configurations shall provide a minimum 35-foot lot width at front property line and shall meet the minimum lot width established for the Planning Area at the building setback. All minimum side and rear yard setbacks shall be maintained at all times.

Minimum Setbacks

All front and corner side setbacks are measured from the property line at back of sidewalk.
All other setbacks are measured from property line unless otherwise noted.

Front Setbacks

Living Area	12'
Porch with Single Story Plate Line [2]	8'
Front Entry Garage [3]	18'
Turn In Garage with Single Story Plate Line	10' (Street Facing 18')

Side Setbacks [4]

From Interior PL [1]	5'
From Residential Street - First Story [6], [7]	10'
From Residential Street - Porch	8'
Side for Garages (Min. 10' Between Garages)	3'
Garage to Back-of-Sidewalk	18'
Patio Cover	3'

Rear Setbacks

Main Structure	10'-15'	Max. 50% of the facade may be at 10'
Garage (Single Story Plate Line)	5'	
Patio Cover	5'	
Second Story Deck	10'	
Accessory Structure	3'	

Lot Coverage

Maximum Coverage	55%

Maximum Building Height

Main Structure	35'
Accessory Structures	14'

Walls, Fences and Hedges

Maximum Height in "The Avenue" and/or front or corner side yard areas	3'
Maximum Height at all other Locations	6'
Maximum Height of Retaining Walls	3'
Maximum Height Solid Rear Yard Property Walls adjacent to Pocket Parks	3'

Parking Minimum Number of Parking Spaces Required 2 Garage Spaces

Recreational Vehicle (RV) storage is prohibited in front or corner side yards. RV Street parking over 72 hours is prohibited.

Table 3c - Product Type 1C Development Standards[11]

Typical lot sizes: 40'x80', 45'x80', 50'/70'x80', 50'x85', 45'/50'x90', 40x100' (3,200 - 5,600 SF Lots)

Lot Criteria

Min. Lot Width at Front PL for Standard Lot	40'
Min. Lot Width on Corner	45'
Min. Lot Depth on Standard Lot	80'
Min. Lot Depth on Corner Lot	80'
Min. Lot Size	3,200 S.F.

NOTE: Lots within cul-de-sacs, standard knuckles or modified knuckle configurations shall provide a minimum 35-foot lot width at front property line and shall meet the minimum lot width established for the Planning Area at the building setback. All minimum side and rear yard setbacks shall be maintained at all times.

Minimum Setbacks

All front and corner side setbacks are measured from the property line at back of sidewalk.
All other setbacks are measured from property line unless otherwise noted.

Front Setbacks

Living Area	12'	
Porch with Single Story Plate Line [2]	8'	
Front Entry Garage [3]	18'	
Turn In Garage with Single Story Plate Line	10'	

Side Setbacks [4]

From Interior PL [1]	5'	
From Residential Street - First Story [6], [7]	10'	
From Residential Street - Porch	8'	
Side for Garages (Min. 10' Between Garages)	3'	
Garage to Back-of-Sidewalk	18'	
Patio Cover	3'	

Rear Setbacks

Main Structure	10'-15'	Max. 50% of the facade may be at 10',
Garage (Single Story Plate Line)	5'	
Patio Cover	5'	
Second Story Deck	10'	
Accessory Structure	3'	

Lot Coverage

Maximum Coverage	55%

Maximum Building Height

Main Structure	35'
Accessory Structures	14'

Walls, Fences and Hedges

Maximum Height in "The Avenue" and/or front or corner side yard areas	3'
Maximum Height at all other Locations	6'
Maximum Height of Retaining Walls	3'
Maximum Height Solid Rear Yard Property Walls adjacent to Pocket Parks	3'

Parking Minimum Number of Parking Spaces Required 2 Garage Spaces

Recreational Vehicle (RV) storage is prohibited in front or corner side yards. RV Street parking, over 72 hours, is prohibited.

Table 3d - Product Type 1D Development Standards[11]

Typical lot sizes: 45'/50'x60'/70' (2,700 - 3,500 S.F. Lots)

Lot Criteria

Min. Lot Width at Front PL for Standard Lot	45'
Min. Lot Width on Corner	50'
Min. Lot Depth on Standard Lot	60'
Min. Lot Depth on Corner Lot	60'
Min. Lot Size	2,700 S.F.

NOTE: Lots within cul-de-sacs, standard knuckles or modified knuckle configurations shall provide a minimum 35-foot lot width at front property line and shall meet the minimum lot width established for the Planning Area at the building setback. All minimum side and rear yard setbacks shall be maintained at all times.

Minimum Setbacks [1]

All front and corner side setbacks are measured from the property line at back of sidewalk.
All other setbacks are measured from property line unless otherwise noted.

Front Setbacks [1]

Living Area	10'
Porch with Single Plate Line	8'
Front Entry Garage	18'
Turn in Garage with Single Story Plate Line	10'

Side Setbacks [1]

From Interior PL [1]	5'
From Residential Street [6]	10'
From Residential Street - Porch	8'
Side for Garage (Min. 10' Between Garages)	3'
Garage to Back-of-Sidewalk	18'
Patio Cover	3'

Rear Setbacks [1]

Main Structure	5'
Garage (Single Story Plate Line)	5'
Patio Cover	5'
Second Story Deck	5'
Accessory Structure	3'

Lot Coverage

Maximum Coverage	65%

Maximum Building Height

Main Structure	35'
Accessory Structure	14'

Walls, Fences and Hedges

Maximum Height in Traffic Safety-Site Areas and/or front or corner side yard areas	3'
Maximum Height at all other Locations	6'
Maximum Height of Retaining Walls	3'
Maximum Height of Solid Rear Yard Property Walls adjacent to Pocket Parks	3'

Parking

Minimum Resident Parking Required	2 Garage Spaces

Recreational Vehicle (RV) storage is prohibited in front or corner side yards. RV Street Parking, over 72 hours, is prohibited.

Table 3e - Product Type 2 Development Standards(11)

Typical lot sizes: 40'x70', 35'/40'x75', 34'x78' (2,380 - 3,600 SF alley loaded lots)

Lot Criteria

Min. Lot Width at Front PL for Standard Lot	34'
Min. Lot Width on Corner	39'
Min. Lot Depth on Standard Lot	70'
Min. Lot Depth on Corner Lot	70'
Min. Lot Size	2,380 S.F.

NOTE: Lots within cul-de-sacs, standard knuckles or modified knuckles configurations shall provide a minimum 35-foot lot width at front property line. Lots shall meet the minimum lot width established for the Planning Area at the building setback. All minimum side and rear yard setbacks shall be maintained at all times.

Minimum Setbacks (1)

All front and corner side setbacks are measured from the property line at back of sidewalk.
All other setbacks are measured from property line unless otherwise noted.

Front Setbacks

Living Area	10'
Porch with Single Story Plate Line (2)	8'
Front Entry Garage (3)	NA for Alley, 18' other
Turn In Garage with Single Story Plate Line	NA

Side Setbacks (4)

From Interior PL (1)	5'
From Residential Street (5), (6)	10'
Side for Garages	5'
Garage to Back-of-Sidewalk	18'
Patio Cover	3'

Rear Setbacks (8)

Main Structure (from Alley R/W)	3'
Garage (single story plate line, from alley R/W)	3'
Patio Cover	5'
Accessory Structures	3'
Garage Door to Garage Door	30'

Lot Coverage

Maximum Coverage	55%

Maximum Building Height

Main Structure	35'
Accessory Structure	14'

Walls, Fences and Hedges

Maximum Height in Traffic Safety-Site Areas and/or front or corner side yard areas	3'
Maximum Height at all other Locations on Lot	6'
Maximum Height of Retaining Walls	3'

Parking Minimum No. of Parking Spaces Required — 2 Garage Spaces

Recreational Vehicle (RV) storage is prohibited in front or corner side yards. RV Street parking, over 72 hours, is prohibited.

Table 3f - Product Type 3 Development Standards[11]

Typical product types: SFD 4 to 8 units Cluster/Mews (Common Lot and Single Lot Subdivisions)

Lot Criteria

Min. Lot Size	2,000 S.F. (assumes single unit built where unique site constraints exist)

Minimum Setbacks [1]

Setbacks for Common Lot and Single Lot Subdivision conditions are shown graphically in Section 6, Design Guideline and below. These standards will apply to situations where the Cluster is plotted with less than 4, 6 or 8 typical units including, but not limited to, 2 or 3 unit plots of the 4-unit cluster, 3, 4 or 5 unit plots of the 6-unit cluster, or 4, 5, 6 or 7 unit plots of the 8 unit cluster.

Front Setbacks

Living Area	10’
Porch with Single Plate Line	8’

Side Setbacks

To Interior Property Line	4’
From Residential Street [6]	10’
Building to Building	8’
Garage to Garage (across drive)	30’
Building to Building (across drive)	28’
Patio Cover	3’

Rear Setbacks

To Property Line	5’
Building to Building	10’

Lot Coverage

Maximum Coverage	65%
Maximum Dwelling Units Per Cluster	8

Maximum Building Height

Main Structure	35’

Walls, Fences and Hedges

Maximum Height in Traffic Safety-Site Areas and/or front or corner side yard areas	3’
Maximum Height at all other Locations	6’
Maximum Height of Retaining Walls	3’

Parking

Minimum Resident Parking Required	2 Spaces within a Garage

Driveways may be <5’ or >18’. No driveway between 5 feet and 18 feet is allowed.

Recreational Vehicle (RV) storage is prohibited in front or corner side yards. RV Street Parking, over 72 hours, is prohibited.

Drives

Private lanes shall be enhanced with a combination of pavers, colored concrete or similar decorative material, subject to the review of and approval by the Planning Director.

Table 3g - Product Type 4 Development Standards(11)

Typical product type: Duplex

Lot Criteria

Min. Lot Size	5,000 S.F.

Minimum Setbacks (1)

All front and corner side setbacks are measured from the property line at back of sidewalk.
All other setbacks are measured from property line unless otherwise noted.

Front Setbacks

Living Area	10’
Porch with Single Story Plate Line (2)	8’
Front Entry Garage	NA
Turn In Garage with Single Story Plate Line	NA

Side Setbacks (4)

From Interior PL (1)	5’
From Residential Street (6)	10’
Side for Garages (9)	3’
Garage to Back-of-Sidewalk	18’
Patio Cover	3’

Rear Setbacks (8)

Main Structure (from Alley R/W)	5’
Garage (single story plate line, from alley R/W)	5’
Patio Cover	3’
Accessory Structures	3’
Garage Door to Garage Door	30’

Lot Coverage

Maximum Coverage	60%

Maximum Building Height

Main Structure	35’
Accessory Structure	14’

Walls, Fences and Hedges

Maximum Height in Traffic Safety-Site Areas and/or front or corner side yard areas	3’
Maximum Height at all other Locations on Lot	6’
Maximum Height of Retaining Walls	3’

Parking Minimum No. of Resident Parking Spaces Required

1.75 spaces per one-bedroom unit including 1 in a garage, 2 spaces per two-bedroom unit, including 1 in a garage and 2.5 spaces per 3 or more bedroom unit, including 1 in a garage. Minimum Guest Parking Requirement is 1 space for each 4 units under 50 on a building lot. 1 space for every 5 units between 51-100 units on a building lot. Public on-street parking may be counted toward the guest parking requirement. Recreational Vehicle (RV) storage is prohibited in front or corner side yards. RV Street parking, over 72 hours, is prohibited.

Table 3h - Product Type 5 Development Standards[11]

Typical product type: Triplex

Lot Criteria

Min. Lot Size	5,700 S.F.

Minimum Setbacks (1)

All front and corner side setbacks are measured from the property line at back of sidewalk. All other setbacks are measured from property line unless otherwise noted.

Front Setbacks

Living Area	12’
Porch with Single Story Plate Line (2)	8’
Front Entry Garage	NA
Turn In Garage with Single Story Plate Line	NA

Side Setbacks (4)

From Interior PL (1)	5’
From Residential Street (6)	13’
Side for Garages (9)	3’
Garage to Back-of-Sidewalk	18’
Patio Cover	3’

Rear Setbacks (8)

Main Structure (from Alley R/W)	3’
Garage (single story plate line, from alley R/W)	5’
Patio Cover	3’
Accessory Structures	3’
Garage Door to Garage Door	30’

Lot Coverage

Maximum Coverage	65%

Maximum Building Height

Main Structure	35’
Accessory Structure	14’

Walls, Fences and Hedges

Maximum Height in Traffic Safety-Site Areas and/or front or corner side yard areas	3’
Maximum Height at all other Locations on Lot	6’
Maximum Height of Retaining Walls	3’

Parking Minimum No. of Resident Parking Spaces Required

1.75 spaces per one-bedroom unit including 1 in a garage, 2 spaces per two-bedroom unit, including 1 in a garage and 2.5 spaces per 3 or more bedroom unit, including 1 in a garage. Minimum Guest Parking Requirement is 1 space for each 4 units under 50 on a building lot. 1 space for every 5 units between 51-100 units on a building lot. Public on-street parking may be counted toward the guest parking requirement. Recreational Vehicle (RV) storage is prohibited in front or corner side yards. RV Street parking, over 72 hours, is prohibited.

Table 3i - Product Type 6 Development Standards(11)

Typical product type: Rowtown

Lot Criteria

Min. Lot Size	1,300 S.F./unit

Minimum Setbacks (1)

All front and corner side setbacks are measured from the property line at back of sidewalk. All other setbacks are measured from property line unless otherwise noted.

Front Setbacks

Living Area	10’
Porch with Single Story Plate Line (2)	8’
Front Entry Garage	NA
Turn In Garage with Single Story Plate Line	NA

Side Setbacks (4)

From Interior PL (1)	5’
From Residential Street (6)	10’
Side for Garages (9)	3’
Garage to Back-of-Sidewalk	18’
Patio Cover	3’

Rear Setbacks (8)

Main Structure (from Alley R/W)	5’
Garage (single story plate line, from alley R/W)	5’
Patio Cover	3’
Accessory Structures	3’
Garage Door to Garage Door	30’

Lot Coverage

Maximum Coverage	60%

Maximum Building Height

Main Structure	35’
Accessory Structure	14’

Walls, Fences and Hedges

Maximum Height in Traffic Safety-Site Areas and/or front or corner side yard areas	3’
Maximum Height at all other Locations on Lot	6’
Maximum Height of Retaining Walls	3’

Parking Minimum No. of resident Parking Spaces Required

1.75 spaces per one-bedroom unit including 1 in a garage, 2 spaces per two-bedroom unit, including 1 in a garage and 2.5 spaces per 3 or more bedroom unit, including 1 in a garage. Minimum Guest Parking Requirement is 1 space for each 4 units under 50 on a building lot. 1 space for every 5 units between 51-100 units on a building lot. Public on-street parking may be counted toward the guest parking requirement. Recreational Vehicle (RV) storage is prohibited in front or corner side yards. RV Street parking, over 72 hours, is prohibited.

Table 3j - Product Type 7 Development Standards(11)

Typical product type: Autocourt
20 Du/Ac and under

Lot Criteria

Min. Lot Size	14,000 S.F. (7,000 S.F. for half courts)

Minimum Setbacks (1)

All front and corner setbacks are measured from the property line at back of sidewalk. All other setbacks are measured from property line unless otherwise noted.

Front Setbacks

Living Area	10’
Porch with Single Story Plate Line (2)	8’

Side Setbacks

From Residential Street	10’
From Any Exterior Property Line	10’

Rear Setbacks

From Alley R/W	5’

Minimum Building Separation 20’

Lot Coverage

Maximum Coverage	60%
Maximum Dwelling Units Per Building	10

Maximum Building Height

Main Structure	35’

Walls, Fences and Hedges

Maximum Height in Traffic Safety-Site Areas and/or front or corner side yard areas	3’
Maximum Height at all other Locations	6’
Maximum Height at Retaining Walls (10)	3’

Parking Minimum Resident Parking Required:

1.75 spaces per one-bedroom unit including 1 in a garage, 2 spaces per two-bedroom unit including 1 in a garage and 2.5 spaces per three or more bedroom unit including 1 in a garage.

Minimum Guest Parking Required:

1 Space for each 4 units under 50 on the building lot.

1 Space for every 5 units between 51-100 units on the building lot. Public on-street parking may be counted toward guest requirement. Recreational Vehicle (RV) storage is prohibited in front or corner side yards. RV Street parking, over 72 hours, is prohibited.

Table 3k - Product Type 8 Development Standards(11)

Typical product type: Autocourt-Greater than 20 Du/Ac

Lot Criteria	
Min. Project Area	3 acres
Minimum Perimeter Setbacks	
From Neighborhood Edge	15’
Internal Setbacks	
From Residential Street R.O.W. or parking area	10’
Building to sidewalk	3’
Driveway Apron	3’ min.
Minimum Building Separation	
Front to Front	25’
Front to Side	25’
Side to Side	15’
Porch to Porch	15’
Rear to Rear	30’
Side to Drive Aisle	15’
Front to parking stall	10’
Lot Coverage	
Maximum Coverage	55%
Dwelling Units Per Building	10 min.-55 max.
Maximum Building Height	
Main Structure	45’
Walls, Fences and Hedges	
Maximum Height in Traffic Safety-Site Areas and/or front or corner side yard areas	3’
Maximum Height at all other Locations	6’
Maximum Height at Retaining Walls (10)	3’

Parking

1.75 spaces per one-bedroom unit including 1 in a garage, 2 spaces per two-bedroom unit including 1 in a garage and 2.5 spaces per three or more bedroom unit including 1 in a garage.
Minimum Guest Parking Required:
1 Space for each 4 units under 50 on the building lot.
1 Space for every 5 units between 51-100 units on the building lot. Public on-street parking may be counted toward guest requirement. Recreational Vehicle (RV) storage is prohibited in front or corner side yards. RV Street parking, over 72 hours, is prohibited.

Any public street parking can not be counted towards meeting the parking requirement.
See Section 5.4.1.N. for Tandem Parking.

Open Space

Private open space per unit in balcony or patio- ground floor 150 S.F. with min. 8’ dimension and all other floors 50 S.F. with min. 5’ dimension.
Common open space per unit - 250 S.F. with min. 15’ dimension.
See section 5.4.1.0. for open space requirement for a gated multi-family projects.

Table 3I - Product Type 9A and 9B Development Standards

Typical product type: Apartments max. 25 Du/Ac

Lot Criteria	
Min. Project Area	3 acres
Minimum Perimeter Setbacks	
From Neighborhood Edge	15’
To Carport or Garage	5’
Internal Setbacks	
From Residential Street R.O.W. or parking area	10’
Building to sidewalk	3’
Minimum Building Separation	
Front to Front	25’
Front to Side	25’
Side to Side	20’
Porch to Porch	20’
Rear to Rear	30’
Side to Drive Aisle	10’
Front to parking stall	10’
To Carport or Garage	10’
Lot Coverage	
Maximum Coverage	55%
Dwelling Units Per Building	10 min.-55 max.
Maximum Building Height	
Main Structure	45’
Walls, Fences and Hedges	
Maximum Height in Traffic Safety-Site Areas and/or front or corner side yard areas	3’
Maximum Height at all other Locations	6’
Maximum Height at Retaining Walls (10)	3’
Parking	
Minimum Resident Parking Required:	
1 space per bedroom (1 in garage per unit)	
Minimum Guest Parking Required:	
0.25 space per unit	
A parking study shall be completed and approved by the city for each community.	
Any public street parking can not be counted towards meeting the parking requirement.	
See Section 5.4.1.N. for Tandem Parking.	
Open Space	
Private open space per unit in balcony or patio- ground floor 100 S.F. with min. 10’ dimension and all other floors 50 S.F. with min. 10’ dimension.	
Common open space per unit -250 S.F. with min. 15’ dimension.	
See Section 5.4.1.O. for open space requirement for a gated multi-family projects.	

Footnotes:

(1) Architectural projections may encroach a maximum of 3' into setbacks

(2) The minimum depth of a porch shall be 7 feet with a minimum area of 70 S.F.

(3) If front entry garages are adjacent there shall be a minimum of 3' garage face offset with the adjacent garage

(4) Side yard slopes may not encroach more than 50% into side yard setback areas

(5) Minimum 8' setback from the back of the sidewalk

(6) Side setback measured from the property line at back of sidewalk excluding corner intersection cutoffs

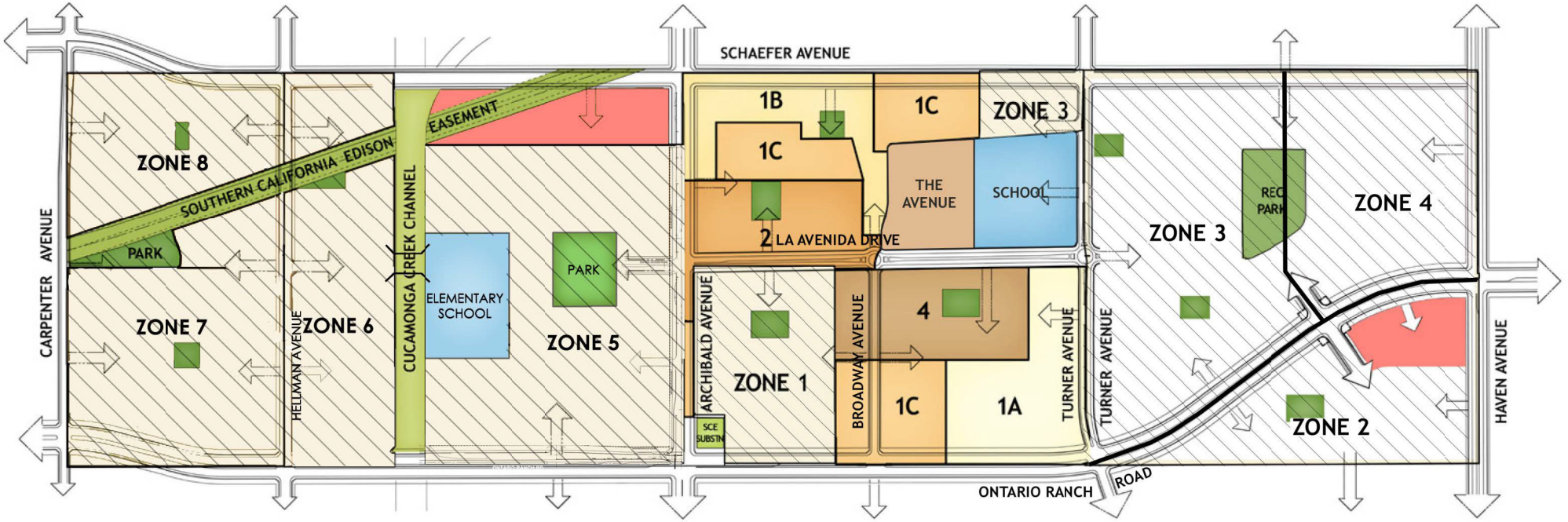
(7) Second story on corner lots is 15' average

(8) Articulation on rear elevations of alley loaded projects to be City approved

(9) Except at corner lot

(10) Stepped walls allowed

(11) All new entitlements shall be subject to consultation with the Gabrieleno Band of Mission Indians – Kizh Nation and the San Manuel Band of Mission Indians - Serrano Nation



LEGEND

P	PARK
C	COMMERCIAL
D	DAYCARE

- PRODUCT 1A 5,500+ SF LOT
- PRODUCT 1B 4,250 - 5,775 SF LOT
- PRODUCT 1C 3,200 - 4,500 SF LOT
- PRODUCT 2 2,380 - 3,600 SF LOT
- PRODUCT 3 SFD 4/8 CLUSTER
- PRODUCT 4 DUPLEX
- PRODUCT 5 TRIPLEX
- PRODUCT 6 ROWTOWN
- PRODUCT 7 AUTOCOURT (20 Du/Ac and under)
- PRODUCT 8 AUTOCOURT (Greater than 20 Du/Ac)
- ZONES 1-8 (Product Distribution Regulations in Section 5.4.1 M.)

NORTH 0 100 200 400 800

NOTE: Subject to change by each individual builder.

The Avenue SPECIFIC PLAN

Conceptual Product Distribution

Ontario Ranch ▪ Ontario, California

Exhibit 26 - Conceptual Product Distribution

5.4.3 Low Density Residential Permitted and Conditional Uses

This category includes the development of single family detached dwelling units. The purpose of the residential standards for single family detached housing is to establish the minimum criteria for the development of these product types on individual lots within the neighborhoods specified within the plan area.

A. Permitted Uses

1. Single family detached dwellings including live/work units and their accessory uses
2. Single family attached dwellings
3. Public or private parks
4. Recreational buildings including swimming pool
5. Child day care facilities serving up to seven (7) children (per State guidelines)
6. Schools
7. Accessory uses to include the following:
    a. Garages
    b. Granny Flats (i.e. Second Dwelling Units, in accordance the City's Zoning Code)
    c. Home occupations
    d. Swimming pools, spas, sports courts, and other similar outdoor recreational amenities
    e. Patios and patio covers
    f. Storage, garden structures, cabanas, and greenhouses
    g. Monument signs
    h. Temporary uses such as model home and subdivision sales trailers, temporary construction parking, offices, and facilities, real estate signs, signage indicating future development and directional signage
    i. Second story additions to single family dwelling units

B. Conditionally Permitted Uses

1. Places of worship including but not limited to churches and synagogues
2. Child day care facilities serving eight (8) to 14 children (per State guidelines)

5.4.4 Low Medium Density Residential Permitted and Conditional Uses

This category includes the development of single-family and multi-family attached type dwelling units.

A. Permitted Uses

1. Single family detached dwellings including Cluster SFD and Mews SFD, single-family attached and multi-family attached dwellings
2. Public or private parks
3. Recreational buildings including swimming pool
4. Child day care facilities serving up to seven (7) children (per State guidelines)
5. Schools
6. Accessory uses to include the following:
    a. Garages
    b. Granny Flats (i.e. Second Dwelling Units, in accordance with City Zoning Code)
    c. Home occupations
    d. Swimming pools, spas, tennis courts, sports courts, and other similar outdoor recreational amenities
    e. Patios and patio covers
    f. Mailboxes
    g. Community center buildings
    h. Maintenance storage buildings
    i. Monument signage
    j. Temporary uses such as model units, sales offices, and subdivision sales trailers, temporary construction offices and facilities, real estate signs, signage indicating future
    k. Second story additions to single dwelling units

B. Conditionally Permitted Uses

1. Places of worship including but not limited to churches and synagogues
2. Child day care facilities serving eight (8) to 14 children (per State guidelines)

5.4.5 Medium Density Residential Permitted and Conditional Uses

This category includes the development of single-family and multi-family attached type dwelling units.

C. Permitted Uses

1. Single family attached and multi-family attached dwellings
2. Public or private parks
3. Recreational buildings including swimming pool
4. Child day care facilities serving up to seven (7) children (per State guidelines)
5. Schools
6. Accessory uses to include the following:
    a. Garages
    b. Home occupations
    c. Swimming pools, spas, tennis courts, sports courts, and other similar outdoor recreational amenities
    d. Patios and patio covers
    e. Mailboxes
    f. Community center buildings
    g. Maintenance storage buildings
    h. Monument signage
    i. Temporary uses such as model units, sales offices, and subdivision sales trailers, temporary construction offices and facilities, real estate signs, signage indicating future

B. Conditionally Permitted Uses

1. Places of worship including but not limited to churches and synagogues
2. Child day care facilities serving eight (8) to 14 children (per State guidelines)
3. Age-restricted/Senior Housing and apartments (MDR only)

5.4.6 Commercial Development Standards[1]

Minimum Lot Area

Minimum lot size shall be large enough to accommodate the proposed use and meet all Development Standards as specified within the Specific Plan. Minimum site area shall be 4 acres; however, the site area may be less when developed as part of an integrated commercial center.

Building Setbacks

Building setbacks shall be determined by the hierarchy of streets (major arterial and local streets) and measured from PL for local streets and RW for Major Arterials. All setback areas are to be landscaped. These landscape area setbacks are:

From Ontario Ranch Road Right-Of-Way	35 feet
From Haven Avenue Right-Of-Way	14 feet
Archibald Avenue Right-Of-Way	19 feet
Schaefer Avenue Right-Of-Way	10 feet
From Private or Local Street (from required 5' min. sidewalk)	10 feet
From Interior Property Line	0 feet
From Interior Property Line Adjacent to Residential District	25 feet

Maximum Development Floor Area Ratio (FAR) shall be 0.35.
Maximum Height shall be 35 feet, excluding architectural projections and focal elements such as towers and cupolas.

Loading Areas

All loading areas shall be screened from adjacent public streets, residential and open space use through the use of landscaping, earthen berms, and/or decorative walls or fencing. All storage including cartons, containers, materials, or trash shall be shielded from view within a building or area enclosed by a solid fence or wall not less than six feet in height.

Parking Setbacks

All parking setback areas are to be landscaped as follows:

From Ontario Ranch Road Right-Of-Way	35 feet
From Haven Avenue Right-Of-Way	14 feet
Archibald Avenue Right-Of-Way	19 feet
Schaefer Avenue Right-Of-Way	10 feet
From Private or Local Street	10 feet
From Interior Property Line	5 feet
From Interior Property Line Adjacent to Residential District	5 feet

Footnote:
[1] All new entitlements shall be subject to consultation with the Gabrieleno Band of Mission Indians - Kizh Nation and the San Manuel Band of Mission Indians - Serrano Nation

Wall and Fences

When a non-residential use adjoins a residential district, a 6-foot high decorative masonry wall shall be required at the interior side and/or rear property lines. Proposed walls in excess of 6 feet in height shall be designed to retain up to a maximum of 3 feet of earth. In no case, however shall a wall exceed an overall height of 9 feet (maximum 6-foot high wall on top of a maximum 3-foot height retaining wall).

5.4.7 Commercial Permitted and Conditional Uses

List of Permitted uses in the Commercial Zone:

Administrative, Professional, and Other Offices

Advertising Agency

Animal Hospital/Veterinarian

Antique Stores

Art Galleries and Art Supply Store

Auditoriums and Other Public Assembly Facilities

Automotive Parts and Accessories Stores (Retail Sales Only)

Automotive Services (i.e. tune-up, emission tests, batteries, etc. — no use of impact wrenches or other equipment that could create noise impacts)



Bakery

Banks, Credit Unions and other Depository Institutions

Barber Shop and Beauty/Nail Salon

Beauty Supply Store

Book Stores

Camera and Photographic Supply Store

Catering establishments

Charitable, Philanthropic, Service and other Non-Profit Organization Offices

Cigar and other Tobacco Products Store

Clothing and Accessory Stores

Communications equipment — Refer to Development Code Section 9-1.3289

Computer and Home Electronic Stores

Computer, Home Electronics, and Small Home Appliances (when ancillary to another use)

Convenience Market (per Development Code Section 9-1.1305)

Dance/Studio (Instructional)



Delicatessen

Discount Variety Store

Dry Cleaners

Fast Food

Florist

General Merchandise Stores

Grocery Store/Supermarket

Hardware Store

Health Club/Gymnasium — less than 2,000 square feet

Hobby, Toy and Game Store

Jewelry and Watches/Clocks

Jewelry Store

Laundry Self Serve

Library Locksmith/Key Shop

Luggage and Leather Goods

Medical Office

Minor Auto Repair (i.e. brakes, tires, radiators, electrical, etc)

Money Transmitting

Music and Video Stores

Office Supply, Stationery and Gift Stores

Other Financial Services

Pet and Pet Supply Store

Pet Grooming — Commercial

Pharmacies and Drug Stores w/o drive thru facilities

Photocopying and Duplicating Services

Photography Studio

Police Storefront/Substation

Police/Fire Station

Restaurants (sit down/full service)

Shoe Repair or Shoe Store

Specialty Food Stores

Sporting Goods Store

Tailor

Thrift and Second Hand Store

Travel Agency

List of Conditionally-Permitted uses in the Commercial Zone:

Alcoholic Beverage Sales

Ambulance Service (Office Only — No Storage of Vehicles)

Assisted Living/Congregate Care

Banks, Credit Unions and other Depository Institutions (with drive thru, see Development Ordinance Section 9-101305 D)

Banquet Facilities

Bar/Cocktail Lounge

Billiard Parlor/Pool Hall

Bowling Alley

Building Materials and Garden Supply

Car Wash — Full

Car Wash Self Service (Ancillary)

Charitable Distribution Services (i.e. food banks, etc.)

Check Cashing, Check/Payday Advance

Church

Commercial Day care

Convalescent Care Facility (w/continuous skilled nursing care)

Exterminating Service per Development Ordinance Section 9-1.1305 E

Fast Food with Drive-through (per Development Code, Section 9-10305D) Funeral Parlor, Mortuary

Gas Stations (per Section 9-1.1305 G)

Health Club Gymnasium — over 10,000 square feet

Home Appliance Store

Liquor Store

Live Entertainment

Pawnshop/Pawnbroker

Pharmacies and Drug Stores with drive thru facilities

Public Storage (PA-4 Only)

Simulated Shooting Games (Indoor)

Skating Rink

Substance Abuse Clinics/Facilities

Theater

Tire Stores

Video/Electronic Game Arcades (per Development Code Section 9-101305V)

Vocational/Trade Schools



5.5 Maintenance

The public and private improvements constructed within The Avenue Specific Plan will be maintained through a combination of public and private entities as described below and in Table 4, "Maintenance Responsibility Matrix".

5.5.1 Public Maintenance

1. All residential development areas will be dedicated as public streets (excluding private drive ways) to the City of Ontario and will be maintained by the City.
2. The SCE Corridor Trail within the SCE owned property will be constructed by the developers of the Specific Plan Area and maintained by the City.
3. The City will maintain landscaping of master-planned arterial streets and "curb-to-curb" on internal streets through the creation of an Operations and Maintenance Community Facilities District. Parkway improvements within the right-of-way of residential areas along interior streets and private drives shall be maintained by Homeowners Associations. Parkway improvements along interior streets and driveways within the retail and commercial center shall be maintained by the property owners of each respective center.
4. Public storm drain, sewer, and water easements shall be dedicated to the City as deemed necessary by the City.
5. All on-site water, sewer, and storm drains within public streets or easements dedicated to the City shall be constructed by the developer and, upon acceptance, shall be maintained by the City.
6. Off-site infrastructure improvements such as water, sewer and storm drain facilities, will be constructed/installed by the developer and maintained by the City.
7. During the course of maintenance of public utilities (including storm drain) within private and public streets, the City will pave the streets and restore landscaping per City standards. Restoration of any enhancements above and beyond City standards, including but not limited to architectural, hardscaping and landscaping enhancements shall be the responsibility of the HOA or other entity maintaining those enhancements. This applies to all areas where public utilities are located including but not limited to public and private streets, gated communities, private drives, etc.



8. Project Financing – The financing of construction, operation, and maintenance of public improvements and facilities ("the facilities"), and public services will include funding through a combination of financing mechanisms. Final determination as to the facilities to be constructed and as maintenance responsibilities, whether publicly or privately maintained, will be made prior to recordation of the final maps. In order for the project to be fiscally self-sufficient, the following financing options can be considered for implementation:

Facilities and Services

- Private capital investment for the construction of facilities.
- Community Facilities District (CFD) established pursuant to the Mello-Roos Community Facilities District Act of 1982, or other special district, to provide funding for the construction of a variety of public facilities and the provision of public services.

Operation and Maintenance

- By individual private property owner.
- By private, Property Owners or Home Owners Association.
- By Community Facilities District (CFD) established pursuant to the Mello-Roos Community Facilities District Act of 1982, or other special district.

5.5.2 Private Maintenance

A Master Homeowner association will be established for the maintenance of common area landscape improvements within the residential portion of The Avenue Specific Plan. Private improvements to be maintained by the homeowner association include:

- Private alleys and adjacent landscaping within the residential development areas
- Courts, parkways and landscaping within the residential areas
- Streets and Landscape areas that have architectural enhancements
- Walkways and common areas distinct to individual residential types and neighborhoods
- Recreational facilities including the country market
- Internal slopes fronting streets and slope areas in the rear of homes
- All internal open spaces, parks, and common areas at neighborhood entries
- Drives and on-site circulation within the retail and commercial areas

5.5.3 Maintenance Responsibility

Table 4 - Maintenance Responsibility Matrix

	City and/or Special District	Private Homeowners Association or Property Owners Association	Private Homeowners	Utility Entity
Master Plan Roadways (Ontario Ranch Road, Haven, Schaefer, Hellman, Archibald Avenue)	X			
Interior Public Streets - Curb to Curb (Primary Entry St., Secondary Entry Streets, Neighborhood Streets)	X			
Traffic Signals and Street Lights in the public street right-of-way	X			
Traffic Control Signs	X			
Alleys including pavement area improvements between curb improvements		X		
Interior public streets-behind the curb improvements (sidewalk, parkway and monument signs)		X		
Parkways and Neighborhood Edges of Master Plan Roadways	X			
Off-site and on-site public water, sewer and storm drain improvements (excluding laterals) (Only those facilities in public roads and those in private streets within public utilities easements that meet public improvement design criteria) (1)	X			
On-site water, sewer, and storm drain improvements (improvements that are: private, laterals, and lines behind meters and/or DCDAs, improvements serving only one lot/ parcel, not within public or private roads, not within public utility easements, or not meeting public improvement design criteria)		X	X	
Private Recreation Areas		X		
Pocket Parks		X		
Linear Parks		X		
Community Trail (SCE Corridor Trail)	X			
Front Yard/Corner Streetside Landscaping Areas (LDR)			X	
Front Yard/Corner Streetside Landscaping Areas (MDR)		X		
Private Interior Yard Walls		X	X	
Community Theme Wall (Outside Face for Graffiti Removal and Paint)	X			

Table 4 - Maintenance Responsibility Matrix (continued)

	City and/or Special District	Private Homeowners Association or Property Owners Association	Private Homeowners	Utility Entity
Community Theme Wall on Master Planned Roadways: Surface (interior) opposite streetside (Structural Integrity and Face Repair)		X		
Interior Tract Graffiti Removal		X		
Community/Neighborhood Entries (within the right-of-way)	X			
Parkways and Neighborhood Edge of all Master Plan Roadways	X			
Neighborhood Edge on all non-Master Plan Roadways		X		
Parkways of all Interior Project Streets (Including Landscaping, Medians, and Sidewalks) (2)		X		
Alley Landscaping and Lighting		X		
Monument Signs (within Neighborhood edges on Master Plan Roadways)		X		
Monument Signs within tract entry		X		
Electricity and Natural Gas				X
Communications Systems	X			X
Police and Fire	X			
Fiber Optic Conduit (in Ontario Ranch streets)	X			
Fiber Optic Conduit (in-tract streets)	X			
NPDES Facilities (off-site)/W.Q.M.P (1)	X			

(1) Only those facilities in public roads or easements

(2) Only those facilities on private property

(3) Including restoration work following public street repairs

5.6 Modifications and Plan Amendment Process

5.6.1 Minor Modifications

The following constitute minor modifications to The Avenue Specific Plan, not requiring a Specific Plan Amendment, and are subject to review and approval by the Zoning Administrator. The Zoning Administrator shall have the discretion to refer any such request for modification to the Planning Commission or the City Council.

A. Change in utility and/or public service provider

B. Adjustment of a neighborhood boundary provided the total acreage of the affected area does not increase or decrease by more than 15% the total acreage stated in the approved The Avenue Specific Plan

C. Minor changes to landscape materials, wall materials, wall alignment, entry design, and streetscape design which are consistent with the conceptual design set forth in the design guidelines contained within The Avenue Specific Plan

D. Minor changes to the Design Guidelines, which are intended to be conceptual in nature only, and are intended to be flexible in implementation

E. Other modifications of a similar nature to those listed above, which are deemed minor by the Director, which are in keeping with the purpose and intent of the approved The Avenue Specific Plan and which are in conformance with the General Plan

F. The Avenue Specific Plan land use plan allocates density to each Planning Area. Variations in allocation of density between the Planning Areas of The Avenue Specific Plan is permitted provided the variation does not exceed a net of 15% and the maximum dwelling unit count of 2,875 units established for the Specific Plan is not exceeded.

5.6.2 Specific Plan Amendments

Amendments to The Avenue Specific Plan may be requested by the applicant or by the City at any time pursuant to Section 65453(a) of the Government Code. Amendments shall be processed pursuant to the provisions of the Government Code for Specific Plan Amendments. In the event the proposed amendment requires supplemental environmental analysis pursuant to the California Environmental Quality Act (CEQA), the applicant(s) will be responsible for preparing the necessary CEQA documentation.

5.7 Airport Land Use Compatibility Planning Consistency

All development proposals or Specific Plan Amendments are required to be consistent with the Airport Land Use Compatibility Plans of Chino Airport and Ontario International Airport. The Project Site is located within the Airport Influence Areas of Chino Airport and Ontario International Airport (ONT). The ALUCP for ONT was adopted in April of 20II and the project site is located outside noise and safety impact zones but is located within the Real Estate Transaction Disclosure zone due to overflight and does not place development restrictions on the property but does require disclosure to new property owners.

The Business and Professions Code Section II010 and Civil Code Sections 1102.6, 1103.4, and 1353 require that, as part of many residential real estate transactions, information be disclosed regarding whether the property is situated within an AIA. The Business and Professions Code applies the disclosure requirement to the sale or lease of newly subdivided lands and condominium conversions and to the sale of certain existing residential property. The Civil Code applies the disclosure requirement to existing residential property transfers only when certain natural conditions (earthquake, fire, or flood hazards) warrant disclosure. State Law provides the following disclosure language:

"NOTICE OF AIRPORT IN VICINITY: This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors).
Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you."

Section 6 - Design Guidelines

6.1 Introduction

All residential master planned communities seek to create a unique identity for their residents and the surrounding community. There are four main components in developing this character for The Avenue. These include:

- A strong, well defined and memorable site plan, emphasizing La Avenida Drive streetscape as a defining element
- Appropriate community amenities and facility design
- Attractive and timeless landscape architecture
- Complementary and purely themed residential architectural styles

In addition to quality site planning and facility design, the residential architectural design concept for The Avenue seeks to blend the traditional architectural styles found in the Pacific Southwest with contemporary lifestyles, building methods and technologies. The specific styles selected for this community include Spanish, Bungalow, California Ranch, Monterey and Cottage. The design aspects of each of these styles will be further described in the following guidelines.

As the individual architectural styles for each home are developed for the various neighborhoods, it is important that the underlying lifestyle defined by each architectural style is considered in the development of the floor plans to help maintain architectural authenticity. The creation of successful floor plans and elevations will always be a function of good design, coupled with the incorporation of contemporary lifestyles and building standards.
Builders may submit home designs using alternative architectural styles to those listed, provided they are consistent with the Specific Plan, and appropriate to the region, environment, and setting.

The architectural character of The Avenue should provide:

- A unique and interesting architectural heritage as the community develops
- Compatible and complementary styles, colors, materials and detailing
- Massing, setbacks and articulation which are appropriate and fundamentally sound
- Historical relevance and timelessness
- Adaptable and flexible to changing market desires

The following design guidelines address site design issues, and key elements of each architectural style.

6.2 Site Planning and Design

The first critical aspect of creating an attractive and successful residential community is proper site planning. Important components of site planning include building setbacks and plotting, architectural massing and articulation, roof forms and garage placement. These components must be successfully addressed regardless of the architectural styles selected

6.2.1 Setbacks and Plotting

The relationship of each building to the property lines, street frontages and to adjacent buildings should be carefully considered within each neighborhood. In addition to the minimum setback standards, variable front and rear setbacks should be incorporated into the plotting of each product type. Corner lots and critical edge conditions shall have increased setbacks to soften the impact of the architecture on the streetscape. These plot prototypes are for illustrative purposes. The Residential Development Standards (Table 3a-3j) will serve as zoning for the project upon adoption of The Avenue Specific Plan.

Lot Demonstration Plotting 5,500+ SF Lot (Product Type 1A)



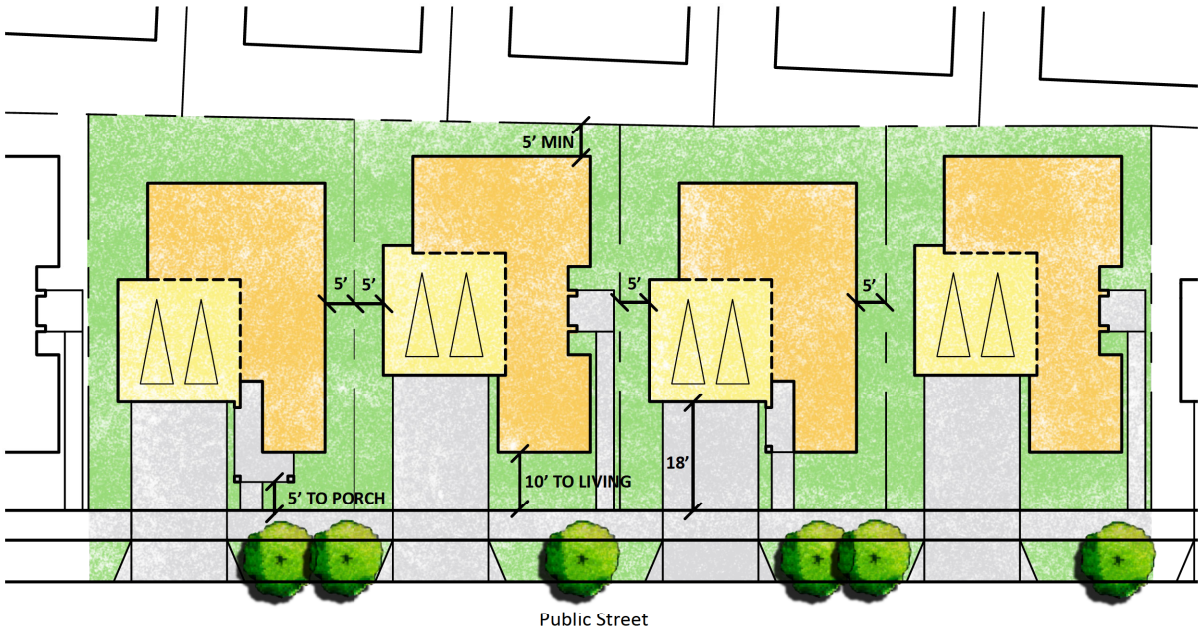
Lot Demonstration Plotting 4,250-5,775 SF Lot (Product Type 1B)



Lot Demonstration Plotting 3,200 - 5,600 SF Lot (Product Type 1C)



Lot Demonstration Plotting 2,700 - 3,500 SF Lot (Product Type 1D) - Public Street



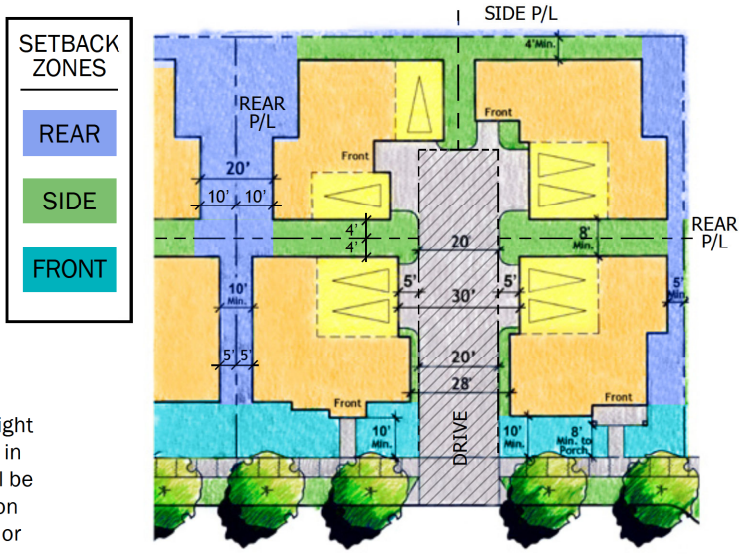
Lot Demonstration Plotting 2,700 - 3,500 SF Lot (Product Type 1D) - Private Drive



Lot Demonstration Plotting 2,380 - 3,600 SF Lot (Product Type 2)



SFD 4/6 Cluster Demonstration Plotting (Product Type 3a)



NOTE: The setback zones shown in the Cluster Demonstration Plotting graphics above and to the right refer to the zones identified in Table 3e. Private lanes shall be enhanced with a combination of pavers, colored concrete or similar decorative material, subject to the review of and approval by the Planning Director.

SFD 4/6 Cluster Demonstration Plotting (Product Type 3b)

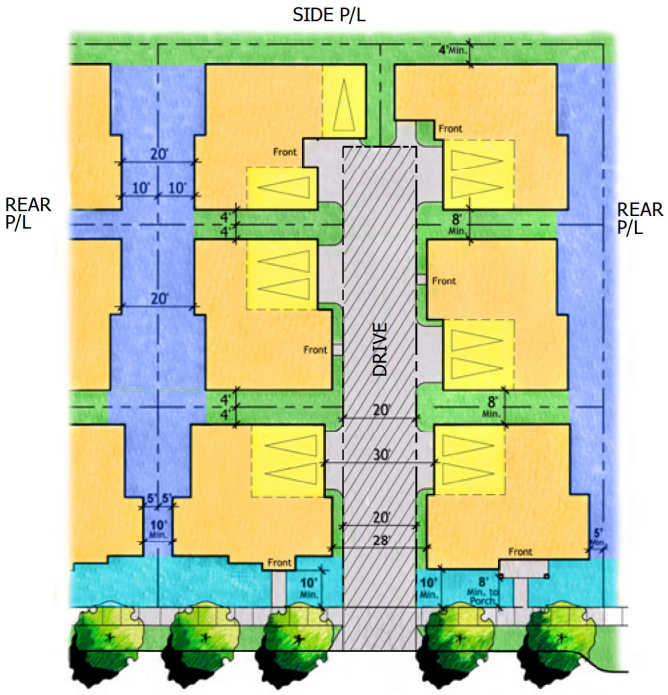
SETBACK ZONES

REAR

SIDE

FRONT

NOTE: The setback zones shown in the Cluster Demonstration Plotting graphics above and to the right refer to the zones identified in Table 3e. Private lanes shall be enhanced with a combination of pavers, colored concrete or similar decorative material, subject to the review of and approval by the Planning Director.



SFD 4/6 Mews/Cluster Demonstration Plotting (Product Type 3c)

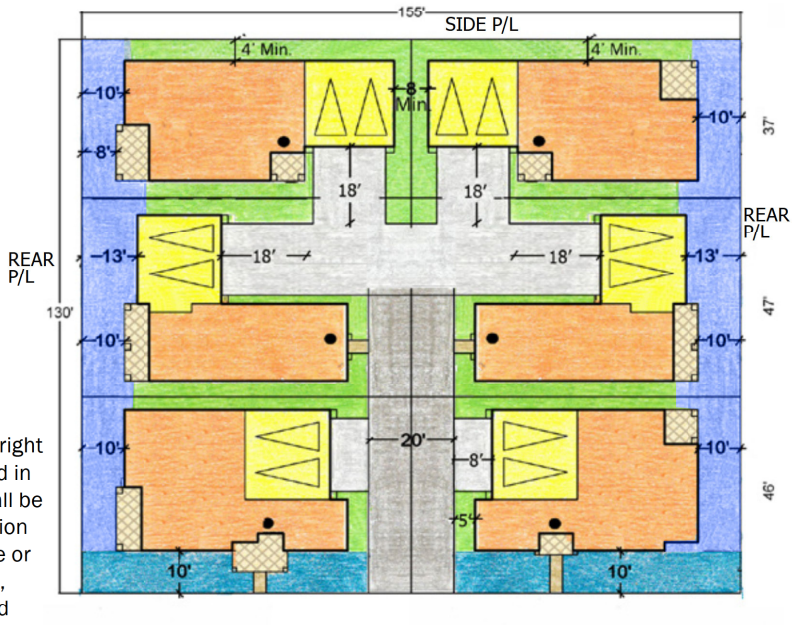
SETBACK ZONES

REAR

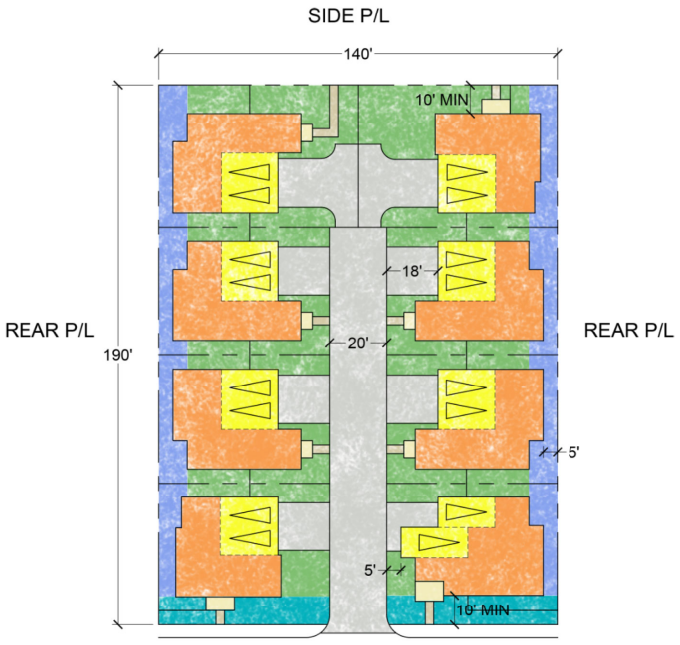
SIDE

FRONT

NOTE: The setback zones shown in the Cluster Demonstration Plotting graphics above and to the right refer to the zones identified in Table 3e. Private lanes shall be enhanced with a combination of pavers, colored concrete or similar decorative material, subject to the review of and approval by the Planning Director.



SFD 4/8 Mews Demonstration Plotting (Product Type 3d)



SETBACK ZONES

REAR

SIDE

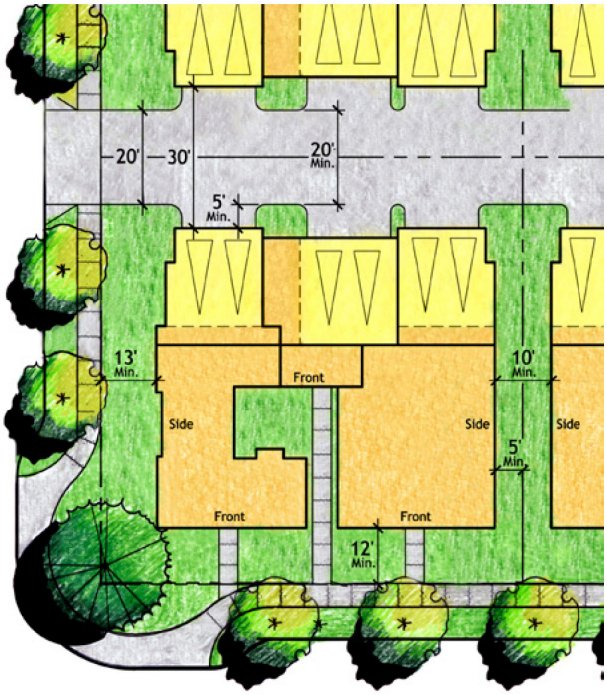
FRONT

NOTE: The setback zones shown in the Cluster Demonstration Plotting graphics above and to the right refer to the zones identified in Table 3e. Private lanes shall be enhanced with a combination of pavers, colored concrete or similar decorative material, subject to the review of and approval by the Planning Director.

Duplex Demonstration Plotting (Product Type 4)



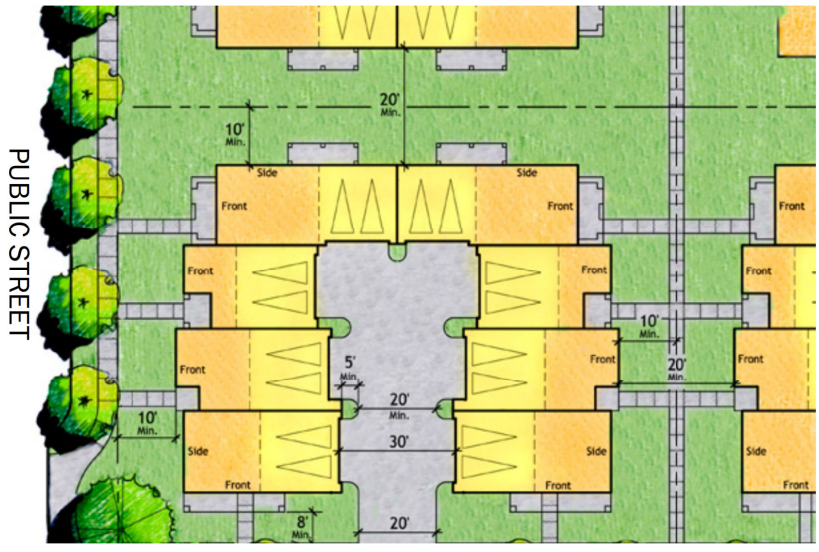
Triplex Demonstration Plotting (Product Type 5)



Rowtown Demonstration Plotting (Product Type 6)

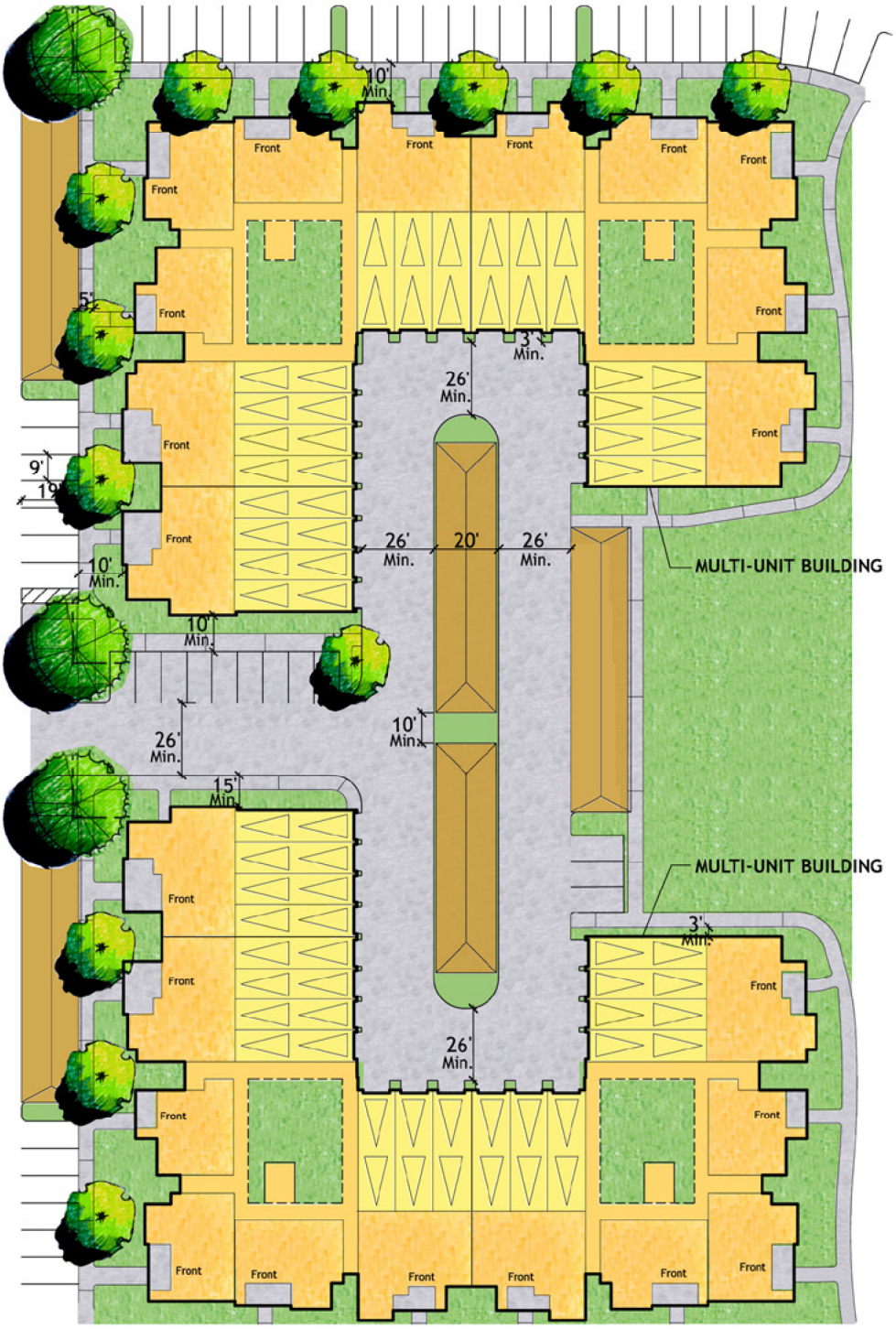


Autocourt Demonstration Plotting (Product Type 7)



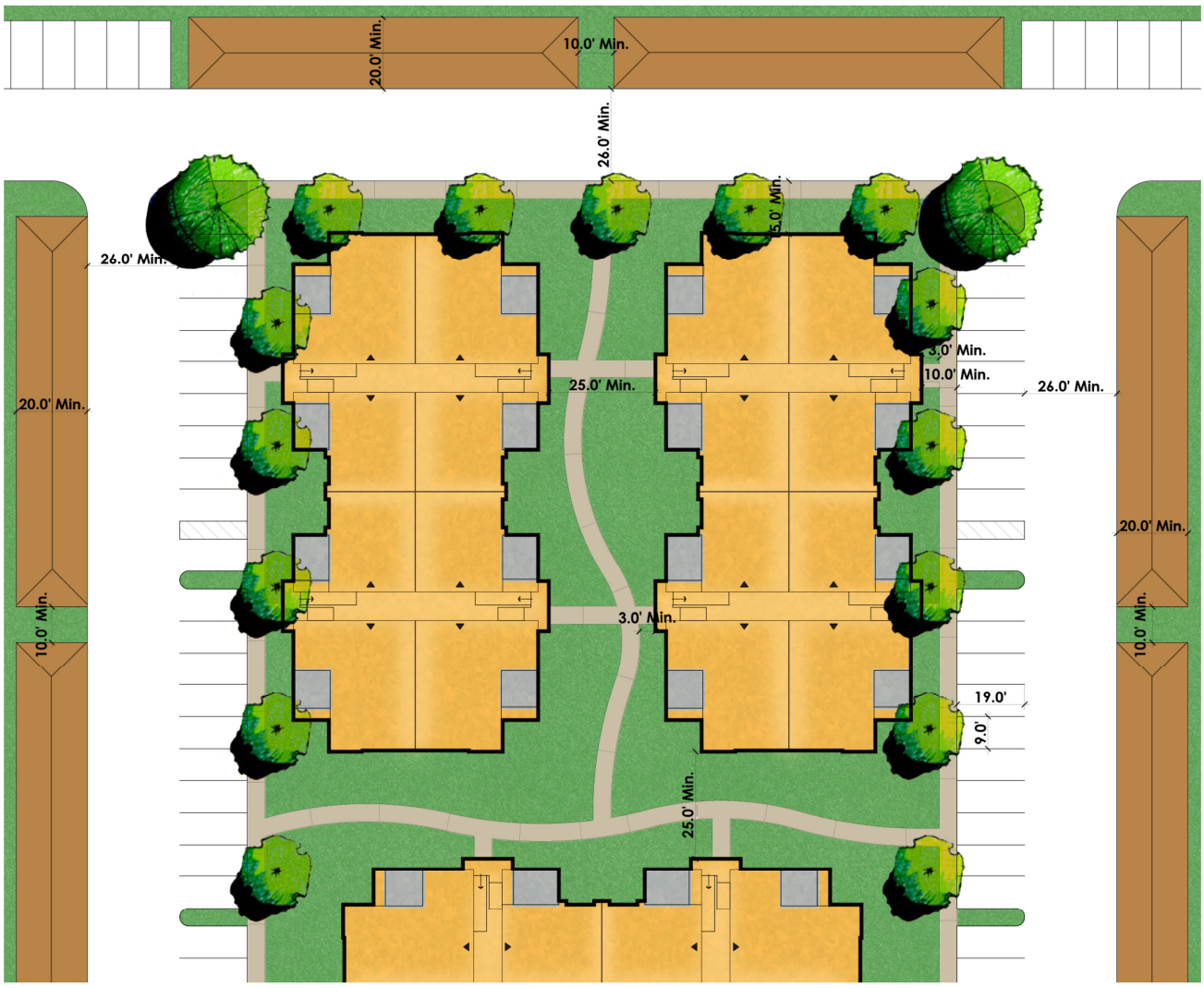
ALLEY

Autocourt (Greater than 20 DU/Ac) Demonstration Plotting (Product Type 8)



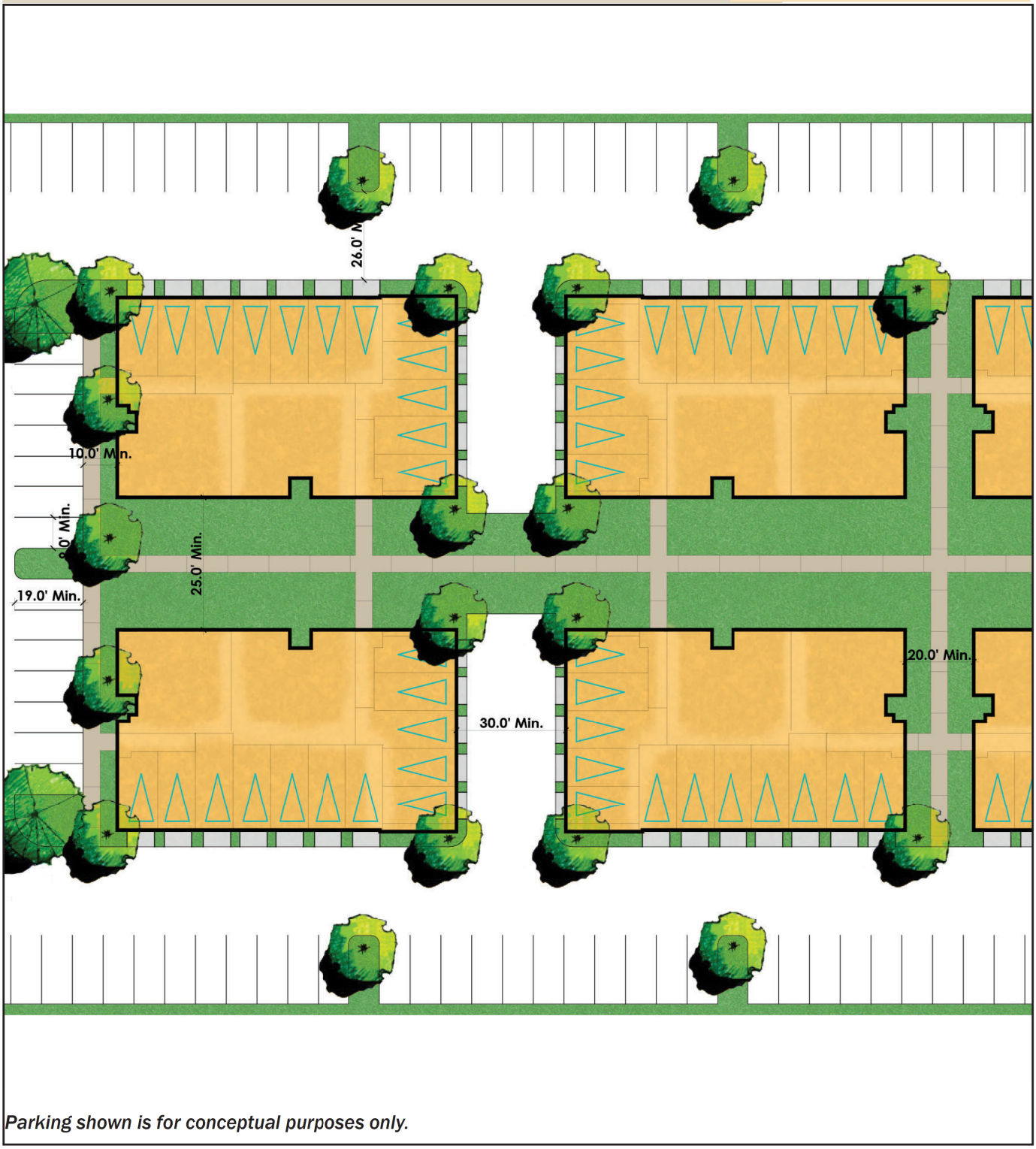
Parking shown is for conceptual purposes only. Tandem parking standards currently under review by the City of Ontario.

Apartments (Max. 25 DU/Ac) Demonstration Plotting (Product Type 9A)



Parking shown is for conceptual purposes only.

Apartments (Max. 25 DU/Ac) Demonstration Plotting (Product Type 9B)



Parking shown is for conceptual purposes only.

6.2.2 Architectural Massing

Building volumes shall be appropriately scaled to the individual lot sizes. The composition of the building mass shall include the incorporation of single- story elements into two-story buildings, variable setbacks along building elevations for porches, living and garage areas, the minimization of shear two- story façades, and the development of four-sided elevations through articulation and detailing.



Garage and Roof Articulation



Autocourt - Garage and Roof Articulation with Single Story Elements

6.2.3 Corner Home Placement

Special attention must be made to the treatment of architectural massing on corner lots and critical edge conditions.

Architectural elements such as porches, single story elevations, special façade materials and architectural fenestration should wrap around from front to side in these conditions whenever possible.



Wrap Around Porch and Architecture with Side Entry



Wrap Around Porch and Architecture with Side Entry

6.2.4 Roof Lines, Forms

Roof forms are critical in creating interest to the building mass. Roof forms and material finishes help blend the structures into the landscape through shadow patterns, texture, color variations and visual interruption of vertical walls and planes.

The roof forms, lines and ridges should be fenestrated and varied. Architectural features, roof intersections and roof pitches consistent with each style should be incorporated whenever possible.

6.2.5 Garage Placement



Side Entry with Wrap Around Architecture



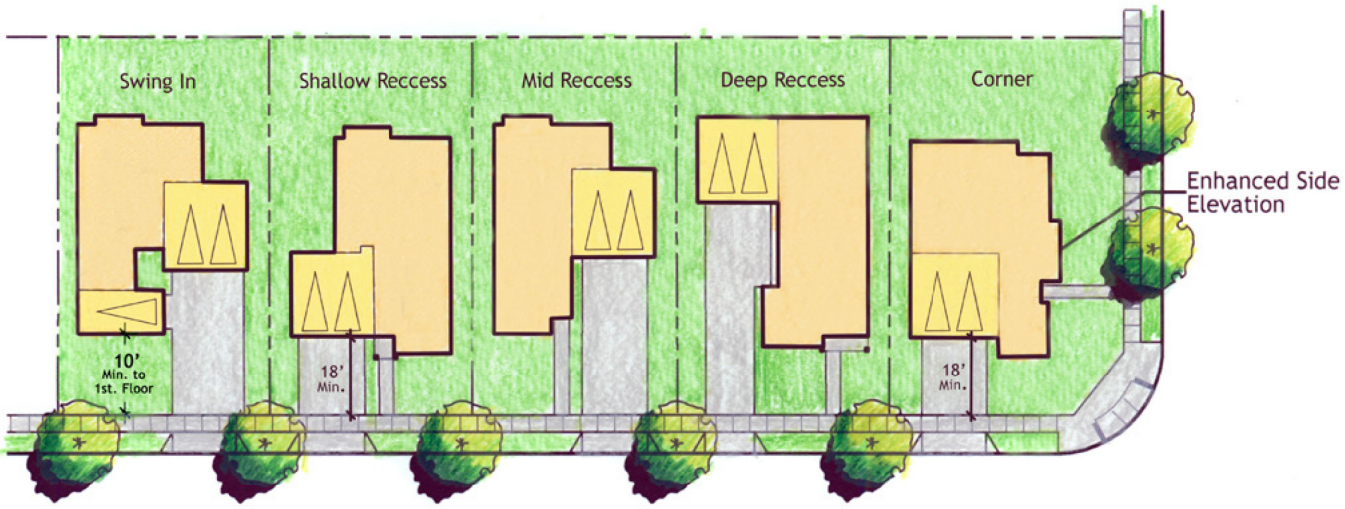
Side Entry with Wrap Around Architecture

The location, configuration and orientation of the garage on each lot are an important design element, both for the composition of the dwelling and its contribution to the streetscape.

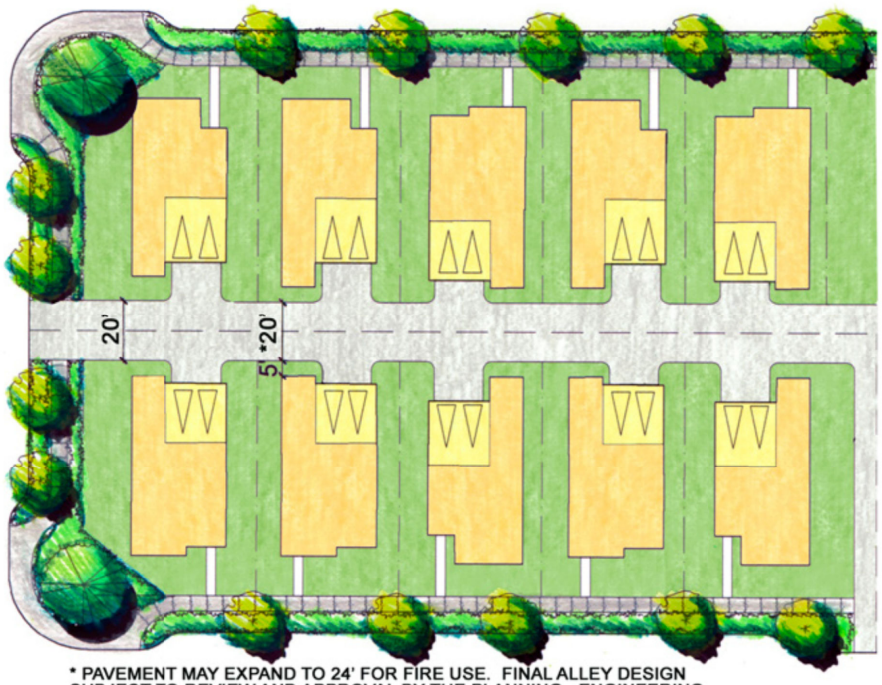
De-emphasizing the garage is important to community design. The goal is to emphasize the living areas of the home as they address the street. Placing living areas forward in lieu of a garage dominant front elevation encourages "eyes on the street" for neighborhood safety and security while establishing neighborhood orientation to the pedestrian as opposed to the automobile. Garage door patterns are encouraged to be varied among elevation types, and to reinforce the architectural theme of the dwelling.

The number of homes with the shallow recess garage condition should be limited to 25% of the total number of units in each builder's plan package and shall be setback a minimum of 18-feet from property line.

Demonstration Plotting

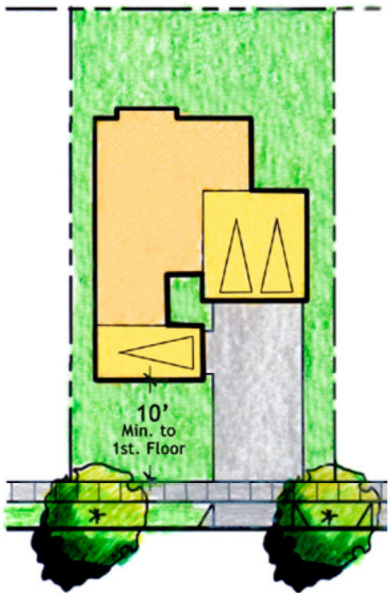


Alley Demonstration Plotting



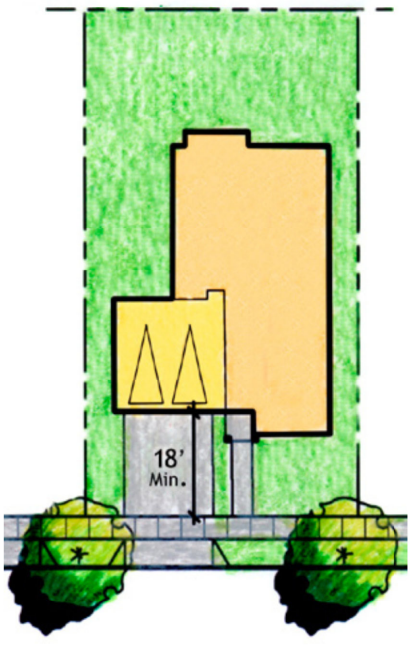
* PAVEMENT MAY EXPAND TO 24' FOR FIRE USE. FINAL ALLEY DESIGN SUBJECT TO REVIEW AND APPROVAL BY THE PLANNING , ENGINEERING, AND FIRE DEPARTMENTS.

Three Car Swing-In



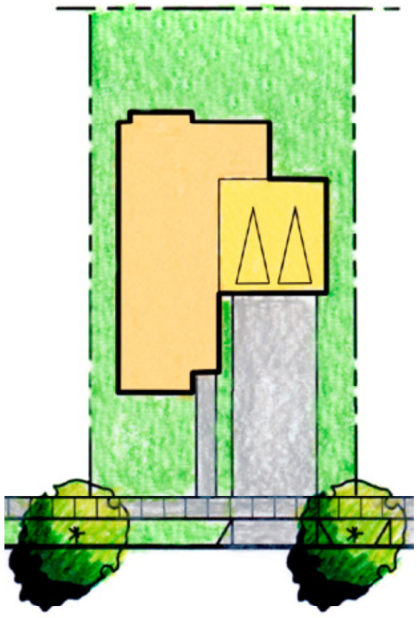


Shallow Recessed



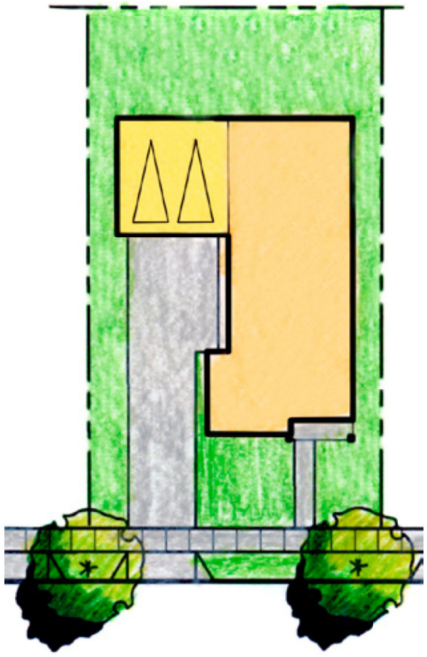


Mid Recessed



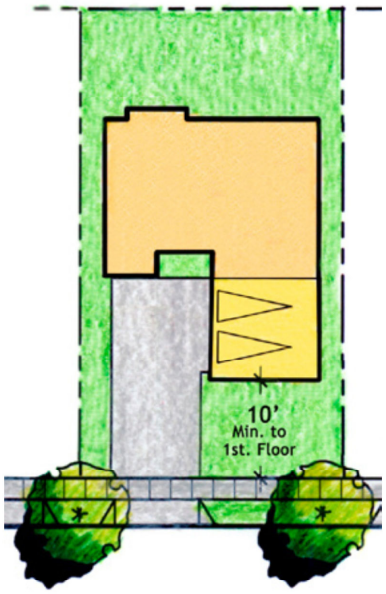


Deep Recessed





Two Car Swing-In





6.3 Miscellaneous Architectural Elements

Each selected style of architecture has attributes specific to that style. There are architectural features that are particularly important from both a standpoint of helping define the architectural style and from providing lifestyle benefits. These items include porches, trellises and arbors and balconies.



Wrap Around Style

6.3.1 Porches

Sufficiently sized porches (minimum depth: 7', minimum area: 70 square feet) become key elements in creating active, social neighborhood, through the visual and conversational interaction that occurs between these elements and the streetscape.

They provide interest, shadow lines and architectural fenestration to the building.

Porches should be provided for various homes in each product area whenever feasible and should have the following attributes:

- Porches should be integrated into the architectural elevation and floor plan consistent with the particular design style
- At corner conditions, porches should wrap around or be designed into two sides of the building
- Porches should be of sufficient depth to allow chair and table placement (seven foot minimum depth at ground level is preferred but can be modified if necessary at side elevations)
- Porches should relate to the streetscape consistent with traditional design aspects



Stucco Detailing



Wood Detailing

6.3.2 Balconies

Balconies are part of many styles of architecture and can range in size from small decorative balustrades to large inviting verandas. Balconies are more flexible in size than porches and can serve many uses from more decorative, offering visual detail and architectural fenestration to accessible congregation spaces which become important outdoor rooms and overlooks.

Balconies are encouraged elements of the architecture but should adhere to the following principals:

- Balcony design and detailing should be consistent with the architectural style
- Balcony placement is encouraged towards the front of homes whenever feasible
- Balcony placement at rear or sides of homes should consider site plan and adjacent lot privacy issues



Balcony on a Multi-Family Building



Wood Detailing

6.3.3 Window Treatments

Window treatment is an important element in defining architectural styles and providing detail to buildings. Whether it is recessed or protruding, multi-paned or single paned, rectangular or arched, framed or not, all make a difference in the building character. The window treatment should be consistent with the style of architecture.

Window sizing and scale must be consistent with the architectural enframement. Use of shutters as window detailing and design style elements is encouraged but shutters should be properly sized to the window opening for authenticity.



Iron Detailing



Recessed Window Detail



Window Surround

6.3.4 Trellises and Arbors

Trellises and arbors are valuable architectural features for softening building façades, extending indoor rooms into the exterior landscape, and creating shelter from harsh sun and glare. Trellises are also encouraged in the design of each building but must also be consistent with the architectural style, be appropriately sized and scaled, and be constructed of material that will survive the harsh inland sun and hot, dry wind conditions.



Wood Trellis Over Entry Drive

6.4 Architectural Styles and Elements

The architectural character of The Avenue shall consist of the traditional styles found in the Pacific Southwest. These styles were developed over time as reactions to prevailing climate, locally available material, historical tradition and/ or architectural trends of the early twentieth century. Over time, these styles have often become blended in part with new interpretations and in response to modern technologies. While the community infrastructure, architecture, site planning, land design, and landscape architecture are the key factors in creating a unique and special place for The Avenue, the interpretation and execution of the individual architectural styles and residential product types will provide lasting value.



Simple Iron Trellis of Driveway

Each style has aspects relating to massing, articulation, roof form, and garage placement. The development of these styles in an appropriate manner requires incorporation of specific elements of each style.

The chosen styles complement one another through overall scale, massing, proportions, details, and the ability to establish a charming architectural backdrop that will age gracefully over time. The materials and colors of these home styles shall complement the overall landscape design of the neighborhoods. Each style shall be developed appropriate to the region, and address the needs and lifestyles of the residents.

Acceptable architecture styles for The Avenue homes include:

- Monterey
- Bungalow
- Spanish
- California Ranch
- Cottage
- Farmhouse
- Transitional

Note: Additional styles proposed by the homebuilder may be deemed acceptable by the City and Community Design Team.

The following guidelines have been developed by The Avenue Community Design Team in order to create a community with an appropriate diversity of architectural styles and design:

- A variety of styles and plans is encouraged
- The adjacent plotting of the same plan, either standard or reverse, should be discouraged
- A variety of plan orientations is encouraged
- No two adjacent homes shall utilize the same architectural styles

The styles on the following pages will provide the builder and their design consultants the tools to create architectural designs appropriate and authentic to each style.

6.4.1 Monterey


Single Family

History and Character:

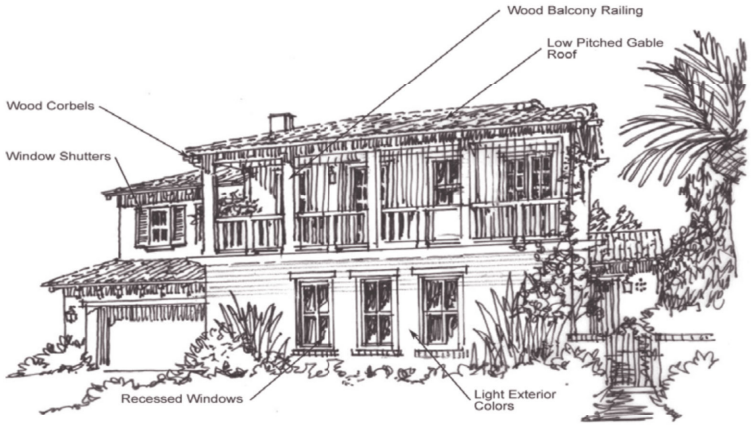
The Monterey style is a combination of Spanish Colonial construction methods and the basic two-story New England Colonial house.

Architects in the 1920's began to reintroduce the style and modify the elements to suit the period preferences. The signature cantilevered balcony on the front of the house may be a prelude to the porch that often surrounds or defines a private courtyard in the back of the house. The original houses used adobe wall construction. Detailing of the porches and the cornice is extremely simple. Rafters are often exposed, gable or hipped roofs are used, chimneys often anchor one end of the house, and flat paneled doors are used both on the ground floor and on the balcony, in addition to a more solid entry door.


Autocourt Example

General Attributes:

- Simple-box plan form
- Front-to-back gable roof
- Stucco finished walls
- Colonial-style windows with shutters and door trim
- Wrought iron or wood balcony railing
- Light exterior colors
- White or dark trim colors



6.4.2 Bungalow

History and Character:

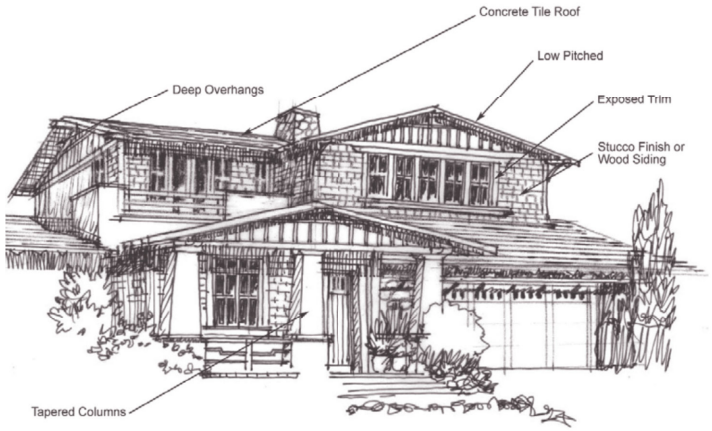
The Bungalow with its variations of the Craftsman style home evolved form the late 19th century American Arts and Crafts movement. These moderately detailed buildings are characterized by the use of hand-finished materials with a rusticated texture. Open porches, sloping roofs with deep overhangs, multiple gables, asymmetrical compositions, oversized first floor windows, expressive trim, rafters, brackets and porches characterize the Bungalow style.





General Attributes:

- Simple plan form massing and simple roof
- Intersecting gable roofs with overhang
- Stucco and/or horizontal siding
- Vertical multi-paned windows at front elevation
- Large picture window at front
- Porches with simple wood columns and railing
- Corbels
- White or dark stucco color
- White or dark color trim



6.4.3 Spanish





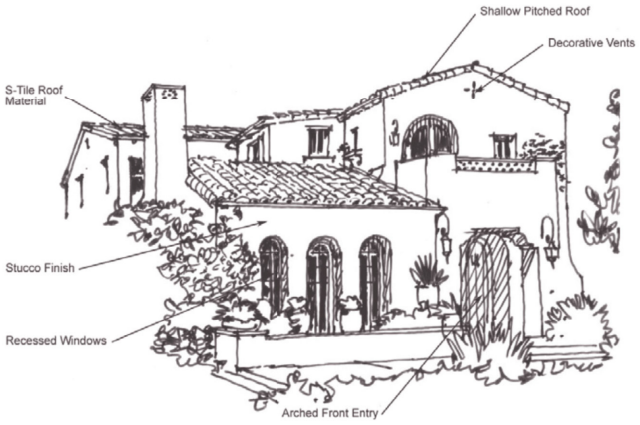
History and Character:

Spanish inspired homes began appearing at the turn of the 20th century in the form of the Mission Style, reflecting a loose adaptation of features often found in detailing from various influences, including Moorish and Spanish Colonial. Spanish Style is a catalog of styles unified by the order of arches, courtyards, strong form and mass, plain wall surfaces and tile roofs all derived from Mediterranean architectural styles. The Spanish style is most often characterized by an informal plan arrangement and massing. This informality reflects the natural composition of the farmhouses and small estates of Spain, which were not symmetrically composed.

General Attributes:

Some identifying features of this style are large distinctive (sometimes arched) windows on the front façade, red clay roofs and light colored stucco walls.

- Two story massing with one story element
- Simple hip or gable roof
- Barrel or 'S' shape concrete tile
- Stucco Finish
- Vertically hung multi-paned windows at front elevation
- Arched stucco column
- Light colors with dark trim
- Wrought iron accent



6.4.4 California Ranch

History and Character:

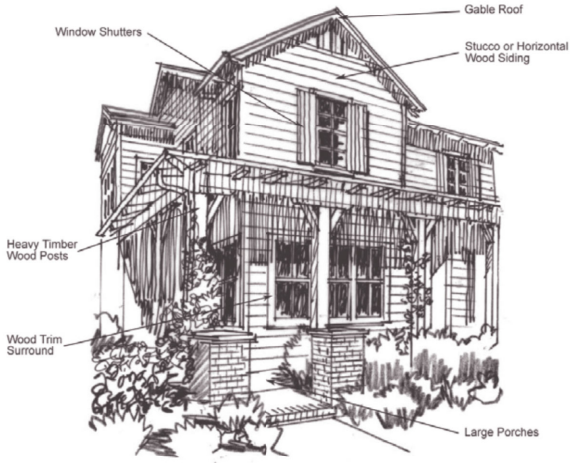
Reminiscent of the early ranchers and farmers of Southern California, the California Ranch Style was developed in response to their lifestyle, available materials and environmental considerations. The strong indoor/outdoor relationship is ideal for the temperature climate of the region and incorporates sliding glass doors, picture windows, terraces and secluded patios. These homes were influenced by Colonial, Spanish Colonial, Stick, Monterey, and Spanish Eclectic architecture; however, the detailing was simplified when adapted to the California Ranch Style.





General Attributes:

- Simple rectilinear form
- Gabled roof
- Long horizontal gable roofs
- Stucco or horizontal wood siding
- Simple column and railing at porches
- White or dark stucco colors
- White or dark color accent trim



6.4.5 Cottage



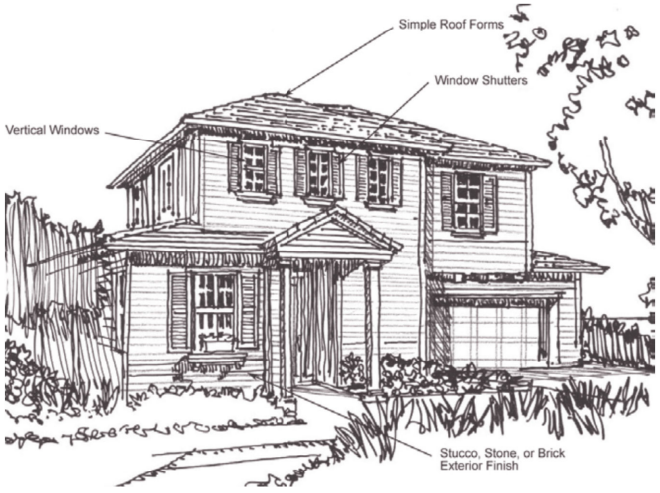
History and Character:

The Cottage style is based upon early twentieth century American interpretations of English architecture. The source for design originates from medieval English and French cottages, as well as from the country estates of Brittany and Normandy, larger manor homes, and rural village vernacular houses. The Cottage style captures a romantic and picturesque architecture, and American interpretations include houses with simple volumes most often with front facing gables that have steeply pitched roofs.



General Attributes:

- Asymmetrical massing
- Large simple roof planes
- Stucco finish
- Vertical windows
- Decorative stone or brick veneer
- White, off-white, light earth tone shades



6.4.6 Farmhouse



History and Character:

The Farmhouse style is based upon regional American interpretations of agrarian architecture. The source for design originates from rural residential homes in the early settlements in Midwestern and Southwestern areas of America. The Farmhouse style establishes a pastoral character, and recent interpretations include houses with simple building designs, gabled roof forms characterized by a moderate to steep pitch.



General Attributes:

- Simple rectangular massing
- Large simple roof planes
- Siding or Stucco building materials
- Vertical windows with decorative accent shutters
- Entry porches with low sloping shed roofs
- White or light earth tone shades with contrasting design elements



6.4.7 Transitional



History and Character:

The Transitional style is an interpretive style based upon historic European and American architecture. The design inspiration uses modern building forms and construction materials to develop more contemporary designs that reflect earlier period styles. The Transitional style incorporates clean lines and simplified architectural detailing to reinforce the intended character. This style includes interpretations of Spanish, Monterey, California Ranch and Farmhouse architecture.



General Attributes:

- Building massing to reinforce the intended period style
- Large simple roof planes, including asymmetrical roof forms and limited flat roofs.
- Horizontal siding or smooth stucco finish
- Square or vertically proportioned windows with simple or no trim details.
- Light exterior building shades with contrasting details such as wood trim/ fascias, window frames, doors and simple window shutters.



6.5 Commercial Design Guidelines

6.5.1 Introduction

The Avenue Specific Plan area includes one (1) neighborhood center. This 10-acre center is at the southwest corner of Ontario Ranch Road and Haven Avenues. A 15.04-acre self-storage is planned at the southwest corner of Archibald and Schaefer. The neighborhood center will allow the homeowners of The Avenue access to shopping and employment opportunities nearby. Residents will have the ability to access services by foot, or ride their bicycles to work via pedestrian trails connecting the community to the neighborhood center.

Throughout the neighborhood center, appropriate landscaping, site planning and architectural design should be considered to create friendly and welcoming places to shop and work and shall continue the vision established in the residential community, including integrating pedestrian-friendly design.

In order to maintain the character of The Avenue, the neighborhood center is expected to be developed with a compatible and harmonious quality. These Avenue Commercial Design Guidelines will help direct the development of the area to enhance the pedestrian experience that positively contributes to the character of The Avenue Specific Plan area. These guidelines are not intended to be strictly enforced rules, but a tool in aiding the design process and are therefore general in nature. Developers of the neighborhood center will be required to submit their own supplemental design guidelines for City approval. These commercial design guidelines are organized into the following:

- Site Planning
- Building Design
- Architectural Details
- Open Space and Landscaping



Pedestrian-friendly Commercial Retail

A. Guiding Principles

Guiding Principles for commercial design for The Avenue are:

Buildings should contribute to a qualitative nature of the overall neighborhood.

- Proper scale and proportions in massing and details should be used
- Pedestrian open spaces should be provided
- Massing and articulation should be varied
- Buildings shall be designed at a human-scale

Buildings should have an enduring quality.

- Design should draw inspiration from the rich and diverse Southern California architectural heritage
- Materials and colors typical to Southern California should be used
- Details and ornamentation should be authentic
- Design shall create an inviting place to shop and work

B. Review Process

The Commercial Design Guidelines are to be used as a general tool to guide the development of the neighborhood center within The Avenue. Final designs will be subject to the City of Ontario's approval. Additionally, more detailed design guidelines for each development will be required by the City prior to final approval. Refer to the City of Ontario Development Code or the Planning Department for further information regarding the review process.

6.5.2 Commercial Design Guidelines

C. Introduction

The Neighborhood Center within The Avenue is intended to continue the pedestrian-friendly character established in the residential community. Appropriate site planning can de-emphasize the vehicle, creating a safe outdoor environment without ignoring the necessary needs of vehicular circulation. Through well executed planning, architecture, and landscape design, the Neighborhood Center can complement and integrate the residential community. Images within this section are for illustrative purposes and final plans must be submitted to, and approved by, the City.



Design shall create an inviting place to shop and work

D. Site Planning

Orientation

Buildings should be oriented for optimal visibility from the street. Windows and entries should face the street avoiding blank walls dominating public views. Stores with entries not visible from the street may be oriented towards pedestrian open space and all primary entries should face onto a street or a connecting walkway.

Building clusterings are recommended to help define parking lot areas and encourage walking between stores. Building entries and storefronts should be positioned close to one another to reduce walking distances between them.

Driveways and Sidewalks

The site shall be provided with an adequate number of driveways to facilitate circulation and also reduce the traffic impact along the surrounding arterials. Pedestrian crossing distances should be minimized at driveways. All driveways and sidewalks shall be constructed per City Standards and to the satisfaction of the City Engineer. No decorative paving will be allowed in the public right of way unless otherwise approved by theCity Engineer.

Street Frontage and Buildings

Streetside buildings, or those with no parking separating them from the street, should use windows and entry features to soften the building's appearance to the street.

Streetside Setbacks and Buildings

The sides of buildings along street edges shall be landscaped within the setback to soften the building's appearance as well as designed with windows or design elements.
Refer to the City of Ontario Development Code for specific setback requirements.

Street Frontage and Parking Lots

Parking lots should generally be placed away from streets. Street frontages shall be broken up with buildings, landscaping, plazas, and other pedestrian features. Continuous parking lots along the street frontage should be avoided. Any parking along street edges shall be set back with a landscaped buffer which can be used to filter parking lot runoff. Continuous parking stalls shall be interrupted by landscaped islands no more than 10 stalls apart.
Parking lots are encouraged to be interconnected rather than separated for each building. Separated parking lots encourage customers to drive from store to store.



Retail Orientation to Vehicular Travel Lanes and Parking

Service and Storage Areas

Loading docks, garages and storage areas are to be located behind or to the side of buildings siting onto secondary access and not primary streets. These features must be screened with walls and landscaping as much as possible from public view of streets, residences, pedestrians walkways and connecting trails. Loading docks and storage areas should not conflict with pedestrian walkways.

Refuse Containers, Utility and Mechanical Equipment

Refuse containers and equipment shall be easily accessed by service vehicles. They shall be screened from view of the streets, parking lots, and connecting walkways through roof forms, walls and/or landscaping.
Screening details should incorporate elements that are compatible to the architecture style of the buildings. Proper landscaping, including trellises, may also help to screen these elements. Equipment and enclosures shall not be located near pedestrian walkways. Roof-mounted equipment shall be screened by the roof/ parapet.

Sidewalks

Sidewalks shall be located along natural pedestrian travel paths. Sidewalks should be a minimum of 6' wide along pedestrian pathways and a minimum of 8' wide along more heavily traveled commercial areas.

E. Building Design

Massing

With larger buildings, appropriate massing becomes more important to maintain the human-scale of the development and create a visually pleasing environment. Bay windows, stepped buildings, height changes and setback variations between stores help to break up large buildings as well as indicate entries and store locations to customers. Tower elements or monumental features are encouraged at focal points, such as corners, plazas, major entrances, or where walkways meet streets.



Architectural Massing and Materials

Varying setbacks along the front façade of buildings are recommended to create small outdoor public spaces for pedestrians to gather and sit.

Roof Forms

Hipped and gable roofs are encouraged. Roof pitches shall be compatible to the architectural style of the buildings. Flat roofs should vary in height and be accompanied by cornice, trim or other accent features.

Arcades and Awnings

Outdoor arcades along store fronts are encouraged over pedestrian walkways. Arcades may be used to connect separate buildings providing a more pleasing experience for pedestrians. Trellises or awnings may also be used to create a covered walkway to protect pedestrians from the sun and rain.

Entry Design

Building entries shall be prominent and easily identified. Various elements can be used to enhance the entry features including massing variation, materials and color change, change in roof form, and awnings. For smaller retail buildings, part of a cluster or strip, arcades, awnings and simple signage may be acceptable as entries.
No signs shall be placed in the public right-of-way and shall be in accordance with City standards regarding corner site distance.



Commercial Retail Massing, Material Change, Entry Design

Design Flexibility

Retail spaces exceeding 30,000 SF should be designed with the flexibility to be divisible into smaller retail spaces should future market demand change.

F. Architectural Details

Architectural Styles

A variety of compatible architectural styles should be used throughout the Neighborhood Center to create a sense of continuity and visual interest between the buildings. Related elements, such as trellises, planters, light-standards, windows, doors, etc. shall also adopt detailing that is compatible to the selected architectural styles. The selected styles of the Neighborhood Center do not necessarily need to be of any one of those specified for the residential community but shall be compatible with them.

Architectural styles shall derive from southern California and Ontario historic precedents. Modern and "high- tech" styles are not acceptable style choices. Acceptable styles generally respond to the region's climate including such features as outdoor circulation, outdoor courtyards or plazas, recessed window frames, awnings, arcades, loggias, and trellises.

Building Wall Treatment

No wall should have a blank, uninterrupted length exceeding 20 feet without including one of the following:

- Change in texture
- Change in material
- Change in plane
- Lattice
- A tree or equivalent element

Façades that are visible from adjacent streets or walkways should display even greater visual interest by using architectural elements that break up the massing of large buildings, such as windows, arcades, awnings, porticos, and other architectural features.

Base And Top Treatments

Base and top treatments help to balance the "weight" of the building visually. Bases should appear to "ground" the building, while tops create a defined edge to the roofline. Possible treatment techniques are as follows:

Base:

- Natural materials
- Pre-cast materials
- Thicker walls
- Enriched landscaping with a mature height of at least 18"
- Other decorative, durable materials as approved by the City

Special materials, such as ceramic tile, granite and marble are encouraged at major entries.
Tops:

- Cornice treatments
- Stepped parapets
- Roof overhangs with brackets
- Textured materials

Colored "stripes" are not acceptable as the only treatment.

Exterior Materials

Recommended materials include, but are not limited to stucco, exterior plaster, brick, wood siding, tile, pre-cast concrete or stone. Exterior materials that appear pre-fabricated are not recommended. Selected materials and detailing should have an enduring appearance. Foam products should be avoided at the pedestrian level.

Roof Materials

Roofing materials that are generally acceptable include standing metal seam, concrete tile, tile and slate or slate-like materials. Asphalt or wood shingles are prohibited.

Colors

Color selection shall be consistent with the selected architecture style.

G. Commercial Site Landscape Requirements

The Neighborhood Center site will be developed both architecturally and through landscape treatments as an extension of The Avenue. The land plan encourages integration of the Neighborhood Center by providing for frontage on Ontario Ranch Road and Haven Avenues, while also incorporating a major community entry. Commercial uses appropriate to and compatible with The Avenue's residential community will be encouraged.

Minimum Landscape Requirements

- Builder/developer shall refer to City of Ontario standards for the percentage of gross commercial site acreage required to be landscaped.
- All areas of the site not occupied by buildings, parking or otherwise utilized shall be landscaped with groundcover, turf or tree materials from the community plant list.
- Appropriate street trees should be utilized adjacent to street frontage integrating the site into the overall community setting.
- Side yard and rear service yard use areas should be screened with a combination of a six foot (6') wall and dense landscape buffer. Tubular steel fencing and gates should be used adjacent to interior residential streets to control access points.
- Accent tree entry planting should be incorporated at the site's vehicular access points.
- No shrubs higher than 3 feet and no tree canopy lower than 7 feet as to allow officers on patrol the ability to view the business, without obstructing their view.
- Plants by low-lying windows may have thorns as a deterrent.

Parking Areas

- Where a parking lot contains 10 or more parking spaces and is visible from a street, not less than 10-15% of the total area (excluding any perimeter landscaping), shall be landscaped. Such landscaping shall not be concentrated in any one location. A minimum of 50% of the plant material shall be canopy or shade trees and shrubs shall be 3' or less to provide clear visibility.
- All rows of parking spaces shall be provided with landscape islands at each row terminus to protect parked vehicles, ensure visibility, confine moving traffic to drive aisles and driveways, and provide space for landscaping. Within each row of parking spaces, landscape islands shall be placed to prevent more than 10 vehicles from being parked side-by-side in an abutting configuration. These landscape islands shall measure a minimum of five (5) feet in width, exclusive of curbs. Creation of large planting islands (tree groves) are encouraged as opposed to small pockets of individual trees.


Retail Plaza

- Planter islands for a single row of parking spaces shall be landscaped with at least one (1) tree and vegetative groundcover or turf. Planter islands for a double row of parking spaces shall contain not less than two (2) trees and vegetative groundcover or turf.
- Landscaped areas shall be delineated with a concrete curb which may have curb cuts to facilitate sheet flow runoff from parking lots to infiltrate the landscape planters.
- Parking area landscaping is required for the screening of large parking areas to limit their visual impact.
- When parking is located adjacent to a public street or interior residential street, a combination of landscaped berms and/or planting totaling three feet (3') high is to be used to screen views or parked cars.

- Wherever possible, pedestrian traffic should be separated from vehicular traffic by additional sidewalks. The parking lot should have crosswalks highlighted with decorative or varied texture paving.

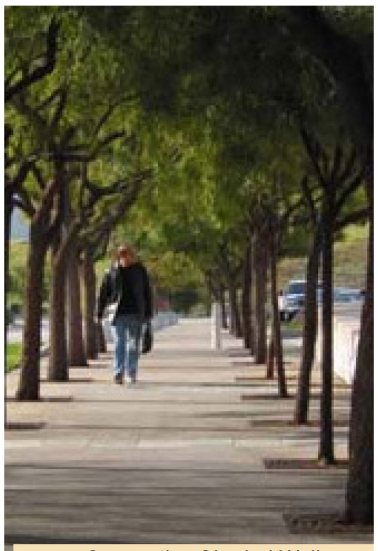
H. Open Space and Landscaping

Site Accessories

Site accessories, such as recycling bins, bike racks, litter cans, planters, benches and transit shelters, should use materials and have an architectural character consistent with the overall project. These accessories should be graffiti-resistant with materials that are easy to clean and paint.

Connecting Walkways

Walkways throughout The Avenue's neighborhood center shall connect the various buildings to each other and to the sidewalks along adjacent arterials. Use of trellises, landscaping, seating areas and building placement adjacent to one another will encourage pedestrian activity within the center. A typical walkway shall be a minimum of 6' wide. In large parking lots, pedestrian walkways shall be provided within the median of at least one parking aisle for eight aisles of 20 stalls or more.


Connecting Shaded Walkway

Pedestrian walkways that may also be used for emergency access must allow minimum clearance of 26' wide and 14' vertical clearance. Off-site connections will be provided from the neighborhood center to The Avenue's residential development.

Plazas

Plazas are encouraged to emphasize a pedestrian-friendly environment by creating locations within the Neighborhood Center that allow for people to gather. Plazas create a more inviting feeling for pedestrians, allowing them to feel safe from the vehicular-dominated parking lot. These outdoor places may include water features, landscaping, and other elements to create a comfortable place to sit. Plazas are encouraged where high levels of pedestrian activity are expected. Major entrances and nearby uses that allow for more interaction with the plaza such as delis, cafes, restaurants, bakeries and other food services are a few key examples.

Landscaping

Landscaping helps to soften the feel of the buildings and parking lot while enhancing the visual aspect of the site. The following landscaping techniques may be used:

1. Provide special landscaping treatment at all project and building entries.
2. Provide shade/canopy trees within parking areas.

3. Use plants to define outdoor spaces such as along edges, outdoor plazas, or pathways between parking and building entrances.
4. Plantings shall provide a continuity of form across the entire project.

Outdoor Storage Areas

Outdoor storage areas should be incorporated into the design of a project to avoid visual impacts on the site. Outdoor storage areas shall be located away from the street, behind or to the side of buildings. Walls and landscaping shall be used to screen stored materials. Materials placed on palettes in front of buildings are not permitted.

Transit Shelters

Transit shelters should be incorporated into the design of neighborhood center. The design of transit related structures shall be integrated architecturally with the project through its color, materials and architectural style. Walkways shall be provided for easy accessibility by pedestrians moving to and from transit stops to the Neighborhood Center.

Fence and Wall Design

Chain-link fencing, barbed wire, corrugated metal fencing and tennis windscreens are not permitted. Fences and walls should be built with attractive, durable materials, including (but not limited to) wrought iron, textured concrete block, or formed concrete with reveals. Fences or walls should be consistent with architectural style, materials and designs used throughout the project.

Adjacent to residential areas walls and fences should not exceed a height of six feet (6') without being made of textured concrete block, interlocking "diamond" blocks, formed concrete with reveals, or similar materials to a maximum of eight feet (8') from grade.

Along streets, walls and fences should not exceed 36" in height and long expanses of uninterrupted fences and walls should be avoided. Use of openings, planter boxes, material changes, pilasters or posts are acceptable. Openings shall be provided to connect walkways directly to the street avoiding long, inconvenient walking paths. These pedestrian portals should be announced by pilasters, trellis, special landscaping, or other features.

Lighting

On-site lighting standards shall provide adequate illumination throughout the site during the nighttime hours. Lighting fixtures shall be designed to be compatible with the architectural styles selected for the project. All light standards should have an attractive base and top; overhead "cobrahead" standards are not permitted.

Along pedestrian walks, lighting fixtures should not exceed 12' in height and may include lighting within bollards. Pedestrian lighting shall provide appropriate illumination at a human scale without too much glare. Lighting within larger parking lots shall not exceed 25' in height providing enough visibility for customers

and employees to walk safely to their vehicles. The same bulb type shall be used for all parking lot and pedestrian lighting fixtures within the development. Service area lighting should be positioned so no bulbs can be seen from public view. Any street light within the public right-of-way shall be per City standards and to the satisfaction of the City Engineer.

G. Main Street Design Guidelines

Building Form and Massing:

- Building heights shall consist of a mix of building heights to provide visual interest.
- Tower elements and other vertical/prominent building features should be used to accentuate key elements such as building entries, pedestrian nodes, plazas or courtyards.
- Modulation and variation of building masses between adjacent buildings. Three and four story elevations should have varied massing and architecture, both in height and depth along the façade.

Materials and Colors:

- Materials and colors should be applied to create obvious and identifiable delineation between uses.
- All materials shall wrap architectural elements in their entirety, on primary elevations and where exposed to public spaces.
- Materials applied to any elevations shall turn the corner of a minimum of 8 feet, or to a logical termination point in relation to architectural features or massing.
- Rough cut, rustic appearances through the use of stone, brick, or siding is encouraged. Only finished materials are allowed, no exposed or untreated concrete masonry materials, unless consistent with the architectural style.



Main Street architecture, walkway and outdoor seating

Exterior Design:

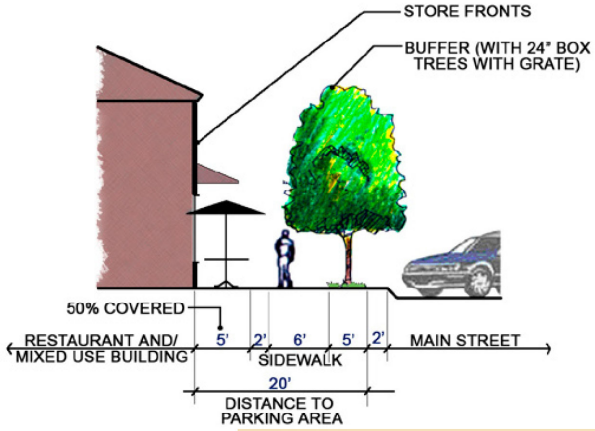
Building shall have articulation along auto and pedestrian corridors to generate pedestrian scaling and visual interest along the streetscape.

- No single building shall have a singular wall plane or building height on the primary elevation.
- Front wall planes of commercial/mixed-use buildings, including retail/shop space veneer configurations, shall be articulated.
- Articulation can include, but is not limited to: 1) Vertical and horizontal offsets, 2) Color blocking and 3) appropriate use of detail elements.

- Mixed-use buildings, multi-tenant shop buildings with more than one ground floor tenant: no more that 66% of the front elevation may consist of a single contiguous wall plane on a tenant by tenant basis.

Primary exposures/elevations shall be appropriately detailed and articulated consistent with the architectural style and character of the development, as established by these guidelines.

- First-story pedestrian scale character and commercial retail exposure is crucial to business viability. In-line retail/commercial/service space shall be designed to optimization of space, exposure and aesthetic articulation.
- No adjacent mixed-use buildings shall have identical architectural appearance, or use of materials, or color palette unless pairing is integral feature of the project design theme.
- Projections, overhangs and recesses may be used to provide shadow articulations and scale to building elevations.
- At least 40% of ground floor of the primary exposure of an in-line/shop-space/free standing show use, excluding restaurants pads, shall be devoted to transparent windows and/or doors.

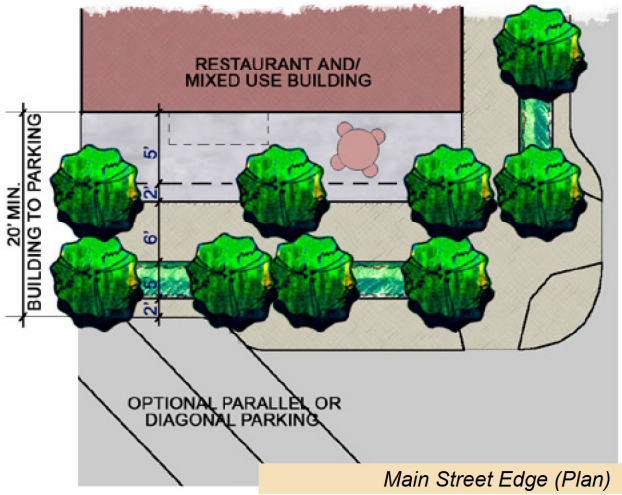


Main Street Edge (Section)

Roof Form and Slope:

Building height shall be varied to provide interest to the "Main Street" as viewed from community streets, open space, or other public spaces.

- Variety in roof forms, ridge heights and direction of gables is required.
- Although the majority of commercial roof area may be flat, visible elevations should be treated with sloping roof elements, including hips or gables forms (as appropriate to the primary architectural style) or parapet treatments.
- Architectural exposed roof materials shall be consist of flat, barrel, or "S" tile concrete or slate tiles or shakes. Metal roofs are permitted as feature elements consistent with the architectural style.



Main Street Edge (Plan)

Patio Dining:

Outdoor seating, in conjunction with business, shall be encouraged to enliven the street scene along commercial edges. Patio dining along retail storefronts have the dimensions:

- A minimum 20-foot area from building to parking area/drive aisle/interior Street. Patio seating area must have an internal minimum dimension of 5 feet clear, with an additional 2-foot buffer area (plant hedge or low fence.
- Minimum 6-foot sidewalk
- Minimum 5-foot landscape buffer or tree well
- Minimum 2-foot paving edge (Along parking area/drive aisle/interior Street).

Signage Guidelines:

A sign guideline section should be incorporated to promote an overall “sense of place” through signage that is architecturally integrated and visually interesting while conforming to applicable code requirements. The guidelines should include the following criteria:

- Signage Design Objectives
- General Sign Design and Limits
- Identity Signs
- Directional Signs
- Information Signs
- Regulation Signs
- Amenity Signs (Banners on light fixtures, etc..)
- Commercial, Retail and Residential Design Guidelines.
- Fabrication and Installation
- Sign Maintenance
- Sign Location
- Temporary Signs
- Sign Illumination

Landscape Design Guidelines:

To create a distinct and unified landscape character for “Main Street”, specific landscape design guidelines should be incorporated. The guidelines should include the flowing criteria:

- Parking/Shopping Interface: To provide a safe and comfortable pedestrian experience and reduce the presence of the parking area from shoppers with buffer planting.
- Retail Plazas: To provide active and passive pedestrian spaces that encourage user interaction; Fountains, stages, public art is encouraged for these spaces.
- To provide shaded and non shaded restaurant/outdoor eating and dining areas, use of awnings or umbrellas in west or south facing building exposures, planting as a way to provide a comfortable barrier and also allow for people watching (a 2-foot minimum plant barrier can be substituted for a rail.
- Building Edge/Retail Shops: Planting areas to create a buffer zone between the parking lot and promenade.

6.6 Landscape Design Guidelines

The Landscape Design Guidelines describe the key elements of the proposed landscape treatments within The Avenue Specific Plan area, which will develop over several years. These guidelines will help maintain a consistent design theme in a high quality, visually attractive and resource efficient framework.
The objectives of the Design Guidelines are:

- To provide guidance to developers and builders, as well as to engineers, architects, landscape architects and other professionals, as to the quality and character of the community and development of each planning area.
- To assure the City of Ontario that The Avenue will develop in accordance with the guidelines provided herein.
- To provide guidance to City decision makers in the review of future development projects in The Avenue.
- To provide guidance in formulating Covenants, Conditions and Restrictions.

These Landscape Design Guidelines are intended to be flexible and are, therefore, illustrative in nature. As a flexible document, the guidelines can, over time, accommodate changing community desires, economic conditions and the marketplace.

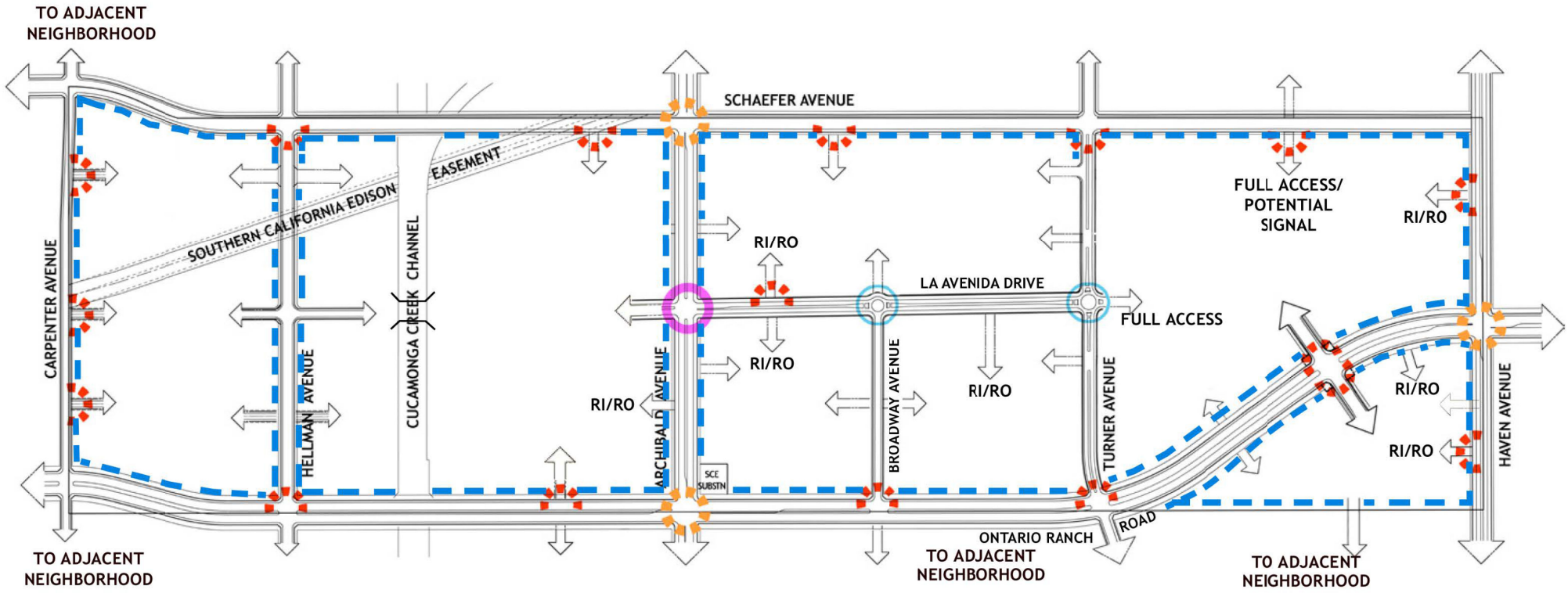
The General Landscape Guidelines address typical areas of importance and concern with regards to landscape architecture such as resource conservation, landscape lighting impacts and maintenance issues. The Plant Material Guidelines provide a specific list of plants compatible with the community design theme and Ontario Ranch Streetscape Master Plan. The lists are organized by community elements and streetscape themes.

Although a great deal of specific design information is provided in these Landscape Design Guidelines, there will at times be a need for interpretation of the intent of the guidelines in keeping with the spirit of The Avenue's design theme. It is critical that these guidelines are followed in a manner consistent with this design theme, in order to create a unified landscape, while providing the opportunities for diversity and visual interest that are so apparent in the most successful residential communities in the City of Ontario.

6.6.1 Community Fences and Walls

Community fences and walls are a major visual element and help unify the appearance of the community. Community walls and fences have been carefully designed to complement the overall theme. They will be easy to maintain and provide a durable, long term edge enclosure defining "private" and "public" spaces. Community walls and fences shall not encroach into the public right-of-way unless permitted. The size and location of any monument, fence or wall that encroach into the public right-of-way shall require approval by the City Engineer.

An encroachment permit shall be obtained to construct any monument, fence or wall in the public right-of-way. Exhibit 27, "Entries, Intersections, and Community Walls" shows the conceptual location of community walls.



LEGEND

- ROUNDABOUT
- MAIN ENTRY
- PRIMARY ENTRY
- SECONDARY ENTRY
- RI/RO — RIGHT IN/RIGHT OUT ONLY
- COMMUNITY WALL

NORTH 0 100 200 400 800

NOTE: The locations of entry points is conceptual. Precise locations will be determined as part of the tract map process.

NOTE: If a wall is proposed along the east side of Carpenter Avenue where the homes are plotted to rear onto Carpenter Avenue, a 10-foot wide landscape buffer shall be incorporated along the street frontage. The 10-foot landscape buffer shall be measured from back of sidewalk (ROW) (13-foot parkway + 10 foot landscape buffer = total 23-foot edge measured from curb face).

NOTE: No monuments or walls will be allowed in the public street right-of-way along backbone streets.

Entries, Intersections and Community Walls

6.6.2 Entries

The entries and intersections within The Avenue establish the design theme for the community while reinforcing the design hierarchy and providing a reassurance of the community areas and boundaries. These features are created through a thematic blend of hardscape and planting schemes, and become the first impressions on all visitors and residents entering the colony. No monuments or walls will be allowed in the public street right-of-way along backbone streets. See Exhibit 27, "Entries, Intersections, and Community Walls" for specific locations of monumentation.

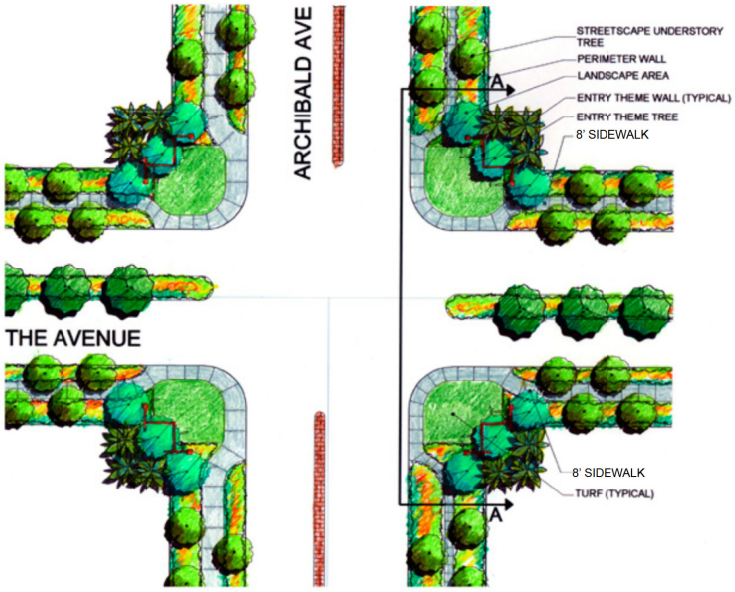
Main Entry

The Avenue is bordered by urban arterials on three sides. This allows easy access to neighborhoods throughout the community but also requires a carefully considered hierarchy and treatment of colony entries. The Main Entry provides a relaxed but strong sense of arrival and identity by utilizing soft open turf leading to stone veneered pilasters and a low planter wall. Clustered palms mixed with evergreen foliage trees and flowering shrubs will evoke the image of a classic Ontario community scene. The developer will be responsible for those improvements to the Main Entry as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project.

Exhibit 27a - Main Entry



Main Entry Section View

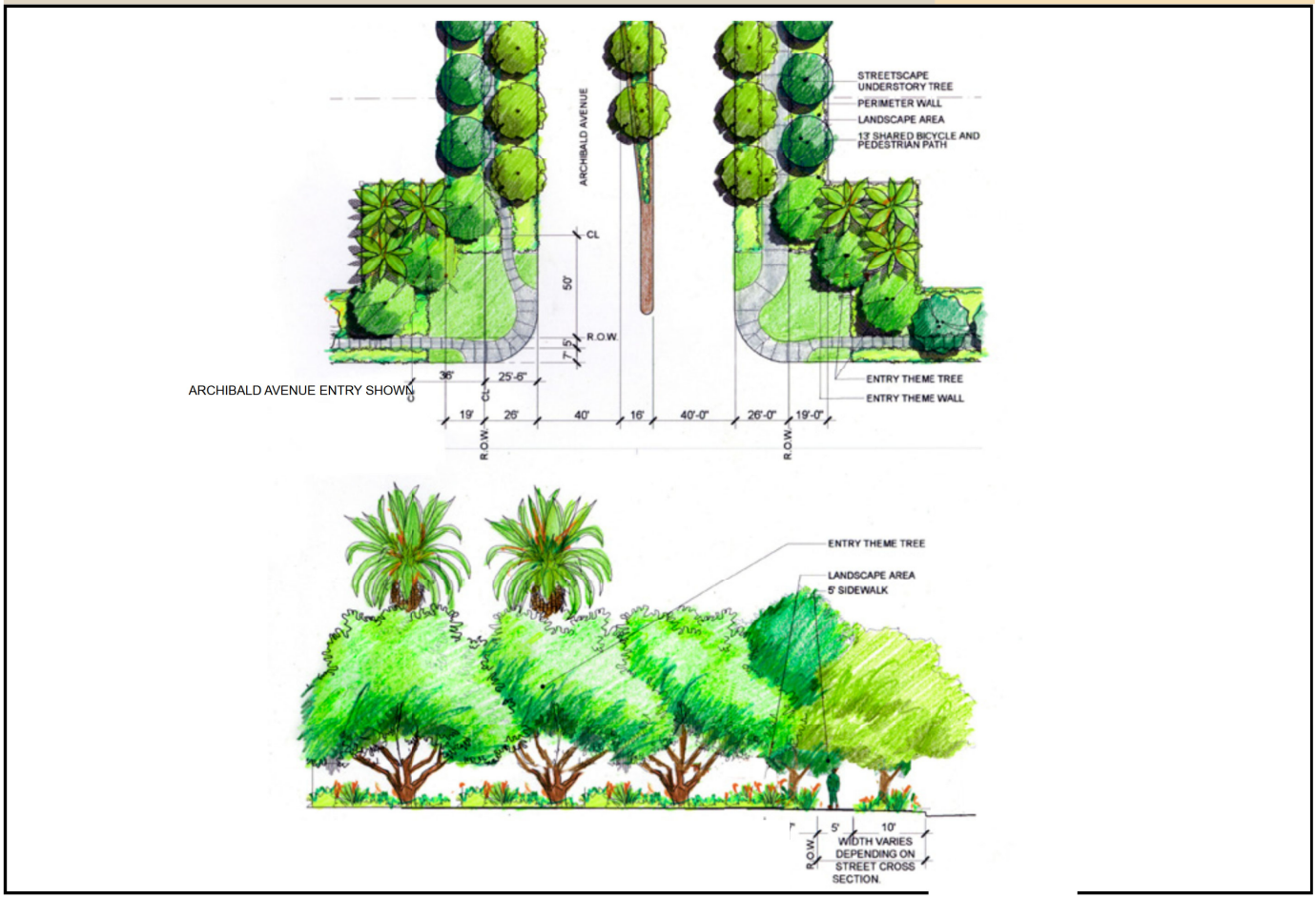


Main Entry Plan View

Primary Entries

These entries occur along the urban arterial and collectors throughout the community as shown in Exhibit 27, “Entries, Intersections and Community Walls”. They will be smaller scale versions of the main entry and will contain minor sign monuments, theme walls and pilasters, simple attractive evergreen and deciduous tree planting and accent shrubs set behind a simple turf area. These entries will provide an important outlet and inlet for colony traffic to most efficiently access residential enclaves and other community elements. The developer will be responsible for those improvements to the Primary Entries as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project.

Exhibit 27b - Primary Entries



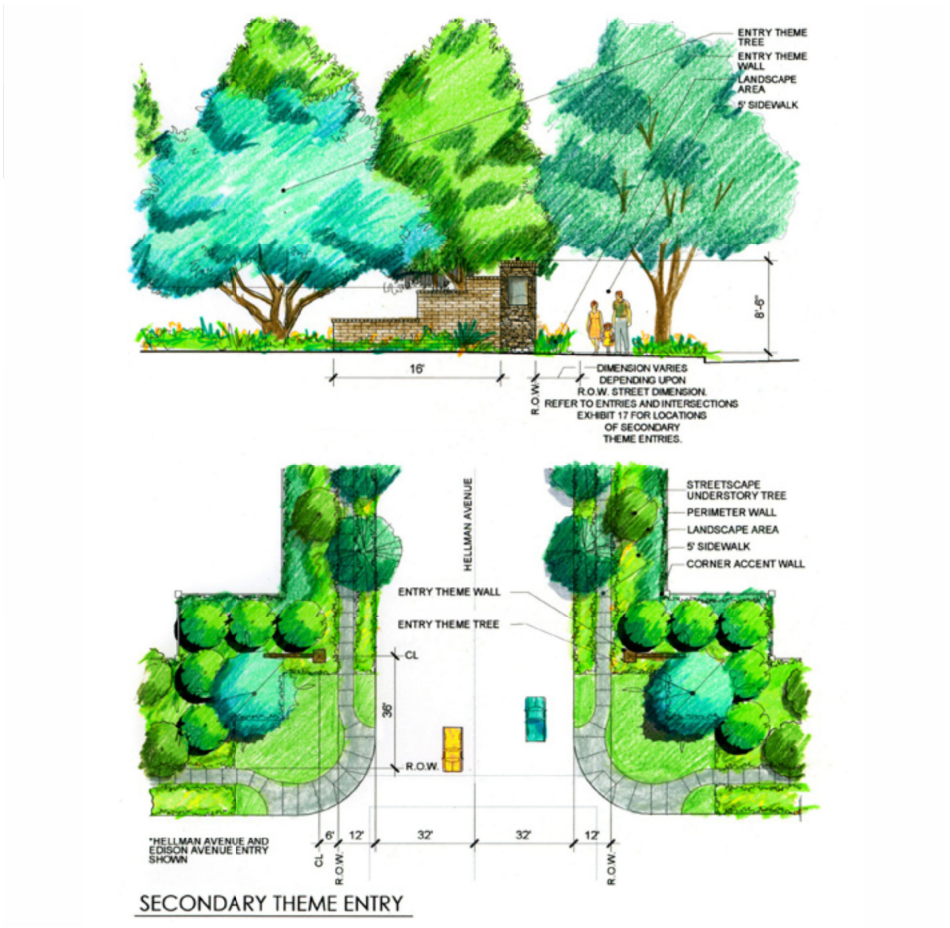
Secondary Entries

These entries will be the primary marketing and residential enclave access for the separate residential products within The Avenue as shown in Exhibit 27, “Entries, Intersections and Community Walls”. These entries occur from the internal road system and will be determined through the separate future planning of each enclave per the City of Ontario’s planning design standards and this Specific Plan document.

Simple identification signage and individualized landscape theming will be allowed. Signage may be permanent or temporary and is subject to review and approval by the master community developer. The signage and landscape materials must be compatible and complementary to The Avenue’s landscape design theme. Flexibility within this framework will allow visual diversity and individualization of the residential neighborhoods.

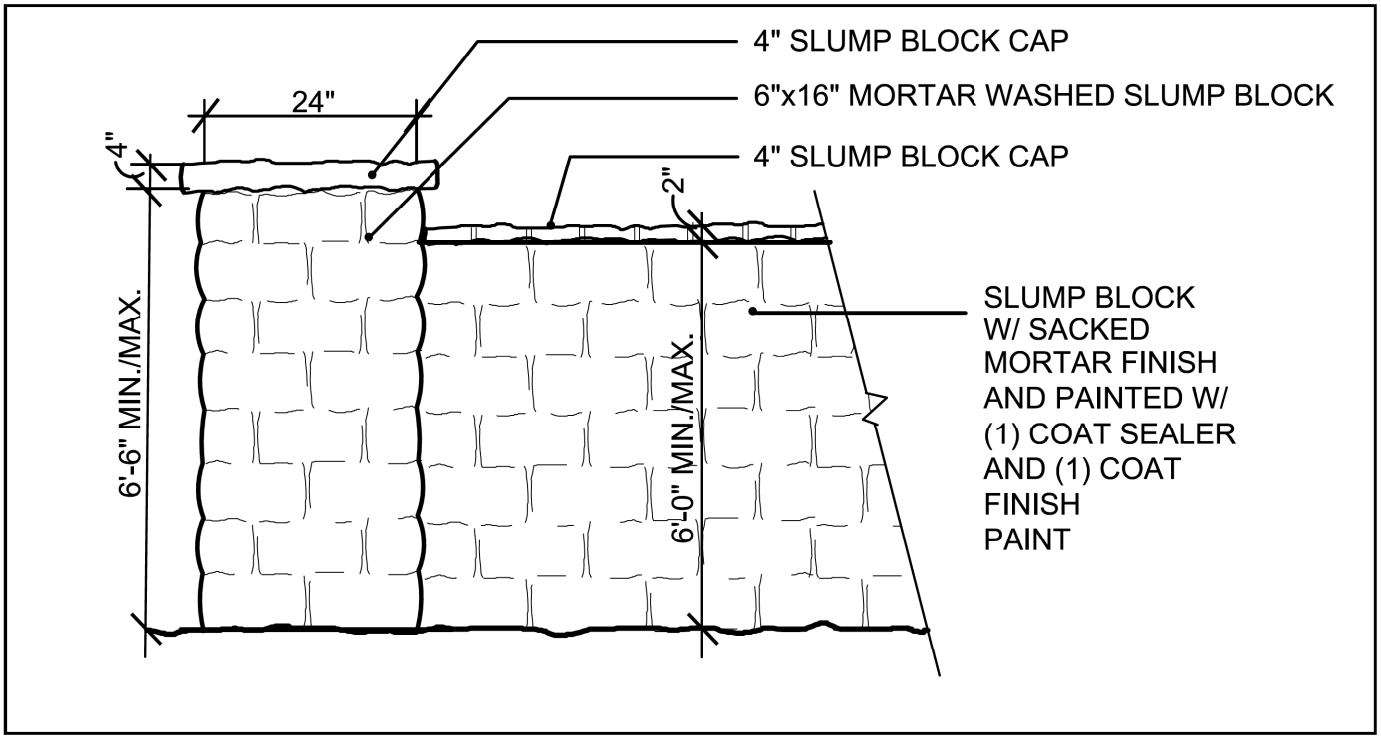
The developer will be responsible for those improvements to Archibald Avenue as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project.

Exhibit 27c - Secondary Entries



Solid Masonry Theme Wall

Solid masonry walls will be provided as rear and side yard enclosures where privacy is desired such as adjacent to streetscapes. The solid theme wall used within The Avenue will be a mortar washed painted slump block masonry unit. Pilasters will be placed at wall terminus points and as determined to be necessary for visual benefit.

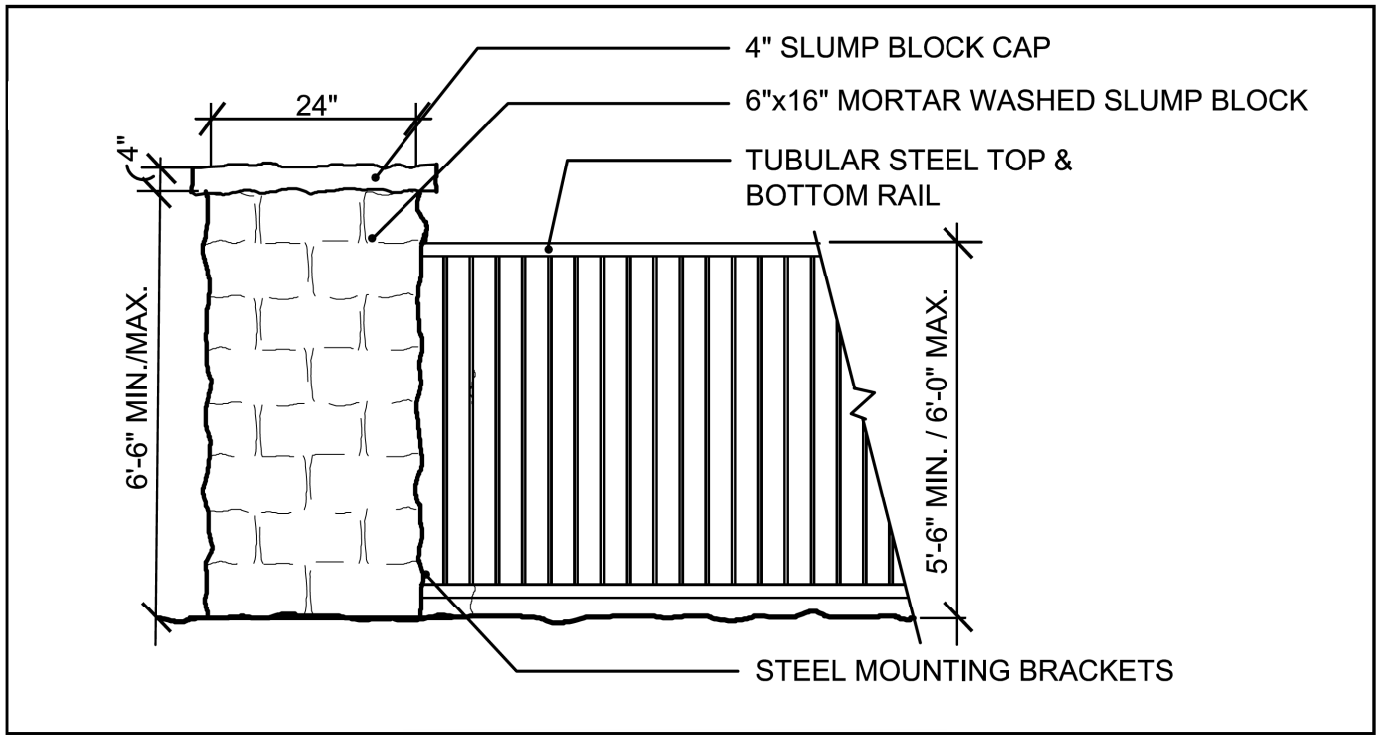




Open Tubular Steel Fence

Tubular steel fencing will be used at residential interfaces to allow maximum view retention. Tubular steel fencing may also be used where an attractive open enclosure is necessary at park sites or recreation facilities.

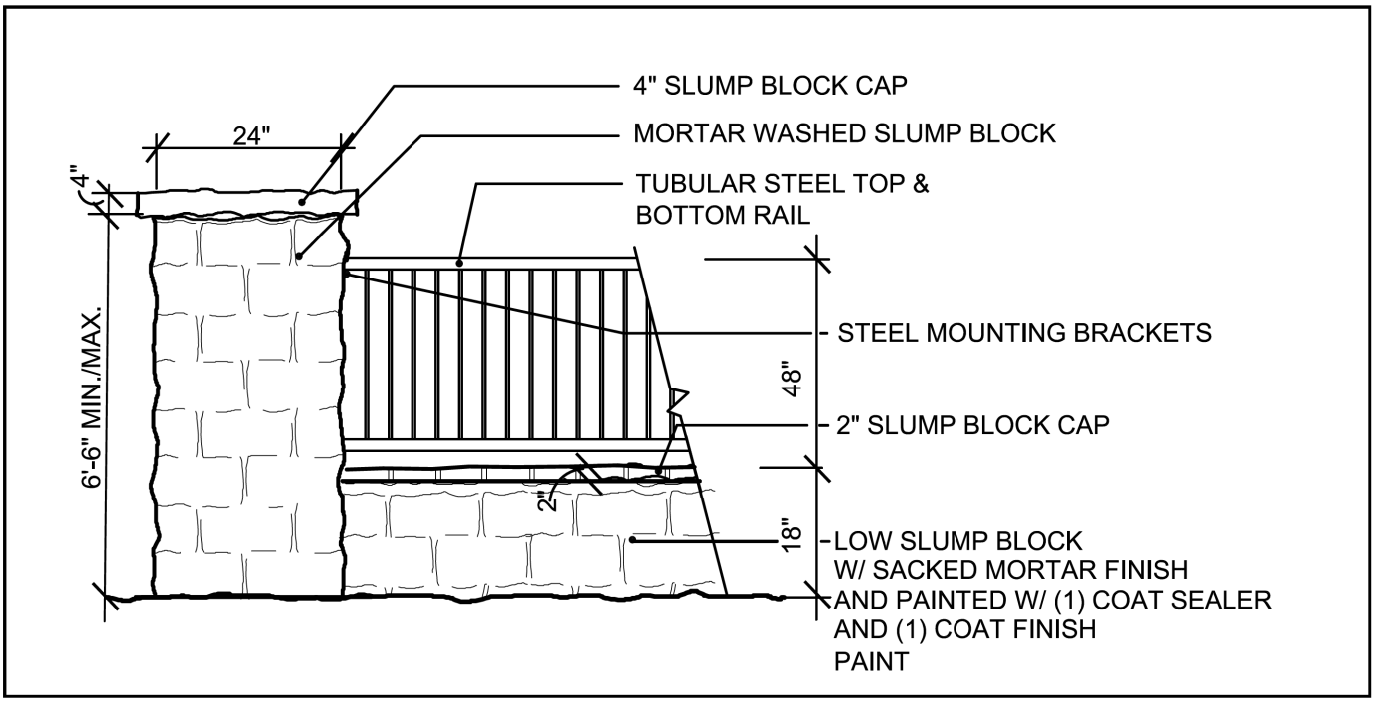
Where feasible, the tubular steel fence will be interspersed with thematic community stone or masonry pilasters.





Combination Fence/Wall

This combination enclosure of a tubular steel fence mounted on a low solid masonry theme wall occurs where partial privacy is necessary, but permits some view opportunity. Pilasters shall occur at the intersections of rear and side property lines and shall be constructed of solid masonry theme wall materials.



Community Wood Fence

Wood fencing is acceptable when not adjacent to common open spaces such as school sites, parks or commercial sites. Wood fencing is allowed for front yard low (3'-6" high max.) decorative fencing. Wood fencing will not be permitted in rear or sides (masonry block only). Wood fence materials must be of sufficient quality to accept solid and semi-transparent stains required to help prevent rotting and weathering. No transparent stains will be allowed.

Interior Neighborhood Streetscene Walls

- Walls adjoining any interior neighborhood streetscene shall have a perimeter streetscene solid community theme treatment.
- The community solid theme wall shall be utilized at all residential corner lot side yards which parallel or are viewed from public streets.
- Wood fencing is permitted within the individual neighborhood provided the fencing is not readily visible from the community streetscenes, except as located behind the front yard setback.

Commercial, Institutional and Other Uses

Screen and security fences and walls are encouraged only in rear or side yards. Trash deposit areas shall be enclosed within a six foot (6') high gated trash enclosure wherever located.

Wall and Fence Heights

Residential, Institutional and Commercial Uses:

- Front yard wall heights must be compatible with the visual appearance and integrity of the front yard streetscene. Fences and walls in the front setback and street side setback shall not exceed three and one-half feet (3 ½') above grade. However, security fencing may be approved if there is a demonstrated need for security. The maximum height for this fencing shall be six feet (6') above grade. In this instance a combination wall/open fence enclosure shall be encouraged.
- Side and rear fences or walls shall not exceed a height of six feet (6').
- Pool Code: All fencing shall conform to the applicable City of Ontario pool code fencing requirements.

Wall and Fence Materials and Colors

All fences and walls within the private residential lots shall be designed and constructed as part of the overall architectural site design. All materials shall be durable and finished in textures and colors complementary to the overall architectural design.

- Permitted Wall Materials: Stone veneer, stucco (including stucco covered block), masonry, brick, slump block, block and wrought iron combination are acceptable.
- Conditionally Acceptable Wall and Fence Materials: Glass and/or heavy, break-resistant plastic are acceptable for use in fences and walls when necessary to preserve views while providing protection against winds, etc., if used in conjunction with the community solid theme wall.
- Prohibited Wall and Fence Materials: Barbed wire, wire, electrically charged fences, plain exposed precision block; plastic materials, corrugated metal, chain link and grape stake fencing are prohibited.
- Color and Special Wall and Fence Treatments: Walls may be left natural or covered with stucco, except plain precision block must be covered with stucco. Brick or slump block walls may be painted or covered with stucco, if desired. Stone surfaces shall remain natural or unpainted.
- Special Wall and Fence Regulations: A six foot (6') high minimum masonry wall shall be constructed on each property line prior to development of any commercial, industrial or business related use that adjoins any parcel specifically zoned for residential use or destined for open space or as a school site.

Special Wall and Fence Regulations

- A six foot (6') high masonry wall shall be constructed on each property line prior to development of any commercial/office related use that adjoins any parcel specifically zoned for residential use, or designed for open space or as a school site.
- All fences and walls connecting two (2) separate residential dwelling units shall be constructed of the same color and material and shall be compatible with the color and material of the architecture.
- Long walls should be broken up with landscaping, alignment offsets and material changes to relieve visual monotony. When possible, a three foot (3') minimum space should be left between paved areas and walls and fences to allow for vines and espaliers.
- All walls and/or fencing in commercial areas shall be planted with vines or screened by dense shrubbery.
- Brick walls or screening walls should have climbing plants or anti-graffiti elements such as anti-graffiti paint to prevent walls from being vandalized.
- If a wall is proposed along the east side of Carpenter Avenue where the homes are plotted to rear onto Carpenter Avenue, a 10-foot wide landscape buffer shall be incorporated along the street frontage. The 10-foot landscape buffer shall be measured from back of sidewalk (ROW) (13-foot parkway + 10 foot landscape buffer: Total 23-foot edge measured from curb face).



Typical residential streetscene

6.6.3 Local Streets/Residential Lot Frontage and Private Lot Landscaping

The local roads within The Avenue consist of private front or side yards of single family residences. Street trees and front and exterior side yards will be required to be installed by the residential enclave builder, however, the rear and interior side yards will be the responsibility of each individual homeowner.

Residential Lot Landscape Requirements

Each single-family dwelling/lot shall be provided with front yard landscaping and a permanent automatic irrigation in the front yard of each lot. At a minimum, a seeded turf lawn, appropriate shrubs and trees and an automatic irrigation system shall be provided. Furthermore, a variety of typical landscape designs shall be provided for use on each lot within the subdivision.

Multiple-family residential projects shall be provided with full landscape improvements throughout the development. At a minimum, a seeded turf lawn, appropriate shrubs and trees, and a permanent automatic irrigation system shall be provided.

Landscape and irrigation drawings of the entire project site must be submitted to the Building department in conjunction with construction plans. The plans shall be approved by the Planning Department and the Landscape Planning Division prior to the issuance of building permits.

Those portions of a property which are not used for drive entries, parking, or approved outdoor uses shall be fully landscaped; all unpaved areas shall be landscaped; and all future development phase areas shall be hydroseeded.

Per City of Ontario's landscape Development Standards, each residential lot shall receive minimum of one (1) - 24" box size street tree planted in the right-of-way. Corner lots shall receive two (2) -24" box size street trees also planted in the right-of-way. Street trees planted in the right-of-way shall be thirty feet (30') maximum on center. Tree varieties shall be chosen from The Avenue's Plant Palette contained herein. Trees should be clustered near property lines to maximize their buffering effect and streetscene impact. One (1) species of tree shall be selected and approved for each residential street to maximize visual neighborhood identity. Deciduous or flowering evergreen accent trees which contrast with the chosen street trees are encouraged at cul-de-sacs, knuckles and intersections to provide seasonal emphasis and interest.

Residential Front Yard Requirements

A maximum of twenty five percent (25%) of the front yard, excluding driveways and sidewalks may be seeded or sodded turf. A minimum of ten (10) 5 gallon shrubs, twenty (20) 1 gallon shrubs and an automatic irrigation system shall be installed by the builder/developer in the front yard of each residential lot. The turf, shrubs and irrigation shall be installed up to a property line from the curb face to the front of house and side yards. Side yard slopes over 3:1 surface gradient and three feet (3') in height should be planted with ground cover. Low slopes may be graded out to a less than 3:1 surface gradient and planted with turf.

A minimum of one (1) 24" box tree shall be planted in the front yard of each residential lot in addition to the required street tree. These trees may match the street trees planted in the right-of-way and be located in proximity to said street trees in order to create a more harmonious effect. The trees may also contrast with the street tree and form backdrop tree clusters. Overall, the front yard scheme shall create a streetscene appearance of tree clusters meandering through the project and across streets.

6.6.4 General Landscape Guidelines

Individual homeowners shall be responsible for the maintenance of public street landscape frontage or side of their property unless otherwise identified within their legal ownership documents. Private homeowners shall also be responsible for all maintenance within their private lot area as well as fences and wall faces on their internal boundaries. For public and common area landscape maintenance responsibility refer to Table 4, “Maintenance Responsibility Matrix”.

Outdoor Lighting

All street and commercial developments within The Avenue shall have uniform lighting standards with regard to style, materials and colors in order to ensure consistent design. Each residential development may develop its own lighting standards, provided that the selected lighting fixture style is used consistently throughout the project. Lighting fixtures shall be well integrated into the visual environment and the appropriate architectural theme. All lighting fixtures within The Avenue project area shall comply with the following regulations and provisions.



- All outdoor lighting, including spotlights, floodlights, electrical reflectors and other means of illumination for signs, structures, landscaping, parking, loading, unloading and similar areas shall be focused, directed and arranged to minimize glare and illumination of streets or adjoining property. Low intensity, energy conserving night lighting is preferred.
- Lights shall be unbreakable plastic, recessed or otherwise designed to reduce the problems associated with damage and replacement of fixtures. Fixtures shall be vandal proof.
- Neon and similar types of lighting are prohibited in all areas of The Avenue except in retail commercial developments.
- All exterior lighting designs should develop a sense of hierarchy by varying fixtures and illumination levels. Proper lighting helps to define the organization of streets and plazas; and also distinguishes vehicular and pedestrian circulation patterns. Community entry areas (both pedestrian and vehicular), public plazas, community facilities and highly used recreation areas shall be creatively lit to develop a sense of place and arrival.
- All exterior lighting designs shall address the issue of security. Parking lots, pedestrian walkways and building entrances shall be well lighted for security reasons.

- Street lighting should be metal halide to project true colors and clear visibility for safety and security reasons.
- All lighting is required to have anti-vandalism fixtures.
- Residential units will be required to have their addresses illuminated on their home as close to the front door as possible. In addition, an illuminated address on the garage door should be present if the garage door faces a private drive. Also, the address numbers should be painted on the curb with white reflective paint on a black background. Each homeowner will be responsible for the maintenance of these numbers.
- All exterior lights should be shielded where feasible and focused to minimize spill light into the night sky or adjacent properties.
- No freestanding lighting fixtures shall exceed twenty-five feet (25') in height.
- Service area lighting shall be contained within the service yard boundaries and enclosure walls.
- The lighting concept of the entry monumentation features is to illuminate the sign graphics and to gently wash the walls and pilasters with light. Trees and other landscape features should be illuminated by concealed uplight fixtures.
- All electrical meter pedestals and light switch/control equipment shall be located with minimum public visibility if possible or shall be screened with appropriate plant materials.
- The level of on-site lighting as well as lighting fixtures, shall comply with any and all applicable requirements and policies of the City of Ontario. Energy conservation, safety and security should be emphasized when designing any light system.
- All community landscape common areas, public facilities, commercial sites, streetscapes, parks, schools and other areas may, at the discretion of the project developer or builders, contain area, accent sports or other night lighting entities.

Irrigation

All landscaped areas shall be watered with a permanent underground irrigation system. Irrigation systems which adjoin a separate maintenance responsibility area shall be designed in a manner to ensure complete water coverage between the areas.

Proper consideration of irrigation system design and installation in the climate extremes of The Avenue area is critical to the success of the landscape investment. In particular, the combined summer elements of heat and wind must be carefully considered in proper irrigation design and equipment selection.

Overhead spray irrigation systems shall be designed with head to head 100 percent double coverage at a minimum. Native and drought tolerant shrub areas will use a combination of spray (temporary) and drip or bubbler irrigation to shrubs and trees. All trees shall have a bubbler or spray irrigation system separate from shrubs and groundcovers. In addition, all irrigation systems shall run by an automatic irrigation controller operated by a centralized computer system with manufacturer to be selected by the Parks and maintenance Department.

Irrigation backflow prevention devices and controllers shall be located with minimum public visibility or shall be screened with appropriate plant materials.

- Reclaimed Water: Irrigation systems designed for use with both domestic and reclaimed water are encouraged (Refer to the city's Ontario Ranch Recycled Water Master Plan for additional information). All irrigation systems shall be designed for the eventual use of reclaimed water and/or conversion when available per current applicable standards.

Water Conservation Measures

- Drip and/or bubbler irrigation will be used where appropriate.
- Use of moisture sensors and/or central control irrigation systems may be incorporated where appropriate and feasible.
- Irrigation systems will be designed per AB 325 guidelines and/or the City of Ontario's Water Conservation Ordinance.
- Irrigation systems and plans will be prepared per landscape maintenance district or the City of Ontario's Landscape Development Standards.



Farming next to Flood Control Channel

- Place plants in similar hydro zone groupings to maximize efficient water use. Do not mix drought tolerant or native plants with ornamental plants that have dissimilar water requirements

6.6.5 Plant Material Guidelines

The Avenue will have a vastly different appearance from initial planting to several years into development. The quality of that appearance will depend on many factors including the initial selection of the plant material palette, soil preparation and installation, irrigation management and care and maintenance. All of these issues have been addressed in the preparation of the planting design theme and plant palette selection. A brief discussion of the planting approach and key issues follows:

General Landscape Requirements

- All areas required to be landscaped shall be planted with turf, groundcover, shrub or tree materials selected from the plant palette contained in these guidelines or other drought-tolerant or regionally appropriate species subject to the approval of Landscape Planning Division.
- The owners of parcels which require landscape development shall consider any existing common landscape areas adjoining their property. Where feasible, landscape development shall reinforce or be compatible with such existing common area setting.

- Cut slopes equal to or greater than eight feet (8') in vertical height and fill slopes equal to or greater than five feet (5') in vertical height shall be planted with an erosion ground cover to protect the slope from erosion and instability. Slopes exceeding fifteen feet (15') in vertical height shall be planted with shrubs, spaced not more than seven feet (7') average on center or trees spaced not to exceed thirty feet (30') average on center or a combination of shrubs and trees at equivalent spacings, in addition to the groundcover. The plants selected and planting methods shall be suitable for the soil and climatic conditions.
- Reference should be made to the City of Ontario Landscape Development Standards for erosion control methods for slopes and other landscaped areas.
- Parkway Tree Planting: All street or parkway trees shall be planted so as to maintain adequate distance and shall maintain the following planting distances:
- Ten feet (10') from all water and sewer lines, fire hydrants, light standards and power poles.
- Five feet (5') from all flat hardscape (sidewalks, curbs, vaults, etc.) except as otherwise approved by the City.
- Twenty-five feet (25') from street intersection beginning of curb returns (BCR).

Climate Constraints

Plant material palettes for The Avenue contained herein are compatible with the climatic setting of the area. The utilization of some materials, depending upon their site location, exposure and relationship to other influential factors may not be appropriate.

Planting Time

Due to the climate extremes of the area, the installation of plant materials during the coldest winter months (December through March) and the hottest summer/fall months (July through September) can be difficult. Container plant materials not acclimated to the area can easily suffer from damage or sun/heat exposure resulting in partial or entire foliage loss even through such materials are perfectly suited to the temperature ranges once established. If planting must be done during these difficult periods, plant establishment may be difficult and require a prolonged period of time, as well as additional replacement plants.

Horticultural Soils Test Requirements

Soil characteristics within The Avenue project may be variable. The owners of parcels which require landscape development shall procure a horticultural soils report in order to determine proper planting and maintenance requirements for proposed plant materials. Such a soils test shall be performed by a qualified agricultural laboratory and shall include a soil fertility and agricultural suitability analysis with pre-planting and post-planting recommendations.

Topography

The Avenue lies across a flat plain. There may be extreme cold conditions occurring during winter months. This will be affected by the development patterns of the community and are difficult to predict. The plant palette proposed may, on occasion, suffer adverse affects in certain areas of the community. Adjustments may need to be made at that time and other drought-tolerant or regionally appropriate species may be substituted subject to the approval of Landscape Planning Division.

Drought Tolerance/Water Conserving Plant Material

Although a plant may be considered as drought tolerant or water conserving, that plant requires proper care, installation, watering and maintenance to maintain an optimum healthy condition.

- Degrees of Drought Tolerance/Water Conservation: There are degrees of drought tolerance with some plants able to withstand or go without water for a greater period of time than others. Water conserving plant material may not be drought tolerant but can thrive on low water amounts throughout the year once established.


Deer Grass

- Plant Installation Water Demand: Drought tolerant plants like other plants, require more watering during the initial installation period and for at least a three month maintenance period following to become established. Therefore, if drought tolerant plants are installed in the warmer months more supplemental water will be required until the plant is established.

- Deep Watering Practices: Drought tolerant plants like most plants need the proper deep watering practices to encourage deep root system development. Drought tolerant plants with a shallow root system resulting from frequent light applications of water will not be drought tolerant. Checking the depth of water penetration into the soil with a soil probe or spade and adjusting irrigation run times enhance plant vigor and prevents plant loss from drought stress over saturation.


Manzanita

- Warmer Months Water Application: Although a plant is labeled drought tolerant, that does not necessarily mean it can survive without summer water, the plant may have low water requirements. Depending upon the plant, drought tolerant plants will have a better appearance and health during the warmer months with infrequent deep watering. Do not water during the heat of the day and avoid overhead watering; prolonged leaf wetting can promote disease.

- Full Season Plant Water Requirements: After drought tolerant plants have grown a full season, the water application rate should be diminished and the drought tolerant plant allowed to survive on less water.

- Maintenance: Drought tolerant and California native plants still need regular maintenance such as pruning, fertilizing, deep watering and checking for pests and diseases.

Invasive Species

Non-native invasive plant species shall not be used in landscape plans. Controlled invasive non-native species shall include the following:

Non-native Acacia's (Acacia spp.)
Tree of Heaven (Ailanthus altissima)
Giant reed (Arundo donax)*
Hottentot-fig (Carpobrotus edulis)
Garland chyrsanthemum (Chrysanthemum coronarium)*
Pampas grass (Cortaderia atacamensis)*
French broom (Cytisus monspessulans)
Scotch broom (Cytisus scoparius)
Crystal ice plant (Mesembryanthemum crystallinum)
Small-flowered ice plant (Mesembryanthemum nodiflorum)
Bermuda buttercup (Oxalis pes-caprae)*
German ivy (Senecio mikanoides)
Pink periwinkle (Vinca major)
Tamarisk (Tamarix spp.)*
Gorse (Ulex europaeus)


Ailanthus altissima

** Indicates a species that may not be used in any plant palettes, regardless of location in the development, due to its ability to readily spread via airborne seeds, rather than vegetatively.*

Plant Pest and Disease Control

A consistent problem in ornamental and native planting schemes is the disease and pests which have affected trees and shrubs often in significant visual patterns through a community. Recent well documented problems include oleander scorch blight and several eucalyptus and olive problems, however, a series of other problems have occurred on an annual basis. There is no way to predict the occurrence of new pests or diseases, however, there are useful methods to limit the impact of outbreaks. These include the following:

- Maintain optimum plant health through soil preparation, water management and nutrient monitoring.
- Review community plant material on a regular basis to observe health problems due to disease or pest infestation and take appropriate action.
- Place plant material in appropriate planting areas and provide proper spacing consistent with the requirements of the plant species.
- Provide good cultural practices to maintain plant health and disease resistance with adequate mulch, sufficient air circulation and protection from mechanical injury from mowers and edgers.

The following Plant List is to provide design guidance and intent. While this list is not a comprehensive list of suitable plants for The Avenue, other drought-tolerant or regionally appropriate species, preferably from the low and moderate species of the WUCOLS (Water Use Classification of Landscape Species) classification system, may be substituted subject to the approval of Landscape Planning Division.

Table 5 - Plant List

Trees		Archibald Avenue	Hellman Avenue	Haven Avenue	SCE Corridor	Edison Avenue	Schaefer Avenue	Turner Avenue	The Avenue	Neighborhood Streets	Alleys	Residential Street Trees	Accent Trees	Primary Entries	Secondary Entries	Residential Entry	Typ. Neighb. Park 1 & 2	Sports Park	Retail/Commercial Area
Botanical Name	**Common Name**	Per Ontario Ranch Streetscape Plan																	
Acacia subporosa	Weeping Acacia																		x
Agonis flexuosa	Peppermint Tree									x									
Albizia julibrissin 'Rosa'	Silk Tree																		
Bauhinia variegata	Purple Orchid Tree												x				x		
Cassia leptophylla	Gold Medallion Tree																		x
Cedrus deodara	Deodar Cedar												x	x	x	x			
Chamaerops humilis	Mediterranean Fan Palm													x	x				
Chionanthus retusus	Chinese Fringe Tree							x											
Cinnamonum camphora	Camphor Tree													x	x				
Citrus spp.	Citrus												x				x	x	
Cupaneopsis anacardioides	Cottonwood									x		x					x	x	x
Eucalyptus spp.	Eucalyptus									x									
Fraxinus spp.	Ash													x	x		x	x	
Geijera parviflora	Austraillian Willow											x					x		x
Gleditsia triacanthos	Honey Locust									x							x	x	x

Trees		Archibald Avenue	Hellman Avenue	Haven Avenue	SCE Corridor	Edison Avenue	Schaefer Avenue	Turner Avenue	The Avenue	Neighborhood Streets	Alleys	Residential Street Trees	Accent Trees	Primary Entries	Secondary Entries	Residential Entry	Typ. Neighb. Park 1 & 2	Sports Park	Retail/Commercial Area
Botanical Name	**Common Name**																		
Jacaranda mimosifolia	Jacaranda								x					x	x				
Koelreuteria bipinnita	Chinese Flame Tree									x			x			x		x	x
Lagerstroemia indica	Crape Myrtle								x		x		x	x			x	x	x
Liriodendron tulipifera	Tulip Tree							x					x	x	x	x	x	x	x
Melaleuca linariifolia	Flaxleaf Paperbark																	x	x
Melaleuca nesophila	Pink Melaleuca													x	x				
Melaleuca quinquenervia	Cajuput Tree								x										
Michelia champaca	Michelia																		
Olea europea	Olive													x	x		x	x	
Phoenix dactylifera	Date Palm													x	x		x	x	x
Pinus spp.	Pine												x	x	x	x	x	x	x
Pistacia chinensis	Chinese Pistache								x			x				x	x	x	x
Plantanus acerifolia	London Plane Tree									x		x					x		
Plantanus racemosa	California Sycamore								x								x	x	
Quercus agifolia	Coast Live Oak													x	x	x	x	x	
Quercus ilex	Cork Oak													x	x	x	x	x	
Podocarpus gracilior	Fern Pine											x				x	x		x
Rhaphiolepis 'Magestic Beauty'	N.C.N.										x						x		x
Rhus lancea	African Sumac																x	x	x
Robinia Pseudoacacia	Locust																		x
Schinus molle	California Pepper							x						x	x	x	x	x	
Sequoia sempervirens	Aptos Blue Redwood													x	x				
Sophora japonica	Japanese Pagoda							x											
Trachycarpus fortunei	Windmill Palm																x	x	
Tristania conferta	Brisbane Box							x		x		x							x
Tristania laurina	N.C.N.									x	x								x
Ulmus parvifolia	Evergreen Elm											x					x	x	x

Per Ontario Ranch Streetscape Plan

Shrubs		Archibald Avenue	Hellman Avenue	Haven Avenue	SCE Corridor	Edison Avenue	Schaefer Avenue	Turner Avenue	The Avenue	Neighborhood Streets	Alleys	Primary Entries	Secondary Entries	Residential Entry	Typ. Neighb. Park 1 & 2	Sports Park	Retail/Commercial Area
Botanical Name	**Common Name**	Per Ontario Ranch Streetscape Plan															
Acacia 'Desert Carpet'	Acacia							x				x	x	x	x	x	x
Agave attenuata	Foxtail Agave								x			x	x	x	x	x	
Aloe species	Aloe								x			x	x	x	x	x	x
Alyogene huegelii	Blue Hibiscus											x	x	x	x	x	x
Arctostaphyllos 'Howard McMinn'	Sur Manzanita																
Baccharis 'spp	Coyote Bush														x	x	
Buxus m. japonica	Japanese Boxwood									x	x	x	x	x	x	x	x
Cistus spp.	Rock Rose							x				x	x	x	x		
Coprosma kirkii	Cooprosma													x	x	x	x
Cotoneaster spp.	Cotoneaster							x				x	x		x	x	
Dietes Bicolor	African Iris									x	x	x	x	x	x	x	x
Echium fastuosum	Pride of Madiera											x	x	x	x	x	
Eleagnus pungens	Silberberry							x								x	x
Encelia farinosa	Encelia																
Festuca californica	California Fescue																
Grewia caffra	Lavender Star Flower											x	x				x
Hemerocallis species	Day Lily							x	x			x	x	x	x		x
Hesperaloe spp.	Hesperaloe							x	x	x	x	x	x	x	x	x	x
Heteromeles arbutifolia	Toyon														x		x
Ilex vomitoria 'Nana'	Holly																x
Lantana montevidensis	Lantana								x			x	x	x	x	x	x
Lavandula species	Lavender								x			x	x	x	x		
Lavatera bicolor	N.C.N.																
Leptospermum scoparium	New Zealand Tea Tree																

Shrubs		Archibald Avenue	Hellman Avenue	Haven Avenue	SCE Corridor	Edison Avenue	Schaefer Avenue	Turner Avenue	The Avenue	Neighborhood Streets	Alleys	Primary Entries	Secondary Entries	Residential Entry	Typ. Neighb. Park 1 & 2	Sports Park	Retail/Commercial Area
Botanical Name	**Common Name**	Per Ontario Ranch Streetscape Plan															
Ligustrum japonicum 'Texanum'	Glossy Privet									x		x	x	x	x	x	x
Muhlenbergia 'Regal Mist'	Deer Grass											x	x	x	x	x	x
Myoporum parvifolium	N.C.N.									x						x	x
Phlomis fruticosa	Jerusalem Sage																
Pittosporum spp.	Mock Orange									x	x	x	x	x	x	x	x
Plumbago auriculata	Cape Plumbago							x			x				x	x	x
Rhamnus spp.	Coffee													x	x		x
Rhaphiolepis indica	India Hawthorne							x	x		x	x	x	x	x	x	x
Rhus integrifolia	Lemonade Berry																
Rosa species	Rose							x				x	x	x		x	x
Rosemarinus spp.	Rosemary							x	x			x	x	x	x		
Salvia spp.	Sage								x			x	x	x	x	x	x
Salvia spathacea	Hummingbird Sage								x			x			x	x	x
Tagetes lemmonii	Bush Marigold											x	x				
Trachelospermum spp.	Star Jasmine											x	x	x	x		x
Xylosma congestum	Shing Xylosma							x					x	x	x	x	x



Ceanothus



Bougainvillea

Vines		Archibald Avenue	Hellman Avenue	Haven Avenue	SCE Corridor	Edison Avenue	Schaefer Avenue	Turner Avenue	The Avenue	Neighborhood Streets	Alleys	Primary Entries	Secondary Entries	Residential Entry	Typ. Neighb. Park 1 & 2	Sports Park	Retail/Commercial Area
Botanical Name	**Common Name**	Per Ontario Ranch Streetscape Plan															
Bougainvillea species	Bougainvillea							x	x			x	x	x	x	x	x
Distictus buccinatoria	Blood Red Trumpet Vine											x	x	x	x	x	x
Gelsemium sempervirens	Carolina Jessamine											x	x	x			x
Grewia caffra	Lavender Star Flower								x			x	x				
Macfadyana unguis-cati	Cat's Claw											x	x		x	x	x
Pandorea jasminoides	Bower Vine											x	x	x	x	x	x
Parthenocissus tricuspidata	Boston Ivy								x			x	x	x	x	x	x
Rosa banksiae	Lady Bank's Rose																
Wisteria sinensis	Chinese Wisteria								x						x	x	x

Groundcovers		Archibald Avenue	Hellman Avenue	Haven Avenue	SCE Corridor	Edison Avenue	Schaefer Avenue	Turner Avenue	The Avenue	Neighborhood Streets	Alleys	Primary Entries	Secondary Entries	Residential Entry	Typ. Neighb. Park 1 & 2	Sports Park	Retail/Commercial Area
Botanical Name	**Common Name**	Per Ontario Ranch Streetscape Plan															
Acacia 'Desert Carpet'	Dwarf Trailing Acacia														x	x	x
Arctostaphylos 'John Dourley'	Manzanita							x	x			x	x	x			x
Carex spp.	Carex							x	x	x	x	x	x	x	x	x	x
Ceanothus griseus Hor. 'Yankee Point'	California Lilac							x	x								
Coprosma kirkii	Coprosma							x	x			x	x	x	x	x	x
Cotneaster spp.	Cotoneaster							x	x	x	x	x	x	x	x	x	x
Festuca spp.	Fescue							x	x	x	x	x	x	x	x	x	x
Juncus spp.	Rushes							x	x	x	x	x	x	x	x	x	x
Lonicera japonica	Japanese Honeysuckle							x	x	x	x	x	x	x	x	x	x
Myoporum parvifolium	Myoporum																
Myoporum pacificum	Pacific Myoporum								x		x				x	x	x
Rosmarinus prostratus	Prostratus Rosemary								x		x	x	x	x	x	x	x
Trachelospermum asiaticum	Asiatic Jasmine								x		x	x	x	x	x	x	x

Turfgrass and Seed:

Year round turf grass mixes as follows:

General turf areas:

100% Dwarf tall fescue blend - 10 lbs. per 1,000 s.f.

Park Site and Athletic areas:

Hybrid bermuda (seeded or stolonized)

Bermuda grass must be planted and mature prior to the dormant season.



General Plan Consistency

California Government Code (Title 7, Division 1, Chapter 3, Article 8, Section 65450-65457) permits the adoption and administration of specific plans as an implementation tool for elements contained in the local general plan. Policy plans must demonstrate consistency in regulations, guidelines, and programs with the goals and policies set forth in the general plan. The Avenue Specific Plan has been prepared in conformance with the goals and policies of the City of Ontario Policy Plan. The policy analysis in Table 7-1, "Policy Plan Consistency," describes the manner in which the Avenue Specific Plan complies with The Ontario Plan (TOP) policies applicable to the project.

Plan Policy	Specific Plan Consistency
Land Use Element	
GOAL LU-1: A community that has a spectrum of housing types and price ranges that match the jobs in the City and that make it possible for people to live and work in Ontario and maintain a quality of life.	
LU-1.1 Strategic Growth. We concentrate growth in strategic locations that help create place and identity, maximize available and planned infrastructure, foster the development of transit, and support the expansion of the active and multimodal transportation networks throughout the City.	The Specific Plan outlines pedestrian sidewalk and multi-use trail network connecting neighborhoods to open space, schools and future commercial land use.
LU-1.2 Sustainable Community Strategy. We integrate state, regional, and local Sustainable Community/Smart Growth principles into the development and entitlement process.	Sustainable Community/Smart Growth principles are incorporated into the Avenue Land Use Plan. Pedestrian sidewalks and bicycle paths to be constructed as part of the project throughout the community provide connectivity among residential planning areas and schools to help reduce vehicle trips and miles traveled. The design of residential areas incorporates tree-lined parkways providing shade for pedestrians and parked cars. Safe and efficient pedestrian and bicycle connectivity is provided throughout the project. The Avenue architectural design guidelines allow for a variety of architectural styles that respond to local climate conditions. Some styles allow the incorporation of flat roofs that facilitate the use of solar collectors. All new construction will utilize design features, fixtures, appliances, and heating and cooling controls to conserve energy and water. The landscape concept for The Avenue incorporates a plant palette of drought tolerant materials and requirements that the development implement planting and irrigation systems designed to conserve water. Park and recreation areas will include shaded areas, bicycle racks, and other amenity features to encourage pedestrian and other non-vehicular activities.

Plan Policy	Specific Plan Consistency
LU-1.3 Adequate Capacity. We require adequate infrastructure and services for all development.	The Avenue Specific Plan establishes an infrastructure and public facilities plan to ensure that adequate roadways and public utilities including sewer, water, and drainage facilities along with schools, parks, and other public facilities are provided to serve the project.
LU-1.4 Multimodal Mobility. We require development and urban design, where appropriate, that reduces reliance on the automobile and capitalizes on active transportation, transit, electric vehicles, and multimodal transportation opportunities	The Avenue Specific Plan requires the construction of Class 1 Bike Paths, which are an integral element to creating accessibility and mobility and Class II on-street striped bike lanes shall be provided on roadways within The Avenue Specific Plan area as determined by the City Engineer. Bus turnouts will be provided on Ontario Ranch Road, Schaefer Avenue, Haven Avenue, and Archibald Avenue to the satisfaction of the City Engineer and Omnitrans.
LU-1.6 Complete Community. We incorporate a variety of land uses and building types in our land use planning efforts that result in a complete community where residents at all stages of life, employers, workers, and visitors have a wide spectrum of choices of where they can live, work, shop and recreate within Ontario.	The Avenue provides for development of up to 3,753 residential dwelling units in a variety of residential single-family detached and multi-family attached housing types oriented toward open space amenities.
GOAL LU-2: Compatibility between a wide range of uses and resultant urban patterns and forms.	
LU-2.6 Infrastructure Compatibility. We require infrastructure to be aesthetically pleasing and in context with the community character.	Arterial streets within Avenue will be uniformly landscaped in an aesthetically pleasing manner with 8-10-foot wide landscaped parkways on each side of the street and 16-26 foot wide landscaped medians in each street. A planting buffer area varying in width from 40-50 feet in width will be provided adjacent to sidewalks within the project adjacent to all arterial roadways. Decorative project monuments will be constructed at key project entries providing community identification and establishing a sense of arrival and a welcoming feeling for the community.
LU-2.9 Methane Gas Sites. We require sensitive land uses and new uses on former dairy farms or other methane-producing sites be designed to minimize health risks.	The project will comply with appropriate mitigation measures identified in the project EIR for soil remediation and proper venting to address the potential existence of methane gases within the project.

Plan Policy	Specific Plan Consistency
GOAL LU-4: Development that provides short-term value only when the opportunity to achieve our Vision can be preserved.	
LU-4.3 Infrastructure Timing. We require that the necessary infrastructure and services be in place prior to or concurrently with development.	Approval of the Avenue Specific Plan is accompanied by an application for approval of a development agreement. The development agreement shall include, but not be limited to, methods for financing, acquisition, and construction of infrastructure, acquisition, and development of adequate levels of parkland and schools, as well as the provision of adequate housing opportunities for various segments of the community consistent with the City's regional housing needs assessment. The Avenue development agreement shall be fully approved before the issuance of the first building permits for the project.
GOAL LU-5: Integrated airport systems and facilities that minimize negative impacts to the community and maximize economic benefits.	
LU-5.2 Airport Planning Consistency. We coordinate with airport authorities to ensure The Ontario Plan is consistent with state law, federal regulations, and/or adopted master plans, and airport land use compatibility plans for ONT and Chino Airport.	The Specific Plan will comply with the ALUCP requirements for Ontario Airport (ONT) and Chino Airport as outlined in The Avenue Specific Plan Section 2-6.
LU-5.7 ALUCP Consistency with Land Use Regulations. We comply with state law that requires general plans, specific plans, and all new development to be consistent with the policies and criteria set forth within an Airport Land Use Compatibility Plan for any public-use airport.	The Specific Plan will comply with the ALUCP requirements for Ontario Airport (ONT) and Chino Airport as outlined in The Avenue Specific Plan Section 2-6.
Housing Element	
GOAL H-2 Diversity of types of quality housing that are affordable to a range of household income levels, accommodate changing demographics, and support and reinforce the economic sustainability of Ontario.	

Plan Policy	Specific Plan Consistency
H-2.4 Ontario Ranch. We support a premier lifestyle community in the Ontario Ranch, distinguished by diverse housing, highest design quality, and cohesive and highly amenitized neighborhoods.	The Avenue Specific Plan allows for the development of up to 3,753 residential dwelling units comprised of a variety of single-family detached and multi-family attached homes. Residential land use areas are linked by a network of street- separated sidewalks and bicycle trails connecting all neighborhoods to parks and schools. Residential development is designed to address a variety of lifestyles and economic segments of the marketplace, such as singles, families, executives and "empty nesters."
H-2.5 Housing Design. We require architectural excellence through adherence to City design guidelines, thoughtful site planning, environmentally sustainable practices, and other best practices.	The Specific Plan includes architectural design guidelines to encourage development of diverse neighborhoods with the use of varied architectural styles articulated with elements true to the architectural characteristics of each style.
GOAL H-5 A full range of housing types and community services that meet the special housing needs for all individuals and families in Ontario, regardless of income level, age, or other status.	
H-5.2 Family Housing. We support the development of larger rental apartments that are appropriate for families with children, including, as feasible, the provision of services, recreation, and other amenities.	The Specific Plan allows for the development of condominium and multi-family home types designed to accommodate families with children. The Specific Plan requires that all condominium and multi-family developments within the project provide private recreational areas and/or pocket parks for residents of the development.
Parks & Recreation Element	
GOAL PR-1: A system of safe and accessible parks that meets the needs of the community.	
PR-1.5 Acreage Standard. We strive to provide 5 acres of parkland (public and private) per 1,000 residents.	The project will comply with the City requirement for the payment of an in-lieu fee in amount equivalent to three acres of parkland per 1,000 residents to fund the development of public parks and the requirement that each new development provide park acreage on-site equivalent to 2 acres per 1,000 residents. The Specific Plan includes the provision of private pocket parks in each Planning Area.

Plan Policy	Specific Plan Consistency
PR-1.6 Private Parks. We expect development to provide a minimum of 2 acres of developed private park space per 1,000 residents.	The Specific Plan includes the provision of private pocket parks in each Planning Area with a total acreage provided equivalent to 2 acres of developed private park per 1,000 residents.
PR-1.9 Phased Development. We require parks be built in new communities before a significant proportion of residents move in.	Development within the Specific Plan is required to be reviewed and approved pursuant to the City's Subdivision Ordinance, which requires the approval of tentative and final subdivision maps for the project. Conditions of approval associated with the City's approval of tentative subdivision maps will provide for the timing of construction of parks as part of the development.
PR-1.11 Environmental Function of Parks. We require new parks to meet environmental management objectives.	The Specific Plan requires all new development to be reviewed and approved pursuant to the provisions of the City's Subdivision Ordinance and Development Plan Review process, which provides for review by the City's Planning Department which may require the development to incorporate environmental management objectives into the design of parks.
PR-1.12 Trails. We promote connections between parks and local trails including those managed by other public agencies.	The Specific Plan is designed for bicycle and pedestrian accessibility provided throughout the community through a network of off-street bike and pedestrian trails within the plan area along Archibald, Haven, Ontario Ranch Road and Schaefer Avenues. Connectivity to this network of off-street trails from all residential Planning Areas is provided through the local street system.
PR-1.14 Multi-family Residential Developments. We require that new multi-family residential developments of five or more units provide recreational facilities or open space, in addition to paying adopted impact fees.	The Specific Plan requires that all condominium and multi-family developments within the project provide private recreational areas and/or pocket parks for residents of the development in addition to the payment by the developer of adopted impact fees.
Environmental Resources Element	
GOAL ER-1: A reliable and cost-effective system that permits the City to manage its diverse water resources and needs.	

Plan Policy	Specific Plan Consistency
ER-1.3 Conservation and Sustainable Water Supply. We work with regional water providers and users to conserve water and ensure sustainable local water supplies as more frequent droughts reduce long term local and regional water availability.	The Specific Plan requires all public and common area landscaping within the project to utilize plant materials listed on the approved Specific Plan Landscape Plant Matrix, which is comprised of drought tolerant and California Friendly plant materials. The Specific Plan requires that irrigation systems for both public and private landscaped areas be designed to be as water-efficient as possible and includes the following minimum requirements. • Use of moisture sensors and/or central control irrigation systems may be incorporated where appropriate and feasible. • Drip and/or bubbler irrigation will be used where appropriate. • Irrigation systems will be designed per AB325 guidelines and/or the City of Ontario's Water Conservation Ordinance. • Irrigation systems and plans will be prepared per landscape maintenance district or the City of Ontario's Landscape Development Standards. • Place plants in similar hydro zone groupings to maximize efficient water use. Do not mix drought tolerant or native plants with ornamental plants that have dissimilar water requirements.
ER-1.5 Water Resource Management. Environmental justice areas are prioritized as we coordinate with local agencies to protect water quality, prevent pollution, address existing contamination, and remediate contaminated surface water and groundwater.	The Avenue Specific Plan requires that the developer obtain approval of a Strom Water Pollution Prevention Plan (SWPPP) prior to issuance of grading or construction permits. All projects greater than 1 acre in size shall apply for coverage under the California General Permit To Discharge Storm Water Associated with construction activity, obtain a WDID# from the State Water Resources Control Board and prepare a Stormwater Pollution Prevention Plan (SWPPP) on the CASQA 2009 Template form and upload it to the State's SMART database system.

Plan Policy	Specific Plan Consistency
	In addition to the preparation of a SWPPP for construction-related activities, and as part of the approval of any grading plans for the project, the developer is required to submit a Water Quality Management Plan (WQMP) on the regional model form provided by the City. The WQMP shall identify and detail all Site Design BMP's, Source Control BMP's and Treatment Control BMP's to be implemented or installed as part of the project in order to reduce storm water pollutants and site runoff.
ER-1.6 Urban Run-off Quantity. We encourage the use of low impact development strategies, including green infrastructure, to intercept run-off, slow the discharge rate, increase infiltration, and ultimately reduce discharge volumes to traditional storm drain systems.	The Specific Plan requires that grading and drainage for the project be designed to retain, filter, and/or treat surface runoff to the maximum extent practicable, to comply with the requirements of the current San Bernardino County NPDES Stormwater Program's MS4 Permit and Water Quality Management Plan (WQMP) for significant new development projects. These effects may be minimized through the implementation of site designs that reduce runoff and pollutant transport by minimizing impervious surfaces and maximizing on-site infiltration, Source Control Best Management Practices (BMP's) and/or either on-site structural Treatment Control BMP's, or participation in regional or watershed-based Treatment Control BMP's. An alternative to the implementation of on-site Low Impact Development (LID) BMPs to retain/infilter and treat stormwater runoff is the utilization of the off-site, regional Mill Creek Wetland facility for accomplishing water quality improvements in residential project runoff from this master planned community. All non-residential planning area projects within The Avenue will incorporate all required on-site LID BMPs, pursuant to the requirements of the current San Bernardino County Water Quality Management Plan.

Plan Policy	Specific Plan Consistency
ER-1.7 Urban Run-off Quality. We require the control and management of urban run-off, consistent with Regional Water Quality Control Board regulations.	The Specific Plan requires that the project comply with the most recent requirements of the San Bernardino County NPDES Storm Water Program's Quality Management (WQMP) for significant new development projects. A final WQMP is required to be submitted by the developer for approval by the City prior to the issuance of any grading and construction permits for the project.
ER-1.8 Wastewater Management. We require the management of wastewater discharge and collection consistent with waste discharge requirements adopted by the Regional Water Quality Control Board.	The Specific Plan requires the construction of a wastewater system consistent with City requirements and also requires that the project obtain approval of a WQMP for the project prior to the issuance of any grading or construction permit.
Community Economics Element	
GOAL ER-3: Cost-effective and reliable energy system sustained through a combination of low impact buildings, site and neighborhood energy conservation, and diverse sources of energy generation that collectively helps to minimize the region's carbon footprint.	
ER-3.1 Conservation Strategy. We require conservation as the first strategy to be employed to meet applicable energy-saving standards.	The Specific Plan requires all public and common area landscaping within the project to utilize plant materials listed on the approved Specific Plan Landscape Plant Matrix, which is comprised of drought tolerant and California Friendly plant materials. The Specific Plan requires that irrigation systems for both public and private landscaped areas be designed to be as water-efficient as possible. The Specific Plan requires the construction of separate water mains for the use of recycled water in public and common areas of the project. The Specific Plan includes architectural styles that respond to local climate conditions and allow for the incorporation of flat roofs that facilitate the use of solar collectors. All new construction will utilize fixtures, appliances, and heating and cooling controls to conserve water and energy.

Plan Policy	Specific Plan Consistency
ER-3.2 Green Development– Communities. We encourage the use of the LEED Neighborhood Development rating system, or similar mechanism, to guide the planning and development of all new communities.	The Specific Plan includes architectural guidelines, which allow for a variety of styles that respond to local climate conditions. Some styles allow the incorporation of flat roofs that facilitate the use of solar collectors. All new construction will utilize design features, fixtures, appliances, and heating and cooling controls to conserve energy and water. The landscape concept for The Avenue incorporates a plant palette and a planting and irrigation system designed to conserve water. Park and recreation areas will include shaded areas, bicycle racks, and other amenity features to encourage pedestrian and other non-vehicular activities.
ER-3.3 Building and Site Design. We require new construction to incorporate energy efficient building and site design strategies, which could include appropriate solar orientation, maximum use of natural daylight, passive solar, and natural ventilation.	The Specific Plan includes architectural design guidelines, which allow for styles that respond to local climate conditions. Some styles allow for flat roofs that facilitate the use of solar collectors.
GOAL ER-4: Improved indoor and outdoor air quality and reduced locally generated pollutant emissions.	
ER-4.4 Indoor Air Quality. We will comply with State Green Building Codes relative to indoor air quality. We seek funding to improve indoor air quality for households with poor indoor air quality, with priority for lower income households in environmental justice areas.	All development within the Specific Plan will be required to comply with the State Green Building Code as implemented by the City.
GOAL ER-5 Protected high value habitat and farming and mineral resource extraction activities that are compatible with adjacent development.	
ER-5.2 Entitlement and Permitting Process. We comply with state and federal regulations regarding protected species.	The project will comply with all mitigation measures identified in the project EIR with regard to biological resources.
ER-5.3 Right to Farm. We support the right of existing farms to continue their operations within the Ontario Ranch.	The Specific Plan requires a minimum 100-foot wide agricultural buffer be provided by the development between any new residential structure and any existing animal feed trough, corral/pen or an existing dairy/feed lot.

Plan Policy	Specific Plan Consistency
ER-5.4 Transition of Farms. We protect both existing farms and sensitive uses around them as agricultural areas transition to urban uses.	The Specific Plan requires a minimum 100-foot wide agricultural buffer be provided by the development between any new residential structure and any existing animal feed trough, corral/pen or an existing dairy/feed lot.
Community Economics Element	
GOAL CE-1: A complete community that provides for all incomes and stages of life.	
CE-1.6 Diversity of Housing. We collaborate with residents, housing providers, and the development community to provide housing opportunities for every stage of life; we plan for a variety of housing types and price points to encourage the development of housing supportive of our efforts to attract business in growing sectors of the community while being respectful of existing viable uses.	The Specific Plan allows for the development of 3,753 residential dwelling units comprised of single-family detached and multi-family attached homes. A network of street-separated sidewalks and Multipurpose Trails connecting all neighborhoods to parks and schools links residential land use areas. Residential development is designed to address a variety of lifestyles and economic segments of the marketplace, such as singles, families, executives and "empty nesters."
GOAL CE-2: A City of distinctive neighborhoods, districts, corridors, and centers where people choose to be.	
CE-2.1 Development Projects. We require new development and redevelopment to create unique, high-quality places that add value to the community.	The Specific Plan includes architectural and landscape design guidelines.
CE-2.2 Development Review. We require those proposing new development and redevelopment to demonstrate how their projects will create appropriately unique, functional, and sustainable places that will compete well with their competition within the region.	The Specific Plan requires all new development to be reviewed and approved pursuant to the provisions of the City's Subdivision Ordinance and Development Plan Review process which provides for review by the City's Planning Department which may require the development to demonstrate how the project will create appropriately unique, functional and sustainable places.
CE-2.5 Private Maintenance. We require adequate maintenance, upkeep, and investment in private property because proper maintenance on private property protects property values.	The Specific Plan includes a Maintenance Responsibility Matrix defining the private responsibilities for maintenance of private roadways, parkways, trails, common areas, parks, yards, walls, and monuments within the project.

Plan Policy	Specific Plan Consistency
CE-2.6 Public Maintenance. We require the establishment and operation of maintenance districts or other vehicles to fund the long-term operation and maintenance of the public realm whether on private land, in rights-of-way, or on publicly-owned property.	The Specific Plan includes a Maintenance Responsibility Matrix defining the responsible public entities, including special districts, for maintenance of roadways, sidewalks, traffic signals, off site and on site public water, sewer, and storm drain infrastructure facilities.
Safety Element	
GOAL S-1: Minimized risk of injury, loss of life, property damage, and economic and social disruption caused by earthquake-induced and other geologic hazards.	
S-1.1 Implementation of Regulations and Standards. We require that all new habitable structures be designed in accordance with the most recent California Building Code adopted by the City, including provisions regarding lateral forces and grading.	All development within the Specific Plan will be required to comply with the State of California Building Code as adopted and implemented by the City.
GOAL S-3: Reduced risk of death, injury, property damage and economic loss due to fires, accidents and normal everyday occurrences through prompt and capable emergency response.	
S-3.8 Fire Prevention through Environmental Design. We require new development to incorporate fire prevention consideration in the design of streetscapes, sites, open spaces, and buildings.	The Specific Plan requires new development to be reviewed and approved pursuant to the City's Subdivision Ordinance and Development Plan Review process, allowing for the Fire Department review, and requiring the incorporation of any required fire prevention design elements in streetscapes, open spaces and buildings.
GOAL S-4: An environment where noise does not adversely affect the public's health, safety, and welfare.	
S-4.1 Noise Mitigation. We utilize the City's Noise Ordinance, building codes, and subdivision and development codes to mitigate noise impacts.	All development within the Specific Plan will be required to comply with City's Noise Ordinance, building codes, and subdivision and development codes to mitigate noise impacts.
GOAL S-5: Minimize the risk of injury, property damage, and economic loss resulting from windstorms and wind-related hazards.	
S-5.1 Dust Control Measures. We require the implementation of Best Management Practices for dust control at all excavation and grading projects.	Construction within the Specific Plan will comply with a City approved construction management plan and all mitigation measures identified in the project EIR with regard to dust control.

Plan Policy	Specific Plan Consistency
GOAL S-6: Reduced potential for hazardous materials exposure and contamination.	
S-6.9 Remediation of Methane. We require development to assess and mitigate the presence of methane, per regulatory standards and guidelines.	The project will comply with all mitigation measures identified as part of the project EIR for soil remediation and proper venting to address the potential existence of methane gases within the project.
GOAL S-7: Residential neighborhoods, commercial areas, and industrial districts that are kept safe through a multi-faceted approach of prevention, suppression, and community involvement in public safety.	
S-7.4 Crime Prevention through Environmental Design (CPTED). We require new development to incorporate CPTED in the design of streetscapes, sites, open spaces, and buildings.	The Specific Plan requires all new development to be reviewed and approved pursuant to the provisions of the City's Subdivision Ordinance and Development Plan Review process which provides for review by the City's Police Department, which may require the development to incorporate CPTED in the design of streetscapes, sites, open spaces and buildings.
Mobility Element	
GOAL M-1: A system of roadways that meets the mobility needs of a dynamic and prosperous Ontario.	
M-1.1 Roadway Design and Maintenance. We require our roadways to: • Comply with federal, state, and local design and safety standards; • Meet the needs of multiple transportation modes and users; • Handle the capacity envisioned in the City of Ontario Master Plan of Streets and Highways; • Be maintained in accordance with best practices; • Be compatible with the streetscape and surrounding land uses; and • Promote the efficient flow of all modes of traffic through the implementation of intelligent transportation systems and travel demand management strategies	The Specific Plan requires the construction of a network of Master Plan Roadways designed consistent with the requirements of the City's Functional Roadway Classification Plan and the New Model Colony Streetscape Master Plan. The roadway system is designed to maintain a peak hour Level of Service (LOS) E or better at all intersections as discussed in the project EIR. Site design, source control, and treatment BMP's for the project are required to be submitted by the developer for approval by the City prior to issuance of permits for the project.

Plan Policy	Specific Plan Consistency
GOAL M-2: A system of trails and corridors that facilitate and encourage active modes of transportation.	
M-2.3 Pedestrian Walkways. We require streets to include sidewalks and visible crosswalks at major intersections where necessary to promote safe and comfortable mobility between residential areas, businesses, schools, parks, recreation areas, and other key destination points.	The Specific Plan requires the developer of the project to coordinate with the local mass transit provider, Omnitrans, to accommodate adequate area for any bus turnouts within the Master Plan Roadways as required by Omnitrans.
Community Design Element	
GOAL CD-1: A dynamic, progressive city containing distinct and complete places that foster a positive sense of identity and belonging among residents, visitors, and businesses.	
CD-1.2 Place Types. We establish Place Types in urban, mixed use, and transit-oriented areas to foster the City's identity as a premier community and require new development within each Place Type to incorporate prescribed urban patterns, forms, and placemaking priorities.	The Specific Plan includes design guidelines to guide the physical character of all future residential development and all community and neighborhood features, including the overall landscape treatment within the project. The proposed community character establishes a unified aesthetic treatment and design theme. The community vision for The Avenue is based upon the architectural and landscape influences found in Ontario and throughout Southern California. The architectural styles and landscape concept chosen for the community have been selected in order to be reflective of older neighborhoods of historic Ontario as well as to accommodate innovative transitional influences. Together, the architectural styles and landscape concept are designed to create a neighborhood character for The Avenue that will be sustainable over time.
CD-1.5 View Corridors. We require all major north-south streets be designed and redeveloped to feature views of the San Gabriel Mountains, which are part of the City's visual identity and a key to geographic orientation. Such views should be free of visual clutter, including billboards and may be enhanced by framing with trees.	The major north south streets in The Avenue are designed to frame the views of the San Gabriel Mountains. The Specific Plan requires the construction of extensive landscaping on both sides of each street and in the median of each street. All new utility lines will be placed underground.

Plan Policy	Specific Plan Consistency
GOAL CD-2: A high level of design quality resulting in neighborhoods, commercial areas, public spaces, parks, and streetscapes that are attractive, safe, functional, human- scale, and distinct	
CD-2.1 Quality Building Design and Architecture. We encourage all development projects to convey visual interest and character through: • Building volume, massing, and height to provide context-appropriate scale and proportion; • A true architectural style which is carried out in plan, section, and elevation through all aspects of the building and site design and appropriate for its setting; and • Exterior building materials that are articulated, high quality, durable, and appropriate for the architectural style.	The Specific Plan includes design guidelines to guide the construction of the project by requiring building massing to address the street and the pedestrian experience, the use of selected architectural styles to be implemented in a comprehensive manner throughout each neighborhood around all building elevations, and the use of building materials and architectural features and elements which are true to each selected style.
CD-2.2 Neighborhood Design. We create distinct residential neighborhoods that promote a sense of community and identity by emphasizing access, connectivity, livability, and social interaction through such elements as: • A pattern of smaller, walkable blocks that promote activity, safety, and access to nearby amenities and services; • Varied parcel sizes and lot configurations to accommodate a diversity of housing types; • Traffic calming measures to slow traffic and promote walkability while maintaining acceptable traffic flows and emergency evacuation access; • Floor plans that encourage views onto the street and de-emphasize the visual and physical dominance of garages (introducing the front porch as the "outdoor living room"), as appropriate; and • Landscaped parkways, with sidewalks separated from the curb and designed to maximize safety, comfort, and aesthetics for all users.	The Avenue is designed as a walkable community of traditional residential neighborhoods organized around a simple grid street system offering a variety of home types within an open space setting. Residents can walk or bike to parks and schools via an interconnected network of sidewalks and trails throughout the community. Traditional site planning elements, varied residential product design and architecture, well-landscaped streets and enhanced entries combine to create welcoming neighborhoods within the community with aesthetic and functional harmony. Streets are linked together in a grid pattern with sidewalks separated from the street by landscaped parkways providing a simple and understandable system for pedestrian and vehicular travel connecting neighborhoods, open space amenities, public facilities, and recreational areas. A variety of housing types, including detached single-family homes, attached single-family homes, and multifamily homes are planned for Avenue, all of which are located close to schools, parks, and open space amenities.

Plan Policy	Specific Plan Consistency
	Residential development standards and design guidelines contained in the Specific Plan ensure that homes are designed at a human scale emphasizing architecture fronting the street. Residential development standards are designed to minimize views of garage doors through use of alternating garage configurations. Traffic calming features incorporated into neighborhood streets include a traditional grid pattern with sidewalks separated by landscaping on either side of the street, and the use of intersection chokers and roundabouts where appropriate.
CD-2.5 Streetscapes. We design new and, when necessary, retrofit existing streets to improve walkability, bicycling and transit integration, strengthen connectivity, and enhance community identity through improvements to the public right-of-way such as sidewalks, street trees, parkways, curbs, street lighting and street furniture.	The Specific Plan is designed with a comprehensive street system to accommodate the safe and efficient movement of automobiles as well as bike trails and a multi-purpose trail to accommodate bicycle and pedestrian mobility and connectivity throughout the community. Streets are designed as a grid system of short blocks allowing for various access points and travel routes. Streets are designed with sidewalks separated from the street to create an inviting environment for walking. Streets connect neighborhoods, parks and schools through a variety of travel paths. There will be several points in the trail system linking to secondary paths that will lead to The Avenue's retail/commercial areas, as well as to the neighborhoods. Multi-use paths are provided within the plan area along Archibald, Haven, Ontario Ranch Road and Schaefer Avenues. These paths are provided adjacent to the major drainage easement, along Hellman Avenue, and along the spine road which traverses the center of the plan area in an east-west direction. Connectivity to this network of off street bike trails from all residential Planning Areas is provided through the local street system.

Plan Policy	Specific Plan Consistency
CD-2.6 Connectivity. We promote development of local street patterns, multimodal networks, and connected public spaces that create and unify neighborhoods, rather than divide them, and create cohesive and continuous corridors, rather than independent "islands" through the following means: • Local street networks that provide access both between subdivisions and within neighborhoods and discourage through traffic; • A local street system that is logical and understandable for the user. A grid system is preferred to avoid circuitous and confusing travel paths between internal neighborhood areas and adjacent arterials and to provide adequate emergency and evacuation access; and • Pedestrian and bicycle networks that provide convenient access to neighborhoods and nearby destinations, such as schools, parks, other public spaces, commercial areas, and transit stops.	Off-street pedestrian circulation is available throughout The Avenue by means of the interconnected, paved sidewalk system within the roadway right-of-way, separated from travel lanes by a landscaped parkway and within off-street Multipurpose Trails. The Project pedestrian system provides connectivity among residential neighborhoods to pocket parks and the schools within The Avenue. Streets are designed in a simple grid system with short blocks promoting a sense of small neighborhoods.
CD-2.8 Safe Design. We incorporate defensible space design into new and existing developments to ensure the maximum safe travel and visibility on pathways, corridors, and open space and at building entrances and parking areas by avoiding physically and visually isolated spaces, maintaining visibility and accessibility, and using lighting.	Residential development standards and design guidelines contained within the Specific Plan require home designs with fronts of homes, not garages, oriented toward the street to ensure that "eyes are on the street" in each neighborhood. Residences are oriented around open space, parks, and trails. Parking areas and garages are located to the rear of residences to avoid dominance of the streetscape by automobiles and to enhance a pedestrian environment on all streets.
CD-2.9 Landscape Design. We encourage durable, sustainable, and drought-tolerant landscaping materials and designs that enhance the aesthetics of structures, create and define public and private spaces, and provide shade and environmental benefits.	The landscape concept for The Avenue incorporates the use of durable landscaping materials, a drought tolerant plant palette, and a planting and irrigation system designed to conserve water. Park and recreation areas will include shaded areas, bicycle racks, and other amenity features to encourage pedestrian and other non-vehicular activities. All materials utilized in private and public common areas will be durable landscaping materials.

Plan Policy	Specific Plan Consistency
CD-2.11 Entry Statements. We encourage the inclusion of amenities, signage, and landscaping at the entry to neighborhoods, commercial centers, mixed use areas, industrial developments, and public places that reinforce them as uniquely identifiable places.	Signage and landscaping will be provided at neighborhood entries within The Avenue. Community and neighborhood entry monumentation is required by the Specific Plan and is designed to establish a hierarchy for each Planning Area of the community. At key entries a monumentation program will be utilized to help identify the community as well as convey a sense of arrival and a welcoming feel for both vehicular and pedestrian traffic. These monuments and "gateways" are to be designed with durable, lasting materials approved by the City of Ontario.
CD-2.12 Site and Building Signage. We encourage the use of sign programs that utilize complementary materials, colors, and themes. Project signage should be designed to effectively communicate and direct users to various aspects of the development and complement the character of the structures.	The Avenue Specific Plan requires identification signage and individualized landscape theming. Signage may be permanent or temporary and will be subject to review and approval by the master community developer. The signage and landscape materials must be compatible and complementary to The Avenue's landscape design theme.
GOAL CD-3: Vibrant urban environments that are organized around intense buildings, pedestrian and transit areas, public plazas, and linkages between and within developments that are conveniently located, visually appealing and safe during all hours.	
CD-3.1 Unique Identity. We promote development that heightens the unique character and identity of each Place Type by requiring compatible land uses and land planning, site design, and building design that promotes an active public realm.	The Specific Plan includes architecture and landscape design guidelines to enrich the community landscape and architectural style for The Avenue. The design guidelines are organized to define the basic landscape design principles for the project, to guide the implementation of the "design vision," and to ensure the design integrity of the project. All landscape plans, streetscape plans, and graphic designs with regard to community identity, neighborhood identity, or entry monumentation within the project are required to conform to the landscape design guidelines as set forth in the Specific Plan and are subject to review and approval by the City of Ontario.

Plan Policy	Specific Plan Consistency
CD-3.3 Complete and Connected Network. We require that pedestrian, vehicular, and bicycle circulation on both public and private property be coordinated to provide connections internally and externally to adjacent neighborhoods and properties (existing and planned) through a system of local roads and trails that promote walking and biking to nearby destinations (including existing and planned parks, commercial areas, and transit stops) and are designed to maximize safety, comfort, and aesthetics.	The Specific Plan is designed for bicycle and pedestrian accessibility throughout the community through a network of off-street bike and pedestrian trails or multi-use paths within Ontario Ranch Road, Archibald, Haven, Schaefer and Hellman Avenues. Connectivity to this network of off street trails from all residential Planning Areas is provided through the local street system.
CD-3.5 Active Frontages. We create lively pedestrian streetscapes by requiring primary building, business, and residential entrances, outdoor dining, and storefronts be located on ground floors adjacent to sidewalks or public spaces and designed to maximize safety, comfort, aesthetics, and the intended functionality (as defined by the Place Type).	The Specific Plan includes architectural design guidelines, which promote street facing front entries and architectural elements visible from adjacent streets, sidewalks, and parks within the project.
GOAL CD-5: A sustained level of maintenance and improvement of properties, buildings, and infrastructure that protects the property values and encourages additional public and private investments.	
CD-5.1 Maintenance of Buildings and Property. We require all public and privately-owned buildings and property (including trails and easements) to be properly and consistently maintained.	The Specific Plan includes a Maintenance Responsibility Matrix defining the public, private, and utility entities responsible for maintenance of roadways, parkways, trails, sidewalks, common areas, parks, yards, walls and monuments, traffic signals, infrastructure, and utilities within the project.
CD-5.2 Maintenance of Infrastructure. We require the continual maintenance of infrastructure.	The Specific Plan includes a Maintenance Responsibility Matrix defining the responsible entities for continual maintenance of roadways, sidewalks, traffic signals, off site and on site public water, sewer, and storm drain infrastructure facilities.

Plan Policy	Specific Plan Consistency
Social Resources Element	
GOAL SR-2: A range of educational and training opportunities for residents and workers of all ages and abilities that improves their life choices and provides a skilled workforce for our businesses.	
SR-2.4 Access to Schools. We work with local and regional partners to improve the safety in and around schools and to improve access for citizens of all ages and abilities to schools and community services, such as after school and other programs.	The Avenue Specific Plan lists creating a strong functional relationship between homes and schools and providing for connectivity between residential neighborhoods, recreational areas, and to the schools, by means of pedestrian and bicycle trail linkages, as part of the Specific Plan Objectives.
GOAL SR-5: Local heritage, entertainment, and cultural experiences that enrich the lives of Ontario's residents, workers, and visitors and serve to attract residents and businesses to the City.	
SR-5.3 Public Art. We encourage public art in buildings, parks, open spaces, and other public and private spaces.	The Avenue Specific Plan Landscape Design Guidelines includes provision of active and passive pedestrian spaces that encourage user interaction; Fountains, stages, public art is encouraged for these spaces.

LAND DEVELOPMENT DIVISION
CONDITIONS OF APPROVAL

303 East B Street, Ontario, California 91764 Phone: 909.395.2036 / Fax: 909.395.2420

Date Prepared: 1/2/2025

File No: PSPA22-005

Related Files: PMTT23-002

Project Description: An amendment to The Avenue Specific Plan to: 1) modify the land use designation of Planning Area 4 and apply density modifications to Planning Areas 1B, 2A, 3B, and 5 for consistency with The Ontario Plan 2050 Land Use Plan; 2) apply general modifications throughout the document for clarity; and, 3) make exhibit and text updates throughout the document to support the Project, for land located at the northwest corner of Archibald Avenue and Ontario Ranch Road; (APNs: 0218-191-04; 0218-191-14; 0218-191-15; 0218-191-16; 0218-191-05; 0218-191-22; 0218-191-20); submitted by Richland Communities.

Prepared By: Alexis Vaughn, Associate Planner
Phone: 909.395.2416 (direct)
Email: avaughn@ontarioca.gov

The Planning Department, Land Development Section, conditions of approval applicable to the above-described Project are listed below. The Project shall comply with each condition of approval as listed:

1.0 Standard Conditions of Approval. The project shall comply with the *Standard Conditions for New Development*, adopted by City Council Resolution No. 2017-027 on April 18, 2017. A copy of the *Standard Conditions for New Development* may be obtained from the Planning Department or City Clerk/Records Management Department.

2.0 Special Conditions of Approval. In addition to the *Standard Conditions for New Development* identified in condition no. 1.0, above, the project shall comply with the following special conditions of approval:

2.1 Specific Plan Amendment. The following shall be submitted to the Planning Department within 30 days following City Council approval of the Specific Plan Amendment:

(a) Two hard copies of the final Specific Plan document (bound, double-sided, color);

(b) One flash drive containing:

(i) A complete Microsoft Word or equivalent copy of the final Specific Plan document, including all required revisions;

(ii) A complete PDF copy of the final Specific Plan document, including all required revisions; and

(iii) A complete electronic website version (PDF, reduced size, OCR) of the final Specific Plan document, including all required revisions.

2.2 Signs.

(a) All Project signage shall comply with the requirements of Ontario Development Code Division 8.1 (Sign Regulations).

(b) On-site posting of public noticing shall be provided pursuant to Code Section 2.03.010.C.4, which consists of one or more large, 6-foot-tall, freestanding public notification signs. The sign face shall measure 4 feet tall by 8 feet wide, in a format approved by the Planning Director. The sign shall be posted no later than ten calendar days prior to the Planning Commission hearing date and removed no later than fourteen calendar days following the City Council hearing date, unless otherwise required by the Planning Director. The format is available on the City's website.

2.3 Additional Fees.

(a) Within 5 days following final application approval, the Notice of Determination ("NOD") filing fee shall be provided to the Planning Department. The fee shall be paid by check, made payable to the "Clerk of the Board of Supervisors", which shall be forwarded to the San Bernardino County Clerk of the Board of Supervisors, along with all applicable environmental forms/notices, pursuant to the requirements of the California Environmental Quality Act ("CEQA"). Failure to provide said fee within the time specified will result in the extension of the statute of limitations for the filing of a CEQA lawsuit from 30 days to 180 days.

CITY OF ONTARIO *Agenda Report* **March 18, 2025**	**SECTION:** **PUBLIC HEARINGS**
Department: Planning Prepared By: Lorena Mejia Department: Prepared By: Lorena Mejia Staff Member Presenting: Rudy Zeledon, Executive Director Community Development Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 21

SUBJECT: **A PUBLIC HEARING TO CONSIDER AN ADDENDUM TO THE ONTARIO PLAN 2050 SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT; TWO ORDINANCES APPROVING A DEVELOPMENT AGREEMENT (FILE NO. PDA23-005) BETWEEN THE CITY OF ONTARIO AND DIVERSIFIED PACIFIC DEVELOPMENT GROUP, LLC IN CONJUNCTION WITH THE EMPIRE GROVES SPECIFIC PLAN (FILE NO. PSP23-001); AND A RESOLUTION FOR A DEVELOPMENT PLAN (FILE NO. PDEV23-039)**

RECOMMENDATION: That the City Council consider and waive further reading of:

A. A Resolution approving the use of an Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364, certified by the City Council on August 16, 2022);
B. An Ordinance for a Development Agreement (File No. PDA23-005) between the City of Ontario and Diversified Pacific Development Group, LLC and the Empire Groves Specific Plan (File No. PSP23-001) to establish terms and conditions for the associated Development Plan (File No. PDEV23-039);
C. An Ordinance for the Empire Grove Specific Plan (File No. PSP23-001 to establish the Land Use District, development standards, guidelines, and infrastructure improvements); and
D. A Resolution approving Development Plan (File No. PDEV23-039) to construct 600,000 SF hotel and commercial building consisting of 600 rooms.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Invest in the Growth and Evolution of the City's Economy
Focus Resources in Ontario's Commercial and Residential Neighborhoods

FISCAL IMPACT: The fiscal impacts have not been determined.

BACKGROUND & ANALYSIS:

On January 27, 2010, the Ontario City Council certified The Ontario Plan Environmental Impact

Report in conjunction with File No. PGPA06-001 (City Council Resolution No. 2010-006). On August 16, 2022, the Ontario City Council certified The Ontario Plan 2050 Update Supplemental Environmental Impact Report in conjunction with File No. PGPA20-002 (City Council Resolution No. 2022-129). The Ontario Plan 2050 (TOP) and associated Environmental Impact Report analyzed the Project site and established the vision, general guidelines, overlays, districts, mixed-use areas, etc. for the Project site and surrounding area.

The TOP adopted several overlay areas at varying scales. The first is the Ontario Airport Metro Center Overlay (OAMC Overlay), which envisioned an area developed with a mix of regional serving retail, office, restaurant, cultural, entertainment, and residential uses. The OAMC is bounded by Fourth Street to the north, the 1-15 Freeway to the east, the Southern Pacific Railroad and Airport Drive to the south and Vineyard Avenue to the west. Within the OAMC there are two Place Type Districts - Airport Metro/Entertainment District and Guasti District, as well as six Mixed Use zoning designations, including the Multimodal Mixed-use Area where the project site is located.

The project site is within the Guasti Place Type District and the Multimodal Mixed-Use zoning designation. Both areas are envisioned with office, commercial, hospitality, and residential uses that can complement current and future public transportation and the nearby Ontario Airport.

On October 16, 2023, the applicant submitted three applications to facilitate the development of a 600-room hotel with commercial/retail space.

- A Development Agreement (File No. PDA23-005) between the City of Ontario and Diversified Pacific Development Group, LLC to establish the terms and conditions for the associated Development Plan (File No. PDEV23-039).
- A Specific Plan application (File No. PSP23-001 - Empire Groves Specific Plan) to establish the land use district, development standards, guidelines, and infrastructure improvements for the potential development of up to 600,000 square feet of hospitality and commercial land uses.
- A Development Plan (File No. PDEV23-039) to construct a 600,000 square foot hotel consisting of 600 rooms and commercial space for restaurant and retail uses for hotel guests and the general public.

DEVELOPMENT AGREEMENT: The proposed Agreement is between the City of Ontario and Diversified Pacific Development Group, LLC for the construction of a full-service hotel with several on-site amenities. The terms of the Agreement outline the development of the hotel project, timing of development, required infrastructure improvements, as well as obligations towards Development Impact Fees, off-site street improvements, among others. Staff finds that the Agreement is consistent with State law, The Ontario Plan, and the City's Development Agreement policies. As a result, Staff is recommending approval of the application to the City Council.

SPECIFIC PLAN: The Empire Groves Specific Plan serves to implement the City's Policy Plan for the project site and provides zoning regulations for development of the Project site by establishing permitted land uses, development standards, infrastructure requirements, implementation

requirements that are outlined below. The proposed Specific Plan boundary covers 10.43 acres of vacant land for the development of a hotel and commercial/retail space. While the Specific Plan currently facilitates the hotel and commercial/retail development, there is anticipation that the proposed development will encourage future growth in the immediate and surrounding areas.

- Land Use Plan – The Empire Groves Specific Plan land use plan includes one Planning Area for the Project site, the Hospitality Mixed Use (PA1). The Hospitality Mixed-Use combines hotel uses, ancillary services and amenities with local service commercial/retail uses on a single property. At buildout, the total development allowed for the project site will be 600,000 square feet (hotel: 553,124 square feet and retail: 46,876 square feet) and up to 600 guest rooms.
- Design Guidelines – The design concept ensures a high-quality, attractive, and cohesive design structure for the Specific Plan. The guidelines ensure a high-quality design for new development design standards that promote energy and water conservation.
- Site Plan and Circulation – The Circulation Plan for the Specific Plan reinforces the objective of moving vehicles, pedestrians, cyclists, and public transit safely and efficiently through and around the Project. The site planning and circulation design guidelines are intended to promote high quality aesthetics, efficient land use practices, and public safety.
- Landscape Design – The landscape design guidelines ensure water-conserving, drought-tolerant plant palette that will soften transitions from the ground plane to the vertical plane of the building; offer screening from the adjacent neighborhood; and add color and texture to the development.
- Infrastructure – Development of the Specific Plan requires the installation of all infrastructure necessary to serve the Project as a standalone development.

DEVELOPMENT PLAN: The proposed Development Plan will allow for the construction of a 600,000 square foot luxury hotel and commercial building consists of 600 rooms and will provide destination dining, luxury retail, banquet halls, spa, fitness center, public gathering spaces and additional guest amenities. The hotel will be 11-stories including two subterranean levels for parking**.** The Applicant proposes a modern architectural design. The primary building materials include a combination of glazing, aluminum panels, metal edging, fiber reinforced concrete, natural stone, laminated glass, metal shade canopies and LED screens integrated into the design of the building walls.

PLANNING COMMISSION REVIEW: On February 25, 2025, the Planning Commission conducted a duly noticed public hearing on the subject applications and voted (4-0) to recommend that the City Council approve the TOP Addendum (Resolution No. PC25-006), the Development Agreement (Resolution No. PC25-007), Specific Plan (Resolution No. PC25-008) and the Development Plan, File No. PDEV23-039 subject to conditions (Resolution No. PC25-009).

COMPLIANCE WITH THE ONTARIO PLAN: The proposed Project is consistent with the principles, goals and policies contained within the Vision, Governance, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan (TOP).

HOUSING ELEMENT COMPLIANCE: The Project is consistent with the Housing Element of the Policy Plan (general plan) component of The Ontario Plan, as the Project site is not one of the properties in the Housing Element Sites contained in Tables B-1 and B-2 (Housing Element Sites Inventory) of the Housing Element Technical Report.

AIRPORT LAND USE COMPATIBILITY PLAN COMPLIANCE: The California State Aeronautics Act (Public Utilities Code Section 21670 et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan. On April 19, 2011, the City Council of the City of Ontario approved and adopted the ONT ALUCP, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the decision-making body the City Council has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the City Council finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the ONT ALUCP.

ENVIRONMENTAL REVIEW: Staff has prepared an Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364, certified by the City Council on August 16, 2022. This Application introduces no new significant environmental impacts. All previously adopted mitigation measures are a condition of Project approval and are incorporated herein by this reference.

CITY OF ONTARIO PLANNING DEPARTMENT

PLANNING COMMISSION AGENDA REPORT

February 25, 2025

303 East B Street, Ontario, California 91764 Phone: 909.395.2036 / Email: PlanningDirector@OntarioCA.gov

FILE NOS: PDA23-005, PSP23-001 and PDEV23-039

SUBJECT: A public hearing to consider the following: [1] A Development Agreement (File No. PDA23-005) between the City of Ontario and Diversified Pacific Development Group, LLC to establish the terms and conditions for the associated Development Plan; [2] A Specific Plan (File No. PSP23-001 - Empire Groves Specific Plan) to establish the land use district, development standards, guidelines, and infrastructure improvements for the potential development of up to 600,000 square feet of hospitality and commercial land uses; and [3] A Development Plan (File No. PDEV23-039) to construct a 600,000 square foot hotel and commercial building consisting of 600 rooms on 10.43-acres of land located on the southeast corner of Guasti Road and Holt Boulevard within the proposed PA1 (Hospitality Mixed-Use) district of the Empire Groves Specific Plan; (APN: 110-322-33) **submitted by Diversified Pacific Development Group, LLC. City Council action is required for PDA23-005 and PSP23-001.**

PROPERTY OWNER: JC Horizon LTD

RECOMMENDED ACTION: That the Planning Commission consider and adopt the following:

1) A Resolution recommending the City Council approve the use of an Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364, certified by the City Council on August 16, 2022); and

2) Resolutions recommending the City Council approve File Nos. PDA23-005 and PSP23-001 pursuant to the facts and reasons contained in the staff report and attached Resolutions; and

3) A Resolution approving File No. PDEV23-039, pursuant to the facts and reasons contained in the staff report and attached Resolution, and subject to the conditions of approval appended to the attached resolution as Attachment A.

BACKGROUND: On January 27, 2010, the Ontario City Council certified The Ontario Plan Environmental Impact Report in conjunction with File No. PGPA06-001 (City Council Resolution No. 2010-006). On August 16, 2022, the Ontario City Council certified The Ontario Plan 2050 Update Supplemental Environmental Impact Report in conjunction with File No. PGPA20-002 (City Council Resolution No. 2022-129). The Ontario Plan 2050

Case Planner:	Lorena Mejia
Planning Director Approval:	
Submittal Date:	10/16/2023

Hearing Body	*Date*	*Decision*	*Action*
DAB	2/19/2025	Approval	Recommend
PC	2/25/2025	Approval	Recommend
CC	3/18/2025		Final

(TOP) and associated Environmental Impact Report analyzed the Project site and established the vision, general guidelines, overlays, districts, mixed-use areas, etc. for the Project site and surrounding area.

The TOP adopted several overlay areas at varying scales. The first is the Ontario Airport Metro Center Overlay (OAMC Overlay), which envisioned an area developed with a mix of regional serving retail, office, restaurant, cultural, entertainment, and residential uses. The OAMC is bounded by Fourth Street to the north, the 1-15 Freeway to the east, the Southern Pacific Railroad and Airport Drive to the south and Vineyard Avenue to the west (see Figure 1: Ontario Airport Metro Center Overlay Map). The OAMC is over 2,300 acres in size and serves as one of the over-arching visionary overlays. Within the OAMC are two Place Type Districts - Airport Metro/Entertainment District and Guasti District, and six Mixed Use areas including the Multimodal Mixed-use Area. The project site is within the Guasti District and Multimodal Mixed-Use, both of which are discussed further below.



Figure 1: Ontario Airport Metro Center Overlay Map

The Guasti District Place is bounded by the I-10 Freeway and Holt Boulevard to the north, Turner Avenue to the east, the Southern Pacific Railroad to the south and Guasti Road to the west (see Figure 2: Guasti District and Mixed-Use Areas Map). The district is envisioned to preserve and enhance the Guasti (winery) historic buildings into vibrant mixed-use area that leverages its proximity to the Ontario International Airport, Ontario Convention Center, and the future development within the adjacent Multimodal land use. The district is designed with intense office, commercial, and lodging uses along the I-10 corridor, and appropriately-scaled residential, office, commercial, and lodging near the Guasti Village.

The Multimodal Mixed-Use Area is envisioned as a future multimodal area with uses that link and support local and regional transportation. Such uses may include office, retail, hotel/hospitality, and residential, that will complement current and future public transportation, as well as the adjacent Ontario Airport.

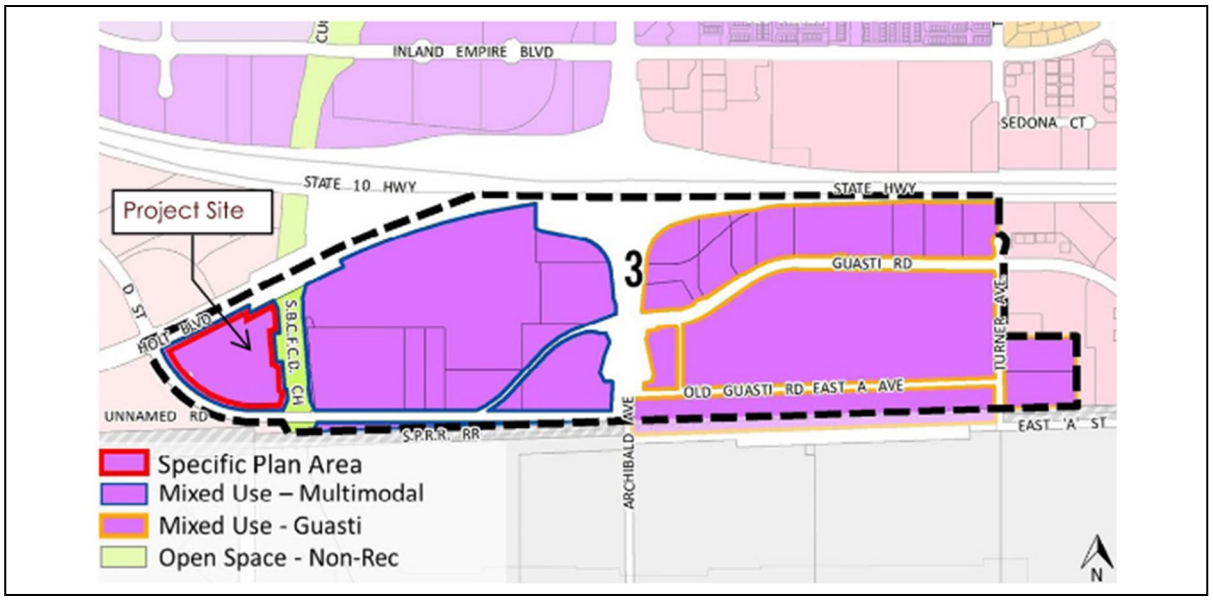


Figure 2: Guasti District and Mixed-Use Areas Map

On October 16, 2023, the applicant submitted three applications to facilitate the development of a 600-room hotel with commercial/retail space.

- A Development Agreement (File No. PDA23-005) between the City of Ontario and Diversified Pacific Development Group, LLC to establish the terms and conditions for the associated Development Plan (File No. PDEV23-039).

- A Specific Plan application (File No. PSP23-001 - Empire Groves Specific Plan) to establish the land use district, development standards, guidelines, and infrastructure improvements for the potential development of up to 600,000 square feet of hospitality and commercial land uses.

- A Development Plan (File No. PDEV23-039) to construct a 600,000 square foot hotel consisting of 600 rooms and commercial space for restaurant and retail uses for hotel guests and the general public. Approval of the Development Plan is contingent upon approval of the associated Specific Plan.

On February 19, 2025, the Development Advisory Board conducted a public hearing regarding File No. PDEV23-039 and adopted a Decision recommending the Planning Commission approve the Development Plan.

Approval of this Project is contingent upon City Council approving the Development Agreement (File No. PDA23-005), the Empire Groves Specific Plan (File No. PSP23-001), and EIR Addendum.

PROJECT SETTING: The Project site consists of 10.43 acres of land located at the southeast corner of Guasti Road and Holt Boulevard, within the proposed PA1 (Hospitality Mixed-Use) district of the Empire Groves Specific Plan, which is depicted in Exhibit A: Project Location Map. The triangular-shaped lot is undeveloped, with 11-foot deferential in grade that slopes down from north to south. Ruderal vegetation, including nonnative trees and shrubs, as well as stockpiled dirt mounds and rocks are present on-site. The site has been maintained through disking and mowing. Surrounding land uses include a mix of hotel and office uses to the north, the San Bernardino flood control channel to the east, and a hotel to the west and south. The existing surrounding land uses, zoning, and Policy Plan (general plan) and specific plan land use designations are summarized in Table 1: Surrounding Zoning & Land Uses.

PROJECT ANALYSIS:

(1) Development Agreement (File No. PDA23-005)

The proposed Agreement is between the City of Ontario and Diversified Pacific Development Group, LLC for the construction of a full-service hotel with several on-site amenities. The terms of the Agreement outline the development of the hotel project, timing of development, such as building plan submittal and commencement of construction, required infrastructure improvements, as well as obligations towards Development Impact Fees, off-site street improvements, among others.

Staff finds that the Agreement is consistent with State law, The Ontario Plan, and the City's Development Agreement policies. As a result, Staff is recommending approval of the application to the Planning Commission. If the Planning Commission finds the Agreement is acceptable, a recommendation of approval to the City Council would be appropriate.

(2) Specific Plan (File No. PSP23-001)

The Empire Groves Specific Plan serves to implement the City's Policy Plan for the project site and provides zoning regulations for development of the Project site by establishing permitted land uses, development standards, infrastructure requirements, implementation requirements, and more. The proposed Specific Plan boundary covers roughly 10.43 acres of vacant land for the development of a hotel and commercial/retail space (see associated PDEV discussion below). While the Specific Plan currently facilitates the hotel and commercial/retail development, there is anticipation that the proposed development will encourage future growth in the immediate and surrounding areas. With this anticipation, the Specific Plan has been drafted in a manner that will allow for adjacent properties to be annexed into the proposed Specific Plan without substantial changes to the current document. This will allow the Specific Plan to cover a larger area and further the vision of the Multimodal Mixed-Use/Guasti area.

(a) Land Use Plan. The Empire Groves Specific Plan proposes a land use plan that includes one Planning Area for the Project site, the Hospitality Mixed Use (PA1) (see

Exhibit F: Empire Groves Specific Plan – Land Use Plan, attached). The Hospitality Mixed-Use combines hotel uses, ancillary services and amenities with local-serving commercial/retail uses on a single property. At buildout, the total development allowed for the project site will be 600,000 square feet.

(i) Hotel Land Use – The Hotel use is the primary component of the Specific Plan's Hospitality Mixed-Use Planning Area and will occupy the majority of the FAR of the development (553,124 square feet). The hotel use includes 600 guest rooms, office space for hotel administration, and may also include ancillary uses such as restaurants, bars, lounges, day spas, gyms, ballrooms and meeting rooms.

(ii) Local-Serving Retail Uses – The local-serving retail uses (46,876 square feet) will occupy a smaller portion of the project site FAR. The local serving retail uses will be stand-alone uses not affiliated with the hotel. Such uses may include a combination of coffee shops, restaurants and/or retail to complement the hotel and nearby Ontario Convention Center.

(b) Design Guidelines. The design concept ensures a high-quality, attractive, and cohesive design structure for the Specific Plan. The guidelines provide the following objectives for future development within the Specific Plan area:

- Establish high-quality design for new development.
- Avoid continuous single planes; break monotony by using at least two planes.
- Allow variation in architectural elements at upper and lower building elevations.
- Use vertical elements to provide rhythm and continuity between the floors.
- Achieve good building articulation, beyond the building façade.
- Incorporate a mix of building heights for appropriate massing, vertical movement.
- Incorporates design standards that promote energy and water conservation.
- Implements the goals and policies of The Ontario Plan.
- Meet the intent of the Ontario Development Code.

(c) Site Plan and Circulation. The Circulation Plan for the Specific Plan reinforces the objective of moving vehicles, pedestrians, cyclists, and public transit safely and efficiently through and around the Project. The following site planning and circulation design guidelines are intended to promote high quality aesthetics, efficient land use practices, and public safety:

- Service, delivery/loading zones should be separated from pedestrian/guest areas.
- Ensure that all areas are accessible to emergency vehicles and personnel.
- The main access to the hotel as well as to the hotel parking is from Guasti Road.
- The main access to the hotel will be full access with a traffic signal.

(d) Landscape Design. The landscape will play an important role at many levels, primarily to soften transitions from the ground plane to the vertical plane; offer screening from the adjacent neighborhood; and add color and texture to the

development. The following landscape design guidelines were incorporated into Specific Plan.

- Landscape material should be native to or adaptive to Southern California.
- All plants should be water-conserving, drought-tolerant to the best extent.
- Trees, shrubs, hedges, etc. should be used to address solar heat gain.
- Paving materials should complement the architectural style, elevation materials.

(e) Infrastructure. Development of the Specific Plan requires the installation of all infrastructure necessary to serve the Project as a standalone development, with phasing and ultimate details to be reviewed and approved via a Development Agreement and Development Plan.

(3) Development Plan (File No. PDEV23-039)

(a) Site Design/Building Layout — The proposed 600,000 square foot luxury hotel and commercial building consists of 600 rooms and will provide destination dining, luxury retail, banquet halls, spa, fitness center, public gathering spaces and additional guest amenities. The Project site's northern property line fronts Holt Boulevard, the southern and western property line fronts Guasti Road and the eastern interior property line is located adjacent to the San Bernadino County flood control channel. The proposed hotel/commercial building is v-shaped and comprised of two wings. The west wing occupies the south and western portion of the parcel, and the smaller secondary east wing occupies the majority of the eastern portion of the parcel. The northern portion of the site and areas between the two wings provide open space amenities that include ground level plaza areas, pools, and gardens. A smaller surface parking lot will also be provided along Guasti Road to serve the local retail/restaurant uses. The hotel's entry lobby will be located on the east and south elevations facing an internal circular motor courtyard (see Exhibit B: Site Plan, attached). There are a total of 11 stories within the building that include two subterranean levels for parking that are described below.

The first floor of the hotel consists of the lobby, lounge, upscale restaurant and bar, spa, retail area, small meeting rooms, and a spacious banquet/conference center. The first-floor mezzanine level has a game room, fitness area, meeting rooms, and a board room in addition to mechanical and electrical equipment (see Exhibit C: Floor Plan, attached). The second floor includes offices and a fitness center. The remaining floors are dedicated to guest suites with a range of modern amenities. The hotel's rooftop is designed with a pool and lounge terrace that offers views and features a full-service restaurant and bar. The two level, subterranean parking structure is located underneath the hotel that is accessed on the east side of the property. The subterranean areas also include facilities, storage, employee areas, offices, mechanical and electrical equipment.

The hotel's main entrance has been designed with a porte-cochere with decorative pavers and lush landscaping, creating a grand and inviting main entrance into the hotel.

The motor courtyard is accessible from Guasti Road and will offer check-in and valet services for guests.

(b) Site Access/Circulation — The Project site will be served by five vehicular entries along Guasti Road. An emergency access will be provided from Holt Boulevard into the northern plaza courtyard area. The project has also been conditioned to provide emergency access and improvements along the eastern property line adjacent to the San Bernardino flood control channel. The improvements include the construction of an access road that connects driveways located along Guasti Road and Holt Boulevard. Pedestrian access from the street to the hotel will be provided from various access points along Guasti Road and Holt Boulevard.

(c) Parking — A shared parking analysis was completed by Translutions (Dated: November 2023) to evaluate the shared parking demand of the 600-room/suite full-service hotel with amenities (a pool/spa, fitness areas, meeting/conference rooms) and retail/restaurant areas. The methodology used for the shared parking analyses includes base parking demand ratios derived from the Urban Land Institute's (ULI) Shared Parking (3rd Edition, 2020). The parking analyses identified the highest parking demand is for 925 spaces on weekdays and 745 parking spaces on weekends. The Project is proposing a total of 932 parking spaces to meet the parking needs of the project.

(d) Architecture — The Applicant has proposed a modern architectural design. The primary building materials include a combination of glazing, aluminum panels, metal edging, fiber reinforced concrete, natural stone, laminated glass, metal shade canopies and LED screens integrated into the design of the building walls (see Exhibit D: Elevations, attached). The building structure is divided into three parts, the base, the middle and top. The bottom two floors include vertical articulation using architectural fin walls, forming a base of the building. These fins span two floors and are capped by a strong horizontal element. The middle has a consistent window pattern, with proportionately spaced vertical architectural fin walls adding depth and perspective to the façade. These architectural fins provide visual appeal and solar shading and connect with the vertical articulation of the base. The fin walls are interrupted every two floors by a strong horizontal element, creating a regularity in design in the form of a grid pattern. The elevation undergoes a transition from a grid patterned building plane to a glass structure as it reaches the limits on the east and west sides of the development. The transition is provided in the form of a stepped design for a seamless shift in architectural style. The top consists of a monolithic glass structure comprising of two stories and connecting the two buildings in the development.

(e) Landscaping — The Project proposes 25.3 percent landscape coverage throughout the Project site consistent with the proposed Empire Groves Specific Plan. The landscape palette consists of plant materials that have been selected for adaptability to site conditions, including rooftop drainage, sun exposure, soil climate, and the impact on underground parking (see Exhibit E—Landscape Plan, attached). Careful attention was given to the transitioning of plantings between the buildings which were specifically

sited to create comfortable outdoor rooms on a rooftop setting. The plant materials selected are also based on natural form and appearance, overall visual impact, and demand on natural resources.

The proposed conceptual landscape plan is divided into three general areas including the Guasti Road main entrance area, edge treatments, and the north central courtyard, which are described further below.

- Guasti Road Main Entrance Area - The main entrance landscape concept has been designed to create a sense of grandeur to the entrance, by providing multiple palm varieties and landscaped features at varying heights and profiles to create a visually appealing entrance. The entranceway has a canal water feature that bisects the entrance roadway and creates a focal point within the overall composition. The main access roadway leads to the entrance motor court plaza area. The entrance road is bordered by terraced plantings, with a variety of colors, textures, and shapes that will further accent the building and create a grand entrance from Guasti Road.

- Edge Treatments – The landscape street edge treatments facilitate a seamless transition between the public streets and the proposed project. The areas along Holt Boulevard and Guasti Road have been designed to encompass an array of street trees and decorative flowering trees to elevate the visual appeal of the streetscape. The sidewalk along Guasti meanders through the project site and provides connections to a plaza area located on the northwest corner of the site and retail/restaurant uses located along the southern portion of the building. The corner plaza features decorative pavers, accent plantings and raised planters, palm trees, and outdoor shaded seating areas. Pedestrian edge pathways will also be illuminated to ensure safe connections to the hotel amenities.

North Central Courtyard – The hotel courtyard, pool, and spa areas are located in the northeastern portion of the project site bounded by Holt Boulevard to the north, the hotel to the south and west, and the flood control channel to the east. The outdoor spaces provide three distinct pool areas, a water garden, large and small event spaces, a wellness garden, and a food and beverage pavilion. These areas include covered seating areas, outdoor furnishings, water features and lush landscaping.

(f) Signage — All Project signage is required to comply with sign regulations provided in Ontario Development Code Division 8.1 and/or additional sign agreements provided through the associated Development Agreement or associated Specific Plan. Prior to the issuance of a Building Permit for the installation of any new on-site signage, the Applicant is required to submit a Sign Program for Planning Department review and approval.

(g) Utilities (drainage, sewer) — Public utilities (water and sewer) are available to serve the Project. Furthermore, the Applicant has submitted a Preliminary Water Quality Management Plan (PWQMP), which establishes the Project's compliance with

storm water discharge/water quality requirements. The PWQMP includes site design measures that capture runoff and pollutant transport by minimizing impervious surfaces and maximizes low impact development (LID) best management practices (BMPs), such as retention and infiltration, biotreatment, and evapotranspiration. The PWQMP proposes the use of underground chambers located on the southeast quadrant of the site within the landscape areas facing Guasti Road. Any overflow drainage will be conveyed to the public street by way of parkway drains and culverts.

PUBLIC NOTIFICATION: The subject application was advertised as a public hearing in at least one newspaper of general circulation in the City of Ontario (the Inland Valley Daily Bulletin newspaper). In addition, the Project site was posted with two large public notification signs and notices were mailed to all owners of real property located within a minimum of 500 feet of the exterior boundaries of the property that is the subject of the hearing, as shown on the records of the County Assessor.

CORRESPONDENCE: As of the preparation of this Agenda Report, Planning Department staff has not received any written or verbal communications from the owners or occupants of properties surrounding the Project site or from the public in general, regarding the subject application.

AGENCY/DEPARTMENT REVIEWS: Each City agency/department has been provided the opportunity to review and comment on the subject application and recommend conditions of approval to be imposed upon the application. At the time of the Resolution preparation, recommended conditions of approval were provided and are appended to the attached Development Plan Resolution as Attachment A.

AIRPORT LAND USE COMPATIBILITY PLAN (ALUCP) COMPLIANCE: The California State Aeronautics Act (Public Utilities Code Section 21670 et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

On April 19, 2011, the City Council of the City of Ontario approved and adopted the ONT ALUCP, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the decision-making body for the Development and recommending body for the Development Agreement and Specific Plan, the Planning Commission has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the Planning Commission finds and determines that the

Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the ONT ALUCP.

COMPLIANCE WITH THE ONTARIO PLAN: The proposed Project is consistent with the principles, goals and policies contained within the Vision, Governance, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan (TOP). More specifically, the goals and policies of TOP that are furthered by the proposed Project are as follows:

(1) City Council Goals

- Invest in the Growth and Evolution of the City's Economy
- Operate in a Businesslike Manner
- Focus Resources in Ontario's Commercial and Residential Neighborhoods
- Invest in the City's Infrastructure (Water, Streets, Sewers, Parks, Storm Drains and Public Facilities)

(2) Vision

Distinctive Development that integrates our varied and diverse focal points, districts, centers, corridors, and neighborhoods to provide a feeling of coherence without sacrificing uniqueness.

Commercial and Residential Development

- Development quality that is broadly recognized as distinctive and not exclusively tied to the general suburban character typical of much of Southern California.

- A system of vibrant retail, town, and neighborhood centers responsive to market demands and woven into the fabric of the community.

Development Quality

- Unique and authentic districts, centers, and corridors of varied scales that establish Ontario as one of the most vital and diverse locales in Southern California.

- Superior quality and design of the built environment and open spaces through careful attention to detail at every scale, including public and private spaces and structures.

(3) Governance

Decision Making

Goal G1: Sustained decision-making that consistently moves Ontario towards its Vision by using The Ontario Plan as a framework for assessing choices.

(4) Policy Plan (General Plan)

Land Use Element

Goal LU-2 Compatibility: Compatibility between a wide range of uses and a resultant urban patterns and forms.

- LU-2.1 Land Use Decisions. We minimize adverse impacts on adjacent properties when considering land use and zoning requests.

- LU-2.2 Buffers. We require new uses to provide mitigation or buffers between existing uses where potential adverse impacts could occur. Additional mitigation is required when new uses could negatively impact environmental justice areas.

- LU-2.6 *Infrastructure Compatibility*. We require infrastructure to be aesthetically pleasing and in context with the community character.

Goal LU-3 Flexibility: Staff, regulations and processes that support and allow flexible response to conditions and circumstances in order to achieve the Vision.

- LU-3.1 Development Standards. We maintain clear development standards which allow flexibility to achieve our Vision and provide objective standards that ensure predictability and deliver the intended physical outcomes.

- LU-3.3 Land Use Flexibility. We consider uses not typically permitted within a land use category if doing so improves livability, reduces vehicular trips, creates community gathering places and activity nodes, and helps create identity.

Community Economics Element

Goal CE-1 Complete Community: A complete community that provides for all incomes and stages of life.

- CE-1.5 Business Attraction. We proactively attract new and expanding businesses to Ontario in order to increase the City's share of growing sectors of the regional and global economy.

Goal CE-2 Placemaking: A City of distinctive neighborhoods, districts, corridors, and centers where people choose to be.

- CE-2.1 *Development Projects.* We require new development and redevelopment to create unique, high-quality places that add value to the community.

Mobility Element

Goal M-2 Active Transportation: A system of trails and corridors that facilitate and encourage active modes of transportation.

- M-2.3 Pedestrian Walkways. We require streets to include sidewalks and visible crosswalks at major intersections where necessary to promote safe and comfortable mobility between residential areas, businesses, schools, parks, recreation areas, and other key destination points.

Community Design Element

Goal CD-1 Image & Identity: A dynamic, progressive city containing distinct and complete places that foster a positive sense of identity and belonging among residents, visitors, and businesses.

- CD-1.1 City Identity. We take actions that are consistent with the City being a leading urban center in Southern California while recognizing, enhancing, and preserving the character of our existing viable neighborhoods.

- CD-1.2 Place Types. We establish Place Types in urban, mixed use, and transit-oriented areas to foster the City's identity as a premier community and require new development within each Place Type to incorporate prescribed urban patterns, forms, and placemaking priorities.

Goal CD-2 Design Quality: A high level of design quality resulting in neighborhoods, public spaces, parks, and streetscapes that are attractive, safe, functional, human-scale, and distinct.

- CD-2.1 Quality Building Design and Architecture. We encourage all development projects to convey visual interest and character through:

    1. Building volume, massing, and height to provide context-appropriate scale and proportion;

    2. A true architectural style which is carried out in plan, section, and elevation through all aspects of the building and site design and appropriate for its setting; and

3. Exterior building materials that are articulated, high quality, durable, and appropriate for the architectural style.

- CD-2.4 Urban, Mixed Use, and Transit-oriented Areas. We establish Place Types to require mixed use, urban, and transit-oriented areas to be designed and developed as pedestrian oriented areas that are integrated with adjacent neighborhoods and promote a vibrant, comfortable, and functional environment, as defined for each Place Type.

- CD-2.9 Landscape Design. We encourage durable, sustainable, and drought-tolerant landscaping materials and designs that enhance the aesthetics of structures, create and define public and private spaces, and provide shade and environmental benefits.

- CD-2.11 Entry Statements. We encourage the inclusion of amenities, signage, and landscaping at the entry to neighborhoods, commercial centers, mixed use areas, industrial developments, and public places that reinforce them as uniquely identifiable places.

- CD-2.13 Entitlement Process. We work collaboratively with all stakeholders to ensure a high degree of certainty in the efficient review and timely processing of all development plans and permits.

Goal CD-3 Urban, Mixed Use, and Transit-Oriented Place Types: Vibrant urban environments that are organized around intense buildings, pedestrian and transit areas, public plazas, and linkages between and within developments that are conveniently located, visually appealing and safe during all hours.

- CD-3.1 Unique Identity. We promote development that heightens the unique character and identity of each Place Type by requiring compatible land uses and land planning, site design, and building design that promotes an active public realm.

- CD-3.2 Comfortable, Human-Scale Public Realm. We require that public spaces, including streets, parks, and plazas on both public and private property be designed to maximize safety, comfort and aesthetics and connect to the citywide pedestrian, vehicular, and bicycle networks.

- CD-3.3 Complete and Connected Network. We require that pedestrian, vehicular, and bicycle circulation on both public and private property be coordinated to provide connections internally and externally to adjacent neighborhoods and properties (existing and planned) through a system of local roads and trails that promote walking and biking to nearby destinations (including existing and planned parks, commercial areas, and transit stops) and are designed to maximize safety, comfort, and aesthetics.

- CD-3.4 Context-Aware and Appropriate Design. We require appropriate building and site design that complements existing development, respects the intent and identity of the Place Type, and provides appropriate transitions and connections between adjacent uses to ensure compatibility of scale, maintain an appropriate level of privacy for each use, and minimize potential conflicts.

- CD-3.5 Active Frontages. We create lively pedestrian streetscapes by requiring primary building, business, and residential entrances, outdoor dining, and storefronts be located on ground floors adjacent to sidewalks or public spaces and designed to maximize safety, comfort, aesthetics, and the intended functionality (as defined by the Place Type).

- CD-3.6 Managed Infrastructure. We collaborate with developers and property owners to facilitate development that realizes the envisioned character and functionality of the Place Type through the use of green and shared infrastructure within each Place Type.

HOUSING ELEMENT COMPLIANCE: The Project is consistent with the Housing Element of the Policy Plan (general plan) component of The Ontario Plan, as the Project site is not one of the properties in the Housing Element Sites contained in Tables B-1 and B-2 (Housing Element Sites Inventory) of the Housing Element Technical Report.

ENVIRONMENTAL REVIEW: Staff has prepared an Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364, certified by the City Council on August 16, 2022. This Application introduces no new significant environmental impacts. All previously adopted mitigation measures are a condition of Project approval and are incorporated herein by this reference.

TECHNICAL APPENDIX:

Table 1: Surrounding Zoning and Land Uses

	Existing Land Use	***Policy Plan Designation***	***Zoning Designation***	***Specific Plan Land Use***
Site	Vacant	Mixed Use - Multimodal (MU-Multimodal): 20.0 to 80.0 du/ac; 1.0 FAR office/retail	Proposed Empire Groves Specific Plan	Proposed - PA1 (Hospitality Mixed-Use) district
North	Offices and Hotel	Hospitality (HOS): 1.00 FAR	CCS (Convention Center Support Commercial)	N/A
South	Hotel	Hospitality (HOS): 1.00 FAR	CCS (Convention Center Support Commercial)	N/A
East	Hotel	Hospitality (HOS): 1.00 FAR	CCS (Convention Center Support Commercial)	N/A
West	San Bernardino County Flood Control Channel	Open Space - Non-Recreation (OS-NR)	UC (Utilities Corridor)	N/A

Table 2: General Site & Building Statistics

Item	***Required Min./Max.***	***Provided (Ranges)***	***Meets Y/N***
Project area (in acres):	n/a	10.43	Y
Floor Area Ratio:	1.0	1.3	Y
Maximum coverage (in %):	40	35	Y
Building Height (FT):	120-140	21-120	Y

Exhibit A: PROJECT LOCATION MAP

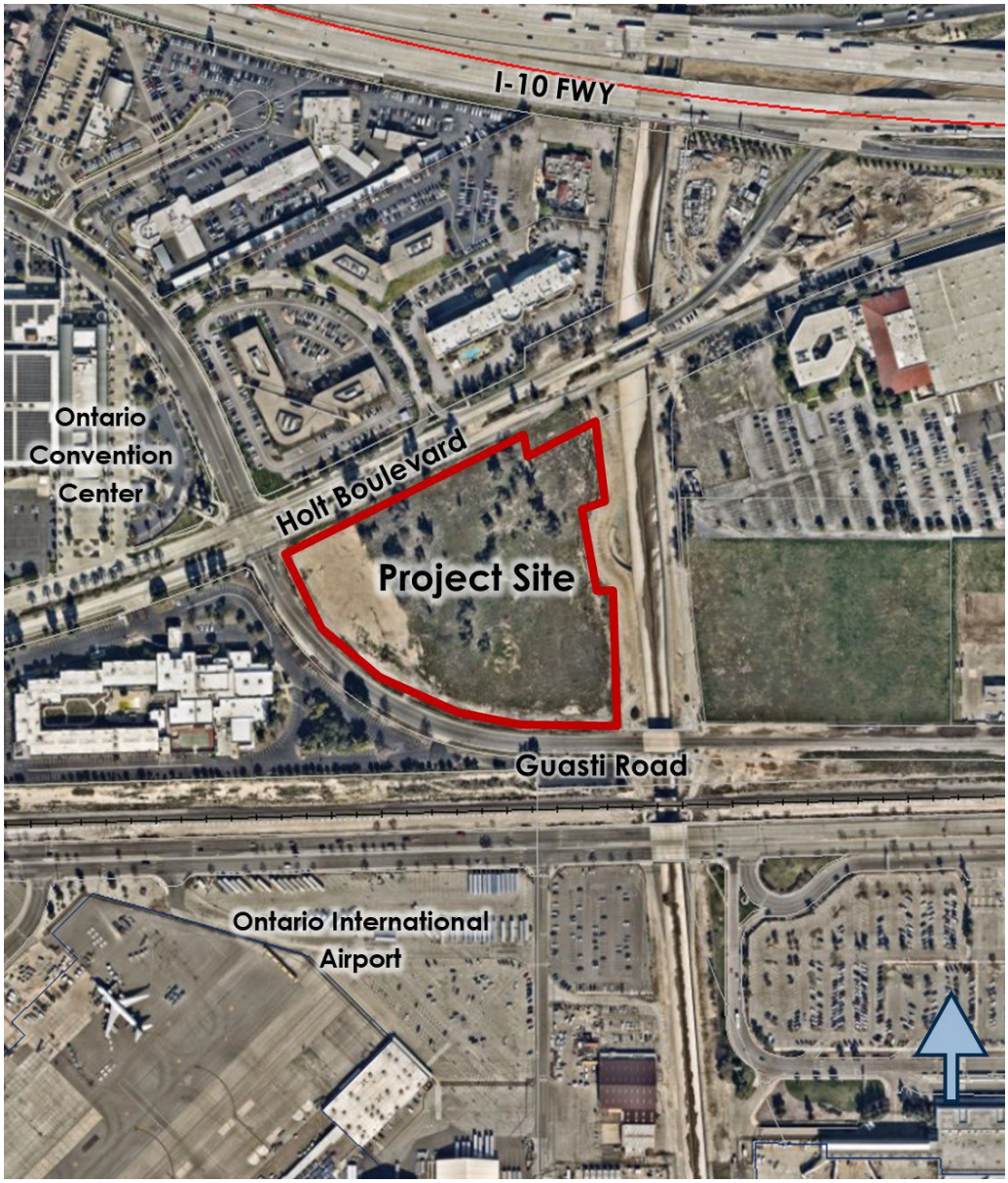


Exhibit B: SITE PLAN

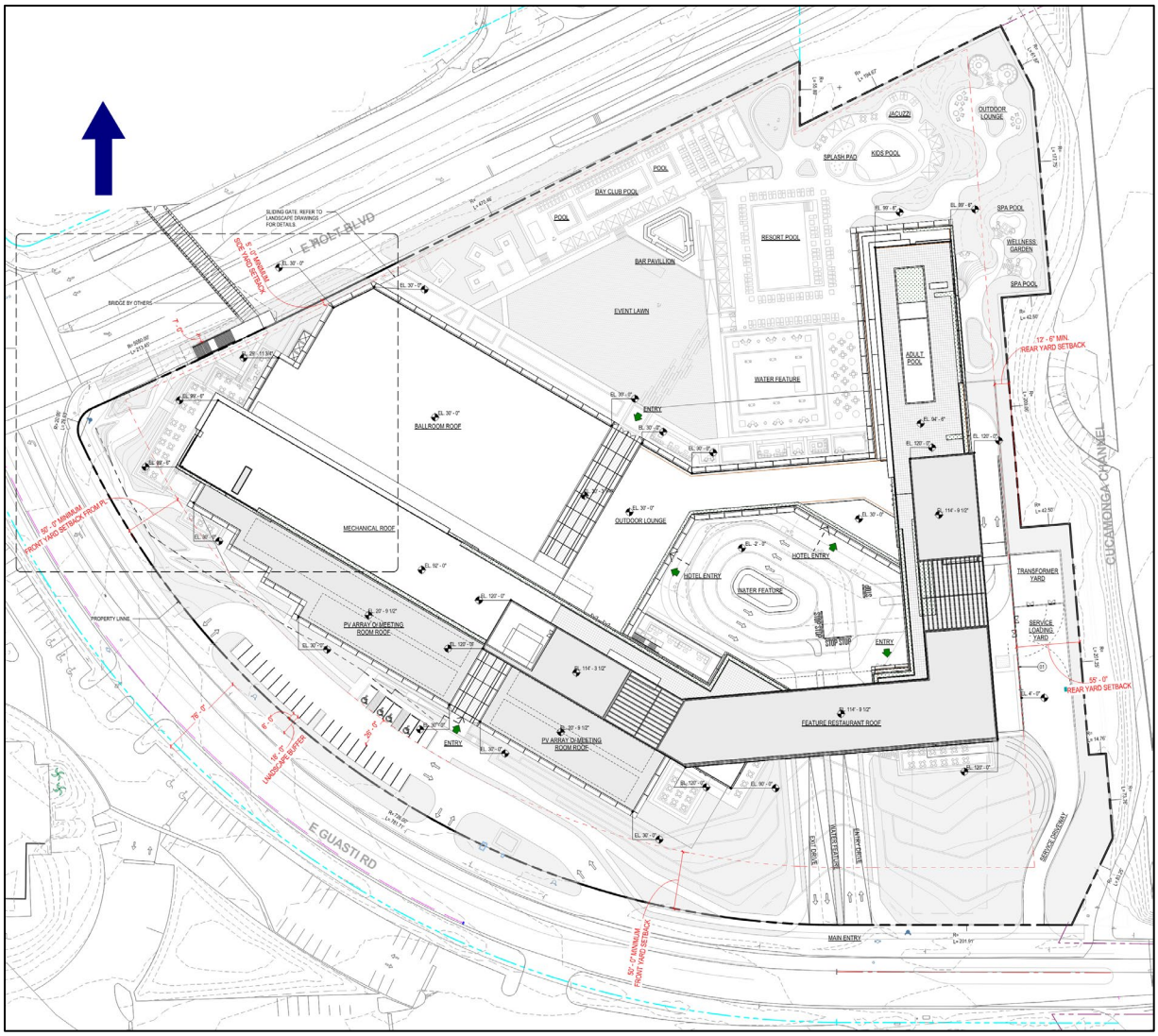
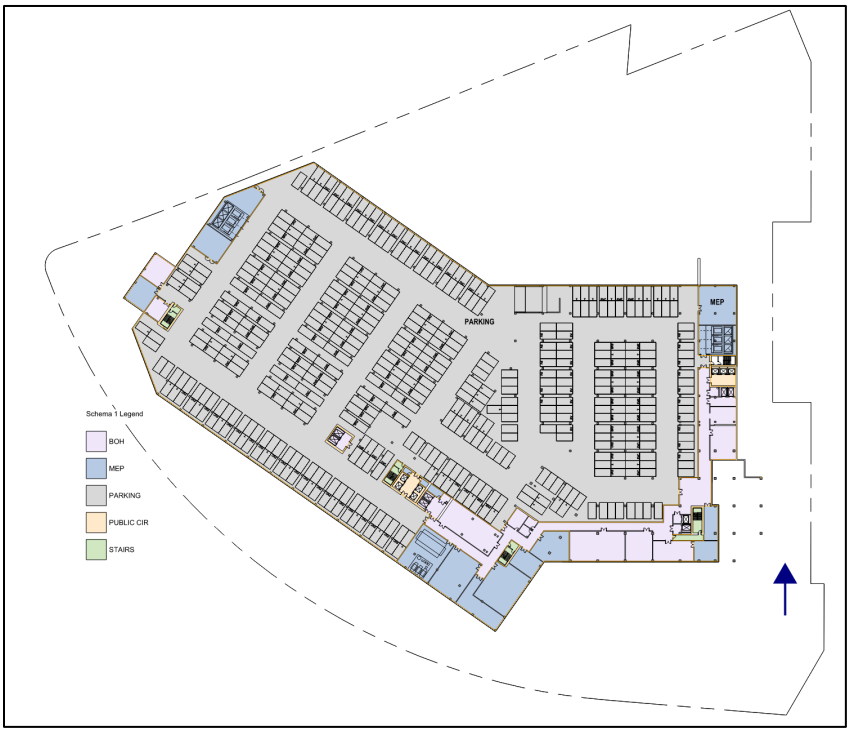
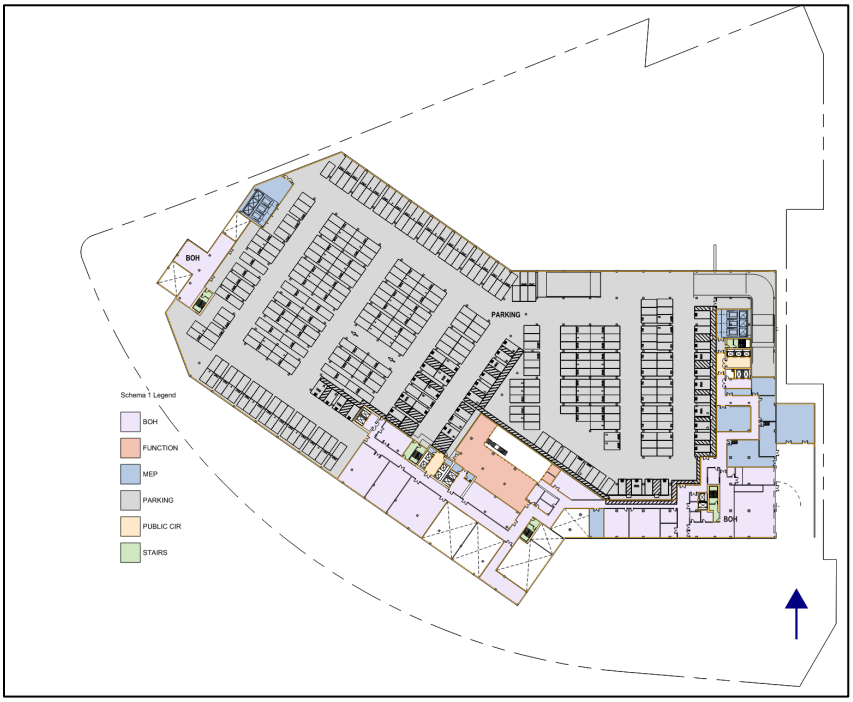


Exhibit C: FLOOR PLAN

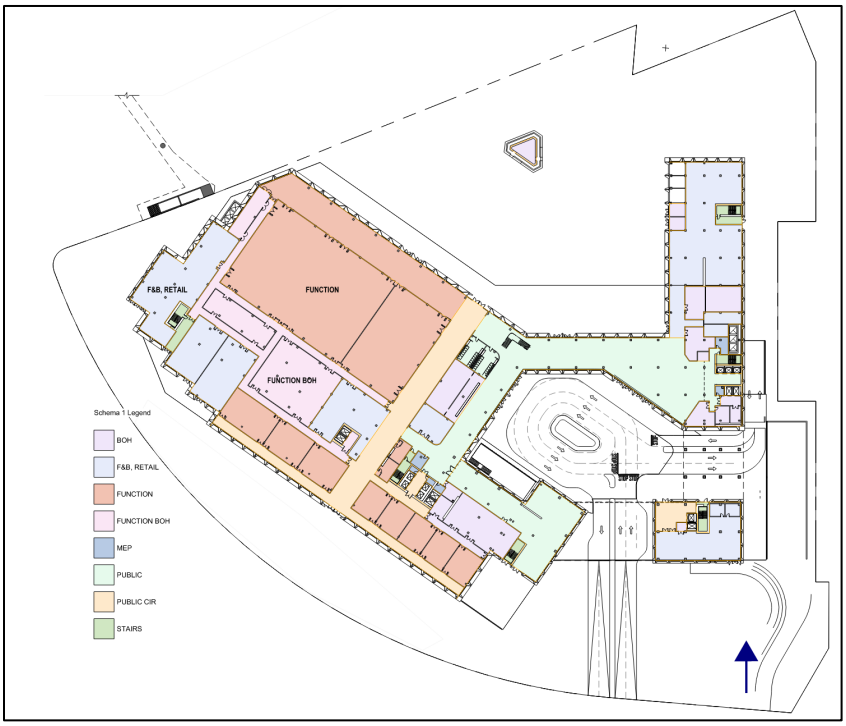


Subterranean Parking Level 2

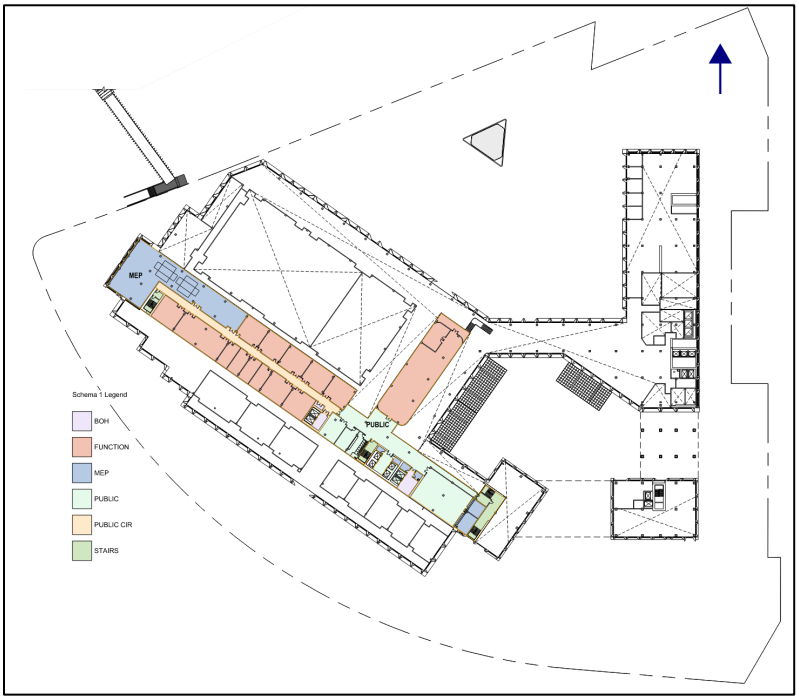


Subterranean Parking Level 1

Exhibit C: FLOOR PLANS CONTINUED

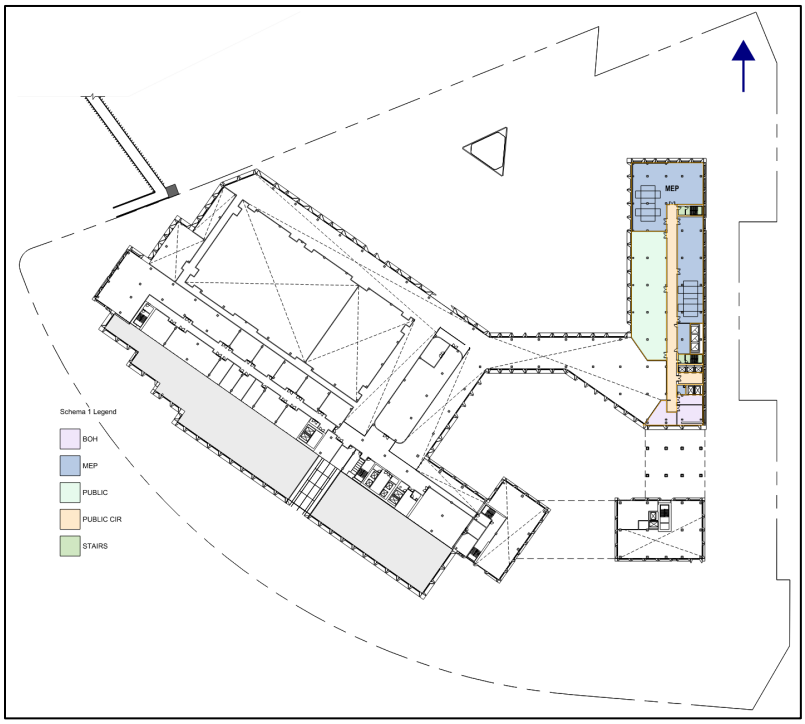


Level 1- Ground Floor

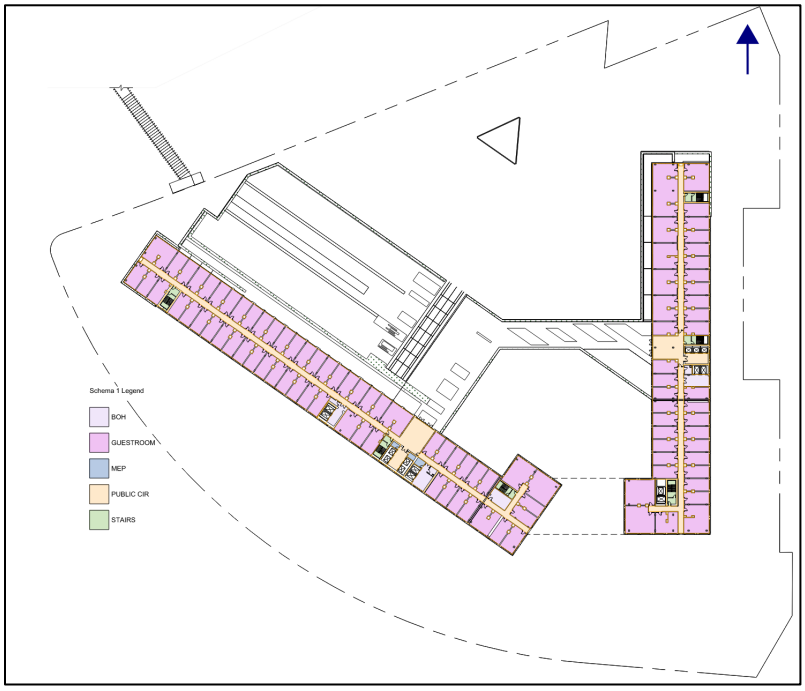


Level 2- Ground Floor Mezzanine

Exhibit C: FLOOR PLANS CONTINUED

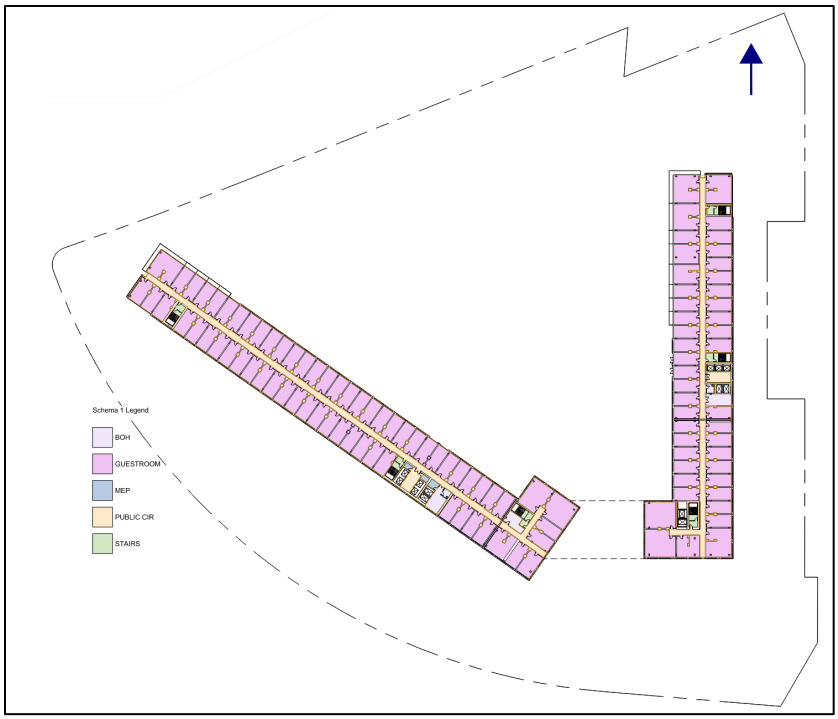


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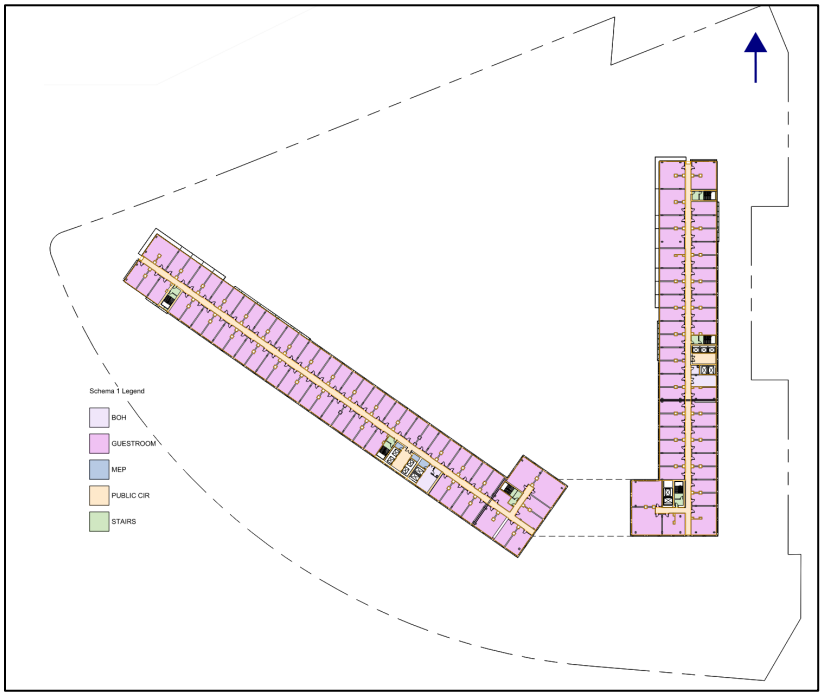


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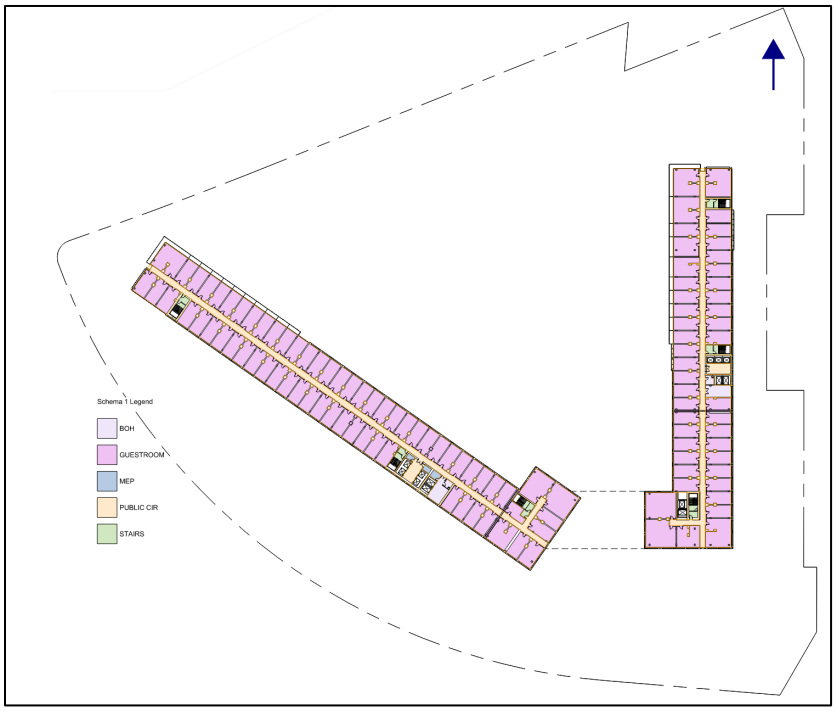


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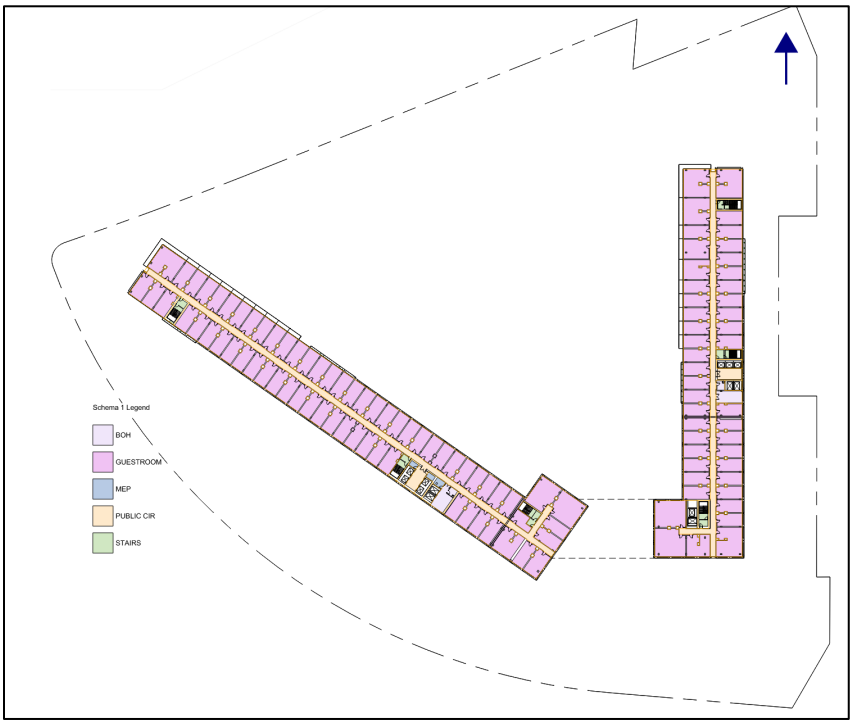


Level 6

Exhibit C: FLOOR PLANS CONTINUED

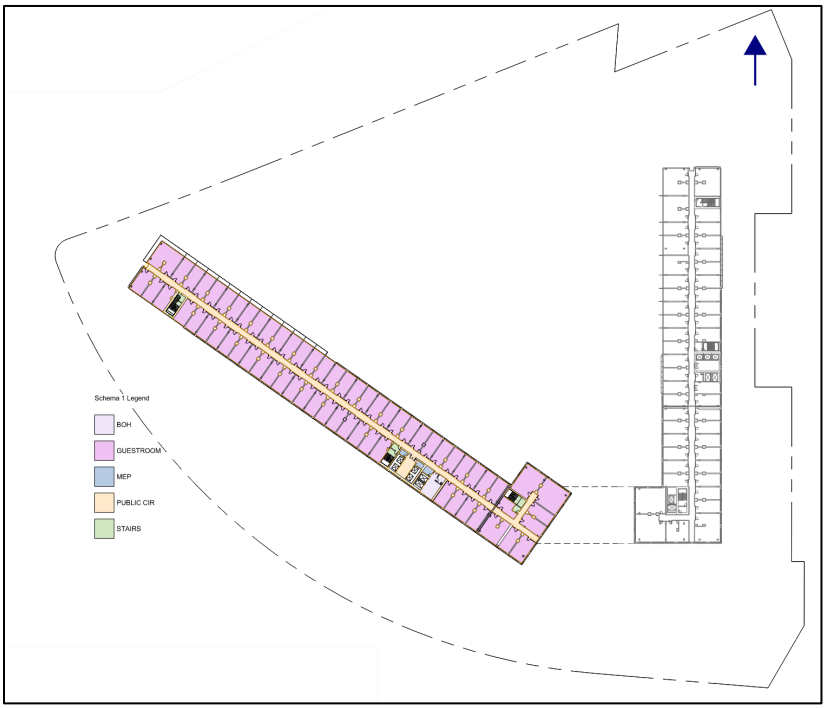


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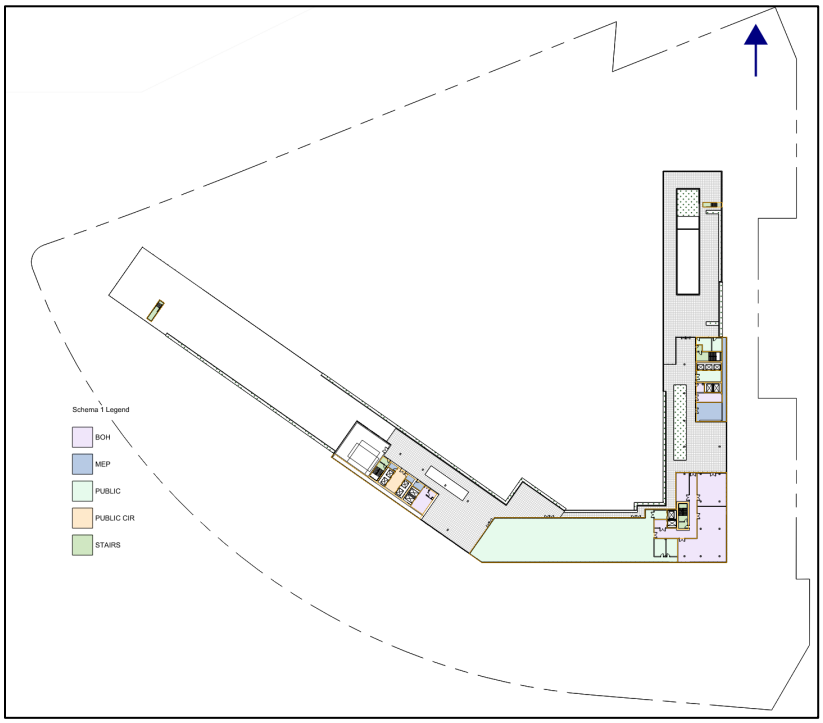


Level 8

Exhibit C: FLOOR PLANS CONTINUED

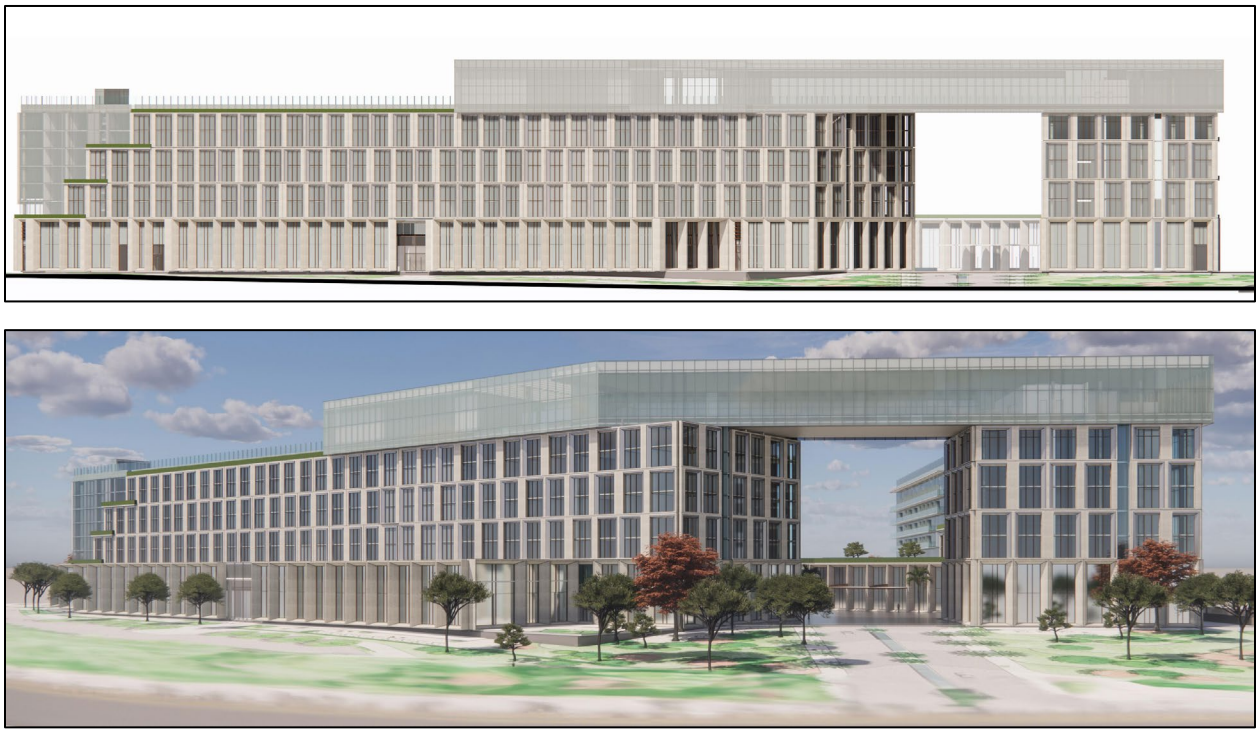


Level 9



Rooftop Level

Exhibit D: ELEVATIONS



South Elevation and Building Rendering – Facing Guasti Road



North Elevation and Building Rendering – Facing Holt Boulevard

Exhibit D: ELEVATIONS CONTINUED



East Elevation



Southeast Building Rendering

Exhibit E: LANDSCAPE PLAN



Exhibit F: EMPIRE GROVES SPECIFIC PLAN – LAND USE MAP



Attachment A:
Addendum Resolution

Attachment B:
File No. PDA23-005 Development Agreement Resolution

Attachment C:
File No. PSP23-001 Specific Plan Resolution

Attachment D:
File No. PDEV23-039 Development Plan Resolution

(Documents to follow this page)

RESOLUTION NO. PC25-006

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ONTARIO RECOMMENDING CITY COUNCIL APPROVE AN ADDENDUM TO THE ONTARIO PLAN 2050 SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT, PURSUANT TO THE REQUIREMENTS OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT, AS AMENDED, FOR FILE NO. PSP23-001

WHEREAS, Diversified Pacific Development Group, LLC (hereinafter referred to as "Applicant") has filed an Application for the approval of the Empire Groves Specific Plan, File No. PSP23-001, to establish the land use district, development standards, guidelines, and infrastructure improvements for the development of up to 600,000 square feet of hospitality and commercial land uses on 10.43-acres of land located on the southeast corner of Guasti Road and Holt Boulevard, in the City of Ontario, California (hereinafter referred to as "Application" or "Project"); and

WHEREAS, in conjunction with the Project, the Applicant also filed an application for a Development Agreement (File No. PDA23-005) between the City of Ontario and Diversified Pacific Development Group, LLC to establish the terms and conditions for the associated Development Plan (File No. PDEV23-039), which will be considered by the City Council and contingent upon approval of the Empire Groves Specific Plan; and

WHEREAS, in conjunction with the Project, the Applicant also filed an application for a Development Plan (File No. PDEV23-039) to construct a 600,000 square foot hotel and commercial building consisting of 600 rooms, which will be considered by the Planning Commission and contingent upon approval of the Empire Groves Specific Plan; and

WHEREAS, the City of Ontario certified the Environmental Impact Report prepared for The Ontario Plan and associated Statement of Overriding Considerations, and issued Resolution No. 2010-003; and

WHEREAS, the City of Ontario adopted the Policy Plan (General Plan) as part of the component framework for The Ontario Plan on January 27, 2010, and issued Resolution No. 2010-004; and

WHEREAS, the City of Ontario certified the Supplemental Environmental Impact Report (SEIR), for the General Plan Amendment for The Ontario Plan 2050 Technical Update on August 16, 2022; and

WHEREAS, the Planning Director of the City of Ontario has prepared and approved for attachment to the certified Environmental Impact Report, an Addendum to the Certified EIR (hereinafter referred to as "EIR Addendum") in accordance with the

requirements of the California Environmental Quality Act of 1970, together with State and local guidelines implementing said Act, all as amended to date (collectively referred to as "CEQA"); and

WHEREAS, the EIR Addendum concluded that implementation of the Project could result in a number of significant effects on the environment that were previously analyzed in the Certified EIR, and that the Certified EIR identified mitigation measures that would reduce each of those significant effects to a less-than-significant level; and

WHEREAS, pursuant to State CEQA Guidelines Section 15164(a), a lead agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary to a project, but the preparation of a subsequent or supplemental EIR is not required; and

WHEREAS, the City determined that none of the conditions requiring preparation of a subsequent or supplemental EIR would occur from the Project, and that preparation of an Addendum to the Certified EIR was appropriate; and

WHEREAS, the City of Ontario is the lead agency on the Project, and the Planning Commission is the recommending authority for the requested approval to construct and otherwise undertake the Project; and

WHEREAS, the Planning Commission has reviewed and considered the EIR Addendum for the Project, has concluded that none of the conditions requiring preparation of a subsequent of supplemental EIR have occurred, and intends to take actions on the Project in compliance with CEQA and state and local guidelines implementing CEQA; and

WHEREAS, the EIR Addendum for the Project is on file in the Planning Department, located at 303 East B Street, Ontario, CA 91764, is available for inspection by any interested person at that location and is, by this reference, incorporated into this Resolution as if fully set forth herein; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED, AND RESOLVED by the Planning Commission of the City of Ontario, as follows:

SECTION 1: ***Environmental Determination and Findings.*** As the recommending authority for the Project, the Planning Commission has reviewed and considered the information contained in the administrative record for the Project. Based upon the facts and information contained in the administrative record, including all written

and oral evidence presented to the Planning Commission, the Planning Commission finds as follows:

(1) The environmental impacts of this Project were reviewed in conjunction with an Addendum to TOP 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364), certified by the Ontario City Council on August 16, 2022, in conjunction with File No. PGPA20-002; and

(2) The EIR Addendum and administrative record have been completed in compliance with CEQA, the State CEQA Guidelines, and the City of Ontario Local CEQA Guidelines; and

(3) The City's "Guidelines for the Implementation of the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed. This Application introduces no new significant environmental impacts; and

(4) All previously adopted mitigation measures shall be a condition of project approval, as they are applicable to the Project, and are incorporated herein by this reference; and

(5) The EIR Addendum contains a complete and accurate reporting of the environmental impacts associated with the Project, and reflects the independent judgment of the Planning Commission; and

(6) There is no substantial evidence in the administrative record supporting a fair argument that the Project may result in significant environmental impacts.

SECTION 2: ***Additional Environmental Review Not Required.*** Based on the Addendum, all related information presented to the Planning Commission, and the specific findings set forth in Section 1, above, the Planning Commission finds that the preparation of a subsequent or supplemental Environmental Impact Report is not required for the Project, as the Project:

(1) Does not constitute substantial changes to the Certified EIR that will require major revisions to the Certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and

(2) Does not constitute substantial changes with respect to the circumstances under which the Certified EIR was prepared, that will require major revisions to the Certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of the previously identified significant effects; and

(3) Does not contain new information of substantial importance that was not known and could not have been known with the exercise of reasonable diligence at the time the Certified EIR was certified/adopted, that shows any of the following:

(a) The Project will have one or more significant effects not discussed in the Certified EIR; or

(b) Significant effects previously examined will be substantially more severe than shown in the Certified EIR; or

(c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the City declined to adopt such measures; or

(d) Mitigation measures or alternatives considerably different from those analyzed in the Certified EIR would substantially reduce one or more significant effects on the environment, but which the City declined to adopt.

SECTION 3: ***Planning Commission Action.*** Based upon the findings and conclusions set forth in Sections 1 and 2, above, the Planning Commission hereby recommends the City Council finds that based upon the entire record of proceedings before it, and all information received, that there is no substantial evidence that the Project will constitute substantial changes to the Certified EIR, and does hereby approve the EIR Addendum, attached hereto as "Attachment A," and incorporated herein by this reference.

SECTION 4: ***Indemnification.*** The Applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void, or annul this approval. The City of Ontario shall promptly notify the Applicant of any such claim, action, or proceeding, and the City of Ontario shall cooperate fully in the defense.

SECTION 5: ***Custodian of Records.*** The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East "B" Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario.

SECTION 6: ***Certification to Adoption.*** The Secretary shall certify to the adoption of the Resolution.

- - - - - - - - - - - - - -

The Secretary Pro Tempore for the Planning Commission of the City of Ontario shall certify as to the adoption of this Resolution.

I hereby certify that the foregoing Resolution was duly and regularly introduced, passed and adopted by the Planning Commission of the City of Ontario at a regular meeting thereof held on the 25th day of February 2025, and the foregoing is a full, true and correct copy of said Resolution, and has not been amended or repealed.

Nicola Ricci
Planning Commission Chairman

ATTEST:

Henry K. Noh
Planning Director and
Secretary to the Planning Commission

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO)
CITY OF ONTARIO)

I, Gwen Berendsen, Secretary Pro Tempore of the Planning Commission of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. PC25-006, was duly passed and adopted by the Planning Commission of the City of Ontario at their regular meeting held on February 25, 2025, by the following roll call vote, to wit:

AYES: DeDiemar, Gage, Lampkin, Ricci

NOES: None

ABSENT: Anderson

ABSTAIN: None

Gwen Berendsen
Secretary Pro Tempore

ATTACHMENT A:

Addendum to TOP 2050
Supplemental Environmental Impact Report

(Addendum to follow this page)

ADDENDUM TO THE FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT FOR THE ONTARIO PLAN 2050

Empire Groves Specific Plan
(State Clearinghouse No. 2021070364)

Lead Agency:

CITY OF ONTARIO
Planning Department
303 East B Street
Ontario, CA 91764
Contact: Lorena Mejia, Senior Planner
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February 14, 2025

JN 195033

This document is designed for double-sided printing to conserve natural resources.

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D Archaeological Resources Report
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F Geotechnical Evaluation
G GHG Analysis
H Hydrology Report/WQMP
I Noise Impact Analysis
J VMT Analysis
K Water Supply Assessment

1.0 INTRODUCTION

In 2009 and 2010, the City of Ontario (City), as Lead Agency, prepared a Draft Environmental Impact Report (EIR), Recirculated Draft EIR, and a Final EIR for *The Ontario Plan* (TOP). These documents are collectively referred to in this document as the 2010 TOP EIR. TOP consisted of a six-part component framework: 1) Vision, 2) Governance Manual, 3) Policy Plan (General Plan), 4) City Council Priorities, 5) Implementation, and 6) Tracking and Feedback, to guide development of Ontario 20 years or more into the future.

In 2022, the City prepared *The Ontario Plan 2050 Final Supplemental Environmental Impact Report* (TOP 2050 SEIR; State Clearinghouse No. 2021070364) for *The Ontario Plan 2050* (TOP 2050), which was an update to TOP to guide the City's development and conservation for the next 30 years through 2050. TOP 2050 is referred to herein as the "approved project."

The Empire Groves Specific Plan (referred to herein as the "modified project" or "Specific Plan") proposes to establish land use regulations, development standards, and design guidelines for a proposed hotel and retail development. This Addendum has been prepared to determine whether the modified project would result in new or substantially more severe significant environmental impacts compared to the impacts of the approved project as disclosed in the TOP 2050 SEIR.

1.1 PROJECT LOCATION

The City of Ontario is in the southwestern portion of San Bernardino County and is surrounded by the cities of Upland and Rancho Cucamonga to the north; the City of Fontana and unincorporated San Bernardino County to the east; the cities of Eastvale and Jurupa Valley to the south; and the cities of Chino and Montclair and unincorporated San Bernardino County to the west; refer to Exhibit 1, *Regional Vicinity*.

As shown on Exhibit 2, *Site Vicinity*, the approximately 10.43-acre triangular modified project site (Assessor's Parcel Number [APN] 0110-322-33) is in the southeastern quadrant of the intersection of East Holt Boulevard and East Guasti Road. The site is bounded by East Holt Boulevard to the north, while East Guasti Road runs along its southern and southwestern edges. The eastern boundary is defined by an existing flood channel and the Cucamonga Creek Trail. To the south of the site lies the Ontario International Airport, which is separated from the site by East Guasti Road, Airport Drive, and a set of railroad tracks. The modified project site (also referred to as "Specific Plan area" herein) has direct access from Interstate 10 (I-10), situated to the north of the site.

Exhibit 1
Regional Vicinity

Exhibit 2
Site Vicinity

1.2 PREVIOUS ENVIRONMENTAL DOCUMENTS

The Ontario Plan Final Environmental Impact Report

In 2009 and 2010, the City prepared a Draft EIR, Recirculated Draft EIR, and Final EIR for *The Ontario Plan* (TOP). These documents are collectively referred to in this document as the 2010 TOP EIR. TOP consisted of a six-part component framework: 1) Vision, 2) Governance Manual, 3) Policy Plan (General Plan), 4) City Council Priorities, 5) Implementation, and 6) Tracking and Feedback, to guide development of Ontario 20 years or more into the future.

The 2009 Draft EIR identified six environmental topical areas (Agricultural Resources, Air Quality, Cultural Resources, Global Climate Change, Noise, and Traffic and Transportation) with significant and unavoidable impacts.

The 2009 Recirculated Draft EIR was released to provide additional analysis related to greenhouse gas (GHG) emissions impacts associated with buildout of TOP.

Pursuant to Section 15088.5(c) of the CEQA Guidelines, which states that if an EIR revision is "limited to a few chapters or portions of the EIR, the lead agency need only recirculate the chapters or portions that have been modified," only the following topic areas were analyzed in the 2009 Recirculated Draft EIR:

- Global Climate Change; and
- Additional Project Alternative: 15 percent GHG Reduction Alternative.

Remaining topics previously analyzed in the 2009 Draft EIR were determined to be adequately addressed. Analysis in the 2009 Recirculated Draft EIR found that significant and unavoidable impacts identified in the 2009 Draft EIR would remain significant and unavoidable. These determinations were reiterated in the 2010 TOP EIR when it was certified on January 27, 2010.

The Ontario Plan 2050 Final Supplemental Environmental Impact Report

In 2022, the City prepared TOP 2050 SEIR for *The Ontario Plan 2050* (TOP 2050), which was an update to TOP to guide the City's development and conservation for the next 30 years through 2050. TOP 2050 is a focused effort, with particular emphasis on technical refinements to the Policy Plan to comply with State housing mandates; conform with new State laws related to community health, environmental justice, climate adaptation, resiliency, and mobility; bring long-term growth and fiscal projections into alignment with current economic conditions; and advance the Implementation Plan and Tracking and Feedback system.

TOP 2050 fulfills the City's mandatory Regional Housing Needs Assessment (RHNA) obligation. TOP 2050 brings long-term growth and fiscal projections into alignment with

current economic conditions as well as property owner and stakeholder requests, to support the vision for Ontario.

TOP 2050 SEIR identified significant and unavailable impacts related to air quality, cultural resources, noise, and transportation.

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2.0 DESCRIPTION OF PROJECT MODIFICATIONS

2.1 ADDENDUM'S PURPOSE AND NEED

When an EIR has been certified or a negative declaration adopted for a project, no subsequent or supplemental environmental review documentation shall be required unless one or more of the following events occurs:

1) Substantial changes are proposed in the project, which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

2) Substantial changes occur with respect to the circumstances under which the project is undertaken, which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:

    A. The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

    B. Significant effects previously examined will be substantially more severe than shown in the previous EIR;

    C. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

    D. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

When none of the above events has occurred, yet minor technical changes or additions to the previously adopted negative declaration are necessary, an addendum may be prepared (CEQA Guidelines Section 15164[b]).

As discussed below, none of the conditions described in CEQA Guidelines Section 15162 calling for preparation of subsequent environmental review have occurred. This Addendum supports the conclusion that the modified project modifications are minor or technical changes that do not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects. In addition, as discussed below, the modified project modifications would not result in any new or substantially increased significant environmental impacts, no new mitigation measures, or no new alternatives that would substantially reduce significant impacts. As a result, an addendum is an appropriate CEQA document for analysis and consideration of the modified project modifications.

Circulation of an addendum for public review is not necessary (CEQA Guidelines Section 15164, subdivision (c)); however, the addendum must be considered in conjunction with the adopted Final EIR by the decision-making body (CEQA Guidelines Section 15164, subdivision (d)). The modified project is an Addendum to TOP 2050 SEIR (i.e., the certified Final EIR).

CEQA requires a comparative evaluation of a modified project and alternatives to the project, including the “No Project” alternative. TOP 2050 SEIR addressed a reasonable range of alternatives for the approved project. There is no new information indicating that an alternative that was previously rejected as infeasible is in fact feasible, or that a considerably different alternative than those previously studied would substantially reduce one or more significant effects on the environment.

2.2 ENVIRONMENTAL SETTING

Located in an urban environment, the modified project site is an undeveloped, vacant, disturbed lot and is relatively flat with no temporary or permanent structures. Ruderal vegetation, including nonnative trees and shrubs, as well as stockpiled dirt mounds and rocks are present on-site. The site was formerly utilized for agriculture production until the early to mid-1980s and has since remained undeveloped. The site has been maintained through disking and mowing. The modified project site is surrounded by development on all four sides, including a channelized portion of Cucamonga Creek to the east.

GENERAL PLAN DESIGNATION

According to TOP 2050 Figures LU-01, *Land Use Plan*, and LU-04, *Mixed Use Areas*, the modified project site has a Mixed Use-Multimodal (MU-Multimodal) land use designation. Per TOP 2050 Figure LU-05, *Overlay Areas*, the site is also within the Ontario Airport Metro Center Overlay.

The City’s future multimodal transit station is under consideration within the MU-Multimodal area, which will link rail, regional, local, and airport transit. Intensive office, retail, and residential uses are envisioned to be integrated with the transit station. The transit center is envisioned as an iconic, convenient, and intuitively designed multimodal transportation center that will serve the City and the region at large.

According to TOP 2050 full buildout summary, the total acreage under the MU-Multimodal designated areas (west of Archibald Avenue and south of I-10) is 72.56 acres, of which 10.43 acres fall in the Specific Plan area. It is estimated that this area will absorb a total of 2,449,727 square feet of nonresidential development and will create 5,993 jobs. Of this, approximately 553,124 square feet is allocated to lodging and the remaining approximately 1,896,603 square feet is allocated to retail and office development. The area has an allowable density of 20.0 to 80.0 dwelling units per acre.

The Ontario Airport Metro Center Overlay is envisioned as the most intensive area in the County with a vertical and horizontal mixture of regional-serving retail, office, restaurant, entertainment, cultural, and residential uses in low- to mid-rise buildings (i.e., 3 to 10 stories in height).

ZONING

According to the City's *Official Zoning Map*, dated January 1, 2016, the site is zoned Specific Plan (SP) within the Multimodal Transit Center (MTC) Overlay District. The SP zoning district is established to accommodate the adoption of specific plans pursuant to TOP 2050 Exhibit LU-05, *Overlay Areas*. All land uses, activities, and facilities within the SP zoning district shall only be allowed pursuant to the applicable Specific Plan document. The MTC Overlay District was established to allow for the interim use of existing buildings located within the overlay district boundary, while preserving the City's vision for development of a multimodal transit center and supporting mixed-use development.

SURROUNDING LAND USES

Surrounding land uses include a mix of commercial, airport, and industrial uses, which are further described as follows:

- *North*: East Holt Boulevard bounds the modified project site to the north. The Frontier Center office building and Holiday Inn are located further north. These land uses are designated Hospitality with a floor area ratio (FAR) of 1.0, and zoned Convention Center Support Commercial (CCS).

- *East*: An existing flood channel and the Cucamonga Creek Trail bound the site to the east. Further east is an industrial warehouse development. Land uses to the east are designated Open Space-Non-Recreation and MU-Multimodal (20.0 to 80.0 dwelling units per acre and 1.0 FAR), and zoned SP with an MTC overlay.

- *South*: East Guasti Road bounds the southern modified project boundary. The Ontario Gateway Hotel is located to the south of East Guasti Road. The Ontario International Airport is located further to the south and is separated from the site by East Guasti Road, Airport Drive, and a set of railroad tracks. Land uses to the

south are designated Hospitality (1.0 FAR), Rail and Airport, and zoned CCS, Railway Corridor (RC), and Ontario International Airport (ONT).

- *West*: East Guasti Road bounds the modified project site to the west. The Ontario Gateway Hotel is located further west and southwest of East Guasti Road. Land uses to the west are designated Hospitality (1.0 FAR) and zoned CCS.

2.3 MODIFIED PROJECT DESCRIPTION

The modified project proposes to implement the Empire Groves Specific Plan which would include construction of a hotel and retail development with ancillary site improvements; refer to Exhibit 3, *Conceptual Site Plan*. The hotel would encompass approximately 553,124 square feet and the local-serving retail component would encompass approximately 46,876 square feet. Buildout of the total development would be approximately 600,000 square feet; refer to Table 1, *Proposed Specific Plan Buildout*. Additionally, as shown, the proposed buildout would be within the TOP 2050 full buildout assumptions for the project site based on the MU-Multimodal designation.

Table 1
Proposed Specific Plan Buildout

Land Use	Proposed Buildout	TOP 2050 Maximum Buildout for Project Site
Hotel	553,124 square feet	553,124 square feet
Local-Serving Retail	46,876 square feet	1,896,603 square feet
TOTAL	**600,000 square feet**	**2,449,727 square feet**
Notes: According to TOP 2050 full buildout summary, the total acreage under the City's MU-Multimodal designated areas is 72.56 acres, of which 10.43 acres fall in the Specific Plan area. It is estimated that the Specific Plan area will absorb a total of 2,449,727 square feet of nonresidential development, consisting of 553,124 square feet of lodging and 1,896,603 square feet of retail and office development.		

In compliance with the City of Ontario's *Community Climate Action Plan* (CCAP), the modified project proposes to implement Screening Table Measures identified in CCAP Table 6, *Screening Table for Implementing GHG Performance Standards for Commercial, Office, Medical, Hotel, Fitness, Industrial, and Retail Development, 2030*, that achieve a minimum of 100 points to ensure modified project-related GHG emission impacts remain less than significant. Potential GHG reduction measures include those related to building electrification, solar energy systems, green roofs, urban cooling, transit oriented communities, and transit ridership. The City would be responsible for verifying that Screening Table Measures achieving the requisite points are incorporated into the modified project plans and are appropriately implemented. At the discretion of the City, measures that provide GHG reductions equivalent to GHG emissions reductions achieved via the CCAP Screening Table Measures may be implemented.

Exhibit 3
Conceptual Site Plan

PROPOSED DEVELOPMENT

Hotel Component

The hotel component consists of a 600-room hotel with a variety of amenities, including banquet halls, conference rooms, restaurants/cafes, spa and pool facilities, and a rooftop deck. The hotel consists of an east and west wing, connected above by a rooftop floor. In total, there would be eight levels with a rooftop deck with a maximum building height of 120 feet. The first floor of the hotel consists of the lobby, lounge, upscale restaurant and bar, spa, retail area, small meeting rooms, and a spacious banquet/conference center. The first-floor mezzanine level is planned to include a game room, fitness area, meeting rooms, and a board room in addition to mechanical and electrical equipment. The second floor would house offices and a fitness center, and the remaining floors would be dedicated to hotel rooms. A rooftop pool and lounge terrace are also proposed with a full-service restaurant and bar.

Local-Serving Retail Component

The local-serving retail and restaurant component would be located on the ground floor and be the focus of the northwest corner of the modified project site as a community plaza. Local-serving retail would consist of business spaces to provide services to the local community. Small businesses may include such uses as coffee shops, food and beverage outlets, retail, print shops, laundry or tailoring services, among others.

Landscaping

Extensive landscaping is proposed on the ground level of the entire site and third and rooftop floors of the hotel building. On the ground level, primary landscaped areas include the entrance area; edge treatments; courtyard, pool, and spa areas; and buffer planting area. Specifically, the primary entranceway to the hotel development from East Guasti Road would be designed with a canal water feature, fountain sculpture, and terraced plantings.

The edge treatments along East Guasti Road and near the intersection of East Guasti Road and East Holt Boulevard would include an array of street trees and decorative flowering trees to provide an aesthetic and safe buffer from vehicular traffic, promoting a pedestrian-friendly environment for the local-serving community plaza. The courtyard, pool, and spa areas would include pools, a water garden, event spaces, a wellness garden, and a food and beverage pavilion landscaped with shade trees, low hedges, and grassy open areas. Lastly, the buffer planting area is located between Cucamonga Creek and the eastern modified project boundary and would include a dense screening hedge to provide a visual privacy barrier that delineates the boundary between the modified project site and trail users along the creek.

On the third floor, a meadow type landscaping is proposed with specimen trees, an herb garden, pathways, and outdoor seating areas with cabanas, a fire pit, and pocket lounges.

The rooftop area would be divided into the Sky Island on the west and High Gardens on the east. The Sky Island would include a central water feature and rock sculpture with a stone landscaping area, an expansive wooden deck, and pocket seating areas. The High Gardens would include a VIP pool with cabanas, chaise chairs, and outdoor living rooms.

Parking

A total of 932 parking spaces would be provided via a 27-space aboveground lot (for the local-serving retail uses) and a two-level, subterranean parking structure with 905 spaces (for the hotel). The subterranean areas would also include back-of-the-hotel facilities, storage, employee areas, and offices as well as mechanical and electrical equipment.

EMPIRE GROVES SPECIFIC PLAN

The proposed Specific Plan establishes land use regulations, development standards, and design guidelines for future development within the Specific Plan area.

Development Plan

The proposed development plan outlines the comprehensive land use framework, encompassing a summary of the modified project, a depiction of land uses specified in the Specific Plan, and various modified project elements, including landscape concepts and parking facilities. It also presents essential infrastructure plans, covering circulation, fire access, water supply, sewage, recycled water, solid waste, and community facilities.

The Specific Plan consists of one planning area (PA1), Hospitality Mixed-Use. The Hospitality Mixed-Use land use refers to a development that combines hotel uses, ancillary services, and amenities with local-serving commercial uses within a single property.

- *Hotel Use*: Hotel use is the primary component of Hospitality Mixed-Use and should occupy the majority of the FAR of the development. This includes guest rooms, office space for hotel administration, and may also include restaurant, bars, lounges, day spas, gyms, ballrooms, meeting rooms, and more.
- Local-Serving Retail Uses: Local-serving retail uses cater to the daily needs of the local community as well as the hotel use. These businesses may include coffee shops, restaurants, retail, print shops, laundry or tailoring services and similar types of uses. These types of uses can benefit shoppers visiting the surrounding area as well as nearby residents who can access these services by foot.

As detailed in Table 1, total anticipated Specific Plan buildout would be approximately 553,124 square feet of hotel use and 46,876 square feet of local-serving use, totaling 600,000 square feet.

As previously described, the City's MU-Multimodal designated areas (west of Archibald Avenue and south of I-10) encompass 72.56 acres, of which 10.43 acres fall in the

Specific Plan area. Based on TOP 2050 full buildout summary, the MU-Multimodal designated areas have an anticipated buildout of 2,449,727 square feet of nonresidential uses (approximately 553,124 square feet for lodging and approximately 1,896,603 square feet for retail and office development). As shown in Table 1, the proposed Specific Plan buildout for both hotel and local-serving retail use would be within the TOP 2050 maximum buildout assumptions for the project site based on the MU-Multimodal designation. Overall, the site's total anticipated buildout of 2,449,727 square feet under the MU-Multimodal designation would not be exceeded.

Circulation and Access

Potential roadway improvements in the modified project vicinity along East Holt Boulevard, East Guasti Road, and Airport Drive are identified in the Specific Plan that would complement future development of the area as well as improve connectivity.

The pedestrian circulation around the Specific Plan area is provided by existing sidewalks that have gaps at certain locations. The development of the Specific Plan would include sidewalks around the site and development of the community plaza at the intersection of East Holt Boulevard and East Guasti Road.

Infrastructure Plan

- *Domestic/Potable Water*: Water service to the Specific Plan area would be provided by the City. Currently, there is an existing 12-inch water main in East Guasti Road along the modified project frontage, and an existing 8-inch water main in East Holt Boulevard along the modified project frontage, both available for connection. The modified project proposes water line connections from the site to the existing water mains in East Guasti Road and East Holt Boulevard.

- *Sewer*: Sewer mains are maintained by the City of Ontario and wastewater is treated at the Inland Empire Utilities Agency (IEUA) Treatment Plant. Several regional trunk sewers collect sewage generated in the City and transport it to IEUA's Regional Plant No. 1 and Regional Plant No. 5 for treatment. The modified project proposes to install a sewer line on-site to connect to an existing 12-inch sewer main in East Holt Boulevard.

- *Recycled Water*: Recycled water is provided to the City by the IEUA from its four wastewater reclamation plants. Currently, there are recycled water mains in the vicinity of the Specific Plan Area, with a point of connection located at the intersection of East Guasti Road and East Holt Boulevard. The modified project proposes to install an 8-inch recycled water main in East Guasti Road that connects to an existing 8-inch recycled water main in Convention Center Way (north of East Holt Boulevard) to extend south in East Guasti Road to end east of the Cucamonga Creek Channel.

- *Stormwater*: The Specific Plan area would connect to existing storm drain infrastructure systems within adjacent roadways. Specifically, the modified project proposes an underground detention system and stormwater pump in the southeast of the site to convey treated stormwater flows on-site to an existing 108-inch storm drain line in Guasti Road.

- *Dry Utilities*: Electrical lines would be installed underground to connect to existing Southern California Edison (SCE) infrastructure. Similarly, the modified project would connect to existing gas lines provided by Southern California Gas Company (SoCalGas). Infrastructure supporting telephone services by AT&T and Verizon and cable television services provided by Time Warner Cable would be installed along with other utilities.

Development Standards

The development standards associated with the proposed Specific Plan serve as the authoritative document that delineates the specific land use designations and regulatory guidelines for the Specific Plan. The Specific Plan establishes standards, including those related to setbacks, maximum building height, floor area ratio, and lot coverage. Specific standards associated with utilities, public and private open space, bicycle parking, and loading areas are also detailed. Additionally, Specific Plan Table 3, *Allowable Land Uses*, details the allowable uses within the Specific Plan area.

Design Guidelines

The design guidelines establish a clear set of qualitative guiding principles that form a basis for the City to review development within the Specific Plan. The guidelines serve to establish high-quality design for new development and facilitate the design review and planning approval process relative to building configuration and architecture.

The guidelines are not intended as a literal requirement; instead, they serve as a framework for the design review process and cover key elements including building mass, elevation treatment and materials, entrances, façade design and composition, roof forms, materials, colors, landscaping, lighting, and signage. The intent is for the City to use the guidelines as part of the formal design review process, and for the City's decision-making body to make qualitative findings demonstrating such compliance.

CONSTRUCTION

The modified project is anticipated to be constructed in a single phase for a duration of approximately 15 months.

DISCRETIONARY ACTIONS

The modified project is anticipated to require the following City discretionary permits and approvals:

- CEQA Clearance;
- Development Plan;
- Specific Plan; and
- Development Agreement.

Additionally, the modified project may be required to obtain permits/approvals from the following agencies:

- ONT Inter-Agency Notification Process;
- FAR Part 77 Notification – Federal Aviation Administration; and
- NPDES Construction General Permit – Santa Ana Regional Water Quality Control Board.

2.4 ADDENDUM SCOPE OF ENVIRONMENTAL REVIEW

As discussed in the TOP 2050 SEIR, the approved project was determined to have less than significant impacts or no impact with regard to the following environmental issue areas:

- Aesthetics;
- Agriculture and Forestry Resources;
- Biological Resources;
- Energy;
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Population and Housing;
- Public Services;
- Recreation;
- Utilities; and
- Wildfire.

The TOP 2050 SEIR established that, with mitigation, the approved project would result in less than significant impacts related to the following environmental issue areas:

- Geology and Soils; and
- Tribal Cultural Resources.

The TOP 2050 SEIR determined that the approved project would result in the following significant and unavoidable impacts:

- Air Quality;
- Cultural Resources;
- Noise; and
- Transportation.

This Addendum addresses changes resulting from implementation of the modified project to each of the environmental resource areas noted above.

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3.0 ENVIRONMENTAL ASSESSMENT

This comparative analysis has been undertaken to analyze whether the modified project would result in any new or substantially more severe significant environmental impacts as compared to the approved project that has been subject to the TOP 2050 SEIR. The comparative analysis discusses whether impacts are greater than, less than, or similar to the conclusions discussed in the TOP 2050 SEIR.

3.1 IMPACTS HAVING NO POTENTIAL TO RESULT IN NEW OR SUBSTANTIALLY MORE SEVERE SIGNIFICANT IMPACTS

- Agriculture and Forestry Resources: According to the California Department of Conservation, the modified project site is designated as Urban and Built-Up Land.[1] As such, no agricultural or forestry resources occur on-site. No new or substantially more severe significant impacts to agricultural and forestry resources would result from implementation of the modified project.

- Hazards and Hazardous Materials: The *Phase I Environmental Site Assessment: Proposed Empire Resort and Spa, Southeast Corner of E. Holt Boulevard and E. Guasti Road, APN 0110-322-33-0-000, City of Ontario, San Bernardino County, California 91761,* (Phase I ESA), prepared by Petra Geosciences, Inc., and dated December 5, 2023, was prepared for the modified project; refer to Appendix A, *Phase I ESA*. According to the Phase I ESA, the modified project site is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Additionally, the Phase I ESA determined that no recognized environmental conditions, controlled recognized environmental conditions, or historical recognized environmental conditions were identified within or affecting the modified project site. Further, the modified project site is not located within 0.25-mile of a school. While modified project construction could involve the use of limited amounts of hazardous materials, such as paints and solvents, gasoline, diesel fuels, and other hazardous materials routinely utilized with construction equipment, activities would be short-term, and the materials used would not be in such quantities, or stored in such a manner, as to pose a significant safety hazard. Given that the modified project site was historically used for agriculture, it is possible that discolored soils, noxious odors, buried pipelines or irrigation channels, and/or other buried objects/debris may be encountered during clearing and grubbing, or future grading. However, similar to the approved project, all modified project-related construction activities would be subject to applicable laws and regulations governing the use, storage, and transportation of hazardous materials, specifically those established by the U.S. Department of Transportation,

[1] California Department of Conservation, *California Important Farmland Finder*, https://maps.conservation.ca.gov/DLRP/CIFF/, accessed August 14, 2024.

California Department of Transportation, and California Highway Patrol, as well as the Hazardous Materials Transportation Uniform Safety Act.

Operation of the proposed uses would involve the use of small amounts of hazardous materials, such as cleansers, paints, fertilizers, and pesticides for cleaning and maintenance purposes. However, uses of such hazardous materials would be regulated by the California Fire Code, as well as other federal, State, and local regulations related to the protection of the public's health and safety. Following compliance with existing local, State, and federal regulations, impacts would be less than significant in this regard. Thus, no new or substantially more severe significant impacts regarding hazards and hazardous materials would result from implementation of the modified project.

- Mineral Resources: According to Figure 5.12-1, *Areas of Mineral Resources Significance*, of TOP 2050 SEIR, the modified project site is identified as Mineral Resource Zone 3 (MRZ-3), which are areas where the significance of mineral deposits cannot be determined from the available data. Development in an MRZ-3 area would not result in significant impacts because mineral resources of Statewide or local importance are not identified in those areas on the California Geological Survey's maps. As such, no new or substantially more severe significant impacts related to mineral resources would result from implementation of the modified project.

- Population and Housing: The modified project site is currently vacant; therefore, the modified project would not displace any existing housing or residents. The proposed hotel and retail uses are considered employment-generating uses. Employment opportunities resulting from the modified project could directly increase the City's population, as employees (and their families) may choose to relocate to the City. However, estimating the number of future employees who may choose to relocate to the City would be highly speculative, since many factors influence personal housing location decisions (e.g., family income levels and the cost and availability of suitable housing in the local area). Further, many modified project employees could already live within Ontario or neighboring jurisdictions. Nonetheless, buildout of the modified project site and other areas designated MU-Multimodal was projected by TOP 2050 to create 5,993 jobs associated with lodging and retail/office uses and was analyzed in TOP 2050 SEIR. The modified project is consistent with the MU-Multimodal designation and thus, would not substantially increase employment growth beyond what was previously analyzed in TOP 2050 SEIR. Additionally, the modified project would support this potential increase in population by providing for the infrastructure to accommodate the projected growth (e.g., utility and roadway improvements). Further, the modified project would support the goals of TOP 2050 by providing employment in proximity to multimodal transit. As such, no new or substantially more severe significant impacts related to population and housing would result from implementation of the modified project.

- Public Services: As discussed above under *Population and Housing*, while the proposed hotel and retail uses may be growth inducing, such growth has been projected by TOP 2050 for MU-Multimodal designated areas within Ontario. As such, while new development may increase demand for public services, including police protection, fire protection, school, and library services, TOP 2050 SEIR determined that buildout of the approved project would be adequately served by existing and planned public services. No new or substantially more severe significant impacts related to public services would result from implementation of the modified project.

- Recreation: As discussed above under *Population and Housing*, while the proposed hotel and retail uses may be growth inducing, such growth has been projected by TOP 2050 for MU-Multimodal Designated areas within Ontario. Additionally, no housing is proposed under the modified project, and the modified project would include extensive public and private open space areas to accommodate the proposed development. As such, demand for parks and other recreational facilities would not substantially increase. No new or substantially more severe significant impacts related to recreation would result from implementation of the modified project.

- Wildfire: According to the California Department of Forestry and Fire, the modified project site is not located in or near a State Responsibility Area Fire Hazard Severity Zone.[2] According to Figure 5.20-2, *Fire Hazard Severity Zones*, of TOP 2050 SEIR, the modified project site is not located in or near a fire hazard zone. Thus, no new or substantially more severe significant impacts related to wildfire would result from implementation of the modified project.

3.2 IMPACTS POTENTIALLY RESULTING IN NEW OR SUBSTANTIALLY MORE SEVERE SIGNIFICANT IMPACTS

3.2.1 Aesthetics/Light And Glare

Approved Project Findings

TOP 2050 SEIR determined that the approved project would have no impact on State-designated scenic highways as there are none in the City. TOP 2050 SEIR concluded that the approved project would not propose any development of a design and/or scale that would impact views of the San Gabriel Mountains, that implementation of the approved project would not conflict with existing zoning and regulations governing scenic quality, and that the approved project would be subject to the *City of Ontario Municipal Code* (Municipal Code) regarding potential light and glare impacts. Overall, aesthetic

[2] California Department of Forestry and Fire, *Fire Hazard Severity Zones in State Responsibility Area*, effective April 1, 2024, https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=988d431a42b242b29d89597ab693d008, accessed August 14, 2024.

impacts were determined to be less than significant. No mitigation measures were required for the approved project.

Modified Project Analysis

The modified project proposes a hotel and retail development in accordance with the proposed Empire Groves Specific Plan that establishes a development plan, development standards, and design guidelines to guide development within the Specific Plan area. As detailed in Section 2.2, *Environmental Setting*, the MU-Multimodal land use designation permits lodging and retail on-site, which is consistent with the modified project's uses. While the MU-Multimodal land use designation permits low- to mid-rise buildings ranging from three to 10 stories (approximately 30 to 100 feet) in height, the proposed Specific Plan would permit a maximum height of 10 to 15 stories (approximately 100 to 140 feet). This would be consistent with the allowable building height for the modified project site based on the *Ontario International Airport Land Use Compatibility Plan* (ONT ALUCP; refer to Section 3.2.9, *Land Use and Planning*). The Specific Plan would include development standards and design guidelines to ensure high-quality design and facilitate the design review and planning approval process within the Specific Plan area. Development standards would require site setbacks ranging from five to 50 feet, a floor area ratio of 1.0, and a maximum 40 percent lot coverage. The Specific Plan would require that public open space be accessible at the pedestrian level from public sidewalks and would set minimum dimensions for private open spaces that are visible to the public. Design guidelines would provide direction regarding building massing and elevation treatments, as well as site landscaping, lighting, and sign design. Specifically, lighting would need to be shielded in order to minimize light trespass, glare, and sky glow. Further, lighting provision for modified project construction are detailed in Municipal Code, Title 4, Chapter 11, Section 4-11.11, *Construction site security provisions*. Collectively, the proposed Specific Plan development standards and design guidelines and existing Municipal Code requirements would ensure the proposed development is consistent with regulations governing scenic quality.

Scenic views of the San Gabriel Mountains, the dominant scenic resource within the City, would not be obstructed with buildout of the proposed Specific Plan. Proposed design guidelines and development standards related to building mass, elevation, and height would ensure the proposed development does not have the potential to alter scenic views provided by the backdrop of the San Gabriel Mountains as the peaks rise to 7,000 feet above mean sea level.

Further, the proposed development would be adjacent to similar uses, including existing hotels to the north and west. Overall, the modified project would be of similar scale and character to surrounding uses and would be compatible with the buildout envisioned for the MU-Multimodal land use designated site by TOP 2050. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Certified TOP 2050 SEIR Mitigation Measures: Not Applicable.

Addendum Project Conditions: None.

3.2.2 Air Quality

Approved Project Findings

According to TOP 2050 SEIR, TOP 2050 would be inconsistent with the South Coast Air Quality Management District's (SCAQMD's) Air Quality Management Plan (AQMP) because buildout under TOP 2050 would generate short- and long-term emissions that exceed SCAQMD's regional significance thresholds and cumulatively contribute to the nonattainment designations of the South Coast Air Basin (Basin). Additionally, operation of industrial and warehousing land uses accommodated under TOP 2050 could expose sensitive receptors to substantial toxic air contaminant concentrations.

Incorporation of mitigation measures that would apply to a development project's construction phase (2010 TOP EIR Mitigation Measure 3-1) and operational phase (2010 TOP EIR Mitigation Measure 3-2 and TOP 2050 SEIR Mitigation Measure AQ-1) would reduce short- and long-term emissions and subsequently, impacts associated with consistency with the SCAQMD. Additionally, TOP 2050 goals and policies would promote increased capacity for alternative transportation modes.

However, due to the magnitude of residential units that would be planned under TOP 2050 to accommodate the City's Regional Housing Needs Assessment requirements, no additional mitigation measures are available that would reduce impacts below SCAQMD thresholds. Impact pertaining to consistency with an adopted AQMP, short-term and long-term air pollutants emissions, and health impacts to nearby sensitive receptors would remain significant and unavoidable.

According to TOP 2050 SEIR, TOP 2050 would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Impacts would be less than significant in this regard.

Modified Project Analysis

The *Empire Groves Hotel Air Quality Impact Analysis, City of Ontario* (Air Quality Impact Analysis), prepared by Urban Crossroads and dated April 19, 2024, was prepared to evaluate potential air quality impacts associated with the modified project; refer to Appendix B, *Air Quality Impact Analysis*.

Project Consistency with AQMP

In December 2022, SCAQMD released the *Final 2022 AQMP* (2022 AQMP). The 2022 AQMP continues to evaluate current integrated strategies and control measures to meet the California Ambient Air Quality Standards (CAAQS), as well as explore new and

innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a strategy with fair-share reductions at the federal, State, and local levels. Similar to the 2016 AQMP, the 2022 AQMP incorporates scientific and technological information and planning assumptions, including the Southern California Association of Governments (SCAG) *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy* (2020-2045 RTP/SCS), a planning document that supports the integration of land use and transportation to help the region meet the Federal Clean Air Act requirements. The modified project's consistency with the AQMP will be determined using the 2022 AQMP as discussed below.

- *Consistency Criterion No. 1*: The proposed project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

As demonstrated below, the modified project's localized and regional construction-source emissions would not exceed applicable regional significance threshold and LST thresholds. As such, a less than significant impact is expected. Further, the modified project's localized and regional operation-source emissions would not exceed applicable regional significance threshold and localized significance thresholds. As such, a less than significant impact is expected. On the basis of the preceding discussion, the modified project is determined to be consistent with the first criterion.

- *Consistency Criterion No. 2*: The project will not exceed the assumptions in the AQMP based on the years of project buildout phase.

Peak day emissions generated by construction activities are largely independent on land use assignments, but rather are a function of development scope and maximum area of disturbance. Irrespective of the site's land use designation, development of the site to its maximum potential would likely occur, with disturbance of the entire site occurring during construction activities. As such, when considering that no emissions thresholds will be exceeded, a less than significant impact would result.

TOP 2050 designates the modified project site as MU-Multimodal. The MU designation allows for a maximum FAR of 1.0 for office and retail uses. Intensive office, retail, and residential uses are envisioned to be integrated with the future multimodal transit station that is under consideration, which links rail, regional, local and airport transit. The modified project includes the development of a hotel with 600 rooms and suites, ballrooms, a spa & fitness center, meeting and conference rooms as well as an outdoor pool and event lawn and locally serving retail uses. Since the modified project's proposed land uses are consistent with TOP 2050 and as the modified project's construction and operational-source air pollutant emissions would not exceed the regional or localized significance thresholds, the modified project is determined to be consistent with the second criterion.

In conclusion, the modified project would not have the potential to result in or cause federal and/or State ambient air quality standards (i.e., National Ambient Air Quality Standards [NAAQS] and/or CAAQS) violations. The modified project's proposed uses are consistent with the site's land use designation and the modified project would not exceed the regional or localized construction and operational thresholds. As such, the modified project is considered to be consistent with the 2022 AQMP and impacts in this regard would be less than significant. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Construction Emissions

As part of the Air Quality Impact Analysis, modified project-related construction-source and operational-source air quality emissions from criteria pollutants (volatile organic compounds [VOCs], nitrous oxides [NO_x], carbon monoxides [CO], sulfur oxides [SO_x], coarse particulate matter [PM_{10}], and fine particulate matter [$PM_{2.5}$]) were calculated using the California Emissions Estimator Model (CalEEMod) version 2022.1.1.22. Output from the model runs for both construction and operational activity are provided in Appendix B.

The estimated maximum daily construction emissions without mitigation are summarized in Table 2, *Overall Construction Emissions Summary*. Under the assumed scenarios, emissions resulting from modified project construction would not exceed criteria pollutant thresholds established by the SCAQMD. Therefore, construction impacts in this regard would be less than significant. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Table 2
Overall Construction Emissions Summary

Year	Emissions (pounds/day)					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Summer						
2024	4.86	85.10	59.57	0.32	15.68	5.96
2025	39.43	27.80	72.35	0.08	9.62	2.95
Winter						
2024	3.67	20.66	46.45	0.06	7.91	2.33
2025	3.30	19.14	43.84	0.06	7.84	2.27
Maximum Daily Emissions	**39.43**	**85.10**	**72.35**	**0.32**	**15.68**	**5.96**
SCAQMD Thresholds	75	100	550	150	150	55
Threshold Exceeded?	***No***	***No***	***No***	***No***	***No***	***No***

Notes: VOC = volatile organic chemical; NO_x = nitrous oxide; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter

Source: Urban Crossroads, *Empire Groves Hotel Air Quality Impact Analysis, City of Ontario*, April 19, 2024; refer to Appendix B, *Air Quality Impact Analysis*.

Operational Emissions

Operational activities associated with the modified project would result in emissions of VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$. Operational emissions are expected from the following primary sources:

- *Area Source Emissions*: Area sources include architectural coatings, consumer products, and landscape maintenance equipment.
- *Energy Source Emissions*: Energy source emissions include combustion emissions associated with generation of natural gas and electricity. However, because electrical generating facilities for the modified project area are located either outside the region (State) or offset through the use of pollution credits (RECLAIM) for generation within the Basin, criteria pollutant emissions from off-site generation of electricity are excluded from the evaluation of significance.
- *Mobile Source Emissions*: Modified project-related air quality emissions derive primarily from vehicle trips associated with the modified project, including employee trips and commercial trips to and from the site associated with the proposed uses. Moreover, vehicles traveling on paved roads would be a source of fugitive emissions due to the generation of road dust inclusive of brake and tire wear particulates. Trip characteristics available from the modified project-specific traffic impact analysis.

The estimated operational-source emissions are summarized in Table 3, *Summary of Peak Operational Emissions*. Modified project operational activities would not exceed the numerical thresholds of significance established by the SCAQMD for emissions of any criteria pollutant. As such, operational impacts would be considered less than significant. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Table 3
Summary of Peak Operational Emissions

Source	Emissions (pounds/day)					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Summer						
Mobile Source	19.66	18.24	172.16	0.41	35.25	9.14
Area Source	23.33	0.40	47.22	0.00	0.08	0.06
Energy Source	0.29	5.21	4.38	0.03	0.40	0.40
Maximum Daily Emissions	**43.28**	**23.84**	**223.76**	**0.44**	**35.73**	**9.60**
SCAQMD Thresholds	75	100	550	150	150	55
Threshold Exceeded?	***No***	***No***	***No***	***No***	***No***	***No***
Winter						
Mobile Source	18.22	19.60	144.10	0.38	35.25	9.14
Area Source	15.58	0.00	0.00	0.00	0.00	0.00

Source	Emissions (pounds/day)					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Energy Source	0.29	5.21	4.38	0.03	0.40	0.40
Maximum Daily Emissions	**34.09**	**24.81**	**148.47**	**0.42**	**35.64**	**9.54**
SCAQMD Thresholds	55	55	550	150	150	55
Threshold Exceeded?	***No***	***No***	***No***	***No***	***No***	***No***

Notes: VOC = volatile organic chemical; NO_x = nitrous oxide; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter

Source: Urban Crossroads, *Empire Groves Hotel Air Quality Impact Analysis, City of Ontario*, April 19, 2024; refer to Appendix B, *Air Quality Impact Analysis*.

Localized Significance to Sensitive Receptors

The Air Quality Impact Analysis makes use of methodology included in the SCAQMD *Final Localized Significance Threshold Methodology* (LST Methodology). The SCAQMD has established that impacts to air quality are significant if there is a potential to contribute or cause localized exceedances of the federal and/or State ambient air quality standards (NAAQS/CAAQS). Collectively, these are referred to as Localized Significance Thresholds (LSTs). Based on SCAQMD's LST Methodology, emissions of concern during construction activities are those associated with on-site NO_X, CO, $PM_{2.5}$, and PM_{10} emissions. The LST Methodology clearly states that "off-site mobile emissions from the project should not be included in the emissions compared to LSTs." As such, for purposes of the construction LST analysis, only emissions included in the CalEEMod "on-site" emissions outputs were considered.

The SCAQMD recommends that the nearest sensitive receptor be considered when determining a project's localized air quality impacts. The nearest land use where an individual could remain for 24 hours to the project site has been used to determine localized construction and operational air quality impacts for emissions of PM_{10} and $PM_{2.5}$ (since PM_{10} and $PM_{2.5}$ thresholds are based on a 24-hour averaging time). Receptors in the modified project area are described and shown in Air Quality Impact Analysis Exhibit 3-B, *Receptor Locations*.

- *R1*: Location R1 represents the Ontario Gateway Hotel at 2200 E Holt Blvd, approximately 176 feet west of the modified project site.
- *R2*: Location R2 represents the existing residence at 304 N Placer Privado, approximately 2,802 feet north of the modified project site.
- *R3*: Location R3 represents the existing building of Holiday Inn Ontario Airport at 2155 E Convention Center Way, approximately 237 feet north of the modified project site.
- *R4*: Location R4 represents the existing residence at 2505 E Date Palm Paseo, approximately 1,968 feet north of the modified project site.
- *R5*: Location R5 represents the existing residence at 710 Via Dolcetto, approximately 3,593 feet northeast of the modified project site.
- *R6*: Location R6 represents the Frontier Center at 2151 E Convention Center Way, approximately 232 feet north of the modified project site.

In order to estimate localized pollutant concentrations resulting from modified project construction, the SCAQMD-approved American Meteorological Society/EPA Regulatory Model (AERMOD) dispersion model was utilized. AERMOD model outputs are provided in Appendix B. As illustrated in Table 4, *Localized Significance Summary Peak Construction*, emissions during the peak construction activity would not exceed the SCAQMD's localized significance thresholds at the maximally exposed receptor location, All other modeled locations in the study area would experience a lesser concentration and consequently a lesser impact.

Table 4
Localized Significance Summary Peak Construction

Peak Construction	CO		NO_2	PM_{10}	$PM_{2.5}$
	Averaging Time				
	1-Hour	8-Hour	1-Hour	24-Hour	24-Hour
Peak Day Localized Emissions	0.05	0.03	0.0366	2.72	1.57
Background Concentration	1.30	1.00	0.085	--	
Total Concentration	**1.35**	**1.03**	**0.12**	**2.72**	**1.57**
SCAQMD LST	*20*	*9*	*0.18*	*10.4*	*10.4*
Threshold Exceeded?	***NO***	***NO***	***NO***	***NO***	***NO***

Notes: NO_2 = nitrogen dioxide; CO = carbon monoxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter

Source: Urban Crossroads, *Empire Groves Hotel Air Quality Impact Analysis, City of Ontario*, April 19, 2024; refer to Appendix B, *Air Quality Impact Analysis*.

According to SCAQMD LST methodology, LSTs would apply to the operational phase of a proposed project, if the project includes stationary sources, or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., transfer facilities and warehouse buildings). The modified project does not include such uses, and thus, due to the lack of significant stationary source emissions, no long-term localized significance threshold analysis is warranted.

Based on the Air Quality Impact Analysis, the modified project would not result in potentially adverse CO concentrations or "hot spots". Further, detailed modeling of project-specific CO "hot spots" is not needed to reach this conclusion. It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). To establish a more accurate record of baseline CO concentrations affecting the Basin, a CO "hot spot" analysis was conducted in 2003 for four busy intersections in Los Angeles at the peak morning and afternoon time periods. This 2003 "hot spot" analysis did not predict any violation of CO standards at any of these busy intersections.

An adverse CO concentration, known as a "hot spot," would occur if an exceedance of the State one-hour standard of 20 ppm or the eight-hour standard of 9 ppm were to occur.

The ambient 1-hour and 8-hour CO concentration within the modified project study area is estimated to be 1.3 ppm and 1.0 ppm, respectively (2022 data from I-10 Near Road monitoring station). Therefore, even if the traffic volumes for the modified project were double or even triple the traffic volumes generated at the Long Beach Boulevard and Imperial Highway intersection (the nearest intersection out of the four busy intersections studied in 2003 “hot spot” analysis), coupled with the on-going improvements in ambient air quality, the modified project would not be capable of resulting in a CO “hot spot” at any study area intersections.

In December 2018, in the case of Sierra Club v. County of Fresno (2018) 6 Cal.5th 502, the California Supreme Court held that an EIR’s air quality analysis must meaningfully connect the identified air quality impacts to the human health consequences of those impacts, or meaningfully explain why that analysis cannot be provided. As the modified project’s emissions would comply with federal, State, and local air quality standards, the modified project’s emissions are not sufficiently high enough to use a regional modeling program to correlate health effects on a Basin-wide level and would not provide a reliable indicator of health effects if modeled.

In conclusion, results of the LST analysis indicate that the modified project would not exceed the SCAQMD localized significance thresholds during construction. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations during modified project construction. Additionally, the modified project would not have the potential to exceed the SCAQMD localized significance thresholds during operation as the modified project lack significant stationary source emissions. Further, modified project-related traffic would not create or result in a CO “hotspot.” Lastly, as the modified project’s emissions would comply with federal, State, and local air quality standards, they are not sufficiently high enough to use a regional modeling program to correlate health effects on a basin-wide level and would not provide a reliable indicator of health effects if modeled. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations as the result of modified project and localized impacts would be less than significant. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Odor

The modified project does not contain land uses typically associated with emitting objectionable odors. Potential odor sources associated with the modified project may result from construction equipment exhaust and the application of asphalt and architectural coatings during construction activities and the temporary storage of typical solid waste (refuse) associated with the modified project’s (long-term operational) uses. Standard construction requirements would minimize odor impacts from construction. The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction and is thus considered less than significant. It is expected that modified project-generated refuse would be stored in covered containers and removed at regular intervals in compliance

with current solid waste regulations. The modified project would also be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Therefore, odors and other emissions (such as those leading to odors) associated with construction and operations activities of the modified project would be less than significant. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Certified TOP 2050 SEIR Mitigation Measures: Not Applicable.

Addendum Project Conditions: None.

3.2.3 Biological Resources

Approved Project Findings

According to TOP 2050 SEIR, there are no sensitive plant species or wildlife movement corridors within the City. However, TOP 2050 SEIR requires all future development located within special-status wildlife critical habitat in the City, including within jurisdictional waters and wetlands, and conservation plans and areas, to conduct focused species surveys where applicable. Additionally, future projects would be required to consult and coordinate with applicable regulating agencies, including, but not limited to, U.S. Fish and Wildlife Service (USFWS), United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW), and implement necessary mitigation measures pursuant to the Federal Endangered Species Act (FESA), Migratory Bird Treaty Act of 1918 (MBTA), Clean Water Act (CWA), and California Endangered Species Act (CESA). Following the focused surveys and agency consultation, any resulting mitigation measures should be implemented. Overall, TOP 2050 SEIR determined that less than significant impacts to biological resources would result as the approved project would not grant specific entitlements for development and would not result in development of new, previously undeveloped areas of the City. No mitigation measures were required for the approved project.

Modified Project Analysis

The *Biological Technical Report for the Ontario Hotel Project, San Bernardino County, California* (Biological Technical Report), prepared by ECORP Consulting, Inc., and dated December 2024, was prepared for the modified project; refer to Appendix C, *Biological Technical Report*. The Biological Technical Report involved a literature review using the CDFW's California Natural Diversity Database (CNDDB), the California Native Plant Society's (CNPS) Electronic Inventory, the Natural Resources Conservation Service (NRCS) Web Soil Survey, NRCS Hydric Soils List, USFWS National Wetlands Inventory, and corresponding U.S. Geological Survey (USGS) topographic maps, a biological reconnaissance survey of the modified project site and 500-foot buffer conducted on June 28, 2023, and a tree inventory by a certified arborist.

Riparian Habitat and Sensitive Natural Communities

The Biological Technical Report determined that the modified project site does not contain any riparian habitat or other sensitive natural communities that would need to be preserved, is not located within a designated wildlife corridor or linkage, does not contain any State or federally protected wetlands, and is not located in a habitat conservation plan or natural community conservation plan. As such, no impacts would occur in this regard.

Special-Status Species

No special-status plant or wildlife species were observed during the site survey; however, 12 special-status plant species and 50 special-status wildlife species appeared in the literature review as occurring within five miles of the modified project site. Of the 12 special-status plant species identified, Parry's spineflower (*Chorizanthe parryi* var. *parryi*) and Brand's star phacelia (*Phacelia stellaris*) have a moderate potential to occur on-site. It is acknowledged that neither species was identified on the modified project site during the field survey and the site provides only marginally or limited amounts of suitable habitat (including soils and elevation factors). Further, Parry's spineflower and Brand's star phacelia are not federally or State-listed species. Therefore, it is not likely that the modified project would require a mechanism for "take" of federally or State-listed plant species. If present on-site, these two species are only expected to occur in very low density and modified project-related impacts would not be expected to contribute to an overall decline of populations for these species. Therefore, less than significant impacts would occur to special-status plant species.

Of the 50 special-status wildlife species identified, Crotch bumble bee (*Bombus crotchii*), southern California legless lizard (*Anniella stebbinsi*), burrowing owl (*Athene cunicularia*), northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*), and Los Angeles pocket mouse (*Perognathus longimembris brevinasus*), have a moderate potential to occur on-site. The southern California legless lizard, northwestern San Diego pocket mouse, Los Angeles pocket mouse are all CDFW species of special concern and, if present on the modified project site, these species could be subject to direct impacts through ground disturbance and indirect impacts from construction noise, vibrations, and increased human activity related to modified project development. However, due to the lack of high-quality habitat within the modified project area, the site's long history of anthropogenic disturbances, and the presence of urban development immediately adjacent to the modified site, if present on the modified project site, these species are only expected to occur in very low density and modified project-related impacts would not be expected to contribute to the overall decline of populations for these species. Therefore, impacts to southern California legless lizard, northwestern San Diego pocket mouse, Los Angeles pocket mouse would not be considered significant under CEQA,

Crotch bumble bee and burrowing owl, both candidate species for listing under CESA, were not present on the modified project site during the field survey; however, these species were determined to have moderate potential to occur based on the presence of

marginally suitable habitat and/or recent (less than 20 years old) species records within five miles of the modified project site. To ensure good faith effort and best practices are implemented during ground disturbing activities, Standard Condition of Approval (SCA) BIO-1 through SCA BIO-3 would require implementation of best management practices, including pre-construction surveys, monitoring, and other avoidance measures to reduce potential impacts to special-status wildlife species. Specifically, SCA BIO-1 requires pre-construction surveys be conducted based on established protocols provided by the CDFW and/or USFWS, SCA BIO-2 requires construction monitoring to ensure compliance with environmental regulations including the MBTA, and SCA BIO-3 requires consultation with CDFW and/or USFWS if special-status wildlife species are observed during monitoring. Thus, impacts in this regard would be less than significant.

Nesting Birds and Roosting Bats

During the tree inventory, potential nesting habitat for migratory birds and raptors protected by the MBTA and California Fish and Game Code was present in the river red gum (*Eucalyptus camaldulensis*) and Peruvian pepper trees (*Schinus mole*) scattered throughout the modified project site. Suitable nesting habitat for ground-nesting bird species, such as mourning doves, as well as suitable roosting habitat for foliage roosting bat species could occur on-site. The project would be subject to compliance with the MBTA and California Fish and Game Code regarding nesting birds. Therefore, SCA BIO-2 would require construction monitoring to ensure best practices to minimize impacts to biological resources are implemented.

The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Certified TOP 2050 SEIR Mitigation Measures: Not Applicable.

Addendum Project Conditions:

SCA BIO-1 Pre-construction Surveys. A biologist should conduct surveys for plants species covered by the San Bernardino County Development Code – Plant Protection and Management (Chapter 88.01) and special-status wildlife species (e.g., desert tortoise, Crotch bumble bee, and burrowing owl), as well as for nesting birds. Surveys should follow established protocols provided by the California Department of Fish and Wildlife (CDFW) and/or U.S. Fish and Wildlife Service (USFWS), if applicable. If special-status species or nesting birds are identified, the biologist should coordinate with CDFW and/or USFWS to develop and implement appropriate measures. These may include establishing protective buffer zones, rescheduling activities to avoid sensitive periods, or other measures.

SCA BIO-2 Construction Monitoring. During initial ground-disturbing and vegetation-clearing activities, a biologist should conduct daily clearance surveys

("sweeps") to ensure compliance with environmental regulations, including the Migratory Bird Treaty Act (MBTA). If an active bird nest, protected by the MTBA or other special-status resource is located, the biologist should establish a visible disturbance-free buffer zone around the nest or resource. Construction activities within these buffer zones should only proceed once the biologist determines the nest is no longer active.

SCA BIO-3 Response to Wildlife Observations. If special-status wildlife species are observed during monitoring, consultation with the California Department of Fish and Wildlife (CDFW) and/or U.S. Fish and Wildlife Service (USFWS) is advised to establish and implement additional protective measures. These may include further monitoring or specific work restrictions to ensure compliance with environmental regulations, including the Migratory Bird Treaty Act (MBTA) and the San Bernardino County Development Code – Plant Protection and Management (Chapter 88.01).

3.2.4 Cultural Resources

Approved Project Findings

According to TOP 2050 SEIR, implementation of TOP 2050 could impact historic resources. TOP 2050 would result in an increase in land use intensity but would not result in development in areas of the City that were not planned for development under TOP 2010. Nonetheless, historical resources categorized under the City's Development Code as Tier III could still be potentially impacted with implementation of new land uses under TOP 2050. 2010 TOP EIR Mitigation Measure 5-1 would require historic or potentially historic resources to be evaluated for historic significance through the City's Development Code tier system. Major modification or demolition of Tier III resources may be appropriate under certain circumstances. If demolition occurs, the City requires historic resources to be documented and historic features to be salvaged and requires a demolition mitigation fee. Provided that major modification or demolition of Tier III resources may still occur upon implementation of 2010 TOP EIR Mitigation Measure 5-1, the measure would not provide a high level of protection for Tier III historic resources under CEQA. Therefore, impacts to historic resources were determined to remain significant and unavoidable.

Implementation of TOP 2050 could impact archaeological resources as future development that would be accommodated by TOP 2050 could potentially unearth previously unrecorded resources. 2010 TOP EIR Mitigation Measure 5-2 would require preservation and curation of archeological resources if uncovered during development. Implementation of 2010 TOP EIR Mitigation Measure 5-2 would reduce potential impacts to archeological resources to a less than significant level.

According to TOP 2050 SEIR, grading activities would not adversely impact human remains, if accidently uncovered, because procedures are required under the Public Resources Code and California Health and Safety code. Although soil-disturbing activities

associated with development in accordance with TOP 2050 could result in the discovery of human remains, compliance with existing regulations would ensure that significant impacts to human remains would not occur.

Modified Project Analysis

The *Archaeological Resources Inventory and Evaluation Report for the Ontario Hotel Project on the East Corner of Holt Boulevard and Guasti Road, San Bernardino County, California* (Archaeological Resources Report), prepared by ECORP Consulting, Inc. and dated August 2023, was prepared to evaluate potential cultural resources impacts associated with the modified project; refer to Appendix D, *Archaeological Resources Report*. The Archaeological Resources Report included a records search for the modified project site using the California Historical Resources Information System (CHRIS) at the South-Central Coastal Information Center (SCCIC) at California State University, Fullerton; literature review, and a field survey. In addition to the official records and maps for archaeological sites and surveys in San Bernardino County, the following historic references were also reviewed during the literature review: Built Environment Resource Directory; the National Register Information System; Office of Historic Preservation, California Historical Landmarks; California Points of Historical Interest Caltrans State Bridge Inventory; and Historic Spots in California. Additionally, a search for a local historical registry was conducted at Ontario Heritage, the nearest historical society in the City of Ontario.

The records search results indicated that 22 previous cultural resources studies have been conducted within one mile of the modified project area. As a result of those studies, no archaeological resources have been previously recorded within the modified project site. Consultation with Ontario Heritage indicated the possible presence of a historic building in the modified project site; however, no structure was identified through the literature review, historic aerial and topographic map review, or field survey.

As a result of the field survey, a single historic-period isolated artifact, OH-1 (a small shard of sun-colored amethyst glass), was recorded within the modified project site. OH-1 was evaluated using the National Register of Historic Places and California Register of Historical Resources eligibility criteria and found not eligible for listing under any criteria. OH-1 does not contribute to any known or suspected historic districts; and is neither considered to be a Historic Property for the purpose of Section 106 National Historic Preservation Act (NHPA), nor a Historical Resource under CEQA. OH-1 is not listed in the local register of historical resources, as defined in PRC 5020.1(k), has not been identified as significant in a historical resources survey, as defined in PRC 5024.1(g), and has not been determined to be historically significant by the CEQA lead agency. Therefore, it is not a historical resource under CEQA and is not a historic property under Section 106 of the NHPA.

In conclusion, the records search did not yield any historic-period or pre-contact cultural resources within the modified project site. The field survey identified a single historic-period isolated find. Isolated finds are not considered Historic Properties under Section

106, nor are they considered historic properties under CEQA. Therefore, no Historic Properties under Section 106 of the NHPA or Historical Resources under CEQA would be affected by the modified project.

Due to the modified project area being covered by Holocene alluvium deposit during the period of human occupation in the Americas and the proximity to Cucamonga Creek, which was channelized during the historic period, there exists a potential for buried pre-contact and historic archaeological sites within the modified project area. However, due to a history of agricultural use, and evidence of earthmoving activities related to the Cucamonga Creek, the Interstate 10 freeway and on-ramp, the Archaeological Resources Report concluded that potential for intact historic subsurface cultural deposits is low.

Nonetheless, there is a potential for disturbing previously unknown archaeological resources during excavation into native soil materials. 2010 TOP EIR Mitigation Measure 5-2 is applicable to the modified project and would require preservation and curation of archeological resources if uncovered during development. As such, upon implementation of 2010 TOP EIR Mitigation Measure 5-2, modified project-related impacts to archeological resources would be reduced to less than significant levels.

Similar to TOP 2050, although soil-disturbing activities associated with development of the modified project could result in the discovery of human remains, compliance with existing law, including procedures are required under the Public Resources Code and California Health and Safety code, would ensure that significant impacts to human remains would not occur. No impacts would occur in this regard.

Overall, cultural impacts would be less than significant with implementation of 2010 TOP EIR Mitigation Measure 5-2. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Certified 2010 TOP EIR Mitigation Measures:

5-2 In areas of documented or inferred from evident archaeological and/or paleontological resource presence, City staff shall require applicants for development permits to provide studies to document the presence/absence of such resources. On properties where resources are identified, such studies shall provide a detailed mitigation plan, including a monitoring program and recovery and/or in situ preservation plan, based on the recommendations of a qualified cultural preservation expert. The mitigation plan shall include the following requirements:

a) Archaeologists and/or paleontologist shall be retained for the modified project and will be on call during grading and other significant ground-disturbing activities.
b) Should any cultural resources be discovered, no further grading shall occur in the area of the discovery until the Planning Director or designee

is satisfied that adequate provisions are in place to protect these resources.

c) Unanticipated discoveries shall be evaluated for significance by a San Bernardino County Certified Professional Archaeologist/Paleontologist. If significance criteria are met, then the modified project shall be required to perform data recovery, professional identification, radiocarbon dates, and other special studies; submit materials to a museum for permanent curation; and provide a comprehensive final report including a catalog with museum numbers.

Certified TOP 2050 SEIR Mitigation Measures: Not Applicable.

Addendum Project Conditions: None.

3.2.5 Energy

Approved Project Findings

According to TOP 2050 SEIR, regulatory compliance (e.g., Building Energy Efficiency Standards [commonly known as Title 24], CALGreen [California's green building code], California Renewables Portfolio Standard [RPS], and Corporate Average Fuel Economy [CAFÉ] standards) would increase building energy efficiency and vehicle fuel efficiency and reduce building energy demand and transportation-related fuel usage. Additionally, TOP 2050 includes policies related to land use and transportation planning and design, energy efficiency, public and active transit, and renewable energy generation that will contribute to minimizing building and transportation-related energy demands overall and demands on nonrenewable sources of energy. Implementation of proposed policies under TOP 2050 and City's Community Climate Action Plan (CCAP), in conjunction with regulatory requirements would ensure that energy demand associated with growth under TOP 2050 would not be inefficient, wasteful, or unnecessary. Therefore, TOP 2050 would not result in new or a substantial increase in magnitude of impacts. Furthermore, TOP 2050 includes Environmental Resources Element and Safety Element policies that would support the Statewide goal of transitioning the electricity grid to renewable sources and employ best practices regarding energy-saving standards. Therefore, implementation of TOP 2050 would not conflict with or obstruct implementation of California's RPS program. TOP 2050 SEIR determined that energy-related impacts would be less than significant.

Modified Project Analysis

The analysis of impacts related to energy use considers construction and operations of the modified project. The analysis of operational electricity and natural gas usage is based on the CalEEMod modeling results for the modified project from the Air Quality Impact Analysis. The modified project's estimated electricity and natural gas consumption is based primarily on CalEEMod's default settings for San Bernardino County and consumption factors provided by SCE and SoCalGas, the electricity and natural gas providers for the City and the modified project site, respectively. The results of the

CalEEMod modeling are included in Appendix B; results of energy use are included in Appendix E, *Energy Analysis*. The amount of operational fuel consumption was estimated using the modified project's annual vehicle miles traveled (VMT) as modeled in CalEEMod, and California Air Resources Board (CARB) Emissions Factor 2021 (EMFAC2021) website platform, which provides typical fuel efficiency for the County.

Construction

This analysis focuses on the on-road (automotive) fuel consumption associated with construction vehicle trips and off-road fuel consumption associated with construction equipment usage. The modified project's construction equipment fuel consumption is estimated from the modified project's construction equipment, timing/phasing, and hours of duration for construction equipment as modeled in CalEEMod.

The modified project's estimated construction-related energy consumption is summarized in Table 5, *Energy Consumption*.

Table 5
Energy Consumption

Energy Type	Modified Project Annual Energy Consumption[1]	San Bernadino County Annual Energy Consumption[2]	Percentage Increase Countywide
Electricity Consumption (MWh)	11,975	16,629,614	0.0720%
Natural Gas Consumption (therms)	194,008	562,123,065	0.0345%
Construction Off-Road Fuel Consumption (Gallon)	37,165	18,336,278	0.2027%
Construction On-Road Fuel Consumption (Gallon)	205,723	205,723,206	0.1000%
Operational Automotive Fuel Consumption (Gallon)	938,341	1,110,012,646	0.0845%

Notes:
1. Modified project electricity and natural gas consumptions as modeled in California Emissions Estimator Model (CalEEMod) computer model provided in Urban Crossroads, *Empire Groves Hotel Air Quality Impact Analysis, City of Ontario*, April 19, 2024; refer to Appendix B, *Air Quality Impact Analysis*. Fuel consumption calculated based on CalEEMod results.
2. The percentage increases in construction off-road and on-road fuel consumption are compared with the projected Countywide off-road fuel consumption and Countywide on-road fuel consumption in 2024 (assumed first year of construction based on CalEEMod). Countywide off-road construction equipment diesel fuel consumption and on-road fuel consumption are from CARB EMFAC2021.

Refer to Appendix E, *Energy Analysis*, for modeling outputs.

Construction would consume energy in two general forms: (1) the fuel energy consumed by construction vehicles and equipment; and (2) bound energy in construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass.

Fossil fuels used for construction vehicles and other energy-consuming equipment would be used during construction of the modified project. Fuel energy consumed during construction would be temporary and would not represent a significant demand on energy resources. In addition, some incidental energy conservation would occur during construction through compliance with State requirements that equipment not in use for more than five minutes be turned off. Construction equipment would also be required to comply with the latest U.S. Environmental Protection Agency (EPA) and CARB engine emissions standards. These emissions standards require highly efficient combustion systems that maximize fuel efficiency and reduce unnecessary fuel consumption. Due to increasing transportation costs and fuel prices, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction. There is growing recognition among developers and retailers that sustainable construction is not prohibitively expensive, and that there is a significant cost-savings potential in green building practices and materials.

The modified project-related incremental increase in the use of energy bound in construction materials, such as asphalt, steel, concrete, pipes and manufactured or processed materials (e.g., lumber and gas), would not substantially increase demand for energy compared to overall local and regional demand for construction materials. As indicated in Table 5, the modified project's off-road fuel consumption and on-road fuel consumption from construction in total would be approximately 37,165 gallons and 205,723 gallons, respectively. Consequently, the modified project's off-road construction equipment diesel fuel consumption and on-road construction fuel consumption would increase San Bernadino County's consumption by approximately 0.2027 percent and 0.1000 percent, respectively. It should be noted that the Countywide annual diesel consumption is based solely on diesel consumption for the mining and construction sector. As such, construction would have a nominal effect on the local and regional energy supplies.

Construction fuel use is temporary and would cease upon completion of construction activities. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in the region or State. Additionally, construction contractors would be required to comply with the provisions of California Code of Regulations Title 13, Sections 2449 and 2485, which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than five minutes and would minimize unnecessary fuel consumption. Construction equipment would be subject to the EPA Construction Equipment Fuel Efficiency Standard, which would also minimize inefficient, wasteful, or unnecessary fuel consumption. Furthermore, per applicable regulatory requirements, such as the current CALGreen, the modified project would comply with construction waste management practices to divert a minimum of 65 percent of construction debris. Therefore, construction fuel consumption would not be any more inefficient, wasteful, or unnecessary than other similar development projects. As such, a less than significant impact would occur.

Operations

As indicated in Table 5, the modified project's operational automotive transportation is estimated to consume approximately 938,341 gallons of fuel per year. This increase would account for 0.0845 percent of the County's forecasted annual consumption of fuel for the buildout year of 2025. As such, the modified project would account for a nominal percentage of the forecasted annual operational automotive fuel consumption for the County and, thus, would have a nominal effect on the local and regional energy supplies. The modified project does not propose any unusual features that would result in excessive long-term operational fuel consumption.

The modified project would be required to comply with the most current and applicable version of the Title 24 standards pertaining to electric vehicle (EV) capable spaces and parking stalls with EV chargers. The modified project would also include features such as bicycle parking, electric vehicle charging station, and vanpool/carpool parking, which would promote near-zero and zero-emissions technologies and encourage alternative modes of transportation. Thus, the modified project would encourage and support the use of EVs and alternative modes of transportation, thus reducing petroleum fuel consumption. Therefore, fuel consumption associated with vehicle trips generated by the modified project would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region.

The CEC developed 2024 to 2040 forecasts for energy consumption and peak demand in support of the 2023 IEPR for each of the major electricity and natural gas planning areas and the State based on the economic and demographic growth projections. CEC forecasted baseline electricity consumption grows at a rate of about 1.7 percent annually through 2040.[3] The natural gas consumption grows at a rate of about 0.2 percent annually through 2035.[4] As shown in Table 5, the modified project's operational energy consumption at full buildout would result in an annual electricity and natural gas consumption of 11,975 MWh and 194,008 therms, respectively. Table 5 also shows the increase of operational energy consumption would result in approximately 0.0720 percent increase in electricity consumption and approximately 0.0345 percent increase in natural gas consumption over the current Countywide usage. As such, energy consumption would be significantly below CEC's forecasts and the current Countywide usage. Therefore, the modified project would be consistent with the CEC's energy consumption forecasts and would not require additional energy capacity or supplies. The modified project would also consume energy during the same time periods as other surrounding residential and commercial developments. As a result, the modified project would not result in unique or more intensive peak or base period electricity demand.

The modified project would be required to comply with the most current and applicable version of the Building Energy Efficiency Standards (commonly known as Title 24), which

[3] California Energy Commission, *2023 Integrated Energy Policy Report, page 130*, July 14, 2024.

[4] Based on the *2023 Integrated Energy Policy Report*, the gas forecast is updated every two years, in odd years. As such, the natural gas consumption shown here is based on the California Energy Commission, *Final 2022 Integrated Energy Policy Report Update, page 140*, May 10, 2023.

provide minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting. The modified project would also comply with CALGreen pertaining to the installation of EV charging stations. Compliance with the most current and applicable Title 24 standards significantly reduces energy usage. Furthermore, the electricity provider, SCE, is subject to California's RPS. The RPS requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 60 percent of total procurement by 2030 and 100 percent of total procurement by 2045. Renewable energy is generally defined as energy that comes from resources which are naturally replenished within a human timescale such as sunlight, wind, tides, waves, and geothermal heat. The increase in reliance of such energy resources further ensures that new development projects will not result in the waste of the finite energy resources. In compliance with Title 24, including the CALGreen, the modified project would install high efficiency lighting and energy efficient appliances. The modified project would also include solar ready roofs. As a result, the modified project would ensure energy consumption to be kept to a minimum through these components.

Based on the analysis above, the modified project would not cause wasteful, inefficient, and unnecessary consumption of building energy during modified project operation or preempt future energy development or future energy conservation. As such, impacts resulting from the modified project would be less than significant.

Conclusion

As discussed above, impacts regarding energy consumption during construction and operation would be less than significant. Modified project implementation would not result in increased operational electricity, natural gas, or fuel consumption compared to existing conditions. Further, the modified project would be required to adhere to all applicable federal, State, and local requirements pertaining to energy efficiency during construction and operation. As such, energy impacts would be less than significant. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Certified TOP 2050 SEIR Mitigation Measures: Not Applicable.

Addendum Project Conditions: None.

3.2.6 Geology And Soils

Approved Project Findings

TOP 2050 SEIR concluded that buildout of TOP 2050 would not result in significant geology and soils impacts. Development in accordance with TOP 2050 would be subject to potential impacts from ground shaking, liquefaction, seismically induced settlement,

ground subsidence, compressible soils, expansive soils, and erosion. TOP 2050 would be subject to its Safety Element and the Municipal Code, which would ensure that geology and soils impacts are reduced to less than significant levels.

With regard to paleontological resources, future development in accordance with TOP 2050 would be required to implement 2010 TOP EIR Mitigation Measure 5-2, which requires that, in the event of an unanticipated discovery of archaeological resources during grading and excavation of a site, a qualified archaeologist is required to assess the find and develop a course of action to preserve the find. Accordingly, 2010 TOP EIR Mitigation Measure 5-2 would reduce potential impacts to paleontological resources to a level that is less than significant.

Modified Project Analysis

The *Preliminary Geotechnical Evaluation, Proposed Empire Resort And Spa Project, Approximately 10.4 Acres Of Vacant Land At Southeast Corner Of E. Holt Boulevard And E. Guasti Road, APN 011 032 233, City Of Ontario, San Bernardino, California* (Geotechnical Evaluation), prepared by Petra Geosciences, Inc. and dated February 10, 2023, was prepared to evaluate potential geology and soils impacts associated with the modified project; refer to Appendix F, *Geotechnical Evaluation*.

Faulting

According to the Geotechnical Evaluation, no active or potentially active faults are known to underly the modified project site and the site does not lie within the bounds of an "Earthquake Fault Zone" as defined by the State of California in the Alquist-Priolo (AP) Earthquake Fault Hazard Zoning Act nor within a San Bernardino County fault zone. In addition, no features in the field were observed that would indicate active faulting. The closest known Quaternary fault is the Red Hill – Etiwanda fault which lies approximately 1,500 feet to the north. As such, the Geotechnical Evaluation concluded that the potential for active fault rupture at the site is considered to be very low; no impacts would occur in this regard.

Seismic Ground Shaking

As discussed above, no active or potentially active faults are known to underly the modified project site and the site does not lie within the bounds of an "Earthquake Fault Zone" nor within a San Bernardino County fault zone. The closest known Quaternary fault is the Red Hill – Etiwanda fault which lies approximately 1,500 feet to the north. Nonetheless, Southern California has numerous active seismic faults subjecting residents to potential earthquake and seismic-related hazards. Therefore, the modified project is anticipated to experience moderate to occasionally high levels of ground motion from nearby faults as well as ground motions from other active seismic areas of the Southern California region.

According to TOP 2050 SEIR, projects considered for approval under TOP 2050 (e.g.,

the modified project) would be required to comply with seismic safety provisions of the California Building Code (CBC) (Title 24, Part 2 of the California Code of Regulations). Such compliance would minimize potential hazards arising from ground shaking. As such, less than significant impacts would occur in this regard.

Liquefaction

According to the Geotechnical Evaluation, the County has identified the general modified project area within a low liquefaction zone. Further, groundwater level is reported at depths of greater than 300 feet below ground surface (bgs). Considering the very dense underlying older alluvial fans deposits that underlay the modified project site, the Geotechnical Evaluation concluded that risks pertaining to liquefaction-induced settlement is considered negligible. As such, no impacts would occur in this regard.

Landslides

According to the Geotechnical Evaluation, the modified project site exhibits nearly level topography that is not subject to landslides. As such, no impacts would occur in this regard.

Soil Erosion

Construction of the modified project would require compliance with the CBC and review of grading plans for individual projects by the City Engineer to ensure no significant impacts regarding soil erosion would occur. In addition, the modified project is required to comply with the requirements of the State's Construction General Permit (CGP), including preparation of a notice of intent and stormwater pollution prevention Plan (SWPPP). Additionally, the modified project would be required to control pollutants in stormwater discharges per the *Water Quality Management Plan for: Empire Hotel, APN: 001032233* (WQMP), prepared by Kimley-Horn and Associates, Inc.; refer to Appendix H, *Hydrology Report/WQMP*. This would include implementation of non-structural and structural source Best Management Practices (BMPs). Following compliance with the existing regulations and implementation of the WQMP, impacts pertaining soil erosion would be minimized, and a less than significant impact would occur in this regard.

Lateral Spreading, Subsidence, or Collapse Associated With Unstable Soil

Lateral spreading is seismically-induced slope instability phenomenon wherein slope failure can occur as a result of liquefaction. According to the Geotechnical Evaluation, risks pertaining to liquefaction-induced settlement is considered negligible. Subsequently, risks pertaining to lateral spreading would also be considered negligible; as such, no impacts would occur in this regard.

Land subsidence may be induced from withdrawal of oil, gas, or water from wells. Based on a search of the California Department of Conservation, Geologic Energy Management Division's (CalGEM) online mapping application Well Finder, there are no active oil or gas

wells within a mile of the site. According to the Phase I ESA prepared for the modified project, the closest mapped well to the modified project site (Chino-1002337) is mapped on the north side of I-10, approximately 3,300 feet to the northeast. Further, groundwater level is reported at depths of greater than 300 feet bgs. Considering the very dense underlying older alluvial fans deposits that underlay the modified project site and the distance to the nearest water well, the likelihood of land subsidence is low. As such, impacts in this regard would be less than significant.

According to the Geotechnical Evaluation, a notable geotechnical factor affecting the modified project site is the presence of existing artificial fills and low density and dry, younger alluvial soils. For relatively light-weight structures, these upper materials, ranging in depth from approximately six to ten feet bgs across the majority site, in their current state are not considered suitable for support of anticipated loads. Therefore, the Geotechnical Evaluation recommended that these materials be removed to an approximate depth of 10 feet and replaced with engineered fill. Any such building may be supported on a shallow spread footing system embedded in compacted fill soils. The lower approximately 10 feet of the younger alluvial soils are not expected to be suitable for the support of the main, moderate- to high-rise structure. However, a portion of the proposed structure is expected to be supported on footings that are within the two-story subterranean parking. As such, no remedial grading (i.e., over-excavation and replacement) is deemed necessary in this area. Conversely, depending on the anticipated loads, considerations may be given to removing the upper approximately 15 to 20 feet of soils consisting of younger alluvial fan deposits to support the other parts of the proposed main structure. Accordingly, the Geotechnical Evaluation recommends that these materials be removed (over-excavation) to expose the underlying competent older alluvial fan deposits, which shall be verified in the field by the geotechnical consultant. Upon implementation of recommendations as provided in the Geotechnical Evaluation, impacts pertaining to collapsible soils would be less than significant.

As such, impacts pertaining to unstable soils would be less than significant upon implementation of recommendations as provided in the Geotechnical Evaluation.

Expansive Soil

According to the Geotechnical Evaluation, on-site soils are sandy and silty with generally a very low to low expansive potential. As such, no impacts would occur in this regard.

Septic Tanks or Alternative Wastewater Disposal System

The modified project does not propose any septic tanks or alternative wastewater disposal systems. The modified project proposes to install a sewer line on-site to connect to an existing 12-inch sewer main in East Holt Boulevard. As such, no impacts would occur in this regard.

Paleontological Resources

Based on the Archaeological Resources Report, the modified project area is comprised of late Pleistocene and early Holocene alluvium, which is characterized by slightly to moderately consolidated deposits consisting mostly of fine to coarse-grained sand, but with thin beds of pebbles, gravels, or silt. Most of the vicinity is alluvial fans and stream valleys removed from mountains. According to the Archaeological Resources Report, there exists the potential for buried pre-contact archaeological sites within the modified project area due to the presence of deep soils deposited during the Holocene period and the likelihood of pre-contact archaeological sites located along perennial waterways such as Cucamonga Creek, which is currently restrained in a constructed channel that forms the eastern boundary of the modified project site. In accordance with TOP 2050 SEIR, the modified project would be required to implement 2010 TOP EIR Mitigation Measure 5-2, which requires that in the event of an unanticipated discovery of paleontological resources during grading and excavation of the site, a qualified paleontologist would assess the find and develop a course of action to preserve the find. Accordingly, 2010 TOP EIR Mitigation Measure 5-2 would reduce potential impacts to paleontological resources to a level that is less than significant.

Conclusion

As detailed above, the modified project would result in less than significant or no geology and soils impacts including those associated with fault rupture; seismic ground shaking; liquefaction; landslides; soil erosion; unstable soils and associated lateral spreading, subsidence, or collapse; expansive soil; and unsupported septic systems. With regard to paleontological resources, the modified project would be required to implement 2010 TOP EIR Mitigation Measure 5-2, which requires that, in the event of an unanticipated discovery of archaeological resources during grading and excavation of a site, a qualified archaeologist is required to assess the find and develop a course of action to preserve the find. Accordingly, 2010 TOP EIR Mitigation Measure 5-2 would reduce potential impacts to paleontological resources to a level that is less than significant. Overall, impacts pertaining to geology and soils would be less than significant. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Certified 2010 TOP EIR Mitigation Measures:

5-2 In areas of documented or inferred from evident archaeological and/or paleontological resource presence, City staff shall require applicants for development permits to provide studies to document the presence/absence of such resources. On properties where resources are identified, such studies shall provide a detailed mitigation plan, including a monitoring program and recovery and/or in situ preservation plan, based on the

recommendations of a qualified cultural preservation expert. The mitigation plan shall include the following requirements:

a) Archaeologists and/or paleontologist shall be retained for the modified project and will be on call during grading and other significant ground-disturbing activities.
b) Should any cultural resources be discovered, no further grading shall occur in the area of the discovery until the Planning Director or designee is satisfied that adequate provisions are in place to protect these resources.
c) Unanticipated discoveries shall be evaluated for significance by a San Bernardino County Certified Professional Archaeologist/Paleontologist. If significance criteria are met, then the modified project shall be required to perform data recovery, professional identification, radiocarbon dates, and other special studies; submit materials to a museum for permanent curation; and provide a comprehensive final report including a catalog with museum numbers.

Certified TOP 2050 SEIR Mitigation Measures: Not Applicable.

Addendum Project Conditions: None.

3.2.7 Greenhouse Gas Emissions

Approved Project Findings

According to TOP 2050 SEIR, with implementation of the City's Community Climate Action Plan (CCAP), TOP 2050 would achieve the State's GHG emissions efficiency target without implementation of additional local GHG reduction measures. Goals and policies in TOP 2050 and actions in the CCAP would minimize GHG emissions generated by the residential and nonresidential land uses in the City. Implementation of TOP 2050 would not obstruct implementation of the CARB Scoping Plan or interfere with SCAG's ability to implement the regional strategies in the 2020-2045 RTP/SCS. Overall, TOP 2050 would not result in significant unavoidable adverse impacts related to GHG emissions with implementation of regulatory requirements and standard conditions of approval, as well as the City's CCAP. Less than significant impacts would occur in this regard.

Modified Project Analysis

The *Empire Groves Hotel Greenhouse Gas Analysis, City of Ontario* (GHG Analysis), prepared by Urban Crossroads and dated September 9, 2024, was prepared to evaluate potential greenhouse gas impacts associated with the modified project; refer to Appendix G, *GHG Analysis*.

Threshold of Significance

The City of Ontario adopted the CCAP on December 16, 2014. The CCAP contains further guidance on the City's GHG Inventory reduction goals, policies, guidelines, and implementation programs. The purpose of the CCAP is to provide guidance on how to analyze GHG emissions and determine significance during the CEQA review of proposed development projects within the City of Ontario. The CCAP builds upon the Reduction Plan to address City-specific information and City-specific GHG reduction measures. To address the State's requirement to reduce GHG emissions, the City prepared the CCAP with the goal of reducing GHG emissions within the City by 15 percent below 2008 levels by the year 2020. The City's target is consistent with the AB 32 target and ensures that the City o achieves GHG reductions locally that complement and are consistent with State efforts to reduce GHG emissions.

As part of the CCAP, the City published a guidance document titled *Greenhouse Gas Emissions, CEQA Thresholds and Screening Tables* in December 2014. As part of this guidance, the City determined that if GHG emissions of a given project exceeds 3,000 metric tons of carbon dioxide equivalents ($MTCO_2e$) per year, then project emissions would need to be reduced by 25 percent when compared to year 2008 emissions levels. Alternatively, the project would need to achieve a minimum of 100 points pursuant to measures identified in the Screening Tables.

TOP 2050 includes an update to the City's CCAP (CCAP Update) originally adopted in 2014. The CCAP Update is a plan to reduce GHG emissions and improve community resilience to hazardous conditions associated with climate change. The CCAP Update includes updated emissions inventories; updated emissions forecasts; identifies GHG emissions reduction targets to achieve the GHG reduction goals of the City consistent with Senate Bill 32, Executive Order S-03-05, and substantial progress toward the State's carbon neutrality goals of Executive Order B-55-18; and measures, that when quantified, achieve the GHG reduction targets for the City. As noted in TOP 2050 SEIR, the measures included in the CCAP Update are not substantially different than that of the previous CCAP and therefore, there is no change in the environmental impacts associated with the CCAP Update. Because the CCAP Update addresses GHG emissions reductions and is consistent with the requirements of AB 32, SB 32, and international efforts to reduce GHG emissions, projects that comply with the CCAP Update would have a less than significant GHG impact.

GHG Emissions

CalEEMod version 2022.1.1.22 was used to calculate modified project-related GHG emissions. Output from the model runs for construction and operational activity are provided in Appendix G. CalEEMod includes GHG emissions from the following source categories: construction, area, energy, mobile, waste, water, and refrigerants.

The modified project's construction activities would generate CO_2 and CH_4 emissions. For construction phase emissions, GHGs are quantified and amortized over the life of the

modified project. To amortize the emissions over the life of a project, the SCAQMD recommends calculating the total GHG emissions for the construction activities, dividing it by a 30-year project life then adding that number to the annual operational phase GHG emissions. As such, construction emissions were amortized over a 30-year period and added to the annual operational phase GHG emissions. Operational activities associated with the modified project would result in emissions of CO_2, CH_4, N_2O, and refrigerants from the following direct and indirect primary sources:

- *Area Source Emissions*: Direct GHG emissions from area sources are mostly associated with landscape maintenance equipment. Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shedders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of a project.
- *Energy Source Emissions*: Direct GHG emissions from energy sources are mostly associated with combustion emissions associated with natural gas and electricity.
- *Mobile Source Emissions*: Direct GHG emissions from mobile sources are mostly associated with vehicle trips, including employee trips to and from the site associated with the proposed uses. Trip characteristics available from the modified project-specific traffic impact analysis.
- *Water Supply, Treatment, and Distribution*: Indirect GHG emissions result from the production of electricity used to convey, treat, and distribute water and wastewater. The amount of electricity required to convey, treat, and distribute water depends on the volume of water as well as the sources of the water.
- *Solid Waste*: The proposed land uses would result in the generation and disposal of solid waste. A percentage of this waste would be diverted from landfills by a variety of means, such as reducing the amount of waste generated, recycling, and/or composting. The remainder of the waste not diverted would be disposed of at a landfill. GHG emissions from landfills are associated with the anaerobic breakdown of material. GHG emissions associated with the disposal of solid waste associated with the modified project were calculated by CalEEMod using default parameters.
- *Refrigerants*: Air conditioning (A/C) and refrigeration equipment associated with the buildings are anticipated to generate GHG emissions. CalEEMod automatically generates a default A/C and refrigeration equipment inventory for each project land use subtype based on industry data from the U.S. Environmental Protection Agency. CalEEMod quantifies refrigerant emissions from leaks during regular operation and routine servicing over the equipment lifetime and then derives average annual emissions from the lifetime estimate. Note that CalEEMod does not quantify emissions from the disposal of refrigeration and A/C equipment at the end of its lifetime. GHG emissions associated with refrigerants were calculated by CalEEMod using default parameters.

The modified project's anticipated GHG emissions are identified in Table 6, *Estimated Greenhouse Gas Emissions*. As shown, construction and operation of the modified project would generate approximately 9,661.88 $MTCO_2e$ per year.

Table 6
Estimated Greenhouse Gas Emissions

Emission Source	CO_2	CH_4	N_2O	Refrigerants	CO_2e
	Metric Tons/year[1]				
Annual construction-related emissions amortized over 30 years	85.04	0.00565	0.00736	0.0940	87.47
Mobile Source	6,302.52	0.32	0.32	10.69	6,415.24
Area Source	22.02	0.00	0.00	0.00	22.10
Energy Source	2,923.18	0.27	0.02	0.00	2,936.99
Water Source	21.21	0.50	0.01	0.00	37.19
Waste	29.31	2.93	0.00	0.00	102.55
Refrigerants	0.00	0.00	0.00	60.33	60.33
Total CO_2e (All Sources)	***9,661.88 $MTCO_2e$ per year***				

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent

Source: Urban Crossroads, *Empire Groves Hotel Greenhouse Gas Analysis, City of Ontario*, April 19, 2024; refer to Appendix G, *GHG Analysis*.

The purpose of the CCAP Update is to provide guidance on how to analyze GHG emissions and determine significance during the CEQA review of proposed development projects within the City. Because the CCAP Update addresses GHG emissions reductions and is consistent with the requirements of AB 32, SB 32, and international efforts to reduce GHG emissions, compliance with the CCAP Update fulfills the description of mitigation found in the State CEQA Guidelines.

The modified project would implement Screening Table Measures that achieve the requisite points as a project design feature as detailed above in Section 2.3, *Modified Project Description*. The City would verify that the Screening Table Measures achieving the requisite points are incorporated in the modified project plans prior to issuance of building permits and are appropriately implemented prior to issuance of certificates of occupancy. Appendix 3.2, *CCAP Screening Tables*, of Appendix G identifies potential CCAP Screening Table Measures to be implemented by the modified project. As such, the modified project would be consistent with CCAP Update and is considered to have a less than significant individual and cumulatively considerable impact regarding GHG emissions.

Certified TOP 2050 SEIR Mitigation Measures: Not Applicable.

Addendum Project Conditions: None.

3.2.8 Hydrology And Water Quality

Approved Project Findings

According to TOP 2050 SEIR, the approved project would not exacerbate risk of flood hazards, tsunamis, or seiches or risk release of pollutants due to inundation. However, future development in the City would increase impervious areas, thus increasing runoff and flows into storm drainage systems. As such, TOP 2050 SEIR requires all future

development to prepare hydrology and hydraulic studies in accordance with the County Hydrology Manual and analyze stormwater flows that result from the 100-year storm event to ensure that the capacities of existing and planned storm drain systems are not exceeded. Additionally, future projects would be required to comply with the Santa Ana Regional Water Quality Control Board (RWQCB) multiple separate storm sewer system (MS4) permit and the San Bernardino County Stormwater Program. Upon implementation of regulatory requirements, including low impact design strategies and construction and post-construction best management practices, and TOP 2050 policies and programs, the approved project would result in less than significant impacts to hydrology and water quality, and no mitigation measures were required for the approved project.

Modified Project Analysis

The *Preliminary Hydrology Report for Diversified Empire Hotel, APN: 0010-322-33, Southeast of Holt Blvd and Guasti Road* (Hydrology Report), prepared by Kimley-Horn and Associates, Inc., and dated October 2023, and the *Water Quality Management Plan for: Empire Hotel, APN: 001032233* (WQMP), prepared by Kimley-Horn and Associates, Inc., were prepared for the modified project; refer to Appendix H, *Hydrology Report/WQMP*.

The modified project site consists of vacant, undeveloped land. According to the Hydrology Report, the modified project site is located within Zone X per the Federal Emergency Management Administration (FEMA) Flood Insurance Rate Map (FIRM), indicating that the site has a 0.2 percent annual chance of flood hazard; as such, potential flooding hazards would be less than significant in this regard.

Currently, the modified project site generally drains in the southeast direction with two main drainage areas (DAs). Runoff from DA 1 flows southeast towards Guasti Road, where there is a curb and gutter on the other side of the road with an existing catch basin, as well as a 108-inch storm drain line that collects stormwater for nearby properties. Runoff from DA 2 flows to the east towards the Cucamonga Channel. Current pre-development flows are detailed in Hydrology Report Table 1, *Pre-Development Flows*, for the 10- and 100-year storm events.

Following implementation of the modified project, the modified project site would consist of one main drainage area comprised of five sub-areas. Runoff from the drainage sub-areas would be intercepted by a combination of trench drains, area drains, and curb inlets, which would then be conveyed into a proposed underground detention system located southeast of the site. A stormwater pump is also proposed in the southeast side to pump runoff into the proposed underground detention system to be treated and conveyed into the existing 108-inch storm drain line in Guasti Road. Unmitigated post-development flows are detailed in Hydrology Report Table 2, *Post-Development Flows (Un-Mitigated)*. With the proposed underground detention system and stormwater pump, the Hydrology Report concluded that the modified project would not cause a significant impact to downstream systems and discharges would be less than existing conditions. Therefore, the modified project would not increase the severity or permanence of impacts related to

the City's storm drain system, and no new impacts would occur. No new mitigation measures are required.

Similar to the approved project, in order to minimize impacts to erosion on-site, the modified project would be required to comply with the requirements of the State's CGP, including preparation of a notice of intent and SWPPP. Additionally, the modified project would be required to control pollutants in stormwater discharges per the WQMP prepared for the modified project. This would include implementation of non-structural and structural source BMPs, including LID requirements consistent with the Santa Ana RWQCB MS4 and National Pollutant Discharge Elimination System (NPDES) program. Following compliance with the existing regulations and implementation of the WQMP, water quality standards and waste discharge requirements would not be exceeded, and surface water and groundwater quality would not be degraded. The modified project would not result in a new significant environmental effect or substantial increase the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Certified TOP 2050 SEIR Mitigation Measures: Not Applicable.

Addendum Project Conditions: None.

3.2.9 Land Use and Planning

Approved Project Findings

TOP 2050 SEIR concluded that the approved project's impacts related to land use and planning would be less than significant. Although the approved project would change existing land use designations, implementation of TOP 2050 would ensure compatibility among adjacent land uses to establish a sense of community and enhance the City's character; overall, it was determined that the approved project would not divide an established community. Additionally, the approved project was found to be consistent with the SCAG 2020-2045 RTP/SCS, the ONT ALUCP, and the *Chino Airport Master Plan*.

Modified Project Analysis

The modified project proposes a Specific Plan that establishes a development plan, development standards, and design guidelines to guide development within the Specific Plan area. The modified project site is bound on all sides by existing roadways to the north, south, and west, and by the Cucamonga Channel to the east. Therefore, the modified project would not physically divide an established community.

The modified project would be consistent with the envisioned buildout of the site's MU-Multimodal designation and Ontario Airport Metro Center Overlay by TOP 2050. As detailed in Section 2.2, TOP 2050 anticipates full buildout of the project site's MU-Multimodal designation to be approximately 2,449,727 square feet of nonresidential uses (553,124 square feet for lodging and 1,896,603 square feet for retail and office

development). As shown in Table 1, the proposed Specific Plan buildout would result in 553,124 square feet of hotel use and 46,876 square feet of local-serving retail use. Thus, the project would be within TOP 2050 buildout assumptions for the project site. Additionally, the modified project would contribute towards the Ontario Airport Metro Center Overlay vision providing an intensive development with vertical and horizontal mixtures of regional-serving uses. Further, the proposed Specific Plan would be consistent with the site's SP zoning. The proposed development would also be adjacent to similar uses, including hotels to the north and west.

Development within the City is also subject to applicable ONT ALUCP land use compatibility standards. The modified project is required to undergo the ONT Inter-Agency Notification Process with the ONT Airport Authority to ensure consistency with policies set forth in the ONT ALUCP. As described in Section 3.2.1, *Aesthetics/Light and Glare*, and Section 3.2.10, *Noise*, the modified project would be consistent with building height and noise-related hazards policies detailed in the ONT ALUCP. In addition to the ONT-IAC approval, the modified project would also require Federal Aviation Administration approval of the proposed building height per Federal Aviation Regulation Part 77, Subpart B, and by the California Public Utilities Code, Sections 21658 and 21659. Thus, the modified project would not conflict with applicable land use plans, policies, or regulations, and impacts would be less than significant.

Overall, the modified project would not result in a new significant environmental effect or substantial increase the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Certified TOP 2050 SEIR Mitigation Measures: Not Applicable.

Addendum Project Conditions: None.

3.2.10 Noise

Approved Project Findings

According to TOP 2050 SEIR, construction activities associated with buildout of TOP 2050 would result in temporary noise increases at sensitive receptors during construction activities and could create groundborne vibration during construction activities in excess of established standards. 2010 TOP EIR Mitigation Measure 12-4 would reduce potential impacts associated with construction from individual development projects to the extent feasible, and 2010 TOP EIR Mitigation Measure 12-2 would reduce potential impacts associated with construction vibration from individual development projects to the extent feasible. However, due to the potential for proximity of construction activities to sensitive uses, the number of construction projects occurring simultaneously, and the potential duration of construction activities, TOP 2050 could still result in a temporary substantial increase in noise levels above ambient conditions and exceedance of the 80 dBA L_{eq} threshold and generate excessive vibration levels at sensitive receptor locations.

Therefore, TOP 2050 SEIR concluded that construction noise and vibration impacts in accordance with TOP 2050 would remain significant and unavoidable.

Buildout associated with TOP 2050 would not result in new types of stationary noise sources. Furthermore, TOP 2050 includes Safety Element Policy S-4.1, *Noise Mitigation*, which utilizes the City's Noise Ordinance, building codes, and subdivision and development code regulations to reduce noise from future development projects. As such, stationary noise impacts would be less than significant. In regard to transportation noise, TOP 2050 traffic noise level increase along studied roadway segments in the City would not result in the exceedance of the significance threshold when other noise sources such as rail have been taken into considerations. Additionally, TOP 2050 includes Safety Element Policies S-4.2, *Coordination with Transportation Authorities*, S-4.4, *Truck Traffic*, and S-4.5, *Roadway Design*, that would minimize traffic noise impacts. As such, transportation noise impacts would be less than significant. Moreover, according to TOP 2050 SEIR, TOP 2050's commercial and industrial operations would not generate significant vibration impacts, and vibration from industrial and commercial operations would be less than significant.

According to TOP 2050 SEIR, implementation of TOP 2050 could expose noise sensitive uses to excessive noise levels from the Ontario International Airport. With the implementation of 2010 TOP EIR Mitigation Measure 12-1, impacts to future sensitive receptors from excessive airport-related noise would be reduced to interior noise levels of 45 dBA Community Noise Equivalent Level (CNEL) or less. While interior noise levels are required to achieve the interior noise limits of Title 24 and Title 25, exterior noise levels may continue to exceed the noise compatibility criteria for the City. Consequently, TOP 2050 SEIR concluded that airport noise compatibility impacts would remain significant and unavoidable.

Modified Project Analysis

The *Empire Groves Hotel Noise Impact Analysis, City of Ontario* (Noise Impact Analysis), prepared by Urban Crossroads and dated May 13, 2024, was prepared to evaluate potential noise impacts associated with the modified project; refer to Appendix I, *Noise Impact Analysis*.

Significance Criteria

Noise impacts shall be considered significant if any of the following occur as a direct result of the proposed development. Table 7, *Significance Criteria Summary*, shows the significance criteria summary matrix that includes the allowable criteria used to identify potentially significant incremental noise level increases.

Table 7
Significance Criteria Summary

	Land Use	Condition(s)	Significance Criteria	
			Daytime	Nighttime
On-Site Traffic Noise	All	Exterior Noise Level Criteria From *TOP 2050 LU-07 Noise Level Exposure and Land Use Compatibility Guidelines*	See Noise Impact Analysis Exhibit 3-A	
	Residential	Interior Noise Level Standard From *TOP 2050 LU-07 Noise Level Exposure and Land Use Compatibility Guidelines*	45 dBA CNEL	
	Non-Residential	Interior Noise Level Standard From *TOP 2050 LU-07 Noise Level Exposure and Land Use Compatibility Guidelines*	50 dBA CNEL	
Off-Site	Noise Sensitive	if ambient is < 60 dBA CNEL	≥ 5 dBA CNEL increase	
		if ambient is 60-65 dBA CNEL	≥ 3 dBA CNEL increase	
		if ambient is > 65 dBA CNEL	≥ 1.5 dBA CNEL increase	
	Non-Noise Sensitive	if ambient is > 75 dBA CNEL	≥ 3 dBA CNEL increase	
Operational	Residential	Exterior Noise Level Limit From City of Ontario Municipal Code Section 5-29.09(a)	55 dBA L_{eq}	45 dBA L_{eq}
	Commercial		65 dBA L_{eq}	60 dBA L_{eq}
	Noise Sensitive	if ambient is < 60 dBA L_{eq}	≥ 5 dBA L_{eq} increase	
		if ambient is 60-65 dBA L_{eq}	≥ 3 dBA L_{eq} increase	
		if ambient is > 65 dBA L_{eq}	≥ 1.5 dBA L_{eq} increase	
Construction	Residential	Noise Level Thresholds From FTA's *Transit Noise and Vibration Impact Assessment Manual*.	80 dBA L_{eq}	70 dBA L_{eq}
	Commercial		85 dBA L_{eq}	80 dBA L_{eq}
	Commercial	Vibration Level Thresholds From Caltrans' *Transportation and Construction Vibration Manual*.	0.5 PPV (in/sec)	n/a
Airport Noise	Long- and Short-Term Lodging	Exterior Noise Level Criteria From *TOP 2050 LU-07 Noise Level Exposure and Land Use Compatibility Guidelines*	70 dBA CNEL	
		Interior Noise Level Standard From *TOP 2050 LU-07 Noise Level Exposure and Land Use Compatibility Guidelines*	45 dBA CNEL	

Source: Urban Crossroads, *Empire Groves Hotel Noise Impact Analysis, City of Ontario*, May 13, 2024; refer to Appendix I, *Noise Impact Analysis*.

Construction Noise

This section analyzes potential impacts resulting from the short-term construction activities associated with the development of the modified project. According to Section 5-29.09, *Construction activity noise regulations*, of the Municipal Code states: No person, while engaged in construction, remodeling, digging, grading, demolition or any other related building activity, shall operate any tool, equipment or machine in a manner that produces loud noise that disturbs a person of normal sensitivity who works or resides in the vicinity, or a Police or Code Enforcement Officer, on any weekday except between the hours of 7:00 a.m. and 6:00 p.m. or on Saturday or Sunday between the hours of 9:00 a.m. and 6:00 p.m. In addition, neither TOP 2050 or the Municipal Code establish numeric maximum acceptable construction source noise levels at potentially affected receivers for CEQA analysis purposes. Therefore, a numerical construction threshold based on the

Federal Transit Administration (FTA) *Transit Noise and Vibration Impact Assessment Manual* is used for analysis of daytime construction impacts. The FTA considers a daytime exterior construction noise level of 80 dBA L_{eq} as a reasonable threshold for noise sensitive residential land use.

Noise generated by the modified project construction equipment would include a combination of trucks, power tools, concrete mixers, and portable generators that when combined can reach high levels. The number and mix of construction equipment are expected to occur in the following stages:

- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

To describe construction noise activities, this construction noise analysis was prepared using reference construction equipment noise levels from the Federal Highway Administration (FHWA) published the Roadway Construction Noise Model (RCNM), which includes a national database of construction equipment reference noise emission levels. The RCNM equipment database, provides a comprehensive list of the noise generating characteristics for specific types of construction equipment. In addition, the database provides an acoustical usage factor to estimate the fraction of time each piece of construction equipment is operating at full power (i.e., its loudest condition) during a construction operation.

Using the reference construction equipment noise levels from RCNM and the CadnaA noise prediction model, calculations of the modified project construction noise level impacts at the nearby sensitive receiver locations were completed; refer to Appendix I for detailed CadnaA construction noise model inputs. For construction noise assessment, construction equipment can be considered to operate in two modes: stationary and mobile. As defined, stationary equipment operates in a single location for one or more days at a time, with either fixed-power operation (e.g., pumps, generators, and compressors) or variable-power operation (e.g., pile drivers, rock drills, and pavement breakers). Mobile equipment moves around the construction site with power applied in cyclic fashion, such as bulldozers, graders, and loaders. The FTA and FHWA recommend noise impacts from stationary equipment be assessed from the center of the equipment location, while noise impacts from mobile construction equipment should be assessed from the center of the equipment activity area (e.g., construction site). Thus, to assess a more realistic and reasonable worst-case construction scenario while accounting for the dynamic nature of construction activities, this construction noise analysis models the equipment combination with the highest reference combined level as a moving point within the construction area (modified project site boundary). Construction impacts are based on the highest noise level calculated at each receiver location. To evaluate whether the modified project would generate potentially significant short-term noise levels at nearest receiver locations, a construction-related daytime noise level threshold of 80 dBA

L_{eq} is used as a reasonable threshold to assess the daytime construction noise level impacts at residential locations.

As shown in Table 8, *Construction Equipment Noise Level Summary*, the construction noise levels are expected to range from 34.4 to 60.0 dBA L_{eq}, and the highest construction levels are expected to range from 40.4 to 60.0 dBA L_{eq} at the nearest receiver locations.

Table 8
Construction Equipment Noise Level Summary

Receiver[1]	Construction Noise Levels (dBA L_{eq})						Threshold	Threshold Exceeded ?
	Site Preparation	Grading	Building Construction	Paving	Architectural Coating	Highest Levels		
R1	57.0	60.0	58.0	60.0	54.0	60	80	No
R2	39.5	42.5	40.5	42.5	36.5	42.5	80	No
R3	56.3	59.3	57.3	59.3	53.3	59.3	80	No
R4	42.5	45.5	43.5	45.5	39.5	45.5	80	No
R5	37.4	40.4	38.4	40.4	34.4	40.4	80	No

Notes:
1. Noise receiver locations are shown on Noise Impact Analysis Exhibit 9-A, *Construction Noise Source And Receiver Locations*; refer to Appendix I, *Noise Impact Analysis*.

Source: Urban Crossroads, *Empire Groves Hotel Noise Impact Analysis, City of Ontario*, May 13, 2024; refer to Appendix I, *Noise Impact Analysis*.

As shown in Table 8, the construction noise levels at the nearest receiver locations would not exceed the daytime significance thresholds. Therefore, construction noise impacts would be less than significant at all receiver locations. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Construction Vibration

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods used, distance to the affected structures and soil type. It is expected that ground-borne vibration from modified project construction activities would cause only intermittent, localized intrusion. Ground-borne vibration levels resulting from typical construction activities occurring within the modified project site were estimated by data published by the FTA and California Department of Transportation (Caltrans). However, while vehicular traffic is rarely perceptible, construction has the potential to result in varying degrees of temporary ground vibration, depending on the specific construction activities and equipment used. Based on the representative vibration levels presented for various construction equipment types, it is possible to estimate the potential construction vibration levels using vibration assessment methods defined by Caltrans.

Vibration-generating activities are appropriately evaluated using the Caltrans vibration damage thresholds to assess potential temporary construction-related impacts at

adjacent building locations. The nearest noise sensitive buildings adjacent to the modified project site can best be described as “modern industrial/commercial buildings” with a maximum acceptable continuous vibration threshold of 0.5 PPV (in/sec).

Ground vibration levels associated with various types of construction equipment at each nearby receiver locations are summarized in Table 9, *Construction Vibration Levels*.

Table 9
Construction Vibration Levels

Receiver[1]	Distance (Feet)[1]	Construction Noise Levels (dBA L_{eq})					Threshold PPV (in/sec)[4]	Threshold Exceeded ?
		Site Preparation	Grading	Building Construction	Paving	Highest Levels		
R1	176	<0.01	<0.01	<0.01	<0.01	<0.01	0.50	No
R2	2,802	<0.01	<0.01	<0.01	<0.01	<0.01	0.50	No
R3	237	<0.01	<0.01	<0.01	<0.01	<0.01	0.50	No
R4	1,968	<0.01	<0.01	<0.01	<0.01	<0.01	0.50	No
R5	3,593	<0.01	<0.01	<0.01	<0.01	<0.01	0.50	No

Notes:
1. Noise receiver locations are shown on Noise Impact Analysis Exhibit 9-A, *Construction Noise Source And Receiver Locations*; refer to Appendix I, *Noise Impact Analysis*. Distances are measured from receiver locations to the nearest construction boundary (modified project site boundary).

Source: Urban Crossroads, *Empire Groves Hotel Noise Impact Analysis, City of Ontario*, May 13, 2024; refer to Appendix I, *Noise Impact Analysis*.

At distances ranging from 176 feet to 3,593 feet from modified project construction area (at the modified project site boundary), construction vibration levels are estimated to be less than 0.01 PPV (inch per second [in/sec]) at the nearest vibration sensitive receiver. Based on maximum acceptable continuous vibration threshold of 0.50 PPV (in/sec), the typical modified project construction vibration levels would fall below the building damage thresholds at all the receiver locations. Further, vibration levels at the site of the closest sensitive receiver are unlikely to be sustained during the entire construction period but will occur rather only during the times that heavy construction equipment is operating simultaneously adjacent to the modified project site perimeter. Therefore, the modified project-related vibration impacts during typical construction activities are considered less than significant. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Operational Noise

This section analyzes the potential operational noise impacts resulting from stationary noise sources, including the operation of events with amplified sound, outdoor activities, swimming pool/spa activities, roof-mounted air conditioning units, loading dock activities, and parking lot vehicle movement, as well as potential operational traffic noise impacts.

Stationary Noise

This operational noise analysis is intended to describe noise level impacts associated with the expected typical of daytime and nighttime activities at the modified project site. To analyze noise impacts originating from the modified project, the operational noise levels are evaluated against standards established in the City of Ontario Municipal Code, 5-29.04, *Exterior noise standards.* Section 5-29.04(a) of the Municipal Code sets a stationary-source average Leq exterior noise limit for not to be exceeded 65 dBA L_{eq} during daytime hours and 45 dBA L_{eq} during nighttime hours at residential properties and 65 dBA Leq during daytime hours and 60 dBA L_{eq} during nighttime hours at commercial properties, such as those nearest the modified project site.

To estimate the modified project operational noise impacts, reference noise levels were collected from sample manufacturers specifications for similar equipment, published research, and/or measurements of similar activities that represent the noise levels expected with the development of the modified project. It is important to note that the predicted noise levels assume the worst-case noise environment with the events with amplified sound, outdoor activities, swimming pool/spa activities, roof-mounted air conditioning units, loading dock activities, and parking lot vehicle movement all operating continuously. These sources of noise activity will likely vary throughout the day.

A detailed description of the reference noise levels are shown in Table 10, *Reference Noise Levels*, which are used to estimate the modified project's operational noise impacts.

Table 10
Reference Noise Levels

Noise Source	Noise Source Height (Feet)	Minutes within the Hour		Reference Noise Level (dBA L_{eq}) @ 50 Feet	Sound Power Level Day Night (dBA)[3]
		Day	Night		
Event/Announcement Speaker	5'	60	60	75.6	107.2
Outdoor Gatherings	5'	60	60	59.9	91.5
Swimming Pool Activities	5'	60	60	63.0	94.6
Roof-Top Air Conditioning Units	5'	45	30	77.4	109.0
Loading Dock Activities	8'	60	60	71.8	103.4
Parking Lot Vehicle Movements	0'	60	60	31.4	63.0

Source: Urban Crossroads, *Empire Groves Hotel Noise Impact Analysis, City of Ontario*, May 13, 2024; refer to Appendix I, *Noise Impact Analysis*.

Using the reference noise levels to represent the proposed modified project operations that include events with amplified sound, outdoor activities, swimming pool/spa activities, roof-mounted air conditioning units, loading dock activities, and parking lot vehicle movement, the Noise Impact Analysis calculated the operational source noise levels that are expected to be generated at the modified project site and the modified project-related noise level increases that would be experienced at each of the sensitive receiver

locations. Table 11, *Operational Noise Levels*, shows the modified project operational noise levels during the daytime hours of 7:00 a.m. to 10:00 p.m., as well as the nighttime hours of 10:00 p.m. to 7:00 a.m.

Table 11
Operational Noise Levels

Noise Source	Operational Noise Levels by Receiver Location[1] (dBA L_{eq})				
	R1	**R2**	**R3**	**R4**	**R5**
Daytime Operational Noise					
Event/Announcement Speaker	22.1	31.0	51.8	34.8	29.1
Outdoor Gatherings	49.4	31.3	49.6	34.0	27.7
Swimming Pool Activities	18.5	28.2	48.1	32.3	27.0
Roof-Top Air Conditioning Units	52.8	38.6	50.8	40.3	35.5
Loading Dock Activities	20.8	5.0	22.0	33.1	28.5
Parking Lot Vehicle Movements	30.2	5.2	0.0	0.0	0.0
Total (All Noise Sources)	**54.4**	**40.2**	**56.3**	**43.0**	**37.9**
Daytime Threshold	*65.0*	*65.0*	*65.0*	*65.0*	*65.0*
Threshold Exceeded?	***No***	***No***	***No***	***No***	***No***
Nighttime Operational Noise					
Event/Announcement Speaker	21.1	30.1	50.8	33.9	28.2
Outdoor Gatherings	48.4	30.4	48.8	33.1	26.8
Swimming Pool Activities	17.6	27.2	47.2	31.3	26.0
Roof-Top Air Conditioning Units	50.1	35.9	48.1	37.6	32.7
Loading Dock Activities	20.8	5.0	22.0	33.1	28.5
Parking Lot Vehicle Movements	30.2	5.2	0.0	0.0	0.0
Total (All Noise Sources)	**52.4**	**38.2**	**55.0**	**41.3**	**36.1**
Nighttime Threshold	*60.0*	*45.0*	*60.0*	*45.0*	*45.0*
Threshold Exceeded?	***No***	***No***	***No***	***No***	***No***

Notes:
1. Noise receiver locations are shown on Noise Impact Analysis Exhibit 9-A, *Construction Noise Source And Receiver Locations*; refer to Appendix I, *Noise Impact Analysis*. Distances are measured from receiver locations to the nearest construction boundary (modified project site boundary).

Source: Urban Crossroads, *Empire Groves Hotel Noise Impact Analysis, City of Ontario*, May 13, 2024; refer to Appendix I, *Noise Impact Analysis*.

The daytime hourly noise levels at the off-site receiver locations are expected to range from 37.9 to 56.3 dBA L_{eq}; the nighttime hourly noise levels at the off-site receiver locations are expected to range from 36.1 to 55.0 dBA L_{eq}. As shown in Table 11, operational noise levels associated with the modified project would satisfy the City's daytime and nighttime exterior noise level standards at all nearby receiver locations.

To describe the operational noise level increases, the operational noise levels are combined with the existing ambient noise levels measurements for the nearest receiver locations potentially impacted by operational noise sources. The difference between the combined modified project's noise levels and ambient noise levels describes the noise level increases to the existing ambient noise environment. As indicated in Table 12, *Operational Noise Level Increases*, the modified project-related daytime and nighttime operational noise level increases are expected to range up to 1.7 dBA L_{eq} at the nearest receiver locations. As such, the modified project-related operational noise level increases would satisfy the operational noise level increase significance criteria presented on Noise Impact Analysis Table 4-1, *Significance Criteria Summary*. Therefore, the incremental operational noise level increase is considered less than significant at all receiver locations.

Table 12
Operational Noise Level Increases

Receiver Location[1]	Modified Project Operational Noise Level (dBA L_{eq})[2]	Measurement Location[3]	Reference Ambient Noise Levels (dBA L_{eq})[4]	Combined Modified Project and Ambient (dBA L_{eq})[5]	Increase (dBA L_{eq})	Increase Criteria (dBA L_{eq})[6]	Increase Criteria Exceeded?
Daytime Operational Noise							
R1	54.4	L1	64.2	64.6	0.4	3.0	No
R2	40.2	L2	59.1	59.2	0.1	5.0	No
R3	56.3	L3	62.0	63.0	1.0	3.0	No
R4	43.0	L4	71.7	71.7	0.0	1.5	No
R5	37.9	L5	66.5	66.5	0.0	1.5	No
Nighttime Operational Noise							
R1	52.4	L1	61.2	61.7	0.5	3.0	No
R2	38.2	L2	58.3	58.3	0.0	5.0	No
R3	55.0	L3	58.3	60.0	1.7	3.0	No
R4	41.3	L4	67.7	67.7	0.0	1.5	No
R5	36.1	L5	61.7	61.7	0.0	1.5	No

Notes:
1. Noise receiver locations are shown on Noise Impact Analysis Exhibit 9-A, *Construction Noise Source And Receiver Locations*; refer to Appendix I, *Noise Impact Analysis*.
2. Refer to Table 10 above.
3. Reference noise level measurement locations as shown on Noise Impact Analysis Exhibit 5-A, *Noise Measurement Locations*.
4. Observed ambient noise levels measured by Urban Crossroads are shown on Noise Impact Analysis Table 5-1, *24-Hour Ambient Noise Level Measurements*.
5. Represents the combined ambient conditions plus the modified project operational activities.
6. Refer to Table 7, *Significance Criteria Summary*.

Source: Urban Crossroads, *Empire Groves Hotel Noise Impact Analysis, City of Ontario*, May 13, 2024; refer to Appendix I, *Noise Impact Analysis*.

Overall, the operational noise levels associated with the modified project would not exceed the City's daytime and nighttime exterior noise level standards at all nearby receiver locations and would not result in significant increases. As such, operational noise impacts resulting from stationary noise sources would be less than significant. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Traffic Noise

To assess the off-site traffic CNEL noise level impacts associated with development of the proposed modified project, noise level contours were developed based on modified project-specific traffic impact analysis; refer to Noise Impact Analysis Appendix 7.1, Off-Site Traffic Noise Calculations, which includes a summary of the dBA CNEL traffic noise level contours. Noise level contour boundaries represent the equal levels of noise exposure and are measured in CNEL from the center of the roadway. Noise contours were used to assess the modified project's incremental 24-hour dBA CNEL traffic-related noise impacts at land uses adjacent to roadways conveying modified project-related traffic. The noise contours represent the distance to noise levels of a constant value and are measured from the center of the roadway for the 70, 65, and 60 dBA CNEL noise levels. The noise contours do not consider the effect of any existing noise barriers or topography that may attenuate ambient noise levels. In addition, because the noise contours reflect modeling of vehicular noise on area roadways, they appropriately do not reflect noise contributions from the surrounding stationary noise sources within the study area.

Roadway segments are analyzed in each of the following timeframes: Existing With and Without Modified Project Conditions, Opening Year 2026 With And Without modified Project Conditions, and Cumulative 2050 With And Without modified Project Conditions. The analyses for each timeframe are as followed:

- *Existing With And Without Modified Project Conditions*: Noise Impact Analysis Table 7-1, *Existing Without Project Conditions Noise Level Contours*, presents the "Existing Without Project Conditions" CNEL noise levels, which are expected to range from 57.5 to 67.6 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Noise Impact Analysis Table 7-2, *Existing With Project Conditions Noise Level Contours*, shows that roadway noise levels from "Existing With Project Conditions" would range from 58.7 to 67.7 dBA CNEL. As shown in Table 7-7, *Existing Off-Site Project-Related Traffic Noise Impacts*, the "Existing With Project Conditions" would generate a noise level increase of up to 2.5 dBA CNEL on the study area roadway segments.

  Based on the significance criteria for off-site traffic noise impacts as presented in Table 7, the modified project-related traffic noise level increases are considered less than significant under "Existing With Modified Project" conditions at the land uses adjacent to roadways conveying modified project-related traffic.

- *Opening Year (2026) With And Without Project Conditions*: Noise Impact Analysis Table 7-3, *OY 2026 Without Project Conditions Noise Level Contours,* presents the "Opening Year (2026) Without Modified Project Conditions" CNEL noise levels, which are expected to range from 60.3 to 69.0 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Noise Impact Analysis Table 7-4, *OY 2026 With Project Conditions Noise Level Contours*, shows that roadway noise levels from "Opening Year (2026) With Modified Project Conditions" would range from 61.0 to 69.0 dBA CNEL. As shown on Noise Impact Analysis Table 7-8, *OY 2026 Off-Site Project-Related Traffic Noise Impacts*, "Opening Year (2026) Without Modified Project Conditions" would generate a noise level increase of up to 1.6 dBA CNEL.

  Based on the significance criteria for off-site traffic noise impacts as presented in Table 7, land uses adjacent to the study area roadway segments would experience less than significant noise level increases due to unmitigated opening year modified project-related traffic noise levels.

- *Cumulative 2050 With And Without Modified Project Conditions*: Noise Impact Analysis Table 7-5, *Cumulative 2050 Without Project Conditions Noise Level Contours*, presents the "Cumulative 2050 Without Modified Project Conditions" CNEL noise levels, which are expected to range from 63.1 to 69.6 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Noise Impact Analysis Table 7-6, *Cumulative 2050 With Project Conditions Noise Level Contours*, shows that roadway noise levels from "Cumulative 2050 Without Modified Project Condition" would range from 66.3 to 69.7 CNEL. Noise Impact Analysis Table 7-9, *Cumulative 2050 Off-Site Project-Related Traffic Noise Impacts*, shows that the modified project off-site contribution to cumulative traffic noise level increases up to 0.5 dBA CNEL.

  Based on the significance criteria for off-site traffic noise impacts as presented in Table 7, land uses adjacent to the study area roadway segments would not experience substantial noise level increases due to modified project-related traffic noise level increases and impacts in this regard would be considered less than significant.

Overall, the modified project would result in less than significant traffic noise impacts during operation. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Operational Vibration

The modified project would not generate additional long-term operational traffic, and no new stationary noise sources are anticipated. Operational noise impacts resulting from the modified project would be less than significant. Further, the modified project would not involve railroads operations or substantial heavy truck trips and would not result in

significant vibration impacts at surrounding uses during operation. As such, less than significant impacts would occur in this regard. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Airport Noise

The modified project site is located approximately 350 feet north of the Ontario International Airport (ONT). This places the modified project site within the ONT Airport Influence Area according to Policy Map 2-1 of the ONT ALUCP. The ONT ALUCP was amended July 2018 to promote compatibility between airport and the surrounding land uses. Since the modified project site is located within the ONT Airport Influence Area, the modified project is subject to the Noise Criteria established in the ONT ALUCP. As shown on Noise Impact Analysis Exhibit 3-B, the modified project site is located within the 60 to 70 dBA CNEL airport noise level contours. Specifically, as shown on Noise Impact Analysis Exhibit 8-A, the 65 dBA CNEL noise level contours cross the southern portion of the modified project site, while the remainder of the modified project site would be located between the 60 and 65 CNEL noise level contours of Ontario Airport.

According to Table 2-3 of the ONT ALUCP, the short-term lodging land use (i.e., hotel) within the 60 to 70 dBA CNEL is considered a conditionally compatible land use which must demonstrate compliance with the interior noise standard of 45 CNEL.

As shown in Noise Impact Analysis Tables 8-4, *First Floor Interior Noise Levels (CNEL)*, through 8-12, *Ninth Floor Interior Noise Levels (CNEL)*, on-site interior traffic noise levels would not exceed the 45 dBA CNEL interior noise level standard for hotel rooms and additional noise abatement measures are not needed. As such, airport noise impacts would be less than significant. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Certified TOP 2050 SEIR Mitigation Measures: Not Applicable.

Addendum Project Conditions: None.

3.2.11 Transportation

Approved Project Findings

TOP 2050 SEIR determined that the approved project would result in less than significant impacts related to the circulation system, hazardous traffic conditions due to geometric design, and adequate emergency access. However, TOP 2050 SEIR found that due to the approved project's anticipated population increase, an increase in Vehicle Miles Traveled (VMT) would occur, which would result in potentially significant impacts. As such, TOP 2050 SEIR included Mitigation Measure T-1, which would require that prior to

approval of discretionary projects under TOP 2050 and subject to VMT reduction analysis, applicants shall demonstrate compliance with the City's VMT Guidelines for CEQA assessment of VMT impacts. For projects with VMT per Service Population exceeding the County's significance threshold, a mitigation plan shall be developed and implemented. Mitigation should consist of Transportation Demand Management (TDM) measures analyzed under a VMT-reduction methodology consistent with the California Air Pollution Control Officers Association's (CAPCOA) *Final Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity*, and approved by the City (if applicable). However, given the uncertainty of the effectiveness of implementing TDM measures at a Citywide level and of their effectiveness at reducing Citywide VMT, VMT impacts were determined to be significant and unavoidable.

Modified Project Analysis

The *Empire Groves Hotel – VMT Analysis,* (VMT Analysis), prepared by Translutions, Inc., and dated October 12, 2023, was prepared for the modified project; refer to Appendix J, *VMT Analysis*.

Based on the City's VMT guidelines, a project would result in a significant VMT impact if either of the following conditions are satisfied:

1. Project Generated VMT: A significant impact would occur if the project VMT per Service Population (VMT/SP) exceeds the Citywide average for Service Population under General Plan Buildout Conditions; or
2. Project Effect on VMT: A significant impact would occur if the project causes total daily VMT within the City to be higher than the no project alternative under cumulative conditions.

Based on the results of the VMT Analysis modeling, modified project-generated VMT would be 32.13 VMT/SP and the Citywide average at General Plan buildout would be 32.55 VMT/SP; therefore, the modified project would result in less than significant VMT impacts. Additionally, based on the modeling, for future year 2045, Citywide average at General Plan buildout with the modified project would be 22.64 VMT/SP, and Citywide average at General Plan buildout without the modified project would be 22.73 VMT/SP. Therefore, implementation of the modified project would lower Citywide VMT/SP at buildout year 2045 and would result in a less than significant impact.

While the modified project does not propose new bicycle facilities or new transit infrastructure, the modified project would continue to provide access to existing facilities, including multipurpose trails, as well as stops and connections for Metrolink, Amtrak, West Valley Connector BRT, Ontario Airport Loop, and Metro. As described in Section 2.3, *Modified Project Description*, the modified project would provide sidewalk improvements along the site perimeter, including visible crosswalks at major intersections and the Specific Plan identifies potential future roadway improvements along East Holt Boulevard, East Guasti Road, and Airport Drive that would further expand the multimodal

transportation network in the modified project area. All transportation improvements would be designed to City standards and would enhance connectivity through and around the modified project site as well as between neighboring districts and the airport. Further, no roadway improvements are proposed that would create geometric design hazards or impact emergency access in the modified project area.

Overall, the modified project would not result in a new significant environmental effect or substantial increase the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Certified TOP 2050 SEIR Mitigation Measures: Not Applicable.

Addendum Project Conditions: None.

3.2.12 Tribal Cultural Resources

Approved Project Findings

According to TOP 2050 SEIR, future development as a result of TOP 2050 implementation could occur in portions of the City with sensitivity to tribal cultural resources. Grading and construction activities in undeveloped areas or redevelopment that requires deeper soil excavation than in the past could potentially disturb tribal cultural resources. However, TOP 2050 SEIR determined that 2010 TOP EIR Mitigation Measures 5-3 (tribal consultation and preparation of a cultural resources assessment) and 5-4 (construction-related tribal resources mitigation) as well as TOP 2050 SEIR Mitigation Measures TCR-1 (tribal cultural resources monitoring plan) and TCR-2 (treatment and disposition of cultural resources) would reduce potential impacts associated with tribal cultural resources to less than significant levels. Therefore, TOP 2050 SEIR concluded that impacts would be less than significant with mitigation incorporated.

Modified Project Analysis

As of July 1, 2015, California Assembly Bill 52 (AB 52) was enacted and expanded CEQA by establishing a formal consultation process for California tribes within the CEQA process. AB 52 states that prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project, a lead agency shall begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project, if the tribe requested to the lead agency, in writing, to be informed by the lead agency of proposed projects in that geographic area and the tribe requests consultation. As this environmental document (i.e., an Addendum) is not a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report, AB 52 consultation would not apply to the modified project. Nevertheless, tribal consultation under AB 52 and California Senate Bill (SB) 18 was conducted as part of TOP 2050 SEIR, which resulted in the inclusion of 2010 TOP EIR Mitigation Measures 5-3 (tribal consultation and preparation of a cultural resources

assessment) and 5-4 (construction-related tribal resources mitigation) as well as TOP 2050 SEIR Mitigation Measures TCR-1 (tribal cultural resources monitoring plan) and TCR-2 (treatment and disposition of cultural resources) to reduce potential impacts associated with tribal cultural resources to less than significant levels.

SB 18 states that prior to a local (city or county) government's adoption of any general plan or specific plan, or amendment to general and specific plans, or a designation of open space land proposed on or after March 1, 2005, the city or county shall conduct consultations with California Native American tribes for the purpose of preserving or mitigating impacts to Cultural Places. The modified project proposes to construct a hotel and retail development with associated site improvements in accordance with the proposed Empire Groves Specific Plan. As such, tribal consultation under SB 18 is required and was conducted for the modified project. As required, the City distributed letters by e-mail to applicable tribes identified by the Native American Heritage Commission (NAHC). The City initiated tribal consultation on October 29, 2024, by emailing letters that provided a description of the modified project and notified each tribe of the opportunity to consult with the City regarding the modified project.

The City initiated consultation on November 12, 2024, with the Gabrieleno Band of Mission Indians – Kizh Nation (Kizh Nation) and concluded consultation on December 3, 2025. The Kizh Nation did not identify any cultural resources on the project site, however, the tribe requested project conditions to be included regarding tribal monitoring and notification that are included below. The Yuhaaviatam of San Manuel Nation e-mailed the City on November 5, 2025, and did not identify any cultural resources on the project site however requested project conditions to be included consistent with TOP 2050 SEIR Mitigation Measures TCR-1 and TCR-2 that are included below. The modified project would not result in any new or substantially increased impacts that were not identified as part of the Certified TOP 2050 SEIR.

Certified TOP 2050 SEIR Mitigation Measures:

TCR-1 Tribal Cultural Resources Monitoring. The project archaeologist, in consultation with interested tribes, the developer, and the City of Ontario, shall develop an archaeological monitoring plan (AMP) to address the details, timing, and responsibility of archaeological and cultural activities that will occur on the project site. Details in the AMP shall include:

1. Project-related ground disturbance (including, but not limited to, brush clearing, grading, trenching, etc.) and development scheduling;
2. The development of a rotating or simultaneous schedule in coordination with the developer and the project archeologist for designated Native American Tribal Monitors from the consulting tribes during grading, excavation and ground disturbing activities on the site: including the scheduling, safety requirements, duties, scope of work, and Native American Tribal Monitors' authority to stop and redirect grading activities in coordination with all project archaeologists (if the tribes cannot come

to an agreement on the rotating or simultaneous schedule of tribal monitoring, the Native American Heritage Commission shall designate the schedule for the onsite Native American Tribal Monitor for the proposed project);

3. The protocols and stipulations that the developer, City, Tribes, and project archaeologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits that shall be subject to a cultural resources evaluation.

At least 30 days prior to application for a grading permit and before any brush clearance, grading, excavation, and/or ground disturbing activities on the site, the developer shall retain a tribal cultural monitor to monitor all ground-disturbing activities in an effort to identify any unknown archaeological resources.

Pursuant to the AMP, a tribal monitor from the consulting tribe shall be present during the initial grading activities. If tribal resources are found during grubbing activities, the tribal monitoring shall be present during site grading activities.

TCR-2 Treatment and Disposition of Cultural Resources. In the event that Native American cultural resources are inadvertently discovered during the course of any ground-disturbing activities, including but not limited to brush clearance, grading, trenching, etc., for the proposed project, the following procedures will be carried out for treatment and disposition of the discoveries:

1. Temporary Curation and Storage: During the course of construction, all discovered resources shall be temporarily curated in a secure location on-site or at the offices of the project archaeologist. The removal of any artifacts from the project site will need to be thoroughly inventoried with tribal monitor oversight of the process;

2. Treatment and Final Disposition: The landowner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and nonhuman remains as part of the required mitigation for impacts to cultural resources. The applicant shall relinquish the artifacts through one or more of the following methods and provide the City of Ontario with evidence of same:

    a. Accommodate the process for on-site reburial of the discovered items with the consulting Native American tribes or bands. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloging, basic analysis, other analyses as recommended by the project archaeologist and approved by consulting tribes, and basic

recordation have been completed; all documentation should be at a level of standard professional practice to allow the writing of a report of professional quality;

b. A curation agreement with an appropriate qualified repository in San Bernardino County that meets federal standards per 36 CFR Part 79, and therefore the resource would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility in San Bernardino County, to be accompanied by payment of the fees necessary for permanent curation;
c. For purposes of conflict resolution, if more than one Native American tribe or band is involved with the project and cannot come to an agreement as to the disposition of cultural materials, materials shall be curated at the San Bernardino County Museum by default;
d. At the completion of grading, excavation, and ground-disturbing activities on the site, a Phase IV Monitoring Report shall be submitted to the City documenting monitoring activities conducted by the project archaeologist and Native Tribal Monitors within 60 days of completion of grading. This report shall document the impacts to the known resources on the property; describe how each mitigation measure was fulfilled; document the type of cultural resources recovered and the disposition of such resources; provide evidence of the required cultural sensitivity training for the construction staff held during the required pregrade meeting; and, in a confidential appendix, include the daily/weekly monitoring notes from the archaeologist. All reports produced will be submitted to the City, County Museum, and consulting tribes.

Addendum Project Conditions: Below are tribal project conditions for the Yuhaaviatam of San Manuel Nation and Gabrieleno Band of Mission Indians – Kizh Nation.

A. Yuhaaviatam of San Manuel Nation:

1. In the event that cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted, as detailed within TOP 2050 SEIR Mitigation Measures TCR-1, regarding any pre-contact finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment.

2. If significant pre-contact cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to YSMN for review and comment, as detailed within TOP 2050 SEIR Mitigation Measures TCR-1. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.

3. If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.

4. The Yuhaaviatam of San Manuel Nation Cultural Resources Management Department (YSMN) shall be contacted, as detailed in TOP 2050 SEIR Mitigation Measure TCR-1, of any pre-contact cultural resources discovered during project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a Cultural Resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with YSMN, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents YSMN for the remainder of the project, should YSMN elect to place a monitor on-site.

5. Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to YSMN. The Lead Agency and/or applicant shall, in good faith, consult with YSMN throughout the life of the project

B. Gabrieleno Band of Mission Indians – Kizh Nation:

1. The project applicant or lead agency shall retain a Native American Tribal Monitor from the Gabrieleno Band of Mission Indians – Kizh Nation to ensure proper oversight of Tribal Cultural Resources (TCR). The Tribal Cultural Resources monitoring plan shall address the details, timing, and responsibilities for cultural resource activities occurring on the project site. The plan shall include:

    a. Project-related ground disturbance (including, but not limited to, brush clearing, grading, trenching, etc.) and development scheduling.

b. Full-time presence of a designated Native American Tribal Monitor from the Gabrieleno Band of Mission Indians – Kizh Nation during all grading, excavation, and ground-disturbing activities on the site. The monitor shall coordinate with the developer to ensure safety requirements, duties, and scope of work are adhered to. The Tribal Monitor shall also have the authority to stop and redirect grading activities if tribal cultural resources are identified.

c. Protocols and stipulations to address inadvertent discoveries of Tribal Cultural Resources, including immediate evaluation by the Kizh Nation. At least 30 days prior to application for a grading permit and before any brush clearance, grading, excavation, and/or ground disturbing activities on the site, the developer shall retain a Tribal Cultural Monitor from the Gabrieleno Band of Mission Indians – Kizh Nation to monitor all such activities. A Tribal Monitor shall be present during all initial grading activities. If tribal resources are identified during grubbing activities, the Tribal Monitor shall continue to be present during subsequent grading activities.

2. Treatment and Disposition of Cultural Resources. In the event that Tribal Cultural Resources are inadvertently discovered during the course of any ground-disturbing activities, including but not limited to brush clearance, grading, trenching, etc., the following procedures shall be followed to ensure proper and disposition of the discoveries:

   a. Temporary Curation and Storage: During construction, all discovered resources shall be temporarily curated in a secure on-site location under the oversight of the Tribal Monitor from the Gabrieleno Band of Mission Indians – Kizh Nation.

   b. Treatment and Final Disposition All discovered cultural resources, including sacred items, burial goods, and archaeological artifacts, shall remain under the custodianship of the Gabrieleno Band of Mission Indians – Kizh Nation. Final disposition shall occur through the following process of On-site Reburial. Discovered items shall be reburied on-site in coordination with the Gabrieleno Band of Mission Indians – Kizh Nation. Measures shall be taken to ensure the future reburial area is protected from any potential future impacts. Reburial shall only occur after cataloging, basic analysis, recordation, and any other necessary documentation have been completed in consultation with the Kizh Nation.

3. Phase IV Monitoring Report: Upon completion of grading, excavation, and ground-disturbing activities, a Phase IV Monitoring Report shall be submitted to the City of Ontario within 60 days. This report shall document:

    a. All monitoring activities conducted by the Tribal Monitors from the Gabrieleno Band of Mission Indians – Kizh Nation.

    b. The impacts to known resources on the property.

    c. A summary of how each mitigation measure was fulfilled.

    d. The type and disposition of cultural resources recovered.

    e. Evidence of cultural sensitivity training provided to construction staff prior to project commencement.

    f. A confidential appendix including daily/weekly monitoring notes prepared by the monitors. All reports produced shall be submitted to the City of Ontario, the Gabrieleno Band of Mission Indians – Kizh Nation, and any other relevant agencies.

3.2.13 Utilities and Service Systems

Approved Project Findings

TOP 2050 SEIR determined that, following compliance with all applicable regulations and ordinances issued by the Inland Empire Utilities Agency (IEUA), wastewater generated by the approved project could be adequately treated by the wastewater service provider and would not require the construction of new wastewater treatment facilities or the expansion of existing facilities or exceed wastewater treatment requirements of the Regional Water Quality Control Board. Additionally, TOP 2050 SEIR concluded that water demand in the City is projected through 2045 in the *City of Ontario 2020 Urban Water Management Plan* (2020 UWMP), and therefore the City's water supply and delivery systems are adequate to meet the requirements of the approved project. Further, as discussed in Section 3.2.8, *Hydrology and Water Quality*, in order to ensure existing and proposed drainage systems under the approved project are adequate to serve buildout of TOP 2050, TOP 2050 SEIR requires all future development to prepare hydrology and hydraulic studies in accordance with the County Hydrology Manual and analyze stormwater flows that result from the 100-year storm event to ensure that the capacities of the storm drain systems are not exceeded. Additionally, future projects would be required to comply with the Santa Ana RWQCB MS4 permit and the San Bernardino County Stormwater Program. Lastly, TOP 2050 determined that existing and/or proposed facilities would be able to accommodate solid waste generated by the approved project, and that the approved project would comply with related solid waste regulations. Overall,

it was determined that impacts to utilities and service systems would be less than significant following compliance with existing regulations and policies.

Modified Project Analysis

The modified project proposes to install a sewer line on-site to connect to an existing 12-inch sewer main in East Holt Boulevard. As the modified project site is currently vacant, development of the modified project would generate additional wastewater compared to existing conditions, which could increase sewer flows and increase demand on the wastewater treatment provider. However, the modified project has a similar footprint compared to the site buildout envisioned by the approved project. As such, the City's Sewer Master Plan and Capital Improvement Program accounted for buildout of the modified project site, and the modified project would be adequately served by the existing conveyance system. Additionally, as stated in TOP 2050 SEIR, IEUA has experienced a decrease in the volume of sewage flow of approximately 10 percent over the last 20 years, due to a decrease in indoor water consumption with new development compliance with California Green Building Standards Code and water conservation efforts. The IEUA anticipates a significant increase in the growth of its service area in the next ten years, with 40 percent of the growth resulting from new development in the City. The IEUA develops 10-year forecasts and specifies capital improvements that will be implemented to meet the increase in demand; further, future projects have been assumed in the IEUA's Sewer System Management Plans. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

The modified project proposes water line connections from the site to an existing 12-inch water main in East Guasti Road along the modified project frontage and an existing 6-inch water main in East Holt Boulevard along the modified project frontage. Additionally, the modified project proposes to install an 8-inch recycled water main in East Guasti Road that connects to an existing 8-inch recycled water main in Convention Center Way (north of East Holt Boulevard) to extend south in East Guasti Road to end east of the Cucamonga Creek Channel. Given that the modified project site is currently vacant, development of the modified project would increase water demand. As stated in TOP 2050 SEIR, the City has the discretion to require water capacity studies associated with new development and redevelopment and currently requires site-specific studies to determine a project's impact throughout the water system. As such, *Water Supply Assessment and Written Verification of Sufficient Water Supply for the Empire Groves Hotel Specific Plan* (Water Supply Assessment), prepared by PlaceWorks and dated August 2024, was prepared for the modified project; refer to Appendix K, *Water Supply Assessment*. Based on the Water Supply Assessment, the modified project would result in total potable water demand of approximately 80.60 acre-feet per year (AFY) and total recycled water demand of approximately 13.35 AFY. Development of the project site consistent with the site's MU-Multimodal land use designation was previously included in the 2020 UWMP. Therefore, water demand associated with the modified project was compared to water demand associated with buildout of the site as a mixed-use

development consistent with the 2020 UWMP. The results showed that the modified project would result in a net increase in potable water demand by 43.55 AFY compared to the approved project and a net decrease in recycled water demand by 1.71 AFY compared to the approved project. Nonetheless, the net increase in potable water demand is within the 2020 UWMP projected water demand increases for the years 2025 to 2030, which is within the timeframe in which the modified project is anticipated to be completed. Furthermore, the City has the ability to increase groundwater production from the Chino Basin as well as increase imported water. As such, the City would have sufficient water supplies available during normal, single dry, and multiple dry years through the year 2045 to meet all projected water demands associated with its existing and future customers, including the modified project. The modified project would also be required to pay connection fees, which would offset the costs of system maintenance and capital upgrades to support the new development in the City's service area. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

The modified project proposes stormwater improvements consisting of an underground detention system and stormwater pump in the southeast corner of the site. According to the Hydrology Report prepared for the modified project, modified project implementation would increase impervious areas on-site, thereby increasing flows discharging from site. As such, the proposed stormwater pump would be installed to convey flows to the proposed underground detention system for treatment and restricted flow into an existing 108-inch stormwater line in Guasti Road. The proposed stormwater improvements would ensure the modified project do not cause a significant impact to downstream systems and discharge flows are reduced compared to existing conditions. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Given that the modified project site is currently vacant, development of the modified project would increase solid waste generation and increase demand for solid waste services. The approved project was estimated to occupy approximately two percent of the Badlands Sanitary Landfill and the El Sobrante Landfill remaining capacities. Given that the modified project has a similar development potential to the buildout envisioned for the City's MU-Multimodal designated areas by the approved project, it is not anticipated that development of the modified project would substantially increase solid waste generation. Additionally, the modified project would be required to comply with CALGreen, AB 341, AB 1826, and TOP 2050 policies regarding waste diversion. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Certified TOP 2050 SEIR Mitigation Measures: Not Applicable.

Addendum Project Conditions: None.

4.0 DETERMINATION/ADDENDUM CONCLUSION

As detailed in the analysis presented above, this Addendum supports the conclusion that the modified project constitutes minor or technical changes and do not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects as compared to the conclusions of TOP 2050 SEIR. No new information has become available and no substantial changes to the circumstances under which the approved project was being undertaken since the certification of TOP 2050 SEIR have occurred. As identified in TOP 2050 SEIR, the approved project would result in significant environmental impacts with regard to air quality, cultural resources, noise, and transportation. However, the modified project would not substantially increase the severity of these effects. In addition, there are no new or different mitigation measures or alternatives that would substantially reduce these significant impacts.

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5.0 REFERENCES

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California Department of Forestry and Fire, *Fire Hazard Severity Zones in State Responsibility Area*, effective April 1, 2024, https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=988d431a42b242b29d89597ab693d008, accessed August 14, 2024.

ECORP Consulting, Inc., *Archaeological Resources Inventory and Evaluation Report for the Ontario Hotel Project on the East Corner of Holt Boulevard and Guasti Road, San Bernardino County, California*, August 2023.

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Kimley-Horn and Associates, Inc., *Preliminary Hydrology Report for Diversified Empire Hotel, APN: 0010-322-33, Southeast of Holt Blvd and Guasti Road*, October 2023.

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Petra Geosciences, Inc., *Phase I Environmental Site Assessment: Proposed Empire Resort and Spa, Southeast Corner of E. Holt Boulevard and E. Guasti Road, APN 0110-322-33-0-000, City of Ontario, San Bernardino County, California 91761*, December 5, 2023.

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PlaceWorks, *Water Supply Assessment and Written Verification of Sufficient Water Supply for the Empire Groves Hotel Specific Plan*, August 2024.

Translutions, Inc., *Empire Groves Hotel – VMT Analysis*, October 12, 2023.

Urban Crossroads, *Empire Groves Hotel Air Quality Impact Analysis, City of Ontario*, April 19, 2024.

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APPENDICES

Appendix A
Phase I ESA

PETRA GEOSCIENCES INC.

SOLID AS A ROCK

ENGINEERS + GEOLOGISTS + ENVIRONMENTAL SCIENTISTS

PHASE I ENVIRONMENTAL SITE ASSESSMENT

PROPOSED EMPIRE RESORT AND SPA
SOUTHEAST CORNER OF E. HOLT BOULEVARD AND E. GUASTI ROAD
ASSESSOR PARCEL NUMBER (APN) 0110-322-33-0-000
CITY OF ONTARIO, SAN BERNARDINO COUNTY, CALIFORNIA 91761

DIVERSIFIED PACIFIC COMMUNITIES

December 5, 2023
J.N. 22-398

2138

December 5, 2023
J.N. 22-398

DIVERSIFIED PACIFIC COMMUNITIES
10621 Civic Center Drive
Rancho Cucamonga, California 91730

Attention: Mr. Nolan Leggio

Subject: **Phase I Environmental Site Assessment: *Proposed Empire Resort and Spa,* Southeast Corner of E. Holt Boulevard and E. Guasti Road, APN 0110-322-33-0-000, City of Ontario, San Bernardino County, California 91761**

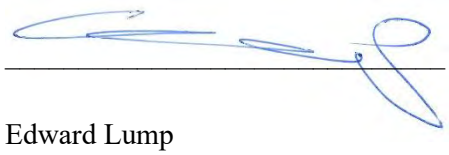
Dear Mr. Leggio:

Petra Geosciences, Inc. (Petra) presents this Phase I Environmental Site Assessment for the above-referenced site. This assessment has been conducted in accordance with our Supplemental Proposal No. 22-398P, dated October 20, 2023, and in conformance with the scope and limitations of the standards set forth in the American Society for Testing and Materials (ASTM) Practice E 1527-21, the EPA's All Appropriate Inquiry (AAI) regulations 40 CFR Part 312.

This opportunity to be of service to you is sincerely appreciated. Please do not hesitate to call this office if you have questions pertaining to this report.

Respectfully submitted,

PETRA GEOSCIENCES, INC.



Edward Lump
Associate Geologist



Siamak Jafroudi, PhD
Senior Principal Engineer

EXECUTIVE SUMMARY

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Proposed Empire Resort and Spa
Southeast Corner of E. Holt Boulevard and E. Guasti Road
Assessor Parcel Number (APN) 0110-322-33-0-000
City of Ontario, San Bernardino County, California 91761

INTRODUCTION

The information presented in this report includes the results of our recent site reconnaissance, a review of pertinent literature, and recent federal, state, and local government agency records. Our field reconnaissance, data gathering, and compilation was performed by Mr. Edward Lump, Associate Geologist, with oversight by Dr. Siamak Jafroudi President and Principal Engineer.

SITE DESCRIPTION AND GENERAL INFORMATION

1. The subject property is a vacant site located at the southeasterly corner of E. Holt Boulevard and E. Guasti Road in the city of Ontario, San Bernardino County, California. The site is bounded by hotel properties to the north and west; improved Cucamonga Creek to the east and a distribution center and vacant land beyond; and a railroad line to the south with Ontario International Airport beyond. Sidewalks are not present along any street edges bounding the subject property. Chain link fencing delineates the subject site boundary perimeter. A site location map is included as Figure 1.

2. The subject site is comprised of one parcel of approximately 10.4-acres with Assessor Parcel Number (APN) 0110-322-33-0-000. A plan showing recent conditions on the site is included as Figure 2.

3. Access to the subject property is via an open gate off E. Guasti Road near E. Holt Boulevard. A second locked gate is situated further south. At the time of our field reconnaissance, the site was vacant land. A majority of the subject site is covered with moderately thick to thick, dry native vegetation with somewhat scattered trees; however, an irregularly shaped strip of cleared vegetation exists along the westerly side of the subject site, exposing native soil. Some of this cleared area is covered with gravel. Some of the trees have been uprooted and partially ground up to mulch. A thinner strip of partially cleared vegetation exists along the east property boundary with Cucamonga Creek. Windblow trash and debris is common along the northern boundary with E. Holt Boulevard and to a lesser extent along the west and south boundary with E. Guasti Road. Windblown trash and debris are occasionally observed along the east edge of the dirt area and the brush area of the northwesterly area onsite. The site slopes gently to the southeast with existing elevations on the order of 965 feet above mean sea level (msl) to 950 feet above msl (USGS, 1981).

4. Within the subject property trash and debris is minimal. The largest area of debris is in the northeastern portion of the subject site, where what appears to be remnants of a homeless encampment was observed. Three dumped piles of soil noted in the south-central area of the subject property appear to be relatively recent. It appears these soil piles were placed on top of a relatively thin layer of leveled fill soil. Except for roots/rootlets, the surface of these piles was clean of trash and debris. Except for occasional concrete fragments, trash and debris was limited within the subject property. A few small areas of waste concrete and asphalt were noted among the brush in the interior of the subject site.

5. No water wells were observed on site during our reconnaissance.

6. Overhead power lines were observed adjacent to the subject property during our site reconnaissance. Overhead lines with one pole mounted transformer were noted outside the fence along the east side of E. Guasti Road near a fire hydrant. The transformer appeared to be in good condition at the time of our reconnaissance. No ground surface staining or distressed vegetation was noted below the transformer. No pad mounted transformers were observed; however, yellow bollards were observed near two high voltage SCE risers and a vault within the southwesterly portion of the subject site. Closer to the open gate, a buried concrete water valve box was observed inside the fence line.

7. Information obtained during this assessment indicated that the subject property and vicinity appeared to have been utilized for agricultural purposes in the form of grape orchards from at least 1938 to sometime after/during 1975 and before/during 1985. No structures were observed within the subject site boundary from at least 1938 to the present day. From 1985 to 2023, the subject property was vacant and undeveloped land with relatively uniform native vegetation and scattered trees. Holt Boulevard was constructed along the north side of the subject property from at least 1938. Guasti Road was constructed along the south and western site boundary sometime after/during 1985 and before/during 1989. Historical information reviewed during this assessment includes aerial photographs (dating back to 1938), USGS topographical maps (dating back to 1897), and interviews.

8. No sites were identified in our search of various government agency database records, which appear to have impacted the soils or groundwater beneath the subject site.

9. There was no evidence of drums, above ground storage tanks, underground storage tanks, sumps, pits, pools, or lagoons identified within the subject property boundary during our site assessment.

RECOGNIZED ENVIRONMENTAL CONDITIONS

Recognized environmental conditions are defined by the American Society of Testing and Materials (ASTM) as any hazardous substance or petroleum product under conditions that indicate an existing, past, or material threat of release into the structures, ground, groundwater, or surface water at the subject site. If the presences of recognized environmental conditions are identified on a subject site, it may warrant additional research, site assessment, and/or action.

- No REC's have been identified within or affecting the subject property.

Controlled recognized environmental conditions (CREC'S) are defined by the American Society of Testing and Materials (ASTM) Practice E 1527-21 as a recognized environmental condition resulting from the past *release* of *hazardous substances* or *petroleum products* that has been addressed to the satisfaction of the applicable regulatory authority (i.e., as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with *hazardous substances* or *petroleum products* allowed to remain in place subject to the implementation of required controls. For example, if a leaking underground storage tank has been cleaned up to a commercial use standard but does not meet unrestricted residential cleanup criteria; this would be considered a controlled recognized environmental condition. The "control" is represented by the (inferred) restriction that the property remains commercial.

- No CREC's have been identified within or affecting the subject property.

Historical recognized environmental conditions (HREC'S) are defined by the American Society of Testing and Materials (ASTM) Practice E 1527-21 as a past release of any *hazardous substances or petroleum products* that has occurred in connection with the *property* and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory agency, without subjecting the *property* to any required controls (i.e., *property* use restrictions, *activity and use limitations*, *institutional controls* or *engineering controls*).

- No HREC's have been identified within or affecting the subject property.

We have performed a Phase I Environmental Site Assessment in general conformance with the scope and limitations of ASTM Practice E 1527-21 for the subject property, APN 0110-322-33-0-000, located at the southeast corner of E. Holt Boulevard and E. Guasti Road, in the City of Ontario, San Bernardino County, California. Any exceptions to, or deletions from, this practice are described in the section titled data gaps of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the subject property at this time.

SITE CONSIDERATIONS

The items presented below are not considered recognized environmental conditions in accordance with ASTM E 1527-21. Although these items may warrant consideration in conjunction with any planned development activities, they are not recognized environmental conditions. The information regarding possible actions relative to these items has been provided as guidance.

1. With re-development of any former agricultural property, a certain amount of unknown subsurface conditions may be anticipated. Any discolored soils, noxious odors, buried pipelines or irrigation channels, and/or other buried objects/debris encountered during clearing and grubbing, or future grading and development should be left in place until an experienced environmental professional (such as Petra) has had the opportunity to evaluate the conditions and provide recommendations if needed.

2. It is possible that abandoned irrigation lines will be encountered during demolition, clearing, and grubbing, or rough grading. If these irrigation lines are concrete, they should be left in place until an experienced environmental professional (such as Petra) has had the opportunity to evaluate the conditions and provide recommendations if needed. In the event concrete irrigation lines are encountered, caution should be taken to not crush the lines until it can be ascertained that they do not contain asbestos.

3. It is recommended that all debris and trash observed on the subject site be removed and disposed of in accordance with current local, state and federal disposal regulations.

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PHASE I ENVIRONMENTAL SITE ASSESSMENT

Proposed Empire Resort and Spa
Southeast Corner of E. Holt Boulevard and E. Guasti Road
Assessor Parcel Number (APN) 0110-322-33-0-000
City of Ontario, San Bernardino County, California 91761

INTRODUCTION

The information presented in this report includes the results of our recent field reconnaissance, a review of various federal, state, and local government agency records, and a review of historic aerial photographs and topographic maps for the site and vicinity. This report includes a summary of our findings, our opinion as to the current environmental condition of the site, and recommendations for additional work, if needed.

Purpose

This assessment was conducted to determine if any recognized environmental conditions exist on the subject site. Recognized environmental conditions are defined by the American Society for Testing and Materials (ASTM) as any hazardous substance or petroleum product under conditions that indicate an existing, past, or material threat of release into the structures, ground, groundwater, or surface water at the subject site.

This assessment is also intended to satisfy the requirement for conducting all appropriate inquiries into the previous ownership and uses of a property for the purposes of meeting the all appropriate inquiries provisions necessary to qualify for certain landowner liability protections under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

We have performed this assessment in general conformance with the scope and limitations of the standards set forth in the ASTM Practice E 1527-21, the EPA's All Appropriate Inquiry (AAI) regulations 40 CFR Part 312.

Involved Parties

This report was prepared by Petra Geosciences, Inc. (Petra), at the request of Diversified Pacific Communities, for their exclusive use. Use of this report or reliance thereon by other parties or projects is not authorized. The report may not be suitable for other parties or other purposes.

SCOPE OF ASSESSMENT

The scope of this assessment included the following:

1. Performing a site reconnaissance to identify the current conditions and land use of the subject site and adjoining properties, during which visual evidence of prior uses of the subject site and adjoining properties were noted. The site reconnaissance included an observation of the site surface and the site perimeter. Representative photographs of our site walk are provided in Appendix A.

2. Researching historical land use of the subject site and vicinity by reviewing available historical aerial photographs, United States Geologic Survey (USGS) topographic maps, fire insurance maps, city directories, and other reasonably ascertainable maps and data (Appendix C).

3. Review Preliminary Title Search document by Ticor Title, dated May 6, 2022, provided by the client (Appendix E).

4. Conducting a search for Environmental Liens and Activities and Use Limitations (AULs) back to 1980 for the subject property parcel (Appendix C).

5. Performing a cursory review of local and regional geological conditions as they pertain solely to commenting of recognized environmental conditions for the site.

6. Obtaining and reviewing a search of pertinent federal, state, and local regulatory agency databases concerning environmental conditions on and in the vicinity of the site. As specified in the ASTM and AAI standards, the following databases were searched using, at a minimum, the recommended search radius:

    - Federal National Priority List (NPL) site list,
    - Federal Delisted NPL site list,
    - Federal Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) site list,
    - Federal CERCLIS- No Further Remedial Action Planned (CERC-NFRAP) site list,
    - Federal Resource Conservation and Recovery Act Information (RCRA) Corrective Action Report (CORRACTS) facilities list,
    - Federal RCRA non-CORRACTS Treat, Store and Dispose (RCRA-TSD) facilities list,
    - Federal RCRA generators list,
    - Federal institutional control/engineering control registries,
    - Federal Emergency Response Notification System (ERNS) list,
    - State and tribal lists of hazardous waste sites identified for investigation or remediation including: State- and tribal-equivalent NPL, State, and tribal-equivalent CERCLIS lists,
    - State and tribal landfill and/or solid waste disposal site lists,
    - State and tribal leaking storage tank lists,
    - State and tribal registered storage tank lists,
    - State and tribal institutional control/engineering control registries,
    - State and tribal voluntary cleanup sites, and
    - State and tribal Brownfield sites.

    In the interest of thoroughness, numerous non-ASTM and non-AAI required databases were also searched. These databases are listed and discussed in the database search included within this report (Appendix B).

7. Contacting and interviewing knowledgeable persons, such as property owners, managers, and representatives of local government agencies regarding historical site use and current site conditions, if possible.

8. Evaluating the presence of recognized environmental conditions at the subject site through visual observation and research of reasonably ascertainable records. Recognized environmental conditions may include the presence of hazardous materials, petroleum products, underground storage tanks, above ground storage tanks, drums, chemical containers, polychlorinated biphenyls

(PCB's), liquid or solid wastes, oil wells, and areas indicative of potential contamination including stained soils and/or pavement, stressed vegetation, drains, sumps, pits, ponds, lagoons, odors, and septic systems.

9. Preparing this report presenting the results of our assessment.

10. Non-Scope Items. In addition to those items discussed above, several items outside the scope of ASTM Standard E 1527-21 and AAI will be addressed in this assessment. The non-scope items include:

    a. Cursory visual examination of the site for the potential presence of asbestos containing materials. Please note this is not a survey for these materials.

    b. Cursory visual examination of the site for the potential presence of lead-based paint. Please note this is not a survey for these materials.

Unless listed above, this assessment does not include any testing or sampling of materials (such as an assessment for the potential presence of methane or radon, asbestos or lead-based paints, or the sampling and testing of soil, soil vapor, air, surface water, or groundwater). This assessment does not include evaluating the site for the presence of wetlands, regulatory compliance, or other items beyond the scope of ASTM E 1527-21 or 40 CFR Part 312, nor is it an assessment for vapor intrusion as defined by ASTM E 2600-15.

SITE OVERVIEW

According to the California Department of Conservation, Geologic Energy Management Division (CalGEM) Online Mapping System (2023), the site is located within Township 01 South, Range 07 West, Section 22, San Bernardino Base and Meridian. Site elevations range from approximately 965± feet above mean sea level (msl) in the northern portion of the site, to 950± feet above msl in the southeast (USGS, 2018). A site location map is included as Figure 1.

The subject site is comprised of one parcel of approximately 10.4-acres with Assessor Parcel Number (APN) 011-032-233. The site is bounded by hotel properties to the north and west; improved Cucamonga Creek to the east and a distribution center and vacant land beyond; and a railroad line to the south with Ontario International Airport beyond. Sidewalks are not present along any street edges bounding the subject property. Chain link fencing delineates the subject site boundary perimeter. An aerial photograph showing the configuration of the subject property is attached as Figure 2.

PREVIOUS LAND USE

Information obtained during this assessment indicated that the subject property and vicinity appeared to have been utilized for agricultural purposes in the form of grapes from at least 1938 to sometime after/during 1975 and before/during 1985. No structures were observed within the subject site boundary from at least 1938 to the present day. From 1985 to 2023, the subject property was vacant and undeveloped land with relatively uniform native vegetation and scattered trees. Holt Boulevard was constructed along the north side of the subject property from at least 1938. Guasti Road was constructed along the south and western site boundary sometime after/during 1985 and before/during 1989. Historical information reviewed during this assessment includes aerial photographs (dating back to 1938), USGS topographical maps (dating back to 1897), and interviews.

PREVIOUS REPORTS

No previous environmental report for the subject site was provided to Petra for review during this assessment.

As a part of this assessment, Petra also reviewed potential environmental concerns associated with facilities in proximity to the subject property via electronic reports, maps, and/or databases. Information from our review is incorporated into this report.

ENVIRONMENTAL SETTING

The following section provides a cursory overview of the regional and local geologic setting and includes information pertaining to groundwater conditions in the vicinity of the subject site. Geotechnical hazard information (faults, landslides, etc.) is not part of this assessment. This section does not constitute a geotechnical evaluation of the subject property and should not be taken as such.

Geology

Geologically, the site lies within the northern portion of the Peninsular Ranges Geomorphic Province (CGS, 2002). The Peninsular Range Province extends from the tip of Baja California north to the Transverse Ranges Geomorphic Province and is characterized by northwest trending mountain ranges separated by subparallel fault zones. The San Bernardino Mountains, located north of the site, provides the boundary between the Peninsula Range Province and the Transverse Ranges Province. In general, the province is underlain primarily of plutonic rock of the Southern California Batholith. The Peninsular Range Geomorphic Province is generally characterized by alluviated basins and elevated erosion surfaces.

More specifically, published geologic maps of the area indicate that the site and surrounding alluvial areas are underlain by Holocene- and Late Pleistocene-age Young alluvial-fan deposits (Bedrossian, Hayhurst, and Roffers, 2010). This soil is described as unconsolidated to slightly consolidated boulder, cobble, sand, and silt deposits issued from a confined valley or canyon.

Surface Water

No indication of surface water was observed on the property or in close proximity at the time of our site reconnaissance.

The subject property is situated within Flood Insurance Rate Map (FIRMette) 06071C8628J. Most of the subject property is mapped within Zone X, defined as an area defined as areas of 0.2 percent annual chance flood; and areas of 1 percent annual chance flood with average depths of less than 1 foot or within drainage areas less than 1 square mile. A small portion of the north central portion of the subject property is also mapped within Zone X, defined, however, as an area of minimal flood hazard. Cucamonga Creek is within Zone A, defined as a 1 percent annual chance flood discharge contained within structure. The FIRMette map (effective February 10, 2015) is provided in Appendix B.

Groundwater

The site is located within the Upper Santa Ana Valley - Chino (8-002.01) Groundwater Basin. No historic groundwater wells are listed within the subject site on the CDWR water data library (CDWR, 2023). Based on our review, the closest mapped well to the subject property (Chino-1002337) is mapped on the north side of the I-10 Freeway, approximately 3,300 feet to the northeast. In April 1929, this well reported a depth to groundwater of approximately 219 feet below the ground surface (bgs). In 1944 depth was recorded as 242 feet bgs; in 2000 355 feet bgs; in 2018 343 feet bgs; and, in March 2023 344 feet bgs. In general, groundwater depth varies within the area and though flow direction specifically beneath the subject property is unknown, it is reasonable to estimate flow to follow regional topography to the south/southeast.

RESULTS OF ASSESSMENT

The results of our site reconnaissance and assessment of adjacent sites, agency database review, and historical land use study are presented in the following sections.

Site Observation

Petra conducted a reconnaissance of the subject site on November 4, 2023. Representative site photographs are included in Appendix A. Our site observations are summarized below.

1. The subject property is a vacant site located at the southeasterly corner of E. Holt Boulevard and E. Guasti Road in the city of Ontario, San Bernardino County, California. The site is bounded by hotel properties to the north and west; improved Cucamonga Creek to the east and a distribution center and vacant land beyond; and a railroad line to the south with Ontario International Airport beyond. Sidewalks are not present along any street edges bounding the subject property. Chain link fencing delineates the subject site boundary perimeter. A site location map is included as Figure 1.

2. The subject site is comprised of one parcel of approximately 10.4-acres with Assessor Parcel Number (APN) 0110-322-33-0-000. A plan showing recent conditions on the site is included as Figure 2.

3. Access to the subject property is via an open gate off E. Guasti Road near E. Holt Boulevard. A second locked gate is situated further south. At the time of our field reconnaissance, the site was vacant land. A majority of the subject site is covered with moderately thick to thick, dry native vegetation with somewhat scattered trees; however, an irregularly shaped strip of cleared vegetation exists along the westerly side of the subject site, exposing native soil. Some of this cleared area is covered with gravel. Some of the trees have been uprooted and partially ground up to mulch. A thinner strip of partially cleared vegetation exists along the east property boundary with Cucamonga Creek. Windblow trash and debris is common along the northern boundary with E. Holt Boulevard and to a lesser extent along the west and south boundary with E. Guasti Road. Windblown trash and debris are occasionally observed along the east edge of the dirt area and the brush area of the northwesterly area onsite. The site slopes gently to the southeast with existing elevations on the order of 965 feet above mean sea level (msl) to 950 feet above msl (USGS, 1981).

4. Within the subject property trash and debris is minimal. The largest area of debris is in the northeastern portion of the subject site, where what appears to be remnants of a homeless encampment was observed. Three dumped piles of soil noted in the south-central area of the subject property appear to be relatively recent. It appears these soil piles were placed on top of a relatively thin layer of leveled fill soil. Except for roots/rootlets, the surface of these piles was clean of trash and debris. Except for occasional concrete fragments, trash and debris was limited within the subject property. A few small areas of waste concrete and asphalt were noted among the brush in the interior of the subject site.

5. No water wells were observed on site during our reconnaissance.

6. Overhead power lines were observed adjacent to the subject property during our site reconnaissance. Overhead lines with one pole mounted transformer were noted outside the fence along the east side of E. Guasti Road near a fire hydrant. The transformer appeared to be in good condition at the time of our reconnaissance. No ground surface staining or distressed vegetation was noted below the transformer. No pad mounted transformers were observed; however, yellow bollards were observed near two high voltage SCE risers and a vault within the southwesterly portion of the subject site. Closer to the open gate, a buried concrete water valve box was observed inside the fence line.

7. There was no evidence of drums, above ground storage tanks, underground storage tanks, sumps, pits, pools, or lagoons identified within the subject property boundary during our site assessment.

Adjacent Site and Vicinity Observations

The property is situated in an area of commercial land use. Our observations are noted below:

South To the south of the property is E. Guasti Road, a railroad line and Ontario Airport beyond.

East To the east of the site is Cucamonga Creek, with a distribution center to the northeast and a vacant lot to the southeast beyond.

West To the west of the property is E. Guasti Road, with a hotel beyond.

North To the north of the site is E. Holt Boulevard and the east bound onramp to I-10, with hotel development beyond.

Government Agency Database Research

A search of federal, state, and local government listings was performed by Environmental Data Resources, Inc. (EDR) for the purposes of this report. The search radius used for all government databases meets or exceeds the standard search distance adopted by ASTM and AAI.

Results of Agency Records Search

A data search of the various government agency records listed in Appendix C revealed two listings mapped for the subject site under the Facility Index System/Facility Registry System (FINDS), Enforcement & Compliance History Information (ECHO), and Aerometric Information Retrieval System-Minor (US AIRS) databases. The Site Name is listed as Marriott Airport Hotel, 2200 E. Holt Street, Ontario, CA 91761. Based upon our site reconnaissance and Bing Maps, 2200 E. Holt Boulevard is located on the west side of E. Guasti Road (the subject property is located on the east). These database listings pertain solely to air quality monitoring of stationary sources of air pollution.

The EDR report shows 57 other listings at approximately 25 addresses within the requested search radii. Eighteen of the listings refer to businesses reported only under the Resource Conservation Recovery Act (RCRA) NonGenerator (RCRA NonGen/NLR) or San Bernardino County Permit (CA San Bern. Co. Permit) databases. Thirty-six of the listings are mapped within 1,760 feet (1/3 mile) of the center of the subject property; however, 13 are mapped at a down- or cross-groundwater gradient. Thirty-one orphan sites (sites with inadequate address information to be mapped by EDR) were identified during the agency database search. Refer to the EDR Radius Map Report in Appendix C for the search radii completed for this assessment.

The linear distance and groundwater gradient guidelines provided in ASTM E2600-15 (Tier 1 Areas of Concern) are used as a reasonable screening tool for groundwater and vapor migration to identify a

recognized environmental condition (REC) associated with the subject site (ASTM, 2015; Buonicore, 2014). For contaminated sources (such as a dry cleaner with a PCE release or a gas station with a leaking underground storage tank releasing BTEX) located up-gradient of the Target Property (TP), the focus would be on those contaminated sites within the AOC distance of 1,760 feet. The AOC search distance in the cross-gradient quadrant is reduced from 1,760 feet to 365 feet and the AOC for contaminated sites down-gradient from the TP is reduced from 1,760 feet to 100 feet.

A brief description of the sites listed in the EDR report, which are of potential concern due to the nature of the listing or their proximity to the site (i.e., within the AOC), is provided below. EDR's VEC Map application depicting the AOC pertaining to the subject property is provided in Appendix B.

Sites A1 & A2 Target Site: Marriott Airport Hotel, 2200 E. Holt St., Ontario, CA 91761: This listing is mapped as the Target Property; however, as noted above, Bing Maps located this address and hotel across E. Guasti Road from the subject property. This address is reported under the Facility Index System/Facility Registry System (FINDS), Enforcement & Compliance History Information (ECHO), and Aerometric Information Retrieval System-Minor (US AIRS) databases. Under FINDS, the Air Facility System (AFS) contains compliance and permit data for stationary sources of air pollution regulated by the US EPA, state, and local air pollution agencies. No additional pertinent data is provided. No additional pertinent data is provided under ECHO. Under US AIRS MINOR, the default air classification code is reported as MIN. The air program is reported as "Stratospheric Ozone Protection." The activity group is listed as "Compliance Monitoring." No additional pertinent data is provided. Based upon the absence of a dual listing pertaining to an unauthorized release, spill, or leak of hazardous materials this adjacent property these listings do not appear to represent a recognized environmental condition (REC) with regards to the subject property currently.

Site 3: Well 29, Ontario, CA: This site is listed less than 1/8-mile east-northeast of and at a higher elevation than the subject site. This site is reported on the State Water Resources Control Board's (CA PFAS) database. EDR maps the well directly east of the Cucamonga Channel, which bounds the east edge of the subject property. The site use is reported as "Drinking Water Wells". Potential Contaminants of Concern are "not reported". Potential media affected is listed as "not reported". Site history is "not reported." The matrix is listed as "liquid." PFOA is listed as < 2 nanograms per liter (NG/L) in December 2019. An additional 10 PFAS analytes are reported at a concentration < 2 NG/L. No additional pertinent data is provided.

Based upon our experience with laboratory detection levels of PFAS in groundwater, a concentration reported as <2 NG/L represent a non-detect designation, or below the laboratory detection limit. Based upon the 2019 PFAS groundwater results, this listing does not appear to represent a recognized environmental condition (REC) with regards to the subject property currently.

Site B4: Frontier California: Airport RSC3/9, 2152 E. D St., Ontario, CA 91764: This site is listed less than 1/8-mile west-northwest of and at a higher elevation than the subject site. This site is reported on the San Bernardino County Permit (CA San Bern. Co. Permit) database. The permit category is listed as "hazardous materials 1-3 chemicals special." The facility status is listed as "active." The expiration date is reported as 5-31-2023. No additional pertinent data is provided. Based upon the absence of a dual listing pertaining to an unauthorized release, spill, or leak of hazardous materials this property listing does not appear to represent a recognized environmental condition (REC) with regards to the subject property currently.

Site 5: Holiday Inn, 2155 E. Convention Center Way, Ontario, CA 91764: This site is listed less than 1/8-mile north of and at a higher elevation than the subject site. This site is reported on the Resource Conservation Recovery Act (RCRA) Non-Generator/No Longer Regulated (RCRA NonGen/NLR) database. The Federal Waste Generation Description is reported as "not regulated, verified." The NAICS Code, 72111, is described as "hotels (except casino hotels) and motels." This facility has received no notices of violations and no evaluation actions. Based upon the absence of a dual listing pertaining to an unauthorized release, spill, or leak of hazardous materials this property listing does not appear to represent a recognized environmental condition (REC) with regards to the subject property currently.

Site B11: L.D. King, Inc., 2151 E. Convention Center Way, Suite 100, Ontario, CA 91764: This site is listed less than 1/8-mile northwest of and at a higher elevation than the subject site. This site is reported on the CA San Bern. Co. Permit database. The permit category is listed as "conditionally exempt small quantity generator." The facility status is reported as "inactive" as of 8-3-2005. No additional pertinent information is provided. Based upon the absence of a dual listing pertaining to an unauthorized release, spill, or leak of hazardous materials this property listing does not appear to represent a recognized environmental condition (REC) with regards to the subject property currently.

Site 14: Radisson Ontario Airport, 2200 E. Holt Blvd., Ontario, CA 91761: This site is listed less than 1/8-mile west of and at a higher elevation than the subject site. This site is reported on the CA San Bern. Co. Permit database. The permit category is listed as "hazardous materials 1-3 chemicals special." The facility status is listed as "inactive." The expiration date is reported as 9-30-2017. No additional pertinent data is provided. Based upon the absence of a dual listing pertaining to an unauthorized release, spill, or leak of hazardous materials this property listing does not appear to represent a recognized environmental condition (REC) with regards to the subject property currently.

Site D15: Mark Christopher Auto Center, 2131 Convention Center Way, Ontario, CA 91764: This site is listed between 1/8-mile and 1/4-mile northwest of and at a higher elevation than the subject site. This address is reported on CA EPA's California Underground Storage Tank (CA UST) database. The UST is permitted through San Bernardino County Fire Department. The installation date was listed as 1-7-1991. The double-walled steel UST is reported to have two compartments with a capacity of 4,000 gallons. The UST content is listed as regular unleaded. Tank piping was reported as fiberglass. Tank alarms are present. A permit for a second UST was listed for A 2,000-gallon used oil UST. The same general tank construction was reported. No additional pertinent information is provided. Based upon the absence of a dual listing pertaining to an unauthorized release, spill, or leak of hazardous materials this property listing does not appear to represent a recognized environmental condition (REC) with regards to the subject property currently.

Site D16: Mark Christopher Chevrolet, 2131 E. D St, Ontario, CA 91764: This site is listed between 1/8-mile and 1/4-mile northwest of and at a higher elevation than the subject site. This facility is reported on multiple regulatory agency databases including Small Quantity Hazardous Waste Generator (RCRA SQG) and multiple UST databases, which can be reviewed in EDR's *Radius Report* in Appendix C; however, this site was not reported on a leaking underground storage tank (LUST) database. This address is considered located up groundwater gradient from the subject property.

Under the CA San Bern. Co. Permit database, the permit category was listed as "1,320- to 10,000-gallon facility capacity." The facility status is listed as "active" with an expiration date of 10-31-2023. The second permit category was reported for "hazardous materials 11 – 30 chemicals" with the same status and expiration date. The permit also reported this facility as a "large quantity (hazardous waste) generator." These permits noted regular UST annual inspections per tank for the facility. Under the CA EPA's Environmental Reporting System (CERS) database, administrative violations were listed. Notes indicate

the facility returned to compliance, in some cases corrected during the agency inspection. No additional pertinent information is provided.

Based upon the absence of a dual listing pertaining to an unauthorized release, spill, or leak of hazardous materials this property the listing does not appear to represent a recognized environmental condition (REC) with regards to the subject property currently. Additional information is provided below under GeoTracker in the *Local Agencies* section.

Site D17: Metropolitan Transit District, 2131 D, Ontario, CA 91764: This site is listed between 1/8-mile and 1/4-mile northwest of and at a higher elevation than the subject site. This facility is reported on CA EPA's Historic Hazardous Waste & Substance Site (CA HIST CORTESE) database. No additional pertinent information is provided. Based upon the absence of a dual listing pertaining to an unauthorized release, spill, or leak of hazardous materials this property listing does not appear to represent a recognized environmental condition (REC) with regards to the subject property currently.

Site F30: Ontario Convention Center, 2000 Convention Center Way, Ontario, CA 91764: This site is listed between 1/8-mile and 1/4-mile northwest of and at a higher elevation than the subject site. This facility is reported on CA San Bern. Co. Permit and CA CERS databases. Under CA San Bern. Co. Permit, the owner of this facility is reported as the City of Ontario Utilities Department. The permit category is reported as "Hazardous Materials 4-10 Chemicals." The status is reported as "active" with an expiration date of 5-31-2023. Administrative violations and compliance evaluation inspections were listed. Notes indicate the facility returned to compliance, in some cases corrected during the agency inspection. No additional pertinent information is provided.

A second permit was listed for *Version Wireless: Turner* at the same address. The permit category is reported as "Hazardous Materials 1-3 Chemicals." The status is reported as "active" with an expiration date of 11-30-2021. This site was also listed under CERS, with a description of "Chemical Storage Facilities." Administrative violations and compliance evaluation inspections were listed.

Based upon the absence of a dual listing pertaining to an unauthorized release, spill, or leak of hazardous materials this property listing does not appear to represent a recognized environmental condition (REC) with regards to the subject property currently.

Site F31: AT&T Mobility-(USID26378), 2000 Convention Center Way, Ontario, CA 91764: This site is listed between 1/8-mile and 1/4-mile northwest of and at a higher elevation than the subject site. This facility is reported on the CA San Bern. Co. Permit database. Under CA San Bern. Co. Permit, the owner of this facility is reported as New Cingular Wireless PCS, LLC dba AT&T Mobility. The permit category is reported as "Hazardous Materials 1-3 Chemicals." The status is reported as "inactive" with an expiration date of 8-31-2022. No administrative violations or compliance evaluation inspections were listed. No additional pertinent information is provided. Based upon the absence of a dual listing pertaining to an unauthorized release, spill, or leak of hazardous materials this property listing does not appear to represent a recognized environmental condition (REC) with regards to the subject property currently.

All other site listings in the EDR report do not currently appear to represent a recognized environmental condition with regards to the subject site, due to the nature of the listings (school site assessments, non-generators, etc.), the oversight agency having granted No Further Action, the site being outside the AOC from the subject site, and/or their distance from the subject site and/or depth to contamination.

Orphan Sites

Orphan sites are those that the database search was not able to locate due to lack of complete address information. Thirty-one orphan sites are listed in the EDR report. Nine LUST listings for the City of Ontario and the Ontario Postal Service, four drycleaners, one EDR Manufactured Gas Plant (MGP), two EDR Historic Auto Stations, and five SLIC database listings were checked for location relative to the subject property. The drycleaners at 9359 Foothill Boulevard, Rancho Cucamonga, were over 1 mile north-northeast from the subject property. The MGP site appeared to be over a mile west of the subject site. The LUST listings were the most difficult to locate based upon the readably available data presented by EDR. The Post office LUST site was mapped by Bings Maps over a half mile to the west of the subject site and at a cross gradient. The remaining 8 City LUST listings were not located. The EDR Historic Auto database sites at 4265 E. Holt Boulevard appeared to be over 1 mile to the west. The 4 SLIC database sites listed Northrop, Lockheed, Douglass Aircraft Company, California Air National Guard, and GE Engine Service at the Ontario International Airport, which is south and down gradient from the subject property.

Based upon our cursory review of the most relevant orphan sites, the orphan sites do not appear to represent a recognized environmental condition (REC) with regards to the subject property at this time.

Local Agencies

Petra reviewed information held by the agencies listed below during the course of this assessment.

San Bernardino County Fire Department

The San Bernardino County Fire Department Hazardous Materials Division maintains records related to hazardous materials business and management plans, hazardous waste generation and onsite treatment, aboveground petroleum storage, underground storage tanks, and California Accidental Release Program facilities in San Bernardino County. Records held by this agency were accessed by EDR during the government database search. No listings for the subject site were reported by EDR.

California Regional Water Quality Control Board

The California Regional Water Quality Control Board-Santa Ana Region 8 (RWQCB) maintains records of leaking underground storage tank sites and groundwater cleanups for sites in the Santa Ana Region. Records held by the RWQCB were accessed by EDR during the government database search. No listings for the subject site were reported by EDR.

GeoTracker

The GeoTracker website maintains a record of environmental data for regulated facilities in California. No database listings for the subject site were reported on GeoTracker. The memorandum documenting this inquiry is included in Appendix B.

Based upon the number of database listings for Mark Christopher Auto Center (2131 Convention Center Way, Ontario, CA 91764) above in the *Results of Agency Records* database search, Petra reviewed information on GeoTracker. The facility was mapped with permitted underground storage tanks only. The permitting agency was reported as San Bernardino County Fire Department. A LUST listing was not reported. Based upon the absence of a dual listing pertaining to an unauthorized release, spill, or leak of hazardous materials, this confirms that this offsite property listing does not appear to represent a recognized environmental condition (REC) with regards to the subject property currently.

- GeoTracker PFAS Map

Per- and polyfluoroalkyl substances (PHAS) is a large family of emerging contaminants with over 2,000 fluorinated chemicals. The persistence and mobility of some PFAS, combined with decades of widespread use in industrial processes, certain types of firefighting foams, and consumer products, have resulted in their being present in environmental media at trace levels across the globe. Toxicological studies have raised concerns regarding the bioaccumulative nature and potential health concerns of some PFAS. As a result, our understanding of PFAS and the risks they may pose is rapidly evolving (ITRC, 2022).

Since the 1950s, many products commonly used by consumers and industry have been manufactured with or from PFAS, as the unique physical and chemical properties of PFAS impart oil, water, stain, and soil repellency, chemical and thermal stability, and/or friction reduction to a range of products. These products have applications in many industries, including the aerospace, semiconductor, medical, automotive, construction, electronics, and aviation industries, as well as in consumer products (such as carpets, clothing, furniture, outdoor equipment, food packaging), and firefighting applications (ITRC, 2022).

Effective February 25, 2022, for purposes of Proposition 65, the Office of Environmental Health Hazard Assessment (OEHHA) added perfluorooctanoic acid (PFOA) to the list of chemicals known to the State of California to cause cancer. On September 6, 2022, the US EPA issued a notice of proposed rulemaking to designate perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) as hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund).

Petra reviewed the interactive map of sites where water wells have analytical test data for the suite identified as per- and polyfluoroalkyl (PFAS), which include PHOA and PFOS (currently listed on CERCLA). One well was mapped in proximity to the subject property, just east of Cucamonga Creek (Public Drinking Water Well 29). Results for 12 different PFAS, including PFOA and PFOS, were reported as less than 2 nanograms per liter (ng/L) or non-detect on January 9, 2020. May 2023 US EPA Regional Screening Levels (RSLs) for tap water list PFOA at 0.06 micrograms per liter (µg/L) and PFOS at 0.04 µg/L (or 60 ng/L and 40 ng/L, respectively). No Maximum Contaminant Level (MCL) is provided. As such, non-detect concentrations, or the detection limit of PFOA and PFOS in groundwater, over 200 feet below the ground surface in the subject site area, are well below the RSLs for tap water.

<u>California Department of Conservation, Geologic Energy Management Division (CalGEM)</u>

According to the California Department of Conservation, Geologic Energy Management Division (CalGEM), there are no active or abandoned oil, or gas wells located on the subject site. Further, there were no indications of any such wells found during our reconnaissance of the subject site. A copy of this map is included in Appendix B.

California Department of Conservation

The California Department of Conservation, Division of Mine Reclamation's "Mines Online" interactive map was queried regarding mines in proximity to the subject property. The map depicted no mines within the subject property or within one mile of the subject property. The memorandum documenting this inquiry is included in Appendix B.

Department of Toxic Substances Control

The online database EnviroStor (DTSC, 2023), which provides records on LUSTs, SLICs, Priority cleanup sites and states sites, is maintained by the Department of Toxic Substances Control (DTSC). No database listings for the subject site were reported on EnviroStor. The memorandum documenting this inquiry is included in Appendix B.

Department of Toxic Substances Control – Land Use Covenants

Petra reviewed the DTSC's Permitting Land Use Covenants Web App for land use covenants (LUCs) affecting the subject property. None were found for the subject property. The memorandum documenting this inquiry is included in Appendix B.

National Pipeline Mapping System

Petra reviewed the National Pipeline Mapping System (NPMS, 2023) public viewer website for gas transmission pipelines and hazardous liquid trunklines on or close to the subject property. Due to security purposes, close-up map views are not available. According to the information reviewed, a hazardous liquid pipeline or petroleum pipelines are mapped south of Guasti Road, apparently along the railroad line. One of the pipelines is reported as permanently abandoned. The commodity of the second pipeline is reported as "non HVL product." The pipeline owner is listed as Kinder Morgan. A copy of this map is included in Appendix B.

Vapor Migration

Standards presented in ASTM E1527-21 considers the assessment of vapor migration similar to that of groundwater contamination. As a result, Petra reviewed documentation regarding surrounding sites near the subject property with known soil and groundwater contamination to preliminarily evaluate potential areas of concern for vapor migration/encroachment onto the subject property. An area of concern typically includes active or abandoned gas stations and dry cleaners, industrial facilities, and hazardous waste disposal and landfill facilities with known or suspected soil and/or groundwater contamination.

For vapor encroachment to represent a potential for vapor intrusion to structures within the subject property, vapors must have a pathway to create an indoor air quality condition (i.e., Recognized Environmental Condition). As a result, vapor encroachment from an offsite release onto the subject property does not immediately equate to vapor intrusion into existing or proposed structures within the subject property, and cannot be ascertained without additional field work.

In the absence of specific criteria within ASTM Standard E1527-21, Petra considered the linear distance and groundwater gradient guidelines provided in ASTM E2600-15 (Tier 1 Areas of Concern) as a reasonable screening tool for vapor migration to identify a recognized environmental condition (REC) associated with the subject site (ASTM, 2015; Buonicore, 2014). As a result of our review of readily available information, no surrounding sites have been identified during this assessment which would represent a concern in regard to vapor encroachment on to the subject site at this time.

Petra also reviewed the USEPA's default residential Vapor Intrusion Screening Levels (VISLs) for PFOA and PFOS. We found that these chemicals "are not considered sufficiently volatile and hazardous to pose inhalation risk via vapor from a soil or groundwater source". Currently, non-detect levels of PFOA and PFOS are reported in a public well adjacent to the subject property; however, groundwater is over 200 feet below the ground surface in proximity to the subject property and not anticipated to represent a potential environmental concern to the subject property unless groundwater rises to less than 100 feet below the ground surface. PHOA and PFOS vapor encroachment is not considered a likely risk to the subject property.

Evaluation of Records Search Results

In summary, no sites were identified in our search of various government agency database records, which may have significantly adversely impacted soil, soil vapor, or groundwater beneath the subject site at this time.

Results of Aerial Photo Analysis

Although aerial photographs can often be a valuable source of information in the assessment of historical land usage, it should be understood that information extrapolated from photographic images is strictly interpretation and not necessarily fact. For this reason, it may not be appropriate to draw conclusions regarding previous site activities based solely upon aerial photograph analysis.

In order to provide a complete assessment of historical land usage on and in the vicinity of the subject site, aerial photographs with coverage of the subject site and vicinity were obtained from EDR and viewed by a representative of this firm. Photographs from the years 1938, 1949, 1953, 1966, 1975, 1985, 1989, 1994, 2002, 2006, 2009, 2012, 2016, and 2020 were provided by EDR. Also, aerial photographs (i.e., Google Earth®) from 2020 through 2023 have been reviewed for this assessment and noted no significant changes to the subject property. A summary of the information obtained during the aerial photograph review follows. Copies of the aerial photographs obtained from EDR are included in Appendix C.

1938, 1949 and 1953 Photographs

In photographs from 1938, 1949, and 1953, the subject property and surrounding land is developed for agricultural purposes, which may consist of grapes. A roadway exists along the north and south boundaries of the site. An unimproved drainage is visible along the east boundary. Multiple rows of young and mature trees are observed mostly south of the dirt road along the south property boundary. What appears to be a railroad line is south of the dirt road. No buildings are readily visible within the subject property.

No readily detectable changes to the subject property were observed in the 1949 black and white aerial photograph. The roadway along the north site boundary is improved. The drainage channel east of the site appears to be channelized. Only one row of trees is visible on the north side of the dirt road south of the subject property. No significant changes are noted to land surrounding the subject site; however, the photograph has been blocked south of the railroad. Rows of cultivated vegetation remains visible within the subject property in the 1953 photograph. An airfield is visible south of the subject site. I-10 bridge construction is noted across the drainage north of the site.

1966, 1975, and 1985 Photographs

In the 1966 black and white aerial photograph, surface conditions within the subject property remain very similar to the previous photograph. Vegetation in the eastern two-thirds of the site appears less dense compared to the western one-third. A thin, north-south trending dirt road separates the two areas. No structures are visible within the subject property. What appears to be a farm compound is visible on the east side of the channel across from the southeast corner of the site. The drainage channel along the east edge of the site may be concrete lined. The I-10 Freeway north of the subject property appears active. An expanded airfield with at least two runways is visible south of the subject property.

The 1975 infrared aerial photograph depicts minimal changes to the subject property, except for checkered vegetation patterns. Additionally, vegetation onsite presents a light red or pink tone, suggesting lower plant vigor. An improved road (Guasti Road), which intersects Holt Boulevard, is visible along the south and western edges of the subject property. The farm compound east of the southeast portion of the subject property has expanded to the north and includes multiple buildings.

Cultivated vegetation rows are no longer visible onsite or in the site vicinity in the 1985 photograph. Areas of this vegetation are noted along the eastern property boundary with the drainage channel. Uniform grasses are observed within the remaining area of the subject property. Hotels are observed to the north, between I-10 and Holt Boulevard, including the northeast corner of Guasti Road and Holt Boulevard. What appear to be graded pads are observed to the west (across Guasti Road), to the northwest (across Holt Boulevard),

and to the northeast (across Holt Boulevard). A large building (commercial?) with parking and truck docks is east of the drainage channel, opposite the northeastern portion of the subject property. The farm compound remains east of the southeast portion of the site.

1989, 1994, 2002, 2006, 2009, and 2012 Photographs

In the 1989 photograph, the subject property is undeveloped with buildings visible. What appears to be native vegetation covers a majority of the subject site, except for the eastern edge and three thin areas crossing the site. Trees are noted in the northern portion of the site. Surrounding land appears to be built out to conditions similar to what is current in the vicinity, except for vacant lots across Holt Boulevard and the northeastern portion of the site. Except for the absence of vegetation clearings crossing the site, the subject property conditions in 1994 remain similar to the previous photograph. In addition, a small, half circle shaped clearing is observed on the southwest edge of the subject property. The farm compound east of the southeast portion of the site is no longer visible and the area consists of unform grasses. Except for local variations in onsite vegetation, no significant changes were noted on the undeveloped subject property in 2002, 2006, 2009, and 2012. In the 2009 aerial photograph, what appears to be a hotel has been constructed offsite, across Holt Boulevard from the northeastern portion of the subject site.

2016 and 2020 Photographs

In the 2016 color photograph, a relatively large area of vegetation clearing was observed in the west-northwesterly portion of the subject property. Vegetation clearing was also noted along the south, southeast, and east areas of the site. A small clearing was observed at the northeasterly area of the property. No significant changes were noted in the 2020 aerial photograph. Surrounding land remained hotel use to the west and north, Ontario Airport to the south, vacant land to the southeast and a commercial warehouse to the northeast.

Google Earth Imagery 2020 to 2023

Petra also reviewed historic aerial photographs on Goggle Earth™ from October 2020, September 2022, and May 2023. These photographs depicted similar site conditions to the property to that described above and observed within the subject site during our site walk.

Historical USGS Topographic Maps

Petra reviewed the historical USGS topographic maps of the site and vicinity provided by EDR which included Target Quad's: dated 1897, 1900, 1903, 1941, 1944, 1953, 1954, 1966, 1973, 1976, 1981, 2012, 2015, and 2018. No structures were shown on the subject property in any of the maps. The 1897, 1900, and 1903 maps depicted the subject property and immediate vicinity as undeveloped. A small, northwest-

southeast trending drainage intersected the western edge of the site. A railroad line was visible south of the property. No buildings were depicted in the site area. The 1941 and 1944 maps showed an improved road along the north edge of the site (Holt Boulevard). An unimproved road (1941) and later improved (1944) trending east-west was noted along the south property boundary. Railroad tracks were further south. A thin, unimproved drainage was visible to the east.

Maps from 1953, 1954, 1966, 1973, 1976, and 1981 depicted agricultural development on the subject property and vicinity. I-10 to the north and Ontario International Airport to the south were visible in the 1953 map. In the 1966 map, the road along the south edge of the subject property was labeled A Street. The 1976 map showed three small buildings offsite across the channel from the southeastern portion of the subject site. The 2012 map depicted Guasti Road improved along the south and western edge of the subject site. Maps from 2015 and 2018 showed no changes to the subject property or streets in the vicinity. These maps generally support observations made from the aerial photographs reviewed. Copies of the maps reviewed are provided in Appendix C.

Environmental Lien and Activity and Use Limitations Search 1980

Environmental Liens and Activity and Use Limitations (AULs) indicate restrictions on a property, which may represent a recognized environmental condition for the property. The subject properties San Bernardino County Assessor Parcel Number (APN) 011-032-233-0000 was utilized in this search.

An Environmental Liens and AUL Search dating back to 1980 was conducted by EDR as part of this assessment using the above APN. The EDR Environmental Lien and AUL Search 1980 Report provides results from a search of available current land title records for environmental cleanup liens and other activity and use limitations, such as engineering controls and institutional controls.

A network of professional, trained researchers, following established procedures, uses client supplied address information to:

- search for parcel information and/or legal description;
- search for ownership information filed between January 1, 1980 and October 30, 2023;
- research official land title documents recorded at jurisdictional agencies such as recorders' offices, registries of deeds, county clerks' offices, etc.;
- search for environmental encumbering instrument(s) filed between 1980 and the date of this report;
- provide a copy of any environmental encumbrance(s); and
- provide a copy of the current deed when available.

Public records of San Bernardino County, California were searched from January 1, 1980 to October 30, 2023, and no other deeds vesting title in the subject property were found or recorded during the period searched. Research sources included the San Bernardino County Recorder's Office, the San Bernardino County Assessor's Office, and the California Department of Toxic Substances Control (DTSC). Judicial records were not searched. Based upon available information evaluated by the title search professional, the jurisdiction does not require a search of judicial records in order to identify environmental liens.

The results from this search indicated that there were no recorded Environmental Liens or AULs listed for the subject property APN. A complete Environmental Liens and AUL Search 1980 report is provided in Appendix C. A summary is provided in the table below.

Historic Chain of Title From 1980

Assessor Parcel Number	Grantor	Grantee	Recorded Date
011--032-233	Qualco, Inc. fka Agriswiss, Inc.	JC Horizon, Ltd.	08/24/2018
	Co-Invest Ontario, Inc	Agriswiss, Inc.	11/22/1985
	James M. & Eloise B. Kline	Co-Invest Ontario, Inc.	07/01/1983

A copy of the lien and AUL search report are provided in Appendix C.

Preliminary Title Report

A Preliminary Title report by Ticor Title was provided by the client, dated November 15, 2023. The land referred to in this report in the County of San Bernardino, State of California is described as APN: 0110-322-33-0-000. The title to said estate or interest at the date hereof is vested in *JC Horizon. Ltd*., a California Corporation.

Exceptions presented in the report date back to April 17, 1946 and include easements to San Bernardino County Flood Control District (September 12, 1951) and the City of Ontario Public Utilities (April 7, 1966).

Fire Insurance Maps and City Directories

Fire Insurance Maps provide information on structure locations and operations, which were present at the time of the survey. These maps were completed for most major cities and metropolitan areas, dating from 1867, and provide information into past usage of buildings and how commercial and industrial zoning has changed over time. Sanborn™ Fire Insurance maps were requested for this study. EDR reports that the

subject site is "unmapped property" on fire insurance maps. The memorandum documenting this inquiry is included in Appendix C.

City Directory

City Directories provide information for a specific address at a specific time. A search of city directories from 1922 to 2020 was conducted by EDR for this assessment. The search was conducted for the target streets (E. Guasti Rd. and E. Holt Blvd.) and adjoining streets (A St., Airport Dr., Convention Center Way).

McCutcheon Construction was reported on A Street in 1980 and 1985. Historically A Street was located south of the subject property, but no longer exists. The US Department of Agriculture Animal and Plant Inspection facility is reported on Airport Drive, south of the railroad easement, in 2000, 2003, and 2008.

Mark Christopher Auto Center at 2131 Convention Center Way, north of the subject property, was listed in 2003 and 2008. Mark Christopher was also listed on D Street in 1990 and 1995. Additional discussion regarding Mark Christopher Chevrolet and Auto Center is provided above in the *Results of Agency Records Search* section. Additional commercial businesses, offices, and hotels are reported on Convention Center Way in 2003 and 2008, including the California State Health Vector Borne Disease facility and the California State Health Food and Drug Branch at 2151 Convention Center Way in 2003. The California Department of Health Services was also listed at the same address in 1995, 2000 and 2010. Kaiser Cement Corporation was listed at 2151 D Street, north of the site, in 1985.

In 2000 through 2010, Great Quality and E.L. Yeager Construction companies were listed at 2445 E. Guasti Rd., east of the subject property. HUB Distributing Corporation was listed at the same address in 1980, 1985, 1992, 1995, 2000, and 2008.

The only address listed on E. Holt Boulevard was 2200 E. Holt Boulevard, Ontario, California. Google Earth maps this address across E. Guasti Road from the subject property. In 1991 and 1995 the occupants were reported as Clarion Hotel Ontario Airport and Swank Audio Visuals, Inc. In 2003 and 2008 the occupants were reported as Kustom Gifts, KVL Audio Visual Corp., Marriott Hotel, and On Command Corp.

No listings were found for the subject property. Adjoining properties were first listed in 1975. No surrounding listings, which would indicate a potential concern for the subject site based on the name of the listing, was included in the EDR city directory image report. A copy of this search is presented in Appendix C.

EDR Property Tax Map Report

EDR's Property Tax Map report indicated there was no coverage for the subject parcel number. A copy of the EDR report is provided in Appendix C.

Building Permits

Building Permit data provides information to identify current and/or former operations and structures/features which may represent a recognized environmental condition for the subject site. The complete collection of building permit available to EDR was searched, and as of October 2, 2023, EDR does not have access to building permits in the city where the target property is located (Ontario, California). A copy of this search is presented in Appendix C.

Interviews

Petra provided an Owner Questionnaire to Mr. Jake Sowder, Assistant Project Manager with Diversified Pacific Communities. Mr. Sowder forwarded the Questionnaire to Ms. Judy Lee, owner of subject site. The completed Property Owner Interview Questionnaire was returned to Petra on October 30, 2023 by Mr. Sowder. Ms. Lee's response to the questionnaire is summarized below.

1. According to Ms. Lee, she does have a good knowledge regarding the uses and physical characteristics of the property and does have good knowledge regarding the activities/processes conducted at the property.

2. Ms. Lee stated that the subject property was, "vacant land since we purchased it in 2018". No additional information was provided regarding past use of the site.

3. Ms. Lee indicated that, to the best of her knowledge, there are no hazardous substances or petroleum products present on the site. He indicated that there is no potential recognized environmental conditions within or adjacent to the site. Additionally, Ms. Lee noted that she is not aware of any current or previous uses of the property, or nearby properties that would suggest the presence of potential recognized environmental conditions, hazardous substances, or materials.

4. Ms. Lee indicated that there are no water wells, clarifiers, disposal wells or underground irrigation system on the subject property. She also noted that, to the best of her knowledge, there are no utility corridors on the site.

5. Ms. Lee started that she does not have good knowledge regarding the identity of any existing documents relating to the property and responded that there is one environmental assessment report by BBG Assessment, dated February 11, 2019. Ms. Lee noted that she is not aware of environmental permits, storage tank registrations, reports regarding hydrogeologic condition on site or in the vicinity, there are no hazardous waste generator notices or reports, and no geotechnical studies.

6. According to Ms. Lee , based on her knowledge and experience related to the property, there are no notices or other correspondence from any government agency relating to past or current violations of environmental laws.

7. According to Ms. Lee, there are no notices or other correspondence from any governmental agency relating to environmental liens encumbering the property.

8. According to Ms. Lee, there are no pending, threatened, or past litigation or administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the property.

9. According to Ms. Lee, there are no notices from any governmental entity regarding any possible violations of environmental laws, or possible liability relating to hazardous substances or petroleum products.

A copy of the complete Owner Questionnaire is provided in Appendix D.

User / Client Knowledge

In compliance with AAI, Petra provided a User / Client Questionnaire to Mr. Jake Sowder, Assistant Project Manager with Diversified Pacific Communities. Mr. Sowder forwarded the Questionnaire to Mr. Nolan Leggio, Director of Forward Planning with Diversified Pacific Communities to complete. Mr. Leggio noted that the Phase I ESA was required due to development of the site as a hotel. A summary of the questions and response is provided below.

1. Mr. Leggio indicated he does have reports for this project.

2. Mr. Leggio indicated that there are no current restrictions regarding Petra contacting local agencies regarding the subject property.

3. According to Mr. Leggio, he is not aware of any environmental clean-up liens against the property that are filed or recorded under federal, tribal, state of local law. He did not respond to the question whether he will be conducting a search of environmental cleanup liens against the property that are filed or recorded in a registry. Mr. Leggio indicated that Petra is to complete this task. Mr. Leggio noted that a preliminary title report was conducted by Ticor Title Company of California. (*Petra: a copy was provided by Mr. Leggio.*)

According to Mr. Leggio, he is not aware of any activity and land use limitations (AULs), such as engineering controls, land use restrictions, or institutional controls that are in place on or for the site, and/or have been filed or that environmental cleanup liens against the property that are filed or recorded under federal, tribal, state of local law. He responded that he will be conducting a search of AULs against the property that are filed or recorded in a registry. Mr. Leggio requested Petra to complete this task.

4. According to Mr. Leggio, he does not have specialized knowledge or experience related to the property or nearby properties.

5. Mr. Leggio indicated that the purchase price for the land is fair market value.

6. Mr. Leggio indicated that he is not aware of past uses of the subject property.

7. Mr. Leggio indicated that he is not aware of chemical spills that have occurred on the subject property or environmental cleanups that have taken place on the property or on adjacent properties.

8. According to Mr. Leggio, he is not aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of hazardous materials/chemical releases or threatened releases.

9. According to Mr. Leggio, he is not aware of any specific chemicals present currently or previously on the site.

10. According to Mr. Leggio, he does not know of any obvious indicators that point to the presence or likely presence of contamination at the property.

A copy of the complete user-client questionnaire is provided in Appendix D.

Data Failures and Data Gaps

In the event that data gaps are identified, the Environmental Professional (EP) will endeavor to comment on the significance of those data gaps. However, the EP cannot, and does not warrant or guarantee that no significant events, releases, or conditions arose, during periods such as data gaps.

Petra reviewed several sources for historical information regarding the subject site. These sources included a government agency database search, a city directory search, a review of historical aerial photographs and historical USGS topographic maps, and interviews. Some of the gaps between the aerial photographs (1938 to 1949: 1953 to 1966) and the USGS topographic maps exceeded 10 years and fire insurance maps covering the target property were not found.

Data gaps exist in the historic information reviewed. These gaps are due to the limited records and resources available, which are reasonably ascertainable and practically reviewable in the local area. However, it is our opinion that if additional historical information were to become available, it is not likely to change the conclusions or recommendations of this assessment.

DISCUSSION OF POTENTIAL ENVIRONMENTAL CONCERNS

The following discussions of potential environmental concerns are presented to inform the client as to the existence, or lack thereof, of recognized environmental conditions present on the subject site.

Regulatory Actions

Based upon a thorough search of available federal, state, and local records, no known current regulatory action is pending with respect to the subject property.

Adjacent and Nearby Properties

No information has been obtained during this assessment which would indicate the presence of recognized environmental conditions adjacent to the subject site that are considered likely to pose a significant impact to soils or groundwater beneath the subject site at this time.

Polychlorinated Biphenyls (PCB's)

Polychlorinated biphenyls (PCB's) are historically linked to electrical equipment, such as capacitors and transformers, due to their physical and chemical characteristics. PCB's, persistent in the environment, are known to accumulate in organisms and the food chain.

Any electrical equipment (i.e., transformers, capacitors, and fluorescent light fittings) containing dielectric insulating fluids or coolants, manufactured prior to 1976, should be considered to potentially contain PCB's. PCB's may also be found in older lubricating oils, cutting oils, hydraulic fluids, paints, sealants, and flame retardants (UNEP, 2002).

At this time, buildings which were known to have occupied the southern portion of the subject property, are no longer present. One pole-mounted transformer was observed outside the chain link fencing along E. Guasti Road. The transformer appeared to be in good condition and there were no readily detectable signs of surface staining around the base of the wooden pole. No information has been obtained during this assessment which would indicate the existing or past presence of Polychlorinated Biphenyls (PCB's) at the site. A PCB survey, however, was not conducted at the subject property as part of this assessment.

Underground Storage Tanks

No information has been obtained during this assessment, which would indicate fuel underground storage tanks (UST's) to be located on the subject site currently nor are UST's reported to have been located on site in the past. Further, no surface indications of UST's were observed on the subject site during the site reconnaissance.

Above Ground Storage Tanks

No information has been obtained during this assessment, which would indicate above ground fuel storage tanks (AST's) are located on the subject site currently, nor are ASTs reported to have been located on the site in the past.

Stormwater/Wastewater Discharge

At this time, stormwater/wastewater discharge from the site appears to be limited to surface water runoff. It is anticipated that precipitation falling on the site would infiltrate site soils. Water which does not infiltrate site soils would be expected to flow off of the site following the surface topography. Cucamonga Creek, a concrete lines drainage channel flows south along the eastern edge of the subject property.

Pesticide and Herbicide Residue

Based on information obtained during this assessment, the site was used for agricultural (grape vineyards) purposes from at least 1938 to sometime during/between 1975 and 1985; however, the infrared photograph from 1975 presents light red or pink tones suggesting lower plant vigor. Sometime during/between 1975 and 1985 agricultural usage ceased, and the land has remained vacant from that time to the present. There is a potential that copper based fungicides (common vineyard contaminants) may have been applied to the former grape plants to prevent vine downy mildew and, therefore, may have impacted the near surface soils. However, it is our understanding that the potential for vine downy mildew is relatively low for the area due to the temperate climate in the region.

Copper sulfate is partly washed down to lower soil levels by water percolating through the ground; partly bound to soil components; and partly changed into different metabolites, or breakdown products. Copper is considered to be among the more mobile of the heavy metals in surface environments. Due to the passage of time (at least 38 years), soil characteristics (alluvial fan deposits of sands, gravel, and cobbles) and the environment of the region, the potential that copper residues remaining in onsite soils exceeding regulatory screening levels is considered very low to nil.

Asbestos-Containing Materials

Buildings were not known to have occupied the subject property from at least 1938 to the present day. No potential asbestos-containing materials (ACMs) were observed on the site during our recent site reconnaissance and no information was found which indicated the use, storage, or disposal of asbestos-containing materials on the site. An ACM survey, however, was not conducted at the subject property as part of this assessment.

Lead-Based Paints

Buildings were not known to have occupied the subject property from at least 1938 to the present day. No potential lead-based paint (LBP) materials were observed on the site during our recent site reconnaissance and no information was found which indicated the use, storage, or disposal of lead-based paint materials on the site. A LBP survey, however, was not conducted at the subject property as part of this assessment.

Landfills

The EDR Radius Report does not list any known landfills within the search radius conducted for this assessment. Therefore, landfills do not appear to represent a recognized environmental condition with regards to the subject site.

Water Supplies

No water wells were observed on the subject site. There were no signs observed by Petra during our recent site reconnaissance indicating water is supplied to the subject property.

Waste Generation and Storage

Waste generation and storage was not observed onsite during our site reconnaissance. Windblown trash was most common along the perimeter fencing and small localized areas of trash/debris were noted within the subject property, including remnants of a homeless encampment in the northeasterly portion of the subject property. A few areas of tree stump grinding have created relatively large isolated areas of wood mulch. It is recommended that the debris be removed and disposed of, in accordance with current regulations.

CONCLUSIONS

Recognized Environmental Conditions

Recognized environmental conditions are defined by the American Society of Testing and Materials (ASTM) as any hazardous substance or petroleum product under conditions that indicate an existing, past, or material threat of release into the structures, ground, groundwater, or surface water at the subject site. If the presences of recognized environmental conditions are identified on a subject site, it may warrant additional research, site assessment, and/or action.

- No REC's have been identified within or affecting the subject property.

Controlled recognized environmental conditions (CREC'S) are defined by the American Society of Testing and Materials (ASTM) Practice E 1527-21 as a recognized environmental condition resulting from the past *release* of *hazardous substances* or *petroleum products* that has been addressed to the satisfaction of the applicable regulatory authority (i.e., as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with *hazardous substances* or *petroleum products* allowed to remain in place subject to the implementation of required controls. For example, if a leaking underground storage tank has been cleaned up to a commercial use standard but does not meet unrestricted residential cleanup criteria; this would be considered a controlled recognized environmental condition. The "control" is represented by the (inferred) restriction that the property remains commercial.

- No CREC's have been identified within or affecting the subject property.

Historical recognized environmental conditions (HREC'S) are defined by the American Society of Testing and Materials (ASTM) Practice E 1527-21 as a past release of any *hazardous substances or petroleum products* that has occurred in connection with the *property* and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory agency, without subjecting the *property* to any required controls (i.e., *property* use restrictions, *activity and use limitations*, *institutional controls* or *engineering controls*).

- No HREC's have been identified within or affecting the subject property.

We have performed a Phase I Environmental Site Assessment in general conformance with the scope and limitations of ASTM Practice E 1527-21 for the subject property, APN 011-032-233, located at the southeast corner of E. Holt Boulevard and E. Guasti Road, in the city of Ontario, San Bernardino County, California. Any exceptions to, or deletions from, this practice are described in the section titled data gaps of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the subject property at this time.

SITE CONSIDERATIONS

The items presented below are not considered recognized environmental conditions in accordance with ASTM E 1527-21. Although these items may warrant consideration in conjunction with any planned development activities, they are not recognized environmental conditions. The information regarding possible actions relative to these items has been provided as guidance.

1. With re-development of any former agricultural property, a certain amount of unknown subsurface conditions may be anticipated. Any discolored soils, noxious odors, buried pipelines or irrigation channels, and/or other buried objects/debris encountered during clearing and grubbing, or future grading and development should be left in place until an experienced environmental professional (such as Petra) has had the opportunity to evaluate the conditions and provide recommendations if needed.

2. It is possible that abandoned irrigation lines will be encountered during demolition, clearing, and grubbing, or rough grading. If these irrigation lines are concrete, they should be left in place until an experienced environmental professional (such as Petra) has had the opportunity to evaluate the conditions and provide recommendations if needed. In the event concrete irrigation lines are encountered, caution should be taken to not crush the lines until it can be ascertained that they do not contain asbestos.

3. It is recommended that all debris and trash observed on the subject site be removed and disposed of in accordance with current local, state and federal disposal regulations.

LIMITATIONS

This assessment is based upon the project as described and the environmental data obtained from the field reconnaissance and research performed as outlined in this report. This report has not been prepared for use by parties or projects other than those named or described in this report, additional studies may be required.

Since our assessment is based upon a review of available data and visual assessment of the site, without any invasive study, the conclusions presented herein are professional opinions. These opinions have been derived in accordance with current standards of practice, and no warranty is expressed or implied.

This firm's evaluation of previous reports and/or subconsultant reports focuses on the completeness of the information presented in the document, in accordance with applicable rules and regulations, and does not include the establishment of data sufficiency or accuracy.

QUALIFICATIONS

Resumes for the staff who contributed to this report are presented in Appendix F.

“We the undersigned declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in § 312.10 of 40 CFR 312. We have the specific qualification based on education, training, and experience to assess a property of the nature, history, and setting of the subject site. We have developed and performed the all appropriate inquiries in general conformance with the standards and practices set forth in 40 CFR Part 312.”

Respectfully submitted,

PETRA GEOSCIENCES, INC.

Edward Lump
Associate Geologist
PG 5975

Siamak Jafroudi, PhD
Senior Principal Engineer
GE 2024

12/5/23

EL/JC/SJ/lv

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_____, 2023g, EDR Environmental Lien and AUL Search 1980, Ontario Hotel, SE Corner E. Holt Blvd. and E. Guasti Rd., Ontario, CA 91761 (Inquiry No. 07482419.8R), dated November 2.

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FIGURES



- Reproduced from: USGS, 2023, The National Map Viewer

LEGEND

- Approximate Site Location

PETRA GEOSCIENCES, INC.
40880 COUNTY CENTER DRIVE, SUITE M
TEMECULA, CALIFORNIA 92591
PHONE: (951) 600-9271
COSTA MESA MURRIETA PALM DESERT SANTA CLARITA

Site Location Map

Proposed Empire Resort and Spa
Ontario, San Bernardino County, California

DATE: DECEMBER 2023	J.N.: 22-398	Figure 2176
DWG BY: epl	SCALE: see map	



- Reproduced from: Google Earth, 2023, Photograph dated May 16

LEGEND

- - - - - - - Approximate Limits of Site

PETRA GEOSCIENCES, INC.
40880 COUNTY CENTER DRIVE, SUITE M
TEMECULA, CALIFORNIA 92591
PHONE: (951) 600-9271
COSTA MESA MURRIETA PALM DESERT SANTA CLARITA

Site Aerial Photograph

Proposed Empire Report and Spa
Ontario, San Bernardino County, California

DATE: December 2023	J.N.: 22-398	Figure 2
DWG BY: epl	SCALE: see map	

APPENDIX A

SITE PHOTOGRAPHS



Photo #1 – northerly view across the west-central portion of the property.



Photo #2 – east view of import soils stockpiled in the southwesterly portion of the property.



Photo # 3 – northeasterly view of tree stump and lumber in the west central area of the site. Note ground mulch in foreground.



Photo #4 – northeasterly view of rubber tire in northwesterly portion of the property.



Photo # 5 – cardboard and lumber debris in north-central portion of the property.



Photo #6 – West view of surface conditions along northwest edge of the site. Holt Blvd. is visible to the right.



Photo # 7 – southeast view of site conditions in west-southwest portion of the property.



Photo #8 – southerly view of site conditions along southwesterly boundary with E. Guasti Rd. Note above ground yellow SCE bollards and risers in background.



Photo # 9 – electric meter box onsite near second southern gate along E. Guasti Rd.



Photo #10 – southeasterly view of high voltage SCE risers and manhole near electric meter box shown in Photo 9.



Photo # 11 – small level pile of asphalt in west-central portion of the property.



Photo #12 – northwest view of pole-mounted transformer outside fence in the southwest portion of the site.



Photo #13 – southerly view of surface utilities and Cucamonga Creek access road in southeast corner of site.



Photo #14 – north view of large concrete fragments noted near Cucamonga Creek in east-central edge of site.



Photo #15 – northeast view of site conditions in northeast portion of the site. Homeless camp is near base of tree.



Photo #16 – debris related to abandoned homeless camp in northeastern portion of the property. Holt Blvd. and Cucamonga Creek are visible in the background.



Photo #17 – additional debris related to abandoned homeless camp in northeast portion of the property.



Photo #18 – northeast view of dumped concrete and asphalt fragments north of homeless camp in northeast portion of the subject property.



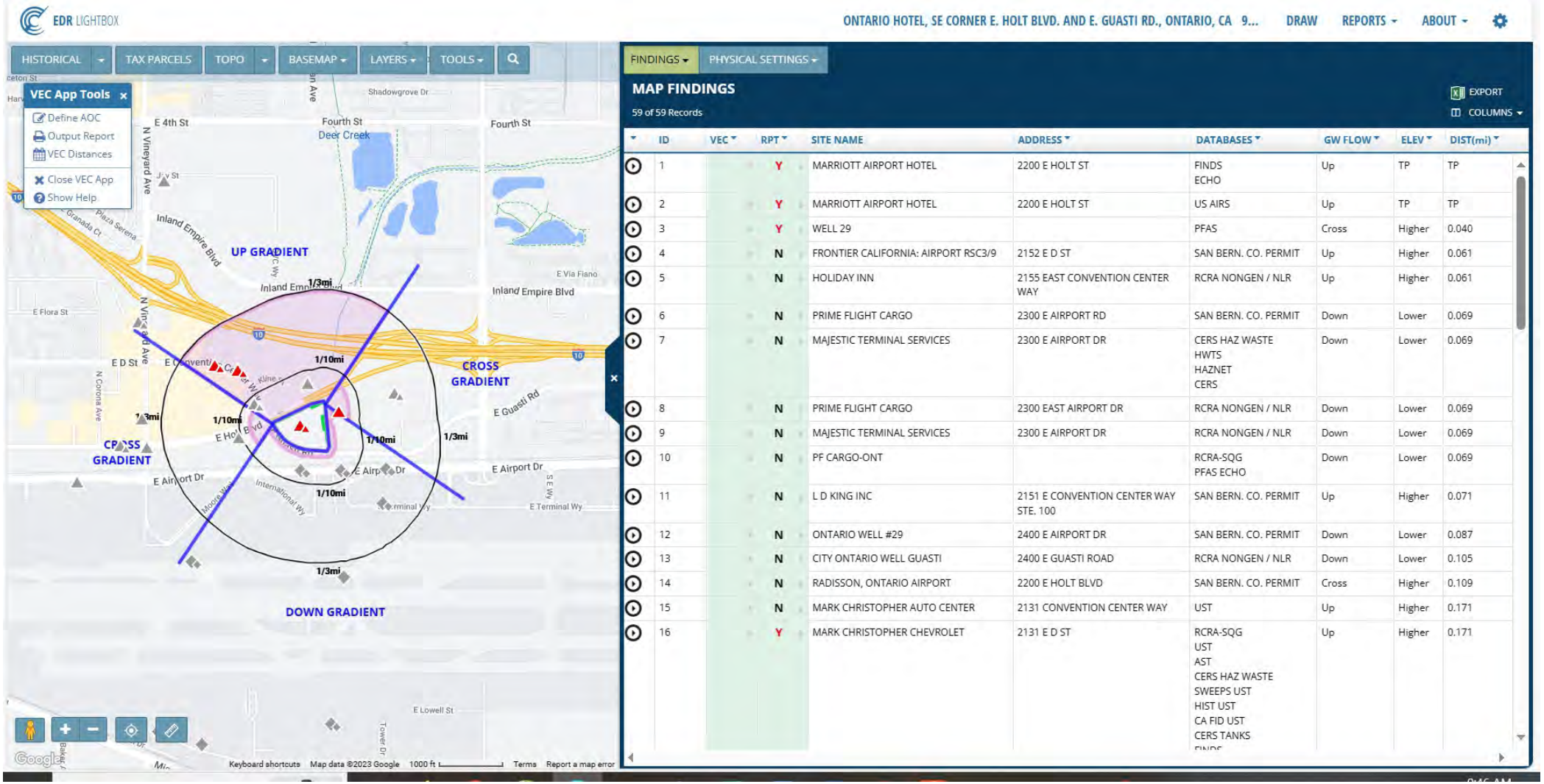
Photo #19 – west view of surface conditions in northeasterly portion of the site. Holt Blvd. is visible in right photo.



Photo #20 – southwest view across the subject property from near the northeast corner of the site.

APPENDIX B

AGENCY SEARCH RESULTS



	ID	VEC	RPT	SITE NAME	ADDRESS	DATABASES	GW FLOW	ELEV	DIST(mi)
	1		Y	MARRIOTT AIRPORT HOTEL	2200 E HOLT ST	FINDS ECHO	Up	TP	TP
	2		Y	MARRIOTT AIRPORT HOTEL	2200 E HOLT ST	US AIRS	Up	TP	TP
	3		Y	WELL 29		PFAS	Cross	Higher	0.040
	4		N	FRONTIER CALIFORNIA: AIRPORT RSC3/9	2152 E D ST	SAN BERN. CO. PERMIT	Up	Higher	0.061
	5		N	HOLIDAY INN	2155 EAST CONVENTION CENTER WAY	RCRA NONGEN / NLR	Up	Higher	0.061
	6		N	PRIME FLIGHT CARGO	2300 E AIRPORT RD	SAN BERN. CO. PERMIT	Down	Lower	0.069
	7		N	MAJESTIC TERMINAL SERVICES	2300 E AIRPORT DR	CERS HAZ WASTE HWTS HAZNET CERS	Down	Lower	0.069
	8		N	PRIME FLIGHT CARGO	2300 EAST AIRPORT DR	RCRA NONGEN / NLR	Down	Lower	0.069
	9		N	MAJESTIC TERMINAL SERVICES	2300 E AIRPORT DR	RCRA NONGEN / NLR	Down	Lower	0.069
	10		N	PF CARGO-ONT		RCRA-SQG PFAS ECHO	Down	Lower	0.069
	11		N	L D KING INC	2151 E CONVENTION CENTER WAY STE. 100	SAN BERN. CO. PERMIT	Up	Higher	0.071
	12		N	ONTARIO WELL #29	2400 E AIRPORT DR	SAN BERN. CO. PERMIT	Down	Lower	0.087
	13		N	CITY ONTARIO WELL GUASTI	2400 E GUASTI ROAD	RCRA NONGEN / NLR	Down	Lower	0.105
	14		N	RADISSON, ONTARIO AIRPORT	2200 E HOLT BLVD	SAN BERN. CO. PERMIT	Cross	Higher	0.109
	15		N	MARK CHRISTOPHER AUTO CENTER	2131 CONVENTION CENTER WAY	UST	Up	Higher	0.171
	16		Y	MARK CHRISTOPHER CHEVROLET	2131 E D ST	RCRA-SQG UST AST CERS HAZ WASTE SWEEPS UST HIST UST CA FID UST CERS TANKS	Up	Higher	0.171

National Flood Hazard Layer FIRMette

FEMA

117°36'29"W 34°4'7"N



117°35'52"W 34°3'37"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

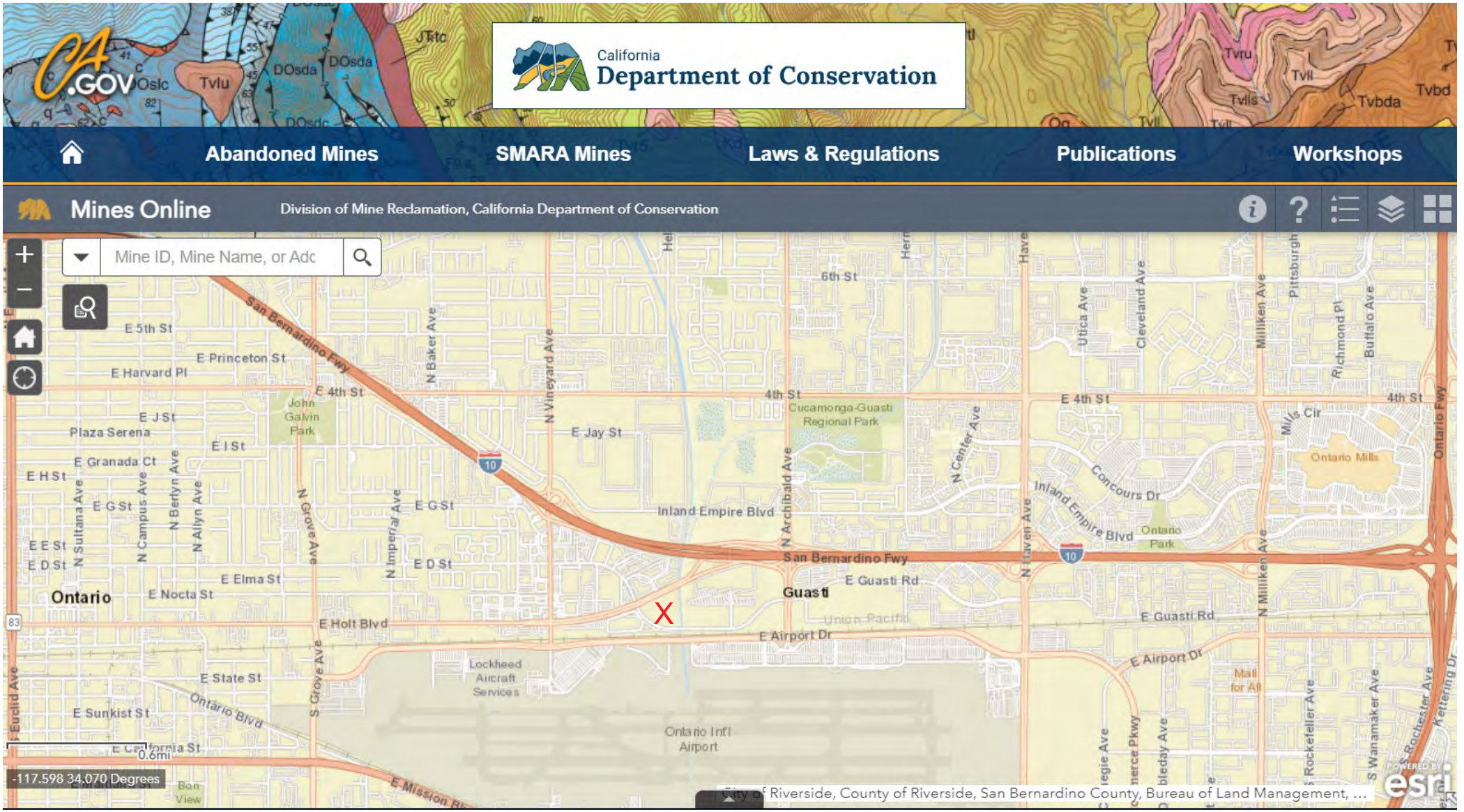
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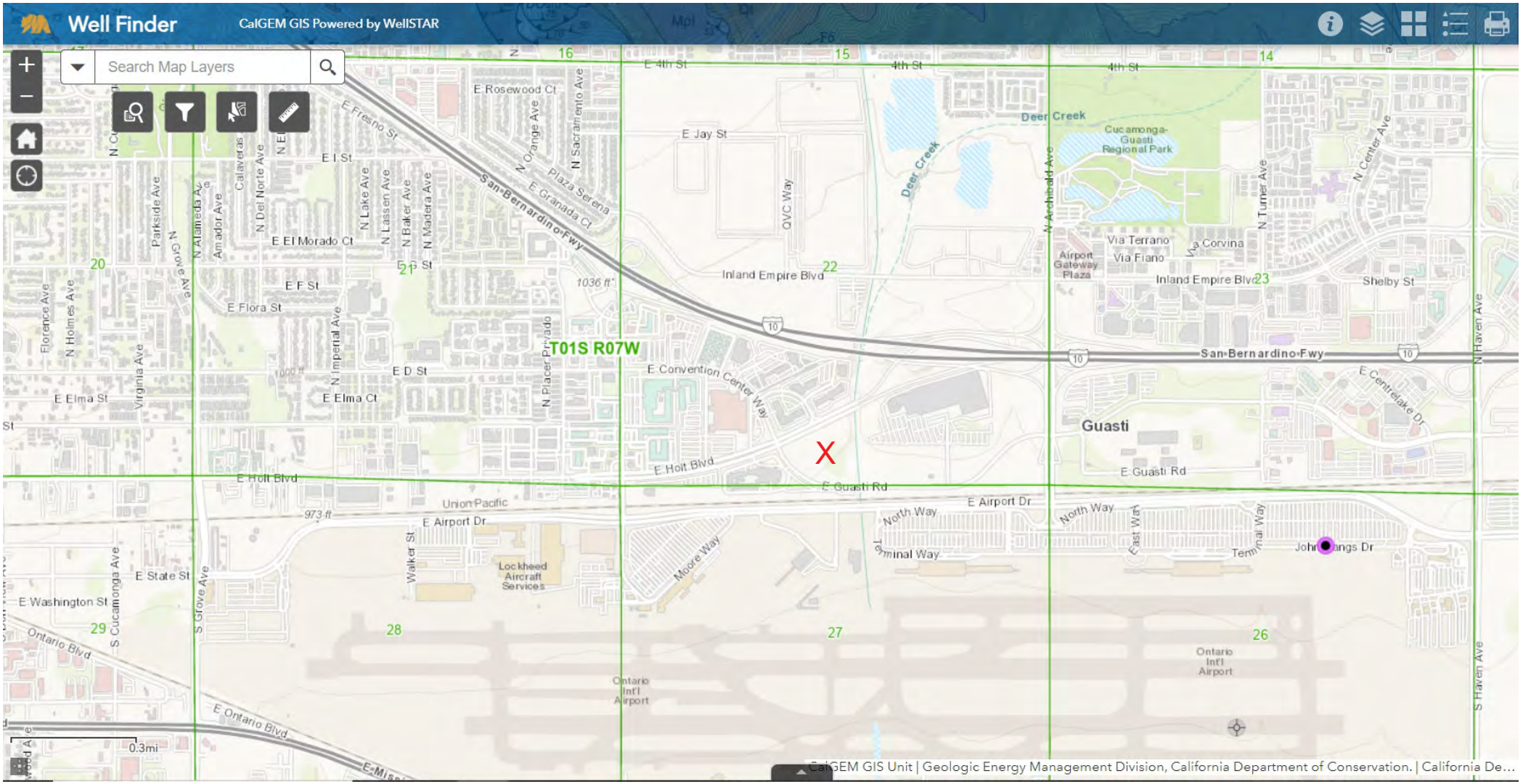
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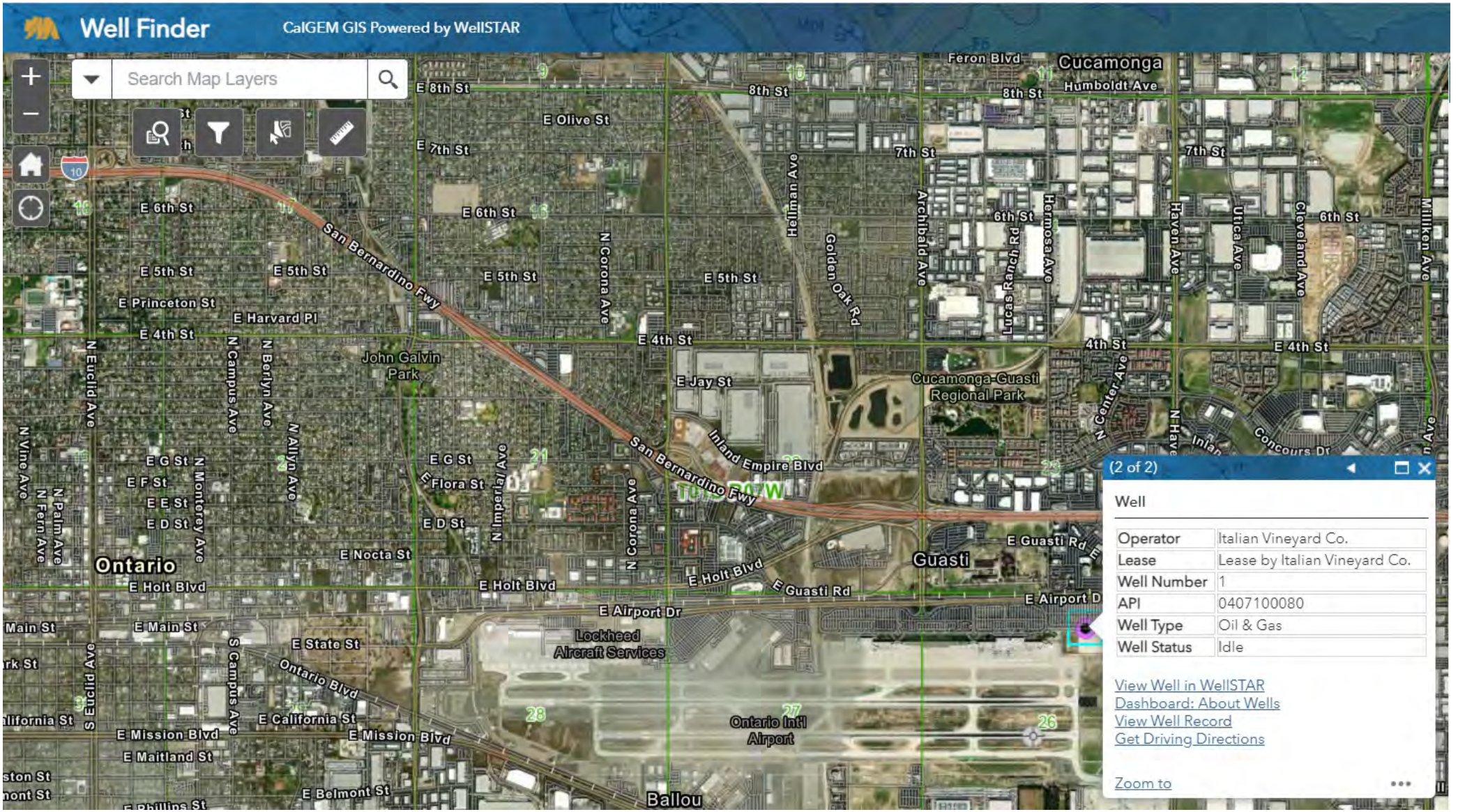
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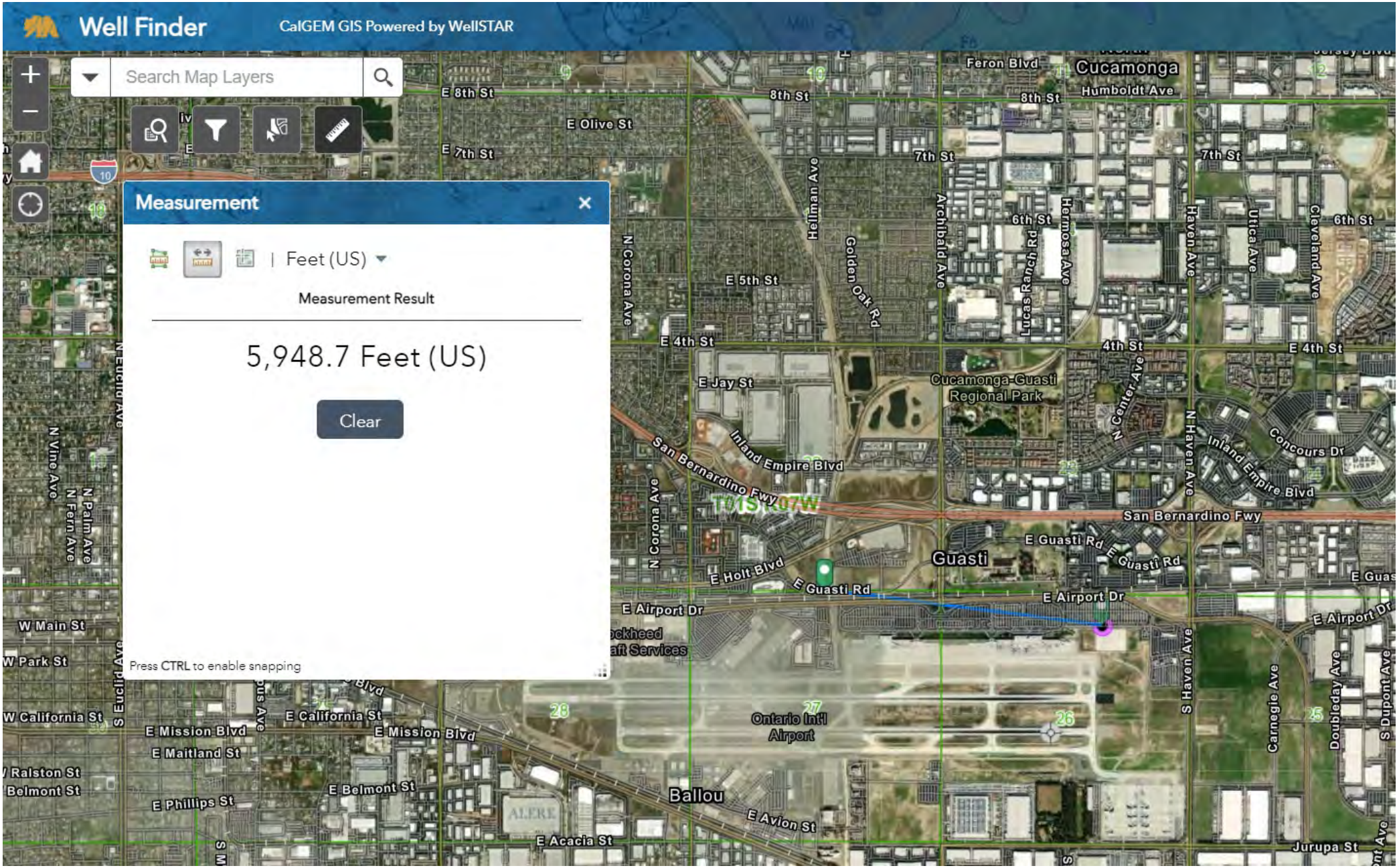
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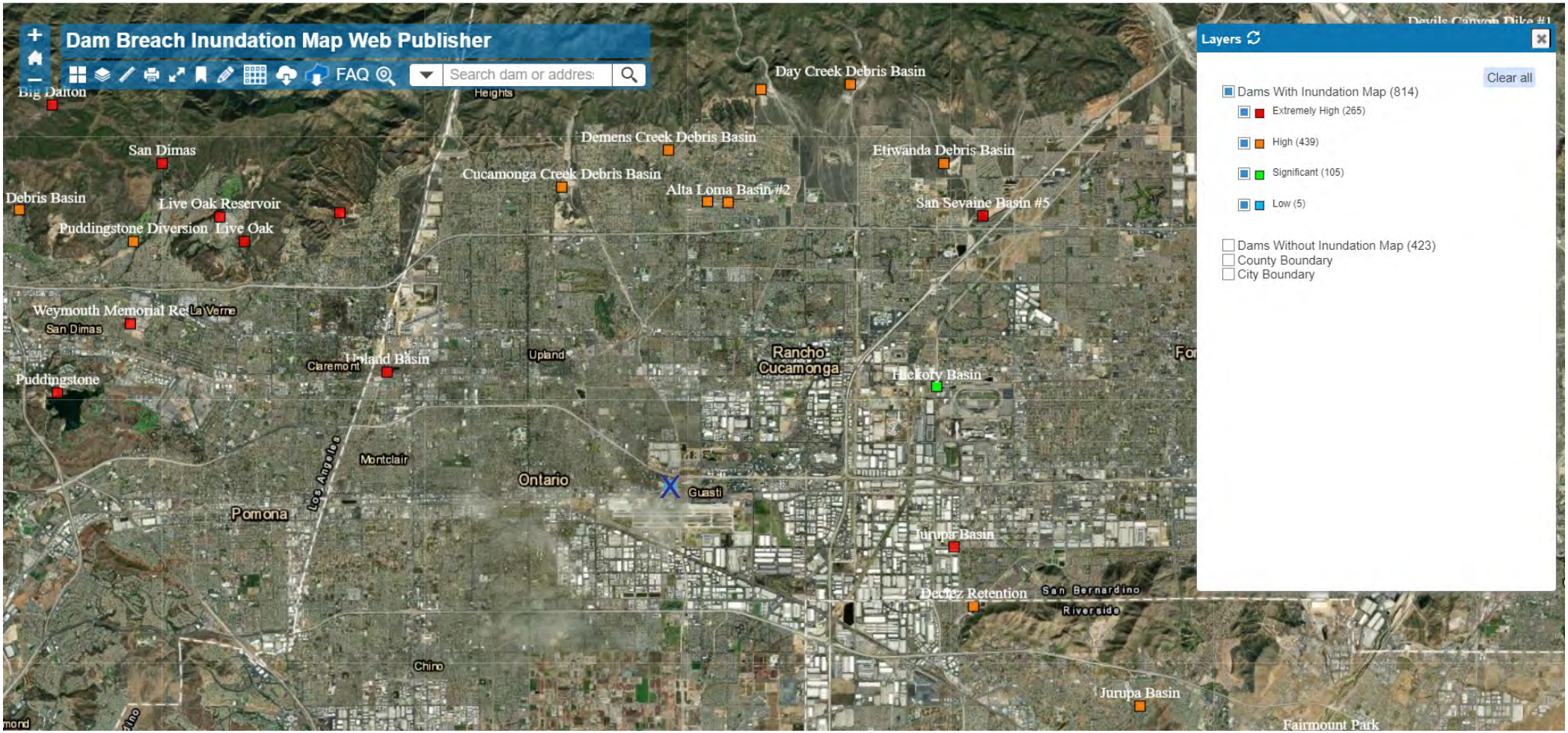
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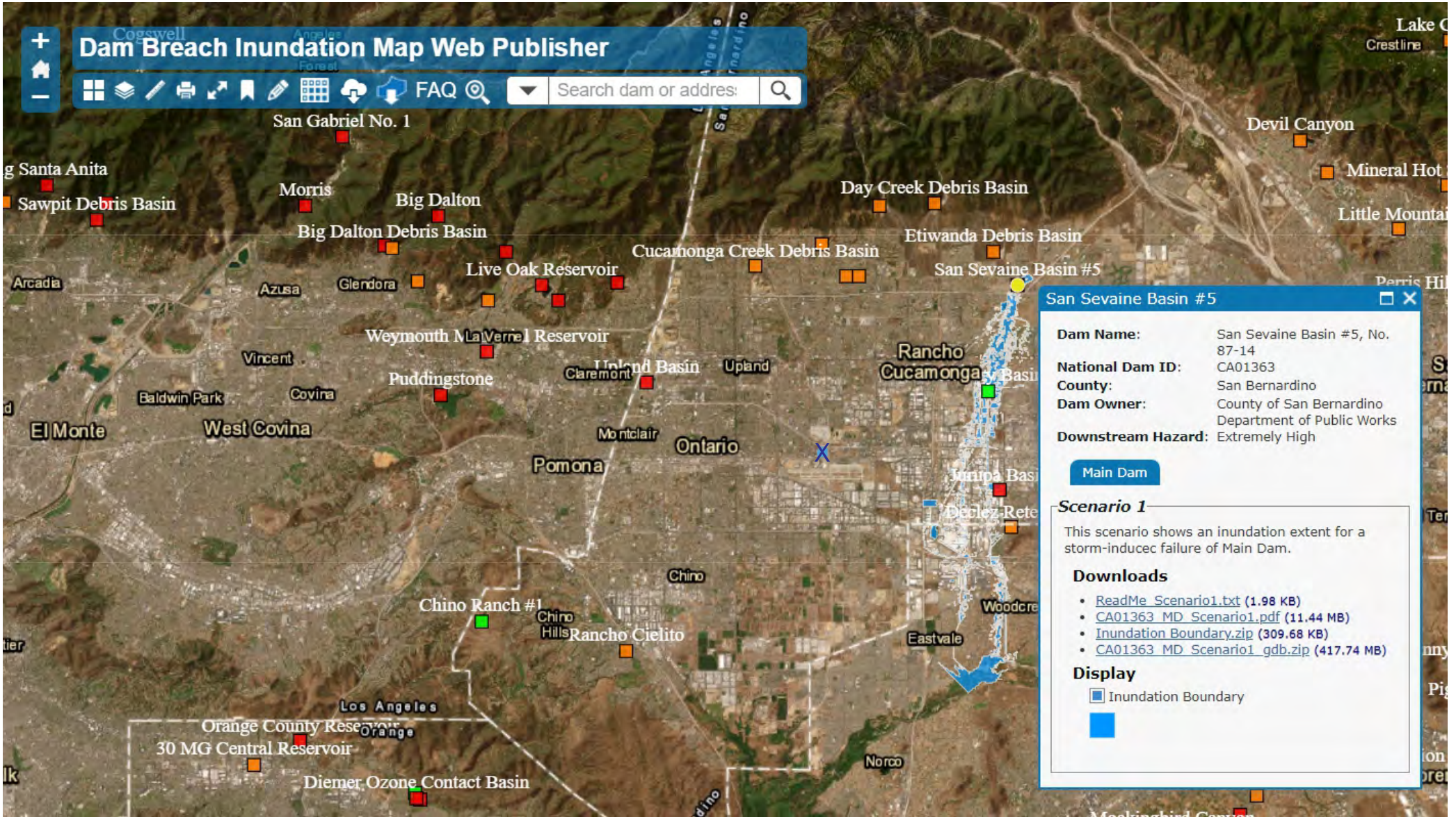

CA.GOV
California
Department of Conservation
Abandoned Mines
SMARA Mines
Laws & Regulations
Publications
Workshops
Mines Online
Division of Mine Reclamation, California Department of Conservation
Mine ID, Mine Name, or Adc
X
Ontario
Guasti
San Bernardino Fwy
Inland Empire Blvd
E Guasti Rd
E Airport Dr
E Holt Blvd
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Lockheed Aircraft Services
Ontario Int'l Airport
Cucamonga-Guasti Regional Park
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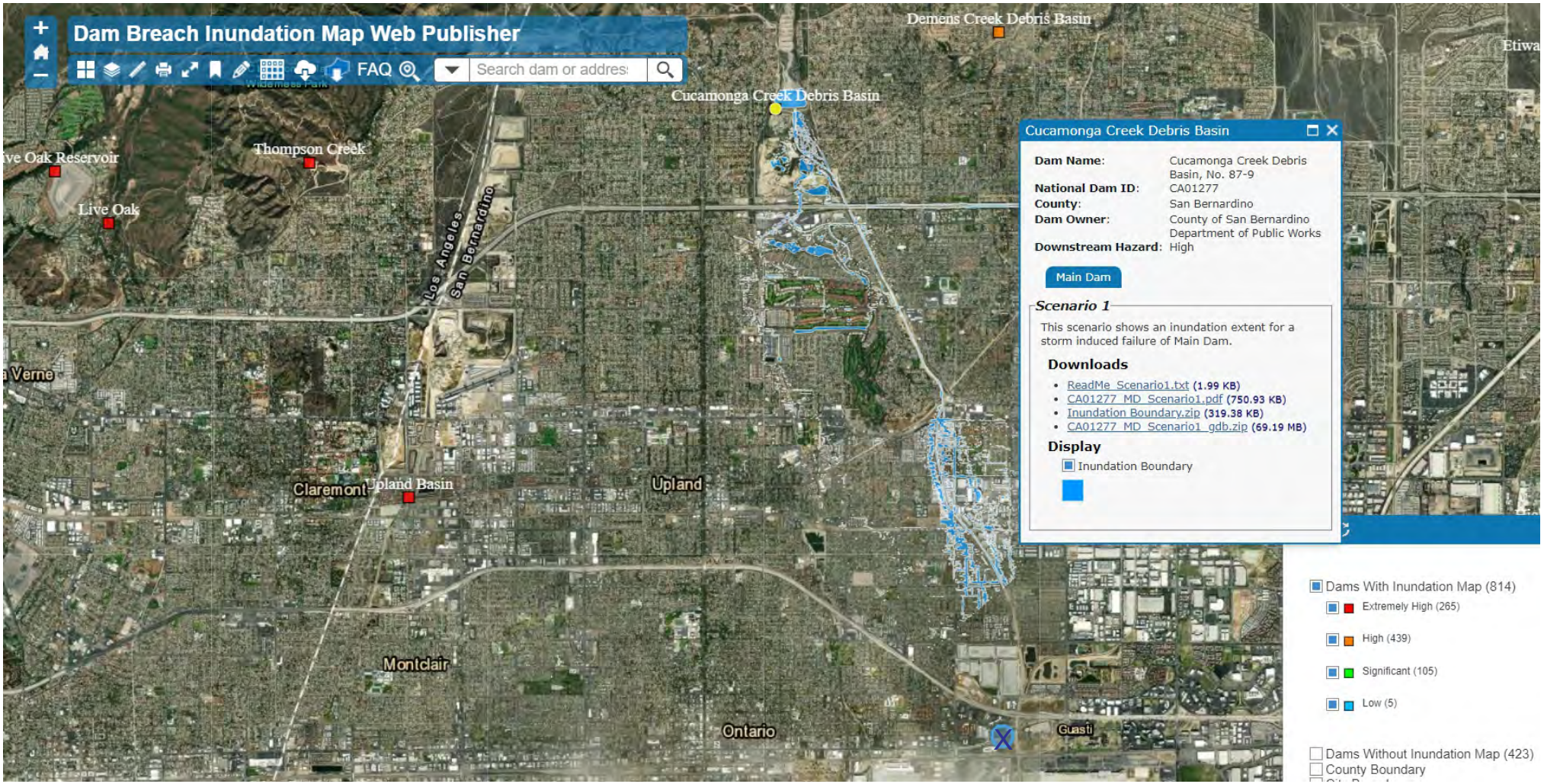

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Search Map Layers
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E Airport Dr
E Convention Center Way
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Cucamonga-Guasti Regional Park
Ontario Int'l Airport
Lockheed Aircraft Services
Union Pacific
E Fresno St
E Rosewood Ct
E Jay St
E 4th St
4th St
E I St
E El Morado Ct
E F St
E Flora St
E D St
E Elma St
E Elma Ct
E State St
E Washington St
E Ontario Blvd
Ontario Blvd
Shelby St
Via Terrano
Via Fiano
Via Corvina
Airport Gateway Plaza
North Way
Terminal Way
East Way
Moore Way
Walker St
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S Cucamonga Ave
N Haven Ave
N Center Ave
N Turner Ave
N Archibald Ave
N Sacramento Ave
N Orange Ave
Plaza Serena
E Granada Ct
QVC Way
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N Imperial Ave
N Lake Ave
N Lassen Ave
N Baker Ave
N Madera Ave
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CalGEM GIS Unit | Geologic Energy Management Division, California Department of Conservation. | California De...

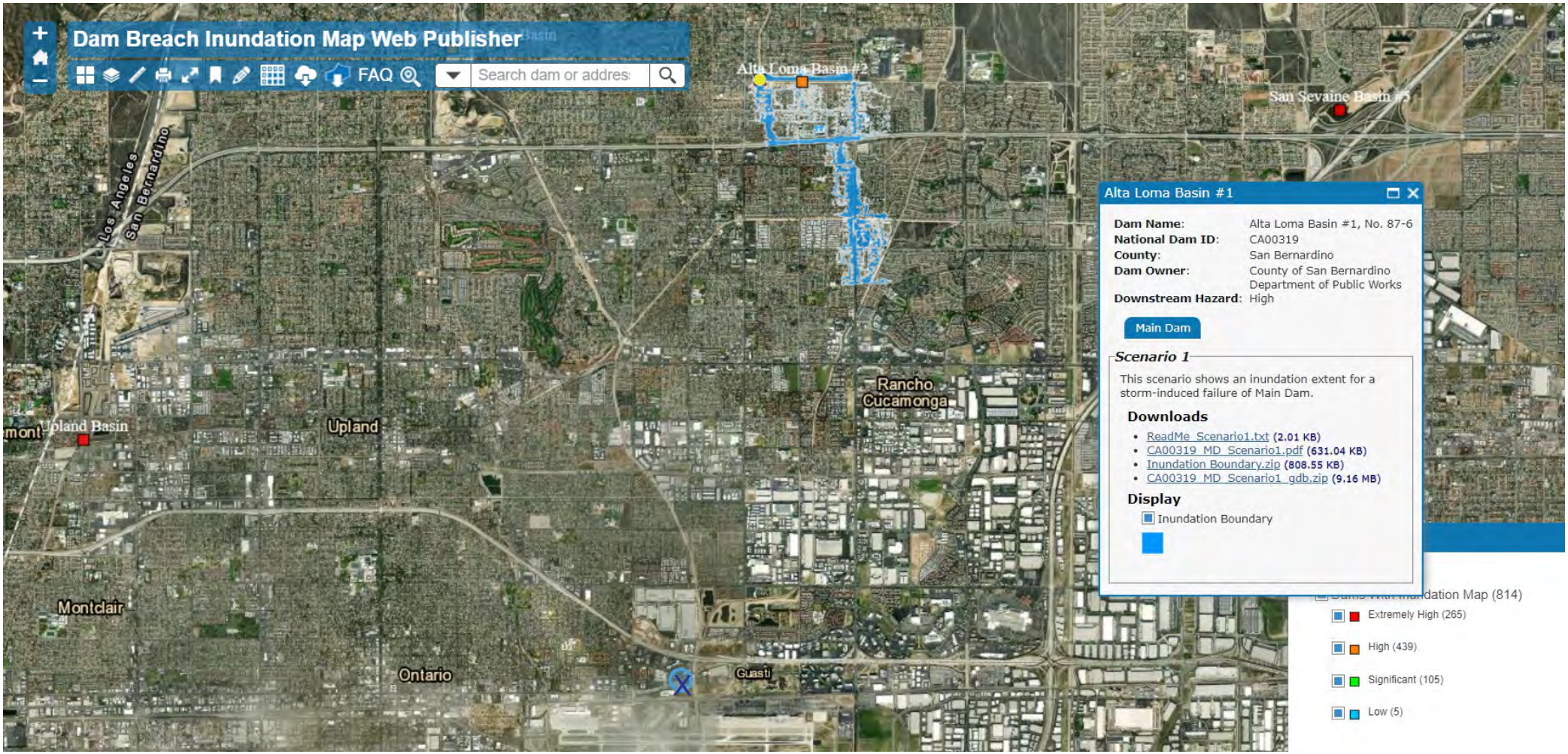

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6th St
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Golden Oak Rd
Archibald Ave
Lucas Ranch Rd
Hermosa Ave
Haven Ave
Utica Ave
Cleveland Ave
Milliken Ave
San Bernardino Fwy
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N Corona Ave
E Princeton St
E Harvard Pl
E 4th St
4th St
John Galvin Park
E Jay St
Cucamonga-Guasti Regional Park
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Concours Dr
N Euclid Ave
N Campus Ave
N Berlyn Ave
N Allyn Ave
N Vine Ave
N Fern Ave
N Palm Ave
N Monterey Ave
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E F St
E E St
E D St
E Flora St
N Imperial Ave
Inland Empire Blvd
Ontario
E Nocta St
E Holt Blvd
Guasti
E Guasti Rd
E Airport Dr
Lockheed Aircraft Services
Main St
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E State St
S Euclid Ave
S Campus Ave
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View Well Record
Get Driving Directions
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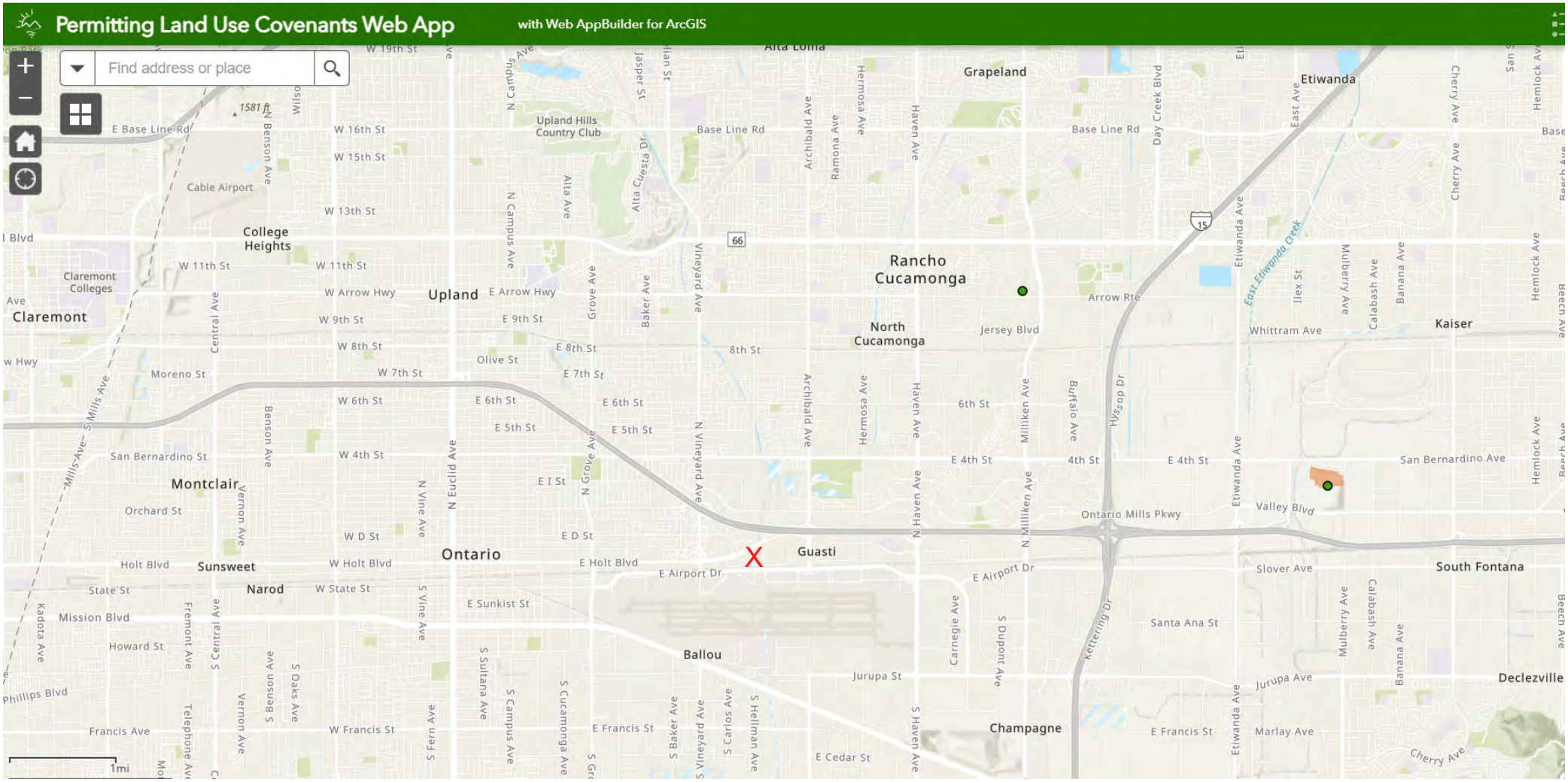

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CalGEM GIS Powered by WellSTAR
Search Map Layers
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Cucamonga
Feron Blvd
Humboldt Ave
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4th St
Hellman Ave
Archibald Ave
Golden Oak Rd
Lucas Ranch Rd
Hermosa Ave
Haven Ave
Utica Ave
Cleveland Ave
N Corona Ave
N Center Ave
N Haven Ave
Cucamonga-Guasti Regional Park
E Jay St
Inland Empire Blvd
San Bernardino Fwy
Concours Dr
T01S R07W
Guasti
E Guasti Rd
E Holt Blvd
E Airport Dr
Ontario Int'l Airport
Ballou
E Avion St
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W Park St
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E Mission Blvd
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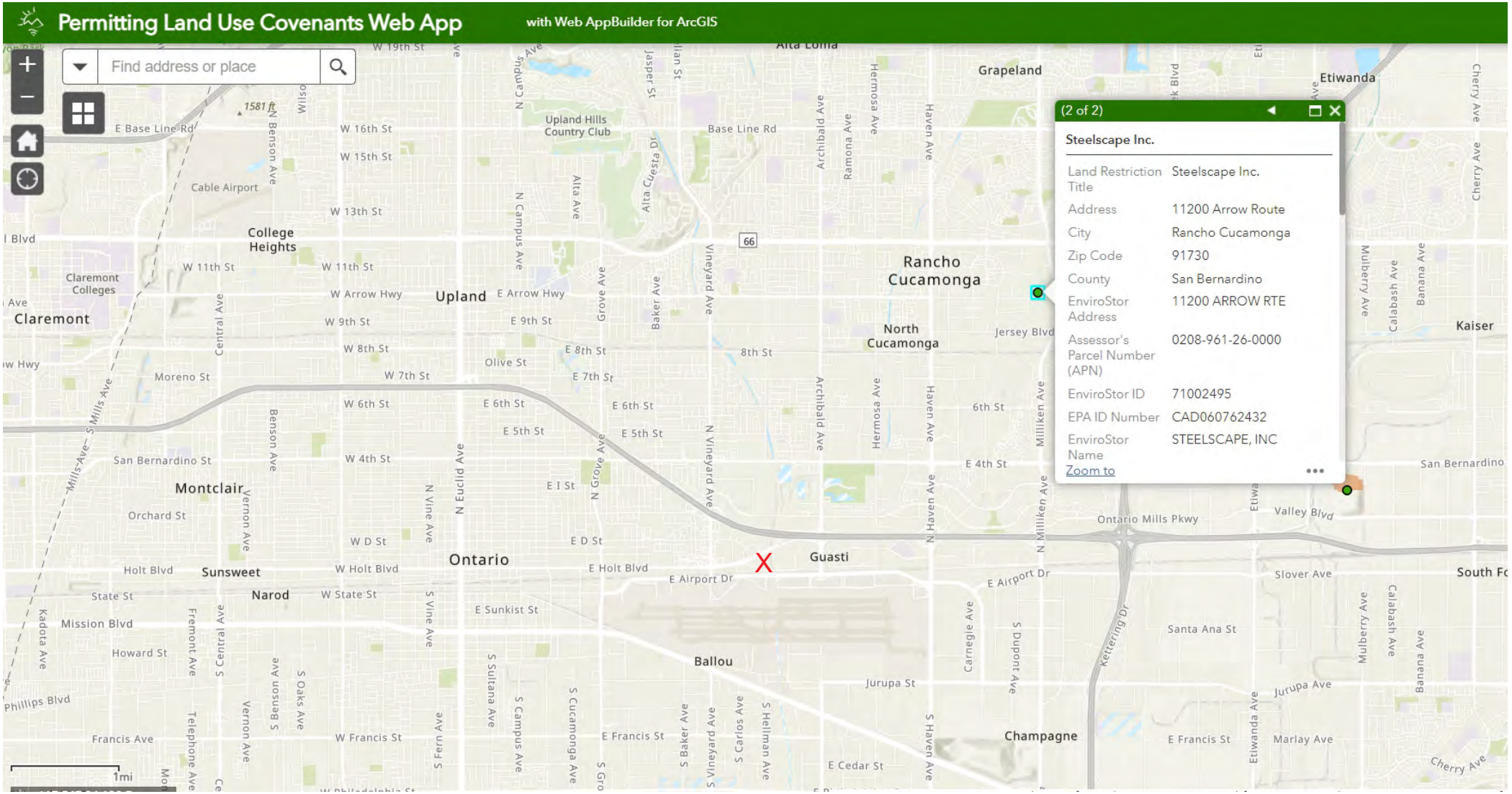

Dam Breach Inundation Map Web Publisher
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Search dam or addres
Layers
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Dams With Inundation Map (814)
Extremely High (265)
High (439)
Significant (105)
Low (5)
Dams Without Inundation Map (423)
County Boundary
City Boundary
Day Creek Debris Basin
Demens Creek Debris Basin
Cucamonga Creek Debris Basin
Alta Loma Basin #2
Etiwanda Debris Basin
San Sevaine Basin #5
San Dimas
Live Oak Reservoir
Puddingstone Diversion
Live Oak
Weymouth Memorial Re
La Verne
San Dimas
Puddingstone
Claremont
Upland Basin
Upland
Rancho Cucamonga
Hickory Basin
Montclair
Ontario
Guasti
Pomona
Los Angeles
Jurupa Basin
Declez Retention
San Bernardino
Riverside
Chino
Jurupa Basin
Fairmount Park


Dam Breach Inundation Map Web Publisher
FAQ
Search dam or addres
San Gabriel No. 1
Devil Canyon
Sawpit Debris Basin
Morris
Big Dalton
Day Creek Debris Basin
Big Dalton Debris Basin
Etiwanda Debris Basin
Cucamonga Creek Debris Basin
San Sevaine Basin #5
Live Oak Reservoir
Arcadia
Azusa
Glendora
Weymouth
La Verne
Reservoir
Vincent
Puddingstone
Claremont
Upland Basin
Upland
Rancho Cucamonga
Baldwin Park
Covina
El Monte
West Covina
Montclair
Ontario
Pomona
Chino
Chino Ranch #1
Chino Hills
Rancho Cielito
Eastvale
Los Angeles
Orange County Reservoir
Orange
30 MG Central Reservoir
Diemer Ozone Contact Basin
Norco
Crestline
Mineral Hot
Little Mountai
San Sevaine Basin #5
Dam Name: San Sevaine Basin #5, No. 87-14
National Dam ID: CA01363
County: San Bernardino
Dam Owner: County of San Bernardino Department of Public Works
Downstream Hazard: Extremely High
Main Dam
Scenario 1
This scenario shows an inundation extent for a storm-inducec failure of Main Dam.
Downloads
ReadMe_Scenario1.txt (1.98 KB)
CA01363_MD_Scenario1.pdf (11.44 MB)
Inundation Boundary.zip (309.68 KB)
CA01363_MD_Scenario1_gdb.zip (417.74 MB)
Display
Inundation Boundary


Dam Breach Inundation Map Web Publisher
FAQ
Search dam or address
Demens Creek Debris Basin
Cucamonga Creek Debris Basin
Thompson Creek
Live Oak Reservoir
Live Oak
Los Angeles
San Bernardino
Claremont
Upland Basin
Upland
Montclair
Ontario
Guasti
Cucamonga Creek Debris Basin
Dam Name: Cucamonga Creek Debris Basin, No. 87-9
National Dam ID: CA01277
County: San Bernardino
Dam Owner: County of San Bernardino Department of Public Works
Downstream Hazard: High
Main Dam
Scenario 1
This scenario shows an inundation extent for a storm induced failure of Main Dam.
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Display
Inundation Boundary
Dams With Inundation Map (814)
Extremely High (265)
High (439)
Significant (105)
Low (5)
Dams Without Inundation Map (423)
County Boundary


Dam Breach Inundation Map Web Publisher
FAQ
Search dam or addres
Alta Loma Basin #2
San Sevaine Basin #5
Los Angeles
San Bernardino
Alta Loma Basin #1
Dam Name: Alta Loma Basin #1, No. 87-6
National Dam ID: CA00319
County: San Bernardino
Dam Owner: County of San Bernardino Department of Public Works
Downstream Hazard: High
Main Dam
Scenario 1
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Upland Basin
Upland
Montclair
Ontario
Guasti
Extremely High (265)
High (439)
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Low (5)


Permitting Land Use Covenants Web App
with Web AppBuilder for ArcGIS
Find address or place
Upland
Claremont
College Heights
Rancho Cucamonga
North Cucamonga
Grapeland
Etiwanda
Kaiser
Montclair
Ontario
Guasti
Sunsweet
Narod
Ballou
Champagne
South Fontana
Declezville
Upland Hills Country Club
Cable Airport
Claremont Colleges
Ontario Mills Pkwy
Valley Blvd
San Bernardino Ave
Base Line Rd
E Arrow Hwy
Jersey Blvd
Whittram Ave
Arrow Rte
East Etiwanda Creek
Slover Ave
Santa Ana St
Jurupa St
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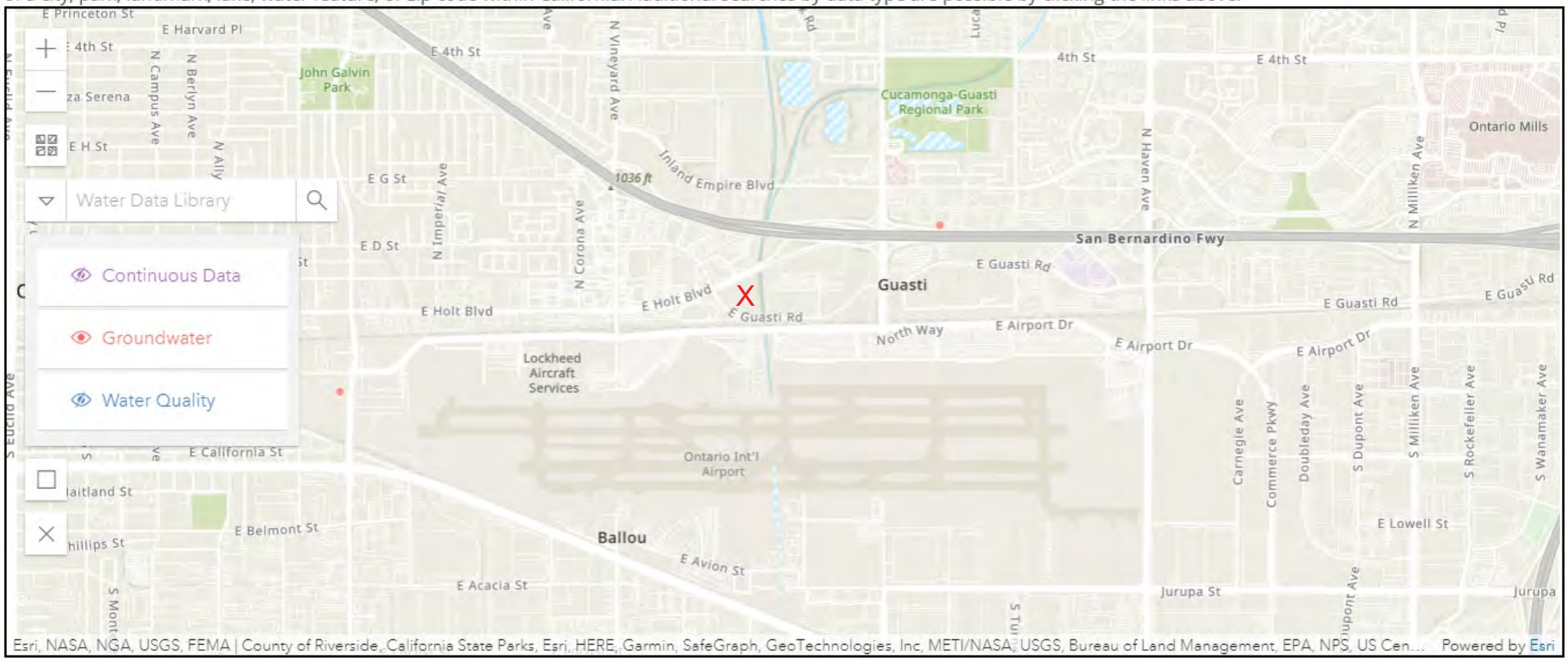

Permitting Land Use Covenants Web App
with Web AppBuilder for ArcGIS
Find address or place
(2 of 2)
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Land Restriction Title Steelscape Inc.
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City Rancho Cucamonga
Zip Code 91730
County San Bernardino
EnviroStor Address 11200 ARROW RTE
Assessor's Parcel Number (APN) 0208-961-26-0000
EnviroStor ID 71002495
EPA ID Number CAD060762432
EnviroStor Name STEELSCAPE, INC
Zoom to
Rancho Cucamonga
Upland
Claremont
College Heights
Ontario
Montclair
Guasti
North Cucamonga
Grapeland
Etiwanda
Kaiser
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Champagne
Narod
Sunsweet
Upland Hills Country Club
Cable Airport
Claremont Colleges
E Base Line Rd
Base Line Rd
W Arrow Hwy
E Arrow Hwy
Jersey Blvd
Ontario Mills Pkwy
Valley Blvd
E Airport Dr
Holt Blvd
W Holt Blvd
E Holt Blvd
Mission Blvd
Jurupa St
Jurupa Ave
Santa Ana St
Slover Ave
Francis Ave
W Francis St
E Francis St
Marlay Ave
Moreno St
San Bernardino St
Orchard St
Howard St
State St
W State St
E Sunkist St
Olive St
E Cedar St
1mi

CALIFORNIA DEPARTMENT OF
WATER RESOURCES

WDL Station Map | Water Quality | Groundwater | Continuous Data | About | Login

Water Data Library (WDL) Station Map

Use the map below to locate monitoring stations. You can find an area of interest if you zoom and pan the map. Use the search box below to find features on the map such as the name of a city, park, landmark, lake, water feature, or zip code within California. Additional searches by data type are possible by clicking the links above.



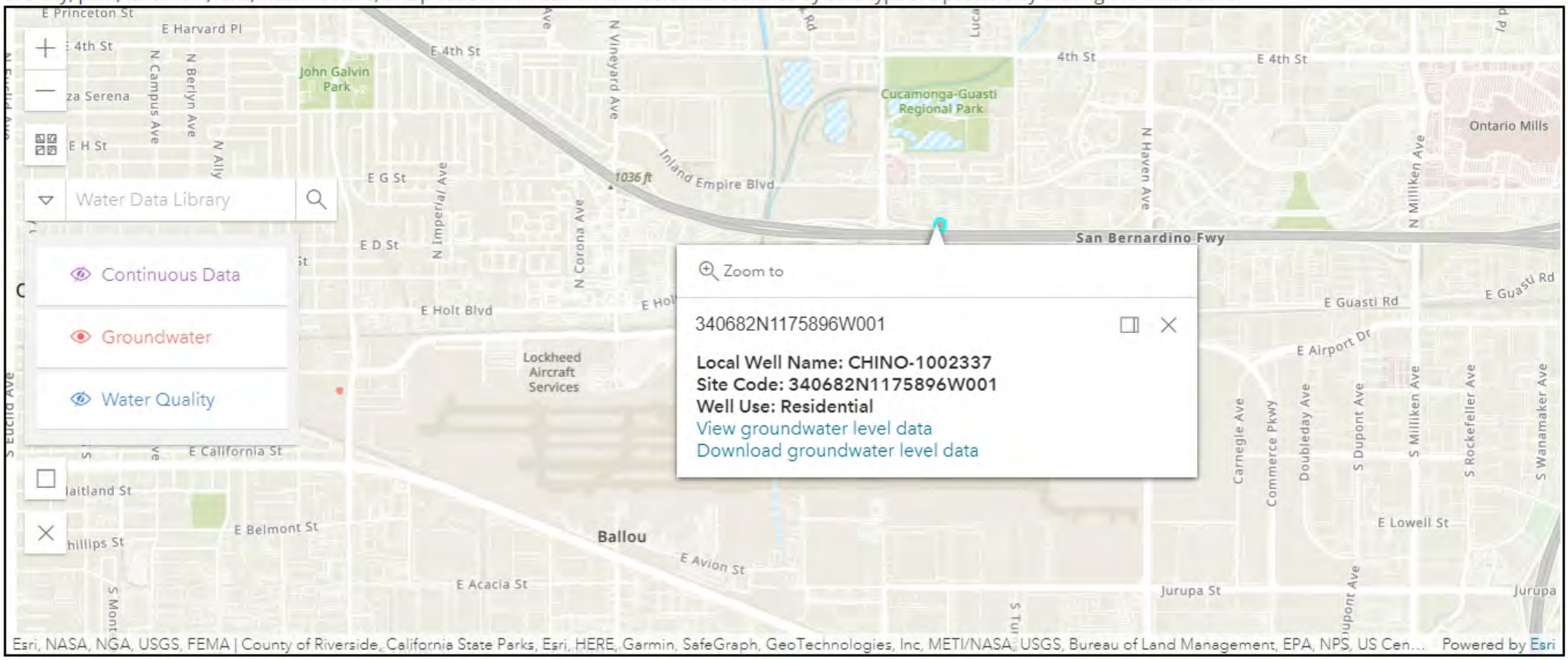
CALIFORNIA DEPARTMENT OF
WATER RESOURCES

WDL Station Map | Water Quality | Groundwater | Continuous Data | About

Login

Water Data Library (WDL) Station Map

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Back to Search

Groundwater Level Report

Station 340682N1175896W001

Station Data | Groundwater Level Data

State Well Number:	01S07W23M001S
Local Well Name:	CHINO-1002337
Site Code:	340682N1175896W001
Latitude (NAD83):	34.068166
Longitude (NAD83):	-117.589579
Basin Subbasin Name (Code):	Chino (8-002.01)
Well Use Type:	Residential
Well Status:	Active
WCR Number:	
Reference Point Elevation (NAVD88 ft):	981.000
Ground Surface Elevation (NAVD88 ft):	981.000
Well Depth (feet bgs):	903
Perforated Interval Depths (feet bgs):	370.000 903.000



CALIFORNIA DEPARTMENT OF
WATER RESOURCES

WDL Station Map | Water Quality | Groundwater | Continuous Data | About | Logi

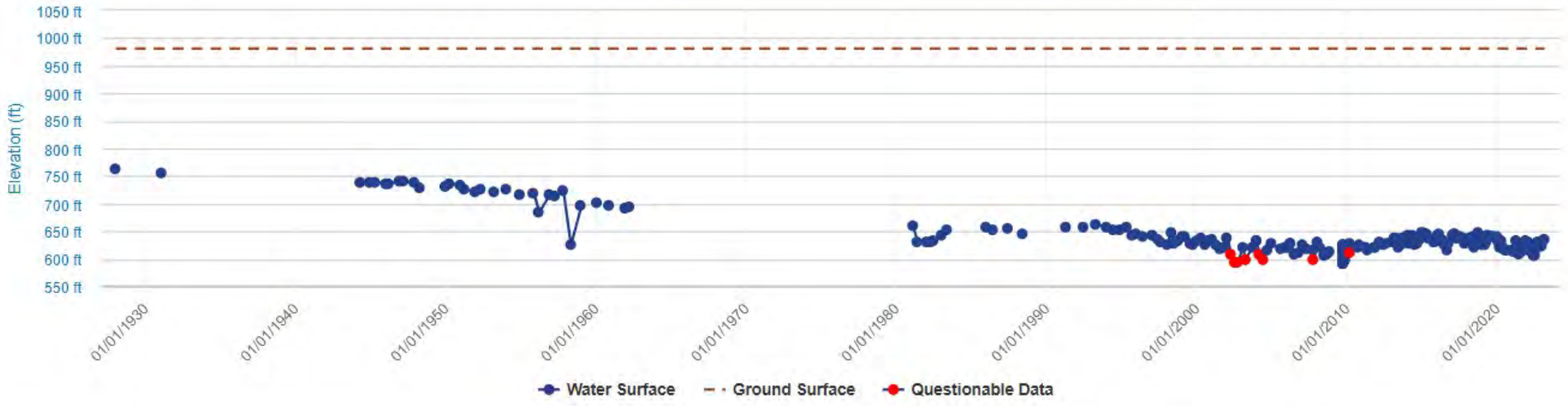
Back to Search

Groundwater Level Report

Station 340682N1175896W001

Station Data | Groundwater Level Data

Groundwater Levels for Well 340682N1175896W001



Measurement Date (PST)	Reference Point Elevation	Ground Surface Elevation	Distance from RP to WS	Groundwater Elevation	Ground Surface to Water Surface	Measurement Issue	Submitting Organization	Collecting Organization	Water Level Measurement Comments
10/01/2022 00:00:00	981.000	981.000	350	631	350		Chino Basin Watermaster...	Chino Basin Watermaster	
11/01/2022 00:00:00	981.000	981.000	352	629	352		Chino Basin Watermaster...	Chino Basin Watermaster	
12/01/2022 00:00:00	981.000	981.000	351	630	351		Chino Basin Watermaster...	Chino Basin Watermaster	
01/01/2023 00:00:00	981.000	981.000	358	623	358		Chino Basin Watermaster...	Chino Basin Watermaster	
02/01/2023 00:00:00	981.000	981.000	348	633	348		Chino Basin Watermaster...	Chino Basin Watermaster	
03/01/2023 00:00:00	981.000	981.000	344	637	344		Chino Basin Watermaster...	Chino Basin Watermaster	

426 to 431 of 431 records

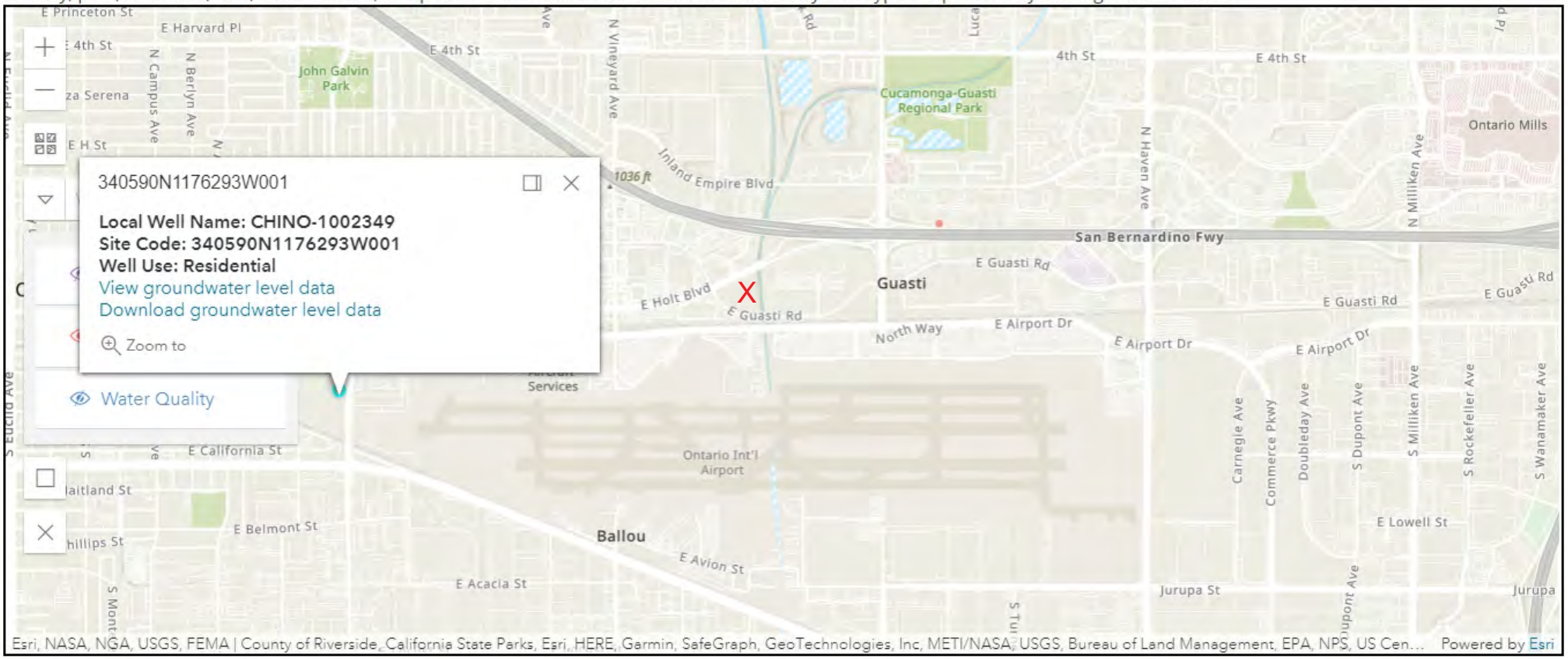
‹ ... 13 14 15 16 17 18 ›

CALIFORNIA DEPARTMENT OF
WATER RESOURCES

WDL Station Map | Water Quality | Groundwater | Continuous Data | About | Login

Water Data Library (WDL) Station Map

Use the map below to locate monitoring stations. You can find an area of interest if you zoom and pan the map. Use the search box below to find features on the map such as the name of a city, park, landmark, lake, water feature, or zip code within California. Additional searches by data type are possible by clicking the links above.



Back to Search

Groundwater Level Report

Station 340590N1176293W001

Station Data | Groundwater Level Data

State Well Number:	01S07W29A001S
Local Well Name:	CHINO-1002349
Site Code:	340590N1176293W001
Latitude (NAD83):	34.059042
Longitude (NAD83):	-117.629251
Basin Subbasin Name (Code):	Chino (8-002.01)
Well Use Type:	Residential
Well Status:	Active
WCR Number:	90430
Reference Point Elevation (NAVD88 ft):	958.000
Ground Surface Elevation (NAVD88 ft):	958.000
Well Depth (feet bgs):	1028
Perforated Interval Depths (feet bgs):	415.000 430.000 510.000 695.000 770.000 885.000 925.000 1007.000



CALIFORNIA DEPARTMENT OF
WATER RESOURCES

WDL Station Map | Water Quality | Groundwater | Continuous Data | About | Login

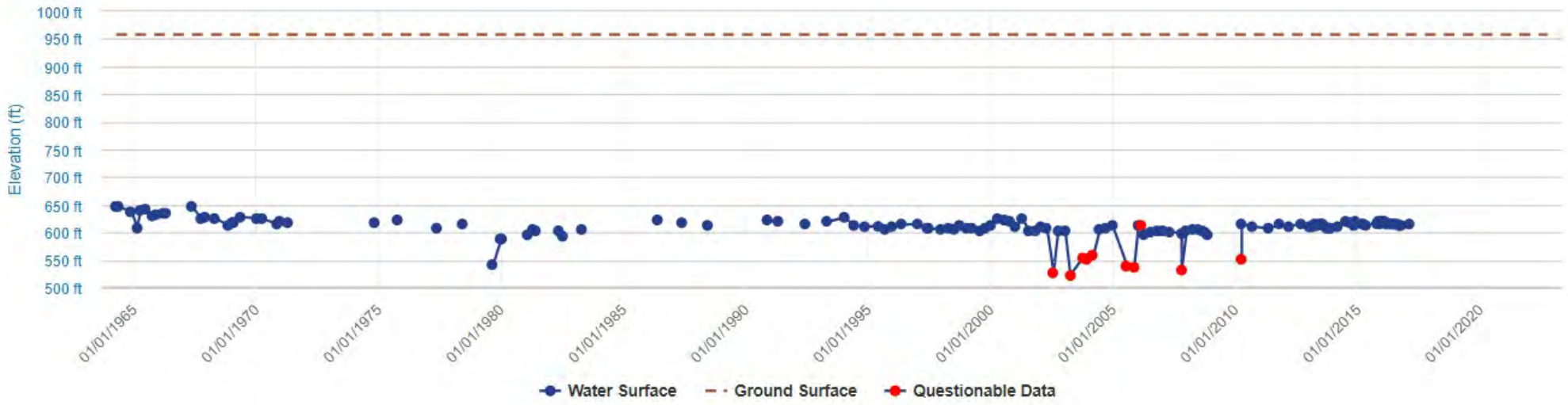
Back to Search

Groundwater Level Report

Station 340590N1176293W001

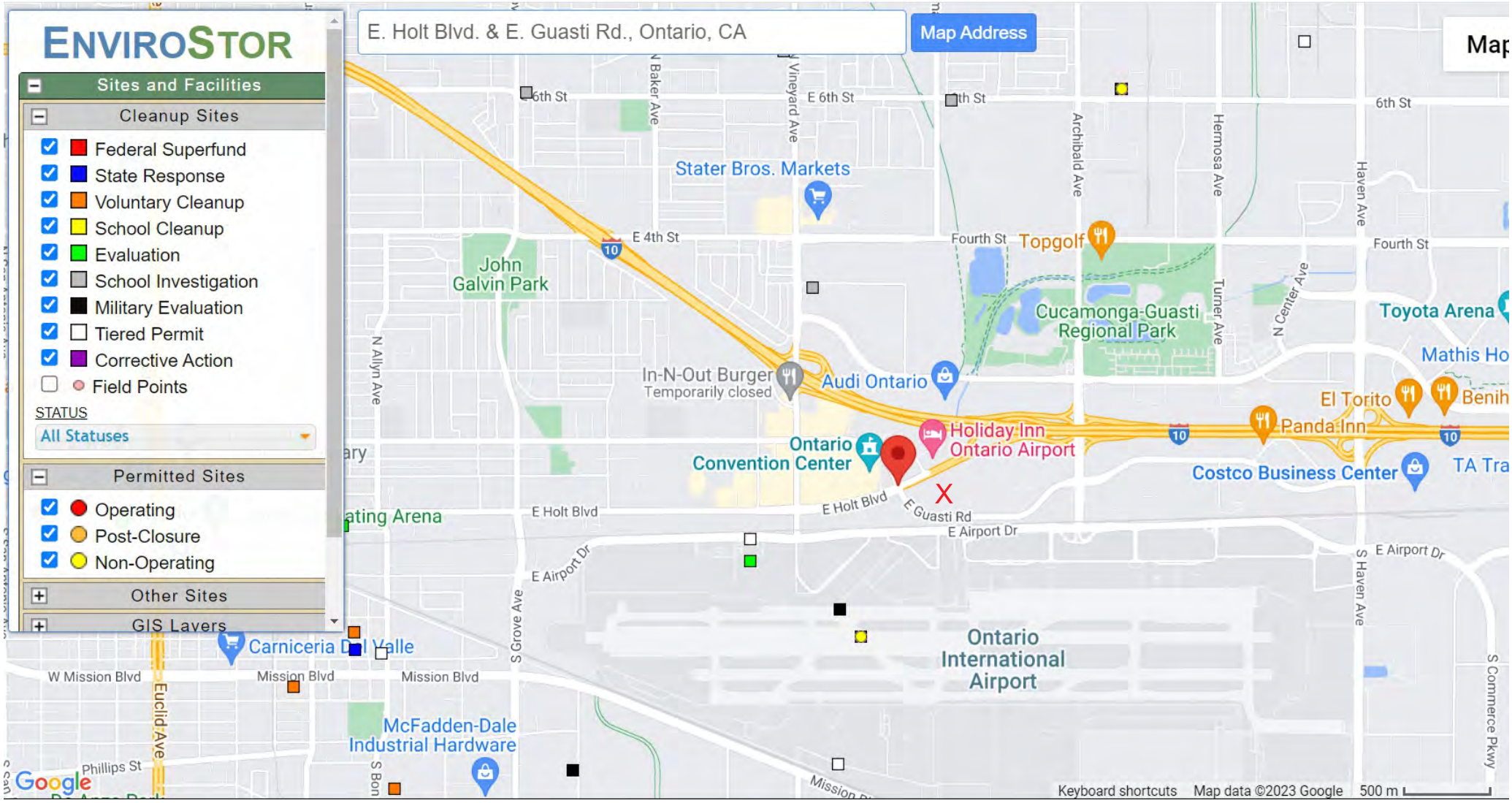
Station Data | Groundwater Level Data

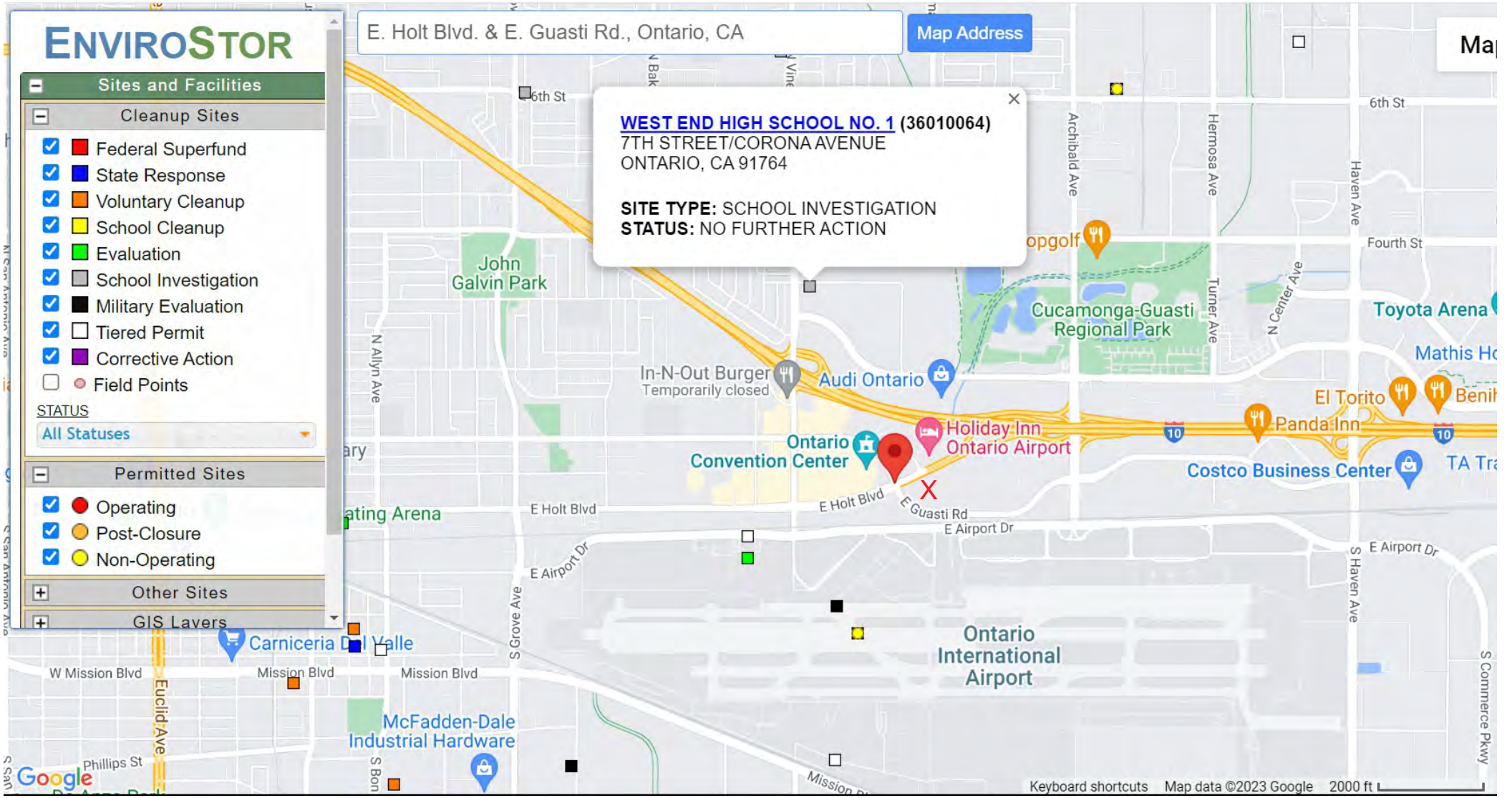
Groundwater Levels for Well 340590N1176293W001



Measurement Date (PST)	Reference Point Elevation	Ground Surface Elevation	Distance from RP to WS	Groundwater Elevation	Ground Surface to Water Surface	Measurement Issue	Submitting Organization	Collecting Organization	Water Level Measurement Comments
04/06/1964 00:00:00	958.000	958.000	312	646	312		Chino Basin Watermaster...	Chino Basin Watermaster	
05/09/1964 00:00:00	958.000	958.000	312	646	312		Chino Basin Watermaster...	Chino Basin Watermaster	
11/23/1964 00:00:00	958.000	958.000	320	638	320		Chino Basin Watermaster...	Chino Basin Watermaster	
02/15/1965 00:00:00	958.000	958.000	349	609	349		Chino Basin Watermaster...	Chino Basin Watermaster	
04/07/1965 00:00:00	958.000	958.000	318	640	318		Chino Basin Watermaster...	Chino Basin Watermaster	
06/21/1965 00:00:00	958.000	958.000	316	642	316		Chino Basin Watermaster...	Chino Basin Watermaster	
10/11/1965 00:00:00	958.000	958.000	327	631	327		Chino Basin Watermaster...	Chino Basin Watermaster	
11/23/1965 00:00:00	958.000	958.000	325	633	325		Chino Basin Watermaster...	Chino Basin Watermaster	
03/15/1966 00:00:00	958.000	958.000	324	634	324		Chino Basin Watermaster...	Chino Basin Watermaster	
04/13/1966 00:00:00	958.000	958.000	323	635	323		Chino Basin Watermaster...	Chino Basin Watermaster	

03/01/2016 00:00:00	958.000	958.000	342	616	342		Chino Basin Watermaster...	Chino Basin Watermaster	ONT 17
04/01/2016 00:00:00	958.000	958.000	344	614	344		Chino Basin Watermaster...	Chino Basin Watermaster	ONT 17
05/01/2016 00:00:00	958.000	958.000	342	616	342		Chino Basin Watermaster...	Chino Basin Watermaster	ONT 17
06/01/2016 00:00:00	958.000	958.000	342	616	342		Chino Basin Watermaster...	Chino Basin Watermaster	
07/01/2016 00:00:00	958.000	958.000	342	616	342		Chino Basin Watermaster...	Chino Basin Watermaster	
08/01/2016 00:00:00	958.000	958.000	343	615	343		Chino Basin Watermaster...	Chino Basin Watermaster	
09/01/2016 00:00:00	958.000	958.000	345	613	345		Chino Basin Watermaster...	Chino Basin Watermaster	
10/01/2016 00:00:00	958.000	958.000	345	613	345		Chino Basin Watermaster...	Chino Basin Watermaster	
02/01/2017 00:00:00	958.000	958.000	343	615	343		Chino Basin Watermaster...	Chino Basin Watermaster	
04/01/2017 00:00:00	958.000	958.000				NM:Measurement Discontinued	Chino Basin Watermaster...	Chino Basin Watermaster	Agency abandoned well.
11/01/2017 00:00:00	958.000	958.000				NM:Measurement Discontinued	Chino Basin Watermaster...	Chino Basin Watermaster	Agency abandoned well.


ENVIROSTOR
Sites and Facilities
Cleanup Sites
Federal Superfund
State Response
Voluntary Cleanup
School Cleanup
Evaluation
School Investigation
Military Evaluation
Tiered Permit
Corrective Action
Field Points
STATUS
All Statuses
Permitted Sites
Operating
Post-Closure
Non-Operating
Other Sites
GIS Layers
E. Holt Blvd. & E. Guasti Rd., Ontario, CA
Map Address
Stater Bros. Markets
John Galvin Park
Topgolf
Cucamonga-Guasti Regional Park
Toyota Arena
In-N-Out Burger
Temporarily closed
Audi Ontario
Holiday Inn Ontario Airport
Ontario Convention Center
El Torito
Panda Inn
Costco Business Center
Carniceria Del Valle
McFadden-Dale Industrial Hardware
Ontario International Airport
E 6th St
E 4th St
Fourth St
E Holt Blvd
E Guasti Rd
E Airport Dr
W Mission Blvd
Mission Blvd
Euclid Ave
Phillips St
Google
Keyboard shortcuts
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ENVIROSTOR
Sites and Facilities
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School Investigation
Military Evaluation
Tiered Permit
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Field Points
STATUS
All Statuses
Permitted Sites
Operating
Post-Closure
Non-Operating
Other Sites
GIS Layers
E. Holt Blvd. & E. Guasti Rd., Ontario, CA
Map Address
WEST END HIGH SCHOOL NO. 1 (36010064)
7TH STREET/CORONA AVENUE
ONTARIO, CA 91764
SITE TYPE: SCHOOL INVESTIGATION
STATUS: NO FURTHER ACTION
John Galvin Park
Cucamonga-Guasti Regional Park
In-N-Out Burger
Temporarily closed
Audi Ontario
Holiday Inn Ontario Airport
Ontario Convention Center
Panda Inn
El Torito
Toyota Arena
Costco Business Center
Ontario International Airport
Carniceria Del Valle
McFadden-Dale Industrial Hardware
6th St
Fourth St
E Holt Blvd
E Guasti Rd
E Airport Dr
W Mission Blvd
Mission Blvd
Euclid Ave
Phillips St
S Grove Ave
S Haven Ave
S Commerce Pkwy
Archibald Ave
Hermosa Ave
Haven Ave
Turner Ave
N Center Ave
N Allyn Ave
Google
Keyboard shortcuts
Map data ©2023 Google
2000 ft

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

ENVIROSTOR

Tools | Reports | Community Involvement | How to Use EnviroStor | ESI | DTSC Web

WEST END HIGH SCHOOL NO. 1 (36010064)

SIGN UP FOR EMAIL ALERTS

7TH STREET/CORONA AVENUE
ONTARIO, CA 91764
SAN BERNARDINO COUNTY
SITE TYPE: SCHOOL

SUPERVISOR:	JAVIER HINOJOSA
OFFICE:	SOUTHERN CALIFORNIA SCHOOLS & BROWNFIELDS OUTREACH
SCHOOL DISTRICT:	SAN BERNARDINO COUNTY OFF OF EDUCATION SCHOOL DISTRICT
CENSUS TRACT:	6071001312
CALENVIROSCREEN PERCENTILE SCORE:	75-80%

Site Information

CLEANUP STATUS

NO FURTHER ACTION AS OF 12/28/2001

SITE TYPE: SCHOOL	**SCHOOL DISTRICT:**	SAN BERNARDINO COUNTY OFF OF EDUCATION SCHOOL DISTRICT	
NATIONAL PRIORITIES LIST: NO	**ENVIROSTOR ID:**		36010064
ACRES: 5 ACRES	**SITE CODE:**		404080
APN: NONE SPECIFIED	**SPECIAL PROGRAM:**		
CLEANUP OVERSIGHT AGENCIES:	**FUNDING:**		SCHOOL DISTRICT
DTSC - LEAD AGENCY	**ASSEMBLY DISTRICT:**		50
	SENATE DISTRICT:		22

Regulatory Profile

PAST USE(S) THAT CAUSED CONTAMINATION

AGRICULTURAL - ROW CROPS

POTENTIAL CONTAMINANTS OF CONCERN

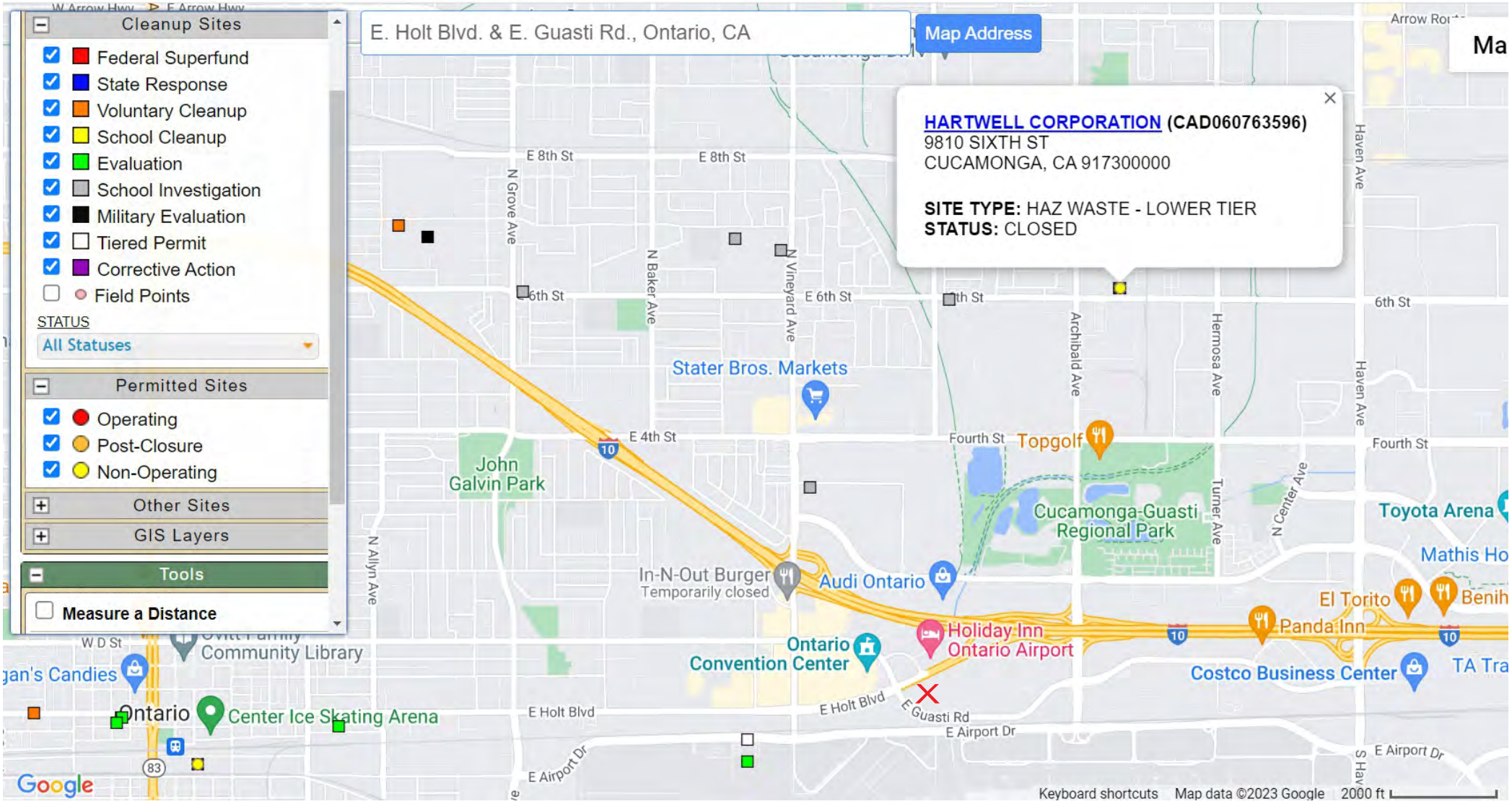
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DDT
DIELDRIN
SELENIUM

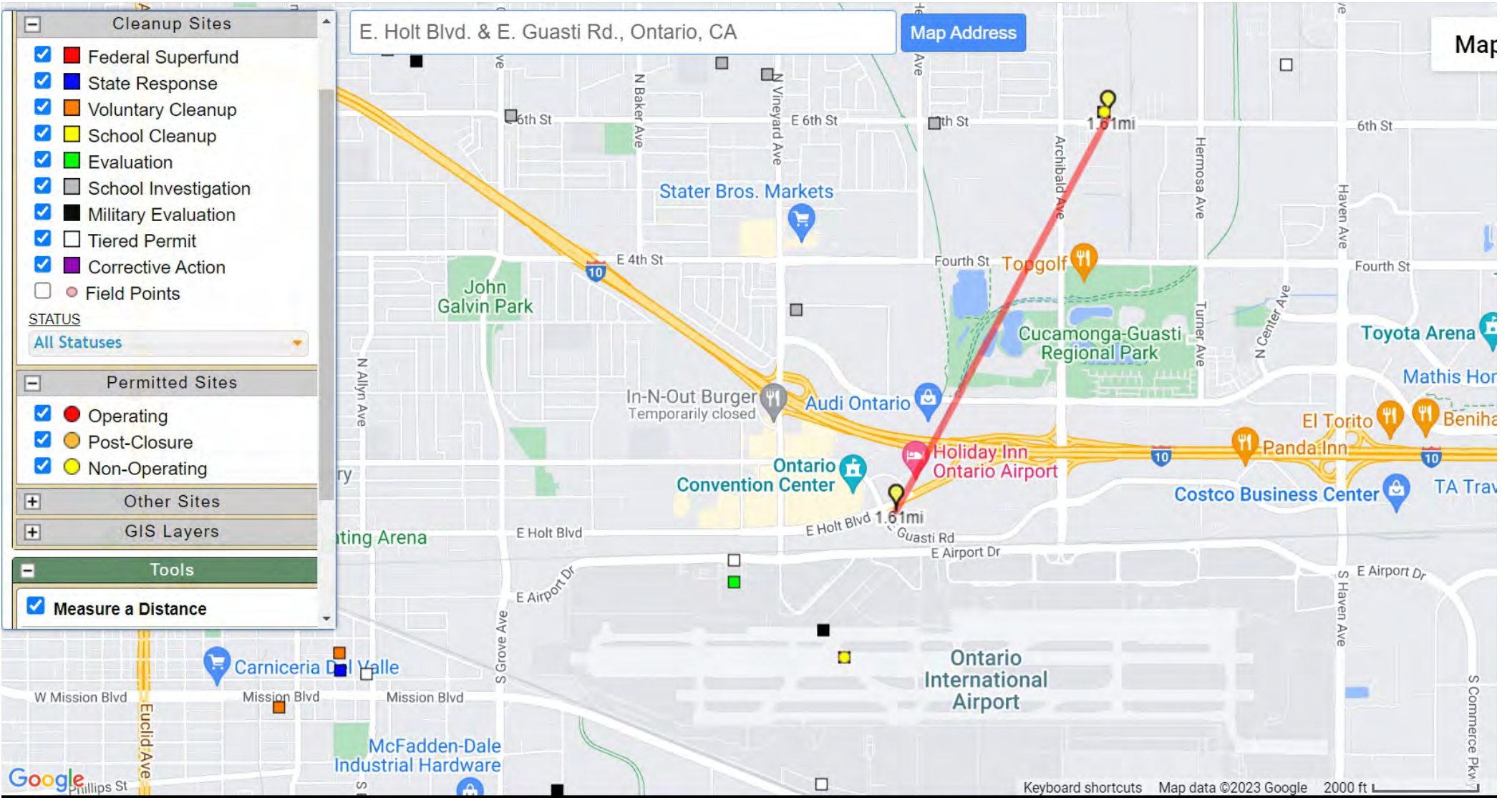
POTENTIAL MEDIA AFFECTED

SOIL

Site History

The proposed school site is currently vacant and was historically agricultural.


Cleanup Sites
Federal Superfund
State Response
Voluntary Cleanup
School Cleanup
Evaluation
School Investigation
Military Evaluation
Tiered Permit
Corrective Action
Field Points
STATUS
All Statuses
Permitted Sites
Operating
Post-Closure
Non-Operating
Other Sites
GIS Layers
Tools
Measure a Distance
E. Holt Blvd. & E. Guasti Rd., Ontario, CA
Map Address
HARTWELL CORPORATION (CAD060763596)
9810 SIXTH ST
CUCAMONGA, CA 917300000
SITE TYPE: HAZ WASTE - LOWER TIER
STATUS: CLOSED
E 8th St
N Grove Ave
N Baker Ave
N Vineyard Ave
E 6th St
6th St
Archibald Ave
Hermosa Ave
Haven Ave
Stater Bros. Markets
E 4th St
Fourth St
Topgolf
John Galvin Park
Cucamonga-Guasti Regional Park
Turner Ave
N Center Ave
Toyota Arena
N Allyn Ave
In-N-Out Burger
Temporarily closed
Audi Ontario
Holiday Inn Ontario Airport
Ontario Convention Center
El Torito
Panda Inn
Costco Business Center
W D St
Community Library
Ontario
Center Ice Skating Arena
E Holt Blvd
N Guasti Rd
E Airport Dr
Google
Keyboard shortcuts
Map data ©2023 Google
2000 ft


Cleanup Sites
Federal Superfund
State Response
Voluntary Cleanup
School Cleanup
Evaluation
School Investigation
Military Evaluation
Tiered Permit
Corrective Action
Field Points
STATUS
All Statuses
Permitted Sites
Operating
Post-Closure
Non-Operating
Other Sites
GIS Layers
Tools
Measure a Distance
E. Holt Blvd. & E. Guasti Rd., Ontario, CA
Map Address
1.61mi
Stater Bros. Markets
John Galvin Park
Topgolf
Cucamonga-Guasti Regional Park
Toyota Arena
In-N-Out Burger
Temporarily closed
Audi Ontario
Holiday Inn Ontario Airport
Ontario Convention Center
Panda Inn
El Torito
Costco Business Center
E Holt Blvd
E Guasti Rd
E Airport Dr
Ontario International Airport
Carniceria Del Valle
McFadden-Dale Industrial Hardware
W Mission Blvd
Mission Blvd
6th St
E 6th St
E 4th St
Fourth St
N Baker Ave
N Vineyard Ave
Archibald Ave
Hermosa Ave
Haven Ave
Turner Ave
N Center Ave
S Grove Ave
S Haven Ave
Euclid Ave
Google
Keyboard shortcuts
Map data ©2023 Google
2000 ft

HARTWELL CORPORATION (CAD060763596)

SIGN UP FOR EMAIL ALERTS

9810 SIXTH ST
CUCAMONGA, CA 917300000
SAN BERNARDINO COUNTY

FACILITY TYPE: CLOSED
PROGRAM TYPE: HAZARDOUS WASTE FACILITY

CENSUS TRACT: 6071002110
CALENVIROSCREEN PERCENTILE SCORE: 70-75%

Permitting | Activities | Site/Facility Docs | Map | Related Sites | CalEnviroScreen | Enforcement / Inspections | Corrective Action

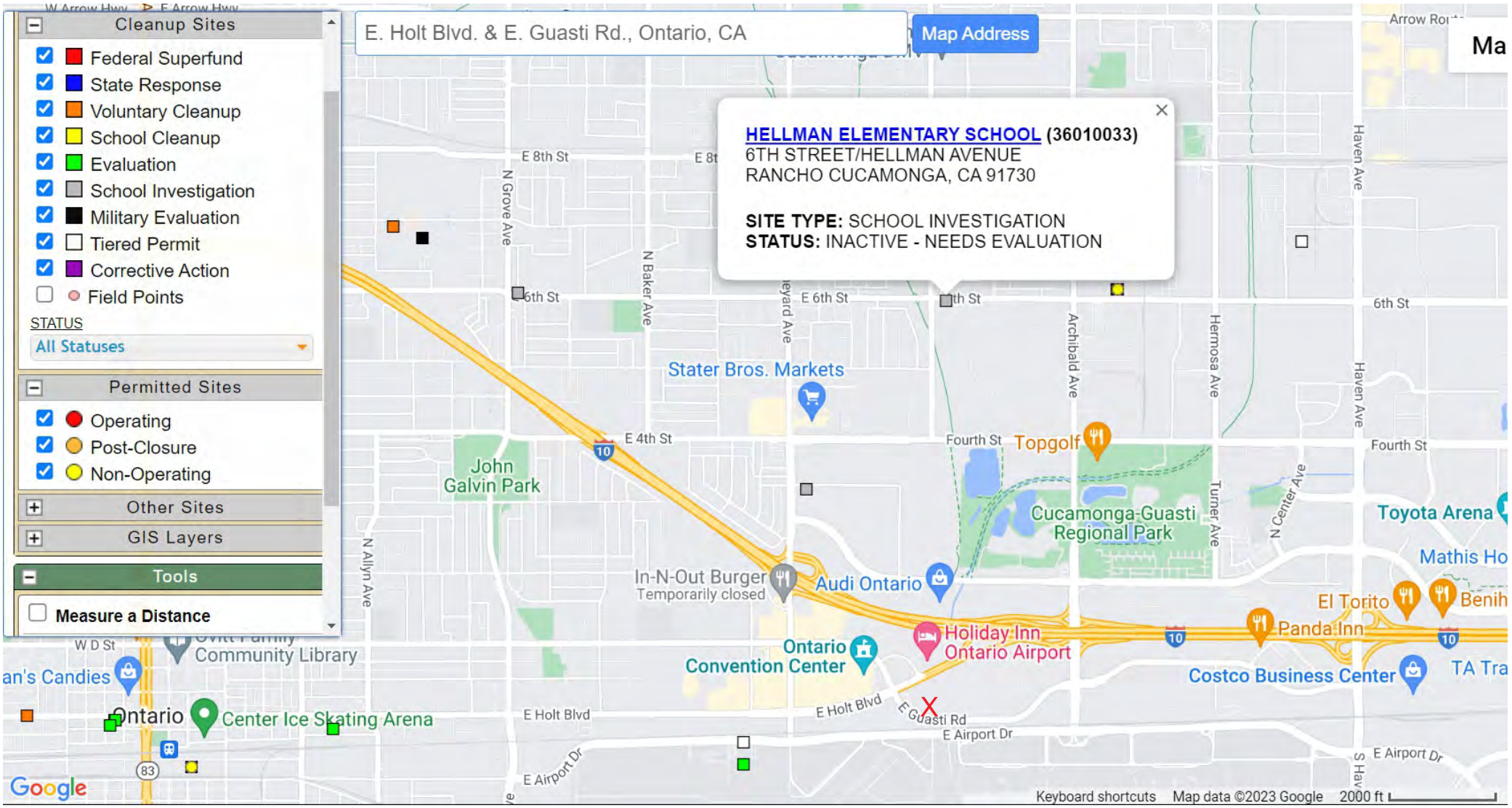
Site Information

SITE/FACILITY TYPE
CLOSED

SITE CODE	ASSEMBLY DISTRICT	SENATE DISTRICT
	50	29

Facility History

5/3/17- The Hartwell corporation received an ISD on 12/12/81. In February of 1983 the facility then applied for a variance and exemption for ISD as they determined the facility should not have been permitted under an ISD in 1981. In January 1991, they withdrew from variance and applied for PBR. However due to violations and contaminations at the site, this facility was referred to clean up (see project information in clean up Envirostor for details). A no further action determination for the Hartwell Corp was made on 9/25/14 by the clean up program. This facility is being administratively closed in the Permitting Evirostor database due to never being a TSDF and was regulated by the tiered permitting program.


Cleanup Sites
Federal Superfund
State Response
Voluntary Cleanup
School Cleanup
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All Statuses
Permitted Sites
Operating
Post-Closure
Non-Operating
Other Sites
GIS Layers
Tools
Measure a Distance
E. Holt Blvd. & E. Guasti Rd., Ontario, CA
Map Address
HELLMAN ELEMENTARY SCHOOL (36010033)
6TH STREET/HELLMAN AVENUE
RANCHO CUCAMONGA, CA 91730
SITE TYPE: SCHOOL INVESTIGATION
STATUS: INACTIVE - NEEDS EVALUATION
E 8th St
N Grove Ave
N Baker Ave
E 6th St
6th St
Archibald Ave
Hermosa Ave
Haven Ave
Stater Bros. Markets
E 4th St
Fourth St
Topgolf
John Galvin Park
Cucamonga-Guasti Regional Park
Turner Ave
N Center Ave
Toyota Arena
N Allyn Ave
In-N-Out Burger
Temporarily closed
Audi Ontario
Holiday Inn Ontario Airport
Ontario Convention Center
El Torito
Panda Inn
Costco Business Center
W D St
Community Library
Ontario
Center Ice Skating Arena
E Holt Blvd
E Guasti Rd
E Airport Dr
Google
Keyboard shortcuts
Map data ©2023 Google
2000 ft

HELLMAN ELEMENTARY SCHOOL (36010033)

SIGN UP FOR EMAIL ALERTS

6TH STREET/HELLMAN AVENUE
RANCHO CUCAMONGA, CA 91730
SAN BERNARDINO COUNTY
SITE TYPE: SCHOOL

SUPERVISOR: SHAHIR HADDAD
OFFICE: SOUTHERN CALIFORNIA SCHOOLS & BROWNFIELDS OUTREACH
SCHOOL DISTRICT: CUCAMONGA ELEMENTARY SCHOOL DISTRICT
CENSUS TRACT: 6071001311
CALENVIROSCREEN PERCENTILE SCORE: 55-60%

Site Information

CLEANUP STATUS
INACTIVE - NEEDS EVALUATION AS OF 6/29/2000

SITE TYPE: SCHOOL
NATIONAL PRIORITIES LIST: NO
ACRES: 9.54 ACRES
APN: NONE SPECIFIED
CLEANUP OVERSIGHT AGENCIES:
DTSC - SITE CLEANUP PROGRAM - LEAD AGENCY

SCHOOL DISTRICT: CUCAMONGA ELEMENTARY SCHOOL DISTRICT
ENVIROSTOR ID: 36010033
SITE CODE: 404035, 404092
SPECIAL PROGRAM:
FUNDING: SCHOOL DISTRICT
ASSEMBLY DISTRICT: 50
SENATE DISTRICT: 29

Regulatory Profile

PAST USE(S) THAT CAUSED CONTAMINATION
AGRICULTURAL - ROW CROPS

POTENTIAL CONTAMINANTS OF CONCERN
NONE SPECIFIED

POTENTIAL MEDIA AFFECTED
NONE SPECIFIED

Site History

The site currently has two residential structures on a portion of the site with the remainder being used as a vineyard since 1945. The vineyard replaced peach orchards and tomatoes that were grown as an agricultural crop. Reported onsite environmental conditions include current and historic application of agricultural chemicals, an abandoned 200-gallon underground storage tanks and stained soils.

Summary | Activities | Site/Facility Docs | Map | Related Sites | CalEnviroScreen

DOCUMENT DATE RANGE: TO Filter

Completed Activities

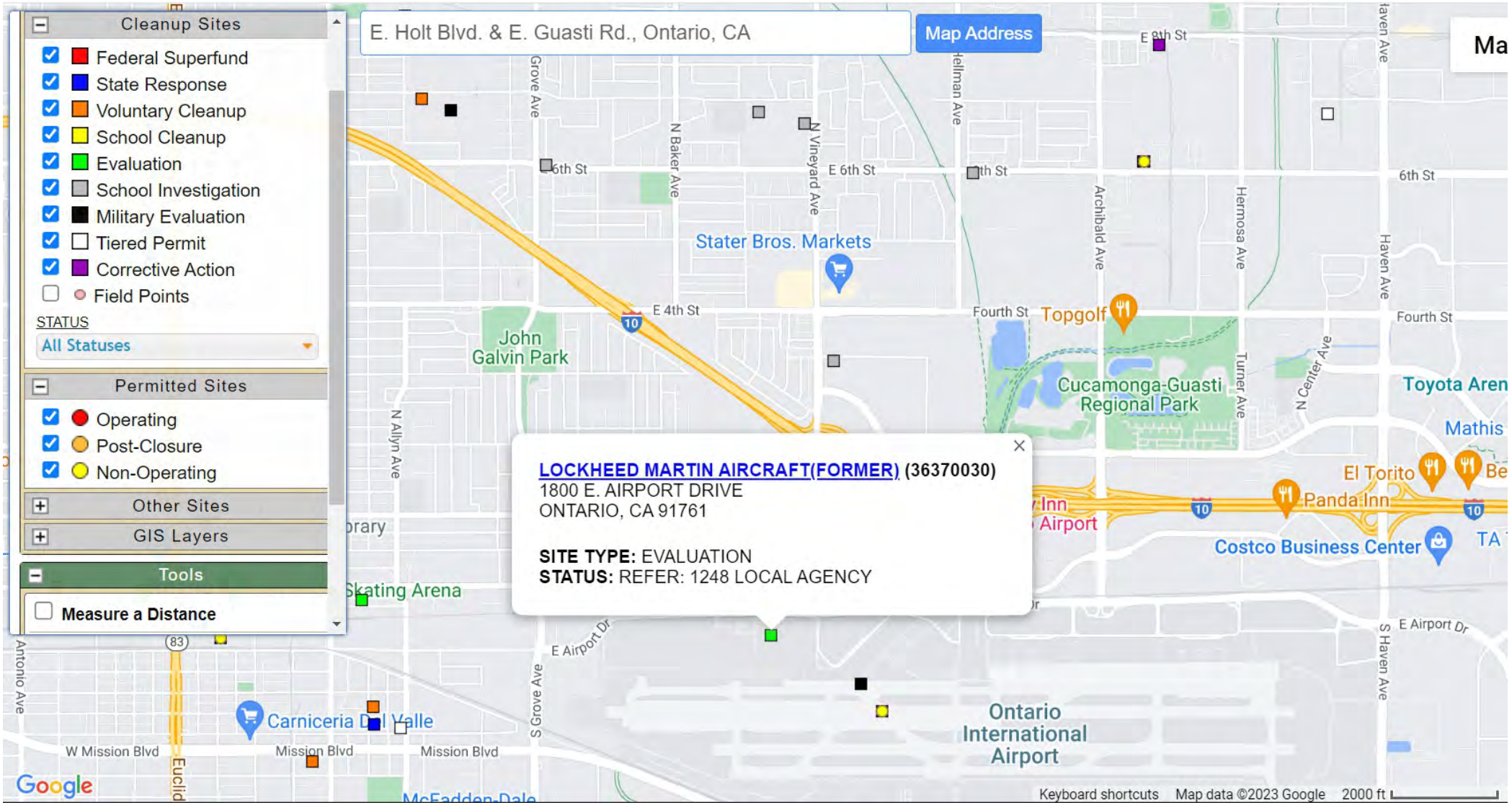
HIDE DOCUMENTS > 1 YEAR OLD

TITLE/DESCRIPTION	DOCUMENT TYPE	DATE COMPLETED

Community Involvement Documents

HIDE DOCUMENTS > 1 YEAR OLD

NO COMMUNITY INVOLVEMENT DOCUMENTS HAVE BEEN UPLOADED TO THIS PROJECT


Cleanup Sites
Federal Superfund
State Response
Voluntary Cleanup
School Cleanup
Evaluation
School Investigation
Military Evaluation
Tiered Permit
Corrective Action
Field Points
STATUS
All Statuses
Permitted Sites
Operating
Post-Closure
Non-Operating
Other Sites
GIS Layers
Tools
Measure a Distance
E. Holt Blvd. & E. Guasti Rd., Ontario, CA
Map Address
LOCKHEED MARTIN AIRCRAFT(FORMER) (36370030)
1800 E. AIRPORT DRIVE
ONTARIO, CA 91761
SITE TYPE: EVALUATION
STATUS: REFER: 1248 LOCAL AGENCY
Stater Bros. Markets
John Galvin Park
Cucamonga-Guasti Regional Park
Topgolf
Panda Inn
El Torito
Costco Business Center
Toyota Aren
Mathis
Ontario International Airport
Carniceria Del Valle
Skating Arena
E 4th St
Fourth St
E 6th St
6th St
E Airport Dr
W Mission Blvd
Mission Blvd
Grove Ave
N Baker Ave
N Vineyard Ave
Hellman Ave
Archibald Ave
Hermosa Ave
Haven Ave
Turner Ave
N Center Ave
N Allyn Ave
S Grove Ave
S Haven Ave
Antonio Ave
Euclid
Google
Keyboard shortcuts
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DEPARTMENT OF TOXIC SUBSTANCES CONTROL

ENVIROSTOR

Tools | Reports | Community Involvement | How to Use EnviroStor | ESI | DTSC Web

LOCKHEED MARTIN AIRCRAFT(FORMER) (36370030)

SIGN UP FOR EMAIL ALERTS

1800 E. AIRPORT DRIVE
ONTARIO, CA 91761
SAN BERNARDINO COUNTY
SITE TYPE: EVALUATION

OFFICE: CLEANUP CYPRESS
CENSUS TRACT: 6071001600
CALENVIROSCREEN PERCENTILE SCORE: 95-100% (highest scores)

Summary | Map | Related Sites | CalEnviroScreen

Site Information

CLEANUP STATUS
REFER: 1248 LOCAL AGENCY AS OF 3/8/2001

SITE TYPE: EVALUATION
NATIONAL PRIORITIES LIST: NO
ACRES: NONE SPECIFIED
APN: NONE SPECIFIED
CLEANUP OVERSIGHT AGENCIES:
NONE SPECIFIED

ENVIROSTOR ID: 36370030
SITE CODE:
SPECIAL PROGRAM:
FUNDING: NOT APPLICABLE
ASSEMBLY DISTRICT: 53
SENATE DISTRICT: 22

Site Information

CLEANUP STATUS
REFER: 1248 LOCAL AGENCY AS OF 3/8/2001

SITE TYPE: EVALUATION
NATIONAL PRIORITIES LIST: NO
ACRES: NONE SPECIFIED
APN: NONE SPECIFIED
CLEANUP OVERSIGHT AGENCIES:
NONE SPECIFIED

ENVIROSTOR ID: 36370030
SITE CODE:
SPECIAL PROGRAM:
FUNDING: NOT APPLICABLE
ASSEMBLY DISTRICT: 53
SENATE DISTRICT: 22

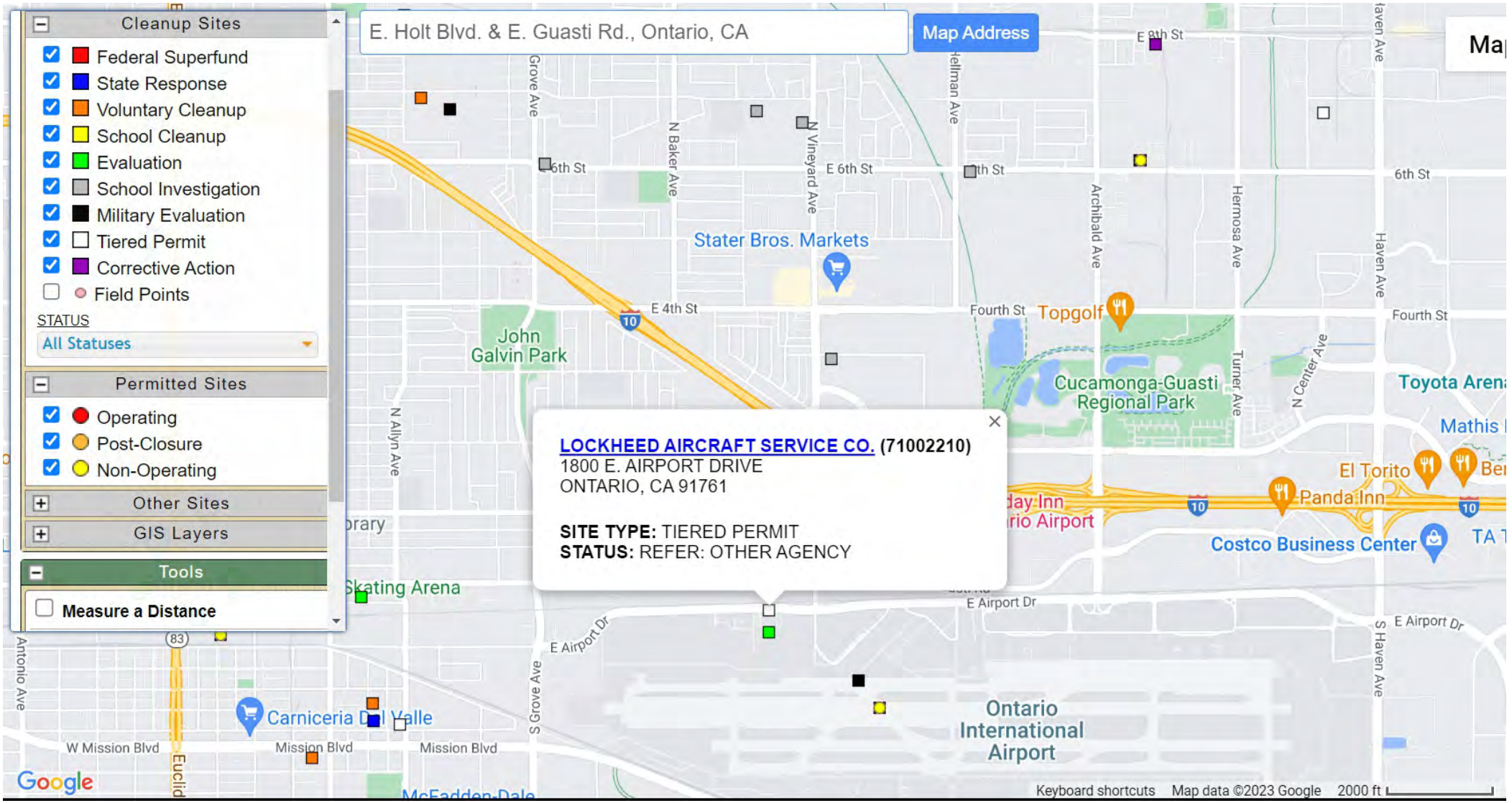
Regulatory Profile

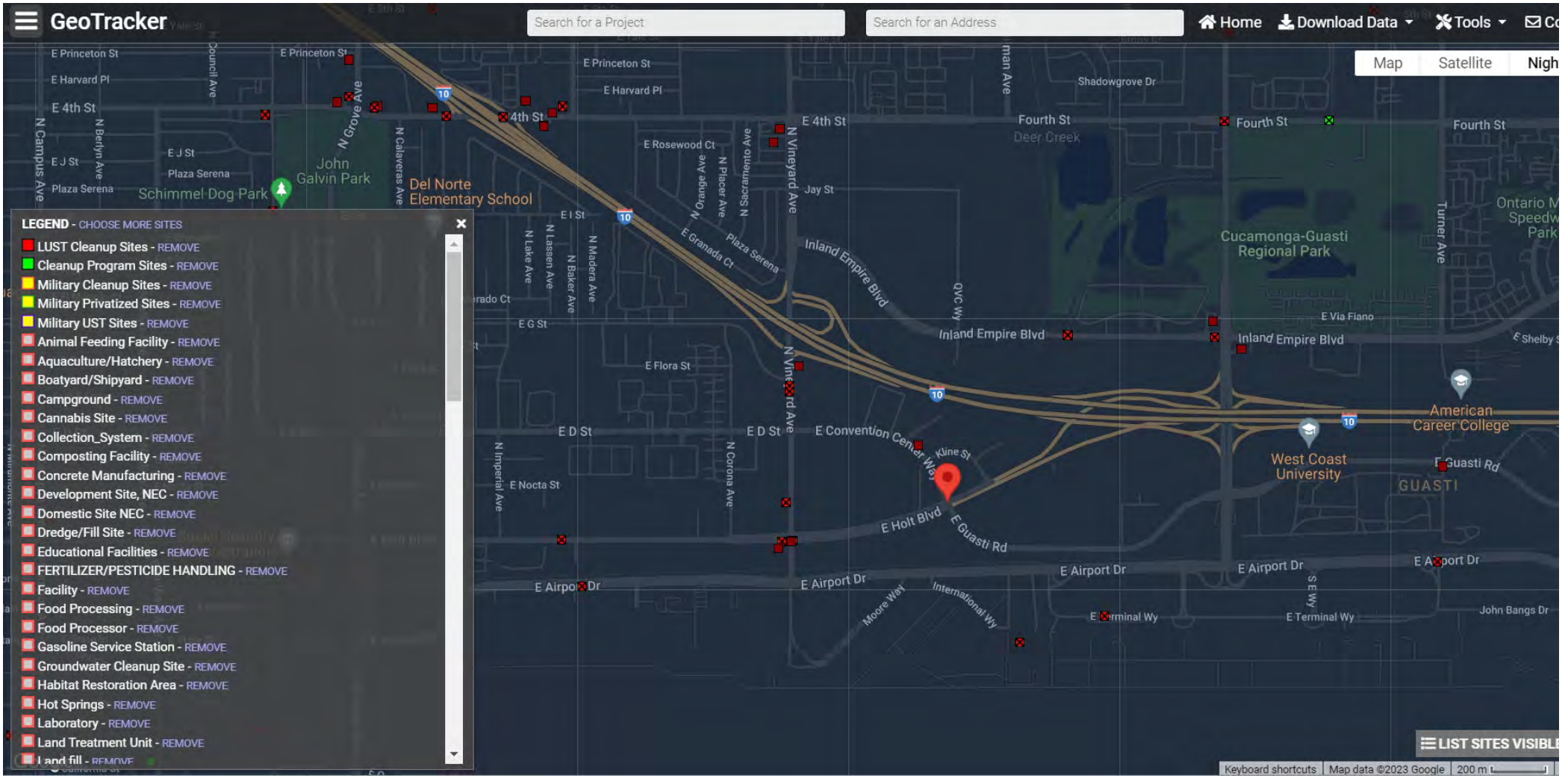
PAST USE(S) THAT CAUSED CONTAMINATION
NONE SPECIFIED

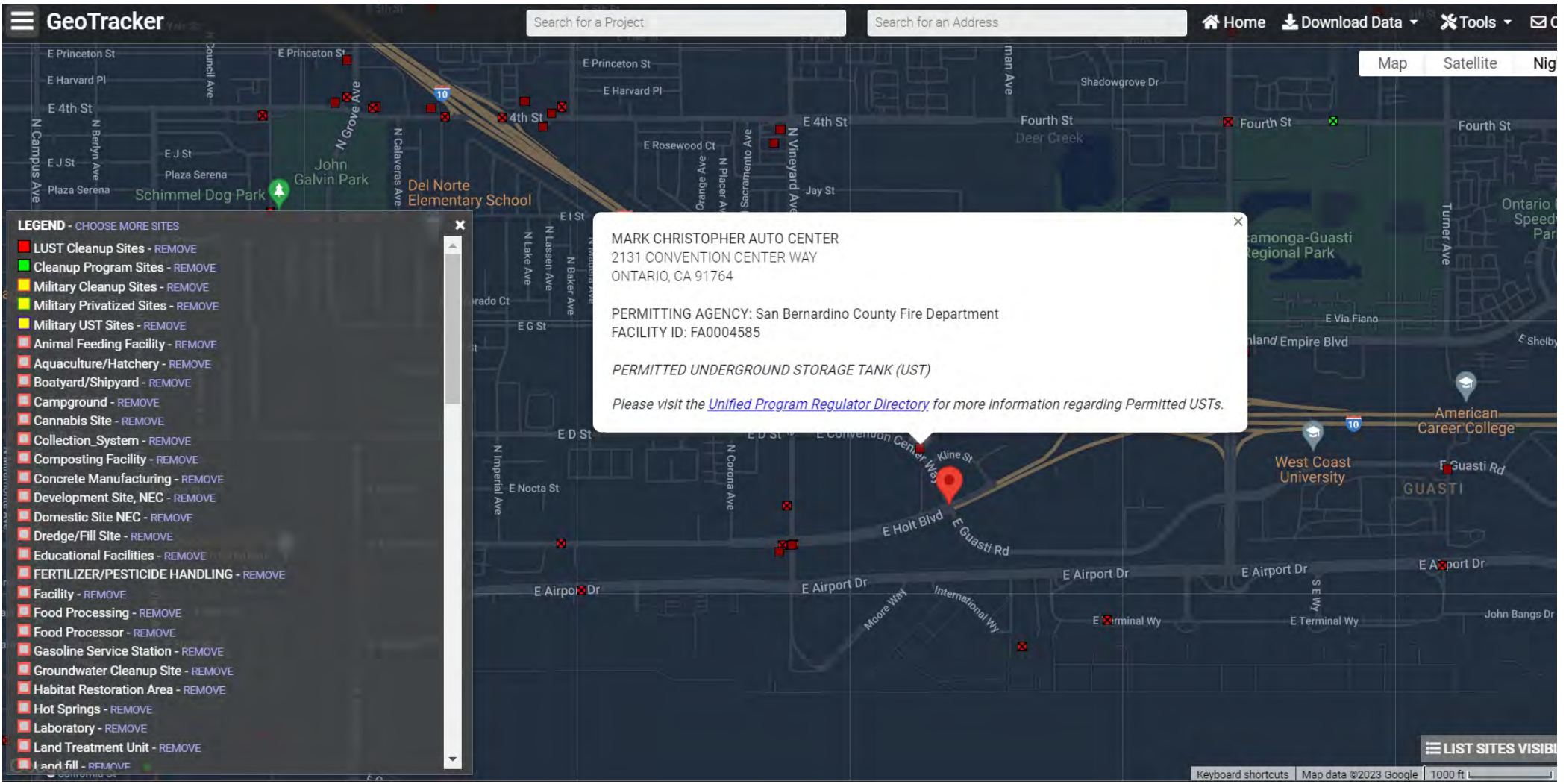
POTENTIAL CONTAMINANTS OF CONCERN
NONE SPECIFIED

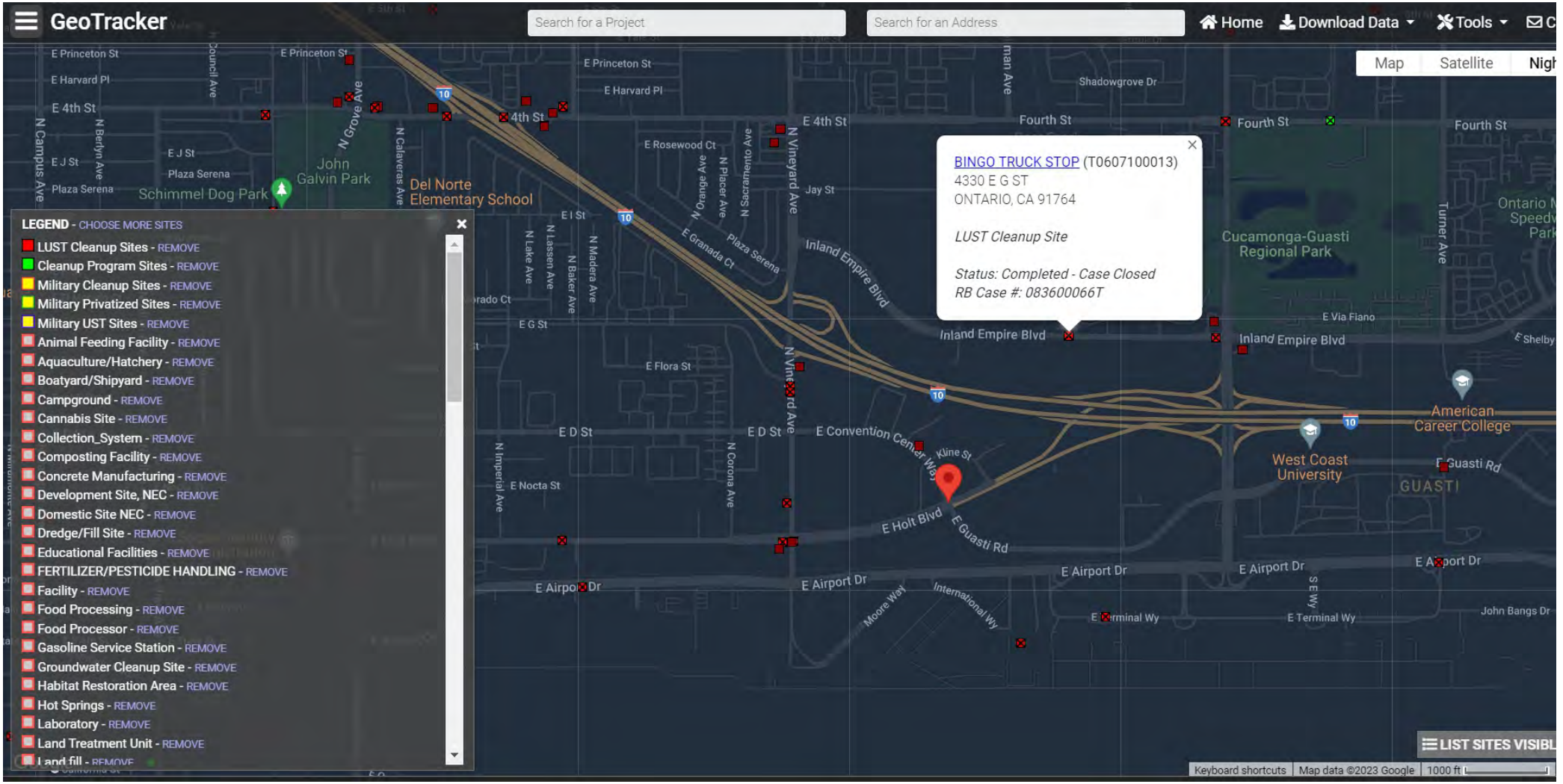
POTENTIAL MEDIA AFFECTED
NONE SPECIFIED

Site History


Cleanup Sites
Federal Superfund
State Response
Voluntary Cleanup
School Cleanup
Evaluation
School Investigation
Military Evaluation
Tiered Permit
Corrective Action
Field Points
STATUS
All Statuses
Permitted Sites
Operating
Post-Closure
Non-Operating
Other Sites
GIS Layers
Tools
Measure a Distance
E. Holt Blvd. & E. Guasti Rd., Ontario, CA
Map Address
LOCKHEED AIRCRAFT SERVICE CO. (71002210)
1800 E. AIRPORT DRIVE
ONTARIO, CA 91761
SITE TYPE: TIERED PERMIT
STATUS: REFER: OTHER AGENCY
Stater Bros. Markets
John Galvin Park
Cucamonga-Guasti Regional Park
Topgolf
Panda Inn
El Torito
Costco Business Center
Ontario International Airport
Carniceria Del Valle
Skating Arena
E 4th St
Fourth St
6th St
E 6th St
E Airport Dr
Mission Blvd
W Mission Blvd
Grove Ave
N Baker Ave
N Vineyard Ave
Archibald Ave
Hermosa Ave
Haven Ave
Turner Ave
N Center Ave
N Allyn Ave
S Grove Ave
S Haven Ave
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LEGEND - CHOOSE MORE SITES
LUST Cleanup Sites - REMOVE
Cleanup Program Sites - REMOVE
Military Cleanup Sites - REMOVE
Military Privatized Sites - REMOVE
Military UST Sites - REMOVE
Animal Feeding Facility - REMOVE
Aquaculture/Hatchery - REMOVE
Boatyard/Shipyard - REMOVE
Campground - REMOVE
Cannabis Site - REMOVE
Collection_System - REMOVE
Composting Facility - REMOVE
Concrete Manufacturing - REMOVE
Development Site, NEC - REMOVE
Domestic Site NEC - REMOVE
Dredge/Fill Site - REMOVE
Educational Facilities - REMOVE
FERTILIZER/PESTICIDE HANDLING - REMOVE
Facility - REMOVE
Food Processing - REMOVE
Food Processor - REMOVE
Gasoline Service Station - REMOVE
Groundwater Cleanup Site - REMOVE
Habitat Restoration Area - REMOVE
Hot Springs - REMOVE
Laboratory - REMOVE
Land Treatment Unit - REMOVE
Land fill - REMOVE
LIST SITES VISIBLE
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Habitat Restoration Area - REMOVE
Hot Springs - REMOVE
Laboratory - REMOVE
Land Treatment Unit - REMOVE
Land fill - REMOVE
MARK CHRISTOPHER AUTO CENTER
2131 CONVENTION CENTER WAY
ONTARIO, CA 91764
PERMITTING AGENCY: San Bernardino County Fire Department
FACILITY ID: FA0004585
PERMITTED UNDERGROUND STORAGE TANK (UST)
Please visit the Unified Program Regulator Directory for more information regarding Permitted USTs.
E Princeton St
E Harvard Pl
E 4th St
E J St
Plaza Serena
Schimmel Dog Park
John Galvin Park
Del Norte Elementary School
N Grove Ave
N Campus Ave
N Berlyn Ave
N Calaveras Ave
Council Ave
4th St
E Rosewood Ct
Orange Ave
N Placer Ave
Sacramento Ave
N Vineyard Ave
Jay St
Shadowgrove Dr
Fourth St
Deer Creek
Turner Ave
E I St
E G St
E D St
N Lake Ave
N Lassen Ave
N Baker Ave
N Imperial Ave
N Corona Ave
E Nocta St
E Via Piano
Inland Empire Blvd
American Career College
West Coast University
GUASTI
E Guasti Rd
E Holt Blvd
E Airport Dr
Moore Way
International Wy
E Terminal Wy
John Bangs Dr
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BINGO TRUCK STOP (T0607100013)
4330 E G ST
ONTARIO, CA 91764
LUST Cleanup Site
Status: Completed - Case Closed
RB Case #: 083600066T
LEGEND - CHOOSE MORE SITES
LUST Cleanup Sites - REMOVE
Cleanup Program Sites - REMOVE
Military Cleanup Sites - REMOVE
Military Privatized Sites - REMOVE
Military UST Sites - REMOVE
Animal Feeding Facility - REMOVE
Aquaculture/Hatchery - REMOVE
Boatyard/Shipyard - REMOVE
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Hot Springs - REMOVE
Laboratory - REMOVE
Land Treatment Unit - REMOVE
Land fill - REMOVE
Inland Empire Blvd
E Princeton St
E Harvard Pl
E 4th St
E J St
Plaza Serena
Schimmel Dog Park
John Galvin Park
Del Norte Elementary School
E Rosewood Ct
E I St
E G St
E Flora St
E D St
E Nocta St
E Holt Blvd
E Guasti Rd
E Airport Dr
Moore Way
International Wy
E Terminal Wy
Fourth St
Shadowgrove Dr
Jay St
E Via Fiano
Cucamonga-Guasti Regional Park
American Career College
West Coast University
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BINGO TRUCK STOP (T0607100013) - (MAP)

SIGN UP FOR EMAIL ALERTS

4330 E G ST
ONTARIO, CA 91764
SAN BERNARDINO COUNTY
LUST CLEANUP SITE (INFO)
COMPLETED - CASE CLOSED AS OF 12/5/1984 - DEFINITION
PRINTABLE CASE SUMMARY / CSM REPORT

CLEANUP OVERSIGHT AGENCIES
SANTA ANA RWQCB (REGION 8) *(LEAD)* - *CASE #: 083600066T*
SAN BERNARDINO COUNTY
CASE MANAGER: CATHERINE RICHARDS

Summary | Cleanup Action Report | Regulatory Activities | *Environmental Data (ESI)* | Site Maps / Documents | Community Involvement | *Related Cases*

Regulatory Profile

PRINTABLE CASE SUMMARY

CLEANUP STATUS - DEFINITIONS
COMPLETED - CASE CLOSED AS OF 12/5/1984 - CLEANUP STATUS HISTORY

POTENTIAL CONTAMINANTS OF CONCERN
DIESEL

POTENTIAL MEDIA OF CONCERN
AQUIFER USED FOR DRINKING WATER SUPPLY

FILE LOCATION

DESIGNATED GROUNDWATER BENEFICIAL USE(S) - DEFINITIONS
MUN, AGR, IND, PROC - Note: Also incl parts of 481.21 and 481.23 (R4).

DWR GROUNDWATER SUB-BASIN NAME
Upper Santa Ana Valley - Chino (8-002.01)

CALWATER WATERSHED NAME
Santa Ana River - Middle Santa Ana River - Chino (Split) (801.21)

Site History

No site history available

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BINGO TRUCK STOP (T0607100013) - (MAP)

SIGN UP FOR EMAIL ALERTS

4330 E G ST
ONTARIO, CA 91764
SAN BERNARDINO COUNTY
LUST CLEANUP SITE (INFO)
COMPLETED - CASE CLOSED AS OF 12/5/1984 - DEFINITION
PRINTABLE CASE SUMMARY / CSM REPORT

CLEANUP OVERSIGHT AGENCIES
SANTA ANA RWQCB (REGION 8) *(LEAD)* - *CASE #: 083600066T*
SAN BERNARDINO COUNTY
CASE MANAGER: CATHERINE RICHARDS

Summary | Cleanup Action Report | Regulatory Activities | *Environmental Data (ESI)* | Site Maps / Documents | Community Involvement | *Related Cases*

CLICK HERE TO MARK MULTIPLE DOCUMENTS TO DOWNLOAD

* DENOTES A SUBMITTAL WAS AUTO-RECEIVED

Site Maps (GEO_MAP), Boring Logs (GEO_BORE) and KML / KMZ Files

NO SITE MAP SUBMITTALS FOUND FOR THIS FACILITY.

Site Documents

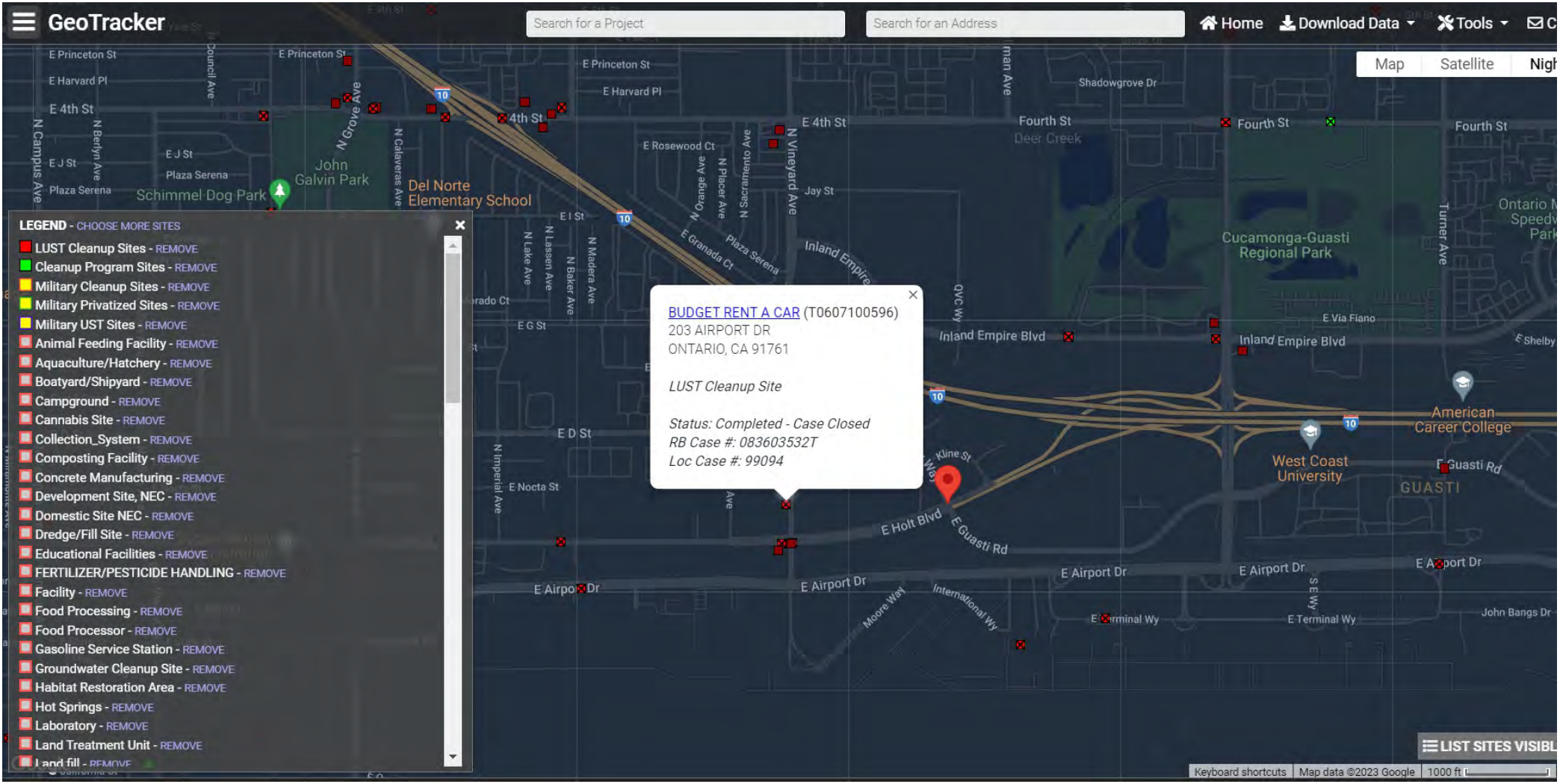
TITLE	TYPE	SUBMITTED BY	DOCUMENT DATE	SIZE
CLOSURE/NO FURTHER ACTION LETTER	CLOSURE/NO FURTHER ACTION LETTER	(REGULATOR)	12/22/1999	

Petition Documents

NO PETITION DOCUMENT SUBMITTALS FOUND FOR THIS FACILITY.

Monitoring Reports

NO MONITORING REPORT SUBMITTALS FOUND FOR THIS FACILITY.


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LEGEND - CHOOSE MORE SITES
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Cleanup Program Sites - REMOVE
Military Cleanup Sites - REMOVE
Military Privatized Sites - REMOVE
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Animal Feeding Facility - REMOVE
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FERTILIZER/PESTICIDE HANDLING - REMOVE
Facility - REMOVE
Food Processing - REMOVE
Food Processor - REMOVE
Gasoline Service Station - REMOVE
Groundwater Cleanup Site - REMOVE
Habitat Restoration Area - REMOVE
Hot Springs - REMOVE
Laboratory - REMOVE
Land Treatment Unit - REMOVE
BUDGET RENT A CAR (T0607100596)
203 AIRPORT DR
ONTARIO, CA 91761
LUST Cleanup Site
Status: Completed - Case Closed
RB Case #: 083603532T
Loc Case #: 99094
E Princeton St
E Harvard Pl
E 4th St
E J St
Plaza Serena
John Galvin Park
Schimmel Dog Park
Del Norte Elementary School
E I St
E G St
E D St
E Nocta St
E Granada Ct
Inland Empire
Cucamonga-Guasti Regional Park
Shadowgrove Dr
Fourth St
Deer Creek
Jay St
E Rosewood Ct
Inland Empire Blvd
E Via Fiano
E Holt Blvd
E Guasti Rd
E Airport Dr
Moore Way
International Wy
E Terminal Wy
John Bangs Dr
American Career College
West Coast University
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Kline St
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BUDGET RENT A CAR (T0607100596) - (MAP)

SIGN UP FOR EMAIL ALERTS

203 AIRPORT DR
ONTARIO, CA 91761
SAN BERNARDINO COUNTY
LUST CLEANUP SITE (INFO)
COMPLETED - CASE CLOSED AS OF 2/28/2002 - DEFINITION
PRINTABLE CASE SUMMARY / CSM REPORT

CLEANUP OVERSIGHT AGENCIES
SAN BERNARDINO COUNTY *(LEAD)* - *CASE #: 99094*
SANTA ANA RWQCB (REGION 8) - *CASE #: 083603532T*
CASE MANAGER: MAILE SEEGER GEE

Summary | Cleanup Action Report | Regulatory Activities | Environmental Data (ESI) | Site Maps / Documents | Community Involvement | Related Cases

Regulatory Profile

PRINTABLE CASE SUMMARY

CLEANUP STATUS - DEFINITIONS
COMPLETED - CASE CLOSED AS OF 2/28/2002 - CLEANUP STATUS HISTORY

POTENTIAL CONTAMINANTS OF CONCERN
GASOLINE

POTENTIAL MEDIA OF CONCERN
SOIL

FILE LOCATION
LOCAL AGENCY

DESIGNATED GROUNDWATER BENEFICIAL USE(S) - DEFINITIONS
MUN, AGR, IND, PROC - Note: Also incl parts of 481.21 and 481.23 (R4).

DWR GROUNDWATER SUB-BASIN NAME
Upper Santa Ana Valley - Chino (8-002.01)

CALWATER WATERSHED NAME
Santa Ana River - Middle Santa Ana River - Chino (Split) (801.21)

Site History

No site history available

STATE WATER RESOURCES CONTROL BOARD

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BUDGET RENT A CAR (T0607100596) - (MAP)

SIGN UP FOR EMAIL ALERTS

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ONTARIO, CA 91761
SAN BERNARDINO COUNTY
LUST CLEANUP SITE (INFO)
COMPLETED - CASE CLOSED AS OF 2/28/2002 - DEFINITION
PRINTABLE CASE SUMMARY / CSM REPORT

CLEANUP OVERSIGHT AGENCIES
SAN BERNARDINO COUNTY *(LEAD)* - *CASE #: 99094*
SANTA ANA RWQCB (REGION 8) - *CASE #: 083603532T*
CASE MANAGER: MAILE SEEGER GEE

Summary | Cleanup Action Report | Regulatory Activities | Environmental Data (ESI) | Site Maps / Documents | Community Involvement | Related Cases

Cleanup Action Report

NO CLEANUP ACTIONS EXIST

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BUDGET RENT A CAR (T0607100596) - (MAP)

SIGN UP FOR EMAIL ALERTS

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ONTARIO, CA 91761
SAN BERNARDINO COUNTY
LUST CLEANUP SITE (INFO)
COMPLETED - CASE CLOSED AS OF 2/28/2002 - DEFINITION
PRINTABLE CASE SUMMARY / CSM REPORT

CLEANUP OVERSIGHT AGENCIES
SAN BERNARDINO COUNTY *(LEAD)* - *CASE #: 99094*
SANTA ANA RWQCB (REGION 8) - *CASE #: 083603532T*
CASE MANAGER: MAILE SEEGER GEE

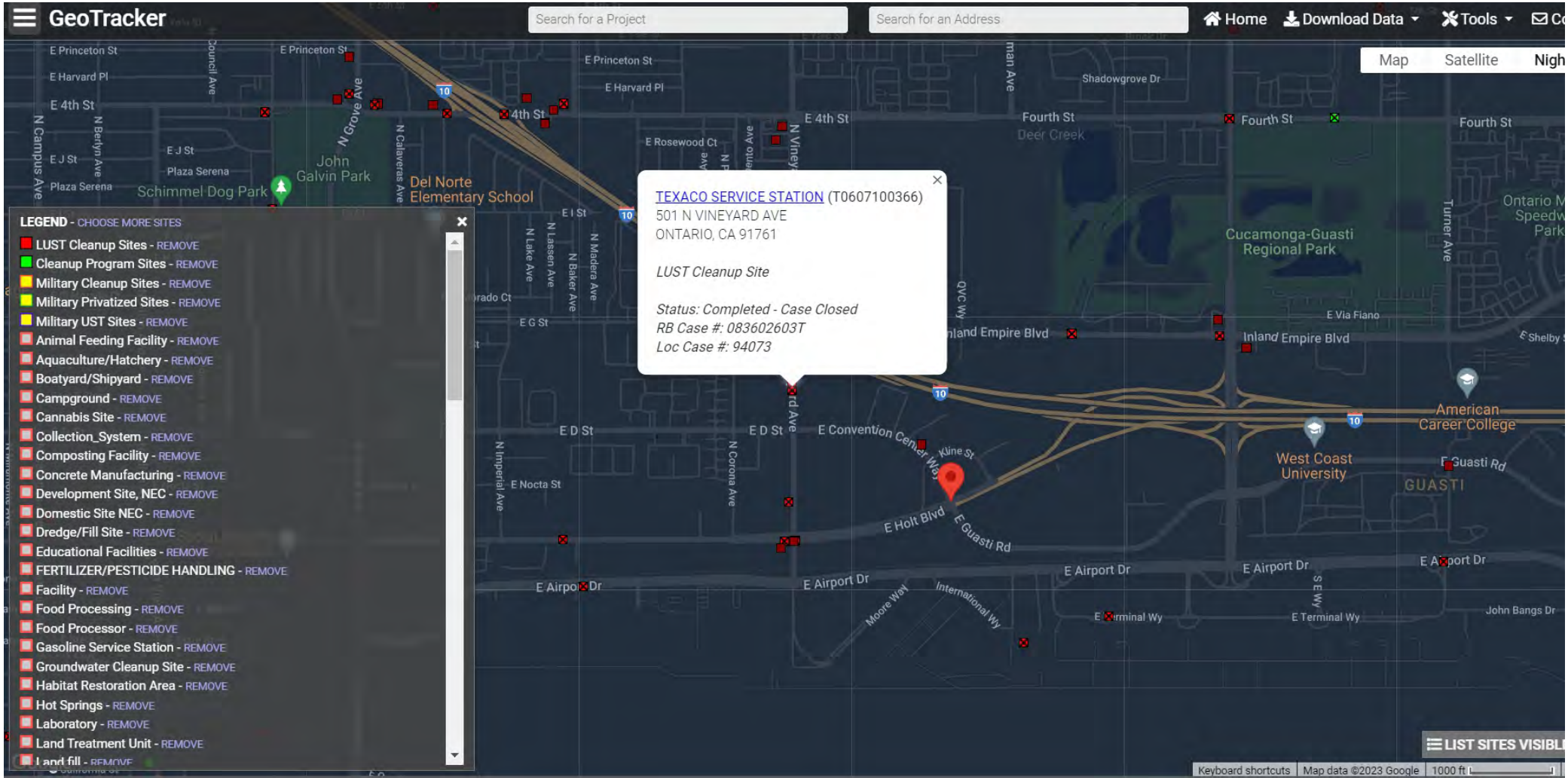
Summary | Cleanup Action Report | Regulatory Activities | Environmental Data (ESI) | Site Maps / Documents | Community Involvement | Related Cases

Regulatory Activities

Action Type Filter: Show All Activities Go

* Indicates a revised due date

ACTION TYPE	ACTION	ACTION DATE	RECEIVED / ISSUE DATE	TITLE / DESCRIPTION / COMMENTS
Leak Action	Leak Reported	6/23/1999		
Leak Action	Leak Discovery	6/22/1999		


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TEXACO SERVICE STATION (T0607100366)
501 N VINEYARD AVE
ONTARIO, CA 91761
LUST Cleanup Site
Status: Completed - Case Closed
RB Case #: 083602603T
Loc Case #: 94073
LEGEND - CHOOSE MORE SITES
LUST Cleanup Sites - REMOVE
Cleanup Program Sites - REMOVE
Military Cleanup Sites - REMOVE
Military Privatized Sites - REMOVE
Military UST Sites - REMOVE
Animal Feeding Facility - REMOVE
Aquaculture/Hatchery - REMOVE
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Cannabis Site - REMOVE
Collection_System - REMOVE
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Concrete Manufacturing - REMOVE
Development Site, NEC - REMOVE
Domestic Site NEC - REMOVE
Dredge/Fill Site - REMOVE
Educational Facilities - REMOVE
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Facility - REMOVE
Food Processing - REMOVE
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Groundwater Cleanup Site - REMOVE
Habitat Restoration Area - REMOVE
Hot Springs - REMOVE
Laboratory - REMOVE
Land Treatment Unit - REMOVE
Land fill - REMOVE
E Princeton St
E Harvard Pl
E 4th St
E J St
Plaza Serena
Schimmel Dog Park
John Galvin Park
Del Norte Elementary School
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N Calaveras Ave
N Campus Ave
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E I St
E G St
E D St
E Rosewood Ct
Shadowgrove Dr
Fourth St
Deer Creek
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E Via Fiano
Inland Empire Blvd
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E Airport Dr
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N Corona Ave
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TEXACO SERVICE STATION (T0607100366) - (MAP)

SIGN UP FOR EMAIL ALERTS

501 N VINEYARD AVE
ONTARIO, CA 91761
SAN BERNARDINO COUNTY
LUST CLEANUP SITE (INFO)
COMPLETED - CASE CLOSED AS OF 9/10/1999 - DEFINITION
PRINTABLE CASE SUMMARY / CSM REPORT

CUF Claim #:	16236
CUF Priority Assigned:	D
CUF Amount Paid:	$61,460

CLEANUP OVERSIGHT AGENCIES
SAN BERNARDINO COUNTY *(LEAD)* - *CASE #: 94073*
SANTA ANA RWQCB (REGION 8) - *CASE #: 083602603T*
CASE MANAGER: MIGUEL OVIEDO

Summary | Cleanup Action Report | Regulatory Activities | Environmental Data (ESI) | Site Maps / Documents | Community Involvement | Related Cases | LUST CUF Data

Regulatory Profile

PRINTABLE CASE SUMMARY

CLEANUP STATUS - DEFINITIONS

COMPLETED - CASE CLOSED AS OF 9/10/1999 - CLEANUP STATUS HISTORY

POTENTIAL CONTAMINANTS OF CONCERN
GASOLINE

POTENTIAL MEDIA OF CONCERN
SOIL

FILE LOCATION
LOCAL AGENCY

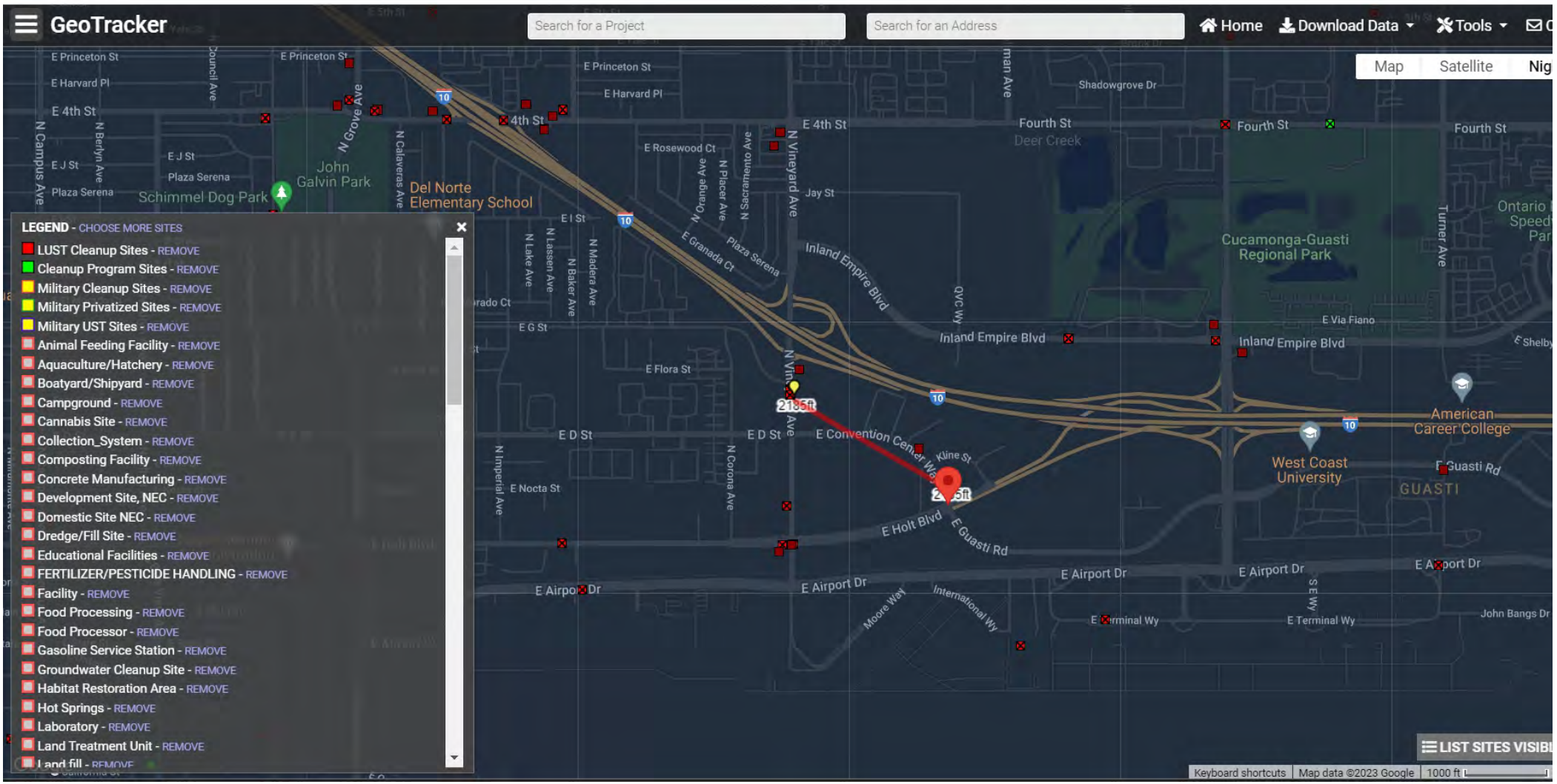
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MUN, AGR, IND, PROC - Note: Also incl parts of 481.21 and 481.23 (R4).

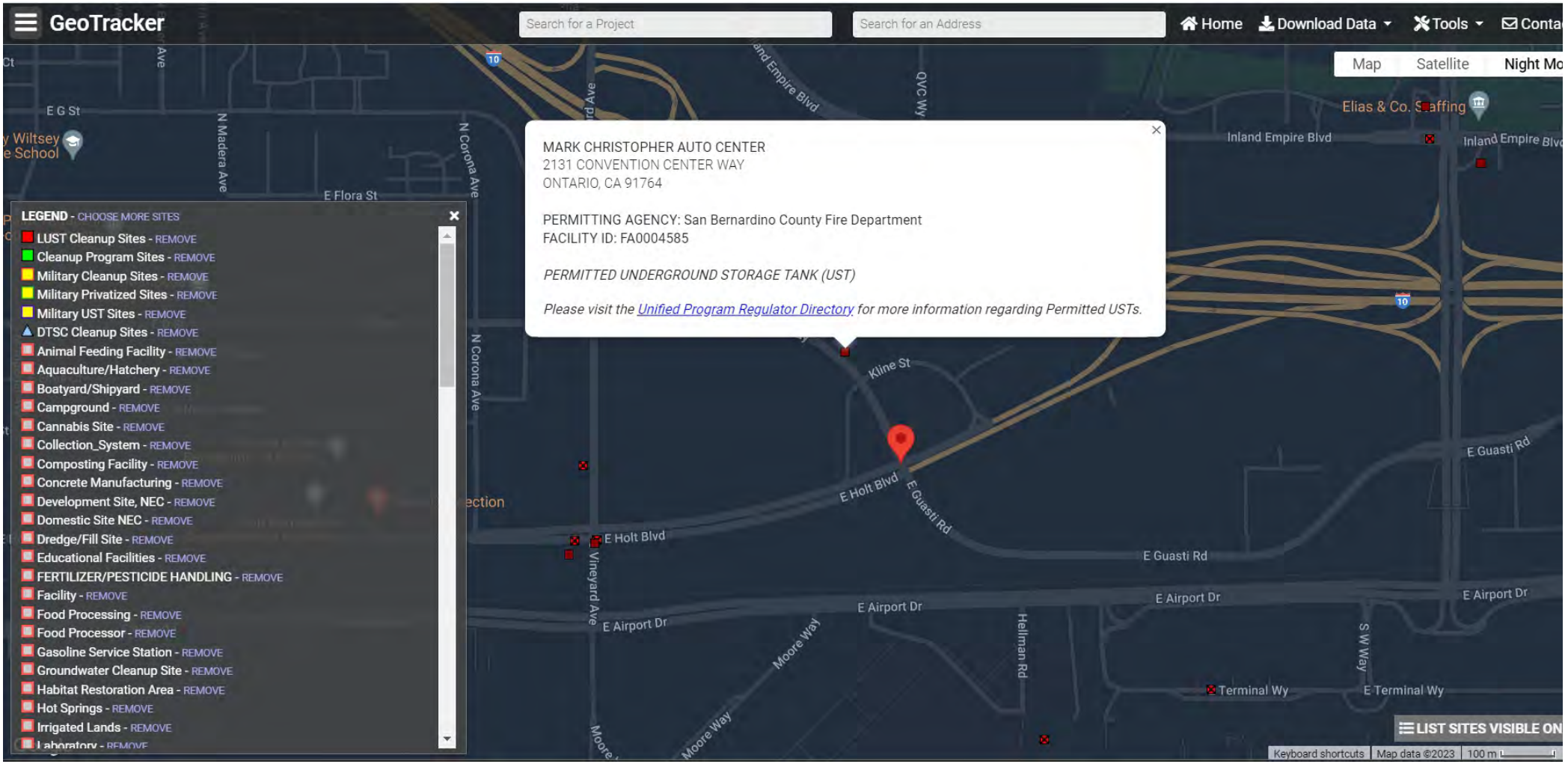
DWR GROUNDWATER SUB-BASIN NAME
Upper Santa Ana Valley - Chino (8-002.01)

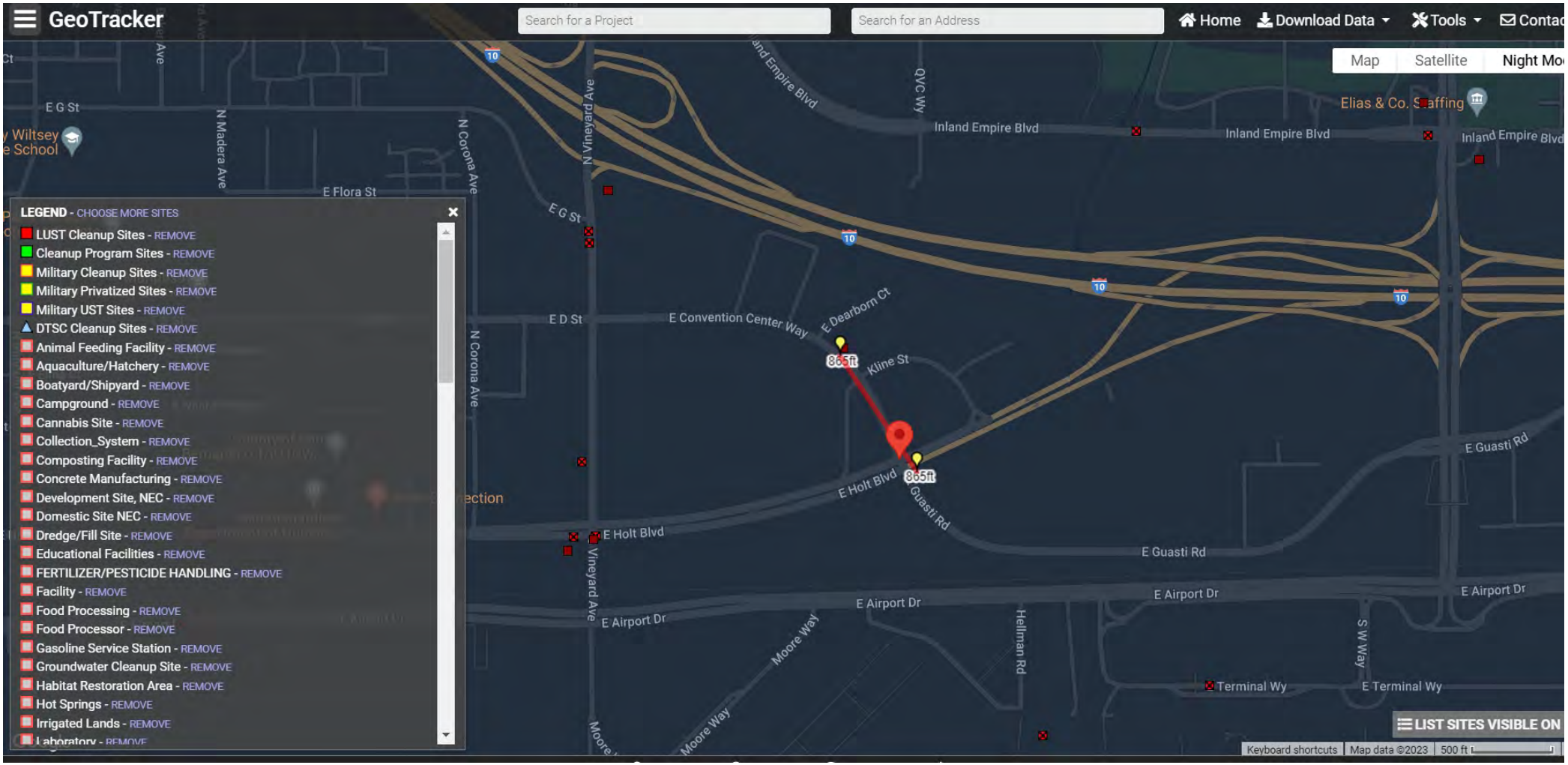
CALWATER WATERSHED NAME
Santa Ana River - Middle Santa Ana River - Chino (Split) (801.21)

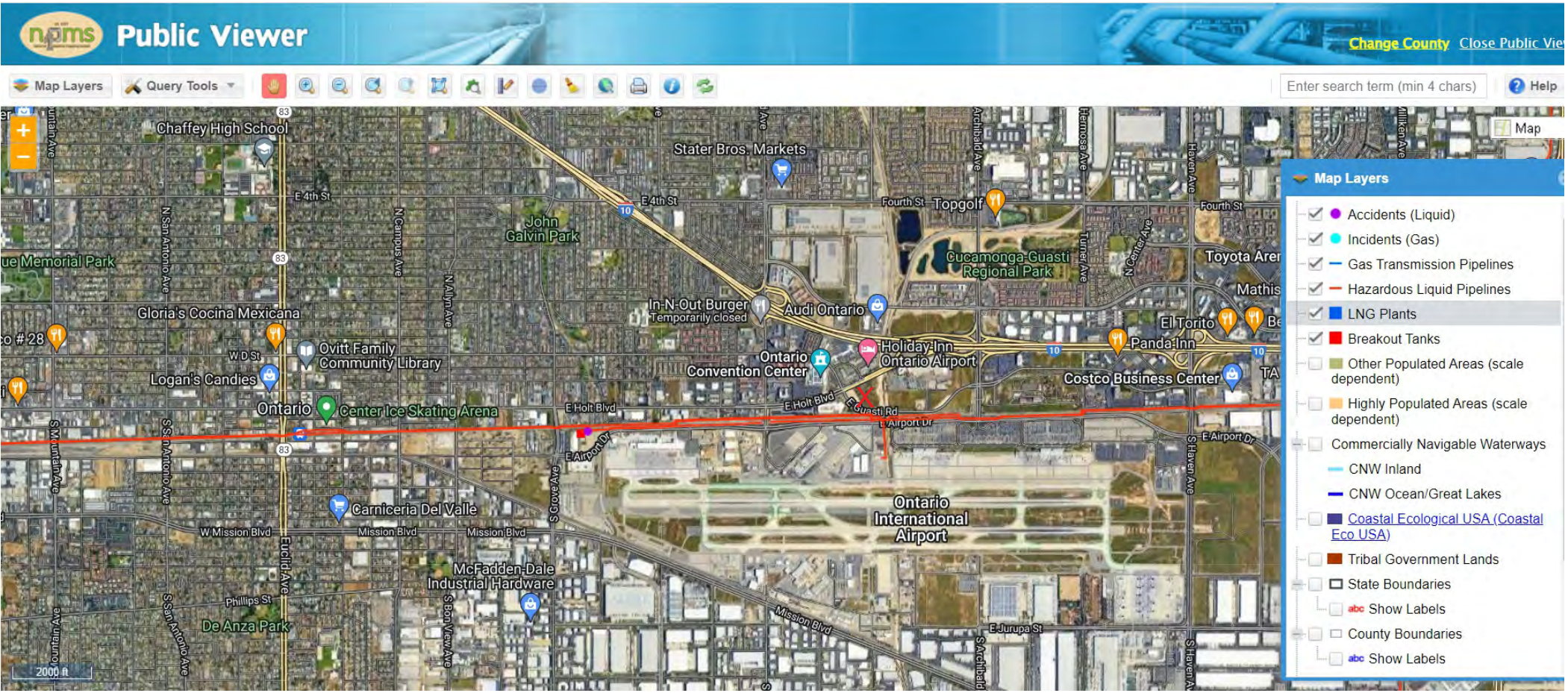
Site History

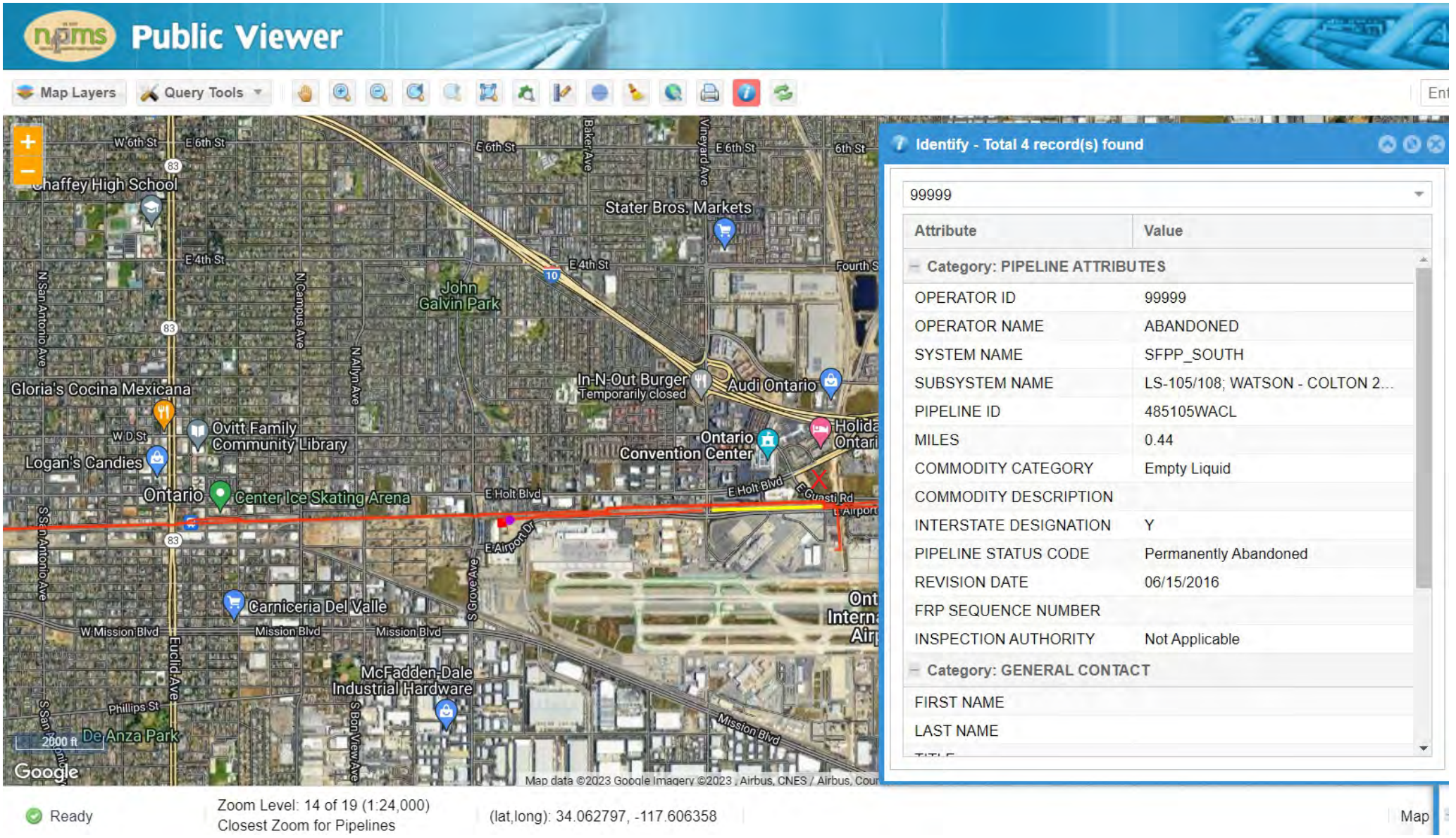
No site history available

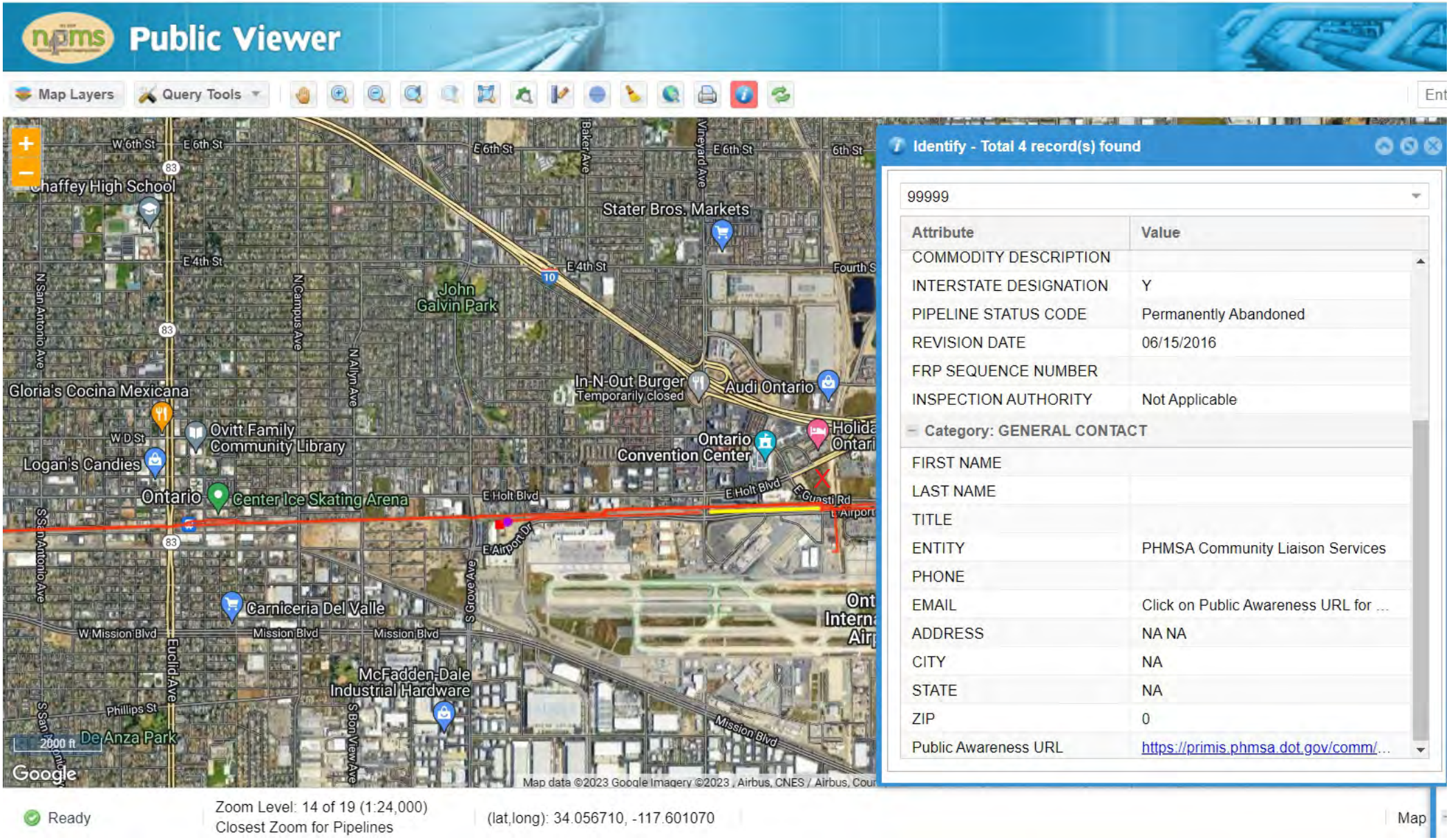

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N Sacramento Ave
N Placer Ave
N Orange Ave
N Lake Ave
N Lassen Ave
N Baker Ave
N Madera Ave
N Imperial Ave
N Corona Ave
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Plaza Serena
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International Wy
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John Bangs Dr
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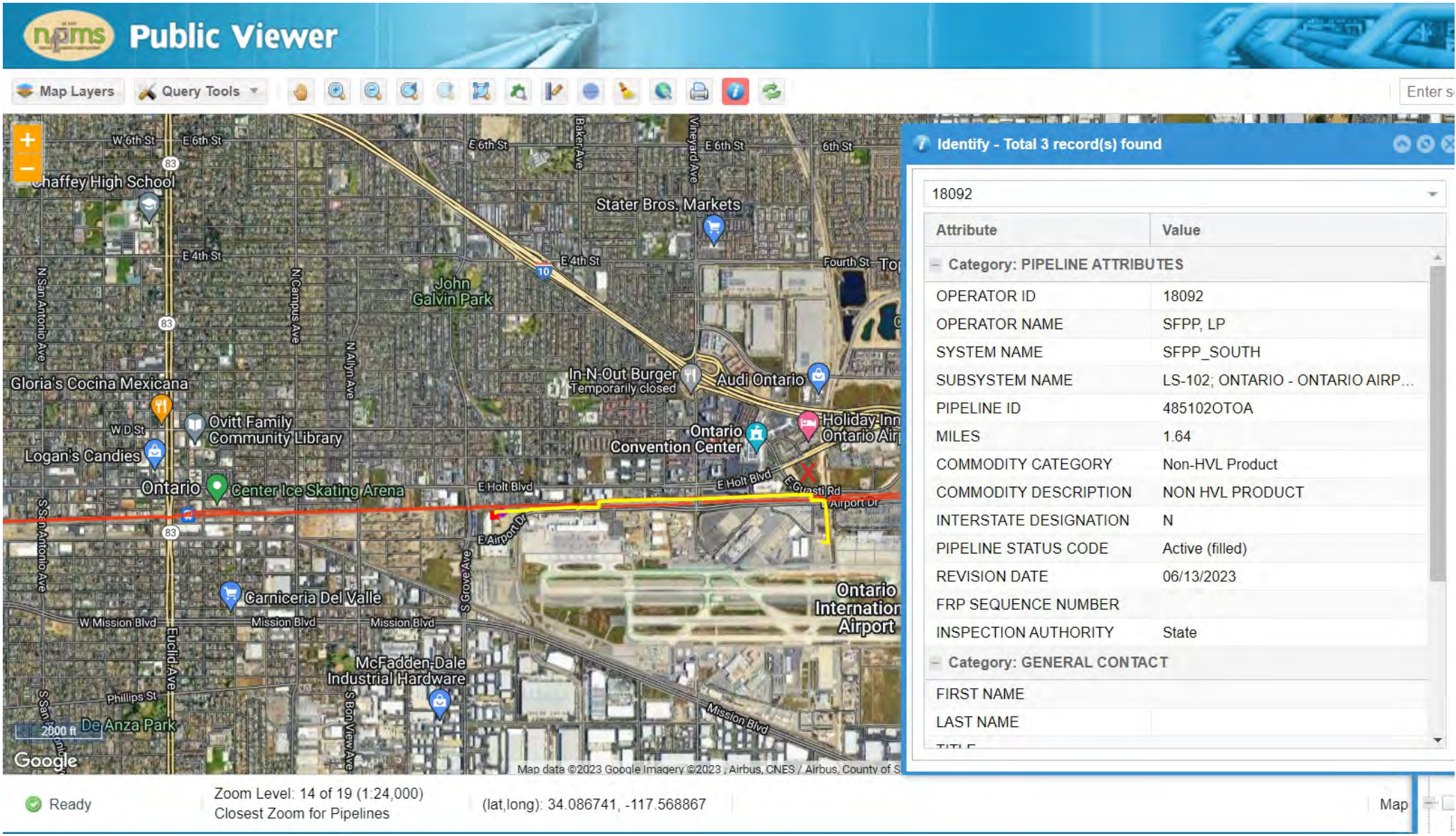

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Tools
Map
Satellite
Night Mo
MARK CHRISTOPHER AUTO CENTER
2131 CONVENTION CENTER WAY
ONTARIO, CA 91764
PERMITTING AGENCY: San Bernardino County Fire Department
FACILITY ID: FA0004585
PERMITTED UNDERGROUND STORAGE TANK (UST)
Please visit the Unified Program Regulator Directory for more information regarding Permitted USTs.
LEGEND - CHOOSE MORE SITES
LUST Cleanup Sites - REMOVE
Cleanup Program Sites - REMOVE
Military Cleanup Sites - REMOVE
Military Privatized Sites - REMOVE
Military UST Sites - REMOVE
DTSC Cleanup Sites - REMOVE
Animal Feeding Facility - REMOVE
Aquaculture/Hatchery - REMOVE
Boatyard/Shipyard - REMOVE
Campground - REMOVE
Cannabis Site - REMOVE
Collection_System - REMOVE
Composting Facility - REMOVE
Concrete Manufacturing - REMOVE
Development Site, NEC - REMOVE
Domestic Site NEC - REMOVE
Dredge/Fill Site - REMOVE
Educational Facilities - REMOVE
FERTILIZER/PESTICIDE HANDLING - REMOVE
Facility - REMOVE
Food Processing - REMOVE
Food Processor - REMOVE
Gasoline Service Station - REMOVE
Groundwater Cleanup Site - REMOVE
Habitat Restoration Area - REMOVE
Hot Springs - REMOVE
Irrigated Lands - REMOVE
Laboratory - REMOVE
E G St
E Flora St
N Madera Ave
N Corona Ave
Inland Empire Blvd
Elias & Co. Staffing
Kline St
E Holt Blvd
E Guasti Rd
Vineyard Ave
E Airport Dr
Moore Way
Hellman Rd
S W Way
Terminal Wy
E Terminal Wy
LIST SITES VISIBLE ON
Keyboard shortcuts
Map data ©2023
100 m

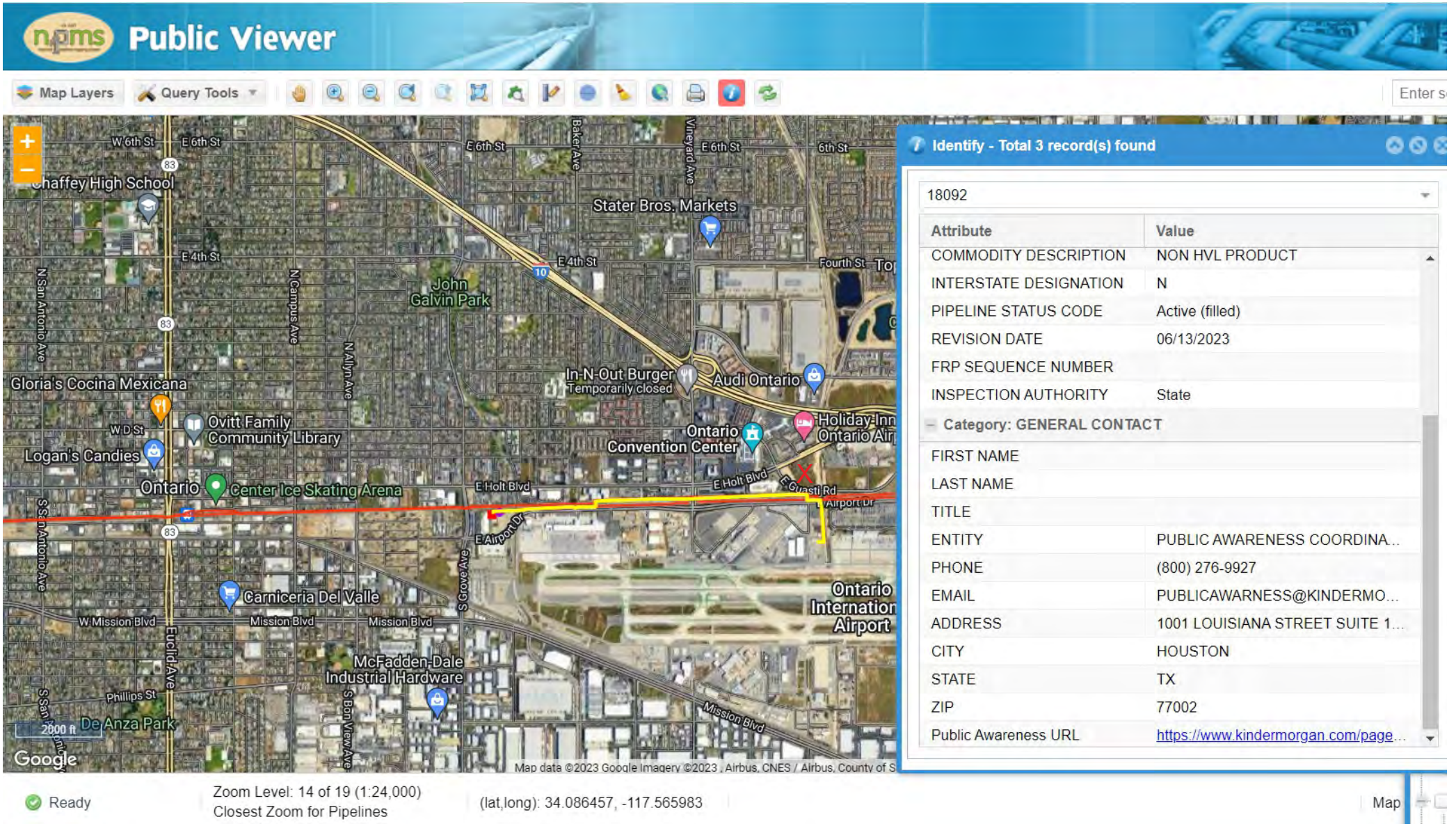

GeoTracker
Search for a Project
Search for an Address
Home
Download Data
Tools
Map
Satellite
Night Mo
LEGEND - CHOOSE MORE SITES
LUST Cleanup Sites - REMOVE
Cleanup Program Sites - REMOVE
Military Cleanup Sites - REMOVE
Military Privatized Sites - REMOVE
Military UST Sites - REMOVE
DTSC Cleanup Sites - REMOVE
Animal Feeding Facility - REMOVE
Aquaculture/Hatchery - REMOVE
Boatyard/Shipyard - REMOVE
Campground - REMOVE
Cannabis Site - REMOVE
Collection_System - REMOVE
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Concrete Manufacturing - REMOVE
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Educational Facilities - REMOVE
FERTILIZER/PESTICIDE HANDLING - REMOVE
Facility - REMOVE
Food Processing - REMOVE
Food Processor - REMOVE
Gasoline Service Station - REMOVE
Groundwater Cleanup Site - REMOVE
Habitat Restoration Area - REMOVE
Hot Springs - REMOVE
Irrigated Lands - REMOVE
Laboratory - REMOVE
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N Vineyard Ave
Inland Empire Blvd
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Elias & Co. Staffing
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E Convention Center Way
E Dearborn Ct
865ft
Kline St
E Holt Blvd
Guasti Rd
E Guasti Rd
E Airport Dr
Moore Way
Hellman Rd
S W Way
Terminal Wy
E Terminal Wy
LIST SITES VISIBLE ON
Keyboard shortcuts
Map data ©2023
500 ft

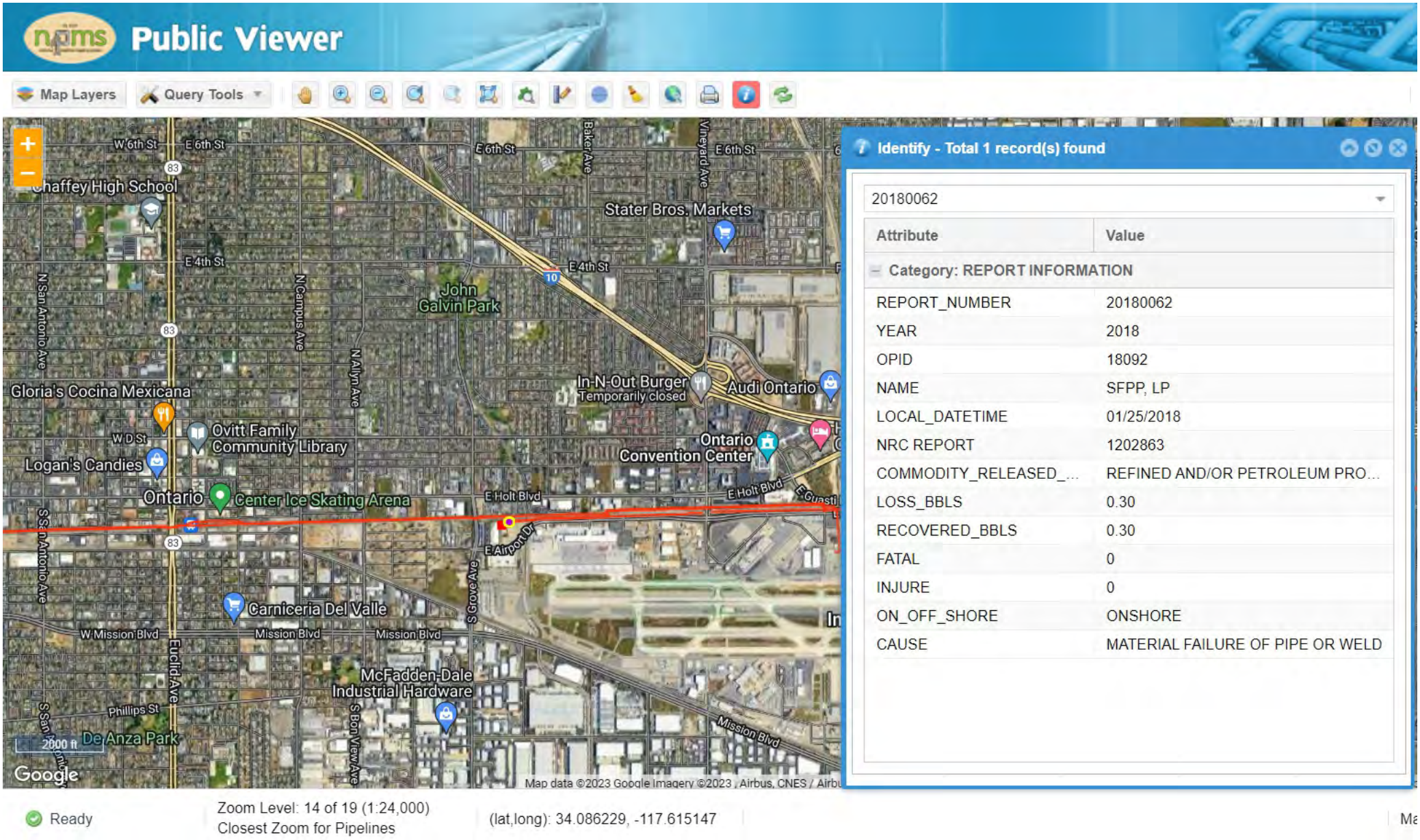

Public Viewer
Change County
Close Public Vie
Map Layers
Query Tools
Enter search term (min 4 chars)
Help
Map
Chaffey High School
Stater Bros. Markets
Topgolf
John Galvin Park
Cucamonga-Guasti Regional Park
Toyota Aren
Gloria's Cocina Mexicana
In-N-Out Burger
Temporarily closed
Audi Ontario
El Torito
Panda Inn
Ovitt Family Community Library
Logan's Candies
Ontario Convention Center
Holiday Inn Ontario Airport
Costco Business Center
Ontario
Center Ice Skating Arena
Carniceria Del Valle
Ontario International Airport
McFadden-Dale Industrial Hardware
De Anza Park
E 4th St
E Holt Blvd
E Airport Dr
E Guasti Rd
W Mission Blvd
Mission Blvd
E Jurupa St
Phillips St
W D St
Fourth St
2000 ft
Map Layers
Accidents (Liquid)
Incidents (Gas)
Gas Transmission Pipelines
Hazardous Liquid Pipelines
LNG Plants
Breakout Tanks
Other Populated Areas (scale dependent)
Highly Populated Areas (scale dependent)
Commercially Navigable Waterways
CNW Inland
CNW Ocean/Great Lakes
Coastal Ecological USA (Coastal Eco USA)
Tribal Government Lands
State Boundaries
Show Labels
County Boundaries
Show Labels

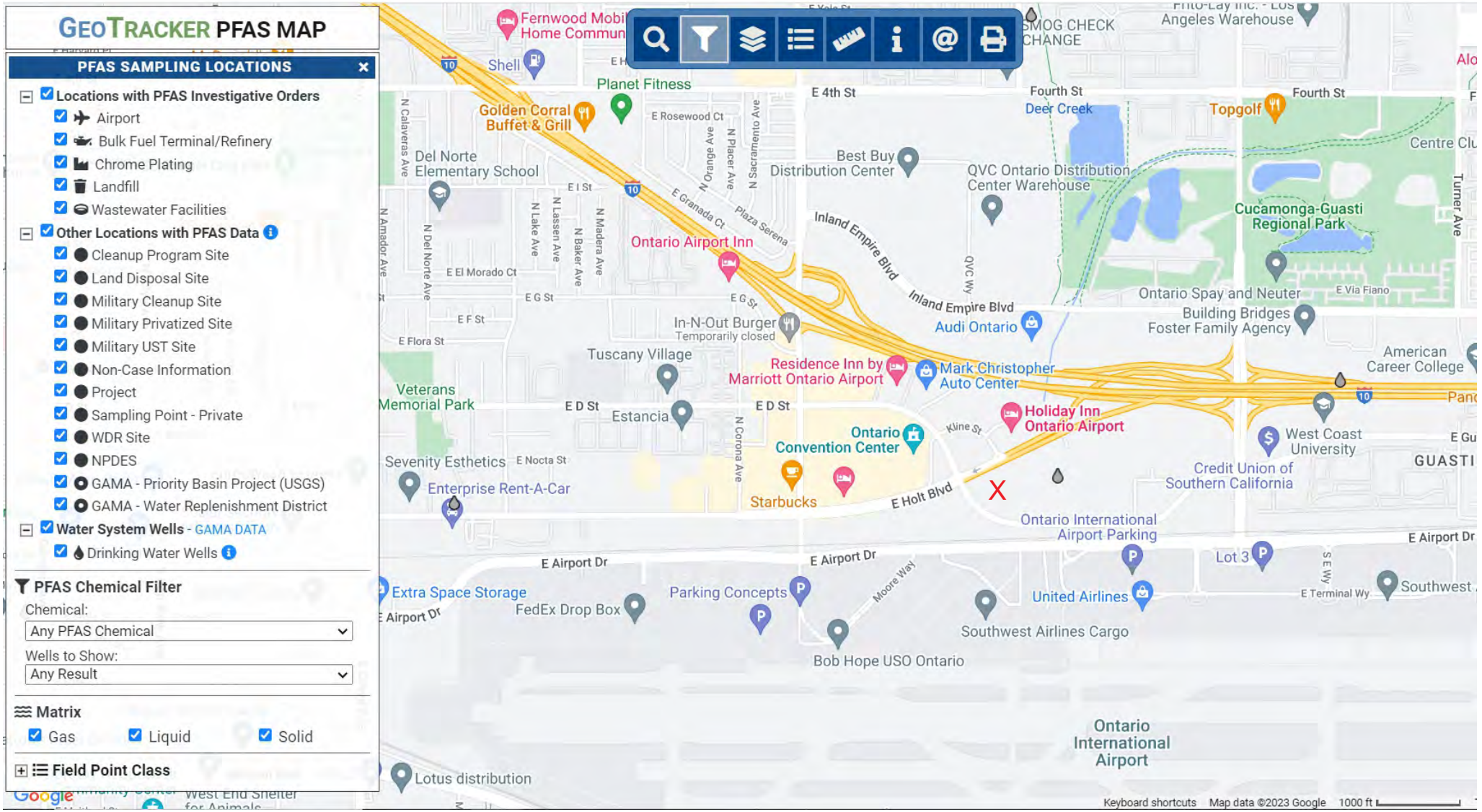

Public Viewer
Map Layers
Query Tools
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99999
Attribute
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Category: PIPELINE ATTRIBUTES
OPERATOR ID 99999
OPERATOR NAME ABANDONED
SYSTEM NAME SFPP_SOUTH
SUBSYSTEM NAME LS-105/108; WATSON - COLTON 2...
PIPELINE ID 485105WACL
MILES 0.44
COMMODITY CATEGORY Empty Liquid
COMMODITY DESCRIPTION
INTERSTATE DESIGNATION Y
PIPELINE STATUS CODE Permanently Abandoned
REVISION DATE 06/15/2016
FRP SEQUENCE NUMBER
INSPECTION AUTHORITY Not Applicable
Category: GENERAL CONTACT
FIRST NAME
LAST NAME
Chaffey High School
Stater Bros. Markets
John Galvin Park
In-N-Out Burger
Temporarily closed
Audi Ontario
Gloria's Cocina Mexicana
Ovitt Family Community Library
Logan's Candies
Ontario Convention Center
Ontario Center Ice Skating Arena
Carniceria Del Valle
McFadden-Dale Industrial Hardware
De Anza Park
E 6th St
E 4th St
E Holt Blvd
E Airport Dr
Mission Blvd
W Mission Blvd
Euclid Ave
Google
Map data ©2023 Google Imagery ©2023 , Airbus, CNES / Airbus, Cour
Ready
Zoom Level: 14 of 19 (1:24,000)
Closest Zoom for Pipelines
(lat,long): 34.062797, -117.606358
Map

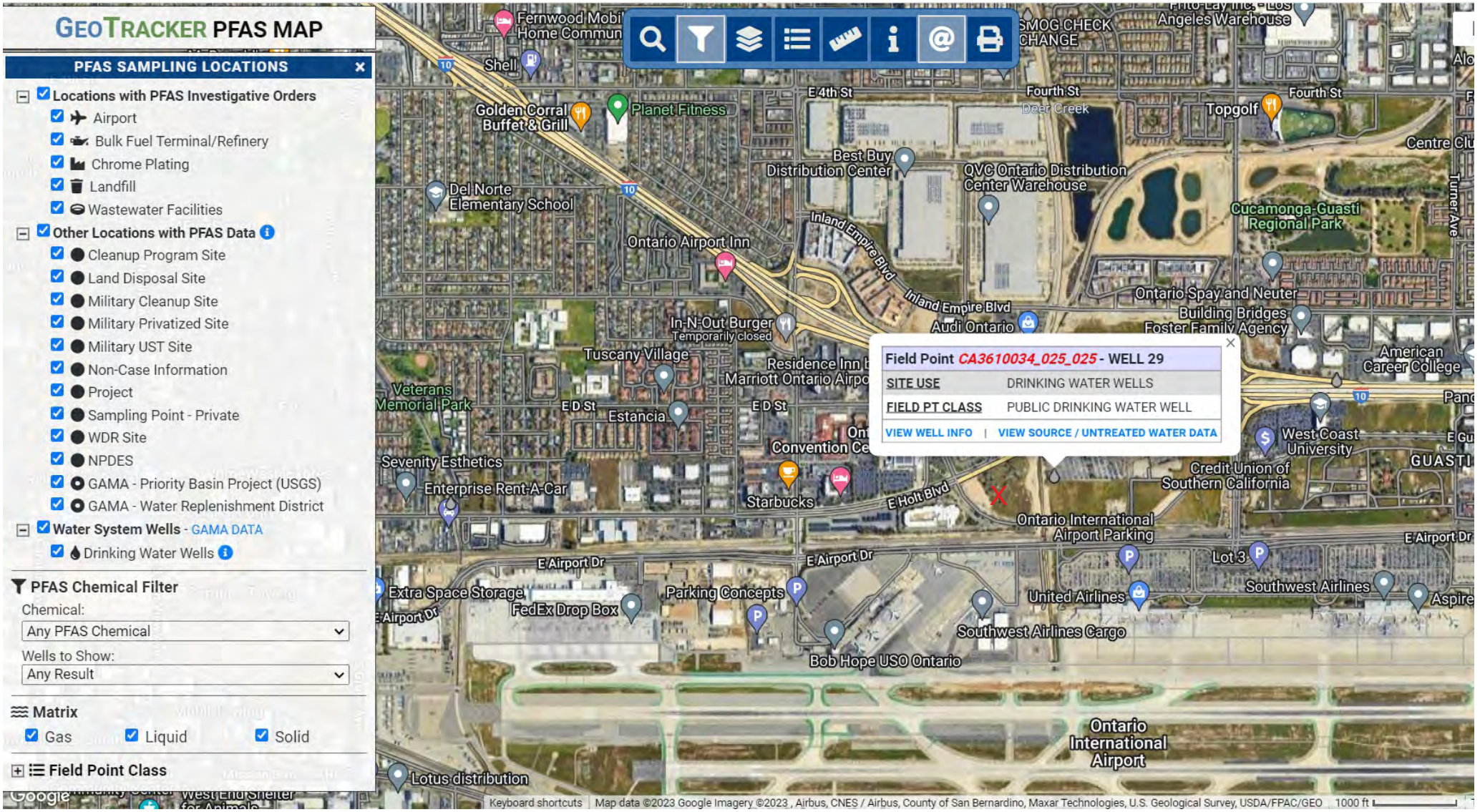

Public Viewer
Map Layers
Query Tools
Identify - Total 4 record(s) found
99999
Attribute
Value
COMMODITY DESCRIPTION
INTERSTATE DESIGNATION
Y
PIPELINE STATUS CODE
Permanently Abandoned
REVISION DATE
06/15/2016
FRP SEQUENCE NUMBER
INSPECTION AUTHORITY
Not Applicable
Category: GENERAL CONTACT
FIRST NAME
LAST NAME
TITLE
ENTITY
PHMSA Community Liaison Services
PHONE
EMAIL
Click on Public Awareness URL for ...
ADDRESS
NA NA
CITY
NA
STATE
NA
ZIP
0
Public Awareness URL
https://primis.phmsa.dot.gov/comm/...
Chaffey High School
Stater Bros. Markets
John Galvin Park
In-N-Out Burger
Temporarily closed
Audi Ontario
Gloria's Cocina Mexicana
Ovitt Family Community Library
Logan's Candies
Ontario Convention Center
Ontario Center Ice Skating Arena
Carniceria Del Valle
McFadden-Dale Industrial Hardware
De Anza Park
W 6th St
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E Holt Blvd
E Airport Dr
W Mission Blvd
Mission Blvd
Phillips St
Baker Ave
Vineyard Ave
N San Antonio Ave
N Campus Ave
N Allyn Ave
S Grove Ave
Euclid Ave
S Bon View Ave
Google
Map data ©2023 Google Imagery ©2023 , Airbus, CNES / Airbus, Cour
Ready
Zoom Level: 14 of 19 (1:24,000)
Closest Zoom for Pipelines
(lat,long): 34.056710, -117.601070
Map


Public Viewer
Map Layers
Query Tools
Identify - Total 3 record(s) found
18092
Attribute
Value
Category: PIPELINE ATTRIBUTES
OPERATOR ID 18092
OPERATOR NAME SFPP, LP
SYSTEM NAME SFPP_SOUTH
SUBSYSTEM NAME LS-102; ONTARIO - ONTARIO AIRP...
PIPELINE ID 485102OTOA
MILES 1.64
COMMODITY CATEGORY Non-HVL Product
COMMODITY DESCRIPTION NON HVL PRODUCT
INTERSTATE DESIGNATION N
PIPELINE STATUS CODE Active (filled)
REVISION DATE 06/13/2023
FRP SEQUENCE NUMBER
INSPECTION AUTHORITY State
Category: GENERAL CONTACT
FIRST NAME
LAST NAME
Chaffey High School
Stater Bros. Markets
John Galvin Park
In-N-Out Burger
Temporarily closed
Audi Ontario
Gloria's Cocina Mexicana
Ovitt Family Community Library
Logan's Candies
Ontario Convention Center
Holiday Inn Ontario Airp
Ontario
Center Ice Skating Arena
Carniceria Del Valle
Ontario International Airport
McFadden-Dale Industrial Hardware
De Anza Park
E 6th St
E 4th St
E Holt Blvd
E Airport Dr
Mission Blvd
W Mission Blvd
Euclid Ave
Google
Map data ©2023 Google Imagery ©2023 , Airbus, CNES / Airbus, County of S
Ready
Zoom Level: 14 of 19 (1:24,000)
Closest Zoom for Pipelines
(lat,long): 34.086741, -117.568867
Map


Public Viewer
Map Layers
Query Tools
Identify - Total 3 record(s) found
18092
Attribute
Value
COMMODITY DESCRIPTION
NON HVL PRODUCT
INTERSTATE DESIGNATION
N
PIPELINE STATUS CODE
Active (filled)
REVISION DATE
06/13/2023
FRP SEQUENCE NUMBER
INSPECTION AUTHORITY
State
Category: GENERAL CONTACT
FIRST NAME
LAST NAME
TITLE
ENTITY
PUBLIC AWARENESS COORDINA...
PHONE
(800) 276-9927
EMAIL
PUBLICAWARNESS@KINDERMO...
ADDRESS
1001 LOUISIANA STREET SUITE 1...
CITY
HOUSTON
STATE
TX
ZIP
77002
Public Awareness URL
https://www.kindermorgan.com/page...
Chaffey High School
Stater Bros. Markets
John Galvin Park
In-N-Out Burger
Temporarily closed
Audi Ontario
Gloria's Cocina Mexicana
Ovitt Family Community Library
Logan's Candies
Ontario Convention Center
Holiday Inn Ontario Air
Ontario Center Ice Skating Arena
Carniceria Del Valle
Ontario International Airport
McFadden-Dale Industrial Hardware
De Anza Park
Google
Map data ©2023 Google Imagery ©2023 , Airbus, CNES / Airbus, County of S
Ready
Zoom Level: 14 of 19 (1:24,000)
Closest Zoom for Pipelines
(lat,long): 34.086457, -117.565983
Map


nams
Public Viewer
Map Layers
Query Tools
Identify - Total 1 record(s) found
20180062
Attribute
Value
Category: REPORT INFORMATION
REPORT_NUMBER 20180062
YEAR 2018
OPID 18092
NAME SFPP, LP
LOCAL_DATETIME 01/25/2018
NRC REPORT 1202863
COMMODITY_RELEASED_... REFINED AND/OR PETROLEUM PRO...
LOSS_BBLS 0.30
RECOVERED_BBLS 0.30
FATAL 0
INJURE 0
ON_OFF_SHORE ONSHORE
CAUSE MATERIAL FAILURE OF PIPE OR WELD
Chaffey High School
Stater Bros. Markets
John Galvin Park
In-N-Out Burger
Temporarily closed
Audi Ontario
Gloria's Cocina Mexicana
Ovitt Family Community Library
Logan's Candies
Ontario Convention Center
Ontario Center Ice Skating Arena
Carniceria Del Valle
McFadden-Dale Industrial Hardware
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W 6th St
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E Airport Dr
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N San Antonio Ave
N Campus Ave
N Allyn Ave
S Grove Ave
Euclid Ave
S Bon View Ave
Baker Ave
Vineyard Ave
2000 ft
Google
Map data ©2023 Google Imagery ©2023 , Airbus, CNES / Airbu
Ready
Zoom Level: 14 of 19 (1:24,000)
Closest Zoom for Pipelines
(lat,long): 34.086229, -117.615147


GeoTracker PFAS MAP
PFAS SAMPLING LOCATIONS
Locations with PFAS Investigative Orders
Airport
Bulk Fuel Terminal/Refinery
Chrome Plating
Landfill
Wastewater Facilities
Other Locations with PFAS Data
Cleanup Program Site
Land Disposal Site
Military Cleanup Site
Military Privatized Site
Military UST Site
Non-Case Information
Project
Sampling Point - Private
WDR Site
NPDES
GAMA - Priority Basin Project (USGS)
GAMA - Water Replenishment District
Water System Wells - GAMA DATA
Drinking Water Wells
PFAS Chemical Filter
Chemical:
Any PFAS Chemical
Wells to Show:
Any Result
Matrix
Gas
Liquid
Solid
Field Point Class
Fernwood Mobil Home Commun
Shell
Planet Fitness
Golden Corral Buffet & Grill
Del Norte Elementary School
Ontario Airport Inn
In-N-Out Burger
Temporarily closed
Tuscany Village
Veterans Memorial Park
Estancia
Sevenity Esthetics
Enterprise Rent-A-Car
Starbucks
Ontario Convention Center
Residence Inn by Marriott Ontario Airport
Mark Christopher Auto Center
Holiday Inn Ontario Airport
Best Buy Distribution Center
QVC Ontario Distribution Center Warehouse
Audi Ontario
Deer Creek
Topgolf
Cucamonga-Guasti Regional Park
Ontario Spay and Neuter
Building Bridges Foster Family Agency
American Career College
West Coast University
Credit Union of Southern California
Ontario International Airport Parking
Lot 3
United Airlines
Southwest Airlines Cargo
Bob Hope USO Ontario
Parking Concepts
FedEx Drop Box
Extra Space Storage
Lotus distribution
Ontario International Airport
E 4th St
Fourth St
E Rosewood Ct
E I St
E Granada Ct
Plaza Serena
Inland Empire Blvd
E G St
E F St
E Flora St
E D St
E El Morado Ct
E Nocta St
E Holt Blvd
Kline St
E Airport Dr
Moore Way
E Terminal Wy
Keyboard shortcuts
Map data ©2023 Google
1000 ft


GeoTracker PFAS MAP
PFAS SAMPLING LOCATIONS
Locations with PFAS Investigative Orders
Airport
Bulk Fuel Terminal/Refinery
Chrome Plating
Landfill
Wastewater Facilities
Other Locations with PFAS Data
Cleanup Program Site
Land Disposal Site
Military Cleanup Site
Military Privatized Site
Military UST Site
Non-Case Information
Project
Sampling Point - Private
WDR Site
NPDES
GAMA - Priority Basin Project (USGS)
GAMA - Water Replenishment District
Water System Wells - GAMA DATA
Drinking Water Wells
PFAS Chemical Filter
Chemical:
Any PFAS Chemical
Wells to Show:
Any Result
Matrix
Gas
Liquid
Solid
Field Point Class
Field Point CA3610034_025_025 - WELL 29
SITE USE
DRINKING WATER WELLS
FIELD PT CLASS
PUBLIC DRINKING WATER WELL
VIEW WELL INFO | VIEW SOURCE / UNTREATED WATER DATA
Fernwood Mobil Home Commun
Shell
Golden Corral Buffet & Grill
Planet Fitness
E 4th St
Fourth St
Deer Creek
Topgolf
Best Buy Distribution Center
QVC Ontario Distribution Center Warehouse
Del Norte Elementary School
Ontario Airport Inn
Inland Empire Blvd
Cucamonga-Guasti Regional Park
Ontario Spay and Neuter
Building Bridges Foster Family Agency
In-N-Out Burger
Temporarily closed
Audi Ontario
Tuscany Village
Residence Inn Marriott Ontario Airpo
American Career College
Veterans Memorial Park
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Estancia
Convention Ce
West Coast University
Sevenity Esthetics
Enterprise Rent-A-Car
Starbucks
Credit Union of Southern California
E Holt Blvd
Ontario International Airport Parking
E Airport Dr
Lot 3
Extra Space Storage
FedEx Drop Box
Parking Concepts
United Airlines
Southwest Airlines
Southwest Airlines Cargo
Bob Hope USO Ontario
Ontario International Airport
Lotus distribution
Keyboard shortcuts
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1000 ft

Well Report

ONTARIO MUNICIPAL UTILITIES COMPANY (ONTARIO)
WELL 29
303 East B Street
ONTARIO , CA 91761761

State Well #: CA3610034_025_025
Well Source: Groundwater
Well Status: Active Raw

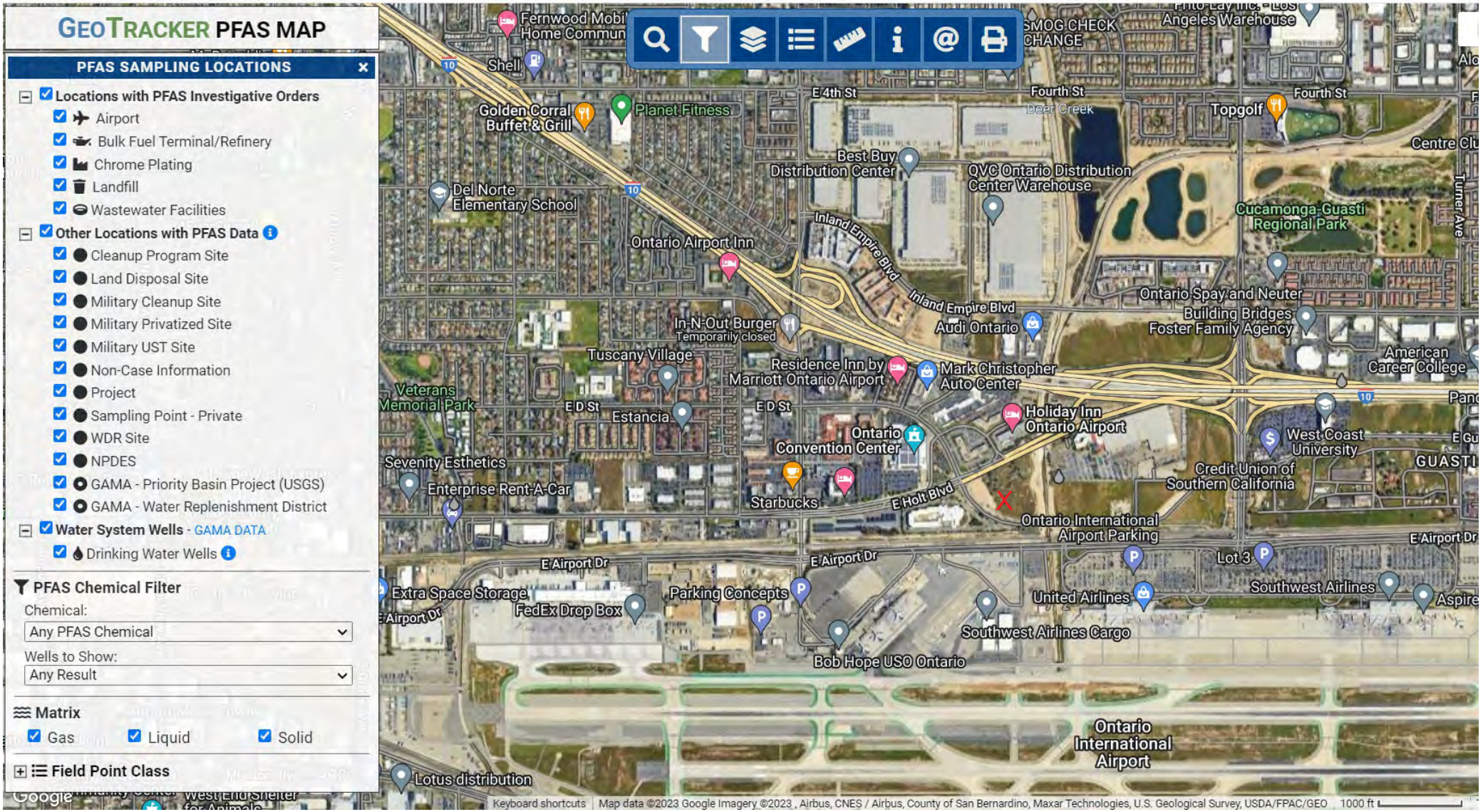
Detailed Well Information | Water Quality Data

Plot Selected Chemicals | Reset Boxes | **Note: You may select up to 6 chemicals.**

(ALL DATA) | (MOST RECENT) | (MAXIMUM CONCENTRATIONS)

DATE	PARAMETER	SOURCE QUALIFIER	SOURCE RESULT	UNITS	MCL	Plot
7/15/2020	1,1,1,2-TETRACHLOROETHANE	<	0.5	UG/L	NA	☐

7/27/2022	PERCHLORATE	<	2	UG/L	6	☐
1/9/2020	PERFLUOROBUTANESULFONIC ACID (PFBS)	<	2	NG/L	NA	☐
1/9/2020	PERFLUORODECANOIC ACID (PFDA)	<	2	NG/L	NA	☐
1/9/2020	PERFLUORODODECANOIC ACID (PFDoA)	<	2	NG/L	NA	☐
1/9/2020	PERFLUOROHEPTANOIC ACID (PFHpA)	<	2	NG/L	NA	☐
1/9/2020	PERFLUOROHEXANE SULFONIC ACID (PFHxS)	<	2	NG/L	NA	☐
1/9/2020	PERFLUOROHEXANOIC ACID (PFHxA)	<	2	NG/L	NA	☐
1/9/2020	PERFLUORONONANOIC ACID (PFNA)	<	2	NG/L	NA	☐
1/9/2020	PERFLUOROOCTANE SULFONIC ACID (PFOS)	<	2	NG/L	NA	☐
1/9/2020	PERFLUOROOCTANOIC ACID (PFOA)	<	2	NG/L	NA	☐
1/9/2020	PERFLUOROTETRADECANOIC ACID (PFTA)	<	2	NG/L	NA	☐
1/9/2020	PERFLUOROTRIDECANOIC ACID (PFTrDA)	<	2	NG/L	NA	☐
1/9/2020	PERFLUOROUNDECANOIC ACID (PFUnA)	<	2	NG/L	NA	☐
7/15/2020	PH, LABORATORY		8.1		NA	☐


GeoTracker PFAS MAP
PFAS SAMPLING LOCATIONS
Locations with PFAS Investigative Orders
Airport
Bulk Fuel Terminal/Refinery
Chrome Plating
Landfill
Wastewater Facilities
Other Locations with PFAS Data
Cleanup Program Site
Land Disposal Site
Military Cleanup Site
Military Privatized Site
Military UST Site
Non-Case Information
Project
Sampling Point - Private
WDR Site
NPDES
GAMA - Priority Basin Project (USGS)
GAMA - Water Replenishment District
Water System Wells - GAMA DATA
Drinking Water Wells
PFAS Chemical Filter
Chemical:
Any PFAS Chemical
Wells to Show:
Any Result
Matrix
Gas
Liquid
Solid
Field Point Class
Fernwood Mobil Home Commun
Shell
Golden Corral Buffet & Grill
Planet Fitness
E 4th St
Fourth St
Deer Creek
Topgolf
Best Buy Distribution Center
QVC Ontario Distribution Center Warehouse
Del Norte Elementary School
Ontario Airport Inn
Inland Empire Blvd
Cucamonga-Guasti Regional Park
Ontario Spay and Neuter
Building Bridges Foster Family Agency
In-N-Out Burger
Temporarily closed
Audi Ontario
Tuscany Village
Residence Inn by Marriott Ontario Airport
Mark Christopher Auto Center
American Career College
Veterans Memorial Park
E D St
Estancia
Holiday Inn Ontario Airport
Ontario Convention Center
West Coast University
Sevenity Esthetics
Enterprise Rent-A-Car
Starbucks
Credit Union of Southern California
E Holt Blvd
Ontario International Airport Parking
E Airport Dr
Lot 3
Extra Space Storage
FedEx Drop Box
Parking Concepts
United Airlines
Southwest Airlines
Southwest Airlines Cargo
Bob Hope USO Ontario
Ontario International Airport
Lotus distribution
Google
Keyboard shortcuts
Map data ©2023 Google Imagery ©2023 , Airbus, CNES / Airbus, County of San Bernardino, Maxar Technologies, U.S. Geological Survey, USDA/FPAC/GEO
1000 ft

Well Report

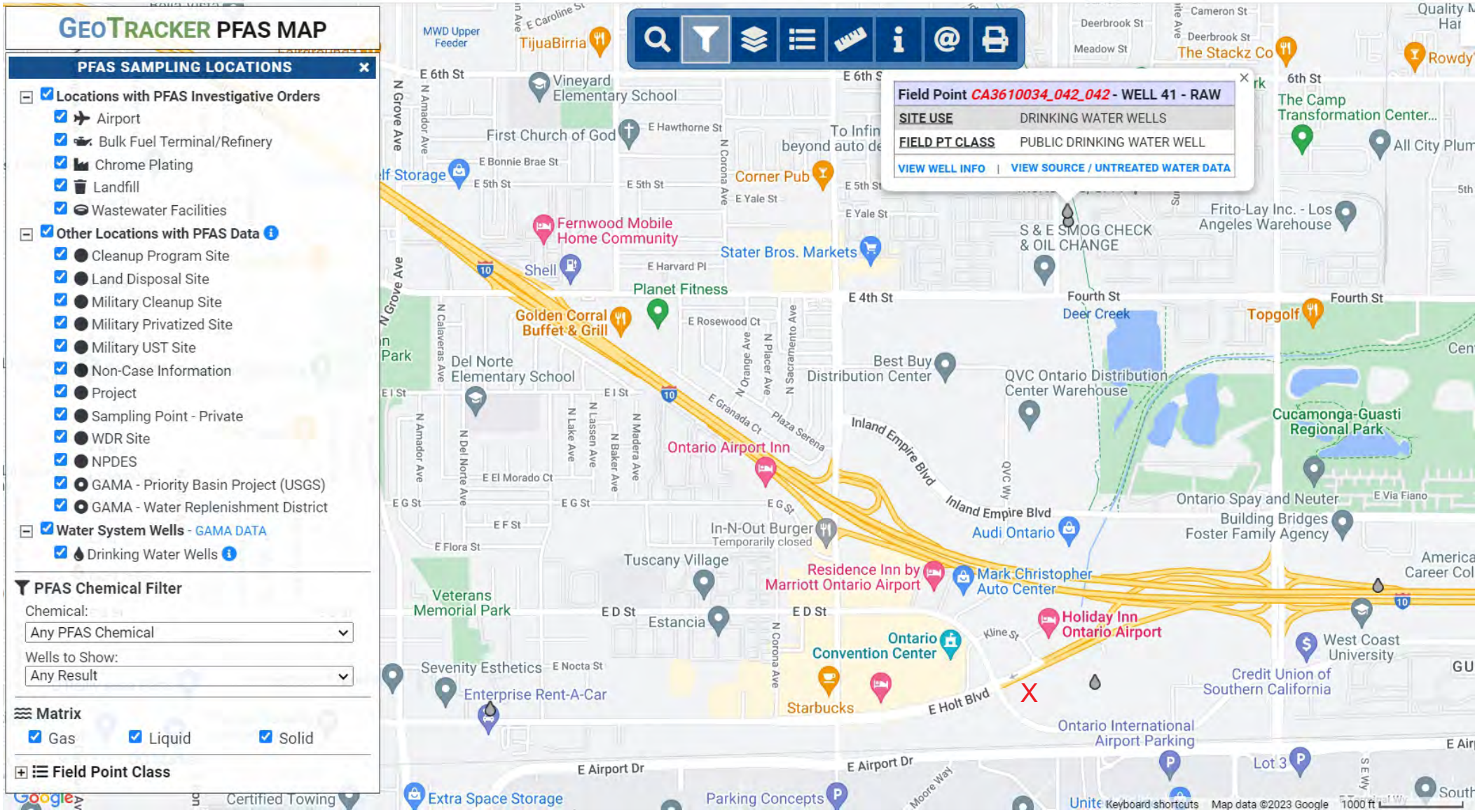
ONTARIO MUNICIPAL UTILITIES COMPANY (ONTARIO)
WELL 29
303 East B Street
ONTARIO , CA 91761761

State Well #: CA3610034_025_025
Well Source: Groundwater
Well Status: Active Raw

Detailed Well Information | Water Quality Data



Chemical	Color	Visible?
PERFLUOROOCTANE SULFONIC ACID (PFOS)	Red	Visible?: ☑
PERFLUOROOCTANOIC ACID (PFOA)	Blue	Visible?: ☑


GeoTracker PFAS MAP
PFAS SAMPLING LOCATIONS
Locations with PFAS Investigative Orders
Airport
Bulk Fuel Terminal/Refinery
Chrome Plating
Landfill
Wastewater Facilities
Other Locations with PFAS Data
Cleanup Program Site
Land Disposal Site
Military Cleanup Site
Military Privatized Site
Military UST Site
Non-Case Information
Project
Sampling Point - Private
WDR Site
NPDES
GAMA - Priority Basin Project (USGS)
GAMA - Water Replenishment District
Water System Wells - GAMA DATA
Drinking Water Wells
PFAS Chemical Filter
Chemical:
Any PFAS Chemical
Wells to Show:
Any Result
Matrix
Gas
Liquid
Solid
Field Point Class
Field Point CA3610034_042_042 - WELL 41 - RAW
SITE USE
DRINKING WATER WELLS
FIELD PT CLASS
PUBLIC DRINKING WATER WELL
VIEW WELL INFO
VIEW SOURCE / UNTREATED WATER DATA
Ontario Airport Inn
Residence Inn by Marriott Ontario Airport
Holiday Inn Ontario Airport
Ontario Convention Center
Ontario International Airport Parking
Lot 3
Ontario Spay and Neuter
Cucamonga-Guasti Regional Park
Topgolf
Deer Creek
Best Buy Distribution Center
QVC Ontario Distribution Center Warehouse
Frito-Lay Inc. - Los Angeles Warehouse
S & E SMOG CHECK & OIL CHANGE
Stater Bros. Markets
Fernwood Mobile Home Community
Golden Corral Buffet & Grill
Planet Fitness
Vineyard Elementary School
Del Norte Elementary School
First Church of God
Corner Pub
Shell
In-N-Out Burger
Temporarily closed
Tuscany Village
Estancia
Veterans Memorial Park
Audi Ontario
Mark Christopher Auto Center
Building Bridges Foster Family Agency
West Coast University
Credit Union of Southern California
Starbucks
Enterprise Rent-A-Car
Sevenity Esthetics
Extra Space Storage
Parking Concepts
Certified Towing
Inland Empire Blvd
E Holt Blvd
E Airport Dr
E 6th St
E 4th St
Fourth St
Keyboard shortcuts
Map data ©2023 Google
1000 ft

Well Report

ONTARIO MUNICIPAL UTILITIES COMPANY (ONTARIO)
WELL 41 - RAW
303 East B Street
ONTARIO , CA 91761761

State Well #: CA3610034_042_042
Well Source: Groundwater
Well Status: Active Raw

Detailed Well Information | Water Quality Data

Plot Selected Chemicals | Reset Boxes **Note: You may select up to 6 chemicals.**

(ALL DATA) | (MOST RECENT) | (MAXIMUM CONCENTRATIONS)

DATE	PARAMETER	SOURCE QUALIFIER	SOURCE RESULT	UNITS	MCL	Plot
7/1/2020	1,1,1,2-TETRACHLOROETHANE	<	0.5	UG/L	NA	☐

8/30/2023	PERCHLORATE	<	2	UG/L	6	☐
1/23/2020	PERFLUOROBUTANESULFONIC ACID (PFBS)	<	2	NG/L	NA	☐
1/23/2020	PERFLUORODECANOIC ACID (PFDA)	<	2	NG/L	NA	☐
1/23/2020	PERFLUORODODECANOIC ACID (PFDoA)	<	2	NG/L	NA	☐
1/23/2020	PERFLUOROHEPTANOIC ACID (PFHpA)	<	2	NG/L	NA	☐
1/23/2020	PERFLUOROHEXANE SULFONIC ACID (PFHxS)	<	2	NG/L	NA	☐
1/23/2020	PERFLUOROHEXANOIC ACID (PFHxA)	<	2	NG/L	NA	☐
1/23/2020	PERFLUORONONANOIC ACID (PFNA)	<	2	NG/L	NA	☐
1/23/2020	PERFLUOROOCTANE SULFONIC ACID (PFOS)	<	2	NG/L	NA	☐
1/23/2020	PERFLUOROOCTANOIC ACID (PFOA)	<	2	NG/L	NA	☐
1/23/2020	PERFLUOROTETRADECANOIC ACID (PFTA)	<	2	NG/L	NA	☐
1/23/2020	PERFLUOROTRIDECANOIC ACID (PFTrDA)	<	2	NG/L	NA	☐
1/23/2020	PERFLUOROUNDECANOIC ACID (PFUnA)	<	2	NG/L	NA	☐
7/1/2020	PH, LABORATORY		8.1		NA	☐

Well Report

ONTARIO MUNICIPAL UTILITIES COMPANY (ONTARIO)
WELL 41 - RAW
303 East B Street
ONTARIO , CA 91761761

State Well #: CA3610034_042_042
Well Source: Groundwater
Well Status: Active Raw

Detailed Well Information | Water Quality Data



Chemical	Color	Visible?
PERFLUOROOCTANE SULFONIC ACID (PFOS)	Red	Visible?: ☑
PERFLUOROOCTANOIC ACID (PFOA)	Blue	Visible?: ☑

APPENDIX C

EDR HISTORICAL REPORTS

Ontario Hotel
SE Corner E. Holt Blvd. and E. Guasti Rd.
Ontario, CA 91761

Inquiry Number: 07482419.2r
October 27, 2023

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527 - 21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E2247 - 16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E1528 - 22) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

SE CORNER E. HOLT BLVD. AND E. GUASTI RD.
ONTARIO, CA 91761

COORDINATES

Latitude (North):	34.0642390 - 34° 3' 51.26''
Longitude (West):	117.6026560 - 117° 36' 9.56''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	444386.3
UTM Y (Meters):	3769248.0
Elevation:	962 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	12015973 GUASTI, CA
Version Date:	2018

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20200423
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
SE CORNER E. HOLT BLVD. AND E. GUASTI RD.
ONTARIO, CA 91761

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	MARRIOTT AIRPORT HOT	2200 E HOLT ST	FINDS, ECHO		TP
A2	MARRIOTT AIRPORT HOT	2200 E HOLT ST	US AIRS		TP
3	WELL 29		CA PFAS	Higher	209, 0.040, ENE
B4	FRONTIER CALIFORNIA:	2152 E D ST	CA San Bern. Co. Permit	Higher	321, 0.061, WNW
5	HOLIDAY INN	2155 EAST CONVENTION	RCRA NonGen / NLR	Higher	324, 0.061, North
C6	PRIME FLIGHT CARGO	2300 E AIRPORT RD	CA San Bern. Co. Permit	Lower	362, 0.069, South
C7	MAJESTIC TERMINAL SE	2300 E AIRPORT DR	CA CERS HAZ WASTE, CA HWTS, CA HAZNET, CA CERS	Lower	362, 0.069, South
C8	PRIME FLIGHT CARGO	2300 EAST AIRPORT DR	RCRA NonGen / NLR	Lower	362, 0.069, South
C9	MAJESTIC TERMINAL SE	2300 E AIRPORT DR	RCRA NonGen / NLR	Lower	362, 0.069, South
C10	PF CARGO-ONT		RCRA-SQG, PFAS ECHO	Lower	362, 0.069, South
B11	L D KING INC	2151 E CONVENTION CE	CA San Bern. Co. Permit	Higher	374, 0.071, NW
12	ONTARIO WELL #29	2400 E AIRPORT DR	CA San Bern. Co. Permit	Lower	461, 0.087, SE
13	CITY ONTARIO WELL GU	2400 E GUASTI ROAD	RCRA NonGen / NLR	Lower	555, 0.105, ESE
14	RADISSON, ONTARIO AI	2200 E HOLT BLVD	CA San Bern. Co. Permit	Higher	573, 0.109, West
D15	MARK CHRISTOPHER AUT	2131 CONVENTION CENT	CA UST	Higher	901, 0.171, NW
D16	MARK CHRISTOPHER CHE	2131 E D ST	RCRA-SQG, CA UST, CA AST, CA CERS HAZ WASTE, CA...	Higher	901, 0.171, NW
D17	METROPOLITAN TRANSIT	2131 D	CA HIST CORTESE	Higher	901, 0.171, NW
E18	UNITED GROUND EXPRES	2500 E AIRPORT DR ST	RCRA NonGen / NLR	Lower	1063, 0.201, ESE
E19	UNIFI AVIATION, LLC.	2500 E AIRPORT DR	RCRA-SQG	Lower	1063, 0.201, ESE
E20	DELTA AIRLINES ONTAR	2500 AIRPORT DR STE	RCRA NonGen / NLR	Lower	1063, 0.201, ESE
E21	MICHAEL WESTER	2500 E. AIRPORT DRIV	RCRA NonGen / NLR	Lower	1063, 0.201, ESE
E22	UNIFI AVIATION, LLC.	2500 E AIRPORT DR	FINDS, ECHO, PFAS ECHO	Lower	1063, 0.201, ESE
E23	UNITED AIRLINES INC	2500 E AIRPORT DR ST	CA San Bern. Co. Permit	Lower	1063, 0.201, ESE
E24	AIRCRAFT SERVICE INT	2500 E. AIRPORT DRIV	CA LUST, CA CERS HAZ WASTE, CA Cortese, CA NPDES,...	Lower	1063, 0.201, ESE
E25	SKYWEST AIRLINES INC	2500 E AIRPORT DR ST	RCRA NonGen / NLR	Lower	1063, 0.201, ESE
E26	TRANSPORTATION SECUR	2500 E AIRPORT DR	RCRA-VSQG	Lower	1063, 0.201, ESE
E27	ONTARIO INTERNATIONA	2500 E AIRPORT DR	CA HAULERS, CA CERS HAZ WASTE, CA AQUEOUS FOAM, CA...	Lower	1063, 0.201, ESE
E28	NORTHWEST AIRLINES I	2500 E AIRPORT DR 12	CA San Bern. Co. Permit	Lower	1063, 0.201, ESE
E29	UNITED AIRLINES INC	2500 E AIRPORT DR ST	RCRA NonGen / NLR	Lower	1063, 0.201, ESE
F30	ONTARIO CONVENTION C	2000 CONVENTION CENT	CA San Bern. Co. Permit, CA CERS	Higher	1187, 0.225, NW
F31	AT&T MOBILITY - (USI	2000 E CONVENTION CE	CA San Bern. Co. Permit	Higher	1187, 0.225, NW
G32	CARDENAS MARKETS DIS	2501 E GUASTI RD	RCRA NonGen / NLR	Higher	1191, 0.226, ENE
G33	CARDENAS MARKETS DIS	2501 E GUASTI RD	CA CERS HAZ WASTE, CA HWTS, CA HAZNET, CA NPDES,...	Higher	1191, 0.226, ENE
G34	CARDENAS MARKETS DIS	2501 E GUASTI RD	RCRA NonGen / NLR	Higher	1191, 0.226, ENE
H35	AVIS RENT A CAR	ONTARIO AIRPORT	CA LUST, CA CHMIRS, CA Cortese	Lower	1313, 0.249, SE
H36	AVIS RENT A CAR	ONTARIO AIRPORT	CA LUST	Lower	1313, 0.249, SE
H37	AEROJET	N/A ONT. INTL. AIRPO	CA CPS-SLIC	Lower	1369, 0.259, SE
H38	AEROJET GENERAL CORP	ONTARIO INTERNATIONA	CA CPS-SLIC	Lower	1392, 0.264, SE
39	GE ONTARIO AIRCRAFT	2264	CA LUST, CA HIST CORTESE	Lower	1996, 0.378, SSE

MAPPED SITES SUMMARY

Target Property Address:
SE CORNER E. HOLT BLVD. AND E. GUASTI RD.
ONTARIO, CA 91761

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
40	ARCO #5222	101 VINEYARD AVE	CA LUST, CA Cortese, CA CERS	Higher	2016, 0.382, West
41	BUDGET RENT A CAR	203 AIRPORT DR	CA LUST, CA Cortese, CA HIST CORTESE, CA CERS	Higher	2067, 0.391, West
I42	SHELL STN. #088	1862 E HOLT	CA LUST, CA SWEEPS UST, CA FID UST, CA Cortese, CA...	Higher	2350, 0.445, West
I43	BERTINO-LAWTON PROPE	1862 HOLT	CA LUST, CA HIST CORTESE	Higher	2350, 0.445, West
J44	SBD ONTARIO ARMY AIR		CA ENVIROSTOR, CA AQUEOUS FOAM	Lower	2403, 0.455, SW
J45	OBSERV. SQUADRON OAA		CA ENVIROSTOR	Lower	2403, 0.455, SW
J46	SMALL ARMS RANGES		UXO	Lower	2408, 0.456, SW
J47	ONTARIO ARMY AIRFIEL		FUDS	Lower	2408, 0.456, SW
K48	TEXACO SERVICE STATI	501 VINEYARD AVE	CA LUST, CA CERS	Higher	2555, 0.484, WNW
K49	TEXACO SERVICE STATI	501 N VINEYARD AVE	CA LUST, CA SWEEPS UST, CA FID UST, CA Cortese, CA...	Higher	2555, 0.484, WNW
K50	TEXACO SERVICE STATI	501 VINEYARD AVENUE	CA LUST, CA Cortese	Higher	2555, 0.484, WNW
51	LOCKHEED MARTIN AIRC	1800 E. AIRPORT DRIV	CA ENVIROSTOR, CA San Bern. Co. Permit	Higher	3221, 0.610, WSW
52	WEST END HIGH SCHOOL	7TH STREET/CORONA AV	CA ENVIROSTOR, CA SCH	Higher	4183, 0.792, NNW
L53	ONTARIO ANG TNG SITE		UXO	Lower	4354, 0.825, South
L54	ONTARIO A.N.G. TRAIN		FUDS	Lower	4354, 0.825, South
55	GE ENGINE SERVICES,	2264 E. AVION PLACE	CA RESPONSE, CA ENVIROSTOR, CA LUST, CA CPS-SLIC,...	Lower	4906, 0.929, SSW
M56	GENERAL ELECTRIC CO-	1923 EAST AVION	CA ENVIROSTOR, CA CERS HAZ WASTE, CA HIST UST, CA..	Lower	4987, 0.945, SSW
M57	GE ENGINE SERVICES I	1923 E AVION ST	SEMS-ARCHIVE, CORRACTS, RCRA-TSDF, RCRA NonGen /..	Lower	4987, 0.945, SSW
M58	GENERAL ELECTRIC ENG	1923 EAST AVION STRE	CA BOND EXP. PLAN	Lower	4987, 0.945, SSW
59	GE ENGINE SERVICES	2264 AVION DR	CA HIST Cal-Sites, CA EMI	Lower	5089, 0.964, South

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 9 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
MARRIOTT AIRPORT HOT 2200 E HOLT ST ONTARIO, CA 91761	FINDS Registry ID:: 110001179064 ECHO Registry ID: 110001179064	N/A
MARRIOTT AIRPORT HOT 2200 E HOLT ST ONTARIO, CA 91761	US AIRS Database: US AIRS MINOR, Date of Government Version: 10/12/2016 EPA plant ID:: 110000479401	N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Lists of Federal Delisted NPL sites

Delisted NPL ---------- National Priority List Deletions

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

Lists of Federal RCRA generators

RCRA-LQG ---------- RCRA - Large Quantity Generators

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List

US INST CONTROLS ..... Institutional Controls Sites List

Federal ERNS list

ERNS ..... Emergency Response Notification System

Lists of state and tribal landfills and solid waste disposal facilities

CA SWF/LF ..... Solid Waste Information System

Lists of state and tribal leaking storage tanks

INDIAN LUST ..... Leaking Underground Storage Tanks on Indian Land

Lists of state and tribal registered storage tanks

FEMA UST ..... Underground Storage Tank Listing
INDIAN UST ..... Underground Storage Tanks on Indian Land

Lists of state and tribal voluntary cleanup sites

CA VCP ..... Voluntary Cleanup Program Properties
INDIAN VCP ..... Voluntary Cleanup Priority Listing

Lists of state and tribal brownfield sites

CA BROWNFIELDS ..... Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

CA WMUDS/SWAT ..... Waste Management Unit Database
CA SWRCY ..... Recycler Database
INDIAN ODI ..... Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9 ..... Torres Martinez Reservation Illegal Dump Site Locations
ODI ..... Open Dump Inventory
IHS OPEN DUMPS ..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ..... Delisted National Clandestine Laboratory Register
CA CDL ..... Clandestine Drug Labs
CA Toxic Pits ..... Toxic Pits Cleanup Act Sites
US CDL ..... National Clandestine Laboratory Register

Local Land Records

CA LIENS ..... Environmental Liens Listing
LIENS 2 ..... CERCLA Lien Information

CA DEED	Deed Restriction Listing

Records of Emergency Release Reports

HMIRS	Hazardous Materials Information Reporting System
CA LDS	Land Disposal Sites Listing
CA MCS	Military Cleanup Sites Listing
CA SPILLS 90	SPILLS 90 data from FirstSearch

Other Ascertainable Records

DOD	Department of Defense Sites
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US MINES	Mines Master Index File
MINES MRDS	Mineral Resources Data System
ABANDONED MINES	Abandoned Mines
DOCKET HWC	Hazardous Waste Compliance Docket Listing
FUELS PROGRAM	EPA Fuels Program Registered Listing
PFAS NPL	Superfund Sites with PFAS Detections Information
PFAS FEDERAL SITES	Federal Sites PFAS Information
PFAS TRIS	List of PFAS Added to the TRI
PFAS TSCA	PFAS Manufacture and Imports Information
PFAS RCRA MANIFEST	PFAS Transfers Identified In the RCRA Database Listing
PFAS ATSDR	PFAS Contamination Site Location Listing
PFAS WQP	Ambient Environmental Sampling for PFAS
PFAS NPDES	Clean Water Act Discharge Monitoring Information
PFAS ECHO FIRE TRAINING	Facilities in Industries that May Be Handling PFAS Listing
PFAS PART 139 AIRPORT	All Certified Part 139 Airports PFAS Information Listing
AQUEOUS FOAM NRC	Aqueous Foam Related Incidents Listing

BIOSOLIDS ICIS-NPDES Biosolids Facility Data
CA CHROME PLATING Chrome Plating Facilities Listing
CA CUPA Listings CUPA Resources List
CA DRYCLEANERS Cleaner Facilities
CA ENF Enforcement Action Listing
CA Financial Assurance Financial Assurance Information Listing
CA ICE Inspection, Compliance and Enforcement
CA HWT Registered Hazardous Waste Transporter Database
CA MINES Mines Site Location Listing
CA MWMP Medical Waste Management Program Listing
CA PEST LIC Pesticide Regulation Licenses Listing
CA PROC Certified Processors Database
CA Notify 65 Proposition 65 Records
CA HAZMAT Hazardous Material Facilities
CA UIC UIC Listing
CA UIC GEO UIC GEO (GEOTRACKER)
CA WASTEWATER PITS Oil Wastewater Pits Listing
CA WDS Waste Discharge System
CA WIP Well Investigation Program Case List
CA MILITARY PRIV SITES MILITARY PRIV SITES (GEOTRACKER)
CA PROJECT PROJECT (GEOTRACKER)
CA WDR Waste Discharge Requirements Listing
CA NON-CASE INFO NON-CASE INFO (GEOTRACKER)
CA OTHER OIL GAS OTHER OIL & GAS (GEOTRACKER)
CA PROD WATER PONDS PROD WATER PONDS (GEOTRACKER)
CA SAMPLING POINT SAMPLING POINT (GEOTRACKER)
CA WELL STIM PROJ Well Stimulation Project (GEOTRACKER)

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP EDR Proprietary Manufactured Gas Plants
EDR Hist Auto EDR Exclusive Historical Auto Stations
EDR Hist Cleaner EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

CA RGA LF Recovered Government Archive Solid Waste Facilities List
CA RGA LUST Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 07/24/2023 has revealed that there is 1 CORRACTS site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
GE ENGINE SERVICES I EPA ID:: CAD009542721	***1923 E AVION ST***	***SSW 1/2 - 1 (0.945 mi.)***	***M57***	***264***

Lists of Federal RCRA generators

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 07/24/2023 has revealed that there are 3 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MARK CHRISTOPHER CHE EPA ID:: CAD044336741	***2131 E D ST***	***NW 1/8 - 1/4 (0.171 mi.)***	***D16***	***45***

Lower Elevation	Address	Direction / Distance	Map ID	Page
PF CARGO-ONT EPA ID:: CAR000352476		***S 0 - 1/8 (0.069 mi.)***	***C10***	***37***
UNIFI AVIATION, LLC. EPA ID:: CAR000273326	2500 E AIRPORT DR	ESE 1/8 - 1/4 (0.201 mi.)	E19	75

RCRA-VSQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-VSQG list, as provided by EDR, and dated 07/24/2023 has revealed that there is 1 RCRA-VSQG site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
TRANSPORTATION SECUR	2500 E AIRPORT DR	ESE 1/8 - 1/4 (0.201 mi.)	E26	98

EPA ID:: CAR000192575

Lists of state- and tribal (Superfund) equivalent sites

CA RESPONSE: Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

A review of the CA RESPONSE list, as provided by EDR, has revealed that there is 1 CA RESPONSE site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
GE ENGINE SERVICES,	***2264 E. AVION PLACE***	***SSW 1/2 - 1 (0.929 mi.)***	***55***	***213***
Database: RESPONSE, Date of Government Version: 07/24/2023 Status: Refer: RWQCB Facility Id: 36370024				

Lists of state- and tribal hazardous waste facilities

CA ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the CA ENVIROSTOR list, as provided by EDR, and dated 07/24/2023 has revealed that there are 6 CA ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LOCKHEED MARTIN AIRC	***1800 E. AIRPORT DRIV***	***WSW 1/2 - 1 (0.610 mi.)***	***51***	***203***
Facility Id: 71002210 Facility Id: 36370030 Status: Refer: Other Agency Status: Refer: 1248 Local Agency				
WEST END HIGH SCHOOL	***7TH STREET/CORONA AV***	***NNW 1/2 - 1 (0.792 mi.)***	***52***	***206***
Facility Id: 36010064 Facility Id: 36010010 Status: No Further Action				

Lower Elevation	Address	Direction / Distance	Map ID	Page
SBD ONTARIO ARMY AIR		***SW 1/4 - 1/2 (0.455 mi.)***	***J44***	***189***
Facility Id: 80000880 Status: Inactive - Needs Evaluation				
OBSERV. SQUADRON OAA		SW 1/4 - 1/2 (0.455 mi.)	J45	191

Facility Id: 80000874
Status: Inactive - Needs Evaluation

GE ENGINE SERVICES,	***2264 E. AVION PLACE***	***SSW 1/2 - 1 (0.929 mi.)***	***55***	***213***

Facility Id: 36370024
Facility Id: 71002752
Status: Refer: RWQCB
Status: Inactive - Needs Evaluation

GENERAL ELECTRIC CO-	***1923 EAST AVION***	***SSW 1/2 - 1 (0.945 mi.)***	***M56***	***229***

Facility Id: 71002298
Facility Id: 80001638
Facility Id: 80000416
Status: Inactive - Needs Evaluation
Status: No Further Action

Lists of state and tribal leaking storage tanks

CA LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the CA LUST list, as provided by EDR, has revealed that there are 11 CA LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ARCO #5222	***101 VINEYARD AVE***	***W 1/4 - 1/2 (0.382 mi.)***	***40***	***176***

Database: LUST REG 8, Date of Government Version: 02/14/2005
Database: LUST, Date of Government Version: 06/05/2023
Status: Completed - Case Closed
Facility Status: Preliminary site assessment workplan submitted
Global Id: T0607100539
Global ID: T0607100539

BUDGET RENT A CAR	***203 AIRPORT DR***	***W 1/4 - 1/2 (0.391 mi.)***	***41***	***180***

Database: LUST REG 8, Date of Government Version: 02/14/2005
Database: LUST, Date of Government Version: 06/05/2023
Status: Completed - Case Closed
Facility Status: Case Closed
Global Id: T0607100596
Global ID: T0607100596

SHELL STN. #088	***1862 E HOLT***	***W 1/4 - 1/2 (0.445 mi.)***	***I42***	***184***

Database: LUST, Date of Government Version: 06/05/2023
Status: Completed - Case Closed
Global Id: T0607100410

BERTINO-LAWTON PROPE	***1862 HOLT***	***W 1/4 - 1/2 (0.445 mi.)***	***I43***	***188***

Database: LUST REG 8, Date of Government Version: 02/14/2005
Facility Status: Case Closed
Global ID: T0607100410

TEXACO SERVICE STATI	***501 VINEYARD AVE***	***WNW 1/4 - 1/2 (0.484 mi.)***	***K48***	***194***

Database: LUST REG 8, Date of Government Version: 02/14/2005
Database: LUST, Date of Government Version: 06/05/2023
Status: Completed - Case Closed

Facility Status: Pollution Characterization
Global Id: T0607102075
Global ID: T0607100366

TEXACO SERVICE STATI ***501 N VINEYARD AVE*** ***WNW 1/4 - 1/2 (0.484 mi.)*** ***K49*** ***198***
Database: LUST, Date of Government Version: 06/05/2023
Status: Completed - Case Closed
Global Id: T0607100366

TEXACO SERVICE STATI ***501 VINEYARD AVENUE*** ***WNW 1/4 - 1/2 (0.484 mi.)*** ***K50*** ***202***
Database: LUST REG 8, Date of Government Version: 02/14/2005
Facility Status: Leak being confirmed
Global ID: T0607102075

Lower Elevation	Address	Direction / Distance	Map ID	Page
AIRCRAFT SERVICE INT	***2500 E. AIRPORT DRIV***	***ESE 1/8 - 1/4 (0.201 mi.)***	***E24***	***86***

Database: LUST, Date of Government Version: 06/05/2023
Status: Completed - Case Closed
Global Id: T0607181149

AVIS RENT A CAR ***ONTARIO AIRPORT*** ***SE 1/8 - 1/4 (0.249 mi.)*** ***H35*** ***169***
Database: LUST REG 8, Date of Government Version: 02/14/2005
Facility Status: Case Closed
Global ID: T0607100472

AVIS RENT A CAR ONTARIO AIRPORT SE 1/8 - 1/4 (0.249 mi.) H36 172
Database: LUST, Date of Government Version: 06/05/2023
Status: Completed - Case Closed
Global Id: T0607100472

GE ONTARIO AIRCRAFT ***2264*** ***SSE 1/4 - 1/2 (0.378 mi.)*** ***39*** ***175***
Database: LUST REG 8, Date of Government Version: 02/14/2005
Facility Status: Pollution Characterization
Global ID: T0607100233

CA CPS-SLIC: Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the CA CPS-SLIC list, as provided by EDR, has revealed that there are 2 CA CPS-SLIC sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
AEROJET	N/A ONT. INTL. AIRPO	SE 1/4 - 1/2 (0.259 mi.)	H37	173

Database: SLIC REG 8, Date of Government Version: 04/03/2008
Facility Status: Closed

AEROJET GENERAL CORP ONTARIO INTERNATIONA SE 1/4 - 1/2 (0.264 mi.) H38 174
Database: CPS-SLIC, Date of Government Version: 06/05/2023
Facility Status: Completed - Case Closed
Global Id: SLT8R0503934

Lists of state and tribal registered storage tanks

CA UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the CA UST list, as provided by EDR, has revealed that there are 2 CA UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MARK CHRISTOPHER AUT Database: UST, Date of Government Version: 06/05/2023 Facility Id: FA0004585	2131 CONVENTION CENT	NW 1/8 - 1/4 (0.171 mi.)	D15	44
MARK CHRISTOPHER CHE Database: UST, Date of Government Version: 06/05/2023 Facility Id: 86008986	***2131 E D ST***	***NW 1/8 - 1/4 (0.171 mi.)***	***D16***	***45***

CA AST: A listing of aboveground storage tank petroleum storage tank locations.

A review of the CA AST list, as provided by EDR, has revealed that there is 1 CA AST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MARK CHRISTOPHER CHE Database: AST, Date of Government Version: 07/06/2016	***2131 E D ST***	***NW 1/8 - 1/4 (0.171 mi.)***	***D16***	***45***

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Hazardous waste / Contaminated Sites

CA HIST Cal-Sites: Formerly known as ASPIS, this database contains both known and potential hazardous substance sites. The source is the California Department of Toxic Substance Control. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

A review of the CA HIST Cal-Sites list, as provided by EDR, and dated 08/08/2005 has revealed that there is 1 CA HIST Cal-Sites site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
GE ENGINE SERVICES	***2264 AVION DR***	***S 1/2 - 1 (0.964 mi.)***	***59***	***286***

CA CERS HAZ WASTE: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

A review of the CA CERS HAZ WASTE list, as provided by EDR, and dated 07/17/2023 has revealed that there are 5 CA CERS HAZ WASTE sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MARK CHRISTOPHER CHE	*2131 E D ST*	*NW 1/8 - 1/4 (0.171 mi.)*	*D16*	*45*
CARDENAS MARKETS DIS	*2501 E GUASTI RD*	*ENE 1/8 - 1/4 (0.226 mi.)*	*G33*	*142*

Lower Elevation	Address	Direction / Distance	Map ID	Page
MAJESTIC TERMINAL SE	*2300 E AIRPORT DR*	*S 0 - 1/8 (0.069 mi.)*	*C7*	*21*
AIRCRAFT SERVICE INT	*2500 E. AIRPORT DRIV*	*ESE 1/8 - 1/4 (0.201 mi.)*	*E24*	*86*
ONTARIO INTERNATIONA	*2500 E AIRPORT DR*	*ESE 1/8 - 1/4 (0.201 mi.)*	*E27*	*105*

Local Lists of Registered Storage Tanks

CA SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the CA SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there is 1 CA SWEEPS UST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MARK CHRISTOPHER CHE	*2131 E D ST*	*NW 1/8 - 1/4 (0.171 mi.)*	*D16*	*45*
Status: A				
Tank Status: A				
Comp Number: 1210				

CA HIST UST: Historical UST Registered Database.

A review of the CA HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there is 1 CA HIST UST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MARK CHRISTOPHER CHE	*2131 E D ST*	*NW 1/8 - 1/4 (0.171 mi.)*	*D16*	*45*
Facility Id: 00000001210				

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there is 1 CA FID UST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MARK CHRISTOPHER CHE	*2131 E D ST*	*NW 1/8 - 1/4 (0.171 mi.)*	*D16*	*45*
Facility Id: 36002031				
Status: A				

CA CERS TANKS: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

A review of the CA CERS TANKS list, as provided by EDR, and dated 07/17/2023 has revealed that there is 1 CA CERS TANKS site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MARK CHRISTOPHER CHE	***2131 E D ST***	***NW 1/8 - 1/4 (0.171 mi.)***	***D16***	***45***

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 07/24/2023 has revealed that there are 11 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HOLIDAY INN EPA ID:: CAC003235247	2155 EAST CONVENTION	N 0 - 1/8 (0.061 mi.)	5	18
CARDENAS MARKETS DIS EPA ID:: CAL000451589	2501 E GUASTI RD	ENE 1/8 - 1/4 (0.226 mi.)	G32	140
CARDENAS MARKETS DIS EPA ID:: CAL000378320	2501 E GUASTI RD	ENE 1/8 - 1/4 (0.226 mi.)	G34	167

Lower Elevation	Address	Direction / Distance	Map ID	Page
PRIME FLIGHT CARGO EPA ID:: CAL000457984	2300 EAST AIRPORT DR	S 0 - 1/8 (0.069 mi.)	C8	32
MAJESTIC TERMINAL SE EPA ID:: CAL000432907	2300 E AIRPORT DR	S 0 - 1/8 (0.069 mi.)	C9	34
CITY ONTARIO WELL GU EPA ID:: CAC003135817	2400 E GUASTI ROAD	ESE 0 - 1/8 (0.105 mi.)	13	41
UNITED GROUND EXPRES EPA ID:: CAL000468632	2500 E AIRPORT DR ST	ESE 1/8 - 1/4 (0.201 mi.)	E18	73
DELTA AIRLINES ONTAR EPA ID:: CAL000277336	2500 AIRPORT DR STE	ESE 1/8 - 1/4 (0.201 mi.)	E20	79
MICHAEL WESTER EPA ID:: CAC003132588	2500 E. AIRPORT DRIV	ESE 1/8 - 1/4 (0.201 mi.)	E21	81
SKYWEST AIRLINES INC EPA ID:: CAL000412202	2500 E AIRPORT DR ST	ESE 1/8 - 1/4 (0.201 mi.)	E25	96
UNITED AIRLINES INC EPA ID:: CAL000385095	2500 E AIRPORT DR ST	ESE 1/8 - 1/4 (0.201 mi.)	E29	130

FUDS: The Listing includes locations of Formerly Used Defense Sites Properties where the US Army Corps Of Engineers is actively working or will take necessary cleanup actions.

A review of the FUDS list, as provided by EDR, and dated 08/07/2023 has revealed that there are 2 FUDS sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ONTARIO ARMY AIRFIEL		SW 1/4 - 1/2 (0.456 mi.)	J47	192
ONTARIO A.N.G. TRAIN		S 1/2 - 1 (0.825 mi.)	L54	211

UXO: A listing of unexploded ordnance site locations

A review of the UXO list, as provided by EDR, and dated 11/09/2021 has revealed that there are 2 UXO sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SMALL ARMS RANGES		SW 1/4 - 1/2 (0.456 mi.)	J46	192
ONTARIO ANG TNG SITE		S 1/2 - 1 (0.825 mi.)	L53	211

PFAS ECHO: Regulators and the public have expressed interest in knowing which regulated entities may be using PFAS. EPA has developed a dataset from various sources that show which industries may be handling PFAS. Approximately 120,000 facilities subject to federal environmental programs have operated or currently operate in industry sectors with processes that may involve handling and/or release of PFAS.

A review of the PFAS ECHO list, as provided by EDR, and dated 07/05/2023 has revealed that there are 2 PFAS ECHO sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PF CARGO-ONT		***S 0 - 1/8 (0.069 mi.)***	***C10***	***37***
UNIFI AVIATION, LLC.	***2500 E AIRPORT DR***	***ESE 1/8 - 1/4 (0.201 mi.)***	***E22***	***83***

CA PFAS: A listing of PFAS contaminated sites included in the GeoTracker database.

A review of the CA PFAS list, as provided by EDR, and dated 06/02/2023 has revealed that there is 1 CA PFAS site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WELL 29		ENE 0 - 1/8 (0.040 mi.)	3	10

CA AQUEOUS FOAM: Airports shown on this list are those believed to use Aqueous Film Forming Foam (AFFF), and certified by the Federal Aviation Administration (FAA) under Title 14, Code of Federal Regulations (CFR), Part 139 (14 CFR Part 139). This list was created by SWRCB using information available from the FAA. Location points shown are from the latitude and longitude listed on the FAA airport master record.

A review of the CA AQUEOUS FOAM list, as provided by EDR, and dated 06/02/2023 has revealed that there is 1 CA AQUEOUS FOAM site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ONTARIO INTERNATIONA	***2500 E AIRPORT DR***	***ESE 1/8 - 1/4 (0.201 mi.)***	***E27***	***105***

CA BOND EXP. PLAN: Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

A review of the CA BOND EXP. PLAN list, as provided by EDR, and dated 01/01/1989 has revealed that there is 1 CA BOND EXP. PLAN site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
GENERAL ELECTRIC ENG	1923 EAST AVION STRE	SSW 1/2 - 1 (0.945 mi.)	M58	285

CA Cortese: The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

A review of the CA Cortese list, as provided by EDR, and dated 06/14/2023 has revealed that there are 7 CA Cortese sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ARCO #5222	***101 VINEYARD AVE***	***W 1/4 - 1/2 (0.382 mi.)***	***40***	***176***
Cleanup Status: COMPLETED - CASE CLOSED				
BUDGET RENT A CAR	***203 AIRPORT DR***	***W 1/4 - 1/2 (0.391 mi.)***	***41***	***180***
Cleanup Status: COMPLETED - CASE CLOSED				
SHELL STN. #088	***1862 E HOLT***	***W 1/4 - 1/2 (0.445 mi.)***	***I42***	***184***
Cleanup Status: COMPLETED - CASE CLOSED				
TEXACO SERVICE STATI	***501 N VINEYARD AVE***	***WNW 1/4 - 1/2 (0.484 mi.)***	***K49***	***198***
Cleanup Status: COMPLETED - CASE CLOSED				
TEXACO SERVICE STATI	***501 VINEYARD AVENUE***	***WNW 1/4 - 1/2 (0.484 mi.)***	***K50***	***202***
Cleanup Status: COMPLETED - CASE CLOSED				

Lower Elevation	Address	Direction / Distance	Map ID	Page
AIRCRAFT SERVICE INT	***2500 E. AIRPORT DRIV***	***ESE 1/8 - 1/4 (0.201 mi.)***	***E24***	***86***
Cleanup Status: COMPLETED - CASE CLOSED				
AVIS RENT A CAR	***ONTARIO AIRPORT***	***SE 1/8 - 1/4 (0.249 mi.)***	***H35***	***169***
Cleanup Status: COMPLETED - CASE CLOSED				

CA HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the CA HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 4 CA HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
METROPOLITAN TRANSIT	2131 D	NW 1/8 - 1/4 (0.171 mi.)	D17	72
Reg Id: 3112				
BUDGET RENT A CAR	***203 AIRPORT DR***	***W 1/4 - 1/2 (0.391 mi.)***	***41***	***180***
Reg Id: 083603532T				
BERTINO-LAWTON PROPE	***1862 HOLT***	***W 1/4 - 1/2 (0.445 mi.)***	***I43***	***188***
Reg Id: 083602824T				

Lower Elevation	Address	Direction / Distance	Map ID	Page
GE ONTARIO AIRCRAFT	***2264***	***SSE 1/4 - 1/2 (0.378 mi.)***	***39***	***175***

Reg Id: 083601881T

CA HWP: Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

A review of the CA HWP list, as provided by EDR, and dated 05/15/2023 has revealed that there is 1 CA HWP site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
GE ENGINE SERVICES I	***1923 E AVION ST***	***SSW 1/2 - 1 (0.945 mi.)***	***M57***	***264***
EPA ID: CAD009542721				
Cleanup Status: CLOSED				

San Bernardino County Fire Department Hazardous Materials Division.

A review of the CA San Bern. Co. Permit list, as provided by EDR, and dated 05/09/2023 has revealed that there are 13 CA San Bern. Co. Permit sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FRONTIER CALIFORNIA:	2152 E D ST	WNW 0 - 1/8 (0.061 mi.)	B4	18
Facility Status: ACTIVE				
Facility Id: FA0003619				
L D KING INC	2151 E CONVENTION CE	NW 0 - 1/8 (0.071 mi.)	B11	40
Facility Status: INACTIVE				
Facility Id: FA0004325				
RADISSON, ONTARIO AI	2200 E HOLT BLVD	W 0 - 1/8 (0.109 mi.)	14	43
Facility Status: INACTIVE				
Facility Id: FA0008294				
MARK CHRISTOPHER CHE	***2131 E D ST***	***NW 1/8 - 1/4 (0.171 mi.)***	***D16***	***45***
Facility Status: ACTIVE				
Facility Status: INACTIVE				
Facility Id: FA0004585				
ONTARIO CONVENTION C	***2000 CONVENTION CENT***	***NW 1/8 - 1/4 (0.225 mi.)***	***F30***	***132***
Facility Status: ACTIVE				
Facility Id: FA0008300				
Facility Id: FA0017086				
AT&T MOBILITY - (USI	2000 E CONVENTION CE	NW 1/8 - 1/4 (0.225 mi.)	F31	139
Facility Status: INACTIVE				
Facility Id: FA0009012				
CARDENAS MARKETS DIS	***2501 E GUASTI RD***	***ENE 1/8 - 1/4 (0.226 mi.)***	***G33***	***142***
Facility Status: ACTIVE				
Facility Status: INACTIVE				
Facility Id: FA0015061				
Facility Id: FA0003876				

Lower Elevation	Address	Direction / Distance	Map ID	Page
PRIME FLIGHT CARGO	2300 E AIRPORT RD	S 0 - 1/8 (0.069 mi.)	C6	21

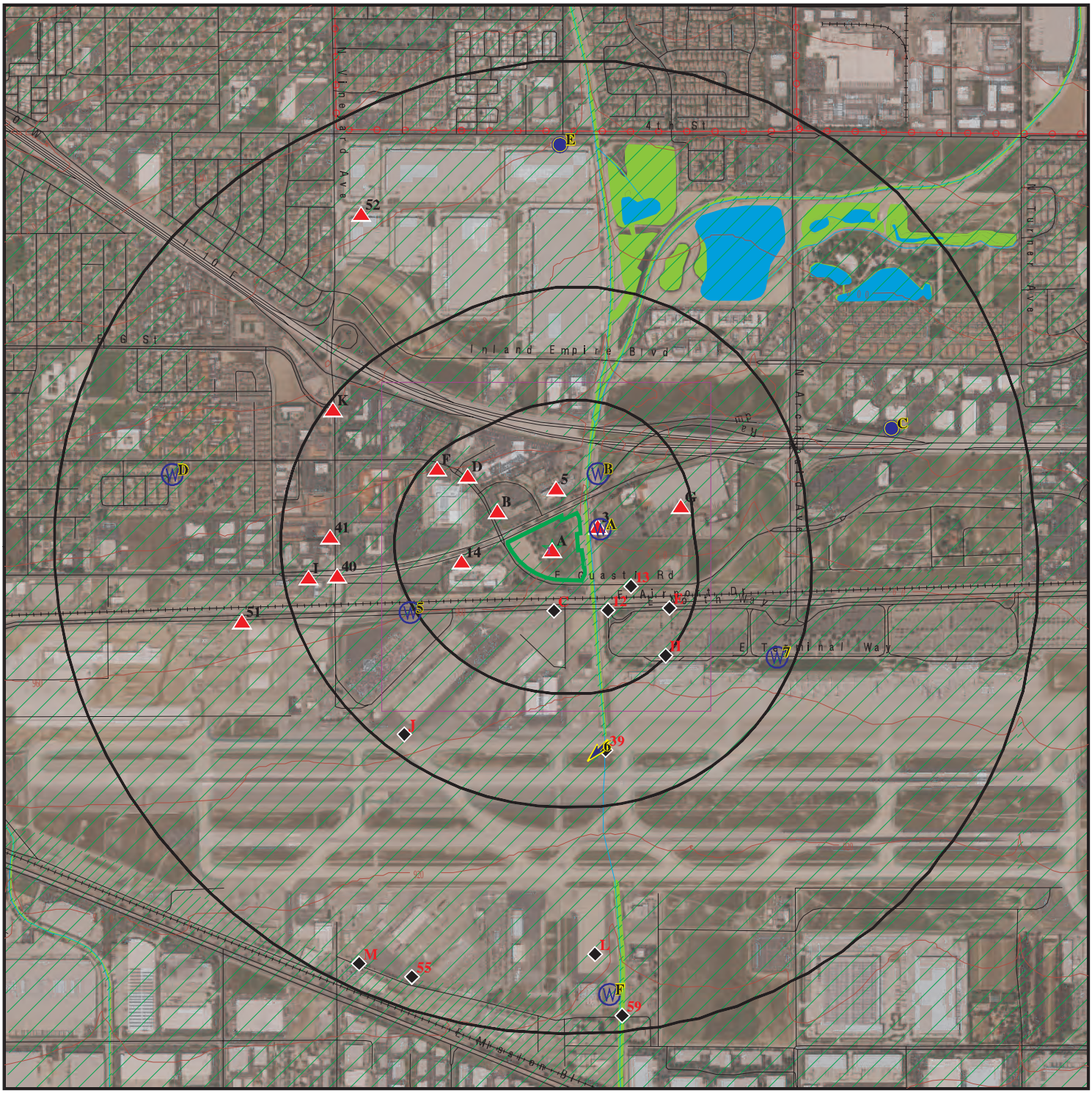
Facility Status: ACTIVE Facility Id: FA0019127				
ONTARIO WELL #29 Facility Status: INACTIVE Facility Id: FA0002048	2400 E AIRPORT DR	SE 0 - 1/8 (0.087 mi.)	12	41
UNITED AIRLINES INC Facility Status: INACTIVE Facility Id: FA0006904	2500 E AIRPORT DR ST	ESE 1/8 - 1/4 (0.201 mi.)	E23	85
AIRCRAFT SERVICE INT Facility Status: ACTIVE Facility Status: INACTIVE Facility Id: FA0011617 Facility Id: FA0000800	***2500 E. AIRPORT DRIV***	***ESE 1/8 - 1/4 (0.201 mi.)***	***E24***	***86***
ONTARIO INTERNATIONA Facility Status: ACTIVE Facility Status: INACTIVE Facility Id: FA0017002 Facility Id: FA0002679 Facility Id: FA0018764 Facility Id: FA0016229	***2500 E AIRPORT DR***	***ESE 1/8 - 1/4 (0.201 mi.)***	***E27***	***105***
NORTHWEST AIRLINES I Facility Status: INACTIVE Facility Id: FA0005004	2500 E AIRPORT DR 12	ESE 1/8 - 1/4 (0.201 mi.)	E28	130

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 31 records.

Site Name	Database(s)
GENUINE PARTS COMPANY DBA NAPA AUT	CA CERS HAZ WASTE
HBIZCTR ONTARIO	CA NPDES, CA CIWQS
LOT 1 OF ONTARIO AVE BUSINESS PARK	CA CIWQS
ONTARIO AIRPORT TOWERS - WCU PARKI	CA CIWQS
ONTARIO, CITY OF	CA RGA LUST
ONTARIO, CITY OF	CA RGA LUST
ONTARIO, CITY OF	CA RGA LUST
ONTARIO, CITY OF	CA RGA LUST
ONTARIO, CITY OF	CA RGA LUST
ONTARIO, CITY OF	CA RGA LUST
U. S. POSTAL SERVICE ONTARIO	CA RGA LUST
GTE ONTARIO	CA RGA LUST
GTE ONTARIO	CA RGA LUST
ONTARIO AIRPORT TOWERS WCU PARKING	CA NPDES
	CA CDL
RRR & H INC	CA DRYCLEANERS
BONDED CLEANERS, JOSEPH MONTES	CA DRYCLEANERS
BONDED CLEANERS	CA DRYCLEANERS
BONDED CLEANERS, HOURT SENG DBA	CA DRYCLEANERS
ONTARIO PACIFIC BUSINESS CENTRE	RCRA-SQG
CITY ONTARIO WELL GUASTI	FINDS
ONTARIO PACIFIC BUSINESS CENTRE	FINDS
NORTHROP (O)	CA CPS-SLIC
LOCKHEED (O)	CA CPS-SLIC
DOUGLAS AIRCRAFT CO	CA CPS-SLIC
CALIF. AIR NATIONAL GUARD	CA CPS-SLIC
G E ENGINE SERVICE	CA CPS-SLIC
MOUNTAIN VIEW SD PROPOSED ELEMENTA	CA ENVIROSTOR, CA SCH
SO CAL GAS/ONTARIO MGP	EDR MGP
ONTARIO AUTO TRUCK PLAZA INC	EDR Hist Auto
ONTARIO AUTO TRUCK PLAZA INC	EDR Hist Auto

OVERVIEW MAP - 07482419.2R



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

0 1/4 1/2 1 Miles

Indian Reservations BIA

Power transmission lines

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

Areas of Concern

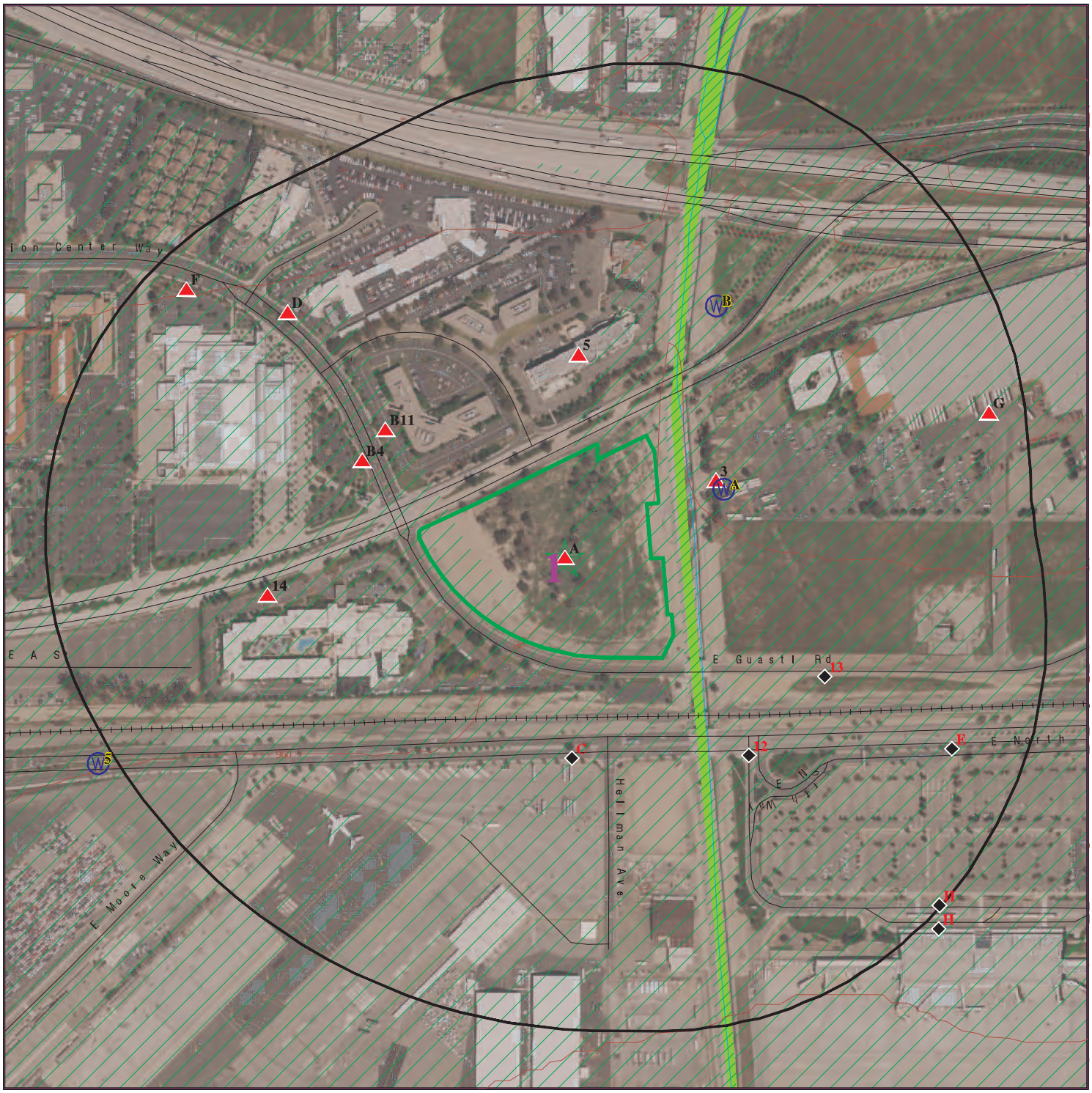
N

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Ontario Hotel	CLIENT:	Petra Geotechnical Inc
ADDRESS:	SE Corner E. Holt Blvd. and E. Guasti Rd. Ontario CA 91761	CONTACT:	Ed Lump
		INQUIRY #:	07482419.2r
LAT/LONG:	34.064239 / 117.602656	DATE:	October 27, 2023 6:18 pm

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DETAIL MAP - 07482419.2R



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

0 1/16 1/8 1/4 Miles

Indian Reservations BIA

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

Areas of Concern

N

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Ontario Hotel	CLIENT:	Petra Geotechnical Inc
ADDRESS:	SE Corner E. Holt Blvd. and E. Guasti Rd. Ontario CA 91761	CONTACT:	Ed Lump
		INQUIRY #:	07482419.2r
LAT/LONG:	34.064239 / 117.602656	DATE:	October 27, 2023 6:19 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Lists of Federal NPL (Superfund) sites								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Lists of Federal Delisted NPL sites								
Delisted NPL	1.000		0	0	0	0	NR	0
Lists of Federal sites subject to CERCLA removals and CERCLA orders								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Lists of Federal CERCLA sites with NFRAP								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA facilities undergoing Corrective Action								
CORRACTS	1.000		0	0	0	1	NR	1
Lists of Federal RCRA TSD facilities								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA generators								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		1	2	NR	NR	NR	3
RCRA-VSQG	0.250		0	1	NR	NR	NR	1
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
Lists of state- and tribal (Superfund) equivalent sites								
CA RESPONSE	1.000		0	0	0	1	NR	1
Lists of state- and tribal hazardous waste facilities								
CA ENVIROSTOR	1.000		0	0	2	4	NR	6
Lists of state and tribal landfills and solid waste disposal facilities								
CA SWF/LF	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Lists of state and tribal leaking storage tanks								
CA LUST	0.500		0	3	8	NR	NR	11
INDIAN LUST	0.500		0	0	0	NR	NR	0
CA CPS-SLIC	0.500		0	0	2	NR	NR	2
Lists of state and tribal registered storage tanks								
FEMA UST	0.250		0	0	NR	NR	NR	0
CA UST	0.250		0	2	NR	NR	NR	2
CA AST	0.250		0	1	NR	NR	NR	1
INDIAN UST	0.250		0	0	NR	NR	NR	0
Lists of state and tribal voluntary cleanup sites								
CA VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
Lists of state and tribal brownfield sites								
CA BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
CA WMUDS/SWAT	0.500		0	0	0	NR	NR	0
CA SWRCY	0.500		0	0	0	NR	NR	0
CA HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
CA HIST Cal-Sites	1.000		0	0	0	1	NR	1
CA SCH	0.250		0	0	NR	NR	NR	0
CA CDL	0.001		0	NR	NR	NR	NR	0
CA CERS HAZ WASTE	0.250		1	4	NR	NR	NR	5
CA Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
CA SWEEPS UST	0.250		0	1	NR	NR	NR	1
CA HIST UST	0.250		0	1	NR	NR	NR	1
CA FID UST	0.250		0	1	NR	NR	NR	1
CA CERS TANKS	0.250		0	1	NR	NR	NR	1
Local Land Records								
CA LIENS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	0.001		0	NR	NR	NR	NR	0
CA DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CA CHMIRS	0.001		0	NR	NR	NR	NR	0
CA LDS	0.001		0	NR	NR	NR	NR	0
CA MCS	0.001		0	NR	NR	NR	NR	0
CA SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		4	7	NR	NR	NR	11
FUDS	1.000		0	0	1	1	NR	2
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001	1	0	NR	NR	NR	NR	1
US MINES	0.250		0	0	NR	NR	NR	0
MINES MRDS	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001	1	0	NR	NR	NR	NR	1
UXO	1.000		0	0	1	1	NR	2
ECHO	0.001	1	0	NR	NR	NR	NR	1
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
PFAS NPL	0.250		0	0	NR	NR	NR	0
PFAS FEDERAL SITES	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
PFAS TRIS	0.250		0	0	NR	NR	NR	0
PFAS TSCA	0.250		0	0	NR	NR	NR	0
PFAS RCRA MANIFEST	0.250		0	0	NR	NR	NR	0
PFAS ATSDR	0.250		0	0	NR	NR	NR	0
PFAS WQP	0.250		0	0	NR	NR	NR	0
PFAS NPDES	0.250		0	0	NR	NR	NR	0
PFAS ECHO	0.250		1	1	NR	NR	NR	2
PFAS ECHO FIRE TRAINING	0.250		0	0	NR	NR	NR	0
PFAS PART 139 AIRPORT	0.250		0	0	NR	NR	NR	0
AQUEOUS FOAM NRC	0.250		0	0	NR	NR	NR	0
BIOSOLIDS	0.001		0	NR	NR	NR	NR	0
CA PFAS	0.250		1	0	NR	NR	NR	1
CA AQUEOUS FOAM	0.250		0	1	NR	NR	NR	1
CA BOND EXP. PLAN	1.000		0	0	0	1	NR	1
CA CHROME PLATING	0.500		0	0	0	NR	NR	0
CA Cortese	0.500		0	2	5	NR	NR	7
CA CUPA Listings	0.250		0	0	NR	NR	NR	0
CA DRYCLEANERS	0.250		0	0	NR	NR	NR	0
CA EMI	0.001		0	NR	NR	NR	NR	0
CA ENF	0.001		0	NR	NR	NR	NR	0
CA Financial Assurance	0.001		0	NR	NR	NR	NR	0
CA ICE	0.001		0	NR	NR	NR	NR	0
CA HIST CORTESE	0.500		0	1	3	NR	NR	4
CA HWP	1.000		0	0	0	1	NR	1
CA HWT	0.250		0	0	NR	NR	NR	0
CA HWTS	0.001		0	NR	NR	NR	NR	0
CA HAZNET	0.001		0	NR	NR	NR	NR	0
NY MANIFEST	0.250		0	0	NR	NR	NR	0
CA MINES	0.250		0	0	NR	NR	NR	0
CA MWMP	0.250		0	0	NR	NR	NR	0
CA NPDES	0.001		0	NR	NR	NR	NR	0
CA San Bern. Co. Permit	0.250		5	8	NR	NR	NR	13
CA PEST LIC	0.001		0	NR	NR	NR	NR	0
CA PROC	0.500		0	0	0	NR	NR	0
CA Notify 65	1.000		0	0	0	0	NR	0
CA HAZMAT	0.250		0	0	NR	NR	NR	0
CA UIC	0.001		0	NR	NR	NR	NR	0
CA UIC GEO	0.001		0	NR	NR	NR	NR	0
CA WASTEWATER PITS	0.500		0	0	0	NR	NR	0
CA WDS	0.001		0	NR	NR	NR	NR	0
CA WIP	0.250		0	0	NR	NR	NR	0
CA MILITARY PRIV SITES	0.001		0	NR	NR	NR	NR	0
CA PROJECT	0.001		0	NR	NR	NR	NR	0
CA WDR	0.001		0	NR	NR	NR	NR	0
CA CIWQS	0.001		0	NR	NR	NR	NR	0
CA CERS	0.001		0	NR	NR	NR	NR	0
CA NON-CASE INFO	0.001		0	NR	NR	NR	NR	0
CA OTHER OIL GAS	0.001		0	NR	NR	NR	NR	0
CA PROD WATER PONDS	0.001		0	NR	NR	NR	NR	0
CA SAMPLING POINT	0.001		0	NR	NR	NR	NR	0
CA WELL STIM PROJ	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
CA RGA LF	0.001		0	NR	NR	NR	NR	0
CA RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		3	13	37	22	11	0	86

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1
Target Property
MARRIOTT AIRPORT HOTEL
2200 E HOLT ST
ONTARIO, CA 91761

FINDS **1016063768**
ECHO **N/A**

Site 1 of 2 in cluster A

Actual: 962 ft.

FINDS:
Registry ID: 110001179064

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:
The Air Facility System (AFS) contains compliance and permit data for stationary sources of air pollution regulated by the EPA, state, and local air pollution agencies.
ICIS-Air (AIR) AIR is the modernization of the Air Facility System (AFS) into the Integrated Compliance Information System (ICIS). AIR contains enforcement, compliance, and permit data for stationary sources of air pollution regulated by the EPA, State, and Local air pollution agencies.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1016063768
Registry ID:	110001179064
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110001179064
Name:	MARRIOTT AIRPORT HOTEL
Address:	2200 E HOLT ST
City,State,Zip:	ONTARIO, CA 91761

A2
Target Property
MARRIOTT AIRPORT HOTEL
2200 E HOLT ST
ONTARIO, CA 91761

US AIRS **1005654742**
N/A

Site 2 of 2 in cluster A

Actual: 962 ft.

US AIRS MINOR:

Envid:	1005654742
Region Code:	09
Programmatic ID:	AIR 0900000006071R9732
Facility Registry ID:	110001179064
D and B Number:	Not reported
Primary SIC Code:	7011
NAICS Code:	335911
Default Air Classification Code:	MIN
Facility Type of Ownership Code:	POF
Air CMS Category Code:	Not reported
HPV Status:	Not reported

US AIRS MINOR:

Region Code:	09
Programmatic ID:	AIR 0900000006071R9732
Facility Registry ID:	110001179064
Air Operating Status Code:	OPR
Default Air Classification Code:	MIN
Air Program:	Stratospheric Ozone Protection
Activity Date:	2000-11-28 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring

MARRIOTT AIRPORT HOTEL (Continued) **1005654742**

Activity Type:	Information Request
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR 0900000006071R9732
Facility Registry ID:	110001179064
Air Operating Status Code:	OPR
Default Air Classification Code:	MIN
Air Program:	Stratospheric Ozone Protection
Activity Date:	2000-09-15 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

---

3 **WELL 29** **CA PFAS** **S127520305**
ENE **N/A**
< 1/8 **ONTARIO, CA**
0.040 mi.
209 ft.

Relative:
Higher

Actual:
964 ft.

PFAS:

Name:	WELL 29
Address:	Not reported
City,State,Zip:	ONTARIO, CA
Envirostor ID:	Not reported
Program Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Enviroscreen Score:	Not reported
Site Code:	Not reported
Global ID:	W0603610034
Facility Region:	Not reported
Lead Agency:	Not reported
Case worker:	Not reported
Local Agency:	Not reported
Location Case Number:	Not reported
File Location:	Not reported
Potential Contaminants of Concern:	Not reported
Potential Media Affected:	Not reported
Site History:	Not reported
Begin Date:	Not reported
RB Case Number:	Not reported
source_type:	All PFAS Chemicals
Location ID:	CA3610034_025_025
Matrix:	Liquid
Chemical:	PFOA
Qualifier:	<
Value:	2
Reporting Limit:	Not reported
Detection Limit:	Not reported
Lab Notes:	Not reported
Quarterly Running Annual Average:	Not reported
Units:	NG/L
Date:	12/26/2019
Field Pt Class:	PUBW

WELL 29 (Continued) **S127520305**

Site Use: Drinking Water Wells
Site Type: DDW Well
Latitude: 34.064989
Longitude: -117.600889
Geo Tracker URL: Not reported

Name: WELL 29
Address: Not reported
City,State,Zip: ONTARIO, CA
Envirostor ID: Not reported
Program Type: Not reported
Status: Not reported
Status Date: Not reported
Enviroscreen Score: Not reported
Site Code: Not reported
Global ID: W0603610034
Facility Region: Not reported
Lead Agency: Not reported
Case worker: Not reported
Local Agency: Not reported
Location Case Number: Not reported
File Location: Not reported
Potential Contaminants of Concern: Not reported
Potential Media Affected: Not reported
Site History: Not reported

Begin Date: Not reported
RB Case Number: Not reported
source_type: All PFAS Chemicals
Location ID: CA3610034_025_025
Matrix: Liquid
Chemical: PFTEDA
Qualifier: <
Value: 2
Reporting Limit: Not reported
Detection Limit: Not reported
Lab Notes: Not reported
Quarterly Running Annual Average: Not reported
Units: NG/L
Date: 1/9/2020
Field Pt Class: PUBW
Site Use: Drinking Water Wells
Site Type: DDW Well
Latitude: 34.064989
Longitude: -117.600889
Geo Tracker URL: Not reported

Name: WELL 29
Address: Not reported
City,State,Zip: ONTARIO, CA
Envirostor ID: Not reported
Program Type: Not reported
Status: Not reported
Status Date: Not reported
Enviroscreen Score: Not reported
Site Code: Not reported
Global ID: W0603610034

WELL 29 (Continued) **S127520305**

Facility Region:	Not reported
Lead Agency:	Not reported
Case worker:	Not reported
Local Agency:	Not reported
Location Case Number:	Not reported
File Location:	Not reported
Potential Contaminants of Concern:	Not reported
Potential Media Affected:	Not reported
Site History:	Not reported
Begin Date:	Not reported
RB Case Number:	Not reported
source_type:	All PFAS Chemicals
Location ID:	CA3610034_025_025
Matrix:	Liquid
Chemical:	PFHXSA
Qualifier:	<
Value:	2
Reporting Limit:	Not reported
Detection Limit:	Not reported
Lab Notes:	Not reported
Quarterly Running Annual Average:	Not reported
Units:	NG/L
Date:	1/9/2020
Field Pt Class:	PUBW
Site Use:	Drinking Water Wells
Site Type:	DDW Well
Latitude:	34.064989
Longitude:	-117.600889
Geo Tracker URL: Not reported	
Name:	WELL 29
Address:	Not reported
City,State,Zip:	ONTARIO, CA
Envirostor ID:	Not reported
Program Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Enviroscreen Score:	Not reported
Site Code:	Not reported
Global ID:	W0603610034
Facility Region:	Not reported
Lead Agency:	Not reported
Case worker:	Not reported
Local Agency:	Not reported
Location Case Number:	Not reported
File Location:	Not reported
Potential Contaminants of Concern:	Not reported
Potential Media Affected:	Not reported
Site History:	Not reported
Begin Date:	Not reported
RB Case Number:	Not reported
source_type:	All PFAS Chemicals
Location ID:	CA3610034_025_025
Matrix:	Liquid
Chemical:	PFDOA

WELL 29 (Continued) **S127520305**

Qualifier: <
Value: 2
Reporting Limit: Not reported
Detection Limit: Not reported
Lab Notes: Not reported
Quarterly Running Annual Average: Not reported
Units: NG/L
Date: 1/9/2020
Field Pt Class: PUBW
Site Use: Drinking Water Wells
Site Type: DDW Well
Latitude: 34.064989
Longitude: -117.600889
Geo Tracker URL: Not reported

Name: WELL 29
Address: Not reported
City,State,Zip: ONTARIO, CA
Envirostor ID: Not reported
Program Type: Not reported
Status: Not reported
Status Date: Not reported
Enviroscreen Score: Not reported
Site Code: Not reported
Global ID: W0603610034
Facility Region: Not reported
Lead Agency: Not reported
Case worker: Not reported
Local Agency: Not reported
Location Case Number: Not reported
File Location: Not reported
Potential Contaminants of Concern: Not reported
Potential Media Affected: Not reported
Site History: Not reported

Begin Date: Not reported
RB Case Number: Not reported
source_type: All PFAS Chemicals
Location ID: CA3610034_025_025
Matrix: Liquid
Chemical: PFBSA
Qualifier: <
Value: 2
Reporting Limit: Not reported
Detection Limit: Not reported
Lab Notes: Not reported
Quarterly Running Annual Average: Not reported
Units: NG/L
Date: 6/27/2019
Field Pt Class: PUBW
Site Use: Drinking Water Wells
Site Type: DDW Well
Latitude: 34.064989
Longitude: -117.600889
Geo Tracker URL: Not reported

Name: WELL 29

WELL 29 (Continued) **S127520305**

Address:	Not reported
City,State,Zip:	ONTARIO, CA
Envirostor ID:	Not reported
Program Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Enviroscreen Score:	Not reported
Site Code:	Not reported
Global ID:	W0603610034
Facility Region:	Not reported
Lead Agency:	Not reported
Case worker:	Not reported
Local Agency:	Not reported
Location Case Number:	Not reported
File Location:	Not reported
Potential Contaminants of Concern:	Not reported
Potential Media Affected:	Not reported
Site History:	Not reported

Begin Date:	Not reported
RB Case Number:	Not reported
source_type:	All PFAS Chemicals
Location ID:	CA3610034_025_025
Matrix:	Liquid
Chemical:	NMEFOSAA
Qualifier:	<
Value:	2
Reporting Limit:	Not reported
Detection Limit:	Not reported
Lab Notes:	Not reported
Quarterly Running Annual Average:	Not reported
Units:	NG/L
Date:	12/26/2019
Field Pt Class:	PUBW
Site Use:	Drinking Water Wells
Site Type:	DDW Well
Latitude:	34.064989
Longitude:	-117.600889

Geo Tracker URL: Not reported

Name:	WELL 29
Address:	Not reported
City,State,Zip:	ONTARIO, CA
Envirostor ID:	Not reported
Program Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Enviroscreen Score:	Not reported
Site Code:	Not reported
Global ID:	W0603610034
Facility Region:	Not reported
Lead Agency:	Not reported
Case worker:	Not reported
Local Agency:	Not reported
Location Case Number:	Not reported
File Location:	Not reported
Potential Contaminants of Concern:	Not reported

WELL 29 (Continued) **S127520305**

Potential Media Affected:	Not reported
Site History:	Not reported
Begin Date:	Not reported
RB Case Number:	Not reported
source_type:	All PFAS Chemicals
Location ID:	CA3610034_025_025
Matrix:	Liquid
Chemical:	PFNA
Qualifier:	<
Value:	2
Reporting Limit:	Not reported
Detection Limit:	Not reported
Lab Notes:	Not reported
Quarterly Running Annual Average:	Not reported
Units:	NG/L
Date:	12/26/2019
Field Pt Class:	PUBW
Site Use:	Drinking Water Wells
Site Type:	DDW Well
Latitude:	34.064989
Longitude:	-117.600889
Geo Tracker URL:	Not reported
Name:	WELL 29
Address:	Not reported
City,State,Zip:	ONTARIO, CA
Envirostor ID:	Not reported
Program Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Enviroscreen Score:	Not reported
Site Code:	Not reported
Global ID:	W0603610034
Facility Region:	Not reported
Lead Agency:	Not reported
Case worker:	Not reported
Local Agency:	Not reported
Location Case Number:	Not reported
File Location:	Not reported
Potential Contaminants of Concern:	Not reported
Potential Media Affected:	Not reported
Site History:	Not reported
Begin Date:	Not reported
RB Case Number:	Not reported
source_type:	All PFAS Chemicals
Location ID:	CA3610034_025_025
Matrix:	Liquid
Chemical:	PFTRIDA
Qualifier:	<
Value:	2
Reporting Limit:	Not reported
Detection Limit:	Not reported
Lab Notes:	Not reported
Quarterly Running Annual Average:	Not reported
Units:	NG/L

WELL 29 (Continued) **S127520305**

Date: 6/27/2019
Field Pt Class: PUBW
Site Use: Drinking Water Wells
Site Type: DDW Well
Latitude: 34.064989
Longitude: -117.600889
Geo Tracker URL: Not reported

Name: WELL 29
Address: Not reported
City,State,Zip: ONTARIO, CA
Envirostor ID: Not reported
Program Type: Not reported
Status: Not reported
Status Date: Not reported
Enviroscreen Score: Not reported
Site Code: Not reported
Global ID: W0603610034
Facility Region: Not reported
Lead Agency: Not reported
Case worker: Not reported
Local Agency: Not reported
Location Case Number: Not reported
File Location: Not reported
Potential Contaminants of Concern: Not reported
Potential Media Affected: Not reported
Site History: Not reported

Begin Date: Not reported
RB Case Number: Not reported
source_type: All PFAS Chemicals
Location ID: CA3610034_025_025
Matrix: Liquid
Chemical: PFHPA
Qualifier: <
Value: 2
Reporting Limit: Not reported
Detection Limit: Not reported
Lab Notes: Not reported
Quarterly Running Annual Average: Not reported
Units: NG/L
Date: 7/10/2019
Field Pt Class: PUBW
Site Use: Drinking Water Wells
Site Type: DDW Well
Latitude: 34.064989
Longitude: -117.600889
Geo Tracker URL: Not reported

Name: WELL 29
Address: Not reported
City,State,Zip: ONTARIO, CA
Envirostor ID: Not reported
Program Type: Not reported
Status: Not reported
Status Date: Not reported
Enviroscreen Score: Not reported

WELL 29 (Continued) **S127520305**

Site Code:	Not reported
Global ID:	W0603610034
Facility Region:	Not reported
Lead Agency:	Not reported
Case worker:	Not reported
Local Agency:	Not reported
Location Case Number:	Not reported
File Location:	Not reported
Potential Contaminants of Concern:	Not reported
Potential Media Affected:	Not reported
Site History:	Not reported
Begin Date:	Not reported
RB Case Number:	Not reported
source_type:	All PFAS Chemicals
Location ID:	CA3610034_025_025
Matrix:	Liquid
Chemical:	PFTRIDA
Qualifier:	<
Value:	2
Reporting Limit:	Not reported
Detection Limit:	Not reported
Lab Notes:	Not reported
Quarterly Running Annual Average:	Not reported
Units:	NG/L
Date:	7/10/2019
Field Pt Class:	PUBW
Site Use:	Drinking Water Wells
Site Type:	DDW Well
Latitude:	34.064989
Longitude:	-117.600889
Geo Tracker URL: Not reported	
Name:	WELL 29
Address:	Not reported
City,State,Zip:	ONTARIO, CA
Envirostor ID:	Not reported
Program Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Enviroscreen Score:	Not reported
Site Code:	Not reported
Global ID:	W0603610034
Facility Region:	Not reported
Lead Agency:	Not reported
Case worker:	Not reported
Local Agency:	Not reported
Location Case Number:	Not reported
File Location:	Not reported
Potential Contaminants of Concern:	Not reported
Potential Media Affected:	Not reported
Site History:	Not reported
Begin Date:	Not reported
RB Case Number:	Not reported
source_type:	All PFAS Chemicals
Location ID:	CA3610034_025_025

WELL 29 (Continued) **S127520305**

Matrix:	Liquid
Chemical:	PFNA
Qualifier:	<
Value:	2
Reporting Limit:	Not reported
Detection Limit:	Not reported
Lab Notes:	Not reported
Quarterly Running Annual Average:	Not reported
Units:	NG/L
Date:	6/27/2019
Field Pt Class:	PUBW
Site Use:	Drinking Water Wells
Site Type:	DDW Well
Latitude:	34.064989
Longitude:	-117.600889
Geo Tracker URL:	Not reported

Click this hyperlink while viewing on your computer to access
46 additional CA PFAS: record(s) in the EDR Site Report.

B4 **FRONTIER CALIFORNIA: AIRPORT RSC3/9** **CA San Bern. Co. Permit** **S104905650**
WNW **2152 E D ST** **N/A**
< 1/8 **ONTARIO, CA 91764**
0.061 mi.
321 ft. **Site 1 of 2 in cluster B**

Relative:
Higher

Actual:
970 ft.

San Bern. Co. Permit:

Name:	FRONTIER CALIFORNIA: AIRPORT RSC3/9
Address:	2152 E D ST
City,State,Zip:	ONTARIO, CA 91764
Region:	SAN BERNARDINO
Facility ID:	FA0003619
Owner:	FRONTIER CALIFORNIA, INC
Permit Number:	PT0009512
Permit Category:	HAZARDOUS MATERIALS 1-3 CHEMICALS SPECIAL
Facility Status:	ACTIVE
Expiration Date:	05/31/2023

---

5 **HOLIDAY INN** **RCRA NonGen / NLR** **1027692628**
North **2155 EAST CONVENTION CENTER WAY** **CAC003235247**
< 1/8 **ONTARIO, CA 91764**
0.061 mi.
324 ft.

Relative:
Higher

Actual:
970 ft.

RCRA Listings:

Date Form Received by Agency:	20230601
Handler Name:	Holiday Inn
Handler Address:	2155 EAST CONVENTION CENTER WAY
Handler City,State,Zip:	ONTARIO, CA 91764
EPA ID:	CAC003235247
Contact Name:	JEFF WILLIAMS
Contact Address:	2155 EAST CONVENTION CENTER WAY
Contact City,State,Zip:	ONTARIO, CA 91764
Contact Telephone:	909-212-8000
Contact Fax:	Not reported
Contact Email:	JUSTIN.EASTMAN@HAZARDOUSWASTEEXPERTS.COM

HOLIDAY INN (Continued) **1027692628**

Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	2155 EAST CONVENTION CENTER WAY
Mailing City,State,Zip:	ONTARIO, CA 91764
Owner Name:	Jeff Williams
Owner Type:	Other
Operator Name:	Jeff Williams
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20230601
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

HOLIDAY INN (Continued) **1027692628**

Handler - Owner Operator:
Owner/Operator Indicator: Operator
Owner/Operator Name: JEFF WILLIAMS
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 2155 EAST CONVENTION CENTER WAY
Owner/Operator City,State,Zip: ONTARIO, CA 91764
Owner/Operator Telephone: 909-212-8000
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: JEFF WILLIAMS
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 2155 EAST CONVENTION CENTER WAY
Owner/Operator City,State,Zip: ONTARIO, CA 91764
Owner/Operator Telephone: 909-212-8000
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20230601
Handler Name: HOLIDAY INN
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Code: 72111
NAICS Description: HOTELS (EXCEPT CASINO HOTELS) AND MOTELS

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

C6 **PRIME FLIGHT CARGO** **CA San Bern. Co. Permit** **S128547100**
South **2300 E AIRPORT RD** **N/A**
< 1/8 **ONTARIO, CA 91761**
0.069 mi.
362 ft. **Site 1 of 5 in cluster C**

Relative: **Lower**

Actual: **954 ft.**

San Bern. Co. Permit:

Name:	PRIME FLIGHT CARGO
Address:	2300 E AIRPORT RD
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO
Facility ID:	FA0019127
Owner:	PRIME FLIGHT CARGO
Permit Number:	PT0041176
Permit Category:	CONDITIONALLY EXEMPT SM QTY GENERATOR
Facility Status:	ACTIVE
Expiration Date:	05/31/2023

Name:	PRIME FLIGHT CARGO
Address:	2300 E AIRPORT RD
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO
Facility ID:	FA0019127
Owner:	PRIME FLIGHT CARGO
Permit Number:	PT0041175
Permit Category:	HAZARDOUS MATERIALS 1-3 CHEMICALS
Facility Status:	ACTIVE
Expiration Date:	05/31/2023

C7 **MAJESTIC TERMINAL SERVICES** **CA CERS HAZ WASTE** **S124920069**
South **2300 E AIRPORT DR** **CA HWTS** **N/A**
< 1/8 **ONTARIO, CA 98390** **CA HAZNET**
0.069 mi. **CA CERS**
362 ft. **Site 2 of 5 in cluster C**

Relative: **Lower**

Actual: **954 ft.**

CERS HAZ WASTE:

Name:	PRIMEFLIGHT CARGO
Address:	2300 E AIRPORT DR
City,State,Zip:	ONTARIO, CA 91761
Site ID:	611765
CERS ID:	10896028
CERS Description:	Hazardous Waste Generator

Name:	PRIMEFLIGHT CARGO
Address:	2300 E AIRPORT DR
City,State,Zip:	ONTARIO, CA 91761
Site ID:	611765
CERS ID:	10896028
CERS Description:	RCRA LQ HW Generator

HWTS:

Name:	MAJESTIC TERMINAL SERVICES
Address:	2300 E AIRPORT DR
Address 2:	Not reported
City,State,Zip:	ONTARIO, CA 92860
EPA ID:	CAL000432907
Inactive Date:	06/30/2021
Create Date:	01/03/2018
Last Act Date:	Not reported

MAJESTIC TERMINAL SERVICES (Continued) **S124920069**

Mailing Name:	Not reported
Mailing Address:	9568 ARCHIBALD AVE, SUITE 100
Mailing Address 2:	Not reported
Mailing City,State,Zip:	RANCHO CUCAMONGA, CA 91730
Owner Name:	BRIAN CELLA
Owner Address:	15127 MAIN ST E STE 104 PMB 217
Owner Address 2:	Not reported
Owner City,State,Zip:	SUMNER, WA 98390
Owner Phone:	Not reported
Owner Fax:	Not reported
Contact Name:	FRANK AUDELO
Contact Address:	2300 E AIRPORT DR
Contact Address 2:	Not reported
City,State,Zip:	ONTARIO, CA 917610000
Contact Phone:	Not reported
Contact Fax:	Not reported
Facility Status:	Inactive
Facility Type:	PERMANENT
Category:	STATE
Latitude:	34.06222718
Longitude:	-117.6037299

NAICS:

EPA ID:	CAL000432907
Create Date:	2018-01-03 11:08:39.853
NAICS Code:	711410
NAICS Description:	Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures
Issued EPA ID Date:	2018-01-03 11:08:39.48000
Inactive Date:	2020-06-30 00:00:00
Facility Name:	MAJESTIC TERMINAL SERVICES
Facility Address:	2300 E AIRPORT DR
Facility Address 2:	Not reported
Facility City:	ONTARIO
Facility County:	Not reported
Facility State:	CA
Facility Zip:	92860

HAZNET:

Name:	MAJESTIC TERMINAL SERVICES
Address:	2300 E AIRPORT DR
Address 2:	Not reported
City,State,Zip:	ONTARIO, CA 92860
Contact:	FRANK AUDELO
Telephone:	9097869894
Mailing Name:	Not reported
Mailing Address:	9568 ARCHIBALD AVE SUITE 100
Year:	2020
Gepaid:	CAL000432907
TSD EPA ID:	AZR000520478
CA Waste Code:	352 - Other organic solids
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.65

MAJESTIC TERMINAL SERVICES (Continued) **S124920069**

Year:	2018
Gepaid:	CAL000432907
TSD EPA ID:	CAD097030993
CA Waste Code:	352 - Other organic solids
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.30000

Additional Info:

Year:	2020
Gen EPA ID:	CAL000432907
Shipment Date:	9/9/2020
Creation Date:	10/30/2020
Receipt Date:	9/16/2020
Manifest ID:	006384693GBF
Trans EPA ID:	CAR000129254
Trans Name:	BENNYS MAINT AND OIL FILTER RECYCLING
Trans 2 EPA ID:	CAR000183574
Trans 2 Name:	ENVIRONMENTAL MNGMT TECHNOLOGIES INC
TSDF EPA ID:	AZR000520478
Trans Name:	ENVIRONMENTAL WASTE SOLUTIONS, INC.
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.1
Waste Quantity:	200
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	7/22/2020
Creation Date:	11/4/2020
Receipt Date:	8/3/2020
Manifest ID:	006384614GBF
Trans EPA ID:	CAR000129254
Trans Name:	BENNYS MAINT AND OIL FILTER RECYCLING
Trans 2 EPA ID:	CAR000183574
Trans 2 Name:	ENVIRONMENTAL MNGMT TECHNOLOGIES INC
TSDF EPA ID:	AZR000520478
Trans Name:	ENVIRONMENTAL WASTE SOLUTIONS, INC.
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.2
Waste Quantity:	400
Quantity Unit:	P

MAJESTIC TERMINAL SERVICES (Continued) **S124920069**

Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	7/1/2020
Creation Date:	8/26/2020
Receipt Date:	7/10/2020
Manifest ID:	006101814GBF
Trans EPA ID:	CAR000129254
Trans Name:	BENNYS MAINT AND OIL FILTER RECYCLING
Trans 2 EPA ID:	CAR000183574
Trans 2 Name:	ENVIRONMENTAL MNGMT TECHNOLOGIES INC
TSDF EPA ID:	AZR000520478
Trans Name:	ENVIRONMENTAL WASTE SOLUTIONS, INC.
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.1
Waste Quantity:	200
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	3/25/2020
Creation Date:	6/17/2020
Receipt Date:	4/1/2020
Manifest ID:	006244372GBF
Trans EPA ID:	CAR000129254
Trans Name:	BENNYS MAINT AND OIL FILTER RECYCLING
Trans 2 EPA ID:	CAR000183574
Trans 2 Name:	ENVIRONMENTAL MNGMT TECHNOLOGIES INC
TSDF EPA ID:	AZR000520478
Trans Name:	ENVIRONMENTAL WASTE SOLUTIONS, INC.
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.1
Waste Quantity:	200
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	1/15/2020

MAJESTIC TERMINAL SERVICES (Continued) **S124920069**

Creation Date:	12/4/2020
Receipt Date:	1/27/2020
Manifest ID:	006201713GBF
Trans EPA ID:	CAR000129254
Trans Name:	BENNYS MAINT AND OIL FILTER RECYCLING
Trans 2 EPA ID:	CAR000183574
Trans 2 Name:	ENVIRONMENTAL MNGMT TECHNOLOGIES INC
TSDF EPA ID:	AZR000520478
Trans Name:	ENVIRONMENTAL WASTE SOLUTIONS, INC.
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.15
Waste Quantity:	300
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Detail Two:

Year:	2020
EM Manifest ID:	49ae78eb-51a7-4131-9a18-a787a6a44419
Shipment Date:	9/9/2020
Receipt Date:	9/16/2020
Manifest Number:	006384693GBF
Generator EPA ID:	CAL000432907
Name:	MAJESTIC TERMINAL SERVICES
Address:	2300 E AIRPORT DR
Address 2:	Not reported
City:	ONTARIO
Zip:	92860
Telephone:	800-535-5053
Contact:	AIMEE BRIDGES
Contact Telephone:	909-314-9758
Transporter 1 EPA ID:	CAR000129254
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	CAR000183574
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	AZR000520478
TSDF Name:	ENVIRONMENTAL WASTE SOLUTIONS, INC.
TSDF Address 1:	31915 INDUSTRIAL LANE
TSDF Address 2:	Not reported
TSDF City:	PAKER
TSDF Zip:	85344
TSDF Telephone:	Not reported

State:

Year:	2020
EM Manifest ID:	49ae78eb-51a7-4131-9a18-a787a6a44419
Generator EPA ID:	CAL000432907
Shipment Date:	2020-09-09
Manifest Number:	006384693GBF

MAJESTIC TERMINAL SERVICES (Continued) **S124920069**

Line Number: 1
Method Code: H141
Quantity Tons: 0.10000
Quantity Waste: 200.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: Metal drums, barrels, kegs
Quantity Type: Pounds
State Code: 352

Year: 2020
EM Manifest ID: e3c57d7d-5301-4a5e-861b-fafd39a909e4
Shipment Date: 7/22/2020
Receipt Date: 8/3/2020
Manifest Number: 006384614GBF
Generator EPA ID: CAL000432907
Name: MAJESTIC TERMINAL SERVICES
Address: 2300 E AIRPORT DR
Address 2: Not reported
City: ONTARIO
Zip: 92860
Telephone: 800-535-5053
Contact: AIMEE BRIDGES
Contact Telephone: 909-314-9758
Transporter 1 EPA ID: CAR000129254
Transporter 1 Emergency Number: Not reported
Transporter 2 EPA ID: CAR000183574
Transporter 2 Emergency Number: Not reported
TSDF EPA ID: AZR000520478
TSDF Name: ENVIRONMENTAL WASTE SOLUTIONS, INC.
TSDF Address 1: 31915 INDUSTRIAL LANE
TSDF Address 2: Not reported
TSDF City: PAKER
TSDF Zip: 85344
TSDF Telephone: Not reported

State:
Year: 2020
EM Manifest ID: e3c57d7d-5301-4a5e-861b-fafd39a909e4
Generator EPA ID: CAL000432907
Shipment Date: 2020-07-22
Manifest Number: 006384614GBF
Line Number: 1
Method Code: H141
Quantity Tons: 0.20000
Quantity Waste: 400.000000
Quantity Unit: P
Number of Containers: 2
Type of Container: Metal drums, barrels, kegs
Quantity Type: Pounds
State Code: 352

Year: 2020
EM Manifest ID: 0c2ffc91-5af5-44be-9a87-a08b281a96ac
Shipment Date: 7/1/2020
Receipt Date: 7/10/2020

MAJESTIC TERMINAL SERVICES (Continued) **S124920069**

Manifest Number:	006101814GBF
Generator EPA ID:	CAL000432907
Name:	MAJESTIC TERMINAL SERVICES
Address:	2300 E AIRPORT DR
Address 2:	Not reported
City:	ONTARIO
Zip:	92860
Telephone:	800-535-5053
Contact:	AIMEE BRIDGES
Contact Telephone:	909-314-9758
Transporter 1 EPA ID:	CAR000129254
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	CAR000183574
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	AZR000520478
TSDF Name:	ENVIRONMENTAL WASTE SOLUTIONS, INC.
TSDF Address 1:	31915 INDUSTRIAL LANE
TSDF Address 2:	Not reported
TSDF City:	PAKER
TSDF Zip:	85344
TSDF Telephone:	Not reported

State:

Year:	2020
EM Manifest ID:	0c2ffc91-5af5-44be-9a87-a08b281a96ac
Generator EPA ID:	CAL000432907
Shipment Date:	2020-07-01
Manifest Number:	006101814GBF
Line Number:	1
Method Code:	H141
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Metal drums, barrels, kegs
Quantity Type:	Pounds
State Code:	352

Year:	2020
EM Manifest ID:	98d0691b-acfa-46e4-aa53-0bbd529db7cb
Shipment Date:	3/25/2020
Receipt Date:	4/1/2020
Manifest Number:	006244372GBF
Generator EPA ID:	CAL000432907
Name:	MAJESTIC TERMINAL SERVICES
Address:	2300 E AIRPORT DR
Address 2:	Not reported
City:	ONTARIO
Zip:	92860
Telephone:	800-535-5053
Contact:	AIMEE BRIDGES
Contact Telephone:	909-314-9758
Transporter 1 EPA ID:	CAR000129254
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	CAR000183574
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	AZR000520478

MAJESTIC TERMINAL SERVICES (Continued) **S124920069**

TSDF Name: ENVIRONMENTAL WASTE SOLUTIONS, INC.
TSDF Address 1: 31915 INDUSTRIAL LANE
TSDF Address 2: Not reported
TSDF City: PAKER
TSDF Zip: 85344
TSDF Telephone: Not reported

State:
Year: 2020
EM Manifest ID: 98d0691b-acfa-46e4-aa53-0bbd529db7cb
Generator EPA ID: CAL000432907
Shipment Date: 2020-03-25
Manifest Number: 006244372GBF
Line Number: 1
Method Code: H141
Quantity Tons: 0.10000
Quantity Waste: 200.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: Metal drums, barrels, kegs
Quantity Type: Pounds
State Code: 352

Year: 2020
EM Manifest ID: a5ebc832-7a98-4831-a02d-dcb1fd12cdad
Shipment Date: 1/15/2020
Receipt Date: 1/27/2020
Manifest Number: 006201713GBF
Generator EPA ID: CAL000432907
Name: MAJESTIC TERMINAL SERVICES
Address: 2300 E AIRPORT DR
Address 2: Not reported
City: ONTARIO
Zip: 92860
Telephone: 800-535-5053
Contact: Not reported
Contact Telephone: 909-314-9758
Transporter 1 EPA ID: CAR000129254
Transporter 1 Emergency Number: Not reported
Transporter 2 EPA ID: CAR000183574
Transporter 2 Emergency Number: Not reported
TSDF EPA ID: AZR000520478
TSDF Name: ENVIRONMENTAL WASTE SOLUTIONS, INC.
TSDF Address 1: 31915 INDUSTRIAL LANE
TSDF Address 2: Not reported
TSDF City: PAKER
TSDF Zip: 85344
TSDF Telephone: Not reported

State:
Year: 2020
EM Manifest ID: a5ebc832-7a98-4831-a02d-dcb1fd12cdad
Generator EPA ID: CAL000432907
Shipment Date: 2020-01-15
Manifest Number: 006201713GBF
Line Number: 1
Method Code: H141

MAJESTIC TERMINAL SERVICES (Continued) **S124920069**

Quantity Tons:	0.15000
Quantity Waste:	300.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Metal drums, barrels, kegs
Quantity Type:	Pounds
State Code:	352

CERS:

Name:	PRIMEFLIGHT CARGO
Address:	2300 E AIRPORT DR
City,State,Zip:	ONTARIO, CA 91761
Site ID:	611765
CERS ID:	10896028
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	611765
Site Name:	PrimeFlight Cargo
Violation Date:	03-17-2022
Citation:	Un-Specified
Violation Description:	Hazardous Waste Generator Program - Administration/Documentation - General Local Ordinance
Violation Notes:	OBSERVATION: The facility generates hazardous waste from maintenance activities and did not obtain a hazardous waste permit. CORRECTIVE ACTION: Submit payment upon receipt of invoice.
Violation Division:	San Bernardino County Fire Department
Violation Program:	HW
Violation Source:	CERS,

Site ID:	611765
Site Name:	PrimeFlight Cargo
Violation Date:	03-17-2022
Citation:	HSC 6.95 25507 - California Health and Safety Code, Chapter 6.95, Section(s) 25507
Violation Description:	Failure to adequately establish and implement a business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes:	Returned to compliance on 04/11/2022. OBSERVATION: The facility has not established and implemented a hazardous materials business plan in CERS. CORRECTIVE ACTION: Establish and implement a complete business plan in CERS.
Violation Division:	San Bernardino County Fire Department
Violation Program:	HMRRP
Violation Source:	CERS,

Site ID:	611765
Site Name:	PrimeFlight Cargo
Violation Date:	03-17-2022
Citation:	Un-Specified
Violation Description:	Business Plan Program - Administration/Documentation - General Local Ordinance
Violation Notes:	OBSERVATION: The facility stores hazardous materials above the reportable quantities and did not obtain a hazardous materials permit. CORRECTIVE ACTION: Submit payment upon receipt of the invoice.
Violation Division:	San Bernardino County Fire Department

MAJESTIC TERMINAL SERVICES (Continued) **S124920069**

Violation Program: HMRRP
Violation Source: CERS,

Site ID: 611765
Site Name: PrimeFlight Cargo
Violation Date: 03-17-2022
Citation: 40 CFR 1 265.174 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.174
Violation Description: Failure to inspect hazardous waste storage areas at least weekly and look for leaking and deteriorating containers.
Violation Notes: Returned to compliance on 04/11/2022. OBSERVATION: A weekly inspection of the hazardous waste collection area has not been conducted. A template was provided. CORRECTIVE ACTION: Submit a signed certificate of compliance indicating that the hazardous waste storage area is being inspected weekly.
Violation Division: San Bernardino County Fire Department
Violation Program: HW
Violation Source: CERS,

Site ID: 611765
Site Name: PrimeFlight Cargo
Violation Date: 03-17-2022
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description: Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes: Returned to compliance on 03/17/2022. OBSERVATION: The drum of waste coolant was observed missing a hazardous waste label and the drum of waste oil was missing the accumulation start date. CORRECTIVE ACTION: Properly label all hazardous waste containers. This was corrected during the inspection.
Violation Division: San Bernardino County Fire Department
Violation Program: HW
Violation Source: CERS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-17-2022
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-17-2022
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

MAJESTIC TERMINAL SERVICES (Continued) **S124920069**

Affiliation:

Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	9568 Archibald Ave, Suite 100
Affiliation City:	Rancho Cucamonga
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	91730
Affiliation Phone:	,

Affiliation Type Desc:	Operator
Entity Name:	PrimeFlight Cargo
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(909) 390-1210,

Affiliation Type Desc:	Parent Corporation
Entity Name:	PrimeFlight Cargo
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Document Preparer
Entity Name:	Fransico Audelo
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Environmental Contact
Entity Name:	Fransico Xavier Audelo
Entity Title:	Not reported
Affiliation Address:	9568 Archibald Ave, Suite 100
Affiliation City:	Rancho Cucamonga
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	91730
Affiliation Phone:	,

Affiliation Type Desc:	Legal Owner
Entity Name:	Wayne Ingle
Entity Title:	Not reported
Affiliation Address:	Three Sugar Creek Cr
Affiliation City:	Sugar Land
Affiliation State:	TX

MAJESTIC TERMINAL SERVICES (Continued) **S124920069**

Affiliation Country:	United States
Affiliation Zip:	77478
Affiliation Phone:	(734) 626-5175,
Affiliation Type Desc:	CUPA District
Entity Name:	San Bernardino County Fire
Entity Title:	Not reported
Affiliation Address:	620 South E Street
Affiliation City:	San Bernardino
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92415-0153
Affiliation Phone:	(909) 386-8401,
Affiliation Type Desc:	Identification Signer
Entity Name:	Fransico Audelo
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

C8 **PRIME FLIGHT CARGO** **RCRA NonGen / NLR** **1026493177**
South **2300 EAST AIRPORT DR** **CAL000457984**
< 1/8 **ONTARIO, CA 91761**
0.069 mi.
362 ft. **Site 3 of 5 in cluster C**

Relative: **Lower**

Actual: **954 ft.**

RCRA Listings:

Date Form Received by Agency:	20201103
Handler Name:	Prime Flight Cargo
Handler Address:	2300 EAST AIRPORT DR
Handler City,State,Zip:	ONTARIO, CA 91761
EPA ID:	CAL000457984
Contact Name:	FRANK AUDELO
Contact Address:	9568 ARCHIBALD AVE STE 100
Contact City,State,Zip:	RANCHO CUCAMONGA, CA 91730
Contact Telephone:	734-626-5175
Contact Fax:	Not reported
Contact Email:	FAUDELO@PRIMEFLIGHT.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	9568 ARCHIBALD AVE STE 100
Mailing City,State,Zip:	RANCHO CUCAMONGA, CA 91730
Owner Name:	Wayne Ingle
Owner Type:	Other
Operator Name:	Frank Audelo

PRIME FLIGHT CARGO (Continued) **1026493177**

Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20201106
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name: FRANK AUDELO	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	9568 ARCHIBALD AVE STE 100
Owner/Operator City,State,Zip:	RANCHO CUCAMONGA, CA 91730
Owner/Operator Telephone:	734-626-5175
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner

PRIME FLIGHT CARGO (Continued) **1026493177**

Owner/Operator Name: WAYNE INGLE
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 3 SUGAR CREEK CENTER BLVD STE 450
Owner/Operator City,State,Zip: SUGAR LAND, TX 77478
Owner/Operator Telephone: 734-626-5175
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20201103
Handler Name: PRIME FLIGHT CARGO
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 811420
NAICS Description: REUPHOLSTERY AND FURNITURE REPAIR

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

C9 **MAJESTIC TERMINAL SERVICES** **RCRA NonGen / NLR** **1024864346**
South **2300 E AIRPORT DR** **CAL000432907**
< 1/8 **ONTARIO, CA 92860**
0.069 mi.
362 ft. **Site 4 of 5 in cluster C**

Relative: **Lower**
Actual: **954 ft.**

RCRA Listings:
Date Form Received by Agency: 20180103
Handler Name: Majestic Terminal Services
Handler Address: 2300 E AIRPORT DR
Handler City,State,Zip: ONTARIO, CA 92860
EPA ID: CAL000432907
Contact Name: AIMEE BRIDGES
Contact Address: 2300 E AIRPORT DR
Contact City,State,Zip: ONTARIO, CA 92860
Contact Telephone: 909-314-9758
Contact Fax: 909-390-4780
Contact Email: AIMEE.BRIDGES@MAJESTICTERMINALSERVICES.COM
Contact Title: Not reported
EPA Region: 09

MAJESTIC TERMINAL SERVICES (Continued) **1024864346**

Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	15127 MAIN ST E STE 104 PMB 217
Mailing City,State,Zip:	SUMNER, WA 98390
Owner Name:	Brian Cella
Owner Type:	Other
Operator Name:	Aimee Bridges
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20180907
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

MAJESTIC TERMINAL SERVICES (Continued) **1024864346**

Handler - Owner Operator:
Owner/Operator Indicator: Owner
Owner/Operator Name: BRIAN CELLA
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 15127 MAIN ST E STE 104 PMB 217
Owner/Operator City,State,Zip: SUMNER, WA 98390
Owner/Operator Telephone: 253-862-1269
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: AIMEE BRIDGES
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 2300 E AIRPORT DR
Owner/Operator City,State,Zip: ONTARIO, CA 92860
Owner/Operator Telephone: 909-314-9758
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20180103
Handler Name: MAJESTIC TERMINAL SERVICES
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 711410
NAICS Description: AGENTS AND MANAGERS FOR ARTISTS, ATHLETES, ENTERTAINERS, AND OTHER PUBLIC FIGURES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

C10 **PF CARGO-ONT** **RCRA-SQG 1027702938**
South **PFAS ECHO CAR000352476**
< 1/8 **ONTARIO, CA**
0.069 mi.
362 ft. **Site 5 of 5 in cluster C**

Relative: **Lower**

Actual: **954 ft.**

RCRA Listings:

Date Form Received by Agency:	20230325
Handler Name:	Pf Cargo-Ont
Handler Address:	EAST AIRPORT DRIVE
Handler City,State,Zip:	ONTARIO, CA 91761
EPA ID:	CAR000352476
Contact Name:	ROBB HINRICHS
Contact Address:	EAST AIRPORT DRIVE
Contact City,State,Zip:	ONTARIO, CA 91761
Contact Telephone:	951-241-9204
Contact Fax:	Not reported
Contact Email:	RHINRICHS@PRIMEFLIGHT.COM
Contact Title:	GENERAL MANAGER
EPA Region:	09
Land Type:	Municipal
Federal Waste Generator Description:	Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	ARCHIBALD AVE
Mailing City,State,Zip:	RANCHO CUCAMONGA, CA 91730
Owner Name:	Ontario International Airport
Owner Type:	Municipal
Operator Name:	Primeflight Aviation Services
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No

PF CARGO-ONT (Continued) **1027702938**

Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20230328
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Hazardous Waste Summary:

Waste Code:	D001
Waste Description:	Ignitable Waste
Waste Code:	D002
Waste Description:	Corrosive Waste

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	ONTARIO INTERNATIONAL AIRPORT
Legal Status:	Municipal
Date Became Current:	20230316
Date Ended Current:	Not reported
Owner/Operator Address:	2900 EAST AIRPORT DRIVE
Owner/Operator City,State,Zip:	ONTARIO, CA 91761
Owner/Operator Telephone:	909-544-5300
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	ATLF.ELKADI'S@FLYONTARIO.COM
Owner/Operator Indicator:	Operator
Owner/Operator Name:	PRIMEFLIGHT AVIATION SERVICES
Legal Status:	Private
Date Became Current:	20190628
Date Ended Current:	Not reported
Owner/Operator Address:	3 SUGAR CREEK CENTER BLVD
Owner/Operator City,State,Zip:	SUGAR LAND, TX 77478
Owner/Operator Telephone:	281-942-6800
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	SAFETY@PRIMEFLIGHT.COM

Historic Generators:

Receive Date:	20230325
Handler Name: PF CARGO-ONT	
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No

PF CARGO-ONT (Continued) **1027702938**

Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	No
Electronic Manifest Broker:	No

List of NAICS Codes and Descriptions:

NAICS Code:	488119
NAICS Description:	OTHER AIRPORT OPERATIONS

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

PFAS ECHO:

Name:	PF CARGO-ONT
Address:	Not reported
City,State,Zip:	ONTARIO, CA
Latitude:	34.062238
Longitude:	-117.60373
Count:	1
County:	SAN BERNARDINO
Status:	Active
Region:	09
Industry:	Airports
ECHO Facility Report:	https://echo.epa.gov/detailed-facility-report?fid=110071414134
Facility Percent Minority:	81.657
Facility Derived Tribes:	San Manuel Band of Mission Indians, California - 22.2 mile(s), San Manuel Band of Mission Indians, California - 22.3 mile(s)
Facility Population:	4200.57
EPA Programs:	RCRA
Federal Facility:	No
Federal Agency:	-
Facility FIPS Code:	06071
Facility Indian Country Flag:	N
Facility Collection Method:	GDT-ADDRESS MATCHING (GEOCODING)
Facility Derived HUC:	18070203
Facility Derived WBD:	180702030704
Facility Derived CD113:	35
Facility Derived CB2010:	060710016002026
Facility Major Flag:	-
Facility Active Flag:	Y
Facility Inspection Count:	0
Facility Date Last Inspection:	-
Facility Days Last Inspection:	-
Facility Informal Count:	0
Facility Date Last Informal Action:	-
Facility Formal Action Count:	0
Facility Date Last Formal Action:	-
Facility Total Penalties:	0
Facility Penalty Count:	-

PF CARGO-ONT (Continued) **1027702938**

Facility Date Last Penalty:	-
Facility Last Penalty AMT:	-
Facility QTRS With NC:	0
Facility Programs With SNC:	0
Facility Compliance Status:	No Violation Identified
Facility SNC Flag:	N
AIR Flag:	N
NPDES Flag:	N
SDWIS Flag:	N
RCRA Flag:	Y
TRI Flag:	N
GHG Flag:	N
AIR IDS:	-
CAA Permit Types:	-
CAA NAICS:	-
CAA SICS:	-
NPDES IDS:	-
CWA Permit Types:	-
CWA NAICS:	-
CWA SICS:	-
RCRA IDS:	CAR000352476
RCRA Permit Types:	SQG
RCRA NAICS:	488119
SDWA IDS:	-
SDWA System Types:	-
SDWA Compliance Status:	-
SDWA SNC Flag:	N
TRI IDS:	-
TRI Releases Transfers:	-
TRI On Site Releases:	-
TRI Off Site Transfers:	-
TRI Reporter:	-
Facility IMP Water Flag:	-
EJSCREEN Flag US:	Y
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-117.60373,%22y%22:34.062238,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1

B11 **L D KING INC** **CA San Bern. Co. Permit** **S102682127**
NW **2151 E CONVENTION CENTER WAY STE. 100** **N/A**
< 1/8 **ONTARIO, CA 91764**
0.071 mi.
374 ft. **Site 2 of 2 in cluster B**

Relative: **Higher**

Actual: **971 ft.**

San Bern. Co. Permit:

Name:	L D KING INC
Address:	2151 E CONVENTION CENTER WAY STE. 100
City,State,Zip:	ONTARIO, CA 91764
Region:	SAN BERNARDINO
Facility ID:	FA0004325
Owner:	L D KING INC
Permit Number:	PT0008641
Permit Category:	CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR
Facility Status:	INACTIVE
Expiration Date:	08/31/2005

12
SE
< 1/8
0.087 mi.
461 ft.

ONTARIO WELL #29
2400 E AIRPORT DR
ONTARIO, CA 91761

CA San Bern. Co. Permit

S103367692
N/A

Relative:
Lower

Actual:
951 ft.

San Bern. Co. Permit:

Name:	ONTARIO WELL #29
Address:	2400 E AIRPORT DR
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO
Facility ID:	FA0002048
Owner:	CITY OF ONTARIO
Permit Number:	PT0009317
Permit Category:	HAZMAT HANDLER 0-10 EMPLOYEES
Facility Status:	INACTIVE
Expiration Date:	09/30/2012

Name:	ONTARIO WELL #29
Address:	2400 E AIRPORT DR
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO
Facility ID:	FA0002048
Owner:	CITY OF ONTARIO
Permit Number:	PT0009316
Permit Category:	CALARP FACILITY PERMIT
Facility Status:	INACTIVE
Expiration Date:	09/30/2006

13
ESE
< 1/8
0.105 mi.
555 ft.

CITY ONTARIO WELL GUASTI
2400 E GUASTI ROAD
ONTARIO, CA 91761

RCRA NonGen / NLR

1026822841
CAC003135817

Relative:
Lower

Actual:
955 ft.

RCRA Listings:

Date Form Received by Agency:	20210824
Handler Name:	City Ontario Well Guasti
Handler Address:	2400 E GUASTI ROAD
Handler City,State,Zip:	ONTARIO, CA 91761
EPA ID:	CAC003135817
Contact Name:	MAN SANDOVAL
Contact Address:	340 S LEMON AVE SUITE 5210
Contact City,State,Zip:	WALNUT, CA 91789
Contact Telephone:	844-252-2677
Contact Fax:	Not reported
Contact Email:	ZHERNANDEZ@SIGNALRESTORATION.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	303 EAST B STREET
Mailing City,State,Zip:	ONTARIO, CA 91764
Owner Name:	City Of Ontartio

CITY ONTARIO WELL GUASTI (Continued) **1026822841**

Owner Type:	Other
Operator Name:	Man Sandoval
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20210824
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name: MAN SANDOVAL	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	340 S LEMON AVE SUITE 5210
Owner/Operator City,State,Zip:	WALNUT, CA 91789
Owner/Operator Telephone:	844-252-2677
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

CITY ONTARIO WELL GUASTI (Continued) **1026822841**

Owner/Operator Indicator: Owner
Owner/Operator Name: CITY OF ONTARTIO
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 303 EAST B STREET
Owner/Operator City,State,Zip: ONTARIO, CA 91764
Owner/Operator Telephone: 909-395-2000
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20210824
Handler Name: CITY ONTARIO WELL GUASTI
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

14
West
< 1/8
0.109 mi.
573 ft.

RADISSON, ONTARIO AIRPORT **CA San Bern. Co. Permit** **S106230113**
2200 E HOLT BLVD **N/A**
ONTARIO, CA 91761

Relative:
Higher

Actual:
966 ft.

San Bern. Co. Permit:
Name: RADISSON, ONTARIO AIRPORT
Address: 2200 E HOLT BLVD
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0008294
Owner: PRIME HOSPITALITY LLC
Permit Number: PT0014501
Permit Category: HAZARDOUS MATERIALS 1-3 CHEMICALS SPECIAL
Facility Status: INACTIVE
Expiration Date: 09/30/2017

D15 **MARK CHRISTOPHER AUTO CENTER** **CA UST** **U004263830**
NW **2131 CONVENTION CENTER WAY** **N/A**
1/8-1/4 **ONTARIO, CA 91764**
0.171 mi.
901 ft. **Site 1 of 3 in cluster D**

Relative:
Higher

Actual:
978 ft.

UST:

Name:	MARK CHRISTOPHER AUTO CENTER
Address:	2131 CONVENTION CENTER WAY
City,State,Zip:	ONTARIO, CA 91764
Facility ID:	FA0004585
Permitting Agency:	San Bernardino County Fire Department
CERSID:	10041748
Latitude:	34.0665940
Longitude:	-117.605809
Owner type:	Non-Government
Facility type:	Other
Num of inuse ust:	Not reported
Num of closed ust:	0
Num of oos ust:	0
Epa region:	9
Tribal lands:	No
Tank owner name:	Mark Christopher Auto Center
Tank owner mailing address:	2131 E. Convention Center Way
Tank owner mailing city:	Ontario
Tank owner mailing zip:	91764
Tank owner mailing state:	CA
Tank operator name:	MARK CHRISTOPHER AUTO CENTER
Tank operator mailing address:	2131 CONVENTION CENTER WAY
Tank operator mailing city:	ONTARIO
Tank operator mailing zip:	91764
Tank operator mailing state:	CA
Tankidnumber:	T1/87
Tank status:	Renewal Permit
Tank configuration:	One in a Compartmented Unit
Tank closure date:	Not reported
Tank installation date:	10/7/1991 12:00:00 AM
Tank num of compartments:	2
Tank contents:	Regular Unleaded
Tank capacity gallons:	4000
Tank type:	Double Wall
Tank pc construction:	Steel
Tank pwpiping construction:	Fiberglass
Tank piping type:	23 CCR S2636(a)(3) Suction
Tank piping construction:	Double Walled
Tank sacrificial anode:	No
Tank cp impressed current:	No
Tank cp shutoff:	No
Tank alarms:	Yes
Tank ball float:	Yes
Tank spill bucket:	Yes

Name:	MARK CHRISTOPHER AUTO CENTER
Address:	2131 CONVENTION CENTER WAY
City,State,Zip:	ONTARIO, CA 91764
Facility ID:	FA0004585
Permitting Agency:	San Bernardino County Fire Department
CERSID:	10041748
Latitude:	34.0665940

MARK CHRISTOPHER AUTO CENTER (Continued) **U004263830**

Longitude:	-117.605809
Owner type:	Non-Government
Facility type:	Other
Num of inuse ust:	Not reported
Num of closed ust:	0
Num of oos ust:	0
Epa region:	9
Tribal lands:	No
Tank owner name:	Mark Christopher Auto Center
Tank owner mailing address:	2131 E. Convention Center Way
Tank owner mailing city:	Ontario
Tank owner mailing zip:	91764
Tank owner mailing state:	CA
Tank operator name:	MARK CHRISTOPHER AUTO CENTER
Tank operator mailing address:	2131 CONVENTION CENTER WAY
Tank operator mailing city:	ONTARIO
Tank operator mailing zip:	91764
Tank operator mailing state:	CA
Tankidnumber:	T2 waste oil
Tank status:	Confirmed/Updated Information
Tank configuration:	One in a Compartmented Unit
Tank closure date:	Not reported
Tank installation date:	10/7/1991 12:00:00 AM
Tank num of compartments:	2
Tank contents:	Used Oil
Tank capacity gallons:	2000
Tank type:	Double Wall
Tank pc construction:	Steel
Tank pwpiping construction:	Fiberglass
Tank piping type:	Gravity
Tank piping construction:	Double Walled
Tank sacrificial anode:	No
Tank cp impressed current:	No
Tank cp shutoff:	No
Tank alarms:	Yes
Tank ball float:	Yes
Tank spill bucket:	Yes

D16
NW
1/8-1/4
0.171 mi.
901 ft.

Relative:
Higher

Actual:
978 ft.

MARK CHRISTOPHER CHEVROLET
2131 E D ST
ONTARIO, CA 91764

Site 2 of 3 in cluster D

RCRA-SQG **1000266136**
CA UST **CAD044336741**
CA AST
CA CERS HAZ WASTE
CA SWEEPS UST
CA HIST UST
CA CERS TANKS
CA FID UST
FINDS
ECHO
CA EMI
CA San Bern. Co. Permit
CA CERS

RCRA Listings:

Date Form Received by Agency:	19960901
Handler Name:	Mark Christopher Chevrolet
Handler Address:	2131 E D ST
Handler City,State,Zip:	ONTARIO, CA 91764
EPA ID:	CAD044336741

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Contact Name:	Not reported
Contact Address:	Not reported
Contact City,State,Zip:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Ca
State District:	4
Mailing Address:	2131 E D ST
Mailing City,State,Zip:	ONTARIO, CA 91764
Owner Name:	Not reported
Owner Type:	Not reported
Operator Name:	Not Required
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20060905
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name: NOT REQUIRED	
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name: NOT REQUIRED	
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name: CHUCK LEGGIO	
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	19960901
Handler Name: MARK CHRISTOPHER CHEVROLET	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Ca
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Electronic Manifest Broker: Not reported

Receive Date: 19960901
Handler Name: MARK CHRISTOPHER CHEVROLET
Federal Waste Generator Description: Small Quantity Generator
State District Owner: Ca
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19851021
Handler Name: MARK CHRISTOPHER CHEVROLET
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Ca
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19900313
Handler Name: MARK CHRISTOPHER CHEVROLET
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19920217
Handler Name: MARK CHRISTOPHER CHEVROLET
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 44111
NAICS Description: NEW CAR DEALERS

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

UST:

Name:	MARK CHRISTOPHER CHEV INC
Address:	2131 E CONVENTION CENTER WAY
City,State,Zip:	ONTARIO, CA 91764
Facility ID:	86008986
Permitting Agency:	SAN BERNARDINO COUNTY
CERSID:	Not reported
Latitude:	34.0689606
Longitude:	-117.6027028
Owner type:	Not reported
Facility type:	Not reported
Num of inuse ust:	Not reported
Num of closed ust:	Not reported
Num of oos ust:	Not reported
Epa region:	Not reported
Tribal lands:	Not reported
Tank owner name:	Not reported
Tank owner mailing address:	Not reported
Tank owner mailing city:	Not reported
Tank owner mailing zip:	Not reported
Tank owner mailing state:	Not reported
Tank operator name:	Not reported
Tank operator mailing address:	Not reported
Tank operator mailing city:	Not reported
Tank operator mailing zip:	Not reported
Tank operator mailing state:	Not reported
Tankidnumber:	Not reported
Tank status:	Not reported
Tank configuration:	Not reported
Tank closure date:	Not reported
Tank installation date:	Not reported
Tank num of compartments:	Not reported
Tank contents:	Not reported
Tank capacity gallons:	Not reported
Tank type:	Not reported
Tank pc construction:	Not reported
Tank pwpiping construction:	Not reported
Tank piping type:	Not reported
Tank piping construction:	Not reported
Tank sacrificial anode:	Not reported
Tank cp impressed current:	Not reported
Tank cp shutoff:	Not reported
Tank alarms:	Not reported
Tank ball float:	Not reported
Tank spill bucket:	Not reported

AST:
Name: MARK CHRISTOPHER AUTO CENTER

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Address:	2131 CONVENTION CENTER WAY
City/Zip:	ONTARIO,
Certified Unified Program Agencies:	San Bernardino
Owner:	MARK & CHRIS LEGGIO
Total Gallons:	2,300
CERSID:	Not reported
Facility ID:	Not reported
Business Name:	Not reported
Phone:	Not reported
Fax:	Not reported
Mailing Address:	Not reported
Mailing Address City:	Not reported
Mailing Address State:	Not reported
Mailing Address Zip Code:	Not reported
Operator Name:	Not reported
Operator Phone:	Not reported
Owner Phone:	Not reported
Owner Mail Address:	Not reported
Owner State:	Not reported
Owner Zip Code:	Not reported
Owner Country:	Not reported
Property Owner Name:	Not reported
Property Owner Phone:	Not reported
Property Owner Mailing Address:	Not reported
Property Owner City:	Not reported
Property Owner Stat :	Not reported
Property Owner Zip Code:	Not reported
Property Owner Country:	Not reported
EPAID:	Not reported

Name:	MARK CHRISTOPHER AUTO CENTER
Address:	2131 CONVENTION CENTER WAY
City/Zip:	ONTARIO,91764
Certified Unified Program Agencies:	Not reported
Owner:	MARK CHRISTOPHER AUTO CENTER
Total Gallons:	Not reported
CERSID:	10041748
Facility ID:	FA0004585
Business Name:	MARK CHRISTOPHER AUTO CENTER
Phone:	(909) 390-2900
Fax:	(909) 390-2956
Mailing Address:	2131 CONVENTION CENTER WAY
Mailing Address City:	ONTARIO
Mailing Address State:	CA
Mailing Address Zip Code:	91764
Operator Name:	Mark & Chris Leggio
Operator Phone:	(909) 390-2900
Owner Phone:	(909) 390-2900
Owner Mail Address:	2131 CONVENTION CENTER WAY
Owner State:	CA
Owner Zip Code:	Not reported
Owner Country:	United States
Property Owner Name:	MARK CHRISTOPHER AUTO CENTER
Property Owner Phone:	(909) 390-2900
Property Owner Mailing Address:	2131 CONVENTION CENTER WAY
Property Owner City:	ONTARIO
Property Owner Stat :	CA

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Property Owner Zip Code: 91764
Property Owner Country: United States
EPAID: CAD044336741

CERS HAZ WASTE:
Name: MARK CHRISTOPHER AUTO CENTER
Address: 2131 CONVENTION CENTER WAY
City,State,Zip: ONTARIO, CA 91764
Site ID: 46662
CERS ID: 10041748
CERS Description: Hazardous Waste Generator

SWEEPS UST:
Name: MARK CHRISTOPHER CHEVROLET INC
Address: 2131 E D ST
City: ONTARIO
Status: Active
Comp Number: 1210
Number: 9
Board Of Equalization: 44-019794
Referral Date: 09-04-91
Action Date: 09-04-91
Created Date: 02-29-88
Owner Tank Id: 1
SWRCB Tank Id: 36-000-001210-000001
Tank Status: A
Capacity: 6000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: 3

Name: MARK CHRISTOPHER CHEVROLET INC
Address: 2131 E D ST
City: ONTARIO
Status: Active
Comp Number: 1210
Number: 9
Board Of Equalization: 44-019794
Referral Date: 09-04-91
Action Date: 09-04-91
Created Date: 02-29-88
Owner Tank Id: 3
SWRCB Tank Id: 36-000-001210-000002
Tank Status: A
Capacity: 250
Active Date: 07-01-85
Tank Use: OIL
STG: W
Content: WASTE OIL
Number Of Tanks: Not reported

Name: MARK CHRISTOPHER CHEVROLET INC
Address: 2131 E D ST
City: ONTARIO

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Status: Active
Comp Number: 1210
Number: 9
Board Of Equalization: 44-019794
Referral Date: 09-04-91
Action Date: 09-04-91
Created Date: 02-29-88
Owner Tank Id: 2
SWRCB Tank Id: 36-000-001210-000003
Tank Status: A
Capacity: 2000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

HIST UST:
Name: MARK CHRISTOPHER CHEVROLET INC
Address: 2131 EAST D STREET
City,State,Zip: ONTARIO, CA 91764
File Number: 0002a218
URL: https://documents.geotracker.waterboards.ca.gov/ustpdfs/pdf/0002a218.pdf
Region: STATE
Facility ID: 00000001210
Facility Type: Other
Other Type: CAR DEALER
Contact Name: RENE JONES
Telephone: 7149830017
Owner Name: MARK CHRISTOPHER CHEVROLET INC
Owner Address: 2131 EAST D STREET
Owner City,St,Zip: ONTARIO, CA 91764
Total Tanks: 0003

Tank Num: 001
Container Num: 1
Year Installed: 1981
Tank Capacity: 00006000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: Not reported
Leak Detection: Visual

Tank Num: 002
Container Num: 3
Year Installed: Not reported
Tank Capacity: 00000250
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Container Construction Thickness: Not reported
Leak Detection: Visual

Tank Num: 003
Container Num: 2
Year Installed: 1981
Tank Capacity: 00002000
Tank Used for: PRODUCT

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Type of Fuel: DIESEL
Container Construction Thickness: Not reported
Leak Detection: Visual

Click here for Geo Tracker PDF:

CERS TANKS:
Name: MARK CHRISTOPHER AUTO CENTER
Address: 2131 CONVENTION CENTER WAY
City,State,Zip: ONTARIO, CA 91764
Site ID: 46662
CERS ID: 10041748
CERS Description: Aboveground Petroleum Storage

Name: MARK CHRISTOPHER AUTO CENTER
Address: 2131 CONVENTION CENTER WAY
City,State,Zip: ONTARIO, CA 91764
Site ID: 46662
CERS ID: 10041748
CERS Description: Underground Storage Tank

CA FID UST:
Facility ID: 36002031
Regulated By: UTNKA
Regulated ID: 00001210
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 7149830017
Mail To: Not reported
Mailing Address: 2131 E D ST
Mailing Address 2: Not reported
Mailing City,St,Zip: ONTARIO 91764
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

FINDS:
Registry ID: 110002645638

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:
The Resource Conservation and Recovery Act Information System (RCRAInfo) is EPA's comprehensive information system in support of the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. It tracks many types of information about generators, transporters, treaters, storers, and disposers of hazardous waste.
California's Hazardous Waste Tracking System Data Mart (HWTS-DATAMART) provides information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000266136
Registry ID:	110002645638
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110002645638
Name:	MARK CHRISTOPHER CHEVROLET
Address:	2131 E D ST
City,State,Zip:	ONTARIO, CA 91764

EMI:

Name:	MARK CHRISTOPHER CHEVROLET
Address:	2131 E D ST
City,State,Zip:	ONTARIO, CA 91764
Year:	1995
County Code:	36
Air Basin:	SC
Facility ID:	3112
Air District Name:	SC
SIC Code:	5511
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	8
Reactive Organic Gases Tons/Yr:	7
Carbon Monoxide Emissions Tons/Yr:	2
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	MARK CHRISTOPHER CHEVROLET
Address:	2131 E D ST
City,State,Zip:	ONTARIO, CA 91764
Year:	1996
County Code:	36
Air Basin:	SC
Facility ID:	3112
Air District Name:	SC
SIC Code:	5511
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	7
Reactive Organic Gases Tons/Yr:	5
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

San Bern. Co. Permit:

Name:	MARK CHRISTOPHER AUTO CENTER
Address:	2131 CONVENTION CENTER WAY
City,State,Zip:	ONTARIO, CA 91764

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Region: SAN BERNARDINO
Facility ID: FA0004585
Owner: MARK CHRISTOPHER AUTO CENTER
Permit Number: PT0012832
Permit Category: APSA 1,320-10,000 GAL FAC CAPACITY
Facility Status: ACTIVE
Expiration Date: 10/31/2023

Name: MARK CHRISTOPHER AUTO CENTER
Address: 2131 CONVENTION CENTER WAY
City,State,Zip: ONTARIO, CA 91764
Region: SAN BERNARDINO
Facility ID: FA0004585
Owner: MARK CHRISTOPHER AUTO CENTER
Permit Number: PT0002303
Permit Category: HAZARDOUS MATERIALS 11-30 CHEMICALS
Facility Status: ACTIVE
Expiration Date: 10/31/2023

Name: MARK CHRISTOPHER AUTO CENTER
Address: 2131 CONVENTION CENTER WAY
City,State,Zip: ONTARIO, CA 91764
Region: SAN BERNARDINO
Facility ID: FA0004585
Owner: MARK CHRISTOPHER AUTO CENTER
Permit Number: PT0002304
Permit Category: LARGE QUANTITY GENERATOR
Facility Status: ACTIVE
Expiration Date: 10/31/2023

Name: MARK CHRISTOPHER AUTO CENTER
Address: 2131 CONVENTION CENTER WAY
City,State,Zip: ONTARIO, CA 91764
Region: SAN BERNARDINO
Facility ID: FA0004585
Owner: MARK CHRISTOPHER AUTO CENTER
Permit Number: PT0011852
Permit Category: REGULAR UST ANNUAL INSPECTION (PER TANK)
Facility Status: ACTIVE
Expiration Date: 10/31/2023

Name: MARK CHRISTOPHER AUTO CENTER
Address: 2131 CONVENTION CENTER WAY
City,State,Zip: ONTARIO, CA 91764
Region: SAN BERNARDINO
Facility ID: FA0004585
Owner: MARK CHRISTOPHER AUTO CENTER
Permit Number: PT0011853
Permit Category: REGULAR UST ANNUAL INSPECTION (PER TANK)
Facility Status: ACTIVE
Expiration Date: 10/31/2023

Name: MARK CHRISTOPHER AUTO CENTER
Address: 2131 CONVENTION CENTER WAY
City,State,Zip: ONTARIO, CA 91764
Region: SAN BERNARDINO
Facility ID: FA0004585

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Owner: MARK CHRISTOPHER AUTO CENTER
Permit Number: PT0020324
Permit Category: EPCRA FACILITY
Facility Status: INACTIVE
Expiration Date: 10/31/2013

CERS:
Name: MARK CHRISTOPHER AUTO CENTER
Address: 2131 CONVENTION CENTER WAY
City,State,Zip: ONTARIO, CA 91764
Site ID: 46662
CERS ID: 10041748
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 46662
Site Name: MARK CHRISTOPHER AUTO CENTER
Violation Date: 03-09-2022
Citation: 23 CCR 16 2715(c)(4) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(c)(4)
Violation Description: Failure to maintain a list of employees trained by the designated operator on-site or off-site at a readily available location, if approved by the UPA. For training that occurs on or after October 1, 2018, failure to maintain a copy of the "Facility Employee Training Certificate" on-site or off-site at a readily available location, if approved by the UPA.
Violation Notes: Returned to compliance on 03/30/2022. OBSERVATION: At the time of document review, UST employee training documentation records were not in the UST Compliance binder. CORRECTIVE ACTION: Provide UST employee training documentation within 30 days.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 46662
Site Name: MARK CHRISTOPHER AUTO CENTER
Violation Date: 03-09-2022
Citation: 23 CCR 16 2716(f) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2716(f)
Violation Description: Failure to maintain on-site, or off-site at a readily available location if approved by the UPA, copies of Designated Operator inspection records as follows: Designated operator monthly inspection records for inspections performed before October 1, 2018 must be kept for 12 months from the month of inspection. For inspections performed on or after October 1, 2018, copies of the "Designated Underground Storage Tank Operator Visual Inspection Report" must be kept for 36 months from the month of inspection.
Violation Notes: Returned to compliance on 04/05/2022. OBSERVATION: At the time of document review, observed that the Designated Operator Monthly Inspection Report for January 2022 was missing from the UST Compliance Binder. CORRECTIVE ACTION: Provide the Designated Operator Monthly Inspection Report for January 2022 within 30 days and place the copy in the UST Compliance Binder.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Site ID:	46662
Site Name:	MARK CHRISTOPHER AUTO CENTER
Violation Date:	10-24-2018
Citation:	HSC 6.67 25270.4.5 (a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5 (a)
Violation Description:	Failure to complete a review and evaluation of the SPCC Plan at least once every five years, document the completion of the review, and sign a statement as to whether the SPCC Plan will be amended.
Violation Notes:	Returned to compliance on 11/16/2018. OBSERVATION: The most recent SPCC plan was dated 9/30/2010 by a professional engineer. A revision certification was not found. CORRECTIVE ACTION: Submit a signed statement indicating that the 5-year review has been performed, documented and SPCC plan amended if necessary.
Violation Division:	San Bernardino County Fire Department
Violation Program:	APSA
Violation Source:	CERS,

Site ID:	46662
Site Name:	MARK CHRISTOPHER AUTO CENTER
Violation Date:	03-23-2015
Citation:	23 CCR 16 2665 - California Code of Regulations, Title 23, Chapter 16, Section(s) 2665
Violation Description:	Failure of the overfill prevention system to meet one of the following requirements: 1. Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or 2. Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or 3. Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or 4. Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling.
Violation Notes:	Returned to compliance on 03/23/2015. VISUAL ALARM (LIGHT) AT EXTERNAL ENUNCIATOR FAILED TO PROPERLY OPERATE WHEN TESTED. COMPLIANCE REQUIREMENT: LIGHT WAS REPAIRED AND DEVICE WAS RETESTED. VIOLATION CORRECTED.
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,

Site ID:	46662
Site Name:	MARK CHRISTOPHER AUTO CENTER
Violation Date:	03-31-2023
Citation:	23 CCR 16 2635(e)(8) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2635(e)(8)
Violation Description:	Failure to submit as-built plans for the location and orientation of the tanks and appurtenant piping systems for new installations and/or with the permit application.
Violation Notes:	OBSERVATION: At the time of inspection, the fill sump for T1 (Regular) was hydrostatically tested. CORRECTIVE ACTION: Submit as built plans for the SB989 repairs that were done to the fill sump for T1 (Regular) within 30 days.
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Site ID:	46662
Site Name:	MARK CHRISTOPHER AUTO CENTER
Violation Date:	10-24-2018
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes:	Returned to compliance on 10/25/2018. OBSERVATION: The hazardous materials inventory was found to be incomplete. Waste filters, parts washer waste, air bags and metal turning wastes were found that were not listed on the plan inventory. CORRECTIVE ACTION: Submit an accurate and complete hazardous materials inventory via CERS to include all routinely generated hazardous waste.
Violation Division:	San Bernardino County Fire Department
Violation Program:	HMRRP
Violation Source:	CERS,

Site ID:	46662
Site Name:	MARK CHRISTOPHER AUTO CENTER
Violation Date:	03-23-2015
Citation:	HSC 6.7 25291 - California Health and Safety Code, Chapter 6.7, Section(s) 25291
Violation Description:	Failure to maintain under-dispenser containment, sumps, and/or other secondary containment in good condition and/or free of debris/liquid.
Violation Notes:	Returned to compliance on 03/23/2015. LIQUID WAS OBSERVED IN 87 AND IN WASTE OIL SUMPS DURING INSPECTION. COMPLIANCE REQUIREMENT: LIQUID WAS REMOVED. VIOLATION WAS CORRECTED DURING INSPECTION
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,

Site ID:	46662
Site Name:	MARK CHRISTOPHER AUTO CENTER
Violation Date:	03-23-2015
Citation:	HSC 6.75 25299.30-25299.34 - California Health and Safety Code, Chapter 6.75, Section(s) 25299.30-25299.34
Violation Description:	Failure to submit and maintain complete and current Certification of Financial Responsibility or other mechanism of financial assurance.
Violation Notes:	Returned to compliance on 04/20/2015. CERTIFICATE OF FINANCIAL RESPONSIBILITY (CFR) WAS NOT AVAILABLE ON CERS DURING INSPECTION. VIOLATION REMAINS OUTSTANDING AND IS RECALCITRANT AND WAS CITED ON 3/25/14 INSPECTION REPORT. COMPLIANCE REQUIREMENT: UPDATE CERS TO REFLECT CURRENT CFR WITHIN 30 DAYS. SUBMIT A SIGNED CERTIFICATE OF COMPLIANCE WITHIN 30 DAYS. 4/7/15 CERS REVIEWED WRONG CFR DOCUMENTATION UPLOADED VIOLATION STILL OUTSTANDING PS CERS UPDATED TO REFLECT CURRENT CFR 4/20 PS
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,

Site ID:	46662
Site Name:	MARK CHRISTOPHER AUTO CENTER
Violation Date:	11-23-2021
Citation:	HSC 6.67 25270.4.5 (a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5 (a)
Violation Description:	Failure to complete a review and evaluation of the SPCC Plan at least

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

	once every five years, document the completion of the review, and sign a statement as to whether the SPCC Plan will be amended.
Violation Notes:	Returned to compliance on 12/07/2021. OBSERVATION: The SPCC plan reviewed on site was stamped on 09/30/2010 by a professional engineer and is expired. CORRECTIVE ACTION: Provide a current SPCC plan using the Tier 1 or Tier2 templates (for sites that have under 10,000 gal of hazardous material) within 30 days.
Violation Division:	San Bernardino County Fire Department
Violation Program:	APSA
Violation Source:	CERS,
Site ID:	46662
Site Name:	MARK CHRISTOPHER AUTO CENTER
Violation Date:	03-25-2014
Citation:	HSC 6.7 25286(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25286(a)
Violation Description:	Failure to prepare, maintain, and submit accurate CUPA UST Operating Permit Application for Facility information and/or Tank information.
Violation Notes:	Returned to compliance on 05/14/2014. THE DUE DATE TO SUBMIT ALL REQUIRED DOCUMENTATION TO THE CALIFORNIA ENVIRONMENTAL REPORTING SYSTEM (CERS) WAS DECEMBER 31, 2013. REQUIREMENT: UPDATE AND SUBMIT THE COMPLETE UST APPLICATION PACKAGE (FACILITY AND TANK INFORMATION) TO CERS WITHIN 30 DAYS. PROVIDE NOTIFICATION TO JKOOYMAN@SBCFIRE.ORG UPON COMPLETION.
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,
Site ID:	46662
Site Name:	MARK CHRISTOPHER AUTO CENTER
Violation Date:	03-25-2014
Citation:	HSC 6.7 Multiple Sections - California Health and Safety Code, Chapter 6.7, Section(s) Multiple Sections
Violation Description:	UST Program - Administration/Documentation - General
Violation Notes:	Returned to compliance on 05/14/2014. Failure to have a written monitoring program with monitoring procedures and response plan. (CCR 2632(d)) REQUIREMENT: UPDATE THE MONITORING PLAN AND UPLOAD THE INFORMATION INTO CERS WITHIN 30 DAYS.
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,
Site ID:	46662
Site Name:	MARK CHRISTOPHER AUTO CENTER
Violation Date:	03-09-2022
Citation:	HSC 6.7 25292.2(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25292.2(a)
Violation Description:	Failure to submit and maintain complete and current Certification of Financial Responsibility or other mechanism of financial assurance.
Violation Notes:	Returned to compliance on 03/14/2022. OBSERVATION: At the time of CERS review, observed that the Certificate of Financial Responsibility dated 02/01/2021 is expired. CORRECTIVE ACTION: Provide a current Certificate of Financial Responsibility on CERS within 30 days.
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Site ID: 46662
Site Name: MARK CHRISTOPHER AUTO CENTER
Violation Date: 03-25-2014
Citation: 23 CCR 16 2665 - California Code of Regulations, Title 23, Chapter 16, Section(s) 2665
Violation Description: Failure to comply with one or more of the following: failure to install a spill bucket, have a functional drain valve or other method for the removal of liquid from the spill bucket/spill container, and/or be resistant to galvanic corrosion.
Violation Notes: Returned to compliance on 04/02/2014. THE OVERSPILL BUCKET FOR THE 87 TANK FAILED TO HOLD LIQUID WHEN TESTED. REQUIREMENT: WITHIN 7 DAYS, REPAIR OR REPLACE THE BUCKET USING LIKE-FOR-LIKE EQUIPMENT. PROVIDE THE A COPY OF THE WORK ORDER DOCUMENTING THE REPAIR AND RETEST TO THIS DEPARTMENT UPON COMPLETION. (attn: JAKE KOOYMAN).
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 46662
Site Name: MARK CHRISTOPHER AUTO CENTER
Violation Date: 03-23-2015
Citation: 23 CCR 16 2715 - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715
Violation Description: Failure to comply with one or more of the designated operator monthly inspection requirements: failed to inspect the monthly alarm history report; attach a copy of the alarm history; failed to inspect for the presence of liquid or debris in the spill container/spill bucket and under dispenser containment; failed to inspect the under dispenser containment to ensure that monitoring equipment is placed in the proper position; failure to inspect for liquid or debris in the containment sump where an alarm occurred or for which there is no record of a service visit; or failure to check that all testing and maintenance has been completed and documented.
Violation Notes: Returned to compliance on 04/07/2015. MONTHLY DO INSPECTION REPORTS FOR 10/14, 12/14 AND 2015 WERE NOT AVAILABLE FOR REVIEW. SENSOR ALARMS REPORTS WERE NOT AVAILABLE FOR 11/14 AND 12/14. COMPLIANCE REQUIREMENT: SUBMIT COPIES OF MISSING DO REPORTS FOR THE MONTHS NOT AVAILABLE. SUBMIT COPIES OF REPAIRS PERFORMED AND OR ALARM CAUSE AND CORRECTIVE ACTION. SUBMIT A SIGNED CERTIFICATE OF COMPLIANCE WITHIN 30 DAYS WITH REQUIRED DOCUMENTATION WITHIN 30 DAYS. 4/7/15 COMPLIANCE DOCS RECEIVED. PS
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 46662
Site Name: MARK CHRISTOPHER AUTO CENTER
Violation Date: 06-15-2022
Citation: 23 CCR 16 2637(f) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2637(f)
Violation Description: Failure to submit a copy of the secondary containment test results on the Secondary Containment Testing report Form to the UPA within 30 days after the test.
Violation Notes: Returned to compliance on 06/15/2022. OBSERVATION: The Secondary Containment (SB989) test results were not submitted within 30 days of testing. CORRECTIVE ACTION: The Secondary Containment (SB989) was conducted on 03/09/2022 and test results were received on 04/19/2022.

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 46662
Site Name: MARK CHRISTOPHER AUTO CENTER
Violation Date: 03-23-2016
Citation: HSC 6.7 25286(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25286(a)
Violation Description: Failure to submit an complete and accurate application for a permit to operate an underground storage tank, or for renewal of the permit.
Violation Notes: Returned to compliance on 07/11/2016. COMPLIANCE ACTIVITY: 07/11/2016- FACILITY COMPLIED- CERS DOCUMENTATION UPDATED COMPLIANCE ACTIVITY: 06/21/2016- MAILED OUTSTANDING VIOLATIONS LETTER. OBSERVATION: UST Monitoring Site plan must be updated. COMPLIANCE REQUIREMENT: Updated the monitoring site plan. Include the sensor model types and routes of UST piping ON THE UST Monitoring site plan.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 46662
Site Name: MARK CHRISTOPHER AUTO CENTER
Violation Date: 03-23-2015
Citation: HSC 6.7 25286(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25286(a)
Violation Description: Failure to submit an complete and accurate application for a permit to operate an underground storage tank, or for renewal of the permit.
Violation Notes: Returned to compliance on 04/07/2015. CERTIFICATE OF FINANCIAL RESPONSIBILITY AND DESIGNATED OPERATOR STATEMENT WAS NOT UPLOADED TO CERS WEBSITE. VIOLATION WAS ALSO CITED 3/25/14 AND IS RECALCITRANT. COMPLIANCE REQUIREMENT: SUBMIT REQUIRED UST DOCUMENTS TO CERS WITHIN 30 DAYS. SUBMIT A SGNED CERTIFICATE OF COMPLIANCE WITHIN 30 DAYS. 4/7/15 RECEIVED COMPLIANCE DOCUMENTATION FROM OPERATOR. CHECKED CERS ALL IS UPDATED EXCEPT CFR, WRONG DOCUMENT. PS
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 46662
Site Name: MARK CHRISTOPHER AUTO CENTER
Violation Date: 06-15-2022
Citation: 23 CCR 16 2638(d) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2638(d)
Violation Description: Failure to submit the Monitoring System Certification Form to the UPA within 30 days of completion of the test.
Violation Notes: Returned to compliance on 06/15/2022. OBSERVATION: The Annual Monitoring Certification test results were not submitted within 30 days after testing was conducted. CORRECTIVE ACTION: The Annual Monitoring Certification test results was conducted on 3/9/22 and test results were received on 4/22/22.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 46662
Site Name: MARK CHRISTOPHER AUTO CENTER

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Violation Date: 03-22-2017
Citation: HSC 6.7 Multiple - California Health and Safety Code, Chapter 6.7, Section(s) Multiple
Violation Description: UST Program - Administration/Documentation - General - Must include violation description, proper statute and regulation citation in the "comment" section.
Violation Notes: Returned to compliance on 04/14/2017. Failure to obtain a UST construction permit and plan approval (CHSC 25270.4.5(a)) Failure to obtain a UST construction permit and plan approval (SBCC 23.0603(a)) OBSERVED COLD START PERFORMED TODAY DUE TO MALFUNCTION IN VEEDER ROOT MONITORING PANEL. DISCUSSED COLD START WITH TECHNICIAN AND IT WAS PERFORMED PRIOR TO ANNUAL INSPECTION. COMPLIANCE REQUREMENT; SUBMIT FEES AND REQUIRED PERMIT FOR COLD START WITHIN 30 DAYS. IF SUBMITTED WITHIN 30 DAYS, THEN THIS INSPECTION WILL SERVE AS COLD START FINAL INSPECTION. IF FEES SUBMITTED AFTER 30 DAYS, THEN ANOTHER COLD START INSPECTION WILL BE REQUIRED.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 46662
Site Name: MARK CHRISTOPHER AUTO CENTER
Violation Date: 03-09-2022
Citation: 23 CCR 16 2712(b)(1)(F) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(b)(1)(F)
Violation Description: "Failure to conduct secondary containment testing, or one or more of the following requirements: Perform the test of the secondary containment system upon installation, within six months of installation and every 36 months thereafter. Perform the test of a secondary containment component within 30 days of a repair or discontinuing vacuum, pressure or hydrostatic monitoring. Use a procedure that demonstrates the system works as well as at installation. Use applicable manufacturer guidelines, industry codes, engineering standard, or professional engineer approval. Performed by a certified service technician. Maintain records of secondary containment testing for 36 months."
Violation Notes: OBSERVATION: The fill sump for T1 (Regular) failed the hydrostatic test (SB989 testing). CORRECTIVE ACTION: Submit plans and apply for a permit for repairs to the fill sump for T1 (Regular) within 30 days for SB989 failures.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 46662
Site Name: MARK CHRISTOPHER AUTO CENTER
Violation Date: 03-22-2017
Citation: HSC 6.7 Multiple - California Health and Safety Code, Chapter 6.7, Section(s) Multiple
Violation Description: UST Program - Administration/Documentation - General - Must include violation description, proper statute and regulation citation in the "comment" section.
Violation Notes: Returned to compliance on 02/28/2018. Failure to submit a signed Designated UST Operator Statement (23 CCR 2715(a)) OBSERVED DO STATEMENT ON CERS WITH EXPIRED CERTIFICATION NUMBERS. COMPLIANCE REQUIREMENT: UPDATE CERS DO STATEMENT WITH CURRENT ICC CERTIFICATIONS. SUBMIT A SIGNED CERTIFICATE OF COMPLIANCE WITH 30 DAYS.

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,
Site ID:	46662
Site Name:	MARK CHRISTOPHER AUTO CENTER
Violation Date:	10-24-2018
Citation:	HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Description:	Failure to implement the SPCC Plan.
Violation Notes:	Returned to compliance on 11/16/2018. OBSERVATION: Inspection logs for the SPCC plan were not available for review. CORRECTIVE ACTION: Implement the SPCC Plan. Submit a signed statement indicating that the SPCC plan has been properly implemented.
Violation Division:	San Bernardino County Fire Department
Violation Program:	APSA
Violation Source:	CERS,
Site ID:	46662
Site Name:	MARK CHRISTOPHER AUTO CENTER
Violation Date:	06-15-2022
Citation:	HSC 6.7 25291(a)(2) - California Health and Safety Code, Chapter 6.7, Section(s) 25291(a)(2)
Violation Description:	Failure to maintain secondary containment (e.g., failure of secondary containment testing).
Violation Notes:	OBSERVATION: At the time of test results review, observed that there were secondary containment failures on the report dated 03/09/2022. CORRECTIVE ACTION: Submit plans and apply for a permit for SB989 repairs within 30 days.
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,
Site ID:	46662
Site Name:	MARK CHRISTOPHER AUTO CENTER
Violation Date:	10-01-2014
Citation:	HSC 6.5 Multiple Sections - California Health and Safety Code, Chapter 6.5, Section(s) Multiple Sections
Violation Description:	Haz Waste Generator Program - Operations/Maintenance - General
Violation Notes:	Returned to compliance on 12/17/2014. Failure to keep hazardous waste containers closed when not in active use (CCR 66265.173(a)) There were several drums of used oil filters stored in a bay on the east end of the shop. Most of the drums were overfilled with used oil filters and could not have a lid on the drums. All hazardous waste containers must have a locking lid installed.
Violation Division:	San Bernardino County Fire Department
Violation Program:	HW
Violation Source:	CERS,
Site ID:	46662
Site Name:	MARK CHRISTOPHER AUTO CENTER
Violation Date:	03-25-2014
Citation:	HSC 6.75 25299.30-25299.34 - California Health and Safety Code, Chapter 6.75, Section(s) 25299.30-25299.34
Violation Description:	Failure to submit and maintain complete and current Certification of Financial Responsibility or other mechanism of financial assurance.
Violation Notes:	Returned to compliance on 05/14/2014. REQUIREMENT: UPDATE THE

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

CERTIFICATE OF FINANCIAL RESPONSIBILITY AND UPLOAD INTO CERS WITHIN 30 DAYS.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 46662
Site Name: MARK CHRISTOPHER AUTO CENTER
Violation Date: 03-22-2017
Citation: HSC 6.7 Multiple - California Health and Safety Code, Chapter 6.7, Section(s) Multiple
Violation Description: UST Program - Administration/Documentation - General - Must include violation description, proper statute and regulation citation in the "comment" section.
Violation Notes: Returned to compliance on 02/28/2018. Failure to have a written monitoring program with monitoring procedures and response plan (CHSC 25286(a)) OBSERVED UST INFORMATION PAGE ON CERS MISSING UST INSTALLATION DATE. IF DATE IS UNKNOWN, LIST 1/1/1900 AS INSTALLATION DATE. COMPLIANCE REQUIREMENT: UPDATE CERS TO REFLECT CORRECT AND COMPLETE INFORMATION.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 46662
Site Name: MARK CHRISTOPHER AUTO CENTER
Violation Date: 03-25-2014
Citation: HSC 6.7 Multiple Sections - California Health and Safety Code, Chapter 6.7, Section(s) Multiple Sections
Violation Description: UST Program - Administration/Documentation - General
Violation Notes: Returned to compliance on 05/14/2014. Failure to submit a signed Designated UST Operator Statement (23 CCR 2715(a)) REQUIREMENT: UPDATE THE DESIGNATED OPERATOR STATEMENT AND UPLOAD INTO CERS WITHIN 30 DAYS.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 46662
Site Name: MARK CHRISTOPHER AUTO CENTER
Violation Date: 03-11-2019
Citation: HSC 6.7 25292.2(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25292.2(a)
Violation Description: Failure to submit and maintain complete and current Certification of Financial Responsibility or other mechanism of financial assurance.
Violation Notes: Returned to compliance on 03/09/2020. OBSERVATION: The Certificate of Financial Responsibility on CERS was dated 02/21/2018 and therefore not current. CORRECTIVE ACTION: Provide a current Certificate of Financial Responsibility.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-09-2022
Violations Found: Yes
Eval Type: Routine done by local agency

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Eval Notes: An inspection was conducted to determine compliance with underground storage tank (UST) laws and regulations.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-22-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Mark Christopher UST Inspection
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 03-23-2016
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: MARK CHRISTOPHER- UST SB989 INSPECTION- SB989 NOT FULLY WITNESSED
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-24-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-23-2021
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: On site to conduct a Hazardous Material and Hazardous Waste inspection.
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-09-2020
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: On-site to conduct an Annual Underground Storage Tank (UST) inspection. Inspection was conducted during the annual monitoring certification testing.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 03-11-2019
Violations Found: No

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Eval Type: Other, not routine, done by local agency
Eval Notes: Witnessed the SB989 test.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-24-2021
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: On-site to conduct an Annual Underground Storage Tank (UST) inspection.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 06-15-2022
Violations Found: Yes
Eval Type: Other, not routine, done by local agency
Eval Notes: NON INSPECTION RELATED VIOLATION
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-01-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Routine inspection
Eval Division: San Bernardino County Fire Department
Eval Program: APSA
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-24-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: APSA
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-23-2015
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: ANNUAL MONITORING CERTIFICATION
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-23-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: MARK CHRISTOPHER AUTO CENTER- UST INSPECTION & UST MONITORING

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

CERTIFICATION
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 03-24-2021
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: OPE INSPECTION WAS CONDUCTED. RESULTS PENDING.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-31-2023
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: An inspection was conducted to determine compliance with underground storage tank (UST) laws and regulations.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 09-25-2014
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Attempted inspection but due to excessive work load it was requested that I return the following week.
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-01-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Routine inspection
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-01-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Routine inspection
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 03-09-2022
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: WITNESSED THE SB989 TESTING.

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 03-11-2019
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Witnessed the OPE inspection.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-11-2019
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: On-site to conduct an Annual Underground Storage Tank (UST) inspection. Inspection was conducted during the annual monitoring certification testing.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-22-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: ANNUAL UST INSPECTION AND CERS REVIEW
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-25-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: UST FIELD INSPECTION-ANNUAL MONITORING SYSTEM CERTIFICATION (2 TANKS) W/JIM HORNE. TIME ONSITE INCLUDED CERS DISCUSSION WITH RODNEY REID (SERVICE MANAGER)
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-24-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-23-2021
Violations Found: No
Eval Type: Routine done by local agency

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Eval Notes: CONDUCTED A FULL CUPA INSPECTION.
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-23-2021
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: CONDUCTED A FULL CUPA INSPECTION.
Eval Division: San Bernardino County Fire Department
Eval Program: APSA
Eval Source: CERS,

Enforcement Action:
Site ID: 46662
Site Name: MARK CHRISTOPHER AUTO CENTER
Site Address: 2131 CONVENTION CENTER WAY
Site City: ONTARIO
Site Zip: 91764
Enf Action Date: 03-22-2017
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: San Bernardino County Fire Department
Enf Action Program: UST
Enf Action Source: CERS,

Site ID: 46662
Site Name: MARK CHRISTOPHER AUTO CENTER
Site Address: 2131 CONVENTION CENTER WAY
Site City: ONTARIO
Site Zip: 91764
Enf Action Date: 03-23-2015
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: San Bernardino County Fire Department
Enf Action Program: UST
Enf Action Source: CERS,

Site ID: 46662
Site Name: MARK CHRISTOPHER AUTO CENTER
Site Address: 2131 CONVENTION CENTER WAY
Site City: ONTARIO
Site Zip: 91764
Enf Action Date: 03-23-2016
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: San Bernardino County Fire Department
Enf Action Program: UST
Enf Action Source: CERS,

Site ID: 46662
Site Name: MARK CHRISTOPHER AUTO CENTER
Site Address: 2131 CONVENTION CENTER WAY

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Site City: ONTARIO
Site Zip: 91764
Enf Action Date: 03-25-2014
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: San Bernardino County Fire Department
Enf Action Program: UST
Enf Action Source: CERS,

Site ID: 46662
Site Name: MARK CHRISTOPHER AUTO CENTER
Site Address: 2131 CONVENTION CENTER WAY
Site City: ONTARIO
Site Zip: 91764
Enf Action Date: 10-01-2014
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: San Bernardino County Fire Department
Enf Action Program: HW
Enf Action Source: CERS,

Affiliation:
Affiliation Type Desc: CUPA District
Entity Name: San Bernardino County Fire
Entity Title: Not reported
Affiliation Address: 620 South E Street
Affiliation City: San Bernardino
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92415-0153
Affiliation Phone: (909) 386-8401,

Affiliation Type Desc: UST Tank Owner
Entity Name: MARK CHRISTOPHER AUTO CENTER
Entity Title: Not reported
Affiliation Address: 2131 E. Convention Center Way
Affiliation City: Ontario
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 91764
Affiliation Phone: (909) 390-2900,

Affiliation Type Desc: Document Preparer
Entity Name: KPA, LLC
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Environmental Contact
Entity Name: Jeff Rizzi
Entity Title: Not reported

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Affiliation Address:	2131 CONVENTION CENTER WAY
Affiliation City:	ONTARIO
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	91764
Affiliation Phone:	,
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	2131 CONVENTION CENTER WAY
Affiliation City:	ONTARIO
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	91764
Affiliation Phone:	,
Affiliation Type Desc:	Legal Owner
Entity Name:	MARK CHRISTOPHER AUTO CENTER
Entity Title:	Not reported
Affiliation Address:	2131 CONVENTION CENTER WAY
Affiliation City:	ONTARIO
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	91764-9176
Affiliation Phone:	(909) 390-2900,
Affiliation Type Desc:	Property Owner
Entity Name:	MARK CHRISTOPHER AUTO CENTER
Entity Title:	Not reported
Affiliation Address:	2131 CONVENTION CENTER WAY
Affiliation City:	ONTARIO
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	91764
Affiliation Phone:	(909) 390-2900,
Affiliation Type Desc:	Identification Signer
Entity Name:	Jeff Rizzi
Entity Title:	Service Director
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Operator
Entity Name:	Christopher Leggio
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(909) 390-2900,

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Affiliation Type Desc:	Parent Corporation
Entity Name:	MARK CHRISTOPHER AUTO CENTER
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	UST Permit Applicant
Entity Name:	RODNEY REID
Entity Title:	SERVICE MANAGER
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(909) 975-3933,

Affiliation Type Desc:	UST Property Owner Name
Entity Name:	Roberta Caswell
Entity Title:	Not reported
Affiliation Address:	2875 Calle Heraldo
Affiliation City:	San Clemente
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92673-6817
Affiliation Phone:	(949) 276-5260,

Affiliation Type Desc:	UST Tank Operator
Entity Name:	MARK CHRISTOPHER AUTO CENTER
Entity Title:	Not reported
Affiliation Address:	2131 CONVENTION CENTER WAY
Affiliation City:	ONTARIO
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	91764
Affiliation Phone:	(909) 390-2900,

D17 **METROPOLITAN TRANSIT DIST** **CA HIST CORTESE** **S105025358**
NW **2131 D** **N/A**
1/8-1/4 **ONTARIO, CA 91764**
0.171 mi.
901 ft. **Site 3 of 3 in cluster D**

Relative: HIST CORTESE:
Higher

Actual: edr_fname:	Metropolitan Transit Dist
978 ft. edr_fadd1:	2131 D
City,State,Zip:	ONTARIO, CA 91764
Region:	CORTESE
Facility County Code:	36
Reg By:	LTNKA
Reg Id:	3112

E18
ESE
1/8-1/4
0.201 mi.
1063 ft.

UNITED GROUND EXPRESS
2500 E AIRPORT DR STE 1211-A
ONTARIO, CA 91761

Site 1 of 12 in cluster E

RCRA NonGen / NLR

1027095029
CAL000468632

Relative:
Lower

Actual:
952 ft.

RCRA Listings:

Date Form Received by Agency:	20220216
Handler Name:	United Ground Express
Handler Address:	2500 E AIRPORT DR STE 1211-A
Handler City,State,Zip:	ONTARIO, CA 91761
EPA ID:	CAL000468632
Contact Name:	UGE SAFETY
Contact Address:	11555 W TOUHY AVE
Contact City,State,Zip:	CHICAGO, IL 60666
Contact Telephone:	479-236-1916
Contact Fax:	Not reported
Contact Email:	SAFETY@UNITEDGROUNDEXPRESS.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	2500 E AIRPORT DR STE 1211-A
Mailing City,State,Zip:	MONTEREY, CA 91761
Owner Name:	United Ground Express Inc
Owner Type:	Other
Operator Name:	Uge Safety
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No

UNITED GROUND EXPRESS (Continued) **1027095029**

Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20220223
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name: UGE SAFETY	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	11555 W TOUHY AVE
Owner/Operator City,State,Zip:	CHICAGO, IL 60666
Owner/Operator Telephone:	479-236-1916
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name: UNITED GROUND EXPRESS INC	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	233 S WACKER DR 14TH FL WHQCT
Owner/Operator City,State,Zip:	CHICAGO, IL 60606
Owner/Operator Telephone:	479-236-1916
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20220216
Handler Name: UNITED GROUND EXPRESS	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	No
Electronic Manifest Broker:	No

UNITED GROUND EXPRESS (Continued) **1027095029**

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

E19 ESE 1/8-1/4 0.201 mi. 1063 ft. **UNIFI AVIATION, LLC.- ONTARIO** **RCRA-SQG** **1023675299**
2500 E AIRPORT DR **CAR000273326**
ONTARIO, CA 91761

Site 2 of 12 in cluster E

Relative: Lower
Actual: 952 ft.

RCRA Listings:

Date Form Received by Agency:	20230314
Handler Name:	Unifi Aviation, Llc.- Ontario
Handler Address:	E AIRPORT DR
Handler City,State,Zip:	ONTARIO, CA 91761
EPA ID:	CAR000273326
Contact Name:	ART SLAYTON
Contact Address:	VIRGINIA AVE
Contact City,State,Zip:	ATLANTA, GA 30354
Contact Telephone:	470-630-2448
Contact Fax:	Not reported
Contact Email:	ART.SLAYTON@UNIFISERVICE.COM
Contact Title:	ENVIRONMENTAL PROGRAM & COMPLIANCE MGR.
EPA Region:	09
Land Type:	Municipal
Federal Waste Generator Description:	Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	E AIRPORT DR
Mailing City,State,Zip:	ONTARIO, CA 91761
Owner Name:	Ontario International Airport Authority
Owner Type:	Municipal
Operator Name:	Unifi Aviation, Llc.
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No

UNIFI AVIATION, LLC.- ONTARIO (Continued) **1023675299**

Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20230321
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Hazardous Waste Summary:

Waste Code:	D001
Waste Description:	Ignitable Waste
Waste Code:	D018
Waste Description:	Benzene

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	ONTARIO INTERNATIONAL AIRPORT AUTHORITY
Legal Status:	Municipal
Date Became Current:	20120801
Date Ended Current:	Not reported
Owner/Operator Address:	1923 EAST AVION ST
Owner/Operator City,State,Zip:	ONTARIO, CA 91761
Owner/Operator Telephone:	918-688-6184
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	UNIFI AVIATION, LLC.
Legal Status:	Private
Date Became Current:	20170301
Date Ended Current:	Not reported

UNIFI AVIATION, LLC.- ONTARIO (Continued) **1023675299**

Owner/Operator Address: 1007 VIRGINIA AVE, SUITE 150, ENVIRONMENTAL
Owner/Operator City,State,Zip: ATLANTA, GA 30354
Owner/Operator Telephone: 470-630-2448
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: ART.SLAYTON@UNIFISERVICES.COM

Owner/Operator Indicator: Operator
Owner/Operator Name: UNIFI AVIATION, LLC.
Legal Status: Private
Date Became Current: 20170301
Date Ended Current: Not reported
Owner/Operator Address: 1007 VIRGINIA AVE, SUITE 150, ENVIRONMENTAL
Owner/Operator City,State,Zip: ATLANTA, GA 30354
Owner/Operator Telephone: 470-630-2448
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: ART.SLAYTON@UNIFISERVICES.COM

Owner/Operator Indicator: Owner
Owner/Operator Name: ONTARIO INTERNATIONAL AIRPORT AUTHORITY
Legal Status: Municipal
Date Became Current: 20120801
Date Ended Current: Not reported
Owner/Operator Address: 1923 EAST AVION ST
Owner/Operator City,State,Zip: ONTARIO, CA 91761
Owner/Operator Telephone: 918-688-6184
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: ONTPAWSQUAD@FLYONTARIO.COM

Owner/Operator Indicator: Owner
Owner/Operator Name: ONTARIO INTERNATIONAL AIRPORT AUTHORITY
Legal Status: Municipal
Date Became Current: 20120801
Date Ended Current: Not reported
Owner/Operator Address: 1923 EAST AVION ST
Owner/Operator City,State,Zip: ONTARIO, CA 91761
Owner/Operator Telephone: 918-688-6184
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: ONTPAWSQUAD@FLYONTARIO.COM

Owner/Operator Indicator: Operator
Owner/Operator Name: DELTA GLOBAL SERVICES
Legal Status: Private
Date Became Current: 20170301
Date Ended Current: Not reported
Owner/Operator Address: Not reported
Owner/Operator City,State,Zip: Not reported
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20170612

UNIFI AVIATION, LLC.- ONTARIO (Continued) **1023675299**

Handler Name: DELTA GLOBAL SERVICES - ONTARIO CA
Federal Waste Generator Description: Small Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20220406
Handler Name: UNIFI AVIATION, LLC.- ONTARIO
Federal Waste Generator Description: Small Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

Receive Date: 20230314
Handler Name: UNIFI AVIATION, LLC.- ONTARIO
Federal Waste Generator Description: Small Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Code: 481111
NAICS Description: SCHEDULED PASSENGER AIR TRANSPORTATION

NAICS Code: 488119
NAICS Description: OTHER AIRPORT OPERATIONS

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

E20
ESE
1/8-1/4
0.201 mi.
1063 ft.

DELTA AIRLINES ONTARIO
2500 AIRPORT DR STE 1259
ONTARIO, CA 91761

Site 3 of 12 in cluster E

RCRA NonGen / NLR

1024807941
CAL000277336

Relative:
Lower

Actual:
952 ft.

RCRA Listings:

Date Form Received by Agency:	20031216
Handler Name:	Delta Airlines Ontario
Handler Address:	2500 AIRPORT DR STE 1259
Handler City,State,Zip:	ONTARIO, CA 91761-2132
EPA ID:	CAL000277336
Contact Name:	ALFONSO CARDENAS
Contact Address:	2500 E AIRPORT DR STE 1259
Contact City,State,Zip:	ONTARIO, CA 91761
Contact Telephone:	909-605-7370
Contact Fax:	909-605-7372
Contact Email:	ALFONSO.L.CARDENAS@DELTA.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	2500 E AIRPORT DR STE 1259
Mailing City,State,Zip:	ONTARIO, CA 91761-2132
Owner Name:	Delta Air Lines, Inc
Owner Type:	Other
Operator Name:	Alfonso Cardenas
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No

DELTA AIRLINES ONTARIO (Continued) **1024807941**

Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20180905
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name: ALFONSO CARDENAS	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	2500 E AIRPORT DR STE 1259
Owner/Operator City,State,Zip:	ONTARIO, CA 91761
Owner/Operator Telephone:	909-605-7370
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name: DELTA AIR LINES, INC	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1020 DELTA BLVD DEPT 885
Owner/Operator City,State,Zip:	ATLANTA, GA 30354-0000
Owner/Operator Telephone:	404-714-6061
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20031216
Handler Name: DELTA AIRLINES ONTARIO	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

DELTA AIRLINES ONTARIO (Continued) **1024807941**

List of NAICS Codes and Descriptions:
NAICS Code: 481112
NAICS Description: SCHEDULED FREIGHT AIR TRANSPORTATION

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

E21 **MICHAEL WESTER** **RCRA NonGen / NLR** **1026819738**
ESE **2500 E. AIRPORT DRIVE** **CAC003132588**
1/8-1/4 **ONTARIO, CA 91761**
0.201 mi.
1063 ft. **Site 4 of 12 in cluster E**

Relative: **Lower**
Actual: **952 ft.**

RCRA Listings:

Date Form Received by Agency:	20210803
Handler Name:	Michael Wester
Handler Address:	2500 E. AIRPORT DRIVE
Handler City,State,Zip:	ONTARIO, CA 91761
EPA ID:	CAC003132588
Contact Name:	MICHAEL WESTER
Contact Address:	1130 S. ARCHIBALD AVE
Contact City,State,Zip:	ONTARIO, CA 91761
Contact Telephone:	909-418-2601
Contact Fax:	Not reported
Contact Email:	GABRIELLEPGJ@GMAIL.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	1130 S. ARCHIBALD AVE
Mailing City,State,Zip:	ONTARIO, CA 91761
Owner Name:	Michael Wester
Owner Type:	Other
Operator Name:	Michael Wester
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No

MICHAEL WESTER (Continued) **1026819738**

Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20210804
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name: MICHAEL WESTER	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1130 S. ARCHIBALD AVE
Owner/Operator City,State,Zip:	ONTARIO, CA 91761
Owner/Operator Telephone:	909-418-2601
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name: MICHAEL WESTER	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1130 S. ARCHIBALD AVE
Owner/Operator City,State,Zip:	ONTARIO, CA 91761
Owner/Operator Telephone:	909-418-2601
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

MICHAEL WESTER (Continued) **1026819738**

Historic Generators:
- Receive Date: 20210803
- Handler Name: MICHAEL WESTER
- Federal Waste Generator Description: Not a generator, verified
- State District Owner: Not reported
- Large Quantity Handler of Universal Waste: No
- Recognized Trader Importer: No
- Recognized Trader Exporter: No
- Spent Lead Acid Battery Importer: No
- Spent Lead Acid Battery Exporter: No
- Current Record: Yes
- Non Storage Recycler Activity: No
- Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
- NAICS Code: 56299
- NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
- Violations: No Violations Found

Evaluation Action Summary:
- Evaluations: No Evaluations Found

E22
ESE
1/8-1/4
0.201 mi.
1063 ft.

UNIFI AVIATION, LLC.- ONTARIO
2500 E AIRPORT DR
ONTARIO, CA 91761

FINDS **1023708589**
ECHO **N/A**
PFAS ECHO

Site 5 of 12 in cluster E

Relative:
Lower

Actual:
952 ft.

FINDS:
- Registry ID: 110070119309

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:
The Resource Conservation and Recovery Act Information System (RCRAInfo) is EPA's comprehensive information system in support of the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. It tracks many types of information about generators, transporters, treaters, storers, and disposers of hazardous waste.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
- Envid: 1023708589
- Registry ID: 110070119309
- DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110070119309
- Name: UNIFI AVIATION, LLC.- ONTARIO
- Address: 2500 E AIRPORT DR
- City,State,Zip: ONTARIO, CA 91761

PFAS ECHO:

UNIFI AVIATION, LLC.- ONTARIO (Continued) **1023708589**

Name:	UNIFI AVIATION, LLC.- ONTARIO
Address:	Not reported
City,State,Zip:	ONTARIO, CA
Latitude:	34.061921
Longitude:	-117.612034
Count:	1
County:	SAN BERNARDINO
Status:	Active
Region:	09
Industry:	Airports
ECHO Facility Report:	https://echo.epa.gov/detailed-facility-report?fid=110070119309
Facility Percent Minority:	82.311
Facility Derived Tribes:	San Manuel Band of Mission Indians, California - 22.6 mile(s), San Manuel Band of Mission Indians, California - 22.8 mile(s)
Facility Population:	4766.5
EPA Programs:	RCRA
Federal Facility:	No
Federal Agency:	-
Facility FIPS Code:	06071
Facility Indian Country Flag:	N
Facility Collection Method:	GDT-ADDRESS MATCHING (GEOCODING)
Facility Derived HUC:	18070203
Facility Derived WBD:	180702030704
Facility Derived CD113:	35
Facility Derived CB2010:	060710016002026
Facility Major Flag:	-
Facility Active Flag:	Y
Facility Inspection Count:	0
Facility Date Last Inspection:	-
Facility Days Last Inspection:	-
Facility Informal Count:	0
Facility Date Last Informal Action:	-
Facility Formal Action Count:	0
Facility Date Last Formal Action:	-
Facility Total Penalties:	0
Facility Penalty Count:	-
Facility Date Last Penalty:	-
Facility Last Penalty AMT:	-
Facility QTRS With NC:	0
Facility Programs With SNC:	0
Facility Compliance Status:	No Violation Identified
Facility SNC Flag:	N
AIR Flag:	N
NPDES Flag:	N
SDWIS Flag:	N
RCRA Flag:	Y
TRI Flag:	N
GHG Flag:	N
AIR IDS:	-
CAA Permit Types:	-
CAA NAICS:	-
CAA SICS:	-
NPDES IDS:	-
CWA Permit Types:	-
CWA NAICS:	-
CWA SICS:	-
RCRA IDS:	CAR000273326

UNIFI AVIATION, LLC.- ONTARIO (Continued) **1023708589**

RCRA Permit Types:	SQG
RCRA NAICS:	488119
SDWA IDS:	-
SDWA System Types:	-
SDWA Compliance Status:	-
SDWA SNC Flag:	N
TRI IDS:	-
TRI Releases Transfers:	-
TRI On Site Releases:	-
TRI Off Site Transfers:	-
TRI Reporter:	-
Facility IMP Water Flag:	-
EJSCREEN Flag US:	Y
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-117.612034,%22y%22:34.061921,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1

E23 **UNITED AIRLINES INC** **CA San Bern. Co. Permit** **S105048147**
ESE **2500 E AIRPORT DR STE 1211A** **N/A**
1/8-1/4 **ONTARIO, CA 91761**
0.201 mi.
1063 ft. **Site 6 of 12 in cluster E**

Relative: **Lower**

Actual: **952 ft.**

San Bern. Co. Permit:

Name:	UNITED AIRLINES INC
Address:	2500 E AIRPORT DR STE 1211A
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO
Facility ID:	FA0006904
Owner:	UNITED AIRLINES INC
Permit Number:	PT0007799
Permit Category:	SMALL QUANTITY GENERATOR
Facility Status:	INACTIVE
Expiration Date:	09/30/2016

Name:	UNITED AIRLINES INC
Address:	2500 E AIRPORT DR STE 1211A
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO
Facility ID:	FA0006904
Owner:	UNITED AIRLINES INC
Permit Number:	PT0007798
Permit Category:	HAZARDOUS MATERIALS 4-10 CHEMICALS
Facility Status:	INACTIVE
Expiration Date:	09/30/2016

E24
ESE
1/8-1/4
0.201 mi.
1063 ft.

Relative:
Lower

Actual:
952 ft.

AIRCRAFT SERVICE INTERNATIONAL GROUP (ASIG), ONT
2500 E. AIRPORT DRIVE
ONTARIO, CA 91761

Site 7 of 12 in cluster E

CA LUST **S108223679**
CA CERS HAZ WASTE **N/A**
CA Cortese
CA NPDES
CA San Bern. Co. Permit
CA CIWQS
CA CERS

LUST:

Name:	AIRCRAFT SERVICE INTERNATIONAL GROUP (ASIG), ONT
Address:	2500 E. AIRPORT DRIVE
City,State,Zip:	ONTARIO, CA 91761
Lead Agency:	SANTA ANA RWQCB (REGION 8)
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607181149
Global Id:	T0607181149
Latitude:	34.0600014921062
Longitude:	-117.601711750031
Status:	Completed - Case Closed
Status Date:	10/11/2016
Case Worker:	MAO
RB Case Number:	T0607181149
Local Agency:	SAN BERNARDINO COUNTY
File Location:	Regional Board
Local Case Number:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Aviation
EPA Region:	9
Coordinate Source:	Manual Entry on Screens
Cuf Case:	NO
Quantity Released Gallons:	5500
Begin Date:	06/19/2006
Leak Reported Date:	06/19/2006
How Discovered:	Other Means
How Discovered Description:	SURFACE SPILL
Discharge Source:	Other
Discharge Cause:	Overfill
Stop Method:	Other Means
Stop Description:	EMERGENCY SHUTOFF
No Further Action Date:	10/11/2016
CA Water Watershed Name:	Santa Ana River - Middle Santa Ana River - Chino (Split) (801.21)
Dwr Groundwater Subbasin Name:	Upper Santa Ana Valley - Chino (8-002.01)
Disadvantaged Community:	Severely Disadvantaged Community
CA Enviroscreen 3 Score:	96-100% (highest scores)
CA Enviroscreen 4 Score:	95-100% (highest scores)
Military DOD Site:	No
Facility Project Subtype:	Not reported
RWQCB Region:	SANTA ANA RWQCB (REGION 8)
Site History:	,

LUST:

Global Id:	T0607181149
Contact Type:	Local Agency Caseworker
Contact Name:	JACKSON CRUTSINGER
Organization Name:	SAN BERNARDINO COUNTY
Address:	620 SOUTH E STREET
City:	SAN BERNARDINO
Email:	jcrutsinger@sbcfire.org
Phone Number:	Not reported

AIRCRAFT SERVICE INTERNATIONAL GROUP (ASIG), ONT (Continued) **S108223679**

Global Id:	T0607181149
Contact Type:	Regional Board Caseworker - Primary Caseworker
Contact Name:	MIGUEL OVIEDO
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 Main Street, Suite 500
City:	RIVERSIDE
Email:	miguel.oviedo@waterboards.ca.gov
Phone Number:	9517823238

LUST:

Global Id:	T0607181149
Action Type:	ENFORCEMENT
Date:	10/11/2016
Action:	Closure/No Further Action Letter
Global Id:	T0607181149
Action Type:	Other
Date:	06/19/2006
Action:	Leak Reported
Global Id:	T0607181149
Action Type:	ENFORCEMENT
Date:	03/22/2011
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0607181149
Action Type:	ENFORCEMENT
Date:	05/09/2012
Action:	File review
Global Id:	T0607181149
Action Type:	ENFORCEMENT
Date:	12/17/2012
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0607181149
Action Type:	ENFORCEMENT
Date:	04/09/2010
Action:	Referral to Regional Board
Global Id:	T0607181149
Action Type:	ENFORCEMENT
Date:	10/13/2013
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0607181149
Action Type:	RESPONSE
Date:	08/24/2014
Action:	Request for Closure - Regulator Responded
Global Id:	T0607181149
Action Type:	RESPONSE
Date:	04/20/2014
Action:	Site Investigation Workplan - Regulator Responded
Global Id:	T0607181149
Action Type:	RESPONSE

AIRCRAFT SERVICE INTERNATIONAL GROUP (ASIG), ONT (Continued) **S108223679**

Date: 08/24/2014
Action: Other Workplan - Regulator Responded

Global Id: T0607181149
Action Type: RESPONSE
Date: 09/28/2014
Action: Respond to Petition - Regulator Responded

Global Id: T0607181149
Action Type: RESPONSE
Date: 08/20/2014
Action: Preliminary Site Assessment Workplan - Addendum - Regulator Responded

Global Id: T0607181149
Action Type: RESPONSE
Date: 11/03/2016
Action: Other Workplan - Regulator Responded

Global Id: T0607181149
Action Type: RESPONSE
Date: 07/20/2016
Action: Request for Closure - Regulator Responded

Global Id: T0607181149
Action Type: RESPONSE
Date: 06/20/2016
Action: Request for Closure - Regulator Responded

Global Id: T0607181149
Action Type: RESPONSE
Date: 08/02/2016
Action: Request for Closure - Regulator Responded

Global Id: T0607181149
Action Type: RESPONSE
Date: 08/30/2016
Action: Other Report / Document - Regulator Responded

Global Id: T0607181149
Action Type: REMEDIATION
Date: 06/19/2010
Action: Excavation

Global Id: T0607181149
Action Type: ENFORCEMENT
Date: 01/12/2010
Action: Staff Letter

Global Id: T0607181149
Action Type: ENFORCEMENT
Date: 02/05/2015
Action: Email Correspondence

Global Id: T0607181149
Action Type: ENFORCEMENT
Date: 03/16/2016
Action: Technical Correspondence / Assistance / Other

AIRCRAFT SERVICE INTERNATIONAL GROUP (ASIG), ONT (Continued) **S108223679**

Global Id: T0607181149
Action Type: Other
Date: 06/19/2006
Action: Leak Discovery

Global Id: T0607181149
Action Type: RESPONSE
Date: 07/28/2016
Action: Other Report / Document

LUST:
Global Id: T0607181149
Status: Open - Assessment & Interim Remedial Action
Status Date: 06/19/2006

Global Id: T0607181149
Status: Open - Case Begin Date
Status Date: 06/19/2006

Global Id: T0607181149
Status: Open - Site Assessment
Status Date: 06/19/2006

Global Id: T0607181149
Status: Open - Eligible for Closure
Status Date: 08/01/2016

Global Id: T0607181149
Status: Completed - Case Closed
Status Date: 10/11/2016

CERS HAZ WASTE:
Name: TRANSPORTATION SECURITY ADMINISTRATION (ONT)
Address: 2500 E AIRPORT DR
City,State,Zip: ONTARIO, CA 91761
Site ID: 77539
CERS ID: 10487590
CERS Description: Hazardous Waste Generator

CORTESE:
Name: AIRCRAFT SERVICE INTERNATIONAL GROUP (ASIG), ONT
Address: 2500 E. AIRPORT DRIVE
City,State,Zip: ONTARIO, CA 91761
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0607181149
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported

AIRCRAFT SERVICE INTERNATIONAL GROUP (ASIG), ONT (Continued) **S108223679**

Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

NPDES:

Name:	ONTARIO AIRPORT PARKING LOT 6
Address:	2500 E AIRPORT DR
City,State,Zip:	ONTARIO, CA 91761
Facility Status:	Active
NPDES Number:	CAS000002
Region:	8
Agency Number:	0
Regulatory Measure ID:	553510
Place ID:	Not reported
Order Number:	2009-0009-DWQ
WDID:	8 36C398642
Regulatory Measure Type:	Enrollee
Program Type:	Construction
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	09/15/2022
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	303 E B Street
Discharge Name:	Ontario International Airport Authority
Discharge City:	Ontario
Discharge State:	California
Discharge Zip:	91764
Status:	Not reported
Status Date:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported

Name:	ONTARIO AIRPORT PARKING LOT 6
Address:	2500 E AIRPORT DR
City,State,Zip:	ONTARIO, CA 91761
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	8 36C398642
Regulatory Measure Type:	Construction
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported

AIRCRAFT SERVICE INTERNATIONAL GROUP (ASIG), ONT (Continued) **S108223679**

Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Active
Status Date:	09/15/2022
Operator Name:	Ontario International Airport Authority
Operator Address:	303 E B Street
Operator City:	Ontario
Operator State:	California
Operator Zip:	91764

San Bern. Co. Permit:

Name:	TRANSPORTATION SECURITY ADMINISTRATION (ONT)
Address:	2500 E AIRPORT DR
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO
Facility ID:	FA0011617
Owner:	Transportation Security Administration
Permit Number:	PT0020061
Permit Category:	SMALL QUANTITY GENERATOR
Facility Status:	ACTIVE
Expiration Date:	05/31/2023

Name:	TRANSPORTATION SECURITY ADMINISTRATION (ONT)
Address:	2500 E AIRPORT DR
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO
Facility ID:	FA0011617
Owner:	Transportation Security Administration
Permit Number:	PT0020060
Permit Category:	HAZARDOUS MATERIALS 4-10 CHEMICALS
Facility Status:	ACTIVE
Expiration Date:	05/31/2023

Name:	ALASKA AIRLINES INC
Address:	2500 E AIRPORT DR
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO
Facility ID:	FA0000800
Owner:	ALASKA AIRLINES INC
Permit Number:	PT0040092
Permit Category:	SMALL QUANTITY GENERATOR
Facility Status:	INACTIVE
Expiration Date:	05/31/2022

Name:	ALASKA AIRLINES INC
Address:	2500 E AIRPORT DR
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO
Facility ID:	FA0000800
Owner:	ALASKA AIRLINES INC
Permit Number:	PT0008646
Permit Category:	HAZARDOUS MATERIALS 4-10 CHEMICALS
Facility Status:	INACTIVE

AIRCRAFT SERVICE INTERNATIONAL GROUP (ASIG), ONT (Continued) **S108223679**

Expiration Date: 05/31/2022

CIWQS:

Name:	ONTARIO AIRPORT PARKING LOT 6
Address:	2500 E AIRPORT DR
City,State,Zip:	ONTARIO, CA 91761
Agency:	Ontario International Airport Authority
Agency Address:	303 E B Street, Ontario, CA 91764
Place/Project Type:	Construction - Other: Parking Lot
SIC/NAICS:	Not reported
Region:	8
Program:	CONSTW
Regulatory Measure Status:	Active
Regulatory Measure Type:	Storm water construction
Order Number:	2009-0009-DWQ
WDID:	8 36C398642
NPDES Number:	CAS000002
Adoption Date:	Not reported
Effective Date:	09/15/2022
Termination Date:	Not reported
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	34.06028
Longitude:	-117.59727

CERS:

Name:	TRANSPORTATION SECURITY ADMINISTRATION (ONT)
Address:	2500 E AIRPORT DR
City,State,Zip:	ONTARIO, CA 91761
Site ID:	77539
CERS ID:	10487590
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	77539
Site Name:	Transportation Security Administration (ONT)
Violation Date:	07-31-2013
Citation:	HSC 6.95 25505(a) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)
Violation Description:	Owner/Operator failed to complete and/or submit a Hazardous Materials Business Plan when storing hazardous materials at or above the thresholds quantities of 55 gallons/500 lbs/200 cubic feet.
Violation Notes:	Returned to compliance on 08/28/2013.
Violation Division:	San Bernardino County Fire Department
Violation Program:	HMRRP
Violation Source:	CERS,

Evaluation:

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	03-05-2020
Violations Found:	No

AIRCRAFT SERVICE INTERNATIONAL GROUP (ASIG), ONT (Continued) **S108223679**

Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-09-2023
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-17-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: ROUTINE GENERATOR INSPECTION-ONTARIO AIRPORT TSA
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-09-2023
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-31-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: ROUTINE GENERATOR INSPECTION-TSA
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-31-2013
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: ROUTINE HANDLER INSPECTION-TSA
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-05-2020
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department

AIRCRAFT SERVICE INTERNATIONAL GROUP (ASIG), ONT (Continued) **S108223679**

Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-17-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: ROUTINE HANDLER INSPECTION-ONTARIO AIRPORT TSA
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Enforcement Action:
Site ID: 77539
Site Name: Transportation Security Administration (ONT)
Site Address: 2500 E AIRPORT DR
Site City: ONTARIO
Site Zip: 91761
Enf Action Date: 07-31-2013
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: San Bernardino County Fire Department
Enf Action Program: HMRRP
Enf Action Source: CERS,

Affiliation:
Affiliation Type Desc: Parent Corporation
Entity Name: Transportation Security Administration (ONT)
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: CUPA District
Entity Name: San Bernardino County Fire
Entity Title: Not reported
Affiliation Address: 620 South E Street
Affiliation City: San Bernardino
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92415-0153
Affiliation Phone: (909) 386-8401,

Affiliation Type Desc: Identification Signer
Entity Name: Leslie Husted
Entity Title: EMC
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

AIRCRAFT SERVICE INTERNATIONAL GROUP (ASIG), ONT (Continued) **S108223679**

Affiliation Type Desc:	Legal Owner
Entity Name:	TRANSPORTATION SECURITY ADMINISTRATION
Entity Title:	Not reported
Affiliation Address:	3200 E Guasti Rd, Suite 250
Affiliation City:	Ontario
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	91761
Affiliation Phone:	(949) 573-7780,

Affiliation Type Desc:	Document Preparer
Entity Name:	Amber Kennedy, Leidos
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Environmental Contact
Entity Name:	Jonathan Michaels
Entity Title:	Not reported
Affiliation Address:	3200 E Guasti Rd, Suite 250
Affiliation City:	Ontario
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	91761
Affiliation Phone:	,

Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	3200 E Guasti Rd, Suite 250
Affiliation City:	Ontario
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	91761
Affiliation Phone:	,

Affiliation Type Desc:	Operator
Entity Name:	TSA
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(909) 472-0108,

Name:	AIRCRAFT SERVICE INTERNATIONAL GROUP (ASIG), ONT
Address:	2500 E. AIRPORT DRIVE
City,State,Zip:	ONTARIO, CA 91761
Site ID:	632642
CERS ID:	T0607181149
CERS Description:	Leaking Underground Storage Tank Cleanup Site

AIRCRAFT SERVICE INTERNATIONAL GROUP (ASIG), ONT (Continued) **S108223679**

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	JACKSON CRUTSINGER - SAN BERNARDINO COUNTY
Entity Title:	Not reported
Affiliation Address:	620 SOUTH E STREET
Affiliation City:	SAN BERNARDINO
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Regional Board Caseworker
Entity Name:	MIGUEL OVIEDO - SANTA ANA RWQCB (REGION 8)
Entity Title:	Not reported
Affiliation Address:	3737 Main Street, Suite 500
Affiliation City:	RIVERSIDE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	9517823238,

Name:	ONTARIO AIRPORT PARKING LOT 6
Address:	2500 E AIRPORT DR
City,State,Zip:	ONTARIO, CA 91761
Site ID:	622369
CERS ID:	907203
CERS Description:	Construction Storm Water

E25 **SKYWEST AIRLINES INC** **RCRA NonGen / NLR** **1024852899**
ESE **2500 E AIRPORT DR STE 1211A** **CAL000412202**
1/8-1/4 **ONTARIO, CA 91761**
0.201 mi.
1063 ft. **Site 8 of 12 in cluster E**

Relative: **Lower**

Actual: **952 ft.**

RCRA Listings:

Date Form Received by Agency:	20151106
Handler Name:	Skywest Airlines Inc
Handler Address:	2500 E AIRPORT DR STE 1211A
Handler City,State,Zip:	ONTARIO, CA 91761-2132
EPA ID:	CAL000412202
Contact Name:	TUFI NAEA
Contact Address:	2500 E AIRPORT DR STE 1211A
Contact City,State,Zip:	ONTARIO, CA 91761-2132
Contact Telephone:	909-605-2220
Contact Fax:	909-605-2830
Contact Email:	TNAEA@SKYWEST.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported

SKYWEST AIRLINES INC (Continued) **1024852899**

Mailing Address:	1202 PACIFIC CT
Mailing City,State,Zip:	FORT LUPTON, CO 80621
Owner Name:	Skywest Airlines Inc
Owner Type:	Other
Operator Name:	Tufi Naea
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20181120
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name: SKYWEST AIRLINES INC	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	444 S RIVER RD
Owner/Operator City,State,Zip:	ST GEORGE, UT 84790
Owner/Operator Telephone:	435-634-3000

SKYWEST AIRLINES INC (Continued) **1024852899**

Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: TUFI NAEA
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 2500 E AIRPORT DR STE 1211A
Owner/Operator City,State,Zip: ONTARIO, CA 91761-2132
Owner/Operator Telephone: 909-605-2220
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20151106
Handler Name: SKYWEST AIRLINES INC
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: Not reported
Recognized Trader Exporter: Not reported
Spent Lead Acid Battery Importer: Not reported
Spent Lead Acid Battery Exporter: Not reported
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 481112
NAICS Description: SCHEDULED FREIGHT AIR TRANSPORTATION

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

E26 **TRANSPORTATION SECURITY ADMINISTRATION AT ONTARIO** **RCRA-VSQG** **1011488120**
ESE **2500 E AIRPORT DR** **CAR000192575**
1/8-1/4 **ONTARIO, CA 91761**
0.201 mi.
1063 ft. **Site 9 of 12 in cluster E**

Relative: RCRA Listings:
Lower
Date Form Received by Agency: 20220201
Actual: Handler Name: Transportation Security Administration At Ontario Intl Airport
952 ft. Handler Address: 2500 E AIRPORT DR
Handler City,State,Zip: ONTARIO, CA 91761
EPA ID: CAR000192575
Contact Name: TERRELL BOWIE
Contact Address: E GUASTI RD
Contact City,State,Zip: ONTARIO, CA 91761

TRANSPORTATION SECURITY ADMINISTRATION AT ONTARIO INTL AIRPO (Continued) **1011488120**

Contact Telephone:	909-418-6607
Contact Fax:	Not reported
Contact Email:	TERRELL.BOWIE@TSA.DHS.GOV
Contact Title:	EMC
EPA Region:	09
Land Type:	Other
Federal Waste Generator Description:	Conditionally Exempt Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	2021
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	E GUASTI RD
Mailing City,State,Zip:	ONTARIO, CA 91761
Owner Name:	Ontario Int'L Airport Authority
Owner Type:	Other
Operator Name:	Transportation Security Administration
Operator Type:	Federal
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	The site is federally-operated
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20220603
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No

TRANSPORTATION SECURITY ADMINISTRATION AT ONTARIO INTL AIRPO (Continued) **1011488120**

Manifest Broker: No
Sub-Part P Indicator: No

Biennial: List of Years
Year: 2021

Click Here for Biennial Reporting System Data:
Year: 2019

Click Here for Biennial Reporting System Data:

Hazardous Waste Summary:
Waste Code: D001
Waste Description: Ignitable Waste

Waste Code: D002
Waste Description: Corrosive Waste

Waste Code: D003
Waste Description: Reactive Waste

Waste Code: D006
Waste Description: Cadmium

Waste Code: D008
Waste Description: Lead

Waste Code: D009
Waste Description: Mercury

Waste Code: D035
Waste Description: Methyl Ethyl Ketone

Waste Code: U002
Waste Description: 2-Propanone (I) (Or) Acetone (I)

Waste Code: U080
Waste Description: Methane, Dichloro- (Or) Methylene Chloride

Handler - Owner Operator:
Owner/Operator Indicator: Operator
Owner/Operator Name: TSA
Legal Status: Federal
Date Became Current: 20000101
Date Ended Current: Not reported
Owner/Operator Address: Not reported
Owner/Operator City,State,Zip: Not reported
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: TSA
Legal Status: Federal
Date Became Current: 20000101

TRANSPORTATION SECURITY ADMINISTRATION AT ONTARIO INTL AIRPO (Continued) **1011488120**

Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name: ONTARIO INT'L AIRPORT AUTHORITY	
Legal Status:	Other
Date Became Current:	19460501
Date Ended Current:	Not reported
Owner/Operator Address:	1923 E AVION ST
Owner/Operator City,State,Zip:	ONTARIO, CA 91761
Owner/Operator Telephone:	909-544-5300
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	UNKNOWN@UNKNOWN.COM

Owner/Operator Indicator:	Owner
Owner/Operator Name: CITY OF LOS ANGELES	
Legal Status:	Other
Date Became Current:	19300101
Date Ended Current:	Not reported
Owner/Operator Address:	NO 1 WORLD WAY
Owner/Operator City,State,Zip:	LOS ANGELES, CA 90009
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name: TSA	
Legal Status:	Federal
Date Became Current:	20000101
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name: ONTARIO INT'L AIRPORT AUTHORITY	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1923 E AVION ST
Owner/Operator City,State,Zip:	ONTARIO, CA 91761
Owner/Operator Telephone:	909-544-5300
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner

TRANSPORTATION SECURITY ADMINISTRATION AT ONTARIO INTL AIRPO (Continued) **1011488120**

Owner/Operator Name: CITY OF LOS ANGELES
Legal Status: Other
Date Became Current: 19300101
Date Ended Current: Not reported
Owner/Operator Address: NO 1 WORLD WAY
Owner/Operator City,State,Zip: LOS ANGELES, CA 90009
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: ONTARIO INT'L AIRPORT AUTHORITY
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 1923 E AVION ST
Owner/Operator City,State,Zip: ONTARIO, CA 91761
Owner/Operator Telephone: 909-544-5300
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: TRANSPORTATION SECURITY ADMINISTRATION
Legal Status: Federal
Date Became Current: 20000101
Date Ended Current: Not reported
Owner/Operator Address: 3200 E GUASTI RD
Owner/Operator City,State,Zip: ONTARIO, CA 91761
Owner/Operator Telephone: 909-418-6607
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: TERRELL.BOWIE@TSA.DHS.GOV

Owner/Operator Indicator: Operator
Owner/Operator Name: TRANSPORTATION SECURITY ADMINISTRATION
Legal Status: Federal
Date Became Current: 20000101
Date Ended Current: Not reported
Owner/Operator Address: 3200 E GUASTI RD
Owner/Operator City,State,Zip: ONTARIO, CA 91761
Owner/Operator Telephone: 909-418-6607
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: TERRELL.BOWIE@TSA.DHS.GOV

Owner/Operator Indicator: Owner
Owner/Operator Name: CITY OF LOS ANGELES
Legal Status: Other
Date Became Current: 19300101
Date Ended Current: Not reported
Owner/Operator Address: NO 1 WORLD WAY
Owner/Operator City,State,Zip: LOS ANGELES, CA 90009
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported

TRANSPORTATION SECURITY ADMINISTRATION AT ONTARIO INTL AIRPO (Continued) **1011488120**

Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: CITY OF LOS ANGELES
Legal Status: Other
Date Became Current: 19300101
Date Ended Current: Not reported
Owner/Operator Address: NO 1 WORLD WAY
Owner/Operator City,State,Zip: LOS ANGELES, CA 90009
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: TRANSPORTATION SECURITY ADMINISTRATION
Legal Status: Federal
Date Became Current: 20000101
Date Ended Current: Not reported
Owner/Operator Address: 3200 E GUASTI RD
Owner/Operator City,State,Zip: ONTARIO, CA 91761
Owner/Operator Telephone: 909-418-6607
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: TERRELL.BOWIE@TSA.DHS.GOV

Historic Generators:
Receive Date: 20200413
Handler Name: TRANSPORTATION SECURITY ADMINISTRATION AT ONTARIO INTL AIRPORT
Federal Waste Generator Description: Conditionally Exempt Small Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: Yes
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

Receive Date: 20220201
Handler Name: TRANSPORTATION SECURITY ADMINISTRATION AT ONTARIO INTL AIRPORT
Federal Waste Generator Description: Conditionally Exempt Small Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

Receive Date: 20100714
Handler Name: TSA AT ONTARIO INTL AIRPORT
Federal Waste Generator Description: Small Quantity Generator
State District Owner: Not reported

TRANSPORTATION SECURITY ADMINISTRATION AT ONTARIO INTL AIRPO (Continued) **1011488120**

Large Quantity Handler of Universal Waste: Yes
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20080523
Handler Name: TSA AT ONTARIO INTL AIRPORT
Federal Waste Generator Description: Small Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20171106
Handler Name: TRANSPORTATION SECURITY ADMINISTRATION AT ONTARIO INTL AIRPORT
Federal Waste Generator Description: Conditionally Exempt Small Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: Yes
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Code: 488119
NAICS Description: OTHER AIRPORT OPERATIONS

NAICS Code: 926120
NAICS Description: REGULATION AND ADMINISTRATION OF TRANSPORTATION PROGRAMS

NAICS Code: 92811
NAICS Description: NATIONAL SECURITY

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

E27
ESE
1/8-1/4
0.201 mi.
1063 ft.

Relative:
Lower

Actual:
952 ft.

ONTARIO INTERNATIONAL AIRPORT
2500 E AIRPORT DR
ONTARIO, CA 91761

Site 10 of 12 in cluster E

CA HAULERS
CA CERS HAZ WASTE
CA AQUEOUS FOAM
CA NPDES
CA San Bern. Co. Permit
CA CIWQS
CA CERS

S119086494
N/A

HAULERS:

Name:	UNIFI
Address:	2500 EAST AIRPORT DRIVE - SUITE 1259
City,State,Zip:	ONTARIO, CA 91761
Facility ID:	1950424
Facility Phone:	(909) 605-7390
Business Email Address:	Not reported
Contact Person:	Art Slayton
Mailing Address:	980 Virginia Avenue - Department 937, Environmental
Mailing City:	Atlanta
Mailing State:	GA
Mailing Zip:	30354
Mailing County:	Not reported
Mailing Phone:	(470) 630-2448
Current Status:	Active
Current Hauler Status:	Not reported
Accepting Tires From Public:	Not reported
Regulatory Status Last Changed:	2021-09-07 13:17:31
Business Types:	Not reported

CERS HAZ WASTE:

Name:	UNIFI AVIATION, LLC - ONT
Address:	2500 E AIRPORT DR STE 1259
City,State,Zip:	ONTARIO, CA 91761
Site ID:	364979
CERS ID:	10411489
CERS Description:	Hazardous Waste Generator

AQUEOUS FOAM:

Object ID:	26
Name:	ONTARIO INTERNATIONAL AIRPORT
Address:	2500 E AIRPORT DR
City,State,Zip:	ONTARIO, CA
Airport ID:	ONT
Airport Class:	Medium Hub
Lead Agency:	Santa Ana Regional Water quality Control Board (8)
Lead Agency Name:	Mehrnoosh Behrooz
Contact URL:	https://www.waterboards.ca.gov/pfas/regional_board_contacts.html
Global ID:	T10000012784
Geotracker:	http://geotracker.waterboards.ca.gov/profile_report?global_id=T10000012861
Latitude:	34.06033000
Longitude:	-117.59716000
Envirostor ID:	Not reported
Program Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Calenviroscreen Score:	Not reported
Site Code:	Not reported

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

NPDES:

Name:	ONTARIO INTERNATIONAL AIRPORT
Address:	2500 E AIRPORT DR
City,State,Zip:	ONTARIO, CA 91761
Facility Status:	Active
NPDES Number:	CAS000001
Region:	8
Agency Number:	0
Regulatory Measure ID:	479771
Place ID:	Not reported
Order Number:	97-03-DWQ
WDID:	8 36I026885
Regulatory Measure Type:	Enrollee
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	10/25/2016
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	303 E B Street
Discharge Name:	Ontario International Airport Authority
Discharge City:	Ontario
Discharge State:	California
Discharge Zip:	91764
Status:	Not reported
Status Date:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported

NPDES as of 03/2018:

NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	8
Regulatory Measure ID:	479771
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	8 36I026885
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	10/18/2016
Processed Date:	10/25/2016
Status:	Active
Status Date:	10/25/2016
Place Size:	1463
Place Size Unit:	Acres

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Contact:	Kelly Fredericks
Contact Title:	CEO
Contact Phone:	909-395-2400
Contact Phone Ext:	Not reported
Contact Email:	kfredericks@ontariooiaa.com
Operator Name:	Ontario International Airport Authority
Operator Address:	303 E B Street
Operator City:	Ontario
Operator State:	California
Operator Zip:	91764
Operator Contact:	Kelly Fredericks
Operator Contact Title:	CEO
Operator Contact Phone:	909-395-2400
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	kfredericks@ontariooiaa.com
Operator Type:	Private Business
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	California
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	N
Receiving Water Name:	Santa Ana River
Certifier:	Kelly Fredericks
Certifier Title:	CEO
Certification Date:	18-OCT-16
Primary Sic:	4581-Airports, Flying Fields, and Airport Terminal Services
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	CAS000001
Status:	Active
Agency Number:	0
Region:	8
Regulatory Measure ID:	479771
Order Number:	97-03-DWQ

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	8 36I026885
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	10/25/2016
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Ontario International Airport Authority
Discharge Address:	303 E B Street
Discharge City:	Ontario
Discharge State:	California
Discharge Zip:	91764
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

Name:	OIAA TAXIWAY S
Address:	2500 E AIRPORT DRIVE
City,State,Zip:	ONTARIO, CA 91761
Facility Status:	Terminated
NPDES Number:	CAS000002
Region:	8
Agency Number:	0
Regulatory Measure ID:	532919
Place ID:	Not reported
Order Number:	2009-0009-DWQ
WDID:	8 36C393246
Regulatory Measure Type:	Enrollee
Program Type:	Construction
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	03/23/2021
Termination Date Of Regulatory Measure:	12/02/2021
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	303 E B Street
Discharge Name:	Ontario International Airport Authority
Discharge City:	Ontario
Discharge State:	California
Discharge Zip:	91764
Status:	Not reported
Status Date:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported

Name:	ONTARIO INTERNATIONAL AIRPORT
Address:	2500 E AIRPORT DR
City,State,Zip:	ONTARIO, CA 91761
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	8 36I026885
Regulatory Measure Type:	Industrial
Program Type:	Not reported

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Active
Status Date:	10/25/2016
Operator Name:	Ontario International Airport Authority
Operator Address:	303 E B Street
Operator City:	Ontario
Operator State:	California
Operator Zip:	91764

NPDES as of 03/2018:

NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	8
Regulatory Measure ID:	479771
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	8 36I026885
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	10/18/2016
Processed Date:	10/25/2016
Status:	Active
Status Date:	10/25/2016
Place Size:	1463
Place Size Unit:	Acres
Contact:	Kelly Fredericks
Contact Title:	CEO
Contact Phone:	909-395-2400
Contact Phone Ext:	Not reported
Contact Email:	kfredericks@ontariooiaa.com
Operator Name:	Ontario International Airport Authority
Operator Address:	303 E B Street
Operator City:	Ontario
Operator State:	California
Operator Zip:	91764
Operator Contact:	Kelly Fredericks
Operator Contact Title:	CEO
Operator Contact Phone:	909-395-2400
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	kfredericks@ontariooiaa.com

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Operator Type:	Private Business
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	California
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	N
Receiving Water Name:	Santa Ana River
Certifier:	Kelly Fredericks
Certifier Title:	CEO
Certification Date:	18-OCT-16
Primary Sic:	4581-Airports, Flying Fields, and Airport Terminal Services
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	CAS000001
Status:	Active
Agency Number:	0
Region:	8
Regulatory Measure ID:	479771
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	8 36I026885
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	10/25/2016
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Ontario International Airport Authority
Discharge Address:	303 E B Street
Discharge City:	Ontario
Discharge State:	California
Discharge Zip:	91764
Received Date:	Not reported
Processed Date:	Not reported

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

Name: OIAA TAXIWAY S

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Address:	2500 E AIRPORT DRIVE
City,State,Zip:	ONTARIO, CA 91761
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	8 36C393246
Regulatory Measure Type:	Construction
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Terminated
Status Date:	12/16/2021
Operator Name:	Ontario International Airport Authority
Operator Address:	303 E B Street
Operator City:	Ontario
Operator State:	California
Operator Zip:	91764

Name:	OIAA TAXIWAY S
Address:	2500 E AIRPORT DRIVE
City,State,Zip:	ONTARIO, CA 91761
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	8 36C393246
Regulatory Measure Type:	Construction
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Terminated
Status Date:	12/16/2021
Operator Name:	Ontario International Airport Authority
Operator Address:	303 E B Street
Operator City:	Ontario
Operator State:	California

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Operator Zip:	91764
Name:	OIAA TAXIWAY S
Address:	2500 E AIRPORT DRIVE
City,State,Zip:	ONTARIO, CA 91761
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	8 36C393246
Regulatory Measure Type:	Construction
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Terminated
Status Date:	12/16/2021
Operator Name:	Ontario International Airport Authority
Operator Address:	303 E B Street
Operator City:	Ontario
Operator State:	California
Operator Zip:	91764
Name:	OIAA TAXIWAY S
Address:	2500 E AIRPORT DRIVE
City,State,Zip:	ONTARIO, CA 91761
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	8 36C393246
Regulatory Measure Type:	Construction
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Terminated
Status Date:	12/16/2021
Operator Name:	Ontario International Airport Authority

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Operator Address:	303 E B Street
Operator City:	Ontario
Operator State:	California
Operator Zip:	91764
Name:	TAXIWAY S AND W
Address:	2500 E AIRPORT DRIVE
City,State,Zip:	ONTARIO, CA 91761
Facility Status:	Terminated
NPDES Number:	CAS000002
Region:	8
Agency Number:	0
Regulatory Measure ID:	495269
Place ID:	Not reported
Order Number:	2009-0009-DWQ
WDID:	8 36C382579
Regulatory Measure Type:	Enrollee
Program Type:	Construction
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	02/26/2018
Termination Date Of Regulatory Measure:	12/02/2021
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	303 E B Street
Discharge Name:	Ontario International Airport Authority
Discharge City:	Ontario
Discharge State:	California
Discharge Zip:	91764
Status:	Not reported
Status Date:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported

NPDES as of 03/2018:

NPDES Number:	CAS000002
Status:	Active
Agency Number:	0
Region:	8
Regulatory Measure ID:	495269
Order Number:	2009-0009-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	8 36C382579
Program Type:	Construction
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	02/26/2018
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Ontario International Airport Authority
Discharge Address:	303 E B Street
Discharge City:	Ontario
Discharge State:	California
Discharge Zip:	91764
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

San Bern. Co. Permit:
Name: UNIFI AVIATION, LLC - ONT

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Address: 2500 E AIRPORT DR STE 1259
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0017002
Owner: UNIFI AVIATION, LLC
Permit Number: PT0036345
Permit Category: SMALL QUANTITY GENERATOR
Facility Status: ACTIVE
Expiration Date: 10/31/2023

Name: UNIFI AVIATION, LLC - ONT
Address: 2500 E AIRPORT DR STE 1259
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0017002
Owner: UNIFI AVIATION, LLC
Permit Number: PT0036344
Permit Category: HAZARDOUS MATERIALS 1-3 CHEMICALS
Facility Status: ACTIVE
Expiration Date: 10/31/2023

Name: DELTA AIR LINES, INC.
Address: 2500 E AIRPORT DR STE 1259
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0002679
Owner: Delta Air Lines, Inc.
Permit Number: PT0005688
Permit Category: HAZARDOUS MATERIALS 1-3 CHEMICALS SPECIAL
Facility Status: ACTIVE
Expiration Date: 10/31/2023

Name: UNITED GROUND EXPRESS
Address: 2500 E AIRPORT DR
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0018764
Owner: UNITED AIRLINES INC
Permit Number: PT0040542
Permit Category: HAZARDOUS MATERIALS 1-3 CHEMICALS SPECIAL
Facility Status: ACTIVE
Expiration Date: 04/30/2023

Name: SKYWEST AIRLINES, INC
Address: 2500 E AIRPORT DR STE 1211A
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0016229
Owner: SkyWest Airlines
Permit Number: PT0034998
Permit Category: CONDITIONALLY EXEMPT SM QTY GENERATOR
Facility Status: INACTIVE
Expiration Date: 10/31/2019

Name: SKYWEST AIRLINES, INC
Address: 2500 E AIRPORT DR STE 1211A
City,State,Zip: ONTARIO, CA 91761

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Region: SAN BERNARDINO
Facility ID: FA0016229
Owner: SkyWest Airlines
Permit Number: PT0034997
Permit Category: HAZARDOUS MATERIALS 1-3 CHEMICALS
Facility Status: INACTIVE
Expiration Date: 10/31/2019

CIWQS:

Name:	OIAA TAXIWAY S
Address:	2500 E AIRPORT DRIVE
City,State,Zip:	ONTARIO, CA 91761
Agency:	Ontario International Airport Authority
Agency Address:	303 E B Street, Ontario, CA 91764
Place/Project Type:	Construction - Transportation
SIC/NAICS:	Not reported
Region:	8
Program:	CONSTW
Regulatory Measure Status:	Terminated
Regulatory Measure Type:	Storm water construction
Order Number:	2009-0009-DWQ
WDID:	8 36C393246
NPDES Number:	CAS000002
Adoption Date:	Not reported
Effective Date:	03/23/2021
Termination Date:	12/02/2021
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	34.053842
Longitude:	-117.607341

Name:	TAXIWAY S AND W
Address:	2500 E AIRPORT DRIVE
City,State,Zip:	ONTARIO, CA 91761
Agency:	Ontario International Airport Authority
Agency Address:	303 E B Street, Ontario, CA 91764
Place/Project Type:	Construction - Industrial, Transportation
SIC/NAICS:	Not reported
Region:	8
Program:	CONSTW
Regulatory Measure Status:	Terminated
Regulatory Measure Type:	Storm water construction
Order Number:	2009-0009-DWQ
WDID:	8 36C382579
NPDES Number:	CAS000002
Adoption Date:	Not reported
Effective Date:	02/26/2018
Termination Date:	12/02/2021
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	34.053189
Longitude:	-117.583611
Name:	ONTARIO INTERNATIONAL AIRPORT
Address:	2500 E AIRPORT DR
City,State,Zip:	ONTARIO, CA 91761
Agency:	Ontario International Airport Authority
Agency Address:	303 E B Street, Ontario, CA 91764
Place/Project Type:	Industrial - Airports, Flying Fields, and Airport Terminal Services
SIC/NAICS:	4581
Region:	8
Program:	INDSTW
Regulatory Measure Status:	Active
Regulatory Measure Type:	Storm water industrial
Order Number:	2014-0057-DWQ
WDID:	8 36I026885
NPDES Number:	CAS000001
Adoption Date:	Not reported
Effective Date:	10/25/2016
Termination Date:	Not reported
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	1
Violations within 5 years:	3
Latitude:	34.06033
Longitude:	-117.59716

CERS:

Name:	DELTA AIR LINES, INC.
Address:	2500 E AIRPORT DR STE 1259
City,State,Zip:	ONTARIO, CA 91761
Site ID:	24611
CERS ID:	10407691
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	24611
Site Name:	Delta Air Lines, Inc.
Violation Date:	02-16-2023
Citation:	HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)
Violation Description:	Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes:	Returned to compliance on 02/28/2023. OBSERVATION: 1. At the time of the inspection observed (1) 120-gallon aboveground diesel tank not reported on the hazardous materials inventory. 2. At the time of the inspection, observed ~17,000 Kg of lead acid batteries inaccurately reported on the hazardous materials inventory. CORRECTIVE ACTION: Ensure all hazardous materials stored above the thresholds of 55-gallons of liquids, 500-pounds of solids, 200-cubic feet of

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

compressed flammable gases, 1,000-cubic feet of compressed non-flammable gas, and any amount of hazardous waste are completely and accurately reported on the hazardous materials inventory. Update the hazardous materials inventory reported to CERS. Sign and return the Certificate of Compliance to the inspector within 30 days indicating the Hazardous materials inventory has been completely and accurately updated.

Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Evaluation:

Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-12-2020
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-16-2023
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 01-11-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Routine Inspection
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Affiliation:

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 2500 E Airport Dr Ste 1259
Affiliation City: Ontario
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 91761
Affiliation Phone: ,

Affiliation Type Desc: Identification Signer
Entity Name: Alfonso Cardenas
Entity Title: Station Manager
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Environmental Contact
Entity Name:	Bernardo Melendez
Entity Title:	Not reported
Affiliation Address:	2500 E Airport Dr Ste 1259
Affiliation City:	Ontario
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	91761
Affiliation Phone:	,
Affiliation Type Desc:	CUPA District
Entity Name:	San Bernardino County Fire
Entity Title:	Not reported
Affiliation Address:	620 South E Street
Affiliation City:	San Bernardino
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92415-0153
Affiliation Phone:	(909) 386-8401,
Affiliation Type Desc:	Document Preparer
Entity Name:	Ben Huron
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Operator
Entity Name:	Delta Air Lines, Inc.-ONT
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(909) 605-7373,
Affiliation Type Desc:	Parent Corporation
Entity Name:	Delta Air Lines, Inc.
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Legal Owner
Entity Name:	Delta Air Lines, Inc.
Entity Title:	Not reported

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Affiliation Address:	1020 Delta Blvd., Dept. 885
Affiliation City:	Atlanta
Affiliation State:	GA
Affiliation Country:	United States
Affiliation Zip:	30354
Affiliation Phone:	(404) 773-5673,
Affiliation Type Desc:	Property Owner
Entity Name:	Delta Air Lines, Inc.
Entity Title:	Not reported
Affiliation Address:	1020 Delta Blvd., Dept. 885
Affiliation City:	Atlanta
Affiliation State:	GA
Affiliation Country:	United States
Affiliation Zip:	30354
Affiliation Phone:	(404) 773-5673,
Name:	UNIFI AVIATION, LLC - ONT
Address:	2500 E AIRPORT DR STE 1259
City,State,Zip:	ONTARIO, CA 91761
Site ID:	364979
CERS ID:	10411489
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	364979
Site Name:	Unifi Aviation, LLC - ONT
Violation Date:	03-05-2021
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes:	Returned to compliance on 09/28/2021. OBSERVATION: The facility is no longer operating the shop on the North side of the airport and has moved into a building on the South side of the airport. The mailing address and operations are still based out of Terminal 2 on the North side. As the shop itself has moved, the site map submitted in CERS is no longer valid and a new map shall be prepared and submitted into CERS. The emergency response plan document shall also be revised accordingly to account for any changes with the move. Also, hazardous materials were observed on site during the inspection that are not listed in the most current CERS inventory or are listed in lesser quantities. CORRECTIVE ACTION: Submit a signed statement that the Business Plan elements have been updated and resubmitted into CERS.
Violation Division:	San Bernardino County Fire Department
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	364979
Site Name:	Unifi Aviation, LLC - ONT
Violation Date:	03-05-2021
Citation:	HSC 6.5 25123.3(h)(1) - California Health and Safety Code, Chapter 6.5, Section(s) 25123.3(h)(1)
Violation Description:	Failure to send hazardous waste offsite for treatment, storage, or disposal within 180 days (or 270 days if waste is transported over 200 miles) for a generator who generates less than 1000 kilogram per month

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

	if all of the following conditions are met: (1) The quantity of hazardous waste accumulated onsite never exceeds 6,000 kilograms. (2) The generator complies with the requirements of 40 Code of Federal Regulations section 262.34(d), (e) and (f). (3) The generator does not hold acutely hazardous waste or extremely hazardous waste in an amount greater than one kilogram for more than 90 days.
Violation Notes:	Returned to compliance on 04/05/2021. OBSERVATION: Observed a 55-gallon drum of used oil and a ~20-gallon container of waste coolant stored on site for longer than one year. CORRECTIVE ACTION: Submit a copy of a hazardous waste manifest showing that the used oil and waste coolant have been removed.
Violation Division:	San Bernardino County Fire Department
Violation Program:	HW
Violation Source:	CERS,
Site ID:	364979
Site Name:	Unifi Aviation, LLC - ONT
Violation Date:	12-13-2017
Citation:	HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Description:	Hazardous Waste Generator Program - Administration/Documentation - General
Violation Notes:	Returned to compliance on 01/11/2018. Failure to obtain a CUPA Hazardous Waste Generator Permit (SBCC 23.0602(b)(1))
Violation Division:	San Bernardino County Fire Department
Violation Program:	HW
Violation Source:	CERS,
Site ID:	364979
Site Name:	Unifi Aviation, LLC - ONT
Violation Date:	12-13-2017
Citation:	HSC 6.95 25508.1(a)-(f) - California Health and Safety Code, Chapter 6.95, Section(s) 25508.1(a)-(f)
Violation Description:	Failure to electronically update business plan within 30 days of any one of the following events: A 100 percent or more increase in the quantity of a previously disclosed material. Any handling of a previously undisclosed hazardous materials at or above reportable quantities. A change of business address, business ownership, or business name. A substantial change in the handler's operations that requires modification to any portion of the business plan.
Violation Notes:	Returned to compliance on 01/11/2018.
Violation Division:	San Bernardino County Fire Department
Violation Program:	HMRRP
Violation Source:	CERS,

Evaluation:

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	03-05-2021
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	San Bernardino County Fire Department
Eval Program:	HMRRP
Eval Source:	CERS,
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	03-05-2021

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-13-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-13-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Affiliation:
Affiliation Type Desc: CUPA District
Entity Name: San Bernardino County Fire
Entity Title: Not reported
Affiliation Address: 620 South E Street
Affiliation City: San Bernardino
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92415-0153
Affiliation Phone: (909) 386-8401,

Affiliation Type Desc: Legal Owner
Entity Name: Unifi Aviation, LLC
Entity Title: Not reported
Affiliation Address: 1007 Virginia Ave, STE 150, Environmental
Affiliation City: Atlanta
Affiliation State: GA
Affiliation Country: United States
Affiliation Zip: 30354
Affiliation Phone: (470) 630-2448,

Affiliation Type Desc: Environmental Contact
Entity Name: Art Slayton
Entity Title: Not reported
Affiliation Address: 1007 Virginia Ave, STE 150, Environmental
Affiliation City: Atlanta
Affiliation State: GA
Affiliation Country: Not reported
Affiliation Zip: 30354
Affiliation Phone: ,

Affiliation Type Desc: Facility Mailing Address

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	2500 E. Airport Drive, Ste 1259
Affiliation City:	Ontario
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	91761
Affiliation Phone:	,
Affiliation Type Desc:	Document Preparer
Entity Name:	Art Slayton
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Operator
Entity Name:	Unifi Aviation, LLC - ONT
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(760) 422-8793,
Affiliation Type Desc:	Parent Corporation
Entity Name:	Unifi Aviation, LLC
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Property Owner
Entity Name:	Unifi Aviation, LLC
Entity Title:	Not reported
Affiliation Address:	1007 Virginia Ave, STE 150, Environmental
Affiliation City:	ATLANTA
Affiliation State:	GA
Affiliation Country:	United States
Affiliation Zip:	30354
Affiliation Phone:	(470) 630-2448,
Affiliation Type Desc:	Identification Signer
Entity Name:	Alice Parra
Entity Title:	Station Manager
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Affiliation Phone: ,

Name: ONTARIO INTERNATIONAL AIRPORT
Address: 2500 E AIRPORT DR
City,State,Zip: ONTARIO, CA 91761
Site ID: 538456
CERS ID: 850683
CERS Description: Industrial Facility Storm Water

Violations:

Site ID: 538456
Site Name: Ontario International Airport
Violation Date: 12-16-2021
Citation: 2014-0057-DWQ - Industrial General Permit
Violation Description: SWPPP
Violation Notes: Sampling violation: Section XI.B.4 requires samples shall be collected from each drainage area at all discharge locations unless a Representative Sampling Reduction report has been submitted. As no report has been submitted, this is a violation of section XI.B.4.
Violation Division: Water Boards
Violation Program: INDSTW
Violation Source: SMARTS,

Site ID: 538456
Site Name: Ontario International Airport
Violation Date: 06-15-2022
Citation: 2014-0057-DWQ - Industrial General Permit
Violation Description: SWPPP
Violation Notes: The resolution of site map Figures 2, 3, 4, 5, 7, and 8 makes some text illegible. The illegibility of the maps is in violation of section X.E.1 of the IGP.
Violation Division: Water Boards
Violation Program: INDSTW
Violation Source: SMARTS,

Site ID: 538456
Site Name: Ontario International Airport
Violation Date: 12-16-2021
Citation: 2014-0057-DWQ - Industrial General Permit
Violation Description: SWPPP
Violation Notes: Sampling violation: Per December 16, 2021 inspection, wattles were installed around the CC-terminals sampling point inlet and no other terminal inlets. Any samples collected from CC-terminals under these conditions were not representative of storm water associated with industrial activities as is required under section XI.B.4 of the IGP.
Violation Division: Water Boards
Violation Program: INDSTW
Violation Source: SMARTS,

Site ID: 538456
Site Name: Ontario International Airport
Violation Date: 06-15-2022
Citation: 2014-0057-DWQ - Industrial General Permit
Violation Description: SW - Deficient BMP Implementation
Violation Notes: I observed accumulated sediment and broken concrete near the CC-sheetflow sampling point (pages 5-7). The broken concrete is in violation of XXI.F since concrete serves as a pollution control device

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

that prevents sediment from being mobilized. The accumulated sediment may be in violation of section X.H.1 if it is feasible to clean it up.
I observed five open dumpsters in the Menzies Maintenance area, at least three of which contained industrial waste (page 10), and one uncovered waste bin in the MY area (page 20). This is in violation of section X.H.1.d.iii. I observed eroded banks causing deterioration of the asphalt paving in the MY channel (pages 13-16). This is also in violation of section XXI.F mentioned previously. I observed open absorbent bags, spilled absorbent, and a deteriorated sandbag in the MY area. This may be in violation of section X.H.1.c.ii if it is feasible to clean up the spilled material.

Violation Division: Water Boards
Violation Program: INDSTW
Violation Source: SMARTS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-16-2021
Violations Found: No
Eval Type: Industrial Storm Water Compliance Evaluation
Eval Notes: Walkthrough of site with Matthew Renaud. Photos and details in inspection report. Note that Deer Creek is no longer being sampled, and CC Sheetflow and CC terminal sampling sites have been added. SWPPP and inspection reports were accessible on site. Some concerns with erosion and displacement of BMPS were noted, and Mr. Renaud commented that they would be repaired. Envirosocks used at sampling locations. Site is in level 1 for Zinc, TSS, and Copper
Eval Division: Water Boards
Eval Program: INDSTW
Eval Source: SMARTS,

Enforcement Action:
Site ID: 538456
Site Name: Ontario International Airport
Site Address: 2500 E AIRPORT DR
Site City: ONTARIO
Site Zip: 91761
Enf Action Date: 06-23-2022
Enf Action Type: Industrial Storm Water Enforcement
Enf Action Description: Industrial Storm Water Enforcement
Enf Action Notes: Follow up email alleging violations
Enf Action Division: Water Boards
Enf Action Program: INDSTW
Enf Action Source: SMARTS,

Affiliation:
Affiliation Type Desc: Owner/Operator
Entity Name: Ontario International Airport Authority
Entity Title: Operator
Affiliation Address: 303 E B Street
Affiliation City: Ontario
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 91764
Affiliation Phone: ,

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Name: UNITED GROUND EXPRESS
Address: 2500 E AIRPORT DR
City,State,Zip: ONTARIO, CA 91761
Site ID: 572401
CERS ID: 10864402
CERS Description: Chemical Storage Facilities

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-08-2021
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Coordinates:
Site ID: 572401
Facility Name: United Ground Express
Env Int Type Code: HMBP
Program ID: 10864402
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.,
Latitude: 34.060300
Longitude: -117.597170

Affiliation:
Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 2500 E Airport Dr
Affiliation City: Ontario
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 91761
Affiliation Phone: ,

Affiliation Type Desc: Legal Owner
Entity Name: United Ground Express
Entity Title: Not reported
Affiliation Address: 11555 W Touhy Ave
Affiliation City: Chicago
Affiliation State: IL
Affiliation Country: United States
Affiliation Zip: 60606
Affiliation Phone: (872) 825-7431,

Affiliation Type Desc: CUPA District
Entity Name: San Bernardino County Fire
Entity Title: Not reported
Affiliation Address: 620 South E Street
Affiliation City: San Bernardino
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92415-0153
Affiliation Phone: (909) 386-8401,

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Affiliation Type Desc:	Document Preparer
Entity Name:	Amanda Thomas
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Environmental Contact
Entity Name:	Amanda Thomas
Entity Title:	Not reported
Affiliation Address:	11555 W Touhy Ave
Affiliation City:	Chicago
Affiliation State:	IL
Affiliation Country:	Not reported
Affiliation Zip:	60606
Affiliation Phone:	,

Affiliation Type Desc:	Operator
Entity Name:	United Ground Express
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(909) 418-2820,

Affiliation Type Desc:	Identification Signer
Entity Name:	Amanda Thomas
Entity Title:	GSE Regional Manager
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Parent Corporation
Entity Name:	United Ground Express
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

E28 **NORTHWEST AIRLINES INC** **CA San Bern. Co. Permit** **S106112205**
ESE **2500 E AIRPORT DR 1243** **N/A**
1/8-1/4 **ONTARIO, CA 91761**
0.201 mi.
1063 ft. **Site 11 of 12 in cluster E**

Relative: **Lower**

Actual: **952 ft.**

San Bern. Co. Permit:

Name:	NORTHWEST AIRLINES INC
Address:	2500 E AIRPORT DR 1243
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO
Facility ID:	FA0005004
Owner:	NORTHWEST AIRLINES INC
Permit Number:	PT0008648
Permit Category:	SPECIAL GENERATOR
Facility Status:	INACTIVE
Expiration Date:	08/31/2006

Name:	NORTHWEST AIRLINES INC
Address:	2500 E AIRPORT DR 1243
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO
Facility ID:	FA0005004
Owner:	NORTHWEST AIRLINES INC
Permit Number:	PT0008647
Permit Category:	SPECIAL HANDLER
Facility Status:	INACTIVE
Expiration Date:	08/31/2006

E29 **UNITED AIRLINES INC** **RCRA NonGen / NLR** **1024838364**
ESE **2500 E AIRPORT DR STE 1211A** **CAL000385095**
1/8-1/4 **ONTARIO, CA 91761**
0.201 mi.
1063 ft. **Site 12 of 12 in cluster E**

Relative: **Lower**

Actual: **952 ft.**

RCRA Listings:

Date Form Received by Agency:	20130502
Handler Name:	United Airlines Inc
Handler Address:	2500 E AIRPORT DR STE 1211A
Handler City,State,Zip:	ONTARIO, CA 91761-0000
EPA ID:	CAL000385095
Contact Name:	MONICA LU
Contact Address:	PO BOX 92245
Contact City,State,Zip:	LOS ANGELES, CA 90009
Contact Telephone:	310-431-3623
Contact Fax:	310-431-3696
Contact Email:	MONICA.LU@UNITED.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	PO BOX 92245
Mailing City,State,Zip:	LOS ANGELES, CA 90009-0000
Owner Name:	United Air Lines

UNITED AIRLINES INC (Continued) **1024838364**

Owner Type:	Other
Operator Name:	Monica Lu
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20180906
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name: UNITED AIR LINES	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	6020 AVION DR
Owner/Operator City,State,Zip:	LOS ANGELES, CA 90045-5679
Owner/Operator Telephone:	310-431-3623
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

UNITED AIRLINES INC (Continued) **1024838364**

Owner/Operator Indicator:	Operator
Owner/Operator Name: MONICA LU	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	PO BOX 92245
Owner/Operator City,State,Zip:	LOS ANGELES, CA 90009
Owner/Operator Telephone:	310-431-3623
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20130502
Handler Name: UNITED AIRLINES INC	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	481112
NAICS Description:	SCHEDULED FREIGHT AIR TRANSPORTATION

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

F30 **ONTARIO CONVENTION CENTER** **CA San Bern. Co. Permit** **S106230076**
NW **2000 CONVENTION CENTER WAY** **CA CERS** **N/A**
1/8-1/4 **ONTARIO, CA 91764**
0.225 mi.
1187 ft. **Site 1 of 2 in cluster F**

Relative: Higher

Actual: 980 ft.

San Bern. Co. Permit:

Name:	ONTARIO CONVENTION CENTER
Address:	2000 CONVENTION CENTER WAY
City,State,Zip:	ONTARIO, CA 91764
Region:	SAN BERNARDINO
Facility ID:	FA0008300
Owner:	CITY OF ONTARIO UTILITIES DEPT
Permit Number:	PT0014514
Permit Category:	HAZARDOUS MATERIALS 4-10 CHEMICALS
Facility Status:	ACTIVE
Expiration Date:	05/31/2023

Name: VERIZON WIRELESS: TURNER

ONTARIO CONVENTION CENTER (Continued) **S106230076**

Address: 2000 CONVENTION CENTER WAY
City,State,Zip: ONTARIO, CA 91764
Region: SAN BERNARDINO
Facility ID: FA0017086
Owner: Verizon Wireless
Permit Number: PT0036442
Permit Category: HAZARDOUS MATERIALS 1-3 CHEMICALS SPECIAL
Facility Status: ACTIVE
Expiration Date: 11/30/2021

CERS:
Name: VERIZON WIRELESS: TURNER
Address: 2000 CONVENTION CENTER WAY
City,State,Zip: ONTARIO, CA 91764
Site ID: 168784
CERS ID: 10165151
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 168784
Site Name: Verizon Wireless: Turner
Violation Date: 07-20-2022
Citation: Un-Specified
Violation Description: Business Plan Program - Administration/Documentation - General Local Ordinance
Violation Notes: OBSERVATION: At the time of inspection, the Hazardous Materials Handler permit had expired on 11/30/2021. CORRECTIVE ACTION: Contact fiscal and pay permit fees within 30 days.
Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-20-2022
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-05-2019
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Affiliation:
Affiliation Type Desc: Identification Signer
Entity Name: Wilson Rodriguez
Entity Title: Engr III Spec-RE/Regulatory
Affiliation Address: Not reported

ONTARIO CONVENTION CENTER (Continued) **S106230076**

Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Operator
Entity Name:	Verizon Wireless
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(949) 286-7000,
Affiliation Type Desc:	Environmental Contact
Entity Name:	Environmental Compliance
Entity Title:	Not reported
Affiliation Address:	15505 Sand Canyon Avenue
Affiliation City:	Irvine
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92618
Affiliation Phone:	,
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	15505 Sand Canyon Avenue
Affiliation City:	Irvine
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92618
Affiliation Phone:	,
Affiliation Type Desc:	Parent Corporation
Entity Name:	Verizon Wireless [Southern California]
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Document Preparer
Entity Name:	Steve Skanderson, Stantec
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Legal Owner

ONTARIO CONVENTION CENTER (Continued) **S106230076**

Entity Name: Verizon Wireless
Entity Title: Not reported
Affiliation Address: 15505 Sand Canyon Avenue
Affiliation City: Irvine
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 92618
Affiliation Phone: (949) 286-7000,

Affiliation Type Desc: CUPA District
Entity Name: San Bernardino County Fire
Entity Title: Not reported
Affiliation Address: 620 South E Street
Affiliation City: San Bernardino
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92415-0153
Affiliation Phone: (909) 386-8401,

Name: ONTARIO CONVENTION CENTER
Address: 2000 CONVENTION CENTER WAY
City,State,Zip: ONTARIO, CA 91764
Site ID: 53940
CERS ID: 10048348
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 53940
Site Name: ONTARIO CONVENTION CENTER
Violation Date: 04-25-2019
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.
Violation Notes: Returned to compliance on 05/07/2019. OBSERVATION: The CERS business plan inventory was last submitted on 10/2/2017 and the emergency response plan section was last submitted in 2013. The plan is required to be updated and submitted annually by March 1st. CORRECTIVE ACTION: Review and certify the business plan via CERS within 30 days and yearly before March 1st.
Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 53940
Site Name: ONTARIO CONVENTION CENTER
Violation Date: 04-25-2019
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes: Returned to compliance on 05/07/2019. OBSERVATION: The hazardous materials inventory was found to be incomplete. Water treatment chemicals were observed that are above the 55 gallon threshold reporting quantities. CORRECTIVE ACTION: Submit an accurate and

ONTARIO CONVENTION CENTER (Continued) **S106230076**

complete hazardous materials inventory via CERS.
Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 53940
Site Name: ONTARIO CONVENTION CENTER
Violation Date: 04-07-2016
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2
Violation Description: Failure to annually review and electronically certify that the business plan is complete, accurate, and up-to-date.
Violation Notes: Returned to compliance on 10/11/2017. The last update submitted by this facility is dated 6/7/2013.
Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 53940
Site Name: ONTARIO CONVENTION CENTER
Violation Date: 04-25-2019
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit a site map with all required content.
Violation Notes: Returned to compliance on 05/07/2019. OBSERVATION: The site map as submitted is incomplete. The following items must be indicated on the site map: north orientation, loading areas, internal roads, adjacent streets, storm and sewer drains, access and exit points, utility emergency shutoff, evacuation staging areas, hazardous material handling and storage areas, and emergency response equipment. CORRECTIVE ACTION: Submit an accurate and complete site map into CERS.
Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 53940
Site Name: ONTARIO CONVENTION CENTER
Violation Date: 04-07-2016
Citation: HSC 6.95 25508.1(a)-(e) - California Health and Safety Code, Chapter 6.95, Section(s) 25508.1(a)-(e)
Violation Description: Failure to electronically update business plan within 30 days of any one of the following events: A 100 percent or more increase in the quantity of a previously disclosed material. Any handling of a previously undisclosed hazardous materials at or above reportable quantities. A change of business address, business ownership, or business name.
Violation Notes: Returned to compliance on 05/07/2019. Hazardous materials were observed on site during the inspection that are not listed in the most current Business Plan inventory or are listed in lesser quantities. The contacts listed in CERS have changed and require revision. Also, some of the elements required on the site map were not present.
Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 53940

ONTARIO CONVENTION CENTER (Continued) **S106230076**

Site Name: ONTARIO CONVENTION CENTER
Violation Date: 04-25-2019
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to establish and electronically submit an adequate emergency response plan and procedures for a release or threatened release of a hazardous material.
Violation Notes: Returned to compliance on 05/07/2019. OBSERVATION: The emergency response phone number for this agency (CUPA) was not listed within the emergency response plan. Regulated facilities in this jurisdiction are required to include one of the following phone numbers in the Emergency Response Plans & Procedures: (800) 33-TOXIC or (909) 386-8425. CORRECTIVE ACTION: Submit an updated emergency response plan into the California Environmental Reporting System (CERS).
Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-07-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: ROUTINE HANDLER INSPECTION-ONTARIO CONVENTION CENTER
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-25-2019
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-23-2022
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Enforcement Action:
Site ID: 53940
Site Name: ONTARIO CONVENTION CENTER
Site Address: 2000 CONVENTION CENTER WAY
Site City: ONTARIO
Site Zip: 91764
Enf Action Date: 04-07-2016
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported

ONTARIO CONVENTION CENTER (Continued) **S106230076**

Enf Action Division: San Bernardino County Fire Department
Enf Action Program: HMRRP
Enf Action Source: CERS,

Affiliation:
Affiliation Type Desc: Document Preparer
Entity Name: Operations Coordinator
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Legal Owner
Entity Name: CITY OF ONTARIO UTILITIES DEPT
Entity Title: Not reported
Affiliation Address: 303 EAST 'B' STREET
Affiliation City: ONTARIO
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 91764-9176
Affiliation Phone: (909) 395-2000,

Affiliation Type Desc: Operator
Entity Name: Operations Coordinator
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (909) 937-3025,

Affiliation Type Desc: Parent Corporation
Entity Name: SMG
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: CUPA District
Entity Name: San Bernardino County Fire
Entity Title: Not reported
Affiliation Address: 620 South E Street
Affiliation City: San Bernardino
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92415-0153
Affiliation Phone: (909) 386-8401,

Affiliation Type Desc: Identification Signer
Entity Name: Daniel J. Villegas

ONTARIO CONVENTION CENTER (Continued) **S106230076**

Entity Title:	DIRECTOR OF FACILITIES
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Property Owner
Entity Name:	CITY OF ONTARIO UTILITIES DEPT
Entity Title:	Not reported
Affiliation Address:	2000 CONVENTION CENTER WAY
Affiliation City:	ONTARIO
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	91764
Affiliation Phone:	(909) 395-2000,
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	2000 E. CONVENTION CENTER WAY
Affiliation City:	ONTARIO
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	91764
Affiliation Phone:	,
Affiliation Type Desc:	Environmental Contact
Entity Name:	Daniel J. Villegas
Entity Title:	Not reported
Affiliation Address:	2000 E. CONVENTION CENTER WAY
Affiliation City:	ONTARIO
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	91764
Affiliation Phone:	,

F31 **AT&T MOBILITY - (USID26378)** **CA San Bern. Co. Permit** **S124442837**
NW **2000 E CONVENTION CENTER WAY** **N/A**
1/8-1/4 **ONTARIO, CA 91762**
0.225 mi.
1187 ft. **Site 2 of 2 in cluster F**

Relative:
Higher

Actual:
980 ft.

San Bern. Co. Permit:

Name:	AT&T MOBILITY - (USID26378)
Address:	2000 E CONVENTION CENTER WAY
City,State,Zip:	ONTARIO, CA 91762
Region:	SAN BERNARDINO
Facility ID:	FA0009012
Owner:	New Cingular Wireless PCS, LLC dba AT&T Mobility
Permit Number:	PT0015880
Permit Category:	HAZARDOUS MATERIALS 1-3 CHEMICALS SPECIAL
Facility Status:	INACTIVE
Expiration Date:	08/31/2022

G32 **CARDENAS MARKETS DISTRIBUTION CENTER** **RCRA NonGen / NLR** **1026055407**
ENE **2501 E GUASTI RD** **CAL000451589**
1/8-1/4 **ONTARIO, CA 91761**
0.226 mi.
1191 ft. **Site 1 of 3 in cluster G**

Relative:
Higher

Actual:
966 ft.

RCRA Listings:

Date Form Received by Agency:	20191224
Handler Name:	Cardenas Markets Distribution Center
Handler Address:	2501 E GUASTI RD
Handler City,State,Zip:	ONTARIO, CA 91761-7657
EPA ID:	CAL000451589
Contact Name:	MIRNA RUACHO
Contact Address:	2501 E. GUASTI RD.
Contact City,State,Zip:	ONTARIO, CA 91761
Contact Telephone:	909-470-7135
Contact Fax:	Not reported
Contact Email:	MRUACHO@CMKTS.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	2501 E GUASTI RD
Mailing City,State,Zip:	ONTARIO, CA 91761-3631
Owner Name:	Cardenas Markets Llc
Owner Type:	Other
Operator Name:	Mirna Ruacho
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **1026055407**

Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20200210
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name: CARDENAS MARKETS LLC	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	2501 E GUASTI RD
Owner/Operator City,State,Zip:	ONTARIO, CA 91761-3631
Owner/Operator Telephone:	909-923-7426
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name: MIRNA RUACHO	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	2501 E. GUASTI RD.
Owner/Operator City,State,Zip:	ONTARIO, CA 91761
Owner/Operator Telephone:	909-470-7135
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20191224
Handler Name:	CARDENAS MARKETS DISTRIBUTION CENTER
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **1026055407**

List of NAICS Codes and Descriptions:
NAICS Code: 454390
NAICS Description: OTHER DIRECT SELLING ESTABLISHMENTS

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

G33 **CARDENAS MARKETS DISTRIBUTION CENTER** **CA CERS HAZ WASTE** **S102040171**
ENE **2501 E GUASTI RD** **CA HWTS** **N/A**
1/8-1/4 **ONTARIO, CA 91761** **CA HAZNET**
0.226 mi. **CA NPDES**
1191 ft. **Site 2 of 3 in cluster G** **CA San Bern. Co. Permit**
CA CIWQS
Relative: Higher **CA CERS**

Actual: 966 ft.

CERS HAZ WASTE:
Name: CARDENAS MARKETS DISTRIBUTION CENTER
Address: 2501 E GUASTI RD
City,State,Zip: ONTARIO, CA 91761
Site ID: 102986
CERS ID: 10459684
CERS Description: Hazardous Waste Generator

HWTS:
Name: CARDENAS MARKETS DISTRIBUTION CENTER
Address: 2501 E GUASTI RD
Address 2: Not reported
City,State,Zip: ONTARIO, CA 91761
EPA ID: CAL000451589
Inactive Date: Not reported
Create Date: 12/24/2019
Last Act Date: Not reported
Mailing Name: Not reported
Mailing Address: 2501 E GUASTI RD
Mailing Address 2: Not reported
Mailing City,State,Zip: ONTARIO, CA 91761
Owner Name: CARDENAS MARKET LLC
Owner Address: 2501 E GUASTI RD
Owner Address 2: Not reported
Owner City,State,Zip: ONTARIO, CA 917610000
Owner Phone: Not reported
Owner Fax: Not reported
Contact Name: MIRNA RUACHO
Contact Address: 2501 E. GUASTI RD.
Contact Address 2: Not reported
City,State,Zip: ONTARIO, CA 917610000
Contact Phone: Not reported
Contact Fax: Not reported
Facility Status: Active
Facility Type: PERMANENT
Category: STATE
Latitude: 34.063179

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Longitude: -117.600129

NAICS:

EPA ID: CAL000451589
Create Date: 2019-12-24 10:04:02.227
NAICS Code: 454390
NAICS Description: Other Direct Selling Establishments
Issued EPA ID Date: 2019-12-24 10:04:02.19700
Inactive Date: Not reported
Facility Name: CARDENAS MARKETS DISTRIBUTION CENTER
Facility Address: 2501 E GUASTI RD
Facility Address 2: Not reported
Facility City: ONTARIO
Facility County: Not reported
Facility State: CA
Facility Zip: 917617657

Name: CARDENAS MARKETS DISTRIBUTION CENTER
Address: 2501 E GUASTI RD
Address 2: Not reported
City,State,Zip: ONTARIO, CA 91761
EPA ID: CAL000378320
Inactive Date: 06/30/2019
Create Date: 09/19/2012
Last Act Date: Not reported
Mailing Name: Not reported
Mailing Address: 2501 E GUASTI RD
Mailing Address 2: Not reported
Mailing City,State,Zip: ONTARIO, CA 917613631
Owner Name: CARDENAS MARKETS INC
Owner Address: 2501 E GUASTI RD
Owner Address 2: Not reported
Owner City,State,Zip: ONTARIO, CA 917613631
Owner Phone: Not reported
Owner Fax: Not reported
Contact Name: MIRNA RUACHO
Contact Address: 2501 E. GUASTI RD.
Contact Address 2: Not reported
City,State,Zip: ONTARIO, CA 91761
Contact Phone: Not reported
Contact Fax: Not reported
Facility Status: Inactive
Facility Type: PERMANENT
Category: STATE
Latitude: 34.063179
Longitude: -117.600129

NAICS:

EPA ID: CAL000378320
Create Date: 2012-09-19 12:55:11.343
NAICS Code: 56121
NAICS Description: Facilities Support Services
Issued EPA ID Date: 2012-09-19 12:55:11.32700
Inactive Date: 2019-06-30 00:00:00
Facility Name: CARDENAS MARKETS DISTRIBUTION CENTER
Facility Address: 2501 E GUASTI RD
Facility Address 2: Not reported

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Facility City: ONTARIO
Facility County: Not reported
Facility State: CA
Facility Zip: 917617657

HAZNET:
Name: CARDENAS MARKETS DISTRIBUTION CENTER
Address: 2501 E GUASTI RD
Address 2: Not reported
City,State,Zip: ONTARIO, CA 917617657
Contact: MIRNA RUACHO
Telephone: 9094707135
Mailing Name: Not reported
Mailing Address: 2501 E GUASTI RD

Year: 2021
Gepaid: CAL000451589
TSD EPA ID: CAD008364432
CA Waste Code: 331 - Off-specification, aged or surplus organics
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.0135

Year: 2021
Gepaid: CAL000451589
TSD EPA ID: CAD008364432
CA Waste Code: 214 - Unspecified solvent mixture
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.0135

Year: 2021
Gepaid: CAL000451589
TSD EPA ID: CAD008364432
CA Waste Code: 791 - Liquids with pH <= 2
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.037

Year: 2020
Gepaid: CAL000451589
TSD EPA ID: CAD008364432
CA Waste Code: 331 - Off-specification, aged or surplus organics
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.0395

Year: 2019
Gepaid: CAL000378320
TSD EPA ID: CAD008364432
CA Waste Code: 791 - Liquids with pH <= 2
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.00600

Year: 2019

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Gepaid: CAL000378320
TSD EPA ID: CAD008364432
CA Waste Code: 214 - Unspecified solvent mixture
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.00500

Year: 2019
Gepaid: CAL000378320
TSD EPA ID: AZR000515924
CA Waste Code: 352 - Other organic solids
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.05000

Year: 2018
Gepaid: CAL000378320
TSD EPA ID: CAD008364432
CA Waste Code: 331 - Off-specification, aged or surplus organics
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.02050

Year: 2017
Gepaid: CAL000378320
TSD EPA ID: AZR000515924
CA Waste Code: 352 - Other organic solids
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.075

Year: 2015
Gepaid: CAL000378320
TSD EPA ID: AZR000515924
CA Waste Code: 352 - Other organic solids
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.1

Click this hyperlink while viewing on your computer to access additional CA HAZNET: detail in the EDR Site Report.

Additional Info:
Year: 2021
Gen EPA ID: CAL000451589

Shipment Date: 7/13/2020
Creation Date: 7/23/2020
Receipt Date: 7/21/2020
Manifest ID: 014930515FLE
Trans EPA ID: MNS000110924
Trans Name: Stericycle Specialty Waste Solutions Inc
Trans 2 EPA ID: MNS000110924
Trans 2 Name: Stericycle Specialty Waste Solutions Inc
TSDF EPA ID: CAD008364432
Trans Name: Rho Chem LLC

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0155
Waste Quantity:	31
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	1/16/2020
Creation Date:	2/13/2020
Receipt Date:	1/24/2020
Manifest ID:	014047563FLE
Trans EPA ID:	MNS000110924
Trans Name:	Stericycle Specialty Waste Solutions Inc
Trans 2 EPA ID:	MNS000110924
Trans 2 Name:	Stericycle Specialty Waste Solutions Inc
TSDF EPA ID:	CAD008364432
Trans Name:	Rho Chem LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.024
Waste Quantity:	48
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2020
Gen EPA ID:	CAL000451589
Shipment Date:	7/13/2020
Creation Date:	7/23/2020
Receipt Date:	7/21/2020
Manifest ID:	014930515FLE
Trans EPA ID:	MNS000110924
Trans Name:	Stericycle Specialty Waste Solutions Inc
Trans 2 EPA ID:	MNS000110924
Trans 2 Name:	Stericycle Specialty Waste Solutions Inc
TSDF EPA ID:	CAD008364432
Trans Name:	Rho Chem LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0155
Waste Quantity:	31
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	1/16/2020
Creation Date:	2/13/2020
Receipt Date:	1/24/2020
Manifest ID:	014047563FLE
Trans EPA ID:	MNS000110924
Trans Name:	Stericycle Specialty Waste Solutions Inc
Trans 2 EPA ID:	MNS000110924
Trans 2 Name:	Stericycle Specialty Waste Solutions Inc
TSDF EPA ID:	CAD008364432
Trans Name:	Rho Chem LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.024
Waste Quantity:	48
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Detail Two:

Year:	2020
EM Manifest ID:	c09f4372-f268-48cb-83fd-bc5e73e9e911
Shipment Date:	7/13/2020
Receipt Date:	7/21/2020
Manifest Number:	014930515FLE
Generator EPA ID:	CAL000451589
Name:	CARDENAS MARKETS
Address:	2501 E. GUASTI ROAD
Address 2:	Not reported
City:	ONTARIO
Zip:	91761
Telephone:	877-577-2669
Contact:	Not reported
Contact Telephone:	323-776-6233
Transporter 1 EPA ID:	MNS000110924
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MNS000110924
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD008364432

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

TSDF Name:	Rho Chem LLC
TSDF Address 1:	425 Isis Ave.
TSDF Address 2:	Not reported
TSDF City:	Inglewood
TSDF Zip:	90301
TSDF Telephone:	Not reported

State:

Year:	2020
EM Manifest ID:	c09f4372-f268-48cb-83fd-bc5e73e9e911
Generator EPA ID:	CAL000451589
Shipment Date:	2020-07-13
Manifest Number:	014930515FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.01550
Quantity Waste:	31.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
State Code:	331

Year:	2020
EM Manifest ID:	1006101
Shipment Date:	1/16/2020
Receipt Date:	1/24/2020
Manifest Number:	014047563FLE
Generator EPA ID:	CAL000451589
Name:	CARDENAS MARKETS
Address:	2501 E. GUASTI ROAD
Address 2:	Not reported
City:	ONTARIO
Zip:	91761
Telephone:	877-577-2669
Contact:	Not reported
Contact Telephone:	323-776-6233
Transporter 1 EPA ID:	MNS000110924
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MNS000110924
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD008364432
TSDF Name:	Rho Chem LLC
TSDF Address 1:	425 Isis Ave.
TSDF Address 2:	Not reported
TSDF City:	Inglewood
TSDF Zip:	90301
TSDF Telephone:	Not reported

State:

Year:	2020
EM Manifest ID:	1006101
Generator EPA ID:	CAL000451589
Shipment Date:	2020-01-16
Manifest Number:	014047563FLE
Line Number:	1
Method Code:	H141

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Quantity Tons:	0.02400
Quantity Waste:	48.000000
Quantity Unit:	P
Number of Containers:	2
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
State Code:	331

Detail Two:

Year:	2019
EM Manifest ID:	286862
Shipment Date:	1/2/2019
Receipt Date:	1/10/2019
Manifest Number:	018146617JJK
Generator EPA ID:	CAL000378320
Name:	CARDENAS MARKETS DISTRIBUTION CENTER
Address:	2501 E GUASTI RD
Address 2:	Not reported
City:	ONTARIO
Zip:	91761-7657
Telephone:	949-310-2747
Contact:	Not reported
Contact Telephone:	909-923-7426
Transporter 1 EPA ID:	CAR000267260
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	CAR000175422
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	AZR000515924
TSDF Name:	YUMA YES WASTE TRANSFER FACILITY
TSDF Address 1:	2730 E 13TH ST
TSDF Address 2:	Not reported
TSDF City:	YUMA
TSDF Zip:	85365-1901
TSDF Telephone:	Not reported

State:

Year:	2019
EM Manifest ID:	286862
Generator EPA ID:	CAL000378320
Shipment Date:	2019-01-02
Manifest Number:	018146617JJK
Line Number:	1
Method Code:	H141
Quantity Tons:	0.05000
Quantity Waste:	100.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Metal drums, barrels, kegs
Quantity Type:	Pounds
State Code:	352

Detail Two:

Year:	2018
EM Manifest ID:	016089401JJK20170606_D_1
Shipment Date:	6/6/2017

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Receipt Date:	6/17/2017
Manifest Number:	016089401JJK
Generator EPA ID:	CAL000378320
Name:	CARDENAS MARKET CORPORATION
Address:	Not reported
Address 2:	Not reported
City:	Not reported
Zip:	Not reported
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	Not reported
Transporter 1 EPA ID:	CAR000287260
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	CAR000175422
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	AZR000515924
TSDF Name:	YUMA ENVIRONMENTAL SERVICES
TSDF Address 1:	Not reported
TSDF Address 2:	Not reported
TSDF City:	Not reported
TSDF Zip:	Not reported
TSDF Telephone:	Not reported

State:

Year:	2018
EM Manifest ID:	016089401JJK20170606_D_1
Generator EPA ID:	CAL000378320
Shipment Date:	2017-06-06
Manifest Number:	016089401JJK
Line Number:	1
Method Code:	H141
Quantity Tons:	0.07500
Quantity Waste:	150.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	352

Additional Info:

Year:	2017
Gen EPA ID:	CAL000378320
Shipment Date:	20170606
Creation Date:	7/6/2018 18:30:59
Receipt Date:	20170617
Manifest ID:	016089401JJK
Trans EPA ID:	CAR000287260
Trans Name:	ALPHA PETROLEUM TRANSPORT INC II DBA AEEC
Trans 2 EPA ID:	CAR000175422
Trans 2 Name:	WORLDWIDE RECOVERY SYS INC
TSDF EPA ID:	AZR000515924
Trans Name:	YUMA ENVIRONMENTAL SERVICES
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.075
Waste Quantity:	150
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2015
Gen EPA ID:	CAL000378320
Shipment Date:	20150825
Creation Date:	2/9/2016 22:16:04
Receipt Date:	20150901
Manifest ID:	014918538JJK
Trans EPA ID:	CAT080012800
Trans Name:	HAZ MAT TRANS INC
Trans 2 EPA ID:	CAR000175422
Trans 2 Name:	WORLDWIDE RECOVERY SYSTEMS
TSDF EPA ID:	AZR000515924
Trans Name:	YUMA ENVIRONMENTAL SERVICES
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.1
Waste Quantity:	200
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

NPDES:

Name:	CARDENAS MARKETS LLC
Address:	2501 EAST GUASTI ROAD
City,State,Zip:	ONTARIO, CA 91761
Facility Status:	Active
NPDES Number:	CAS000001
Region:	8
Agency Number:	0
Regulatory Measure ID:	491074
Place ID:	Not reported
Order Number:	97-03-DWQ
WDID:	8 36I027360
Regulatory Measure Type:	Enrollee
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Effective Date Of Regulatory Measure:	09/22/2017
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	2501 East Guasti Road
Discharge Name:	Cardenas Markets LLC
Discharge City:	Ontario
Discharge State:	California
Discharge Zip:	91761
Status:	Not reported
Status Date:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported

NPDES as of 03/2018:

NPDES Number:	CAS000001
Status:	Active
Agency Number:	0
Region:	8
Regulatory Measure ID:	491074
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	8 36I027360
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	09/22/2017
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Cardenas Markets LLC
Discharge Address:	2501 East Guasti Road
Discharge City:	Ontario
Discharge State:	California
Discharge Zip:	91761
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

Name:	CARDENAS MARKETS LLC
Address:	2501 EAST GUASTI ROAD
City,State,Zip:	ONTARIO, CA 91761
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	8 36I027360
Regulatory Measure Type:	Industrial
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Discharge Zip:	Not reported
Status:	Active
Status Date:	07/17/2018
Operator Name:	Cardenas Markets LLC
Operator Address:	2501 East Guasti Road
Operator City:	Ontario
Operator State:	California
Operator Zip:	91761

NPDES as of 03/2018:

NPDES Number:	CAS000001
Status:	Active
Agency Number:	0
Region:	8
Regulatory Measure ID:	491074
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	8 36I027360
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	09/22/2017
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Cardenas Markets LLC
Discharge Address:	2501 East Guasti Road
Discharge City:	Ontario
Discharge State:	California
Discharge Zip:	91761
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

Name:	CARDENAS MARKETS LLC
Address:	2501 EAST GUASTI RD
City,State,Zip:	ONTARIO, CA 91761
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	8 36I024173
Regulatory Measure Type:	Industrial
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Terminated
Status Date:	07/18/2018
Operator Name:	Cardenas Markets LLC
Operator Address:	2501 East Guasti Road
Operator City:	Ontario
Operator State:	California

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Operator Zip:	91761
NPDES as of 03/2018:	
NPDES Number:	CAS000001
Status:	Active
Agency Number:	0
Region:	8
Regulatory Measure ID:	436251
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	8 36I024173
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	03/27/2013
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Cardenas Markets LLC
Discharge Address:	2501 East Guasti Road
Discharge City:	Ontario
Discharge State:	California
Discharge Zip:	91761
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	8
Regulatory Measure ID:	436251
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	8 36I024173
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	03/27/2013
Processed Date:	03/27/2013
Status:	Active
Status Date:	03/20/2017
Place Size:	263842
Place Size Unit:	SqFt
Contact:	Adrian Castaneda
Contact Title:	Supply Chain Director
Contact Phone:	909-923-7426
Contact Phone Ext:	Not reported
Contact Email:	ancastaneda@cmkts.com
Operator Name:	Cardenas Markets LLC
Operator Address:	2501 East Guasti Road
Operator City:	Ontario
Operator State:	California
Operator Zip:	91761
Operator Contact:	Maria Bermudez

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Operator Contact Title:	Director of risk management
Operator Contact Phone:	909-923-7426
Operator Contact Phone Ext:	1601
Operator Contact Email:	mbermudez@cmkts.com
Operator Type:	Private Business
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	California
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	909-243-4212
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	N
Receiving Water Name:	Rancho Cucamonga Channel
Certifier:	Robert Lopez
Certifier Title:	Director of Risk Management
Certification Date:	25-JUL-17
Primary Sic:	4226-Special Warehousing and Storage, NEC
Secondary Sic:	4225-General Warehousing and Storage
Tertiary Sic:	Not reported

San Bern. Co. Permit:

Name:	CARDENAS MARKETS DISTRIBUTION CENTER
Address:	2501 E GUASTI RD
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO
Facility ID:	FA0015061
Owner:	CARDENAS MARKETS LLC
Permit Number:	PT0026222
Permit Category:	SMALL QUANTITY GENERATOR
Facility Status:	ACTIVE
Expiration Date:	02/28/2024

Name:	CARDENAS MARKETS DISTRIBUTION CENTER
Address:	2501 E GUASTI RD
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Facility ID: FA0015061
Owner: CARDENAS MARKETS LLC
Permit Number: PT0026221
Permit Category: HAZARDOUS MATERIALS 4-10 CHEMICALS
Facility Status: ACTIVE
Expiration Date: 02/28/2024

Name: HUB DISTRIBUTING INC
Address: 2501 E GUASTI RD
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0003876
Owner: HUB DISTRIBUTING INC
Permit Number: PT0006357
Permit Category: CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR
Facility Status: INACTIVE
Expiration Date: 11/30/2009

CIWQS:
Name: CARDENAS MARKETS LLC
Address: 2501 EAST GUASTI RD
City,State,Zip: ONTARIO, CA 91761
Agency: Cardenas Markets LLC
Agency Address: 2501 East Guasti Road, Ontario , CA 91761
Place/Project Type: Industrial - Special Warehousing and Storage, NEC
SIC/NAICS: 4226(+)
Region: 8
Program: INDSTW
Regulatory Measure Status: Terminated
Regulatory Measure Type: Storm water industrial
Order Number: 2014-0057-DWQ
WDID: 8 36I024173
NPDES Number: CAS000001
Adoption Date: Not reported
Effective Date: 03/27/2013
Termination Date: 07/18/2018
Expiration/Review Date: Not reported
Design Flow: Not reported
Major/Minor: Not reported
Complexity: Not reported
TTWQ: Not reported
Enforcement Actions within 5 years: 0
Violations within 5 years: 0
Latitude: 34.06564
Longitude: -117.59772

Name: CARDENAS MARKETS LLC
Address: 2501 EAST GUASTI ROAD
City,State,Zip: ONTARIO, CA 91761
Agency: Cardenas Markets LLC
Agency Address: 2501 East Guasti Road, Ontario , CA 91761
Place/Project Type: Industrial - Special Warehousing and Storage, NEC
SIC/NAICS: 4226
Region: 8
Program: INDSTW
Regulatory Measure Status: Active
Regulatory Measure Type: Storm water industrial

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Order Number:	2014-0057-DWQ
WDID:	8 36I027360
NPDES Number:	CAS000001
Adoption Date:	Not reported
Effective Date:	09/22/2017
Termination Date:	Not reported
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	1
Violations within 5 years:	1
Latitude:	34.06636
Longitude:	-117.59769

CERS:

Name:	CARDENAS MARKETS LLC
Address:	2501 EAST GUASTI ROAD
City,State,Zip:	ONTARIO, CA 91761
Site ID:	528622
CERS ID:	858871
CERS Description:	Industrial Facility Storm Water

Violations:

Site ID:	528622
Site Name:	Cardenas Markets LLC
Violation Date:	07-15-2019
Citation:	2014-0057-DWQ - Industrial General Permit
Violation Description:	SW - Late Report
Violation Notes:	Failure to submit the 2018-2019 Annual Report by July 15, 2019.
Violation Division:	Water Boards
Violation Program:	INDSTW
Violation Source:	SMARTS,

Enforcement Action:

Site ID:	528622
Site Name:	Cardenas Markets LLC
Site Address:	2501 EAST GUASTI ROAD
Site City:	ONTARIO
Site Zip:	91761
Enf Action Date:	08-08-2019
Enf Action Type:	Industrial Storm Water Enforcement
Enf Action Description:	Industrial Storm Water Enforcement
Enf Action Notes:	Failure to submit the 2018-2019 Annual Report by July 15, 2019.
Enf Action Division:	Water Boards
Enf Action Program:	INDSTW
Enf Action Source:	SMARTS,

Affiliation:

Affiliation Type Desc:	Owner/Operator
Entity Name:	Cardenas Markets LLC
Entity Title:	Operator
Affiliation Address:	2501 East Guasti Road
Affiliation City:	Ontario
Affiliation State:	CA

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Affiliation Country: Not reported
Affiliation Zip: 91761
Affiliation Phone: ,

Name: CARDENAS MARKETS DISTRIBUTION CENTER
Address: 2501 E GUASTI RD
City,State,Zip: ONTARIO, CA 91761
Site ID: 102986
CERS ID: 10459684
CERS Description: Chemical Storage Facilities

Violations:

Site ID: 102986
Site Name: Cardenas Markets Distribution Center
Violation Date: 05-28-2020
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes: Returned to compliance on 06/15/2020. OBSERVATION: The hazardous materials inventory needs to be updated to include used oil filter and the sulfuric acid content of the equipment batteries. The quantity of propane also needs to be updated to show approximately 255 gallons instead of the 50 gallons currently listed. CORRECTIVE ACTION: Submit an accurate and complete hazardous materials inventory.
Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 102986
Site Name: Cardenas Markets Distribution Center
Violation Date: 05-30-2023
Citation: HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)
Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes: OBSERVATION: Refrigerant underreported and approximately 85 electric forklift/pallet jack batteries observed missing from inventory submitted via CERS on 6/24/2022. CORRECTIVE ACTION: Update refrigerant amounts and include total electric forklift lead acid amounts in the hazardous materials inventory and resubmit via CERS.
Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 102986
Site Name: Cardenas Markets Distribution Center
Violation Date: 04-14-2014
Citation: HSC 6.67 Multiple - California Health and Safety Code, Chapter 6.67, Section(s) Multiple
Violation Description: Haz Waste Generator Program - Operations/Maintenance - General
Violation Notes: Returned to compliance on 03/28/2017. Failure to note accumulation start date on labels (CCR 66262.34(f)(2))
Violation Division: San Bernardino County Fire Department
Violation Program: HW

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Violation Source:	CERS,
Site ID:	102986
Site Name:	Cardenas Markets Distribution Center
Violation Date:	05-28-2020
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.
Violation Notes:	Returned to compliance on 06/15/2020. OBSERVATION: The CERS web page was last update for this site on June 19, 2018. The plan is required to be updated yearly. CORRECTIVE ACTION: Submit an annual update and ensure that it is updated yearly.
Violation Division:	San Bernardino County Fire Department
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	102986
Site Name:	Cardenas Markets Distribution Center
Violation Date:	05-28-2020
Citation:	22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description:	Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes:	Returned to compliance on 06/22/2020. OBSERVATION: The waste oil containers in the outdoor maintenance area was found missing an accumulation start date. A container of universal waste inside the warehouse was also found missing an accumulation start date. CORRECTIVE ACTION: Submit photos demonstrating that the containers listed above has been properly labeled.
Violation Division:	San Bernardino County Fire Department
Violation Program:	HW
Violation Source:	CERS,
Site ID:	102986
Site Name:	Cardenas Markets Distribution Center
Violation Date:	03-28-2017
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes:	Returned to compliance on 06/15/2020. Incomplete Business Plan submittal to CERS on 11/8/16.
Violation Division:	San Bernardino County Fire Department
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	102986
Site Name:	Cardenas Markets Distribution Center
Violation Date:	04-14-2014
Citation:	HSC 6.95 25505(a) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Violation Description: Owner/Operator failed to complete and/or submit a Hazardous Materials Business Plan when storing hazardous materials at or above the thresholds quantities of 55 gallons/500 lbs/200 cubic feet.
Violation Notes: Returned to compliance on 06/15/2020.
Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-28-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: ROUTINE GENERATOR INSPECTION
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-14-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Follow up routine inspection to initial inspection when facility was moving in.
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-28-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: ROUTINE HANDLER INSPECTION
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-14-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Follow up routine inspection to previous inspection when facility was still moving to this location.
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-28-2020
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Eval Date: 05-30-2023
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-28-2020
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-30-2023
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Enforcement Action:
Site ID: 102986
Site Name: Cardenas Markets Distribution Center
Site Address: 2501 E GUASTI RD
Site City: ONTARIO
Site Zip: 91761
Enf Action Date: 03-28-2017
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: San Bernardino County Fire Department
Enf Action Program: HMRRP
Enf Action Source: CERS,

Site ID: 102986
Site Name: Cardenas Markets Distribution Center
Site Address: 2501 E GUASTI RD
Site City: ONTARIO
Site Zip: 91761
Enf Action Date: 04-14-2014
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: San Bernardino County Fire Department
Enf Action Program: HMRRP
Enf Action Source: CERS,

Site ID: 102986
Site Name: Cardenas Markets Distribution Center
Site Address: 2501 E GUASTI RD
Site City: ONTARIO

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Site Zip:	91761
Enf Action Date:	04-14-2014
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	San Bernardino County Fire Department
Enf Action Program:	HW
Enf Action Source:	CERS,

Coordinates:

Site ID:	102986
Facility Name:	Cardenas Markets Distribution Center
Env Int Type Code:	HWG
Program ID:	10459684
Coord Name:	Not reported
Ref Point Type Desc:	Center of a facility or station.,
Latitude:	34.065760
Longitude:	-117.597720

Affiliation:

Affiliation Type Desc:	Identification Signer
Entity Name:	Jorge Morfin
Entity Title:	Regulatory Compliance Specialist
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Parent Corporation
Entity Name:	Cardenas Markets, LLC.
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	2501 E. Guasti Rd.
Affiliation City:	Ontario
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	91761
Affiliation Phone:	,
Affiliation Type Desc:	Legal Owner
Entity Name:	Cardenas Markets LLC
Entity Title:	Not reported
Affiliation Address:	2501 E Guasti Rd
Affiliation City:	Ontario
Affiliation State:	CA

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Affiliation Country:	United States
Affiliation Zip:	91761
Affiliation Phone:	(909) 923-7426,
Affiliation Type Desc:	CUPA District
Entity Name:	San Bernardino County Fire
Entity Title:	Not reported
Affiliation Address:	620 South E Street
Affiliation City:	San Bernardino
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92415-0153
Affiliation Phone:	(909) 386-8401,
Affiliation Type Desc:	Environmental Contact
Entity Name:	Mirna Ruacho
Entity Title:	Not reported
Affiliation Address:	2501 E Guasti Rd
Affiliation City:	Ontario
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	91761
Affiliation Phone:	,
Affiliation Type Desc:	Operator
Entity Name:	Cardenas Markets Distribution Center
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(909) 243-4212,
Affiliation Type Desc:	Property Owner
Entity Name:	M-K Associates, Ltd.
Entity Title:	Not reported
Affiliation Address:	3625 Del Amo Boulevard Ste 130
Affiliation City:	Torrance
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	90503
Affiliation Phone:	(310) 371-4095,
Affiliation Type Desc:	Document Preparer
Entity Name:	Jorge Morfin
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

G34 **CARDENAS MARKETS DISTRIBUTION CENTER** **RCRA NonGen / NLR** **1024835793**
ENE **2501 E GUASTI RD** **CAL000378320**
1/8-1/4 **ONTARIO, CA 91761**
0.226 mi.
1191 ft. **Site 3 of 3 in cluster G**

Relative:
Higher

Actual:
966 ft.

RCRA Listings:

Date Form Received by Agency:	20120919
Handler Name:	Cardenas Markets Distribution Center
Handler Address:	2501 E GUASTI RD
Handler City,State,Zip:	ONTARIO, CA 91761-7657
EPA ID:	CAL000378320
Contact Name:	ROBERT LOPEZ
Contact Address:	2501 E. GUASTI RD.
Contact City,State,Zip:	ONTARIO, CA 91761
Contact Telephone:	951-775-4783
Contact Fax:	Not reported
Contact Email:	RLOPEZ@CMKTS.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	2501 E GUASTI RD
Mailing City,State,Zip:	ONTARIO, CA 91761-3631
Owner Name:	Cardenas Markets Inc
Owner Type:	Other
Operator Name:	Robert Lopez
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **1024835793**

Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20180906
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name: ROBERT LOPEZ	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	2501 E. GUASTI RD.
Owner/Operator City,State,Zip:	ONTARIO, CA 91761
Owner/Operator Telephone:	951-775-4783
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name: CARDENAS MARKETS INC	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	2501 E GUASTI RD
Owner/Operator City,State,Zip:	ONTARIO, CA 91761-3631
Owner/Operator Telephone:	909-923-7426
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20120919
Handler Name:	CARDENAS MARKETS DISTRIBUTION CENTER
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **1024835793**

List of NAICS Codes and Descriptions:
NAICS Code: 56121
NAICS Description: FACILITIES SUPPORT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

H35 **AVIS RENT A CAR** **CA LUST** **S103249206**
SE **ONTARIO AIRPORT** **CA CHMIRS** **N/A**
1/8-1/4 **ONTARIO, CA 91762** **CA Cortese**
0.249 mi.
1313 ft. **Site 1 of 4 in cluster H**

Relative: **Lower**
Actual: **943 ft.**

LUST REG 8:

Name:	AVIS RENT A CAR
Address:	ONTARIO AIRPORT
City:	ONTARIO
Region:	8
County:	San Bernardino
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083603159T
Local Case Num:	98023
Case Type:	Soil only
Substance:	Gasoline
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	AIRPORT DR
Enf Type:	CLOS
Funding:	Not reported
How Discovered:	Not reported
How Stopped:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Global ID:	T0607100472
How Stopped Date:	Not reported
Enter Date:	5/6/1998
Date Confirmation of Leak Began:	3/27/1997
Date Preliminary Assessment Began:	Not reported
Discover Date:	3/27/1997
Enforcement Date:	Not reported
Close Date:	10/22/1999
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	5/6/1998
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported

AVIS RENT A CAR (Continued) **S103249206**

Interim:	Not reported
Oversite Program:	LUST
Latitude:	34.0597921
Longitude:	-117.66595
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	TME
Staff Initials:	JC3
Lead Agency:	Local Agency
Local Agency:	36000L
Hydr Basin #:	UPPER SANTA ANA VALL
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported

Summary: Not reported

CHMIRS:

Name:	Not reported
Address:	ONTARIO AIRPORT
City,State,Zip:	ONTARIO, CA
OES Incident Number:	5-1232
OES notification:	02/23/2005
OES Date:	Not reported
OES Time:	Not reported
Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	Not reported
Waterway:	East Cucamonga Channel

AVIS RENT A CAR (Continued) **S103249206**

Spill Site:	Not reported
Cleanup By:	Unknown
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Date/Time:	Not reported
Year:	2005
Agency:	Ontario Airport
Incident Date:	2/23/200512:00:00 AM
Admin Agency:	San Bernardino County Health Department
Amount:	Not reported
Contained:	Unknown
Site Type:	Waterways
E Date:	Not reported
Substance:	Jet Fuel
Gallons:	0.000000
Unknown:	5
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	0
Number of Injuries:	0
Number of Fatalities:	0
#1 Pipeline:	Not reported
#2 Pipeline:	Not reported
#3 Pipeline:	Not reported
#1 Vessel >= 300 Tons:	Not reported
#2 Vessel >= 300 Tons:	Not reported
#3 Vessel >= 300 Tons:	Not reported
Evacs:	Not reported
Injuries:	Not reported
Fatals:	Not reported
Comments:	Not reported
Description:	The jet fuel spilled into channel for unknown reason.

CORTESE:

Name:	AVIS RENT A CAR
Address:	ONTARIO AIRPORT
City,State,Zip:	ONTARIO, CA 91762
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0607100472
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported

AVIS RENT A CAR (Continued) **S103249206**

Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

H36
SE
1/8-1/4
0.249 mi.
1313 ft.

AVIS RENT A CAR
ONTARIO AIRPORT
ONTARIO, CA 91762

CA LUST **S110655013**
N/A

Site 2 of 4 in cluster H

Relative:
Lower

Actual:
943 ft.

LUST:

Name:	AVIS RENT A CAR
Address:	ONTARIO AIRPORT
City,State,Zip:	ONTARIO, CA 91762
Lead Agency:	SAN BERNARDINO COUNTY
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607100472
Global Id:	T0607100472
Latitude:	34.060855
Longitude:	-117.598279
Status:	Completed - Case Closed
Status Date:	10/22/1999
Case Worker:	JC
RB Case Number:	083603159T
Local Agency:	SAN BERNARDINO COUNTY
File Location:	Local Agency
Local Case Number:	98023
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
EPA Region:	9
Coordinate Source:	Google Geocode
Cuf Case:	YES
Quantity Released Gallons:	Not reported
Begin Date:	03/27/1997
Leak Reported Date:	04/13/1998
How Discovered:	Not reported
How Discovered Description:	Not reported
Discharge Source:	Not reported
Discharge Cause:	Not reported
Stop Method:	Not reported
Stop Description:	Not reported
No Further Action Date:	10/22/1999
CA Water Watershed Name:	Santa Ana River - Middle Santa Ana River - Chino (Split) (801.21)
Dwr Groundwater Subbasin Name:	Upper Santa Ana Valley - Chino (8-002.01)
Disadvantaged Community:	Not reported
CA Enviroscreen 3 Score:	96-100% (highest scores)
CA Enviroscreen 4 Score:	95-100% (highest scores)
Military DOD Site:	No
Facility Project Subtype:	Not reported
RWQCB Region:	SANTA ANA RWQCB (REGION 8)
Site History:	Not reported

LUST:

Global Id:	T0607100472
Contact Type:	Local Agency Caseworker - Primary Caseworker
Contact Name:	JACKSON CRUTSINGER

AVIS RENT A CAR (Continued) **S110655013**

Organization Name: SAN BERNARDINO COUNTY
Address: 620 SOUTH E STREET
City: SAN BERNARDINO
Email: jcrutsinger@sbcfire.org
Phone Number: Not reported

Global Id: T0607100472
Contact Type: Regional Board Caseworker
Contact Name: MIGUEL OVIEDO
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 Main Street, Suite 500
City: RIVERSIDE
Email: miguel.oviedo@waterboards.ca.gov
Phone Number: 9517823238

LUST:
Global Id: T0607100472
Action Type: Other
Date: 04/13/1998
Action: Leak Reported

Global Id: T0607100472
Action Type: ENFORCEMENT
Date: 10/22/1999
Action: Closure/No Further Action Letter

Global Id: T0607100472
Action Type: Other
Date: 03/27/1997
Action: Leak Discovery

LUST:
Global Id: T0607100472
Status: Open - Case Begin Date
Status Date: 03/27/1997

Global Id: T0607100472
Status: Open - Site Assessment
Status Date: 03/27/1997

Global Id: T0607100472
Status: Completed - Case Closed
Status Date: 10/22/1999

H37 **AEROJET** **CA CPS-SLIC** **S108542868**
SE **N/A ONT. INTL. AIRPORT** **N/A**
1/4-1/2 **ONTARIO, CA**
0.259 mi.
1369 ft. **Site 3 of 4 in cluster H**

Relative: **Lower**
Actual: **942 ft.**

SLIC REG 8:
Name: AEROJET
Address: N/A ONT. INTL. AIRPORT
City: ONTARIO
Type: Undefined
Facility Status: Closed

AEROJET (Continued) **S108542868**

Staff: Kamron Saremi, Tel 909-782-4303, SLIC
Substance: TCE
Lead Agency: Regional Board
Location Code: Not reported
Thomas Bros Code: Not reported

H38 **AEROJET GENERAL CORPORATION** **CA CPS-SLIC** **S106717771**
SE **ONTARIO INTERNATIONAL AIRPORT** **N/A**
1/4-1/2 **ONTARIO, CA**
0.264 mi.
1392 ft. **Site 4 of 4 in cluster H**

Relative: **Lower**
Actual: **942 ft.**

CPS-SLIC:

Name:	AEROJET GENERAL CORPORATION
Address:	ONTARIO INTERNATIONAL AIRPORT
City,State,Zip:	ONTARIO, CA
Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	02/01/2000
Global Id:	SLT8R0503934
Lead Agency:	SANTA ANA RWQCB (REGION 8)
Lead Agency Case Number:	Not reported
Latitude:	34.0539525420464
Longitude:	-117.626323513672
Case Type:	Cleanup Program Site
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	SLT8R050
File Location:	Not reported
Potential Media Affected:	Under Investigation
Potential Contaminants of Concern:	Tetrachloroethylene (PCE), Trichloroethylene (TCE)
EPA Region:	9
Coordinate Source:	Manual Entry on Screens
Cuf Case:	NO
Quantity Released Gallons:	Not reported
Begin Date:	02/01/2000
Leak Reported Date:	Not reported
How Discovered:	* RBD
How Discovered Description:	Not reported
Discharge Source:	Not reported
Discharge Cause:	Not reported
Stop Method:	Not reported
Stop Description:	Not reported
No Further Action Date:	02/01/2000
CA Water Watershed Name:	Santa Ana River - Middle Santa Ana River - Chino (Split) (801.21)
Dwr Groundwater Subbasin Name:	Upper Santa Ana Valley - Chino (8-002.01)
Disadvantaged Community:	Not reported
CA Enviroscreen 3 Score:	96-100% (highest scores)
CA Enviroscreen 4 Score:	95-100% (highest scores)
Military DOD Site:	No
Facility Project Subtype:	Not reported
RWQCB Region:	SANTA ANA RWQCB (REGION 8)
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

39
SSE
1/4-1/2
0.378 mi.
1996 ft.

GE ONTARIO AIRCRAFT ENGIN
2264
ONTARIO, CA 91761

CA LUST **S102430671**
CA HIST CORTESE **N/A**

Relative:
Lower

Actual:
932 ft.

LUST REG 8:

Name:	GE ONTARIO AIRCRAFT ENGINES
Address:	2264 AVION ST
City:	ONTARIO
Region:	8
County:	San Bernardino
Regional Board:	Santa Ana Region
Facility Status:	Pollution Characterization
Case Number:	083601881T
Local Case Num:	95031
Case Type:	Aquifer affected
Substance:	Diesel
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Not reported
How Stopped:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Global ID:	T0607100233
How Stopped Date:	Not reported
Enter Date:	7/20/1991
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	Not reported
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	5/30/1991
Date Pollution Characterization Began:	1/1/1965
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	7/20/1991
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	34.0342211
Longitude:	-117.6066882
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*
Staff:	CAB
Staff Initials:	CB5
Lead Agency:	Local Agency

GE ONTARIO AIRCRAFT ENGIN (Continued) **S102430671**

Local Agency:	36000L
Hydr Basin #:	UPPER SANTA ANA VALL
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported

Summary: GASOLINE & JET FUEL DETECTED TO 120 FT. ON GOING CHLORINATED VOC INVESTIGATION. GROUNDWATER IMPACTED UP TO 5.5 PPB BENZENE (9/95, CAB)

HIST CORTESE:

edr_fname:	GE ONTARIO AIRCRAFT ENGIN
edr_fadd1:	2264
City,State,Zip:	ONTARIO, CA 91761
Region:	CORTESE
Facility County Code:	36
Reg By:	LTNKA
Reg Id:	083601881T

40
West
1/4-1/2
0.382 mi.
2016 ft.

ARCO #5222
101 VINEYARD AVE
ONTARIO, CA 91761

CA LUST **S103891726**
CA Cortese **N/A**
CA CERS

Relative:
Higher

Actual:
968 ft.

LUST:

Name:	ARCO #5222
Address:	101 VINEYARD AVE
City,State,Zip:	ONTARIO, CA 91761
Lead Agency:	SAN BERNARDINO COUNTY
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607100539
Global Id:	T0607100539
Latitude:	34.0634042
Longitude:	-117.6109234
Status:	Completed - Case Closed
Status Date:	06/07/2011
Case Worker:	CR2
RB Case Number:	083603367T
Local Agency:	SAN BERNARDINO COUNTY
File Location:	Local Agency
Local Case Number:	99027
Potential Media Affect:	Soil, Soil Vapor
Potential Contaminants of Concern:	Gasoline, MTBE / TBA / Other Fuel Oxygenates
EPA Region:	9
Coordinate Source:	* Historical Geocode - Exact Address Match
Cuf Case:	YES
Quantity Released Gallons:	Not reported
Begin Date:	01/04/1999
Leak Reported Date:	02/16/1999
How Discovered:	Tank Closure
How Discovered Description:	Not reported
Discharge Source:	Piping
Discharge Cause:	Unknown
Stop Method:	Repair Product Piping
Stop Description:	Not reported
No Further Action Date:	06/07/2011
CA Water Watershed Name:	Santa Ana River - Middle Santa Ana River - Chino (Split) (801.21)

ARCO #5222 (Continued) **S103891726**

Dwr Groundwater Subbasin Name: Upper Santa Ana Valley - Chino (8-002.01)
Disadvantaged Community: Severely Disadvantaged Community
CA Enviroscreen 3 Score: 96-100% (highest scores)
CA Enviroscreen 4 Score: 95-100% (highest scores)
Military DOD Site: No
Facility Project Subtype: Not reported
RWQCB Region: SANTA ANA RWQCB (REGION 8)
Site History: CONFIRMATION SOIL BORINGS WERE INSTALLED AND SAMPLED IN JULY 2010.

LUST:
Global Id: T0607100539
Contact Type: Local Agency Caseworker - Primary Caseworker
Contact Name: CATHERINE RICHARDS
Organization Name: SAN BERNARDINO COUNTY
Address: 620 SOUTH E STREET
City: SAN BERNARDINO
Email: crichards@sbcfire.org
Phone Number: 9093868419

Global Id: T0607100539
Contact Type: Regional Board Caseworker
Contact Name: MAILE SEEGER GEE
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: maile.gee@waterboards.ca.gov
Phone Number: 9517824379

LUST:
Global Id: T0607100539
Action Type: ENFORCEMENT
Date: 08/10/2010
Action: Letter - Notice

Global Id: T0607100539
Action Type: Other
Date: 02/16/1999
Action: Leak Reported

Global Id: T0607100539
Action Type: ENFORCEMENT
Date: 05/12/2010
Action: Staff Letter

Global Id: T0607100539
Action Type: ENFORCEMENT
Date: 08/10/2010
Action: Letter - Notice

Global Id: T0607100539
Action Type: ENFORCEMENT
Date: 06/07/2011
Action: Closure/No Further Action Letter

Global Id: T0607100539
Action Type: Other
Date: 01/04/1999

ARCO #5222 (Continued) **S103891726**

Action: Leak Stopped

Global Id: T0607100539
Action Type: REMEDIATION
Date: 10/15/2008
Action: Soil Vapor Extraction (SVE)

Global Id: T0607100539
Action Type: ENFORCEMENT
Date: 01/16/2008
Action: Notification - Public Notice of ROD/RAP/CAP

Global Id: T0607100539
Action Type: Other
Date: 01/04/1999
Action: Leak Discovery

Global Id: T0607100539
Action Type: RESPONSE
Date: 02/01/2011
Action: Other Report / Document

LUST:
Global Id: T0607100539
Status: Open - Case Begin Date
Status Date: 01/04/1999

Global Id: T0607100539
Status: Open - Site Assessment
Status Date: 01/26/1999

Global Id: T0607100539
Status: Open - Remediation
Status Date: 09/21/2009

Global Id: T0607100539
Status: Completed - Case Closed
Status Date: 06/07/2011

LUST REG 8:
Name: ARCO #5222
Address: 101 VINEYARD AVE
City: ONTARIO
Region: 8
County: San Bernardino
Regional Board: Santa Ana Region
Facility Status: Preliminary site assessment workplan submitted
Case Number: 083603367T
Local Case Num: 99027
Case Type: Soil only
Substance: 8006619, MTB
Qty Leaked: Not reported
Abate Method: Not reported
Cross Street: HOLT
Enf Type: Not reported

ARCO #5222 (Continued) **S103891726**

Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Not reported
Leak Cause:	UNK
Leak Source:	Piping
Global ID:	T0607100539
How Stopped Date:	1/4/1999
Enter Date:	3/19/1999
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	1/4/1999
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	1/26/1999
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	3/19/1999
GW Qualifies:	Not reported
Soil Qualifies:	ND
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	34.0634042
Longitude:	-117.6109234
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	0
MTBE Fuel:	0
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	*
Staff:	VJJ
Staff Initials:	LH6
Lead Agency:	Local Agency
Local Agency:	36000L
Hydr Basin #:	UPPER SANTA ANA VALL
Beneficial:	MUN
Priority:	A2
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported

Summary: DISPENSER AND PIPING UPGRADE

CORTESE:

Name:	ARCO #5222
Address:	101 VINEYARD AVE
City,State,Zip:	ONTARIO, CA 91761
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0607100539
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported

ARCO #5222 (Continued) **S103891726**

Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

CERS:

Name:	ARCO #5222
Address:	101 VINEYARD AVE
City,State,Zip:	ONTARIO, CA 91761
Site ID:	635111
CERS ID:	T0607100539
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	CATHERINE RICHARDS - SAN BERNARDINO COUNTY
Entity Title:	Not reported
Affiliation Address:	620 SOUTH E STREET
Affiliation City:	SAN BERNARDINO
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	9093868419,

41
West
1/4-1/2
0.391 mi.
2067 ft.

BUDGET RENT A CAR
203 AIRPORT DR
ONTARIO, CA 91761

CA LUST **S104744910**
CA Cortese **N/A**
CA HIST CORTESE
CA CERS

Relative:
Higher

Actual:
974 ft.

LUST:

Name:	BUDGET RENT A CAR
Address:	203 AIRPORT DR
City,State,Zip:	ONTARIO, CA 91761
Lead Agency:	SAN BERNARDINO COUNTY
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607100596
Global Id:	T0607100596
Latitude:	34.0646651
Longitude:	-117.6111915
Status:	Completed - Case Closed
Status Date:	02/28/2002
Case Worker:	Not reported
RB Case Number:	083603532T
Local Agency:	Not reported
File Location:	Local Agency
Local Case Number:	99094
Potential Media Affect:	Soil

BUDGET RENT A CAR (Continued) **S104744910**

Potential Contaminants of Concern:	Gasoline
EPA Region:	9
Coordinate Source:	* Historical Geocode - Exact Address Match
Cuf Case:	NO
Quantity Released Gallons:	Not reported
Begin Date:	06/22/1999
Leak Reported Date:	06/23/1999
How Discovered:	Tank Closure
How Discovered Description:	Not reported
Discharge Source:	Other
Discharge Cause:	Unknown
Stop Method:	Not reported
Stop Description:	Not reported
No Further Action Date:	02/28/2002
CA Water Watershed Name:	Santa Ana River - Middle Santa Ana River - Chino (Split) (801.21)
Dwr Groundwater Subbasin Name:	Upper Santa Ana Valley - Chino (8-002.01)
Disadvantaged Community:	Not reported
CA Enviroscreen 3 Score:	96-100% (highest scores)
CA Enviroscreen 4 Score:	80-85%
Military DOD Site:	No
Facility Project Subtype:	Not reported
RWQCB Region:	SANTA ANA RWQCB (REGION 8)
Site History:	Not reported

LUST:

Global Id:	T0607100596
Contact Type:	Regional Board Caseworker
Contact Name:	MAILE SEEGER GEE
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	maile.gee@waterboards.ca.gov
Phone Number:	9517824379

LUST:

Global Id:	T0607100596
Action Type:	Other
Date:	06/23/1999
Action:	Leak Reported
Global Id:	T0607100596
Action Type:	Other
Date:	06/22/1999
Action:	Leak Discovery

LUST:

Global Id:	T0607100596
Status:	Open - Case Begin Date
Status Date:	06/22/1999
Global Id:	T0607100596
Status:	Open - Site Assessment
Status Date:	06/23/1999
Global Id:	T0607100596
Status:	Completed - Case Closed
Status Date:	02/28/2002

BUDGET RENT A CAR (Continued) **S104744910**

LUST REG 8:

Name:	BUDGET RENT A CAR
Address:	203 AIRPORT DR
City:	ONTARIO
Region:	8
County:	San Bernardino
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083603532T
Local Case Num:	99094
Case Type:	Soil only
Substance:	Gasoline
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	VINEYARD
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Not reported
Leak Cause:	UNK
Leak Source:	UNK
Global ID:	T0607100596
How Stopped Date:	Not reported
Enter Date:	9/2/1999
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	6/22/1999
Enforcement Date:	Not reported
Close Date:	2/28/2002
Date Prelim Assessment Workplan Submitted:	6/23/1999
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	9/2/1999
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	34.0646651
Longitude:	-117.6111915
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	CAB
Staff Initials:	LH6
Lead Agency:	Local Agency
Local Agency:	36000L
Hydr Basin #:	UPPER SANTA ANA VALL
Beneficial:	Not reported
Priority:	Not reported

BUDGET RENT A CAR (Continued) **S104744910**

Cleanup Fund Id: Not reported
Work Suspended: No
Summary: Not reported

CORTESE:
Name: BUDGET RENT A CAR
Address: 203 AIRPORT DR
City,State,Zip: ONTARIO, CA 91761
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0607100596
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported
Flag: active
Order No: Not reported
Waste Discharge System No: Not reported
Effective Date: Not reported
Region 2: Not reported
WID Id: Not reported
Solid Waste Id No: Not reported
Waste Management Uit Name: Not reported
File Name: Active Open

HIST CORTESE:
edr_fname: BUDGET RENT A CAR
edr_fadd1: 203
City,State,Zip: ONTARIO, CA 91761
Region: CORTESE
Facility County Code: 36
Reg By: LTNKA
Reg Id: 083603532T

CERS:
Name: BUDGET RENT A CAR
Address: 203 AIRPORT DR
City,State,Zip: ONTARIO, CA 91761
Site ID: 639686
CERS ID: T0607100596
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Regional Board Caseworker
Entity Name: MAILE SEEGER GEE - SANTA ANA RWQCB (REGION 8)
Entity Title: Not reported
Affiliation Address: 3737 MAIN STREET, SUITE 500
Affiliation City: RIVERSIDE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported

BUDGET RENT A CAR (Continued) **S104744910**

Affiliation Phone: 9517824379,

I42 **SHELL STN. #088** **CA LUST** **S101618982**
West **1862 E HOLT** **CA SWEEPS UST** **N/A**
1/4-1/2 **ONTARIO, CA 91761** **CA FID UST**
0.445 mi. **CA Cortese**
2350 ft. **Site 1 of 2 in cluster I** **CA CERS**

Relative: Higher

Actual: 969 ft.

LUST:

Name:	BERTINO-LAWTON PROPERTIES
Address:	1862 E HOLT BLVD
City,State,Zip:	ONTARIO, CA 91761
Lead Agency:	SAN BERNARDINO COUNTY
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607100410
Global Id:	T0607100410
Latitude:	34.0633733
Longitude:	-117.6113645
Status:	Completed - Case Closed
Status Date:	11/19/1996
Case Worker:	JC
RB Case Number:	083602824T
Local Agency:	SAN BERNARDINO COUNTY
File Location:	Local Agency
Local Case Number:	96028
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
EPA Region:	9
Coordinate Source:	Google Geocode
Cuf Case:	YES
Quantity Released Gallons:	Not reported
Begin Date:	05/07/1996
Leak Reported Date:	06/05/1996
How Discovered:	Tank Closure
How Discovered Description:	Not reported
Discharge Source:	Other
Discharge Cause:	Unknown
Stop Method:	Not reported
Stop Description:	Not reported
No Further Action Date:	11/19/1996
CA Water Watershed Name:	Santa Ana River - Middle Santa Ana River - Chino (Split) (801.21)
Dwr Groundwater Subbasin Name:	Upper Santa Ana Valley - Chino (8-002.01)
Disadvantaged Community:	Not reported
CA Enviroscreen 3 Score:	96-100% (highest scores)
CA Enviroscreen 4 Score:	95-100% (highest scores)
Military DOD Site:	No
Facility Project Subtype:	Not reported
RWQCB Region:	SANTA ANA RWQCB (REGION 8)
Site History:	Not reported

LUST:

Global Id:	T0607100410
Contact Type:	Local Agency Caseworker - Primary Caseworker
Contact Name:	JACKSON CRUTSINGER
Organization Name:	SAN BERNARDINO COUNTY
Address:	620 SOUTH E STREET
City:	SAN BERNARDINO

SHELL STN. #088 (Continued) **S101618982**

Email: jcrutsinger@sbcfire.org
Phone Number: Not reported

Global Id: T0607100410
Contact Type: Regional Board Caseworker
Contact Name: MAILE SEEGER GEE
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: maile.gee@waterboards.ca.gov
Phone Number: 9517824379

LUST:
Global Id: T0607100410
Action Type: Other
Date: 06/05/1996
Action: Leak Reported

Global Id: T0607100410
Action Type: ENFORCEMENT
Date: 11/19/1996
Action: Closure/No Further Action Letter

Global Id: T0607100410
Action Type: Other
Date: 05/07/1996
Action: Leak Stopped

Global Id: T0607100410
Action Type: Other
Date: 05/07/1996
Action: Leak Discovery

LUST:
Global Id: T0607100410
Status: Open - Case Begin Date
Status Date: 05/07/1996

Global Id: T0607100410
Status: Open - Site Assessment
Status Date: 05/07/1996

Global Id: T0607100410
Status: Open - Site Assessment
Status Date: 06/05/1996

Global Id: T0607100410
Status: Completed - Case Closed
Status Date: 11/19/1996

SWEEPS UST:
Name: SHELL STN. #088
Address: 1862 E HOLT
City: ONTARIO
Status: Active

SHELL STN. #088 (Continued) **S101618982**

Comp Number: 4694
Number: 9
Board Of Equalization: 44-000074
Referral Date: 07-28-92
Action Date: 07-28-92
Created Date: 02-29-88
Owner Tank Id: 88-1
SWRCB Tank Id: 36-000-004694-000001
Tank Status: A
Capacity: 10000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: LEADED
Number Of Tanks: 3

Name: SHELL STN. #088
Address: 1862 E HOLT
City: ONTARIO
Status: Active
Comp Number: 4694
Number: 9
Board Of Equalization: 44-000074
Referral Date: 07-28-92
Action Date: 07-28-92
Created Date: 02-29-88
Owner Tank Id: 88-2
SWRCB Tank Id: 36-000-004694-000002
Tank Status: A
Capacity: 10000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Name: SHELL STN. #088
Address: 1862 E HOLT
City: ONTARIO
Status: Active
Comp Number: 4694
Number: 9
Board Of Equalization: 44-000074
Referral Date: 07-28-92
Action Date: 07-28-92
Created Date: 02-29-88
Owner Tank Id: 88-5
SWRCB Tank Id: 36-000-004694-000003
Tank Status: A
Capacity: 10000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

SHELL STN. #088 (Continued) **S101618982**

CA FID UST:
- Facility ID: 36003384
- Regulated By: UTNKA
- Regulated ID: 00004694
- Cortese Code: Not reported
- SIC Code: Not reported
- Facility Phone: 2139239876
- Mail To: Not reported
- Mailing Address: 10000 LAKEWOOD BLVD
- Mailing Address 2: Not reported
- Mailing City,St,Zip: ONTARIO 91761
- Contact: Not reported
- Contact Phone: Not reported
- DUNs Number: Not reported
- NPDES Number: Not reported
- EPA ID: Not reported
- Comments: Not reported
- Status: Active

CORTESE:
- Name: BERTINO-LAWTON PROPERTIES
- Address: 1862 E HOLT BLVD
- City,State,Zip: ONTARIO, CA 91761
- Region: CORTESE
- Envirostor Id: Not reported
- Global ID: T0607100410
- Site/Facility Type: LUST CLEANUP SITE
- Cleanup Status: COMPLETED - CASE CLOSED
- Status Date: Not reported
- Site Code: Not reported
- Latitude: Not reported
- Longitude: Not reported
- Owner: Not reported
- Enf Type: Not reported
- Swat R: Not reported
- Flag: active
- Order No: Not reported
- Waste Discharge System No: Not reported
- Effective Date: Not reported
- Region 2: Not reported
- WID Id: Not reported
- Solid Waste Id No: Not reported
- Waste Management Uit Name: Not reported
- File Name: Active Open

CERS:
- Name: BERTINO-LAWTON PROPERTIES
- Address: 1862 E HOLT BLVD
- City,State,Zip: ONTARIO, CA 91761
- Site ID: 638050
- CERS ID: T0607100410
- CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
- Affiliation Type Desc: Local Agency Caseworker
- Entity Name: JACKSON CRUTSINGER - SAN BERNARDINO COUNTY

SHELL STN. #088 (Continued) **S101618982**

Entity Title:	Not reported
Affiliation Address:	620 SOUTH E STREET
Affiliation City:	SAN BERNARDINO
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

I43 **BERTINO-LAWTON PROPERTIES** **CA LUST S103637900**
West **1862 HOLT** **CA HIST CORTESE N/A**
1/4-1/2 **ONTARIO, CA 91761**
0.445 mi.
2350 ft. **Site 2 of 2 in cluster I**

Relative: LUST REG 8:
Higher

Actual:
969 ft.

Name:	BERTINO-LAWTON PROPERTIES
Address:	1862 HOLT BLVD
City:	ONTARIO
Region:	8
County:	San Bernardino
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083602824T
Local Case Num:	96028
Case Type:	Soil only
Substance:	Gasoline
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	CORONA
Enf Type:	CLOS
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Not reported
Leak Cause:	UNK
Leak Source:	UNK
Global ID:	T0607100410
How Stopped Date:	5/7/1996
Enter Date:	6/18/1996
Date Confirmation of Leak Began:	5/7/1996
Date Preliminary Assessment Began:	5/7/1996
Discover Date:	5/7/1996
Enforcement Date:	Not reported
Close Date:	11/19/1996
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	6/5/1996
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	6/18/1996
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	34.0633122
Longitude:	-117.6120725

BERTINO-LAWTON PROPERTIES (Continued) **S103637900**

MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	2
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	*
Staff:	VJJ
Staff Initials:	JC3
Lead Agency:	Local Agency
Local Agency:	36000L
Hydr Basin #:	UPPER SANTA ANA VALL
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported

Summary: Not reported

HIST CORTESE:

edr_fname:	BERTINO-LAWTON PROPERTIES
edr_fadd1:	1862 HOLT
City,State,Zip:	ONTARIO, CA 91761
Region:	CORTESE
Facility County Code:	36
Reg By:	LTNKA
Reg Id:	083602824T

J44 **SBD ONTARIO ARMY AIRFIELD** **CA ENVIROSTOR** **S107736960**
SW **CA AQUEOUS FOAM** **N/A**
1/4-1/2 **ONTARIO, CA 91761**
0.455 mi.
2403 ft. **Site 1 of 4 in cluster J**

Relative:
Lower

Actual:
943 ft.

ENVIROSTOR:

Name:	SBD ONTARIO ARMY AIRFIELD
Address:	Not reported
City,State,Zip:	ONTARIO, CA 91761
Facility ID:	80000880
Status:	Inactive - Needs Evaluation
Status Date:	08/15/2018
Site Code:	Not reported
Site Type:	Military Evaluation
Site Type Detailed:	FUDS
Acres:	875
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Not reported
Supervisor:	Patrick Hsieh
Division Branch:	Cleanup Cypress
Assembly:	53
Senate:	22
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	DERA
Latitude:	34.05833

SBD ONTARIO ARMY AIRFIELD (Continued) **S107736960**

Longitude: -117.6083
APN: NONE SPECIFIED
Past Use: AIRFIELD OPERATIONS, HAZARDOUS WASTE STORAGE - TANKS/CONTAINERS
Potential COC: Explosives (UXO, MEC
Confirmed COC: NONE SPECIFIED
Potential Description: UE
Alias Name: CA99799FA00100
Alias Type: Federal Facility ID
Alias Name: J09CA7178
Alias Type: INPR
Alias Name: 80000880
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Inventory Project Report (INPR)
Completed Date: 04/29/1999
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 05/02/2016
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

AQUEOUS FOAM:
Object ID: Not reported
Name: SBD ONTARIO ARMY AIRFIELD
Address: Not reported
City,State,Zip: ONTARIO, CA
Airport ID: Not reported
Airport Class: Not reported
Lead Agency: Not reported
Lead Agency Name: Not reported
Contact URL: Not reported
Global ID: Not reported
Geotracker: Not reported
Latitude: 34.058333333
Longitude: -117.60833333
Envirostor ID: 80000880
Program Type: MILITARY EVALUATION
Status: INACTIVE - NEEDS EVALUATION
Status Date: 8/15/2018
Calenviroscreen Score: 95-100%
Site Code: Not reported

J45 **OBSERV. SQUADRON OAA** **CA ENVIROSTOR** **S107736949**
SW **N/A**
1/4-1/2 **ONTARIO army AIRPT, CA**
0.455 mi.
2403 ft. **Site 2 of 4 in cluster J**

Relative:
Lower

Actual:
943 ft.

ENVIROSTOR:

Name:	OBSERV. SQUADRON OAA
Address:	Not reported
City,State,Zip:	ONTARIO ARMY AIRPT, CA
Facility ID:	80000874
Status:	Inactive - Needs Evaluation
Status Date:	07/01/2005
Site Code:	Not reported
Site Type:	Military Evaluation
Site Type Detailed:	FUDS
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Not reported
Supervisor:	Douglas Bautista
Division Branch:	Cleanup Cypress
Assembly:	53
Senate:	22
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	DERA
Latitude:	34.05833
Longitude:	-117.6083
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	CA99799F999500
Alias Type:	Federal Facility ID
Alias Name:	J09CA7172
Alias Type:	INPR
Alias Name:	80000874
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Inventory Project Report (INPR)
Completed Date:	04/29/1999
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

J46 **SMALL ARMS RANGES** **UXO** **1024714813**
SW **N/A**
1/4-1/2 **ONTARIO, CA**
0.456 mi.
2408 ft. **Site 3 of 4 in cluster J**

Relative: UXO:
Lower

Actual: DoD Component:	FUDS
943 ft. Installation Name:	ONTARIO ARMY AIRFIELD
Name:	SMALL ARMS RANGES
Address:	Not reported
Address 2:	Not reported
City,State,Zip:	ONTARIO, CA
Site ID:	02OEW
Site Type:	Small Arms Range
Latitude:	34.058333
Longitude:	-117.608333

J47 **ONTARIO ARMY AIRFIELD** **FUDS** **1007212224**
SW **N/A**
1/4-1/2 **ONTARIO, CA**
0.456 mi.
2408 ft. **Site 4 of 4 in cluster J**

Relative: FUDS:
Lower

Actual: EPA Region:	09
943 ft. Installation ID:	CA99799F686800
Congressional District Number:	35
Name:	ONTARIO ARMY AIRFIELD
FUDS Number:	J09CA0531
City:	ONTARIO
State:	CA
County:	SAN BERNARDINO
Object ID:	7806
USACE Division:	SPD
USACE District:	Los Angeles District (SPL)
Status:	Properties with all projects at site closeout
Current Owner:	LOCAL: CITY The City of Los Angeles, Department of Airports, currently owns the site and uses it for the Ontario International Airport.
EMS Map Link:	https://fudsportal.usace.army.mil/ems/inventory/map?id=61967
Eligibility:	Eligible
Has Projects:	Yes
NPL Status:	Not reported
Project Required:	Yes
Feature Description:	The site consisted of a total of 875.49 acres; 375.11 acres fee, 518.12 acres lease, and 0.26 acres easement acquired between 1942 and 1944. A portion of the site (Ontario Air National Guard) is adressed under J09CA0522. Civilian airport operations at this site began in the early 1930s and was located in the southwest corner of the field. The airport was then expanded between 1940 and 1942 by the City of Ontario. The AAF began operation in 1942, when the U.S. Army obtained control of Ontario Municipal Airport and expanded it by development of the agricultural land adjacent to the airport. The U.S. Army utilized the site for training P-38 fighter pilots. The site was surplused on 15 November 1945 and then transferred on 29 October 1946 to the War Assets Administration for control. In 1949, the U.S. terminated allleases and easements at the site and quitclaimed the fee title tot he City of Ontario, with the exception of 7.93 acres, which was withdrawn from surplus on 7 April 1949 by the U.S. Air Force for the establishment of the National Guard Training Site.

ONTARIO ARMY AIRFIELD (Continued) **1007212224**

Latitude: 34.05833333
Longitude: -117.60833333

FUDS Detail as of Jan 2015:
Fiscal Year: 2013
Federal Facility ID: CA9799F6868
RAB: Not reported
NPL Status: Not Listed
Description: The site comprised of 875.49 acres in Ontario, California. The site encompasses all of the present airport property west of Archibald Avenue and sections south of Mission Blvd. between Grove and Turner Streets. The City of Ontario subsequently expanded the airport to the east to lengthen the runways and taxiways and named the airport Ontario International Airport. Over the years, the City of Ontario leased portions of the airport to numerous companies for commercial and industrial purposes. Aerospace companies built, tested, overhauled, and refurbished aircraft within and adjacent to the airport. In 1985, the City of Ontario deeded title of the airport property to the City of Los Angeles, Department of Airports (LADA). From 1967 to 1985, the LADA operated and maintained the airport for the City of Ontario under an agreement. AAF improvements included maintenance and fueling facilities for aircraft and motor vehicles, taxiways and hardstands, subsistence, recreation, storage and operations buildings, utilities, and an ammo dump.
History: The site consisted of a total of 875.49 acres; 375.11 acres fee, 518.12 acres lease, and 0.26 acres easement acquired between 1942 and 1944. A portion of the site (Ontario Air National Guard) is adressed under J09CA0522. Civilian airport operations at this site began in the early 1930s and was located in the southwest corner of the field. The airport was then expanded between 1940 and 1942 by the City of Ontario. The AAF began operation in 1942, when the U.S. Army obtained control of Ontario Municipal Airport and expanded it by development of the agricultural land adjacent to the airport. The U.S. Army utilized the site for training P-38 fighter pilots. The site was surplused on 15 November 1945 and then transferred on 29 October 1946 to the War Assets Administration for control. In 1949, the U.S. terminated allleases and easements at the site and quitclaimed the fee title tot he City of Ontario, with the exception of 7.93 acres, which was withdrawn from surplus on 7 April 1949 by the U.S. Air Force for the establishment of the National Guard Training Site.
CTC: 868.20000000000005
Current Program: Not reported
Future Program: Not reported
Institutional ID: 61967

MRA:
Inst ID: 61967
FUDS Number: J09CA0531
Facility Name: ONTARIO ARMY AIRFIELD
PHASE: 4
ARC: Y
DIST: SPL
MMRP: Y
MRA ID: J09CA053102R01

Inst ID: 61967
FUDS Number: J09CA0531

ONTARIO ARMY AIRFIELD (Continued) **1007212224**

Facility Name:	ONTARIO ARMY AIRFIELD
PHASE:	4
ARC:	Y
DIST:	SPL
MMRP:	Y
MRA ID:	J09CA053102R01

MRS:

Inst ID:	61967
FUDS Number:	J09CA0531
Facility Name:	ONTARIO ARMY AIRFIELD
PHASE:	4
Site ID:	02
DIST:	SPL
MMRP:	Y
MRA ID:	J09CA053102R01
PROJ NO:	J09CA053102

Inst ID:	61967
FUDS Number:	J09CA0531
Facility Name:	ONTARIO ARMY AIRFIELD
PHASE:	4
Site ID:	02
DIST:	SPL
MMRP:	Y
MRA ID:	J09CA053102R01
PROJ NO:	J09CA053102

K48 **TEXACO SERVICE STATION** **CA LUST S103066110**
WNW **501 VINEYARD AVE** **CA CERS N/A**
1/4-1/2 **ONTARIO, CA 91761**
0.484 mi.
2555 ft. **Site 1 of 3 in cluster K**

Relative:
Higher

Actual:
1002 ft.

LUST:

Name:	TEXACO SERVICE STATION
Address:	501 VINEYARD AVENUE NORTH
City,State,Zip:	ONTARIO, CA 91764
Lead Agency:	SAN BERNARDINO COUNTY
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607102075
Global Id:	T0607102075
Latitude:	34.0685896
Longitude:	-117.6110655
Status:	Completed - Case Closed
Status Date:	05/06/2005
Case Worker:	JC
RB Case Number:	Not reported
Local Agency:	SAN BERNARDINO COUNTY
File Location:	Local Agency
Local Case Number:	2002011
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
EPA Region:	9
Coordinate Source:	Google Geocode
Cuf Case:	YES

TEXACO SERVICE STATION (Continued) **S103066110**

Quantity Released Gallons:	Not reported
Begin Date:	02/26/2002
Leak Reported Date:	03/26/2002
How Discovered:	Tank Closure
How Discovered Description:	Not reported
Discharge Source:	Other
Discharge Cause:	Unknown
Stop Method:	Close and Remove Tank
Stop Description:	Not reported
No Further Action Date:	05/06/2005
CA Water Watershed Name:	Santa Ana River - Middle Santa Ana River - Chino (Split) (801.21)
Dwr Groundwater Subbasin Name:	Upper Santa Ana Valley - Chino (8-002.01)
Disadvantaged Community:	Disadvantaged Community
CA Enviroscreen 3 Score:	96-100% (highest scores)
CA Enviroscreen 4 Score:	80-85%
Military DOD Site:	No
Facility Project Subtype:	Not reported
RWQCB Region:	SANTA ANA RWQCB (REGION 8)
Site History:	Not reported

LUST:

Global Id:	T0607102075
Contact Type:	Local Agency Caseworker
Contact Name:	JACKSON CRUTSINGER
Organization Name:	SAN BERNARDINO COUNTY
Address:	620 SOUTH E STREET
City:	SAN BERNARDINO
Email:	jcrutsinger@sbcfire.org
Phone Number:	Not reported

LUST:

Global Id:	T0607102075
Action Type:	Other
Date:	03/26/2002
Action:	Leak Reported
Global Id:	T0607102075
Action Type:	ENFORCEMENT
Date:	05/06/2005
Action:	Closure/No Further Action Letter
Global Id:	T0607102075
Action Type:	REMEDIATION
Date:	04/10/2002
Action:	Excavation
Global Id:	T0607102075
Action Type:	REMEDIATION
Date:	07/22/2004
Action:	Soil Vapor Extraction (SVE)
Global Id:	T0607102075
Action Type:	Other
Date:	03/19/2002
Action:	Leak Discovery

TEXACO SERVICE STATION (Continued) **S103066110**

LUST:

Global Id:	T0607102075
Status:	Open - Case Begin Date
Status Date:	02/26/2002
Global Id:	T0607102075
Status:	Open - Site Assessment
Status Date:	02/26/2002
Global Id:	T0607102075
Status:	Open - Remediation
Status Date:	04/10/2002
Global Id:	T0607102075
Status:	Open - Site Assessment
Status Date:	06/01/2003
Global Id:	T0607102075
Status:	Completed - Case Closed
Status Date:	05/06/2005

LUST REG 8:

Name:	TEXACO SERVICE STATION
Address:	501 VINEYARD AVE
City:	ONTARIO
Region:	8
County:	San Bernardino
Regional Board:	Santa Ana Region
Facility Status:	Pollution Characterization
Case Number:	083602603T
Local Case Num:	94073
Case Type:	Soil only
Substance:	Gasoline
Qty Leaked:	Not reported
Abate Method:	Excavate and Dispose - remove contaminated soil and dispose in approved site
Cross Street:	G
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Not reported
Leak Cause:	Not reported
Leak Source:	Piping
Global ID:	T0607100366
How Stopped Date:	12/1/1994
Enter Date:	2/3/1995
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	12/7/1994
Discover Date:	12/1/1994
Enforcement Date:	Not reported
Close Date:	9/10/1999
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	1/1/1965
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported

TEXACO SERVICE STATION (Continued) **S103066110**

Date Post Remedial Action Monitoring:	Not reported
Enter Date:	2/3/1995
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	34.068441
Longitude:	-117.6112025
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	TME
Staff Initials:	LH6
Lead Agency:	Local Agency
Local Agency:	36000L
Hydr Basin #:	UPPER SANTA ANA VALL
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported

Summary: SANDY GRAVEL SOIL

CERS:

Name:	TEXACO SERVICE STATION
Address:	501 VINEYARD AVENUE NORTH
City,State,Zip:	ONTARIO, CA 91764
Site ID:	689800
CERS ID:	T0607102075
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	JACKSON CRUTSINGER - SAN BERNARDINO COUNTY
Entity Title:	Not reported
Affiliation Address:	620 SOUTH E STREET
Affiliation City:	SAN BERNARDINO
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

K49 **TEXACO SERVICE STATION** **CA LUST** **U001566648**
WNW **501 N VINEYARD AVE** **CA SWEEPS UST** **N/A**
1/4-1/2 **ONTARIO, CA 91761** **CA FID UST**
0.484 mi. **CA Cortese**
2555 ft. **Site 2 of 3 in cluster K** **CA CERS**

Relative:
Higher

Actual:
1002 ft.

LUST:

Name:	TEXACO SERVICE STATION
Address:	501 N VINEYARD AVE
City,State,Zip:	ONTARIO, CA 91761
Lead Agency:	SAN BERNARDINO COUNTY
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607100366
Global Id:	T0607100366
Latitude:	34.0683922
Longitude:	-117.611058
Status:	Completed - Case Closed
Status Date:	09/10/1999
Case Worker:	Not reported
RB Case Number:	083602603T
Local Agency:	Not reported
File Location:	Local Agency
Local Case Number:	94073
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
EPA Region:	9
Coordinate Source:	Google Geocode
Cuf Case:	YES
Quantity Released Gallons:	Not reported
Begin Date:	12/01/1994
Leak Reported Date:	12/07/1994
How Discovered:	Tank Closure
How Discovered Description:	Not reported
Discharge Source:	Piping
Discharge Cause:	Not reported
Stop Method:	Not reported
Stop Description:	Not reported
No Further Action Date:	09/10/1999
CA Water Watershed Name:	Santa Ana River - Middle Santa Ana River - Chino (Split) (801.21)
Dwr Groundwater Subbasin Name:	Upper Santa Ana Valley - Chino (8-002.01)
Disadvantaged Community:	Disadvantaged Community
CA Enviroscreen 3 Score:	96-100% (highest scores)
CA Enviroscreen 4 Score:	80-85%
Military DOD Site:	No
Facility Project Subtype:	Not reported
RWQCB Region:	SANTA ANA RWQCB (REGION 8)
Site History:	Not reported

LUST:

Global Id:	T0607100366
Contact Type:	Regional Board Caseworker
Contact Name:	MIGUEL OVIEDO
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 Main Street, Suite 500
City:	RIVERSIDE
Email:	miguel.oviedo@waterboards.ca.gov
Phone Number:	9517823238

LUST:

TEXACO SERVICE STATION (Continued) **U001566648**

Global Id: T0607100366
Action Type: ENFORCEMENT
Date: 12/22/1998
Action: Closure/No Further Action Letter

Global Id: T0607100366
Action Type: Other
Date: 12/07/1994
Action: Leak Reported

Global Id: T0607100366
Action Type: Other
Date: 12/01/1994
Action: Leak Stopped

Global Id: T0607100366
Action Type: Other
Date: 12/01/1994
Action: Leak Discovery

LUST:
Global Id: T0607100366
Status: Open - Case Begin Date
Status Date: 12/01/1994

Global Id: T0607100366
Status: Open - Site Assessment
Status Date: 12/07/1994

Global Id: T0607100366
Status: Completed - Case Closed
Status Date: 09/10/1999

SWEEPS UST:
Name: EXXON SERVICE STATION #7-2886
Address: 501 N VINEYARD
City: ONTARIO
Status: Active
Comp Number: 23936
Number: 1
Board Of Equalization: 44-000285
Referral Date: 07-28-92
Action Date: 07-28-92
Created Date: 02-29-88
Owner Tank Id: 1
SWRCB Tank Id: 36-000-023936-000001
Tank Status: A
Capacity: 6000
Active Date: 08-23-88
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: 4

Name: EXXON SERVICE STATION #7-2886

TEXACO SERVICE STATION (Continued) **U001566648**

Address:	501 N VINEYARD
City:	ONTARIO
Status:	Active
Comp Number:	23936
Number:	1
Board Of Equalization:	44-000285
Referral Date:	07-28-92
Action Date:	07-28-92
Created Date:	02-29-88
Owner Tank Id:	2
SWRCB Tank Id:	36-000-023936-000002
Tank Status:	A
Capacity:	8000
Active Date:	08-23-88
Tank Use:	M.V. FUEL
STG:	P
Content:	LEADED
Number Of Tanks:	Not reported

Name:	EXXON SERVICE STATION #7-2886
Address:	501 N VINEYARD
City:	ONTARIO
Status:	Active
Comp Number:	23936
Number:	1
Board Of Equalization:	44-000285
Referral Date:	07-28-92
Action Date:	07-28-92
Created Date:	02-29-88
Owner Tank Id:	4
SWRCB Tank Id:	36-000-023936-000003
Tank Status:	A
Capacity:	1000
Active Date:	08-23-88
Tank Use:	OIL
STG:	W
Content:	WASTE OIL
Number Of Tanks:	Not reported

Name:	EXXON SERVICE STATION #7-2886
Address:	501 N VINEYARD
City:	ONTARIO
Status:	Active
Comp Number:	23936
Number:	1
Board Of Equalization:	44-000285
Referral Date:	07-28-92
Action Date:	07-28-92
Created Date:	02-29-88
Owner Tank Id:	3
SWRCB Tank Id:	36-000-023936-000004
Tank Status:	A
Capacity:	10000
Active Date:	08-23-88
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED

TEXACO SERVICE STATION (Continued) **U001566648**

Number Of Tanks: Not reported

CA FID UST:
Facility ID: 36004687
Regulated By: UTNKA
Regulated ID: 00023936
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: Not reported
Mail To: Not reported
Mailing Address: 501 N VINEYARD
Mailing Address 2: Not reported
Mailing City,St,Zip: ONTARIO 91061
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

CORTESE:
Name: TEXACO SERVICE STATION
Address: 501 N VINEYARD AVE
City,State,Zip: ONTARIO, CA 91761
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0607100366
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported
Flag: active
Order No: Not reported
Waste Discharge System No: Not reported
Effective Date: Not reported
Region 2: Not reported
WID Id: Not reported
Solid Waste Id No: Not reported
Waste Management Uit Name: Not reported
File Name: Active Open

CERS:
Name: TEXACO SERVICE STATION
Address: 501 N VINEYARD AVE
City,State,Zip: ONTARIO, CA 91761
Site ID: 689795
CERS ID: T0607100366
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:

TEXACO SERVICE STATION (Continued) **U001566648**

Affiliation Type Desc:	Regional Board Caseworker
Entity Name:	MIGUEL OVIEDO - SANTA ANA RWQCB (REGION 8)
Entity Title:	Not reported
Affiliation Address:	3737 Main Street, Suite 500
Affiliation City:	RIVERSIDE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	9517823238,

K50 **TEXACO SERVICE STATION** **CA LUST** **S106784777**
WNW **501 VINEYARD AVENUE NORTH** **CA Cortese** **N/A**
1/4-1/2 **ONTARIO, CA 91764**
0.484 mi.
2555 ft. **Site 3 of 3 in cluster K**

Relative: **Higher**
Actual: **1002 ft.**

LUST REG 8:

Name:	TEXACO SERVICE STATION
Address:	501 VINEYARD AVENUE NORTH
City:	ONTARIO
Region:	8
County:	San Bernardino
Regional Board:	Santa Ana Region
Facility Status:	Leak being confirmed
Case Number:	Not reported
Local Case Num:	2002011
Case Type:	Soil only
Substance:	Gasoline
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	"G" STREET
Enf Type:	Not reported
Funding:	REDEV
How Discovered:	Tank Closure
How Stopped:	Close Tank
Leak Cause:	UNK
Leak Source:	UNK
Global ID:	T0607102075
How Stopped Date:	Not reported
Enter Date:	Not reported
Date Confirmation of Leak Began:	1/28/2005
Date Preliminary Assessment Began:	Not reported
Discover Date:	3/19/2002
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST

TEXACO SERVICE STATION (Continued) **S106784777**

Latitude:	0
Longitude:	0
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	Not reported
Staff Initials:	JC3
Lead Agency:	Local Agency
Local Agency:	36000L
Hydr Basin #:	Not reported
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported

Summary: Not reported

CORTESE:

Name:	TEXACO SERVICE STATION
Address:	501 VINEYARD AVENUE NORTH
City,State,Zip:	ONTARIO, CA 91764
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0607102075
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

51
WSW
1/2-1
0.610 mi.
3221 ft.

LOCKHEED MARTIN AIRCRAFT(FORMER) **CA ENVIROSTOR** **S108221154**
1800 E. AIRPORT DRIVE **CA San Bern. Co. Permit** **N/A**
ONTARIO, CA 91761

Relative:
Higher

Actual:
966 ft.

ENVIROSTOR:

Name:	LOCKHEED AIRCRAFT SERVICE CO.
Address:	1800 E. AIRPORT DRIVE
City,State,Zip:	ONTARIO, CA 91761
Facility ID:	71002210

LOCKHEED MARTIN AIRCRAFT(FORMER) (Continued) **S108221154**

Status: Refer: Other Agency
Status Date: Not reported
Site Code: Not reported
Site Type: Tiered Permit
Site Type Detailed: Tiered Permit
Acres: Not reported
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Not reported
Division Branch: Cleanup Cypress
Assembly: 53
Senate: 22
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 34.06199
Longitude: -117.6138
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CAD008368896
Alias Type: EPA Identification Number
Alias Name: 71002210
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

Name: LOCKHEED MARTIN AIRCRAFT(FORMER)
Address: 1800 E. AIRPORT DRIVE
City,State,Zip: ONTARIO, CA 91761
Facility ID: 36370030
Status: Refer: 1248 Local Agency
Status Date: 03/08/2001
Site Code: Not reported
Site Type: Evaluation
Site Type Detailed: Evaluation
Acres: Not reported
NPL: NO

LOCKHEED MARTIN AIRCRAFT(FORMER) (Continued) **S108221154**

Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Referred - Not Assigned
Division Branch: Cleanup Cypress
Assembly: 53
Senate: 22
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not Applicable
Latitude: 34.06083
Longitude: -117.6139
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: 36370030
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

San Bern. Co. Permit:
Name: SOUTHWEST AIRLINES CO - GSE
Address: 1800 E AIRPORT DR
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0009746
Owner: SOUTHWEST AIRLINES CO
Permit Number: PT0016610
Permit Category: SMALL QUANTITY GENERATOR
Facility Status: INACTIVE
Expiration Date: 05/31/2020

Name: SOUTHWEST AIRLINES CO - GSE
Address: 1800 E AIRPORT DR
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0009746
Owner: SOUTHWEST AIRLINES CO
Permit Number: PT0016609

LOCKHEED MARTIN AIRCRAFT(FORMER) (Continued) **S108221154**

Permit Category: HAZARDOUS MATERIALS 4-10 CHEMICALS
Facility Status: INACTIVE
Expiration Date: 05/31/2020

Name: SOUTHWEST AIRLINES CO ONT CARGO
Address: 1800 E AIRPORT DR
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0007762
Owner: SOUTHWEST AIRLINES CO
Permit Number: PT0013384
Permit Category: HAZMAT HANDLER 0-10 EMPLOYEES
Facility Status: INACTIVE
Expiration Date: 04/30/2014

52
NNW
1/2-1
0.792 mi.
4183 ft.

WEST END HIGH SCHOOL NO. 1 **CA ENVIROSTOR** **S105628827**
7TH STREET/CORONA AVENUE **CA SCH** **N/A**
ONTARIO, CA 91764

Relative:
Higher

Actual:
1023 ft.

ENVIROSTOR:
Name: WEST END HIGH SCHOOL NO. 1
Address: 7TH STREET/CORONA AVENUE
City,State,Zip: ONTARIO, CA 91764
Facility ID: 36010064
Status: No Further Action
Status Date: 12/28/2001
Site Code: 404080
Site Type: School Investigation
Site Type Detailed: School
Acres: 5
NPL: NO
Regulatory Agencies: DTSC
Lead Agency: DTSC
Program Manager: Not reported
Supervisor: Javier Hinojosa
Division Branch: Southern California Schools & Brownfields Outreach
Assembly: 50
Senate: 22
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: School District
Latitude: 34.075
Longitude: -117.61
APN: NONE SPECIFIED
Past Use: AGRICULTURAL - ROW CROPS
Potential COC: DDE DDT Dieldrin Selenium
Confirmed COC: 30515-NO 30207-NO 30007-NO 30008-NO
Potential Description: SOIL
Alias Name: 404080
Alias Type: Project Code (Site Code)
Alias Name: 36010064
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE

WEST END HIGH SCHOOL NO. 1 (Continued) **S105628827**

Completed Sub Area Name: Not reported
Completed Document Type: Phase 1
Completed Date: 12/28/2001
Comments: DTSC reviewed a Phase I Environmental Assessment and has made a

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

Name: WEST END HIGH SCHOOL NO. 1
Address: 7TH STREET/CORONA AVENUE
City,State,Zip: ONTARIO, CA 91764
Facility ID: 36010010
Status: No Further Action
Status Date: 12/28/2000
Site Code: 404144
Site Type: School Investigation
Site Type Detailed: School
Acres: 5
NPL: NO
Regulatory Agencies: DTSC
Lead Agency: DTSC
Program Manager: Not reported
Supervisor: Javier Hinojosa
Division Branch: Southern California Schools & Brownfields Outreach
Assembly: 50
Senate: 22
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: School District
Latitude: 34.075
Longitude: -117.61
APN: NONE SPECIFIED
Past Use: AGRICULTURAL - ROW CROPS
Potential COC: Selenium Dieldrin DDT DDE
Confirmed COC: NONE SPECIFIED
Potential Description: SOIL
Alias Name: SAN BERNARDINO CO SCHS/WEST END HS #1
Alias Type: Alternate Name
Alias Name: SAN BERNARDINO CO. SUPERINTENDENT SCHOOL
Alias Type: Alternate Name
Alias Name: SAN BERNARDINO COE-W. END SCH NO.1/VCA
Alias Type: Alternate Name
Alias Name: SAN BERNARDINO COE-WEST END HI NO. 1/CDE
Alias Type: Alternate Name
Alias Name: WEST END HIGH SCHOOL #1
Alias Type: Alternate Name
Alias Name: 404033
Alias Type: Project Code (Site Code)
Alias Name: 404080

WEST END HIGH SCHOOL NO. 1 (Continued) **S105628827**

Alias Type: Project Code (Site Code)
Alias Name: 404144
Alias Type: Project Code (Site Code)
Alias Name: 36010010
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 06/29/2000
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 01/11/2001
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 10/26/2000
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 12/28/2000
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 07/05/2001
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

SCH:

Name: WEST END HIGH SCHOOL NO. 1
Address: 7TH STREET/CORONA AVENUE
City,State,Zip: ONTARIO, CA 91764
Facility ID: 36010010
Site Type: School Investigation
Site Type Detail: School
Site Mgmt. Req.: NONE SPECIFIED
Acres: 5

WEST END HIGH SCHOOL NO. 1 (Continued) **S105628827**

National Priorities List:	NO
Cleanup Oversight Agencies:	DTSC
Lead Agency:	DTSC
Lead Agency Description:	* DTSC
Project Manager:	Not reported
Supervisor:	Javier Hinojosa
Division Branch:	Southern California Schools & Brownfields Outreach
Site Code:	404144
Assembly:	50
Senate:	22
Special Program Status:	Not reported
Status:	No Further Action
Status Date:	12/28/2000
Restricted Use:	NO
Funding:	School District
Latitude:	34.075
Longitude:	-117.61
APN:	NONE SPECIFIED
Past Use:	AGRICULTURAL - ROW CROPS
Potential COC:	Selenium, Selenium, Dieldrin, DDT, DDE
Confirmed COC:	NONE SPECIFIED
Potential Description:	SOIL
Alias Name:	SAN BERNARDINO CO SCHS/WEST END HS #1
Alias Type:	Alternate Name
Alias Name:	SAN BERNARDINO CO. SUPERINTENDENT SCHOOL
Alias Type:	Alternate Name
Alias Name:	SAN BERNARDINO COE-W. END SCH NO.1/VCA
Alias Type:	Alternate Name
Alias Name:	SAN BERNARDINO COE-WEST END HI NO. 1/CDE
Alias Type:	Alternate Name
Alias Name:	WEST END HIGH SCHOOL #1
Alias Type:	Alternate Name
Alias Name:	404033
Alias Type:	Project Code (Site Code)
Alias Name:	404080
Alias Type:	Project Code (Site Code)
Alias Name:	404144
Alias Type:	Project Code (Site Code)
Alias Name:	36010010
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Cost Recovery Closeout Memo
Completed Date:	06/29/2000
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Cost Recovery Closeout Memo
Completed Date:	01/11/2001
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Environmental Oversight Agreement
Completed Date:	10/26/2000

WEST END HIGH SCHOOL NO. 1 (Continued) **S105628827**

Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	12/28/2000
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Cost Recovery Closeout Memo
Completed Date:	07/05/2001
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported
Name:	WEST END HIGH SCHOOL NO. 1
Address:	7TH STREET/CORONA AVENUE
City,State,Zip:	ONTARIO, CA 91764
Facility ID:	36010064
Site Type:	School Investigation
Site Type Detail:	School
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	5
National Priorities List:	NO
Cleanup Oversight Agencies:	DTSC
Lead Agency:	DTSC
Lead Agency Description:	* DTSC
Project Manager:	Not reported
Supervisor:	Javier Hinojosa
Division Branch:	Southern California Schools & Brownfields Outreach
Site Code:	404080
Assembly:	50
Senate:	22
Special Program Status:	Not reported
Status:	No Further Action
Status Date:	12/28/2001
Restricted Use:	NO
Funding:	School District
Latitude:	34.075
Longitude:	-117.61
APN:	NONE SPECIFIED
Past Use:	AGRICULTURAL - ROW CROPS
Potential COC:	DDE, DDT, Dieldrin, Selenium
Confirmed COC:	30515-NO, 30207-NO, 30007-NO, 30008-NO
Potential Description:	SOIL
Alias Name:	404080
Alias Type:	Project Code (Site Code)

WEST END HIGH SCHOOL NO. 1 (Continued) **S105628827**

Alias Name: 36010064
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1
Completed Date: 12/28/2001
Comments: DTSC reviewed a Phase I Environmental Assessment and has made a

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

L53 **ONTARIO ANG TNG SITE** **UXO** **1024713491**
South **N/A**
1/2-1 **ONTARIO, CA**
0.825 mi.
4354 ft. **Site 1 of 2 in cluster L**

Relative:
Lower

Actual:
904 ft.

UXO:
DoD Component: FUDS
Installation Name: ONTARIO A.N.G. TRAINING SITE
Name: ONTARIO ANG TNG SITE
Address: Not reported
Address 2: Not reported
City,State,Zip: ONTARIO, CA
Site ID: 00OEW
Site Type: Unexploded Munitions and Ordnance Area
Latitude: 34.051300
Longitude: -117.600998

L54 **ONTARIO A.N.G. TRAINING SITE** **FUDS** **1009484399**
South **N/A**
1/2-1 **ONTARIO, CA**
0.825 mi.
4354 ft. **Site 2 of 2 in cluster L**

Relative:
Lower

Actual:
904 ft.

FUDS:
EPA Region: 09
Installation ID: CA99799F554300
Congressional District Number: 35
Name: ONTARIO A.N.G. TRAINING SITE
FUDS Number: J09CA0522
City: ONTARIO
State: CA
County: SAN BERNARDINO
Object ID: 9921
USACE Division: SPD
USACE District: Los Angeles District (SPL)
Status: Properties with all projects at site closeout

ONTARIO A.N.G. TRAINING SITE (Continued) **1009484399**

Current Owner:	LOCAL: CITY The City of Los Angeles, the current owner and operator of the Ontario International Airport, uses the site for aviation purposes.
EMS Map Link:	https://fudsportal.usace.army.mil/ems/inventory/map?id=61125
Eligibility:	Eligible
Has Projects:	Yes
NPL Status:	Not reported
Project Required:	Yes
Feature Description:	The site has been used as an airport and for Air National Guard training. The former Ontario Air National Guard Training Site is located on a small portion of the former Ontario Army Airfield (DERP Site No. J09CA053100). The U.S. Air Force acquired the site for the use of the CANG. The CANG used the site from 1949 to about 1980 for ANG flight training. The former ANG site was disposed of to the LADA in 1988. LADA has leased this area to various tenants whom have used the hangar located on this site.
Latitude:	34.0513
Longitude:	-117.600998

FUDS Detail as of Jan 2015:

Fiscal Year:	2013
Federal Facility ID:	CA9799F5543
RAB:	Not reported
NPL Status:	Not Listed
Description:	The former Ontario Air National Guard Training Site consisted of 30.62 acres leased to the U.S. Air Force by the City of Ontario and 7.93 acres fee owned by the U.S. Air Force and leased to the California Air National Guard (CANG). It is on 1280 S. Tower Drive, Ontario, California. The site is located along the south-central border of Ontario International Airport. In 1985, the city of Ontario conveyed the entire airport to the City of Los Angeles, Department of Airports (LADA). The site was included in that conveyance. By supplemental agreement dated 11 May 1988, 27.41 acres were deleted from the lease between the Air Force and the City of Los Angeles, reducing the size of the site. The Air Force still leases 3.21 acres from LADA and still owns 7.93 acres fee. This area is currently used by the California Air National Guard (CANG), 148th Combat Communications Squadron. This portion contains supply and administrative facilities and a motor pool, and is ineligible for consideration under DERP-FUDS. Since 1988, the eligible portion of the site has been leased to various tenants whom have used the hangar.
History:	The site has been used as an airport and for Air National Guard training. The former Ontario Air National Guard Training Site is located on a small portion of the former Ontario Army Airfield (DERP Site No. J09CA053100). The U.S. Air Force acquired the site for the use of the CANG. The CANG used the site from 1949 to about 1980 for ANG flight training. The former ANG site was disposed of to the LADA in 1988. LADA has leased this area to various tenants whom have used the hangar located on this site.
CTC:	86.5
Current Program:	Not reported
Future Program:	Not reported
Institutional ID:	61125

55
SSW
1/2-1
0.929 mi.
4906 ft.

Relative:
Lower

Actual:
906 ft.

GE ENGINE SERVICES, INC.
2264 E. AVION PLACE
ONTARIO, CA 91761

CA RESPONSE **S109517004**
CA ENVIROSTOR **N/A**
CA LUST
CA CPS-SLIC
CA Cortese
CA San Bern. Co. Permit
CA CERS

RESPONSE:

Name:	GE ENGINE SERVICES TEST CELL FACILITY (AKA GE AIRCRAFT)
Address:	2264 E. AVION PLACE
City,State,Zip:	ONTARIO, CA 91761
Facility ID:	36370024
Site Type:	State Response
Site Type Detail:	State Response or NPL
Acres:	4
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP, RWQCB 8 - Santa Ana
Lead Agency Description:	Not reported
Project Manager:	Not reported
Supervisor:	Yolanda Garza
Division Branch:	Southern California Schools & Brownfields Outreach
Site Code:	400070
Site Mgmt. Req.:	NONE SPECIFIED
Assembly:	53
Senate:	22
Special Program Status:	Not reported
Status:	Refer: RWQCB
Status Date:	05/07/2019
Restricted Use:	YES
Funding:	Responsible Party
Latitude:	34.04773
Longitude:	-117.6009
APN:	011327136
Past Use:	AIRCRAFT MAINTENANCE, JET FUEL STORAGE/REFUELING
Potential COC :	* HYDROCARBON SOLVENTS * Laboratory Waste Chemicals * ORGANIC LIQUIDS WITH METALS * OXYGENATED SOLVENTS * Sludge - Paint * UNSPECIFIED ACID SOLUTION * WASTE OIL & MIXED OIL * BAGHOUSE WASTE Tetrachloroethylene (PCE Trichloroethylene (TCE Chromium VI
Confirmed COC:	10179-NO 10193-NO 10199-NO 20003-NO 10009-NO 10012-NO 10061-NO 10067-NO Tetrachloroethylene (PCE 30153-NO Trichloroethylene (TCE
Potential Description:	OTH, SOIL, SV
Alias Name:	GE Aircraft
Alias Type:	Alternate Name
Alias Name:	GENERAL ELECTRIC CO AVIATION SERVICE
Alias Type:	Alternate Name
Alias Name:	GENERAL ELECTRIC ENGINE MAINTENANCE CTR.
Alias Type:	Alternate Name
Alias Name:	GENERAL ELECTRIC JET ENGINE TEST CELL
Alias Type:	Alternate Name
Alias Name:	011327136
Alias Type:	APN
Alias Name:	CAD009542721
Alias Type:	EPA Identification Number
Alias Name:	110033619742
Alias Type:	EPA (FRS #)
Alias Name:	SL208133868
Alias Type:	GeoTracker Global ID
Alias Name:	P41017

GE ENGINE SERVICES, INC. (Continued) **S109517004**

Alias Type: PCode
Alias Name: 400070
Alias Type: Project Code (Site Code)
Alias Name: 36370024
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/01/2016
Comments: Groundwater monitoring at the site is conducted under the Santa Ana RWQCB's oversight.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/29/2013
Comments: report submitted by the facility but not reviewed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/21/2014
Comments: No comments from DTSC.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/21/2014
Comments: No comments from DTSC

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/21/2014
Comments: No comments from DTSC

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operation & Maintenance Order/Agreement
Completed Date: 08/28/1998
Comments: Enforceable Agreement for Operation and Maintenance was signed by DTSC and GE.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * CEQA
Completed Date: 09/16/1994
Comments: The Department approved the final Remedial Action Plan for the General Electric Jet Engine Test Cell Facility. The CEQA (Negative Declaration) documents have also been approved. The remedial alternative recommended for the site consists of in situ soil vapor extraction to reduce VOC levels at the known source areas of the site. Groundwater investigation and cleanup will be under the oversight of the RWQCB.

Completed Area Name: PROJECT WIDE

GE ENGINE SERVICES, INC. (Continued) **S109517004**

Completed Sub Area Name: Not reported
Completed Document Type: Consent Order
Completed Date: 09/28/1988
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 03/15/1983
Comments: Facility Identified: RWQCB files - aircraft parts mfg.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 05/06/2019
Comments: The project was transferred to SARWQCB.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/31/2018
Comments: DTSC is not the oversight agency for GW monitoring.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 11/21/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Reports
Completed Date: 01/16/2009
Comments: DTSC sent approval with Engineering and HERD's comments.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Reports
Completed Date: 05/04/2007
Comments: 2nd 5 Yr. Review Report was approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/27/2006
Comments: Final letter sent to RP.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Reports
Completed Date: 01/27/2006
Comments: Shallow soil remedy only.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 05/26/1989

GE ENGINE SERVICES, INC. (Continued) **S109517004**

Comments: Reassessment was reviewed by Region 4 staff recommended AWP.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment Report
Completed Date: 01/01/1985
Comments: Preliminary Assessment Done: Facility is located in the Ontario International Airport. Test Area is 1/3-mile east along Avion. Operations consist of cleaning, overhauling, and testing of aircraft engines. In operation since 1956 (dry wells 1974-1980). Discharge to sewer. Preliminary Assessment submitted to U.S. EPA.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 10/09/1996
Comments: RMDL: Installation, operation and maintenance of three (3) separate soil vapor extraction and treatment systems (VET's) was completed on 10/09/1996.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 01/10/1996
Comments: Military and commercial jet engine testing facility. Contaminants include petroleum hydrocarbons, TCA, PCE, volatile and semi-volatile organic compounds, chloroform, naphthalene, 2-methylnaphthalene, and volatile aromatics (xylene, toluene, ethyl benzene).

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Plan
Completed Date: 09/16/1994
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 06/30/1993
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan
Completed Date: 02/29/1992
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan
Completed Date: 12/31/1991
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/27/2014

GE ENGINE SERVICES, INC. (Continued) **S109517004**

Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	02/08/2018
Comments:	DTSC is not the oversight agency for GW monitoring.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	07/31/2014
Comments:	No comments for the GW monitoring Report. DTSC is waiting for RWQCB's determination for the soil gas and GW investigation.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	03/12/2015
Comments:	Increasing TCE observed in Well OW-15.
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

ENVIROSTOR:

Name:	GE ENGINE SERVICES TEST CELL FACILITY (AKA GE AIRCRAFT)
Address:	2264 E. AVION PLACE
City,State,Zip:	ONTARIO, CA 91761
Facility ID:	36370024
Status:	Refer: RWQCB
Status Date:	05/07/2019
Site Code:	400070
Site Type:	State Response
Site Type Detailed:	State Response or NPL
Acres:	4
NPL:	NO
Regulatory Agencies:	SMBRP, RWQCB 8 - Santa Ana
Lead Agency:	RWQCB 8 - Santa Ana,SMBRP
Program Manager:	Not reported
Supervisor:	Yolanda Garza
Division Branch:	Southern California Schools & Brownfields Outreach
Assembly:	53
Senate:	22
Special Program:	Not reported
Restricted Use:	YES
Site Mgmt Req:	NONE SPECIFIED
Funding:	Responsible Party
Latitude:	34.04773
Longitude:	-117.6009
APN:	011327136

GE ENGINE SERVICES, INC. (Continued) **S109517004**

Past Use: AIRCRAFT MAINTENANCE, JET FUEL STORAGE/REFUELING
Potential COC: * HYDROCARBON SOLVENTS * Laboratory Waste Chemicals * ORGANIC LIQUIDS WITH METALS * OXYGENATED SOLVENTS * Sludge - Paint * UNSPECIFIED ACID SOLUTION * WASTE OIL & MIXED OIL * BAGHOUSE WASTE Tetrachloroethylene (PCE Trichloroethylene (TCE Chromium VI
Confirmed COC: 10179-NO 10193-NO 10199-NO 20003-NO 10009-NO 10012-NO 10061-NO 10067-NO Tetrachloroethylene (PCE 30153-NO Trichloroethylene (TCE
Potential Description: OTH, SOIL, SV
Alias Name: GE Aircraft
Alias Type: Alternate Name
Alias Name: GENERAL ELECTRIC CO AVIATION SERVICE
Alias Type: Alternate Name
Alias Name: GENERAL ELECTRIC ENGINE MAINTENANCE CTR.
Alias Type: Alternate Name
Alias Name: GENERAL ELECTRIC JET ENGINE TEST CELL
Alias Type: Alternate Name
Alias Name: 011327136
Alias Type: APN
Alias Name: CAD009542721
Alias Type: EPA Identification Number
Alias Name: 110033619742
Alias Type: EPA (FRS #)
Alias Name: SL208133868
Alias Type: GeoTracker Global ID
Alias Name: P41017
Alias Type: PCode
Alias Name: 400070
Alias Type: Project Code (Site Code)
Alias Name: 36370024
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/01/2016
Comments: Groundwater monitoring at the site is conducted under the Santa Ana RWQCB's oversight.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/29/2013
Comments: report submitted by the facility but not reviewed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/21/2014
Comments: No comments from DTSC.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/21/2014
Comments: No comments from DTSC

Completed Area Name: PROJECT WIDE

GE ENGINE SERVICES, INC. (Continued) **S109517004**

Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/21/2014
Comments: No comments from DTSC

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operation & Maintenance Order/Agreement
Completed Date: 08/28/1998
Comments: Enforceable Agreement for Operation and Maintenance was signed by DTSC and GE.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * CEQA
Completed Date: 09/16/1994
Comments: The Department approved the final Remedial Action Plan for the General Electric Jet Engine Test Cell Facility. The CEQA (Negative Declaration) documents have also been approved. The remedial alternative recommended for the site consists of in situ soil vapor extraction to reduce VOC levels at the known source areas of the site. Groundwater investigation and cleanup will be under the oversight of the RWQCB.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Consent Order
Completed Date: 09/28/1988
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 03/15/1983
Comments: Facility Identified: RWQCB files - aircraft parts mfg.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 05/06/2019
Comments: The project was transferred to SARWQCB.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/31/2018
Comments: DTSC is not the oversight agency for GW monitoring.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 11/21/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Reports

GE ENGINE SERVICES, INC. (Continued) **S109517004**

Completed Date: 01/16/2009
Comments: DTSC sent approval with Engineering and HERD's comments.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Reports
Completed Date: 05/04/2007
Comments: 2nd 5 Yr. Review Report was approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/27/2006
Comments: Final letter sent to RP.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Reports
Completed Date: 01/27/2006
Comments: Shallow soil remedy only.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 05/26/1989
Comments: Reassessment was reviewed by Region 4 staff recommended AWP.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment Report
Completed Date: 01/01/1985
Comments: Preliminary Assessment Done: Facility is located in the Ontario International Airport. Test Area is 1/3-mile east along Avion. Operations consist of cleaning, overhauling, and testing of aircraft engines. In operation since 1956 (dry wells 1974-1980). Discharge to sewer. Preliminary Assessment submitted to U.S. EPA.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 10/09/1996
Comments: RMDL: Installation, operation and maintenance of three (3) separate soil vapor extraction and treatment systems (VET's) was completed on 10/09/1996.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 01/10/1996
Comments: Military and commercial jet engine testing facility. Contaminants include petroleum hydrocarbons, TCA, PCE, volatile and semi-volatile organic compounds, chloroform, naphthalene, 2-methylnaphthalene, and volatile aromatics (xylene, toluene, ethyl benzene).

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Plan

GE ENGINE SERVICES, INC. (Continued) **S109517004**

Completed Date: 09/16/1994
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 06/30/1993
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan
Completed Date: 02/29/1992
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan
Completed Date: 12/31/1991
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/27/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/08/2018
Comments: DTSC is not the oversight agency for GW monitoring.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/31/2014
Comments: No comments for the GW monitoring Report. DTSC is waiting for RWQCB's determination for the soil gas and GW investigation.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/12/2015
Comments: Increasing TCE observed in Well OW-15.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

Name: GE ENGINE SERVICES, INC.

GE ENGINE SERVICES, INC. (Continued) **S109517004**

Address: 2264 E. AVION PLACE
City,State,Zip: ONTARIO, CA 91761
Facility ID: 71002752
Status: Inactive - Needs Evaluation
Status Date: Not reported
Site Code: Not reported
Site Type: Tiered Permit
Site Type Detailed: Tiered Permit
Acres: Not reported
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Not reported
Division Branch: Cleanup Cypress
Assembly: 53
Senate: 22
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 34.04773
Longitude: -117.6009
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CAD981375124
Alias Type: EPA Identification Number
Alias Name: 71002752
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

LUST:
Name: GE TEST CELL FACILITY
Address: 2264 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Lead Agency: SAN BERNARDINO COUNTY
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607100233

GE ENGINE SERVICES, INC. (Continued) **S109517004**

Global Id:	T0607100233
Latitude:	34.050565678
Longitude:	-117.6080382
Status:	Completed - Case Closed
Status Date:	03/01/2010
Case Worker:	JC
RB Case Number:	083601881T
Local Agency:	SAN BERNARDINO COUNTY
File Location:	Local Agency
Local Case Number:	95031
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Diesel
EPA Region:	9
Coordinate Source:	* GeoTracker web moving tool
Cuf Case:	NO
Quantity Released Gallons:	Not reported
Begin Date:	01/20/1987
Leak Reported Date:	07/20/1995
How Discovered:	Site Assessment/Site Investigation
How Discovered Description:	Not reported
Discharge Source:	Not reported
Discharge Cause:	Not reported
Stop Method:	Change Operating Procedures
Stop Description:	Not reported
No Further Action Date:	03/01/2010
CA Water Watershed Name:	Santa Ana River - Middle Santa Ana River - Chino (Split) (801.21)
Dwr Groundwater Subbasin Name:	Upper Santa Ana Valley - Chino (8-002.01)
Disadvantaged Community:	Severely Disadvantaged Community
CA Enviroscreen 3 Score:	96-100% (highest scores)
CA Enviroscreen 4 Score:	95-100% (highest scores)
Military DOD Site:	No
Facility Project Subtype:	Not reported
RWQCB Region:	SANTA ANA RWQCB (REGION 8)
Site History:	Not reported

LUST:

Global Id:	T0607100233
Contact Type:	Local Agency Caseworker - Primary Caseworker
Contact Name:	JACKSON CRUTSINGER
Organization Name:	SAN BERNARDINO COUNTY
Address:	620 SOUTH E STREET
City:	SAN BERNARDINO
Email:	jcrutsinger@sbcfire.org
Phone Number:	Not reported

Global Id:	T0607100233
Contact Type:	Regional Board Caseworker
Contact Name:	MAILE SEEGER GEE
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	maile.gee@waterboards.ca.gov
Phone Number:	9517824379

LUST:

Global Id:	T0607100233
Action Type:	ENFORCEMENT

GE ENGINE SERVICES, INC. (Continued) **S109517004**

Date: 07/06/1995
Action: Notice of Responsibility

Global Id: T0607100233
Action Type: ENFORCEMENT
Date: 09/19/1995
Action: File review

Global Id: T0607100233
Action Type: Other
Date: 03/28/1988
Action: Leak Discovery

Global Id: T0607100233
Action Type: Other
Date: 07/20/1995
Action: Leak Reported

Global Id: T0607100233
Action Type: RESPONSE
Date: 10/16/2009
Action: Other Report / Document

Global Id: T0607100233
Action Type: ENFORCEMENT
Date: 03/01/2010
Action: Closure/No Further Action Letter

Global Id: T0607100233
Action Type: ENFORCEMENT
Date: 03/01/2010
Action: Closure/No Further Action Letter

Global Id: T0607100233
Action Type: Other
Date: 07/12/1990
Action: Leak Stopped

Global Id: T0607100233
Action Type: REMEDIATION
Date: 05/01/1996
Action: Soil Vapor Extraction (SVE)

Global Id: T0607100233
Action Type: ENFORCEMENT
Date: 02/02/2008
Action: Notification - Fee Title Owners Notice

LUST:
Global Id: T0607100233
Status: Open - Case Begin Date
Status Date: 01/20/1987

Global Id: T0607100233
Status: Open - Site Assessment
Status Date: 01/20/1987

GE ENGINE SERVICES, INC. (Continued) **S109517004**

Global Id: T0607100233
Status: Open - Site Assessment
Status Date: 07/06/1995

Global Id: T0607100233
Status: Open - Remediation
Status Date: 10/26/1996

Global Id: T0607100233
Status: Completed - Case Closed
Status Date: 03/01/2010

CPS-SLIC:

Name:	GENERAL ELECTRIC CO - JET ENGINE TEST CELL FACILITY
Address:	2264 E. AVION STREET
City,State,Zip:	ONTARIO, CA 91761
Region:	STATE
Facility Status:	**Open - Verification Monitoring**
Status Date:	02/05/2010
Global Id:	SL208133868
Lead Agency:	SANTA ANA RWQCB (REGION 8)
Lead Agency Case Number:	36370024
Latitude:	34.047717
Longitude:	-117.601186
Case Type:	Cleanup Program Site
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	2081300
File Location:	Regional Board
Potential Media Affected:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Tetrachloroethylene (PCE), Trichloroethylene (TCE)
EPA Region:	9
Coordinate Source:	Manual Entry on Screens
Cuf Case:	NO
Quantity Released Gallons:	Not reported
Begin Date:	05/18/1990
Leak Reported Date:	01/02/1965
How Discovered:	* GOV
How Discovered Description:	Not reported
Discharge Source:	Not reported
Discharge Cause:	Not reported
Stop Method:	Not reported
Stop Description:	Not reported
No Further Action Date:	Not reported
CA Water Watershed Name:	Santa Ana River - Middle Santa Ana River - Chino (Split) (801.21)
Dwr Groundwater Subbasin Name:	Upper Santa Ana Valley - Chino (8-002.01)
Disadvantaged Community:	Severely Disadvantaged Community
CA Enviroscreen 3 Score:	96-100% (highest scores)
CA Enviroscreen 4 Score:	95-100% (highest scores)
Military DOD Site:	No
Facility Project Subtype:	Not reported
RWQCB Region:	SANTA ANA RWQCB (REGION 8)
Site History:	The Site has been operated by GE Engine Services as an aircraft engine facility since 1956. Chlorintaed solvents were used in the 1950s and 1960s. In early 1970s, 1,1,1-TCE replaced TCE. From 1981 to 1996, isopropyl alcohol was the only solvent used at the facility.

GE ENGINE SERVICES, INC. (Continued) **S109517004**

Prior to 1974, some waste water flowed to the wash area along the north side of the facility. In 1974, two dry wells were constructed (Area A & B). Some waste water were discharged to dry wells. From 1980 until 2006, waste water were treated at the Site. Site investigations were completed between 1985 and 1998. On-ste and off-Site ground investigations were performed between 1994 and 1998. Another phase of off-Site GW investigation occured in 2001 and 2002. Another phase is scheduled for 2009. GW plume extend approximately in southwesterly direction to Grove Ave. On-Site soil remediation have been completed and GE is working with DTSC to complete the closure process in 2009.

Click here to access the California GeoTracker records for this facility:

CORTESE:

Name:	GE TEST CELL FACILITY
Address:	2264 E AVION ST
City,State,Zip:	ONTARIO, CA 91761
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0607100233
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

San Bern. Co. Permit:

Name:	GE ENGINE SERVICES LLC
Address:	2264 E AVION ST
City,State,Zip:	ONTARIO, CA 91710
Region:	SAN BERNARDINO
Facility ID:	FA0003387
Owner:	GE AVIATION SERVICES
Permit Number:	PT0020069
Permit Category:	UW HANDLER WITH ANOTHER CUPA PERMIT
Facility Status:	INACTIVE
Expiration Date:	07/31/2011

Name:	GE ENGINE SERVICES LLC
Address:	2264 E AVION ST
City,State,Zip:	ONTARIO, CA 91710
Region:	SAN BERNARDINO

GE ENGINE SERVICES, INC. (Continued) **S109517004**

Facility ID: FA0003387
Owner: GE AVIATION SERVICES
Permit Number: PT0006086
Permit Category: HAZMAT HANDLER 11-25 EMPLOYEES (W/GEN PRMT)
Facility Status: INACTIVE
Expiration Date: 07/31/2011

Name: GE ENGINE SERVICES LLC
Address: 2264 E AVION ST
City,State,Zip: ONTARIO, CA 91710
Region: SAN BERNARDINO
Facility ID: FA0003387
Owner: GE AVIATION SERVICES
Permit Number: PT0017389
Permit Category: EPCRA FACILITY
Facility Status: INACTIVE
Expiration Date: 07/31/2011

Name: GE ENGINE SERVICES LLC
Address: 2264 E AVION ST
City,State,Zip: ONTARIO, CA 91710
Region: SAN BERNARDINO
Facility ID: FA0003387
Owner: GE AVIATION SERVICES
Permit Number: PT0006085
Permit Category: HAZARDOUS WASTE GENERATOR - 11-25 EMPLOYEES
Facility Status: INACTIVE
Expiration Date: 07/31/2011

Name: GE ENGINE SERVICES LLC
Address: 2264 E AVION ST
City,State,Zip: ONTARIO, CA 91710
Region: SAN BERNARDINO
Facility ID: FA0003387
Owner: GE AVIATION SERVICES
Permit Number: PT0006084
Permit Category: CA ANNUAL FEE
Facility Status: INACTIVE
Expiration Date: 07/31/2010

Name: GE ENGINE SERVICES LLC
Address: 2264 E AVION ST
City,State,Zip: ONTARIO, CA 91710
Region: SAN BERNARDINO
Facility ID: FA0003387
Owner: GE AVIATION SERVICES
Permit Number: PT0006087
Permit Category: APSA 10,001-100,000 GAL FAC CAPACITY
Facility Status: INACTIVE
Expiration Date: 07/31/2010

CERS:
Name: GE TEST CELL FACILITY
Address: 2264 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Site ID: 657207
CERS ID: T0607100233

GE ENGINE SERVICES, INC. (Continued) **S109517004**

CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Local Agency Caseworker
Entity Name: JACKSON CRUTSINGER - SAN BERNARDINO COUNTY
Entity Title: Not reported
Affiliation Address: 620 SOUTH E STREET
Affiliation City: SAN BERNARDINO
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Regional Board Caseworker
Entity Name: MAILE SEEGER GEE - SANTA ANA RWQCB (REGION 8)
Entity Title: Not reported
Affiliation Address: 3737 MAIN STREET, SUITE 500
Affiliation City: RIVERSIDE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 9517824379,

Name: GE ENGINE SERVICES T
Address: 2264 E. AVION PLACE
City,State,Zip: ONTARIO, CA 91761
Site ID: 607548
CERS ID: 36370024
CERS Description: State Response

Affiliation:
Affiliation Type Desc: Lead Project Manager
Entity Name: Chia Rin Yen
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Supervisor
Entity Name: Yolanda Garza
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

M56
SSW
1/2-1
0.945 mi.
4987 ft.

Relative:
Lower

Actual:
909 ft.

GENERAL ELECTRIC CO-AVIATION
1923 EAST AVION
ONTARIO, CA 91761

Site 1 of 3 in cluster M

CA ENVIROSTOR **U001569990**
CA CERS HAZ WASTE **N/A**
CA HIST UST
CA CERS TANKS
CA NPDES
CA San Bern. Co. Permit
CA CIWQS
CA CERS

ENVIROSTOR:

Name:	GENERAL ELECTRIC, MAIN FACILITY
Address:	1923 E. AVION STREET
City,State,Zip:	ONTARIO, CA 91761
Facility ID:	71002298
Status:	Inactive - Needs Evaluation
Status Date:	Not reported
Site Code:	Not reported
Site Type:	Tiered Permit
Site Type Detailed:	Tiered Permit
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	Not reported
Division Branch:	Cleanup Cypress
Assembly:	53
Senate:	22
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Not reported
Latitude:	34.05034
Longitude:	-117.6084
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	CAD009542721
Alias Type:	EPA Identification Number
Alias Name:	71002298
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	Not reported
Completed Sub Area Name:	Not reported
Completed Document Type:	Not reported
Completed Date:	Not reported
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Name: GE ENGINE SERVICES INC
Address: 1923 E. AVION PLACE
City,State,Zip: ONTARIO, CA 917610000
Facility ID: 80001638
Status: Inactive - Needs Evaluation
Status Date: 03/20/2013
Site Code: 400359
Site Type: Corrective Action
Site Type Detailed: Corrective Action
Acres: 3
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: MBR
Program Manager: Katherine Gould
Supervisor: John Scandura
Division Branch: Cleanup Cypress
Assembly: 53
Senate: 22
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 34.05695
Longitude: -117.6069
APN: NONE SPECIFIED
Past Use: AEROSPACE ROCKET TESTING/LAUNCH, JET FUEL STORAGE/REFUELING
Potential COC: Tetrachloroethylene (PCE 1,1,1-Trichloroethane (TCA Chloroform Ethylbenzene Toluene Xylenes
Confirmed COC: Tetrachloroethylene (PCE 1,1,1-Trichloroethane (TCA Ethylbenzene Toluene Xylenes Chloroform
Potential Description: OTH, SOIL
Alias Name: CAD009542721
Alias Type: EPA Identification Number
Alias Name: 400359
Alias Type: Project Code (Site Code)
Alias Name: 80001638
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Interim Measures Questionnaire
Completed Date: 12/03/1997
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Consent Order
Completed Date: 01/01/1990
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: SOILS
Completed Document Type: Consent Order
Completed Date: 09/28/1988
Comments: Not reported

Completed Area Name: Sites With No Operable Unit

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Completed Sub Area Name: SOILS
Completed Document Type: Design/Implementation Workplan
Completed Date: 01/10/1996
Comments: Remedial Design approved. Groundwater investigation and remediation will be conducted by the RWQCB.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: RCRA Facility Assessment Report
Completed Date: 09/13/1988
Comments: Reassessment of GE PA

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: SOILS
Completed Document Type: Remedy Selection and Statement of Basis
Completed Date: 09/16/1994
Comments: Final Remedial Action plan approval. Per file chronology.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: RCRA Facility Assessment Report
Completed Date: 09/13/1988
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Groundwater Migration Controlled
Completed Date: 12/03/1997
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedy Construction Complete
Completed Date: 10/09/1996
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Remedy Selected
Completed Date: 09/16/1994
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Human Exposure Controlled
Completed Date: 12/03/1997
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment Report
Completed Date: 07/01/1985
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: SOILS
Completed Document Type: Corrective Measures Study Report

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Completed Date: 06/30/1993
Comments: Remedial Investigation and Feasibility Study Approved per file chronology.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Interim Measures Workplan
Completed Date: 08/01/1994
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment Report
Completed Date: 11/14/1988
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: SOILS
Completed Document Type: Remedy Constructed: Operating Properly & Successfully
Completed Date: 10/09/1996
Comments: Remedial Action Completion per Site Mit database. O&M of 3 SVE and treatment system.

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: SOILS
Completed Document Type: RFI Report
Completed Date: 06/01/1990
Comments: Approval of Phase I Remedial Investigation

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: SOILS
Completed Document Type: RFI Workplan
Completed Date: 12/27/1991
Comments: Phase IIb Remedial Investigation Workplan Approved per file chronology.

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: SOILS
Completed Document Type: RFI Report
Completed Date: 06/30/1993
Comments: Remedial Investigation and Feasibility Study Approved per file chronology.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

Name: ONTARIO ARMY AIRFIELD
Address: 1923 E AVION DR
City,State,Zip: ONTARIO, CA 91761
Facility ID: 80000416

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Status: No Further Action
Status Date: 03/05/2012
Site Code: 401330
Site Type: Military Evaluation
Site Type Detailed: FUDS
Acres: 875
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Daniel Cordero
Supervisor: Manny Alonzo
Division Branch: Cleanup Cypress
Assembly: 53
Senate: 22
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: DERA
Latitude: 34.05833
Longitude: -117.6083
APN: NONE SPECIFIED
Past Use: FIRING RANGE - SMALL ARMS ETC...
Potential COC: Explosives (UXO, MEC Munitions Debris (MD
Confirmed COC: 30011-NO 32000-NO
Potential Description: SOIL
Alias Name: ONTARIO AAF
Alias Type: Alternate Name
Alias Name: CA99799F686800
Alias Type: Federal Facility ID
Alias Name: 401330
Alias Type: Project Code (Site Code)
Alias Name: 80000416
Alias Type: Envirostor ID Number
Alias Name: J09CA0531
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 01/03/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Inventory Project Report (INPR)
Completed Date: 02/10/1992
Comments: INPR concluded that site is eligible the Formerly Used Defense Sites program.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment/Site Inspection Report (PA/SI)
Completed Date: 10/12/2011
Comments: DTSC comments incorporated into final document.

Future Area Name: Not reported
Future Sub Area Name: Not reported

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

CERS HAZ WASTE:
Name: ONTARIO INTERNATIONAL AIRPORT
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Site ID: 398642
CERS ID: 10037323
CERS Description: Hazardous Waste Generator

HIST UST:
Name: GENERAL ELECTRIC CO-AVIATION
Address: 1923 EAST AVION
City,State,Zip: ONTARIO, CA 91761
File Number: 00029f0e
URL: https://documents.geotracker.waterboards.ca.gov/ustpdfs/pdf/00029f0e.pdf
Region: STATE
Facility ID: 00000000186
Facility Type: Other
Other Type: JET ENGINE OVERHAUL
Contact Name: Not reported
Telephone: 7149866731
Owner Name: GENERAL ELECTRIC CO.
Owner Address: 3135 EASTON TURNPIKE
Owner City,St,Zip: FAIRFIELD, CT 06431
Total Tanks: 0017

Tank Num: 001
Container Num: ASO/06
Year Installed: 1981
Tank Capacity: 00006000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Container Construction Thickness: Not reported
Leak Detection: Visual

Tank Num: 002
Container Num: ASO/07
Year Installed: 1981
Tank Capacity: 00006000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Container Construction Thickness: Not reported
Leak Detection: Visual

Tank Num: 003
Container Num: ASO/05
Year Installed: 1981
Tank Capacity: 00006000
Tank Used for: PRODUCT

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Visual
Tank Num:	004
Container Num:	ASO/04
Year Installed:	1980
Tank Capacity:	00008000
Tank Used for:	WASTE
Type of Fuel:	WASTE OIL
Container Construction Thickness:	Not reported
Leak Detection:	Visual
Tank Num:	005
Container Num:	ASO/03
Year Installed:	1980
Tank Capacity:	00008000
Tank Used for:	PRODUCT
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Visual
Tank Num:	006
Container Num:	ASO/02
Year Installed:	1960
Tank Capacity:	00004000
Tank Used for:	PRODUCT
Type of Fuel:	06
Container Construction Thickness:	Not reported
Leak Detection:	Visual
Tank Num:	007
Container Num:	ASO/01
Year Installed:	1970
Tank Capacity:	00002000
Tank Used for:	WASTE
Type of Fuel:	WASTE OIL
Container Construction Thickness:	8
Leak Detection:	Visual
Tank Num:	008
Container Num:	SPO/01
Year Installed:	1984
Tank Capacity:	00008000
Tank Used for:	WASTE
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Visual, Vapor Sniff Well
Tank Num:	009
Container Num:	ASO/14
Year Installed:	1970
Tank Capacity:	00000500
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Visual

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Tank Num: 010
Container Num: ASO/13
Year Installed: 1964
Tank Capacity: 00002000
Tank Used for: PRODUCT
Type of Fuel: 06
Container Construction Thickness: Not reported
Leak Detection: Visual

Tank Num: 011
Container Num: ASO/12
Year Installed: 1964
Tank Capacity: 00002000
Tank Used for: PRODUCT
Type of Fuel: 06
Container Construction Thickness: Not reported
Leak Detection: Visual

Tank Num: 012
Container Num: ASO/11
Year Installed: 1963
Tank Capacity: 00002000
Tank Used for: PRODUCT
Type of Fuel: 06
Container Construction Thickness: Not reported
Leak Detection: Visual

Tank Num: 013
Container Num: ASO/10
Year Installed: Not reported
Tank Capacity: 00002000
Tank Used for: WASTE
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Visual

Tank Num: 014
Container Num: ASO/09
Year Installed: Not reported
Tank Capacity: 00007000
Tank Used for: PRODUCT
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Visual

Tank Num: 015
Container Num: ASO/08
Year Installed: 1968
Tank Capacity: 00000250
Tank Used for: WASTE
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Visual

Tank Num: 016
Container Num: SPO02
Year Installed: 1984

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Tank Capacity: 00004000
Tank Used for: PRODUCT
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Visual, Vapor Sniff Well

Tank Num: 017
Container Num: SPO03
Year Installed: 1984
Tank Capacity: 00004000
Tank Used for: PRODUCT
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Visual, Vapor Sniff Well

Click here for Geo Tracker PDF:

CERS TANKS:
Name: ONTARIO INTERNATIONAL AIRPORT
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Site ID: 398642
CERS ID: 10037323
CERS Description: Aboveground Petroleum Storage

Name: ONTARIO INTERNATIONAL AIRPORT
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Site ID: 398642
CERS ID: 10037323
CERS Description: Underground Storage Tank

NPDES:
Name: ONTARIO INTERNATIONAL AIRPORT
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Facility Status: Not reported
NPDES Number: Not reported
Region: Not reported
Agency Number: Not reported
Regulatory Measure ID: Not reported
Place ID: Not reported
Order Number: Not reported
WDID: 8 36I004993
Regulatory Measure Type: Industrial
Program Type: Not reported
Adoption Date Of Regulatory Measure: Not reported
Effective Date Of Regulatory Measure: Not reported
Termination Date Of Regulatory Measure: Not reported
Expiration Date Of Regulatory Measure: Not reported
Discharge Address: Not reported
Discharge Name: Not reported
Discharge City: Not reported
Discharge State: Not reported
Discharge Zip: Not reported
Status: Terminated

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Status Date:	11/03/2016
Operator Name:	Los Angeles World Airports
Operator Address:	7301 World Way West
Operator City:	Los Angeles
Operator State:	California
Operator Zip:	90045

NPDES as of 03/2018:

NPDES Number:	CAS000001
Status:	Terminated
Agency Number:	0
Region:	8
Regulatory Measure ID:	213197
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	8 36I004993
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	04/08/1992
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	11/01/2016
Discharge Name:	Los Angeles World Airports
Discharge Address:	7301 World Way West
Discharge City:	Los Angeles
Discharge State:	California
Discharge Zip:	90045
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	8
Regulatory Measure ID:	213197
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	8 36I004993
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	11/01/2016
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	05/09/2008
Processed Date:	04/08/1992
Status:	Terminated
Status Date:	11/03/2016
Place Size:	1463
Place Size Unit:	Acres
Contact:	Robert Freeman
Contact Title:	Airport Environmental Manager
Contact Phone:	646-424-6474
Contact Phone Ext:	Not reported
Contact Email:	rfreeman@lawa.org
Operator Name:	Los Angeles World Airports

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Operator Address:	7301 World Way West
Operator City:	Los Angeles
Operator State:	California
Operator Zip:	90045
Operator Contact:	Robert Freeman
Operator Contact Title:	Airport Environmental Manager
Operator Contact Phone:	424-646-6474
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	rfreeman@lawa.org
Operator Type:	City/Town Agency
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	California
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	310-908-1495
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	N
Receiving Water Name:	Santa Ana River
Certifier:	Robert Freeman
Certifier Title:	Airport Environmental Manager
Certification Date:	22-JUN-15
Primary Sic:	4581-Airports, Flying Fields, and Airport Terminal Services
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

Name:	SOUTH CARGO RAMP REHABILITATION
Address:	1923 EAST AVION STREET
City,State,Zip:	ONTARIO, CA 91761
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	8 36C384883

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Regulatory Measure Type:	Construction
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Terminated
Status Date:	03/11/2020
Operator Name:	Ontario International Airport Authority
Operator Address:	303 E B Street
Operator City:	Ontario
Operator State:	California
Operator Zip:	91764

San Bern. Co. Permit:

Name:	ONTARIO INTERNATIONAL AIRPORT
Address:	1923 E AVION ST
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO
Facility ID:	FA0002014
Owner:	Ontario International Airport Authority
Permit Number:	PT0016534
Permit Category:	UW HANDLER WITH ANOTHER CUPA PERMIT
Facility Status:	ACTIVE
Expiration Date:	10/31/2023

Name:	ONTARIO INTERNATIONAL AIRPORT
Address:	1923 E AVION ST
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO
Facility ID:	FA0002014
Owner:	Ontario International Airport Authority
Permit Number:	PT0016535
Permit Category:	APSA 10,001-100,000 GAL FAC CAPACITY
Facility Status:	ACTIVE
Expiration Date:	10/31/2023

Name:	ONTARIO INTERNATIONAL AIRPORT
Address:	1923 E AVION ST
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO
Facility ID:	FA0002014
Owner:	Ontario International Airport Authority
Permit Number:	PT0011564
Permit Category:	REGULAR UST ANNUAL INSPECTION (PER TANK)
Facility Status:	ACTIVE
Expiration Date:	10/31/2023

Name:	ONTARIO INTERNATIONAL AIRPORT
Address:	1923 E AVION ST
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Facility ID: FA0002014
Owner: Ontario International Airport Authority
Permit Number: PT0011565
Permit Category: REGULAR UST ANNUAL INSPECTION (PER TANK)
Facility Status: ACTIVE
Expiration Date: 10/31/2023

Name: ONTARIO INTERNATIONAL AIRPORT
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0002014
Owner: Ontario International Airport Authority
Permit Number: PT0002689
Permit Category: LARGE QUANTITY GENERATOR
Facility Status: ACTIVE
Expiration Date: 10/31/2023

Name: ONTARIO INTERNATIONAL AIRPORT
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0002014
Owner: Ontario International Airport Authority
Permit Number: PT0016537
Permit Category: REGULAR UST ANNUAL INSPECTION (PER TANK)
Facility Status: ACTIVE
Expiration Date: 10/31/2023

Name: ONTARIO INTERNATIONAL AIRPORT
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0002014
Owner: Ontario International Airport Authority
Permit Number: PT0002690
Permit Category: HAZARDOUS MATERIALS 31-50 CHEMICALS
Facility Status: ACTIVE
Expiration Date: 10/31/2023

Name: ONTARIO INTERNATIONAL AIRPORT
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0002014
Owner: Ontario International Airport Authority
Permit Number: PT0021720
Permit Category: REGULAR UST ANNUAL INSPECTION (PER TANK)
Facility Status: INACTIVE
Expiration Date: 10/31/2013

Name: ONTARIO INTERNATIONAL AIRPORT
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0002014
Owner: Ontario International Airport Authority

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Permit Number: PT0016536
Permit Category: EPCRA FACILITY
Facility Status: INACTIVE
Expiration Date: 10/31/2013

Name: ONTARIO INTERNATIONAL AIRPORT
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0002014
Owner: Ontario International Airport Authority
Permit Number: PT0010664
Permit Category: REGULAR UST ANNUAL INSPECTION (PER TANK)
Facility Status: INACTIVE
Expiration Date: 10/31/2010

Name: ONTARIO INTERNATIONAL AIRPORT
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0002014
Owner: Ontario International Airport Authority
Permit Number: PT0010665
Permit Category: REGULAR UST ANNUAL INSPECTION (PER TANK)
Facility Status: INACTIVE
Expiration Date: 10/31/2010

Name: G E ENGINE SERVICES INC
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0003388
Owner: GE AVIATION SERVICES
Permit Number: PT0002121
Permit Category: PBR ANNUAL FEE
Facility Status: INACTIVE
Expiration Date: 07/31/2007

Name: G E ENGINE SERVICES INC
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0003388
Owner: GE AVIATION SERVICES
Permit Number: PT0002119
Permit Category: HAZMAT HANDLER 101-250 EMPLOYEES (W/GEN PRMT)
Facility Status: INACTIVE
Expiration Date: 07/31/2007

Name: G E ENGINE SERVICES INC
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0003388
Owner: GE AVIATION SERVICES
Permit Number: PT0002120
Permit Category: HAZARDOUS WASTE GENERATOR - 101-250 EMPLOYEES

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Facility Status: INACTIVE
Expiration Date: 07/31/2007

Name: G E ENGINE SERVICES INC
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0003388
Owner: GE AVIATION SERVICES
Permit Number: PT0017053
Permit Category: HAZARDOUS WASTE GENERATOR RCRA LQG
Facility Status: INACTIVE
Expiration Date: 07/31/2007

Name: ONTARIO INTERNATIONAL AIRPORT
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0002014
Owner: Ontario International Airport Authority
Permit Number: PT0011566
Permit Category: REGULAR UST ANNUAL INSPECTION (PER TANK)
Facility Status: INACTIVE
Expiration Date: 10/31/2005

Name: ONTARIO INTERNATIONAL AIRPORT
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0002014
Owner: Ontario International Airport Authority
Permit Number: PT0011567
Permit Category: REGULAR UST ANNUAL INSPECTION (PER TANK)
Facility Status: INACTIVE
Expiration Date: 10/31/2005

CIWQS:
Name: ONTARIO INTERNATIONAL AIRPORT
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Agency: Los Angeles World Airports
Agency Address: 7301 World Way West Rm 312, Los Angeles, CA 90045
Place/Project Type: Industrial - Airports, Flying Fields, and Airport Terminal Services
SIC/NAICS: 4581
Region: 8
Program: INDSTW
Regulatory Measure Status: Terminated
Regulatory Measure Type: Storm water industrial
Order Number: 2014-0057-DWQ
WDID: 8 36I004993
NPDES Number: CAS000001
Adoption Date: Not reported
Effective Date: 04/08/1992
Termination Date: 11/01/2016
Expiration/Review Date: Not reported
Design Flow: Not reported
Major/Minor: Not reported

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	34.05169
Longitude:	-117.60845
Name:	ONTARIO INTL AIRPORT
Address:	1923 EAST AVION STREET
City,State,Zip:	ONTARIO, CA 91761
Agency:	Ontario International Airport Authority
Agency Address:	1923 East Avion Street, Ontario, CA 91761
Place/Project Type:	Other
SIC/NAICS:	Not reported
Region:	SB
Program:	SLIC
Regulatory Measure Status:	Active
Regulatory Measure Type:	Co-Permitee
Order Number:	2019-0005-DWQ
WDID:	Not reported
NPDES Number:	Not reported
Adoption Date:	Not reported
Effective Date:	03/20/2019
Termination Date:	Not reported
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	Not reported
Longitude:	Not reported

CERS:

Name:	GE ENGINE SERVICES I
Address:	1923 E. AVION PLACE
City,State,Zip:	ONTARIO, CA 917610000
Site ID:	607546
CERS ID:	80001638
CERS Description:	Corrective Action

Affiliation:

Affiliation Type Desc:	Supervisor
Entity Name:	John Scandura
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Lead Project Manager
Entity Name:	Katherine Gould
Entity Title:	Not reported
Affiliation Address:	Not reported

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Name: ONTARIO INTERNATIONAL AIRPORT
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Site ID: 398642
CERS ID: 10037323
CERS Description: Chemical Storage Facilities

Violations:

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Violation Date: 08-18-2017
Citation: 23 CCR 16 2715(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(i)
Violation Description: Failure to have a properly qualified service technician test leak detection equipment as required every 12 months (vapor, pressure, hydrostatic (VPH) system, sensors, line-leak detectors (LLD), automatic tank gauge (ATG), etc.).
Violation Notes: Returned to compliance on 08/29/2017. 09/25/17 : WITNESSED INSPECTION TOOK PLACE ON 08/29/17 BY SHANE BARBAO OBSERVATION: THE DIESEL SIPHON SYSTEM--- FLEET MAINTENANCE AREA--- STOP OPERATING DURING THE MONITORING CERTIFICATION. ESO & THE FAIL SAFE SYSTEMS WERE NOT TESTED. COMPLIANCE REQUIREMENT: TROUBLESHOOT SIPHON OPERATION PROBLEMS. WITHIN 30-DAYS, CALL FOR A WITNESSED TEST OF THE DIESEL'S ESO & FAILSAFE SYSTEM.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Violation Date: 04-12-2016
Citation: HSC 6.7 25292.1(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25292.1(a)
Violation Description: Failure to operate the UST system to prevent spills and/or overfills.
Violation Notes: Returned to compliance on 04/19/2016. THE TRIENNIAL SECONDARY CONTAINMENT (SB989) TESTING PERFORMED ON 3/22/16 REVEALED A FAILURE WITHIN THE DIESEL UDC (MAINTENANCE YARD). THE EXACT POINT OF FAILURE HAS YET TO BE IDENTIFIED AS ALL PENETRATIONS (PIPING AND CONDUIT) ARE LOCATED AT APPROXIMATELY THE SAME HEIGHT WITHIN THE CONTAINMENT. PER THE ON-SITE CONTRACTOR, PLANS FOR REPAIR HAVE BEEN DRAWN UP, BUT HAVE YET TO BE SUBMITTED TO THIS DEPARTMENT FOR REVIEW. REQUIREMENT: WITHIN 10 DAYS, COMPLETE AND SUBMIT THE REPAIR PLAN FOR THE DIESEL UDC. NOTE: A PERMIT WILL BE REQUIRED FOR PENETRATION REPAIRS.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Violation Date: 04-29-2020
Citation: HSC 6.7 25284.2 - California Health and Safety Code, Chapter 6.7,

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Section(s) 25284.2

Violation Description: "Failure to meet one or more of the following requirements: Install or maintain a liquid-tight spill container. Have a minimum capacity of five gallons. Have a functional drain valve or other method for the removal of liquid from the spill container. Be resistant to galvanic corrosion. Perform a tightness test at installation, every 12 months thereafter, or within 30 days after a repair to the spill container. Tested using applicable manufacturer guidelines, industry codes, engineering standards, or a method approved by a professional engineer. Tested by a certified UST service technician. Maintain records of spill containment testing for 36 months. "

Violation Notes: Returned to compliance on 05/21/2021. OBSERVATION: At the time of inspection, the spill buckets did not meet the 5-gallon capacity requirement. CORRECTIVE ACTION: Submit plans and apply for a permit for replacement of the spill buckets for both tanks (unleaded and diesel) within 30 days.

Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Violation Date: 04-23-2021
Citation: HSC 6.7 25284.2 - California Health and Safety Code, Chapter 6.7, Section(s) 25284.2

Violation Description: "Failure to meet one or more of the following requirements: Install or maintain a liquid-tight spill container. Have a minimum capacity of five gallons. Have a functional drain valve or other method for the removal of liquid from the spill container. Be resistant to galvanic corrosion. Perform a tightness test at installation, every 12 months thereafter, or within 30 days after a repair to the spill container. Tested using applicable manufacturer guidelines, industry codes, engineering standards, or a method approved by a professional engineer. Tested by a certified UST service technician. Maintain records of spill containment testing for 36 months. "

Violation Notes: Returned to compliance on 05/21/2021. OBSERVATION: At the time of inspection, the spill buckets did not meet the 5-gallon capacity requirement. (REPEAT VIOLATION-CLASS 1). CORRECTIVE ACTION: Submit plans and apply for a permit for replacement of the spill buckets for both tanks within 30 days. (REPEAT VIOLATION-CLASS 1)

Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Violation Date: 07-13-2022
Citation: HSC 6.7 25284, 25286 - California Health and Safety Code, Chapter 6.7, Section(s) 25284, 25286

Violation Description: Failure to submit a complete and accurate application for a permit to operate a UST, or for renewal of the permit.

Violation Notes: Returned to compliance on 07/19/2022. OBSERVATION: At the time of document review, observed that the UST Overfill Protection section on CERS was not updated to reflect the installation of the Overfill Prevention Valve in the Diesel UST. CORRECTIVE ACTION: Update the Overfill Protection section on CERS and say YES to Fill tube shut off valve for the Diesel UST.

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Violation Date: 04-17-2015
Citation: 23 CCR 16 2665 - California Code of Regulations, Title 23, Chapter 16, Section(s) 2665
Violation Description: Failure of the overfill prevention system to meet one of the following requirements: 1. Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or 2. Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or 3. Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or 4. Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling.
Violation Notes: Returned to compliance on 04/17/2015. OBSERVATION: THE LIGHT IN THE EXTERNAL OVERFILL ALARM FAILED WHEN TESTED. COMPLIANCE MET ON SITE: TECHNICIAN REPLACED LIGHT BULB IN THE EXTERNAL OVERFILL ALARM AND RE-TESTED- PASSED
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Violation Date: 08-18-2017
Citation: HSC 6.7 29291(b) - California Health and Safety Code, Chapter 6.7, Section(s) 29291(b)
Violation Description: Failure of the UST system to be designed and constructed with a monitoring system capable of detecting the entry of the hazardous substance into the secondary containment.
Violation Notes: Returned to compliance on 08/18/2017. OBSERVATION: DURING THE INSPECTION, TERMINAL 4 TANK'S ANNULAR SENSOR FAILED DURING THE MONITORING CERTIFICATION. COMPLIANCE MET ON SITE: TECHNICIAN REPLACED AND RE-TESTED ANNULAR SENSOR (VR 409)-PASSED
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Violation Date: 09-27-2018
Citation: HSC 6.7 25290.1(d) - California Health and Safety Code, Chapter 6.7, Section(s) 25290.1(d)
Violation Description: Failure of a UST system installed on or after July 1, 2004 to be designed and constructed with a monitoring system capable of detecting the entry of the liquid or vapor-phase of the hazardous substance stored in the primary containment into the secondary containment and capable of detecting water intrusion into the secondary containment.
Violation Notes: Returned to compliance on 04/04/2019. Testing of the annular space of the tank at Terminal 4 indicates that the annular space will not hold

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

a vacuum of -10.0 in Hg for 60 minutes. After 17 minutes of testing the vacuum level dropped from -10.0 to -9.4 inHg and continued to drop. Submit plans for repair of the annular space to this office within 30 days.

Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Violation Date: 04-28-2023
Citation: 23 CCR 16 2712(b)(1)(G) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(b)(1)(G)
Violation Description: Failure to comply with one or more of the following overfill prevention equipment requirements: Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling. Install/retrofit overfill prevention equipment that does not use flow restrictors on vent piping to meet overfill prevention equipment requirements when the overfill prevention equipment is installed, repaired, or replaced on and after October 1, 2018. For USTs installed before October 1, 2018, perform an inspection by October 13, 2018 and every 36 months thereafter. For USTs installed on and after October 1, 2018, perform an inspection at installation and every 36 months thereafter. Inspected within 30 days after a repair to the overfill prevention equipment. Inspected using an applicable manufacturer guidelines, industry codes, engineering standards, or a method approved by a professional engineer. Inspected by a certified UST service technician. Maintain records of overfill prevention equipment inspection for 36 months.
Violation Notes: OBSERVATION: At the time of inspection, observed that the ext. A/V system did not activate when the ATG was tested. CORRECTIVE ACTION: The Service Technician troubleshooted the ext. A/V system and determined that the acknowledgement box would have to be replaced. Submit plans and permit application to ustplancheck@sbcfire.org within 30 days for the replacement of the ext. A/V acknowledgement box.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Violation Date: 04-23-2021
Citation: 23 CCR 16 2715(a)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(a)(2)
Violation Description: Failure to submit the Underground Storage Tank Statement of Understanding and Compliance Form.
Violation Notes: Returned to compliance on 05/07/2021. OBSERVATION: The following changes/updates are needed on CERS. See corrective action. CORRECTIVE ACTION: Provide a UST Statement of Understanding and Compliance form

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

	on CERS.
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,
Site ID:	398642
Site Name:	ONTARIO INTERNATIONAL AIRPORT
Violation Date:	04-29-2022
Citation:	23 CCR 16 2636(f)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(2)
Violation Description:	Failure of the functional line leak detector (LLD) monitoring pressurized piping to meet one or more of the following requirements: Monitored at least hourly with the capability of detecting a release of 3.0 gallons per hour leak at 10 pounds per square inch and restrict or shut off the flow of product through the piping when a leak is detected.
Violation Notes:	Returned to compliance on 04/29/2022. OBSERVATION: At the time of inspection, the mechanical line leak detector for T1 (Regular) failed initial testing. CORRECTIVE ACTION: The Service Technician replaced the mechanical line leak detector with like for like components, re-tested and passed. Violation abated.
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,
Site ID:	398642
Site Name:	ONTARIO INTERNATIONAL AIRPORT
Violation Date:	04-23-2021
Citation:	HSC 6.7 25290.1(c)(3),25290.2(c)(3) - California Health and Safety Code, Chapter 6.7, Section(s) 25290.1(c)(3),25290.2(c)(3)
Violation Description:	Failure to keep water out of the secondary containment of UST systems installed on or after July 1, 2003.
Violation Notes:	Returned to compliance on 04/30/2021. OBSERVATION: At the time of inspection the following was observed that there was moisture in the annular space. CORRECTIVE ACTION: Remove moisture from the annular space within 7 days. Provide a work order.
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,
Site ID:	398642
Site Name:	ONTARIO INTERNATIONAL AIRPORT
Violation Date:	04-23-2021
Citation:	HSC 6.7 25292.2(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25292.2(a)
Violation Description:	Failure to submit and maintain complete and current Certification of Financial Responsibility or other mechanism of financial assurance.
Violation Notes:	Returned to compliance on 05/07/2021. OBSERVATION: The following changes/updates are needed on CERS. See corrective action. CORRECTIVE ACTION: The Certificate of Financial Responsibility is dated 02/24/2020 and is expired. Provide a current Certificate of Financial Responsibility on CERS.
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,
Site ID:	398642

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Site Name:	ONTARIO INTERNATIONAL AIRPORT
Violation Date:	04-29-2022
Citation:	HSC 6.7 25290.1(c)(3),25290.2(c)(3) - California Health and Safety Code, Chapter 6.7, Section(s) 25290.1(c)(3),25290.2(c)(3)
Violation Description:	Failure to keep water out of the secondary containment of UST systems installed on or after July 1, 2003.
Violation Notes:	Returned to compliance on 04/29/2022. OBSERVATION: At the time of inspection, there was an annular alarm for Tank 3 (generator tank). CORRECTIVE ACTION: The Service Technician removed the water/moisture from the annular space and the alarm cleared. Violation abated.
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,
Site ID:	398642
Site Name:	ONTARIO INTERNATIONAL AIRPORT
Violation Date:	08-17-2018
Citation:	23 CCR 16 2715(a) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(a)
Violation Description:	Failure to submit the UPA. of the designated operator (DO) identification and/or change of the DO within 30 days.
Violation Notes:	Returned to compliance on 09/12/2018. The Designated Operator Statement has an expired operator certification. Update the statement to show the current operator certification and submit a copy to this department. Upload the current statement to the CERS website.
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,
Site ID:	398642
Site Name:	ONTARIO INTERNATIONAL AIRPORT
Violation Date:	08-17-2018
Citation:	HSC 6.7 25290.1(c)(3),25290.2(c)(3) - California Health and Safety Code, Chapter 6.7, Section(s) 25290.1(c)(3),25290.2(c)(3)
Violation Description:	Failure to keep water out of the secondary containment of UST systems installed on or after July 1, 2003.
Violation Notes:	Returned to compliance on 09/27/2018. As indicated in previous months, water is entering the interstitial space of the Terminal 4 tank. The technician indicated water was also in the annular space today. Conduct the necessary inspection and/or testing to verify the source of water to verify if a leak exists.
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,
Site ID:	398642
Site Name:	ONTARIO INTERNATIONAL AIRPORT
Violation Date:	08-18-2017
Citation:	23 CCR 6.7 25284, 25286 - California Code of Regulations, Title 23, Chapter 6.7, Section(s) 25284, 25286
Violation Description:	Failure to submit a complete and accurate application for a permit to operate a UST, or for renewal of the permit.
Violation Notes:	Returned to compliance on 09/17/2017. OBSERVATION: THE FOLLOWING UST ITEMS LISTED IN CERS MUST BE UPDATED. 1) THE CURRENT BOE NUMBER IS NOT VALID-- OBTAIN A VAILD NUMBER-contact BOE at 800-400-7115 IF YOU NEED HELP. 2) LIQUID SENSORS WERE NOTED TO BE VR 208-- DURING THE INSPECTION, VR 323 WERE OBSERVED. COMPLIANCE REQUIREMENT: UPDATE CERS

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

	WITH CURRENT INFORMATION.
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,
Site ID:	398642
Site Name:	ONTARIO INTERNATIONAL AIRPORT
Violation Date:	11-01-2017
Citation:	HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Description:	Hazardous Waste Generator Program - Operations/Maintenance - General
Violation Notes:	Returned to compliance on 11/14/2017. Failure to inspect Hazardous Waste tank (CCR 66265.195)
Violation Division:	San Bernardino County Fire Department
Violation Program:	HW
Violation Source:	CERS,
Site ID:	398642
Site Name:	ONTARIO INTERNATIONAL AIRPORT
Violation Date:	04-17-2014
Citation:	HSC 6.7 29291(b) - California Health and Safety Code, Chapter 6.7, Section(s) 29291(b)
Violation Description:	Failure of the UST system to be designed and constructed with a monitoring system capable of detecting the entry of the hazardous substance stored in the primary containment into the secondary containment.
Violation Notes:	Returned to compliance on 04/30/2014. IMMEDIATELY REPAIR/REPLACE FAILED SPILL BUCKET AND RETEST. PROVIDE DOCUMENTATION OF REPAIR/REPLACEMENT OF SPILL BUCKET WITH PASSING TEST RESULTS TO THIS DEPARTMENT WITHIN 30 DAYS.
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,
Site ID:	398642
Site Name:	ONTARIO INTERNATIONAL AIRPORT
Violation Date:	04-29-2020
Citation:	HSC 6.7 25291(a)(2) - California Health and Safety Code, Chapter 6.7, Section(s) 25291(a)(2)
Violation Description:	Failure to maintain secondary containment (e.g., failure of secondary containment testing).
Violation Notes:	Returned to compliance on 05/06/2020. OBSERVATION: Penetrations were replaced inside the turbine sump for the unleaded tank without permits. CORRECTIVE ACTION: Submit plans and apply for a permit for SB989 repairs to the turbine sump for the unleaded tank within 30 days. The SB989 failure was noted on report dated 03/19/2019. Penalty fees will apply.
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,
Site ID:	398642
Site Name:	ONTARIO INTERNATIONAL AIRPORT
Violation Date:	04-17-2014
Citation:	HSC 6.7 25292(e) - California Health and Safety Code, Chapter 6.7, Section(s) 25292(e)
Violation Description:	Failure to install line leak detector on pressurized piping system.

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Violation Notes:	Returned to compliance on 04/30/2014. LD2000 VMI MECHANICAL LINE LEAK DETECTOR FAILED WHEN TESTED. IMMEDIATELY REPAIR/REPLACE FAILED DETECTOR AND SCHEDULE RETEST WITH THIS DEPARTMENT WITHIN 15 DAYS.
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,
Site ID:	398642
Site Name:	ONTARIO INTERNATIONAL AIRPORT
Violation Date:	04-29-2015
Citation:	HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2
Violation Description:	Failure to annually review and electronically certify that the business plan is complete, accurate, and up-to-date.
Violation Notes:	Returned to compliance on 06/29/2015.
Violation Division:	San Bernardino County Fire Department
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	398642
Site Name:	ONTARIO INTERNATIONAL AIRPORT
Violation Date:	04-29-2020
Citation:	23 CCR 16 2641(j) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2641(j)
Violation Description:	Failure of the leak detection equipment to be installed, calibrated, operated, and/or maintained properly.
Violation Notes:	Returned to compliance on 04/29/2020. OBSERVATION: At the time of inspection, the annular sensor for the generator tank was not working properly. CORRECTIVE ACTION: The Service Technician replaced the annular sensor (VR 409) for the generator tank with like for like components, re-tested and passed. Violation abated.
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,
Site ID:	398642
Site Name:	ONTARIO INTERNATIONAL AIRPORT
Violation Date:	08-18-2017
Citation:	23 CCR 16 2665 - California Code of Regulations, Title 23, Chapter 16, Section(s) 2665
Violation Description:	Failure of the overfill prevention system to meet one of the following requirements: Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling.
Violation Notes:	Returned to compliance on 08/18/2017. OBSERVATION: THE VISUAL (LIGHT BULB) IN THE EXTERNAL OVERFILL ALARM FAILED WHEN TESTED. COMPLIANCE MET ON SITE: TECHNICIAN REPLACED AND RE-TESTED ALARM- PASSED
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Violation Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Violation Date: 08-17-2018
Citation: HSC 6.75 25299.30-25299.34 - California Health and Safety Code, Chapter 6.75, Section(s) 25299.30-25299.34
Violation Description: Failure to submit and maintain complete and current Certification of Financial Responsibility or other mechanism of financial assurance.
Violation Notes: Returned to compliance on 09/12/2018. Certificate of Financial Responsibility expired on 11/04/17. Update the certificate within 30 days and submit a signed Certificate of Financial Responsibility to this office.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Violation Date: 04-29-2015
Citation: HSC 6.5 Multiple Sections - California Health and Safety Code, Chapter 6.5, Section(s) Multiple Sections
Violation Description: Haz Waste Generator Program - Operations/Maintenance - General
Violation Notes: Returned to compliance on 07/02/2015. Failure to manage contaminated containers lawfully (CCR 66261.7)
Violation Division: San Bernardino County Fire Department
Violation Program: HW
Violation Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Violation Date: 04-23-2021
Citation: 23 CCR 16 2641(j) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2641(j)
Violation Description: Failure of the leak detection equipment to be installed, calibrated, operated, and/or maintained properly.
Violation Notes: Returned to compliance on 04/23/2021. OBSERVATION: At the time of inspection, the annular sensor for the diesel generator tank was not working properly. CORRECTIVE ACTION: The Service Technician replaced the annular sensor (VR 409) with like for like components for the diesel generator tank, re-tested and passed. Violation abated.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Violation Date: 04-29-2022
Citation: 23 CCR 16 2712(b)(1)(G) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(b)(1)(G)
Violation Description: Failure to comply with one or more of the following overfill prevention equipment requirements: Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

minutes before the tank overfills; or Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling. Install/retrofit overfill prevention equipment that does not use flow restrictors on vent piping to meet overfill prevention equipment requirements when the overfill prevention equipment is installed, repaired, or replaced on and after October 1, 2018. For USTs installed before October 1, 2018, perform an inspection by October 13, 2018 and every 36 months thereafter. For USTs installed on and after October 1, 2018, perform an inspection at installation and every 36 months thereafter. Inspected within 30 days after a repair to the overfill prevention equipment. Inspected using an applicable manufacturer guidelines, industry codes, engineering standards, or a method approved by a professional engineer. Inspected by a certified UST service technician. Maintain records of overfill prevention equipment inspection for 36 months.

Violation Notes: Returned to compliance on 07/13/2022. OBERVATION: 1) All UST s at the Maintenance Yard have external Audible/Visual (A/V) alarms only. When an overfill alarm is activated for one UST, additional overfill alarms for other tanks will not activate if the alarm for the first tank has not yet cleared. This effectively eliminates overfill protection for all but one tank if multiple tanks are filled at the same time. 2) The initial Overfill Prevention Equipment test was conducted on 04/09/2019. The next Overfill Prevention Equipment test was due by 10/31/2021. The Overfill Prevention Equipment test must be conducted once every three years starting 10/01/2018. CORRECTIVE ACTION: 1) UST systems that can only activate external alarms when the first UST overfill condition occurs, additional actions must be taken to ensure that each UST has a functional overfill prevention independent of the other UST s at the facility (i.e., installing a separate alarm unit or other appropriate overfill equipment for each tank). [Truncated]

Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Violation Date: 04-29-2020
Citation: 23 CCR 16 2636(f)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(2)

Violation Description: Failure of the functional line leak detector (LLD) monitoring pressurized piping to meet one or more of the following requirements: Monitored at least hourly with the capability of detecting a release of 3.0 gallons per hour leak at 10 pounds per square inch and restrict or shut off the flow of product through the piping when a leak is detected.

Violation Notes: Returned to compliance on 04/29/2020. OBSERVATION: At the time of the inspection, the line leak detector for the unleaded tank failed testing. CORRECTIVE ACTION: The service technician replaced the line leak detector for the unleaded tank with like for like components, re-tested and passed. Violation abated.

Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Evaluation:

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-12-2016
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	UST FIELD INSPECTION-ANNUAL MONITORING SYSTEM CERTIFICATION (3 TANKS/2 PANELS)W/ STEVEN GRAHAM
Eval Division:	San Bernardino County Fire Department
Eval Program:	UST
Eval Source:	CERS,

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-17-2015
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	ONTARIO WORLD AIRPORTS- UST MONITORING CERTIFICATION
Eval Division:	San Bernardino County Fire Department
Eval Program:	UST
Eval Source:	CERS,

Eval General Type:	Other/Unknown
Eval Date:	04-23-2021
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	On-site to conduct a plan check inspection for a dispenser upgrade permit at the UST Maintenance Yard located at 2132 E. Avion St.
Eval Division:	San Bernardino County Fire Department
Eval Program:	UST
Eval Source:	CERS,

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-29-2015
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	ROUTINE INSPECTION.
Eval Division:	San Bernardino County Fire Department
Eval Program:	APSA
Eval Source:	CERS,

Eval General Type:	Other/Unknown
Eval Date:	04-28-2014
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	UST REINSPECTION
Eval Division:	San Bernardino County Fire Department
Eval Program:	UST
Eval Source:	CERS,

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-29-2020
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	On-site to conduct an Annual Underground Storage Tank (UST) inspection. Inspection was conducted during the annual monitoring certification testing.
Eval Division:	San Bernardino County Fire Department
Eval Program:	UST

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 06-15-2020
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: ON SITE TO CONDUCT A FINAL PLAN CHECK INSPECTION FOR SB989 REPAIRS.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 07-09-2021
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: ON SITE FOR A FINAL PLAN CHECK INSPECTION
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 07-26-2013
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: PRESENT FOR STATE WATER RESOURCES CONTROL BOARD AND LOS ANGELES WORLD AIRPORTS REPRESENTATIVES.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 07-13-2022
Violations Found: Yes
Eval Type: Other, not routine, done by local agency
Eval Notes: On-site to conduct a final plan check inspection for permit SR0202540 for installation of an Overfill Prevention Valve in the Diesel UST.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-01-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-12-2020
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-09-2019
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Routine inspection with monitoring certification
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-17-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: UST ANNUAL INSPECTION WITH MONITORING SYSTEM CERTIFICATION
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-17-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Routine inspection with monitoring certification
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-18-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: ONTARIO AIRPORT- UST INSPECTION & UST MONITORING CERTIFICATION--TRAINING W/ K.A & J.H.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 08-29-2017
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: ONTARIO AIR PORT- UST- RE---INSPECTION
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-01-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: APSA
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-12-2020

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: APSA
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 11-18-2020
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: On-site to conduct a final plan check inspection for repairs made to the Diesel generator at Terminal 4.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 12-17-2020
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: On-site to witness the SB989 6-month post repairs test for the Unleaded STP sump.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-23-2021
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: On-site to conduct an Annual Underground Storage Tank (UST) inspection.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-28-2023
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: An inspection was conducted to determine compliance with underground storage tank (UST) laws.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-29-2015
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Routine inspection
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Other/Unknown

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Eval Date: 04-29-2022
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: WITNESSED THE OPE INSPECTION.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-29-2022
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: An inspection was conducted to determine compliance with underground storage tank (UST) laws.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 09-27-2018
Violations Found: Yes
Eval Type: Other, not routine, done by local agency
Eval Notes: Special inspection of the annular space
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-01-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-12-2020
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-29-2015
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Routine inspection
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 11-19-2013
Violations Found: No

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Eval Type: Other, not routine, done by local agency
Eval Notes: Pre-UST removal site meeting with contractor.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Enforcement Action:
Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Site Address: 1923 E AVION ST
Site City: ONTARIO
Site Zip: 91761
Enf Action Date: 04-12-2016
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: San Bernardino County Fire Department
Enf Action Program: UST
Enf Action Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Site Address: 1923 E AVION ST
Site City: ONTARIO
Site Zip: 91761
Enf Action Date: 04-17-2014
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: San Bernardino County Fire Department
Enf Action Program: UST
Enf Action Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Site Address: 1923 E AVION ST
Site City: ONTARIO
Site Zip: 91761
Enf Action Date: 04-17-2015
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: San Bernardino County Fire Department
Enf Action Program: UST
Enf Action Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Site Address: 1923 E AVION ST
Site City: ONTARIO
Site Zip: 91761
Enf Action Date: 04-29-2015
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: San Bernardino County Fire Department
Enf Action Program: HMRRP

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Enf Action Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Site Address: 1923 E AVION ST
Site City: ONTARIO
Site Zip: 91761
Enf Action Date: 04-29-2015
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: San Bernardino County Fire Department
Enf Action Program: HW
Enf Action Source: CERS,

Coordinates:
Site ID: 398642
Facility Name: ONTARIO INTERNATIONAL AIRPORT
Env Int Type Code: APSA
Program ID: 10037323
Coord Name: Not reported
Ref Point Type Desc: Unknown,
Latitude: 34.050979
Longitude: -117.610160

Affiliation:
Affiliation Type Desc: Environmental Contact
Entity Name: Kristy Monji-Chung
Entity Title: Not reported
Affiliation Address: 2132 E Avion Street
Affiliation City: Ontario
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 91761
Affiliation Phone: ,

Affiliation Type Desc: Property Owner
Entity Name: Ontario International Airport Authorities
Entity Title: Not reported
Affiliation Address: 1923 E Avion Street
Affiliation City: Ontario
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 90761
Affiliation Phone: (909) 395-2400,

Affiliation Type Desc: UST Tank Operator
Entity Name: Atif Elkadi
Entity Title: Not reported
Affiliation Address: 1923 E Avion Street
Affiliation City: Ontario
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 91761
Affiliation Phone: (909) 544-5432,

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	1923 E Avion Street
Affiliation City:	Ontario
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	91761
Affiliation Phone:	,

Affiliation Type Desc:	Operator
Entity Name:	Atif Elkadi
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(858) 361-9319,

Affiliation Type Desc:	UST Permit Applicant
Entity Name:	Anh Nguyen
Entity Title:	Executive Services Administrator
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(909) 544-5372,

Affiliation Type Desc:	UST Property Owner Name
Entity Name:	Ontario Airport Authority
Entity Title:	Not reported
Affiliation Address:	1923 E Avion Street
Affiliation City:	Ontario
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	91764
Affiliation Phone:	(909) 395-2400,

Affiliation Type Desc:	UST Tank Owner
Entity Name:	Ontario International Airport Authority
Entity Title:	Not reported
Affiliation Address:	1923 E Avion Street
Affiliation City:	Ontario
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	91764
Affiliation Phone:	(909) 395-2400,

Affiliation Type Desc:	CUPA District
Entity Name:	San Bernardino County Fire
Entity Title:	Not reported
Affiliation Address:	620 South E Street
Affiliation City:	San Bernardino
Affiliation State:	CA
Affiliation Country:	Not reported

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Affiliation Zip:	92415-0153
Affiliation Phone:	(909) 386-8401,
Affiliation Type Desc:	Document Preparer
Entity Name:	Ramsha Salim
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Identification Signer
Entity Name:	Kristy Monji -Chung
Entity Title:	Environmental Consultant
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Legal Owner
Entity Name:	Ontario International Airport Authority
Entity Title:	Not reported
Affiliation Address:	1923 E Avion Street
Affiliation City:	Ontario
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	91761
Affiliation Phone:	(909) 395-2400,
Affiliation Type Desc:	Parent Corporation
Entity Name:	Ontario International Airport Authority
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

M57 **GE ENGINE SERVICES INC.** **SEMS-ARCHIVE** **1000213808**
SSW **1923 E AVION ST** **CORRACTS** **CAD009542721**
1/2-1 **ONTARIO, CA 91761** **RCRA-TSDF**
0.945 mi. **RCRA NonGen / NLR**
4987 ft. **Site 2 of 3 in cluster M** **CA HWP**
NY MANIFEST

Relative:
Lower

Actual:
909 ft.

SEMS Archive:

Site ID:	0901222
EPA ID:	CAD009542721
Name:	GENERAL ELECTRIC AVIATION SERVS OPS
Address:	1923 E AVION ST
Address 2:	Not reported
City,State,Zip:	ONTARIO, CA 91761

GE ENGINE SERVICES INC. (Continued) **1000213808**

Cong District: 35
FIPS Code: 06071
FF: N
NPL: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

SEMS Archive Detail:

Region: 09
Site ID: 0901222
EPA ID: CAD009542721
Site Name: GENERAL ELECTRIC AVIATION SERVS OPS
NPL: N
FF: N
OU: 00
Action Code: VS
Action Name: ARCH SITE
SEQ: 1
Start Date: Not reported
Finish Date: 1988-11-14 05:00:00
Qual: Not reported
Current Action Lead: EPA Perf In-Hse

Region: 09
Site ID: 0901222
EPA ID: CAD009542721
Site Name: GENERAL ELECTRIC AVIATION SERVS OPS
NPL: N
FF: N
OU: 00
Action Code: PA
Action Name: PA
SEQ: 1
Start Date: Not reported
Finish Date: 1988-11-14 05:00:00
Qual: N
Current Action Lead: EPA Perf

Region: 09
Site ID: 0901222
EPA ID: CAD009542721
Site Name: GENERAL ELECTRIC AVIATION SERVS OPS
NPL: N
FF: N
OU: 00
Action Code: DS
Action Name: DISCVRY
SEQ: 1
Start Date: 1980-07-01 04:00:00
Finish Date: 1980-07-01 04:00:00
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0901222
EPA ID: CAD009542721
Site Name: GENERAL ELECTRIC AVIATION SERVS OPS
NPL: N
FF: N

GE ENGINE SERVICES INC. (Continued) **1000213808**

OU: 00
Action Code: PA
Action Name: PA
SEQ: 2
Start Date: 1985-03-01 06:00:00
Finish Date: 1985-07-01 05:00:00
Qual: L
Current Action Lead: St Perf

CORRACTS:
Name: GE ENGINE SERVICES INC.
Address: 1923 E AVION ST
Address 2: Not reported
EPA ID: CAD009542721
Area Name: SOILS
Corrective Action: INVESTIGATION COMPLETE
Actual Date: 19930630
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: GE ENGINE SERVICES INC.
Address: 1923 E AVION ST
Address 2: Not reported
EPA ID: CAD009542721
Area Name: SOILS
Corrective Action: CMS COMPLETE
Actual Date: 19930630
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: GE ENGINE SERVICES INC.
Address: 1923 E AVION ST
Address 2: Not reported
EPA ID: CAD009542721
Area Name: SOILS
Corrective Action: INVESTIGATION COMPLETE
Actual Date: 19900601
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: GE ENGINE SERVICES INC.
Address: 1923 E AVION ST
Address 2: Not reported
EPA ID: CAD009542721
Area Name: SOILS
Corrective Action: INVESTIGATION WORKPLAN APPROVED
Actual Date: 19911227
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported

GE ENGINE SERVICES INC. (Continued) **1000213808**

Surface Water Release Indicator: Not reported

Name: GE ENGINE SERVICES INC.
Address: 1923 E AVION ST
Address 2: Not reported
EPA ID: CAD009542721
Area Name: ENTIRE FACILITY
Corrective Action: RFA COMPLETED
Actual Date: 19880913
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: GE ENGINE SERVICES INC.
Address: 1923 E AVION ST
Address 2: Not reported
EPA ID: CAD009542721
Area Name: ENTIRE FACILITY
Corrective Action: HUMAN EXPOSURES CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE
Actual Date: 19971203
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: GE ENGINE SERVICES INC.
Address: 1923 E AVION ST
Address 2: Not reported
EPA ID: CAD009542721
Area Name: ENTIRE FACILITY
Corrective Action: RELEASE TO GW CONTROLLED DETERMINATION-FACILITY DOES NOT MEET DEFINITION
Actual Date: 19971203
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: GE ENGINE SERVICES INC.
Address: 1923 E AVION ST
Address 2: Not reported
EPA ID: CAD009542721
Area Name: ENTIRE FACILITY
Corrective Action: REMEDY DECISION
Actual Date: 19940916
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: GE ENGINE SERVICES INC.
Address: 1923 E AVION ST
Address 2: Not reported
EPA ID: CAD009542721
Area Name: ENTIRE FACILITY

GE ENGINE SERVICES INC. (Continued) **1000213808**

Corrective Action: REMEDY CONSTRUCTION-REMEDY CONSTRUCTED
Actual Date: 19961009
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

RCRA TSDF:
Treatment Storage and Disposal Type: Storage, Treatment
Full Enforcement Universe: Not reported
Corrective Action Workload Universe: Yes
Permit Renewals Workload Universe: Not reported
Permit Workload Universe: Not reported
Permit Progress Universe: Storage, Treatment
Post-Closure Workload Universe: Not reported
Closure Workload Universe: Not reported
Operating TSDF Universe: Not reported
Commercial TSD Indicator: No
Active Site Fed-Reg Treatment Storage and Disposal Facility: Not reported
Active Site Converter Treatment storage and Disposal Facility: Not reported
Active Site State-Reg Treatment Storage and Disposal Facility: Not reported
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe: No
TSDFs Only Subject to CA under Discretionary Auth Universe: Yes

Biennial: List of Years
Year: 2005

Click Here for Biennial Reporting System Data:
Year: 2003

Click Here for Biennial Reporting System Data:
Year: 2001

Click Here for Biennial Reporting System Data:

RCRA Listings:
Date Form Received by Agency: 20071116
Handler Name: Ge Engine Services Inc.
Handler Address: 1923 E AVION ST
Handler City,State,Zip: ONTARIO, CA 91761
EPA ID: CAD009542721
Contact Name: TAMI NORWOOD
Contact Address: PO BOX 797
Contact City,State,Zip: ARKANSAS CITY, KS 67005
Contact Telephone: 620-442-3600 4331
Contact Fax: Not reported
Contact Email: Not reported
Contact Title: Not reported
EPA Region: 09
Land Type: Municipal
Federal Waste Generator Description: Not a generator, verified
Non-Notifier: Not reported
Biennial Report Cycle: Not reported
Accessibility: Not reported
Active Site Indicator: Corrective Action Activities
State District Owner: Not reported

GE ENGINE SERVICES INC. (Continued) **1000213808**

State District:	Not reported
Mailing Address:	PO BOX 797
Mailing City,State,Zip:	ARKANSAS CITY, KS 67005
Owner Name:	City Of Los Angeles
Owner Type:	Municipal
Operator Name:	Ge Company
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	Yes
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	Yes
Groundwater Controls Indicator:	No
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20071120
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Biennial: List of Years
Year: 2005

Click Here for Biennial Reporting System Data:
Year: 2003

Click Here for Biennial Reporting System Data:
Year: 2001

GE ENGINE SERVICES INC. (Continued) **1000213808**

Click Here for Biennial Reporting System Data:

Hazardous Waste Summary:

Waste Code:	D001
Waste Description:	Ignitable Waste
Waste Code:	D002
Waste Description:	Corrosive Waste
Waste Code:	D003
Waste Description:	Reactive Waste
Waste Code:	D005
Waste Description:	Barium
Waste Code:	D007
Waste Description:	Chromium
Waste Code:	D008
Waste Description:	Lead
Waste Code:	D035
Waste Description:	Methyl Ethyl Ketone
Waste Code:	F003
Waste Description:	The Following Spent Nonhalogenated Solvents: Xylene, Acetone, Ethyl Acetate, Ethyl Benzene, Ethyl Ether, Methyl Isobutyl Ketone, N-Butyl Alcohol, Cyclohexanone, And Methanol; All Spent Solvent Mixtures/Blends Containing, Before Use, Only The Above Spent Nonhalogenated Solvents; And All Spent Solvent Mixtures/Blends Containing, Before Use, One Or More Of The Above Nonhalogenated Solvents, And A Total Of Ten Percent Or More (By Volume) Of One Or More Of Those Solvents Listed In F001, F002, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures.
Waste Code:	F005
Waste Description:	The Following Spent Nonhalogenated Solvents: Toluene, Methyl Ethyl Ketone, Carbon Disulfide, Isobutanol, Pyridine, Benzene, 2-Ethoxyethanol, And 2-Nitropropane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Nonhalogenated Solvents Or Those Solvents Listed In F001, F002, Or F004; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures.
Waste Code:	F006
Waste Description:	Wastewater Treatment Sludges From Electroplating Operations, Except From The Following Processes: (1) Sulfuric Acid Anodizing Of Aluminum; (2) Tin Plating On Carbon Steel; (3) Zinc Plating (Segregated Basis) On Carbon Steel; (4) Aluminum Or Zinc-Aluminum Plating On Carbon Steel; (5) Cleaning/Stripping Associated With Tin, Zinc, And Aluminum Plating On Carbon Steel; And (6) Chemical Etching And Milling Of Aluminum.

Handler - Owner Operator:

GE ENGINE SERVICES INC. (Continued) **1000213808**

Owner/Operator Indicator:	Operator
Owner/Operator Name: GE COMPANY	
Legal Status:	Private
Date Became Current:	19550101
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name: CITY OF LOS ANGELES	
Legal Status:	Municipal
Date Became Current:	19530101
Date Ended Current:	Not reported
Owner/Operator Address:	1 NEUMANN WAY
Owner/Operator City,State,Zip:	CINCINNATI, OH 45215
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name: GENERAL ELECTRIC COMPANY	
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	I-75 & NEUMANN WAY
Owner/Operator City,State,Zip:	CITY NOT REPORTED, OH 99999
Owner/Operator Telephone:	513-243-5194
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name: GE COMPANY	
Legal Status:	Private
Date Became Current:	19550101
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name: CITY OF LOS ANGELES	
Legal Status:	Municipal
Date Became Current:	19530101
Date Ended Current:	Not reported
Owner/Operator Address:	1 NEUMANN WAY
Owner/Operator City,State,Zip:	CINCINNATI, OH 45215
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported

GE ENGINE SERVICES INC. (Continued) **1000213808**

Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: CITY OF LOS ANGELES
Legal Status: Municipal
Date Became Current: 19530101
Date Ended Current: Not reported
Owner/Operator Address: 1 NEUMANN WAY
Owner/Operator City,State,Zip: CINCINNATI, OH 45215
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: GE COMPANY
Legal Status: Private
Date Became Current: 19550101
Date Ended Current: Not reported
Owner/Operator Address: Not reported
Owner/Operator City,State,Zip: Not reported
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: GE ENGINE SERVICES INC
Legal Status: Private
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 1923 E AVION ST
Owner/Operator City,State,Zip: ONTARIO, CA 91761
Owner/Operator Telephone: 909-986-6731
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 19940304
Handler Name: GE ENGINE SERVICES INC
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Ca
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19970123
Handler Name: GE ENGINE SERVICES INC
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Ca

GE ENGINE SERVICES INC. (Continued) **1000213808**

Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20071116
Handler Name: GE ENGINE SERVICES INC.
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19900412
Handler Name: GENERAL ELECTRIC ONTARIO AIRPORT
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19920227
Handler Name: GE AIRCRAFT ENGINES ENGINE MAINTENANCE C
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19940331
Handler Name: GE ENGINE SERVICES/ W COAST OPERATIONS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No

GE ENGINE SERVICES INC. (Continued) **1000213808**

Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19960229
Handler Name: GE ENGINE SERVICES - WEST COAST OPERATIO
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19990304
Handler Name: GE ENGINE SERVICES, INC.
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20001012
Handler Name: GE ENGINEE SERVICES, INC.
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20020227
Handler Name: GE ENGINE SERVICES INC
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20040218

GE ENGINE SERVICES INC. (Continued) **1000213808**

Handler Name: GE ENGINE SERVICES, INC.
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20060228
Handler Name: GE ENGINE SERVICES INC.
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 332813
NAICS Description: ELECTROPLATING, PLATING, POLISHING, ANODIZING, AND COLORING

NAICS Code: 336411
NAICS Description: AIRCRAFT MANUFACTURING

NAICS Code: 336412
NAICS Description: AIRCRAFT ENGINE AND ENGINE PARTS MANUFACTURING

NAICS Code: 81149
NAICS Description: OTHER PERSONAL AND HOUSEHOLD GOODS REPAIR AND MAINTENANCE

Has the Facility Received Notices of Violations:
Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported

GE ENGINE SERVICES INC. (Continued) **1000213808**

Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported

GE ENGINE SERVICES INC. (Continued) **1000213808**

Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	19880510
Actual Return to Compliance Date:	19880628
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	19880615
Enforcement Identifier:	001
Date of Enforcement Action:	19880523
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	TSD - Financial Requirements
Date Violation was Determined:	19921201
Actual Return to Compliance Date:	19921215
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	EPA
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported

GE ENGINE SERVICES INC. (Continued) **1000213808**

Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - General
Date Violation was Determined: 19900427
Actual Return to Compliance Date: 19900909
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 002
Date of Enforcement Action: 19900605
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: FINAL 3008(A) COMPLIANCE ORDER
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: 5500
Paid Amount: 5500
Final Count: 1

GE ENGINE SERVICES INC. (Continued) **1000213808**

Final Amount: 5500

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - General
Date Violation was Determined: 20051006
Actual Return to Compliance Date: 20051209
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 501
Date of Enforcement Action: 20051006
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number:Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Evaluation Action Summary:
Evaluation Date: 20060928
Evaluation Responsible Agency: Local
Found Violation: No
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier: Not reported
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: Not reported
Scheduled Compliance Date: Not reported
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

Evaluation Date: 19880519
Evaluation Responsible Agency: State
Found Violation: No

GE ENGINE SERVICES INC. (Continued) **1000213808**

Evaluation Type Description:	FINANCIAL RECORD REVIEW
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19880510
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19880628
Scheduled Compliance Date:	19880615
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19920514
Evaluation Responsible Agency:	EPA Contractor/Grantee
Found Violation:	Yes
Evaluation Type Description:	FINANCIAL RECORD REVIEW
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19921215
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19900427
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19900909
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	20051006
Evaluation Responsible Agency:	State Contractor/Grantee
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20051209
Scheduled Compliance Date:	Not reported

GE ENGINE SERVICES INC. (Continued) **1000213808**

Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

GE ENGINE SERVICES INC. (Continued) **1000213808**

HWP:

EPA ID:	CAD009542721
Name:	GE ENGINE SERVICES INC
Address:	ONTARIO INT'L AIRPORT
Cleanup Status:	CLOSED
Latitude:	34.05695
Longitude:	-117.6069
Facility Type:	Historical - Non-Operating
Facility Size:	Not reported
Supervisor:	Not reported
Site Code:	400359
Senate District:	22
Assembly District:	53
Public Information Officer:	Not reported
Commercial Offsite Facility Types:	Not reported
Quarterly Update:	The site is a test facility for commercial and military jet engines that has operated from 1956 to the present. About 6,000 gallons of hazardous waste were disposed of in dry wells. There is an estimated 600 cubic yards of waste and contaminated soil on the site. Results of a preliminary investigation in 1987 indicated the presence of 1,1,1-trichloroethane (TCA), tetrachloroethene (PCE), chloroform, naphthalene, 2-methylnaph- thalene, and volatile aromatic (xylene, toluene, ethylbenzene) in soils near the dry wells. Hazardous substances disposed of in dry wells may potentially enter groundwater and contaminate drinking water supplies. The workers on the facility may be exposed to volatile organic compounds if contaminated subsurface soils are excavated or disturbed. General Electric performed preliminary assessment soil sampling in 1984 and 1987 to identify contaminated areas on the facility. A Consent Order between General Electric and DHS was signed September 28, 1988, for both groundwater and soil remediation. A Remedial Investigation / Feasibility Study was done in 1993 to fully characterize the site. DTSC approved the final Remedial Action Plan on September 16, 1994. System operation of the vapor extraction treatment systems in areas A, B and C began on May 17, 1996. An Enforceable Agreement for Operation and Maintenance was signed by DTSC and GE on August 28, 1998. Quarterly reports on the status of operation have been submitted to DTSC since commencing remediation. Concentrations of VOCs in shallow soils in areas A, B, and C at the site have reached acceptable closure levels. The shallow extraction wells in areas A, B, and C will be maintained in operational condition until sufficient data can be obtained to evaluate rebound data.
Project Manager Lead:	Not reported
Project Manager:	Not reported
Permit Type:	RCRA Interim Status Permit
Permit Effective Date:	Not reported
Permit Expiration Date:	Not reported
Calenviroscreen Score:	96-100% (highest scores)
Total Planned Hours:	Not reported
Total Planned Amount:	Not reported
Total Actual Hours:	Not reported

Activities:

EPA ID:	CAD009542721
Facility Type:	Historical - Non-Operating
Facility Name:	GE ENGINE SERVICES INC
Project Manager:	Not reported

GE ENGINE SERVICES INC. (Continued) **1000213808**

Project Manager Lead: Not reported
Supervisor: Not reported
Facility Status: CLOSED
Activity Type: New Operating Permit
Permit Being Renewed: Not reported
Permit Being Modified: Not reported
Final Date: Not reported
Type: Not reported
Title Description: Imported 12/2011:PERMIT1
Due Date: Not reported
Comments: Not reported
Unit Names: Not reported
Event Description: New Operating Permit - CALL-IN LETTER ISSUED
Actual Date: 03/23/1983

EPA ID: CAD009542721
Facility Type: Historical - Non-Operating
Facility Name: GE ENGINE SERVICES INC
Project Manager: Not reported
Project Manager Lead: Not reported
Supervisor: Not reported
Facility Status: CLOSED
Activity Type: New Operating Permit
Permit Being Renewed: Not reported
Permit Being Modified: Not reported
Final Date: Not reported
Type: Not reported
Title Description: Imported 12/2011:PERMIT1
Due Date: Not reported
Comments: Not reported
Unit Names: Not reported
Event Description: New Operating Permit - APPLICATION PART A RECEIVED
Actual Date: 11/18/1980

Closure:
EPA ID: CAD009542721
Facility Type: Historical - Non-Operating
Facility Name: GE ENGINE SERVICES INC
Project Manager: Not reported
Project Manager Lead: Not reported
Supervisor: Not reported
Facility Size: Not reported
Facility Status: CLOSED
Activity Type: Closure
Final Date: Not reported
Type: Not reported
Title Description: Imported 12/2011:CLOSURE1
Due Date: Not reported
Comments: Not reported
Unit Names: TANKSTR1, TANKSTR2, TANKTRT1
Event Description: Closure - CLOSURE PLAN RECEIVED
Actual Date: 11/20/1990

EPA ID: CAD009542721
Facility Type: Historical - Non-Operating
Facility Name: GE ENGINE SERVICES INC
Project Manager: Not reported

GE ENGINE SERVICES INC. (Continued) **1000213808**

Project Manager Lead:	Not reported
Supervisor:	Not reported
Facility Size:	Not reported
Facility Status:	CLOSED
Activity Type:	Closure
Final Date:	Not reported
Type:	Not reported
Title Description:	Imported 12/2011:CLOSURE1
Due Date:	Not reported
Comments:	Not reported
Unit Names:	TANKSTR1, TANKSTR2, TANKTRT1
Event Description:	Closure - ISSUE CLOSURE VERIFICATION
Actual Date:	10/17/1994

EPA ID:	CAD009542721
Facility Type:	Historical - Non-Operating
Facility Name:	GE ENGINE SERVICES INC
Project Manager:	Not reported
Project Manager Lead:	Not reported
Supervisor:	Not reported
Facility Size:	Not reported
Facility Status:	CLOSED
Activity Type:	Closure
Final Date:	Not reported
Type:	Not reported
Title Description:	Imported 12/2011:CLOSURE1
Due Date:	Not reported
Comments:	Not reported
Unit Names:	TANKSTR1, TANKSTR2, TANKTRT1
Event Description:	Closure - 1ST NOTICE OF DEFICIENCY ISSUED
Actual Date:	02/06/1992

Alias:

EPA ID:	CAD009542721
Facility Type:	Historical - Non-Operating
Facility Name:	GE ENGINE SERVICES INC
Facility Status:	CLOSED
Project Manager:	Not reported
Project Manager Lead:	Not reported
Supervisor:	Not reported
Alias Type:	Project Code (Site Code)
Alias:	400359

NY MANIFEST:

Name:	GENERAL ELECTRIC
Address:	1923 E. AVION STREET
City,State,Zip:	ONTARIO, CA 91761-0000
Country:	USA
EPA ID:	CAD009542721
Facility Status:	Not reported
Location Address 1:	1923 EAST AVION STREET
Code:	BP
Location Address 2:	Not reported
Total Tanks:	Not reported
Location City:	ONTARIO

GE ENGINE SERVICES INC. (Continued) **1000213808**

Location State:	CA
Location Zip:	91761
Location Zip 4:	Not reported

NY MANIFEST:

EPAID:	CAD009542721
Mailing Name:	GENERAL ELECTRIC
Mailing Contact:	ROBERT
Mailing Address 1:	1923 EAST AVION STREET
Mailing Address 2:	Not reported
Mailing City:	ONTARIO
Mailing State:	VA
Mailing Zip:	91761
Mailing Zip 4:	Not reported
Mailing Country:	USA
Mailing Phone:	7143915424

M58 **GENERAL ELECTRIC ENGINE MAINTENANCE CENTER** **CA BOND EXP. PLAN** **S100833313**
SSW **1923 EAST AVION STREET** **N/A**
1/2-1 **ONTARIO, CA 91761**
0.945 mi.
4987 ft. **Site 3 of 3 in cluster M**

Relative: **Lower**

Actual: **909 ft.**

CA BOND EXP. PLAN:

Reponsible Party:	RESPONSIBLE PARTY LEAD SITE CLEANUP WORKPLAN
Project Revenue Source Company:	Not reported
Project Revenue Source Addr:	Not reported
Project Revenue Source City,St,Zip:	Not reported
Project Revenue Source Desc:	The potentially responsible parties (PRPs) include General Electric and the City of Los Angeles Department of Airports. DHS entered into a consent order with the PRPs on September 28, 1988. DHS has budgeted $50,000 for oversight/monitoring of cleanup activities. DHS will recover its direct costs, plus staff costs and overhead related to the project. The PRPs will pay for the cost of investigation and remedial action.
Site Description:	This facility maintains and overhauls aircraft engines. Hazardous wastes disposed of onsite have contaminated soils.
Hazardous Waste Desc:	About 6,000 gallons of hazardous waste were disposed of in dry wells. There is an estimated 600 cubic yards of waste and contaminated soil on the site. Results of a 1987 investigation indicated the presence of 1,1,1-trichloroethane (TCA), tetrachloroethene (PCE), chloroform, naphthalene, 2- methylnaphthalene, and volatile aromatics (xylene, toluene, ethylbenzene) in soils near the dry wells.
Threat To Public Health & Env:	Hazardous substances disposed of in dry wells may potentially enter ground water and contaminate drinking water supplies. The workers on the facility may be exposed to volatile organic compounds if contaminated soils, currently beneath an asphalt orcement cover, are excavated or disturbed.
Site Activity Status:	General Electric performed soil sampling in 1984 and 1987 to identify contaminated areas on the facility. General Electric is proceeding with site investigation in order to fully characterize the site.

59
South
1/2-1
0.964 mi.
5089 ft.

GE ENGINE SERVICES
2264 AVION DR
ONTARIO, CA 91761

CA HIST Cal-Sites **S103643503**
CA EMI **N/A**

Relative:
Lower

Actual:
892 ft.

Calsite:

Name:	GE AIRCRAFT, ENGINE MAINTENANCE CTR
Address:	2264 AVION PLACE
City:	ONTARIO
Region:	CYPRESS
Facility ID:	36370024
Facility Type:	RP
Type:	RESPONSIBLE PARTY
Branch:	SB
Branch Name:	SO CAL - CYPRESS
File Name:	Not reported
State Senate District:	04231996
Status:	ANNUAL WORKPLAN (AWP) - ACTIVE SITE
Status Name:	ANNUAL WORKPLAN - ACTIVE SITE
Lead Agency:	DEPT OF TOXIC SUBSTANCES CONTROL
NPL:	Not Listed
SIC Code:	37
SIC Name:	MANU - TRANSPORTATION EQUIPMENT
Access:	Not reported
Cortese:	Not reported
Hazardous Ranking Score:	Not reported
Date Site Hazard Ranked:	Not reported
Groundwater Contamination:	Suspected
Staff Member Responsible for Site:	THOM
Supervisor Responsible for Site:	Not reported
Region Water Control Board:	Not reported
Region Water Control Board Name:	Not reported
Lat/Long Direction:	Not reported
Lat/Long (dms):	0 0 0 / 0 0 0
Lat/long Method:	Not reported
Lat/Long Description:	Not reported
State Assembly District Code:	61
State Senate District Code:	32
Facility ID:	36370024
Activity:	DISC
Activity Name:	DISCOVERY
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	03151983
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported

GE ENGINE SERVICES (Continued) **S103643503**

For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	36370024
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	CNSNT
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	09281988
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	36370024
Activity:	SS
Activity Name:	SITE SCREENING
AWP Code:	EPAPA
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	05261989
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	36370024
Activity:	FRIFS
Activity Name:	FOCUSED REMEDIAL INVESTIGATION/FEASIBILITY STUDY
AWP Code:	Not reported
Proposed Budget:	0

GE ENGINE SERVICES (Continued) **S103643503**

AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	12311991
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	36370024
Activity:	FRIFS
Activity Name:	FOCUSED REMEDIAL INVESTIGATION/FEASIBILITY STUDY
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	02291992
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	36370024
Activity:	RIFS
Activity Name:	REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	06301993
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0

GE ENGINE SERVICES (Continued) **S103643503**

Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	36370024
Activity:	CEQA
Activity Name:	CEQA INCLUDING NEGATIVE DECS
AWP Code:	NEGDK
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	09161994
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	36370024
Activity:	RAP
Activity Name:	REMEDIAL ACTION PLAN / RECORD OF DECISION
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	09161994
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0

GE ENGINE SERVICES (Continued) **S103643503**

Unknown Type:	0
Facility ID:	36370024
Activity:	DES
Activity Name:	DESIGN
AWP Code:	GW
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	01101996
Est Person-Yrs to complete:	0.32000
Estimated Size:	L
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	36370024
Activity:	RMDL
Activity Name:	REMEDIAL ACTION (RAP REQUIRED)
AWP Code:	SOIL
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	10091996
Est Person-Yrs to complete:	0.20000
Estimated Size:	L
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	36370024
Activity:	OM
Activity Name:	OPERATION & MAINTENANCE
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	06302010
Revised Due Date:	Not reported
Comments Date:	Not reported

GE ENGINE SERVICES (Continued) **S103643503**

Est Person-Yrs to complete:	0
Estimated Size:	L
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	36370024
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	SOIL
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	08281998
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	36370024
Activity:	COST
Activity Name:	COST RECOVERY
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	09151998
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported

GE ENGINE SERVICES (Continued) **S103643503**

Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	36370024
Activity:	5YEAR
Activity Name:	FIVE-YEAR REVIEW REQUIRED BY CERCLA
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	03312005
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Alternate Address:	1923 AVION STREET (ONTARIO AIRPORT)
Alternate City,St,Zip:	ONTARIO, CA 91761
Alternate Address:	2264 AVION PLACE
Alternate City,St,Zip:	ONTARIO, CA 91761

Background Info:

General Electric has operated a jet engine test facility at this site from 1956 to the present. Both commercial and military engines are tested at the facility.

About 6,000 gallons of hazardous waste were disposed of in dry wells. There is an estimated 600 cubic yards of waste and contaminated soil on the site. Results of a preliminary investigation in 1987, indicated the presence of 1,1,1-trichloroethane (TCA), tetrachloroethene (PCE), chloroform, naphthalene, 2-methylnaphthalene, and volatile aromatic (xylene, toluene, ethylbenzene) in soils near the dry wells.

Hazardous substances disposed of in dry wells may potentially enter groundwater and contaminate drinking water supplies. The workers on the facility may be exposed to volatile organic compounds if contaminated subsurface soils, are excavated or disturbed.

General Electric performed soil sampling in 1984, and 1987, to identify contaminated areas on the facility. General Electric has performed a site investigation to fully characterizethe site. A Consent Order between General Electric and DHS was signed September 28, 1988, for both groundwater and soil remediation.

System operation of the vapor extraction treatment systems in

GE ENGINE SERVICES (Continued) **S103643503**

areas A, B and C began on May 17, 1996. Quarterly reports on the status of operation have been submitted to DTSC since commencing remediation. Concentrations of VOCs in shallow soils in areas A, B, and C at the site have reached acceptable closure levels. The shallow extraction wells in areas A, B, and C will be maintained in operational condition until sufficient data can be obtained to evaluate rebound data.

Comments Date: 10091996
Comments: separate soil vapor extraction and treatment systems (VET's)
Comments Date: 10091996
Comments: was completed on 10/09/1996.
Comments Date: 12062001
Comments: In January 2001, DTSC issued conditional closure of the
Comments Date: 01011985
Comments: Preliminary Assessment Done: Facility is located in the Ontario
Comments Date: 01011985
Comments: International Airport. Test Area is 1/3-mile east along Avion.
Comments Date: 01011985
Comments: Operations consist of cleaning, overhauling, and testing of
Comments Date: 01011985
Comments: aircraft engines. In operation since 1956 (dry wells 1974-1980).
Comments Date: 01011985
Comments: Discharge to sewer. Preliminary Assessment submitted to
Comments Date: 01011985
Comments: U.S. EPA.
Comments Date: 01101996
Comments: DTSC approved the remedial design for the GE Company site.
Comments Date: 01111999
Comments: As part of a Cost Recovery Settlement between GE (the
Comments Date: 01111999
Comments: Responsible Party) and DTSC, for the period July 1, 1998 to
Comments Date: 01111999
Comments: June 30, 1997 for Invoice No. 13637, GE settled the disputed
Comments Date: 01111999
Comments: amount. DTSC received settlement payment pursuant to the
Comments Date: 01111999
Comments: settlement signed on 09/15/98 by GE and DTSC.
Comments Date: 01301984
Comments: DHS/TSCD Inspection: No violations found.
Comments Date: 02071997
Comments: O&M agreement being reviewed by OLC .
Comments Date: 02071997
Comments: Quarterly progrss reports, weekly operation logs and O&M Manual
Comments Date: 02071997
Comments: have been submitted by GE.
Comments Date: 02152000
Comments: GE conducted soil gas sampling of deep and shallow soils in
Comments Date: 02152000
Comments: October 1999. There were some operational soil vapor
Comments Date: 02152000
Comments: extraction for rebound and closure data in areas A, B and C for
Comments Date: 02152000
Comments: shallow soils. The final closure decision will be based on an
Comments Date: 02152000
Comments: evaluation of rebound concentrations in shallow soil extraction
Comments Date: 02152000
Comments: wells over time. The remediation for deeper wells in each area

GE ENGINE SERVICES (Continued) **S103643503**

Comments Date:	02152000
Comments:	will continue.
Comments Date:	02171995
Comments:	The Pilot Test and deep soil monitoring protocol RAP
Comments Date:	02171995
Comments:	implementation document was submitted to DTSC.
Comments Date:	03151983
Comments:	Facility Identified: RWQCB files - aircraft parts mfg.
Comments Date:	04231996
Comments:	SVE System was installed this month.
Comments Date:	05201983
Comments:	Facility Drive-By: Active firm. Large, secured, paved
Comments Date:	05201983
Comments:	complex.
Comments Date:	05261989
Comments:	Reassessment was reviewed by Region 4 staff recommended AWP.
Comments Date:	05281997
Comments:	Draft O&M Agreement sent to GE.
Comments Date:	05281997
Comments:	Not reported
Comments Date:	06161983
Comments:	DHS/HMMS Inspection: No violations found.
Comments Date:	07251991
Comments:	Military and commercial jet engine testing facility.
Comments Date:	07251991
Comments:	Contaminants include petroleum hydrocarbons, TCA, PCE, volatile
Comments Date:	07251991
Comments:	and semi-volatile organic compounds, chloroform, naphthalene,
Comments Date:	07251991
Comments:	2-methylnaphthalene, and volatile aromatics (xylene, toluene,
Comments Date:	07251991
Comments:	ethyl benzene).
Comments Date:	08011984
Comments:	Core samples from two dry wells show 1,1,1-trichloroethane,
Comments Date:	08011984
Comments:	TCE, PCE, and bibromochloroethane.
Comments Date:	08281998
Comments:	Enforceable Agreement for Operation and Maintenance was signed
Comments Date:	08281998
Comments:	by DTSC and GE.
Comments Date:	09131988
Comments:	EPA submitted a reassessment recommending NFA.
Comments Date:	09161994
Comments:	The Department approved the final Remedial Action Plan for the
Comments Date:	09161994
Comments:	General Electric Jet Engine Test Cell Facility. The CEQA
Comments Date:	09161994
Comments:	(Negative Declaration) documents have also been approved. The
Comments Date:	09161994
Comments:	remedial alternative recommended for the site consists of
Comments Date:	09161994
Comments:	in situ soil vapor extraction to reduce VOC levels at the known
Comments Date:	09161994
Comments:	source areas of the site. Groundwater investigation and cleanup
Comments Date:	09161994
Comments:	will be under the oversight of the RWQCB.
Comments Date:	10091996

GE ENGINE SERVICES (Continued) **S103643503**

Comments:	RMDL: Installation, operation and maintenance of three (3)
Comments Date:	12062001
Comments:	shallow soils in Areas A, B, and C. In October 4, 2001,
Comments Date:	12062001
Comments:	DTSC supported closure of shallow soils at Areas A,B, and C
Comments Date:	12062001
Comments:	and recommended cessation of deep soil vapor extraction
Comments Date:	12062001
Comments:	operations in Area A. The VETS effluent concentration at
Comments Date:	12062001
Comments:	Area A is being closely monitored. The VETS is being
Comments Date:	12062001
Comments:	operated in accordance with the requirements of the Regional
Comments Date:	12062001
Comments:	Water Quality Control Board (RWQCB).
Comments Date:	12062001
Comments:	Not reported
Comments Date:	12062001
Comments:	The individual VETS are being operated with the intent to
Comments Date:	12062001
Comments:	operate deep soil VETS at each of the areas, A,B, and C
Comments Date:	12062001
Comments:	until asymptotic conditions are achieved.
Comments Date:	12062001
Comments:	Not reported
Comments Date:	12062001
Comments:	It is recommended that there is resolution of two issues
Comments Date:	12062001
Comments:	relating to the extent of deep soil VETS operation required
Comments Date:	12062001
Comments:	at this site, which are: 1) A determination of the
Comments Date:	12062001
Comments:	contamination specific clean up objectives for each of the
Comments Date:	12062001
Comments:	five extraction wells in each VETS based on the distance
Comments Date:	12062001
Comments:	from the screened interval of each individual well to
Comments Date:	12062001
Comments:	groundwater; 2) An analysis of the relationship of
Comments Date:	12062001
Comments:	contaminant levels in deep extraction wells to the level
Comments Date:	12062001
Comments:	of contamination in groundwater and the proximity of the
Comments Date:	12062001
Comments:	screened interval to groundwater.
ID Name:	CALSTARS CODE
ID Value:	400070
ID Name:	BEP DATABASE PCODE
ID Value:	P41017
ID Name:	EPA IDENTIFICATION NUMBER
ID Value:	CAD009542721
Alternate Name:	GENERAL ELECTRIC ENGINE MAINTENANCE CTR.
Alternate Name:	GENERAL ELECTRIC CO AVIATION SERVICE
Alternate Name:	GE AIRCRAFT, ENGINE MAINTENANCE CTR
Alternate Name:	GENERAL ELECTRIC JET ENGINE TEST CELL
Alternate Name:	Not reported
Special Programs Code:	R3012

GE ENGINE SERVICES (Continued) **S103643503**

Special Programs Name: RCRA 3012

EMI:

Name:	GENERAL ELECTRIC COMPANY
Address:	2264 AVION PLACE
City,State,Zip:	ONTARIO, CA 917610000
Year:	1990
County Code:	36
Air Basin:	SC
Facility ID:	61160
Air District Name:	SC
SIC Code:	5171
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	GENERAL ELECTRIC COMPANY
Address:	2264 AVION DR
City,State,Zip:	ONTARIO, CA 917610000
Year:	1993
County Code:	36
Air Basin:	SC
Facility ID:	61160
Air District Name:	SC
SIC Code:	5171
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	13
Reactive Organic Gases Tons/Yr:	13
Carbon Monoxide Emissions Tons/Yr:	7
NOX - Oxides of Nitrogen Tons/Yr:	29
SOX - Oxides of Sulphur Tons/Yr:	13
Particulate Matter Tons/Yr:	2
Part. Matter 10 Micrometers and Smllr Tons/Yr:	2

Name:	GENERAL ELECTRIC COMPANY
Address:	2264 AVION DR
City,State,Zip:	ONTARIO, CA 917610000
Year:	1995
County Code:	36
Air Basin:	SC
Facility ID:	61160
Air District Name:	SC
SIC Code:	5171
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	13
Reactive Organic Gases Tons/Yr:	13

GE ENGINE SERVICES (Continued) **S103643503**

Carbon Monoxide Emissions Tons/Yr:	7
NOX - Oxides of Nitrogen Tons/Yr:	29
SOX - Oxides of Sulphur Tons/Yr:	13
Particulate Matter Tons/Yr:	2
Part. Matter 10 Micrometers and Smllr Tons/Yr:	2

Name:	GE ENGINE SERVICES
Address:	2264 AVION DR
City,State,Zip:	ONTARIO, CA 917610000
Year:	1996
County Code:	36
Air Basin:	SC
Facility ID:	61160
Air District Name:	SC
SIC Code:	5171
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	11
Reactive Organic Gases Tons/Yr:	11
Carbon Monoxide Emissions Tons/Yr:	5
NOX - Oxides of Nitrogen Tons/Yr:	23
SOX - Oxides of Sulphur Tons/Yr:	11
Particulate Matter Tons/Yr:	2
Part. Matter 10 Micrometers and Smllr Tons/Yr:	2

Name:	GE ENGINE SERVICES
Address:	2264 AVION DR
City,State,Zip:	ONTARIO, CA 917610000
Year:	1997
County Code:	36
Air Basin:	SC
Facility ID:	61160
Air District Name:	SC
SIC Code:	5171
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	15
Reactive Organic Gases Tons/Yr:	13
Carbon Monoxide Emissions Tons/Yr:	16
NOX - Oxides of Nitrogen Tons/Yr:	80
SOX - Oxides of Sulphur Tons/Yr:	2
Particulate Matter Tons/Yr:	1
Part. Matter 10 Micrometers and Smllr Tons/Yr:	1

Name:	GE ENGINE SERVICES
Address:	2264 AVION DR
City,State,Zip:	ONTARIO, CA 917610000
Year:	1998
County Code:	36
Air Basin:	SC
Facility ID:	61160
Air District Name:	SC
SIC Code:	5171
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported

GE ENGINE SERVICES (Continued) **S103643503**

Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	15
Reactive Organic Gases Tons/Yr:	13
Carbon Monoxide Emissions Tons/Yr:	16
NOX - Oxides of Nitrogen Tons/Yr:	80
SOX - Oxides of Sulphur Tons/Yr:	2
Particulate Matter Tons/Yr:	1
Part. Matter 10 Micrometers and Smllr Tons/Yr:	1

Name:	GE ENGINE SERVICES
Address:	2264 AVION DR
City,State,Zip:	ONTARIO, CA 917610000
Year:	1999
County Code:	36
Air Basin:	SC
Facility ID:	61160
Air District Name:	SC
SIC Code:	5171
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	15
Reactive Organic Gases Tons/Yr:	13
Carbon Monoxide Emissions Tons/Yr:	16
NOX - Oxides of Nitrogen Tons/Yr:	80
SOX - Oxides of Sulphur Tons/Yr:	2
Particulate Matter Tons/Yr:	1
Part. Matter 10 Micrometers and Smllr Tons/Yr:	1

Name:	GE ENGINE SERVICES
Address:	2264 AVION DR
City,State,Zip:	ONTARIO, CA 917610000
Year:	2000
County Code:	36
Air Basin:	SC
Facility ID:	61160
Air District Name:	SC
SIC Code:	5171
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	15
Reactive Organic Gases Tons/Yr:	13
Carbon Monoxide Emissions Tons/Yr:	16
NOX - Oxides of Nitrogen Tons/Yr:	80
SOX - Oxides of Sulphur Tons/Yr:	2
Particulate Matter Tons/Yr:	1
Part. Matter 10 Micrometers and Smllr Tons/Yr:	1

Name:	GE ENGINE SERVICES
Address:	2264 AVION DR
City,State,Zip:	ONTARIO, CA 91761
Year:	2009
County Code:	36
Air Basin:	SC
Facility ID:	61160
Air District Name:	SC

GE ENGINE SERVICES (Continued) **S103643503**

SIC Code:	7538
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.34695481795966199
Reactive Organic Gases Tons/Yr:	0.29103200000000001
Carbon Monoxide Emissions Tons/Yr:	0.94186999999999999
NOX - Oxides of Nitrogen Tons/Yr:	2.2469600000000001
SOX - Oxides of Sulphur Tons/Yr:	0.0100321
Particulate Matter Tons/Yr:	2.0400999999999999E-2
Part. Matter 10 Micrometers and Smllr Tons/Yr:	1.9900950000000001E-2

Name:	GE ENGINE SERVICES
Address:	2264 AVION DR
City,State,Zip:	ONTARIO, CA 91761
Year:	2010
County Code:	36
Air Basin:	SC
Facility ID:	61160
Air District Name:	SC
SIC Code:	7538
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	8.2598359947286606E-2
Reactive Organic Gases Tons/Yr:	6.3538750000000005E-2
Carbon Monoxide Emissions Tons/Yr:	0.24610000000000001
NOX - Oxides of Nitrogen Tons/Yr:	1.18371
SOX - Oxides of Sulphur Tons/Yr:	0.00679
Particulate Matter Tons/Yr:	0.01106
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0.01078

Count: 31 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
ONTARIO	S117701653	HBIZCTR ONTARIO	SE CORNER OF THE INT OF FRANCI	91761	CA NPDES, CA CIWQS
ONTARIO	S121652155	LOT 1 OF ONTARIO AVE BUSINESS PARK	NE CORNER OF GROVE AVE & LUCUS	91761	CA CIWQS
ONTARIO	1009508586	SO CAL GAS/ONTARIO MGP	CORNER OF CAMPUS, MARTLAND, MO	91761	EDR MGP
ONTARIO	S129213612	MOUNTAIN VIEW SD PROPOSED ELEMENTA	NORTHWEST CORNER OF THE INTERS	91761	CA ENVIROSTOR, CA SCH
ONTARIO	1027048732	CITY ONTARIO WELL GUASTI	2400 E GUASTI ROAD	91761	FINDS
ONTARIO	1025878940	ONTARIO PACIFIC BUSINESS CENTRE	3979 B GUASTI	91764	RCRA-SQG
ONTARIO	1026440623	ONTARIO PACIFIC BUSINESS CENTRE	3979 B GUASTI	91764	FINDS
ONTARIO	S114663927	ONTARIO, CITY OF	W HOLT BLVD		CA RGA LUST
ONTARIO	S114663925	ONTARIO, CITY OF	HOLT BOULEVARD, WEST		CA RGA LUST
ONTARIO	S114663923	ONTARIO, CITY OF	HOLT BLVD		CA RGA LUST
ONTARIO	S114663922	ONTARIO, CITY OF	HOLT AVENUE		CA RGA LUST
ONTARIO	S114663921	ONTARIO, CITY OF	W HOLT BLVD		CA RGA LUST
ONTARIO	S114663920	ONTARIO, CITY OF	HOLT BLVD		CA RGA LUST
ONTARIO	S114708156	U. S. POSTAL SERVICE ONTARIO	1555 HOLT BLVD		CA RGA LUST
ONTARIO	1021787704	ONTARIO AUTO TRUCK PLAZA INC	4265 E HOLT RD	91761	EDR Hist Auto
ONTARIO	1022258803	ONTARIO AUTO TRUCK PLAZA INC	4265 E HOLT BLVD	91761	EDR Hist Auto
ONTARIO	S126215803	ONTARIO AIRPORT TOWERS WCU PARKING	NEC OF GUASTI RD & ARCHIBALD A	91761	CA NPDES
ONTARIO	S110735027	ONTARIO AIRPORT TOWERS - WCU PARKI	NEC OF GUASTI RD. AND ARCHIBAL	91761	CA CIWQS
ONTARIO	S108543038	NORTHROP (O)	N/A ONT. INTL. AIRPORT		CA CPS-SLIC
ONTARIO	S108543020	LOCKHEED (O)	N/A ONT. INTL. AIRPORT		CA CPS-SLIC
ONTARIO	S108542946	DOUGLAS AIRCRAFT CO	N/A ONT. INTL. AIRPORT		CA CPS-SLIC
ONTARIO	S108985930	CALIF. AIR NATIONAL GUARD	N/A ONT. INTL. AIRPORT		CA CPS-SLIC
ONTARIO	S108985929	G E ENGINE SERVICE	N/A ONT. INTL. AIRPORT		CA CPS-SLIC
ONTARIO	S114629501	GTE ONTARIO	207 D ST		CA RGA LUST
ONTARIO	S114629502	GTE ONTARIO	207 D STREET, WEST		CA RGA LUST
RANCHO CUCAMONGA	S126976690	GENUINE PARTS COMPANY DBA NAPA AUT	9359 FOOTHILL BLVD, SUITE A	91730	CA CERS HAZ WASTE
RANCHO CUCAMONGA	S126286583	RRR & H INC	9359 FOOTHILL BLVD A-1	91730	CA DRYCLEANERS
RANCHO CUCAMONGA	S121694037	BONDED CLEANERS, JOSEPH MONTES	9359 FOOTHILL A BLVD	91730	CA DRYCLEANERS
RANCHO CUCAMONGA	S121696509	BONDED CLEANERS	9359 FOOTHILL BLVD A-1	91730	CA DRYCLEANERS
RANCHO CUCAMONGA	S121695007	BONDED CLEANERS, HOURT SENG DBA	9359 FOOTHILL BLVD A-1	91730	CA DRYCLEANERS
SAN BERNARDINO COUNT	S107538165		CORNER OF HWY 247 & 18 AND 76		CA CDL

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 09/19/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 16

Source: EPA
Telephone: N/A
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 09/19/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 16

Source: EPA
Telephone: N/A
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Lists of Federal Delisted NPL sites

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 09/19/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 16

Source: EPA
Telephone: N/A
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: Quarterly

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 06/23/2023
Date Data Arrived at EDR: 06/23/2023
Date Made Active in Reports: 09/20/2023
Number of Days to Update: 89

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 09/26/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 09/19/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 16

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/22/2024
Data Release Frequency: Quarterly

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 09/19/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 16

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/22/2024
Data Release Frequency: Quarterly

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 07/24/2023
Date Data Arrived at EDR: 07/31/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 14

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

Lists of Federal RCRA TSD facilities

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 07/24/2023
Date Data Arrived at EDR: 07/31/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 14

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

Lists of Federal RCRA generators

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 07/24/2023
Date Data Arrived at EDR: 07/31/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 14

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 07/24/2023
Date Data Arrived at EDR: 07/31/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 14

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 07/24/2023
Date Data Arrived at EDR: 07/31/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 14

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 08/03/2023
Date Data Arrived at EDR: 08/07/2023
Date Made Active in Reports: 10/10/2023
Number of Days to Update: 64

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 08/02/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 05/22/2023
Date Data Arrived at EDR: 05/23/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 62

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/21/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 05/22/2023
Date Data Arrived at EDR: 05/23/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 62

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/21/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 06/12/2023
Date Data Arrived at EDR: 06/20/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 55

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

Lists of state- and tribal (Superfund) equivalent sites

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 07/24/2023
Date Data Arrived at EDR: 07/25/2023
Date Made Active in Reports: 10/11/2023
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/24/2023
Next Scheduled EDR Contact: 02/05/2024
Data Release Frequency: Quarterly

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 07/24/2023
Date Data Arrived at EDR: 07/25/2023
Date Made Active in Reports: 10/11/2023
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/24/2023
Next Scheduled EDR Contact: 02/05/2024
Data Release Frequency: Quarterly

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 08/07/2023
Date Data Arrived at EDR: 08/08/2023
Date Made Active in Reports: 10/26/2023
Number of Days to Update: 79

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 08/08/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: Quarterly

Lists of state and tribal leaking storage tanks

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks
California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)
Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Quarterly

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 1: Active Toxic Site Investigation
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 10/11/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/14/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 10/11/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/11/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/19/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 10/11/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 10/11/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 10/11/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/11/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/19/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 10/11/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)

Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

Lists of state and tribal registered storage tanks

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 03/08/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 05/30/2023
Number of Days to Update: 82

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 10/10/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Semi-Annually

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases
UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 05/31/2023
Date Data Arrived at EDR: 06/02/2023
Date Made Active in Reports: 08/23/2023
Number of Days to Update: 82

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)
Military ust sites

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 09/07/2023
Next Scheduled EDR Contact: 12/25/2023
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 10/11/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/11/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 10/11/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/19/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 10/11/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 10/11/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/14/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 10/11/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/11/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 10/11/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

Lists of state and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 07/08/2021
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 09/12/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 07/24/2023
Date Data Arrived at EDR: 07/25/2023
Date Made Active in Reports: 10/11/2023
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/24/2023
Next Scheduled EDR Contact: 02/05/2024
Data Release Frequency: Quarterly

Lists of state and tribal brownfield sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 06/14/2023
Date Data Arrived at EDR: 06/14/2023
Date Made Active in Reports: 09/06/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 04/06/2023
Date Data Arrived at EDR: 04/13/2023
Date Made Active in Reports: 04/19/2023
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 08/30/2023
Next Scheduled EDR Contact: 12/25/2023
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 10/20/2023
Next Scheduled EDR Contact: 02/05/2024
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 06/02/2023
Date Data Arrived at EDR: 06/02/2023
Date Made Active in Reports: 08/23/2023
Number of Days to Update: 82

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 11/16/2022
Date Data Arrived at EDR: 11/22/2022
Date Made Active in Reports: 02/13/2023
Number of Days to Update: 83

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 08/29/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 10/23/2023
Next Scheduled EDR Contact: 02/05/2024
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 10/10/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176
Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 07/27/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 05/22/2023
Date Data Arrived at EDR: 05/23/2023
Date Made Active in Reports: 07/10/2023
Number of Days to Update: 48
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/21/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21
Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program
This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 07/24/2023
Date Data Arrived at EDR: 07/25/2023
Date Made Active in Reports: 10/11/2023
Number of Days to Update: 78
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/24/2023
Next Scheduled EDR Contact: 02/05/2024
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs
A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2022
Date Made Active in Reports: 02/09/2023
Number of Days to Update: 71
Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 10/25/2023
Next Scheduled EDR Contact: 02/12/2024
Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites
Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27
Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

CERS HAZ WASTE: California Environmental Reporting System Hazardous Waste
List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 07/17/2023
Date Data Arrived at EDR: 07/18/2023
Date Made Active in Reports: 10/06/2023
Number of Days to Update: 80
Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 10/17/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 05/22/2023
Date Data Arrived at EDR: 05/23/2023
Date Made Active in Reports: 07/10/2023
Number of Days to Update: 48
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/21/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing
Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35
Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HIST UST: Hazardous Substance Storage Container Database
The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18
Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing
Aboveground storage tank sites

Date of Government Version: 08/04/2023
Date Data Arrived at EDR: 08/08/2023
Date Made Active in Reports: 10/25/2023
Number of Days to Update: 78
Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 10/25/2023
Next Scheduled EDR Contact: 02/12/2024
Data Release Frequency: Varies

CERS TANKS: California Environmental Reporting System (CERS) Tanks
List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 07/17/2023
Date Data Arrived at EDR: 07/18/2023
Date Made Active in Reports: 10/06/2023
Number of Days to Update: 80

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 10/17/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Quarterly

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 06/06/2023
Date Data Arrived at EDR: 06/07/2023
Date Made Active in Reports: 08/25/2023
Number of Days to Update: 79

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/22/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 09/19/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 16

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 05/25/2023
Date Data Arrived at EDR: 05/25/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 81

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 08/29/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/19/2023
Date Data Arrived at EDR: 06/23/2023
Date Made Active in Reports: 09/20/2023
Number of Days to Update: 89

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System
California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 06/01/2023
Date Data Arrived at EDR: 07/18/2023
Date Made Active in Reports: 10/05/2023
Number of Days to Update: 79

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 10/20/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)
Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/25/2023
Number of Days to Update: 81

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)
Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/25/2023
Number of Days to Update: 81

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch
Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 07/24/2023
Date Data Arrived at EDR: 07/31/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 14

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 08/07/2023
Date Data Arrived at EDR: 08/15/2023
Date Made Active in Reports: 10/10/2023
Number of Days to Update: 56

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 06/07/2021
Date Data Arrived at EDR: 07/13/2021
Date Made Active in Reports: 03/09/2022
Number of Days to Update: 239

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 10/09/2023
Next Scheduled EDR Contact: 01/22/2024
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 10/04/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 07/30/2021
Date Data Arrived at EDR: 02/03/2023
Date Made Active in Reports: 02/10/2023
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 08/01/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 06/19/2023
Date Data Arrived at EDR: 06/20/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 55

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 07/31/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 08/03/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 06/14/2022
Date Made Active in Reports: 03/24/2023
Number of Days to Update: 283

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/15/2023
Next Scheduled EDR Contact: 12/25/2023
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 02/16/2023
Date Made Active in Reports: 05/02/2023
Number of Days to Update: 75

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 08/18/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 07/17/2023
Date Data Arrived at EDR: 07/18/2023
Date Made Active in Reports: 10/10/2023
Number of Days to Update: 84

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 10/20/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 09/19/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 16

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 05/09/2023
Date Data Arrived at EDR: 06/29/2023
Date Made Active in Reports: 09/25/2023
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 09/26/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 09/19/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 16

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 03/20/2023
Date Data Arrived at EDR: 04/04/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 66

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 10/06/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 09/27/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 07/20/2023
Date Data Arrived at EDR: 09/01/2023
Date Made Active in Reports: 09/20/2023
Number of Days to Update: 19

Source: Nuclear Regulatory Commission
Telephone: 301-415-0717
Last EDR Contact: 10/10/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 04/14/2023
Date Made Active in Reports: 07/10/2023
Number of Days to Update: 87

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 09/01/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 08/28/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 08/03/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 09/22/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data
Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80
Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 10/04/2023
Next Scheduled EDR Contact: 02/05/2024
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2023
Date Data Arrived at EDR: 07/19/2023
Date Made Active in Reports: 10/10/2023
Number of Days to Update: 83
Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11
Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546
Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 10/02/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 03/03/2023
Date Data Arrived at EDR: 03/03/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 98
Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 10/25/2023
Next Scheduled EDR Contact: 02/12/2024
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74
Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 08/10/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 09/19/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 16
Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 07/05/2023
Date Data Arrived at EDR: 07/05/2023
Date Made Active in Reports: 09/25/2023
Number of Days to Update: 82

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 10/04/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: Quarterly

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 05/01/2023
Date Data Arrived at EDR: 05/24/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 61

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 08/22/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 01/07/2022
Date Data Arrived at EDR: 02/24/2023
Date Made Active in Reports: 05/17/2023
Number of Days to Update: 82

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 08/24/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 08/24/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System

Mineral Resources Data System

Date of Government Version: 08/23/2022
Date Data Arrived at EDR: 11/22/2022
Date Made Active in Reports: 02/28/2023
Number of Days to Update: 98

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 08/24/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 06/13/2023
Date Data Arrived at EDR: 06/14/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 61

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 09/12/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 05/04/2023
Date Data Arrived at EDR: 05/25/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 60

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 09/28/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 06/24/2023
Date Data Arrived at EDR: 06/29/2023
Date Made Active in Reports: 09/25/2023
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/06/2021
Date Data Arrived at EDR: 05/21/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Varies

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 11/09/2021
Date Data Arrived at EDR: 10/20/2022
Date Made Active in Reports: 01/10/2023
Number of Days to Update: 82

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 09/13/2023
Next Scheduled EDR Contact: 01/22/2024
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 08/14/2023
Date Data Arrived at EDR: 08/15/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 65

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Quarterly

PFAS NPL: Superfund Sites with PFAS Detections Information

EPA's Office of Land and Emergency Management and EPA Regional Offices maintain data describing what is known about site investigations, contamination, and remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) where PFAS is present in the environment.

Date of Government Version: 07/05/2023
Date Data Arrived at EDR: 07/05/2023
Date Made Active in Reports: 10/02/2023
Number of Days to Update: 89

Source: Environmental Protection Agency
Telephone: 703-603-8895
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Varies

PFAS FEDERAL SITES: Federal Sites PFAS Information

Several federal entities, such as the federal Superfund program, Department of Defense, National Aeronautics and Space Administration, Department of Transportation, and Department of Energy provided information for sites with known or suspected detections at federal facilities.

Date of Government Version: 07/05/2023
Date Data Arrived at EDR: 07/05/2023
Date Made Active in Reports: 10/02/2023
Number of Days to Update: 89

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Varies

PFAS TRIS: List of PFAS Added to the TRI

Section 7321 of the National Defense Authorization Act for Fiscal Year 2020 (NDAA) immediately added certain per- and polyfluoroalkyl substances (PFAS) to the list of chemicals covered by the Toxics Release Inventory (TRI) under Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) and provided a framework for additional PFAS to be added to TRI on an annual basis.

Date of Government Version: 07/05/2023
Date Data Arrived at EDR: 07/05/2023
Date Made Active in Reports: 10/02/2023
Number of Days to Update: 89

Source: Environmental Protection Agency
Telephone: 202-566-0250
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Varies

PFAS TSCA: PFAS Manufacture and Imports Information

EPA issued the Chemical Data Reporting (CDR) Rule under the Toxic Substances Control Act (TSCA) and requires chemical manufacturers and facilities that manufacture or import chemical substances to report data to EPA. EPA publishes non-confidential business information (non-CBI) and includes descriptive information about each site, corporate parent, production volume, other manufacturing information, and processing and use information.

Date of Government Version: 07/05/2023
Date Data Arrived at EDR: 07/05/2023
Date Made Active in Reports: 10/02/2023
Number of Days to Update: 89

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Varies

PFAS RCRA MANIFEST: PFAS Transfers Identified In the RCRA Database Listing

To work around the lack of PFAS waste codes in the RCRA database, EPA developed the PFAS Transfers dataset by mining e-Manifest records containing at least one of these common PFAS keywords: PFAS, PFOA, PFOS, PERFL, AFFF, GENX, GEN-X (plus the VT waste codes). These keywords were searched for in the following text fields: Manifest handling instructions (MANIFEST_HANDLING_INSTR), Non-hazardous waste description (NON_HAZ_WASTE_DESCRIPTION), DOT printed information (DOT_PRINTED_INFORMATION), Waste line handling instructions (WASTE_LINE_HANDLING_INSTR), Waste residue comments (WASTE_RESIDUE_COMMENTS).

Date of Government Version: 07/05/2023
Date Data Arrived at EDR: 07/05/2023
Date Made Active in Reports: 10/02/2023
Number of Days to Update: 89

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Varies

PFAS ATSDR: PFAS Contamination Site Location Listing

PFAS contamination site locations from the Department of Health & Human Services, Center for Disease Control & Prevention. ATSDR is involved at a number of PFAS-related sites, either directly or through assisting state and federal partners. As of now, most sites are related to drinking water contamination connected with PFAS production facilities or fire training areas where aqueous film-forming firefighting foam (AFFF) was regularly used.

Date of Government Version: 06/24/2020
Date Data Arrived at EDR: 03/17/2021
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 601

Source: Department of Health & Human Services
Telephone: 202-741-5770
Last EDR Contact: 10/23/2023
Next Scheduled EDR Contact: 02/05/2024
Data Release Frequency: Varies

PFAS WQP: Ambient Environmental Sampling for PFAS

The Water Quality Portal (WQP) is a part of a modernized repository storing ambient sampling data for all environmental media and tissue samples. A wide range of federal, state, tribal and local governments, academic and non-governmental organizations and individuals submit project details and sampling results to this public repository. The information is commonly used for research and assessments of environmental quality.

Date of Government Version: 09/23/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 10/10/2023
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Varies

PFAS NPDES: Clean Water Act Discharge Monitoring Information

Any discharger of pollutants to waters of the United States from a point source must have a National Pollutant Discharge Elimination System (NPDES) permit. The process for obtaining limits involves the regulated entity (permittee) disclosing releases in a NPDES permit application and the permitting authority (typically the state but sometimes EPA) deciding whether to require monitoring or monitoring with limits. Caveats and Limitations: Less than half of states have required PFAS monitoring for at least one of their permittees and fewer states have established PFAS effluent limits for permittees. New rulemakings have been initiated that may increase the number of facilities monitoring for PFAS in the future.

Date of Government Version: 07/05/2023
Date Data Arrived at EDR: 07/05/2023
Date Made Active in Reports: 10/02/2023
Number of Days to Update: 89

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Varies

PFAS ECHO: Facilities in Industries that May Be Handling PFAS Listing

Regulators and the public have expressed interest in knowing which regulated entities may be using PFAS. EPA has developed a dataset from various sources that show which industries may be handling PFAS. Approximately 120,000 facilities subject to federal environmental programs have operated or currently operate in industry sectors with processes that may involve handling and/or release of PFAS.

Date of Government Version: 07/05/2023
Date Data Arrived at EDR: 07/05/2023
Date Made Active in Reports: 09/25/2023
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Varies

PFAS ECHO FIRE TRAINING: Facilities in Industries that May Be Handling PFAS Listing

A list of fire training sites was added to the Industry Sectors dataset using a keyword search on the permitted facilitys name to identify sites where fire-fighting foam may have been used in training exercises. Additionally, you may view an example spreadsheet of the subset of fire training facility data, as well as the keywords used in selecting or deselecting a facility for the subset. as well as the keywords used in selecting or deselecting a facility for the subset. These keywords were tested to maximize accuracy in selecting facilities that may use fire-fighting foam in training exercises, however, due to the lack of a required reporting field in the data systems for designating fire training sites, this methodology may not identify all fire training sites or may potentially misidentify them.

Date of Government Version: 07/05/2023
Date Data Arrived at EDR: 07/05/2023
Date Made Active in Reports: 09/25/2023
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Varies

PFAS PART 139 AIRPORT: All Certified Part 139 Airports PFAS Information Listing

Since July 1, 2006, all certified part 139 airports are required to have fire-fighting foam onsite that meet military specifications (MIL-F-24385) (14 CFR 139.317). To date, these military specification fire-fighting foams are fluorinated and have been historically used for training and extinguishing. The 2018 FAA Reauthorization Act has a provision stating that no later than October 2021, FAA shall not require the use of fluorinated AFFF. This provision does not prohibit the use of fluorinated AFFF at Part 139 civilian airports; it only prohibits FAA from mandating its use. The Federal Aviation Administration?s document AC 150/5210-6D - Aircraft Fire Extinguishing Agents provides guidance on Aircraft Fire Extinguishing Agents, which includes Aqueous Film Forming Foam (AFFF).

Date of Government Version: 07/05/2023
Date Data Arrived at EDR: 07/05/2023
Date Made Active in Reports: 09/25/2023
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Varies

AQUEOUS FOAM NRC: Aqueous Foam Related Incidents Listing

The National Response Center (NRC) serves as an emergency call center that fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. The spreadsheets posted to the NRC website contain initial incident data that has not been validated or investigated by a federal/state response agency. Response center calls from 1990 to the most recent complete calendar year where there was indication of Aqueous Film Forming Foam (AFFF) usage are included in this dataset. NRC calls may reference AFFF usage in the ?Material Involved? or ?Incident Description? fields.

Date of Government Version: 07/05/2023
Date Data Arrived at EDR: 07/06/2023
Date Made Active in Reports: 09/25/2023
Number of Days to Update: 81

Source: Environmental Protection Agency
Telephone: 202-267-2675
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Varies

PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 55

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 09/28/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: No Update Planned

PCS ENF: Enforcement data

No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 09/28/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Varies

BIOSOLIDS: ICIS-NPDES Biosolids Facility Data

The data reflects compliance information about facilities in the biosolids program.

Date of Government Version: 07/16/2023
Date Data Arrived at EDR: 07/18/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 41

Source: Environmental Protection Agency
Telephone: 202-564-4700
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 06/02/2023
Date Data Arrived at EDR: 06/02/2023
Date Made Active in Reports: 08/23/2023
Number of Days to Update: 82

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

AQUEOUS FOAM: Former Fire Training Facility Assessments Listing

Airports shown on this list are those believed to use Aqueous Film Forming Foam (AFFF), and certified by the Federal Aviation Administration (FAA) under Title 14, Code of Federal Regulations (CFR), Part 139 (14 CFR Part 139). This list was created by SWRCB using information available from the FAA. Location points shown are from the latitude and longitude listed on the FAA airport master record.

Date of Government Version: 06/02/2023
Date Data Arrived at EDR: 06/02/2023
Date Made Active in Reports: 08/23/2023
Number of Days to Update: 82

Source: State Water Resources Control Board
Telephone: 916-341-5455
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CHROME PLATING: Chrome Plating Facilities Listing

This listing represents chrome plating facilities the California State Water Resources Control Board staff identified as possibly being a source of Per- and polyfluoroalkyl substance (PFAS) contamination. Sites and locations were identified by staff with the Division of Water Quality in the California State Water Board. Data was collected from the CA Air Resources Board 2013 and 2018 - Cr VI emission survey, CA Emission Inventory, CA HAZ Waste discharge database and by reviewing storm water permits. Former chrome plating sites are also included that are open site investigation or remediation cases with the Regional Water Quality Control Boards and the Department of Toxic Substances Control.

Date of Government Version: 06/08/2023
Date Data Arrived at EDR: 06/08/2023
Date Made Active in Reports: 09/26/2023
Number of Days to Update: 110

Source: State Water Resources Control Board
Telephone: 916-341-5455
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 06/14/2023
Date Data Arrived at EDR: 06/14/2023
Date Made Active in Reports: 09/06/2023
Number of Days to Update: 84

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing

list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 03/31/2023
Date Data Arrived at EDR: 05/08/2023
Date Made Active in Reports: 07/31/2023
Number of Days to Update: 84

Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 08/10/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: Varies

DRYCLEAN SAN LUIS OB CO DIST: San Luis Obispo County Air Pollution Control District Drycleaner Facility Listing

A listing of drycleaner facility locations, for the San Luis Obispo County Air Pollution Control District.

Date of Government Version: 07/26/2023
Date Data Arrived at EDR: 07/27/2023
Date Made Active in Reports: 10/13/2023
Number of Days to Update: 78

Source: San Luis Obispo County Air Pollution Control District
Telephone: 805-781-5756
Last EDR Contact: 07/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SAN DIEGO CO DIST: San Diego County Air Pollution Control District Drycleaner Facility Listing

A listing of drycleaner facility locations, for the San Diego County Air Pollution Control District.

Date of Government Version: 08/08/2023
Date Data Arrived at EDR: 08/09/2023
Date Made Active in Reports: 10/26/2023
Number of Days to Update: 78

Source: San Diego County Air Pollution Control District
Telephone: 858-586-2616
Last EDR Contact: 08/08/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN FEATHER RIVER DIST: Feather River Air Quality Management District Drycleaner Facility Listing

A listing of drycleaner facility locations, for the Feather River Air Quality Management District.

Date of Government Version: 03/08/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 06/05/2023
Number of Days to Update: 88

Source: Feather River Air Quality Management District
Telephone: 530-634-7659
Last EDR Contact: 06/08/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SACRAMENTO METO DIST: Sacramento Metropolitan Air Quality Management DistrictDrycleaner Facility Listing
A listing of drycleaner facility locations, for the Sacramento Metropolitan Air Quality Management District.

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 04/28/2023
Date Made Active in Reports: 07/19/2023
Number of Days to Update: 82
Source: Sacramento Metropolitan Air Quality Management District
Telephone: 916-874-3958
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SAN JOAQ VAL DIST: San Joaquin Valley Air Pollution Control District District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the San Joaquin Valley Air Pollution Control District.

Date of Government Version: 05/24/2023
Date Data Arrived at EDR: 05/30/2023
Date Made Active in Reports: 08/21/2023
Number of Days to Update: 83
Source: San Joaquin Valley Air Pollution Control District
Telephone: 559-230-6001
Last EDR Contact: 05/11/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 08/27/2021
Date Data Arrived at EDR: 09/01/2021
Date Made Active in Reports: 11/19/2021
Number of Days to Update: 79
Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 08/22/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Annually

DRYCLEAN GLENN CO DIST: Glenn County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Glenn County Air Pollution Control District.

Date of Government Version: 05/02/2023
Date Data Arrived at EDR: 05/03/2023
Date Made Active in Reports: 07/25/2023
Number of Days to Update: 83
Source: Glenn County Air Pollution Control District
Telephone: 530-934-6500
Last EDR Contact: 05/03/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN EAST KERN DIST: Eastern Kern Air Pollution Control District District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Eastern Kern Air Pollution Control District.

Date of Government Version: 01/12/2023
Date Data Arrived at EDR: 04/26/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 79
Source: Eastern Kern Air Pollution Control District
Telephone: 661-862-9684
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN IMPERIAL CO DIST: Imperial County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Imperial County Air Pollution Control District

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 04/26/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 79
Source: Imperial County Air Pollution Control District
Telephone: 442-265-1800
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN MENDO CO DIST: Mendocino County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Mendocino County Air Quality Management District.

Date of Government Version: 04/27/2023
Date Data Arrived at EDR: 04/28/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 77

Source: Mendocino County Air Quality Management District
Telephone: 707-463-4354
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN MOJAVE DESERT DIST: Mojave Desert Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Mojave Desert Air Quality Management District.

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 78

Source: Mojave Desert Air Quality Management District
Telephone: 760-245-1661
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN MONTEREY BAY DIST: Monterey Bay Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Monterey Bay Air Quality Management District.

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 04/26/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 79

Source: Monterey Bay Air Quality Management District
Telephone: 831-647-9411
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SHASTA CO DIST: Shasta County Air Quality Management District District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Shasta County Air Quality Management District.

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 78

Source: Shasta County Air Quality Management District
Telephone: 530-225-5674
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN YOLO-SOLANO DIST: Yolo-Solano Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Yolo-Solano Air Quality Management District.

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 78

Source: Yolo-Solano Air Quality Management District
Telephone: 530-757-3650
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 05/22/2023
Date Data Arrived at EDR: 05/24/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 82

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 08/22/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Varies

DRYCLEAN PLACER CO DIST: Placer County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Placer County Air Quality Management District.

Date of Government Version: 05/15/2023
Date Data Arrived at EDR: 05/17/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 89

Source: Placer County Air Quality Management District
Telephone: 530-745-2335
Last EDR Contact: 05/11/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN BAY AREA DIST: Bay Area Air Quality Management District Drycleaner Facility Listing
Bay Area Air Quality Management District Drycleaner Facility Listing.

Date of Government Version: 02/20/2019
Date Data Arrived at EDR: 05/30/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1432
Source: Bay Area Air Quality Management District
Telephone: 415-516-1916
Last EDR Contact: 07/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN BUTTE CO DIST: Butte County Air Quality Management DistrictDrycleaner Facility Listing
Butte County Air Quality Management DistrictDrycleaner Facility Listing.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1469
Source: Butte County Air Quality Management District
Telephone: 530-332-9400
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN CALAVERAS CO DIST: Calaveras County Environmental Management Agency Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Calaveras County Environmental Management Agency.

Date of Government Version: 06/17/2019
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1412
Source: Calaveras County Environmental Management Agency
Telephone: 209-754-6399
Last EDR Contact: 04/24/2023
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Varies

DRYCLEAN GRANT: Grant Recipients List
Assembly Bill 998 (AB 998) established the Non-Toxic Dry Cleaning Incentive Program to provide financial assistance to the dry cleaning industry to switch from systems using perchloroethylene (Perc), an identified toxic air contaminant and potential human carcinogen, to non-toxic and non-smog forming alternatives.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 02/04/2021
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 816
Source: California Air Resources Board
Telephone: 916-323-0006
Last EDR Contact: 07/24/2023
Next Scheduled EDR Contact: 11/06/2023
Data Release Frequency: Varies

DRYCLEAN LAKE CO DIST: Lake County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Lake County Air Quality Management District,

Date of Government Version: 04/29/2019
Date Data Arrived at EDR: 05/07/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1455
Source: Lake County Air Quality Management District
Telephone: 707-263-7000
Last EDR Contact: 05/11/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN NO COAST UNIFIED DIST: North Coast Unified Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the North Coast Unified Air Quality Management District.

Date of Government Version: 11/30/2016
Date Data Arrived at EDR: 04/19/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1473
Source: North Coast Unified Air Quality Management District
Telephone: 707-443-3093
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN NO SIERRA DIST: Northern Sierra Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Northern Sierra Air Quality Management District,

Date of Government Version: 05/07/2019
Date Data Arrived at EDR: 05/07/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1455
Source: Northern Sierra Air Quality Management District
Telephone: 530-274-9350
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN NO SONOMA CO DIST: Norther Sonoma County County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Northern Sonoma County Air Pollution Control District.,

Date of Government Version: 04/17/2019
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1475
Source: Santa Barbara County Air Pollution Control District
Telephone: 707-433-5911
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SANTA BARB CO DIST: Santa Barbara County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Santa Barbara County Air Pollution Control District.

Date of Government Version: 02/19/2019
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1475
Source: Santa Barbara County Air Pollution Control District
Telephone: 805-961-8867
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN TEHAMA CO DIST: Tehama County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Tehama County Air Pollution Control District.

Date of Government Version: 04/24/2019
Date Data Arrived at EDR: 04/24/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1468
Source: Tehama County Air Pollution Control District
Telephone: 530-527-3717
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN VENTURA CO DIST: Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Ventura County Air Pollution Control District.

Date of Government Version: 04/16/2019
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1475
Source: Ventura County Air Pollution Control District
Telephone: 805-645-1421
Last EDR Contact: 10/11/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 05/17/2023
Date Data Arrived at EDR: 05/18/2023
Date Made Active in Reports: 08/09/2023
Number of Days to Update: 83
Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Varies

DRYCLEAN AMADOR: Amador Air District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Amador Air Quality Management District

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 77
Source: Amador Air Quality Management District
Telephone: 209-257-0112
Last EDR Contact: 04/24/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 06/09/2023
Date Made Active in Reports: 08/30/2023
Number of Days to Update: 82
Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 09/15/2023
Next Scheduled EDR Contact: 12/25/2023
Data Release Frequency: Varies

ENF: Enforcement Action Listing
A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 07/17/2023
Date Data Arrived at EDR: 07/18/2023
Date Made Active in Reports: 10/05/2023
Number of Days to Update: 79
Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 10/17/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 09/13/2023
Date Data Arrived at EDR: 09/14/2023
Date Made Active in Reports: 09/21/2023
Number of Days to Update: 7
Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 09/13/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing
A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 05/04/2023
Date Data Arrived at EDR: 05/25/2023
Date Made Active in Reports: 08/16/2023
Number of Days to Update: 83
Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: Varies

ICE: Inspection, Compliance and Enforcement
Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 05/15/2023
Date Data Arrived at EDR: 05/16/2023
Date Made Active in Reports: 08/09/2023
Number of Days to Update: 85
Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 08/14/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List
The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing
Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 05/15/2023
Date Data Arrived at EDR: 05/16/2023
Date Made Active in Reports: 08/09/2023
Number of Days to Update: 85
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/14/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 06/29/2023
Date Data Arrived at EDR: 06/29/2023
Date Made Active in Reports: 09/19/2023
Number of Days to Update: 82

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 10/04/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Quarterly

HWTS: Hazardous Waste Tracking System

DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 08/04/2023
Date Data Arrived at EDR: 08/09/2023
Date Made Active in Reports: 10/26/2023
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-324-2444
Last EDR Contact: 09/27/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 07/05/2022
Date Made Active in Reports: 09/19/2022
Number of Days to Update: 76

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 07/05/2022
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Annually

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 06/02/2023
Date Data Arrived at EDR: 06/02/2023
Date Made Active in Reports: 08/23/2023
Number of Days to Update: 82

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 05/08/2023
Date Data Arrived at EDR: 05/25/2023
Date Made Active in Reports: 08/16/2023
Number of Days to Update: 83

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 08/29/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 08/07/2023
Date Data Arrived at EDR: 08/08/2023
Date Made Active in Reports: 10/26/2023
Number of Days to Update: 79

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 08/08/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 05/25/2023
Date Data Arrived at EDR: 05/25/2023
Date Made Active in Reports: 08/16/2023
Number of Days to Update: 83

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 08/29/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Quarterly

PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 06/02/2023
Date Data Arrived at EDR: 06/02/2023
Date Made Active in Reports: 08/23/2023
Number of Days to Update: 82

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 06/06/2023
Date Data Arrived at EDR: 06/07/2023
Date Made Active in Reports: 08/25/2023
Number of Days to Update: 79

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 09/07/2023
Next Scheduled EDR Contact: 12/25/2023
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/03/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 01/26/2021
Number of Days to Update: 82

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 10/25/2023
Next Scheduled EDR Contact: 02/12/2024
Data Release Frequency: Annually

SANTA CRUZ CO SITE MITI: Site Mitigation Listing

Sites may become contaminated with toxic chemicals through illegal dumping or disposal, from leaking underground storage tanks, or through industrial or commercial activities.The goal of the site mitigation program is to protect the public health and the environment while facilitating completion of contaminated site clean-up projects in a timely manner.

Date of Government Version: 12/03/2018
Date Data Arrived at EDR: 06/23/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 20

Source: Santa Cruz Environmental Health Services
Telephone: 831-454-2761
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 06/02/2023
Date Data Arrived at EDR: 06/02/2023
Date Made Active in Reports: 08/23/2023
Number of Days to Update: 82

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84
Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 07/01/2021
Date Made Active in Reports: 09/29/2021
Number of Days to Update: 90
Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 10/06/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9
Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13
Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 09/12/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)
Projects sites

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing
In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 06/02/2023
Date Data Arrived at EDR: 06/02/2023
Date Made Active in Reports: 08/23/2023
Number of Days to Update: 82

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 05/25/2023
Date Data Arrived at EDR: 05/25/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 81

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 08/29/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 07/17/2023
Date Data Arrived at EDR: 07/18/2023
Date Made Active in Reports: 10/06/2023
Number of Days to Update: 80

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 10/17/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)

Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 09/27/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 06/27/2023
Date Data Arrived at EDR: 06/28/2023
Date Made Active in Reports: 09/14/2023
Number of Days to Update: 78

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 09/27/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List
Cupa Facility List

Date of Government Version: 04/27/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 77

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 10/25/2023
Next Scheduled EDR Contact: 02/12/2024
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing
Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 09/27/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 06/27/2023
Date Data Arrived at EDR: 06/28/2023
Date Made Active in Reports: 09/14/2023
Number of Days to Update: 78

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 09/12/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/06/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 78

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 10/25/2023
Next Scheduled EDR Contact: 02/12/2024
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 07/05/2023
Date Data Arrived at EDR: 07/20/2023
Date Made Active in Reports: 10/05/2023
Number of Days to Update: 77

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 10/20/2023
Next Scheduled EDR Contact: 02/05/2024
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 08/02/2023
Date Data Arrived at EDR: 08/03/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 77

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 10/20/2023
Next Scheduled EDR Contact: 02/05/2024
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/08/2022
Date Data Arrived at EDR: 08/09/2022
Date Made Active in Reports: 09/01/2022
Number of Days to Update: 23

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 10/20/2023
Next Scheduled EDR Contact: 02/05/2024
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 06/28/2021
Date Data Arrived at EDR: 12/21/2021
Date Made Active in Reports: 03/03/2022
Number of Days to Update: 72

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 09/28/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 10/10/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/12/2021
Date Data Arrived at EDR: 08/12/2021
Date Made Active in Reports: 11/08/2021
Number of Days to Update: 88

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 07/11/2023
Date Data Arrived at EDR: 07/12/2023
Date Made Active in Reports: 09/26/2023
Number of Days to Update: 76

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 10/10/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

KERN COUNTY:

CUPA KERN: CUPA Facility List
A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 07/26/2023
Date Data Arrived at EDR: 07/27/2023
Date Made Active in Reports: 08/09/2023
Number of Days to Update: 13

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 10/25/2023
Next Scheduled EDR Contact: 02/12/2024
Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 07/26/2023
Date Data Arrived at EDR: 07/27/2023
Date Made Active in Reports: 08/03/2023
Number of Days to Update: 7

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 10/25/2023
Next Scheduled EDR Contact: 02/12/2024
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 12/03/2020
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/14/2021
Number of Days to Update: 78

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 05/31/2023
Number of Days to Update: 34

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 10/04/2023
Next Scheduled EDR Contact: 01/22/2024
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List
Cupa facility list

Date of Government Version: 07/31/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 80

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 10/10/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 09/07/2023
Next Scheduled EDR Contact: 12/25/2023
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 06/21/2023
Date Data Arrived at EDR: 06/28/2023
Date Made Active in Reports: 09/14/2023
Number of Days to Update: 78

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 09/27/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 07/10/2023
Date Data Arrived at EDR: 07/10/2023
Date Made Active in Reports: 09/27/2023
Number of Days to Update: 79

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 10/09/2023
Next Scheduled EDR Contact: 01/22/2024
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 12/31/2022
Date Data Arrived at EDR: 01/12/2023
Date Made Active in Reports: 03/29/2023
Number of Days to Update: 76

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 10/04/2023
Next Scheduled EDR Contact: 01/22/2024
Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory
A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/19/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills
This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 04/13/2023
Date Data Arrived at EDR: 07/13/2023
Date Made Active in Reports: 09/27/2023
Number of Days to Update: 76

Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 10/04/2023
Next Scheduled EDR Contact: 01/22/2024
Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory
A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 06/20/2023
Date Data Arrived at EDR: 06/22/2023
Date Made Active in Reports: 08/09/2023
Number of Days to Update: 48

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory
A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 06/20/2023
Date Data Arrived at EDR: 06/22/2023
Date Made Active in Reports: 09/12/2023
Number of Days to Update: 82

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 03/02/2023
Date Data Arrived at EDR: 04/18/2023
Date Made Active in Reports: 07/07/2023
Number of Days to Update: 80

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 10/17/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 10/04/2023
Next Scheduled EDR Contact: 01/22/2024
Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 65

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 10/10/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 04/12/2023
Date Data Arrived at EDR: 05/02/2023
Date Made Active in Reports: 06/13/2023
Number of Days to Update: 42

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 10/10/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/10/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 72

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 09/21/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: Semi-Annually

MENDOCINO COUNTY:

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/22/2021
Date Data Arrived at EDR: 11/18/2021
Date Made Active in Reports: 11/22/2021
Number of Days to Update: 4

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 07/25/2023
Date Data Arrived at EDR: 08/03/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 77

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 07/25/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 10/04/2021
Date Data Arrived at EDR: 10/06/2021
Date Made Active in Reports: 12/29/2021
Number of Days to Update: 84

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 10/20/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 07/21/2023
Date Data Arrived at EDR: 07/25/2023
Date Made Active in Reports: 10/11/2023
Number of Days to Update: 78

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 10/20/2023
Next Scheduled EDR Contact: 02/05/2024
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 05/15/2023
Date Data Arrived at EDR: 07/31/2023
Date Made Active in Reports: 08/09/2023
Number of Days to Update: 9

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 07/31/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 05/15/2023
Date Data Arrived at EDR: 07/31/2023
Date Made Active in Reports: 08/09/2023
Number of Days to Update: 9

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 07/31/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 04/01/2023
Date Data Arrived at EDR: 05/18/2023
Date Made Active in Reports: 06/14/2023
Number of Days to Update: 27

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/03/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 08/26/2022
Date Data Arrived at EDR: 08/29/2022
Date Made Active in Reports: 11/15/2022
Number of Days to Update: 78

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 07/31/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 10/10/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 07/10/2023
Date Data Arrived at EDR: 07/11/2023
Date Made Active in Reports: 09/26/2023
Number of Days to Update: 77

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/07/2023
Next Scheduled EDR Contact: 12/25/2023
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 07/10/2023
Date Data Arrived at EDR: 07/11/2023
Date Made Active in Reports: 09/26/2023
Number of Days to Update: 77

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/07/2023
Next Scheduled EDR Contact: 12/25/2023
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 11/07/2022
Date Data Arrived at EDR: 12/21/2022
Date Made Active in Reports: 03/16/2023
Number of Days to Update: 85

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 09/25/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 11/07/2022
Date Data Arrived at EDR: 12/09/2022
Date Made Active in Reports: 03/01/2023
Number of Days to Update: 82

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 09/25/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List
Cupa facility list

Date of Government Version: 05/02/2023
Date Data Arrived at EDR: 05/04/2023
Date Made Active in Reports: 07/25/2023
Number of Days to Update: 82

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 10/18/2023
Next Scheduled EDR Contact: 02/12/2024
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 05/09/2023
Date Data Arrived at EDR: 05/10/2023
Date Made Active in Reports: 08/01/2023
Number of Days to Update: 83

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 10/26/2023
Next Scheduled EDR Contact: 02/12/2024
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 05/25/2023
Date Data Arrived at EDR: 05/25/2023
Date Made Active in Reports: 08/16/2023
Number of Days to Update: 83

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 08/29/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 04/04/2023
Date Data Arrived at EDR: 04/05/2023
Date Made Active in Reports: 06/27/2023
Number of Days to Update: 83

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 10/10/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 07/22/2021
Date Data Arrived at EDR: 10/19/2021
Date Made Active in Reports: 01/13/2022
Number of Days to Update: 86

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 10/10/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 08/22/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 08/04/2023
Date Data Arrived at EDR: 08/08/2023
Date Made Active in Reports: 10/26/2023
Number of Days to Update: 79

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 10/25/2023
Next Scheduled EDR Contact: 02/12/2024
Data Release Frequency: Varies

LUST SAN FRANCISCO: Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 10/25/2023
Next Scheduled EDR Contact: 02/12/2024
Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 08/04/2023
Date Data Arrived at EDR: 08/08/2023
Date Made Active in Reports: 10/25/2023
Number of Days to Update: 78

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 10/25/2023
Next Scheduled EDR Contact: 02/12/2024
Data Release Frequency: Quarterly

SAN FRANCISO COUNTY:

SAN FRANCISCO MAHER: Maher Ordinance Property Listing
a listing of properties that fall within a Maher Ordinance, for all of San Francisco

Date of Government Version: 07/17/2023
Date Data Arrived at EDR: 07/18/2023
Date Made Active in Reports: 10/05/2023
Number of Days to Update: 79

Source: San Francisco Planning
Telephone: 628-652-7483
Last EDR Contact: 10/17/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 09/07/2023
Next Scheduled EDR Contact: 12/25/2023
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 05/10/2023
Date Data Arrived at EDR: 05/11/2023
Date Made Active in Reports: 07/31/2023
Number of Days to Update: 81

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 09/08/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 08/29/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28
Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 05/10/2023
Date Data Arrived at EDR: 05/11/2023
Date Made Active in Reports: 07/31/2023
Number of Days to Update: 81
Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22
Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13
Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: No Update Planned

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 08/22/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 09/15/2021
Date Data Arrived at EDR: 09/16/2021
Date Made Active in Reports: 12/09/2021
Number of Days to Update: 84

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 08/22/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

Date of Government Version: 07/02/2021
Date Data Arrived at EDR: 07/06/2021
Date Made Active in Reports: 07/14/2021
Number of Days to Update: 8

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 09/12/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 06/30/2021
Date Data Arrived at EDR: 06/30/2021
Date Made Active in Reports: 09/24/2021
Number of Days to Update: 86

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 09/12/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List
Cupa facility list

Date of Government Version: 02/08/2022
Date Data Arrived at EDR: 02/10/2022
Date Made Active in Reports: 05/04/2022
Number of Days to Update: 83

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 10/04/2023
Next Scheduled EDR Contact: 01/22/2024
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 08/03/2023
Date Data Arrived at EDR: 08/24/2023
Date Made Active in Reports: 09/12/2023
Number of Days to Update: 19

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 08/22/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 08/01/2023
Date Data Arrived at EDR: 08/02/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 78

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 10/25/2023
Next Scheduled EDR Contact: 02/12/2024
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 07/11/2023
Date Data Arrived at EDR: 07/12/2023
Date Made Active in Reports: 09/26/2023
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 10/10/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 10/07/2022
Date Data Arrived at EDR: 10/07/2022
Date Made Active in Reports: 12/21/2022
Number of Days to Update: 75

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 10/25/2023
Next Scheduled EDR Contact: 02/12/2024
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 10/10/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 06/26/2023
Date Data Arrived at EDR: 07/20/2023
Date Made Active in Reports: 10/03/2023
Number of Days to Update: 75

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 10/16/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/21/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 08/02/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 06/26/2023
Date Data Arrived at EDR: 07/25/2023
Date Made Active in Reports: 10/13/2023
Number of Days to Update: 80

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 10/16/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 05/26/2023
Date Data Arrived at EDR: 06/02/2023
Date Made Active in Reports: 06/14/2023
Number of Days to Update: 12

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 04/03/2023
Date Data Arrived at EDR: 04/18/2023
Date Made Active in Reports: 06/13/2023
Number of Days to Update: 56

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 09/21/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 07/24/2023
Date Data Arrived at EDR: 07/26/2023
Date Made Active in Reports: 10/11/2023
Number of Days to Update: 77

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 10/20/2023
Next Scheduled EDR Contact: 02/05/2024
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 08/07/2023
Date Data Arrived at EDR: 08/08/2023
Date Made Active in Reports: 10/24/2023
Number of Days to Update: 77

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 08/08/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 09/28/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 10/29/2021
Date Made Active in Reports: 01/19/2022
Number of Days to Update: 82

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 07/27/2023
Next Scheduled EDR Contact: 11/06/2023
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 10/05/2023
Next Scheduled EDR Contact: 01/22/2024
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/18/2022
Number of Days to Update: 80

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 08/10/2022
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 08/30/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.
Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

ONTARIO HOTEL
SE CORNER E. HOLT BLVD. AND E. GUASTI RD.
ONTARIO, CA 91761

TARGET PROPERTY COORDINATES

Latitude (North):	34.064239 - 34° 3' 51.26''
Longitude (West):	117.602656 - 117° 36' 9.56''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	444386.3
UTM Y (Meters):	3769248.0
Elevation:	962 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	12015973 GUASTI, CA
Version Date:	2018

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

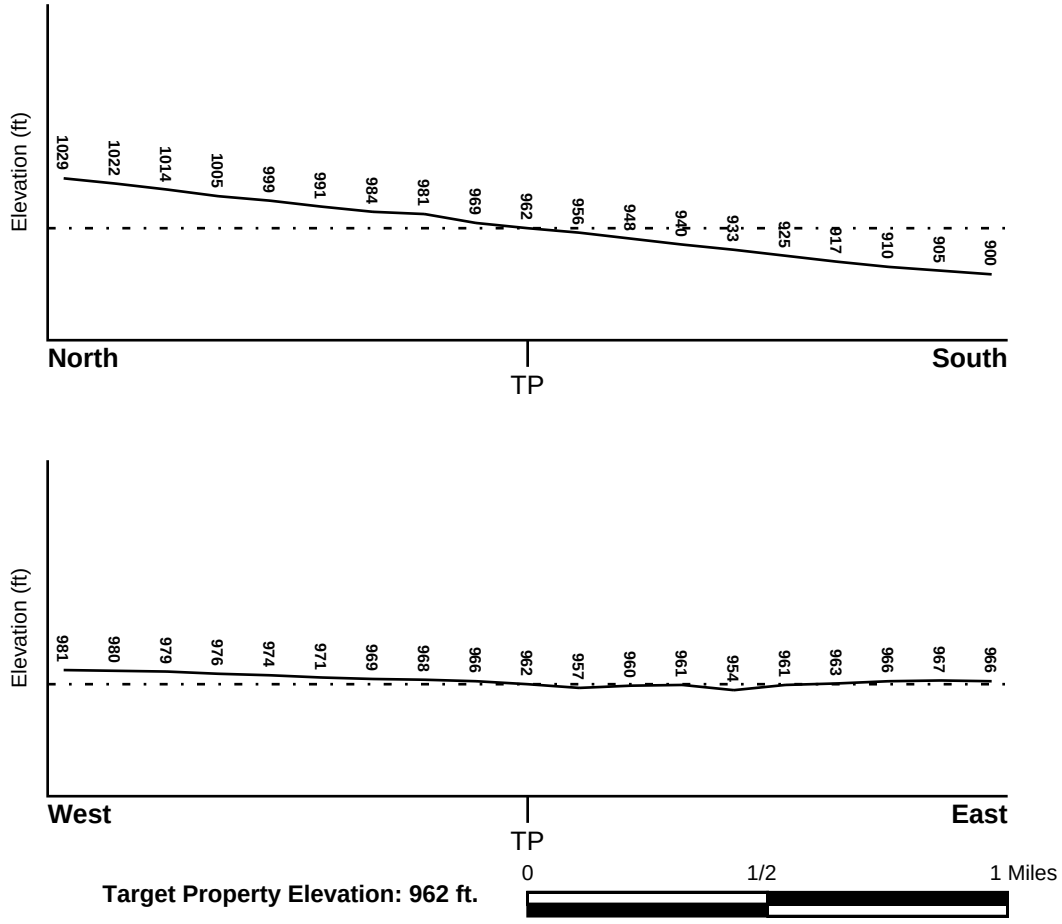
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SSE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Target Property Elevation: 962 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06071C8628J	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06071C8629H	FEMA FIRM Flood data
06071C8636J	FEMA FIRM Flood data
06071C8637H	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
GUASTI	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
6	1/4 - 1/2 Mile SSE	SW
1G	1/4 - 1/2 Mile SSE	SW

For additional site information, refer to Physical Setting Source Map Findings.

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

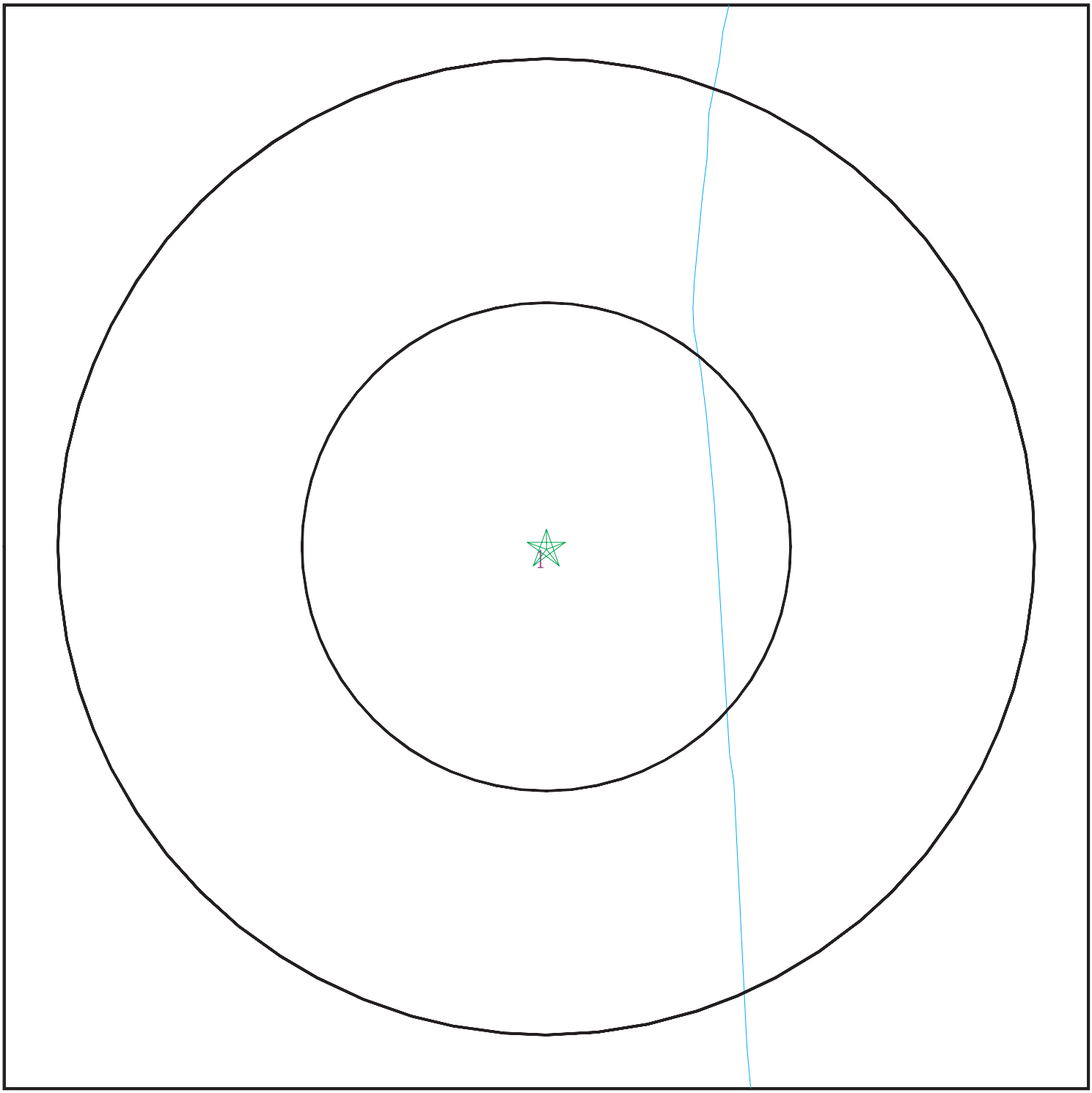
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 07482419.2r



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Ontario Hotel	CLIENT:	Petra Geotechnical Inc
ADDRESS:	SE Corner E. Holt Blvd. and E. Guasti Rd. Ontario CA 91761	CONTACT:	Ed Lump
LAT/LONG:	34.064239 / 117.602656	INQUIRY #:	07482419.2r
		DATE:	October 27, 2023 6:20 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: TUJUNGA

Soil Surface Texture: gravelly loamy sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	18 inches	gravelly loamy sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.8 Min: 6.1
2	18 inches	59 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.8 Min: 6.1

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
5	USGS40000140377	1/4 - 1/2 Mile WSW
C9	USGS40000140479	1/2 - 1 Mile ENE
E18	USGS40000140670	1/2 - 1 Mile North

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

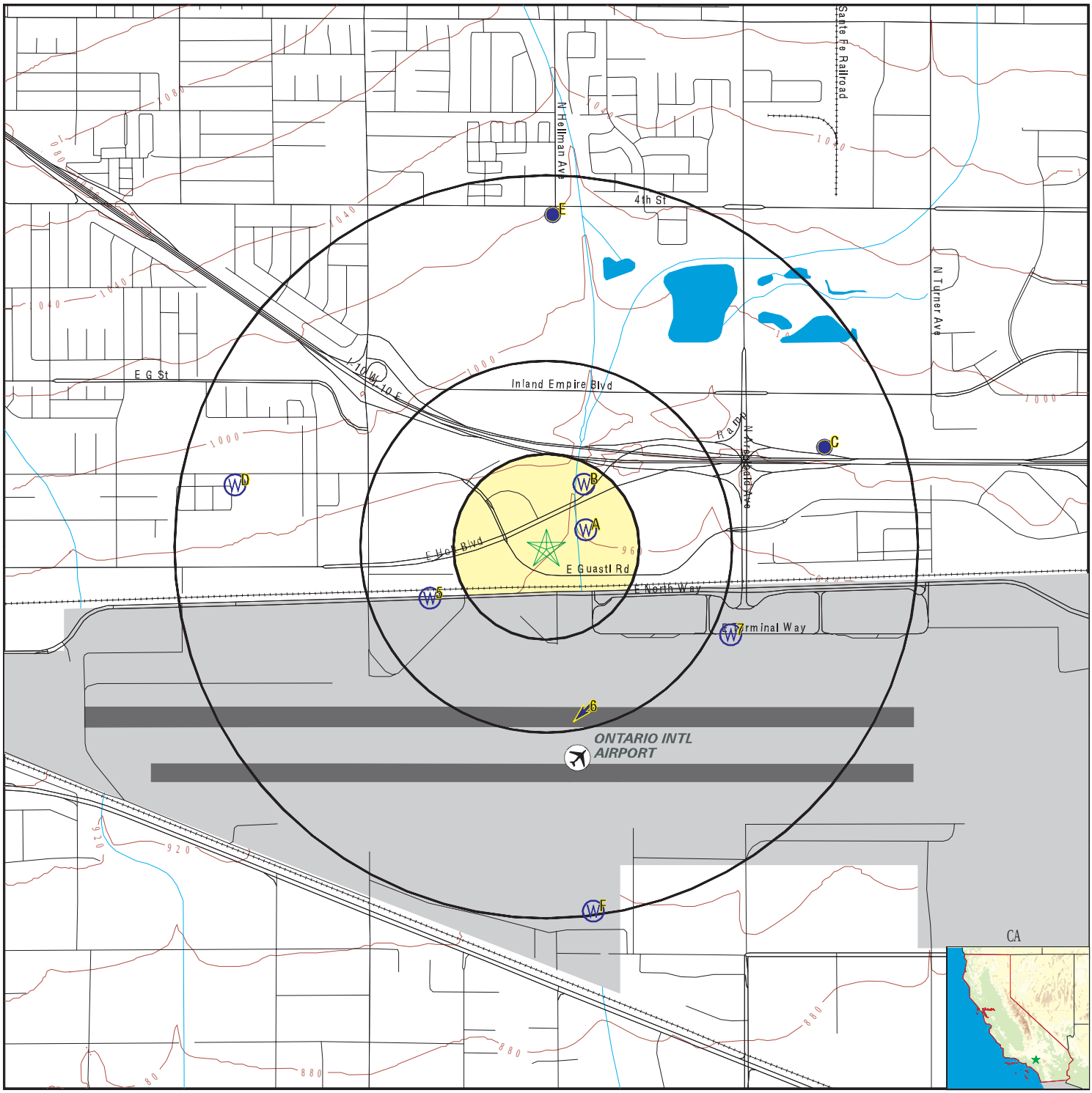
MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	CADDW0000012724	0 - 1/8 Mile ENE
A2	CAPFAS000001596	0 - 1/8 Mile ENE
B3	1082	1/8 - 1/4 Mile NNE
B4	1083	1/8 - 1/4 Mile NNE
7	CADWR0000031399	1/2 - 1 Mile ESE
C8	CADWR9000006602	1/2 - 1 Mile ENE
C10	CAPFAS000001247	1/2 - 1 Mile ENE
C11	CADDW0000009565	1/2 - 1 Mile ENE
C12	CAUSGS000002128	1/2 - 1 Mile ENE
C13	CAUSGSN00000130	1/2 - 1 Mile ENE
D14	CADDW0000015707	1/2 - 1 Mile WNW
D15	1081	1/2 - 1 Mile West
D16	1080	1/2 - 1 Mile West
E17	CADDW0000019623	1/2 - 1 Mile North
F19	1089	1/2 - 1 Mile South
F20	CADDW0000012553	1/2 - 1 Mile South

PHYSICAL SETTING SOURCE MAP - 07482419.2r



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	Ontario Hotel	CLIENT:	Petra Geotechnical Inc
ADDRESS:	SE Corner E. Holt Blvd. and E. Guasti Rd. Ontario CA 91761	CONTACT:	Ed Lump
		INQUIRY #:	07482419.2r
LAT/LONG:	34.064239 / 117.602656	DATE:	October 27, 2023 6:20 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A1
ENE
0 - 1/8 Mile
Higher

CA WELLS **CADDW0000012724**

Well ID:	3610034-025	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 29	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=3610034-025&store_num=		
GeoTracker Data:	Not Reported		

A2
ENE
0 - 1/8 Mile
Higher

CA WELLS **CAPFAS000001596**

Well ID:	3610034-025	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 29	GAMA PFAS Testing:	Yes
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=3610034-025&store_num=		
GeoTracker Data:	Not Reported		

B3
NNE
1/8 - 1/4 Mile
Higher

CA WELLS **1082**

Seq:	1082	Prim sta c:	01S/07W-22B01 S
Frds no:	3610034015	County:	36
District:	13	User id:	TAN
System no:	3610034	Water type:	G
Source nam:	WELL 18	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	340400.0	Longitude:	1173600.0
Precision:	8	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	3610034	System nam:	Ontario, City Of
Hqname:	Not Reported	Address:	303 EAST B STREET
City:	ONTARIO	State:	CA
Zip:	91764	Zip ext:	Not Reported
Pop serv:	140000	Connection:	30927
Area serve:	ONTARIO CITY		

B4
NNE
1/8 - 1/4 Mile
Higher

CA WELLS **1083**

Seq:	1083	Prim sta c:	01S/07W-22Q02 S
Frds no:	3610034025	County:	36

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

District:	13	User id:	TAN
System no:	3610034	Water type:	G
Source nam:	WELL 29	Station ty:	WELL/AMBNT
Latitude:	340400.0	Longitude:	1173600.0
Precision:	3	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	3610034	System nam:	Ontario, City Of
Hqname:	Not Reported	Address:	303 EAST B STREET
City:	ONTARIO	State:	CA
Zip:	91764	Zip ext:	Not Reported
Pop serv:	140000	Connection:	30927
Area serve:	ONTARIO CITY		

Sample date:	12-JUL-17	Finding:	2.4
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		

Sample date:	06-JUL-17	Finding:	140.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		

Sample date:	06-JUL-17	Finding:	140.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		

Sample date:	06-JUL-17	Finding:	140.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		

Sample date:	06-JUL-17	Finding:	42.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		

Sample date:	06-JUL-17	Finding:	8.6
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		

Sample date:	06-JUL-17	Finding:	23.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		

Sample date:	06-JUL-17	Finding:	2.
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		

Sample date:	06-JUL-17	Finding:	13.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		

Sample date:	06-JUL-17	Finding:	16.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		

Sample date:	06-JUL-17	Finding:	0.2
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		

Sample date:	06-JUL-17	Finding:	81.

Chemical:	BARIUM	Report units:	UG/L
Dlr:	100.		
Sample date:	06-JUL-17	Finding:	4.2
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	06-JUL-17	Finding:	4.5
Chemical:	CHROMIUM (TOTAL)	Report units:	UG/L
Dlr:	10.		
Sample date:	06-JUL-17	Finding:	230.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	06-JUL-17	Finding:	0.21
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	06-JUL-17	Finding:	380.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	06-JUL-17	Finding:	8.3
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	28-JUL-16	Finding:	1.2
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	06-JUL-15	Finding:	4.9
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	06-JUL-15	Finding:	0.2
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	06-JUL-15	Finding:	11.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	06-JUL-15	Finding:	5.2
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	06-JUL-15	Finding:	1.7
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	06-JUL-15	Finding:	21.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	06-JUL-15	Finding:	8.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	06-JUL-15	Finding:	39.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		

Sample date:	06-JUL-15	Finding:	130.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	06-JUL-15	Finding:	180.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	06-JUL-15	Finding:	140.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	06-JUL-15	Finding:	8.3
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	06-JUL-15	Finding:	320.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	06-JUL-15	Finding:	210.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	09-FEB-15	Finding:	280.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	09-FEB-15	Finding:	3.4
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	09-FEB-15	Finding:	12.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	09-FEB-15	Finding:	4.9
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	09-FEB-15	Finding:	1.8
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	09-FEB-15	Finding:	22.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	09-FEB-15	Finding:	7.7
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	09-FEB-15	Finding:	38.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	09-FEB-15	Finding:	130.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	09-FEB-15	Finding:	180.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L

Dlr:	0.		
Sample date:	09-FEB-15	Finding:	140.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	09-FEB-15	Finding:	340.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	09-FEB-15	Finding:	7.8
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	15-OCT-14	Finding:	8.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	15-OCT-14	Finding:	20.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	15-OCT-14	Finding:	1.7
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	15-OCT-14	Finding:	5.1
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	15-OCT-14	Finding:	10.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	15-OCT-14	Finding:	0.2
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	15-OCT-14	Finding:	3.4
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	15-OCT-14	Finding:	3.7
Chemical:	CHROMIUM (TOTAL)	Report units:	UG/L
Dlr:	10.		
Sample date:	15-OCT-14	Finding:	180.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	15-OCT-14	Finding:	4.9
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	15-OCT-14	Finding:	0.4
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	15-OCT-14	Finding:	310.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		

Sample date:	15-OCT-14	Finding:	8.
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	15-OCT-14	Finding:	140.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	15-OCT-14	Finding:	170.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	15-OCT-14	Finding:	1.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	15-OCT-14	Finding:	130.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	15-OCT-14	Finding:	37.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	29-JUL-14	Finding:	140.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	29-JUL-14	Finding:	340.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	29-JUL-14	Finding:	1.1
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	29-JUL-14	Finding:	0.416
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	29-JUL-14	Finding:	1.28
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	29-JUL-14	Finding:	180.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	29-JUL-14	Finding:	130.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	29-JUL-14	Finding:	38.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	29-JUL-14	Finding:	7.8
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	29-JUL-14	Finding:	0.2
Chemical:	RADIUM 228 MDA95	Report units:	PCI/L

Dlr:	0.		
Sample date:	29-JUL-14	Finding:	20.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	29-JUL-14	Finding:	1.7
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	29-JUL-14	Finding:	5.4
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	29-JUL-14	Finding:	11.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	29-JUL-14	Finding:	2.8
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	29-JUL-14	Finding:	190.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	29-JUL-14	Finding:	4.4
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	29-JUL-14	Finding:	7.8
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	17-APR-14	Finding:	0.253
Chemical:	RADIUM 228 MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	17-APR-14	Finding:	1.64
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	17-APR-14	Finding:	0.412
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	17-APR-14	Finding:	1.3
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	17-APR-14	Finding:	0.25
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	17-APR-14	Finding:	4.9
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	17-APR-14	Finding:	4.
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		

Sample date:	17-APR-14	Finding:	11.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	17-APR-14	Finding:	5.4
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	17-APR-14	Finding:	1.7
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	17-APR-14	Finding:	21.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	17-APR-14	Finding:	7.6
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	17-APR-14	Finding:	37.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	17-APR-14	Finding:	120.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	17-APR-14	Finding:	180.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	17-APR-14	Finding:	140.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	17-APR-14	Finding:	7.8
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	17-APR-14	Finding:	360.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	17-APR-14	Finding:	210.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	27-JAN-14	Finding:	5.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	27-JAN-14	Finding:	640.
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		
Sample date:	27-JAN-14	Finding:	3.
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	27-JAN-14	Finding:	11.
Chemical:	SULFATE	Report units:	MG/L

Dlr:	0.5		
Sample date:	27-JAN-14	Finding:	4.8
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	27-JAN-14	Finding:	1.6
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	27-JAN-14	Finding:	20.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	27-JAN-14	Finding:	7.8
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	27-JAN-14	Finding:	38.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	27-JAN-14	Finding:	130.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	27-JAN-14	Finding:	180.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	27-JAN-14	Finding:	150.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	27-JAN-14	Finding:	7.7
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	27-JAN-14	Finding:	340.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	27-JAN-14	Finding:	160.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	19-NOV-13	Finding:	330.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	19-NOV-13	Finding:	150.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	19-NOV-13	Finding:	180.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	19-NOV-13	Finding:	130.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		

Sample date:	19-NOV-13	Finding:	38.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	19-NOV-13	Finding:	7.8
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	19-NOV-13	Finding:	20.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	19-NOV-13	Finding:	1.8
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	19-NOV-13	Finding:	5.9
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	19-NOV-13	Finding:	11.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	19-NOV-13	Finding:	0.2
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	19-NOV-13	Finding:	3.6
Chemical:	CHROMIUM (TOTAL)	Report units:	UG/L
Dlr:	10.		
Sample date:	19-NOV-13	Finding:	170.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	19-NOV-13	Finding:	5.1
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	19-NOV-13	Finding:	0.34
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	19-NOV-13	Finding:	7.9
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	29-JUL-13	Finding:	360.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	29-JUL-13	Finding:	7.8
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	29-JUL-13	Finding:	130.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	29-JUL-13	Finding:	160.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L

Dlr:	0.		
Sample date:	29-JUL-13	Finding:	130.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	29-JUL-13	Finding:	38.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	29-JUL-13	Finding:	8.3
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	29-JUL-13	Finding:	21.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	29-JUL-13	Finding:	1.7
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	29-JUL-13	Finding:	6.8
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	29-JUL-13	Finding:	11.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	29-JUL-13	Finding:	240.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	29-JUL-13	Finding:	6.2
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	16-MAY-13	Finding:	6.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	15-MAY-13	Finding:	5.8
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	17-APR-13	Finding:	140.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	17-APR-13	Finding:	6.1
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	17-APR-13	Finding:	210.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	17-APR-13	Finding:	12.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		

Sample date:	17-APR-13	Finding:	7.1
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	17-APR-13	Finding:	1.7
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	17-APR-13	Finding:	21.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	17-APR-13	Finding:	8.4
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	17-APR-13	Finding:	40.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	17-APR-13	Finding:	130.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	17-APR-13	Finding:	180.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	17-APR-13	Finding:	7.9
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	17-APR-13	Finding:	340.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	16-JAN-13	Finding:	7.7
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	16-JAN-13	Finding:	170.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JAN-13	Finding:	140.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JAN-13	Finding:	360.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	16-JAN-13	Finding:	220.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JAN-13	Finding:	150.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JAN-13	Finding:	12.
Chemical:	CHLORIDE	Report units:	MG/L

Dlr:	0.		
Sample date:	16-JAN-13	Finding:	1.8
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JAN-13	Finding:	21.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JAN-13	Finding:	9.5
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JAN-13	Finding:	43.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JAN-13	Finding:	16.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	19-DEC-12	Finding:	0.2
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	19-DEC-12	Finding:	4.8
Chemical:	CHROMIUM (TOTAL)	Report units:	UG/L
Dlr:	10.		
Sample date:	04-OCT-12	Finding:	8.3
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	04-OCT-12	Finding:	140.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	04-OCT-12	Finding:	230.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	04-OCT-12	Finding:	140.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	04-OCT-12	Finding:	41.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	04-OCT-12	Finding:	8.5
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	04-OCT-12	Finding:	20.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	04-OCT-12	Finding:	1.6
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		

Sample date:	04-OCT-12	Finding:	12.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	04-OCT-12	Finding:	14.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	04-OCT-12	Finding:	380.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	04-OCT-12	Finding:	170.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	12-SEP-12	Finding:	0.68
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	12-SEP-12	Finding:	0.252
Chemical:	RADIUM 228 MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	12-SEP-12	Finding:	0.25
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	12-SEP-12	Finding:	0.578
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	12-SEP-12	Finding:	240.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	12-SEP-12	Finding:	4.6
Chemical:	CHROMIUM (TOTAL)	Report units:	UG/L
Dlr:	10.		
Sample date:	12-SEP-12	Finding:	0.3
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	12-SEP-12	Finding:	13.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	12-SEP-12	Finding:	7.8
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	12-SEP-12	Finding:	360.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	12-SEP-12	Finding:	7.8
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	12-SEP-12	Finding:	140.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L

Dlr:	0.		
Sample date:	12-SEP-12	Finding:	170.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	12-SEP-12	Finding:	140.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	12-SEP-12	Finding:	40.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	12-SEP-12	Finding:	8.5
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	12-SEP-12	Finding:	20.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	12-SEP-12	Finding:	1.9
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		

5
WSW
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000140377**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	001S007W27D001S	Type:	Well
Description:	Not Reported	HUC:	18070203
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	496
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

6
SSE
1/4 - 1/2 Mile
Lower

AQUIFLOW **50214**

Site ID:	083601881T
Groundwater Flow:	SW
Shallow Water Depth:	250
Deep Water Depth:	300
Average Water Depth:	Not Reported
Date:	04/14/1987

7
ESE
1/2 - 1 Mile
Lower

CA WELLS **CADWR0000031399**

Well ID:	01S07W27D001S	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	01S07W27D001S	GAMA PFAS Testing:	Not Reported

Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=01S07W27D001S&store_num=
GeoTracker Data: Not Reported

C8
ENE
1/2 - 1 Mile
Higher

CA WELLS **CADWR9000006602**

State Well #:	01S07W23M001S	Station ID:	48061
Well Name:	CHINO-1002337	Basin Name:	Chino
Well Use:	Residential	Well Type:	Single Well
Well Depth:	903	Well Completion Rpt #:	Not Reported

C9
ENE
1/2 - 1 Mile
Higher

FED USGS **USGS40000140479**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	001S007W23M001S	Type:	Well
Description:	Not Reported	HUC:	18070203
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Cenozoic Erathem	Aquifer Type:	Unconfined single aquifer
Construction Date:	19650205	Well Depth:	900
Well Depth Units:	ft	Well Hole Depth:	903
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	3	Level reading date:	2004-06-17
Feet below surface:	360	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	2003-03-25	Feet below surface:	359
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-01	Feet below surface:	348
Feet to sea level:	Not Reported	Note:	Not Reported

C10
ENE
1/2 - 1 Mile
Higher

CA WELLS **CAPFAS000001247**

Well ID:	3610034-021	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 25 - INACTIVE	GAMA PFAS Testing:	Yes

Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=3610034-021&store_num=
GeoTracker Data: Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

C11
ENE
1/2 - 1 Mile
Higher

CA WELLS **CADDW0000009565**

Well ID:	3610034-021	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 25 - INACTIVE	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=3610034-021&store_num=		
GeoTracker Data:	Not Reported		

C12
ENE
1/2 - 1 Mile
Higher

CA WELLS **CAUSGS000002128**

C13
ENE
1/2 - 1 Mile
Higher

CA WELLS **CAUSGSN00000130**

Well ID:	USGS-340406117351701	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-340406117351701	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-340406117351701&store_num=		
GeoTracker Data:	Not Reported		

D14
WNW
1/2 - 1 Mile
Higher

CA WELLS **CADDW0000015707**

Well ID:	3610034-003	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 04 - DESTROYED 3/8/10		
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=3610034-003&store_num=		
GeoTracker Data:	Not Reported		

D15
West
1/2 - 1 Mile
Higher

CA WELLS **1081**

Seq:	1081	Prim sta c:	01S/07W-21D01 S
Frds no:	3610034003	County:	36
District:	13	User id:	TAN
System no:	3610034	Water type:	G
Source nam:	WELL 04	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	340400.0	Longitude:	1173700.0

Precision:	8	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	3610034	System nam:	Ontario, City Of
Hqname:	Not Reported	Address:	303 EAST B STREET
City:	ONTARIO	State:	CA
Zip:	91764	Zip ext:	Not Reported
Pop serv:	140000	Connection:	30927
Area serve:	ONTARIO CITY		

D16
West
1/2 - 1 Mile
Higher

CA WELLS **1080**

Seq:	1080	Prim sta c:	01S/07W-21C01 S
Frds no:	3610034002	County:	36
District:	13	User id:	TAN
System no:	3610034	Water type:	G
Source nam:	WELL 03A	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	340400.0	Longitude:	1173700.0
Precision:	8	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	3610034	System nam:	Ontario, City Of
Hqname:	Not Reported	Address:	303 EAST B STREET
City:	ONTARIO	State:	CA
Zip:	91764	Zip ext:	Not Reported
Pop serv:	140000	Connection:	30927
Area serve:	ONTARIO CITY		

E17
North
1/2 - 1 Mile
Higher

CA WELLS **CADDW0000019623**

Well ID:	3610034-015	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 18 - DESTROYED 8/3/08		
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=3610034-015&store_num=		
GeoTracker Data:	Not Reported		

E18
North
1/2 - 1 Mile
Higher

FED USGS **USGS40000140670**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	001S007W22B001S	Type:	Well

Description:	Not Reported	HUC:	18070203
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	1035
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

F19
South
1/2 - 1 Mile
Lower

CA WELLS **1089**

Seq:	1089	Prim sta c:	01S/07W-27D01 S
Frds no:	3610034006	County:	36
District:	13	User id:	TAN
System no:	3610034	Water type:	G
Source nam:	WELL 07 - ABANDONED	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	340300.0	Longitude:	1173600.0
Precision:	8	Status:	AB
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	3610034	System nam:	Ontario, City Of
Hqname:	Not Reported	Address:	303 EAST B STREET
City:	ONTARIO	State:	CA
Zip:	91764	Zip ext:	Not Reported
Pop serv:	140000	Connection:	30927
Area serve:	ONTARIO CITY		

F20
South
1/2 - 1 Mile
Lower

CA WELLS **CADDW0000012553**

Well ID:	3610034-006	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 07 - ABANDONED	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=3610034-006&store_num=		
GeoTracker Data:	Not Reported		

1G
SSE
1/4 - 1/2 Mile
Lower

AQUIFLOW **50214**

Site ID:	083601881T
Groundwater Flow:	SW
Shallow Water Depth:	250
Deep Water Depth:	300
Average Water Depth:	Not Reported
Date:	04/14/1987

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
91761	7	0

Federal EPA Radon Zone for SAN BERNARDINO County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for SAN BERNARDINO COUNTY, CA

Number of sites tested: 18

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.678 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

Groundwater Ambient Monitoring & Assessment Program
State Water Resources Control Board
Telephone: 916-341-5577
The GAMA Program is Californias comprehensive groundwater quality monitoring program. GAMA collects data by testing the untreated, raw water in different types of wells for naturally-occurring and man-made chemicals. The GAMA data includes Domestic, Monitoring and Municipal well types from the following sources, Department of Water Resources, Department of Heath Services, EDF, Agricultural Lands, Lawrence Livermore National Laboratory, Department of Pesticide Regulation, United States Geological Survey, Groundwater Ambient Monitoring and Assessment Program and Local Groundwater Projects.

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

California Oil and Gas Well Locations
Source: Dept of Conservation, Geologic Energy Management Division
Telephone: 916-323-1779
Oil and Gas well locations in the state.

California Earthquake Fault Lines
Source: California Division of Mines and Geology
The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon
Source: Department of Public Health
Telephone: 916-210-8558
Radon Database for California

PHYSICAL SETTING SOURCE RECORDS SEARCHED

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

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Ontario Hotel

SE Corner E. Holt Blvd. and E. Guasti Rd.

Ontario, CA 91761

Inquiry Number: 7482419.3

October 27, 2023

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

10/27/23

Site Name:

Ontario Hotel
SE Corner E. Holt Blvd. and E.
Ontario, CA 91761
EDR Inquiry # 7482419.3

Client Name:

Petra Geotechnical Inc
40880 County Center Drive, Suite M
Temecula, CA 92591
Contact: Ed Lump

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Certified Sanborn Results:

Certification # 332F-4B91-8A1F

PO # J.N. 22-398

Project Ontario Hotel

UNMAPPED PROPERTY

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Sanborn® Library search results

Certification #: 332F-4B91-8A1F

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- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

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Ontario Hotel

SE Corner E. Holt Blvd. and E. Guasti Rd.

Ontario, CA 91761

Inquiry Number: 7482419.4

October 27, 2023

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

10/27/23

Site Name:

Ontario Hotel
SE Corner E. Holt Blvd. and E.
Ontario, CA 91761
EDR Inquiry # 7482419.4

Client Name:

Petra Geotechnical Inc
40880 County Center Drive, Suite M
Temecula, CA 92591
Contact: Ed Lump

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Petra Geotechnical Inc were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:

P.O.# J.N. 22-398

Project: Ontario Hotel

Coordinates:

Latitude:	34.064239 34° 3' 51" North
Longitude:	-117.602656 -117° 36' 10" West
UTM Zone:	Zone 11 North
UTM X Meters:	444387.57
UTM Y Meters:	3769442.53
Elevation:	962.22' above sea level

Maps Provided:

2018	1953
2015	1944
2012	1941
1981	1903
1976	1900
1973	1897
1966	
1954	

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2018 Source Sheets



Guasti
2018
7.5-minute, 24000



Ontario
2018
7.5-minute, 24000

2015 Source Sheets



Guasti
2015
7.5-minute, 24000



Ontario
2015
7.5-minute, 24000

2012 Source Sheets



Guasti
2012
7.5-minute, 24000

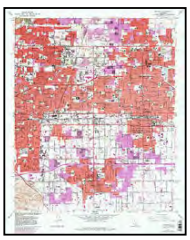


Ontario
2012
7.5-minute, 24000

1981 Source Sheets



Guasti
1981
7.5-minute, 24000
Aerial Photo Revised 1978



Ontario
1981
7.5-minute, 24000
Aerial Photo Revised 1978

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1976 Source Sheets

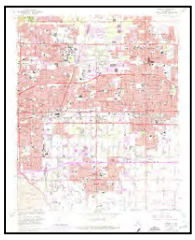


ONTARIO
1976
15-minute, 50000

1973 Source Sheets



Guasti
1973
7.5-minute, 24000
Aerial Photo Revised 1973



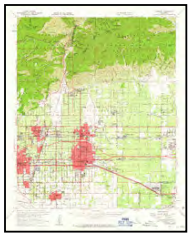
Ontario
1973
7.5-minute, 24000
Aerial Photo Revised 1973

1966 Source Sheets



Guasti
1966
7.5-minute, 24000
Aerial Photo Revised 1966

1954 Source Sheets



Ontario
1954
15-minute, 62500
Aerial Photo Revised 1952

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1953 Source Sheets



Guasti
1953
7.5-minute, 24000
Aerial Photo Revised 1952

1944 Source Sheets



CUCAMONGA
1944
15-minute, 50000

1941 Source Sheets



GUASTI VICINITY
1941
7.5-minute, 31680

1903 Source Sheets



Cucamonga
1903
15-minute, 62500

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1900 Source Sheets



Cucamonga
1900
15-minute, 62500

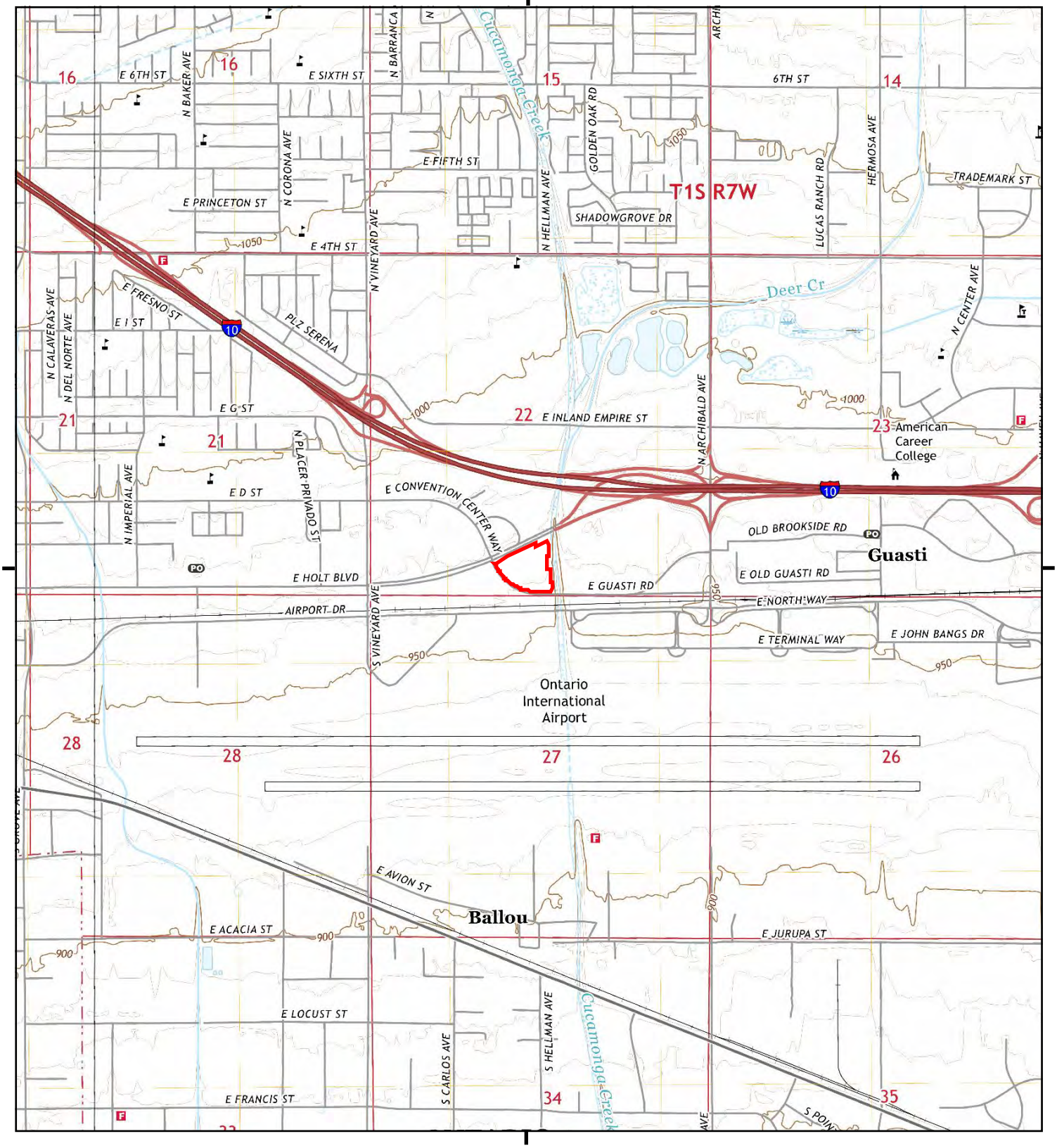
1897 Source Sheets



Cucamonga
1897
15-minute, 62500

Historical Topo Map

2018



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

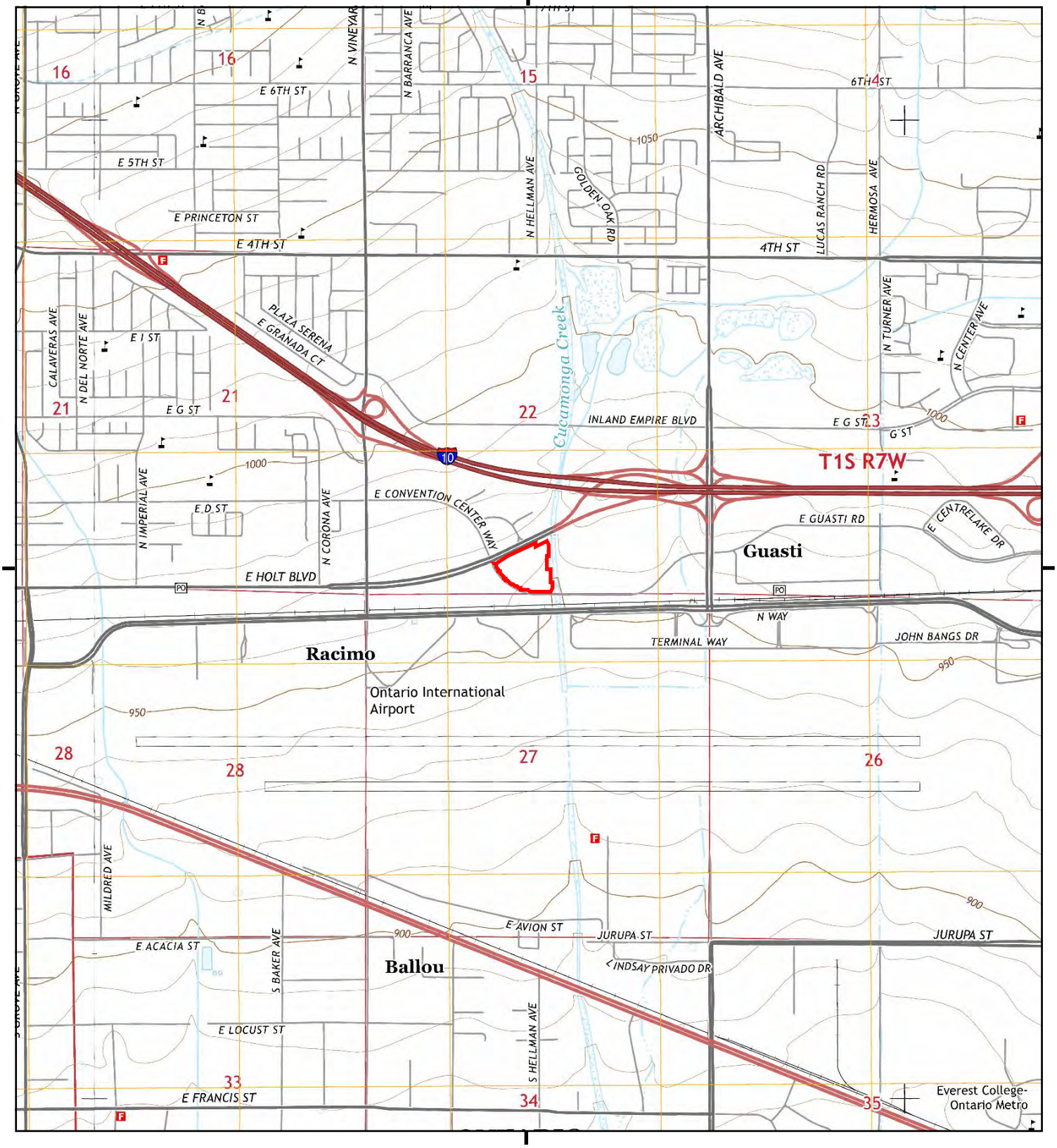
TP, Guasti, 2018, 7.5-minute
W, Ontario, 2018, 7.5-minute

SITE NAME: Ontario Hotel
ADDRESS: SE Corner E. Holt Blvd. and E. Guasti Rd
Ontario, CA 91761
CLIENT: Petra Geotechnical Inc

N

Historical Topo Map

2015



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

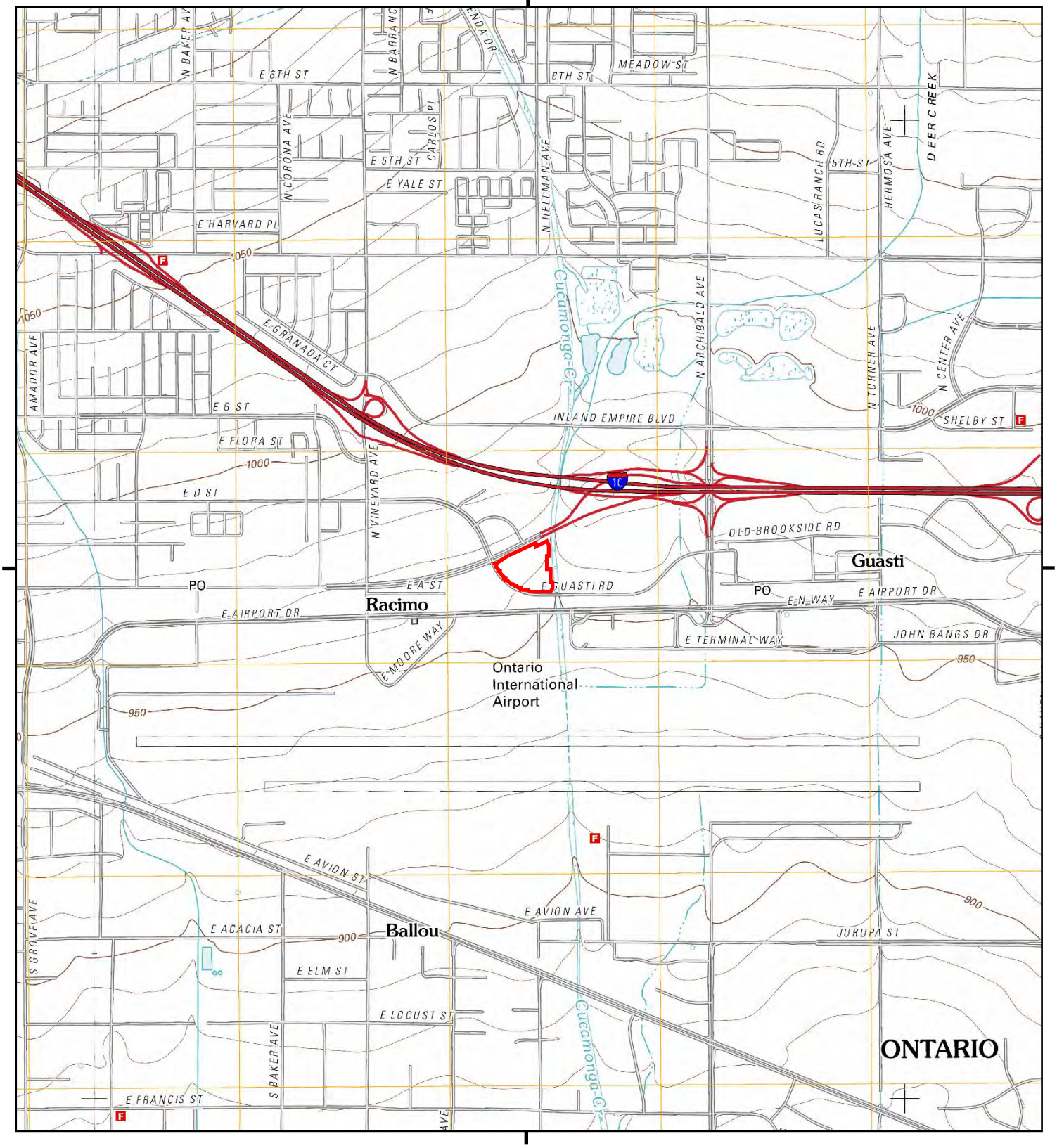
TP, Guasti, 2015, 7.5-minute
W, Ontario, 2015, 7.5-minute

SITE NAME: Ontario Hotel
ADDRESS: SE Corner E. Holt Blvd. and E. Guasti Rd
Ontario, CA 91761
CLIENT: Petra Geotechnical Inc

N

Historical Topo Map

2012



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

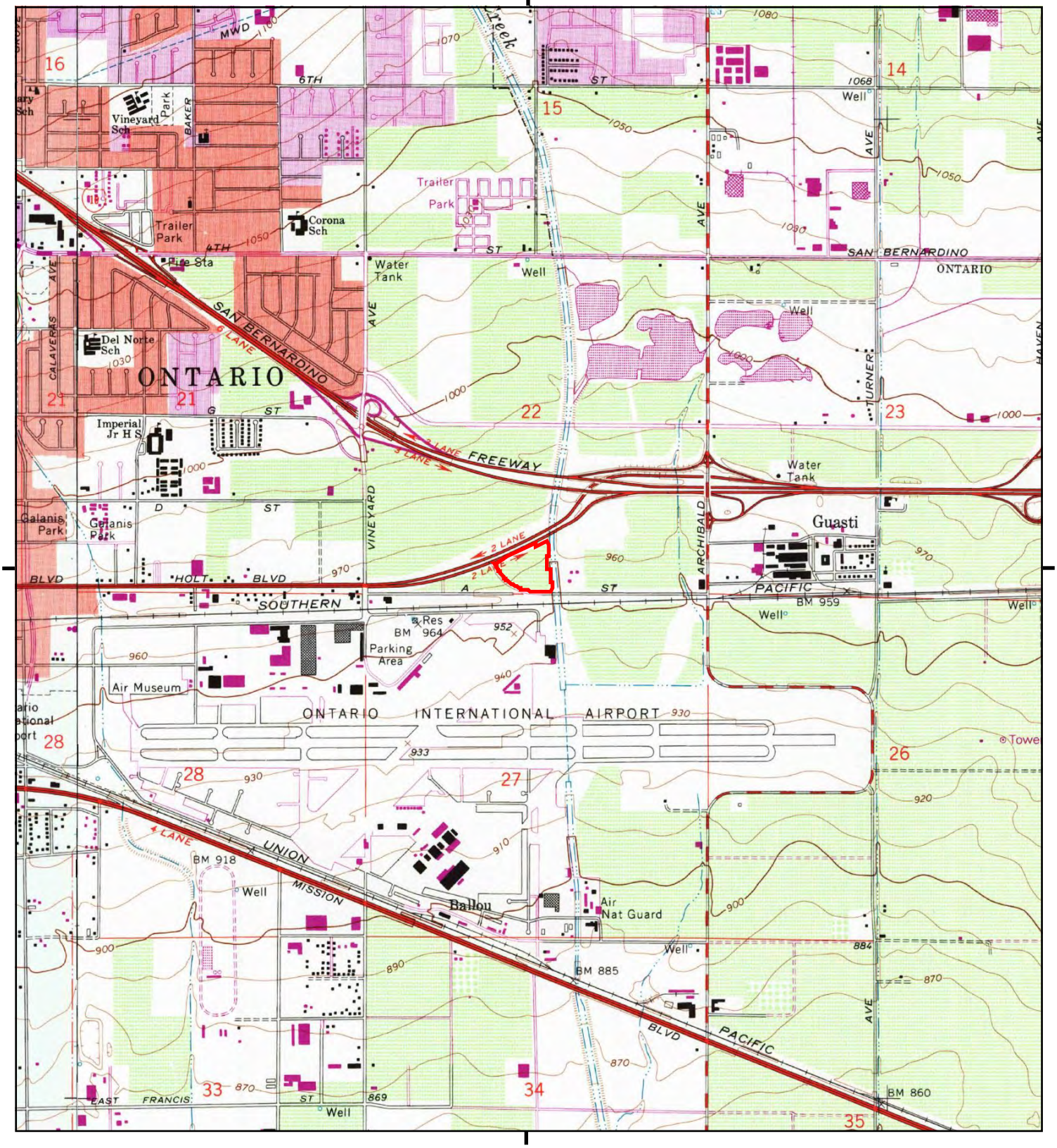
TP, Guasti, 2012, 7.5-minute
W, Ontario, 2012, 7.5-minute

SITE NAME: Ontario Hotel
ADDRESS: SE Corner E. Holt Blvd. and E. Guasti Rd
Ontario, CA 91761
CLIENT: Petra Geotechnical Inc

N

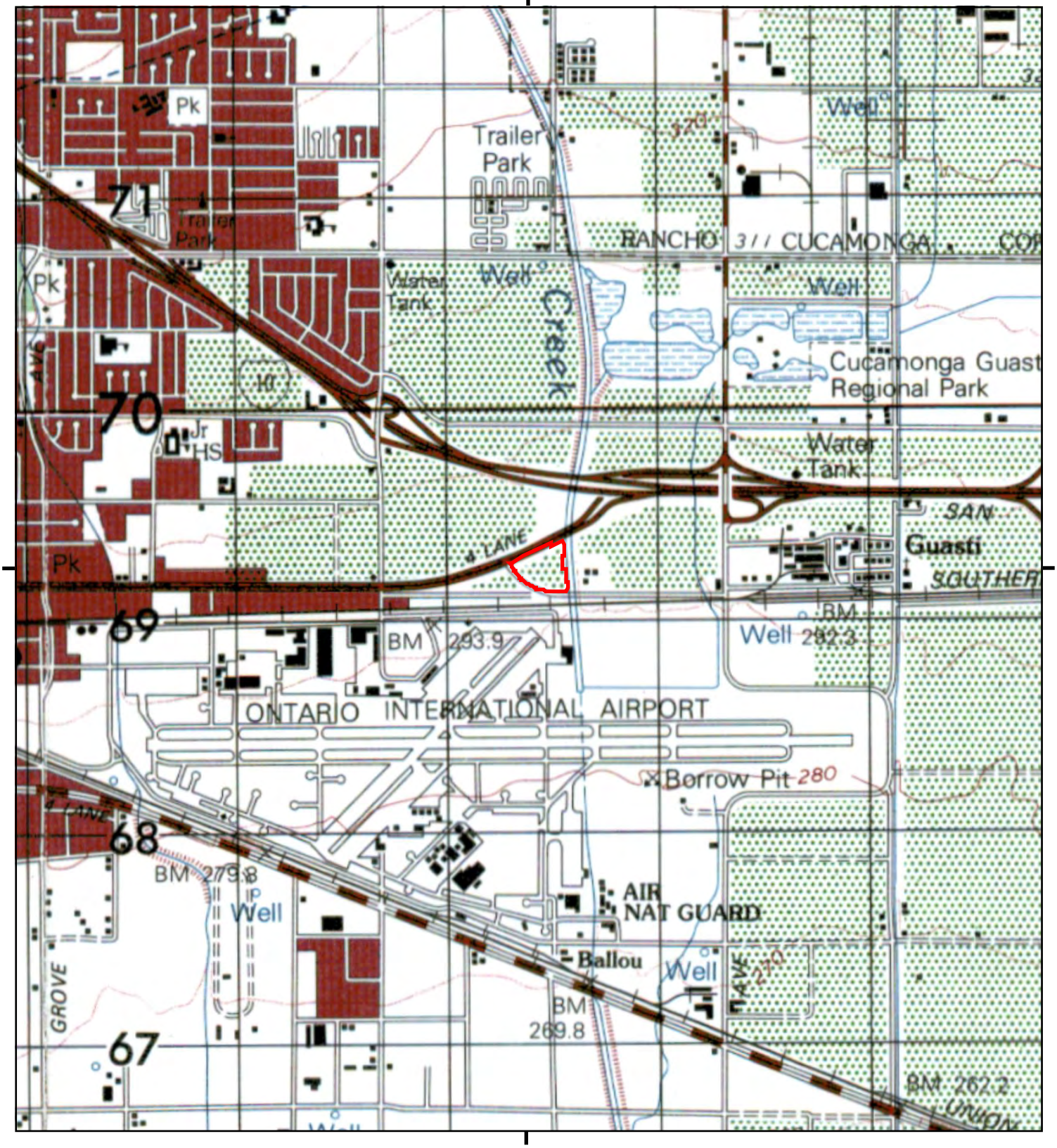
Historical Topo Map

1981


ONTARIO
ONTARIO INTERNATIONAL AIRPORT
SAN BERNARDINO 3 LANE FREEWAY
SOUTHERN PACIFIC
UNION PACIFIC
Guasti
Vineyard Sch
Trailer Park
Corona Sch
Del Norte Sch
Imperial Jr H S
Galanis Park
Water Tank
Well
Parking Area
Air Museum
Air Nat Guard
Ballou
Res BM 964
BM 959
BM 918
BM 885
BM 860
Fire Sta
Trailer Park
Water Tank
Well
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Historical Topo Map

1976



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

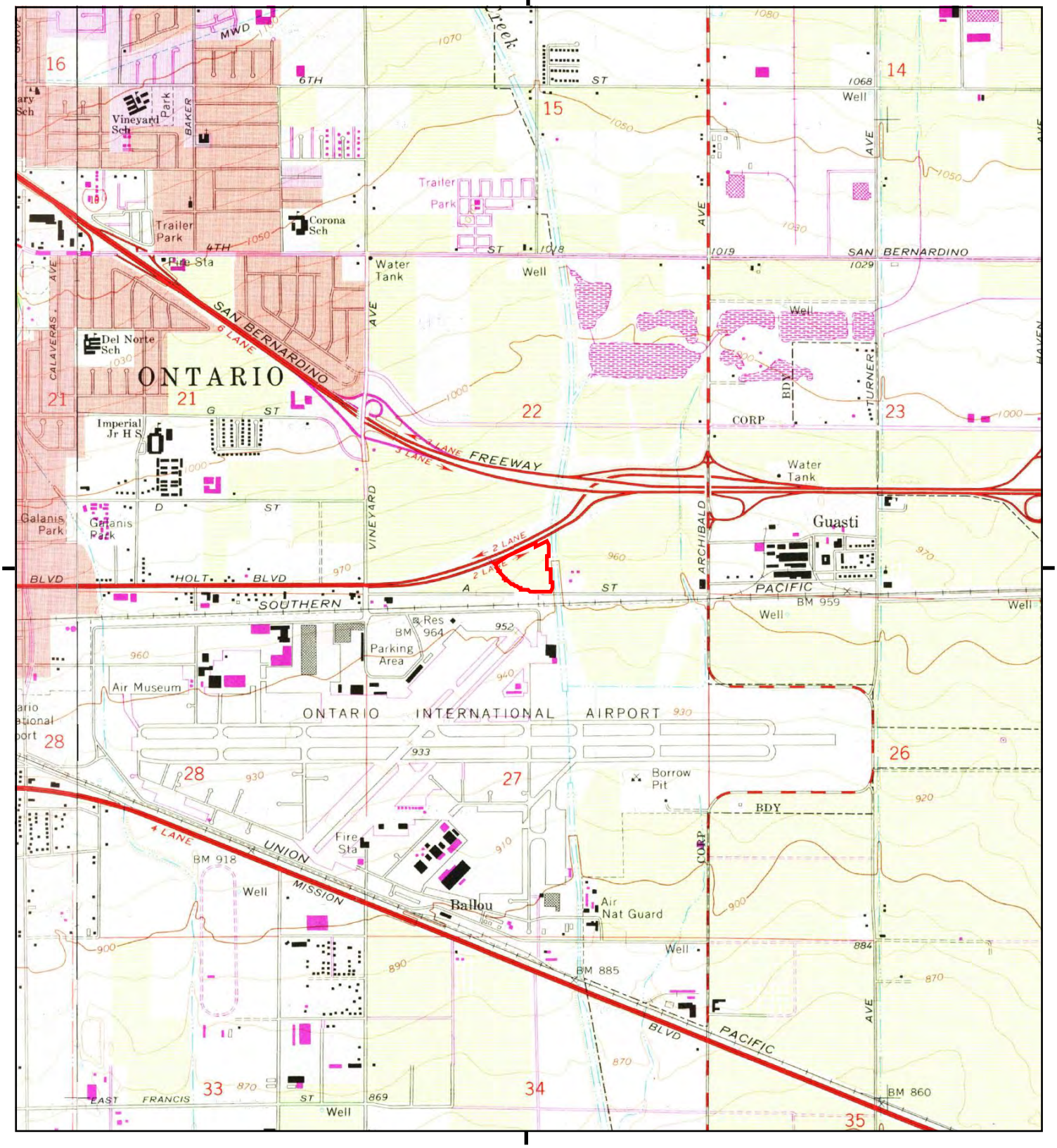
TP, ONTARIO, 1976, 15-minute

SITE NAME: Ontario Hotel
ADDRESS: SE Corner E. Holt Blvd. and E. Guasti Rd
Ontario, CA 91761
CLIENT: Petra Geotechnical Inc

N

Historical Topo Map

1973



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

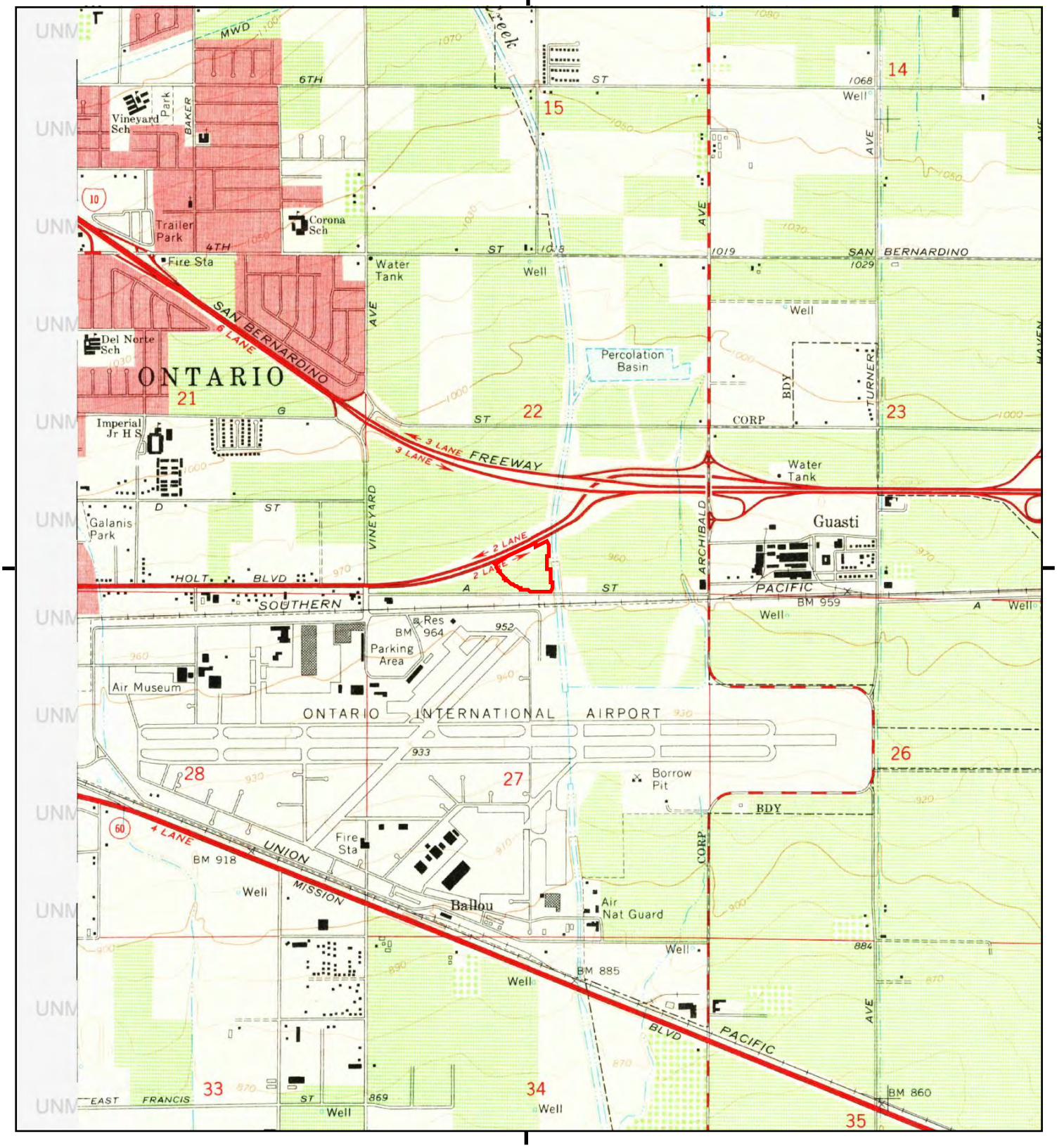
TP, Guasti, 1973, 7.5-minute
W, Ontario, 1973, 7.5-minute

SITE NAME: Ontario Hotel
ADDRESS: SE Corner E. Holt Blvd. and E. Guasti Rd
Ontario, CA 91761
CLIENT: Petra Geotechnical Inc

N

Historical Topo Map

1966



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

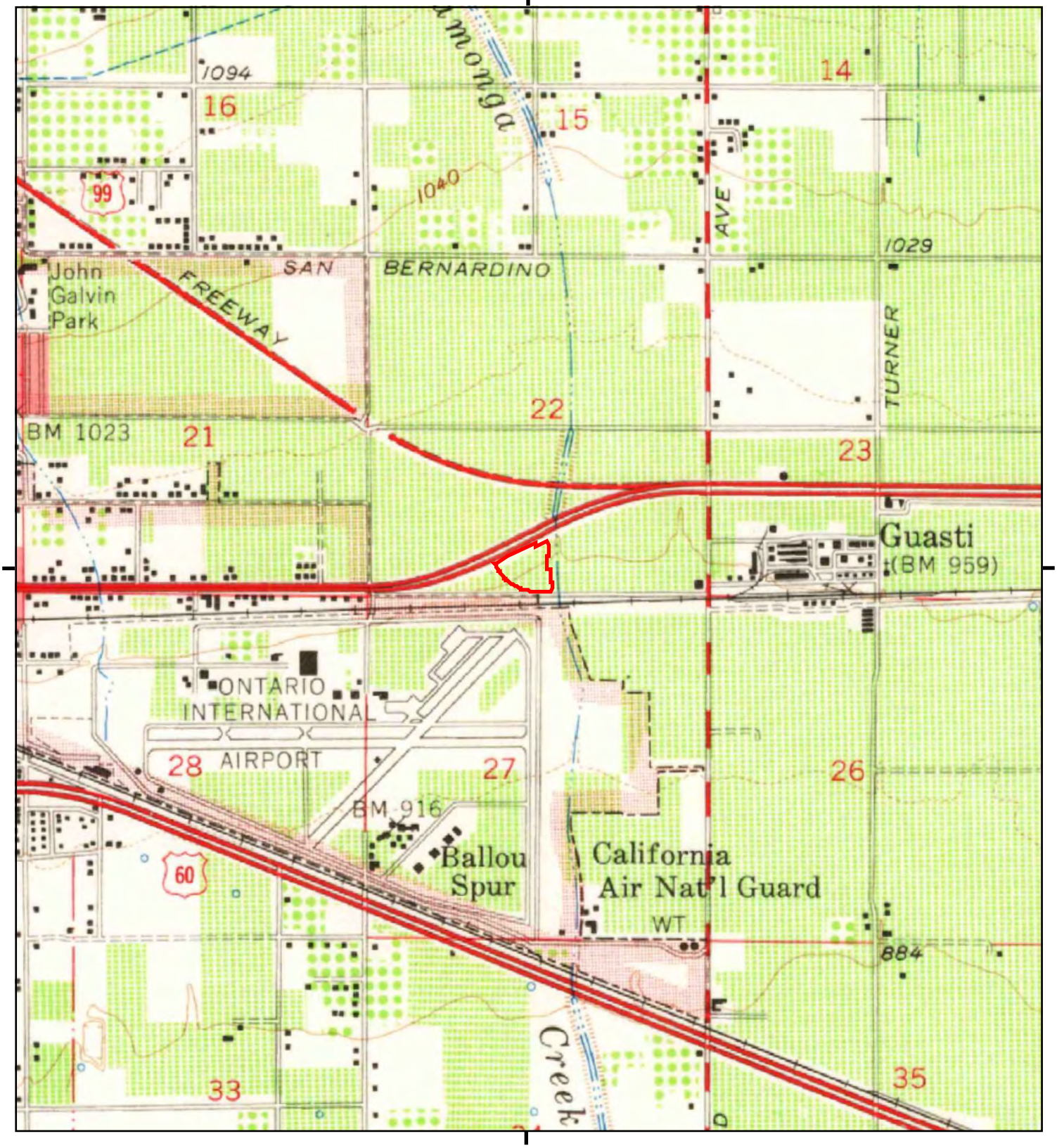
TP, Guasti, 1966, 7.5-minute

SITE NAME: Ontario Hotel
ADDRESS: SE Corner E. Holt Blvd. and E. Guasti Rd
Ontario, CA 91761
CLIENT: Petra Geotechnical Inc

N

Historical Topo Map

1954



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

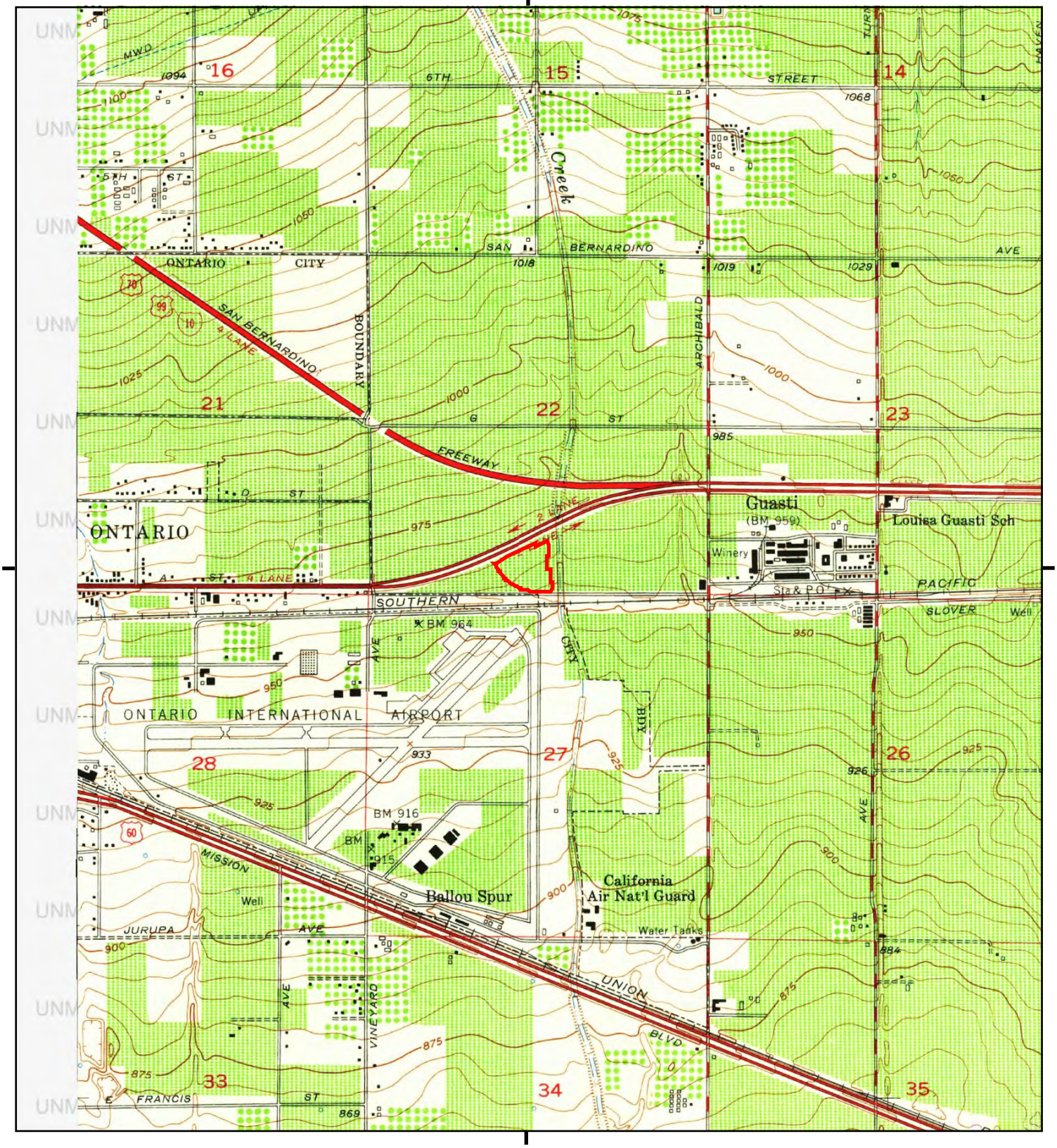
TP, Ontario, 1954, 15-minute

SITE NAME: Ontario Hotel
ADDRESS: SE Corner E. Holt Blvd. and E. Guasti Rd
Ontario, CA 91761
CLIENT: Petra Geotechnical Inc

N

Historical Topo Map

1953



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

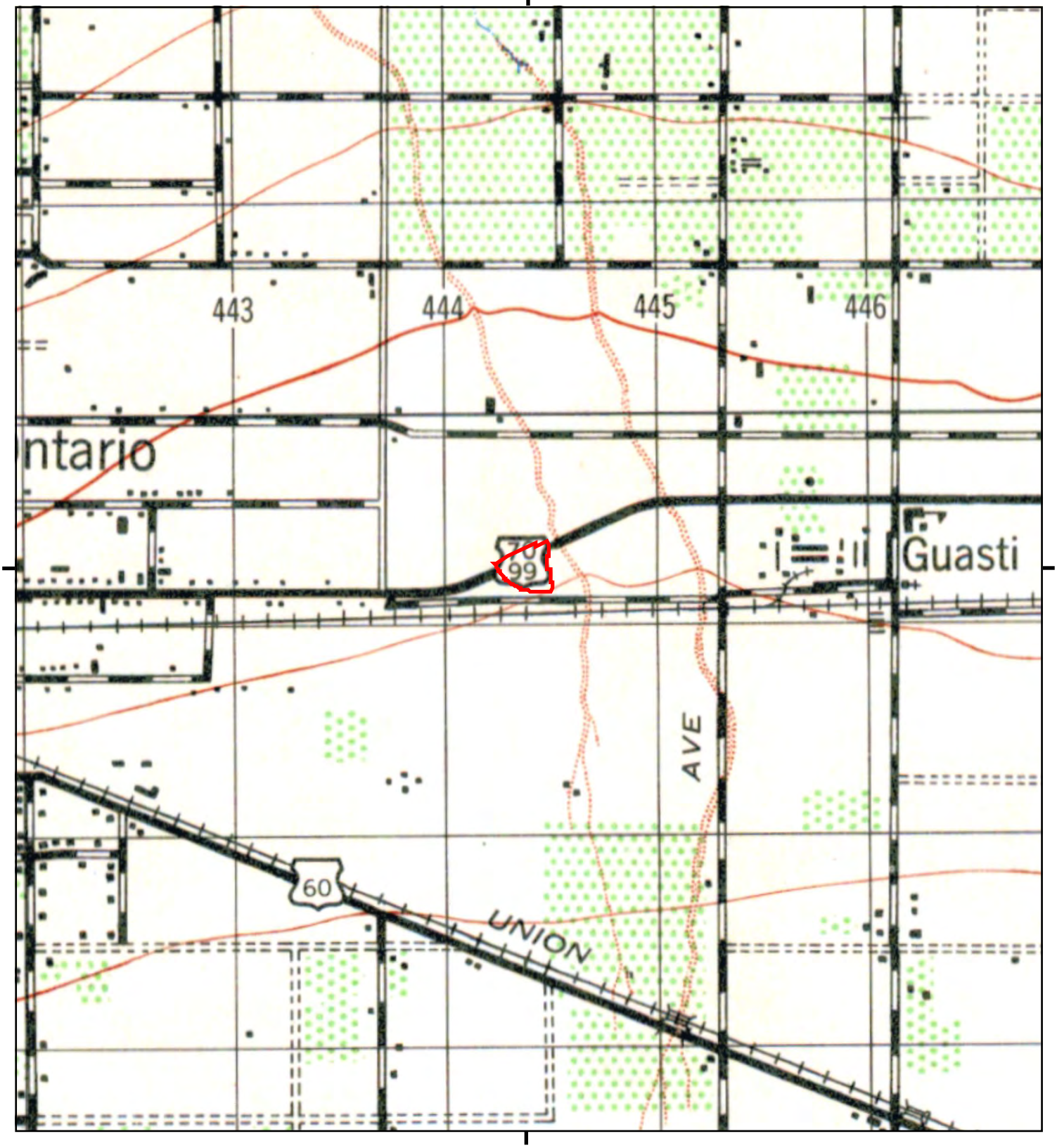
TP, Guasti, 1953, 7.5-minute

SITE NAME: Ontario Hotel
ADDRESS: SE Corner E. Holt Blvd. and E. Guasti Rd
Ontario, CA 91761
CLIENT: Petra Geotechnical Inc

N

Historical Topo Map

1944



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

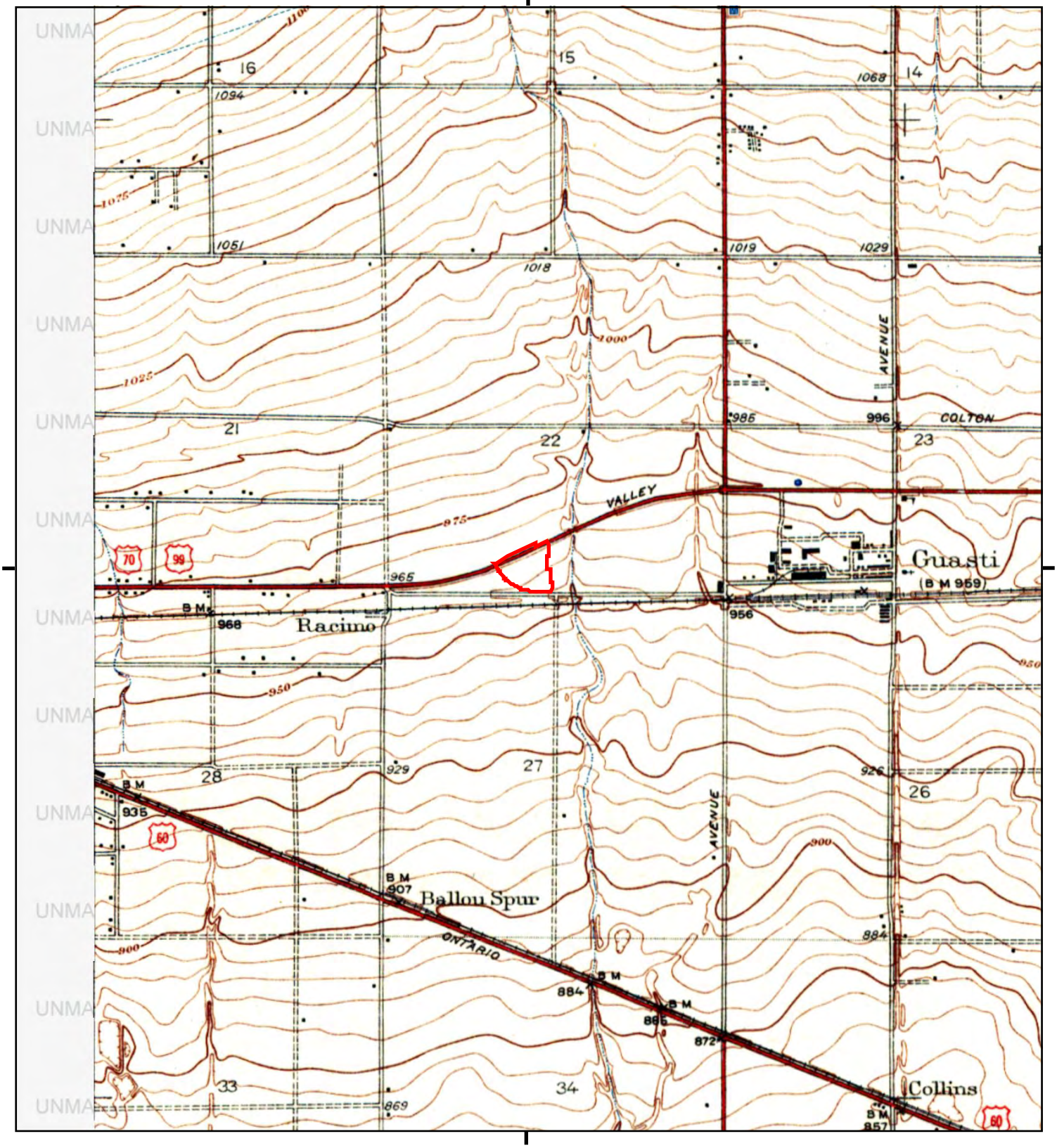
TP, CUCAMONGA, 1944, 15-minute

SITE NAME: Ontario Hotel
ADDRESS: SE Corner E. Holt Blvd. and E. Guasti Rd
Ontario, CA 91761
CLIENT: Petra Geotechnical Inc

N

Historical Topo Map

1941



This report includes information from the following map sheet(s).

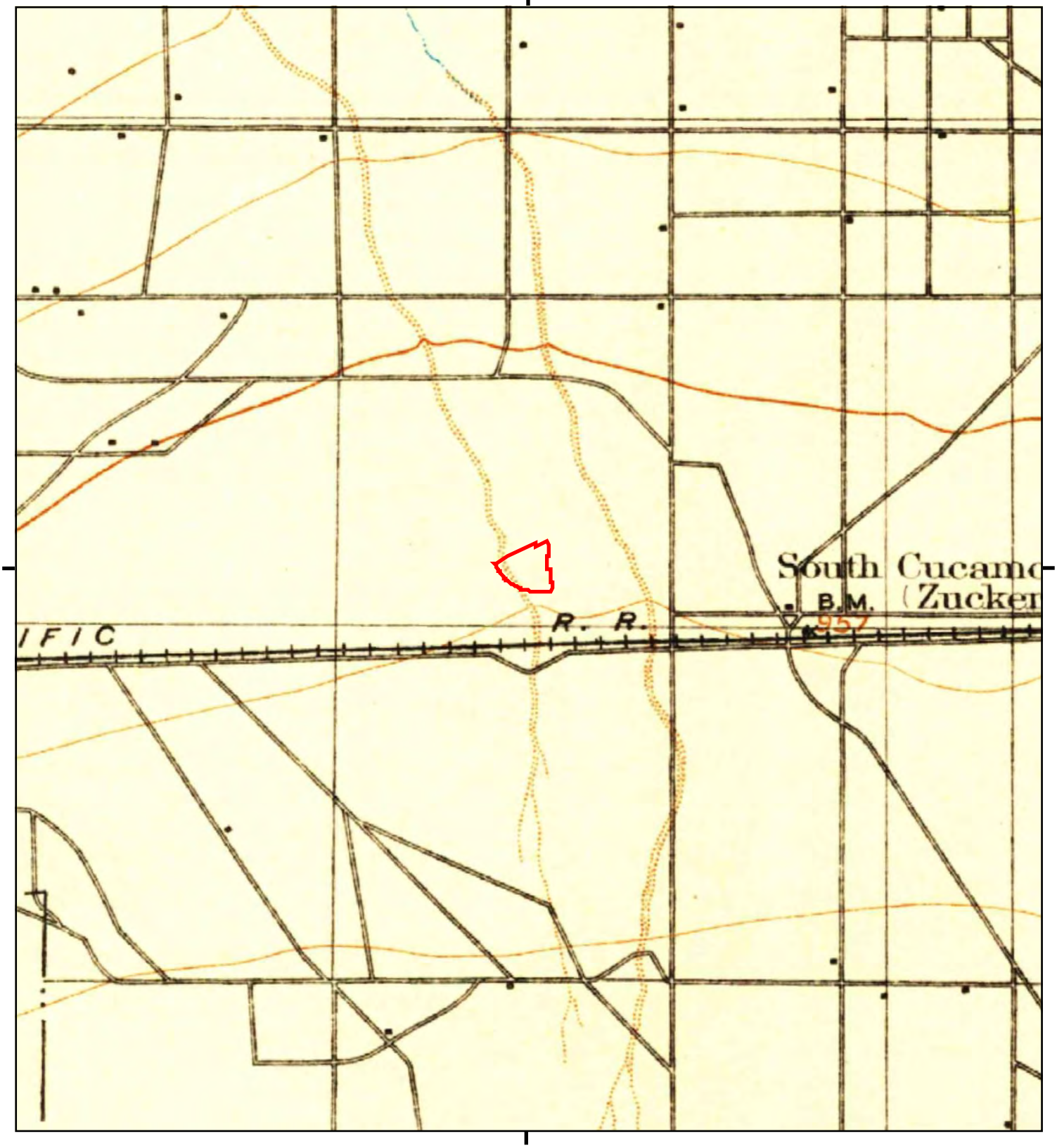
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, GUASTI VICINITY, 1941, 7.5-minute

SITE NAME: Ontario Hotel
ADDRESS: SE Corner E. Holt Blvd. and E. Guasti Rd
Ontario, CA 91761
CLIENT: Petra Geotechnical Inc

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

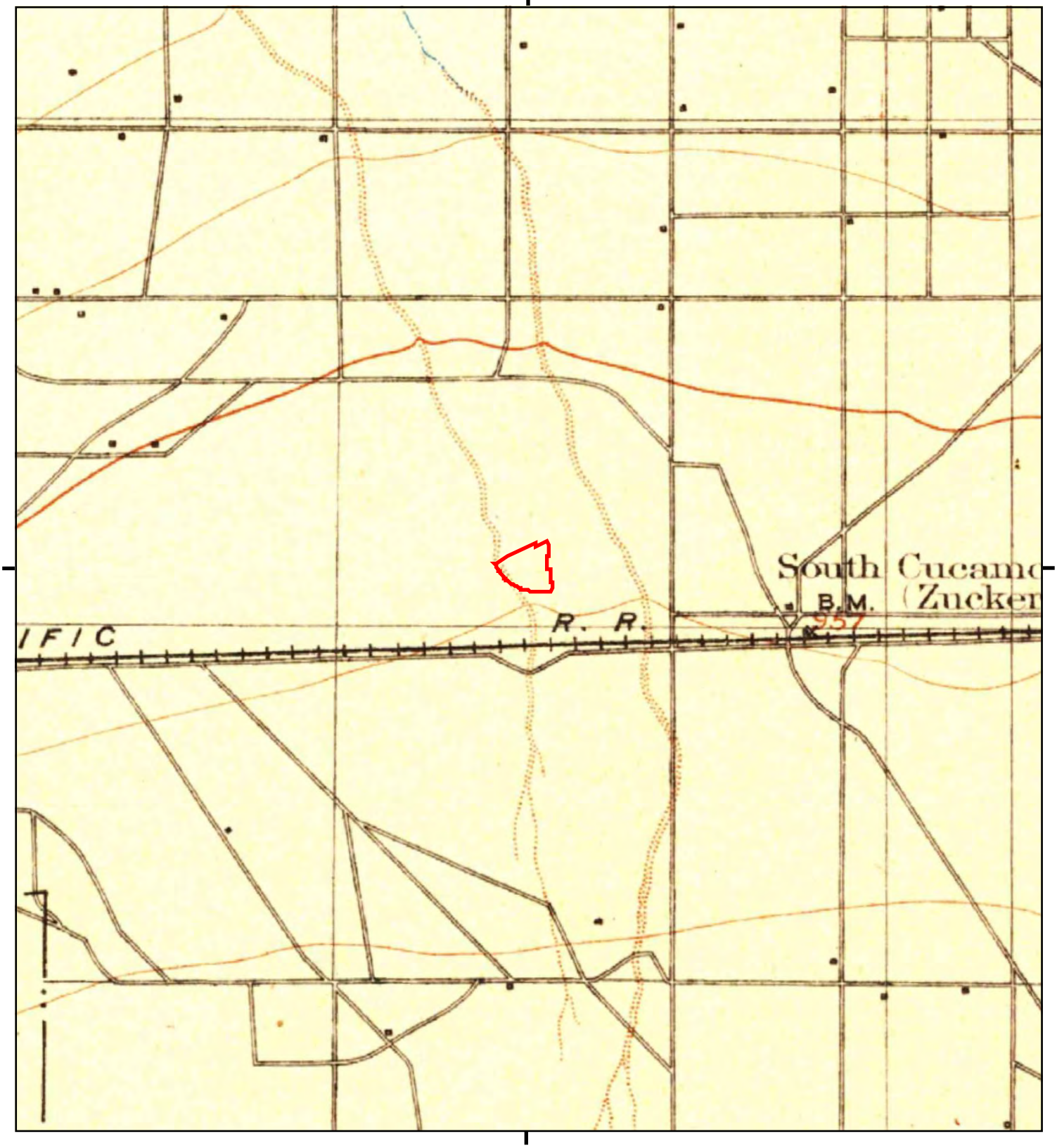
TP, Cucamonga, 1903, 15-minute

SITE NAME: Ontario Hotel
ADDRESS: SE Corner E. Holt Blvd. and E. Guasti Rd
Ontario, CA 91761
CLIENT: Petra Geotechnical Inc

N

Historical Topo Map

1900



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

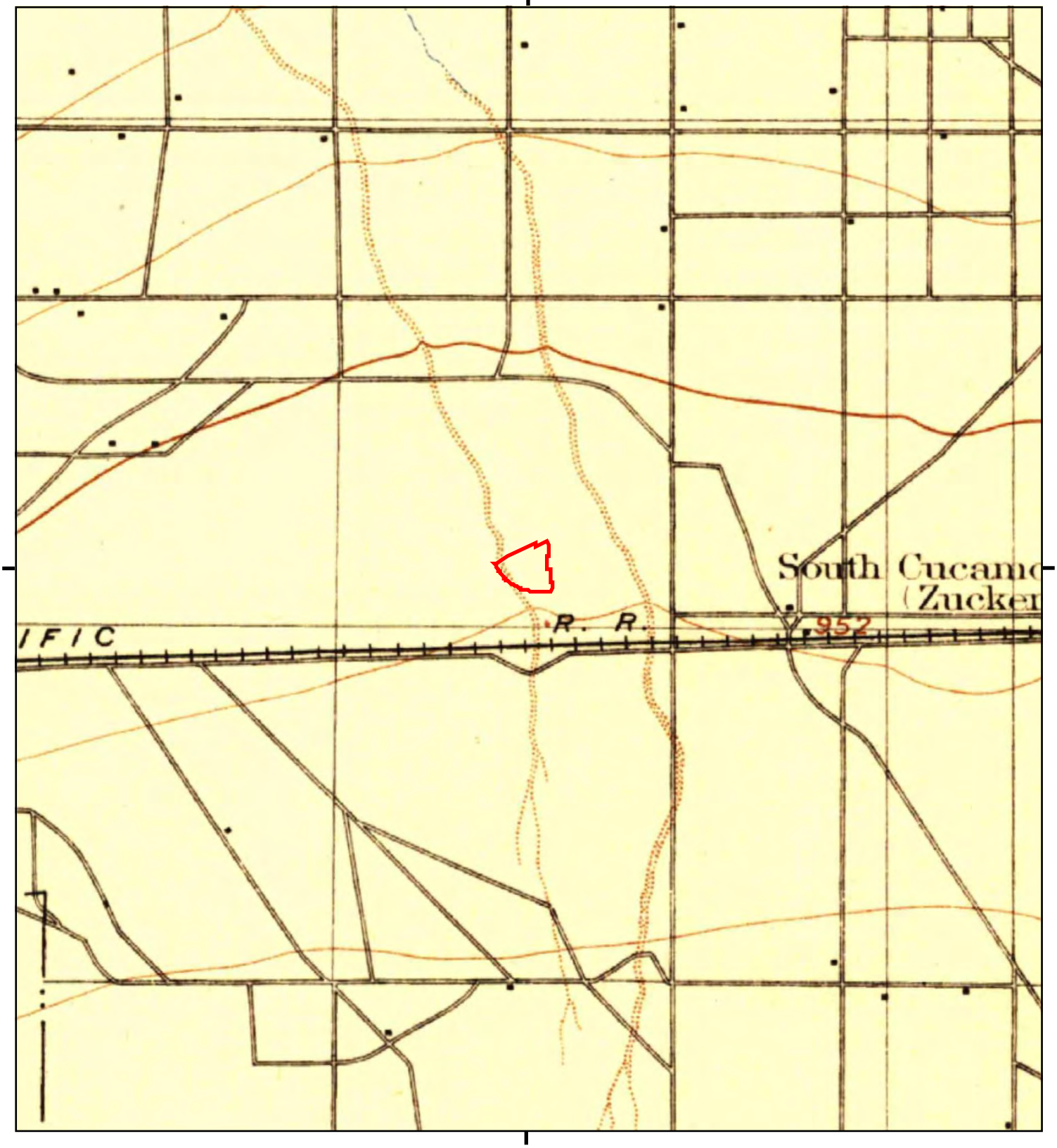
TP, Cucamonga, 1900, 15-minute

SITE NAME: Ontario Hotel
ADDRESS: SE Corner E. Holt Blvd. and E. Guasti Rd
Ontario, CA 91761
CLIENT: Petra Geotechnical Inc

N

Historical Topo Map

1897



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Cucamonga, 1897, 15-minute

SITE NAME: Ontario Hotel
ADDRESS: SE Corner E. Holt Blvd. and E. Guasti Rd
Ontario, CA 91761
CLIENT: Petra Geotechnical Inc

N

Ontario Hotel
SE Corner E. Holt Blvd. and E. Guasti Rd.
Ontario, CA 91761

Inquiry Number: 7482419.5
October 27, 2023

The EDR-City Directory Abstract

Environmental Data Resources Inc
6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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City Directory Images

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at approximately five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1922 through current. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 1320 feet of the target property.

Summary information obtained is provided in the text of this report.

RECORD SOURCES

The EDR City Directory Report accesses a variety of business directory sources, including Haines, InfoUSA, Polk, Cole, Bresser, and Stewart. Listings marked as EDR Digital Archive access Cole and InfoUSA records. The various directory sources enhance and complement each other to provide a more thorough and accurate report.

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

Year	Source	TP	Adjoining	Text Abstract	Source Image
2020	EDR Digital Archive	-	X	X	-
2017	Cole Information	-	X	X	-
2014	Cole Information	-	X	X	-
2010	Cole Information	-	X	X	-
2008	Haines Company, Inc.	-	X	X	-
2005	Cole Information	-	X	X	-
2003	Haines & Co Publishers	-	X	X	-
2002	Cole Information Services	-	-	-	-
2000	Cole Information	-	X	X	-
1996	GTE	-	-	-	-
1995	Cole Information	-	X	X	-
	GTE Directories	-	X	X	-
1992	Cole Information	-	X	X	-
1991	GTE California Incorporated	-	-	-	-
1990	GTE	-	X	X	-
1985	GTE	-	X	X	-

EXECUTIVE SUMMARY

Year	Source	TP	Adjoining	Text Abstract	Source Image
1981	General Telephone Company of California	-	-	-	-
1980	GTE General Telephone Company of California	-	X	X	-
1975	GTE Directories	-	X	X	-
1970	General Telephone Company of California	-	-	-	-
1965	GTE	-	-	-	-
1964	Luskey Brothers & Co	-	-	-	-
1961	Luskey Brothers& Co Publishers	-	-	-	-
1960	Luskey Brothers & Co Publishers	-	-	-	-
1956	General Telephone Company Publishers	-	-	-	-
1955	Luskey Brothers Co Publishers	-	-	-	-
1951	Los Angeles Directory Co Publishers	-	-	-	-
1950	The Pacific Telephone and Telegraph Co	-	-	-	-
1949	San Bernardino Directory Co. Publishers	-	-	-	-
1946	Los Angeles Directory Company Publishers	-	-	-	-
1945	Southern Califronia Telephone Company	-	-	-	-
1942	San Bernardino Directory Co Publisher	-	-	-	-
1941	Associated Telephone Company Limited	-	-	-	-
1940	Los Angeles Directory Co.	-	-	-	-
1938	Los Angeles Directory Co.	-	-	-	-
1936	San Bernardino Directory Co Publisher	-	-	-	-
1934	Los Angeles Directory Co.	-	-	-	-
1931	Los Angeles Directory Co.	-	-	-	-
1930	San Bernardino Directory Co Publisher	-	-	-	-
1926	Los Angeles Directory Co.	-	-	-	-
1923	Los Angeles Directory Company	-	-	-	-
1922	R.L. Polk & Co Publishers	-	-	-	-

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

SE Corner E. Holt Blvd. and E. Guasti Rd.
Ontario, CA 91761

FINDINGS DETAIL

Target Property research detail.

FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

A ST

2345 A ST

Year	Uses	Source
1985	MC CUTCHEON CONSTR	GTE
1980	MC CUTCHEON CONSTR	GTE General Telephone Company of California

AIRPORT DR

2222 AIRPORT DR

Year	Uses	Source
2008	US AGRI ANML & PLNT INSPCTN	Haines Company, Inc.
2003	US AGRI ANML & PLNT INSPCTN	Haines & Co Publishers

AIRPRT DR

2222 AIRPRT DR

Year	Uses	Source
2000	UNITED STATES GOVERNMENT AGRICULTURE DEPARTMENT OF	Cole Information

CONVENTION CENTER WAY

2131 CONVENTION CENTER WAY

Year	Uses	Source
2008	CADILLAC MRK CHRSTPHR ATO CNTR	Haines Company, Inc.
	CHEVROLET MARK CHRSTPHR CNTR	Haines Company, Inc.
	ENTERPRISE RNT A CR ONTROMRK	Haines Company, Inc.
	HUMMER MARK C	Haines Company, Inc.
	MARK CHRISTOPHER AUTO CENTER	Haines Company, Inc.

FINDINGS

2143 CONVENTION CENTER WAY

Year	*Uses*	*Source*
2008	CARE ALTERNATIVE	Haines Company, Inc.
	HEE ENVRNMNTL ENGRG LLC	Haines Company, Inc.
	HERFF JONES INC	Haines Company, Inc.
	JT2 INTERGRATED RESOURCES	Haines Company, Inc.
	MISSION HILLS MORTGAGE	Haines Company, Inc.
	SUPREME LENDING	Haines Company, Inc.
	TAIT & ASSOCIATES INC	Haines Company, Inc.

2149 CONVENTION CENTER WAY

Year	*Uses*	*Source*
2008	MARIECLLNDRS RSTRNTS & BKRS	Haines Company, Inc.

2151 CONVENTION CENTER WAY

Year	*Uses*	*Source*
2008	BUILDING	Haines Company, Inc.
	A & L FINANCE	Haines Company, Inc.
	ALLCOM	Haines Company, Inc.
	ANTHONY TRAVEL INC	Haines Company, Inc.
	APPLIED PLANNING	Haines Company, Inc.
	BARNES LAW FIRM THE	Haines Company, Inc.
	BEVERLY HILLS REALTY & LOANS	Haines Company, Inc.
	BRAUNWALDER INSURANCE AGENCY	Haines Company, Inc.
	CA CONTRACTORS NETWORK SIG	Haines Company, Inc.
	CA ST HLTH VECTR BORNE DISEASE	Haines Company, Inc.
	COMBINE INS CO OF AMER	Haines Company, Inc.
	FARMERS INS	Haines Company, Inc.
	FARMERS INS	Haines Company, Inc.
	FONT CAPITAL LLC	Haines Company, Inc.
	FPSGOLD	Haines Company, Inc.
	GARZON INSURANCE AGENCY	Haines Company, Inc.
	HAVEN MANAGEMENT INC	Haines Company, Inc.
	KING L	Haines Company, Inc.
	MANPOWER TEMPORARY STAFFING	Haines Company, Inc.

Year	Uses	Source
2008	QUADRANT DISTRIBUTION	Haines Company, Inc.
	SELF INSURED SOLUTIONS LLC	Haines Company, Inc.
	TRADE EXCHANGE NETWORK INC	Haines Company, Inc.
	VALPAK OF GREATER LA	Haines Company, Inc.
	WHITEBOARD PARTNERS LLC	Haines Company, Inc.

2155 CONVENTION CENTER WAY

Year	Uses	Source
2008	HOLIDAY INN	Haines Company, Inc.
	HOLIDAY INN	Haines Company, Inc.

CONVENTION CNTR WAY

2131 CONVENTION CNTR WAY

Year	Uses	Source
2003	CASWELL George	Haines & Co Publishers
	HUMMER MARK C	Haines & Co Publishers
	MARK CHRISTOPHER AUTO CENTER	Haines & Co Publishers

2143 CONVENTION CNTR WAY

Year	Uses	Source
2003	ALPLAN CHIROPRACTIC	Haines & Co Publishers
	MISSION HILLS MORTGAGE	Haines & Co Publishers
	SOUTHLND ECONOMIC	Haines & Co Publishers

2147 CONVENTION CNTR WAY

Year	Uses	Source
2003	CALLENDER Donald	Haines & Co Publishers

2149 CONVENTION CNTR WAY

Year	Uses	Source
2003	MARIE CALLENDERS REST & BKRY	Haines & Co Publishers

2151 CONVENTION CNTR WAY

Year	Uses	Source
2003	BUILDING	Haines & Co Publishers
	ALLCOM	Haines & Co Publishers

FINDINGS

Year	Uses	Source
2003	BEATTY & ASSOCIATES	Haines & Co Publishers
	BROADBAND OFFICE	Haines & Co Publishers
	CA MANUFACTURING TECHNOLOGY CT	Haines & Co Publishers
	CASTHLTH FOOD & DRUGBRANCH	Haines & Co Publishers
	CA ST HLTH VECTH BORNE DISEASE	Haines & Co Publishers
	EDAMAME RESTAURANT	Haines & Co Publishers
	FARMERS INS	Haines & Co Publishers
	FARMERS INS	Haines & Co Publishers
	FARMERS INS	Haines & Co Publishers
	FARMERS INS	Haines & Co Publishers
	FARMERS INS ANDRES PERNETT	Haines & Co Publishers
	FPSGOLD	Haines & Co Publishers
	GENE BURTON & ASSOCIATES	Haines & Co Publishers
	HAVEN MANAGEMENT INC	Haines & Co Publishers
	HORACE MANN	Haines & Co Publishers
	INSURANCE CO	Haines & Co Publishers
	J M FUNDING CORPORATION	Haines & Co Publishers
	JENKINS S LESLIE ATTY AT LAW	Haines & Co Publishers
	JENKINS & ASSOCIATES	Haines & Co Publishers
	L D KING ENGINEERING CO INC	Haines & Co Publishers
	MANPOWER STAFFING SERVICES	Haines & Co Publishers
	MCIG CAPITAL CORP	Haines & Co Publishers
	RICHARDS & ASSOCIATES	Haines & Co Publishers
	TRADE EXCHANGE	Haines & Co Publishers
	NETWORK INC	Haines & Co Publishers
	U S LONG DISTANCE	Haines & Co Publishers
	SALES BRANCH	Haines & Co Publishers
	URBINA INSURANCE AGENCY	Haines & Co Publishers
	VOCAID INC	Haines & Co Publishers
	WEST COAST AD FEX	Haines & Co Publishers

D

2131 D

Year	Uses	Source
1995	MARK CHRISTOPHER	GTE Directories

2143 D

Year	Uses	Source
1995	Building	GTE Directories
	DONNELLY INFORMATION	GTE Directories

2149 D

Year	Uses	Source
1995	MARIE CALLENDERS	GTE Directories

2151 D

Year	Uses	Source
1995	Building	GTE Directories

D ST

2129 D ST

Year	Uses	Source
1990	MARK CHRIS SUBARU	GTE

2131 D ST

Year	Uses	Source
1990	CHRISTOPHER MARK CHEVROLET INC	GTE
	MARK CHRISTOPHER CHEVROLET INC	GTE
	MARK CHRISTOPHER LEASING	GTE
1985	MARK CHRISTOPHER	GTE

2139 D ST

Year	Uses	Source
1985	MARK CHRIS SUBARU	GTE

FINDINGS

2143 D ST

Year	*Uses*	*Source*
1990	Ardmore Brow n & Broedow	GTE
	From Azusa Glendora Telephones Call	GTE
	Donnelly Information Publishing	GTE
	DUNAWAY ASSOCIATES INC	GTE
	FABRICARE CENTER	GTE
	Facemate Corp	GTE
	Health Dynamics	GTE
	Holiday Corp Loss Prevention	GTE
	Household Finance Western Division Executive Headquarters	GTE
	Kline Center	GTE
	Kline Center Executive Suite	GTE
	Kline Center Office Services	GTE
	Larrob Enterprises	GTE
	LONG BEACH SAVINGS & LOAN ASSOCIATION Equity Loans	GTE
	NAIOP	GTE
	Neff Don	GTE
	Rafco Hotel Supply	GTE
	RAFFELSINC	GTE
	SUMITOMO MACHINERY CORP	GTE
	Sunteau Sales Internatl Inc	GTE
	Technical Systems Concepts Inc	GTE
	Trammell Crow Co	GTE
	V & V Services	GTE
	William David & Associates	GTE

2149 D ST

Year	*Uses*	*Source*
1990	Ontario	GTE
	Marie Callenders Restaurants & Bakeries	GTE

2151 D ST

Year	Uses	Source
1990	American Creditors Bureau Of Los Angeles	GTE
	Ayerst Laboratories A Div Of American Home Products	GTE
	Gottfried Phillip MAI	GTE
	Grubb & Ellis Commercial Real Estate Services	GTE
	Hays Al & Associates	GTE
	Healthdent	GTE
	Micro Frame Technologies Inc	GTE
	Mitsubishi Corp	GTE
	PRIVATE LEDGER FINANCIAL SERVICES INC	GTE
	Pro Staff Personnel Services	GTE
1985	BUILDING	GTE
	CLARION HOTL ONTARIO	GTE
	XCORONA PACIFIC CORP	GTE
	DOLE CITRUS CASTLE	GTE
	EQUIDON CONTRACTORS	GTE
	KAISER CEMENT CORP	GTE

E AIRPORT DR

2222 E AIRPORT DR

Year	Uses	Source
2020	CONCERT TECHNOLOGIES	EDR Digital Archive
	US CUSTOMS SVC	EDR Digital Archive
2017	CONCERT TECHNOLOGIES	Cole Information
2014	CONCERT TECHNOLOGIES	Cole Information
2010	US CUSTOMS SVC	Cole Information

E CONVENTION CENTER WAY

2131 E CONVENTION CENTER WAY

Year	Uses	Source
2020	MARK CHRISTOPHER CHEV BUICK	EDR Digital Archive

FINDINGS

Year	Uses	Source
2020	J-LEGG AVIATION LLC	EDR Digital Archive
	NATIONWIDE INSURANCE-PL KINAN	EDR Digital Archive
	ELECTRIC CHARGING STATION	EDR Digital Archive
	NATIONWIDE INSURANCE	EDR Digital Archive
2017	ENTERPRISE	Cole Information
	MARK CHRISTOPHER AUTO CENTER	Cole Information
2014	MARK CHRISTOPHER AUTO CENTER	Cole Information
	ENTERPRISE	Cole Information
2010	MARK CHRISTOPHER AUTO CTR	Cole Information
	ENTERPRISE RENTACAR	Cole Information
2005	STRIPE MAN INC	Cole Information
	MARK CHRISTOPHER AUTO CENTER	Cole Information
2000	HERTZ LOCAL EDITION	Cole Information
	MARK CHRISTOPHER CHEVY OLDSMOBILE INCORPORATED SALES LEASE S	Cole Information

2143 E CONVENTION CENTER WAY

Year	Uses	Source
2020	PRIME HEALTHCARE	EDR Digital Archive
2017	JT2 INTERGRATED RESOURCES	Cole Information
	SUPREME LENDING	Cole Information
	PRIME HEALTHCARE	Cole Information
	AMERICAN PUBLISHING	Cole Information
	GOLDEN STATE WATER COMPANY REGION II	Cole Information
	MISSION HILLS MORTGAGE	Cole Information
2014	JT2 INTERGRATED RESOURCES	Cole Information
	GOLDEN STATE WATER COMPANY REGION II	Cole Information
	MISSION HILLS MORTGAGE	Cole Information
2010	GOLDEN STATE WATER CO	Cole Information
	MISSION HILLS MORTGAGE BANKERS	Cole Information
	HEE ENVIRONMENTAL ENGRG LLC	Cole Information
	HYGIENE TECHNOLOGIES	Cole Information

FINDINGS

Year	Uses	Source
2005	FIRST NLC FINANCIAL SERVICE LLC	Cole Information
	MISSION HILLS MORTGAGE	Cole Information
	KENNEDY / JENKS CONSULTANTS	Cole Information
	GLOBAL BANCORP INC	Cole Information
	AMERICAN STATES WATER CO	Cole Information
	WFS FINANCIAL	Cole Information
2000	KENNEDY JENKS CONSULTANTS	Cole Information
	MICHAEL BRANDMAN ASSOCIATES	Cole Information
	INFINITY INSURANCE	Cole Information
	PATHTRACE SYSTEMS INCORPORATED	Cole Information
	NORRELL SERVICES	Cole Information
	INFINITY INSURANCE COMPANY	Cole Information
	NMC HOMECARE	Cole Information
	WESTERN FINANCIAL	Cole Information
	NORRELL SERVICES CLIENT LINE	Cole Information
	REICHERT STANFORD E LAW OFFICES OF	Cole Information

2149 E CONVENTION CENTER WAY

Year	Uses	Source
2010	MARIE CALLENDERS	Cole Information
2005	MARIE CALLENDERS RESTAURANTS & BAKE	Cole Information
	CASTLE HARLAN PARTNERS III LP	Cole Information
2000	MARIE CALLENDERS RESTAURANTS & BAKERIES	Cole Information

2151 E CONVENTION CENTER WAY

Year	Uses	Source
2020	FRONTIER BROKERS INC	EDR Digital Archive
	FRONTIER COMMUNITIES	EDR Digital Archive
	FARMERS INSURANCE-GERMAIN GRC	EDR Digital Archive
	FARMERS INSURANCE-GARCIA AGCY	EDR Digital Archive
	GSG PROTECTIVE SVC	EDR Digital Archive
	APPLIED PLANNING	EDR Digital Archive
	YANG FRANCES C DO	EDR Digital Archive

FINDINGS

Year	Uses	Source
2020	TAM HELEN B MD	EDR Digital Archive
	DAUWALDER TIMOTHY J DO	EDR Digital Archive
	RIM OF THE WORLD HM HEALTH INC	EDR Digital Archive
	MONTGOMERY STEELE LAW	EDR Digital Archive
	LALA FOODS INC	EDR Digital Archive
	GARZON INSURANCE AGENCY	EDR Digital Archive
	GRAND CAPITAL	EDR Digital Archive
	ALCID CHRIS ALAN	EDR Digital Archive
	MARSHALL ELIZABETH L PT	EDR Digital Archive
	INTEGRITY REIMBURSEMENT INC	EDR Digital Archive
	HEALTH SERVICES DEPT	EDR Digital Archive
2017	BEVERLY HILLS REALTY & LOANS	Cole Information
	TRADE EXCHANGE NETWORK INC	Cole Information
	VALPAK	Cole Information
	ALLCOM	Cole Information
	BARNES LAW FIRM	Cole Information
	FPSGOLD INC	Cole Information
	ITERIS INC	Cole Information
	LA LA FOODS INC	Cole Information
	ROYAL PRESTIGE HEALTHQUEST	Cole Information
	FARMERS INSURANCE	Cole Information
	INTEGRITY REIMBURSEMENT INC	Cole Information
	APPLIED PLANNING	Cole Information
	FONT CAPITAL LLC	Cole Information
	KING L D INC	Cole Information
2014	BARNES LAW FIRM THE	Cole Information
	MANPOWER	Cole Information
	VALPAK OF GREATER LA	Cole Information
	CALIFORNIA CONTRACTORS NETWORK SIG	Cole Information
	FARMERS INSURANCE GROUP	Cole Information
	VALPAK	Cole Information
	APPLIED PLANNING INC	Cole Information

FINDINGS

Year	Uses	Source
2014	STATE OF CALIFORNIA	Cole Information
	FPSGOLD INC	Cole Information
	ITERIS INC	Cole Information
	INTEGRITY REIMBURSEMENT INC	Cole Information
	KING L D INC	Cole Information
2010	HEALTH SERVICES DEPT	Cole Information
	INLAND SOUTHERN INSURANCE	Cole Information
	HAVEN MANAGEMENT INC	Cole Information
	MANPOWER	Cole Information
	SELF INSURED SOLUTIONS LLC	Cole Information
	U S LONG DISTANCE SALES BRANCH	Cole Information
	BARNES LAW FIRM	Cole Information
	FPSGOLD INC	Cole Information
	ANTHONY TRAVEL INC	Cole Information
	L D KING INC	Cole Information
	FARMERS INSURANCE	Cole Information
	COMBINED INSURANCE COAMERICA	Cole Information
	CALIFORNIA CONTRACTORS NTWRK	Cole Information
	QUADRANT DISTRIBUTION	Cole Information
	VALPAK	Cole Information
2005	L D KING ENGINEERING CO INC	Cole Information
	TRADE EXCHANGE NETWORK INC	Cole Information
	BAB DEVELOPMENT CORP	Cole Information
	APPLIED PLANNING INC	Cole Information
	VAN MOORE INC	Cole Information
	SASHCO INC	Cole Information
	JM FUNDING CORP	Cole Information
	MJM INVESTIGATIONS INC	Cole Information
	HAVEN MANAGEMENT INC	Cole Information
	THE BARNES LAW FIRM APC	Cole Information
	WORLWIDE SECURITY INC	Cole Information
	ONTARIO WARRIORS LLC	Cole Information

FINDINGS

Year	Uses	Source
2005	11066 HOLE AVENUE PRTNR LLC	Cole Information
	GENE BURTON & ASSOCIATES	Cole Information
	VOCAID INC	Cole Information
	FPSGOLD	Cole Information
	T MOBILE	Cole Information
	GRAND CAPITAL	Cole Information
	WMG & ASSOCIATES	Cole Information
	ACCU FAB SYSTEMS INC	Cole Information
	MCIG CAPITAL CORP	Cole Information
	RICHARDS & ASSOCIATES	Cole Information
	HORACE MANN INSURANCE	Cole Information
	BRAUNWALDER INSURANCE AGENCY	Cole Information
	VALPAK OF GREATER LA	Cole Information
	JAMES LANI	Cole Information
	FARMERS INSURANCE	Cole Information
	BEATTY & ASSOCIATES	Cole Information
	CALIFORNIA MFG TECHNOLOGY	Cole Information
	FARMERS INSURANCE ANDRES PERNETT	Cole Information
	JENKINS & ASSOCIATES	Cole Information
	LEM PARTNERS LLC	Cole Information
	THE BARNES LAW FIRM A PROFESSI	Cole Information
	FERRARI CORP	Cole Information
2000	ONE STOCK FINANCIAL SERVICES	Cole Information
	TRADE EXCHANGE NETWORK INCORPORATED	Cole Information
	L D KING ENGINEERING COMPANY INCORPORATED	Cole Information
	CALIFORNIA MANUFACTURING TECHNOLOGY CENTER	Cole Information
	TEACHERS INSURANCE CLAIMS	Cole Information
	WMA SECURITIES	Cole Information
	LOVE MED TRANSPORTATION	Cole Information
	MANPOWER STAFFING SERVICES	Cole Information

Year	Uses	Source
2000	CALIFORNIA MANUFACTURING TECHNOLOGY CENTER	Cole Information
	ALLCOM	Cole Information
	MORTGAGENET WORK	Cole Information
	HAVEN MANAGEMENT INCORPORATED	Cole Information
	OFFICE OF PUBLIC SCHOOL CONSTRUCTION	Cole Information
	APPLIED PLANNING	Cole Information
	U S LONG DISTANCE SALES BRANCH	Cole Information
	ENVIROSPECT INCORPORATED	Cole Information
	SEARCH WEST	Cole Information
	ALLEGIANCE INS SERVICE	Cole Information
	RICHARDS & ASSOCIATES	Cole Information
	SPIEKER PROPERTIES	Cole Information
	BEATTY & ASSOCIATES	Cole Information
	FPS GOLD	Cole Information
	U S LONG DISTANCE	Cole Information
	CALIFORNIA STATE OF HEALTH SERVICIES	Cole Information
	MARIA JACINTO	Cole Information
	TODD WALKER	Cole Information

2155 E CONVENTION CENTER WAY

Year	Uses	Source
2020	ATM	EDR Digital Archive
	HOLIDAY INN-ONTARIO AIRPORT	EDR Digital Archive
2017	HOLIDAY INN	Cole Information
	HOLIDAY INN ONTARIO AIRPORT	Cole Information
2014	HOLIDAY INN	Cole Information
2010	HOLIDAY INNONTARIO	Cole Information

E CONVENTION CENTER WAY STE 222

2151 E CONVENTION CENTER WAY STE 222

Year	Uses	Source
2020	JAMES PREVITI	EDR Digital Archive

FINDINGS

E D ONTARIO

2143 E D ONTARIO

Year	Uses	Source
2000	65 PLUS CAREAMERICA BRANCH OFFICES	Cole Information

E D ST

2131 E D ST

Year	Uses	Source
1995	MARK CHRISTOPHER CHEVROLET	Cole Information
	ACURA, MARC	Cole Information
1992	MARK C CHEVROLET	Cole Information

2143 E D ST

Year	Uses	Source
2000	65 PLUS CAREAMERICA BRANCH OFFICES	Cole Information
	SEARS ROEBUCK AND CO ONTARIO	Cole Information
1995	LARROB ENTERPRISES	Cole Information
	COFFEE CONCEPTS	Cole Information
	KLINE CENTER OFFICE SVC	Cole Information
	LOMAS MANAGEMENT INC	Cole Information
	BISHOP HAWK INC	Cole Information
	LONG BEACH BANK	Cole Information
	PRESTIGE INTERIORS	Cole Information
	BROWN & BROEDOW	Cole Information
	DONNELLEY INFORMATION PUB	Cole Information
	METRO BROKERS	Cole Information
	DRUG & CRIME FREE YOUTH FNDTN	Cole Information
	CALIFORNIA HOMEOWNERS	Cole Information
	MITSUBISHI FUSO TRUCK	Cole Information
	SUN MICROSYSTEMS INC	Cole Information
	ALOHA FINANCIAL & INVESTMENT	Cole Information
	HARRISON GLENN & ASSOC	Cole Information
	SUN STAR MORTGAGE CORP	Cole Information

FINDINGS

Year	Uses	Source
1995	ITT FINANCIAL CORP	Cole Information
	COMPS	Cole Information
	L D KING ENGINEERING CO	Cole Information
	TECHNICAL SYSTEMS CONCEPTS INC	Cole Information
	TRANSPORT INSURANCE CO	Cole Information
1992	SUNSTAR MORTAGE	Cole Information
	LARROB ENTERPRISES	Cole Information
	CA METER SERVICE	Cole Information
	UPLAND INDS CORP	Cole Information
	BROWN&WILLIAMSON	Cole Information
	FACEMATE CORP	Cole Information
	SUN MICROSYSTEM INC	Cole Information
	LONG BEACH BANK SSB	Cole Information
	INTL TROPICAL FRUIT	Cole Information
	PINNACLE FLOORING	Cole Information
	METRO BROKERS	Cole Information
	ARDMORE BROEDOW	Cole Information
	B&B ASSOCIATES	Cole Information
	ALCAN AEROSPACE	Cole Information
	HOLIDAY CORP PRVNTN	Cole Information
	TECHNICAL SYS CNCPT	Cole Information
	PREMIER CREDIT SERV	Cole Information
	SUNTEAU SALES INTL	Cole Information
	SCARBROUGH&SISSON	Cole Information
	PROGRSV INS	Cole Information
	C M O CAREER CNTRS	Cole Information
	TOKAI CREDIT CORP	Cole Information
	DUNAWAY ASSOCIATES	Cole Information
	KLINE CENTER	Cole Information
	NATL ASN IND&OFC PK	Cole Information
	DONNELLY INFO PBLSH	Cole Information
	DENTAL HEALTH SERVS	Cole Information

FINDINGS

Year	Uses	Source
1992	PHOTO&SOUND CO	Cole Information
	HAINES WM D	Cole Information
	ARDMORE, BROWN	Cole Information
	HAINES, WILLIAM D	Cole Information

2149 E D ST

Year	Uses	Source
1995	MARIE CALLENDERS RESTAURANT	Cole Information
1992	MARIE CALLNDRS REST	Cole Information

2151 E D ST

Year	Uses	Source
2000	EXIDE CORPORATION	Cole Information
	BIG THREE LIQUID AIR	Cole Information
1995	EMERGENCY SERVICES OFFICE	Cole Information
	BILL PARSONS SVC	Cole Information
	GOTTFRIED GAMBLE & ASSOCS INC	Cole Information
	VOC AID INC	Cole Information
	DOLE CITRUS WESTERN REGIONAL	Cole Information
	OPTIMA ASSET MANAGEMENT SVC	Cole Information
	HEALTH SERVICE DEPT	Cole Information
	GRUBB & ELLIS REAL ESTATE INC	Cole Information
	BIG THREE LIQUID AIR	Cole Information
	GALAHER SETTLEMENTS & INS SVC	Cole Information
	GOTTFRIED, PHILLIP	Cole Information
1992	BILL PARSONS SERV	Cole Information
	GOTTFRIED GAMBLE	Cole Information
	C I T GROUP	Cole Information
	VOC AID INC	Cole Information
	GRUBB&ELLIS BRKRGE	Cole Information
	BOMBARDIER CAPITAL	Cole Information
	MITSUBISHI CEMENT	Cole Information
	TRANSPORT INSURANCE	Cole Information
	CA ST EMER SERV OFC	Cole Information

Year	Uses	Source
1992	KING L D ENGRG CO	Cole Information
	CARDOX DIVISION	Cole Information
	MICRO FRAME TECH	Cole Information
	PRO STAFF PRSNNL SV	Cole Information
	DOLE CITRUS C&C ADM	Cole Information
	GOTTFRIED, PHILLIP	Cole Information

E GUASTI RD

2381 E GUASTI RD

Year	Uses	Source
2000	COMSYS INFORMATION TECHNOLOGY SERVICES	Cole Information

2445 E GUASTI RD

Year	Uses	Source
2017	VETERANS COMMUNICATION SERVICES INC	Cole Information
2014	VETERANS COMMUNICATION SERVICES INC	Cole Information
2010	VETERANS COMMUNICATION SVC INC	Cole Information
	GREAT QUALITY CONSTRUCTION	Cole Information
2005	VETERANS COMM SERVICES INC	Cole Information
	JLB PROTECTIVE SERVICES INC	Cole Information
2000	YEAGER E L CONSTRUCTION	Cole Information
	SVERDRUP CIVIL	Cole Information

2501 E GUASTI RD

Year	Uses	Source
2017	TANTARA WEST	Cole Information
	SALES MAX INC	Cole Information
2014	SALES MAX INC	Cole Information
2010	CERTEGY	Cole Information
	TANTARA WEST	Cole Information
	ANCHOR BLUE RETAIL GROUP	Cole Information
2005	HUB HOLDING CORP	Cole Information

Year	Uses	Source
2000	HUB DISTRIBUTING INCORPORATED	Cole Information
1995	HUB DISTRIBUTING INC	Cole Information
1992	HUB DISTRIBUTING	Cole Information

E HOLT BLVD

2200 E HOLT BLVD

Year	Uses	Source
2020	ONTARIO GATEWAY HOTEL	EDR Digital Archive
	AUTO GLASS SVC	EDR Digital Archive
2017	RADISSON HOTEL ONTARIO AIRPORT	Cole Information
	MARRIOTT HOTELS & RESORTS	Cole Information
	MARRIOTT ONTARIO AIRPORT	Cole Information
	AUTO GLASS SERVICES	Cole Information
2014	RADISSON ONTARIO AIRPORT	Cole Information
	MARRIOTT ONTARIO AIRPORT	Cole Information
	RADISSON HOTELS & RESORTS	Cole Information
2010	KVL AUDIO VISUAL INC	Cole Information
	MARRIOTTONTARIO AIRPORT	Cole Information
2005	CSDR REUNION	Cole Information
	ONTARIO AIRPORT MARRIOTT	Cole Information
	CUSTOM GIFTS	Cole Information
	MARRIOTT HOTELS & RESORTS	Cole Information
	THERAPEUTIC TOUCH	Cole Information
	KVL AUDIO VISUAL CORP	Cole Information
	PADILLAS BARBER & BEAUTY SHOP	Cole Information
2000	KUSTOM GIFTS	Cole Information
	MPS MARKETING & PUBLISHING GROUP	Cole Information
	MARRIOTT HOTEL ONTARIO AIRPORT	Cole Information
	ONTARIO AIRPORT MARRIOTT	Cole Information
	KVL AUDIO VISUAL CORPORATION	Cole Information
	ON COMMAND CORP	Cole Information
	MARRIOTT HOTELS RESORTS SUITES	Cole Information

Year	Uses	Source
1995	SWANK AUDIO VISUALS INC	Cole Information
	MARRIOTT HOTELS & RESORTS	Cole Information
	JACKSON, CLAUDIA	Cole Information
1992	SWANK AUDIO VISUALS	Cole Information
	CLARION HOTEL	Cole Information

GAREY AVE

1807 GAREY AVE

Year	Uses	Source
1975	Rowetts Portable X Ray Service Inc	GTE Directories

GUASTI RD

2345 GUASTI RD

Year	Uses	Source
1985	MCCUTCHEON SUPERIOR	GTE

2445 GUASTI RD

Year	Uses	Source
2008	VETERANS COMMUNICATION SRV INC	Haines Company, Inc.
2003	VETERANS COMMUNICATION SRV INC	Haines & Co Publishers

2501 GUASTI RD

Year	Uses	Source
2008	CERTEGY	Haines Company, Inc.
	HUB DISTRIBUTING INC	Haines Company, Inc.
	HUB DISTRIBUTING INC	Haines Company, Inc.
	KUEHNE NAGEL	Haines Company, Inc.
	TANTARA WEST	Haines Company, Inc.
2003	HUB DISTRIBUTING INC	Haines & Co Publishers
1995	HUB DISTRIBUTING INC	GTE Directories
1985	HUB DISTRIBUTING INC	GTE
1980	MHUB DISTRIBUTING INC	GTE General Telephone Company of California

FINDINGS

HOLT BLVD

2200 HOLT BLVD

Year	*Uses*	*Source*
2008	KUSTOM GIFTS	Haines Company, Inc.
	KVL AUDIO VISUAL CORP	Haines Company, Inc.
	KVL AUDIO VISUAL INC	Haines Company, Inc.
	MARRIOTT HOTELS & RESORTS	Haines Company, Inc.
	ON COMMAND CORP	Haines Company, Inc.
2003	KUSTOM GIFTS	Haines & Co Publishers
	KVL AUDIO VISUAL CORP	Haines & Co Publishers
	MARRIOTT HOTEL	Haines & Co Publishers
	ON COMMAND CORP	Haines & Co Publishers
1995	SWANK AUDIO VISUALS	GTE Directories
	MARRIOTT HOTEL ONTARIO	GTE Directories
1990	CLARION HOTEL ONTARIO AIRPORT	GTE
	Swank Audio Visuals Inc	GTE

FINDINGS

ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

Address Researched	Address Not Identified in Research Source
1807 GAREY AVE	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2129 D ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2131 CONVENTION CENTER WAY	2020, 2017, 2014, 2010, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2131 CONVENTION CNTR WAY	2020, 2017, 2014, 2010, 2008, 2005, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2131 D	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2131 D ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2131 D ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2131 E CONVENTION CENTER WAY	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2131 E CONVENTION CENTER WAY	2020, 2017, 2014, 2010, 2008, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2131 E CONVENTION CENTER WAY	2020, 2017, 2014, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2131 E CONVENTION CENTER WAY	2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
2131 E CONVENTION CENTER WAY	2020, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2131 E CONVENTION CENTER WAY	2020, 2017, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2131 E D ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2131 E D ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2139 D ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2143 CONVENTION CENTER WAY	2020, 2017, 2014, 2010, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2143 CONVENTION CNTR WAY	2020, 2017, 2014, 2010, 2008, 2005, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2143 D	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2143 D ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2143 E CONVENTION CENTER WAY	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2143 E CONVENTION CENTER WAY	2020, 2017, 2014, 2010, 2008, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2143 E CONVENTION CENTER WAY	2020, 2017, 2014, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2143 E CONVENTION CENTER WAY	2020, 2017, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
2143 E CONVENTION CENTER WAY	2020, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2143 E CONVENTION CENTER WAY	2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2143 E D ONTARIO	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2143 E D ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2143 E D ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2143 E D ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2147 CONVENTION CNTR WAY	2020, 2017, 2014, 2010, 2008, 2005, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2149 CONVENTION CENTER WAY	2020, 2017, 2014, 2010, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2149 CONVENTION CNTR WAY	2020, 2017, 2014, 2010, 2008, 2005, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2149 D	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2149 D ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2149 E CONVENTION CENTER WAY	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2149 E CONVENTION CENTER WAY	2020, 2017, 2014, 2010, 2008, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
2149 E CONVENTION CENTER WAY	2020, 2017, 2014, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2149 E D ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2149 E D ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2151 CONVENTION CENTER WAY	2020, 2017, 2014, 2010, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2151 CONVENTION CNTR WAY	2020, 2017, 2014, 2010, 2008, 2005, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2151 D	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2151 D ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2151 D ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2151 E CONVENTION CENTER WAY	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2151 E CONVENTION CENTER WAY	2020, 2017, 2014, 2010, 2008, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2151 E CONVENTION CENTER WAY	2020, 2017, 2014, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2151 E CONVENTION CENTER WAY	2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2151 E CONVENTION CENTER WAY	2020, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
2151 E CONVENTION CENTER WAY	2020, 2017, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2151 E CONVENTION CENTER WAY STE 222	2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2151 E D ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2151 E D ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2151 E D ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2155 CONVENTION CENTER WAY	2020, 2017, 2014, 2010, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2155 E CONVENTION CENTER WAY	2020, 2017, 2014, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2155 E CONVENTION CENTER WAY	2020, 2017, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2155 E CONVENTION CENTER WAY	2020, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2155 E CONVENTION CENTER WAY	2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2200 E HOLT BLVD	2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2200 E HOLT BLVD	2020, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2200 E HOLT BLVD	2020, 2017, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
2200 E HOLT BLVD	2020, 2017, 2014, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2200 E HOLT BLVD	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2200 E HOLT BLVD	2020, 2017, 2014, 2010, 2008, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2200 E HOLT BLVD	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2200 E HOLT BLVD	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2200 HOLT BLVD	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2200 HOLT BLVD	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2200 HOLT BLVD	2020, 2017, 2014, 2010, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2200 HOLT BLVD	2020, 2017, 2014, 2010, 2008, 2005, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2222 AIRPORT DR	2020, 2017, 2014, 2010, 2008, 2005, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2222 AIRPORT DR	2020, 2017, 2014, 2010, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2222 AIRPRT DR	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2222 E AIRPORT DR	2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
2222 E AIRPORT DR	2020, 2017, 2014, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2222 E AIRPORT DR	2020, 2017, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2222 E AIRPORT DR	2020, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2345 A ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2345 A ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2345 GUASTI RD	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2381 E GUASTI RD	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2445 E GUASTI RD	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2445 E GUASTI RD	2020, 2017, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2445 E GUASTI RD	2020, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2445 E GUASTI RD	2020, 2017, 2014, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2445 E GUASTI RD	2020, 2017, 2014, 2010, 2008, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2445 GUASTI RD	2020, 2017, 2014, 2010, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
2445 GUASTI RD	2020, 2017, 2014, 2010, 2008, 2005, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2501 E GUASTI RD	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2501 E GUASTI RD	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2501 E GUASTI RD	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2501 E GUASTI RD	2020, 2017, 2014, 2010, 2008, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2501 E GUASTI RD	2020, 2017, 2014, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2501 E GUASTI RD	2020, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2501 E GUASTI RD	2020, 2017, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2501 GUASTI RD	2020, 2017, 2014, 2010, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2501 GUASTI RD	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2501 GUASTI RD	2020, 2017, 2014, 2010, 2008, 2005, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2501 GUASTI RD	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2501 GUASTI RD	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

Address Researched	Address Not Identified in Research Source
SE Corner E. Holt Blvd. and E. Guasti Rd.	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

Ontario Hotel
SE Corner E. Holt Blvd. and E. Guasti Rd.
Ontario, CA 91761

Inquiry Number: 7482419.6
October 27, 2023

The EDR Property Tax Map Report

EDR® Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

EDR Property Tax Map Report

Environmental Data Resources, Inc.'s EDR Property Tax Map Report is designed to assist environmental professionals in evaluating potential environmental conditions on a target property by understanding property boundaries and other characteristics. The report includes a search of available property tax maps, which include information on boundaries for the target property and neighboring properties, addresses, parcel identification numbers, as well as other data typically used in property location and identification.

NO COVERAGE

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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Ontario Hotel
SE Corner E. Holt Blvd. and E. Guasti Rd.
Ontario, CA 91761

Inquiry Number: 7482419.7
October 27, 2023

EDR Building Permit Report

Target Property and Adjoining Properties

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

EDR Building Permit Report: Search Documentation

10/27/23

Site Name:
Ontario Hotel
SE Corner E. Holt
Ontario, CA 91761

EDR Inquiry # 7482419.7

Client Name:
Petra Geotechnical Inc
40880 County Center Drive,
Temecula, CA 92591

Contact: Ed Lump

Search Documentation

DATA GAP

The complete collection of Building Permit data available to EDR has been searched, and as of 10/27/23, EDR does not have access to building permits in the city where your target property is located (Ontario, CA).

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EDR BUILDING PERMIT REPORT

About This Report

The EDR Building Permit Report provides a practical and efficient method to search building department records for indications of environmental conditions. Generated via a search of municipal building permit records gathered from more than 1,600 cities nationwide, this report will assist you in meeting the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527 - 21), or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

Building permit data can be used to identify current and/or former operations and structures/features of environmental concern. The data can provide information on a target property and adjoining properties such as the presence of underground storage tanks, pump islands, sumps, drywells, etc., as well as information regarding water, sewer, natural gas, electrical connection dates, and current/former septic tanks.

Methodology

EDR has developed the EDR Building Permit Report through our partnership with BuildFax, the nation's largest repository of building department records. BuildFax collects, updates, and manages building department records from local municipal governments. The database now includes 30 million permits, on more than 10 million properties across 1,600 cities in the United States.

The EDR Building Permit Report comprises local municipal building permit records, gathered directly from local jurisdictions, including both target property and adjoining properties. Years of coverage vary by municipality. Data reported includes (where available): date of permit, permit type, permit number, status, valuation, contractor company, contractor name, and description.

Incoming permit data is checked at seven stages in a regimented quality control process, from initial data source interview, to data preparation, through final auditing. To ensure the building department is accurate, each of the seven quality control stages contains, on average, 15 additional quality checks, resulting in a process of approximately 105 quality control "touch points."

For more information about the EDR Building Permit Report, please contact your EDR Account Executive at (800) 352-0050.

Ontario Hotel
SEC E. Holt Blvd. & E. Guasti Rd.
Ontario, CA 91761

Inquiry Number: 07482419.8R
November 2, 2023

EDR Environmental Lien and AUL Search 1980

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Environmental Lien and AUL Search 1980

The EDR Environmental Lien and AUL Search 1980 report provides results from a search of available land title records for environmental cleanup liens and other activity and use limitations (AULs), such as engineering controls and institutional controls.

A network of professional, trained researchers, following established procedures, uses client supplied address and/or parcel information to:

- search for parcel number and/or legal description
- search for ownership information filed between 1980 and the most current publicly available date
- research official land title documents recorded at jurisdictional agencies such as recorders' offices, registries of deeds, county clerks' offices, etc.
- search for environmental encumbering instrument(s) filed between 1980 and the most current publicly available date
- provide a copy of any environmental encumbrance(s)
- provide a copy of the current deed when available

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Property Archives, LLC researched and compiled the land title information contained in this EDR Environmental Lien and AUL Search 1980 report on behalf of EDR.



Property Archives

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EDR Environmental Lien and AUL Search 1980

TARGET PROPERTY INFORMATION

ADDRESS

Ontario Hotel
SEC of E. Holt Blvd. & E. Guasti Rd.
Ontario, CA 91761

PROPERTY DESCRIPTION

Parcel ID: 011-032-233

Current Owner: JC Horizon, Ltd.

Legal Description: PARCEL MAP 5660 PARCEL 2

FINDINGS SUMMARY

The following is a summary of information contained in the report. Additional details may be found in the Findings Detail section.

Parcel ID: 011-032-233

Environmental Lien: Found ☐ Not Found ■

Other Activity and Use Limitations (AULs): Found ☐ Not Found ■

HISTORICAL CHAIN of TITLE FROM 1980			
RECORDED	**INSTRUMENT**	**GRANTEE**	**GRANTOR**
08/24/2018	0311349	JC Horizon, Ltd.	Qualco, Inc. fka Agriswiss, Inc.
11/22/1985	0296035	Agriswiss, Inc.	Co-Invest Ontario, Inc.
07/01/1983	0147041	Co-Invest Ontario, Inc.	James M. & Eloise B. Kline

RESEARCH SOURCE(S)

The following research sources were reviewed from January 1, 1980, to October 30, 2023. Based on available information evaluated by the title search professional, the jurisdiction does not require a search of judicial records to identify environmental liens.

Source 1: San Bernardino County Assessor
San Bernardino County, California

Source 2: San Bernardino County Clerk-Recorder
San Bernardino County, California

Source 3: California Department of Toxic Substances Control

FINDINGS DETAIL

EDR Environmental Lien and AUL Search 1980

Parcel ID: 011-032-233

ENVIRONMENTAL LIEN

Environmental Lien: Found ☐ Not Found ■

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

Other AULs: Found ☐ Not Found ■

MISCELLANEOUS DOCUMENTS

Not Applicable

HISTORICAL CHAIN OF TITLE FROM 1980

Parcel ID: 011-032-233

DEED TYPE:	Corporation Grant Deed
GRANTEE:	JC Horizon, Ltd.
GRANTOR:	Qualco, Inc. fka Agriswiss, Inc.
DATE EXECUTED:	August 23, 2018
DATE RECORDED:	August 24, 2018
INSTRUMENT NO.:	2018-0311349

*See attached exhibit.

DEED TYPE:	Deed
GRANTEE:	Agriswiss, Inc.
GRANTOR:	Co-Invest Ontario, Inc.
DATE EXECUTED:	November 21, 1985
DATE RECORDED:	November 22, 1985
INSTRUMENT NO.:	1985-0296035

DEED TYPE:	Grant Deed
GRANTEE:	Co-Invest Ontario, Inc.
GRANTOR:	James M. & Eloise B. Kline
DATE EXECUTED:	July 1, 1983
DATE RECORDED:	July 1, 1983
INSTRUMENT NO.:	1983-0147041

*Property acquired by James M. & Eloise B. Kline prior to January 1, 1980.

EDR Environmental Lien and AUL Search 1980

CURRENT DEED EXHIBIT

RECORDING REQUESTED BY

AND WHEN RECORDED MAIL DOCUMENT TO:

NAME Judy Lee
STREET ADDRESS JC Horizon, LTD.
CITY, STATE & ZIP CODE 625 E. State St.
Ontario, CA. 91761

Electronically Recorded in Official Records, County of San Bernardino

8/24/2018
02:15 PM
CG

BOB DUTTON
ASSESSOR - RECORDER - CLERK
867 SPL Title Services

Doc# 2018-0311349

Titles 1 Pages 6

Fees	29.00
Taxes	8,800.00
CA SB2 Fee	.00
Others	.00
Paid	8,829.00

SPACE ABOVE FOR RECORDER'S USE ONLY

Corporation Grant Deed
Title of Document

THIS COVER SHEET ADDED TO PROVIDE ADEQUATE SPACE FOR RECORDING INFORMATION
($3.00 Additional Recording Fee Applies)

Recording Requested By
Fidelity National Title

RECORDING REQUESTED BY
AND WHEN RECORDED RETURN TO:

Judy Lee
JC Horizon, Ltd.
825 E. State Street
Ontario, California 91761

The undersigned declares that
the Documentary Transfer Tax
is $8,800 and is computed on
the full value of the property conveyed.

SPACE ABOVE THIS LINE FOR RECORDER'S USE

2306l143-MB **CORPORATION GRANT DEED**

THE UNDERSIGNED GRANTOR DECLARES:

Documentary Transfer Tax is $8,800.
( ) Unincorporated area (x) City of Ontario, California

Parcel No. 0110-322-33-0-000

(x) computed on full value of the property conveyed, or
( ) computed on full value less value of liens or encumbrances remaining at time of sale.

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, **Qualco, Inc.**, a California corporation, successor by name change to Agriswiss, Inc., a California corporation ("Grantor"), having an address of 1503 South Coast Dr., Suite 206, Costa Mesa, California 92626, hereby GRANTS to **JC Horizon, Ltd.**, a California corporation ("Grantee"), having an address of 825 E. State Street, Ontario, California 91761, the following described real property situated in the County of San Bernardino, State of California (the "Property").

SEE EXHIBIT "A" ATTACHED HERETO AND
INCORPORATED HEREIN BY THIS REFERENCE.

This Deed is made, and is accepted by Grantee, subject to the restrictions, easements, covenants, encumbrances, and liens described on Exhibit "B" attached hereto and incorporated herein by reference for all purposes (the "Permitted Exceptions").

Dated as of this 23rd day of August, 2018.

GRANTOR:

QUALCO, INC., successor by name change to
AGRISWISS, INC., a California corporation

By: _____
Victor Kawana, Secretary

EXHIBIT A

LEGAL DESCRIPTION

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

PARCEL 2 OF PARCEL MAP NO. 5660, IN THE CITY OF ONTARIO, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS PER PLAT RECORDED IN BOOK 69 OF PARCEL MAPS, PAGES 76 THROUGH 78, INCLUSIVE, RECORDS OF SAID COUNTY AS AMENDED BY MAP RECORDED IN BOOK 80 OF PARCEL MAPS, PAGES 56 THROUGH 58, INCLUSIVE, RECORDS OF SAID COUNTY.

APN: 0110-322-33-0-000

EXHIBIT B
PERMITTED EXCEPTIONS

A. Property taxes, which are a lien not yet due and payable, including any assessments collected with taxes to be levied for the fiscal year 2018-2019.

B. Property taxes, including any personal property taxes and any assessments collected with taxes, are as follows:

Tax Identification No.:	0110-322-33-0-000
Fiscal Year:	2014-2015
1st Installment:	$21,676.95, Paid
2nd Installment:	$21,676.91, Paid
Homeowners Exemption:	$0.00
Code Area:	004-080

C. The lien of supplemental or escaped assessments of property taxes, if any, made pursuant to the provisions of Chapter 3.5 (commencing with Section 75) or Part 2, Chapter 3, Articles 3 and 4, respectively, of the Revenue and Taxation Code of the State of California as a result of the transfer of title to the vestee named in Schedule A or as a result of changes in ownership or new construction occurring prior to Date of Policy.

1. Water rights, claims or title to water, whether or not disclosed by the public records.

2. The ownership of said Land does not include rights of access to or from the street, highway, or freeway abutting said Land, such rights having been relinquished by the document,

Recording Date:	April 17, 1946
Recording No:	in Book 1881, Page 477, Official Records
Affects:	Said land

Said deed further contains a waiver in favor of the State of California of any claims for damages to said land by reason of the location, construction, landscaping or maintenance of a highway or freeway contiguous thereto.

3. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to:	San Bernardino County Flood Control District
Purpose:	Flood control and water conservation
Recording Date:	September 12, 1951
Recording No:	in Book 2822, Page 335, Official Records
Affects:	That portion of Parcel 2 shown on the recorded Map of said Parcel Map and more particularly described by recital therein.

4. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to:	The City of Ontario
Purpose:	Public utilities
Recording Date:	April 7, 1966
Recording No:	in Book 6604, Page 153, Official Records
Affects:	That portion of Hellman Avenue, vacated.

5. Requirements contained in the Improvement Certificate as shown by recital in the Owners Certificate of the recorded map of said Parcel Map thereon.

EXHIBIT B
PERMITTED EXCEPTIONS
(Continued)

6. Covenants, conditions, restrictions and easements but omitting any covenants or restrictions, if any, including but not limited to those based upon race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, source of income, gender, gender identity, gender expression, medical condition or genetic information, as set forth in applicable state or federal laws, except to the extent that said covenant or restriction is permitted by applicable law, as set forth in the document

Recording Date: July 26, 1984
Recording No: 84-176925, Official Records

Said covenants, conditions and restrictions provide that a violation thereof shall not defeat the lien of any mortgage or deed of trust made in good faith and for value.

7. The Land described herein is included within a project area of the Redevelopment Agency shown below, and that proceedings for the redevelopment of said project have been instituted under the Redevelopment Law (such redevelopment to proceed only after the adoption of the Redevelopment Plan) as disclosed by a document.

Redevelopment Agency: Guasti Redevelopment Project Area
Recording Date: November 5, 2007
Recording No: 2007-0615960, Official Records

8. Please be advised that our search did not disclose any open Deeds of Trust of record. If you should have knowledge of any outstanding obligation, please contact the Title Department immediately for further review prior to closing.

9. Any easements not disclosed by the public records as to matters affecting title to real property, whether or not said easements are visible and apparent.

10. Matters which may be disclosed by an inspection and/or by a correct ALTA/ACSM Land Title Survey of said Land that is satisfactory to the Company, and/or by inquiry of the parties in possession thereof.

11. Any rights of the parties in possession of a portion of, or all of, said Land, which rights are not disclosed by the public records.

The Company will require, for review, a full and complete copy of any unrecorded agreement, contract, license and/or lease, together with all supplements, assignments and amendments thereto, before issuing any policy of title insurance without excepting this item from coverage.

The Company reserves the right to except additional items and/or make additional requirements after reviewing said documents.

END OF EXCEPTIONS

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy or validity of that document

STATE OF CALIFORNIA)
)
COUNTY OF ORANGE)

On 08/23/2018 before me, LORRAINE E. PETERSON, Notary Public, personally appeared VICTOR KAWANA, who provided to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/~~are~~ subscribed to the within instrument and acknowledged to me that he/she/~~the~~y executed the same in his/~~her/their~~ authorized capacity(i~~es~~), and that by his/~~her/the~~ir signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY, under the laws of the State of California that the forgoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Lorraine E Peterson (Seal)

LORRAINE E. PETERSON
COMM. #2101793
Notary Public · California
Orange County
My Comm. Expires Mar. 28, 2019

Ontario Hotel

SE Corner E. Holt Blvd. and E. Guasti Rd.

Ontario, CA 91761

Inquiry Number: 7482419.11

October 27, 2023

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

10/27/23

Site Name:

Ontario Hotel
SE Corner E. Holt Blvd. and E.
Ontario, CA 91761
EDR Inquiry # 7482419.11

Client Name:

Petra Geotechnical Inc
40880 County Center Drive, Suite M
Temecula, CA 92591
Contact: Ed Lump

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	Scale	Details	Source
2020	1"=500'	Flight Year: 2020	USDA/NAIP
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
2002	1"=500'	Acquisition Date: January 01, 2002	USGS/DOQQ
1994	1"=500'	Acquisition Date: June 01, 1994	USGS/DOQQ
1989	1"=500'	Flight Date: August 03, 1989	USDA
1985	1"=500'	Flight Date: July 28, 1985	USDA
1975	1"=500'	Flight Date: August 01, 1975	USGS
1966	1"=500'	Flight Date: April 16, 1966	USGS
1953	1"=500'	Flight Date: February 02, 1953	USDA
1949	1"=500'	Flight Date: May 21, 1949	USDA
1938	1"=500'	Flight Date: May 27, 1938	USDA

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INQUIRY #: 7482419.11

YEAR: 2020

= 500'

N

EDR


INQUIRY #: 7482419.11
YEAR: 2016
= 500'
N
EDR



INQUIRY #: 7482419.11

YEAR: 2012

= 500'

N

EDR

2745


INQUIRY #: 7482419.11
YEAR: 2009
= 500'
N
EDR



INQUIRY #: 7482419.11

YEAR: 2006

= 500'

N

EDR

2747


INQUIRY #: 7482419.11
YEAR: 2002
= 500'
N
EDR


INQUIRY #: 7482419.11
YEAR: 1994
= 500'
N
EDR


INQUIRY #: 7482419.11
YEAR: 1989
= 500'
N
EDR



INQUIRY #: 7482419.11

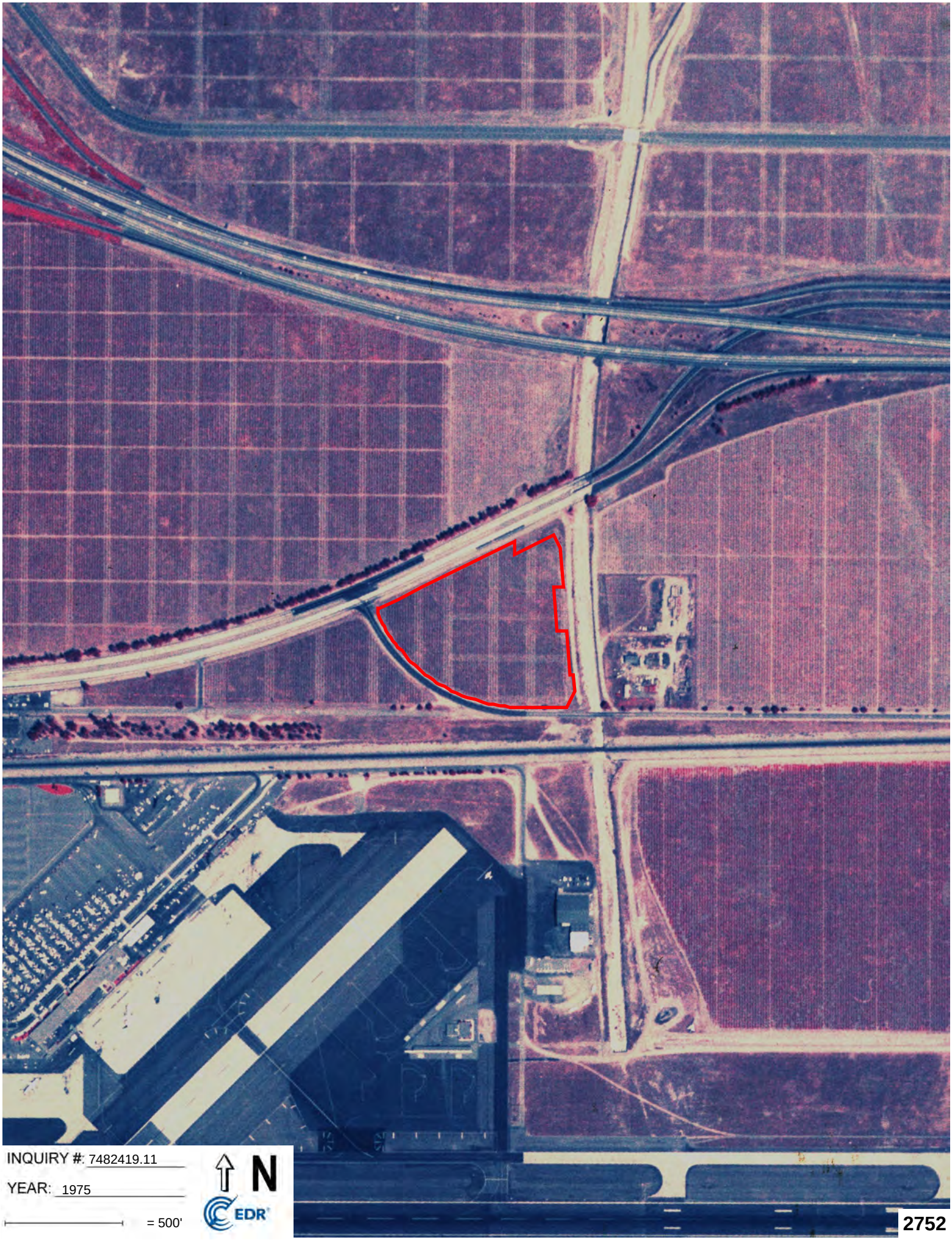
YEAR: 1985

= 500'

N

EDR

2751



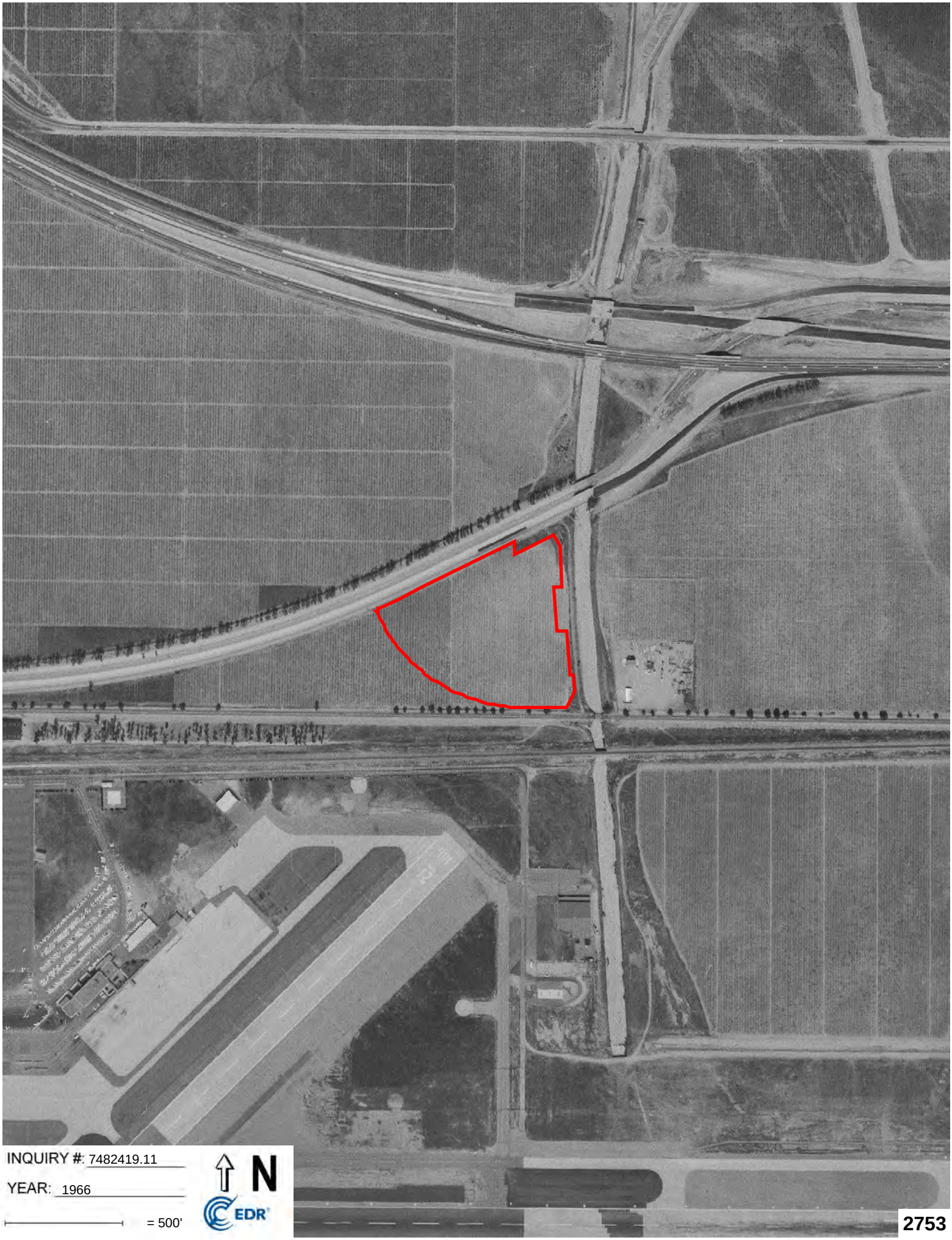
INQUIRY #: 7482419.11

YEAR: 1975

= 500'

N

EDR



INQUIRY #: 7482419.11

YEAR: 1966

= 500'

N

EDR

2753



INQUIRY #: 7482419.11

YEAR: 1953

= 500'

N

EDR

2754



INQUIRY #: 7482419.11

YEAR: 1949

= 500'

N

EDR

2755



INQUIRY #: 7482419.11

YEAR: 1938

= 500'

N

EDR

APPENDIX D

INTERVIEWS

PETRA GEOSCIENCES, INC.
40880 County Center Dr., Suite M, Temecula, CA 92591 * (951) 600-9271 * (714) 549-8921

PHASE I USER/CLIENT QUESTIONNAIRE

The purpose of this questionnaire is to obtain information from the user / client regarding the Subject Property.

Date Sent to Client **October 27, 2023** Date Received from Client _____

A. SITE INFORMATION

1. Property Name/APN: **Ontario Hotel / APN 011-032-233**

2. Location (If a map is available, please include it): **10.5 Acres of undeveloped land at SE corner of E. Holt Blvd. & E. Guasti Rd., Ontario, CA**

3. Why is the Phase I required? (Development as a residential parcel, protection from CERCLA liability, etc?): Development as hotel

4. Please list all parties who will rely on the Phase I report: Diversified Pacific

5. Is there an Interview Contact for this job? (A current owner, operator, or someone with knowledge of the history and/or processes occurring at the site). ☑ Yes ☐ No

   If yes, please provide the following information:
   Person to be interviewed: Judy Lee
   Title/Company: President/JC Horizons LTD
   Phone number and/or email address: (626) 695-790
   judy-jchorizon@jchorizonsltd.com

6. Do you have any reports for this job (such as previous Phase I's, biology reports, cultural resource reports, geotechnical reports, etc.) ☑ Yes ☐ No

   If yes, please provide them for Petra to review. *Date Received from Client*_____

7. As part of our assessment, Petra contacts local agencies to obtain miscellaneous information about the project site such as previous investigations, zoning, and flood zone. Do you have any current restrictions regarding Petra contacting these agencies?

   ☐ Yes ☑ No

   If yes, please contact us to discuss further.

B. SITE ACESS

1. Does Petra have access to the property at this time? ☑ Yes ☐ No

2. Are there any access restrictions such as a locked gate or required insurance forms? Certificate of Insurance needed.
   There is a gate surrounding the property. Enter from the southeast corner adacent to the flood control channel on Guasti Road.

3. Is there a site manager that Petra needs to contact prior to visiting the site? No, just give Diversified (Nolan Leggio) 48 hr notice.

C. LANDOWNER LIABILITY PROTECTIONS

In order to qualify for one of the Landowner Liability Protections offered by the Small Business liability Relief and Brownfields Revitalization of 2001 (the "Brownfields Amendments"), the client must provide the following information (if available) to the environmental professional. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete.

1. Did a search of the land title records identify any environmental liens filed or recorded against the subject property under federal, tribal, state, or local law? (40 CFR 312.25) ☐ Yes ☑ No

   If no, have you or will you conduct a search for any environmental cleanup liens against the property that are filed or recorded in a registry? ☑ Yes ☐ No

   If yes, please provide Petra with this information. A title report has been provided

   If no, do you require Petra to complete this task, which requires an additional fee? ☑ Yes ☐ No

2. Did a search of the land title records identify land use limitations (AULs), such as engineering controls, land use restrictions, or institutional controls that are in place at the subject site and/or have been recorded against the subject property under federal, tribal, state, or local law? (40 CFR 312.25) ☐ Yes ☑ No

   If no, have you or will you conduct a search for any AULs against the property that are filed or recorded in a registry? ☑ Yes ☐ No

   If yes, please provide Petra with this information. _____

   If no, do you require Petra to complete this task, which requires an additional fee? ☑ Yes ☐No

3. As the User of this Environmental Site Assessment, do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the potential chemicals and processes used by this type of business? (40 CFR 312.28) ☐ Yes ☑ No

   If yes, please provide Petra with this information. _____

PETRA GEOSCIENCES, INC.
40880 County Center Dr., Suite M, Temecula, CA 92591 * (951) 600-9271 * (714) 549-8921

4. Does the purchase price being paid for the subject property reasonably reflect the fair market value of the property? (40 CFR 312.29) ☑ Yes ☐ No

   If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination or any environmental concerns are known or believed to be present at the property?

   ☐ Yes ☐ No

   If yes, please provide Petra with that information. _____

5. Are you aware of commonly known or reasonably ascertainable information about the subject property that would help the environmental professional to identify conditions indicative of hazardous materials/chemical releases or threatened releases? (40 CFR 312.30) For example,

   A. Do you know the past uses of the property? ☐ Yes ☑ No

   If yes, please provide Petra with the information. _____

   B. Do you know of specific chemicals that are present or once were present at the subject property? ☐ Yes ☑ No

   If yes, please provide Petra with the information. _____

   C. Do you know of spills or other chemical releases that have taken place at the subject property? ☐ Yes ☑ No

   If yes, please provide Petra with the information. _____

   D. Do you know of any environmental cleanups that have taken place at the subject property or adjacent properties? ☐ Yes ☑ No

   If yes, please provide Petra with the information. _____

6. As the user of this ESA, based on your knowledge and experience related to the property, are there any obvious indicators that point to the presence or likely presence of contamination at the subject property? (40 CFR 312.31) ☐ Yes ☑ No

   If yes, please provide Petra with the information. _____

User/Client Representative: Nick Foggia Date: 10/27/23
(Please sign and print name)

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PHASE I PROPERTY OWNER INTERVIEW QUESTIONNAIRE

The purpose of this questionnaire is to obtain information from knowledgeable individuals regarding the Subject Site. This questionnaire will become part of the assessment report.

A. SITE INFORMATION

Project Number: **22-398** Property Location: **10.5 acres of vacant land at the SE corner of E. Holt Blvd. & E. Guasti Rd., Ontario, CA**

INTERVIEW INFORMATION

Date/Time: N/A ☐ In Person
Interviewer: N/A ☐ By Telephone, Number: _____
Person Interviewed: _____ ☐ By Facsimile, Number: _____
Title/Company: _____ ☐ Email: _____

1. What is your relationship to the property? Property owner

2. Do you have good knowledge regarding the uses and physical characteristics of the property?
☑Yes
☐No If not, who does? _____ Phone Number: _____

3. Do you have good knowledge regarding the activities/processes conducted at the property?
☑Yes
☐No If not, who does? _____ Phone Number: _____

B. PROPERTY INFORMATION

1. To the best of your knowledge, what are the current and past uses of the property? Please describe with approximate dates.

Vacant land since we purchased it in 2018.

2. To your knowledge, are there:

Hazardous substances present on the site? ☐Yes ☑No
Petroleum products present on the site? ☐Yes ☑No

If the preceding items are present, are there indications of any of the following:

An existing release? ☐Yes ☐No
A past release? ☐Yes ☐No
A threat of their release? ☐Yes ☐No

If yes to any of the above, please describe: _____

_____

_____

3. Are you aware of the presence of any of the following either currently or previously on the property or any nearby properties:

Potential Recognized Environmental Conditions	Site		Adjacent	
Hazardous substances?	☐ Yes	☑ No	☐ Yes	☑ No
Petroleum products?	☐ Yes	☒ No	☐ Yes	☑ No
Chemicals?	☐ Yes	☑ No	☐ Yes	☑ No
Asbestos or asbestos-containing materials?	☐ Yes	☑ No	☐ Yes	☑ No
Lead-based paints?	☐ Yes	☑ No	☐ Yes	☑ No
Underground storage tanks?	☐Yes	☑ No	☐ Yes	☑ No
Above-ground storage tanks?	☐ Yes	☑ No	☐ Yes	☑ No
Oil Wells?	☐Yes	☑No	☐ Yes	☑ No
Sumps?	☐Yes	☑ No	☐ Yes	☑ No
Industrial land use?	☐Yes	☑No	☐Yes	☑No
Landfill?	☐Yes	☑No	☐Yes	☑ No
Biosolids?	☐Yes	☑No	☐Yes	☑ No
Wastewater treatment?	☐Yes	☑No	☐Yes	☑No
Structure fire?	☐Yes	☑No	☐Yes	☑No

If yes to any of the above, please describe: _____

_____

_____

4. Are you aware of any current or previous uses of the property or nearby properties that would suggest the presence of the foregoing items, substances, or materials? ☐Yes ☑No

If yes to any of the above, please describe: _____

_____

5. To your knowledge, are there any utility corridors on the property? ☐Yes ☑No

If yes to any of the above, please describe: _____

_____

6. To your knowledge, are you aware of any of the following on the property:

Water Wells?	☐Yes ☑No	Disposal Wells?	☐Yes ☑No
Clarifiers?	☐Yes ☑No	Underground Irrigation Systems?	☐Yes ☑No

If yes to any of the above, please describe: _____

_____

7. Are there any occupants on the property? ☐Yes ☑No

If yes to any of the above, please describe: _____

_____

8. Do you have good knowledge regarding the identity of any existing documents relating to the property?
☐Yes
☑No If not, who does? _____ Phone Number: _____

9. To your knowledge, do any of the following documents exist with respect to the subject property? If yes, please name the document and comment upon whether it is available for review.

Document	Yes	No	Name/Availability
Environmental site assessment reports?	X		BBG Assessment / Feb 11, 2019
Environmental audit reports?		x	
Environmental permits?		x	
Storage tank registration?		x	
Material safety data sheets (MSDS)?		x	
Community right-to-know plans?		x	
Safety plans?		x	
Spill Prevention, Countermeasure, & Control Plans?		x	
Illness and Injury Prevention Plans?		x	
Reports regarding hydrogeologic conditions on the property or surrounding area?		X	
Hazardous waste generator notices or reports?		x	
Geotechnical studies?		x	

10. To your knowledge, do any of the following exist with respect to the subject property?

a. Notices or other correspondence from any government agency relating to past or current violations of environmental laws? ☐Yes ☑No

If yes to any of the above, please describe: _____

b. Notices or other correspondence from any government agency relating to environmental liens encumbering the property? ☐Yes ☑No

If yes to any of the above, please describe: _____

c. Pending, threatened, or past litigation or administrative proceedings relevant to hazardous substances, or petroleum products in, on, or from the property? ☐Yes ☑No

If yes to any of the above, please describe: _____

d. Notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products? ☐Yes ☑No

If yes to any of the above, please describe: _____

11. Please provide any additional information associated to this property.

None

Owner/Representative: _____ Date: 10/27/23
(please, sign and print name) Judy Lee

APPENDIX E

PRELIMINARY TITLE REPORT

Ticor Title - IE
4210 Riverwalk Pkwy, Suite 200

Title Report

4210 Riverwalk Pkwy, Suite 200
Riverside, CA 92505

Title Officer:
Email: TicorIE1@ticortitle.com
Phone No.:
File No.: TT4002374-SA

Property Address: Vacant Land, Ontario, CA

Introducing Ticor Title LiveLOOK

LiveLOOK title document delivery system is designed to provide 24/7 real-time access to all information related to a title insurance transaction.

Access title reports, exception documents, an easy-to-use summary page, and more, at your fingertips and your convenience.

To view your new Ticor Title LiveLOOK report, Click Here



Effortless, Efficient, Compliant, and Accessible

PRELIMINARY REPORT

TICOR TITLE COMPANY

4210 Riverwalk Pkwy, Suite 200
Riverside, CA 92505

Prelim Number:

TT4002374

Issuing Policies of **Chicago Title Insurance Company**

Order No.: TT4002374-SA

Escrow/Customer Phone:

Diversified Pacific
10621 Civic Center Drive
Rancho Cucamonga, CA 91730
Attn: Jake Sowder
Email: JSowder@divpac.com

Title Officer.: Salvador Alvarez
Phone No.: (951)343-3805
Fax No.: (951)848-9799
Email: TicorIE1@ticortitle.com

Ref No.:

Property: Vacant Land, Ontario, CA

In response to the application for a policy of title insurance referenced herein, **Ticor Title Company of California** hereby reports that it is prepared to issue, or cause to be issued, as of the date hereof, a policy or policies of title insurance describing the land and the estate or interest therein hereinafter set forth, insuring against loss which may be sustained by reason of a defect, lien or encumbrance not shown or referred to as an exception herein or not excluded from coverage pursuant to the printed Schedules, Exclusions from Coverage, and Conditions of said policy forms.

With respect to any contemplated owner's policy, the printed Exceptions and Exclusions from the coverage and Limitations on Covered Risks of said policy or policies are set forth in Attachment One. The policy to be issued may contain an arbitration clause. When the Amount of Insurance is less than that set forth in the arbitration clause, all arbitrable matters shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties. Limitations on Covered Risks applicable to the CLTA/ALTA Homeowner's Policy of Title Insurance, which establish a Deductible Amount and a Maximum Dollar Limit of Liability for certain coverages are also set forth in Attachment One. Copies of the policy forms should be read. They are available from the office which issued this report.

Please read the exceptions shown or referred to herein and the exceptions and exclusions set forth in Attachment One of this report carefully. The exceptions and exclusions are meant to provide you with notice of matters which are not covered under the terms of the title insurance policy and should be carefully considered.

It is important to note that this preliminary report is not a written representation as to the condition of title and may not list all liens, defects, and encumbrances affecting title to the land.

This report (and any supplements or amendments hereto) is issued solely for the purpose of facilitating the issuance of a policy of title insurance and no liability is assumed hereby. If it is desired that liability be assumed prior to the issuance of a policy of title insurance, a binder or commitment should be requested.

Countersigned By:

Authorized Officer or Agent
Kenji Kikuchi

Effective date: November 15, 2023 at 07:30 AM

The form of Policy or Policies of Title Insurance contemplated by this Report is:

ALTA Homeowner's Policy of Title Insurance 2021

1. The estate or interest in the Land hereinafter described or referred to covered by this Report is:

   A Fee

2. Title to said estate or interest at the date hereof is vested in:

   JC Horizon, Ltd., a California Corporation

3. The Land referred to in this Report is described as follows:

   SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

EXHIBIT A

Legal Description

For APN/Parcel ID(s): 0110-322-33-0-000

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA AND IS DESCRIBED AS FOLLOWS:

PARCEL 2 OF PARCEL MAP NO. 5660, IN THE CITY OF ONTARIO, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS PER PLAT RECORDED IN BOOK 69 OF PARCEL MAPS, PAGES 76 THROUGH 78, INCLUSIVE, RECORDS OF SAID COUNTY AS AMENDED BY MAP RECORDED IN BOOK 80 OF PARCEL MAPS, PAGES 56 THROUGH 58, INCLUSIVE, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

EXCEPTIONS

At the date hereof, items to be considered and exceptions to coverage in addition to the printed exceptions and exclusions in said policy form would be as follows:

1. Property taxes, including any personal property taxes and any assessments collected with taxes, are as follows:

   Tax Id No.: 0110-322-33-0-000
   Fiscal Year: 2023-2024
   1st Installment: $44,865.94, Open (Delinquent after December 10)
   Penalty: $4,486.60
   2nd Installment: $44,865.92, Open (Delinquent after April 10)
   Penalty and Cost: $4,496.60
   Homeowners Exempt: None
   Code Area: 004-080

2. Any liens or other assessments, bonds, or special district liens including without limitation, Community Facility Districts, that arise by reason of any local, City, Municipal or County Project or Special District.

3. The lien of supplemental or escaped assessments of property taxes, if any, made pursuant to the provisions of Chapter 3.5 (commencing with Section 75) or Part 2, Chapter 3, Articles 3 and 4, respectively, of the Revenue and Taxation Code of the State of California as a result of the transfer of title to the vestee named in Schedule A or as a result of changes in ownership or new construction occurring prior to Date of Policy.

4. Water rights, claims or title to water, whether or not disclosed by the public records.

5. Easement(s) in favor of the public over any existing roads lying within said Land.

6. The fact that the ownership of said land does not include rights of access to or from the street, highway, or freeway abutting said land, such rights having been relinquished by the document,

   Recording Date: April 17, 1946
   Recording No.: Book 1881, Page 477, Official Records
   Affects: said land more particularly described therein

   Said deed further contains a waiver in favor of the State of California of any claims for damages to said land by reason of the location, construction, landscaping or maintenance of a highway or freeway contiguous thereto.

7. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

   Granted to: San Bernardino County Flood Control District
   Purpose: flood control and water conservation
   Recording Date: September 12, 1951
   Recording No.: Book 2822, Page 335, Official Records
   Affects: said land more particularly described therein

8. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

   Granted to: The City of Ontario
   Purpose: public utilities
   Recording Date: April 7, 1966
   Recording No.: Book 6604, Page 153, Official Records
   Affects: said land more particularly described therein

9. All easements, offers and dedications as shown on the official map

   Parcel Map No.: 5660

10. Covenants, conditions and restrictions but omitting any covenants or restrictions, if any, including but not limited to those based upon age, race, color, religion, sex, gender, gender identity, gender expression, sexual orientation, marital status, national origin, ancestry, familial status, source of income, disability, veteran or military status, genetic information, medical condition, citizenship, primary language, and immigration status, as set forth in applicable state or federal laws, except to the extent that said covenant or restriction is permitted by applicable law, as set forth in the document

    Recording Date: July 26, 1984
    Recording No: 84-176925, Official Records

    Said covenants, conditions and restrictions provide that a violation thereof shall not defeat the lien of any mortgage or trust deed made in good faith and for value.

    Matters contained in that certain document

    Entitled: Assignment and Assumption of Declarant Rights and Obligations
    Recording Date: June 15, 1998
    Recording No.: 1998-0228785, Official Records

    Reference is hereby made to said document for full particulars.

11. The Land described herein is included within a project area of the Redevelopment Agency shown below, and that proceedings for the redevelopment of said project have been instituted under the Redevelopment Law (such redevelopment to proceed only after the adoption of the Redevelopment Plan) as disclosed by a document.

    Redevelopment Agency: City of Ontario Redevelopment Agency
    Recording Date: July 26, 2001
    Recording No.: 2001-301860, Official Records

    and Recording Date: November 5, 2007
    and Recording No: 2007-0615960, Official Records

12. A deed of trust to secure an indebtedness in the amount shown below,

    Amount: $4,000,000.00
    Dated: March 29, 2019
    Trustor/Grantor: JC Horizon Ltd., a California Corporation
    Trustee: Stewart Title of California, Inc
    Beneficiary: Golden Bank, National Association, a National Bank Association
    Loan No: 2008099
    Recording Date: April 5, 2019
    Recording No.: 2019-0105954, Official Records

    An agreement to modify the terms and provisions of said deed of trust as therein provided

    Executed by: JC Horizon Ltd., a California Corporation and Golden Bank, NA
    Recording Date: May 19, 2021
    Recording No.: 2021-0230979, Official Records

    An agreement to modify the terms and provisions of said deed of trust as therein provided

    Executed by: JC Horizon Ltd and Golden Bank, NA
    Recording Date: June 9, 2023
    Recording No.: 2023-0142795, Official Records

13. An assignment of all moneys due, or to become due as rental or otherwise from said Land, to secure payment of an indebtedness, shown below and upon the terms and conditions therein

Amount:	$4,000,000.00
Assigned to:	Golden Bank, National Association, a National Bank Association
Assigned By:	JC Horizon Ltd., a California Corporation
Recording Date:	April 5, 2019
Recording No:	2019-0105955, Official Records

14. Matters which may be disclosed by an inspection and/or by a correct ALTA/ACSM Land Title Survey of said Land that is satisfactory to the Company, and/or by inquiry of the parties in possession thereof.

15. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other matters which a correct survey would disclose and which are not shown by the public records.

16. Any easements not disclosed by the Public Records as to matters affecting title to real property, whether or not said easements are visible and apparent.

17. Any rights of the parties in possession of a portion of, or all of, said Land, which rights are not disclosed by the Public Records.

    The Company will require, for review, a full and complete copy of any unrecorded agreement, contract, license and/or lease, together with all supplements, assignments and amendments thereto, before issuing any policy of title insurance without excepting this item from coverage.

    The Company reserves the right to except additional items and/or make additional requirements after reviewing said documents.

END OF EXCEPTIONS

PLEASE REFER TO THE "INFORMATIONAL NOTES" AND "REQUIREMENTS" SECTIONS WHICH FOLLOW FOR INFORMATION NECESSARY TO COMPLETE THIS TRANSACTION.

REQUIREMENTS

1. In order to complete this report, the Company requires a Statement of Information to be completed by the following party(s),

   Party(s): All Parties

   The Company reserves the right to add additional items or make further requirements after review of the requested Statement of Information.

   NOTE: The Statement of Information is necessary to complete the search and examination of title under this order. Any title search includes matters that are indexed by name only, and having a completed Statement of Information assists the Company in the elimination of certain matters which appear to involve the parties but in fact affect another party with the same or similar name. Be assured that the Statement of Information is essential and will be kept strictly confidential to this file.

2. The Company will require the following documents for review prior to the issuance of any title insurance predicated upon a conveyance or encumbrance from the limited partnership named below.

   Name: JC Horizon, Ltd., a California Corporation

   a. A complete copy of the limited partnership agreement and all amendments thereto.

   b. Satisfactory evidence that the partnership was validly formed and is in good standing

   The Company reserves the right to add additional items or make further requirements after review of the requested documentation.

3. Furnish for review a full and complete copy of any unrecorded agreement, contract, license and/or lease together with all supplements, assignments and amendments thereto, prior to the close of this transaction.

   The Company reserves the right to add additional items or make further requirements after review of the requested documentation.

4. The Company will require an affidavit signed by the seller/mortgagor certifying that there are no matters that could give rise to any defects, liens, encumbrances, adverse claims or other matters that would attach to the Land between the effective date of the report and the recording of the instruments creating the estate to be insured.

END OF REQUIREMENTS

INFORMATIONAL NOTES

1. Note: There are NO conveyances affecting said Land recorded within 24 months of the date of this report.

2. NOTE: Please contact your Title Officer to obtain the current recording fees.

3. NOTE: The policy of title insurance will include an arbitration provision. The Company or the insured may demand arbitration. Arbitrable matters may include, but are not limited to, any controversy or claim between the Company and the insured arising out of or relating to this policy, any service of the Company in connection with its issuance or the breach of a policy provision or other obligation. Please ask your escrow or title officer for a sample copy of the policy to be issued if you wish to review the arbitration provisions and any other provisions pertaining to your Title Insurance coverage.

4. Notice: Please be aware that due to the conflict between federal and state laws concerning the cultivation, distribution, manufacture or sale of marijuana, the Company is not able to close or insure any transaction involving Land that is associated with these activities.

5. Pursuant to Government Code Section 27388.1, as amended and effective as of 1-1-2018, a Documentary Transfer Tax (DTT) Affidavit may be required to be completed and submitted with each document when DTT is being paid or when an exemption is being claimed from paying the tax. If a governmental agency is a party to the document, the form will not be required. DTT Affidavits may be available at a Tax Assessor-County Clerk-Recorder.

END OF INFORMATIONAL NOTES

FIDELITY NATIONAL FINANCIAL
PRIVACY NOTICE

Effective January 1, 2023

Fidelity National Financial, Inc. and its majority-owned subsidiary companies (collectively, "FNF," "our," or "we") respect and are committed to protecting your privacy. This Privacy Notice explains how we collect, use, and protect personal information, when and to whom we disclose such information, and the choices you have about the use and disclosure of that information.

A limited number of FNF subsidiaries have their own privacy notices. If a subsidiary has its own privacy notice, the privacy notice will be available on the subsidiary's website and this Privacy Notice does not apply.

Collection of Personal Information

FNF may collect the following categories of Personal Information:

- contact information (*e.g.*, name, address, phone number, email address);
- demographic information (*e.g.*, date of birth, gender, marital status);
- identity information (*e.g.* Social Security Number, driver's license, passport, or other government ID number);
- financial account information (*e.g.* loan or bank account information); and
- other personal information necessary to provide products or services to you.

We may collect Personal Information about you from:

- information we receive from you or your agent;
- information about your transactions with FNF, our affiliates, or others; and
- information we receive from consumer reporting agencies and/or governmental entities, either directly from these entities or through others.

Collection of Browsing Information

FNF automatically collects the following types of Browsing Information when you access an FNF website, online service, or application (each an "FNF Website") from your Internet browser, computer, and/or device:

- Internet Protocol (IP) address and operating system;
- browser version, language, and type;
- domain name system requests; and
- browsing history on the FNF Website, such as date and time of your visit to the FNF Website and visits to the pages within the FNF Website.

Like most websites, our servers automatically log each visitor to the FNF Website and may collect the Browsing Information described above. We use Browsing Information for system administration, troubleshooting, fraud investigation, and to improve our websites. Browsing Information generally does not reveal anything personal about you, though if you have created a user account for an FNF Website and are logged into that account, the FNF Website may be able to link certain browsing activity to your user account.

Other Online Specifics

Cookies. When you visit an FNF Website, a "cookie" may be sent to your computer. A cookie is a small piece of data that is sent to your Internet browser from a web server and stored on your computer's hard drive. Information gathered using cookies helps us improve your user experience. For example, a cookie can help the website load properly or can customize the display page based on your browser type and user preferences. You can choose whether or not to accept cookies by changing your Internet browser settings. Be aware that doing so may impair or limit some functionality of the FNF Website.

Web Beacons. We use web beacons to determine when and how many times a page has been viewed. This information is used to improve our websites.

Do Not Track. Currently our FNF Websites do not respond to "Do Not Track" features enabled through your browser.

Links to Other Sites. FNF Websites may contain links to unaffiliated third-party websites. FNF is not responsible for the privacy practices or content of those websites. We recommend that you read the privacy policy of every website you visit.

Use of Personal Information

FNF uses Personal Information for three main purposes:

- To provide products and services to you or in connection with a transaction involving you.
- To improve our products and services.
- To communicate with you about our, our affiliates', and others' products and services, jointly or independently.

When Information Is Disclosed

We may disclose your Personal Information and Browsing Information in the following circumstances:

- to enable us to detect or prevent criminal activity, fraud, material misrepresentation, or nondisclosure;
- to affiliated or nonaffiliated service providers who provide or perform services or functions on our behalf and who agree to use the information only to provide such services or functions;
- to affiliated or nonaffiliated third parties with whom we perform joint marketing, pursuant to an agreement with them to jointly market financial products or services to you;
- to law enforcement or authorities in connection with an investigation, or in response to a subpoena or court order; or
- in the good-faith belief that such disclosure is necessary to comply with legal process or applicable laws, or to protect the rights, property, or safety of FNF, its customers, or the public.

The law does not require your prior authorization and does not allow you to restrict the disclosures described above. Additionally, we may disclose your information to third parties for whom you have given us authorization or consent to make such disclosure. We do not otherwise share your Personal Information or Browsing Information with nonaffiliated third parties, except as required or permitted by law.

We reserve the right to transfer your Personal Information, Browsing Information, and any other information, in connection with the sale or other disposition of all or part of the FNF business and/or assets, or in the event of bankruptcy, reorganization, insolvency, receivership, or an assignment for the benefit of creditors. By submitting Personal Information and/or Browsing Information to FNF, you expressly agree and consent to the use and/or transfer of the foregoing information in connection with any of the above described proceedings.

Security of Your Information

We maintain physical, electronic, and procedural safeguards to protect your Personal Information.

Choices With Your Information

Whether you submit Personal Information or Browsing Information to FNF is entirely up to you. If you decide not to submit Personal Information or Browsing Information, FNF may not be able to provide certain services or products to you.

For California Residents: We will not share your Personal Information or Browsing Information with nonaffiliated third parties, except as permitted by California law. For additional information about your California privacy rights, please visit the "California Privacy" link on our website (https://fnf.com/pages/californiaprivacy.aspx) or call (888) 413-1748.

For Nevada Residents: We are providing this notice pursuant to state law. You may be placed on our internal Do Not Call List by calling FNF Privacy at (888) 714-2710 or by contacting us via the information set forth at the end of this Privacy Notice. For further information concerning Nevada's telephone solicitation law, you may contact: Bureau of Consumer Protection, Office of the Nevada Attorney General, 555 E. Washington St., Suite 3900, Las Vegas, NV 89101; Phone number: (702) 486-3132; email: aginquiries@ag.state.nv.us.

For Oregon Residents: We will not share your Personal Information or Browsing Information with nonaffiliated third parties for marketing purposes, except after you have been informed by us of such sharing and had an opportunity to indicate that you do not want a disclosure made for marketing purposes.

For Vermont Residents: We will not disclose information about your creditworthiness to our affiliates and will not disclose your personal information, financial information, credit report, or health information to nonaffiliated third parties to market to you, other than as permitted by Vermont law, unless you authorize us to make those disclosures.

For Virginia Residents: For additional information about your Virginia privacy rights, please email privacy@fnf.com or call (888) 714-2710.

Information From Children

The FNF Websites are not intended or designed to attract persons under the age of eighteen (18). We do not collect Personal Information from any person that we know to be under the age of thirteen (13) without permission from a parent or guardian.

International Users

FNF's headquarters is located within the United States. If you reside outside the United States and choose to provide Personal Information or Browsing Information to us, please note that we may transfer that information outside of your country of residence. By providing FNF with your Personal Information and/or Browsing Information, you consent to our collection, transfer, and use of such information in accordance with this Privacy Notice.

FNF Website Services for Mortgage Loans

Certain FNF companies provide services to mortgage loan servicers, including hosting websites that collect customer information on behalf of mortgage loan servicers (the "Service Websites"). The Service Websites may contain links to both this Privacy Notice and the mortgage loan servicer or lender's privacy notice. The sections of this Privacy Notice titled When Information is Disclosed, Choices with Your Information, and Accessing and Correcting Information do not apply to the Service Websites. The mortgage loan servicer or lender's privacy notice governs use, disclosure, and access to your Personal Information. FNF does not share Personal Information collected through the Service Websites, except as required or authorized by contract with the mortgage loan servicer or lender, or as required by law or in the good-faith belief that such disclosure is necessary: to comply with a legal process or applicable law, to enforce this Privacy Notice, or to protect the rights, property, or safety of FNF or the public.

Your Consent To This Privacy Notice; Notice Changes

By submitting Personal Information and/or Browsing Information to FNF, you consent to the collection and use of the information in accordance with this Privacy Notice. We may change this Privacy Notice at any time. The Privacy Notice's effective date will show the last date changes were made. If you provide information to us following any change of the Privacy Notice, that signifies your assent to and acceptance of the changes to the Privacy Notice.

Accessing and Correcting Information; Contact Us

If you have questions or would like to correct your Personal Information, visit FNF's Privacy Inquiry Website or contact us by phone at (888) 714-2710, by email at privacy@fnf.com, or by mail to:

Fidelity National Financial, Inc.
601 Riverside Avenue,
Jacksonville, Florida 32204
Attn: Chief Privacy Officer

FIDELITY NATIONAL FINANCIAL
CALIFORNIA PRIVACY NOTICE

Fidelity National Financial, Inc. and its majority-owned subsidiary companies (collectively, "FNF," "our," or "we") respect and are committed to protecting your privacy. This California Privacy Notice explains how we collect, use, and disclose Personal Information, when and to whom we disclose such information, and the rights you, as a California resident ("Consumer"), have regarding your Personal Information ("California Privacy Rights"). "Personal Information" means information that identifies, relates to, describes, and is reasonably capable of being associated with, or could reasonably be linked, directly or indirectly, with a particular consumer or household. If FNF has collected, used, or disclosed your Personal Information in relation to a job application or employment, independent contractor, officer, owner, or director relationship with FNF, FNF's practices are discussed in our Notice at Collection for Prospective Employees, available at ***Prospective California Employees***.

Some subsidiaries maintain separate California Privacy Notices or privacy statements. If a subsidiary has a separate California Privacy Notice, it will be available on the subsidiary's website, and this California Privacy Notice does not apply.

Collection of categories of Personal Information:

In the preceding twelve (12) months FNF has collected, and will continue to collect, the following categories of Personal Information from you:

- Identifiers such as name, address, telephone number, IP address, email address, account name, social security number, driver's license number, state identification card, passport number, financial information, date of birth, or other similar identifiers;
- Characteristics of protected classifications under California or Federal law;
- Commercial information, including records of personal property, products or services purchased, or other purchasing or consuming histories;
- Internet or other electronic network activity information including, but not limited to browsing history on FNF websites, and information regarding a Consumer's interaction with an FNF website;
- Geolocation data;
- Professional or employment information;
- Education Information.

This Personal Information is collected from the following sources:

- Information we receive from you on applications or other forms;
- Information about your transactions with FNF, our affiliates, or others;
- Information we receive from consumer reporting agencies and/or governmental entities, either directly from these entities, or from internet service providers, data analytics providers, and social networks;
- Information from the use of our websites and mobile applications;
- Information we receive directly from you related to doing business with us.

This Personal Information is collected for the following business purposes:

- To provide products and services to you or in connection with a transaction involving you;
- To perform a contract between FNF and the Consumer;
- To improve our products and services;
- To comply with legal obligations;
- To protect against fraudulent or illegal activity;

- To communicate with you about FNF or our affiliates;
- To maintain an account with FNF or our affiliates;
- To provide, support, personalize, and develop our websites, products, and services;
- To directly market our products to consumers;
- As described to you when collecting your Personal Information or as otherwise set forth in the California Consumer Privacy Act.

Disclosures of Personal Information for a business purpose:

In the preceding twelve (12) months FNF has disclosed, and will continue to disclose, the categories of Personal Information listed above for a business purpose. We may disclose Personal Information for a business purpose to the following categories of third parties:

- FNF affiliates and subsidiaries;
- Non-affiliated third parties, with your prior consent;
- Businesses in connection with the sale or other disposition of all or part of the FNF business and/or assets;
- Service Providers and non-affiliated third parties such as internet service providers, data analytics providers, and social networks;
- Law enforcement or authorities in connection with an investigation, or in response to a subpoena or court order.

Sale of Personal Information:

In the preceding twelve (12) months, FNF has not sold or shared Personal Information. FNF does not sell or share Personal Information.

Retention Periods:

Due to the breadth and variety of data collected by FNF, it is not possible for us to provide you with a comprehensive list of timeframes during which we retain each category of Personal Information. FNF retains categories of information as reasonably necessary to satisfy the purpose for which we collect the information. This time period varies depending on the purpose for which we collected the information, the nature and frequency of our interactions and relationship with you, whether we have a legal basis to continue retaining the information, industry practices, the value and sensitivity of the information, and state and federal recordkeeping requirements.

Personal Information of minors:

FNF does not knowingly collect the Personal Information of minors. FNF does not sell or share the information of consumers under sixteen (16) years of age.

Sensitive Personal Information:

FNF does not use or disclose sensitive Personal Information for any purposes other than those specified in the California Consumer Privacy Act.

Right to know:

Consumers have a right to know about Personal Information collected, used, disclosed, shared, or sold, including the categories of such Personal Information, as well as the purpose for such collection, use, disclosure, sharing, or selling, categories of third parties to whom Personal Information is disclosed, shared or sold, and the specific pieces of Personal Information collected about the Consumer. Consumers have the right to request FNF disclose what Personal Information it collected, used, and disclosed in the past twelve (12) months, or since January 1, 2022.

Right to request deletion:

Consumers have a right to request the deletion of their Personal Information, subject to certain exceptions.

Right to Correct:

Consumers have the right to correct inaccurate Personal Information.

Right to non-discrimination:

Consumers have a right not to be discriminated against because of exercising their consumer privacy rights. We will not discriminate against Consumers for exercising any of their California Privacy Rights.

Privacy Requests:

To exercise any of your California Privacy Rights, or if acting as an authorized agent on behalf of another individual, please visit *California Privacy Request*, call us Toll Free at 888-413-1748, or write to the address at the end of this notice.

Upon making a California Privacy Request, FNF will verify the Consumer's identity by requiring an account, loan, escrow number, or other identifying information from the Consumer.

The above-rights are subject to any applicable rights and obligations including both Federal and California exemptions rendering FNF, or Personal Information collected by FNF, exempt from certain CCPA requirements.

A Consumer may use an Authorized Agent to submit any CCPA request. Authorized agents' requests will be processed like any other CCPA request, but FNF will also require the Consumer provide the agent written permission to make the request and verify his or her identity with FNF.

FNF website services for mortgage loans:

Certain FNF companies provide services to mortgage loan servicers, including hosting websites that collect customer information on behalf of mortgage loan servicers (the "Service Websites"). The Service Websites may contain links to both this Privacy Notice and the mortgage loan servicer or lender's privacy notice. The sections of this Privacy Notice describing the categories, sources, and uses of your Personal Information do not apply to the Service Websites. The mortgage loan servicer or lender's privacy notice governs use, disclosure, and access to your Information. FNF does not share Information collected through the Service Websites, except (1) as required or authorized by contract with the mortgage loan servicer or lender, or (2) as required by law or in the good-faith belief that such disclosure is necessary to comply with a legal process or applicable law, to enforce this Privacy Notice, or to protect the rights, property, or safety of FNF or the public.

California Privacy Notice - Effective Date:

This California Privacy Notice was last updated on January 1, 2023.

Contact for more information:

For questions or concerns about FNF's California Privacy Notice and privacy practices, or to exercise any of your California Privacy Rights, please visit ***California Privacy***, call Toll Free 888-413-1748, or contact us by mail at the below address.

Fidelity National Financial, Inc.
601 Riverside Avenue
Jacksonville, Florida 32204
Attn: Chief Privacy Officer

Notice of Available Discounts

Pursuant to Section 2355.3 in Title 10 of the California Code of Regulations Fidelity National Financial, Inc. and its subsidiaries ("FNF") must deliver a notice of each discount available under our current rate filing along with the delivery of escrow instructions, a preliminary report or commitment. Please be aware that the provision of this notice does not constitute a waiver of the consumer's right to be charged the filed rate. As such, your transaction may not qualify for the below discounts.

You are encouraged to discuss the applicability of one or more of the below discounts with a Company representative. These discounts are generally described below; consult the rate manual for a full description of the terms, conditions and requirements for such discount. These discounts only apply to transactions involving services rendered by the FNF Family of Companies. This notice only applies to transactions involving property improved with a one-to-four family residential dwelling.

Not all discounts are offered by every FNF Company. The discount will only be applicable to the FNF Company as indicated by the named discount.

FNF Underwritten Title Companies	**Underwritten by FNF Underwriters**
CTC - Chicago Title Company	CTIC - Chicago Title Insurance Company
CLTC - Commonwealth Land Title Company	CLTIC - Commonwealth Land Title Insurance Company
FNTC - Fidelity National Title Company of California	FNTIC - Fidelity National Title Insurance Company
FNTCCA - Fidelity National Title Company of California	FNTIC - Fidelity National Title Insurance Company
TICOR - Ticor Title Company of California	CTIC - Chicago Title Insurance Company
LTC - Lawyer's Title Company	CLTIC - Commonwealth Land Title Insurance Company
SLTC - ServiceLink Title Company	CTIC - Chicago Title Insurance Company

Available Discounts

DISASTER LOANS (CTIC, CLTIC, FNTIC)
The charge for a Lender's Policy (Standard or Extended coverage) covering the financing or refinancing by an owner of record, within twenty-four (24) months of the date of a declaration of a disaster area by the government of the United States or the State of California on any land located in said area, which was partially or totally destroyed in the disaster, will be fifty percent (50%) of the appropriate title insurance rate.

CHURCHES OR CHARITABLE NON-PROFIT ORGANIZATIONS (CTIC, FNTIC)
On properties used as a church or for charitable purposes within the scope of the normal activities of such entities, provided said charge is normally the church's obligation the charge for an owner's policy shall be fifty percent (50%) to seventy percent (70%) of the appropriate title insurance rate, depending on the type of coverage selected. The charge for a lender's policy shall be forty percent (40%) to fifty percent (50%) of the appropriate title insurance rate, depending on the type of coverage selected.

WIRE SAFE™ | Inquire before you wire!

WIRE FRAUD ALERT

This Notice is not intended to provide legal or professional advice.
If you have any questions, please consult with a lawyer.

All parties to a real estate transaction are targets for wire fraud and many have lost hundreds of thousands of dollars because they simply relied on the wire instructions received via email, without further verification. **If funds are to be wired in conjunction with this real estate transaction, we strongly recommend verbal verification of wire instructions through a known, trusted phone number prior to sending funds.**

In addition, the following non-exclusive self-protection strategies are recommended to minimize exposure to possible wire fraud.

- **NEVER RELY** on emails purporting to change wire instructions. Parties to a transaction rarely change wire instructions in the course of a transaction.
- **ALWAYS VERIFY** wire instructions, specifically the ABA routing number and account number, by calling the party who sent the instructions to you. DO NOT use the phone number provided in the email containing the instructions, use phone numbers you have called before or can otherwise verify. **Obtain the number of relevant parties to the transaction as soon as an escrow account is opened.** DO NOT send an email to verify as the email address may be incorrect or the email may be intercepted by the fraudster.
- **USE COMPLEX EMAIL PASSWORDS** that employ a combination of mixed case, numbers, and symbols. Make your passwords greater than eight (8) characters. Also, change your password often and do NOT reuse the same password for other online accounts.
- **USE MULTI-FACTOR AUTHENTICATION** for email accounts. Your email provider or IT staff may have specific instructions on how to implement this feature.

For more information on wire-fraud scams or to report an incident, please refer to the following links:

Federal Bureau of Investigation:
http://www.fbi.gov

Internet Crime Complaint Center:
http://www.ic3.gov

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ATTACHMENT ONE

CALIFORNIA LAND TITLE ASSOCIATION
STANDARD COVERAGE POLICY - 1990 (11-09-18)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building or zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating (i) the occupancy, use, or enjoyment of the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien, or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.

   (b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.
3. Defects, liens, encumbrances, adverse claims or other matters:
   (a) whether or not recorded in the public records at Date of Policy, but created, suffered, assumed or agreed to by the insured claimant;
   (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;
   (c) resulting in no loss or damage to the insured claimant;
   (d) attaching or created subsequent to Date of Policy; or
   (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the insured mortgage or for the estate or interest insured by this policy.
4. Unenforceability of the lien of the insured mortgage because of the inability or failure of the insured at Date of Policy, or the inability or failure of any subsequent owner of the indebtedness, to comply with the applicable doing business laws of the state in which the land is situated.
5. Invalidity or unenforceability of the lien of the insured mortgage, or claim thereof, which arises out of the transaction evidenced by the insured mortgage and is based upon usury or any consumer credit protection or truth in lending law.
6. Any claim, which arises out of the transaction vesting in the insured the estate or interest insured by this policy or the transaction creating the interest of the insured lender, by reason of the operation of federal bankruptcy, state insolvency or similar creditors' rights laws.

EXCEPTIONS FROM COVERAGE - SCHEDULE B, PART I

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records.

   Proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.
2. Any facts, rights, interests, or claims which are not shown by the public records but which could be ascertained by an inspection of the land or which may be asserted by persons in possession thereof.
3. Easements, liens or encumbrances, or claims thereof, not shown by the public records.
4. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the public records.
6. Any lien or right to a lien for services, labor or material unless such lien is shown by the public records at Date of Policy.

EXCEPTIONS FROM COVERAGE - SCHEDULE B, PART II

(*Variable exceptions such as taxes, easements, CC&R's, etc., are inserted here*)

ATTACHMENT ONE
(CONTINUED)

CALIFORNIA LAND TITLE ASSOCIATION
STANDARD COVERAGE OWNER'S POLICY (02-04-22)
EXCLUSIONS FROM COVERAGE

The following matters are excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. a. any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) that restricts, regulates, prohibits, or relates to:
   i. the occupancy, use, or enjoyment of the Land;
   ii. the character, dimensions, or location of any improvement on the Land;
   iii. the subdivision of land; or
   iv. environmental remediation or protection.
   b. any governmental forfeiture, police, regulatory, or national security power.
   c. the effect of a violation or enforcement of any matter excluded under Exclusion 1.a. or 1.b.

   Exclusion 1 does not modify or limit the coverage provided under Covered Risk 5 or 6.
2. Any power of eminent domain. Exclusion 2 does not modify or limit the coverage provided under Covered Risk 7.
3. Any defect, lien, encumbrance, adverse claim, or other matter:
   a. created, suffered, assumed, or agreed to by the Insured Claimant;
   b. not Known to the Company, not recorded in the Public Records at the Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
   c. resulting in no loss or damage to the Insured Claimant;
   d. attaching or created subsequent to the Date of Policy (Exclusion 3.d. does not modify or limit the coverage provided under Covered Risk 9 or 10); or
   e. resulting in loss or damage that would not have been sustained if consideration sufficient to qualify the Insured named in Schedule A as a bona fide purchaser had been given for the Title at the Date of Policy.
4. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights law, that the transaction vesting the Title as shown in Schedule A is a:
   a. fraudulent conveyance or fraudulent transfer;
   b. voidable transfer under the Uniform Voidable Transactions Act; or
   c. preferential transfer:
      i. to the extent the instrument of transfer vesting the Title as shown in Schedule A is not a transfer made as a contemporaneous exchange for new value; or
      ii. for any other reason not stated in Covered Risk 9.b.
5. Any claim of a PACA-PSA Trust. Exclusion 5 does not modify or limit the coverage provided under Covered Risk 8.
6. Any lien on the Title for real estate taxes or assessments imposed or collected by a governmental authority that becomes due and payable after the Date of Policy.

   Exclusion 6 does not modify or limit the coverage provided under Covered Risk 2.b.
7 Any discrepancy in the quantity of the area, square footage, or acreage of the Land or of any improvement to the Land.

EXCEPTIONS FROM COVERAGE

Some historical land records contain Discriminatory Covenants that are illegal and unenforceable by law. This policy treats any Discriminatory Covenant in a document referenced in Schedule B as if each Discriminatory Covenant is redacted, repudiated, removed, and not republished or recirculated. Only the remaining provisions of the document are excepted from coverage.

This policy does not insure against loss or damage and the Company will not pay costs, attorneys' fees, or expenses resulting from the terms and conditions of any lease or easement identified in Schedule A, and the following matters:

PART I

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records at Date of Policy but that could be (a) ascertained by an inspection of the Land, or (b) asserted by persons or parties in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records at Date of Policy.
4. Any encroachment, encumbrance, violation, variation, easement, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records at Date of Policy.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor, material or equipment unless such lien is shown by the Public Records at Date of Policy.
7. Any claim to (a) ownership of or rights to minerals and similar substances, including but not limited to ores, metals, coal, lignite, oil, gas, uranium, clay, rock, sand, and gravel located in, on, or under the Land or produced from the Land, whether such ownership or rights arise by lease, grant, exception, conveyance, reservation, or otherwise; and (b) any rights, privileges, immunities, rights of way, and easements associated therewith or appurtenant thereto, whether or not the interests or rights excepted in (a) or (b) appear in the Public Records or are shown in Schedule B.

PART II

(*Variable exceptions such as taxes, easements, CC&R's, etc., are inserted here*)

ATTACHMENT ONE
(CONTINUED)

CLTA/ALTA HOMEOWNER'S POLICY OF TITLE INSURANCE (7-01-21)
EXCLUSIONS FROM COVERAGE

The following matters are excluded from the coverage of this policy and We will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. a. any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) that restricts, regulates, prohibits, or relates to:
   i. the occupancy, use, or enjoyment of the Land;
   ii. the character, dimensions, or location of any improvement on the Land;
   iii. the subdivision of land; or
   iv. environmental remediation or protection.
   b. any governmental forfeiture, police, or regulatory, or national security power.
   c. the effect of a violation or enforcement of any matter excluded under Exclusion 1.a. or 1.b.

   Exclusion 1 does not modify or limit the coverage provided under Covered Risk 8.a., 14, 15, 16, 18, 19, 20, 23, or 27.
2. Any power to take the Land by condemnation. Exclusion 2 does not modify or limit the coverage provided under Covered Risk 17.
3. Any defect, lien, encumbrance, adverse claim, or other matter:
   a. created, suffered, assumed, or agreed to by You;
   b. not Known to Us, not recorded in the Public Records at the Date of Policy, but Known to You and not disclosed in writing to Us by You prior to the date You became an Insured under this policy;
   c. resulting in no loss or damage to You;
   d. attaching or created subsequent to the Date of Policy (Exclusion 3.d. does not modify or limit the coverage provided under Covered Risk 5, 8.f., 25, 26, 27, 28, or 32); or
   e. resulting in loss or damage that would not have been sustained if You paid consideration sufficient to qualify You as a bona fide purchaser of the Title at the Date of Policy.
4. Lack of a right:
   a. to any land outside the area specifically described and referred to in Item 3 of Schedule A; and
   b. in any street, road, avenue, alley, lane, right-of-way, body of water, or waterway that abut the Land.

   Exclusion 4 does not modify or limit the coverage provided under Covered Risk 11 or 21.
5. The failure of Your existing structures, or any portion of Your existing structures, to have been constructed before, on, or after the Date of Policy in accordance with applicable building codes. Exclusion 5 does not modify or limit the coverage provided under Covered Risk 14 or 15.
6. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights law, that the transfer of the Title to You is a:
   a. fraudulent conveyance or fraudulent transfer;
   b. voidable transfer under the Uniform Voidable Transactions Act; or
   c. preferential transfer:
      i. to the extent the instrument of transfer vesting the Title as shown in Schedule A is not a transfer made as a contemporaneous exchange for new value; or
      ii. for any other reason not stated in Covered Risk 30.
7. Contamination, explosion, fire, flooding, vibration, fracturing, earthquake, or subsidence.
8. Negligence by a person or an entity exercising a right to extract or develop oil, gas, minerals, groundwater, or any other subsurface substance.
9. Any lien on Your Title for real estate taxes or assessments, imposed or collected by a governmental authority that becomes due and payable after the Date of Policy. Exclusion 9 does not modify or limit the coverage provided under Covered Risk 8.a or 27.
10. Any discrepancy in the quantity of the area, square footage, or acreage of the Land or of any improvement to the Land.

LIMITATIONS ON COVERED RISKS

Your insurance for the following Covered Risks is limited on the Owner's Coverage Statement as follows:

- For Covered Risk 16, 18, 19 and 21 Your Deductible Amount and Our Maximum Dollar Limit of Liability shown in Schedule A.

The deductible amounts and maximum dollar limits shown on Schedule A are as follows:

	Your Deductible Amount	Our Maximum Dollar Limit of Liability
Covered Risk 16:	1.00% of Policy Amount Shown in Schedule A or $2,500.00 (whichever is less)	$ 10,000.00
Covered Risk 18:	1.00% of Policy Amount Shown in Schedule A or $5,000.00 (whichever is less)	$ 25,000.00
Covered Risk 19:	1.00% of Policy Amount Shown in Schedule A or $5,000.00 (whichever is less)	$ 25,000.00
Covered Risk 21:	1.00% of Policy Amount Shown in Schedule A or $2,500.00 (whichever is less)	$ 5,000.00

ATTACHMENT ONE
(CONTINUED)

CLTA/ALTA HOMEOWNER'S POLICY OF TITLE INSURANCE (12-02-13)
EXCLUSIONS

In addition to the Exceptions in Schedule B, You are not insured against loss, costs, attorneys' fees, and expenses resulting from:

1. Governmental police power, and the existence or violation of those portions of any law or government regulation concerning:
   a. building;
   b. zoning;
   c. land use;
   d. improvements on the Land;
   e. land division; and
   f. environmental protection.

   This Exclusion does not limit the coverage described in Covered Risk 8.a., 14, 15, 16, 18, 19, 20, 23 or 27.
2. The failure of Your existing structures, or any part of them, to be constructed in accordance with applicable building codes. This Exclusion does not limit the coverage described in Covered Risk 14 or 15.
3. The right to take the Land by condemning it. This Exclusion does not limit the coverage described in Covered Risk 17.
4. Risks:
   a. that are created, allowed, or agreed to by You, whether or not they are recorded in the Public Records;
   b. that are Known to You at the Policy Date, but not to Us, unless they are recorded in the Public Records at the Policy Date;
   c. that result in no loss to You; or
   d. that first occur after the Policy Date - this does not limit the coverage described in Covered Risk 7, 8.e., 25, 26, 27 or 28.
5. Failure to pay value for Your Title.
6. Lack of a right:
   a. to any land outside the area specifically described and referred to in paragraph 3 of Schedule A; and
   b. in streets, alleys, or waterways that touch the Land.

   This Exclusion does not limit the coverage described in Covered Risk 11 or 21.
7. The transfer of the Title to You is invalid as a preferential transfer or as a fraudulent transfer or conveyance under federal bankruptcy, state insolvency, or similar creditors' rights laws.
8. Contamination, explosion, fire, flooding, vibration, fracturing, earthquake or subsidence.
9. Negligence by a person or an Entity exercising a right to extract or develop minerals, water, or any other substances.

LIMITATIONS ON COVERED RISKS

Your insurance for the following Covered Risks is limited on the Owner's Coverage Statement as follows:

- For Covered Risk 16, 18, 19 and 21, Your Deductible Amount and Our Maximum Dollar Limit of Liability shown in Schedule A.

The deductible amounts and maximum dollar limits shown on Schedule A are as follows:

	Your Deductible Amount	Our Maximum Dollar Limit of Liability
Covered Risk 16:	1.00% of Policy Amount Shown in Schedule A or $2,500.00 (whichever is less)	$ 10,000.00
Covered Risk 18:	1.00% of Policy Amount Shown in Schedule A or $5,000.00 (whichever is less)	$ 25,000.00
Covered Risk 19:	1.00% of Policy Amount Shown in Schedule A or $5,000.00 (whichever is less)	$ 25,000.00
Covered Risk 21:	1.00% of Policy Amount Shown in Schedule A or $2,500.00 (whichever is less)	$ 5,000.00

ATTACHMENT ONE
(CONTINUED)

ALTA OWNER'S POLICY (07-01-2021)

EXCLUSIONS FROM COVERAGE

The following matters are excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. a. any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) that restricts, regulates, prohibits, or relates to:
   i. the occupancy, use, or enjoyment of the Land;
   ii. the character, dimensions, or location of any improvement on the Land;
   iii. the subdivision of land; or
   iv. environmental remediation or protection.
   b. any governmental forfeiture, police, regulatory, or national security power.
   c. the effect of a violation or enforcement of any matter excluded under Exclusion 1.a. or 1.b.

   Exclusion 1 does not modify or limit the coverage provided under Covered Risk 5 or 6.
2. Any power of eminent domain. Exclusion 2 does not modify or limit the coverage provided under Covered Risk 7.
3. Any defect, lien, encumbrance, adverse claim, or other matter:
   a. created, suffered, assumed, or agreed to by the Insured Claimant;
   b. not Known to the Company, not recorded in the Public Records at the Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
   c. resulting in no loss or damage to the Insured Claimant;
   d. attaching or created subsequent to the Date of Policy (Exclusion 3.d. does not modify or limit the coverage provided under Covered Risk 9 or 10); or
   e. resulting in loss or damage that would not have been sustained if consideration sufficient to qualify the Insured named in Schedule A as a bona fide purchaser had been given for the Title at the Date of Policy.
4. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights law, that the transaction vesting the Title as shown in Schedule A is a:
   a. fraudulent conveyance or fraudulent transfer;
   b. voidable transfer under the Uniform Voidable Transactions Act; or
   c. preferential transfer:
      i. to the extent the instrument of transfer vesting the Title as shown in Schedule A is not a transfer made as a contemporaneous exchange for new value; or
      ii. for any other reason not stated in Covered Risk 9.b.
5. Any claim of a PACA-PSA Trust. Exclusion 5 does not modify or limit the coverage provided under Covered Risk 8.
6. Any lien on the Title for real estate taxes or assessments, imposed or collected by a governmental authority that becomes due and payable after the Date of Policy. Exclusion 6 does not modify or limit the coverage provided under Covered Risk 2.b.
7. Any discrepancy in the quantity of the area, square footage, or acreage of the Land or of any improvement to the Land.

EXCEPTIONS FROM COVERAGE

Some historical land records contain Discriminatory Covenants that are illegal and unenforceable by law. This policy treats any Discriminatory Covenant in a document referenced in Schedule B as if each Discriminatory Covenant is redacted, repudiated, removed, and not republished or recirculated. Only the remaining provisions of the document are excepted from coverage.

This policy does not insure against loss or damage and the Company will not pay costs, attorneys' fees, or expenses resulting from the terms and conditions of any lease or easement identified in Schedule A, and the following matters:

NOTE: The 2021 ALTA Owner's Policy may be issued to afford either Standard Coverage or Extended Coverage. In addition to variable exceptions such as taxes, easements, CC&R's, etc., the Exceptions from Coverage in a Standard Coverage policy will also include the Western Regional Standard Coverage Exceptions listed as 1 through 7 below:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records at Date of Policy but that could be (a) ascertained by an inspection of the Land or (b) asserted by persons or parties in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records at Date of Policy.
4. Any encroachment, encumbrance, violation, variation, easement, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records at Date of Policy.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor, material or equipment unless such lien is shown by the Public Records at Date of Policy.
7. Any claim to (a) ownership of or rights to minerals and similar substances, including but not limited to ores, metals, coal, lignite, oil, gas, uranium, clay, rock, sand, and gravel located in, on, or under the Land or produced from the Land, whether such ownership or rights arise by lease, grant, exception, conveyance, reservation, or otherwise; and (b) any rights, privileges, immunities, rights of way, and easements associated therewith or appurtenant thereto, whether or not the interests or rights excepted in (a) or (b) appear in the Public Records or are shown in Schedule B.

ATTACHMENT ONE
(CONTINUED)

2006 ALTA OWNER'S POLICY (06-17-06)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
   (i) the occupancy, use, or enjoyment of the Land;
   (ii) the character, dimensions, or location of any improvement erected on the Land;
   (iii) the subdivision of land; or
   (iv) environmental protection;
   or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
   (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
   (a) created, suffered, assumed, or agreed to by the Insured Claimant;
   (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
   (c) resulting in no loss or damage to the Insured Claimant;
   (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 9 and 10); or
   (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Title.
4. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction vesting the Title as shown in Schedule A, is
   (a) a fraudulent conveyance or fraudulent transfer; or
   (b) a preferential transfer for any reason not stated in Covered Risk 9 of this policy.
5. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the deed or other instrument of transfer in the Public Records that vests Title as shown in Schedule A.

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage, and the Company will not pay costs, attorneys' fees, or expenses that arise by reason of:

NOTE: The 2006 ALTA Owner's Policy may be issued to afford either Standard Coverage or Extended Coverage. In addition to variable exceptions such as taxes, easements, CC&R's, etc., the Exceptions from Coverage in a Standard Coverage policy will also include the Western Regional Standard Coverage Exceptions listed below as 1 through 7 below:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records at Date of Policy but that could be (a) ascertained by an inspection of the Land, or (b) asserted by persons or parties in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records at Date of Policy.
4. Any encroachment, encumbrance, violation, variation, easement, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records at Date of Policy.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor, material or equipment unless such lien is shown by the Public Records at Date of Policy.]
7. Any claim to (a) ownership of or rights to minerals and similar substances, including but not limited to ores, metals, coal, lignite, oil, gas, uranium, clay, rock, sand, and gravel located in, on, or under the Land or produced from the Land, whether such ownership or rights arise by lease, grant, exception, conveyance, reservation, or otherwise; and (b) any rights, privileges, immunities, rights of way, and easements associated therewith or appurtenant thereto, whether or not the interests or rights excepted in (a) or (b) appear in the Public Records or are shown in Schedule B.

TICOR TITLE COMPANY

OWNER'S DECLARATION

Escrow No.: TT4002374
Property: Vacant Land, Ontario, CA

The undersigned hereby declares as follows:

1. (Fill in the applicable paragraph and strike the other)

   A. Declarant ("Owner") is the owner or lessee, as the case may be, of certain premises located at Vacant Land, Ontario, CA, further described as follows: See Preliminary Report/Commitment No. TT4002374 for full legal description (the "Land").

   B. Declarant is the _____ of _____ ("Owner"), which is the owner or lessee, as the case may be, of certain premises located at Vacant Land, Ontario, CA, further described as follows: See Preliminary Report/Commitment No. TT4002374 for full legal description (the "Land").

2. (Fill in the applicable paragraph and strike the other)

   A. During the period of six (6) months immediately preceding the date of this declaration no work has been done, no surveys or architectural or engineering plans have been prepared, and no materials have been furnished in connection with the erection, equipment, repair, protection or removal of any building or other structure on the Land or in connection with the improvement of the Land in any manner whatsoever.

   B. During the period of six (6) months immediately preceding the date of this declaration certain work has been done and materials furnished in connection with _____ upon the Land in the approximate total sum of $_____, but no work whatsoever remains to be done and no materials remain to be furnished to complete the construction in full compliance with the plans and specifications, nor are there any unpaid bills incurred for labor and materials used in making such improvements or repairs upon the Land, or for the services of architects, surveyors or engineers, except as follows: _____. Owner, by the undersigned Declarant, agrees to and does hereby indemnify and hold harmless Chicago Title Insurance Company against any and all claims arising therefrom.

3. Owner has not previously conveyed the Land; is not a debtor in bankruptcy (and if a partnership, the general partner thereof is not a debtor in bankruptcy); and has not received notice of any pending court action affecting the title to the Land.

4. Except as shown in the above referenced Preliminary Report/Commitment, there are no unpaid or unsatisfied mortgages, deeds of trust, Uniform Commercial Code financing statements, regular assessments, special assessments, periodic assessments or any assessment from any source, claims of lien, special assessments, or taxes that constitute a lien against the Land or that affect the Land but have not been recorded in the public records. There are no violations of the covenants, conditions and restrictions as shown in the above referenced Preliminary Report/Commitment.

5. The Land is currently in use as _____; _____ occupy/occupies the Land; and the following are all of the leases or other occupancy rights affecting the Land:

   _____

6. There are no other persons or entities that assert an ownership interest in the Land, nor are there unrecorded easements, claims of easement, or boundary disputes that affect the Land.

7. There are no outstanding options to purchase or rights of first refusal affecting the Land.

OWNER'S DECLARATION

(continued)

8. Between the most recent Effective Date of the above referenced Preliminary Report/Commitment and the date of recording of the Insured Instrument(s), Owner has not taken or allowed, and will not take or allow, any action or inaction to encumber or otherwise affect title to the Land.

This declaration is made with the intention that Chicago Title Insurance Company (the "Company") and its policy issuing agents will rely upon it in issuing their title insurance policies and endorsements. Owner, by the undersigned Declarant, agrees to indemnify the Company against loss or damage (including attorneys' fees, expenses, and costs) incurred by the Company as a result of any untrue statement made herein.

I declare under penalty of perjury that the foregoing is true and correct and that this declaration was executed on December 5, 2023at 12:00 AM.

_____

AFFIDAVIT

Title No.: TT4002374-SA

This Affidavit, when fully completed, is to be signed **and notarized**, then returned to Ticor Title Company of California to enable Ticor Title Company of California to insure the presently pending transaction.

The undersigned owner hereby states that there are no unrecorded leases or agreements affecting the property described in the Preliminary Report for Title Order Number TT4002374-SA and that there is no one in possession or entitled to possession of said property other than the vestee shown in said Preliminary Report, **except**:

_____

_____

_____

_____

The undersigned owner states that to his/her knowledge, there are no liens or rights to liens upon said property for labor, services and materials for work contracted for, and completed by, an owner, lessee, sub-lessee or tenant within the last year or which is now in progress, **except**:

_____

_____

_____

_____

This statement is made in connection with the request to Ticor Title Company of California to issue its policy(ies) of title insurance with respect to Title Order Number TT4002374-SA.

IN WITNESS WHEREOF, the undersigned have executed this document on the date(s) set forth below.

_____
Signature

_____
Print Name

_____
Signature

_____
Print Name

Address: _____

_____

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

AFFIDAVIT
(continued)

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of _____

County of _____

Subscribed and sworn to (or affirmed) before me on this _____ day of _____, 20___, by

_____,
proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me.

_____
Signature

TICOR TITLE COMPANY

STATEMENT OF INFORMATION
CONFIDENTIAL INFORMATION
FOR YOUR PROTECTION

Escrow No.: TT4002374

Completion of this statement expedites your application for title insurance, as it assists in establishing identity, eliminating matters affecting persons with similar names and avoiding the use of fraudulent or forged documents. Complete all blanks (please print) or indicate "none" or "N/A." If more space is needed for any item(s), use the reverse side of the form. Each party (and spouse/domestic partner, if applicable) to the transaction should personally sign this form.

NAME AND PERSONAL INFORMATION

_____ Date of Birth _____
First Name Middle Name (If none, indicate) Last Name Maiden Name

Home Phone _____ Business Phone _____ Birthplace _____

Cell Phone _____ Fax _____ Email _____

Social Security No. _____ Driver's License No. _____

List any other name you have used or been known by _____

State of residence _____ I have lived continuously in the U.S.A. since _____

Are you currently married? ☐ Yes ☐ No Are you currently a registered domestic partner? ☐ Yes ☐ No

If yes, complete the following information:

Date and place of marriage _____

Spouse/Domestic Partner _____ Date of Birth _____
First Name Middle Name (If none, indicate) Last Name Maiden Name

Home Phone _____ Business Phone _____ Birthplace _____

Cell Phone _____ Fax _____ Email _____

Social Security No. _____ Driver's License No. _____

List any other name you have used or been known by _____

State of residence _____ I have lived continuously in the U.S.A. since _____

****

CHILDREN

Child Name: _____ Date of Birth: _____ Child Name: _____ Date of Birth: _____

Child Name: _____ Date of Birth: _____ Child Name: _____ Date of Birth: _____

(if more space is required, use reverse side of form)

****

RESIDENCES (LAST 10 YEARS)

_____
Number & Street City From (date) to (date)

_____
Number & Street City From (date) to (date)

(if more space is required, use reverse side of form)

****

OCCUPATIONS/BUSINESSES (LAST 10 YEARS)

_____
Firm or Business Name Address From (date) to (date)

_____
Firm or Business Name Address From (date) to (date)

(if more space is required, use reverse side of form)

****

SPOUSE'S/DOMESTIC PARTNER'S OCCUPATIONS/BUSINESSES (LAST 10 YEARS)

_____
Firm or Business Name Address From (date) to (date)

_____
Firm or Business Name Address From (date) to (date)

(if more space is required, use reverse side of form)

****

STATEMENT OF INFORMATION
CONFIDENTIAL INFORMATION FOR YOUR PROTECTION
(continued)

PRIOR MARRIAGE(S) and PRIOR DOMESTIC PARTNERSHIP(S)

Any prior marriages or domestic partnerships for either person? _____ If yes, complete the following:

Prior spouse's (Party A) name: _____ Prior Spouse of Party A: _____

Marriage ended by: ☐ Death ☐ Divorce/Dissolution ☐ Nullification Date of Death/Divorce: _____

Prior spouse's (Party B) name: _____ Prior Spouse of Party B: _____ Spouse

Marriage ended by: ☐ Death ☐ Divorce/Dissolution ☐ Nullification Date of Death/Divorce: _____

(if more space is required, use reverse side of form)

****

INFORMATION ABOUT THE PROPERTY

Buyer intends to reside on the property in this transaction: ☐ Yes ☐ No

Owner to complete the following items

Street Address of Property in this transaction: _____

The land is ☐ unimproved; or improved with a structure of the following type: ☐ A Single or 1-4 Family ☐ Condo Unit ☐ Other _____

Improvements, remodeling or repairs to this property have been made within the past six (6) months: ☐ Yes ☐ No

If yes, have all costs for labor and materials arising in connection therewith been paid in full? ☐ Yes ☐ No

Any current loans on property? _____ If yes, complete the following:

Lender_____ Loan Amount_____ Loan Account No._____

Lender_____ Loan Amount_____ Loan Account No. _____

****

The undersigned declare, under penalty of perjury, that the foregoing is true and correct.

IN WITNESS WHEREOF, the undersigned have executed this document on the date(s) set forth below.

_____ _____
Signature Date

_____
Print Name

_____ _____
Signature Date

_____
Print Name

(Note: If applicable, both spouses/domestic partners must sign.)

THANK YOU.

This map/plat is being furnished as an aid in locating the herein described Land in relation to adjoining streets, natural boundaries and other land, and is not a survey of the land depicted. Except to the extent a policy of title insurance is expressly modified by endorsement, if any, the Company does not insure dimensions, distances, location of eas 2795 s, acreage or other matters shown thereon.

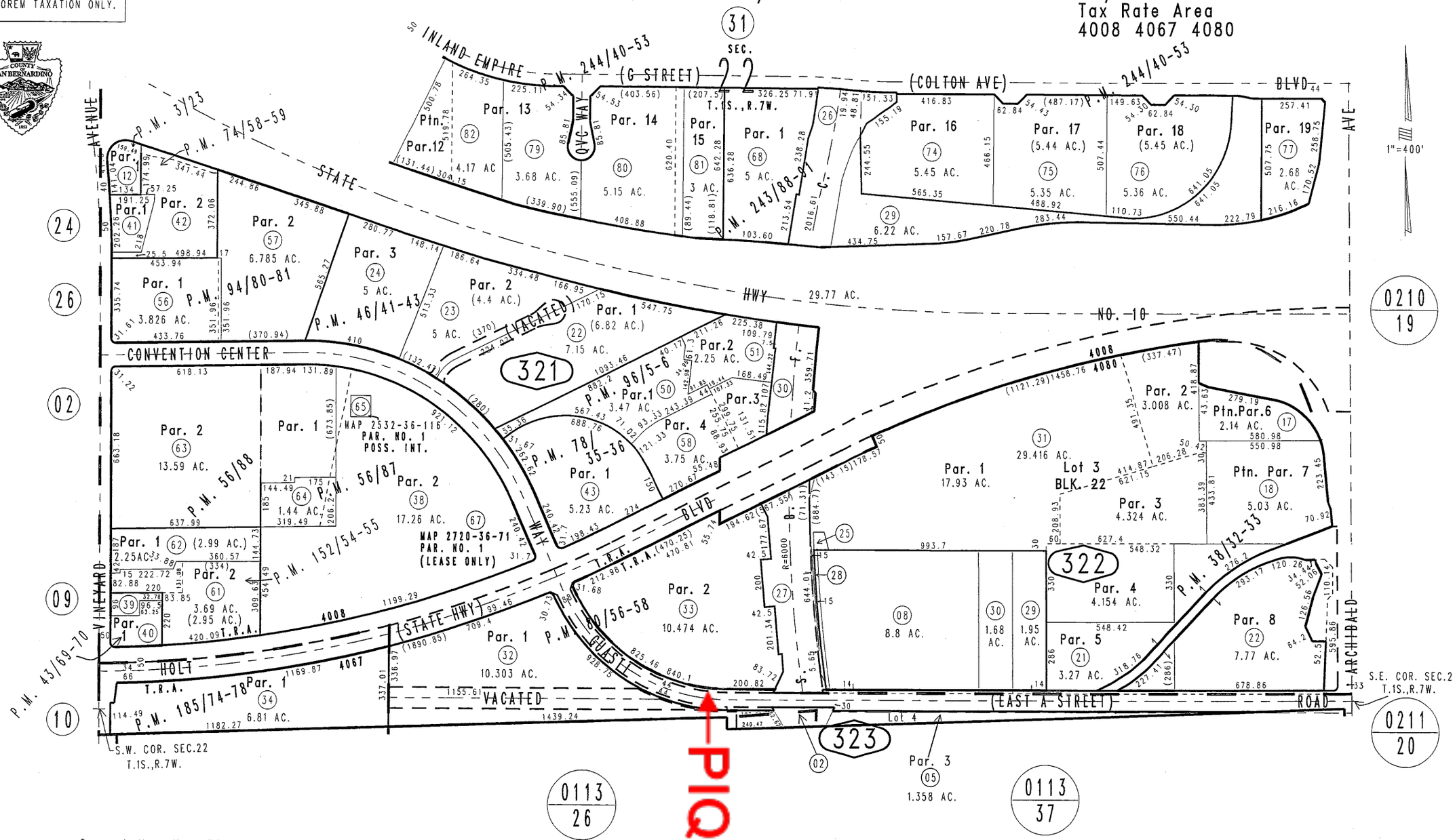
er 2004

MAP IS FOR THE PURPOSE
VALOREM TAXATION ONLY.

Ptn. Tract No. 2244, M.B. 35/50-56

City of Ontario
Tax Rate Area
4008 4067 4080

0110 - 32



Parcel Map No. 7357, P.M. 74/58-59
Ptn. Parcel Map No. 5936, P.M. 56/88
Parcel Map No. 5661, P.M. 56/87
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Parcel Map No. 19579, P.M. 243/88-91
Parcel Map No. 15124, P.M. 185/74-78
Parcel Map No. 12664, P.M. 152/54-55
Parcel Map No. 8690, P.M. 94/80-81
Parcel Map No. 8490, P.M. 88/83-84, Amending Map, P.M. 96/5-6
Parcel Map No. 5660, P.M. 80/56-58
Ptn. Parcel Map No. 7653, P.M. 78/35-36
Ptn. Parcel Map No. 19612, P.M. 244/40-53

Assessor's Map
Book 0110 Page 32
San Bernardino County

REVISED
07/03/18 KA
06/12/19 KC
08/27/19 KA
03/20/20 GW
04/20/20 KC

APPENDIX F

RESUMES

ED LUMP

MR. ED LUMP
Associate Geologist

EDUCATION
B.Sc Geology, San Diego State University, San Diego, California

PROFESSIONAL SUMMARY
Mr. Lump has been in the field of Engineering Geology since 1984 and in the field of Environmental Assessment since 1990. Serving as a field technician, soils laboratory technician, and geologist he has gained field experience on numerous hillside and flatland residential and commercial developments throughout southern California. As an engineering geologist he supervised field personnel and conducted numerous geologic and geotechnical evaluations on residential, commercial and industrial developments in California, Arizona and Nevada. His projects have included landslide and fault evaluations, single and multi-tract residential properties, shopping centers/national chain retail developments, and forensic evaluations, as well as grading and construction oversight. Mr. Lump has also conducted and managed numerous Phase I Environmental Site Assessments and Phase II soil, groundwater and soil vapor assessments for vacant, agricultural, residential, commercial and industrial properties in California, Arizona and Nevada.

SELECTED PROJECT EXPERIENCE

Environmental Site Assessments
- Limited Phase II and Soil Vapor Survey, 2013, County of Riverside, future Eastvale fire station, Riverside County, CA
- Phase I ESA, 2013, Wakeland Housing Development, 10 apartment complex portfolio, San Diego County, CA
- Phase I ESA and Limited Phase II, 2013, William Lyon Homes, Upland Residential Development, San Bernardino County, CA
- Limited Phase II Assessment, 2013, KB Homes, Spring Mountain Ranch, Riverside County, CA
- Environmental demolition and grading oversight, 2011/2012, Standard Pacific Homes, Harmony Grove residential development, San Diego County, CA
- Groundwater Mounding Evaluation, 2008, Lowe's HIW, Lowe's of Pacoima, Los Angeles County, CA
- Phase I ESA, Pesticide Residue Survey, Remedial Earthwork Guidelines, and Final As-Built Assessment, 2003/2004, Lennar Homes, Bressi Ranch, San Diego County, CA

Geologic and Geotechnical Evaluations
- Lake Elsinore Marketplace, Diamond Development, Riverside County, CA
- Salton Sea Solar Plant, Chevron Solar, Inc., Imperial County, CA
- Lowe's of Sparks, Nevada, Lowe's HIW, Washoe County, NV
- Walmart Murrieta, Walmart, Inc., Riverside County, CA
- Santa Fe Hills/Paloma Residential Development, KB Homes, San Diego County, CA
- Carmel Mountain Ranch Residential Development, Presley of San Diego, San Diego County, CA
- Lowe's of Bullhead City, Arizona, Lowe's HIW, Mohave County, AZ

ED LUMP

Grading and Construction

- Discovery Hills Residential Development, Presley of San Diego, San Diego County, CA
- Lowe's of Prescott, Arizona, Lowe's HIW, Yavapai County, AZ
- Salt Creek Residential Development, KB Homes, San Diego County, CA
- Lowe's of Pacoima, Lowe's HIW, Los Angeles County, CA
- Lake Elsinore Marketplace, Diamond Development, Riverside County, CA
- Carmel Mountain Ranch Residential Development, Presley of San Diego, San Diego County, CA
- Santa Fe Hills/Paloma Residential Development, KB Homes, San Diego County, CA
- Cobra Golf Facility-Carlsbad, Cobra Golf, San Diego County, CA

SIAMAK JAFROUDI

DR. SIAMAK JAFROUDI
President
Principal-in-Charge

EDUCATION
PhD, Geotechnical Engineering, 1983,
UC Davis
MS, Civil Engineering, 1978, UC Davis

REGISTRATIONS
Civil Engineering, California, PE 36641
Geotechnical Engineer, California, GE 2024
Environmental Assessor, REA 01655

PROFESSIONAL SUMMARY
Dr. Jafroudi has over 34 years of professional experience in geotechnical engineering. His area of specialization is "material characterization" in relation to slope stability evaluation, liquefaction analysis, pavement design, collapse potential, earth retaining structures and earthquake engineering. Dr. Jafroudi's experience encompasses the design and supervision of a multitude of soil mechanics laboratory tests and drilling programs. With a broad range of project experience, he has served as a Principal Engineer on several key projects for such clients as school, university and college districts, public agencies; transportation agencies; residential and commercial developers, as well as private sector clients.

Acquiring a doctorate degree in Geotechnical Engineering as well as a Master of Science degree in Civil Engineering, Dr. Jafroudi maintains extensive working knowledge and experience with respect to these challenging fields. Dr. Jafroudi is a Registered Geotechnical Engineer (GE), a Registered Environmental Assessor (REA), and is registered in Civil Engineering (PE), all in the state of California. Additionally, he is an active member of the American Society of Civil Engineers, the Earthquake Engineering Research Institute and California Geotechnical Engineering Association.

SELECTED PROJECT EXPERIENCE

Environmental Site Assessments
- KB Homes, Hollywood Beverly Christian Church, Hollywood
- Castle & Cooke, Lake Elsinore Outlet Mall, Lake Elsinore
- Covina Transit Plaza, Foothill Transit, Covina
- First Street Bridge Widening, Los Angeles County
- Overland Street Bridge Improvements, Los Angeles County
- 801 Office Tower, Mani Brothers, Los Angeles
- Harmony Grove Site Acquisition, New Urban West, San Diego County
- Site Acquisitions, County of Los Angeles Office of Education, Los Angeles
- Eleven Projects, City of Mission Viejo, Mission Viejo
- Site Acquisitions, Paramount USD, Paramount
- Site Acquisitions, Santa Ana USD, Santa Ana
- Site Acquisition, Nevis Construction, Chino Hills
- Site Acquisitions, Moreno Valley USD, Moreno Valley
- Corona Farms, Confidential Client, Corona
- Amusement Park, Confidential Client, Orange County
- Nursery Site, Confidential Client, Sylmar

Appendix B
Air Quality Impact Analysis

Empire Groves Hotel

AIR QUALITY IMPACT ANALYSIS

CITY OF ONTARIO

PREPARED BY:

Haseeb Qureshi
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Shannon Wong
swong@urbanxroads.com

APRIL 19, 2024

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LIST OF ABBREVIATED TERMS

%	Percent
°F	Degrees Fahrenheit
(1)	Reference
µg/m^3	Microgram per Cubic Meter
1992 CO Plan	*1992 Federal Attainment Plan for Carbon Monoxide*
1993 CEQA Handbook	*SCAQMD's CEQA Air Quality Handbook (1993)*
2020-2045 RTP/SCS	*2020-2045 Regional Transportation Plan/Sustainable Communities Strategy*
AB 2595	California Clean Air Act
AQIA	Air Quality Impact Analysis
AQMP	Air Quality Management Plan
BACT	Best Available Control Technology
C_2H_3Cl	Vinyl Chloride
CAA	Federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards Code
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CEQA Guidelines	*CEQA Statute and Guidelines*
City	City of Ontario
CO	Carbon Monoxide
COHb	Carboxyhemoglobin
EC	Elemental Carbon
EIR	Environmental Impact Report
EMFAC	Emissions FACtor Model
EPA	Environmental Protection Agency
EV	Electric Vehicle
GHG	Greenhouse Gas
H_2S	Hydrogen Sulfide
HDT	Heavy-Duty Trucks
HHDT	Heavy-Heavy-Duty Trucks

HI	Hazard Index
hp	Horsepower
lbs	Pounds
lbs/day	Pounds Per Day
LDA	Light Duty Auto
LDT1/LDT2	Light-Duty Trucks
LHDT1/LHDT2	Light-Heavy-Duty Trucks
LST	Localized Significance Threshold
LST Methodology	*Final Localized Significance Threshold Methodology*
MICR	Maximum Individual Cancer Risk
MM	Mitigation Measures
mph	Miles Per Hour
MWELO	California Department of Water Resources' Model Water Efficient
N_2	Nitrogen
N_2O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards
NO	Nitric Oxide
NO_2	Nitrogen Dioxide
NO_X	Nitrogen Oxides
O_2	Oxygen
O_3	Ozone
O_2 Deficiency	Chronic Hypoxemia
ODC	Ozone Depleting Compounds
Pb	Lead
PM	Particulate Matter
PM_{10}	Particulate Matter 10 microns in diameter or less
$PM_{2.5}$	Particulate Matter 2.5 microns in diameter or less
ppm	Parts Per Million
Project	Empire Groves Hotel
RECLAIM	Regional Clean Air Incentives Market
ROG	Reactive Organic Gases
SB	Senate Bill
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
sf	Square Feet
SIPs	State Implementation Plans

SO_2	Sulfur Dioxide
SO_4	Sulfates
SO_X	Sulfur Oxides
SRA	Source Receptor Area
TAC	Toxic Air Contaminant
Title 24	California Building Code
TITLE I	Non-Attainment Provisions
TITLE II	Mobile Sources Provisions
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compounds
vph	Vehicles Per Hour

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EXECUTIVE SUMMARY

ES.1 SUMMARY OF FINDINGS

The results of this *Empire Groves Hotel Air Quality Impact Analysis* (AQIA) are summarized below based on the significance criteria in Section 3 of this report consistent with Appendix G of the *Guidelines for Implementation of the California Environmental Quality Act* (*CEQA Guidelines*) (1). Table ES-1 shows the findings of significance for each potential air quality impact under the California Environmental Quality Act (CEQA).

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS

Analysis	Report Section	Significance Findings	
		Unmitigated	Mitigated
Regional Construction Emissions	3.4	*Less Than Significant*	*n/a*
Localized Construction Emissions	3.7	*Less Than Significant*	*n/a*
Regional Operational Emissions	3.5	*Less Than Significant*	*n/a*
Localized Operational Emissions	3.8	*Less Than Significant*	*n/a*
CO "Hot Spot" Analysis	3.9	*Less Than Significant*	*n/a*
Air Quality Management Plan	3.10	*Less Than Significant*	*n/a*
Sensitive Receptors	3.11	*Less Than Significant*	*n/a*
Odors	3.12	*Less Than Significant*	*n/a*
Cumulative Impacts	3.13	*Less Than Significant*	*n/a*

ES.2 REGULATORY REQUIREMENTS

There are numerous requirements that development projects must comply with by law, and that were put in place by federal, State, and local regulatory agencies for the improvement of air quality.

Any operation or activity that might cause the emission of any smoke, fly ash, dust, fumes, vapors, gases, or other forms of air pollution, which can cause damage to human health, vegetation, or

other forms of property, or can cause excessive soiling on any other parcel shall conform to the requirements of the South Coast Air Quality Management District (SCAQMD).

SCAQMD RULES

SCAQMD Rules that are currently applicable during construction activity for this Project are described below.

SCAQMD RULE 402

A person shall not discharge from any source whatsoever such quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any such persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule do not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

Odor Emissions. All uses shall be operated in a manner such that no offensive odor is perceptible at or beyond the property line of that use.

SCAQMD RULE 403

This rule is intended to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (human-made) fugitive dust sources by requiring actions to prevent and reduce fugitive dust emissions. Rule 403 applies to any activity or human-made condition capable of generating fugitive dust and requires best available control measures to be applied to earth moving and grading activities.

Dust Control, Operations. Any operation or activity that might cause the emission of any smoke, fly ash, dust, fumes, vapors, gases, or other forms of air pollution, which can cause damage to human health, vegetation, or other forms of property, or can cause excessive soiling on any other parcel, shall conform to the requirements of the SCAQMD.

SCAQMD RULE 1113

This rule serves to limit the VOC content of architectural coatings used on projects in the South Coast Air Basin. This rule applies to any person who supplies, sells, offers for sale, or manufactures any architectural coating for use on projects.

SCAQMD RULE 1301

This rule is intended to provide that pre-construction review requirements to ensure that new or relocated facilities do not interfere with progress in attainment of the National Ambient Air Quality Standards (NAAQS), while future economic growth within the South Coast Air Basin is not unnecessarily restricted. The specific air quality goal is to achieve no net increases from new or modified permitted sources of nonattainment air contaminants or their precursors. Rule 1301 also limits emission increases of ammonia, and Ozone Depleting Compounds (ODCs) from new, modified or relocated facilities by requiring the use of Best Available Control Technology (BACT).

SCAQMD RULE 1401

A person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any 1 hour that is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the United States (U.S.) Bureau of Mines.

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1 INTRODUCTION

This report presents the results of the AQIA prepared by Urban Crossroads, Inc., for the proposed Empire Groves Hotel Project (Project). The purpose of this AQIA is to evaluate the potential impacts to air quality associated with construction and operation of the Project and recommend measures to mitigate impacts considered potentially significant in comparison to thresholds established by the SCAQMD.

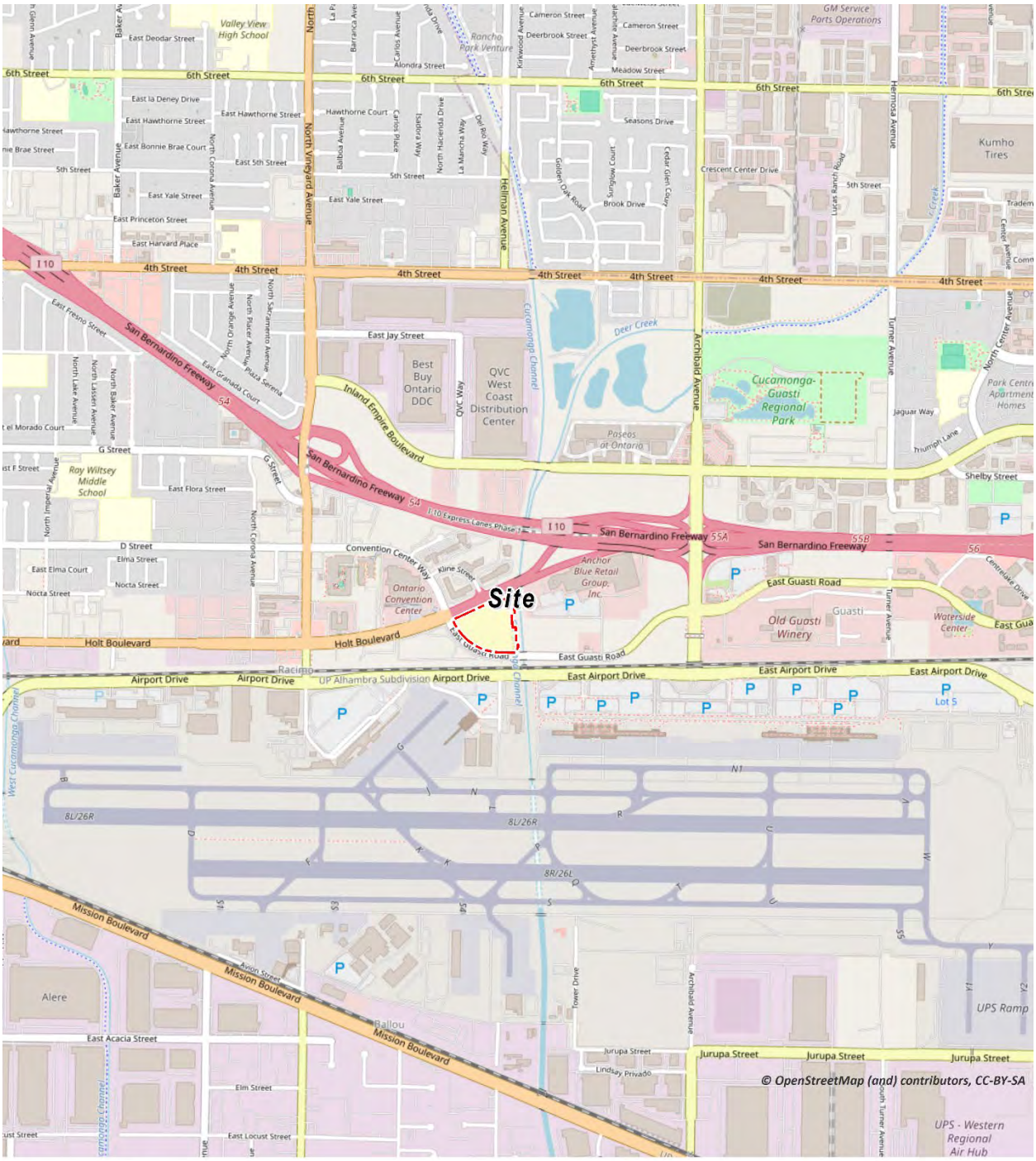
1.1 SITE LOCATION

The proposed Project site is located at the northeast corner of Holt Boulevard and Guasti Road in the City of Ontario, as shown in Exhibit 1-A.

1.2 PROJECT DESCRIPTION

The Project consists of a hotel that includes 600 rooms and suites, 2 ballrooms, a spa & fitness center, meeting and conference rooms as well as an outdoor pool and event lawn on 10.43 acres. A preliminary site plan for the proposed hotel development is shown on Exhibit 1-B. The Project will be developed within a single phase with an anticipated opening year of 2025.

EXHIBIT 1-A: LOCATION MAP

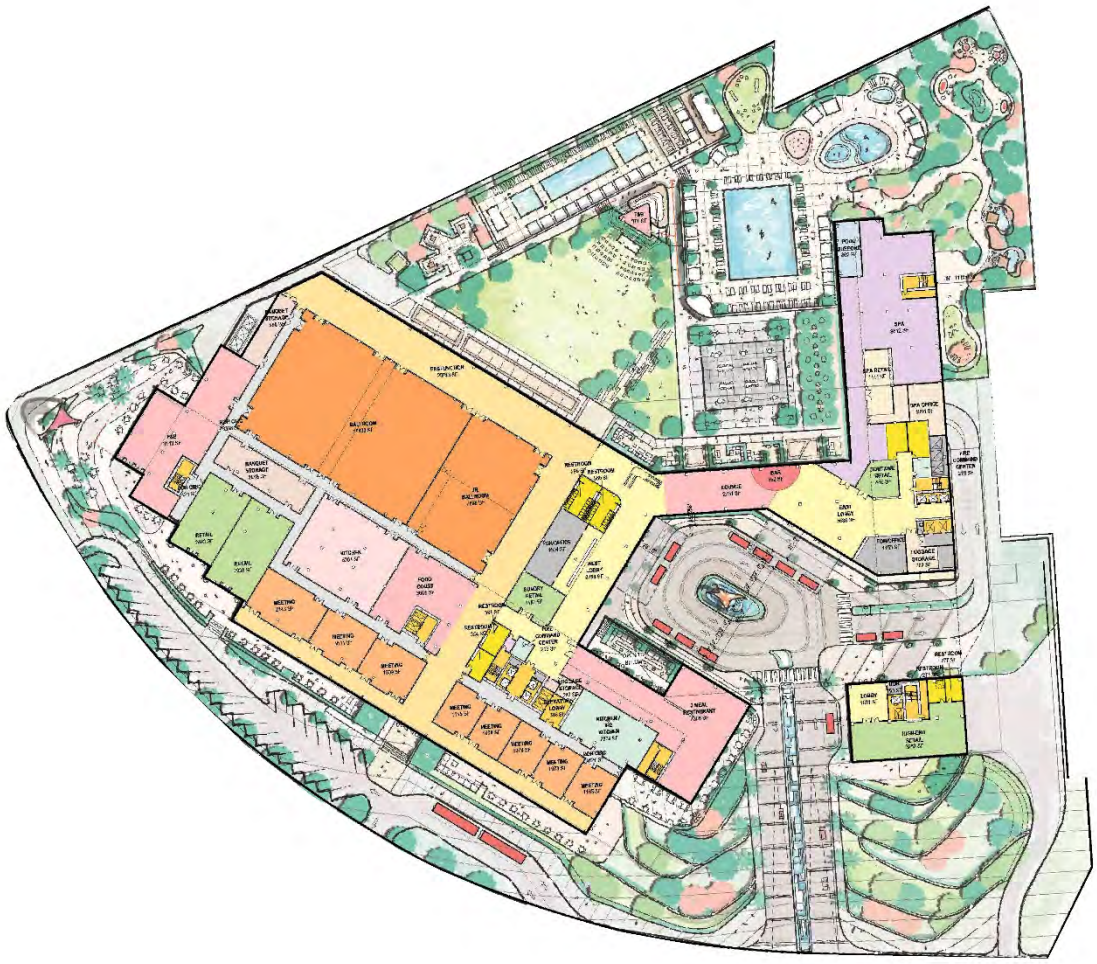


LEGEND:

N

Site Boundary

EXHIBIT 1-B: SITE PLAN





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2 AIR QUALITY SETTING

This section provides an overview of the existing air quality conditions in the Project area and region.

2.1 SOUTH COAST AIR BASIN

The Project site is located in the South Coast Air Basin (SCAB) within the jurisdiction of SCAQMD (2). The SCAQMD was created by the 1977 Lewis-Presley Air Quality Management Act, which merged four county air pollution control bodies into one regional district. Under the Act, the SCAQMD is responsible for bringing air quality in areas under its jurisdiction into conformity with federal and state air quality standards. As stated, the Project site is located within the SCAB, a 6,745-square-mile subregion of the SCAQMD, which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County.

The SCAB is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east, and the San Diego Air Basin to the south.

2.2 REGIONAL CLIMATE

The regional climate has a substantial influence on air quality in the SCAB. In addition, the temperature, wind, humidity, precipitation, and amount of sunshine influence the air quality.

The annual average temperatures throughout the SCAB vary from the low to mid 60s (degrees Fahrenheit [°F]). Due to a decreased marine influence, the eastern portion of the SCAB shows greater variability in average annual minimum and maximum temperatures. January is the coldest month throughout the SCAB, with average minimum temperatures of 47°F in downtown Los Angeles and 36°F in San Bernardino. All portions of the SCAB have recorded maximum temperatures above 100°F.

Although the climate of the SCAB can be characterized as semi-arid, the air near the land surface is quite moist on most days because of the presence of a marine layer. This shallow layer of sea air is an important modifier of SCAB climate. Humidity restricts visibility in the SCAB, and the conversion of sulfur dioxide (SO_2) to sulfates (SO_4) is heightened in air with high relative humidity. The marine layer provides an environment for that conversion process, especially during the spring and summer months. The annual average relative humidity within the SCAB is 71% along the coast and 59% inland. Since the ocean effect is dominant, periods of heavy early morning fog are frequent and low stratus clouds are a characteristic feature. These effects decrease with distance from the coast.

More than 90% of the SCAB's rainfall occurs from November through April. The annual average rainfall varies from approximately nine inches in Riverside to fourteen inches in downtown Los Angeles. Monthly and yearly rainfall totals are extremely variable. Summer rainfall usually consists of widely scattered thunderstorms near the coast and slightly heavier shower activity in the eastern portion of the SCAB with frequency being higher near the coast.

Due to its generally clear weather, about three-quarters of available sunshine is received in the SCAB. The remaining one-quarter is absorbed by clouds. The ultraviolet portion of this abundant radiation is a key factor in photochemical reactions. On the shortest day of the year, there are approximately 10 hours of possible sunshine, and on the longest day of the year, there are approximately 14½ hours of possible sunshine.

The importance of wind to air pollution is considerable. The direction and speed of the wind determines the horizontal dispersion and transport of the air pollutants. During the late autumn to early spring rainy season, the SCAB is subjected to wind flows associated with the traveling storms moving through the region from the northwest. This period also brings five to ten periods of strong, dry offshore winds, locally termed "Santa Anas" each year. During the dry season, which coincides with the months of maximum photochemical smog concentrations, the wind flow is bimodal, typified by a daytime onshore sea breeze and a nighttime offshore drainage wind. Summer wind flows are created by the pressure differences between the relatively cold ocean and the unevenly heated and cooled land surfaces that modify the general northwesterly wind circulation over southern California. Nighttime drainage begins with the radiational cooling of the mountain slopes. Heavy, cool air descends the slopes and flows through the mountain passes and canyons as it follows the lowering terrain toward the ocean. Another characteristic wind regime in the SCAB is the "Catalina Eddy," a low level cyclonic (counterclockwise) flow centered over Santa Catalina Island which results in an offshore flow to the southwest. On most spring and summer days, some indication of an eddy is apparent in coastal sections.

In the SCAB, there are two distinct temperature inversion structures that control vertical mixing of air pollution. During the summer, warm high-pressure descending (subsiding) air is undercut by a shallow layer of cool marine air. The boundary between these two layers of air is a persistent marine subsidence/inversion. This boundary prevents vertical mixing which effectively acts as an impervious lid to pollutants over the entire SCAB. The mixing height for the inversion structure is normally situated 1,000 to 1,500 feet above mean sea level.

A second inversion-type forms in conjunction with the drainage of cool air off the surrounding mountains at night followed by the seaward drift of this pool of cool air. The top of this layer forms a sharp boundary with the warmer air aloft and creates nocturnal radiation inversions. These inversions occur primarily in the winter, when nights are longer and onshore flow is weakest. They are typically only a few hundred feet above mean sea level. These inversions effectively trap pollutants, such as nitrogen oxides (NO_X) and carbon monoxide (CO) from vehicles, as the pool of cool air drifts seaward. Winter is therefore a period of high levels of primary pollutants along the coastline.

2.3 WIND PATTERNS AND PROJECT LOCATION

The distinctive climate of the Project area and the SCAB is determined by its terrain and geographical location. The SCAB is located in a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean in the southwest quadrant with high mountains forming the remainder of the perimeter.

Wind patterns across the south coastal region are characterized by westerly and southwesterly onshore winds during the day and easterly or northeasterly breezes at night. Winds are characteristically light although the speed is somewhat greater during the dry summer months than during the rainy winter season.

2.4 CRITERIA POLLUTANTS

Criteria pollutants are pollutants that are regulated through the development of human health based and/or environmentally based criteria for setting permissible levels. Criteria pollutants, their typical sources, and health effects are identified below (3):

TABLE 2-1: CRITERIA POLLUTANTS

Criteria Pollutant	Description	Sources	Health Effects
CO	CO is a colorless, odorless gas produced by the incomplete combustion of carbon-containing fuels, such as gasoline or wood. CO concentrations tend to be the highest during the winter morning, when little to no wind and surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike ozone (O_3), motor vehicles operating at slow speeds are the primary source of CO in the SCAB. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections.	Any source that burns fuel such as automobiles, trucks, heavy construction equipment, farming equipment, and residential heating.	Individuals with a deficient blood supply to the heart are the most susceptible to the adverse effects of CO exposure. The effects observed include earlier onset of chest pain with exercise, and electrocardiograph changes indicative of decreased oxygen (O_2) supply to the heart. Inhaled CO has no direct toxic effect on the lungs but exerts its effect on tissues by interfering with O_2 transport and competing with O_2 to combine with hemoglobin present in the blood to form carboxyhemoglobin (COHb). Hence, conditions with an increased demand for O_2 supply can be adversely affected by exposure to CO. Individuals most at risk include fetuses, patients with diseases involving heart and blood vessels, and patients with chronic hypoxemia (O_2 deficiency) as seen at high altitudes.
SO_2	SO_2 is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant	Coal or oil burning power plants and industries,	A few minutes of exposure to low levels of SO_2 can result in airway constriction in some

Criteria Pollutant	Description	Sources	Health Effects
	mainly as a result of burning high sulfur-content fuel oils and coal and from chemical processes occurring at chemical plants and refineries. When SO_2 oxidizes in the atmosphere, it forms SO_4. Collectively, these pollutants are referred to as sulfur oxides (SO_X).	refineries, diesel engines.	asthmatics, all of whom are sensitive to its effects. In asthmatics, increase in resistance to air flow, as well as reduction in breathing capacity leading to severe breathing difficulties, are observed after acute exposure to SO_2. In contrast, healthy individuals do not exhibit similar acute responses even after exposure to higher concentrations of SO_2. Animal studies suggest that despite SO_2 being a respiratory irritant, it does not cause substantial lung injury at ambient concentrations. However, very high levels of exposure can cause lung edema (fluid accumulation), lung tissue damage, and sloughing off of cells lining the respiratory tract. Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient SO_2 levels. In these studies, efforts to separate the effects of SO_2 from those of fine particles have not been successful. It is not clear whether the two pollutants act synergistically, or one pollutant alone is the predominant factor.
NO_X	NO_X consist of nitric oxide (NO), nitrogen dioxide (NO_2) and nitrous oxide (N_2O) and are formed when nitrogen (N_2) combines with O_2. Their lifespan in the atmosphere ranges from	Any source that burns fuel such as automobiles, trucks, heavy construction equipment, farming	Population-based studies suggest that an increase in acute respiratory illness, including infections and respiratory symptoms in children (not infants), is

Criteria Pollutant	Description	Sources	Health Effects
	one to seven days for nitric oxide and nitrogen dioxide, to 170 years for nitrous oxide. NO_X is typically created during combustion processes and are major contributors to smog formation and acid deposition. NO_2 is a criteria air pollutant and may result in numerous adverse health effects; it absorbs blue light, resulting in a brownish-red cast to the atmosphere and reduced visibility. Of the seven types of nitrogen oxide compounds, NO_2 is the most abundant in the atmosphere. As ambient concentrations of NO_2 are related to traffic density, commuters in heavy traffic may be exposed to higher concentrations of NO_2 than those indicated by a regional monitoring station.	equipment, and residential heating.	associated with long-term exposure to NO_2 at levels found in homes with gas stoves, which are higher than ambient levels found in Southern California. Increase in resistance to air flow and airway contraction is observed after short-term exposure to NO_2 in healthy subjects. Larger decreases in lung functions are observed in individuals with asthma or chronic obstructive pulmonary disease (e.g., chronic bronchitis, emphysema) than in healthy individuals, indicating a greater susceptibility of these sub-groups. In animals, exposure to levels of NO_2 considerably higher than ambient concentrations result in increased susceptibility to infections, possibly due to the observed changes in cells involved in maintaining immune functions. The severity of lung tissue damage associated with high levels of O_3 exposure increases when animals are exposed to a combination of O_3 and NO_2.
O_3	O_3 is a highly reactive and unstable gas that is formed when VOCs and NO_X, both byproducts of internal combustion engine exhaust, undergo slow photochemical reactions in the presence of sunlight. O_3 concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of this pollutant.	Formed when reactive organic gases (ROG) and NO_X react in the presence of sunlight. ROG sources include any source that burns fuels, (e.g., gasoline, natural gas, wood, oil) solvents, petroleum processing and	Individuals exercising outdoors, children, and people with pre-existing lung disease, such as asthma and chronic pulmonary lung disease, are considered to be the most susceptible sub-groups for O_3 effects. Short-term exposure (lasting for a few hours) to O_3 at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased

Criteria Pollutant	Description	Sources	Health Effects
		storage, and pesticides.	susceptibility to infections, inflammation of the lung tissue, and some immunological changes. Elevated O_3 levels are associated with increased school absences. In recent years, a correlation between elevated ambient O_3 levels and increases in daily hospital admission rates, as well as mortality, has also been reported. An increased risk for asthma has been found in children who participate in multiple outdoor sports and live in communities with high O_3 levels. O_3 exposure under exercising conditions is known to increase the severity of the responses described above. Animal studies suggest that exposure to a combination of pollutants that includes O_3 may be more toxic than exposure to O_3 alone. Although lung volume and resistance changes observed after a single exposure diminish with repeated exposures, biochemical and cellular changes appear to persist, which can lead to subsequent lung structural changes.
Particulate Matter	PM_{10}: A major air pollutant consisting of tiny solid or liquid particles of soot, dust, smoke, fumes, and aerosols. Particulate matter pollution is a major cause of reduced visibility (haze) which is caused by the scattering of light and consequently the significant reduction in air clarity. The size of the particles (10 microns or smaller, about 0.0004 inches or less) allows them to easily enter the lungs where they	Sources of PM_{10} include road dust, windblown dust, and construction. Also formed from other pollutants (acid rain, NO_X, SO_X, organics). Incomplete combustion of any fuel.	A consistent correlation between elevated ambient fine particulate matter (PM_{10} and $PM_{2.5}$) levels and an increase in mortality rates, respiratory infections, number and severity of asthma attacks and the number of hospital admissions has been observed in different parts of the United States and various areas around the world. In

Criteria Pollutant	Description	Sources	Health Effects
	may be deposited, resulting in adverse health effects. Additionally, it should be noted that PM_{10} is considered a criteria air pollutant. $PM_{2.5}$: A similar air pollutant to PM_{10} consisting of tiny solid or liquid particles which are 2.5 microns or smaller (which is often referred to as fine particles). These particles are formed in the atmosphere from primary gaseous emissions that include SO_4 formed from SO_2 release from power plants and industrial facilities and nitrates that are formed from NO_X release from power plants, automobiles, and other types of combustion sources. The chemical composition of fine particles highly depends on location, time of year, and weather conditions. $PM_{2.5}$ is a criteria air pollutant.	$PM_{2.5}$ comes from fuel combustion in motor vehicles, equipment, and industrial sources, residential and agricultural burning. Also formed from reaction of other pollutants (acid rain, NO_X, SO_X, organics).	recent years, some studies have reported an association between long-term exposure to air pollution dominated by fine particles and increased mortality, reduction in lifespan, and an increased mortality from lung cancer. Daily fluctuations in $PM_{2.5}$ concentration levels have also been related to hospital admissions for acute respiratory conditions in children, to school and kindergarten absences, to a decrease in respiratory lung volumes in children without asthma, and to increased medication use in children and adults with asthma. Recent studies show lung function growth in children is reduced with long term exposure to particulate matter. The elderly, people with pre-existing respiratory or cardiovascular disease, and children appear to be more susceptible to the effects of high levels of PM_{10} and $PM_{2.5}$.
VOC	VOCs are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms) that exist in the ambient air. VOCs contribute to the formation of smog through atmospheric photochemical reactions and/or may be toxic. Compounds of carbon (also known as organic compounds) have different levels of reactivity; that is, they do not react at the same speed or do not form O_3 to the same extent when exposed to photochemical processes. VOCs often have an odor, and some examples include	Organic chemicals are widely used as ingredients in household products. Paints, varnishes, and wax all contain organic solvents, as do many cleaning, disinfecting, cosmetic, degreasing, and hobby products. Fuels are made up of organic chemicals. All of these products can	Breathing VOCs can irritate the eyes, nose, and throat, can cause difficulty breathing and nausea, and can damage the central nervous system as well as other organs. Some VOCs can cause cancer. Not all VOCs have all these health effects, though many have several.

Criteria Pollutant	Description	Sources	Health Effects
	gasoline, alcohol, and the solvents used in paints. Exceptions to the VOC designation include CO, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate. VOCs are a criteria pollutant since they are a precursor to O_3, which is a criteria pollutant. The terms VOC and ROG (see below) are used interchangeably.	release organic compounds while you are using them, and, to some degree, when they are stored.	
ROG	Similar to VOC, ROGs are also precursors in forming O_3 and consist of compounds containing methane, ethane, propane, butane, and longer chain hydrocarbons, which are typically the result of some type of combustion/decomposition process. Smog is formed when ROG and NO_X react in the presence of sunlight. ROGs are a criteria pollutant since they are a precursor to O_3, which is a criteria pollutant. The terms ROG and VOC (see previous) are used interchangeably.	Sources similar to VOCs.	Health effects similar to VOCs.
Lead (Pb)	Pb is a heavy metal that is highly persistent in the environment and considered a criteria pollutant. In the past, the primary source of Pb in the air was emissions from vehicles burning leaded gasoline. The major sources of Pb emissions are ore and metals processing, particularly Pb smelters, and piston-engine aircraft operating on leaded aviation gasoline. Other stationary sources include waste incinerators, utilities, and lead-acid battery manufacturers. It should be noted that the Project does not include operational activities such as metal processing or Pb acid battery manufacturing. As such,	Metal smelters, resource recovery, leaded gasoline, deterioration of Pb paint.	Fetuses, infants, and children are more sensitive than others to the adverse effects of Pb exposure. Exposure to low levels of Pb can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotient. In adults, increased Pb levels are associated with increased blood pressure. Pb poisoning can cause anemia, lethargy, seizures, and death; although it appears that there are no direct effects of Pb on the

Criteria Pollutant	Description	Sources	Health Effects
	the Project is not anticipated to generate a quantifiable amount of Pb emissions.		respiratory system. Pb can be stored in the bone from early age environmental exposure, and elevated blood Pb levels can occur due to breakdown of bone tissue during pregnancy, hyperthyroidism (increased secretion of hormones from the thyroid gland) and osteoporosis (breakdown of bony tissue). Fetuses and breast-fed babies can be exposed to higher levels of Pb because of previous environmental Pb exposure of their mothers.
Odor	Odor means the perception experienced by a person when one or more chemical substances in the air come into contact with the human olfactory nerves (4).	Odors can come from many sources including animals, human activities, industry, nature, and vehicles.	Offensive odors can potentially affect human health in several ways. First, odorant compounds can irritate the eye, nose, and throat, which can reduce respiratory volume. Second, studies have shown that the VOCs that cause odors can stimulate sensory nerves to cause neurochemical changes that might influence health, for instance, by compromising the immune system. Finally, unpleasant odors can trigger memories or attitudes linked to unpleasant odors, causing cognitive and emotional effects such as stress.

2.5 EXISTING AIR QUALITY

Existing air quality is measured at established SCAQMD air quality monitoring stations. Monitored air quality is evaluated in the context of ambient air quality standards. These standards are the levels of air quality that are considered safe, with an adequate margin of safety, to protect the public health and welfare. National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) currently in effect are shown in Table 2-2 (5).

The determination of whether a region's air quality is healthful or unhealthful is determined by comparing contaminant levels in ambient air samples to the state and federal standards. At the time of this AQIA, the most recent state and federal standards were updated by CARB on May 4, 2016, and are presented in Table 2-2. The air quality in a region is considered to be in attainment by the state if the measured ambient air pollutant levels for O_3, CO (except 8-hour Lake Tahoe), SO_2 (1 and 24 hour), NO_2, PM_{10}, and $PM_{2.5}$ are not to be exceeded. All others are not to be equaled or exceeded. It should be noted that the three-year period is presented for informational purposes and is not the basis for how the state assigns attainment status. Attainment status for a pollutant means that the SCAQMD meets the standards set by the EPA or the California EPA (CalEPA). Conversely, nonattainment means that an area has monitored air quality that does not meet the NAAQS or CAAQS standards. In order to improve air quality in nonattainment areas, a State Implementation Plan (SIP) is drafted by CARB. The SIP outlines the measures that the state will take to improve air quality. Once nonattainment areas meet the standards and additional redesignation requirements, the EPA will designate the area as a maintenance area (6).

TABLE 2-2: AMBIENT AIR QUALITY STANDARDS (1 OF 2)

Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards [1]		National Standards [2]		
		Concentration [3]	Method [4]	Primary [3,5]	Secondary [3,6]	Method [7]
Ozone (O_3)[8]	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		—		
Fine Particulate Matter (PM2.5)[9]	24 Hour	—	—	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12.0 µg/m^3	15 µg/m^3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		—	—	
Nitrogen Dioxide (NO_2)[10]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemiluminescence	100 ppb (188 µg/m^3)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		0.053 ppm (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	—	Ultraviolet Flourescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[11]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[11]	—	
Lead[12,13]	30 Day Average	1.5 µg/m^3	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m^3 (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m^3		
Visibility Reducing Particles[14]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

See footnotes on next page …

For more information please call ARB-PIO at (916) 322-2990

California Air Resources Board (5/4/16)

TABLE 2-2: AMBIENT AIR QUALITY STANDARDS (2 OF 2)

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15 $\mu g/m^3$. The existing 24-hour PM10 standards (primary and secondary) of 150 $\mu g/m^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
11. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

    Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 $\mu g/m^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

For more information please call ARB-PIO at (916) 322-2990 **California Air Resources Board (5/4/16)**

2.6 REGIONAL AIR QUALITY

Air pollution contributes to a wide variety of adverse health effects. The EPA has established NAAQS for seven of the most common air pollutants: CO, Pb, O_3, PM_{10}, $PM_{2.5}$, NO_2, and SO_2 which are known as criteria pollutants. The SCAQMD monitors levels of various criteria pollutants at 35 permanent monitoring stations and 2 single-pollutant source Pb air monitoring sites throughout the air district (7). On January 25, 2024, CARB adopted the proposed 2023 amendments to the state and national area designations. See Table 2-3 for attainment designations for the SCAB (8). Appendix 2.1 provides geographic representation of the state and federal attainment status for applicable criteria pollutants within the SCAB.

TABLE 2-3: ATTAINMENT STATUS OF CRITERIA POLLUTANTS IN THE SCAB

Criteria Pollutant	State Designation	Federal Designation
O_3 – 1-hour standard	Nonattainment	--
O_3 – 8-hour standard	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Attainment
$PM_{2.5}$	Nonattainment	Nonattainment
CO	Attainment	Unclassifiable/Attainment
NO_2	Attainment	Unclassifiable/Attainment
SO_2	Attainment	Unclassifiable/Attainment
Pb[1]	Attainment	Unclassifiable/Attainment

Note: See Appendix 2.1 for a detailed map of State/National Area Designations within the SCAB
"-" = The national 1-hour O_3 standard was revoked effective June 15, 2005.

2.7 LOCAL AIR QUALITY

The SCAQMD has designated general forecast areas and air monitoring areas (referred to as Source Receptor Areas [SRA]) throughout the district in order to provide Southern California residents about the air quality conditions. The Project site is located within SRA 33. Within SRA 33, the SCAQMD CA-60 Near Road monitoring station, located approximately 2.32 miles south of the Project site, is the nearest long-term air quality monitoring station and reports air quality statistics for NO_2 and $PM_{2.5}$. As the CA-60 Near Road monitoring station does not provide data for O_3, CO, or PM_{10}, the next nearest monitoring stations will be utilized. It should be noted that the following stations will be used to report air quality data for O_3, CO, NO_2, PM_{10}, and $PM_{2.5}$.

- SRA 33 (CA-60 Near Road) – NO_2 and $PM_{2.5}$
- SRA 33 (I-10 Near Road) – CO
- SRA 34 (Central San Bernardino Valley 2) – O_3 and PM_{10}

[1] The Federal nonattainment designation for lead is only applicable towards the Los Angeles County portion of the SCAB.

It should be noted that data from I-10 Near Road and Central San Bernardino Valley 2 monitoring stations were utilized in lieu of the CA-60 Near Road monitoring station only in instances where data was not available.

The most recent three (3) years of data available is shown in Table 2-4 and identifies the number of days ambient air quality standards were exceeded for the study area, which is considered to be representative of the local air quality at the Project site. Data for O_3, CO, NO_2, PM_{10}, and $PM_{2.5}$ for 2020 through 2022 was obtained from the SCAQMD Air Quality Data Tables (9). Additionally, data for SO_2 has been omitted as attainment is regularly met in the SCAB and few monitoring stations measure SO_2 concentrations.

TABLE 2-4: PROJECT AREA AIR QUALITY MONITORING SUMMARY 2020-2022

Pollutant	Standard	Year		
		2020	2021	2022
O_3				
Maximum Federal 1-Hour Concentration (ppm)		0.162	0.142	0.128
Maximum Federal 8-Hour Concentration (ppm)		0.128	0.112	0.105
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	89	66	60
Number of Days Exceeding State/Federal 8-Hour Standard	> 0.070 ppm	128	101	103
CO				
Maximum Federal 1-Hour Concentration	> 35 ppm	1.5	2.8	1.3
Maximum Federal 8-Hour Concentration	> 20 ppm	1.2	1.4	1.0
NO_2				
Maximum Federal 1-Hour Concentration	> 0.100 ppm	0.102	0.080	0.085
Annual Federal Standard Design Value		0.029	0.030	0.029
PM_{10}				
Maximum Federal 24-Hour Concentration (µg/m^3)	> 150 µg/m^3	80	111	177
Annual Federal Arithmetic Mean (µg/m^3)		38.7	39.3	38.0
Number of Days Exceeding Federal 24-Hour Standard	> 150 µg/m^3	0	0	1
Number of Days Exceeding State 24-Hour Standard	> 50 µg/m^3	81	79	65
$PM_{2.5}$				
Maximum Federal 24-Hour Concentration (µg/m^3)	> 35 µg/m^3	53.1	65.4	41.8
Annual Federal Arithmetic Mean (µg/m^3)	> 12 µg/m^3	14.36	14.48	12.20
Number of Days Exceeding Federal 24-Hour Standard	> 35 µg/m^3	4	13	1

ppm = Parts Per Million
µg/m^3 = Microgram per Cubic Meter
Source: Data for O_3, CO, NO_2, PM_{10}, and $PM_{2.5}$ was obtained from SCAQMD Air Quality Data Tables.

2.8 REGULATORY BACKGROUND

2.8.1 FEDERAL REGULATIONS

The EPA is responsible for setting and enforcing the NAAQS for O_3, CO, NO_X, SO_2, PM_{10}, and Pb (10). The EPA has jurisdiction over emissions sources that are under the authority of the federal government including aircraft, locomotives, and emissions sources outside state waters (Outer Continental Shelf). The EPA also establishes emission standards for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission requirements of CARB.

The Federal Clean Air Act (CAA) was first enacted in 1955 and has been amended numerous times in subsequent years (1963, 1965, 1967, 1970, 1977, and 1990). The CAA establishes the federal air quality standards, the NAAQS, and specifies future dates for achieving compliance (11). The CAA also mandates that states submit and implement SIPs for local areas not meeting these standards. These plans must include pollution control measures that demonstrate how the standards will be met.

The 1990 amendments to the CAA that identify specific emission reduction goals for areas not meeting the NAAQS require a demonstration of reasonable further progress toward attainment and incorporate additional sanctions for failure to attain or to meet interim milestones. The sections of the CAA most directly applicable to the development of the Project site include Title I (Non-Attainment Provisions) and Title II (Mobile Source Provisions) (12) (13). Title I provisions were established with the goal of attaining the NAAQS for the following criteria pollutants O_3, NO_2, SO_2, PM_{10}, CO, $PM_{2.5}$, and Pb. The NAAQS were amended in July 1997 to include an additional standard for O_3 and to adopt a NAAQS for $PM_{2.5}$. Table 2-3 (previously presented) provides the NAAQS within the SCAB.

Mobile source emissions are regulated in accordance with Title II provisions. These provisions require the use of cleaner burning gasoline and other cleaner burning fuels such as methanol and natural gas. Automobile manufacturers are also required to reduce tailpipe emissions of hydrocarbons and NO_X. NO_X is a collective term that includes all forms of NO_X which are emitted as byproducts of the combustion process.

2.8.2 CALIFORNIA REGULATIONS

CARB

CARB, which became part of CalEPA in 1991, is responsible for ensuring implementation of the California Clean Air Act (AB 2595), responding to the federal CAA, and for regulating emissions from consumer products and motor vehicles. AB 2595 mandates achievement of the maximum degree of emissions reductions possible from vehicular and other mobile sources in order to attain the state ambient air quality standards by the earliest practical date. CARB established the CAAQS for all pollutants for which the federal government has NAAQS and, in addition, establishes standards for SO_4, visibility, hydrogen sulfide (H_2S), and vinyl chloride (C_2H_3Cl). However, at this time, H_2S and C_2H_3Cl are not measured at any monitoring stations in the SCAB

because they are not considered to be a regional air quality problem. Generally, the CAAQS are more stringent than the NAAQS (14) (10).

Local air quality management districts, such as the SCAQMD, regulate air emissions from stationary sources such as commercial and industrial facilities. All air pollution control districts have been formally designated as attainment or non-attainment for each CAAQS.

Serious non-attainment areas are required to prepare Air Quality Management Plans (AQMP) that include specified emission reduction strategies in an effort to meet clean air goals. These plans are required to include:

- Application of Best Available Retrofit Control Technology to existing sources;
- Developing control programs for area sources (e.g., architectural coatings and solvents) and indirect sources (e.g. motor vehicle use generated by residential and commercial development);
- A District permitting system designed to allow no net increase in emissions from any new or modified permitted sources of emissions;
- Implementing reasonably available transportation control measures and assuring a substantial reduction in growth rate of vehicle trips and miles traveled;
- Significant use of low emissions vehicles by fleet operators;
- Sufficient control strategies to achieve a 5% or more annual reduction in emissions or 15% or more in a period of three years for ROGs, NO_X, CO and PM_{10}. However, air basins may use an alternative emission reduction strategy that achieves a reduction of less than 5% per year under certain circumstances.

TITLE 24 ENERGY EFFICIENCY STANDARDS AND CALIFORNIA GREEN BUILDING STANDARDS

California Code of Regulations (CCR) Title 24 Part 6: The California Energy Code was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption.

The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. CCR, Title 24, Part 11: California Green Building Standards Code (CALGreen) is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on August 1, 2009, and is administered by the California Building Standards Commission.

CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2022 California Green Building Code Standards that became effective on January 1, 2023. The CEC anticipates that the 2022 energy code will provide $1.5 billion in consumer benefits and reduce GHG emissions by 10 million metric tons (15). The Project would be required to comply with the applicable standards in place at the time plan check submittals are made. These require, among other items (16):

RESIDENTIAL MANDATORY MEASURES

- Electric vehicle (EV) charging stations. New construction shall comply with Section 4.106.4.1, 4.106.4.2, 4.106.4.3, to facilitate future installation and use of EV chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the *California Electrical Code*, Article 625. (4.106.4).

  - New one- and two-family dwellings and town-houses with attached private garages. For each dwelling unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces. The service panel and/or subpanel shall provide capacity to install a 40-ampere 208/240-volt minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.
  - New hotels and motels. All newly constructed hotels and motels shall provide EV spaces capable of supporting future installation of EVSE. The construction documents shall identify the location of the EV spaces. The number of required EV spaces shall be based on the total number of parking spaces provided for all types of parking facilities in accordance with Table 4.106.4.3.1.
- Water conserving plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with Sections 4.303.1.1, 4.303.1.2, 4.303.1.3, and 4.303.1.4.
- Outdoor potable water use in landscape areas. Residential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent.
- Operation and maintenance manual. At the time of final inspection, a manual, compact disc, web-based reference or other media acceptable to the enforcing agency which includes all of the following shall be placed in the building:
  - Directions to the owner or occupant that the manual shall remain with the building throughout the life cycle of the structure.
  - Operations and maintenance instructions for the following:
    - Equipment and appliances, including water-saving devices and systems, HVAC systems, photovoltaic systems, EV chargers, water-heating systems and other major appliances and equipment.
    - Roof and yard drainage, including gutter and downspouts.
    - Space conditioning systems, including condensers and air filters.
    - Landscape irrigation systems.
    - Water reuse systems.
  - Information from local utility, water and waste recovery providers on methods to further reduce future resource consumption, including recycling programs and locations.
  - Public transportation and/or carpool options available in the area.
  - Educational material on the positive impacts of an interior relative humidity between 30-60% and what methods occupants may use to maintain the relative humidity level in that range.
  - Information about water-conserving landscape and irrigation design and controllers which conserve water.
  - Instructions for maintaining gutters and downspouts and the importance of diverting water at least 5 feet away from the foundation.

  - Information about state solar energy and incentive programs available.
  - A copy of all special inspection verifications required by the enforcing agency of this code.
  - Information from CALFIRE on maintenance of defensible space around residential structures.
- Any installed gas fireplace shall be direct-vent sealed-combustion type. Any installed woodstove or pellet stove shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as applicable, and shall have a permanent label indicating they are certified to meet the emission limits. Woodstoves, pellet stoves and fireplaces shall also comply with applicable local ordinances.
- Paints and coatings. Architectural paints and coatings shall comply with VOC limits in Table 1 of the CARB Architectural Suggested Control Measure, as shown in Table 4.504.3, unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 4.504.3 shall be determined by classifying the coating as a Flat, Nonflat, or Nonflat-high Gloss coating, based on its glass, as defined in subsections 4.21, 4.36, and 4.37 of the 2007 CARB, Suggested Control Measure, and the corresponding Flat, Nonflat, Nonflat-high Gloss VOC limit in Table 4.504.3 shall apply.

2.8.3 AQMP

Currently, the NAAQS and CAAQS are exceeded in most parts of the SCAB. In response, the SCAQMD has adopted a series of AQMP to meet the state and federal ambient air quality standards (17). AQMPs are updated regularly to ensure an effective reduction in emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy. A detailed discussion on the AQMP and Project consistency with the AQMP is provided in Section 3.10.

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3 PROJECT AIR QUALITY IMPACT

3.1 INTRODUCTION

This study quantifies air quality emissions generated by construction and operation of the Project and addresses whether the Project conflicts with implementation of the SCAQMD's AQMP. The analysis of Project-generated air emissions determines whether the Project would result in a cumulatively considerable net increase of any criteria pollutant for which the SCAB is in non-attainment under an applicable NAAQS and CAAQS. Additionally, the Project has been evaluated to determine whether it would expose sensitive receptors to substantial pollutant concentrations and the impacts of odors. The significance of these potential impacts is described in the following sections.

3.2 STANDARDS OF SIGNIFICANCE

The criteria used to determine the significance of potential Project-related air quality impacts are taken from the *CEQA Guidelines* (14 CCR §§15000, et seq.). Based on these thresholds, a project would result in a significant impact related to air quality if it would (1):

- Conflict with or obstruct implementation of the applicable air quality plan.
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard.
- Expose sensitive receptors to substantial pollutant concentrations.
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

The SCAQMD has also developed regional significance thresholds for other regulated pollutants, as summarized at Table 3-1 (18). The SCAQMD's *CEQA Air Quality Significance Thresholds* (March 2023) indicate that any projects in the SCAB with daily emissions that exceed any of the indicated thresholds should be considered as having an individually and cumulatively significant air quality impact.

TABLE 3-1: MAXIMUM DAILY REGIONAL EMISSIONS THRESHOLDS

Pollutant	Regional Construction Threshold	Regional Operational Thresholds
NO_X	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM_{10}	150 lbs/day	150 lbs/day
$PM_{2.5}$	55 lbs/day	55 lbs/day
SO_X	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Pb	3 lbs/day	3 lbs/day

lbs/day = Pounds Per Day

3.3 MODELS EMPLOYED TO ANALYZE AIR QUALITY

3.3.1 CALEEMOD

Land uses such as the Project affect air quality through construction-source and operational-source emissions.

In August 2023, the California Air Pollution Control Officers Association (CAPCOA) in conjunction with other California air districts including the SCAQMD, released the latest version of the California Emissions Estimator Model (CalEEMod) version 2022.1.1.22. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$) and greenhouse gas (GHG) emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures (19). Accordingly, the latest version of CalEEMod has been used for this Project to determine construction and operational air quality emissions. Output from the model runs for both construction and operational activity are provided in Appendix 3.1.

3.4 CONSTRUCTION EMISSIONS

3.4.1 CONSTRUCTION ACTIVITIES

Construction activities associated with the Project would result in emissions of VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$. Construction-related emissions are expected from the following construction activities:

- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

GRADING ACTIVITIES

Dust is typically a major concern during grading activities. Because such emissions are not amenable to collection and discharge through a controlled source, they are called “fugitive emissions.” Fugitive dust emissions rates vary as a function of many parameters (soil silt, soil moisture, wind speed, area disturbed, number of vehicles, depth of disturbance or excavation, etc.). CalEEMod was utilized to calculate fugitive dust emissions resulting from this phase of activity. Per client-provided data, the Project would require 130,000 cubic yards of export for earthwork activities.

ON-ROAD TRIPS

Construction generates on-road vehicle emissions from vehicle usage for workers, vendors, and haul trucks commuting to and from the site. The number of worker, vendor, and hauling trips are presented below in Table 3-2. Worker trips are based on CalEEMod defaults. It should be noted that for vendor trips, specifically, CalEEMod only assigns vendor trips to the Building Construction

phase. Vendor trips would likely occur during all phases of construction. As such, the CalEEMod defaults for vendor trips have been adjusted based on a ratio of the total vendor trips to the number of days of each subphase of activity.

TABLE 3-2: CONSTRUCTION TRIP ASSUMPTIONS

Construction Activity	Worker Trips Per Day	Vendor Trips Per Day	Hauling Trips Per Day
Site Preparation	18	5	0
Grading	20	16	542
Building Construction	456	157	0
Paving	15	0	0
Architectural Coating	91	0	0

3.4.2 CONSTRUCTION DURATION

For purposes of analysis, construction of Project is expected to commence June 2026 and would last through September 2025. The construction schedule utilized in the analysis, shown in Table 3-3, represents a "conservative" analysis scenario should construction occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent.[2] The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per *CEQA Guidelines* (1).

TABLE 3-3: CONSTRUCTION DURATION

Construction Activity	Start Date	End Date	Working Days
Site Preparation	6/3/2024	6/14/2024	10
Grading	6/17/2024	7/26/2024	30
Building Construction	7/29/2024	9/19/2025	300
Paving	8/25/2025	9/19/2025	20
Architectural Coating	5/19/2025	9/19/2025	90

3.4.3 CONSTRUCTION EQUIPMENT

Consistent with industry standards and typical construction practices, each piece of equipment listed in Table 3-4 is assumed to operate up to a total of eight (8) hours per day, or more than two-thirds of the period during which construction activities are allowed pursuant to the City code.

[2] As shown in the CalEEMod User's Guide Version 2022, Appendix G "Table G-11. Statewide Average Annual Offoad Equipment Emission Factors" as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

TABLE 3-4: CONSTRUCTION EQUIPMENT ASSUMPTIONS

Construction Activity	Equipment[1]	Amount	Hours Per Day
Site Preparation	Rubber Tired Dozers	3	8
	Crawler Tractors	4	8
Grading	Graders	1	8
	Excavators	2	8
	Scrapers	2	8
	Rubber Tired Dozers	1	8
	Crawler Tractors	1	8
Building Construction	Forklifts	2	8
	Generator Sets	3	8
	Cranes	1	8
	Welders	1	8
	Tractors/Loaders/Backhoes	1	8
Paving	Pavers	2	8
	Paving Equipment	2	8
	Rollers	2	8
Architectural Coating	Air Compressors	1	8

[1] In order to account for fugitive dust emissions, Crawler Tractors were used in lieu of Tractors/Loaders/Backhoes during the site preparation and grading phases of Project construction.

3.4.4 CONSTRUCTION EMISSIONS SUMMARY

IMPACTS WITHOUT MITIGATION

The estimated maximum daily construction emissions without mitigation are summarized in Table 3-5. Detailed construction model outputs are presented in Appendix 3.1. Under the assumed scenarios, emissions resulting from the Project construction would not exceed criteria pollutant thresholds established by the SCAQMD.

TABLE 3-5: OVERALL CONSTRUCTION EMISSIONS SUMMARY – WITHOUT MITIGATION

Year	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer						
2024	4.86	85.10	59.57	0.32	15.68	5.96
2025	39.43	27.80	72.35	0.08	9.62	2.95

Year	Emissions (lbs/day)					
	VOC	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Winter						
2024	3.67	20.66	46.45	0.06	7.91	2.33
2025	3.30	19.14	43.84	0.06	7.84	2.27
Maximum Daily Emissions	**39.43**	**85.10**	**72.35**	**0.32**	**15.68**	**5.96**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Source: CalEEMod construction-source (unmitigated) emissions are presented in Appendix 3.1

3.5 OPERATIONAL EMISSIONS

Operational activities associated with the Project would result in emissions of VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$. Operational emissions are expected from the following primary sources:

- Area Source Emissions
- Energy Source Emissions
- Mobile Source Emissions

3.5.1 AREA SOURCE EMISSIONS

ARCHITECTURAL COATINGS

Over a period of time, the Project buildings would require maintenance and would therefore produce emissions resulting from the evaporation of solvents contained in paints, varnishes, primers, and other surface coatings. The emissions associated with architectural coatings were calculated using CalEEMod.

CONSUMER PRODUCTS

Consumer products include, but are not limited to, detergents, cleaning compounds, polishes, personal care products, and lawn and garden products. Many of these products contain organic compounds which when released in the atmosphere can react to form ozone and other photochemically reactive pollutants. The emissions associated with use of consumer products were calculated based on defaults provided within CalEEMod.

LANDSCAPE MAINTENANCE EQUIPMENT

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shedders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the Project. It should be noted that on October 9, 2021, Governor Gavin Newsom signed AB 1346. The bill aims to ban the sale of new gasoline-powered equipment under 25 gross horsepower (known as small off-road engines [SOREs]) by January 1, 2024, which is now in effect. However, for purposes of analysis, the emissions associated with landscape maintenance

equipment were calculated based on assumptions provided in CalEEMod, and do not incorporate the emissions reductions that would be realized from implementation of AB 1346.

3.5.2 Energy Source Emissions

Combustion Emissions Associated with Natural Gas and Electricity

Electricity and natural gas are used by almost every project. Criteria pollutant emissions are emitted through the generation of electricity and consumption of natural gas. However, because electrical generating facilities for the Project area are located either outside the region (state) or offset through the use of pollution credits (RECLAIM) for generation within the SCAB, criteria pollutant emissions from offsite generation of electricity are excluded from the evaluation of significance. Electricity and natural gas usage associated with the Project was calculated by CalEEMod using default parameters.

3.5.3 Mobile Source Emissions

The Project related air quality emissions derive primarily from vehicle trips associated with the Project, including employee trips and commercial trips to and from the site associated with the proposed uses. Trip characteristics available from the *Empire Groves Hotel Traffic Impact Analysis* were utilized in this analysis (20).

Fugitive Dust Related to Vehicular Travel

Vehicles traveling on paved roads would be a source of fugitive emissions due to the generation of road dust inclusive of brake and tire wear particulates. The emissions estimate for travel on paved roads was calculated using CalEEMod.

3.5.4 Operational Emissions Summary

Operational activities for summer and winter scenarios are presented in Table 3-6. The estimated operational-source emissions are summarized in Table 3-6. Detailed operation model outputs for the Project are presented in Appendix 3.1. Project operational activities would not exceed the numerical thresholds of significance established by the SCAQMD for emissions of any criteria pollutant. As such, operational impacts would be considered less-than-significant.

TABLE 3-6: SUMMARY OF PEAK OPERATIONAL EMISSIONS

Source	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer						
Mobile Source	19.66	18.24	172.16	0.41	35.25	9.14
Area Source	23.33	0.40	47.22	0.00	0.08	0.06
Energy Source	0.29	5.21	4.38	0.03	0.40	0.40
Project Maximum Daily Emissions	**43.28**	**23.84**	**223.76**	**0.44**	**35.73**	**9.60**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**
Winter						
Mobile Source	18.22	19.60	144.10	0.38	35.25	9.14
Area Source	15.58	0.00	0.00	0.00	0.00	0.00
Energy Source	0.29	5.21	4.38	0.03	0.40	0.40
Project Maximum Daily Emissions	**34.09**	**24.81**	**148.47**	**0.42**	**35.64**	**9.54**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Source: CalEEMod operational-source emissions are presented in Appendix 3.1.

3.6 LOCALIZED SIGNIFICANCE

BACKGROUND ON LST DEVELOPMENT

The analysis makes use of methodology included in the SCAQMD *Final Localized Significance Threshold Methodology* (LST Methodology). The SCAQMD has established that impacts to air quality are significant if there is a potential to contribute or cause localized exceedances of the federal and/or state ambient air quality standards (NAAQS/CAAQS). Collectively, these are referred to as Localized Significance Thresholds (LSTs).

The SCAQMD established LSTs in response to the SCAQMD Governing Board's Environmental Justice Initiative I-4.[3] LSTs represent the maximum emissions from a project that would not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest residence or sensitive receptor. The SCAQMD states that lead agencies can use the LSTs as another indicator of significance in its air quality impact analyses.

[3] The purpose of SCAQMD's Environmental Justice program is to ensure that everyone has the right to equal protection from air pollution and fair access to the decision-making process that works to improve the quality of air within their communities. Further, the SCAQMD defines Environmental Justice as "…equitable environmental policymaking and enforcement to protect the health of all residents, regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location, from the health effects of air pollution."

LSTs were developed in response to environmental justice and health concerns raised by the public regarding exposure of individuals to criteria pollutants in local communities. To address the issue of localized significance, the SCAQMD adopted LSTs that show whether a project would cause or contribute to localized air quality impacts and thereby cause or contribute to potential localized adverse health effects. The analysis makes use of methodology included in the *LST Methodology* (21).

EMISSIONS CONSIDERED

Based on SCAQMD's *LST Methodology*, emissions for concern during construction activities are on-site NO_X, CO, $PM_{2.5}$, and PM_{10}. The *LST Methodology* clearly states that "off-site mobile emissions from the Project should not be included in the emissions compared to LSTs (22)." As such, for purposes of the construction LST analysis, only emissions included in the CalEEMod "on-site" emissions outputs were considered.

DISPERSION MODELING

In order to estimate localized pollutant concentrations resulting from Project construction, the SCAQMD-approved American Meteorological Society/EPA Regulatory Model (AERMOD) dispersion model was utilized. The modeling approach utilized is discussed as follows:

SOURCES

It should be noted that in order to model worst-case conditions, the highest daily peak on-site emissions resulting from overlapping construction activity were modeled.

A ground level release height and a 1 meter (approximately 3.28 feet) initial vertical dimension (sigma z) were utilized for fugitive dust emissions of PM_{10} and $PM_{2.5}$ consistent with SCAQMD's LST guidance.

In order to account for equipment exhaust emissions from NO_2, CO, PM_{10}, and $PM_{2.5}$ a release height of 5.0 meters was utilized consistent with SCAQMD's LST guidance.

METEOROLOGICAL DATA AND MODEL OPTIONS

In order to account for meteorological conditions at the Project site, meteorological data from the SCAQMD's Ontario Airport monitoring station was utilized, as this is the nearest station to the Project site for which meteorological data is available. Additionally, a receptor height of 2 meters and regulatory default options were utilized consistent with SCAQMD's LST guidance.

RECEPTORS

As previously stated, LSTs represent the maximum emissions from a project that would not cause or contribute to an exceedance of the most stringent applicable NAAQS and CAAQS at the nearest residence or sensitive receptor. Receptor locations are off-site locations where individuals may be exposed to emissions from Project activities.

Some people are especially sensitive to air pollution and are given special consideration when evaluating air quality impacts from projects. These groups of people include children, the elderly,

and individuals with pre-existing respiratory or cardiovascular illness. Structures that house these persons or places where they gather are defined as "sensitive receptors." These structures typically include uses such as residences, hotels, and hospitals where an individual can remain for 24 hours. Consistent with the LST Methodology, the nearest land use where an individual could remain for 24 hours to the Project site has been used to determine construction and operational air quality impacts for emissions of PM_{10} and $PM_{2.5}$, since PM_{10} and $PM_{2.5}$ thresholds are based on a 24-hour averaging time.

LSTs apply, even for non-sensitive land uses, consistent with *LST Methodology* and SCAQMD guidance. Per the *LST Methodology*, commercial and industrial facilities are not included in the definition of sensitive receptor because employees and patrons do not typically remain on-site for a full 24 hours but are typically on-site for 8 hours or less. However, *LST Methodology* explicitly states that "*LSTs based on shorter averaging periods, such as the NO_2 and CO LSTs, could also be applied to receptors such as industrial or commercial facilities since it is reasonable to assume that a worker at these sites could be present for periods of one to eight hours* (22)." Therefore, any adjacent land use where an individual could remain for 1 or 8 hours, that is located at a closer distance to the Project site than the receptor used for PM_{10} and $PM_{2.5}$ analysis, must be considered to determine construction and operational LST air impacts for emissions of NO_2 and CO since these pollutants have an averaging time of 1 and 8 hours.

PROJECT-RELATED RECEPTORS

Receptors in the Project study area are described below and shown in Exhibit 3-B. Localized air quality impacts were evaluated at sensitive receptor land uses nearest the Project site. All distances are measured from the Project site boundary to the outdoor living areas (e.g., backyards) or at the building façade, whichever is closer to the Project site.

- R1: Location R1 represents the Ontario Gateway Hotel at 2200 E Holt Blvd, approximately 176 feet west of the Project site.
- R2: Location R2 represents the existing residence at 304 N Placer Privado, approximately 2,802 feet north of the Project site.
- R3: Location R3 represents the existing building of Holiday Inn Ontario Airport at 2155 E Convention Center Way, approximately 237 feet north of the Project site.
- R4: Location R4 represents the existing residence at 2505 E Date Palm Paseo, approximately 1,968 feet north of the Project site.
- R5: Location R5 represents the existing residence at 710 Via Dolcetto, approximately 3,593 feet northeast of the Project site.
- R6: Location R6 represents the Frontier Center at 2151 E Convention Center Way, approximately 232 feet north of the Project site.

The SCAQMD recommends that the nearest sensitive receptor be considered when determining a Project's impact. The nearest land use where an individual could remain for 24 hours to the Project site has been used to determine localized construction and operational air quality impacts for emissions of PM_{10} and $PM_{2.5}$ (since PM_{10} and $PM_{2.5}$ thresholds are based on a 24-hour averaging time).

EXHIBIT 3-B: RECEPTOR LOCATIONS



3.7 CONSTRUCTION-SOURCE EMISSIONS LST ANALYSIS

Emissions during the peak construction activity will not exceed the SCAQMD's localized significance thresholds at the maximally exposed receptor location, as illustrated in Table 3-7 (without mitigation). All other modeled locations in the study area would experience a lesser concentration and consequently a lesser impact. As such, the Project's localized impacts during construction activity would be less than significant. AERMOD model outputs are provided in Appendix 3.5 (without mitigation).

TABLE 3-7: LOCALIZED SIGNIFICANCE SUMMARY PEAK CONSTRUCTION – WITHOUT MITIGATION

Peak Construction	CO		NO_2	PM_{10}	$PM_{2.5}$
	Averaging Time				
	1-Hour	8-Hour	1-Hour	24-Hours	24-Hours
Peak Day Localized Emissions	0.05	0.03	3.66E-02	2.72	1.57
Background Concentration [A]	1.30	1.00	0.085		
Total Concentration	**1.35**	**1.03**	**0.12**	**2.72**	**1.57**
SCAQMD Localized Significance Threshold	20	9	0.18	10.4	10.4
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**

[A] Highest concentration from the last three years of available data.
Notes: PM_{10} and $PM_{2.5}$ concentrations are expressed in $\mu g/m^3$. All others are expressed in ppm.
Based on SCAQMD's LST Methodology, background concentrations are considered only for CO and NO_2.

3.8 OPERATIONAL-SOURCE EMISSIONS LST ANALYSIS

The Project consists of a hotel that includes 600 rooms and suites, 2 ballrooms, a spa & fitness center, meeting and conference rooms as well as an outdoor pool and event lawn on 10.43 acres.

According to SCAQMD LST methodology, LSTs would apply to the operational phase of a proposed project, if the project includes stationary sources, or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., transfer facilities and warehouse buildings). The proposed Project does not include such uses, and thus, due to the lack of significant stationary source emissions, no long-term localized significance threshold analysis is needed.

3.9 CO "HOT SPOT" ANALYSIS

As discussed below, the Project would not result in potentially adverse CO concentrations or "hot spots." Further, detailed modeling of Project-specific CO "hot spots" is not needed to reach this conclusion. An adverse CO concentration, known as a "hot spot," would occur if an exceedance of the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm were to occur.

It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. In response, vehicle emissions standards have become increasingly stringent in the last twenty years. Currently, the allowable CO emissions standard in

California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration in the SCAB is now designated as attainment. To establish a more accurate record of baseline CO concentrations affecting the SCAB, a CO "hot spot" analysis was conducted in 2003 for four busy intersections in Los Angeles at the peak morning and afternoon time periods. This "hot spot" analysis did not predict any violation of CO standards, as shown in Table 3-8.

TABLE 3-8: CO MODEL RESULTS

Intersection Location	CO Concentrations (ppm)		
	Morning 1-hour	Afternoon 1-hour	8-hour
Wilshire Boulevard/Veteran Avenue	4.6	3.5	3.7
Sunset Boulevard/Highland Avenue	4	4.5	3.5
La Cienega Boulevard/Century Boulevard	3.7	3.1	5.2
Long Beach Boulevard/Imperial Highway	3	3.1	8.4

Source: 2003 AQMP, Appendix V: Modeling and Attainment Demonstrations
Notes: Federal 1-hour standard is 35 ppm and the deferral 8-hour standard is 9.0 ppm.

Based on the SCAQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (*1992 CO Plan*), peak carbon monoxide concentrations in the SCAB were a result of unusual meteorological and topographical conditions and not a result of traffic volumes and congestion at a particular intersection. As evidence of this, for example, 8.4 ppm 8-hour CO concentration measured at the Long Beach Blvd. and Imperial Hwy. intersection (highest CO generating intersection within the "hot spot" analysis), only 0.7 ppm was attributable to the traffic volumes and congestion at this intersection; the remaining 7.7 ppm were due to the ambient air measurements at the time the 2003 AQMP was prepared (23). In contrast, an adverse CO concentration, known as a "hot spot", would occur if an exceedance of the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9 ppm were to occur.

The ambient 1-hour and 8-hour CO concentration within the Project study area is estimated to be 1.3 ppm and 1.0 ppm, respectively (data from CA-60 Near Road monitoring station for 2022). Therefore, even if the traffic volumes for the proposed Project were double or even triple the traffic volumes generated at the Long Beach Blvd. and Imperial Hwy. intersection, coupled with the on-going improvements in ambient air quality, the Project would not be capable of resulting in a CO "hot spot" at any study area intersections.

Similar considerations are also employed by other Air Districts when evaluating potential CO concentration impacts. More specifically, the Bay Area Air Quality Management District (BAAQMD) concludes that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour (vph)—or 24,000 vph where vertical and/or horizontal air does not mix—in order to generate a significant CO impact (24). Traffic volumes generating the CO concentrations for the "hot spot"

analysis is shown in Table 3-9. The busiest intersection evaluated was at Wilshire Boulevard and Veteran Avenue, which has a daily traffic volume of approximately 100,000 vph and AM/PM traffic volumes of 8,062 vph and 7,719 vph respectively (23). The *2003 AQMP* estimated that the 1-hour concentration for this intersection was 4.6 ppm; this indicates that, should the daily traffic volume increase four times to 400,000 vehicles per day, CO concentrations (4.6 ppm x 4= 18.4 ppm) would still not likely exceed the most stringent 1-hour CO standard (20.0 ppm).[4]

TABLE 3-9: TRAFFIC VOLUMES

Intersection Location	Peak Traffic Volumes (vph)				
	Eastbound (AM/PM)	Westbound (AM/PM)	Southbound (AM/PM)	Northbound (AM/PM)	Total (AM/PM)
Wilshire Boulevard/Veteran Avenue	4,954/2,069	1,830/3,317	721/1,400	560/933	8,062/7,719
Sunset Boulevard/Highland Avenue	1,417/1,764	1,342/1,540	2,304/1,832	1,551/2,238	6,614/5,374
La Cienega Boulevard/Century Boulevard	2,540/2,243	1,890/2,728	1,384/2,029	821/1,674	6,634/8,674
Long Beach Boulevard/Imperial Highway	1,217/2,020	1,760/1,400	479/944	756/1,150	4,212/5,514

Source: 2003 AQMP

3.10 AQMP

The Project site is located within the SCAB, which is characterized by relatively poor air quality. The SCAQMD has jurisdiction over an approximately 10,743-square-mile area consisting of the four-county Basin and the Los Angeles County and Riverside County portions of was previoulsy referred to as the Southeast Desert Air Basin. In these areas, the SCAQMD is principally responsible for air pollution control, and works directly with the SCAG, county transportation commissions, local governments, as well as state and federal agencies to reduce emissions from stationary, mobile, and indirect sources to meet state and federal ambient air quality standards.

Currently, these state and federal air quality standards are exceeded in most parts of the SCAB. In response, the SCAQMD has adopted a series of AQMPs to meet the state and federal ambient air quality standards. AQMPs are updated regularly in order to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy.

In December 2022, the SCAQMD released the *Final 2022 AQMP* (*2022 AQMP*). The *2022 AQMP* continues to evaluate current integrated strategies and control measures to meet the CAAQS, as well as explore new and innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a strategy with fair-share reductions at the federal, state, and local levels (25). Similar to the 2016 AQMP, the *2022 AQMP* incorporates scientific and technological information and planning assumptions, including the *2020-2045 RTP/SCS*, a planning document that supports the integration of land use and transportation to help the region meet the federal CAA requirements

[4] Based on the ratio of the CO standard (20.0 ppm) and the modeled value (4.6 ppm)

(26). The Project's consistency with the AQMP will be determined using the *2022 AQMP* as discussed below.

Criteria for determining consistency with the AQMP are defined in Chapter 12, Section 12.2 and Section 12.3 of the *1993 CEQA Handbook* (27). These indicators are discussed below:

3.10.1 CONSISTENCY CRITERION NO. 1

The proposed Project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

The violations that Consistency Criterion No. 1 refer to are the CAAQS and NAAQS. CAAQS and NAAQS violations would occur if regional or localized significance thresholds were exceeded.

Construction Impacts – Consistency Criterion 1

As evaluated, the Project's localized and regional construction-source emissions would not exceed applicable regional significance threshold and LST thresholds. As such, a less than significant impact is expected.

Operational Impacts – Consistency Criterion 1

As evaluated, the Project's localized and regional operation-source emissions would not exceed applicable regional significance threshold and LST thresholds. As such, a less than significant impact is expected.

On the basis of the preceding discussion, the Project is determined to be consistent with the first criterion.

3.10.2 CONSISTENCY CRITERION NO. 2

The Project will not exceed the assumptions in the AQMP based on the years of Project build-out phase.

The *2022 AQMP* demonstrates that the applicable ambient air quality standards can be achieved within the timeframes required under federal law. Growth projections from local general plans adopted by cities in the district are provided to the SCAG, which develops regional growth forecasts, which are then used to develop future air quality forecasts for the AQMP. Development consistent with the growth projections in City of Ontario General Plan is considered to be consistent with the AQMP***.***

Construction Impacts – Consistency Criterion 2

Peak day emissions generated by construction activities are largely independent of land use assignments, but rather are a function of development scope and maximum area of disturbance. Irrespective of the site's land use designation, development of the site to its maximum potential would likely occur, with disturbance of the entire site occurring during construction activities. As such, when considering that no emissions thresholds will be exceeded, a less than significant impact would result.

Operational Impacts – Consistency Criterion 2

The TOP 2050 adopted by the City in August 2022, designates the Project site as "Mixed Use – Multimodal" land uses. The "Mixed-Use" designation allows for a maximum FAR of 1.0 for office and retail uses. Intensive office, retail, and residential uses are envisioned to be integrated with the future multimodal transit station that is under consideration, which links rail, regional, local and Airport transit (28).

The proposed Project includes the development of a hotel with 600 rooms and suites, 2 ballrooms, a spa & fitness center, meeting and conference rooms as well as an outdoor pool and event lawn on 10.43 acres. Since the Project's proposed land use is consistent with the General Plan and as the Project's construction and operational-source air pollutant emissions would not exceed the regional or localized significance thresholds, the Project is determined to be consistent with the second criterion.

On the basis of the preceding discussion, the Project is determined to be consistent with the AQMP and a less than significant impact is expected.

AQMP Consistency Conclusion

The Project would not have the potential to result in or cause NAAQS or CAAQS violations. The Project's proposed uses are consistent with the General Plan land use designation and the Project would not exceed the regional or localized construction and operational thresholds. As such, the Project is considered to be consistent with the AQMP.

3.11 Potential Impacts to Sensitive Receptors

The potential impact of Project-generated air pollutant emissions at sensitive receptors has also been considered. Results of the LST analysis indicate that the Project will not exceed the SCAQMD localized significance thresholds during construction. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations during Project construction.

Additionally, the Project will not exceed the SCAQMD localized significance thresholds during operational activity. Further Project traffic would not create or result in a CO "hotspot." Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations as the result of Project operations.

3.11.1 Friant Ranch Case

In December 2018, in the case of *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, the California Supreme Court held that an Environmental Impact Report's (EIR) air quality analysis must meaningfully connect the identified air quality impacts to the human health consequences of those impacts, or meaningfully explain why that analysis cannot be provided.

Most local agencies, including the City of Perris, lack the data to do their own assessment of potential health impacts from criteria air pollutant emissions, as would be required to establish customized, locally-specific thresholds of significance based on potential health impacts from an individual development project. The use of national or "generic" data to fill the gap of missing local data would not yield accurate results because such data does not capture local air patterns,

local background conditions, or local population characteristics, all of which play a role in how a population experiences air pollution. Because it is impracticable to accurately isolate the exact cause of a human disease (for example, the role a particular air pollutant plays compared to the role of other allergens and genetics in causing asthma), existing scientific tools cannot accurately estimate health impacts of the Project's air emissions without undue speculation. Instead, readers are directed to the Project's air quality impact analysis above, which provides extensive information concerning the quantifiable and non-quantifiable health risks related to the Project's construction and long-term operation.

Notwithstanding, this AQIA does evaluate the proposed Project's localized impact to air quality for emissions of CO, NO_X, PM_{10}, and $PM_{2.5}$ by comparing the proposed project's on-site emissions to the SCAQMD's applicable LST thresholds. The LST analysis above determined that the Project would not result in emissions exceeding SCAQMD's LSTs. Therefore, the proposed Project would not be expected to exceed the most stringent applicable federal or state ambient air quality standards for emissions of CO, NO_X, PM_{10}, and $PM_{2.5}$.

As the Project's emissions would comply with federal, state, and local air quality standards, the proposed Project's emissions are not sufficiently high enough to use a regional modeling program to correlate health effects on a basin-wide level and would not provide a reliable indicator of health effects if modeled.

3.12 ODORS

The potential for the Project to generate objectionable odors has also been considered. Land uses generally associated with odor complaints include:

- Agricultural uses (livestock and farming);
- Wastewater treatment plants;
- Food processing plants;
- Chemical plants;
- Composting operations;
- Refineries;
- Landfills;
- Dairies; and
- Fiberglass molding facilities.

The Project does not contain land uses typically associated with emitting objectionable odors. Potential odor sources associated with the proposed Project may result from construction equipment exhaust and the application of asphalt and architectural coatings during construction activities and the temporary storage of typical solid waste (refuse) associated with the proposed Project's (long-term operational) uses. Standard construction requirements would minimize odor impacts from construction. The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction and is thus considered less than significant. It is expected that Project-generated

refuse would be stored in covered containers and removed at regular intervals in compliance with current solid waste regulations. The proposed Project would also be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Therefore, odors and other emissions (such as those leading to odors) associated with construction and operations activities of the proposed Project would be less than significant and no mitigation is required (29).

3.13 CUMULATIVE IMPACTS

As previously shown in Table 2-3, the CAAQS designate the Project site as nonattainment for O_3 PM_{10}, and $PM_{2.5}$ while the NAAQS designates the Project site as nonattainment for O_3 and $PM_{2.5}$.

The SCAQMD has published a report on how to address cumulative impacts from air pollution: *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution* (30). In this report the SCAQMD clearly states (Page D-3):

> *"…the SCAQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR. The only case where the significance thresholds for project specific and cumulative impacts differ is the Hazard Index (HI) significance threshold for TAC emissions. The project specific (project increment) significance threshold is HI > 1.0 while the cumulative (facility-wide) is HI > 3.0. It should be noted that the HI is only one of three TAC emission significance thresholds considered (when applicable) in a CEQA analysis. The other two are the maximum individual cancer risk (MICR) and the cancer burden, both of which use the same significance thresholds (MICR of 10 in 1 million and cancer burden of 0.5) for project specific and cumulative impacts.*
>
> *Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant."*

Therefore, this analysis assumes that individual projects that do not generate operational or construction emissions exceeding the SCAQMD's thresholds would also not cause a cumulatively considerable increase in emissions for those pollutants for which SCAB is in nonattainment, and, therefore, would not be considered to have a significant, adverse air quality impact. Alternatively, individual project-related construction and operational emissions that exceed SCAQMD thresholds would be considered cumulatively considerable.

CONSTRUCTION IMPACTS

The Project-specific evaluation of emissions presented in the preceding analysis demonstrates that proposed Project construction-source air pollutant emissions would not result in exceedances of regional thresholds. Therefore, proposed Project construction-source emissions would be considered less than significant on a Project-specific and cumulative basis.

OPERATIONAL IMPACTS

The Project-specific evaluation of emissions presented in the preceding analysis demonstrates that proposed Project operation-source air pollutant emissions would not result in exceedances of regional thresholds. Therefore, proposed Project operation-source emissions would be considered less than significant on a project-specific and cumulative basis.

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5 CERTIFICATIONS

The contents of this air study report represent an accurate depiction of the environmental impacts associated with the proposed Empire Groves Hotel. The information contained in this air quality impact assessment report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at hqureshi@urbanxroads.com.

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EDUCATION

Master of Science in Environmental Studies
California State University, Fullerton • May 2010

Bachelor of Arts in Environmental Analysis and Design
University of California, Irvine • June, 2006

PROFESSIONAL AFFILIATIONS

AEP – Association of Environmental Professionals
AWMA – Air and Waste Management Association
ASTM – American Society for Testing and Materials

PROFESSIONAL CERTIFICATIONS

Planned Communities and Urban Infill – Urban Land Institute • June 2011
Indoor Air Quality and Industrial Hygiene – EMSL Analytical • April 2008
Principles of Ambient Air Monitoring – CARB • August 2007
AB2588 Regulatory Standards – Trinity Consultants • November 2006
Air Dispersion Modeling – Lakes Environmental • June 2006

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APPENDIX 2.1:

STATE/FEDERAL ATTAINMENT STATUS OF CRITERIA POLLUTANTS

Appendix C
Maps and Tables of Area Designations for State and National Ambient Air Quality Standards

Appendix C
Maps and Tables of Area Designations for State and National Ambient Air Quality Standards

This attachment fulfills the requirement of Health and Safety Code section 40718 for CARB to publish maps that identify areas where one or more violations of any State ambient air quality standard (State standard) or national ambient air quality standard (national standard) have been measured. The national standards are those promulgated under section 109 of the federal Clean Air Act (42 U.S.C. 7409).

This attachment is divided into three parts. The first part comprises a table showing the levels, averaging times, and measurement methods for each of the State and national standards. This is followed by a section containing maps and tables showing the area designations for each pollutant for which there is a State standard in the California Code of Regulations, title 17, section 70200. The last section contains maps and tables showing the most current area designations for the national standards.

(Updated 5/4/16)

Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards [1]		National Standards [2]		
		Concentration [3]	Method [4]	Primary [3,5]	Secondary [3,6]	Method [7]
Ozone (O_3)[8]	1 Hour	0.09 ppm (180 µg/m³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m³)		0.070 ppm (137 µg/m³)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 µg/m³	Gravimetric or Beta Attenuation	150 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m³		—		
Fine Particulate Matter (PM2.5)[9]	24 Hour	—	—	35 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m³	Gravimetric or Beta Attenuation	12.0 µg/m³	15 µg/m³	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m³)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m³)		9 ppm (10 mg/m³)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m³)		—	—	
Nitrogen Dioxide (NO_2)[10]	1 Hour	0.18 ppm (339 µg/m³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m³)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m³)		0.053 ppm (100 µg/m³)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 µg/m³)	Ultraviolet Fluorescence	75 ppb (196 µg/m³)	—	Ultraviolet Flourescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m³)	
	24 Hour	0.04 ppm (105 µg/m³)		0.14 ppm (for certain areas)[11]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[11]	—	
Lead[12,13]	30 Day Average	1.5 µg/m³	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m³ (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m³		
Visibility Reducing Particles[14]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	**No National Standards**		
Sulfates	24 Hour	25 µg/m³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m³)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m³)	Gas Chromatography			

See footnotes on next page ...

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1- and 24-hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For PM2.5, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4. Any equivalent measurement method which can be shown to the satisfaction of the CARB to give equivalent results at or near the level of the air quality standard may be used.

5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

7. Reference method as described by the U.S. EPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the U.S. EPA.

8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15 $\mu g/m^3$. The existing 24-hour PM10 standards (primary and secondary) of 150 $\mu g/m^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

11. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

    Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

12. The CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 $\mu g/m^3$)as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

14. In 1989, the CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Area Designations for the State Ambient Air Quality Standards

The following maps and tables show the area designations for each pollutant with a State standard set forth in the California Code of Regulations, title 17, section 60200. Each area is identified as attainment, nonattainment, nonattainment-transitional, or unclassified for each pollutant, as shown below:

Designation	Abbreviation
Attainment	A
Nonattainment	N
Nonattainment-Transitional	NA-T
Unclassified	U

In general, CARB designates areas by air basin for pollutants with a regional impact and by county for pollutants with a more local impact. However, when there are areas within an air basin or county with distinctly different air quality deriving from sources and conditions not affecting the entire air basin or county, CARB may designate a smaller area. Generally, when boundaries of the designated area differ from the air basin or county boundaries, the description of the specific area is referenced at the bottom of the summary table.

Figure 1


2023
Area Designations for State
Ambient Air Quality Standards
OZONE
N
0 40 80 120 160
Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
SACRAMENTO VALLEY
Plumas
Sutter Buttes
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
LAKE COUNTY
Lake
Colusa
Yuba
Placer
LAKE TAHOE
Sutter
Yolo
El Dorado
Sonoma
Napa
Sac
Amador
Alpine
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
SAN JOAQUIN VALLEY
San Benito
Fresno
Inyo
NORTH CENTRAL COAST
Kings
Tulare
Monterey
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
San Bernardino
Ventura
Los Angeles
MOJAVE DESERT
Riverside
Orange
SOUTH COAST
SALTON SEA
Imperial
San Diego
SAN DIEGO
Unclassified
Attainment
Nonattainment-Transitional
Nonattainment
Air Basin
County
Last Updated: November 2023
Air Quality Planning and Science Division, CARB

Table 1
California Ambient Air Quality Standards Area Designations for Ozone[1]

Area	N	NA-T	U	A
GREAT BASIN VALLEYS AIR BASIN				
Alpine County			U	
Inyo County	N			
Mono County	N			
LAKE COUNTY AIR BASIN				A
LAKE TAHOE AIR BASIN		NA-T		
MOJAVE DESERT AIR BASIN	N			
MOUNTAIN COUNTIES AIR BASIN				
Amador County		NA-T		
Calaveras County		NA-T		
El Dorado County (portion)	N			
Mariposa County	N			
Nevada County	N			
Placer County (portion)		NA-T		
Plumas County			U	
Sierra County			U	
Tuolumne County		NA-T		
NORTH CENTRAL COAST AIR BASIN				A
NORTH COAST AIR BASIN				A
NORTHEAST PLATEAU AIR BASIN				A

Area	N	NA-T	U	A
SACRAMENTO VALLEY AIR BASIN				
Butte County		NA-T		
Colusa and Glenn Counties				A
Shasta County	N			
Sutter/Yuba Counties				
Sutter Buttes		NA-T		
Remainder of Sutter County		NA-T		
Yuba County		NA-T		
Yolo/Solano Counties		NA-T		
Remainder of Air Basin	N			
SALTON SEA AIR BASIN	N			
SAN DIEGO AIR BASIN	N			
SAN FRANCISCO BAY AREA AIR BASIN		NA-T		
SAN JOAQUIN VALLEY AIR BASIN	N			
SOUTH CENTRAL COAST AIR BASIN				
San Luis Obispo County	N			
Santa Barbara County		NA-T		
Ventura County	N			
SOUTH COAST AIR BASIN	N			

[1] AB 3048 (Olberg) and AB 2525 (Miller) signed into law in 1996, made changes to Health and Safety Code, section 40925.5. One of the changes allows nonattainment districts to become nonattainment-transitional for ozone by operation of law.

Figure 2


2023
Area Designations for State
Ambient Air Quality Standards
PM10
N
0 40 80 120 160
Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
LAKE COUNTY
Lake
Colusa
Yuba
Placer
LAKE TAHOE
Sutter
El Dorado
Yolo
Sonoma
Napa
Sac
Amador
Alpine
Yosemite NP
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
San Benito
Fresno
SAN JOAQUIN VALLEY
Inyo
NORTH CENTRAL COAST
Kings
Tulare
Monterey
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
San Bernardino
Ventura
Los Angeles
MOJAVE DESERT
Riverside
Orange
SOUTH COAST
SALTON SEA
Imperial
San Diego
SAN DIEGO
Unclassified
Attainment
Nonattainment
Air Basin
County
Last Updated: November 2023
Air Quality Planning and Science Division, CARB

Table 2
California Ambient Air Quality Standards Area Designations for Suspended Particulate Matter (PM_{10})

Area	N	U	A
GREAT BASIN VALLEYS AIR BASIN	N		
LAKE COUNTY AIR BASIN			A
LAKE TAHOE AIR BASIN	N		
MOJAVE DESERT AIR BASIN	N		
MOUNTAIN COUNTIES AIR BASIN			
Amador County		U	
Calaveras County	N		
El Dorado County (portion)	N		
Mariposa County			
- Yosemite National Park	N		
- Remainder of County		U	
Nevada County	N		
Placer County (portion)	N		
Plumas County	N		
Sierra County	N		
Tuolumne County		U	

Area	N	U	A
NORTH CENTRAL COAST AIR BASIN	N		
NORTH COAST AIR BASIN			
Del Norte, Mendocino, Sonoma (portion) and Trinity Counties			A
Remainder of Air Basin	N		
NORTHEAST PLATEAU AIR BASIN			
Siskiyou County			A
Remainder of Air Basin		U	
SACRAMENTO VALLEY AIR BASIN			
Shasta County			A
Remainder of Air Basin	N		
SALTON SEA AIR BASIN	N		
SAN DIEGO AIR BASIN	N		
SAN FRANCISCO BAY AREA AIR BASIN	N		
SAN JOAQUIN VALLEY AIR BASIN	N		
SOUTH CENTRAL COAST AIR BASIN	N		
SOUTH COAST AIR BASIN	N		

Figure 3


2023
Area Designations for State
Ambient Air Quality Standards
PM2.5
N
0 40 80 120 160
Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
Portola Valley
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
LAKE COUNTY
Colusa
Yuba
Lake
Sutter
Placer
LAKE TAHOE
Yolo
El Dorado
Sonoma
Napa
Sac
Amador
Alpine
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
SAN JOAQUIN VALLEY
San Benito
Fresno
Inyo
NORTH CENTRAL COAST
Kings
Tulare
Monterey
County Portion of Federal Ozone AQMA
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
San Bernardino
Ventura
Los Angeles
MOJAVE DESERT
Riverside
Orange
SOUTH COAST
SALTON SEA
San Diego
Imperial
SAN DIEGO
Calexico
Unclassified
Attainment
Nonattainment
Air Basin
County
Last Updated: November 2023
Air Quality Planning and Science Division, CARB

Table 3
California Ambient Air Quality Standards Area Designations for Fine Particulate Matter ($PM_{2.5}$)

Area	N	U	A
GREAT BASIN VALLEYS AIR BASIN			A
LAKE COUNTY AIR BASIN			A
LAKE TAHOE AIR BASIN			A
MOJAVE DESERT AIR BASIN			A
MOUNTAIN COUNTIES AIR BASIN			
Plumas County			
- Portola Valley[1]	N		
- Remainder Plumas County		U	
Remainder of Air Basin		U	
NORTH CENTRAL COAST AIR BASIN			A
NORTH COAST AIR BASIN			A
NORTHEAST PLATEAU AIR BASIN			A
SACRAMENTO VALLEY AIR BASIN			
Butte County			A
Colusa County			A
Glenn County			A
Placer County (portion)			A
Sacramento County			A
Shasta County			A
Sutter and Yuba Counties	N		
Remainder of Air Basin		U	

Area	N	U	A
SALTON SEA AIR BASIN			
Imperial County			
- City of Calexico[2]	N		
Remainder of Air Basin			A
SAN DIEGO AIR BASIN	N		
SAN FRANCISCO BAY AREA AIR BASIN	N		
SAN JOAQUIN VALLEY AIR BASIN	N		
SOUTH CENTRAL COAST AIR BASIN			A
SOUTH COAST AIR BASIN	N		

[1] California Code of Regulations, title 17, section 60200(c)

[2] California Code of Regulations, title 17, section 60200(a)

Figure 4


2023
Area Designations for State
Ambient Air Quality Standards
CARBON MONOXIDE
N
0 40 80 120 160
Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
LAKE COUNTY
Colusa
Yuba
Lake
Placer
LAKE TAHOE
Sutter
Yolo
El Dorado
Sonoma
Napa
Sac
Amador
Alpine
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
San Benito
Fresno
SAN JOAQUIN VALLEY
NORTH CENTRAL COAST
Kings
Tulare
Inyo
Monterey
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
San Bernardino
Ventura
Los Angeles
MOJAVE DESERT
Riverside
Orange
SOUTH COAST
SALTON SEA
San Diego
Imperial
SAN DIEGO
Unclassified
Attainment
Air Basin
County
Last Updated: November 2023
Air Quality Planning and Science Division, CARB

Table 4
California Ambient Air Quality Standards Area Designations for Carbon Monoxide*

Area	N	NA-T	U	A
GREAT BASIN VALLEYS AIR BASIN				
Alpine County			U	
Inyo County				A
Mono County				A
LAKE COUNTY AIR BASIN				A
LAKE TAHOE AIR BASIN				A
MOJAVE DESERT AIR BASIN				
Kern County (portion)			U	
Los Angeles County (portion)				A
Riverside County (portion)			U	
San Bernardino County (portion)				A
MOUNTAIN COUNTIES AIR BASIN				
Amador County			U	
Calaveras County			U	
El Dorado County (portion)			U	
Mariposa County			U	
Nevada County			U	
Placer County (portion)			U	
Plumas County				A
Sierra County			U	
Tuolumne County				A
NORTH CENTRAL COAST AIR BASIN				
Monterey County				A
San Benito County			U	
Santa Cruz County			U	
NORTH COAST AIR BASIN				
Del Norte County			U	
Humboldt County				A
Mendocino County				A
Sonoma County (portion)			U	
Trinity County			U	
NORTHEAST PLATEAU AIR BASIN			U	

Area	N	NA-T	U	A
SACRAMENTO VALLEY AIR BASIN				
Butte County				A
Colusa County			U	
Glenn County			U	
Placer County (portion)				A
Sacramento County				A
Shasta County			U	
Solano County (portion)				A
Sutter County				A
Tehama County			U	
Yolo County				A
Yuba County			U	
SALTON SEA AIR BASIN				A
SAN DIEGO AIR BASIN				A
SAN FRANCISCO BAY AREA AIR BASIN				A
SAN JOAQUIN VALLEY AIR BASIN				
Fresno County				A
Kern County (portion)				A
Kings County			U	
Madera County			U	
Merced County			U	
San Joaquin County				A
Stanislaus County				A
Tulare County				A
SOUTH CENTRAL COAST AIR BASIN				A
SOUTH COAST AIR BASIN				A

* The area designated for carbon monoxide is a county or portion of a county

Figure 5



Last Updated: November 2023
Air Quality Planning and Science Division, CARB

Table 5
California Ambient Air Quality Standards Area Designations for Nitrogen Dioxide

Area	N	U	A
GREAT BASIN VALLEYS AIR BASIN			A
LAKE COUNTY AIR BASIN			A
LAKE TAHOE AIR BASIN			A
MOJAVE DESERT AIR BASIN			A
MOUNTAIN COUNTIES AIR BASIN			A
NORTH CENTRAL COAST AIR BASIN			A
NORTH COAST AIR BASIN			A
NORTHEAST PLATEAU AIR BASIN			A
SACRAMENTO VALLEY AIR BASIN			A
SALTON SEA AIR BASIN			A
SAN DIEGO AIR BASIN			A
SAN FRANCISCO BAY AREA AIR BASIN			A
SAN JOAQUIN VALLEY AIR BASIN			A
SOUTH CENTRAL COAST AIR BASIN			A
SOUTH COAST AIR BASIN			
CA 60 Near-road Portion of San Bernardino, Riverside, and Los Angeles Counties			A
Remainder of Air Basin			A

Figure 6


2023
Area Designations for State
Ambient Air Quality Standards
SULFUR DIOXIDE
N
0 40 80 120 160
Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
LAKE COUNTY
Colusa
Yuba
Lake
Sutter
Placer
LAKE TAHOE
Yolo
El Dorado
Sonoma
Napa
Sac
Amador
Alpine
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
San Benito
Fresno
SAN JOAQUIN VALLEY
Inyo
NORTH CENTRAL COAST
Kings
Tulare
Monterey
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
San Bernardino
Ventura
Los Angeles
MOJAVE DESERT
Riverside
Orange
SOUTH COAST
SALTON SEA
San Diego
Imperial
SAN DIEGO
Attainment
Air Basin
County
Last Updated: November 2023
Air Quality Planning and Science Division, CARB

Table 6
California Ambient Air Quality Standards Area Designations for Sulfur Dioxide*

Area	N	A
GREAT BASIN VALLEYS AIR BASIN		A
LAKE COUNTY AIR BASIN		A
LAKE TAHOE AIR BASIN		A
MOJAVE DESERT AIR BASIN		A
MOUNTAIN COUNTIES AIR BASIN		A
NORTH CENTRAL COAST AIR BASIN		A
NORTH COAST AIR BASIN		A
NORTHEAST PLATEAU AIR BASIN		A

Area	N	A
SACRAMENTO VALLEY AIR BASIN		A
SALTON SEA AIR BASIN		A
SAN DIEGO AIR BASIN		A
SAN FRANCISCO BAY AREA AIR BASIN		A
SAN JOAQUIN VALLEY AIR BASIN		A
SOUTH CENTRAL COAST AIR BASIN		A
SOUTH COAST AIR BASIN		A

* The area designated for sulfur dioxide is a county or portion of a county. Since all areas in the State are in attainment for this standard, air basins are indicated here for simplicity.

Figure 7


2023
Area Designations for State
Ambient Air Quality Standards
SULFATES
N
0 40 80 120 160
Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
LAKE COUNTY
Colusa
Yuba
Lake
Placer
LAKE TAHOE
Sutter
Yolo
El Dorado
Sonoma
Napa
Sac
Amador
Alpine
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
SAN JOAQUIN VALLEY
San Benito
Fresno
Inyo
NORTH CENTRAL COAST
Kings
Tulare
Monterey
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
San Bernardino
Ventura
Los Angeles
MOJAVE DESERT
Riverside
Orange
SOUTH COAST
SALTON SEA
San Diego
Imperial
SAN DIEGO
Attainment
Air Basin
County
Last Updated: November 2023
Air Quality Planning and Science Division, CARB

Table 7
California Ambient Air Quality Standards Area Designations for Sulfates

Area	N	U	A
GREAT BASIN VALLEYS AIR BASIN			A
LAKE COUNTY AIR BASIN			A
LAKE TAHOE AIR BASIN			A
MOJAVE DESERT AIR BASIN			A
MOUNTAIN COUNTIES AIR BASIN			A
NORTH CENTRAL COAST AIR BASIN			A
NORTH COAST AIR BASIN			A
NORTHEAST PLATEAU AIR BASIN			A

Area	N	U	A
SACRAMENTO VALLEY AIR BASIN			A
SALTON SEA AIR BASIN			A
SAN DIEGO AIR BASIN			A
SAN FRANCISCO BAY AREA AIR BASIN			A
SAN JOAQUIN VALLEY AIR BASIN			A
SOUTH CENTRAL COAST AIR BASIN			A
SOUTH COAST AIR BASIN			A

Figure 8


2023
Area Designations for State
Ambient Air Quality Standards
LEAD
N
0 40 80 120 160
Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
LAKE COUNTY
Colusa
Yuba
Lake
Placer
LAKE TAHOE
Sutter
Yolo
El Dorado
Sonoma
Napa
Sac
Amador
Alpine
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
San Benito
Fresno
SAN JOAQUIN VALLEY
NORTH CENTRAL COAST
Kings
Tulare
Inyo
Monterey
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
San Bernardino
Ventura
Los Angeles
MOJAVE DESERT
Riverside
Orange
SOUTH COAST
SALTON SEA
San Diego
Imperial
SAN DIEGO
Attainment
Air Basin
County
Last Updated: November 2023
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Table 8
California Ambient Air Quality Standards Area Designations for Lead (particulate)*

Area	N	U	A
GREAT BASIN VALLEYS AIR BASIN			A
LAKE COUNTY AIR BASIN			A
LAKE TAHOE AIR BASIN			A
MOJAVE DESERT AIR BASIN			A
MOUNTAIN COUNTIES AIR BASIN			A
NORTH CENTRAL COAST AIR BASIN			A
NORTH COAST AIR BASIN			A
NORTHEAST PLATEAU AIR BASIN			A
SACRAMENTO VALLEY AIR BASIN			A

Area	N	U	A
SALTON SEA AIR BASIN			A
SAN DIEGO AIR BASIN			A
SAN FRANCISCO BAY AREA AIR BASIN			A
SAN JOAQUIN VALLEY AIR BASIN			A
SOUTH CENTRAL COAST AIR BASIN			A
SOUTH COAST AIR BASIN			A

* The area designated for lead is a county or portion of a county. Since all areas in the State are in attainment for this standard, air basins are indicated here for simplicity.

Figure 9


2023
Area Designations for State
Ambient Air Quality Standards
HYDROGEN SULFIDE
N
0 40 80 120 160
Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
LAKE COUNTY
Colusa
Yuba
Lake
Sutter
Placer
LAKE TAHOE
Geyser Geothermal
Yolo
El Dorado
City of Sutter Creek
Sonoma
Napa
Sac
Amador
Alpine
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
San Benito
Fresno
SAN JOAQUIN VALLEY
Inyo
NORTH CENTRAL COAST
Kings
Tulare
Searles Valley
Monterey
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
San Bernardino
Ventura
Los Angeles
MOJAVE DESERT
Coachella Valley
Riverside
Orange
SOUTH COAST
SALTON SEA
Imperial
San Diego
SAN DIEGO
Unclassified
Attainment
Nonattainment
Air Basin
County
Last Updated: November 2023
Air Quality Planning and Science Division, CARB

Table 9
California Ambient Air Quality Standards Area Designations for Hydrogen Sulfide*

Area	N	NA-T	U	A
GREAT BASIN VALLEYS AIR BASIN				
Alpine County			U	
Inyo County				A
Mono County				A
LAKE COUNTY AIR BASIN				A
LAKE TAHOE AIR BASIN			U	
MOJAVE DESERT AIR BASIN				
Kern County (portion)			U	
Los Angeles County (portion)			U	
Riverside County (portion)			U	
San Bernardino County (portion)				
- Searles Valley Planning Area[1]	N			
- Remainder of County			U	
MOUNTAIN COUNTIES AIR BASIN				
Amador County				
- City of Sutter Creek	N			
- Remainder of County			U	
Calaveras County			U	
El Dorado County (portion)			U	
Mariposa County			U	
Nevada County			U	
Placer County (portion)			U	
Plumas County			U	
Sierra County			U	
Tuolumne County			U	

Area	N	NA-T	U	A
NORTH CENTRAL COAST AIR BASIN			U	
NORTH COAST AIR BASIN				
Del Norte County			U	
Humboldt County				A
Mendocino County			U	
Sonoma County (portion)				
- Geyser Geothermal Area[2]				A
- Remainder of County			U	
Trinity County			U	
NORTHEAST PLATEAU AIR BASIN			U	
SACRAMENTO VALLEY AIR BASIN			U	
SALTON SEA AIR BASIN				
Riverside County (portion)	N			
Imperial County			U	
SAN DIEGO AIR BASIN			U	
SAN FRANCISCO BAY AREA AIR BASIN			U	
SAN JOAQUIN VALLEY AIR BASIN			U	
SOUTH CENTRAL COAST AIR BASIN				
San Luis Obispo County				A
Santa Barbara County				A
Ventura County			U	
SOUTH COAST AIR BASIN			U	

* The area designated for hydrogen sulfide is a county or portion of a county

[1] 52 Federal Register 29384 (August 7, 1987)

[2] California Code of Regulations, title 17, section 60200(d)

Figure 10


2023
Area Designations for State
Ambient Air Quality Standards
VISIBILITY REDUCING PARTICLES
N
0 40 80 120 160
Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
LAKE COUNTY
Lake
Colusa
Yuba
Placer
LAKE TAHOE
Sutter
El Dorado
Yolo
Sonoma
Napa
Sac
Amador
Alpine
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
San Benito
Fresno
SAN JOAQUIN VALLEY
NORTH CENTRAL COAST
Kings
Tulare
Inyo
Monterey
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
San Bernardino
Ventura
Los Angeles
MOJAVE DESERT
Riverside
Orange
SOUTH COAST
SALTON SEA
San Diego
Imperial
SAN DIEGO
Unclassified
Attainment
Air Basin
County
Last Updated: November 2023
Air Quality Planning and Science Division, CARB

Table 10
California Ambient Air Quality Standards Area Designations for Visibility Reducing Particles

Area	N	NA-T	U	A
GREAT BASIN VALLEYS AIR BASIN			U	
LAKE COUNTY AIR BASIN				A
LAKE TAHOE AIR BASIN			U	
MOJAVE DESERT AIR BASIN			U	
MOUNTAIN COUNTIES AIR BASIN			U	
NORTH CENTRAL COAST AIR BASIN			U	
NORTH COAST AIR BASIN			U	
NORTHEAST PLATEAU AIR BASIN			U	

Area	N	NA-T	U	A
SACRAMENTO VALLEY AIR BASIN			U	
SALTON SEA AIR BASIN			U	
SAN DIEGO AIR BASIN			U	
SAN FRANCISCO BAY AREA AIR BASIN			U	
SAN JOAQUIN VALLEY AIR BASIN			U	
SOUTH CENTRAL COAST AIR BASIN			U	
SOUTH COAST AIR BASIN			U	

Area Designations for the National Ambient Air Quality Standards

The following maps and tables show the area designations for each pollutant with a national ambient air quality standard. Additional information about the federal area designations is available on the U.S. EPA website:

https://www.epa.gov/green-book

Over the last several years, U.S. EPA has been reviewing the levels of the various national standards. The agency has already promulgated new standard levels for some pollutants and is considering revising the levels for others. Information about the status of these reviews is available on the U.S. EPA website:

https://www.epa.gov/criteria-air-pollutants

Designation Categories

Suspended Particulate Matter (PM_{10}). The U.S. EPA uses three categories to designate areas with respect to PM_{10}:

- Attainment (A)
- Nonattainment (N)
- Unclassifiable (U)

Ozone, Fine Suspended Particulate Matter ($PM_{2.5}$), Carbon Monoxide (CO), and Nitrogen Dioxide (NO_2). The U.S. EPA uses two categories to designate areas with respect to these standards:

- Nonattainment (N)
- Unclassifiable/Attainment (U/A)

The national 1-hour ozone standard was revoked effective June 15, 2005, and the area designations map reflects the 2015 national 8-hour ozone standard of 0.070 ppm. Area designations were finalized on August 3, 2018.

On December 14, 2012, the U.S. EPA established a new national annual primary $PM_{2.5}$ standard of 12.0 µg/m^3. Area designations were finalized in December 2014. The current designation map reflects the most recently revised (2012) annual average standard of 12.0 µg/m^3 as well as the 24-hour standard of 35 µg/m^3, revised in 2006.

On January 22, 2010, the U.S. EPA established a new national 1-hour NO_2 standard of 100 parts per billion (ppb) and retained the annual average standard of 53 ppb. Designations for the primary NO_2 standard became effective on February 29, 2012. All areas of California meet this standard.

Sulfur Dioxide (SO_2). The U.S. EPA uses three categories to designate areas with respect to the 24-hour and annual average sulfur dioxide standards. These designation categories are:

- Nonattainment (N),
- Unclassifiable (U), and
- Unclassifiable/Attainment (U/A).

On June 2, 2010, the U.S. EPA established a new primary 1-hour SO_2 standard of 75 parts per billion (ppb). At the same time, U.S. EPA revoked the 24-hour and annual average standards. Area designations for the 1-hour SO_2 standard were finalized on December 21, 2017 and are reflected in the area designations map.

Lead (particulate). The U.S. EPA promulgated a new rolling 3-month average lead standard in October 2008 of 0.15 $\mu g/m^3$. Designations were made for this standard in November 2010.

Designation Areas

From time to time, the boundaries of the California air basins have been changed to facilitate the planning process. CARB generally initiates these changes, and they are not always reflected in the U.S. EPA's area designations. For purposes of consistency, the maps in this attachment reflect area designation boundaries and nomenclature as promulgated by the U.S. EPA. In some cases, these may not be the same as those adopted by CARB. For example, the national area designations reflect the former Southeast Desert Air Basin. In accordance with Health and Safety Code section 39606.1, CARB redefined this area in 1996 to be the Mojave Desert Air Basin and Salton Sea Air Basin. The definitions and boundaries for all areas designated for the national standards can be found in Title 40, Code of Federal Regulations (CFR), Chapter I, Subchapter C, Part 81.305. They are available on the web at: *https://ecfr.io/Title-40/se40.20.81_1305*

Figure 11


Area Designations for National Ambient Air Quality Standards
8-HOUR OZONE
N
0 50 100 150 200 Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
Sutter Buttes
Tuscan Buttes
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
LAKE COUNTY
Lake
Colusa
Sutter
Yuba
Placer
LAKE TAHOE
Yolo
El Dorado
Sonoma
Napa
Sac
Amador
Alpine
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
SAN JOAQUIN VALLEY
San Benito
Fresno
NORTH CENTRAL COAST
Kings
Tulare
Inyo
Antelope Valley and Western Mojave Desert
Monterey
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
San Bernardino
Ventura
Los Angeles
MOJAVE DESERT
Riverside
SOUTH COAST
Orange
SALTON SEA
Coachella Valley
Imperial
San Diego
SAN DIEGO
Unclassified/Attainment
Nonattainment
Air Basin
County
Last Updated: November 2023
Map reflects the 2015 8-hour ozone standard of 0.070 ppm
Air Quality Planning and Science Division, CARB

Table 11
National Ambient Air Quality Standards Area Designations for 8-Hour Ozone*

Area	N	U/A
GREAT BASIN VALLEYS AIR BASIN		U/A
LAKE COUNTY AIR BASIN		U/A
LAKE TAHOE AIR BASIN		U/A
MOUNTAIN COUNTIES AIR BASIN		
Amador County	N	
Calaveras County	N	
El Dorado County (portion)[1]	N	
Mariposa County	N	
Nevada County		
- Western Nevada County	N	
- Remainder of County		U/A
Placer County (portion)[1]	N	
Plumas County		U/A
Sierra County		U/A
Tuolumne County	N	
NORTH CENTRAL COAST AIR BASIN		U/A
NORTH COAST AIR BASIN		U/A
NORTHEAST PLATEAU AIR BASIN		U/A
SACRAMENTO VALLEY AIR BASIN		
Butte County	N	
Colusa County		U/A
Glenn County		U/A
Sacramento Metro Area[1]	N	
Shasta County		U/A
Sutter County		
- Sutter Buttes	N	
- Southern portion of Sutter County[1]	N	
- Remainder of Sutter County		U/A
Tehama County		
- Tuscan Buttes	N	
- Remainder of Tehama County		U/A

Area	N	U/A
SACRAMENTO VALLEY AIR BASIN (cont.)		
Yolo County[1]	N	
Yuba County		U/A
SAN DIEGO COUNTY	N	
SAN FRANCISCO BAY AREA AIR BASIN	N	
SAN JOAQUIN VALLEY AIR BASIN	N	
SOUTH CENTRAL COAST AIR BASIN[2]		
San Luis Obispo County		
- Eastern San Luis Obispo County	N	
- Remainder of County		U/A
Santa Barbara County		U/A
Ventura County		
- Area excluding Anacapa and San Nicolas Islands	N	
- Channel Islands[2]		U/A
SOUTH COAST AIR BASIN[2]	N	
SOUTHEAST DESERT AIR BASIN		
Kern County (portion)	N	
- Indian Wells Valley		U/A
Imperial County	N	
Los Angeles County (portion)	N	
Riverside County (portion)		
- Coachella Valley	N	
- Non-AQMA portion		U/A
San Bernardino County		
- Western portion (AQMA)	N	
- Eastern portion (non-AQMA)		U/A

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.
NOTE: This map and Table reflect the 2015 8-hour ozone standard of 0.070 ppm.

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[1] For this purpose, the Sacramento Metro Area comprises all of Sacramento and Yolo Counties, the Sacramento Valley Air Basin portion of Solano County, the southern portion of Sutter County, and the Sacramento Valley and Mountain Counties Air Basins portions of Placer and El Dorado counties.

[2] South Central Coast Air Basin Channel Islands:
Santa Barbara County includes Santa Cruz, San Miguel, Santa Rosa, and Santa Barbara Islands.
Ventura County includes Anacapa and San Nicolas Islands.
South Coast Air Basin:
Los Angeles County includes San Clemente and Santa Catalina Islands.

Figure 12


Area Designations for National Ambient Air Quality Standards PM10
N
0 50 100 150 200 Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Shasta
Trinity
Lassen
Humboldt
Tehema
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
LAKE COUNTY
Colusa
Yuba
Placer
LAKE TAHOE
Lake
Sutter
Yolo
El Dorado
Alpine
Sacramento County
Sonoma
Napa
Sac
Amador
Mono
Mono Basin
SAN FRANCISCO BAY AREA
Marin
Solano
Calaveras
San Joaquin
Contra Costa
Tuolumne
Mammoth Lake
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Inyo
Santa Cruz
San Benito
Fresno
SAN JOAQUIN VALLEY
Owens Valley
Coso Junction
Trona
NORTH CENTRAL COAST
Monterey
Kings
Tulare
San Luis Obispo
Kern
Indian Wells Valley
San Bernardino
SOUTH CENTRAL COAST
Santa Barbara
SOUTHEAST DESERT
Ventura
Los Angeles
Riverside
Coachella Valley
Orange
SOUTH COAST
Imperial
San Diego
SAN DIEGO COUNTY
Unclassified
Attainment
Nonattainment
Air Basin
County
Last Updated: November 2023
Air Quality Planning and Science Division

Table 12
National Ambient Air Quality Standards Area Designations for Suspended Particulate Matter (PM_{10})*

Area	N	U	A
GREAT BASIN VALLEYS AIR BASIN			
Alpine County		U	
Inyo County			
- Owens Valley Planning Area	N		
- Coso Junction			A
- Remainder of County		U	
Mono County			
- Mammoth Lake Planning Area			A
- Mono Lake Basin	N		
- Remainder of County		U	
LAKE COUNTY AIR BASIN		U	
LAKE TAHOE AIR BASIN		U	
MOUNTAIN COUNTIES AIR BASIN		U	
NORTH CENTRAL COAST AIR BASIN		U	
NORTH COAST AIR BASIN		U	
NORTHEAST PLATEAU AIR BASIN		U	
SACRAMENTO VALLEY AIR BASIN			
Sacramento County[1]			A
Remainder of Air Basin		U	
SAN DIEGO COUNTY		U	

Area	N	U	A
SAN FRANCISCO BAY AREA AIR BASIN		U	
SAN JOAQUIN VALLEY AIR BASIN			A
SOUTH CENTRAL COAST AIR BASIN		U	
SOUTH COAST AIR BASIN			A
SOUTHEAST DESERT AIR BASIN			
Eastern Kern County			
- Indian Wells Valley			A
- Portion within San Joaquin Valley Planning Area	N		
- Remainder of County		U	
Imperial County			
- Imperial Valley Planning Area[2]			A
- Remainder of County		U	
Los Angeles County (portion)		U	
Riverside County (portion)			
- Coachella Valley	N		
- Non-AQMA portion		U	
San Bernardino County			
- Trona	N		
- Remainder of County	N		

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.

[1] Air quality in Sacramento County meets the national PM_{10} standards. The request for redesignation to attainment was approved by U.S. EPA in September 2013.

[2] The request for redesignation to attainment for the Imperial Valley Planning Area was approved by U.S. EPA in September 2020, effective October 2020.

Figure 13


Area Designations for National Ambient Air Quality Standards PM2.5
N
0 50 100 150 200 Miles
NORTH COAST
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
Humboldt
Trinity
Shasta
Lassen
Tehama
SACRAMENTO VALLEY
Plumas
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Mendocino
Nevada
LAKE COUNTY
Colusa
Yuba
Placer
Lake
Sutter
LAKE TAHOE
El Dorado
Yolo
Alpine
Sonoma
Napa
Sacramento
Amador
SAN FRANCISCO BAY AREA
Solano
Calaveras
GREAT BASIN VALLEYS
Marin
Tuolumne
Contra Costa
San Joaquin
Mono
Alameda
Stanislaus
Mariposa
San Mateo
Merced
Madera
Santa Clara
Santa Cruz
Fresno
NORTH CENTRAL COAST
San Benito
Inyo
Tulare
Monterey
Kings
SAN JOAQUIN VALLEY
San Luis Obispo
Kern
San Bernardino
SOUTH CENTRAL COAST
Santa Barbara
SOUTHEAST DESERT
Ventura
Los Angeles
Riverside
Orange
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
Unclassified/Attainment
Nonattainment
Air Basin
County
Last Updated: November 2023
Air Quality Planning and Science Division

Table 13
National Ambient Air Quality Standards Area Designations for Fine Particulate Matter ($PM_{2.5}$)

Area	N	U/A
GREAT BASIN VALLEYS AIR BASIN		U/A
LAKE COUNTY AIR BASIN		U/A
LAKE TAHOE AIR BASIN		U/A
MOUNTAIN COUNTIES AIR BASIN		
Plumas County		
- Portola Valley Portion of Plumas County	N	
- Remainder of Plumas County		U/A
Remainder of Air Basin		U/A
NORTH CENTRAL COAST AIR BASIN		U/A
NORTH COAST AIR BASIN		U/A
NORTHEAST PLATEAU AIR BASIN		U/A
SACRAMENTO VALLEY AIR BASIN		
Sacramento Metro Area[1]	N	
Remainder of Air Basin		U/A

Area	N	U/A
SAN DIEGO COUNTY		U/A
SAN FRANCISCO BAY AREA AIR BASIN[2]	N	
SAN JOAQUIN VALLEY AIR BASIN	N	
SOUTH CENTRAL COAST AIR BASIN		U/A
SOUTH COAST AIR BASIN[3]	N	
SOUTHEAST DESERT AIR BASIN		
Imperial County (portion)[4]	N	
Remainder of Air Basin		U/A

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305. This map reflects the 2006 24-hour $PM_{2.5}$ standard as well as the 1997 and 2012 $PM_{2.5}$ annual standards.

[1] For this purpose, Sacramento Metro Area comprises all of Sacramento and portions of El Dorado, Placer, Solano, and Yolo Counties. Air quality in this area meets the national $PM_{2.5}$ standards. A Determination of Attainment for the 2006 24-hour $PM_{2.5}$ standard was made by U.S. EPA in June 2017.

[2] Air quality in this area meets the national $PM_{2.5}$ standards. A Determination of Attainment for the 2006 24-hour $PM_{2.5}$ standard was made by U.S. EPA in June 2017.

[3] Those lands of the Santa Rosa Band of Cahulla Mission Indians in Riverside County are designated Unclassifiable/Attainment.

[4] That portion of Imperial County encompassing the urban and surrounding areas of Brawley, Calexico, El Centro, Heber, Holtville, Imperial, Seeley, and Westmorland. Air quality in this area meets the national $PM_{2.5}$ standards. A Determination of Attainment for the 2006 24-hour $PM_{2.5}$ standard was made by U.S. EPA in June 2017.

Figure 14

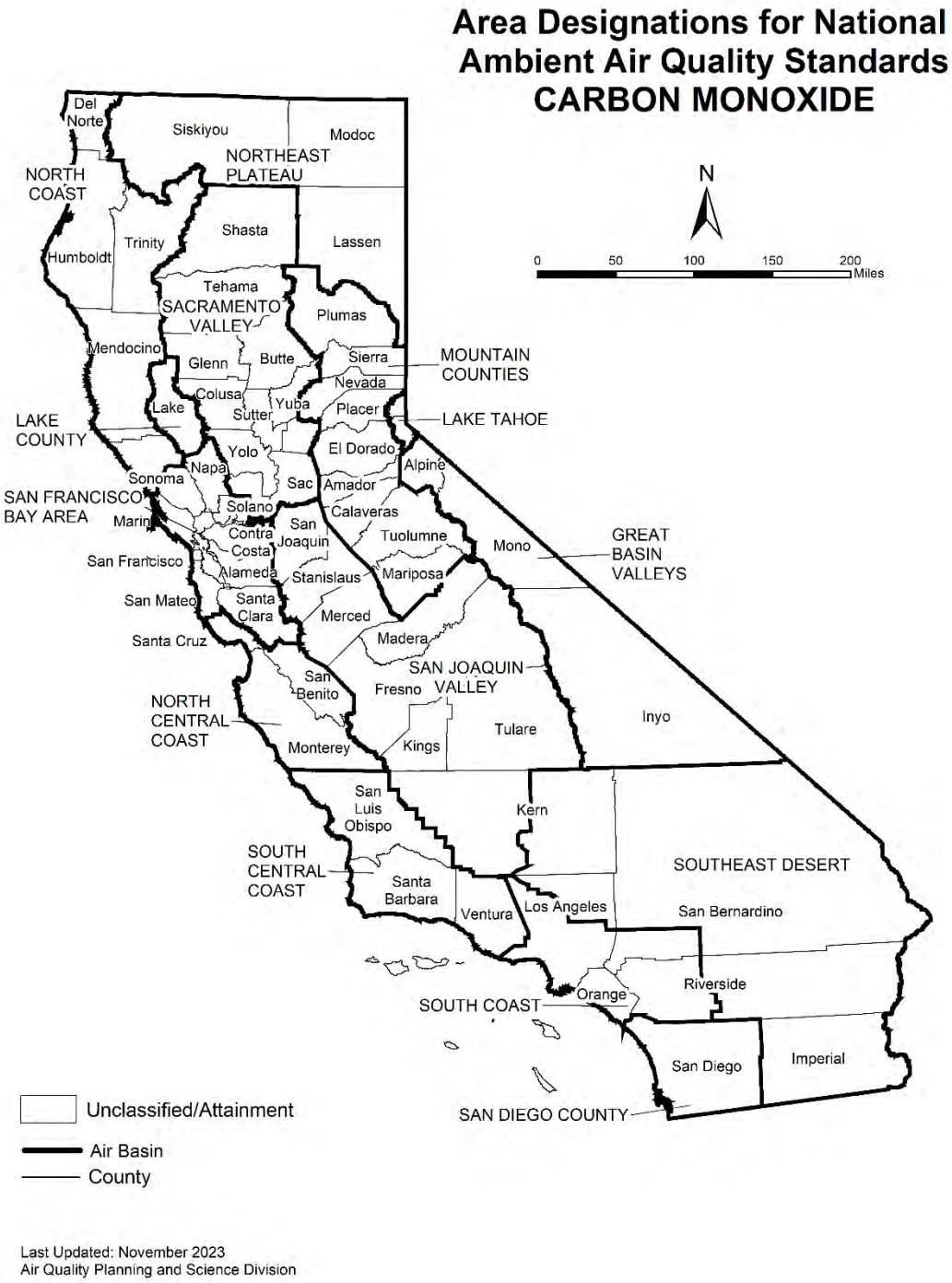

Area Designations for National Ambient Air Quality Standards
CARBON MONOXIDE
N
0 50 100 150 200 Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
Colusa
Lake
Sutter
Yuba
Placer
LAKE TAHOE
LAKE COUNTY
Yolo
El Dorado
Alpine
Napa
Sonoma
Sac
Amador
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
San Joaquin
Contra Costa
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Santa Cruz
Madera
SAN JOAQUIN VALLEY
San Benito
Fresno
NORTH CENTRAL COAST
Tulare
Inyo
Monterey
Kings
San Luis Obispo
Kern
SOUTH CENTRAL COAST
SOUTHEAST DESERT
Santa Barbara
Ventura
Los Angeles
San Bernardino
Riverside
Orange
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
Unclassified/Attainment
Air Basin
County
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Air Quality Planning and Science Division

Table 14
National Ambient Air Quality Standards Area Designations for Carbon Monoxide*

Area	N	U/A
GREAT BASIN VALLEYS AIR BASIN		U/A
LAKE COUNTY AIR BASIN		U/A
LAKE TAHOE AIR BASIN		U/A
MOUNTAIN COUNTIES AIR BASIN		U/A
NORTH CENTRAL COAST AIR BASIN		U/A
NORTH COAST AIR BASIN		U/A
NORTHEAST PLATEAU AIR BASIN		U/A

Area	N	U/A
SACRAMENTO VALLEY AIR BASIN		U/A
SAN DIEGO COUNTY		U/A
SAN FRANCISCO BAY AREA AIR BASIN		U/A
SAN JOAQUIN VALLEY AIR BASIN		U/A
SOUTH CENTRAL COAST AIR BASIN		U/A
SOUTH COAST AIR BASIN		U/A
SOUTHEAST DESERT AIR BASIN		U/A

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.

Figure 15


Area Designations for National Ambient Air Quality Standards
NITROGEN DIOXIDE
N
0 50 100 150 200 Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehema
Plumas
SACRAMENTO VALLEY
Mendocino
Glenn
Butte
Sierra
Nevada
MOUNTAIN COUNTIES
Colusa
Yuba
Placer
LAKE TAHOE
LAKE COUNTY
Lake
Sutter
Yolo
El Dorado
Napa
Alpine
Sonoma
Sac
Amador
SAN FRANCISCO BAY AREA
Solano
Marin
Calaveras
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Santa Cruz
Madera
SAN JOAQUIN VALLEY
San Benito
Fresno
Inyo
NORTH CENTRAL COAST
Tulare
Monterey
Kings
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
SOUTHEAST DESERT
Ventura
Los Angeles
San Bernardino
Riverside
Orange
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
Unclassified/Attainment
Air Basin
County
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Air Quality Planning and Science Division

Table 15
National Ambient Air Quality Standards Area Designations for Nitrogen Dioxide*

Area	N	U/A
GREAT BASIN VALLEYS AIR BASIN		U/A
LAKE COUNTY AIR BASIN		U/A
LAKE TAHOE AIR BASIN		U/A
MOUNTAIN COUNTIES AIR BASIN		U/A
NORTH CENTRAL COAST AIR BASIN		U/A
NORTH COAST AIR BASIN		U/A
NORTHEAST PLATEAU AIR BASIN		U/A

Area	N	U/A
SACRAMENTO VALLEY AIR BASIN		U/A
SAN DIEGO COUNTY		U/A
SAN FRANCISCO BAY AREA AIR BASIN		U/A
SAN JOAQUIN VALLEY AIR BASIN		U/A
SOUTH CENTRAL COAST AIR BASIN		U/A
SOUTH COAST AIR BASIN		U/A
SOUTHEAST DESERT AIR BASIN		U/A

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.

Figure 16


Area Designations for National Ambient Air Quality Standards
SULFUR DIOXIDE
N
0 50 100 150 200 Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Shasta
Lassen
Trinity
Humboldt
Tehema
Plumas
SACRAMENTO VALLEY
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
Colusa
Yuba
Placer
LAKE TAHOE
LAKE COUNTY
Lake
Sutter
Yolo
El Dorado
Napa
Alpine
Sonoma
Sac
Amador
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
San Benito
Fresno
SAN JOAQUIN VALLEY
NORTH CENTRAL COAST
Inyo
Tulare
Monterey
Kings
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
SOUTHEAST DESERT
Ventura
Los Angeles
San Bernardino
Riverside
Orange
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
Unclassified/Attainment
Air Basin
County
Last Updated: November 2023
Air Quality Planning and Science Division

Table 16
National Ambient Air Quality Standards Area Designations for Sulfur Dioxide*

Area	N	U/A
GREAT BASIN VALLEYS AIR BASIN		U/A
LAKE COUNTY AIR BASIN		U/A
LAKE TAHOE AIR BASIN		U/A
MOUNTAIN COUNTIES AIR BASIN		U/A
NORTH CENTRAL COAST AIR BASIN		U/A
NORTH COAST AIR BASIN		U/A
NORTHEAST PLATEAU AIR BASIN		U/A
SACRAMENTO VALLEY AIR BASIN		U/A
SAN DIEGO COUNTY		U/A
SAN FRANCISCO BAY AREA AIR BASIN		U/A
SAN JOAQUIN VALLEY AIR BASIN		U/A
SOUTH CENTRAL COAST AIR BASIN[1]		U/A
SOUTH COAST AIR BASIN		U/A
SOUTHEAST DESERT AIR BASIN		U/A

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.
NOTE: This map and table reflect the 2010 1-hour SO_2 standard of 75 ppb.

[1] South Central Coast Air Basin Channel Islands:
Santa Barbara County includes Santa Cruz, San Miguel, Santa Rosa, and Santa Barbara Islands.
Ventura County includes Anacapa and San Nicolas Islands.
Note that the San Clemente and Santa Catalina Islands are considered part of Los Angeles County, and therefore, are included as part of the South Coast Air Basin.

Figure 17


Area Designations for National Ambient Air Quality Standards
LEAD
N
0 50 100 150 200 Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
Colusa
Yuba
Placer
Lake
Sutter
LAKE TAHOE
LAKE COUNTY
Yolo
El Dorado
Napa
Alpine
Sonoma
Sac
Amador
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Santa Cruz
Madera
SAN JOAQUIN VALLEY
San Benito
Fresno
NORTH CENTRAL COAST
Inyo
Tulare
Monterey
Kings
San Luis Obispo
Kern
SOUTH CENTRAL COAST
SOUTHEAST DESERT
Santa Barbara
Ventura
Los Angeles
San Bernardino
Riverside
Orange
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
Unclassified/Attainment
Nonattainment
Air Basin
County
Last Updated: November 2023
Air Quality Planning and Science Division

Table 17
National Ambient Air Quality Standards Area Designations for Lead (particulate)

Area	N	U/A
GREAT BASIN VALLEYS AIR BASIN		U/A
LAKE COUNTY AIR BASIN		U/A
LAKE TAHOE AIR BASIN		U/A
MOUNTAIN COUNTIES AIR BASIN		U/A
NORTH CENTRAL COAST AIR BASIN		U/A
NORTH COAST AIR BASIN		U/A
NORTHEAST PLATEAU AIR BASIN		U/A
SACRAMENTO VALLEY AIR BASIN		U/A

Area	N	U/A
SAN DIEGO COUNTY		U/A
SAN FRANCISCO BAY AREA AIR BASIN		U/A
SAN JOAQUIN VALLEY AIR BASIN		U/A
SOUTH CENTRAL COAST AIR BASIN		U/A
SOUTH COAST AIR BASIN		
Los Angeles County (portion)[1]	N	
Remainder of Air Basin		U/A
SOUTHEAST DESERT AIR BASIN		U/A

[1] Portion of County in Air Basin, not including Channel Islands

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APPENDIX 3.1:

CALEEMOD PROJECT EMISSIONS MODEL OUTPUTS

15693 - Guasti and Holt Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	15693 - Guasti and Holt
Construction Start Date	6/3/2024
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.80
Precipitation (days)	20.8
Location	34.064251, -117.602592
County	San Bernardino-South Coast
City	Ontario
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5246
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
								2910

Hotel	600	Room	6.90	649,498	0.00	—	—	—
Enclosed Parking with Elevator	436	1000sqft	3.53	436,410	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.90	39.4	85.1	72.3	0.32	2.50	13.2	15.7	2.12	3.84	5.96	—	45,639	45,639	4.53	6.28	82.8	47,705
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.54	3.67	20.7	46.5	0.06	0.61	7.30	7.91	0.57	1.77	2.33	—	13,573	13,573	0.77	0.98	1.04	13,886
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.34	10.3	14.7	25.6	0.05	0.45	4.00	4.30	0.40	0.96	1.32	—	8,081	8,081	0.61	0.82	8.83	8,349
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.43	1.88	2.68	4.67	0.01	0.08	0.73	0.78	0.07	0.18	0.24	—	1,338	1,338	0.10	0.14	1.46	1,382

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	9.90	4.86	85.1	59.6	0.32	2.50	13.2	15.7	2.12	3.84	5.96	—	45,639	45,639	4.53	6.28	82.8	47,705
2025	5.95	39.4	27.8	72.3	0.08	0.92	8.69	9.62	0.85	2.09	2.95	—	17,086	17,086	0.88	1.05	43.0	17,464
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.54	3.67	20.7	46.5	0.06	0.61	7.30	7.91	0.57	1.77	2.33	—	13,573	13,573	0.77	0.98	1.04	13,886
2025	4.11	3.30	19.1	43.8	0.06	0.54	7.30	7.84	0.50	1.77	2.27	—	13,368	13,368	0.76	0.98	0.97	13,681
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	2.34	1.64	14.7	20.5	0.05	0.45	3.44	3.89	0.40	0.92	1.32	—	8,081	8,081	0.61	0.82	8.21	8,349
2025	2.31	10.3	10.7	25.6	0.03	0.30	4.00	4.30	0.28	0.96	1.25	—	7,328	7,328	0.41	0.52	8.83	7,501
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.43	0.30	2.68	3.74	0.01	0.08	0.63	0.71	0.07	0.17	0.24	—	1,338	1,338	0.10	0.14	1.36	1,382
2025	0.42	1.88	1.96	4.67	0.01	0.06	0.73	0.78	0.05	0.18	0.23	—	1,213	1,213	0.07	0.09	1.46	1,242

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	30.6	43.3	23.8	224	0.44	0.76	35.0	35.7	0.72	8.88	9.60	206	60,032	60,238	24.3	2.13	521	62,001
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	20.8	34.1	24.8	148	0.42	0.68	35.0	35.6	0.66	8.88	9.54	206	57,197	57,403	24.4	2.19	368	59,034

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Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	25.5	38.4	24.5	179	0.40	0.72	33.0	33.7	0.69	8.37	9.06	206	55,956	56,162	24.3	2.12	429	57,830
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.66	7.02	4.48	32.8	0.07	0.13	6.01	6.15	0.13	1.53	1.65	34.1	9,264	9,298	4.02	0.35	71.0	9,574

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	21.7	19.7	18.2	172	0.41	0.28	35.0	35.2	0.27	8.88	9.14	—	42,082	42,082	1.97	1.91	157	42,858
Area	8.40	23.3	0.40	47.2	< 0.005	0.08	—	0.08	0.06	—	0.06	—	194	194	0.01	< 0.005	—	195
Energy	0.57	0.29	5.21	4.38	0.03	0.40	—	0.40	0.40	—	0.40	—	17,656	17,656	1.63	0.14	—	17,740
Water	—	—	—	—	—	—	—	—	—	—	—	29.2	99.0	128	3.00	0.07	—	225
Waste	—	—	—	—	—	—	—	—	—	—	—	177	0.00	177	17.7	0.00	—	619
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	364	364
Total	30.6	43.3	23.8	224	0.44	0.76	35.0	35.7	0.72	8.88	9.60	206	60,032	60,238	24.3	2.13	521	62,001
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	20.2	18.2	19.6	144	0.38	0.28	35.0	35.2	0.27	8.88	9.14	—	39,442	39,442	2.05	1.98	4.06	40,086
Area	—	15.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.57	0.29	5.21	4.38	0.03	0.40	—	0.40	0.40	—	0.40	—	17,656	17,656	1.63	0.14	—	17,740
Water	—	—	—	—	—	—	—	—	—	—	—	29.2	99.0	128	3.00	0.07	—	225
Waste	—	—	—	—	—	—	—	—	—	—	—	177	0.00	177	17.7	0.00	—	619
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	364	3

Total	20.8	34.1	24.8	148	0.42	0.68	35.0	35.6	0.66	8.88	9.54	206	57,197	57,403	24.4	2.19	368	59,034
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	19.2	17.3	19.0	143	0.37	0.27	33.0	33.2	0.25	8.37	8.62	—	38,068	38,068	1.96	1.90	64.6	38,748
Area	5.75	20.9	0.27	32.3	< 0.005	0.06	—	0.06	0.04	—	0.04	—	133	133	0.01	< 0.005	—	134
Energy	0.57	0.29	5.21	4.38	0.03	0.40	—	0.40	0.40	—	0.40	—	17,656	17,656	1.63	0.14	—	17,740
Water	—	—	—	—	—	—	—	—	—	—	—	29.2	99.0	128	3.00	0.07	—	225
Waste	—	—	—	—	—	—	—	—	—	—	—	177	0.00	177	17.7	0.00	—	619
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	364	364
Total	25.5	38.4	24.5	179	0.40	0.72	33.0	33.7	0.69	8.37	9.06	206	55,956	56,162	24.3	2.12	429	57,830
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.50	3.15	3.48	26.1	0.07	0.05	6.01	6.06	0.05	1.53	1.57	—	6,303	6,303	0.32	0.32	10.7	6,415
Area	1.05	3.81	0.05	5.90	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.0	22.0	< 0.005	< 0.005	—	22.1
Energy	0.10	0.05	0.95	0.80	0.01	0.07	—	0.07	0.07	—	0.07	—	2,923	2,923	0.27	0.02	—	2,937
Water	—	—	—	—	—	—	—	—	—	—	—	4.83	16.4	21.2	0.50	0.01	—	37.2
Waste	—	—	—	—	—	—	—	—	—	—	—	29.3	0.00	29.3	2.93	0.00	—	103
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60.3	60.3
Total	4.66	7.02	4.48	32.8	0.07	0.13	6.01	6.15	0.13	1.53	1.65	34.1	9,264	9,298	4.02	0.35	71.0	9,574

3. Construction Emissions Details

3.1. Site Preparation (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	5.35	4.49	42.5	35.3	0.05	2.25	—	2.25	2.07	—	2.07	—	5,529	5,529	0.22	0.04	—	5,548
Dust From Material Movement	—	—	—	—	—	—	5.66	5.66	—	2.69	2.69	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.16	0.97	< 0.005	0.06	—	0.06	0.06	—	0.06	—	151	151	0.01	< 0.005	—	152
Dust From Material Movement	—	—	—	—	—	—	0.16	0.16	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.21	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	25.1	25.1	< 0.005	< 0.005	—	25.2
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.08	1.48	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	252	252	0.01	0.01	1.01	256

Vendor	0.02	< 0.005	0.18	0.10	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	157	157	0.01	0.02	0.44	164
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.42	6.42	< 0.005	< 0.005	0.01	6.51
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.30	4.30	< 0.005	< 0.005	0.01	4.50
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.06	1.06	< 0.005	< 0.005	< 0.005	1.08
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.71	0.71	< 0.005	< 0.005	< 0.005	0.75
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.69	3.94	37.6	31.4	0.06	1.77	—	1.77	1.63	—	1.63	—	6,715	6,715	0.27	0.05	—	6,738
Dust From Material Movement	—	—	—	—	—	—	2.74	2.74	—	0.99	0.99	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.39	0.32	3.09	2.58	0.01	0.15	—	0.15	0.13	—	0.13	—	552	552	0.02	< 0.005	—	554
Dust From Material Movement	—	—	—	—	—	—	0.22	0.22	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.56	0.47	< 0.005	0.03	—	0.03	0.02	—	0.02	—	91.4	91.4	< 0.005	< 0.005	—	91.7
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.10	1.69	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	288	288	0.01	0.01	1.15	292
Vendor	0.05	0.01	0.58	0.31	< 0.005	0.01	0.14	0.14	0.01	0.04	0.05	—	502	502	0.04	0.07	1.40	526
Hauling	5.04	0.80	46.9	26.2	0.25	0.72	10.0	10.8	0.48	2.75	3.23	—	38,134	38,134	4.20	6.14	80.3	40,149
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	22.0	22.0	< 0.005	< 0.005	0.04	22.3
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	41.2	41.2	< 0.005	0.01	0.05	43.2
Hauling	0.41	0.06	4.06	2.16	0.02	0.06	0.82	0.88	0.04	0.22	0.26	—	3,135	3,135	0.35	0.50	2.84	3,297
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.64	3.64	< 0.005	< 0.005	0.01	3.69
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.83	6.83	< 0.005	< 0.005	0.01	7.15
Hauling	0.08	0.01	0.74	0.39	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	519	519	0.06	0.08	0.47	546

3.5. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.55	1.30	12.2	14.2	0.03	0.54	—	0.54	0.49	—	0.49	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.55	1.30	12.2	14.2	0.03	0.54	—	0.54	0.49	—	0.49	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.40	3.72	4.34	0.01	0.16	—	0.16	0.15	—	0.15	—	803	803	0.03	0.01	—	806

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.07	0.68	0.79	< 0.005	0.03	—	0.03	0.03	—	0.03	—	133	133	0.01	< 0.005	—	133
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.61	2.39	2.21	38.6	0.00	0.00	5.96	5.96	0.00	1.40	1.40	—	6,566	6,566	0.28	0.23	26.3	6,667
Vendor	0.52	0.14	5.65	3.03	0.04	0.07	1.34	1.41	0.07	0.37	0.44	—	4,922	4,922	0.38	0.73	13.7	5,164
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.48	2.25	2.60	29.2	0.00	0.00	5.96	5.96	0.00	1.40	1.40	—	6,018	6,018	0.29	0.23	0.68	6,094
Vendor	0.51	0.13	5.88	3.07	0.04	0.07	1.34	1.41	0.07	0.37	0.44	—	4,925	4,925	0.38	0.73	0.36	5,153
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.75	0.68	0.80	9.35	0.00	0.00	1.80	1.80	0.00	0.42	0.42	—	1,863	1,863	0.09	0.07	3.46	1,889
Vendor	0.16	0.04	1.81	0.93	0.01	0.02	0.41	0.43	0.02	0.11	0.13	—	1,503	1,503	0.12	0.22	1.80	1,574
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.12	0.15	1.71	0.00	0.00	0.33	0.33	0.00	0.08	0.08	—	308	308	0.01	0.01	0.57	313
Vendor	0.03	0.01	0.33	0.17	< 0.005	< 0.005	0.07	0.08	< 0.005	0.02	0.02	—	249	249	0.02	0.04	0.30	261
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.45	1.21	11.3	14.1	0.03	0.47	—	0.47	0.43	—	0.43	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.45	1.21	11.3	14.1	0.03	0.47	—	0.47	0.43	—	0.43	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74	0.62	5.80	7.25	0.01	0.24	—	0.24	0.22	—	0.22	—	1,349	1,349	0.05	0.01	—	1,353
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	1.06	1.32	< 0.005	0.04	—	0.04	0.04	—	0.04	—	223	223	0.01	< 0.005	—	224
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.32	2.09	2.01	35.5	0.00	0.00	5.96	5.96	0.00	1.40	1.40	—	6,426	6,426	0.27	0.23	23.8	6,524
Vendor	0.48	0.14	5.38	2.91	0.04	0.07	1.34	1.41	0.07	0.37	0.44	—	4,843	4,843	0.38	0.73	13.6	5,085
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.19	1.96	2.21	26.8	0.00	0.00	5.96	5.96	0.00	1.40	1.40	—	5,892	5,892	0.28	0.23	0.62	5,967
Vendor	0.47	0.13	5.62	2.92	0.04	0.07	1.34	1.41	0.07	0.37	0.44	—	4,846	4,846	0.38	0.73	0.35	5,074
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.11	0.99	1.23	14.5	0.00	0.00	3.02	3.02	0.00	0.71	0.71	—	3,064	3,064	0.14	0.12	5.28	3,107
Vendor	0.24	0.07	2.90	1.48	0.02	0.04	0.68	0.72	0.04	0.19	0.22	—	2,484	2,484	0.19	0.38	3.03	2,604
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.18	0.22	2.64	0.00	0.00	0.55	0.55	0.00	0.13	0.13	—	507	507	0.02	0.02	0.87	514
Vendor	0.04	0.01	0.53	0.27	< 0.005	0.01	0.12	0.13	0.01	0.03	0.04	—	411	411	0.03	0.06	0.50	431
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.95	0.80	7.45	9.98	0.01	0.35	—	0.35	0.32	—	0.32	—	1,511	1,511	0.06	0.01	—	1,517
Paving	—	0.46	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.41	0.55	< 0.005	0.02	—	0.02	0.02	—	0.02	—	82.8	82.8	< 0.005	< 0.005	—	83.1
Paving	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.7	13.7	< 0.005	< 0.005	—	13.8
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.07	1.17	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	211	211	0.01	0.01	0.78	215
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.8	10.8	< 0.005	< 0.005	0.02	10.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.78	1.78	< 0.005	< 0.005	< 0.005	1.81
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.17	1.18	1.52	< 0.005	0.04	—	0.04	0.03	—	0.03	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	—	34.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.29	0.37	< 0.005	0.01	—	0.01	0.01	—	0.01	—	43.9	43.9	< 0.005	< 0.005	—	44.0
Architectural Coatings	—	8.40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.27	7.27	< 0.005	< 0.005	—	7.29
Architectural Coatings	—	1.53	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.42	0.40	7.10	0.00	0.00	1.19	1.19	0.00	0.28	0.28	—	1,285	1,285	0.05	0.05	4.77	1,305
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.12	1.39	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	295	295	0.01	0.01	0.51	299
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.25	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	48.8	48.8	< 0.005	< 0.005	0.08	49.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	21.7	19.7	18.2	172	0.41	0.28	35.0	35.2	0.27	8.88	9.14	—	42,082	42,082	1.97	1.91	157	42,858
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	21.7	19.7	18.2	172	0.41	0.28	35.0	35.2	0.27	8.88	9.14	—	42,082	42,082	1.97	1.91	157	42,858
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	20.2	18.2	19.6	144	0.38	0.28	35.0	35.2	0.27	8.88	9.14	—	39,442	39,442	2.05	1.98	4.06	40,086
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	20.2	18.2	19.6	144	0.38	0.28	35.0	35.2	0.27	8.88	9.14	—	39,442	39,442	2.05	1.98	4.06	40,086
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	3.50	3.15	3.48	26.1	0.07	0.05	6.01	6.06	0.05	1.53	1.57	—	6,303	6,303	0.32	0.32	10.7	6,415
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Total	3.50	3.15	3.48	26.1	0.07	0.05	6.01	6.06	0.05	1.53	1.57	—	6,303	6,303	0.32	0.32	10.7	6,415

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	9,900	9,900	0.94	0.11	—	9,957
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	1,539	1,539	0.15	0.02	—	1,548
Total	—	—	—	—	—	—	—	—	—	—	—	—	11,438	11,438	1.08	0.13	—	11,505
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	9,900	9,900	0.94	0.11	—	9,957
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	1,539	1,539	0.15	0.02	—	1,548
Total	—	—	—	—	—	—	—	—	—	—	—	—	11,438	11,438	1.08	0.13	—	11,505
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	1,639	1,639	0.16	0.02	—	1,648
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	255	255	0.02	< 0.005	—	256
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,894	1,894	0.18	0.02	—	1

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	0.57	0.29	5.21	4.38	0.03	0.40	—	0.40	0.40	—	0.40	—	6,218	6,218	0.55	0.01	—	6,235
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.57	0.29	5.21	4.38	0.03	0.40	—	0.40	0.40	—	0.40	—	6,218	6,218	0.55	0.01	—	6,235
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	0.57	0.29	5.21	4.38	0.03	0.40	—	0.40	0.40	—	0.40	—	6,218	6,218	0.55	0.01	—	6,235
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.57	0.29	5.21	4.38	0.03	0.40	—	0.40	0.40	—	0.40	—	6,218	6,218	0.55	0.01	—	6,235
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	0.10	0.05	0.95	0.80	0.01	0.07	—	0.07	0.07	—	0.07	—	1,029	1,029	0.09	< 0.005	—	1,032
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.10	0.05	0.95	0.80	0.01	0.07	—	0.07	0.07	—	0.07	—	1,029	1,029	0.09	< 0.005	—	1,032

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	13.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	8.40	7.75	0.40	47.2	< 0.005	0.08	—	0.08	0.06	—	0.06	—	194	194	0.01	< 0.005	—	195
Total	8.40	23.3	0.40	47.2	< 0.005	0.08	—	0.08	0.06	—	0.06	—	194	194	0.01	< 0.005	—	195
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	13.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	15.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	2.54	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landsca Equipment	1.05	0.97	0.05	5.90	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.0	22.0	< 0.005	< 0.005	—	22.1
Total	1.05	3.81	0.05	5.90	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.0	22.0	< 0.005	< 0.005	—	22.1

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	29.2	99.0	128	3.00	0.07	—	225
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	29.2	99.0	128	3.00	0.07	—	225
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	29.2	99.0	128	3.00	0.07	—	225
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	29.2	99.0	128	3.00	0.07	—	225
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	4.83	16.4	21.2	0.50	0.01	—	37.2

Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4.83	16.4	21.2	0.50	0.01	—	37.2

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	177	0.00	177	17.7	0.00	—	619
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	177	0.00	177	17.7	0.00	—	619
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	177	0.00	177	17.7	0.00	—	619
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	177	0.00	177	17.7	0.00	—	619
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	29.3	0.00	29.3	2.93	0.00	—	103

Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	29.3	0.00	29.3	2.93	0.00	—	103

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	364	364
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	364	364
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	364	364
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	364	364
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60.3	60.3
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60.3	60.3

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	6/3/2024	6/14/2024	5.00	10.0	—
Grading	Grading	6/17/2024	7/26/2024	5.00	30.0	—
Building Construction	Building Construction	7/29/2024	9/19/2025	5.00	300	—
Paving	Paving	8/25/2025	9/19/2025	5.00	20.0	—
Architectural Coating	Architectural Coating	5/19/2025	9/19/2025	5.00	90.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Crawler Tractors	Diesel	Average	4.00	8.00	87.0	0.43
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Crawler Tractors	Diesel	Average	2.00	8.00	87.0	0.43
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	5.00	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	16.0	10.2	HHDT,MHDT
Grading	Hauling	542	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	456	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	157	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	91.2	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT

Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	980,480	325,442	8,311

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	35.0	0.00	—
Grading	—	130,000	120	0.00	—
Paving	0.00	0.00	0.00	0.00	3.53

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt

Hotel	0.00	0%
Enclosed Parking with Elevator	3.53	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	349	0.03	< 0.005
2024	0.00	349	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Hotel	4,794	4,842	3,564	1,688,177	48,806	49,295	36,284	17,186,694
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	981,167	325,518	9,226

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Hotel	10,364,336	349	0.0330	0.0040	19,400,828
Enclosed Parking with Elevator	1,610,978	349	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Hotel	15,220,062	0.00
Enclosed Parking with Elevator	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Hotel	329	—
Enclosed Parking with Elevator	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Hotel	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Hotel	Other commercial A/C and heat pumps	User Defined	750	1.80	4.00	4.00	18.0
Hotel	User Defined	User Defined	150	< 0.005	7.50	7.50	20.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

2941

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	20.2	annual days of extreme heat
Extreme Precipitation	5.10	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2

Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	88.8
AQ-PM	97.4
AQ-DPM	86.0
Drinking Water	93.3
Lead Risk Housing	97.4
Pesticides	14.9
Toxic Releases	71.7
Traffic	47.3
Effect Indicators	—
CleanUp Sites	96.3

2944

Groundwater	83.7
Haz Waste Facilities/Generators	96.6
Impaired Water Bodies	43.8
Solid Waste	92.8
Sensitive Population	—
Asthma	70.1
Cardio-vascular	82.9
Low Birth Weights	67.4
Socioeconomic Factor Indicators	—
Education	95.7
Housing	89.8
Linguistic	96.3
Poverty	94.2
Unemployment	19.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	5.184139612
Employed	38.86821506
Median HI	6.518670602
Education	—
Bachelor's or higher	4.157577313
High school enrollment	100
Preschool enrollment	44.43731554
Transportation	—

2945

Auto Access	53.75336841
Active commuting	60.25920698
Social	—
2-parent households	47.31168998
Voting	7.776209419
Neighborhood	—
Alcohol availability	22.98216348
Park access	54.67727448
Retail density	38.34210189
Supermarket access	66.63672527
Tree canopy	31.84909534
Housing	—
Homeownership	26.45964327
Housing habitability	7.55806493
Low-inc homeowner severe housing cost burden	3.284999358
Low-inc renter severe housing cost burden	23.90606955
Uncrowded housing	9.611189529
Health Outcomes	—
Insured adults	1.796484024
Arthritis	48.2
Asthma ER Admissions	30.2
High Blood Pressure	56.0
Cancer (excluding skin)	94.8
Asthma	7.7
Coronary Heart Disease	28.5
Chronic Obstructive Pulmonary Disease	11.3
Diagnosed Diabetes	10.7

2946

Life Expectancy at Birth	49.6
Cognitively Disabled	70.6
Physically Disabled	78.7
Heart Attack ER Admissions	7.4
Mental Health Not Good	2.6
Chronic Kidney Disease	20.1
Obesity	4.2
Pedestrian Injuries	85.8
Physical Health Not Good	2.6
Stroke	22.5
Health Risk Behaviors	—
Binge Drinking	73.8
Current Smoker	3.5
No Leisure Time for Physical Activity	3.6
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	33.8
Elderly	95.7
English Speaking	3.6
Foreign-born	91.6
Outdoor Workers	9.3
Climate Change Adaptive Capacity	—
Impervious Surface Cover	63.3
Traffic Density	55.4
Traffic Access	70.1
Other Indices	—

2947

Hardship	94.8
Other Decision Support	—
2016 Voting	30.3

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	100
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Taken from site plan
Construction: Construction Phases	Taken from client data Building Construction, Paving, and Architectural Coating overlap to present a conservative analysis

Construction: Off-Road Equipment	T/L/B replaced with Crawler Tractor to accurately calculate disturbance for Site Preparation and Grading phases. Standard 8 hours work days
Construction: Trips and VMT	Vendor Trips adjusted based on CalEEMod defaults for Building Construction and number of days for Demolition, Site Preparation, Grading, and Building Construction
Construction: Architectural Coatings	SCAQMD Rule 1113
Operations: Vehicle Data	Taken from trip generation
Operations: Refrigerants	As of 1 January 2022, new commercial refrigeration equipment may not use refrigerants with a GWP of 150 or greater. Further, R-404A (the CalEEMod default) is unacceptable for new supermarket and cold storage systems as of 1 January 2019 and 2023, respectively Beginning 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater

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APPENDIX 3.2:

AERMOD LOCALIZED EMISSIONS MODEL OUTPUTS

```
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 12.0.0
** Lakes Environmental Software Inc.
** Date: 4/19/2024
** File: C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\Construction LST
CO\15693-Guasti & Holt.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti &
   MODELOPT DFAULT CONC
   AVERTIME 1 8 PERIOD
   URBANOPT 2035210 County_of_San_Bernardino
   POLLUTID CO
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "15693-Guasti & Holt.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     444242.944  3769467.059      293.700
   LOCATION VOL2         VOLUME     444272.020  3769484.508      293.810
   LOCATION VOL3         VOLUME     444300.793  3769498.282      293.730
   LOCATION VOL4         VOLUME     444329.261  3769513.893      293.600
   LOCATION VOL5         VOLUME     444357.422  3769528.280      293.640
   LOCATION VOL6         VOLUME     444385.889  3769541.748      293.610
   LOCATION VOL7         VOLUME     444413.132  3769549.401      293.400
   LOCATION VOL8         VOLUME     444441.600  3769548.483      293.090
   LOCATION VOL9         VOLUME     444469.455  3769555.829      292.810
   LOCATION VOL10        VOLUME     444469.761  3769527.974      292.810
   LOCATION VOL11        VOLUME     444470.679  3769499.813      292.190
   LOCATION VOL12        VOLUME     444461.190  3769471.345      291.870
   LOCATION VOL13        VOLUME     444441.293  3769520.934      293.100
```

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LOCATION VOL14        VOLUME     444442.518  3769499.200      292.910
LOCATION VOL15        VOLUME     444433.029  3769471.345      292.530
LOCATION VOL16        VOLUME     444462.108  3769443.796      290.990
LOCATION VOL17        VOLUME     444477.719  3769423.900      290.030
LOCATION VOL18        VOLUME     444479.250  3769395.738      289.870
LOCATION VOL19        VOLUME     444485.678  3769367.883      289.640
LOCATION VOL20        VOLUME     444485.678  3769347.375      289.640
LOCATION VOL21        VOLUME     444434.559  3769443.184      291.880
LOCATION VOL22        VOLUME     444413.744  3769521.852      293.250
LOCATION VOL23        VOLUME     444451.089  3769415.023      290.920
LOCATION VOL24        VOLUME     444457.211  3769387.780      290.450
LOCATION VOL25        VOLUME     444458.129  3769359.619      290.190
LOCATION VOL26        VOLUME     444456.905  3769347.375      290.200
LOCATION VOL27        VOLUME     444429.049  3769347.681      290.600
LOCATION VOL28        VOLUME     444401.500  3769347.681      291.160
LOCATION VOL29        VOLUME     444373.339  3769351.660      291.500
LOCATION VOL30        VOLUME     444344.260  3769360.537      291.890
LOCATION VOL31        VOLUME     444315.792  3769372.781      292.300
LOCATION VOL32        VOLUME     444287.325  3769382.576      292.690
LOCATION VOL33        VOLUME     444266.510  3769410.125      293.050
LOCATION VOL34        VOLUME     444246.613  3769438.593      293.350
LOCATION VOL35        VOLUME     444271.714  3769456.959      293.530
LOCATION VOL36        VOLUME     444273.550  3769438.286      293.340
LOCATION VOL37        VOLUME     444381.910  3769457.265      292.800
LOCATION VOL38        VOLUME     444385.583  3769513.893      293.330
LOCATION VOL39        VOLUME     444300.793  3769470.733      293.450
LOCATION VOL40        VOLUME     444328.954  3769486.344      293.320
LOCATION VOL41        VOLUME     444357.728  3769500.731      293.360
LOCATION VOL42        VOLUME     444413.744  3769494.915      293.000
LOCATION VOL43        VOLUME     444429.662  3769374.617      290.940
LOCATION VOL44        VOLUME     444429.049  3769402.473      291.450
LOCATION VOL45        VOLUME     444422.621  3769430.940      291.860
LOCATION VOL46        VOLUME     444407.010  3769458.489      292.560
LOCATION VOL47        VOLUME     444404.561  3769486.344      292.910
LOCATION VOL48        VOLUME     444377.012  3769485.426      293.130
LOCATION VOL49        VOLUME     444354.361  3769472.570      293.080
LOCATION VOL50        VOLUME     444301.099  3769442.878      293.170
LOCATION VOL51        VOLUME     444328.342  3769458.795      293.050
LOCATION VOL52        VOLUME     444294.671  3769411.043      292.910
LOCATION VOL53        VOLUME     444301.099  3769427.267      293.010
LOCATION VOL54        VOLUME     444315.180  3769400.942      292.600
LOCATION VOL55        VOLUME     444328.648  3769430.634      292.760
LOCATION VOL56        VOLUME     444356.810  3769444.408      292.790
LOCATION VOL57        VOLUME     444343.647  3769389.004      292.190
LOCATION VOL58        VOLUME     444343.341  3769416.553      292.500
LOCATION VOL59        VOLUME     444371.809  3769380.127      291.810
LOCATION VOL60        VOLUME     444400.582  3769376.148      291.470
LOCATION VOL61        VOLUME     444400.276  3769404.309      291.770
LOCATION VOL62        VOLUME     444371.502  3769408.289      292.210
LOCATION VOL63        VOLUME     444371.502  3769436.144      292.670
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   LOCATION VOL64        VOLUME     444395.991  3769430.328      292.140
** Source Parameters **
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   SRCPARAM VOL2         0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL3         0.0086938538     5.000     6.407     1.400
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   SRCPARAM VOL5         0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL6         0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL7         0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL8         0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL9         0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL10        0.0086938538     5.000     6.407     1.400
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   SRCPARAM VOL12        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL13        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL14        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL15        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL16        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL17        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL18        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL19        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL20        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL21        0.0086938538     5.000     6.407     1.400
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   SRCPARAM VOL24        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL25        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL26        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL27        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL28        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL29        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL30        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL31        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL32        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL33        0.0086938538     5.000     6.407     1.400
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   SRCPARAM VOL41        0.0086938538     5.000     6.407     1.400
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   SRCPARAM VOL44        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL45        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL46        0.0086938538     5.000     6.407     1.400
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   SRCPARAM VOL53        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL54        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL55        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL56        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL57        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL58        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL59        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL60        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL61        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL62        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL63        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL64        0.0086938538     5.000     6.407     1.400
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

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** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

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** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL37        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL38        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL39        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Sunday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL40        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL41        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL42        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL43        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL44        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL45        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL46        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Saturday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL47        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL48        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL49        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Sunday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL50        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL51        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL52        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL53        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL54        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL55        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL56        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Saturday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL57        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL58        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL59        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

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** Sunday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL60        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL61        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL62        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL63        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL64        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED "15693-Guasti & Holt.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE KONT_V9_ADJU\KONT_v9.SFC
   PROFFILE KONT_V9_ADJU\KONT_v9.PFL
```

```
   SURFDATA 3102 2012
   UAIRDATA 3190 2012
   PROFBASE 289.0 METERS
ME FINISHED
**
**********************************
** AERMOD Output Pathway
**********************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
   RECTABLE 8 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "15693-Guasti & Holt.AD\01H1GALL.PLT" 31
   PLOTFILE 8 ALL 1ST "15693-Guasti & Holt.AD\08H1GALL.PLT" 32
   PLOTFILE PERIOD ALL "15693-Guasti & Holt.AD\PE00GALL.PLT" 33
   SUMMFILE "15693-Guasti & Holt.sum"
OU FINISHED
**
**********************************
** Project Parameters
**********************************
** PROJCTN  CoordinateSystemUTM
** DESCPTN  UTM: Universal Transverse Mercator
** DATUM    North American Datum 1983
** DTMRGN   CONUS
** UNITS    m
** ZONE     11
** ZONEINX  0
**
**
**********************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 12.0.0
** Lakes Environmental Software Inc.
** Date: 4/19/2024
** File: C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\Construction LST
CO\15693-Guasti & Holt.ADI
**
**********************************
**
**
**********************************
** AERMOD Control Pathway
**********************************
**
**
```

```
CO STARTING
   TITLEONE C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti &
   MODELOPT DFAULT CONC
   AVERTIME 1 8 PERIOD
   URBANOPT 2035210 County_of_San_Bernardino
   POLLUTID CO
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "15693-Guasti & Holt.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     444242.944  3769467.059      293.700
   LOCATION VOL2         VOLUME     444272.020  3769484.508      293.810
   LOCATION VOL3         VOLUME     444300.793  3769498.282      293.730
   LOCATION VOL4         VOLUME     444329.261  3769513.893      293.600
   LOCATION VOL5         VOLUME     444357.422  3769528.280      293.640
   LOCATION VOL6         VOLUME     444385.889  3769541.748      293.610
   LOCATION VOL7         VOLUME     444413.132  3769549.401      293.400
   LOCATION VOL8         VOLUME     444441.600  3769548.483      293.090
   LOCATION VOL9         VOLUME     444469.455  3769555.829      292.810
   LOCATION VOL10        VOLUME     444469.761  3769527.974      292.810
   LOCATION VOL11        VOLUME     444470.679  3769499.813      292.190
   LOCATION VOL12        VOLUME     444461.190  3769471.345      291.870
   LOCATION VOL13        VOLUME     444441.293  3769520.934      293.100
   LOCATION VOL14        VOLUME     444442.518  3769499.200      292.910
   LOCATION VOL15        VOLUME     444433.029  3769471.345      292.530
   LOCATION VOL16        VOLUME     444462.108  3769443.796      290.990
   LOCATION VOL17        VOLUME     444477.719  3769423.900      290.030
   LOCATION VOL18        VOLUME     444479.250  3769395.738      289.870
   LOCATION VOL19        VOLUME     444485.678  3769367.883      289.640
   LOCATION VOL20        VOLUME     444485.678  3769347.375      289.640
   LOCATION VOL21        VOLUME     444434.559  3769443.184      291.880
   LOCATION VOL22        VOLUME     444413.744  3769521.852      293.250
   LOCATION VOL23        VOLUME     444451.089  3769415.023      290.920
   LOCATION VOL24        VOLUME     444457.211  3769387.780      290.450
   LOCATION VOL25        VOLUME     444458.129  3769359.619      290.190
   LOCATION VOL26        VOLUME     444456.905  3769347.375      290.200
   LOCATION VOL27        VOLUME     444429.049  3769347.681      290.600
   LOCATION VOL28        VOLUME     444401.500  3769347.681      291.160
   LOCATION VOL29        VOLUME     444373.339  3769351.660      291.500
   LOCATION VOL30        VOLUME     444344.260  3769360.537      291.890
   LOCATION VOL31        VOLUME     444315.792  3769372.781      292.300
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   LOCATION VOL32        VOLUME     444287.325  3769382.576      292.690
   LOCATION VOL33        VOLUME     444266.510  3769410.125      293.050
   LOCATION VOL34        VOLUME     444246.613  3769438.593      293.350
   LOCATION VOL35        VOLUME     444271.714  3769456.959      293.530
   LOCATION VOL36        VOLUME     444273.550  3769438.286      293.340
   LOCATION VOL37        VOLUME     444381.910  3769457.265      292.800
   LOCATION VOL38        VOLUME     444385.583  3769513.893      293.330
   LOCATION VOL39        VOLUME     444300.793  3769470.733      293.450
   LOCATION VOL40        VOLUME     444328.954  3769486.344      293.320
   LOCATION VOL41        VOLUME     444357.728  3769500.731      293.360
   LOCATION VOL42        VOLUME     444413.744  3769494.915      293.000
   LOCATION VOL43        VOLUME     444429.662  3769374.617      290.940
   LOCATION VOL44        VOLUME     444429.049  3769402.473      291.450
   LOCATION VOL45        VOLUME     444422.621  3769430.940      291.860
   LOCATION VOL46        VOLUME     444407.010  3769458.489      292.560
   LOCATION VOL47        VOLUME     444404.561  3769486.344      292.910
   LOCATION VOL48        VOLUME     444377.012  3769485.426      293.130
   LOCATION VOL49        VOLUME     444354.361  3769472.570      293.080
   LOCATION VOL50        VOLUME     444301.099  3769442.878      293.170
   LOCATION VOL51        VOLUME     444328.342  3769458.795      293.050
   LOCATION VOL52        VOLUME     444294.671  3769411.043      292.910
   LOCATION VOL53        VOLUME     444301.099  3769427.267      293.010
   LOCATION VOL54        VOLUME     444315.180  3769400.942      292.600
   LOCATION VOL55        VOLUME     444328.648  3769430.634      292.760
   LOCATION VOL56        VOLUME     444356.810  3769444.408      292.790
   LOCATION VOL57        VOLUME     444343.647  3769389.004      292.190
   LOCATION VOL58        VOLUME     444343.341  3769416.553      292.500
   LOCATION VOL59        VOLUME     444371.809  3769380.127      291.810
   LOCATION VOL60        VOLUME     444400.582  3769376.148      291.470
   LOCATION VOL61        VOLUME     444400.276  3769404.309      291.770
   LOCATION VOL62        VOLUME     444371.502  3769408.289      292.210
   LOCATION VOL63        VOLUME     444371.502  3769436.144      292.670
   LOCATION VOL64        VOLUME     444395.991  3769430.328      292.140
** Source Parameters **
   SRCPARAM VOL1         0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL2         0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL3         0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL4         0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL5         0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL6         0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL7         0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL8         0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL9         0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL10        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL11        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL12        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL13        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL14        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL15        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL16        0.0086938538     5.000     6.407     1.400
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SRCPARAM VOL17        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL18        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL19        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL20        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL21        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL22        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL23        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL24        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL25        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL26        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL27        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL28        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL29        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL30        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL31        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL32        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL33        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL34        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL35        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL36        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL37        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL38        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL39        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL40        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL41        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL42        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL43        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL44        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL45        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL46        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL47        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL48        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL49        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL50        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL51        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL52        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL53        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL54        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL55        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL56        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL57        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL58        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL59        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL60        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL61        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL62        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL63        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL64        0.0086938538     5.000     6.407     1.400
URBANSRC ALL
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** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL37        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL38        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL39        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL40        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL41        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL42        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL43        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL44        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL45        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL46        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL47        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL48        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL49        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL50        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL51        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL52        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL53        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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```
   EMISFACT VOL54        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL55        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL56        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL57        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

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   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL58        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL59        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL60        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

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   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL61        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL62        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL63        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
```

```
   EMISFACT VOL64        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED "15693-Guasti & Holt.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE KONT_V9_ADJU\KONT_v9.SFC
   PROFFILE KONT_V9_ADJU\KONT_v9.PFL
   SURFDATA 3102 2012
   UAIRDATA 3190 2012
   PROFBASE 289.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
   RECTABLE 8 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "15693-Guasti & Holt.AD\01H1GALL.PLT" 31
   PLOTFILE 8 ALL 1ST "15693-Guasti & Holt.AD\08H1GALL.PLT" 32
   PLOTFILE PERIOD ALL "15693-Guasti & Holt.AD\PE00GALL.PLT" 33
```

```
   SUMMFILE "15693-Guasti & Holt.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186    1153       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
      0.50
 ME W187    1153       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET


 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                         ***       10:05:50

                                   PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                            ***     MODEL SETUP OPTIONS SUMMARY
  ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -

 ** Model Options Selected:
      * Model Uses Regulatory DEFAULT Options
      * Model Is Setup For Calculation of Average CONCentration Values.
      * NO GAS DEPOSITION Data Provided.
      * NO PARTICLE DEPOSITION Data Provided.
      * Model Uses NO DRY DEPLETION. DDPLETE  =  F
      * Model Uses NO WET DEPLETION. WETDPLT  =  F
      * Stack-tip Downwash.
      * Model Accounts for ELEVated Terrain Effects.
```

```
      * Use Calms Processing Routine.
      * Use Missing Data Processing Routine.
      * No Exponential Decay.
      * Model Uses URBAN Dispersion Algorithm for the SBL for    64 Source(s),
        for Total of    1 Urban Area(s):
   Urban Population =   2035210.0 ;  Urban Roughness Length =  1.000 m
      * Urban Roughness Length of 1.0 Meter Used.
      * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
      * CCVR_Sub - Meteorological data includes CCVR substitutions
      * TEMP_Sub - Meteorological data includes TEMP substitutions
      * Model Accepts FLAGPOLE Receptor . Heights.
      * The User Specified a Pollutant Type of: CO

 **Model Calculates  2 Short Term Average(s) of:   1-HR   8-HR
     and Calculates PERIOD Averages

 **This Run Includes:     64 Source(s);       1 Source Group(s); and      27
Receptor(s)

                with:      0 POINT(s), including
                           0 POINTCAP(s) and      0 POINTHOR(s)
                 and:     64 VOLUME source(s)
                 and:      0 AREA type source(s)
                 and:      0 LINE source(s)
                 and:      0 RLINE/RLINEXT source(s)
                 and:      0 OPENPIT source(s)
                 and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                 and:      0 SWPOINT source(s)


 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  16216

 **Output Options Selected:
          Model Outputs Tables of PERIOD Averages by Receptor
          Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
Keyword)
          Model Outputs External File(s) of High Values for Plotting (PLOTFILE
Keyword)
          Model Outputs Separate Summary File of High Ranked Values (SUMMFILE
Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                 m for Missing
Hours
                                                                 b for Both Calm
and Missing Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   289.00 ;  Decay
```

Coef. =   0.000   ; Rot. Angle =   0.0
                  Emission Units = GRAMS/SEC   ;
Emission Rate Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =   3.6 MB of RAM.

 **Input Runstream File: aermod.inp

 **Output Print File: aermod.out

 **Detailed Error/Message File: 15693-Guasti & Holt.err

 **File for Summary of Results: 15693-Guasti & Holt.sum

 *** AERMOD - VERSION 23132 ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION 16216 ***   ***
                       ***   10:05:50

                                  PAGE   2
 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                                                *** VOLUME SOURCE DATA ***

               NUMBER EMISSION RATE   BASE   RELEASE   INIT.
INIT.   URBAN EMISSION RATE   AIRCRAFT
   SOURCE   PART. (GRAMS/SEC)   X   Y   ELEV.   HEIGHT   SY
SZ   SOURCE SCALAR VARY
     ID   CATS.   (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)   BY
 -
- - - - - - - - - - - - - - - - - - - -

 VOL1   0   0.86939E-02 444242.9 3769467.1   293.7   5.00   6.41
1.40   YES   HRDOW   NO
 VOL2   0   0.86939E-02 444272.0 3769484.5   293.8   5.00   6.41
1.40   YES   HRDOW   NO
 VOL3   0   0.86939E-02 444300.8 3769498.3   293.7   5.00   6.41
1.40   YES   HRDOW   NO
 VOL4   0   0.86939E-02 444329.3 3769513.9   293.6   5.00   6.41
1.40   YES   HRDOW   NO
 VOL5   0   0.86939E-02 444357.4 3769528.3   293.6   5.00   6.41
1.40   YES   HRDOW   NO
 VOL6   0   0.86939E-02 444385.9 3769541.7   293.6   5.00   6.41
1.40   YES   HRDOW   NO
 VOL7   0   0.86939E-02 444413.1 3769549.4   293.4   5.00   6.41

```
1.40     YES   HRDOW            NO
 VOL8             0   0.86939E-02  444441.6 3769548.5   293.1     5.00     6.41
1.40     YES   HRDOW            NO
 VOL9             0   0.86939E-02  444469.5 3769555.8   292.8     5.00     6.41
1.40     YES   HRDOW            NO
 VOL10            0   0.86939E-02  444469.8 3769528.0   292.8     5.00     6.41
1.40     YES   HRDOW            NO
 VOL11            0   0.86939E-02  444470.7 3769499.8   292.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL12            0   0.86939E-02  444461.2 3769471.3   291.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL13            0   0.86939E-02  444441.3 3769520.9   293.1     5.00     6.41
1.40     YES   HRDOW            NO
 VOL14            0   0.86939E-02  444442.5 3769499.2   292.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL15            0   0.86939E-02  444433.0 3769471.3   292.5     5.00     6.41
1.40     YES   HRDOW            NO
 VOL16            0   0.86939E-02  444462.1 3769443.8   291.0     5.00     6.41
1.40     YES   HRDOW            NO
 VOL17            0   0.86939E-02  444477.7 3769423.9   290.0     5.00     6.41
1.40     YES   HRDOW            NO
 VOL18            0   0.86939E-02  444479.2 3769395.7   289.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL19            0   0.86939E-02  444485.7 3769367.9   289.6     5.00     6.41
1.40     YES   HRDOW            NO
 VOL20            0   0.86939E-02  444485.7 3769347.4   289.6     5.00     6.41
1.40     YES   HRDOW            NO
 VOL21            0   0.86939E-02  444434.6 3769443.2   291.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL22            0   0.86939E-02  444413.7 3769521.9   293.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL23            0   0.86939E-02  444451.1 3769415.0   290.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL24            0   0.86939E-02  444457.2 3769387.8   290.4     5.00     6.41
1.40     YES   HRDOW            NO
 VOL25            0   0.86939E-02  444458.1 3769359.6   290.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL26            0   0.86939E-02  444456.9 3769347.4   290.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL27            0   0.86939E-02  444429.0 3769347.7   290.6     5.00     6.41
1.40     YES   HRDOW            NO
 VOL28            0   0.86939E-02  444401.5 3769347.7   291.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL29            0   0.86939E-02  444373.3 3769351.7   291.5     5.00     6.41
1.40     YES   HRDOW            NO
 VOL30            0   0.86939E-02  444344.3 3769360.5   291.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL31            0   0.86939E-02  444315.8 3769372.8   292.3     5.00     6.41
1.40     YES   HRDOW            NO
 VOL32            0   0.86939E-02  444287.3 3769382.6   292.7     5.00     6.41
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1.40     YES   HRDOW            NO
 VOL33           0   0.86939E-02  444266.5 3769410.1   293.1     5.00     6.41
1.40     YES   HRDOW            NO
 VOL34           0   0.86939E-02  444246.6 3769438.6   293.4     5.00     6.41
1.40     YES   HRDOW            NO
 VOL35           0   0.86939E-02  444271.7 3769457.0   293.5     5.00     6.41
1.40     YES   HRDOW            NO
 VOL36           0   0.86939E-02  444273.5 3769438.3   293.3     5.00     6.41
1.40     YES   HRDOW            NO
 VOL37           0   0.86939E-02  444381.9 3769457.3   292.8     5.00     6.41
1.40     YES   HRDOW            NO
 VOL38           0   0.86939E-02  444385.6 3769513.9   293.3     5.00     6.41
1.40     YES   HRDOW            NO
 VOL39           0   0.86939E-02  444300.8 3769470.7   293.4     5.00     6.41
1.40     YES   HRDOW            NO
 VOL40           0   0.86939E-02  444329.0 3769486.3   293.3     5.00     6.41
1.40     YES   HRDOW            NO
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
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 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                                    *** VOLUME SOURCE DATA ***

               NUMBER EMISSION RATE                    BASE    RELEASE    INIT.
INIT.   URBAN  EMISSION RATE   AIRCRAFT
   SOURCE       PART.  (GRAMS/SEC)     X        Y      ELEV.   HEIGHT      SY
SZ     SOURCE  SCALAR VARY
     ID          CATS.               (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)              BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - -

 VOL41           0   0.86939E-02  444357.7 3769500.7   293.4     5.00     6.41
1.40     YES   HRDOW            NO
 VOL42           0   0.86939E-02  444413.7 3769494.9   293.0     5.00     6.41
1.40     YES   HRDOW            NO
 VOL43           0   0.86939E-02  444429.7 3769374.6   290.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL44           0   0.86939E-02  444429.0 3769402.5   291.4     5.00     6.41
1.40     YES   HRDOW            NO
 VOL45           0   0.86939E-02  444422.6 3769430.9   291.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL46           0   0.86939E-02  444407.0 3769458.5   292.6     5.00     6.41
1.40     YES   HRDOW            NO
```

```
 VOL47            0   0.86939E-02  444404.6 3769486.3   292.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL48            0   0.86939E-02  444377.0 3769485.4   293.1     5.00     6.41
1.40     YES   HRDOW            NO
 VOL49            0   0.86939E-02  444354.4 3769472.6   293.1     5.00     6.41
1.40     YES   HRDOW            NO
 VOL50            0   0.86939E-02  444301.1 3769442.9   293.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL51            0   0.86939E-02  444328.3 3769458.8   293.1     5.00     6.41
1.40     YES   HRDOW            NO
 VOL52            0   0.86939E-02  444294.7 3769411.0   292.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL53            0   0.86939E-02  444301.1 3769427.3   293.0     5.00     6.41
1.40     YES   HRDOW            NO
 VOL54            0   0.86939E-02  444315.2 3769400.9   292.6     5.00     6.41
1.40     YES   HRDOW            NO
 VOL55            0   0.86939E-02  444328.6 3769430.6   292.8     5.00     6.41
1.40     YES   HRDOW            NO
 VOL56            0   0.86939E-02  444356.8 3769444.4   292.8     5.00     6.41
1.40     YES   HRDOW            NO
 VOL57            0   0.86939E-02  444343.6 3769389.0   292.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL58            0   0.86939E-02  444343.3 3769416.6   292.5     5.00     6.41
1.40     YES   HRDOW            NO
 VOL59            0   0.86939E-02  444371.8 3769380.1   291.8     5.00     6.41
1.40     YES   HRDOW            NO
 VOL60            0   0.86939E-02  444400.6 3769376.1   291.5     5.00     6.41
1.40     YES   HRDOW            NO
 VOL61            0   0.86939E-02  444400.3 3769404.3   291.8     5.00     6.41
1.40     YES   HRDOW            NO
 VOL62            0   0.86939E-02  444371.5 3769408.3   292.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL63            0   0.86939E-02  444371.5 3769436.1   292.7     5.00     6.41
1.40     YES   HRDOW            NO
 VOL64            0   0.86939E-02  444396.0 3769430.3   292.1     5.00     6.41
1.40     YES   HRDOW            NO
 *** AERMOD - VERSION 23132  ***   ***
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 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                              *** SOURCE IDs DEFINING SOURCE GROUPS
***

 SRCGROUP ID                                          SOURCE IDs
```

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 -----------                                          ----------


  ALL        VOL1        , VOL2        , VOL3        , VOL4        , VOL5        ,
VOL6        , VOL7        , VOL8        ,

             VOL9        , VOL10       , VOL11       , VOL12       , VOL13       ,
VOL14       , VOL15       , VOL16       ,

             VOL17       , VOL18       , VOL19       , VOL20       , VOL21       ,
VOL22       , VOL23       , VOL24       ,

             VOL25       , VOL26       , VOL27       , VOL28       , VOL29       ,
VOL30       , VOL31       , VOL32       ,

             VOL33       , VOL34       , VOL35       , VOL36       , VOL37       ,
VOL38       , VOL39       , VOL40       ,

             VOL41       , VOL42       , VOL43       , VOL44       , VOL45       ,
VOL46       , VOL47       , VOL48       ,

             VOL49       , VOL50       , VOL51       , VOL52       , VOL53       ,
VOL54       , VOL55       , VOL56       ,

             VOL57       , VOL58       , VOL59       , VOL60       , VOL61       ,
VOL62       , VOL63       , VOL64       ,
 *** AERMOD - VERSION 23132  ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                        *** SOURCE IDs DEFINED AS URBAN SOURCES
***

  URBAN ID   URBAN POP                                    SOURCE IDs
  --------   ---------                                    ----------


              2035210.   VOL1        , VOL2        , VOL3        , VOL4        ,
VOL5        , VOL6        , VOL7        ,
 VOL8        ,

             VOL9        , VOL10       , VOL11       , VOL12       , VOL13       ,
VOL14       , VOL15       , VOL16       ,
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             VOL17       , VOL18       , VOL19       , VOL20       , VOL21       ,
VOL22       , VOL23       , VOL24       ,

             VOL25       , VOL26       , VOL27       , VOL28       , VOL29       ,
VOL30       , VOL31       , VOL32       ,

             VOL33       , VOL34       , VOL35       , VOL36       , VOL37       ,
VOL38       , VOL39       , VOL40       ,

             VOL41       , VOL42       , VOL43       , VOL44       , VOL45       ,
VOL46       , VOL47       , VOL48       ,

             VOL49       , VOL50       , VOL51       , VOL52       , VOL53       ,
VOL54       , VOL55       , VOL56       ,

             VOL57       , VOL58       , VOL59       , VOL60       , VOL61       ,
VOL62       , VOL63       , VOL64       ,
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                         ***       10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL1          ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
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6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL2         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL3         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
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 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL4         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
```

```
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL5         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

```
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL6          ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50
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 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL7   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                  DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL8   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -

```
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  14
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL9         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
```

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   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  15
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL10        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL11   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                    DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                    DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                    DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL12   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR

```
 - - -
```

```
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL14        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
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                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL15   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                 DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL16   ; SOURCE TYPE = VOLUME   :

```
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  22
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL17        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
```

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  23
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL18        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
```

22 .0000E+00   23 .0000E+00   24 .0000E+00

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL19   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

```
 SOURCE ID = VOL20        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  26
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL21        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
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22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                   PAGE  27
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL22        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
```

```
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
*** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  28
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL23        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
*** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  29
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
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                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL24        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  30
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL25        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
```

```
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  31
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL26        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
```

6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL27   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                 DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL28        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL29        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
```

```
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL30        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

```
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL31        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50
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 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL32   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                  DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL33   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -

```
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL34        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
```

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   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL35        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
```

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL36   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                    DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                    DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                    DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL37   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR

```
 - - -
```

```
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                   PAGE  44
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL39        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL40   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                 DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL41   ; SOURCE TYPE = VOLUME   :

```
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL42        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
```

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  48
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL43        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
```

```
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  49
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL44        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  50
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *
```

```
 SOURCE ID = VOL45         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  51
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL46         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
```

```
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL47        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
```

14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL48   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

```
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL51        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
```

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6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL52        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL53        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL54        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
```

```
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL55        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

```
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL56        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50
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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL57 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL58 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

```
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  64
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL59        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
```

```
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  65
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL60        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
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                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL61   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                    DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                    DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                    DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL62   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR

```
 - - -
```

```
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
1 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:05:50

                                   PAGE  69
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL64        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
1 *** AERMOD - VERSION 23132  ***   ***
```

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```
     ( 444219.0, 3769382.9,     292.8,     292.8,       2.0);         ( 443379.3,
3769584.1,     298.2,     298.2,       2.0);
     ( 444284.0, 3769574.3,     294.7,     294.7,       2.0);         ( 444350.0,
3769622.2,     294.8,     294.8,       2.0);
     ( 444673.5, 3770137.6,     299.6,     299.6,       2.0);         ( 444743.3,
3770127.5,     299.5,     299.5,       2.0);
     ( 445412.9, 3770137.2,     301.4,     301.4,       2.0);         ( 444636.5,
3769597.8,     294.0,     294.0,       2.0);
     ( 444745.5, 3769593.1,     293.8,     293.8,       2.0);         ( 444084.6,
3769528.2,     295.0,     295.0,       2.0);
     ( 444307.2, 3769666.6,     295.7,     295.7,       2.0);         ( 444155.1,
3769701.8,     297.0,     297.0,       2.0);
     ( 444913.2, 3769590.1,     293.7,     293.7,       2.0);         ( 445012.2,
3769616.9,     293.2,     293.2,       2.0);
     ( 444972.4, 3769760.1,     295.4,     295.4,       2.0);         ( 445292.2,
3769551.3,     294.0,     294.0,       2.0);
     ( 445542.1, 3769662.7,     295.6,     295.6,       2.0);         ( 445514.2,
3769455.1,     293.2,     293.2,       2.0);
     ( 445434.0, 3769977.3,     299.4,     299.4,       2.0);         ( 445471.4,
3769890.5,     298.7,     298.7,       2.0);
     ( 445125.4, 3770123.8,     298.8,     298.8,       2.0);         ( 445301.5,
3770041.4,     299.5,     299.5,       2.0);
     ( 445546.0, 3769740.4,     296.7,     296.7,       2.0);         ( 445513.5,
3769442.0,     293.1,     293.1,       2.0);
     ( 443901.8, 3769642.3,     296.9,     296.9,       2.0);         ( 443804.6,
3769565.5,     296.1,     296.1,       2.0);
     ( 443786.1, 3769428.4,     294.6,     294.6,       2.0);
```


*** METEOROLOGICAL DAYS SELECTED FOR

PROCESSING ***
(1=YES; 0=NO)

1 1 1

Surface station no.: 3102 Upper air station no.: 3190
Name: UNKNOWN Name: UNKNOWN

Year: 2012 Year: 2012

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
12	01	01	1	01	-16.4	0.171	-9.000	-9.000	-999.	170.	32.3	0.09	1.12	1.00	2.03	43.	7.9	285.9	2.0
12	01	01	1	02	-18.8	0.194	-9.000	-9.000	-999.	205.	41.3	0.09	1.12	1.00	2.28	34.	7.9	285.4	2.0
12	01	01	1	03	-17.8	0.182	-9.000	-9.000	-999.	187.	36.5	0.09	1.12	1.00	2.15	24.	7.9	282.0	2.0
12	01	01	1	04	-9.4	0.128	-9.000	-9.000	-999.	110.	19.6	0.09	1.12	1.00	1.55	41.	7.9	283.1	2.0
12	01	01	1	05	-16.9	0.173	-9.000	-9.000	-999.	173.	33.0	0.09	1.12	1.00	2.05	39.	7.9	280.4	2.0
12	01	01	1	06	-8.0	0.117	-9.000	-9.000	-999.	97.	17.8	0.09	1.12	1.00	1.43	21.	7.9	282.0	2.0
12	01	01	1	07	-7.6	0.115	-9.000	-9.000	-999.	93.	17.4	0.09	1.12	1.00	1.40	31.	7.9	282.5	2.0
12	01	01	1	08	-13.6	0.184	-9.000	-9.000	-999.	190.	40.5	0.09	1.12	0.54	2.16	34.	7.9	284.2	2.0
12	01	01	1	09	28.4	0.126	0.300	0.011	33.	108.	-6.2	0.09	1.12	0.32	1.03	29.	7.9	289.2	2.0
12	01	01	1	10	79.8	0.133	0.607	0.010	99.	116.	-2.6	0.09	1.12	0.25	0.94	173.	7.9	292.5	2.0
12	01	01	1	11	115.8	0.137	0.932	0.006	246.	121.	-2.0	0.09	1.12	0.22	0.92	172.	7.9	295.4	2.0
12	01	01	1	12	133.7	0.139	1.197	0.005	453.	125.	-1.8	0.09	1.12	0.21	0.92	146.	7.9	297.5	2.0
12	01	01	1	13	133.2	0.160	1.354	0.005	657.	153.	-2.7	0.09	1.12	0.21	1.14	117.	7.9	299.9	2.0
12	01	01	1	14	113.5	0.159	1.454	0.005	955.	151.	-3.1	0.09	1.12	0.23	1.16	285.	7.9	300.9	2.0
12	01	01	1	15	76.2	0.166	1.350	0.005	1138.	163.	-5.3	0.09	1.12	0.26	1.33	72.	7.9	302.0	2.0
12	01	01	1	16	23.5	0.175	0.925	0.005	1183.	175.	-19.9	0.09	1.12	0.35	1.65	107.	7.9	301.4	2.0
12	01	01	1	17	-6.1	0.107	-9.000	-9.000	-999.	86.	18.0	0.09	1.12	0.63	1.31	107.	7.9	298.1	2.0
12	01	01	1	18	-11.1	0.141	-9.000	-9.000	-999.	127.	22.1	0.09	1.12	1.00	1.69	86.	7.9	293.1	2.0
12	01	01	1	19	-3.2	0.076	-9.000	-9.000	-999.	51.	11.8	0.09	1.12	1.00	0.91	64.	7.9	292.0	2.0
12	01	01	1	20	-2.3	0.066	-9.000	-9.000	-999.	41.	11.2	0.09	1.12	1.00	0.74	73.	7.9	288.8	2.0

```
 12 01 01   1 21  -10.0  0.133 -9.000 -9.000 -999.  116.     20.5  0.09   1.12
1.00    1.60   14.    7.9  288.1    2.0
 12 01 01   1 22  -19.4  0.201 -9.000 -9.000 -999.  216.     44.5  0.09   1.12
1.00    2.36   22.    7.9  287.5    2.0
 12 01 01   1 23  -23.7  0.246 -9.000 -9.000 -999.  293.     66.5  0.09   1.12
1.00    2.86   40.    7.9  287.0    2.0
 12 01 01   1 24  -12.3  0.147 -9.000 -9.000 -999.  139.     23.8  0.09   1.12
1.00    1.76   40.    7.9  283.8    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 12 01 01 01    7.9 1   43.    2.03   286.0   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  73
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                             *** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL      ***
                                  INCLUDING SOURCE(S):     VOL1        , VOL2
 , VOL3        , VOL4        , VOL5        ,
                   VOL6        , VOL7        , VOL8        , VOL9        , VOL10
 , VOL11       , VOL12       , VOL13       ,
                   VOL14       , VOL15       , VOL16       , VOL17       , VOL18
 , VOL19       , VOL20       , VOL21       ,
                   VOL22       , VOL23       , VOL24       , VOL25       , VOL26
 , VOL27       , VOL28       ,  . . .      ,

                                       *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                    ** CONC OF CO       IN MICROGRAMS/M**3
                    **

       X-COORD (M)   Y-COORD (M)        CONC                        X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
         444218.99    3769382.94        1.05201                       443379.29
3769584.14        0.01112
         444283.97    3769574.32        0.87147                       444350.01
3769622.16        0.75547
         444673.49    3770137.65        0.04413                       444743.34
```

```
3770127.46        0.04873
         445412.86    3770137.16        0.04395                      444636.46
3769597.76        1.09413
         444745.49    3769593.07        0.64684                      444084.62
3769528.25        0.17475
         444307.19    3769666.57        0.33468                      444155.11
3769701.76        0.11977
         444913.20    3769590.10        0.32192                      445012.21
3769616.93        0.22571
         444972.40    3769760.11        0.19125                      445292.22
3769551.27        0.09608
         445542.14    3769662.68        0.06166                      445514.18
3769455.12        0.04855
         445433.98    3769977.29        0.05810                      445471.42
3769890.51        0.06302
         445125.39    3770123.84        0.05289                      445301.47
3770041.39        0.05842
         445545.96    3769740.36        0.06222                      445513.51
3769442.00        0.04715
         443901.79    3769642.26        0.04645                      443804.60
3769565.50        0.03506
         443786.15    3769428.43        0.03618

 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  74
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                             *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                INCLUDING SOURCE(S):     VOL1        , VOL2
 , VOL3        , VOL4        , VOL5        ,
                 VOL6        , VOL7        , VOL8        , VOL9        , VOL10
 , VOL11       , VOL12       , VOL13       ,
                 VOL14       , VOL15       , VOL16       , VOL17       , VOL18
 , VOL19       , VOL20       , VOL21       ,
                 VOL22       , VOL23       , VOL24       , VOL25       , VOL26
 , VOL27       , VOL28       ,  . . .      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                       ** CONC OF CO       IN MICROGRAMS/M**3
                    **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
```

```
Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       444218.99   3769382.94       57.26412  (14121616)               443379.29
 3769584.14        2.23862  (12021516)
       444283.97   3769574.32       45.28012  (14123015)               444350.01
 3769622.16       35.53224  (13112916)
       444673.49   3770137.65        7.16234  (16122116)               444743.34
 3770127.46        5.84764  (14120516)
       445412.86   3770137.16        3.49986  (15122116)               444636.46
 3769597.76       28.02643  (15120816)
       444745.49   3769593.07       19.69449  (16121216)               444084.62
 3769528.25       22.74172  (12021516)
       444307.19   3769666.57       24.85641  (13021809)               444155.11
 3769701.76       14.58427  (15012616)
       444913.20   3769590.10       13.49348  (16121216)               445012.21
 3769616.93       10.31882  (16121216)
       444972.40   3769760.11        6.86158  (15120816)               445292.22
 3769551.27        4.74005  (13112016)
       445542.14   3769662.68        3.58927  (16121216)               445514.18
 3769455.12        4.12030  (14120316)
       445433.98   3769977.29        3.00194  (15122116)               445471.42
 3769890.51        2.16685  (16121216)
       445125.39   3770123.84        4.27637  (12120416)               445301.47
 3770041.39        4.12258  (15122116)
       445545.96   3769740.36        3.81796  (16121216)               445513.51
 3769442.00        4.14256  (14120316)
       443901.79   3769642.26        8.03935  (15012916)               443804.60
 3769565.50        6.98161  (12021516)
       443786.15   3769428.43        6.73590  (16012116)

 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:05:50

                                   PAGE  75
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                               *** THE   1ST HIGHEST  8-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     VOL1        , VOL2
 , VOL3        , VOL4        , VOL5        ,
                 VOL6        , VOL7        , VOL8        , VOL9        , VOL10
 , VOL11       , VOL12       , VOL13       ,
                 VOL14       , VOL15       , VOL16       , VOL17       , VOL18
 , VOL19       , VOL20       , VOL21       ,
                 VOL22       , VOL23       , VOL24       , VOL25       , VOL26
 , VOL27       , VOL28       ,  . . .      ,
```

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF CO IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
444218.99	3769382.94	29.78275	(15122216)	443379.29	3769584.14	0.57939	(16012116)
444283.97	3769574.32	23.42151	(14121216)	444350.01	3769622.16	15.78756	(16010616)
444673.49	3770137.65	1.29563	(13020816)	444743.34	3770127.46	1.24700	(14120516)
445412.86	3770137.16	0.74761	(12110816)	444636.46	3769597.76	11.72592	(13111916)
444745.49	3769593.07	7.61931	(14020616)	444084.62	3769528.25	8.73496	(15112716)
444307.19	3769666.57	9.68197	(16010616)	444155.11	3769701.76	6.08477	(14121216)
444913.20	3769590.10	4.53377	(14020616)	445012.21	3769616.93	3.29367	(14020616)
444972.40	3769760.11	2.43215	(12110916)	445292.22	3769551.27	1.68239	(13112016)
445542.14	3769662.68	1.10009	(13112016)	445514.18	3769455.12	0.79077	(13110416)
445433.98	3769977.29	0.76112	(12110916)	445471.42	3769890.51	0.79659	(14111216)
445125.39	3770123.84	1.28363	(12021316)	445301.47	3770041.39	0.95807	(12110816)
445545.96	3769740.36	0.98955	(14020616)	445513.51	3769442.00	0.78988	(13110416)
443901.79	3769642.26	3.08263	(15112716)	443804.60	3769565.50	2.08644	(15112716)
443786.15	3769428.43	1.99832	(16102416)				

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** THE SUMMARY OF MAXIMUM PERIOD (43848 HRS) RESULTS ***

```
                                    ** CONC OF CO       IN MICROGRAMS/M**3
               **

                         NETWORK
GROUP ID                       AVERAGE CONC                RECEPTOR  (XR, YR,
ZELEV, ZHILL, ZFLAG)  OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - -

ALL       1ST HIGHEST VALUE IS       1.09413 AT (  444636.46,  3769597.76,
294.04,   294.04,    2.00)  DC
          2ND HIGHEST VALUE IS       1.05201 AT (  444218.99,  3769382.94,
292.78,   292.78,    2.00)  DC
          3RD HIGHEST VALUE IS       0.87147 AT (  444283.97,  3769574.32,
294.67,   294.67,    2.00)  DC
          4TH HIGHEST VALUE IS       0.75547 AT (  444350.01,  3769622.16,
294.79,   294.79,    2.00)  DC
          5TH HIGHEST VALUE IS       0.64684 AT (  444745.49,  3769593.07,
293.77,   293.77,    2.00)  DC
          6TH HIGHEST VALUE IS       0.33468 AT (  444307.19,  3769666.57,
295.68,   295.68,    2.00)  DC
          7TH HIGHEST VALUE IS       0.32192 AT (  444913.20,  3769590.10,
293.66,   293.66,    2.00)  DC
          8TH HIGHEST VALUE IS       0.22571 AT (  445012.21,  3769616.93,
293.20,   293.20,    2.00)  DC
          9TH HIGHEST VALUE IS       0.19125 AT (  444972.40,  3769760.11,
295.39,   295.39,    2.00)  DC
         10TH HIGHEST VALUE IS       0.17475 AT (  444084.62,  3769528.25,
295.01,   295.01,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  77
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                                *** THE SUMMARY OF HIGHEST  1-HR
RESULTS ***
```

```
                                    ** CONC OF CO       IN MICROGRAMS/M**3
              **

                                                          DATE
                                         NETWORK
GROUP ID                           AVERAGE CONC     (YYMMDDHH)             RECEPTOR
(XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS      57.26412  ON 14121616: AT (  444218.99,
3769382.94,   292.78,   292.78,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                   PAGE  78
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                                *** THE SUMMARY OF HIGHEST  8-HR
RESULTS ***


                                    ** CONC OF CO       IN MICROGRAMS/M**3
              **

                                                          DATE
                                         NETWORK
GROUP ID                           AVERAGE CONC     (YYMMDDHH)             RECEPTOR
(XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS      29.78275  ON 15122216: AT (  444218.99,
3769382.94,   292.78,   292.78,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of   0 Fatal Error Message(s)
 A Total of   2 Warning Message(s)
 A Total of   1628 Informational Message(s)

 A Total of   43848 Hours Were Processed

 A Total of   1278 Calm Hours Identified

 A Total of   350 Missing Hours Identified (0.80 Percent)

    ******** FATAL ERROR MESSAGES ********
               *** NONE ***

    ********   WARNING MESSAGES   ********
 ME W186   1153   MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
      0.50
 ME W187   1153   MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

    ****
    *** AERMOD Finishes Successfully ***
    ****
**
****
**
** AERMOD Input Produced by:
** AERMOD View Ver. 12.0.0
** Lakes Environmental Software Inc.
** Date: 4/19/2024
** File: C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\Construction LST
NOX\Construction LST NOX.ADI
**
****
**
**

```
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti &
   MODELOPT DFAULT CONC
   AVERTIME 1
   URBANOPT 2035210 County_of_San_Bernardino
   POLLUTID NOX
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "Construction LST NOX.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     444242.944  3769467.059      293.700
   LOCATION VOL2         VOLUME     444272.020  3769484.508      293.810
   LOCATION VOL3         VOLUME     444300.793  3769498.282      293.730
   LOCATION VOL4         VOLUME     444329.261  3769513.893      293.600
   LOCATION VOL5         VOLUME     444357.422  3769528.280      293.640
   LOCATION VOL6         VOLUME     444385.889  3769541.748      293.610
   LOCATION VOL7         VOLUME     444413.132  3769549.401      293.400
   LOCATION VOL8         VOLUME     444441.600  3769548.483      293.090
   LOCATION VOL9         VOLUME     444469.455  3769555.829      292.810
   LOCATION VOL10        VOLUME     444469.761  3769527.974      292.810
   LOCATION VOL11        VOLUME     444470.679  3769499.813      292.190
   LOCATION VOL12        VOLUME     444461.190  3769471.345      291.870
   LOCATION VOL13        VOLUME     444441.293  3769520.934      293.100
   LOCATION VOL14        VOLUME     444442.518  3769499.200      292.910
   LOCATION VOL15        VOLUME     444433.029  3769471.345      292.530
   LOCATION VOL16        VOLUME     444462.108  3769443.796      290.990
   LOCATION VOL17        VOLUME     444477.719  3769423.900      290.030
   LOCATION VOL18        VOLUME     444479.250  3769395.738      289.870
   LOCATION VOL19        VOLUME     444485.678  3769367.883      289.640
   LOCATION VOL20        VOLUME     444485.678  3769347.375      289.640
   LOCATION VOL21        VOLUME     444434.559  3769443.184      291.880
   LOCATION VOL22        VOLUME     444413.744  3769521.852      293.250
   LOCATION VOL23        VOLUME     444451.089  3769415.023      290.920
   LOCATION VOL24        VOLUME     444457.211  3769387.780      290.450
   LOCATION VOL25        VOLUME     444458.129  3769359.619      290.190
   LOCATION VOL26        VOLUME     444456.905  3769347.375      290.200
```

```
   LOCATION VOL27        VOLUME     444429.049  3769347.681      290.600
   LOCATION VOL28        VOLUME     444401.500  3769347.681      291.160
   LOCATION VOL29        VOLUME     444373.339  3769351.660      291.500
   LOCATION VOL30        VOLUME     444344.260  3769360.537      291.890
   LOCATION VOL31        VOLUME     444315.792  3769372.781      292.300
   LOCATION VOL32        VOLUME     444287.325  3769382.576      292.690
   LOCATION VOL33        VOLUME     444266.510  3769410.125      293.050
   LOCATION VOL34        VOLUME     444246.613  3769438.593      293.350
   LOCATION VOL35        VOLUME     444271.714  3769456.959      293.530
   LOCATION VOL36        VOLUME     444273.550  3769438.286      293.340
   LOCATION VOL37        VOLUME     444381.910  3769457.265      292.800
   LOCATION VOL38        VOLUME     444385.583  3769513.893      293.330
   LOCATION VOL39        VOLUME     444300.793  3769470.733      293.450
   LOCATION VOL40        VOLUME     444328.954  3769486.344      293.320
   LOCATION VOL41        VOLUME     444357.728  3769500.731      293.360
   LOCATION VOL42        VOLUME     444413.744  3769494.915      293.000
   LOCATION VOL43        VOLUME     444429.662  3769374.617      290.940
   LOCATION VOL44        VOLUME     444429.049  3769402.473      291.450
   LOCATION VOL45        VOLUME     444422.621  3769430.940      291.860
   LOCATION VOL46        VOLUME     444407.010  3769458.489      292.560
   LOCATION VOL47        VOLUME     444404.561  3769486.344      292.910
   LOCATION VOL48        VOLUME     444377.012  3769485.426      293.130
   LOCATION VOL49        VOLUME     444354.361  3769472.570      293.080
   LOCATION VOL50        VOLUME     444301.099  3769442.878      293.170
   LOCATION VOL51        VOLUME     444328.342  3769458.795      293.050
   LOCATION VOL52        VOLUME     444294.671  3769411.043      292.910
   LOCATION VOL53        VOLUME     444301.099  3769427.267      293.010
   LOCATION VOL54        VOLUME     444315.180  3769400.942      292.600
   LOCATION VOL55        VOLUME     444328.648  3769430.634      292.760
   LOCATION VOL56        VOLUME     444356.810  3769444.408      292.790
   LOCATION VOL57        VOLUME     444343.647  3769389.004      292.190
   LOCATION VOL58        VOLUME     444343.341  3769416.553      292.500
   LOCATION VOL59        VOLUME     444371.809  3769380.127      291.810
   LOCATION VOL60        VOLUME     444400.582  3769376.148      291.470
   LOCATION VOL61        VOLUME     444400.276  3769404.309      291.770
   LOCATION VOL62        VOLUME     444371.502  3769408.289      292.210
   LOCATION VOL63        VOLUME     444371.502  3769436.144      292.670
   LOCATION VOL64        VOLUME     444395.991  3769430.328      292.140
** Source Parameters **
   SRCPARAM VOL1         0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL2         0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL3         0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL4         0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL5         0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL6         0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL7         0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL8         0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL9         0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL10        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL11        0.0104578241     5.000     6.407     1.400
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SRCPARAM VOL12        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL13        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL14        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL15        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL16        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL17        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL18        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL19        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL20        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL21        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL22        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL23        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL24        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL25        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL26        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL27        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL28        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL29        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL30        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL31        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL32        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL33        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL34        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL35        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL36        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL37        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL38        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL39        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL40        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL41        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL42        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL43        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL44        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL45        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL46        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL47        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL48        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL49        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL50        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL51        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL52        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL53        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL54        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL55        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL56        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL57        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL58        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL59        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL60        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL61        0.0104578241     5.000     6.407     1.400
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   SRCPARAM VOL62        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL63        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL64        0.0104578241     5.000     6.407     1.400
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL37        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL38        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL39        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL40        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL41        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL42        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL43        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL44        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL45        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL46        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL47        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL48        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL49        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL50        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL51        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL52        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL53        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL54        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL55        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL56        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL57        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL58        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL59        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL60        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

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   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL61        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL62        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL63        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

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   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL64        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED "Construction LST NOX.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE KONT_V9_ADJU\KONT_v9.SFC
   PROFFILE KONT_V9_ADJU\KONT_v9.PFL
   SURFDATA 3102 2012
   UAIRDATA 3190 2012
   PROFBASE 289.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
```

```
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "CONSTRUCTION LST NOX.AD\01H1GALL.PLT" 31
   SUMMFILE "Construction LST NOX.sum"
OU FINISHED
**
**************************************
** Project Parameters
**************************************
** PROJCTN  CoordinateSystemUTM
** DESCPTN  UTM: Universal Transverse Mercator
** DATUM    North American Datum 1983
** DTMRGN   CONUS
** UNITS    m
** ZONE     11
** ZONEINX  0
**
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 12.0.0
** Lakes Environmental Software Inc.
** Date: 4/19/2024
** File: C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\Construction LST
NOX\Construction LST NOX.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti &
   MODELOPT DFAULT CONC
   AVERTIME 1
   URBANOPT 2035210 County_of_San_Bernardino
   POLLUTID NOX
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "Construction LST NOX.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
```

```
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     444242.944  3769467.059      293.700
   LOCATION VOL2         VOLUME     444272.020  3769484.508      293.810
   LOCATION VOL3         VOLUME     444300.793  3769498.282      293.730
   LOCATION VOL4         VOLUME     444329.261  3769513.893      293.600
   LOCATION VOL5         VOLUME     444357.422  3769528.280      293.640
   LOCATION VOL6         VOLUME     444385.889  3769541.748      293.610
   LOCATION VOL7         VOLUME     444413.132  3769549.401      293.400
   LOCATION VOL8         VOLUME     444441.600  3769548.483      293.090
   LOCATION VOL9         VOLUME     444469.455  3769555.829      292.810
   LOCATION VOL10        VOLUME     444469.761  3769527.974      292.810
   LOCATION VOL11        VOLUME     444470.679  3769499.813      292.190
   LOCATION VOL12        VOLUME     444461.190  3769471.345      291.870
   LOCATION VOL13        VOLUME     444441.293  3769520.934      293.100
   LOCATION VOL14        VOLUME     444442.518  3769499.200      292.910
   LOCATION VOL15        VOLUME     444433.029  3769471.345      292.530
   LOCATION VOL16        VOLUME     444462.108  3769443.796      290.990
   LOCATION VOL17        VOLUME     444477.719  3769423.900      290.030
   LOCATION VOL18        VOLUME     444479.250  3769395.738      289.870
   LOCATION VOL19        VOLUME     444485.678  3769367.883      289.640
   LOCATION VOL20        VOLUME     444485.678  3769347.375      289.640
   LOCATION VOL21        VOLUME     444434.559  3769443.184      291.880
   LOCATION VOL22        VOLUME     444413.744  3769521.852      293.250
   LOCATION VOL23        VOLUME     444451.089  3769415.023      290.920
   LOCATION VOL24        VOLUME     444457.211  3769387.780      290.450
   LOCATION VOL25        VOLUME     444458.129  3769359.619      290.190
   LOCATION VOL26        VOLUME     444456.905  3769347.375      290.200
   LOCATION VOL27        VOLUME     444429.049  3769347.681      290.600
   LOCATION VOL28        VOLUME     444401.500  3769347.681      291.160
   LOCATION VOL29        VOLUME     444373.339  3769351.660      291.500
   LOCATION VOL30        VOLUME     444344.260  3769360.537      291.890
   LOCATION VOL31        VOLUME     444315.792  3769372.781      292.300
   LOCATION VOL32        VOLUME     444287.325  3769382.576      292.690
   LOCATION VOL33        VOLUME     444266.510  3769410.125      293.050
   LOCATION VOL34        VOLUME     444246.613  3769438.593      293.350
   LOCATION VOL35        VOLUME     444271.714  3769456.959      293.530
   LOCATION VOL36        VOLUME     444273.550  3769438.286      293.340
   LOCATION VOL37        VOLUME     444381.910  3769457.265      292.800
   LOCATION VOL38        VOLUME     444385.583  3769513.893      293.330
   LOCATION VOL39        VOLUME     444300.793  3769470.733      293.450
   LOCATION VOL40        VOLUME     444328.954  3769486.344      293.320
   LOCATION VOL41        VOLUME     444357.728  3769500.731      293.360
   LOCATION VOL42        VOLUME     444413.744  3769494.915      293.000
   LOCATION VOL43        VOLUME     444429.662  3769374.617      290.940
   LOCATION VOL44        VOLUME     444429.049  3769402.473      291.450
   LOCATION VOL45        VOLUME     444422.621  3769430.940      291.860
   LOCATION VOL46        VOLUME     444407.010  3769458.489      292.560
   LOCATION VOL47        VOLUME     444404.561  3769486.344      292.910
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   LOCATION VOL48        VOLUME     444377.012  3769485.426      293.130
   LOCATION VOL49        VOLUME     444354.361  3769472.570      293.080
   LOCATION VOL50        VOLUME     444301.099  3769442.878      293.170
   LOCATION VOL51        VOLUME     444328.342  3769458.795      293.050
   LOCATION VOL52        VOLUME     444294.671  3769411.043      292.910
   LOCATION VOL53        VOLUME     444301.099  3769427.267      293.010
   LOCATION VOL54        VOLUME     444315.180  3769400.942      292.600
   LOCATION VOL55        VOLUME     444328.648  3769430.634      292.760
   LOCATION VOL56        VOLUME     444356.810  3769444.408      292.790
   LOCATION VOL57        VOLUME     444343.647  3769389.004      292.190
   LOCATION VOL58        VOLUME     444343.341  3769416.553      292.500
   LOCATION VOL59        VOLUME     444371.809  3769380.127      291.810
   LOCATION VOL60        VOLUME     444400.582  3769376.148      291.470
   LOCATION VOL61        VOLUME     444400.276  3769404.309      291.770
   LOCATION VOL62        VOLUME     444371.502  3769408.289      292.210
   LOCATION VOL63        VOLUME     444371.502  3769436.144      292.670
   LOCATION VOL64        VOLUME     444395.991  3769430.328      292.140
** Source Parameters **
   SRCPARAM VOL1         0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL2         0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL3         0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL4         0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL5         0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL6         0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL7         0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL8         0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL9         0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL10        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL11        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL12        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL13        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL14        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL15        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL16        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL17        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL18        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL19        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL20        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL21        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL22        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL23        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL24        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL25        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL26        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL27        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL28        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL29        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL30        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL31        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL32        0.0104578241     5.000     6.407     1.400
```

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   SRCPARAM VOL33        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL34        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL35        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL36        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL37        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL38        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL39        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL40        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL41        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL42        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL43        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL44        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL45        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL46        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL47        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL48        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL49        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL50        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL51        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL52        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL53        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL54        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL55        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL56        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL57        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL58        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL59        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL60        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL61        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL62        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL63        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL64        0.0104578241     5.000     6.407     1.400
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

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   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
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   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
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   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
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   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
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   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL37        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL38        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL39        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL40        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL41        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL42        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL43        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL44        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL45        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
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   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL46        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL47        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL48        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL49        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL50        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL51        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL52        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL53        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL54        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL55        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
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   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL56        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL57        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL58        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL59        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL60        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL61        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL62        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL63        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL64        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
```

```
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED "Construction LST NOX.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE KONT_V9_ADJU\KONT_v9.SFC
   PROFFILE KONT_V9_ADJU\KONT_v9.PFL
   SURFDATA 3102 2012
   UAIRDATA 3190 2012
   PROFBASE 289.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "CONSTRUCTION LST NOX.AD\01H1GALL.PLT" 31
   SUMMFILE "Construction LST NOX.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186    1153       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
```

```
      0.50
 ME W187    1153       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET


 *********************************
 *** SETUP Finishes Successfully ***
 *********************************

 *** AERMOD - VERSION 23132  ***   ***
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 *** AERMET - VERSION  16216 ***   ***
                        ***        10:11:01

                                   PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                            ***     MODEL SETUP OPTIONS SUMMARY
  ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - -

 ** Model Options Selected:
      * Model Uses Regulatory DEFAULT Options
      * Model Is Setup For Calculation of Average CONCentration Values.
      * NO GAS DEPOSITION Data Provided.
      * NO PARTICLE DEPOSITION Data Provided.
      * Model Uses NO DRY DEPLETION. DDPLETE  =  F
      * Model Uses NO WET DEPLETION. WETDPLT  =  F
      * Stack-tip Downwash.
      * Model Accounts for ELEVated Terrain Effects.
      * Use Calms Processing Routine.
      * Use Missing Data Processing Routine.
      * No Exponential Decay.
      * Model Uses URBAN Dispersion Algorithm for the SBL for    64 Source(s),
        for Total of    1 Urban Area(s):
   Urban Population =   2035210.0 ;  Urban Roughness Length =  1.000 m
      * Urban Roughness Length of 1.0 Meter Used.
      * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
      * CCVR_Sub - Meteorological data includes CCVR substitutions
      * TEMP_Sub - Meteorological data includes TEMP substitutions
      * Model Accepts FLAGPOLE Receptor . Heights.
      * The User Specified a Pollutant Type of: NOX

 **Model Calculates  1 Short Term Average(s) of:   1-HR

 **This Run Includes:     64 Source(s);       1 Source Group(s); and      27
Receptor(s)

                with:      0 POINT(s), including
```

```
                          0 POINTCAP(s) and      0 POINTHOR(s)
                and:     64 VOLUME source(s)
                and:      0 AREA type source(s)
                and:      0 LINE source(s)
                and:      0 RLINE/RLINEXT source(s)
                and:      0 OPENPIT source(s)
                and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                and:      0 SWPOINT source(s)


 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  16216

 **Output Options Selected:
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
Keyword)
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE
Keyword)
         Model Outputs Separate Summary File of High Ranked Values (SUMMFILE
Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                 m for Missing
Hours
                                                                 b for Both Calm
and Missing Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   289.00 ;  Decay
Coef. =    0.000     ;  Rot. Angle =     0.0
                  Emission Units = GRAMS/SEC                                ;
Emission Rate Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      3.6 MB of RAM.

 **Input Runstream File:          aermod.inp

 **Output Print File:             aermod.out


 **Detailed Error/Message File:   Construction LST NOX.err

 **File for Summary of Results:   Construction LST NOX.sum

 *** AERMOD - VERSION 23132  ***   ***
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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
VOL1	0	0.10458E-01	444242.9	3769467.1	293.7	5.00	6.41	1.40	YES	HRDOW	NO
VOL2	0	0.10458E-01	444272.0	3769484.5	293.8	5.00	6.41	1.40	YES	HRDOW	NO
VOL3	0	0.10458E-01	444300.8	3769498.3	293.7	5.00	6.41	1.40	YES	HRDOW	NO
VOL4	0	0.10458E-01	444329.3	3769513.9	293.6	5.00	6.41	1.40	YES	HRDOW	NO
VOL5	0	0.10458E-01	444357.4	3769528.3	293.6	5.00	6.41	1.40	YES	HRDOW	NO
VOL6	0	0.10458E-01	444385.9	3769541.7	293.6	5.00	6.41	1.40	YES	HRDOW	NO
VOL7	0	0.10458E-01	444413.1	3769549.4	293.4	5.00	6.41	1.40	YES	HRDOW	NO
VOL8	0	0.10458E-01	444441.6	3769548.5	293.1	5.00	6.41	1.40	YES	HRDOW	NO
VOL9	0	0.10458E-01	444469.5	3769555.8	292.8	5.00	6.41	1.40	YES	HRDOW	NO
VOL10	0	0.10458E-01	444469.8	3769528.0	292.8	5.00	6.41	1.40	YES	HRDOW	NO
VOL11	0	0.10458E-01	444470.7	3769499.8	292.2	5.00	6.41	1.40	YES	HRDOW	NO
VOL12	0	0.10458E-01	444461.2	3769471.3	291.9	5.00	6.41	1.40	YES	HRDOW	NO
VOL13	0	0.10458E-01	444441.3	3769520.9	293.1	5.00	6.41	1.40	YES	HRDOW	NO
VOL14	0	0.10458E-01	444442.5	3769499.2	292.9	5.00	6.41	1.40	YES	HRDOW	NO
VOL15	0	0.10458E-01	444433.0	3769471.3	292.5	5.00	6.41	1.40	YES	HRDOW	NO
VOL16	0	0.10458E-01	444462.1	3769443.8	291.0	5.00	6.41	1.40	YES	HRDOW	NO
VOL17	0	0.10458E-01	444477.7	3769423.9	290.0	5.00	6.41	1.40	YES	HRDOW	NO

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 VOL18            0   0.10458E-01  444479.2 3769395.7   289.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL19            0   0.10458E-01  444485.7 3769367.9   289.6     5.00     6.41
1.40     YES   HRDOW            NO
 VOL20            0   0.10458E-01  444485.7 3769347.4   289.6     5.00     6.41
1.40     YES   HRDOW            NO
 VOL21            0   0.10458E-01  444434.6 3769443.2   291.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL22            0   0.10458E-01  444413.7 3769521.9   293.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL23            0   0.10458E-01  444451.1 3769415.0   290.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL24            0   0.10458E-01  444457.2 3769387.8   290.4     5.00     6.41
1.40     YES   HRDOW            NO
 VOL25            0   0.10458E-01  444458.1 3769359.6   290.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL26            0   0.10458E-01  444456.9 3769347.4   290.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL27            0   0.10458E-01  444429.0 3769347.7   290.6     5.00     6.41
1.40     YES   HRDOW            NO
 VOL28            0   0.10458E-01  444401.5 3769347.7   291.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL29            0   0.10458E-01  444373.3 3769351.7   291.5     5.00     6.41
1.40     YES   HRDOW            NO
 VOL30            0   0.10458E-01  444344.3 3769360.5   291.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL31            0   0.10458E-01  444315.8 3769372.8   292.3     5.00     6.41
1.40     YES   HRDOW            NO
 VOL32            0   0.10458E-01  444287.3 3769382.6   292.7     5.00     6.41
1.40     YES   HRDOW            NO
 VOL33            0   0.10458E-01  444266.5 3769410.1   293.1     5.00     6.41
1.40     YES   HRDOW            NO
 VOL34            0   0.10458E-01  444246.6 3769438.6   293.4     5.00     6.41
1.40     YES   HRDOW            NO
 VOL35            0   0.10458E-01  444271.7 3769457.0   293.5     5.00     6.41
1.40     YES   HRDOW            NO
 VOL36            0   0.10458E-01  444273.5 3769438.3   293.3     5.00     6.41
1.40     YES   HRDOW            NO
 VOL37            0   0.10458E-01  444381.9 3769457.3   292.8     5.00     6.41
1.40     YES   HRDOW            NO
 VOL38            0   0.10458E-01  444385.6 3769513.9   293.3     5.00     6.41
1.40     YES   HRDOW            NO
 VOL39            0   0.10458E-01  444300.8 3769470.7   293.4     5.00     6.41
1.40     YES   HRDOW            NO
 VOL40            0   0.10458E-01  444329.0 3769486.3   293.3     5.00     6.41
1.40     YES   HRDOW            NO
 *** AERMOD - VERSION 23132  ***   ***
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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
VOL41	0	0.10458E-01	444357.7	3769500.7	293.4	5.00	6.41	1.40	YES	HRDOW	NO
VOL42	0	0.10458E-01	444413.7	3769494.9	293.0	5.00	6.41	1.40	YES	HRDOW	NO
VOL43	0	0.10458E-01	444429.7	3769374.6	290.9	5.00	6.41	1.40	YES	HRDOW	NO
VOL44	0	0.10458E-01	444429.0	3769402.5	291.4	5.00	6.41	1.40	YES	HRDOW	NO
VOL45	0	0.10458E-01	444422.6	3769430.9	291.9	5.00	6.41	1.40	YES	HRDOW	NO
VOL46	0	0.10458E-01	444407.0	3769458.5	292.6	5.00	6.41	1.40	YES	HRDOW	NO
VOL47	0	0.10458E-01	444404.6	3769486.3	292.9	5.00	6.41	1.40	YES	HRDOW	NO
VOL48	0	0.10458E-01	444377.0	3769485.4	293.1	5.00	6.41	1.40	YES	HRDOW	NO
VOL49	0	0.10458E-01	444354.4	3769472.6	293.1	5.00	6.41	1.40	YES	HRDOW	NO
VOL50	0	0.10458E-01	444301.1	3769442.9	293.2	5.00	6.41	1.40	YES	HRDOW	NO
VOL51	0	0.10458E-01	444328.3	3769458.8	293.1	5.00	6.41	1.40	YES	HRDOW	NO
VOL52	0	0.10458E-01	444294.7	3769411.0	292.9	5.00	6.41	1.40	YES	HRDOW	NO
VOL53	0	0.10458E-01	444301.1	3769427.3	293.0	5.00	6.41	1.40	YES	HRDOW	NO
VOL54	0	0.10458E-01	444315.2	3769400.9	292.6	5.00	6.41	1.40	YES	HRDOW	NO
VOL55	0	0.10458E-01	444328.6	3769430.6	292.8	5.00	6.41	1.40	YES	HRDOW	NO
VOL56	0	0.10458E-01	444356.8	3769444.4	292.8	5.00	6.41	1.40	YES	HRDOW	NO
VOL57	0	0.10458E-01	444343.6	3769389.0	292.2	5.00	6.41				

```
1.40     YES   HRDOW            NO
 VOL58           0   0.10458E-01  444343.3 3769416.6   292.5     5.00     6.41
1.40     YES   HRDOW            NO
 VOL59           0   0.10458E-01  444371.8 3769380.1   291.8     5.00     6.41
1.40     YES   HRDOW            NO
 VOL60           0   0.10458E-01  444400.6 3769376.1   291.5     5.00     6.41
1.40     YES   HRDOW            NO
 VOL61           0   0.10458E-01  444400.3 3769404.3   291.8     5.00     6.41
1.40     YES   HRDOW            NO
 VOL62           0   0.10458E-01  444371.5 3769408.3   292.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL63           0   0.10458E-01  444371.5 3769436.1   292.7     5.00     6.41
1.40     YES   HRDOW            NO
 VOL64           0   0.10458E-01  444396.0 3769430.3   292.1     5.00     6.41
1.40     YES   HRDOW            NO
 *** AERMOD - VERSION 23132  ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                          *** SOURCE IDs DEFINING SOURCE GROUPS
***

 SRCGROUP ID                                          SOURCE IDs
 -----------                                          ----------


  ALL        VOL1        , VOL2        , VOL3        , VOL4        , VOL5        ,
VOL6        , VOL7        , VOL8        ,

             VOL9        , VOL10       , VOL11       , VOL12       , VOL13       ,
VOL14       , VOL15       , VOL16       ,

             VOL17       , VOL18       , VOL19       , VOL20       , VOL21       ,
VOL22       , VOL23       , VOL24       ,

             VOL25       , VOL26       , VOL27       , VOL28       , VOL29       ,
VOL30       , VOL31       , VOL32       ,

             VOL33       , VOL34       , VOL35       , VOL36       , VOL37       ,
VOL38       , VOL39       , VOL40       ,

             VOL41       , VOL42       , VOL43       , VOL44       , VOL45       ,
VOL46       , VOL47       , VOL48       ,
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             VOL49       , VOL50       , VOL51       , VOL52       , VOL53       ,
VOL54       , VOL55       , VOL56       ,

             VOL57       , VOL58       , VOL59       , VOL60       , VOL61       ,
VOL62       , VOL63       , VOL64       ,
 *** AERMOD - VERSION 23132  ***   ***
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 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                          *** SOURCE IDs DEFINED AS URBAN SOURCES
***

  URBAN ID   URBAN POP                                  SOURCE IDs
  --------   ---------                                  ----------


              2035210.   VOL1        , VOL2        , VOL3        , VOL4        ,
VOL5        , VOL6        , VOL7        ,
 VOL8        ,

             VOL9        , VOL10       , VOL11       , VOL12       , VOL13       ,
VOL14       , VOL15       , VOL16       ,

             VOL17       , VOL18       , VOL19       , VOL20       , VOL21       ,
VOL22       , VOL23       , VOL24       ,

             VOL25       , VOL26       , VOL27       , VOL28       , VOL29       ,
VOL30       , VOL31       , VOL32       ,

             VOL33       , VOL34       , VOL35       , VOL36       , VOL37       ,
VOL38       , VOL39       , VOL40       ,

             VOL41       , VOL42       , VOL43       , VOL44       , VOL45       ,
VOL46       , VOL47       , VOL48       ,

             VOL49       , VOL50       , VOL51       , VOL52       , VOL53       ,
VOL54       , VOL55       , VOL56       ,

             VOL57       , VOL58       , VOL59       , VOL60       , VOL61       ,
VOL62       , VOL63       , VOL64       ,
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL1 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL2 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

```
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                  DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

                                  PAGE   8
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL3         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                                  DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
```

```
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

                                  PAGE   9
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL4         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
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                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL5   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL6   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR

```
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -
```

```
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL8         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL9 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

```
 SOURCE ID = VOL10        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

                                  PAGE  16
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL11        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
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                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

                                  PAGE  17
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL12        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
```

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   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:11:01

                                   PAGE  18
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL13        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                  DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:11:01

                                   PAGE  19
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
```

```
OF WEEK (HRDOW) *

 SOURCE ID = VOL14        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

                                  PAGE  20
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL15        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
```

```
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL16        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
```

```
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL17        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

                                  PAGE  23
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
```

```
                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL18        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

                                  PAGE  24
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL19        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
```

```
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

                                  PAGE  25
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL20        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
```

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***       10:11:01

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL21        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***       10:11:01
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 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL22   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                  DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
 *** AERMOD - VERSION 23132 ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION 16216 ***   ***
                       ***   10:11:01

 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL23   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                  DAY OF WEEK = WEEKDAY

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL24        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
```

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22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL25        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL26 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL27 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

```
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                  DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL28        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                                  DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
```

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14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL29        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL30   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL31   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR

```
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -
```

```
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

                                  PAGE  38
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL33        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL34 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

```
 SOURCE ID = VOL35        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL36        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

```
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

                                  PAGE  42
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL37        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
```

```
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:11:01

                                   PAGE  43
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL38        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                  DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:11:01

                                   PAGE  44
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
```

```
OF WEEK (HRDOW) *

 SOURCE ID = VOL39        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

                                  PAGE  45
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL40        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
```

```
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

                                  PAGE  46
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL41        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
```

```
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL42        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

                                  PAGE  48
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
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```
                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL43        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

                                  PAGE  49
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL44        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
```

```
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL45        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
```

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***       10:11:01

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL46        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***       10:11:01
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 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL47   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL48   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL49        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
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22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL50        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL51 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL52 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

```
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                  DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

                                  PAGE  58
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL53        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                                  DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
```

```
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

                                   PAGE  59
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL54        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL55   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL56   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR

```
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -
```

```
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL58        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL59 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

```
 SOURCE ID = VOL60        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

                                  PAGE  66
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL61        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

```
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

                                  PAGE  67
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL62        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
```

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   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:11:01

                                   PAGE  68
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL63        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                  DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:11:01

                                   PAGE  69
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
```

```
OF WEEK (HRDOW) *

 SOURCE ID = VOL64        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***       10:11:01

                                  PAGE  70
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                          *** DISCRETE CARTESIAN RECEPTORS ***
                                       (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                    (METERS)

     ( 444219.0, 3769382.9,     292.8,     292.8,       2.0);         ( 443379.3,
3769584.1,     298.2,     298.2,       2.0);
     ( 444284.0, 3769574.3,     294.7,     294.7,       2.0);         ( 444350.0,
3769622.2,     294.8,     294.8,       2.0);
     ( 444673.5, 3770137.6,     299.6,     299.6,       2.0);         ( 444743.3,
3770127.5,     299.5,     299.5,       2.0);
     ( 445412.9, 3770137.2,     301.4,     301.4,       2.0);         ( 444636.5,
3769597.8,     294.0,     294.0,       2.0);
     ( 444745.5, 3769593.1,     293.8,     293.8,       2.0);         ( 444084.6,
```

3769528.2,   295.0,   295.0,   2.0);
     (444307.2, 3769666.6,   295.7,   295.7,   2.0);   (444155.1,
3769701.8,   297.0,   297.0,   2.0);
     (444913.2, 3769590.1,   293.7,   293.7,   2.0);   (445012.2,
3769616.9,   293.2,   293.2,   2.0);
     (444972.4, 3769760.1,   295.4,   295.4,   2.0);   (445292.2,
3769551.3,   294.0,   294.0,   2.0);
     (445542.1, 3769662.7,   295.6,   295.6,   2.0);   (445514.2,
3769455.1,   293.2,   293.2,   2.0);
     (445434.0, 3769977.3,   299.4,   299.4,   2.0);   (445471.4,
3769890.5,   298.7,   298.7,   2.0);
     (445125.4, 3770123.8,   298.8,   298.8,   2.0);   (445301.5,
3770041.4,   299.5,   299.5,   2.0);
     (445546.0, 3769740.4,   296.7,   296.7,   2.0);   (445513.5,
3769442.0,   293.1,   293.1,   2.0);
     (443901.8, 3769642.3,   296.9,   296.9,   2.0);   (443804.6,
3769565.5,   296.1,   296.1,   2.0);
     (443786.1, 3769428.4,   294.6,   294.6,   2.0);

                                          *** METEOROLOGICAL DAYS SELECTED FOR
PROCESSING ***
                                                              (1=YES; 0=NO)

           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1

               NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON
WHAT IS INCLUDED IN THE DATA FILE.

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: KONT_V9_ADJU\KONT_v9.SFC
Met Version: 16216
Profile file: KONT_V9_ADJU\KONT_v9.PFL

Surface format: FREE

Profile format: FREE

Surface station no.: 3102 Upper air station no.: 3190
Name: UNKNOWN Name: UNKNOWN

Year: 2012 Year: 2012

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
12	01	01	1	01	-16.4	0.171	-9.000	-9.000	-999.	170.	32.3	0.09	1.12	1.00	2.03	43.	7.9	285.9	2.0
12	01	01	1	02	-18.8	0.194	-9.000	-9.000	-999.	205.	41.3	0.09	1.12	1.00	2.28	34.	7.9	285.4	2.0
12	01	01	1	03	-17.8	0.182	-9.000	-9.000	-999.	187.	36.5	0.09	1.12	1.00	2.15	24.	7.9	282.0	2.0
12	01	01	1	04	-9.4	0.128	-9.000	-9.000	-999.	110.	19.6	0.09	1.12	1.00	1.55	41.	7.9	283.1	2.0
12	01	01	1	05	-16.9	0.173	-9.000	-9.000	-999.	173.	33.0	0.09	1.12	1.00	2.05	39.	7.9	280.4	2.0
12	01	01	1	06	-8.0	0.117	-9.000	-9.000	-999.	97.	17.8	0.09	1.12						

```
1.00    1.43   21.    7.9  282.0    2.0
 12 01 01   1 07   -7.6  0.115 -9.000 -9.000 -999.   93.     17.4  0.09   1.12
1.00    1.40   31.    7.9  282.5    2.0
 12 01 01   1 08  -13.6  0.184 -9.000 -9.000 -999.  190.     40.5  0.09   1.12
0.54    2.16   34.    7.9  284.2    2.0
 12 01 01   1 09   28.4  0.126  0.300  0.011   33.  108.     -6.2  0.09   1.12
0.32    1.03   29.    7.9  289.2    2.0
 12 01 01   1 10   79.8  0.133  0.607  0.010   99.  116.     -2.6  0.09   1.12
0.25    0.94  173.    7.9  292.5    2.0
 12 01 01   1 11  115.8  0.137  0.932  0.006  246.  121.     -2.0  0.09   1.12
0.22    0.92  172.    7.9  295.4    2.0
 12 01 01   1 12  133.7  0.139  1.197  0.005  453.  125.     -1.8  0.09   1.12
0.21    0.92  146.    7.9  297.5    2.0
 12 01 01   1 13  133.2  0.160  1.354  0.005  657.  153.     -2.7  0.09   1.12
0.21    1.14  117.    7.9  299.9    2.0
 12 01 01   1 14  113.5  0.159  1.454  0.005  955.  151.     -3.1  0.09   1.12
0.23    1.16  285.    7.9  300.9    2.0
 12 01 01   1 15   76.2  0.166  1.350  0.005 1138.  163.     -5.3  0.09   1.12
0.26    1.33   72.    7.9  302.0    2.0
 12 01 01   1 16   23.5  0.175  0.925  0.005 1183.  175.    -19.9  0.09   1.12
0.35    1.65  107.    7.9  301.4    2.0
 12 01 01   1 17   -6.1  0.107 -9.000 -9.000 -999.   86.     18.0  0.09   1.12
0.63    1.31  107.    7.9  298.1    2.0
 12 01 01   1 18  -11.1  0.141 -9.000 -9.000 -999.  127.     22.1  0.09   1.12
1.00    1.69   86.    7.9  293.1    2.0
 12 01 01   1 19   -3.2  0.076 -9.000 -9.000 -999.   51.     11.8  0.09   1.12
1.00    0.91   64.    7.9  292.0    2.0
 12 01 01   1 20   -2.3  0.066 -9.000 -9.000 -999.   41.     11.2  0.09   1.12
1.00    0.74   73.    7.9  288.8    2.0
 12 01 01   1 21  -10.0  0.133 -9.000 -9.000 -999.  116.     20.5  0.09   1.12
1.00    1.60   14.    7.9  288.1    2.0
 12 01 01   1 22  -19.4  0.201 -9.000 -9.000 -999.  216.     44.5  0.09   1.12
1.00    2.36   22.    7.9  287.5    2.0
 12 01 01   1 23  -23.7  0.246 -9.000 -9.000 -999.  293.     66.5  0.09   1.12
1.00    2.86   40.    7.9  287.0    2.0
 12 01 01   1 24  -12.3  0.147 -9.000 -9.000 -999.  139.     23.8  0.09   1.12
1.00    1.76   40.    7.9  283.8    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 12 01 01 01    7.9 1   43.    2.03   286.0   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***       10:11:01
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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***

INCLUDING SOURCE(S): VOL1 , VOL2 , VOL3 , VOL4 , VOL5 ,
VOL6 , VOL7 , VOL8 , VOL9 , VOL10 , VOL11 , VOL12 , VOL13 ,
VOL14 , VOL15 , VOL16 , VOL17 , VOL18 , VOL19 , VOL20 , VOL21 ,
VOL22 , VOL23 , VOL24 , VOL25 , VOL26 , VOL27 , VOL28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF NOX IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
444218.99	3769382.94	68.88293	(14121616)	443379.29	3769584.14	2.69283	(12021516)
444283.97	3769574.32	54.46739	(14123015)	444350.01	3769622.16	42.74168	(13112916)
444673.49	3770137.65	8.61557	(16122116)	444743.34	3770127.46	7.03411	(14120516)
445412.86	3770137.16	4.20998	(15122116)	444636.46	3769597.76	33.71295	(15120816)
444745.49	3769593.07	23.69047	(16121216)	444084.62	3769528.25	27.35598	(12021516)
444307.19	3769666.57	29.89974	(13021809)	444155.11	3769701.76	17.54340	(15012616)
444913.20	3769590.10	16.23129	(16121216)	445012.21	3769616.93	12.41249	(16121216)
444972.40	3769760.11	8.25378	(15120816)	445292.22	3769551.27	5.70180	(13112016)
445542.14	3769662.68	4.31753	(16121216)	445514.18	3769455.12	4.95630	(14120316)
445433.98	3769977.29	3.61103	(15122116)	445471.42	3769890.51	2.60650	(16121216)
445125.39	3770123.84	5.14404	(12120416)	445301.47	3770041.39	4.95905	(15122116)
445545.96	3769740.36	4.59261	(16121216)	445513.51	3769442.00	4.98308	(14120316)
443901.79	3769642.26	9.67053	(15012916)	443804.60	3769565.50	8.39817	(12021516)

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       443786.15   3769428.43        8.10260  (16012116)

 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:11:01

                                   PAGE  74
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                              *** THE SUMMARY OF HIGHEST  1-HR
RESULTS ***


                                    ** CONC OF NOX      IN MICROGRAMS/M**3
               **

                                                        DATE
                                        NETWORK
GROUP ID                           AVERAGE CONC     (YYMMDDHH)             RECEPTOR
(XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS      68.88293  ON 14121616: AT (  444218.99,
3769382.94,   292.78,   292.78,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:11:01

                                   PAGE  75
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of         1628 Informational Message(s)
```

```
 A Total of        43848 Hours Were Processed

 A Total of         1278 Calm Hours Identified

 A Total of          350 Missing Hours Identified (  0.80 Percent)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186    1153       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
      0.50
 ME W187    1153       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET


    ***********************************
    *** AERMOD Finishes Successfully ***
    ***********************************
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 12.0.0
** Lakes Environmental Software Inc.
** Date: 4/19/2024
** File: C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\Construction LST
PM10\Construction LST PM10.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti &
   MODELOPT DFAULT CONC
   AVERTIME 24
   URBANOPT 2035210 County_of_San_Bernardino
   POLLUTID PM_10
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "Construction LST PM10.err"
CO FINISHED
**
**************************************
```

```
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     444242.944  3769467.059      293.700
   LOCATION VOL2         VOLUME     444272.020  3769484.508      293.810
   LOCATION VOL3         VOLUME     444300.793  3769498.282      293.730
   LOCATION VOL4         VOLUME     444329.261  3769513.893      293.600
   LOCATION VOL5         VOLUME     444357.422  3769528.280      293.640
   LOCATION VOL6         VOLUME     444385.889  3769541.748      293.610
   LOCATION VOL7         VOLUME     444413.132  3769549.401      293.400
   LOCATION VOL8         VOLUME     444441.600  3769548.483      293.090
   LOCATION VOL9         VOLUME     444469.455  3769555.829      292.810
   LOCATION VOL10        VOLUME     444469.761  3769527.974      292.810
   LOCATION VOL11        VOLUME     444470.679  3769499.813      292.190
   LOCATION VOL12        VOLUME     444461.190  3769471.345      291.870
   LOCATION VOL13        VOLUME     444441.293  3769520.934      293.100
   LOCATION VOL14        VOLUME     444442.518  3769499.200      292.910
   LOCATION VOL15        VOLUME     444433.029  3769471.345      292.530
   LOCATION VOL16        VOLUME     444462.108  3769443.796      290.990
   LOCATION VOL17        VOLUME     444477.719  3769423.900      290.030
   LOCATION VOL18        VOLUME     444479.250  3769395.738      289.870
   LOCATION VOL19        VOLUME     444485.678  3769367.883      289.640
   LOCATION VOL20        VOLUME     444485.678  3769347.375      289.640
   LOCATION VOL21        VOLUME     444434.559  3769443.184      291.880
   LOCATION VOL22        VOLUME     444413.744  3769521.852      293.250
   LOCATION VOL23        VOLUME     444451.089  3769415.023      290.920
   LOCATION VOL24        VOLUME     444457.211  3769387.780      290.450
   LOCATION VOL25        VOLUME     444458.129  3769359.619      290.190
   LOCATION VOL26        VOLUME     444456.905  3769347.375      290.200
   LOCATION VOL27        VOLUME     444429.049  3769347.681      290.600
   LOCATION VOL28        VOLUME     444401.500  3769347.681      291.160
   LOCATION VOL29        VOLUME     444373.339  3769351.660      291.500
   LOCATION VOL30        VOLUME     444344.260  3769360.537      291.890
   LOCATION VOL31        VOLUME     444315.792  3769372.781      292.300
   LOCATION VOL32        VOLUME     444287.325  3769382.576      292.690
   LOCATION VOL33        VOLUME     444266.510  3769410.125      293.050
   LOCATION VOL34        VOLUME     444246.613  3769438.593      293.350
   LOCATION VOL35        VOLUME     444271.714  3769456.959      293.530
   LOCATION VOL36        VOLUME     444273.550  3769438.286      293.340
   LOCATION VOL37        VOLUME     444381.910  3769457.265      292.800
   LOCATION VOL38        VOLUME     444385.583  3769513.893      293.330
   LOCATION VOL39        VOLUME     444300.793  3769470.733      293.450
   LOCATION VOL40        VOLUME     444328.954  3769486.344      293.320
   LOCATION VOL41        VOLUME     444357.728  3769500.731      293.360
   LOCATION VOL42        VOLUME     444413.744  3769494.915      293.000
   LOCATION VOL43        VOLUME     444429.662  3769374.617      290.940
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   LOCATION VOL44        VOLUME     444429.049  3769402.473      291.450
   LOCATION VOL45        VOLUME     444422.621  3769430.940      291.860
   LOCATION VOL46        VOLUME     444407.010  3769458.489      292.560
   LOCATION VOL47        VOLUME     444404.561  3769486.344      292.910
   LOCATION VOL48        VOLUME     444377.012  3769485.426      293.130
   LOCATION VOL49        VOLUME     444354.361  3769472.570      293.080
   LOCATION VOL50        VOLUME     444301.099  3769442.878      293.170
   LOCATION VOL51        VOLUME     444328.342  3769458.795      293.050
   LOCATION VOL52        VOLUME     444294.671  3769411.043      292.910
   LOCATION VOL53        VOLUME     444301.099  3769427.267      293.010
   LOCATION VOL54        VOLUME     444315.180  3769400.942      292.600
   LOCATION VOL55        VOLUME     444328.648  3769430.634      292.760
   LOCATION VOL56        VOLUME     444356.810  3769444.408      292.790
   LOCATION VOL57        VOLUME     444343.647  3769389.004      292.190
   LOCATION VOL58        VOLUME     444343.341  3769416.553      292.500
   LOCATION VOL59        VOLUME     444371.809  3769380.127      291.810
   LOCATION VOL60        VOLUME     444400.582  3769376.148      291.470
   LOCATION VOL61        VOLUME     444400.276  3769404.309      291.770
   LOCATION VOL62        VOLUME     444371.502  3769408.289      292.210
   LOCATION VOL63        VOLUME     444371.502  3769436.144      292.670
   LOCATION VOL64        VOLUME     444395.991  3769430.328      292.140
   LOCATION PAREA1       AREAPOLY   444232.281  3769472.273      293.860
** Source Parameters **
   SRCPARAM VOL1         0.000554068     5.000     6.407     1.400
   SRCPARAM VOL2         0.000554068     5.000     6.407     1.400
   SRCPARAM VOL3         0.000554068     5.000     6.407     1.400
   SRCPARAM VOL4         0.000554068     5.000     6.407     1.400
   SRCPARAM VOL5         0.000554068     5.000     6.407     1.400
   SRCPARAM VOL6         0.000554068     5.000     6.407     1.400
   SRCPARAM VOL7         0.000554068     5.000     6.407     1.400
   SRCPARAM VOL8         0.000554068     5.000     6.407     1.400
   SRCPARAM VOL9         0.000554068     5.000     6.407     1.400
   SRCPARAM VOL10        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL11        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL12        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL13        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL14        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL15        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL16        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL17        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL18        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL19        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL20        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL21        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL22        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL23        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL24        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL25        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL26        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL27        0.000554068     5.000     6.407     1.400
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SRCPARAM VOL28        0.000554068     5.000     6.407     1.400
SRCPARAM VOL29        0.000554068     5.000     6.407     1.400
SRCPARAM VOL30        0.000554068     5.000     6.407     1.400
SRCPARAM VOL31        0.000554068     5.000     6.407     1.400
SRCPARAM VOL32        0.000554068     5.000     6.407     1.400
SRCPARAM VOL33        0.000554068     5.000     6.407     1.400
SRCPARAM VOL34        0.000554068     5.000     6.407     1.400
SRCPARAM VOL35        0.000554068     5.000     6.407     1.400
SRCPARAM VOL36        0.000554068     5.000     6.407     1.400
SRCPARAM VOL37        0.000554068     5.000     6.407     1.400
SRCPARAM VOL38        0.000554068     5.000     6.407     1.400
SRCPARAM VOL39        0.000554068     5.000     6.407     1.400
SRCPARAM VOL40        0.000554068     5.000     6.407     1.400
SRCPARAM VOL41        0.000554068     5.000     6.407     1.400
SRCPARAM VOL42        0.000554068     5.000     6.407     1.400
SRCPARAM VOL43        0.000554068     5.000     6.407     1.400
SRCPARAM VOL44        0.000554068     5.000     6.407     1.400
SRCPARAM VOL45        0.000554068     5.000     6.407     1.400
SRCPARAM VOL46        0.000554068     5.000     6.407     1.400
SRCPARAM VOL47        0.000554068     5.000     6.407     1.400
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SRCPARAM VOL49        0.000554068     5.000     6.407     1.400
SRCPARAM VOL50        0.000554068     5.000     6.407     1.400
SRCPARAM VOL51        0.000554068     5.000     6.407     1.400
SRCPARAM VOL52        0.000554068     5.000     6.407     1.400
SRCPARAM VOL53        0.000554068     5.000     6.407     1.400
SRCPARAM VOL54        0.000554068     5.000     6.407     1.400
SRCPARAM VOL55        0.000554068     5.000     6.407     1.400
SRCPARAM VOL56        0.000554068     5.000     6.407     1.400
SRCPARAM VOL57        0.000554068     5.000     6.407     1.400
SRCPARAM VOL58        0.000554068     5.000     6.407     1.400
SRCPARAM VOL59        0.000554068     5.000     6.407     1.400
SRCPARAM VOL60        0.000554068     5.000     6.407     1.400
SRCPARAM VOL61        0.000554068     5.000     6.407     1.400
SRCPARAM VOL62        0.000554068     5.000     6.407     1.400
SRCPARAM VOL63        0.000554068     5.000     6.407     1.400
SRCPARAM VOL64        0.000554068     5.000     6.407     1.400
SRCPARAM PAREA1       2.1081E-06      0.000        43     1.000
AREAVERT PAREA1       444232.281 3769472.273 444254.454 3769481.948
AREAVERT PAREA1       444295.373 3769501.098 444329.237 3769517.425
AREAVERT PAREA1       444354.837 3769529.318 444382.654 3769543.428
AREAVERT PAREA1       444410.067 3769556.530 444420.549 3769561.368
AREAVERT PAREA1       444419.945 3769544.436 444459.251 3769562.980
AREAVERT PAREA1       444473.563 3769570.035 444482.230 3769553.305
AREAVERT PAREA1       444485.657 3769499.888 444472.555 3769498.276
AREAVERT PAREA1       444476.586 3769438.409 444490.092 3769439.014
AREAVERT PAREA1       444494.123 3769377.937 444498.759 3769377.736
AREAVERT PAREA1       444500.170 3769355.563 444489.487 3769332.382
AREAVERT PAREA1       444465.500 3769332.583 444435.869 3769333.188
AREAVERT PAREA1       444428.209 3769333.188 444416.316 3769333.793
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   AREAVERT PAREA1       444402.609 3769335.607 444383.662 3769338.227
   AREAVERT PAREA1       444361.690 3769344.275 444346.975 3769349.314
   AREAVERT PAREA1       444335.889 3769354.756 444322.787 3769361.207
   AREAVERT PAREA1       444311.902 3769368.665 444301.420 3769375.115
   AREAVERT PAREA1       444290.334 3769383.178 444281.666 3769390.636
   AREAVERT PAREA1       444268.967 3769402.731 444260.098 3769413.011
   AREAVERT PAREA1       444247.802 3769429.943 444240.948 3769440.425
   AREAVERT PAREA1       444234.700 3769451.108 444229.056 3769463.001
   AREAVERT PAREA1       444228.451 3769465.218 444228.048 3769467.637
   AREAVERT PAREA1       444229.459 3769469.451
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
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   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
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   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
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   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
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   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
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   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
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   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
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   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL37        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL38        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL39        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
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   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL40        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL41        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL42        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL43        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL44        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL45        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL46        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
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   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL47        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL48        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL49        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
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   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL50        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL51        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL52        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL53        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
```

```
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL54        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL55        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL56        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
```

```
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL57        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL58        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL59        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
```

```
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL60        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL61        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL62        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL63        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
```

```
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL64        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED "Construction LST PM10.rou"
RE FINISHED
```

```
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE KONT_V9_ADJU\KONT_v9.SFC
   PROFFILE KONT_V9_ADJU\KONT_v9.PFL
   SURFDATA 3102 2012
   UAIRDATA 3190 2012
   PROFBASE 289.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 24 ALL 1ST "CONSTRUCTION LST PM10.AD\24H1GALL.PLT" 31
   SUMMFILE "Construction LST PM10.sum"
OU FINISHED
**
**************************************
** Project Parameters
**************************************
** PROJCTN  CoordinateSystemUTM
** DESCPTN  UTM: Universal Transverse Mercator
** DATUM    North American Datum 1983
** DTMRGN   CONUS
** UNITS    m
** ZONE     11
** ZONEINX  0
**
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 12.0.0
** Lakes Environmental Software Inc.
** Date: 4/19/2024
** File: C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\Construction LST
PM10\Construction LST PM10.ADI
**
**************************************
**
```

```
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti &
   MODELOPT DFAULT CONC
   AVERTIME 24
   URBANOPT 2035210 County_of_San_Bernardino
   POLLUTID PM_10
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "Construction LST PM10.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     444242.944  3769467.059      293.700
   LOCATION VOL2         VOLUME     444272.020  3769484.508      293.810
   LOCATION VOL3         VOLUME     444300.793  3769498.282      293.730
   LOCATION VOL4         VOLUME     444329.261  3769513.893      293.600
   LOCATION VOL5         VOLUME     444357.422  3769528.280      293.640
   LOCATION VOL6         VOLUME     444385.889  3769541.748      293.610
   LOCATION VOL7         VOLUME     444413.132  3769549.401      293.400
   LOCATION VOL8         VOLUME     444441.600  3769548.483      293.090
   LOCATION VOL9         VOLUME     444469.455  3769555.829      292.810
   LOCATION VOL10        VOLUME     444469.761  3769527.974      292.810
   LOCATION VOL11        VOLUME     444470.679  3769499.813      292.190
   LOCATION VOL12        VOLUME     444461.190  3769471.345      291.870
   LOCATION VOL13        VOLUME     444441.293  3769520.934      293.100
   LOCATION VOL14        VOLUME     444442.518  3769499.200      292.910
   LOCATION VOL15        VOLUME     444433.029  3769471.345      292.530
   LOCATION VOL16        VOLUME     444462.108  3769443.796      290.990
   LOCATION VOL17        VOLUME     444477.719  3769423.900      290.030
   LOCATION VOL18        VOLUME     444479.250  3769395.738      289.870
   LOCATION VOL19        VOLUME     444485.678  3769367.883      289.640
   LOCATION VOL20        VOLUME     444485.678  3769347.375      289.640
   LOCATION VOL21        VOLUME     444434.559  3769443.184      291.880
   LOCATION VOL22        VOLUME     444413.744  3769521.852      293.250
   LOCATION VOL23        VOLUME     444451.089  3769415.023      290.920
   LOCATION VOL24        VOLUME     444457.211  3769387.780      290.450
   LOCATION VOL25        VOLUME     444458.129  3769359.619      290.190
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   LOCATION VOL26        VOLUME     444456.905  3769347.375      290.200
   LOCATION VOL27        VOLUME     444429.049  3769347.681      290.600
   LOCATION VOL28        VOLUME     444401.500  3769347.681      291.160
   LOCATION VOL29        VOLUME     444373.339  3769351.660      291.500
   LOCATION VOL30        VOLUME     444344.260  3769360.537      291.890
   LOCATION VOL31        VOLUME     444315.792  3769372.781      292.300
   LOCATION VOL32        VOLUME     444287.325  3769382.576      292.690
   LOCATION VOL33        VOLUME     444266.510  3769410.125      293.050
   LOCATION VOL34        VOLUME     444246.613  3769438.593      293.350
   LOCATION VOL35        VOLUME     444271.714  3769456.959      293.530
   LOCATION VOL36        VOLUME     444273.550  3769438.286      293.340
   LOCATION VOL37        VOLUME     444381.910  3769457.265      292.800
   LOCATION VOL38        VOLUME     444385.583  3769513.893      293.330
   LOCATION VOL39        VOLUME     444300.793  3769470.733      293.450
   LOCATION VOL40        VOLUME     444328.954  3769486.344      293.320
   LOCATION VOL41        VOLUME     444357.728  3769500.731      293.360
   LOCATION VOL42        VOLUME     444413.744  3769494.915      293.000
   LOCATION VOL43        VOLUME     444429.662  3769374.617      290.940
   LOCATION VOL44        VOLUME     444429.049  3769402.473      291.450
   LOCATION VOL45        VOLUME     444422.621  3769430.940      291.860
   LOCATION VOL46        VOLUME     444407.010  3769458.489      292.560
   LOCATION VOL47        VOLUME     444404.561  3769486.344      292.910
   LOCATION VOL48        VOLUME     444377.012  3769485.426      293.130
   LOCATION VOL49        VOLUME     444354.361  3769472.570      293.080
   LOCATION VOL50        VOLUME     444301.099  3769442.878      293.170
   LOCATION VOL51        VOLUME     444328.342  3769458.795      293.050
   LOCATION VOL52        VOLUME     444294.671  3769411.043      292.910
   LOCATION VOL53        VOLUME     444301.099  3769427.267      293.010
   LOCATION VOL54        VOLUME     444315.180  3769400.942      292.600
   LOCATION VOL55        VOLUME     444328.648  3769430.634      292.760
   LOCATION VOL56        VOLUME     444356.810  3769444.408      292.790
   LOCATION VOL57        VOLUME     444343.647  3769389.004      292.190
   LOCATION VOL58        VOLUME     444343.341  3769416.553      292.500
   LOCATION VOL59        VOLUME     444371.809  3769380.127      291.810
   LOCATION VOL60        VOLUME     444400.582  3769376.148      291.470
   LOCATION VOL61        VOLUME     444400.276  3769404.309      291.770
   LOCATION VOL62        VOLUME     444371.502  3769408.289      292.210
   LOCATION VOL63        VOLUME     444371.502  3769436.144      292.670
   LOCATION VOL64        VOLUME     444395.991  3769430.328      292.140
   LOCATION PAREA1       AREAPOLY   444232.281  3769472.273      293.860
** Source Parameters **
   SRCPARAM VOL1         0.000554068     5.000     6.407     1.400
   SRCPARAM VOL2         0.000554068     5.000     6.407     1.400
   SRCPARAM VOL3         0.000554068     5.000     6.407     1.400
   SRCPARAM VOL4         0.000554068     5.000     6.407     1.400
   SRCPARAM VOL5         0.000554068     5.000     6.407     1.400
   SRCPARAM VOL6         0.000554068     5.000     6.407     1.400
   SRCPARAM VOL7         0.000554068     5.000     6.407     1.400
   SRCPARAM VOL8         0.000554068     5.000     6.407     1.400
   SRCPARAM VOL9         0.000554068     5.000     6.407     1.400
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SRCPARAM VOL10        0.000554068     5.000     6.407     1.400
SRCPARAM VOL11        0.000554068     5.000     6.407     1.400
SRCPARAM VOL12        0.000554068     5.000     6.407     1.400
SRCPARAM VOL13        0.000554068     5.000     6.407     1.400
SRCPARAM VOL14        0.000554068     5.000     6.407     1.400
SRCPARAM VOL15        0.000554068     5.000     6.407     1.400
SRCPARAM VOL16        0.000554068     5.000     6.407     1.400
SRCPARAM VOL17        0.000554068     5.000     6.407     1.400
SRCPARAM VOL18        0.000554068     5.000     6.407     1.400
SRCPARAM VOL19        0.000554068     5.000     6.407     1.400
SRCPARAM VOL20        0.000554068     5.000     6.407     1.400
SRCPARAM VOL21        0.000554068     5.000     6.407     1.400
SRCPARAM VOL22        0.000554068     5.000     6.407     1.400
SRCPARAM VOL23        0.000554068     5.000     6.407     1.400
SRCPARAM VOL24        0.000554068     5.000     6.407     1.400
SRCPARAM VOL25        0.000554068     5.000     6.407     1.400
SRCPARAM VOL26        0.000554068     5.000     6.407     1.400
SRCPARAM VOL27        0.000554068     5.000     6.407     1.400
SRCPARAM VOL28        0.000554068     5.000     6.407     1.400
SRCPARAM VOL29        0.000554068     5.000     6.407     1.400
SRCPARAM VOL30        0.000554068     5.000     6.407     1.400
SRCPARAM VOL31        0.000554068     5.000     6.407     1.400
SRCPARAM VOL32        0.000554068     5.000     6.407     1.400
SRCPARAM VOL33        0.000554068     5.000     6.407     1.400
SRCPARAM VOL34        0.000554068     5.000     6.407     1.400
SRCPARAM VOL35        0.000554068     5.000     6.407     1.400
SRCPARAM VOL36        0.000554068     5.000     6.407     1.400
SRCPARAM VOL37        0.000554068     5.000     6.407     1.400
SRCPARAM VOL38        0.000554068     5.000     6.407     1.400
SRCPARAM VOL39        0.000554068     5.000     6.407     1.400
SRCPARAM VOL40        0.000554068     5.000     6.407     1.400
SRCPARAM VOL41        0.000554068     5.000     6.407     1.400
SRCPARAM VOL42        0.000554068     5.000     6.407     1.400
SRCPARAM VOL43        0.000554068     5.000     6.407     1.400
SRCPARAM VOL44        0.000554068     5.000     6.407     1.400
SRCPARAM VOL45        0.000554068     5.000     6.407     1.400
SRCPARAM VOL46        0.000554068     5.000     6.407     1.400
SRCPARAM VOL47        0.000554068     5.000     6.407     1.400
SRCPARAM VOL48        0.000554068     5.000     6.407     1.400
SRCPARAM VOL49        0.000554068     5.000     6.407     1.400
SRCPARAM VOL50        0.000554068     5.000     6.407     1.400
SRCPARAM VOL51        0.000554068     5.000     6.407     1.400
SRCPARAM VOL52        0.000554068     5.000     6.407     1.400
SRCPARAM VOL53        0.000554068     5.000     6.407     1.400
SRCPARAM VOL54        0.000554068     5.000     6.407     1.400
SRCPARAM VOL55        0.000554068     5.000     6.407     1.400
SRCPARAM VOL56        0.000554068     5.000     6.407     1.400
SRCPARAM VOL57        0.000554068     5.000     6.407     1.400
SRCPARAM VOL58        0.000554068     5.000     6.407     1.400
SRCPARAM VOL59        0.000554068     5.000     6.407     1.400
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   SRCPARAM VOL60        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL61        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL62        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL63        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL64        0.000554068     5.000     6.407     1.400
   SRCPARAM PAREA1       2.1081E-06      0.000        43     1.000
   AREAVERT PAREA1       444232.281 3769472.273 444254.454 3769481.948
   AREAVERT PAREA1       444295.373 3769501.098 444329.237 3769517.425
   AREAVERT PAREA1       444354.837 3769529.318 444382.654 3769543.428
   AREAVERT PAREA1       444410.067 3769556.530 444420.549 3769561.368
   AREAVERT PAREA1       444419.945 3769544.436 444459.251 3769562.980
   AREAVERT PAREA1       444473.563 3769570.035 444482.230 3769553.305
   AREAVERT PAREA1       444485.657 3769499.888 444472.555 3769498.276
   AREAVERT PAREA1       444476.586 3769438.409 444490.092 3769439.014
   AREAVERT PAREA1       444494.123 3769377.937 444498.759 3769377.736
   AREAVERT PAREA1       444500.170 3769355.563 444489.487 3769332.382
   AREAVERT PAREA1       444465.500 3769332.583 444435.869 3769333.188
   AREAVERT PAREA1       444428.209 3769333.188 444416.316 3769333.793
   AREAVERT PAREA1       444402.609 3769335.607 444383.662 3769338.227
   AREAVERT PAREA1       444361.690 3769344.275 444346.975 3769349.314
   AREAVERT PAREA1       444335.889 3769354.756 444322.787 3769361.207
   AREAVERT PAREA1       444311.902 3769368.665 444301.420 3769375.115
   AREAVERT PAREA1       444290.334 3769383.178 444281.666 3769390.636
   AREAVERT PAREA1       444268.967 3769402.731 444260.098 3769413.011
   AREAVERT PAREA1       444247.802 3769429.943 444240.948 3769440.425
   AREAVERT PAREA1       444234.700 3769451.108 444229.056 3769463.001
   AREAVERT PAREA1       444228.451 3769465.218 444228.048 3769467.637
   AREAVERT PAREA1       444229.459 3769469.451
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL37        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL38        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL39        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL40        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL41        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL42        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL43        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL44        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL45        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL46        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL47        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL48        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL49        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL50        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL51        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL52        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL53        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL54        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL55        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL56        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL57        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL58        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL59        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL60        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL61        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
```

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   EMISFACT VOL62        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL63        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL64        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED "Construction LST PM10.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE KONT_V9_ADJU\KONT_v9.SFC
   PROFFILE KONT_V9_ADJU\KONT_v9.PFL
   SURFDATA 3102 2012
   UAIRDATA 3190 2012
   PROFBASE 289.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 24 ALL 1ST "CONSTRUCTION LST PM10.AD\24H1GALL.PLT" 31
   SUMMFILE "Construction LST PM10.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------
```

```
 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186    1192       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
      0.50
 ME W187    1192       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET


 **********************************
 *** SETUP Finishes Successfully ***
 **********************************

 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                         ***       10:24:44

                                   PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                            ***     MODEL SETUP OPTIONS SUMMARY
  ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - -

 ** Model Options Selected:
      * Model Uses Regulatory DEFAULT Options
      * Model Is Setup For Calculation of Average CONCentration Values.
      * NO GAS DEPOSITION Data Provided.
      * NO PARTICLE DEPOSITION Data Provided.
      * Model Uses NO DRY DEPLETION. DDPLETE  =  F
      * Model Uses NO WET DEPLETION. WETDPLT  =  F
      * Stack-tip Downwash.
      * Model Accounts for ELEVated Terrain Effects.
      * Use Calms Processing Routine.
      * Use Missing Data Processing Routine.
      * No Exponential Decay.
      * Model Uses URBAN Dispersion Algorithm for the SBL for    65 Source(s),
        for Total of    1 Urban Area(s):
   Urban Population =   2035210.0 ;  Urban Roughness Length =  1.000 m
      * Urban Roughness Length of 1.0 Meter Used.
      * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
```

```
      * CCVR_Sub - Meteorological data includes CCVR substitutions
      * TEMP_Sub - Meteorological data includes TEMP substitutions
      * Model Accepts FLAGPOLE Receptor . Heights.
      * The User Specified a Pollutant Type of: PM_10

 **Model Calculates  1 Short Term Average(s) of:  24-HR

 **This Run Includes:     65 Source(s);       1 Source Group(s); and      27
Receptor(s)

                with:      0 POINT(s), including
                           0 POINTCAP(s) and      0 POINTHOR(s)
                 and:     64 VOLUME source(s)
                 and:      1 AREA type source(s)
                 and:      0 LINE source(s)
                 and:      0 RLINE/RLINEXT source(s)
                 and:      0 OPENPIT source(s)
                 and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                 and:      0 SWPOINT source(s)


 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  16216

 **Output Options Selected:
          Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
Keyword)
          Model Outputs External File(s) of High Values for Plotting (PLOTFILE
Keyword)
          Model Outputs Separate Summary File of High Ranked Values (SUMMFILE
Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                 m for Missing
Hours
                                                                 b for Both Calm
and Missing Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   289.00 ;  Decay
Coef. =    0.000     ;  Rot. Angle =     0.0
                  Emission Units = GRAMS/SEC                                ;
Emission Rate Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      3.6 MB of RAM.

 **Input Runstream File:          aermod.inp

 **Output Print File:             aermod.out
```

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
VOL1	0	0.55407E-03	444242.9	3769467.1	293.7	5.00	6.41	1.40	YES	HRDOW	NO
VOL2	0	0.55407E-03	444272.0	3769484.5	293.8	5.00	6.41	1.40	YES	HRDOW	NO
VOL3	0	0.55407E-03	444300.8	3769498.3	293.7	5.00	6.41	1.40	YES	HRDOW	NO
VOL4	0	0.55407E-03	444329.3	3769513.9	293.6	5.00	6.41	1.40	YES	HRDOW	NO
VOL5	0	0.55407E-03	444357.4	3769528.3	293.6	5.00	6.41	1.40	YES	HRDOW	NO
VOL6	0	0.55407E-03	444385.9	3769541.7	293.6	5.00	6.41	1.40	YES	HRDOW	NO
VOL7	0	0.55407E-03	444413.1	3769549.4	293.4	5.00	6.41	1.40	YES	HRDOW	NO
VOL8	0	0.55407E-03	444441.6	3769548.5	293.1	5.00	6.41	1.40	YES	HRDOW	NO
VOL9	0	0.55407E-03	444469.5	3769555.8	292.8	5.00	6.41	1.40	YES	HRDOW	NO
VOL10	0	0.55407E-03	444469.8	3769528.0	292.8	5.00	6.41	1.40	YES	HRDOW	NO
VOL11	0	0.55407E-03	444470.7	3769499.8	292.2	5.00	6.41	1.40	YES	HRDOW	NO
VOL12	0	0.55407E-03	444461.2	3769471.3	291.9	5.00	6.41				

```
1.40     YES   HRDOW            NO
 VOL13           0   0.55407E-03  444441.3 3769520.9   293.1     5.00     6.41
1.40     YES   HRDOW            NO
 VOL14           0   0.55407E-03  444442.5 3769499.2   292.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL15           0   0.55407E-03  444433.0 3769471.3   292.5     5.00     6.41
1.40     YES   HRDOW            NO
 VOL16           0   0.55407E-03  444462.1 3769443.8   291.0     5.00     6.41
1.40     YES   HRDOW            NO
 VOL17           0   0.55407E-03  444477.7 3769423.9   290.0     5.00     6.41
1.40     YES   HRDOW            NO
 VOL18           0   0.55407E-03  444479.2 3769395.7   289.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL19           0   0.55407E-03  444485.7 3769367.9   289.6     5.00     6.41
1.40     YES   HRDOW            NO
 VOL20           0   0.55407E-03  444485.7 3769347.4   289.6     5.00     6.41
1.40     YES   HRDOW            NO
 VOL21           0   0.55407E-03  444434.6 3769443.2   291.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL22           0   0.55407E-03  444413.7 3769521.9   293.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL23           0   0.55407E-03  444451.1 3769415.0   290.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL24           0   0.55407E-03  444457.2 3769387.8   290.4     5.00     6.41
1.40     YES   HRDOW            NO
 VOL25           0   0.55407E-03  444458.1 3769359.6   290.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL26           0   0.55407E-03  444456.9 3769347.4   290.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL27           0   0.55407E-03  444429.0 3769347.7   290.6     5.00     6.41
1.40     YES   HRDOW            NO
 VOL28           0   0.55407E-03  444401.5 3769347.7   291.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL29           0   0.55407E-03  444373.3 3769351.7   291.5     5.00     6.41
1.40     YES   HRDOW            NO
 VOL30           0   0.55407E-03  444344.3 3769360.5   291.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL31           0   0.55407E-03  444315.8 3769372.8   292.3     5.00     6.41
1.40     YES   HRDOW            NO
 VOL32           0   0.55407E-03  444287.3 3769382.6   292.7     5.00     6.41
1.40     YES   HRDOW            NO
 VOL33           0   0.55407E-03  444266.5 3769410.1   293.1     5.00     6.41
1.40     YES   HRDOW            NO
 VOL34           0   0.55407E-03  444246.6 3769438.6   293.4     5.00     6.41
1.40     YES   HRDOW            NO
 VOL35           0   0.55407E-03  444271.7 3769457.0   293.5     5.00     6.41
1.40     YES   HRDOW            NO
 VOL36           0   0.55407E-03  444273.5 3769438.3   293.3     5.00     6.41
1.40     YES   HRDOW            NO
 VOL37           0   0.55407E-03  444381.9 3769457.3   292.8     5.00     6.41
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1.40     YES   HRDOW            NO
 VOL38           0   0.55407E-03  444385.6 3769513.9   293.3     5.00     6.41
1.40     YES   HRDOW            NO
 VOL39           0   0.55407E-03  444300.8 3769470.7   293.4     5.00     6.41
1.40     YES   HRDOW            NO
 VOL40           0   0.55407E-03  444329.0 3769486.3   293.3     5.00     6.41
1.40     YES   HRDOW            NO
↑ *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                                    *** VOLUME SOURCE DATA ***

              NUMBER EMISSION RATE                    BASE    RELEASE    INIT.
INIT.   URBAN  EMISSION RATE   AIRCRAFT
   SOURCE       PART.  (GRAMS/SEC)     X        Y      ELEV.   HEIGHT      SY
SZ     SOURCE  SCALAR VARY
     ID          CATS.               (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)              BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - -

 VOL41           0   0.55407E-03  444357.7 3769500.7   293.4     5.00     6.41
1.40     YES   HRDOW            NO
 VOL42           0   0.55407E-03  444413.7 3769494.9   293.0     5.00     6.41
1.40     YES   HRDOW            NO
 VOL43           0   0.55407E-03  444429.7 3769374.6   290.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL44           0   0.55407E-03  444429.0 3769402.5   291.4     5.00     6.41
1.40     YES   HRDOW            NO
 VOL45           0   0.55407E-03  444422.6 3769430.9   291.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL46           0   0.55407E-03  444407.0 3769458.5   292.6     5.00     6.41
1.40     YES   HRDOW            NO
 VOL47           0   0.55407E-03  444404.6 3769486.3   292.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL48           0   0.55407E-03  444377.0 3769485.4   293.1     5.00     6.41
1.40     YES   HRDOW            NO
 VOL49           0   0.55407E-03  444354.4 3769472.6   293.1     5.00     6.41
1.40     YES   HRDOW            NO
 VOL50           0   0.55407E-03  444301.1 3769442.9   293.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL51           0   0.55407E-03  444328.3 3769458.8   293.1     5.00     6.41
1.40     YES   HRDOW            NO
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 VOL52            0   0.55407E-03  444294.7 3769411.0   292.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL53            0   0.55407E-03  444301.1 3769427.3   293.0     5.00     6.41
1.40     YES   HRDOW            NO
 VOL54            0   0.55407E-03  444315.2 3769400.9   292.6     5.00     6.41
1.40     YES   HRDOW            NO
 VOL55            0   0.55407E-03  444328.6 3769430.6   292.8     5.00     6.41
1.40     YES   HRDOW            NO
 VOL56            0   0.55407E-03  444356.8 3769444.4   292.8     5.00     6.41
1.40     YES   HRDOW            NO
 VOL57            0   0.55407E-03  444343.6 3769389.0   292.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL58            0   0.55407E-03  444343.3 3769416.6   292.5     5.00     6.41
1.40     YES   HRDOW            NO
 VOL59            0   0.55407E-03  444371.8 3769380.1   291.8     5.00     6.41
1.40     YES   HRDOW            NO
 VOL60            0   0.55407E-03  444400.6 3769376.1   291.5     5.00     6.41
1.40     YES   HRDOW            NO
 VOL61            0   0.55407E-03  444400.3 3769404.3   291.8     5.00     6.41
1.40     YES   HRDOW            NO
 VOL62            0   0.55407E-03  444371.5 3769408.3   292.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL63            0   0.55407E-03  444371.5 3769436.1   292.7     5.00     6.41
1.40     YES   HRDOW            NO
 VOL64            0   0.55407E-03  444396.0 3769430.3   292.1     5.00     6.41
1.40     YES   HRDOW            NO
↟ *** AERMOD - VERSION 23132  ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                                *** AREAPOLY SOURCE DATA ***

              NUMBER EMISSION RATE   LOCATION OF AREA  BASE     RELEASE  NUMBER
  INIT.   URBAN  EMISSION RATE    AIRCRAFT
   SOURCE       PART.  (GRAMS/SEC       X        Y      ELEV.    HEIGHT  OF VERTS.
   SZ     SOURCE  SCALAR VARY
     ID         CATS.   /METER**2)   (METERS) (METERS) (METERS) (METERS)
(METERS)             BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - -

 PAREA1           0   0.21081E-05  444232.3 3769472.3   293.9     0.00      43
   1.00     YES   HRDOW            NO
↟ *** AERMOD - VERSION 23132  ***   ***
```

*** SOURCE IDs DEFINING SOURCE GROUPS
***

 SRCGROUP ID   SOURCE IDs
 -----------   ----------

  ALL   VOL1   , VOL2   , VOL3   , VOL4   , VOL5   ,
VOL6   , VOL7   , VOL8   ,

             VOL9   , VOL10   , VOL11   , VOL12   , VOL13   ,
VOL14   , VOL15   , VOL16   ,

             VOL17   , VOL18   , VOL19   , VOL20   , VOL21   ,
VOL22   , VOL23   , VOL24   ,

             VOL25   , VOL26   , VOL27   , VOL28   , VOL29   ,
VOL30   , VOL31   , VOL32   ,

             VOL33   , VOL34   , VOL35   , VOL36   , VOL37   ,
VOL38   , VOL39   , VOL40   ,

             VOL41   , VOL42   , VOL43   , VOL44   , VOL45   ,
VOL46   , VOL47   , VOL48   ,

             VOL49   , VOL50   , VOL51   , VOL52   , VOL53   ,
VOL54   , VOL55   , VOL56   ,

             VOL57   , VOL58   , VOL59   , VOL60   , VOL61   ,
VOL62   , VOL63   , VOL64   ,

             PAREA1   ,

```
                                                *** SOURCE IDs DEFINED AS URBAN SOURCES
***

  URBAN ID   URBAN POP                                        SOURCE IDs
  --------   ---------                                        ----------


              2035210.   VOL1        , VOL2        , VOL3        , VOL4        ,
VOL5        , VOL6        , VOL7        ,
 VOL8        ,

              VOL9        , VOL10       , VOL11       , VOL12       , VOL13       ,
VOL14       , VOL15       , VOL16       ,

              VOL17       , VOL18       , VOL19       , VOL20       , VOL21       ,
VOL22       , VOL23       , VOL24       ,

              VOL25       , VOL26       , VOL27       , VOL28       , VOL29       ,
VOL30       , VOL31       , VOL32       ,

              VOL33       , VOL34       , VOL35       , VOL36       , VOL37       ,
VOL38       , VOL39       , VOL40       ,

              VOL41       , VOL42       , VOL43       , VOL44       , VOL45       ,
VOL46       , VOL47       , VOL48       ,

              VOL49       , VOL50       , VOL51       , VOL52       , VOL53       ,
VOL54       , VOL55       , VOL56       ,

              VOL57       , VOL58       , VOL59       , VOL60       , VOL61       ,
VOL62       , VOL63       , VOL64       ,

              PAREA1      ,
↟ *** AERMOD - VERSION 23132  ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL1         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
```

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- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL2          ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
```

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14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL3         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL4   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL5   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR

```
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -
```

```
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

                                  PAGE  13
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL7         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL8 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

```
 SOURCE ID = VOL9          ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL10         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
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                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL11        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
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   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:24:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL12        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                  DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:24:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
```

OF WEEK (HRDOW) *

 SOURCE ID = VOL13   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL14   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01

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   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL15        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
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```
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL16        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

                                  PAGE  23
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
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                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL17        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL18        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
```

```
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL19        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
```

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL20        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***       10:24:44
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 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL21   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                 DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL22   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                 DAY OF WEEK = WEEKDAY

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL23        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
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22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL24        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
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                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL25   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                  DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL26   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -

```
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

                                  PAGE  33
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL27        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
```

```
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

                                   PAGE  34
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL28        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
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                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL29   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL30   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR

```
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -
```

```
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

                                  PAGE  38
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL32        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL33 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

```
 SOURCE ID = VOL34        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

                                  PAGE  41
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL35        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

```
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL36        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
```

```
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:24:44

                                   PAGE  43
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL37        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                  DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:24:44

                                   PAGE  44
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
```

```
OF WEEK (HRDOW) *

 SOURCE ID = VOL38        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

                                  PAGE  45
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL39        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
```

```
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

                                  PAGE  46
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL40        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
```

```
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

                                  PAGE  47
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL41        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

                                  PAGE  48
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
```

```
                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL42        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                    DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                    DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                    DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

                                  PAGE  49
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL43        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                    DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
```

```
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL44        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
```

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    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
*** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL45        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
*** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***       10:24:44
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 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL46   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                  DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
 *** AERMOD - VERSION 23132 ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION 16216 ***   ***
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 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL47   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                  DAY OF WEEK = WEEKDAY

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL48        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
```

```
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL49        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
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                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL50   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                  DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL51   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -

```
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL52        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
```

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14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL53        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
```

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL54   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL55   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR

```
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -
```

```
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL57        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL58 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

```
 SOURCE ID = VOL59        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL60        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

```
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

                                  PAGE  67
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL61        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
```

```
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:24:44

                                   PAGE  68
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL62        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                                  DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:24:44

                                   PAGE  69
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
```

```
OF WEEK (HRDOW) *

 SOURCE ID = VOL63        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

                                  PAGE  70
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL64        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
```

```
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = PAREA1       ; SOURCE TYPE = AREAPOLY :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
```

```
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
*** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

                                  PAGE  72
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                        *** DISCRETE CARTESIAN RECEPTORS ***
                                      (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                (METERS)

     ( 444219.0, 3769382.9,     292.8,     292.8,       2.0);         ( 443379.3,
3769584.1,     298.2,     298.2,       2.0);
     ( 444284.0, 3769574.3,     294.7,     294.7,       2.0);         ( 444350.0,
3769622.2,     294.8,     294.8,       2.0);
     ( 444673.5, 3770137.6,     299.6,     299.6,       2.0);         ( 444743.3,
3770127.5,     299.5,     299.5,       2.0);
     ( 445412.9, 3770137.2,     301.4,     301.4,       2.0);         ( 444636.5,
3769597.8,     294.0,     294.0,       2.0);
     ( 444745.5, 3769593.1,     293.8,     293.8,       2.0);         ( 444084.6,
3769528.2,     295.0,     295.0,       2.0);
     ( 444307.2, 3769666.6,     295.7,     295.7,       2.0);         ( 444155.1,
3769701.8,     297.0,     297.0,       2.0);
     ( 444913.2, 3769590.1,     293.7,     293.7,       2.0);         ( 445012.2,
3769616.9,     293.2,     293.2,       2.0);
     ( 444972.4, 3769760.1,     295.4,     295.4,       2.0);         ( 445292.2,
3769551.3,     294.0,     294.0,       2.0);
     ( 445542.1, 3769662.7,     295.6,     295.6,       2.0);         ( 445514.2,
3769455.1,     293.2,     293.2,       2.0);
     ( 445434.0, 3769977.3,     299.4,     299.4,       2.0);         ( 445471.4,
3769890.5,     298.7,     298.7,       2.0);
     ( 445125.4, 3770123.8,     298.8,     298.8,       2.0);         ( 445301.5,
3770041.4,     299.5,     299.5,       2.0);
     ( 445546.0, 3769740.4,     296.7,     296.7,       2.0);         ( 445513.5,
3769442.0,     293.1,     293.1,       2.0);
     ( 443901.8, 3769642.3,     296.9,     296.9,       2.0);         ( 443804.6,
3769565.5,     296.1,     296.1,       2.0);
     ( 443786.1, 3769428.4,     294.6,     294.6,       2.0);

*** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44
```

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***

(1=YES; 0=NO)

```
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
```

Surface format: FREE

Profile format: FREE

Surface station no.: 3102 Upper air station no.: 3190
Name: UNKNOWN Name: UNKNOWN

Year: 2012 Year: 2012

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
12	01	01	1	01	-16.4	0.171	-9.000	-9.000	-999.	170.	32.3	0.09	1.12	1.00	2.03	43.	7.9	285.9	2.0
12	01	01	1	02	-18.8	0.194	-9.000	-9.000	-999.	205.	41.3	0.09	1.12	1.00	2.28	34.	7.9	285.4	2.0
12	01	01	1	03	-17.8	0.182	-9.000	-9.000	-999.	187.	36.5	0.09	1.12	1.00	2.15	24.	7.9	282.0	2.0
12	01	01	1	04	-9.4	0.128	-9.000	-9.000	-999.	110.	19.6	0.09	1.12	1.00	1.55	41.	7.9	283.1	2.0
12	01	01	1	05	-16.9	0.173	-9.000	-9.000	-999.	173.	33.0	0.09	1.12	1.00	2.05	39.	7.9	280.4	2.0
12	01	01	1	06	-8.0	0.117	-9.000	-9.000	-999.	97.	17.8	0.09	1.12	1.00	1.43	21.	7.9	282.0	2.0
12	01	01	1	07	-7.6	0.115	-9.000	-9.000	-999.	93.	17.4	0.09	1.12	1.00	1.40	31.	7.9	282.5	2.0
12	01	01	1	08	-13.6	0.184	-9.000	-9.000	-999.	190.	40.5	0.09	1.12	0.54	2.16	34.	7.9	284.2	2.0
12	01	01	1	09	28.4	0.126	0.300	0.011	33.	108.	-6.2	0.09	1.12	0.32	1.03	29.	7.9	289.2	2.0
12	01	01	1	10	79.8	0.133	0.607	0.010	99.	116.	-2.6	0.09	1.12	0.25	0.94	173.	7.9	292.5	2.0
12	01	01	1	11	115.8	0.137	0.932	0.006	246.	121.	-2.0	0.09	1.12	0.22	0.92	172.	7.9	295.4	2.0
12	01	01	1	12	133.7	0.139	1.197	0.005	453.	125.	-1.8	0.09	1.12	0.21	0.92	146.	7.9	297.5	2.0
12	01	01	1	13	133.2	0.160	1.354	0.005	657.	153.	-2.7	0.09	1.12	0.21	1.14	117.	7.9	299.9	2.0
12	01	01	1	14	113.5	0.159	1.454	0.005	955.	151.	-3.1	0.09	1.12	0.23	1.16	285.	7.9	300.9	2.0
12	01	01	1	15	76.2	0.166	1.350	0.005	1138.	163.	-5.3	0.09	1.12	0.26	1.33	72.	7.9	302.0	2.0
12	01	01	1	16	23.5	0.175	0.925	0.005	1183.	175.	-19.9	0.09	1.12	0.35	1.65	107.	7.9	301.4	2.0
12	01	01	1	17	-6.1	0.107	-9.000	-9.000	-999.	86.	18.0	0.09	1.12	0.63	1.31	107.	7.9	298.1	2.0
12	01	01	1	18	-11.1	0.141	-9.000	-9.000	-999.	127.	22.1	0.09	1.12						

```
1.00    1.69   86.    7.9  293.1    2.0
 12 01 01   1 19   -3.2  0.076 -9.000 -9.000 -999.   51.     11.8  0.09   1.12
1.00    0.91   64.    7.9  292.0    2.0
 12 01 01   1 20   -2.3  0.066 -9.000 -9.000 -999.   41.     11.2  0.09   1.12
1.00    0.74   73.    7.9  288.8    2.0
 12 01 01   1 21  -10.0  0.133 -9.000 -9.000 -999.  116.     20.5  0.09   1.12
1.00    1.60   14.    7.9  288.1    2.0
 12 01 01   1 22  -19.4  0.201 -9.000 -9.000 -999.  216.     44.5  0.09   1.12
1.00    2.36   22.    7.9  287.5    2.0
 12 01 01   1 23  -23.7  0.246 -9.000 -9.000 -999.  293.     66.5  0.09   1.12
1.00    2.86   40.    7.9  287.0    2.0
 12 01 01   1 24  -12.3  0.147 -9.000 -9.000 -999.  139.     23.8  0.09   1.12
1.00    1.76   40.    7.9  283.8    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 12 01 01 01    7.9 1   43.    2.03   286.0   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

                                  PAGE  75
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                              *** THE   1ST HIGHEST 24-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                 INCLUDING SOURCE(S):     VOL1        , VOL2
 , VOL3        , VOL4        , VOL5        ,
                 VOL6        , VOL7        , VOL8        , VOL9        , VOL10
 , VOL11       , VOL12       , VOL13       ,
                 VOL14       , VOL15       , VOL16       , VOL17       , VOL18
 , VOL19       , VOL20       , VOL21       ,
                 VOL22       , VOL23       , VOL24       , VOL25       , VOL26
 , VOL27       , VOL28       ,  . . .      ,

                                       *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                    ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
```

```
       444218.99   3769382.94        2.72015  (15122224)               443379.29
 3769584.14        0.07006  (14120524)
       444283.97   3769574.32        1.93482  (14121224)               444350.01
 3769622.16        1.34300  (16010624)
       444673.49   3770137.65        0.12920c (12122124)               444743.34
 3770127.46        0.12564c (12101124)
       445412.86   3770137.16        0.08538  (14010724)               444636.46
 3769597.76        1.09345  (13111924)
       444745.49   3769593.07        0.68036  (14020624)               444084.62
 3769528.25        0.76671  (15112724)
       444307.19   3769666.57        0.86718  (16092024)               444155.11
 3769701.76        0.52708  (14121224)
       444913.20   3769590.10        0.43227  (14020624)               445012.21
 3769616.93        0.31607  (14020624)
       444972.40   3769760.11        0.23125c (12103124)               445292.22
 3769551.27        0.17007  (13112024)
       445542.14   3769662.68        0.11991  (13112024)               445514.18
 3769455.12        0.10582c (12120724)
       445433.98   3769977.29        0.08435  (13020524)               445471.42
 3769890.51        0.09934c (12103124)
       445125.39   3770123.84        0.12279c (12120424)               445301.47
 3770041.39        0.09832  (14010724)
       445545.96   3769740.36        0.09834  (13112024)               445513.51
 3769442.00        0.10570c (12120724)
       443901.79   3769642.26        0.28209  (15112724)               443804.60
 3769565.50        0.16675  (15112724)
       443786.15   3769428.43        0.18531  (16012124)

 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***       10:24:44

                                  PAGE  76
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                                *** THE SUMMARY OF HIGHEST 24-HR
RESULTS ***


                                   ** CONC OF PM_10    IN MICROGRAMS/M**3
              **

                                                      DATE
                                        NETWORK
GROUP ID                           AVERAGE CONC     (YYMMDDHH)             RECEPTOR
(XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
```

```
ALL      HIGH   1ST HIGH VALUE IS       2.72015  ON 15122224: AT (  444218.99,
3769382.94,   292.78,   292.78,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

                                  PAGE  77
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of         1628 Informational Message(s)

 A Total of        43848 Hours Were Processed

 A Total of         1278 Calm Hours Identified

 A Total of          350 Missing Hours Identified (  0.80 Percent)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186    1192       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
      0.50
 ME W187    1192       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET


    ***********************************
    *** AERMOD Finishes Successfully ***
    ***********************************
**
***************************************
**
** AERMOD Input Produced by:
```

```
** AERMOD View Ver. 12.0.0
** Lakes Environmental Software Inc.
** Date: 4/19/2024
** File: C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\Construction LST
PM25\Construction LST PM25.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti &
   MODELOPT DFAULT CONC
   AVERTIME 24
   URBANOPT 2035210 County_of_San_Bernardino
   POLLUTID PM_2.5
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "Construction LST PM25.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     444242.944  3769467.059      293.700
   LOCATION VOL2         VOLUME     444272.020  3769484.508      293.810
   LOCATION VOL3         VOLUME     444300.793  3769498.282      293.730
   LOCATION VOL4         VOLUME     444329.261  3769513.893      293.600
   LOCATION VOL5         VOLUME     444357.422  3769528.280      293.640
   LOCATION VOL6         VOLUME     444385.889  3769541.748      293.610
   LOCATION VOL7         VOLUME     444413.132  3769549.401      293.400
   LOCATION VOL8         VOLUME     444441.600  3769548.483      293.090
   LOCATION VOL9         VOLUME     444469.455  3769555.829      292.810
   LOCATION VOL10        VOLUME     444469.761  3769527.974      292.810
   LOCATION VOL11        VOLUME     444470.679  3769499.813      292.190
   LOCATION VOL12        VOLUME     444461.190  3769471.345      291.870
   LOCATION VOL13        VOLUME     444441.293  3769520.934      293.100
   LOCATION VOL14        VOLUME     444442.518  3769499.200      292.910
   LOCATION VOL15        VOLUME     444433.029  3769471.345      292.530
   LOCATION VOL16        VOLUME     444462.108  3769443.796      290.990
   LOCATION VOL17        VOLUME     444477.719  3769423.900      290.030
```

```
   LOCATION VOL18        VOLUME     444479.250  3769395.738      289.870
   LOCATION VOL19        VOLUME     444485.678  3769367.883      289.640
   LOCATION VOL20        VOLUME     444485.678  3769347.375      289.640
   LOCATION VOL21        VOLUME     444434.559  3769443.184      291.880
   LOCATION VOL22        VOLUME     444413.744  3769521.852      293.250
   LOCATION VOL23        VOLUME     444451.089  3769415.023      290.920
   LOCATION VOL24        VOLUME     444457.211  3769387.780      290.450
   LOCATION VOL25        VOLUME     444458.129  3769359.619      290.190
   LOCATION VOL26        VOLUME     444456.905  3769347.375      290.200
   LOCATION VOL27        VOLUME     444429.049  3769347.681      290.600
   LOCATION VOL28        VOLUME     444401.500  3769347.681      291.160
   LOCATION VOL29        VOLUME     444373.339  3769351.660      291.500
   LOCATION VOL30        VOLUME     444344.260  3769360.537      291.890
   LOCATION VOL31        VOLUME     444315.792  3769372.781      292.300
   LOCATION VOL32        VOLUME     444287.325  3769382.576      292.690
   LOCATION VOL33        VOLUME     444266.510  3769410.125      293.050
   LOCATION VOL34        VOLUME     444246.613  3769438.593      293.350
   LOCATION VOL35        VOLUME     444271.714  3769456.959      293.530
   LOCATION VOL36        VOLUME     444273.550  3769438.286      293.340
   LOCATION VOL37        VOLUME     444381.910  3769457.265      292.800
   LOCATION VOL38        VOLUME     444385.583  3769513.893      293.330
   LOCATION VOL39        VOLUME     444300.793  3769470.733      293.450
   LOCATION VOL40        VOLUME     444328.954  3769486.344      293.320
   LOCATION VOL41        VOLUME     444357.728  3769500.731      293.360
   LOCATION VOL42        VOLUME     444413.744  3769494.915      293.000
   LOCATION VOL43        VOLUME     444429.662  3769374.617      290.940
   LOCATION VOL44        VOLUME     444429.049  3769402.473      291.450
   LOCATION VOL45        VOLUME     444422.621  3769430.940      291.860
   LOCATION VOL46        VOLUME     444407.010  3769458.489      292.560
   LOCATION VOL47        VOLUME     444404.561  3769486.344      292.910
   LOCATION VOL48        VOLUME     444377.012  3769485.426      293.130
   LOCATION VOL49        VOLUME     444354.361  3769472.570      293.080
   LOCATION VOL50        VOLUME     444301.099  3769442.878      293.170
   LOCATION VOL51        VOLUME     444328.342  3769458.795      293.050
   LOCATION VOL52        VOLUME     444294.671  3769411.043      292.910
   LOCATION VOL53        VOLUME     444301.099  3769427.267      293.010
   LOCATION VOL54        VOLUME     444315.180  3769400.942      292.600
   LOCATION VOL55        VOLUME     444328.648  3769430.634      292.760
   LOCATION VOL56        VOLUME     444356.810  3769444.408      292.790
   LOCATION VOL57        VOLUME     444343.647  3769389.004      292.190
   LOCATION VOL58        VOLUME     444343.341  3769416.553      292.500
   LOCATION VOL59        VOLUME     444371.809  3769380.127      291.810
   LOCATION VOL60        VOLUME     444400.582  3769376.148      291.470
   LOCATION VOL61        VOLUME     444400.276  3769404.309      291.770
   LOCATION VOL62        VOLUME     444371.502  3769408.289      292.210
   LOCATION VOL63        VOLUME     444371.502  3769436.144      292.670
   LOCATION VOL64        VOLUME     444395.991  3769430.328      292.140
   LOCATION PAREA1       AREAPOLY   444232.281  3769472.273      293.860
** Source Parameters **
   SRCPARAM VOL1         0.0005097426     5.000     6.407     1.400
```

```
SRCPARAM VOL2         0.0005097426     5.000     6.407     1.400
SRCPARAM VOL3         0.0005097426     5.000     6.407     1.400
SRCPARAM VOL4         0.0005097426     5.000     6.407     1.400
SRCPARAM VOL5         0.0005097426     5.000     6.407     1.400
SRCPARAM VOL6         0.0005097426     5.000     6.407     1.400
SRCPARAM VOL7         0.0005097426     5.000     6.407     1.400
SRCPARAM VOL8         0.0005097426     5.000     6.407     1.400
SRCPARAM VOL9         0.0005097426     5.000     6.407     1.400
SRCPARAM VOL10        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL11        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL12        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL13        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL14        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL15        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL16        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL17        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL18        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL19        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL20        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL21        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL22        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL23        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL24        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL25        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL26        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL27        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL28        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL29        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL30        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL31        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL32        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL33        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL34        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL35        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL36        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL37        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL38        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL39        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL40        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL41        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL42        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL43        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL44        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL45        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL46        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL47        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL48        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL49        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL50        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL51        0.0005097426     5.000     6.407     1.400
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   SRCPARAM VOL52        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL53        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL54        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL55        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL56        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL57        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL58        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL59        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL60        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL61        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL62        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL63        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL64        0.0005097426     5.000     6.407     1.400
   SRCPARAM PAREA1       1.0001E-06     0.000        43     1.000
   AREAVERT PAREA1       444232.281 3769472.273 444254.454 3769481.948
   AREAVERT PAREA1       444295.373 3769501.098 444329.237 3769517.425
   AREAVERT PAREA1       444354.837 3769529.318 444382.654 3769543.428
   AREAVERT PAREA1       444410.067 3769556.530 444420.549 3769561.368
   AREAVERT PAREA1       444419.945 3769544.436 444459.251 3769562.980
   AREAVERT PAREA1       444473.563 3769570.035 444482.230 3769553.305
   AREAVERT PAREA1       444485.657 3769499.888 444472.555 3769498.276
   AREAVERT PAREA1       444476.586 3769438.409 444490.092 3769439.014
   AREAVERT PAREA1       444494.123 3769377.937 444498.759 3769377.736
   AREAVERT PAREA1       444500.170 3769355.563 444489.487 3769332.382
   AREAVERT PAREA1       444465.500 3769332.583 444435.869 3769333.188
   AREAVERT PAREA1       444428.209 3769333.188 444416.316 3769333.793
   AREAVERT PAREA1       444402.609 3769335.607 444383.662 3769338.227
   AREAVERT PAREA1       444361.690 3769344.275 444346.975 3769349.314
   AREAVERT PAREA1       444335.889 3769354.756 444322.787 3769361.207
   AREAVERT PAREA1       444311.902 3769368.665 444301.420 3769375.115
   AREAVERT PAREA1       444290.334 3769383.178 444281.666 3769390.636
   AREAVERT PAREA1       444268.967 3769402.731 444260.098 3769413.011
   AREAVERT PAREA1       444247.802 3769429.943 444240.948 3769440.425
   AREAVERT PAREA1       444234.700 3769451.108 444229.056 3769463.001
   AREAVERT PAREA1       444228.451 3769465.218 444228.048 3769467.637
   AREAVERT PAREA1       444229.459 3769469.451
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

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** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL37        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL38        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Saturday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL39        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL40        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL41        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Sunday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL42        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL43        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL44        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL45        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL46        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL47        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL48        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Saturday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL49        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL50        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL51        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Sunday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL52        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL53        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL54        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

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** WeekDays:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL55        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL56        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL57        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL58        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

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** Saturday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL59        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL60        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL61        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

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** Sunday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL62        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL63        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL64        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

```
** WeekDays:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED "Construction LST PM25.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE KONT_V9_ADJU\KONT_v9.SFC
   PROFFILE KONT_V9_ADJU\KONT_v9.PFL
   SURFDATA 3102 2012
   UAIRDATA 3190 2012
   PROFBASE 289.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 24 ALL 1ST "CONSTRUCTION LST PM25.AD\24H1GALL.PLT" 31
```

```
   SUMMFILE "Construction LST PM25.sum"
OU FINISHED
**
**************************************
** Project Parameters
**************************************
** PROJCTN  CoordinateSystemUTM
** DESCPTN  UTM: Universal Transverse Mercator
** DATUM    North American Datum 1983
** DTMRGN   CONUS
** UNITS    m
** ZONE     11
** ZONEINX  0
**
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 12.0.0
** Lakes Environmental Software Inc.
** Date: 4/19/2024
** File: C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\Construction LST
PM25\Construction LST PM25.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti &
   MODELOPT DFAULT CONC
   AVERTIME 24
   URBANOPT 2035210 County_of_San_Bernardino
   POLLUTID PM_2.5
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "Construction LST PM25.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
```

```
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     444242.944  3769467.059      293.700
   LOCATION VOL2         VOLUME     444272.020  3769484.508      293.810
   LOCATION VOL3         VOLUME     444300.793  3769498.282      293.730
   LOCATION VOL4         VOLUME     444329.261  3769513.893      293.600
   LOCATION VOL5         VOLUME     444357.422  3769528.280      293.640
   LOCATION VOL6         VOLUME     444385.889  3769541.748      293.610
   LOCATION VOL7         VOLUME     444413.132  3769549.401      293.400
   LOCATION VOL8         VOLUME     444441.600  3769548.483      293.090
   LOCATION VOL9         VOLUME     444469.455  3769555.829      292.810
   LOCATION VOL10        VOLUME     444469.761  3769527.974      292.810
   LOCATION VOL11        VOLUME     444470.679  3769499.813      292.190
   LOCATION VOL12        VOLUME     444461.190  3769471.345      291.870
   LOCATION VOL13        VOLUME     444441.293  3769520.934      293.100
   LOCATION VOL14        VOLUME     444442.518  3769499.200      292.910
   LOCATION VOL15        VOLUME     444433.029  3769471.345      292.530
   LOCATION VOL16        VOLUME     444462.108  3769443.796      290.990
   LOCATION VOL17        VOLUME     444477.719  3769423.900      290.030
   LOCATION VOL18        VOLUME     444479.250  3769395.738      289.870
   LOCATION VOL19        VOLUME     444485.678  3769367.883      289.640
   LOCATION VOL20        VOLUME     444485.678  3769347.375      289.640
   LOCATION VOL21        VOLUME     444434.559  3769443.184      291.880
   LOCATION VOL22        VOLUME     444413.744  3769521.852      293.250
   LOCATION VOL23        VOLUME     444451.089  3769415.023      290.920
   LOCATION VOL24        VOLUME     444457.211  3769387.780      290.450
   LOCATION VOL25        VOLUME     444458.129  3769359.619      290.190
   LOCATION VOL26        VOLUME     444456.905  3769347.375      290.200
   LOCATION VOL27        VOLUME     444429.049  3769347.681      290.600
   LOCATION VOL28        VOLUME     444401.500  3769347.681      291.160
   LOCATION VOL29        VOLUME     444373.339  3769351.660      291.500
   LOCATION VOL30        VOLUME     444344.260  3769360.537      291.890
   LOCATION VOL31        VOLUME     444315.792  3769372.781      292.300
   LOCATION VOL32        VOLUME     444287.325  3769382.576      292.690
   LOCATION VOL33        VOLUME     444266.510  3769410.125      293.050
   LOCATION VOL34        VOLUME     444246.613  3769438.593      293.350
   LOCATION VOL35        VOLUME     444271.714  3769456.959      293.530
   LOCATION VOL36        VOLUME     444273.550  3769438.286      293.340
   LOCATION VOL37        VOLUME     444381.910  3769457.265      292.800
   LOCATION VOL38        VOLUME     444385.583  3769513.893      293.330
   LOCATION VOL39        VOLUME     444300.793  3769470.733      293.450
   LOCATION VOL40        VOLUME     444328.954  3769486.344      293.320
   LOCATION VOL41        VOLUME     444357.728  3769500.731      293.360
   LOCATION VOL42        VOLUME     444413.744  3769494.915      293.000
   LOCATION VOL43        VOLUME     444429.662  3769374.617      290.940
   LOCATION VOL44        VOLUME     444429.049  3769402.473      291.450
   LOCATION VOL45        VOLUME     444422.621  3769430.940      291.860
   LOCATION VOL46        VOLUME     444407.010  3769458.489      292.560
   LOCATION VOL47        VOLUME     444404.561  3769486.344      292.910
   LOCATION VOL48        VOLUME     444377.012  3769485.426      293.130
   LOCATION VOL49        VOLUME     444354.361  3769472.570      293.080
```

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   LOCATION VOL50        VOLUME     444301.099  3769442.878      293.170
   LOCATION VOL51        VOLUME     444328.342  3769458.795      293.050
   LOCATION VOL52        VOLUME     444294.671  3769411.043      292.910
   LOCATION VOL53        VOLUME     444301.099  3769427.267      293.010
   LOCATION VOL54        VOLUME     444315.180  3769400.942      292.600
   LOCATION VOL55        VOLUME     444328.648  3769430.634      292.760
   LOCATION VOL56        VOLUME     444356.810  3769444.408      292.790
   LOCATION VOL57        VOLUME     444343.647  3769389.004      292.190
   LOCATION VOL58        VOLUME     444343.341  3769416.553      292.500
   LOCATION VOL59        VOLUME     444371.809  3769380.127      291.810
   LOCATION VOL60        VOLUME     444400.582  3769376.148      291.470
   LOCATION VOL61        VOLUME     444400.276  3769404.309      291.770
   LOCATION VOL62        VOLUME     444371.502  3769408.289      292.210
   LOCATION VOL63        VOLUME     444371.502  3769436.144      292.670
   LOCATION VOL64        VOLUME     444395.991  3769430.328      292.140
   LOCATION PAREA1       AREAPOLY   444232.281  3769472.273      293.860
** Source Parameters **
   SRCPARAM VOL1         0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL2         0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL3         0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL4         0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL5         0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL6         0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL7         0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL8         0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL9         0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL10        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL11        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL12        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL13        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL14        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL15        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL16        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL17        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL18        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL19        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL20        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL21        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL22        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL23        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL24        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL25        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL26        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL27        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL28        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL29        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL30        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL31        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL32        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL33        0.0005097426     5.000     6.407     1.400
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SRCPARAM VOL34        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL35        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL36        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL37        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL38        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL39        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL40        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL41        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL42        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL43        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL44        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL45        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL46        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL47        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL48        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL49        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL50        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL51        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL52        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL53        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL54        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL55        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL56        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL57        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL58        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL59        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL60        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL61        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL62        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL63        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL64        0.0005097426     5.000     6.407     1.400
SRCPARAM PAREA1       1.0001E-06     0.000       43     1.000
AREAVERT PAREA1       444232.281 3769472.273 444254.454 3769481.948
AREAVERT PAREA1       444295.373 3769501.098 444329.237 3769517.425
AREAVERT PAREA1       444354.837 3769529.318 444382.654 3769543.428
AREAVERT PAREA1       444410.067 3769556.530 444420.549 3769561.368
AREAVERT PAREA1       444419.945 3769544.436 444459.251 3769562.980
AREAVERT PAREA1       444473.563 3769570.035 444482.230 3769553.305
AREAVERT PAREA1       444485.657 3769499.888 444472.555 3769498.276
AREAVERT PAREA1       444476.586 3769438.409 444490.092 3769439.014
AREAVERT PAREA1       444494.123 3769377.937 444498.759 3769377.736
AREAVERT PAREA1       444500.170 3769355.563 444489.487 3769332.382
AREAVERT PAREA1       444465.500 3769332.583 444435.869 3769333.188
AREAVERT PAREA1       444428.209 3769333.188 444416.316 3769333.793
AREAVERT PAREA1       444402.609 3769335.607 444383.662 3769338.227
AREAVERT PAREA1       444361.690 3769344.275 444346.975 3769349.314
AREAVERT PAREA1       444335.889 3769354.756 444322.787 3769361.207
AREAVERT PAREA1       444311.902 3769368.665 444301.420 3769375.115
AREAVERT PAREA1       444290.334 3769383.178 444281.666 3769390.636
AREAVERT PAREA1       444268.967 3769402.731 444260.098 3769413.011
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   AREAVERT PAREA1       444247.802 3769429.943 444240.948 3769440.425
   AREAVERT PAREA1       444234.700 3769451.108 444229.056 3769463.001
   AREAVERT PAREA1       444228.451 3769465.218 444228.048 3769467.637
   AREAVERT PAREA1       444229.459 3769469.451
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL7         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL17        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL27        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL37        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL37        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL38        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL39        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL40        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL41        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL42        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL43        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL44        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL45        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL46        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL47        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL47        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL48        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL49        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL50        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL51        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL52        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL53        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL54        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL55        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL56        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

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   EMISFACT VOL57        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL57        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL58        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL59        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL60        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

```
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL61        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL62        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL63        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

```
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL64        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED "Construction LST PM25.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
```

```
ME STARTING
   SURFFILE KONT_V9_ADJU\KONT_v9.SFC
   PROFFILE KONT_V9_ADJU\KONT_v9.PFL
   SURFDATA 3102 2012
   UAIRDATA 3190 2012
   PROFBASE 289.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 24 ALL 1ST "CONSTRUCTION LST PM25.AD\24H1GALL.PLT" 31
   SUMMFILE "Construction LST PM25.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186    1192       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
      0.50
 ME W187    1192       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET


 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

↟ *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:31:58
```

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

***   MODEL SETUP OPTIONS SUMMARY
***

- - - -

```
 **Output Options Selected:
          Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
Keyword)
          Model Outputs External File(s) of High Values for Plotting (PLOTFILE
Keyword)
          Model Outputs Separate Summary File of High Ranked Values (SUMMFILE
Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                 m for Missing
Hours
                                                                 b for Both Calm
and Missing Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   289.00 ;  Decay
Coef. =    0.000     ;  Rot. Angle =     0.0
                  Emission Units = GRAMS/SEC                                ;
Emission Rate Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      3.6 MB of RAM.

 **Input Runstream File:          aermod.inp

 **Output Print File:             aermod.out


 **Detailed Error/Message File:   Construction LST PM25.err

 **File for Summary of Results:   Construction LST PM25.sum

 *** AERMOD - VERSION 23132  ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                                  *** VOLUME SOURCE DATA ***

               NUMBER EMISSION RATE                    BASE    RELEASE    INIT.
INIT.   URBAN  EMISSION RATE   AIRCRAFT
   SOURCE       PART.  (GRAMS/SEC)     X        Y      ELEV.   HEIGHT      SY
SZ     SOURCE  SCALAR VARY
     ID         CATS.              (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)             BY
```

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 - - -
```

```
1.40     YES   HRDOW            NO
 VOL25           0   0.50974E-03  444458.1 3769359.6   290.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL26           0   0.50974E-03  444456.9 3769347.4   290.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL27           0   0.50974E-03  444429.0 3769347.7   290.6     5.00     6.41
1.40     YES   HRDOW            NO
 VOL28           0   0.50974E-03  444401.5 3769347.7   291.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL29           0   0.50974E-03  444373.3 3769351.7   291.5     5.00     6.41
1.40     YES   HRDOW            NO
 VOL30           0   0.50974E-03  444344.3 3769360.5   291.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL31           0   0.50974E-03  444315.8 3769372.8   292.3     5.00     6.41
1.40     YES   HRDOW            NO
 VOL32           0   0.50974E-03  444287.3 3769382.6   292.7     5.00     6.41
1.40     YES   HRDOW            NO
 VOL33           0   0.50974E-03  444266.5 3769410.1   293.1     5.00     6.41
1.40     YES   HRDOW            NO
 VOL34           0   0.50974E-03  444246.6 3769438.6   293.4     5.00     6.41
1.40     YES   HRDOW            NO
 VOL35           0   0.50974E-03  444271.7 3769457.0   293.5     5.00     6.41
1.40     YES   HRDOW            NO
 VOL36           0   0.50974E-03  444273.5 3769438.3   293.3     5.00     6.41
1.40     YES   HRDOW            NO
 VOL37           0   0.50974E-03  444381.9 3769457.3   292.8     5.00     6.41
1.40     YES   HRDOW            NO
 VOL38           0   0.50974E-03  444385.6 3769513.9   293.3     5.00     6.41
1.40     YES   HRDOW            NO
 VOL39           0   0.50974E-03  444300.8 3769470.7   293.4     5.00     6.41
1.40     YES   HRDOW            NO
 VOL40           0   0.50974E-03  444329.0 3769486.3   293.3     5.00     6.41
1.40     YES   HRDOW            NO
↟ *** AERMOD - VERSION 23132  ***   ***
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 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                                *** VOLUME SOURCE DATA ***

              NUMBER EMISSION RATE                    BASE    RELEASE    INIT.
INIT.   URBAN  EMISSION RATE   AIRCRAFT
   SOURCE       PART.  (GRAMS/SEC)     X        Y      ELEV.   HEIGHT      SY
SZ     SOURCE  SCALAR VARY
     ID         CATS.              (METERS) (METERS) (METERS) (METERS) (METERS)
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(METERS)              BY
 - - -
```

```
 VOL64            0   0.50974E-03  444396.0 3769430.3   292.1     5.00     6.41
1.40     YES   HRDOW            NO
 *** AERMOD - VERSION 23132  ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                                *** AREAPOLY SOURCE DATA ***

              NUMBER EMISSION RATE   LOCATION OF AREA  BASE     RELEASE  NUMBER
  INIT.   URBAN  EMISSION RATE    AIRCRAFT
   SOURCE       PART.  (GRAMS/SEC       X        Y      ELEV.    HEIGHT  OF VERTS.
   SZ     SOURCE  SCALAR VARY
     ID         CATS.   /METER**2)   (METERS) (METERS) (METERS) (METERS)
(METERS)             BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - -

 PAREA1           0   0.10001E-05  444232.3 3769472.3   293.9     0.00      43
   1.00     YES   HRDOW            NO
 *** AERMOD - VERSION 23132  ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                              *** SOURCE IDs DEFINING SOURCE GROUPS
***

 SRCGROUP ID                                          SOURCE IDs
 -----------                                          ----------


  ALL        VOL1       , VOL2       , VOL3       , VOL4       , VOL5       ,
VOL6       , VOL7       , VOL8       ,

             VOL9       , VOL10      , VOL11      , VOL12      , VOL13      ,
VOL14      , VOL15      , VOL16      ,

             VOL17      , VOL18      , VOL19      , VOL20      , VOL21      ,
VOL22      , VOL23      , VOL24      ,
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             VOL25       , VOL26       , VOL27       , VOL28       , VOL29       ,
VOL30       , VOL31       , VOL32       ,

             VOL33       , VOL34       , VOL35       , VOL36       , VOL37       ,
VOL38       , VOL39       , VOL40       ,

             VOL41       , VOL42       , VOL43       , VOL44       , VOL45       ,
VOL46       , VOL47       , VOL48       ,

             VOL49       , VOL50       , VOL51       , VOL52       , VOL53       ,
VOL54       , VOL55       , VOL56       ,

             VOL57       , VOL58       , VOL59       , VOL60       , VOL61       ,
VOL62       , VOL63       , VOL64       ,

             PAREA1      ,
 *** AERMOD - VERSION 23132  ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                        *** SOURCE IDs DEFINED AS URBAN SOURCES
***

  URBAN ID   URBAN POP                                  SOURCE IDs
  --------   ---------                                  ----------


              2035210.   VOL1        , VOL2        , VOL3        , VOL4        ,
VOL5        , VOL6        , VOL7        ,
 VOL8        ,

             VOL9        , VOL10       , VOL11       , VOL12       , VOL13       ,
VOL14       , VOL15       , VOL16       ,

             VOL17       , VOL18       , VOL19       , VOL20       , VOL21       ,
VOL22       , VOL23       , VOL24       ,

             VOL25       , VOL26       , VOL27       , VOL28       , VOL29       ,
VOL30       , VOL31       , VOL32       ,

             VOL33       , VOL34       , VOL35       , VOL36       , VOL37       ,
VOL38       , VOL39       , VOL40       ,
```

```
             VOL41       , VOL42       , VOL43       , VOL44       , VOL45       ,
VOL46       , VOL47       , VOL48       ,

             VOL49       , VOL50       , VOL51       , VOL52       , VOL53       ,
VOL54       , VOL55       , VOL56       ,

             VOL57       , VOL58       , VOL59       , VOL60       , VOL61       ,
VOL62       , VOL63       , VOL64       ,

             PAREA1      ,
 *** AERMOD - VERSION 23132  ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL1         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                  DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
```

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL2   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL3   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR

```
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -
```

```
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

                                  PAGE  11
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL5         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL6 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

```
 SOURCE ID = VOL7         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

                                  PAGE  14
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL8         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

```
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

                                  PAGE  15
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL9         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
```

```
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:31:58

                                   PAGE  16
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL10        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                                  DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:31:58

                                   PAGE  17
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
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OF WEEK (HRDOW) *

 SOURCE ID = VOL11        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

                                  PAGE  18
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL12        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
```

```
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

                                  PAGE  19
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL13        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
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    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

                                  PAGE  20
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL14        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

                                  PAGE  21
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
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                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL15        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

                                  PAGE  22
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL16        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
```

```
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

                                  PAGE  23
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL17        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
```

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***       10:31:58

                                  PAGE  24
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL18        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL19   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL20   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL21        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
```

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22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

                                  PAGE  28
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL22        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
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                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL23   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                  DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL24   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -

```
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                  DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

                                  PAGE  31
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL25        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                  DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
```

```
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL26        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL27   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                  DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL28   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR

```
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -
```

```
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

                                  PAGE  36
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL30        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL31 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

```
 SOURCE ID = VOL32        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

                                  PAGE  39
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL33        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

```
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

                                  PAGE  40
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL34        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
```

```
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:31:58

                                   PAGE  41
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL35        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                  DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
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                                   PAGE  42
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
```

```
OF WEEK (HRDOW) *

 SOURCE ID = VOL36        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
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                                  PAGE  43
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL37        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
```

```
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
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                                  PAGE  44
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL38        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
```

```
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

                                  PAGE  45
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL39        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

                                  PAGE  46
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
```

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL40   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -

```
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

                                  PAGE  48
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL42        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
```

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    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
*** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***       10:31:58

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL43        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
*** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***       10:31:58
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 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL44   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
 *** AERMOD - VERSION 23132 ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION 16216 ***   ***
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 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL45   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL46        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
```

```
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL47        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
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                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL48   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                  DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL49   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -

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- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL50        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
```

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14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL51        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
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                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL52   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL53   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR

```
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -
```

```
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL55        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL56 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

```
 SOURCE ID = VOL57        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

                                  PAGE  64
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL58        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

```
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

                                  PAGE  65
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL59        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
```

```
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:31:58

                                   PAGE  66
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL60        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                                  DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:31:58

                                   PAGE  67
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
```

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OF WEEK (HRDOW) *

 SOURCE ID = VOL61        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

                                  PAGE  68
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL62        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
```

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   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

                                  PAGE  69
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL63        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
```

```
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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 *** AERMET - VERSION  16216 ***   ***
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                                  PAGE  70
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL64        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
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 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

                                  PAGE  71
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
```

```
                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = PAREA1       ; SOURCE TYPE = AREAPOLY :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
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 *** AERMET - VERSION  16216 ***   ***
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                                  PAGE  72
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                          *** DISCRETE CARTESIAN RECEPTORS ***
                                        (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                    (METERS)

     ( 444219.0, 3769382.9,     292.8,     292.8,       2.0);         ( 443379.3,
3769584.1,     298.2,     298.2,       2.0);
     ( 444284.0, 3769574.3,     294.7,     294.7,       2.0);         ( 444350.0,
3769622.2,     294.8,     294.8,       2.0);
     ( 444673.5, 3770137.6,     299.6,     299.6,       2.0);         ( 444743.3,
3770127.5,     299.5,     299.5,       2.0);
     ( 445412.9, 3770137.2,     301.4,     301.4,       2.0);         ( 444636.5,
```

```
3769597.8,     294.0,     294.0,       2.0);
     ( 444745.5, 3769593.1,     293.8,     293.8,       2.0);         ( 444084.6,
3769528.2,     295.0,     295.0,       2.0);
     ( 444307.2, 3769666.6,     295.7,     295.7,       2.0);         ( 444155.1,
3769701.8,     297.0,     297.0,       2.0);
     ( 444913.2, 3769590.1,     293.7,     293.7,       2.0);         ( 445012.2,
3769616.9,     293.2,     293.2,       2.0);
     ( 444972.4, 3769760.1,     295.4,     295.4,       2.0);         ( 445292.2,
3769551.3,     294.0,     294.0,       2.0);
     ( 445542.1, 3769662.7,     295.6,     295.6,       2.0);         ( 445514.2,
3769455.1,     293.2,     293.2,       2.0);
     ( 445434.0, 3769977.3,     299.4,     299.4,       2.0);         ( 445471.4,
3769890.5,     298.7,     298.7,       2.0);
     ( 445125.4, 3770123.8,     298.8,     298.8,       2.0);         ( 445301.5,
3770041.4,     299.5,     299.5,       2.0);
     ( 445546.0, 3769740.4,     296.7,     296.7,       2.0);         ( 445513.5,
3769442.0,     293.1,     293.1,       2.0);
     ( 443901.8, 3769642.3,     296.9,     296.9,       2.0);         ( 443804.6,
3769565.5,     296.1,     296.1,       2.0);
     ( 443786.1, 3769428.4,     294.6,     294.6,       2.0);

 *** AERMOD - VERSION 23132  ***   ***
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                                  PAGE  73
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                          *** METEOROLOGICAL DAYS SELECTED FOR
PROCESSING ***
                                                              (1=YES; 0=NO)

           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1
```

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***

(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: KONT_V9_ADJU\KONT_v9.SFC
Met Version: 16216
Profile file: KONT_V9_ADJU\KONT_v9.PFL

Surface format: FREE

Profile format: FREE

Surface station no.: 3102 Upper air station no.: 3190
Name: UNKNOWN Name: UNKNOWN

Year: 2012 Year: 2012

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
12	01	01	1	01	-16.4	0.171	-9.000	-9.000	-999.	170.	32.3	0.09	1.12	1.00	2.03	43.	7.9	285.9	2.0
12	01	01	1	02	-18.8	0.194	-9.000	-9.000	-999.	205.	41.3	0.09	1.12	1.00	2.28	34.	7.9	285.4	2.0
12	01	01	1	03	-17.8	0.182	-9.000	-9.000	-999.	187.	36.5	0.09	1.12	1.00	2.15	24.	7.9	282.0	2.0
12	01	01	1	04	-9.4	0.128	-9.000	-9.000	-999.	110.	19.6	0.09	1.12	1.00	1.55	41.	7.9	283.1	2.0
12	01	01	1	05	-16.9	0.173	-9.000	-9.000	-999.	173.	33.0	0.09	1.12						

```
1.00    2.05   39.    7.9  280.4    2.0
 12 01 01   1 06   -8.0  0.117 -9.000 -9.000 -999.   97.     17.8  0.09   1.12
1.00    1.43   21.    7.9  282.0    2.0
 12 01 01   1 07   -7.6  0.115 -9.000 -9.000 -999.   93.     17.4  0.09   1.12
1.00    1.40   31.    7.9  282.5    2.0
 12 01 01   1 08  -13.6  0.184 -9.000 -9.000 -999.  190.     40.5  0.09   1.12
0.54    2.16   34.    7.9  284.2    2.0
 12 01 01   1 09   28.4  0.126  0.300  0.011   33.  108.     -6.2  0.09   1.12
0.32    1.03   29.    7.9  289.2    2.0
 12 01 01   1 10   79.8  0.133  0.607  0.010   99.  116.     -2.6  0.09   1.12
0.25    0.94  173.    7.9  292.5    2.0
 12 01 01   1 11  115.8  0.137  0.932  0.006  246.  121.     -2.0  0.09   1.12
0.22    0.92  172.    7.9  295.4    2.0
 12 01 01   1 12  133.7  0.139  1.197  0.005  453.  125.     -1.8  0.09   1.12
0.21    0.92  146.    7.9  297.5    2.0
 12 01 01   1 13  133.2  0.160  1.354  0.005  657.  153.     -2.7  0.09   1.12
0.21    1.14  117.    7.9  299.9    2.0
 12 01 01   1 14  113.5  0.159  1.454  0.005  955.  151.     -3.1  0.09   1.12
0.23    1.16  285.    7.9  300.9    2.0
 12 01 01   1 15   76.2  0.166  1.350  0.005 1138.  163.     -5.3  0.09   1.12
0.26    1.33   72.    7.9  302.0    2.0
 12 01 01   1 16   23.5  0.175  0.925  0.005 1183.  175.    -19.9  0.09   1.12
0.35    1.65  107.    7.9  301.4    2.0
 12 01 01   1 17   -6.1  0.107 -9.000 -9.000 -999.   86.     18.0  0.09   1.12
0.63    1.31  107.    7.9  298.1    2.0
 12 01 01   1 18  -11.1  0.141 -9.000 -9.000 -999.  127.     22.1  0.09   1.12
1.00    1.69   86.    7.9  293.1    2.0
 12 01 01   1 19   -3.2  0.076 -9.000 -9.000 -999.   51.     11.8  0.09   1.12
1.00    0.91   64.    7.9  292.0    2.0
 12 01 01   1 20   -2.3  0.066 -9.000 -9.000 -999.   41.     11.2  0.09   1.12
1.00    0.74   73.    7.9  288.8    2.0
 12 01 01   1 21  -10.0  0.133 -9.000 -9.000 -999.  116.     20.5  0.09   1.12
1.00    1.60   14.    7.9  288.1    2.0
 12 01 01   1 22  -19.4  0.201 -9.000 -9.000 -999.  216.     44.5  0.09   1.12
1.00    2.36   22.    7.9  287.5    2.0
 12 01 01   1 23  -23.7  0.246 -9.000 -9.000 -999.  293.     66.5  0.09   1.12
1.00    2.86   40.    7.9  287.0    2.0
 12 01 01   1 24  -12.3  0.147 -9.000 -9.000 -999.  139.     23.8  0.09   1.12
1.00    1.76   40.    7.9  283.8    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 12 01 01 01    7.9 1   43.    2.03   286.0   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
 *** AERMOD - VERSION 23132  ***   ***
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 *** AERMET - VERSION  16216 ***   ***
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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***

INCLUDING SOURCE(S): VOL1 , VOL2 , VOL3 , VOL4 , VOL5 ,
VOL6 , VOL7 , VOL8 , VOL9 , VOL10 , VOL11 , VOL12 , VOL13 ,
VOL14 , VOL15 , VOL16 , VOL17 , VOL18 , VOL19 , VOL20 , VOL21 ,
VOL22 , VOL23 , VOL24 , VOL25 , VOL26 , VOL27 , VOL28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
444218.99	3769382.94	1.57238	(15122224)	443379.29	3769584.14	0.03859	(14120524)
444283.97	3769574.32	1.13960	(14121224)	444350.01	3769622.16	0.78658	(16010624)
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444913.20	3769590.10	0.24799	(14020624)	445012.21	3769616.93	0.18112	(14020624)
444972.40	3769760.11	0.13300c	(12103124)	445292.22	3769551.27	0.09661	(13112024)
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```
       443901.79   3769642.26        0.16300  (15112724)                443804.60
 3769565.50        0.09886  (15112724)
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 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:31:58

                                   PAGE  76
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                                *** THE SUMMARY OF HIGHEST 24-HR
RESULTS ***


                                    ** CONC OF PM_2.5   IN MICROGRAMS/M**3
              **

                                                        DATE
                                          NETWORK
GROUP ID                           AVERAGE CONC     (YYMMDDHH)             RECEPTOR
(XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS       1.57238  ON 15122224: AT (  444218.99,
3769382.94,   292.78,   292.78,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:31:58

                                   PAGE  77
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
```

```
A Total of         1628 Informational Message(s)

A Total of        43848 Hours Were Processed

A Total of         1278 Calm Hours Identified

A Total of          350 Missing Hours Identified (  0.80 Percent)


   ******** FATAL ERROR MESSAGES ********
              ***  NONE  ***


   ********   WARNING MESSAGES   ********
ME W186    1192       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
     0.50
ME W187    1192       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET


   ***********************************
   *** AERMOD Finishes Successfully ***
   ***********************************
```

Appendix C
Biological Technical Report

Biological Technical Report
for the
Ontario Hotel Project

San Bernardino County, California

Prepared For:

Diversified Pacific Communities
10621 Civic Center Drive
Rancho Cucamonga, California 91730

Prepared By:



215 North 5th Street
Redlands, California 92374

December 2024

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Term	Definition
°F	Degrees Fahrenheit
APN	Assessor's Parcel Number
Cal-IPC	California Invasive Plant Council
CCR	Code of California Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CNPSEI	California Native Plant Society Electronic Inventory
CRPR	California Rare Plant Rank
CWA	Clean Water Act
DBH	Diameter at Breast Height
ESA	Endangered Species Act
GPS	Global Positioning System
HCP	Habitat Conservation Plan
ITP	Incidental Take Permit
LAPM	Los Angeles Pocket Mouse
MBTA	Migratory Bird Treaty Act
mph	Miles per Hour
NCCP	Natural Community Conservation Plan
NEPA	National Environmental Policy Act
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
NWPR	Navigable Waters Protection Rule
RWQCB	Regional Water Quality Control Boards
SAA	Streambed Alteration Agreement
SSC	California Species of Special Concern
USACE	U.S. Army Corps of Engineers
USC	U.S. Code
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WOTUS	Waters of the U.S.

1.0 INTRODUCTION

ECORP Consulting, Inc. conducted a biological reconnaissance survey at an approximately 10.47-acre property (Assessor's Parcel Number [APN] 0110-322-33) in the City of Ontario, San Bernardino County, California (Figure 1). The survey was conducted to identify any potential biological resources that could be affected by the proposed 10.47-Acre Ontario Hotel Project (Project) pursuant to the terms of the California Environmental Quality Act (CEQA), and for the purposes of identifying any biological constraints that would affect the proposed site plan for the Project. The Project will be subject to county, state, and federal regulations regarding compliance with the federal Endangered Species Act (ESA), California ESA, Migratory Bird Treaty Act (MBTA), Clean Water Act (CWA) regulations, California State Water Resources Control Board for state waters, and California Fish and Game Code.

1.1 Project Description and Location

The Project proposes to construct a 1,073,671-square-foot hotel complex and parking structure. The facility will include more than 650 rooms and suites, and could also include conference and meeting spaces, a pool and event lawn, ballrooms, retail and restaurant spaces, and a rooftop restaurant and bar.

The Project site consists of approximately 10.47 acres of property located in the southeastern quadrant of Section 22 of Township 1 South, Range 7 West, San Bernardino Base and Meridian as depicted on the Guasti, California, U.S. Geological Survey 7.5-minute topographic quadrangle map. It is also known as APN 0110-322-33. The Project Area is located at the intersection of East Holt Boulevard and East Guasti Road in the City of Ontario, California. The elevation of the Project site lies approximately 960 feet above mean seal level (Figure 2).

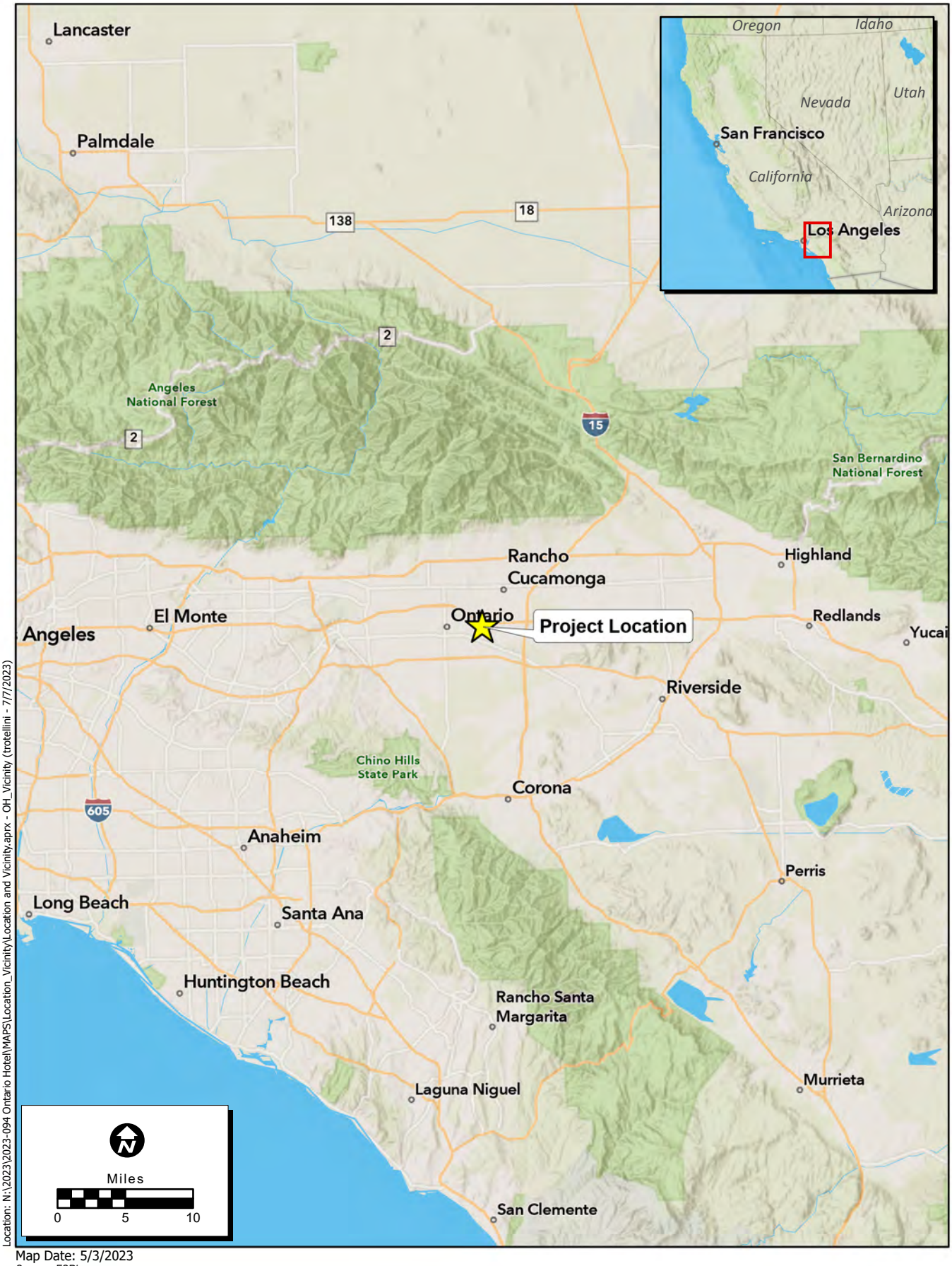
2.0 FEDERAL, STATE, AND LOCAL REGULATIONS

This biological reconnaissance survey was conducted to identify potential biological resource constraints and ensure compliance with federal, state, and local regulations regarding listed, protected, and special-status species and resources. The regulations are detailed below.

2.1 Federal Regulations

2.1.1 The Federal Endangered Species Act

The federal ESA protects plants and animals that are listed as endangered or threatened by the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service. Section 9 of the ESA prohibits the taking of endangered wildlife, where taking is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (50 Code of Federal Regulations [CFR] 17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any endangered plant on federal land and removing, cutting, digging up, damaging, or destroying any endangered plant on non-federal land in knowing violation of state law (16 U.S. Code [USC] 1538).



Location: N:\2023\2023-094 Ontario Hotel\MAPS\Location_Vicinity\Location and Vicinity.aprx - OH_Vicinity (trotellini - 7/7/2023)

Map Date: 5/3/2023

Sources: ESRI

Figure 1. Project Vicinity

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

2023-094 Ontario Hotel



Location: N:\2023\2023-094 Ontario Hotel\MAPS\Location_Vicinity\Location and Vicinity.aprx - OH_Location (trotellini - 7/7/2023)

Map Date: 7/7/2023

Sources: ESRI

Figure 2. Project Location

Under Section 7 of the ESA, federal agencies are required to consult with the USFWS if their actions, including permit approvals or funding, could adversely affect a listed (or proposed) species (including plants) or its critical habitat. Through consultation and the issuance of a biological opinion, the USFWS may issue an incidental take statement allowing take of the species that is incidental to an otherwise authorized activity provided the activity will not jeopardize the continued existence of the species. Section 10 of the ESA provides for issuance of Incidental Take Permits (ITP) where no other federal actions are necessary provided a Habitat Conservation Plan (HCP) is developed.

2.1.2 National Environmental Policy Act

Signed into law on January 1, 1970, the National Environmental Policy Act (NEPA) requires all federal agencies to analyze the environmental impacts related to their proposed actions prior to making and implementing decisions or actions. This framework for evaluation of environmental and associated economic and social effects of proposed actions, described in 42 USC 4321, also provides the public opportunity to review and comment. Actions that are covered by NEPA include decision-making related to publicly owned facilities such as highways, permit applications, and federal land management.

2.1.3 Migratory Bird Treaty Act

The MBTA implements international treaties between the U.S. and other nations devised to protect migratory birds, any of their parts, eggs, and nests from activities including hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. As authorized by the MBTA, the USFWS issues permits to qualified applicants for the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (rehabilitation, education, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal. The regulations governing migratory bird permits can be found in 50 CFR Part 13 General Permit Procedures and 50 CFR Part 21 Migratory Bird Permits.

2.1.4 Federal Clean Water Act

The federal Clean Water Act's (CWA) purpose is to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." Section 404 of the CWA prohibits the discharge of dredged or fill material into Waters of the U.S. without a permit from the U.S. Army Corps of Engineers (USACE). The definition of Waters of the U.S. includes rivers, streams, estuaries, the territorial seas, ponds, lakes, and wetlands. Wetlands are defined as those areas "that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3 7b). The U.S. Environmental Protection Agency acts as a cooperating agency to set policy, guidance, and criteria for use in evaluation permit applications and reviews USACE permit applications.

The USACE regulates fill or dredging of fill material within its jurisdictional features. Fill material means any material used for the primary purpose of replacing an aquatic area with dry land or changing the bottom elevation of a water body. Substantial impacts to wetlands may require an individual permit. Projects that only minimally affect wetlands may meet the conditions of one of the existing Nationwide Permits. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for

Section 404 permit actions; this certification or waiver is issued by the State Water Quality Control Board, administered by each of nine California Regional Water Quality Control Boards.

In 2008, the U.S. Environmental Protection Agency (USEPA) and USACE issued a memorandum providing guidance on the definition of Waters of the U.S. (WOTUS) to include traditional navigable waters and their adjacent wetlands, and water that met either the relatively permanent or significant nexus standards (USACE and USEPA 2008). The USEPA and USACE have defined WOTUS several times, with three new definitions since 2015, including the Navigable Waters Protection Rule (NWPR), which became effective on June 22, 2020. In August 2021, a judge in the U.S. District Court for the District of Arizona ruled to vacate the NWPR. Following this order, the USEPA and USACE halted implementation of the NWPR nationwide and began interpreting Waters of the United States consistent with the pre-2015 regulatory regime.

On December 22, 2022, the USEPA and Department of the Army (Agencies) announced a final rule defining Waters of the U.S. The definition was founded upon the pre-2015 "Rapanos" decision, updated to reflect consideration of Supreme Court decisions, the science, and the Agencies' technical expertise. The final rule was published in the Federal Register on January 18, 2023, effective as of March 20, 2023.

On May 25, 2023, the Supreme Court of the United States adopted a narrower definition of Waters of the U.S. in the case Sackett v. Environmental Protection Agency. Under the majority opinion, Waters of the U.S. refers to "geographical features that are described in ordinary parlance as 'streams, oceans, rivers, and lakes' and to adjacent wetlands that are "indistinguishable" from those bodies of water due to a continuous surface connection."

On August 29, 2023 the Agencies issued a final rule to amend the final "Revised Definition of 'Waters of the United States'" rule, published in the Federal Register on September 8, 2023. This final rule conforms the definition of "waters of the United States" to the U.S. Supreme Court's May 25, 2023 decision in the case of *Sackett v. Environmental Protection Agency*. Parts of the January 2023 Rule are invalid under the Supreme Court's interpretation of the CWA in the Sackett decision. Therefore, the Agencies have amended key aspects of the regulatory text to conform it to the Court's decision.

The conforming rule became effective upon publication in the Federal Register. Where the January 2023 Rule is not enjoined, the agencies will implement the January 2023 Rule, as amended by the conforming rule.

2.2 State and Local Regulations

2.2.1 California Endangered Species Act

The California ESA generally parallels the main provisions of the ESA but, unlike its federal counterpart, the California ESA applies the take prohibitions to species proposed for listing (called "candidates" by the state). Section 2080 of the California Fish and Game Code prohibits the taking, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit or in the regulations. Take is defined in Section 86 of the California Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." The California ESA allows

for take incidental to otherwise lawful development projects. State lead agencies are required to consult with California Department of Fish and Wildlife (CDFW) to ensure that any action they undertake is not likely to jeopardize the continued existence of any endangered or threatened species or result in destruction or adverse modification of essential habitat.

2.2.2 Fully Protected Species

The State of California first began to designate species as *fully protected* prior to the creation of the federal and California ESAs. Lists of fully protected species were initially developed to provide protection to those animals that were rare or faced possible extinction, and included fish, amphibians and reptiles, birds, and mammals. Most fully protected species have since been listed as threatened or endangered under federal or California ESAs. The regulations that implement the Fully Protected Species Statute (California Fish and Game Code § 4700) provide that fully protected species may not be taken or possessed at any time. Furthermore, CDFW prohibits any state agency from issuing ITPs for fully protected species, except for necessary scientific research.

2.2.3 Native Plant Protection Act

The Native Plant Protection Act (NPPA) of 1977 (California Fish and Game Code §§ 1900-1913) was created with the intent to "*preserve, protect and enhance rare and endangered plants in this State*." The NPPA is administered by CDFW. The California Fish and Game Commission has the authority to designate native plants as "endangered" or "rare" and to protect endangered and rare plants from take. The California ESA of 1984 (California Fish and Game Code § 2050-2116) provided further protection for rare and endangered plant species, but the NPPA remains part of the California Fish and Game Code.

2.2.4 California Fish and Game Code

2.2.4.1 Streambed Alteration Agreement

Pursuant to Section 1602 of the California Fish and Game Code, a Streambed Alteration Agreement (SAA) application must be submitted for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake" (CDFW 2021). In Title 14 of the Code of California Regulations (CCR), Section 1.72, the CDFW defines a "stream" (including creeks and rivers) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation."

The CDFW's jurisdiction includes drainages with a definable bed, bank, or channel with the jurisdictional limit being the top-of-bank. It also includes areas that support intermittent, perennial, or subsurface flows; supports fish or other aquatic life; or supports riparian or hydrophytic vegetation. It also includes areas that have a hydrologic source.

The CDFW will determine if the proposed actions will result in diversion, obstruction, or change of the natural flow, bed, channel, or bank of any river, stream, or lake that supports fish or wildlife. The CDFW will

submit an SAA that includes measures to protect affected fish and wildlife resources; this SAA is the final proposal agreed upon by the CDFW and the applicant.

2.2.4.2 Migratory Birds

The CDFW enforces the protection of nongame native birds in §§ 3503, 3503.5, and 3800 of the California Fish and Game Code. Section 3513 of the California Fish and Game Code prohibits the possession or take of birds listed under the MBTA. These sections mandate the protection of California nongame native birds' nests and also make it unlawful to take these birds. All raptor species are also protected from "take" pursuant to California Fish and Game Code § 3503.5 and are also protected at the federal level by the MBTA of 1918 (USFWS 1918).

2.2.5 Porter-Cologne Water Quality Act

The Porter-Cologne Water Quality Control Act requires "any person discharging waste, or proposing to discharge waste, within any region that could affect the waters of the State to file a report of discharge" with the Regional Water Quality Control Boards (RWQCB) through State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures; California Code of Regulations [CCR], title 23, § 3855). "Waters of the State" is defined as any surface water or groundwater, including saline waters, within the boundaries of the state (California Water Code § 13050[e]). Pollution is defined as an alteration of the quality of the Waters of the State by waste to a degree that unreasonably affects its beneficial uses (California Water Code § 13050) and includes filling in Waters of the State. Note that CCR, title 23, § 3855 applies only to individual water quality certifications, but the new Procedures extend the application of § 3855 to individual waste discharge requirements for discharges of dredged or fill material to Waters of the State and waivers thereof.

Regardless, if a CWA Section 404 permit is not required for a project, a permit for impacts to Waters of the State may still be required under the Porter-Cologne Water Quality Control Act. To determine whether a project should be regulated pursuant to the Porter-Cologne Water Quality Control Act, the RWQCB considers whether project activities could impact the quality of Waters of the State.

2.2.6 California Environmental Quality Act Significance Criteria

Section 15064.7 of the CEQA Guidelines encourages local agencies to develop and publish the thresholds the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the CEQA checklist contained in Appendix G of the CEQA Guidelines. Appendix G provides examples of impacts that would normally be considered significant. Based on these examples, impacts to biological resources would normally be considered significant if a project would:

- have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;

- have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW or USFWS;
- interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and
- conflict with the provisions of an adopted HCP, Natural Community Conservation Plan, or other approved local, regional, or state HCP.

An evaluation of whether an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, state, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant according to CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish, or result in the permanent loss of an important resource on a population-wide or region-wide basis.

3.0 METHODS

3.1 Literature Review

Prior to conducting the biological reconnaissance survey, ECORP biologists performed a literature review using the CDFW's California Natural Diversity Database (CNDDB; CDFW 2023a) and the California Native Plant Society's (CNPS) Electronic Inventory (CNPSEI; CNPS 2023) to determine the special-status plant and wildlife species that have been documented near the Project site. ECORP searched CNDDB and CNPSEI records within the Project site boundaries as depicted on U.S. Geological Survey (USGS) 7.5-minute Redlands topographic quadrangle, plus the surrounding eight topographic quadrangles including Guasti, Fontana, Riverside West, Corona North, Prado Dam, Ontario, Mount Baldy, Cucamonga Peak, and Devore (USGS 2023). Due to the isolated nature of the Project site, the fact that it is surrounded by development, the Project site's long history of disturbance, and the lack of mobility for plant species, the CNDDB and CNPSEI searches for special-status plant species were limited to plant species that have been documented within five miles of the Project site. The CNDDB and CNPSEI contain records of reported occurrences of federally and/or state-listed endangered, threatened, proposed endangered or threatened species, California Species of Special Concern (SSC), or other special-status species or habitat that may occur within or near the Project. Additional information was gathered from the following sources and includes, but is not limited to:

- *State and Federally Listed Endangered and Threatened Animals of California* (CDFW 2023b);
- *Special Animals List* (CDFW 2023c);

- *The Jepson Manual: Vascular Plants of California* (Baldwin et al. 2012);
- *The Manual of California Vegetation*, 2nd Edition (Sawyer et al. 2009);
- Countywide – All Biotic Resources Overlay Map (County of San Bernardino 2012); and
- various online websites (e.g., Calflora 2023).

Using this information and observations in the field, a list of special-status plant and animal species that have the potential to occur on or near the Project site was generated. For the purposes of this assessment, special-status species are defined as plants or animals that:

- have been designated as either rare, threatened, or endangered by CDFW, CNPS, or the USFWS, or are protected under either the federal ESA or California ESA;
- are candidate species being considered or proposed for listing under these same acts;
- are fully protected by the California Fish and Game Code, §§ 3511, 4700, 5050, or 5515; or
- are of expressed concern to resource and regulatory agencies or local jurisdictions.

Special-status species reported for the region in the literature review or for which suitable habitat occurs on the site were assessed for their potential to occur within the Project site based on the following guidelines:

- *Present:* The species was observed onsite during a site visit or focused survey.
- *High:* Habitat (including soils and elevation factors) for the species occurs within the Project site and a known occurrence has recently been recorded (within the last 20 years) within five miles of the area.
- *Moderate:* Habitat (including soils and elevation factors) for the species occurs within the Project site and a documented observation occurs within the database search, but not within five miles of the area; a historic documented observation (more than 20 years old) was recorded within five miles of the Project site; or a recently documented observation occurs within five miles of the area and marginal or limited amounts of habitat occurs in the Project site.
- *Low:* Limited or marginal habitat for the species occurs within the Project site and a recently documented observation occurs within the database search, but not within five miles of the area; a historic documented observation (more than 20 years old) was recorded within five miles of the Project site; or suitable habitat strongly associated with the species occurs on site, but no records or only historic records were found within the database search.
- *Presumed Absent:* Species was not observed during a site visit or focused surveys conducted in accordance with protocol guidelines at an appropriate time for identification; habitat (including soils and elevation factors) does not exist on site; or the known geographic range of the species does not include the Project site.

Note that location information on some special-status species may be of questionable accuracy or unavailable. Therefore, for survey purposes, the environmental factors associated with a species' occurrence requirements may be considered sufficient reason to give a species a positive potential for occurrence. In addition, just because a record of a species does not exist in the databases does not mean it does not occur. In many cases, records may not be present in the databases because an area has not been surveyed for that species.

A review of the Natural Resources Conservation Service (NRCS 2023a) Web Soil Survey, NRCS Hydric Soils List (NRCS 2023b), National Wetlands Inventory (USFWS 2023a), and the corresponding USGS topographic maps was also conducted to determine if there were any blue line streams or drainages present on the Project site that potentially fall under the jurisdiction of either federal or state agencies.

3.2 Field Surveys

3.2.1 Biological Reconnaissance Survey

The biological reconnaissance survey was conducted by walking the entire Project site and a 500-foot buffer, where accessible, to determine the vegetation communities and wildlife habitats present on and adjacent to the site. Areas that were not accessible by foot were scanned using binoculars for suitable habitat. The biologists documented the plant and animal species present on the Project site, and the location and condition of the Project site were assessed for the potential to provide habitat for special-status plant and wildlife species. Data were recorded on a Global Positioning System (GPS) unit, field notebooks, or maps. Photographs were also taken during the survey to provide visual representation of the conditions within the Project site. The Project site was also examined to assess its potential to facilitate wildlife movement or function as a movement corridor for wildlife moving throughout the region. In addition, the biologists documented the vegetation communities present on the Project site.

Plant and wildlife species, including any special-status species that were observed during the survey, were recorded. Plant nomenclature follows that of *The Jepson Manual: Vascular Plants of California* (Baldwin et al. 2012). Wildlife nomenclature follows Society for the Study of Amphibians and Reptiles (2017), *Check-list of North American Birds* (Chesser et al. 2020), and the *Revised Checklist of North American Mammals North of Mexico* (Bradley et al. 2014).

In instances where a special-status species was observed, the date, species, location and habitat, and GPS coordinates were recorded. The locations of special-status species observations were recorded using a handheld GPS in North American Datum 1983, Universal Transverse Mercator coordinates, Zone 11S.

3.2.2 Tree Inventory

The tree inventory was conducted by a certified arborist, to ensure compliance with the minimum filling requirements for application submittal with the City of Ontario, Planning Department. During the survey, the area identified by Diversified Pacific as the Project site and the areas immediately adjacent to the Project site were walked and a sub-meter accuracy GPS unit was used in conjunction with ESRI's Collector Application to collect location and survey data. Data was collected for all trees that were either rooted

within the Project area, rooted immediately adjacent to the Project area, and/or had canopy overhang within the Project area.

Data collected for all inventoried trees included tree ID number, species, Diameter at Breast Height (DBH), and number of trunks. A formal assessment of health and structure was not conducted during this inventory. For the purposes of this inventory, DBH is defined as the trunk diameter at 4.5 feet above grade. Occasional deviations from this height were required for trees with branching at this level or with unusual structural configurations (e.g., horizontal trunks). On multi-trunked trees (trees with multiple vertical trunks in contact at or near ground level), the report lists total aggregate diameter along with the total number of trunks that were measured. Maximum dripline radius refers to the maximum distance from the trunk to the edge of the canopy.

Please note that the survey results are intended for general Project planning purposes only; therefore, these results should not be considered a detailed tree analysis (i.e., the results do not include hazard assessment, tree health diagnosis, preservation/removal recommendations, or pruning advisement).

4.0 RESULTS

Summarized below are the results of the literature review and field surveys, including site characteristics, vegetation communities, wildlife, special-status species, and special-status habitats (including any potential wildlife corridors).

4.1 Literature Review

4.1.1 Special-Status Plants and Wildlife

The literature review and database searches identified 12 special-status plant species records within five miles of the Project site and 50 special-status wildlife species were identified in the nine-quadrangle search, that have could occur on and/or near the Project site. A list was generated from the results of the literature review and the Project site was evaluated for suitable habitat that could support any of the special-status plant or wildlife species on the list. The Project site is located within the San Bernardino County biotic overlay for burrowing owl.

4.1.2 U.S. Fish and Wildlife Service Designated Critical Habitat

The Project site is not located within or near any USFWS-designated critical habitat (USFWS 2023b). There are no expected impacts to the critical habitat because there is no critical habitat on or adjacent to the Project site.

4.1.3 Preliminary Aquatic Resources Delineation Literature Review

The Project site itself does not include any state- or federally protected wetlands or Waters of the U.S. The desktop review of the National Wetlands Inventory (NWI) and the NRCS Web Soil Survey Map showed several mapped aquatic features outside of the Project boundary in the 500-foot buffer, including Cucamonga Creek, a concrete lined flood control channel, located adjacent to the Project site along the eastern border (NRCS 2023a, USFWS 2023b). The NWI mapping designation for Cucamonga Creek is

R4SBCr, which indicates that it is a riverine, intermittent streambed that is seasonally flooded and has an artificial substrate. Recent aerial photographs show evidence that aquatic features are likely present in the locations mapped by NWI, outside of the Project site. Although a desktop delineation was conducted, no formal delineation of aquatic resources was conducted.

4.2 Biological Reconnaissance Survey

The biological reconnaissance survey was conducted on June 28, 2023, by ECORP senior wildlife biologist Phillip Wasz. Summarized below are the results of the biological reconnaissance survey including site characteristics, plant communities, wildlife, special-status species, and special-status habitats (including any potential wildlife corridors). Weather conditions during the survey are summarized in Table 1.

Table 1. Weather Conditions During the Survey

Date	Surveyors	Time		Temperature (˚F)		Cloud Cover (%)		Wind Speed (mph)	
		Start	End	Min	Max	Min	Max	Min	Max
6/28/23	Phillip Wasz	0100	1400	83	83	0	0	0	5

Note: °F = Degrees Fahrenheit; mph = Miles per Hour

4.2.1 Property Characteristics

The Project site consists of an undeveloped lot containing ruderal vegetation that appears to have a long history of disturbance. The Project contained scattered river red gum (*Eucalyptus camaldulensis*) and Peruvian pepper (*Schinus molle*) trees and stockpiled dirt mounds and rocks were also present on the Project site. Soil types within the Project site consist of Tujunga loamy sand, 0 to 5 percent slopes (NRCS 2023a). The Project site is bounded by East Holt Boulevard, East Guasti Road, and a dike. The Project site is surrounded by development on all four sides. Historical aerial images show that the site was in active agriculture production until the early to mid-1980s and has since remained undeveloped. Over the years the site has been maintained through disking and mowing and evidence of disking within the last year or was observed during the survey. Aerial images from 2013 show that a large portion of the Project site in the northwest corner was completely graded and graveled and has remained relatively free of vegetation since then. Representative photographs of the Project site are presented in Appendix A.

4.2.2 Vegetation Communities

The Project site is within a developed environment that is generally subjected to repeated and ongoing disturbance from human activities. The vegetation communities on the Project site were identified as Eucalyptus groves and disturbed California buckwheat (*Eriogonum fasciculatum*) scrub (Figure 3). One land cover type, disturbed/developed land, was also observed on the Project site. Other disturbances included vehicle tracks, disking, mowing, and scattered trash. The vegetation height throughout most of the site was between 1 to 24 inches at the time of the survey.



Map Contents

- Project Area
- Dead Snags

Tree Locations

DBH ≥ 4 Inches

- Eucalyptus camaldulensis
- Pepper tree

DBH < 4 Inches

- Eucalyptus camaldulensis
- Pepper tree
- Tree tobacco

Sapling

- Eucalyptus camaldulensis
- Pepper tree

Vegetaiton Communities and Land Cover Types

- Disturbed California Buckwheat Scrub - 5.712 acres
- Disturbed/Developed - 3.080 acres
- Eucalyptus Grove - 1.682 acres

Sources: ESRI, Maxar (2023)
Other Related Info if Needed



Location: N:\2023\2023-094 Ontario Hotel\MAPS\Biological_Resources\Biological Resources.aprx - OH Biological Survey Results (trotellini - 9/25/2023)

Map Date: 9/22/2023

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Scale in Feet
0 50 100

Figure 3. Biological Survey Results

4.2.3 Plants

Plant species observed on the Project site were generally characteristic of disturbed native vegetation communities. Dominant plant species observed on the Project site included native and nonnative species, including Spanish lotus (*Acmispon americanus*), California buckwheat, river red gum, tree tobacco (*Nicotiana glauca*), red stemmed filaree (*Erodium cicutarium*), jimson weed (*Datura wrightii*), Russian thistle (*Salsola tragus*), mustard (*Brassica* spp.), and red brome (*Bromus madritensis* ssp. *rubens*). A full list of plant species observed on the Project site is included in Appendix B.

4.2.4 Wildlife

Despite the disturbed urban nature of the Project site, wildlife species were present. The species observed during the biological survey included one mammal, California ground squirrel (*Otospermophilus beecheyi*), one reptile, side blotched lizard (*Uta stansburiana*), and multiple bird species common in urban landscapes. A full list of wildlife species observed on and immediately adjacent to the Project site is included in Appendix C.

4.2.5 Potential for Special-Status Plant and Wildlife Species to Occur on the Project Site

The literature review and database searches identified 12 special-status plant species records within five miles of the Project site and 50 special-status wildlife species were identified in the nine-quadrangle search, that have could occur on and/or near the Project site. However, due to the high level of human disturbance at the Project site and lack of high-quality habitat for the special-status plant and wildlife species, many of the species are presumed absent from the Project site.

4.2.5.1 Special-Status Plants

There were 12 special-status plant species that appeared in the literature review and database searches as occurring within five miles of the Project site (CDFW 2023a; CNPS 2023). Of those, only one species federally and/or state listed (Slender-horned spineflower [*Dodecahema leptoceras*]). A list was generated from the results of the literature review and the Project was evaluated for suitable habitat that could support any of the special-status plant species on the list.

Due to the isolated nature of the Project site, the fact that it is surrounded by development, the Project site's long history of disturbance, and the lack of mobility for plant species, the results of the literature review were limited to plant species occurring within five miles of the Project site. Descriptions of the CNPS California Rare Plant Rank (CRPR) designations can be found in Table 2. A Potential for Occurrence table outlining each species and their designations can be found in Appendix D.

Table 2. CRPR Status Designations	
List Designation	**Meaning**
1A	Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere
1B	Plants Rare, Threatened, or Endangered in California and Elsewhere
2A	Plants Presumed Extirpated in California, But Common Elsewhere
2B	Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
3	Plants about which more information is needed; a review list
4	Plants of limited distribution; a watch list
List .1, .2 and .3 extension meanings:	
.1	Seriously threatened in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)
.2	Moderately threatened in California (20 to 80 percent occurrences threatened/moderate degree and immediacy of threat)
.3	Not very threatened in California (less than 20 percent of occurrences threatened/low degree and immediacy of threat or no current threats known)

Note: According to CNPS (Skinner and Pavlik 1994), plants on Lists 1B and 2 meet definitions for listing as threatened or endangered under Section 1901, Chapter 10, of the California Fish and Game Code (California Department of Fish and Game 1984). This interpretation is inconsistent with other definitions.

4.2.5.2 Plant Species with a Moderate Potential to Occur

Two species were found to have a moderate potential to occur on the Project site. Although, none of the species were identified on the Project site during the biological reconnaissance survey, the site provides marginal or limited amounts of habitat (including soils and elevation factors), and recently documented (less than 20 years old) observations occur within five miles of the Project site. The special-status plant species with a moderate potential are listed below and detailed in Appendix D.

- Parry's spineflower (*Chorizanthe parryi* var. *parryi*), CRPR 1B.1; and
- Brand's star phacelia (*Phacelia stellaris*), CRPR 1B.1.

4.2.5.3 Plant Species with a Low Potential to Occur

The following three species have a low potential to occur on the Project site because limited or marginally suitable habitat for the species occurs on site and a known historic documented occurrence (more than 20 years old) was recorded within five miles of the Project site; or suitable habitat strongly associated with the species occurs on site, but no records were found in the database search. The special-status plant species with a low potential are listed below and detailed in Appendix D.

- Mesa Horkelia (*Horkelia cuneata* var. *puberula*), CRPR 1B.1;
- Robinson's pepper grass (*Lepidium virginicum* var. *robinsonii*), CRPR 4.3; and

- San Bernardino aster (*Symphyotrichum defoliatum*), CRPR 1B.2.

4.2.5.4 Plant Species Presumed Absent

The following seven species were presumed absent from the Project site due to lack of suitable habitat on the Project site (including elevation, soils, vegetation communities), or because the Project is located outside of the known range for the species:

- California saw-grass (*Cladium californicum*), CRPR 2B.2;
- Slender-horned spineflower (*Dodecahema leptoceras*), CRPR 1B.1;
- California muhly (*Muhlenbergia californica*), CRPR 4.3;
- Aparejo grass (*Muhlenbergia utilis*), CRPR 2B.2;
- Prostrate vernal pool navarretia (*Navarretia prostrata*), CRPR 1B.2; and
- White rabbit-tobacco (*Pseudognaphalium leucocephalum*), CRPR 2B.2; and
- Salt spring checkerbloom (*Sidalcea neomexicana*), CRPR 2B.2.

4.2.5.5 Special-Status Wildlife

The literature search documented 50 special-status wildlife species that occur within the vicinity of the Project site. A list was generated from the results of the literature review and the Project site was evaluated for suitable habitat that could support any of the special-status wildlife species on the list. The Project site's disturbed nature, proximity to commercial development, and the presence of anthropogenic influences on the site likely preclude many of these species from occurring. A table outlining each species, their designations, and potential for occurrence on the Project site can be found in Appendix D.

4.2.5.6 Wildlife Species with a Moderate Potential to Occur

Five species were found to have a moderate potential to occur on the Project site. Although these species were not present on the Project site during the biological reconnaissance survey, habitat for the species occurs onsite, and a known occurrence has been reported in the database, but not within five miles of the site; or a historic documented observation (more than 20 years old) was recorded within five miles of the Project site; or a recently documented observation occurs within five miles of the site and marginal or limited amounts of habitat occurs onsite.

Crotch Bumble Bee

The Crotch bumble bee (*Bombus crotchii*) is a candidate species for listing (endangered) under the California ESA and is therefore afforded all the same legal protections as a fully listed species would receive under the California ESA. The Crotch bumble bee occurs in open grassland and scrub habitats ranging from coastal California, east to the Sierra-Cascade crest, and south into Mexico. The flight period for queens in California is from late February to late October, peaking in early April with a second pulse in

July. The flight period for workers and males in California is from late March through September, peaking in early July. The species prefers a diet consisting of certain plant species including milkweeds (*Asclepias* sp.), dusty maidens (*Chaenactis* sp.), lupines (*Lupinus* sp.), medics (*Medicago* sp.), phacelias (*Phacelia* sp.), sages (Salvia sp.), clarkias (*Clarkia* sp.), poppies (*Papaver* sp. or *Eschscholzia* sp.), and wild buckwheat (*Eriogonum* sp.). The nests of the species are often located underground in abandoned rodent nests or above ground in tufts of grass, old bird nests, rock piles, or cavities in dead trees. Overwintering sites utilized by Crotch bumble bee mated queens include soft, disturbed soils, or under leaf litter or other debris. Marginally suitable habitat was present within the disturbed California buckwheat scrub and rodent burrows for nesting and overwintering are present on the Project site. Additionally, there were two recent CNDDB occurrences from 2019 and 2020 (OCC 247 and 316) approximately 1.7 miles east of the Project site and one historical occurrence (OCC 187) recorded approximately 1.7 miles east of the Project site. Due to the presence of marginally suitable habitat for this species and the recent documented records near the Project site, this species has been determined to have a moderate potential to occur on the Project site.

Southern California Legless Lizard

The Southern California legless lizard (*Anniella stebbinsi*) is a CDFW SSC. The southern California legless lizard is found in coastal sand dunes and a variety of interior habitats including sandy washes and alluvial fans. The species also occurs in moist warm loose soil with plant cover and sparsely vegetated beach dunes, pine-oak woodlands, desert scrub, chaparral, and stream terraces with sycamores, cottonwoods, or oaks and is sometimes found in suburban gardens. Suitable habitat for this species is present within the disturbed California buckwheat scrub and Eucalyptus groves vegetation. Two historical CNDDB records were identified within five miles of the Project site, including OCC 11 from 1993 located approximately 0.5 miles south of the Project site and OCC 135 from 1938, which has a polygon that overlaps with the Project site centered around Cucamonga Creek. However, this observation was recorded when Cucamonga Creek was a natural channel that meandered through agriculture lands. Since that time, it has been completely channelized and concrete lined, and no longer represents suitable habitat for the species. Due to the presence of marginally suitable habitat for this species and the documented records near the Project site, this species has been determined to have a moderate potential to occur on the Project site.

Burrowing Owl

The burrowing owl (*Athene cunicularia*) is a CDFW SSC and state candidate for listing (endangered). Burrowing owls historically occurred throughout much of California and the western U.S.; however, many former California populations have been extirpated. Burrowing owls typically inhabit open habitats, primarily grasslands and deserts. Burrowing owls require burrows for roosting and nesting cover. Although they often nest in abandoned California ground squirrel (*Otospermophilus beecheyi*) burrows, they will also use other small mammal burrows, pipes, culverts, and nest boxes, particularly where burrows are scarce (Zeiner et al. 1990). The Project site provided marginally suitable burrowing owl habitat at the time of the survey. The low-growing vegetation was suitable for burrowing owls and soils within the Project site consisted of friable, sandy loam soils. The site also had many small mammal burrows of suitable size for burrowing owls. Due to the mobile nature of the burrowing owl, it is possible for

burrowing owl to move into the site due to the presence suitable burrows. There are 20 recent CNDDB occurrences of the species within five miles of the Project site (Occurrences: 636, 664, 1788, 561, 565, 1045, 1789, 940, 956, 957, 1198, 1199, 1787, 1044, 1935, 1936, 1937, 1046, 1790, 1792; CDFW 2023a). The most recent occurrence was recorded 1.7 miles away from the Project in 2016 (Occurrence 561; CDFW 2023a), the closest was recorded 1.6 miles away in 2004 (Occurrence 1045; CDFW 2023a) and the furthest was recorded 5.2 miles away in 2006 (Occurrence 957; CDFW 2023a). Based on the presence of marginally suitable burrowing habitat and the recent records of the species within five miles of the Project site, this species has a moderate potential to occur on the Project site.

Northwestern San Diego Pocket Mouse

The northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*) is a CDFW SSC that is typically found in sandy desert fans and shrub communities such as coastal sage scrub, chaparral, sagebrush, desert wash, desert scrub, desert succulent scrub, pinyon-juniper, and annual grassland habitats. Suitable habitat for this species is present in the disturbed California buckwheat scrub on the Project site. There were two recent CNDDB occurrences within five miles of the Project site (64, 65). Due to the presence of suitable habitat for this species and the recent documented records near the Project Area, this species has been determined to have a moderate potential to occur on the Project site.

Los Angeles Pocket Mouse

The Los Angeles Pocket Mouse (LAPM, *Perognathus longimembris brevinasus*) is a CDFW SSC that is typically found in areas containing fine sandy soils or sandy loams, which are excellent substrates for burrow excavation by this diminutive animal. Like many heteromyids, LAPM dig burrow systems near the base of shrubs or amidst other vegetation types and position themselves within the burrow as environmental conditions change. LAPM most commonly occur in coastal sage scrub and grassland habitats, but also in alluvial fan sage scrub habitats. Plant species composition varies greatly among LAPM occupied habitat areas, but typically encompasses both native and nonnative plants commonly associated with sandy or granular soils, and often in lower elevational alluvial systems. Marginally suitable habitat for this species was present within the disturbed California buckwheat scrub vegetation. There were three historic CNDDB occurrences (OCC 33, 36, 45) and one recent occurrence (OCC 44) of this species within five miles of the Project site. Due to the presence of suitable habitat for this species and the recent documented records near the Project Area, this species has been determined to have a moderate potential to occur on the Project site.

4.2.5.7 Wildlife Species with a Low Potential to Occur

The following four species have a low potential to occur on the Project site because limited habitat for the species occurs on site and a known occurrence has been reported in the database, but not within five miles of the site; or a historic documented observation (more than 20 years old) was recorded within five miles of the Project site; or suitable habitat strongly associated with the species occurs on site, but no records were found in the database search. The disturbed California buckwheat scrub and/or Eucalyptus groves habitat on the Project site on the Project site provides marginally suitable habitat for these species. The special-status wildlife species with a low potential are listed below and detailed in Appendix E

- California glossy snake (*Arizona elegans occidentalis*) CDFW SSC;
- Coastal whiptail (*Aspidoscelis tigris stejnegeri*), CDFW SSC;
- Red-diamond rattlesnake (*Crotalus ruber*), CDFW SSC;
- Coast horned lizard (*Phrynosoma blainvillii*) CDFW SSC;

4.2.5.8 Wildlife Species Presumed Absent

A total of 41 species were presumed absent. These species were not present at the site during the biological reconnaissance survey and the habitat present on the Project site was not suitable. For some species, there were historic or recent sightings near the site; however, due to the lack of suitable habitat within the Project site, these species are presumed absent. The species presumed absent are listed below and a table outlining each species, their designations, and potential for occurrence on the Project site can be found in Appendix D:

- Quino checkerspot butterfly (*Euphydryas editha quino*), federally listed (endangered);
- Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*), federally listed (endangered);
- Santa Ana sucker (*Catostomus santaanae*), federally listed (threatened);
- Arroyo chub (*Gila orcutti*), CDFW SSC;
- Steelhead - southern California Distinct Population Segment (*Oncorhynchus mykiss irideus* pop. *10)*, federally listed (endangered), state candidate for listing (endangered);
- Santa Ana speckled dace (*Rhinichthys osculus* ssp. *8*), CDFW SSC;
- Arroyo Toad (*Anaxyrus californicus*), federally listed (endangered), CDFW SSC;
- Foothill yellow-legged frog South Coast Distinct Population Segment (*Rana boylii* pop. 6), state listed (endangered);
- Southern mountain yellow-legged frog (*Rana muscosa*), federally listed (endangered), state listed (endangered);
- Western spadefoot (*Spea hammondii*), CDFW SSC;
- Coast range newt (*Taricha torosa*). CDFW SSC;
- Southern rubber boa (*Charina umbratical*), state listed (threatened);
- San Diego banded gecko (*Coleonyx variegatus abbotti*), CDFW SSC;
- Western pond turtle (*Emys marmorata*), CDFW SSC;
- Two-striped gartersnake (*Thamnophis hammondii*), CDFW SSC;
- Tricolored blackbird (*Agelaius tricolor*), state listed (threatened), CDFW SSC;

- Golden eagle (*Aquila chrysaetos*), CDFW Fully Protected;
- Grasshopper sparrow (*Ammodramus savannarum*), CDFW SSC;
- Long-eared owl (*Asio otus*), CDFW SSC;
- Swainson's hawk (*Buteo swainsoni*) state listed (threatened).
- Coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*), CDFW SSC;
- Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), federally listed (threatened), state-listed (endangered);
- Yellow rail (*Coturnicops noveboracensis*), CDFW SSC;
- Black swift (*Cypseloides niger*), CDFW SSC;
- White-tailed kite (*Elanus leucurus*), CDFW Fully Protected;
- Southwestern willow flycatcher (*Empidonax traillii extimus*), federally listed (endangered), state listed (endangered);
- Yellow-breasted chat (*Icteria virens*), CDFW SSC;
- California black rail (*Laterallus jamaicensis coturniculus*), state listed (threatened), CDFW Fully Protected;
- Coastal California gnatcatcher (*Polioptila californica californica*), federally listed (threatened), CDFW SSC;
- Yellow warbler (*Setophaga petechia*), CDFW SSC;
- Least Bell's vireo (*Vireo bellii pusillus*), federally listed (endangered), state listed (endangered);
- Pallid bat (*Antrozous pallidus*), CDFW SSC;
- Pallid San Diego pocket mouse (*Chaetodipus fallax pallidus*), CDFW SSC;
- San Bernardino kangaroo rat (*Dipodomys merriami parvus*), federally listed (endangered), state candidate for listing (endangered), CDFW SSC;
- Stephens' kangaroo rat (*Dipodomys stephensi*), federally listed (threatened), state listed (threatened);
- Western mastiff bat (*Eumops perotis californicus*), CDFW SSC;
- Western yellow bat (*Lasiurus xanthinus*), CDFW SSC;
- San Diego desert woodrat (*Neotoma lepida intermedia*), CDFW SSC;
- Pocketed free-tailed bat (*Nyctinomops femorosaccus*), CDFW SSC;
- Big free-tailed bat (*Nyctinomops macrotis*), CDFW SSC; and

- Desert bighorn sheep (*Ovis canadensis nelsoni*), CDFW Fully Protected.

4.2.6 Raptors and Migratory Birds

Potential nesting habitat for migratory birds and raptors protected by the MBTA and California Fish and Game Code was present in the river red gum and Peruvian pepper trees scattered through the Project site. Suitable nesting habitat for ground-nesting bird species, such as mourning doves, was also present on the Project site. Therefore, nesting birds could use the Project site during the nesting bird season (typically February 1 through August 31).

4.2.7 Wildlife Movement Corridors, Linkages, and Significant Ecological Areas

The concept of habitat corridors addresses the linkage between large blocks of habitat that allow the safe movement of mammals and other wildlife species from one habitat area to another. The definition of a corridor varies, but corridors may include such areas as greenbelts, refuge systems, underpasses, and biogeographic land bridges. In general, a corridor is described as a linear habitat embedded in a dissimilar matrix that connects two or more large blocks of habitat. Wildlife movement corridors are critical for the survivorship of ecological systems for several reasons. Corridors can connect water, food, and cover sources, spatially linking these three resources with wildlife in different areas. In addition, wildlife movement between habitat areas provides for the potential of genetic exchange between wildlife species populations, thereby maintaining genetic variability and adaptability to maximize the success of wildlife responses to changing environmental conditions. This is especially critical for small populations subject to loss of variability from genetic drift and effects of inbreeding. The nature of corridor usage and wildlife movement patterns vary greatly among species.

The Project site was assessed for its ability to function as a wildlife corridor. The Project site is disturbed and surrounded by paved roads and development. Although the Project site is undeveloped, it is surrounded by development and isolated from large, contiguous blocks of native habitat. The Project site is bordered by East Holt Boulevard to the north, East Guasti Road to the south and west, and a flood control channel to the east. These features isolate the habitat that is present within the Project site from its surrounding area and provide potential barriers to wildlife movement. Additionally, the lack of consistent vegetative cover within the Project site, the urban nature of the site, and the high level of disturbance on and in the vicinity of the site would likely deter wildlife from using the Project site for movement opportunities. Although wildlife could pass through the site while moving about their home range, it would not be considered a movement corridor, linkage, or significant ecological area.

4.3 Tree Inventory

The Tree inventory was conducted by Ms. Carley Adams, a certified arborist (International Society of Arboriculture Certification #WE 11837A). During the survey, a total of 63 trees were inventoried and mapped within the Project area or immediately adjacent to the Project area. Of the 63 trees included in the inventory, a total of 56 trees had a DBH of four inches or greater and all are nonnative or ornamental species. The nonnative trees inventoried included river red gum, Peruvian peppertree, and tree tobacco. Tree tobacco was included in the tree survey because it is considered a shrub or a small-tree; however, this species is listed as moderately invasive by the California Invasive Plant Council (Cal-IPC) and is

generally more shrub-like. Therefore, this species is typically not included in the mitigation planning process. In addition to the adult individuals of river red gum and Peruvian peppertree, 48 saplings of river red gum and 10 saplings of Peruvian peppertree were also mapped. Figure 3 shows the locations of all the trees and saplings included in the inventory and Table 3 below provides the data collected for each tree. Representative photographs of the trees inventoried in are provided in Attachment A.

Table 3. Tree Inventory Results

Tree ID Number	Common Name	Scientific Name	DBH (inches)	Number of Trunks
110	Tree Tobacco*	*Nicotiana glauca*	3.0	1
26	Tree Tobacco*	*Nicotiana glauca*	2.5	1
21	Tree Tobacco*	*Nicotiana glauca*	4.0	2
22	Tree Tobacco*	*Nicotiana glauca*	4.0	2
23	Tree Tobacco*	*Nicotiana glauca*	4.0	2
24	Tree Tobacco*	*Nicotiana glauca*	5.0	2
25	Tree Tobacco*	*Nicotiana glauca*	5.5	3
1	River Red Gum	*Eucalyptus camaldulensis*	31.0	2
2	River Red Gum	*Eucalyptus camaldulensis*	18.0	1
3	River Red Gum	*Eucalyptus camaldulensis*	23.0	2
4	River Red Gum	*Eucalyptus camaldulensis*	20.0	4
5	River Red Gum	*Eucalyptus camaldulensis*	26.5	4
107	River Red Gum	*Eucalyptus camaldulensis*	14.0	2
105	River Red Gum	*Eucalyptus camaldulensis*	45.5	7
106	River Red Gum	*Eucalyptus camaldulensis*	4.0	1
103	River Red Gum	*Eucalyptus camaldulensis*	21.0	1
104	River Red Gum	*Eucalyptus camaldulensis*	18.0	2
102	River Red Gum	*Eucalyptus camaldulensis*	21.0	4
101	River Red Gum	*Eucalyptus camaldulensis*	24.0	1
100	River Red Gum	*Eucalyptus camaldulensis*	9.5	1
99	River Red Gum	*Eucalyptus camaldulensis*	7.0	1
10	River Red Gum	*Eucalyptus camaldulensis*	42.0	3
11	River Red Gum	*Eucalyptus camaldulensis*	29.0	3
14	River Red Gum	*Eucalyptus camaldulensis*	3.0	1
17	River Red Gum	*Eucalyptus camaldulensis*	7.0	3

Table 3. Tree Inventory Results

Tree ID Number	Common Name	Scientific Name	DBH (inches)	Number of Trunks
18	River Red Gum	*Eucalyptus camaldulensis*	32.0	3
19	River Red Gum	*Eucalyptus camaldulensis*	4.0	1
20	River Red Gum	*Eucalyptus camaldulensis*	10.5	4
27	River Red Gum	*Eucalyptus camaldulensis*	17.0	2
29	River Red Gum	*Eucalyptus camaldulensis*	23.5	5
30	River Red Gum	*Eucalyptus camaldulensis*	7.0	1
34	River Red Gum	*Eucalyptus camaldulensis*	3.5	1
35	River Red Gum	*Eucalyptus camaldulensis*	17.0	3
38	River Red Gum	*Eucalyptus camaldulensis*	4.0	2
36	River Red Gum	*Eucalyptus camaldulensis*	6.5	1
37	River Red Gum	*Eucalyptus camaldulensis*	15.5	2
42	River Red Gum	*Eucalyptus camaldulensis*	9.5	2
44	River Red Gum	*Eucalyptus camaldulensis*	12.0	4
43	River Red Gum	*Eucalyptus camaldulensis*	10.5	2
46	River Red Gum	*Eucalyptus camaldulensis*	3.0	2
47	River Red Gum	*Eucalyptus camaldulensis*	15.0	2
48	River Red Gum	*Eucalyptus camaldulensis*	7.0	1
39	River Red Gum	*Eucalyptus camaldulensis*	30.0	2
40	River Red Gum	*Eucalyptus camaldulensis*	23.0	2
41	River Red Gum	*Eucalyptus camaldulensis*	31.0	1
61	River Red Gum	*Eucalyptus camaldulensis*	17.5	5
62	River Red Gum	*Eucalyptus camaldulensis*	16.0	2
65	River Red Gum	*Eucalyptus camaldulensis*	6.5	2
67	River Red Gum	*Eucalyptus camaldulensis*	11.5	4
68	River Red Gum	*Eucalyptus camaldulensis*	47.0	4
97	River Red Gum	*Eucalyptus camaldulensis*	25.5	3
91	River Red Gum	*Eucalyptus camaldulensis*	2.0	1
80	River Red Gum	*Eucalyptus camaldulensis*	14.0	1
79	River Red Gum	*Eucalyptus camaldulensis*	77.0	3

Table 3. Tree Inventory Results

Tree ID Number	Common Name	Scientific Name	DBH (inches)	Number of Trunks
90	River Red Gum	*Eucalyptus camaldulensis*	40.5	3
89	River Red Gum	*Eucalyptus camaldulensis*	2.0	1
88	River Red Gum	*Eucalyptus camaldulensis*	5.5	3
94	River Red Gum	*Eucalyptus camaldulensis*	28.0	2
93	River Red Gum	*Eucalyptus camaldulensis*	9.0	1
92	River Red Gum	*Eucalyptus camaldulensis*	24.0	2
84	Peruvian peppertree	*Schinus molle*	19.0	5
85	River Red Gum	*Eucalyptus camaldulensis*	42.0	2
87	River Red Gum	*Eucalyptus camaldulensis*	34.0	2

*Tree tobacco was included in the tree survey because it is considered a shrub or a small-tree; however, this species is listed as moderately invasive by Cal-IPC and is generally more shrub-like. Therefore, this species is typically not included in the mitigation planning process.

5.0 IMPACT ANALYSIS

5.1 Special-Status Species

The Project site consists of disturbed land and is situated within an urban environment, surrounded by high levels of disturbance. Vegetation communities onsite consisted primarily of disturbed California buckwheat scrub and Eucalyptus groves. Disturbances observed on the site included vehicle tracks, scattered trash, grading along the western boundary, and evidence of mowing and/or disking, likely associated with weed abatement. The literature review and database searches identified 12 special-status plant species that have been documented within five miles of the Project site. Of the 12 special-status plant species, two species (Parry's spineflower and Brand's star phacelia) were determined to have a moderate potential to occur on the Project site based on the habitat present and documented species records within five miles of the Project site. However, due to its isolated nature and history of disturbance the Project Site only provides marginally or limited amounts of suitable habitat (including soils, vegetation, and elevation factors). Further, Parry's spineflower and Brand's star phacelia are not federally or State-listed species. Therefore, it is not likely that the Project would require a mechanism for "take" of federally or state-listed plant species. If present on the Project site, these two species are only expected to occur in very low density and Project-related impacts would not be expected to contribute to the overall decline of populations for these species. Therefore, significant impacts to special-status plant species are not expected to occur.

The literature review and database searches identified 50 special-status wildlife species that could occur in the vicinity of the Project site, and although no special-status wildlife species were documented during the biological survey, the site contained suitable habitat for five species (that were determined to have a moderate potential and four species that were determined to have a low potential, based on the presence of suitable habitat in the Project Area and recent or historic documented records of the species occurring within 5 miles of the Project site. The remaining 41 special-status wildlife species were presumed absent from the Project Area due to lack of suitable habitat or because the Project site is outside of the known species range.

The five species with a moderate potential to occur included Crotch bumble bee, southern California legless lizard, burrowing owl, northwestern San Diego pocket mouse, and Los Angeles pocket mouse. The southern California legless lizard, northwestern San Diego pocket mouse, Los Angeles pocket mouse are all CDFW SSC and, if present on the Project site, these species could be subject to direct impacts through ground disturbance and indirect impacts from construction noise, vibrations, and increased human activity related to the development of the Project site. However, due to the lack of high-quality habitat within the Project Area, the site's long history of anthropogenic disturbances, and the presence of urban development immediately adjacent to the Project site, if present on the Project site, these species are only expected to occur in very low density and Project-related impacts would not be expected to contribute to the overall decline of populations for these species. Therefore, impacts to southern California legless lizard, northwestern San Diego pocket mouse, Los Angeles pocket mouse would not be considered significant under CEQA, and additional surveys and best management practices are not necessary for these species.

Crotch bumble bee and burrowing owl (State candidates for listing under CESA) were determined to have a moderate potential to occur on the Project site based on the presence of marginally suitable habitat and recent species records within five miles of the Project site. If present on the Project site, these species could be subject to direct impacts through ground disturbance and indirect impacts from construction noise, vibrations, and increased human activity related to the development of the Project site. However, the Project will ensure avoidance of these species through best management practices, including pre-construction surveys, monitoring, and other avoidance measures as described in Section 6.0.

The four species with a low potential to occur included California glossy snake, coastal whiptail, red-diamond rattlesnake, and coast horned lizard. The four reptile species are all CDFW SSC and, if present on the Project site, these species could be subject to direct impacts through ground disturbance and indirect impacts from construction noise, vibrations, and increased human activity related to the development of the Project site. However, due to the lack of high-quality habitat within the Project Area, the site's long history of anthropogenic disturbances, and the presence of urban development immediately adjacent to the Project site, if present on the Project site, these species are only expected to occur in very low density and Project-related impacts would not be expected to contribute to the overall decline of populations for these species. Therefore, impacts to California glossy snake, coastal whiptail, red-diamond rattlesnake, coast horned lizard would not be considered significant under CEQA, and additional surveys and best management practices are not necessary for these species.

The remaining 41 special-status wildlife species are presumed absent from occurring on or adjacent to the site due to the lack of suitable habitat; proximity to the surrounding residential, commercial, and industrial development; and the presence of anthropogenic disturbances associated with the commercial and industrial development surrounding the site. No significant impacts to the 41 special-status wildlife species that are presumed absent are anticipated to result from the development of this Project, and additional surveys and best management practices are not necessary for these species.

The river red gum trees and some of the larger shrubs on the Project site, as well as the trees immediately adjacent to the Project site, could provide nesting habitat for nesting birds and raptors protected by the MBTA and California Fish and Game Code. Furthermore, the Project site could provide nesting habitat for ground-nesting bird species. If construction of the proposed Project occurs during the bird breeding season (typically February 1 through August 31), ground-disturbing construction activities could directly affect birds protected by the MBTA and their nests through the removal of habitat on the Project site, and indirectly through increased noise, vibrations, and increased human activity. However, the Project will ensure compliance with the MBTA and California Fish and Game Code avoidance of through best management practices, including pre-construction surveys, monitoring, and other avoidance measures as described in Section 6.0.

The river red gum trees on the Project site could provide suitable roosting habitat for foliage roosting bat species that might occur in the vicinity of the Project site, including hoary bat (*Lasiurus cinereus*) and western red bat (*Lasiurus blossevillii*). If present on the Project site, ground-disturbing activities could directly affect through the removal of roosting habitat on the Project site, and indirectly through increased noise, vibrations, and increased human activity. However, the Project will ensure avoidance of roosting bats through best management practices, including pre-construction surveys, monitoring, and other avoidance measures as described in Section 6.0.

5.2 Sensitive Natural Communities

The Project site consists of disturbed land that supports mostly nonnative and native ruderal vegetation. The Project site does not contain any riparian habitat or other sensitive natural communities that would need to be preserved. No impacts to sensitive natural communities are anticipated to result from the development of this Project.

5.3 State and Federally Protected Wetlands and Waters of the United States

According to the results of the preliminary aquatic resources delineation, no state or federally protected wetlands or Waters of the U.S. were identified on the Project site, therefore no impacts to state or federally protected wetlands are expected to occur.

5.4 Wildlife Corridors and Nursery Sites

The Project site is not located within a designated wildlife corridor or linkage. The Project site is located within and adjacent to areas containing existing disturbances (e.g., paved roads, an airport, and residential and commercial development). Additionally, the site does not contain the structural topography and

vegetative cover that facilitate regional wildlife movement, is subject to a high level of ongoing human disturbance, and much of the Project and surrounding area is fenced or consists of active public roadways, which act as inhibitors to wildlife movement. Therefore, the Project site does not function as a wildlife movement corridor and would not interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors.

The Project site does, however, include non-native shrubs and trees (river red gum), which would be removed under the proposed Project. The Project area may potentially represent a nursery site if pallid bat or big free-tailed bat, or other non-special-status lasiurine bat species are found to be utilizing the large ornamental trees within the Project area as maternity roosts in a colonial or semi-colonial nature. Therefore, the proposed Project may affect wildlife nurseries if colonial or semi-colonial maternally roosting bats are present. However, the Project will ensure avoidance of roosting bats through best management practices, including pre-construction surveys, monitoring, and other avoidance measures as described in Section 6.0.

5.5 Local Policies, Ordinances, and Conservation Plans

The Project Area is not located within an HCP or Natural Community Conservation Plan (NCCP). Therefore, development of the Project Area will not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state HCP.

6.0 BEST MANAGEMNT PRACTICES AND RECOMMENDATIONS

To ensure compliance with environmental regulations, including the MBTA, it is recommended that a qualified biologist be retained to oversee and monitor project activities. This includes conducting preconstruction biological surveys and providing ongoing monitoring during initial ground-disturbing and vegetation-clearing activities.

Pre-construction Surveys: The biologist should conduct surveys for plants species covered by the CDNPA and/or the San Bernardino County Development Code – Plant Protection and Management (Chapter 88.01) and special-status wildlife species (e.g., desert tortoise, Crotch bumble bee, and burrowing owl), as well as for nesting birds. Surveys should follow established protocols provided by the California Department of Fish and Wildlife (CDFW) and/or U.S. Fish and Wildlife Service (USFWS), if applicable. If special-status species or nesting birds are identified, the biologist should coordinate with the Department of Water Resources, CDFW, and/or USFWS to develop and implement appropriate measures. These may include establishing protective buffer zones, rescheduling activities to avoid sensitive periods, or other measures.

Construction Monitoring: During initial ground-disturbing and vegetation-clearing activities, the biologist should conduct daily clearance surveys ("sweeps") to ensure compliance with environmental regulations, including the MBTA. If an active bird nest, protected by the MTBA or other special-status resource is located, the biologist should establish a visible disturbance-free buffer zone around the nest or resource. Construction activities within these buffer zones should only proceed once the biologist determines the nest is no longer active.

Response to Wildlife Observations: If special-status wildlife species are observed during monitoring, consultation with CDFW and/or USFWS is advised to establish and implement additional protective measures. These may include further monitoring or specific work restrictions to ensure compliance with environmental regulations, including the MBTA and California Fish and Game Code.

By adopting these recommendations, the project can comply with environmental regulations, avoid significant impacts on protected species, and promote responsible environmental stewardship.

6.1 Additional Recommendations

The following best management practices are not mitigation measures pursuant to CEQA but are recommended to further reduce impacts to species that have potential to occur on the property:

- Confine all work activities to a predetermined work area.
- To prevent inadvertent entrapment of wildlife during the construction phase of the Project, all excavated, steep-walled holes or trenches more than 2 feet deep should be covered at the close of each working day by plywood or similar materials. If the trenches cannot be closed, one or more escape ramps constructed of earthen fill or wooden planks shall be installed. Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals.
- Wildlife are often attracted to burrow- or den-like structures such as pipes and may enter stored pipes and become trapped or injured. To prevent wildlife use of these structures, all construction pipes, culverts, or similar structures with a diameter of 4 inches or greater should be capped while stored onsite.
- All food-related trash items such as wrappers, cans, bottles, and food scraps should be disposed of in securely closed containers and removed at least once a week from the construction or Project site.
- Use of rodenticides and herbicides on the Project site should be restricted. This is necessary to prevent primary or secondary poisoning of wildlife, and the depletion of prey populations on which they depend. All uses of such compounds should observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other state and federal legislation. If rodent control must be conducted, zinc phosphide should be used because it has a proven lower risk to predatory wildlife.

7.0 CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. Field work conducted for this assessment was performed by me or under my direct supervision. I certify that I have not signed a non-disclosure or consultant confidentiality agreement with the Project applicant or the applicant's representative and that I have no financial interest in the Project.

SIGNED:  DATE: 12/6/2024

Phillip Wasz
Senior Wildlife Biologist
ECORP Consulting, Inc.

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LIST OF APPENDICES

Appendix A – Representative Site Photographs

Appendix B – Plant Species Observed

Appendix C – Wildlife Species Observed

Appendix D – Special-Status Plant Species Potential for Occurrence

Appendix E – Special-Status Wildlife Species Potential for Occurrence

APPENDIX A

Representative Site Photographs



Photo 1: Southeast corner of Project site; looking north.



Photo 2: Southeast corner of Project site; looking west.



Photo 3: Representative photo of disturbance on site; soil and construction debris pile.



Photo 4: Representative photo of river red gum trees (*Eucalyptus camaldulensis*) on site.



Photo 5. Representative photo of disturbed California buckwheat (*Eriogonum fasciculatum*).



Photo 6: Representative photo of disturbed/developed area in northwest portion of site.

APPENDIX B

Plant Species Observed

Plant Species Observed

SCIENTIFIC NAME	COMMON NAME
Acmispon americanus	Spanish lotus
Acmispon glaber	Deerweed
Amsinckia menziesii	Fiddleneck
*Avena fatua**	Wild oats
*Brassica nigra**	Black mustard
*Brassica rapa**	Common mustard
*Bromus madritensis ssp rubens**	Red brome
Croton setiger	Turkey-mullein
Datura wrightii	Jimsonweed
Eriogonum fasciculatum	California buckwheat
*Erodium cicutarium**	Coastal heron's bill
*Eucalyptus camaldulensis**	River red gum
*Festuca myuros**	Rattail sixweeks grass
Heterotheca grandiflora	Telegraph weed
Helianthus annuus	Hairy leaved sunflower
*Nicotiana glauca**	Tree tobacco
*Salsola tragus**	Russian thistle
*Schinus mole**	Peruvian peppertree
Yucca schidigera+	Mojave yucca

*Nonnative species
+Ornamental (Project site is not within normal species range)

APPENDIX C

Wildlife Species Observed

Wildlife Species Observed

SCIENTIFIC NAME	COMMON NAME
Birds	
Buteo jamaicensis	Red-tailed hawk
Haemorhous mexicanus	House finch
Mimus polyglottos	Northern mockingbird
*Sturnus vulgaris**	European starling
Zenaida macroura	Mourning dove
Reptiles	
Uta stansburiana	Side-blotched lizard
Mammals	
Otospermophilus beecheyi	California ground squirrel

*Nonnative species

APPENDIX D

Special-Status Plant Species Potential for Occurrence

Appendix D - Plant Potential for Occurrence Table

Scientific Name Common Name	Status		Bloom Period & Elevation (meters)	Habitat Requirements	Potential for Occurrence
Chorizanthe parryi var. *parryi* Parry's spineflower	Fed: Ca: CRPR:	none none 1B.1	Apr-Jun 275-1220	Occurs in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland habitats in openings in sandy or rocky soils.	**Moderate Potential.** Marginally suitable coastal sage scrub habitat is present within the distrubed buckwheat scrub vegetation on the Project site. Additionally, there was one one recent CNDDB record of this species approximately 4.5 miles northeast of the Project site documented in 1998 (OCC 86).
Cladium californicum California saw-grass	Fed: Ca: CRPR:	none none 2B.2	Jun-Sep 60-1600	Occurs in alkaline or freshwater marshes and swamps as well as meadows and seeps.	**Presumed Absent.** No suitable wetland or riparian habitat is present within the Project site. Additionally, there was only one historic CNDDB record of this species recorded approximately 2.9 miles north of the Project site documented in 1918 (OCC 3).
Dodecahema leptoceras Slender-horned spineflower	Fed: Ca: CRPR:	**END** **END** 1B.1	Apr-Jun 200-760	Occurs in alluvial fans within chaparral and coastal sage scrub.	**Presumed Absent.** No suitable alluvial fan habitat was observed on the Project site. There is one historic CNDDB occurrence recorded from 1905 approximately 2.5 miles northwest of the Project site (OCC 40). All other documented occurences are over 12 miles away from the Project site.
Horkelia cuneata var. *puberula* Mesa Horkelia	Fed: Ca: CRPR:	none none 1B.1	Feb-Jul(Sep) 70-810	Occurs in maritime chaparral, cismontane woodland, and coastal scrub in sandy or gravelly soils.	**Low Potential.** Marginally suitable coastal sage scrub habitat is present within the distrubed buckwheat scrub vegetation on the Project site. Additionally, there was one historical CNDDB occurrences of this species recorded approximately 2.5 miles northwest of the Project site in 1917 (OCC 13).
Lepidium virginicum var. *robinsonii* Robinson's pepper grass	Fed: Ca: CRPR:	none none 4.3	Jan-Jul 1-885	Occurs in chaparral and coastal sage scrub.	**Low Potential.** Marginally suitable coastal sage scrub habitat is present within the distrubed buckwheat scrub vegetation on the Project site. Additionally, there was one historical CNDDB occurrences of this species within five miles of the Project site, recorded approximately 4.8 miles southwest of the Project site in 1936 (OCC 3).
Muhlenbergia californica California muhly	Fed: Ca: CRPR:	none none 4.3	Mar-Oct 25-2325	Typically associated with riparian, streambanks, seeps, and meadows within coastal sage scrub, yellow pine forest, chaparral, and wetland-riparian habitats. Also occaisionally in non-wetlands.	**Presumed Absent.** No suitable riparian, streambanks, and/or meadows habitat was present on the Project site. Additionally, there was only one historic CNDDB record of this species recorded approximately 2.9 miles north of the Project site documented in 1916 (OCC 1).
Muhlenbergia utilis aparejo grass	Fed: Ca: CRPR:	none none 2B.2	Mar-Oct 25-2325	Occurs in chaparral, cismontane woodland, coastal scrub, marshes, swamps, meadows and seeps. Associated with alkaline and serpentine soils.	**Presumed Absent.** No suitable alkaline and/or serptentine soils were observed on the Project site. Additionally, there was only one historic CNDDB record of this species recorded approximately 2.9 miles north of the Project site documented in 1916 (OCC 1).
Navarretia prostrata prostrate vernal pool navarretia	Fed: Ca: CRPR:	none none 1B.2	Apr-Jul 3-1210	Occurs in mesic soils within coastal scrub, meadows, seeps, vernal pools, and alkaline valley and foothill grasslands.	**Presumed Absent.** No suitable mesic soils, seeps, vernal pools, or alkaline grassland habitats are are present within the Project site. However, there was one historic CNDDB record of this species recorded within five miles, located aproximately 3.0 miles north of the Project site in 1918 (OCC 15).

Appendix D - Plant Potential for Occurrence Table

Scientific Name Common Name	Status		Bloom Period & Elevation (meters)	Habitat Requirements	Potential for Occurrence
Phacelia stellaris Brand's star phacelia	Fed: Ca: CRPR:	none none 1B.1	Mar-Jun 1-400	Occurs in coastal scrub and dunes.	**Moderate Potential.** Marginally suitable coastal sage scrub habitat is present within the distrubed buckwheat scrub vegetation on the Project site**.** Additionally, there was only one recent CNDDB occurrence within five miles of the Project site, documented approximately 4.4 miles northeast of the Project site in 2003. However, this population is considered possibly extripated, as 2012 aerial imagery shows a shopping center built in the location of the record (OCC 16).
Pseudognaphalium leucocephalum white rabbit-tobacco	Fed: Ca: CRPR:	none none 2B.2	Jul(Aug)-Nov(Dec) 0-2100	Occurs in gravelly and sandy soils, usually on benches, dry stream bottoms, and canyon bottoms within chaparral, cismontane woodland, coastal scrub, and riparian woodland.	**Presumed Absent.** No suitable bench, dry stream bottom, or canyon bottom habitat was present on the Project site. Additionally, there was only one historical CNDDB occurrence of this species recorded approximately 3.0 miles northeast of the Project site in 1891 (OCC 46).
Sidalcea neomexicana salt spring checkerbloom	Fed: Ca: CRPR:	none none 2B.2	Mar-Jun 15-1530	Occurs in wet meadows and streamsides in moist usually strongly alkaline soils.	**Presumed Absent.** No suitable wet meadow or streamside habitat with moist alkaline soils are present on the Project site. Howerver, there was one historic CNDDB record of this species approximately 4.8 miles southwest of the Project site documented in 1902 (OCC 24).
Symphyotrichum defoliatum San Bernardino aster	Fed: Ca: CRPR:	none none 1B.2	Jul-Nov 2-2040	Typical habitat for this species consists of meadows, streams and springs. However, the literature indicates that this species can also grow in upland habitats including coastal sage scrub, southern oak woodland, and disturbed areas.	**Low Potential.** Marginally suitable coastal sage scrub habitat is present within the distrubed buckwheat scrub vegetation on the Project site. Additionally, there were three historical CNDDB records of this species within five miles of the Project site (OCC 20, 26, 77), that are all almost over 100 years old. The closest occurrence was recorded approximately 3.0 miles north of the Project site in 1916 (OCC 20).

Federal Designations:

(Federal Endangered Species Act,
END: federally listed, endangered
THR: federally listed, threatened

State designations:

(California Endangered Species Act, CDFG)
END: state-listed, endangered
THR: state-listed, threatened

CAN: Candidate for state listing
FP: Fully Protected Species
SSC: Species of Special Concern

CRPR Ranking

1A: Presumed extinct
1B: Rare, threatened, or endangered in California and elsewhe
2B: Rare, threatened, or endangered in California, but more common elsewhere
3: Review list of plants requiring more study
4: Plants of limited distribution watch list
CBR: Considered but rejected

CRPR Threat Code

0.1: Seriously threatened in California
0.2: Fairly threatened in California
0.3: Not very threatened in California

Source: California Natural Diversity Data Base (CNDDB) California Native Plant Society Electronic Inventory (CRPREI) Guasti, Fontana, Riverside West, Corona North, Prado Dam, Ontario, Mt. Baldy, Cucamonga Peak, and Devore 7.5-minute quads.

APPENDIX E

Special-Status Wildlife Species Potential for Occurrence

Appendix E - Wildlife Potential for Occurrence Table

Scientific Name Common Name	**Status**		**Habitat Requirements**	**Potential for Occurrence**
Insects				
Bombus crotchii Crotch bumble bee	Fed: CA:	none **CAN END**	Found in coastal California east to the Sierra-Cascade crest and south into Mexico. Occurs in open grassland and scrub habitats. Prefers a diet consisting of certain plant species including milkweeds, dusty maidens, lupines, medics, phacelias, sages, clarkias, poppies, and wild buckwheats. Nests are often located underground in abandoned rodent nests or above ground in tufts of grass, old bird nests, rock piles, or cavities in dead trees.	**Moderate Potential.** Marginally suitable nectaring habitat is present in the California buckwheat and deerweed. There were two recent CNDDB occurrences from 2019 and 2020 (OCC 247 and 316) approximately 1.7 miles east of the Project site and one historical occurrence (OCC 187) recorded approximately 1.5 miles east of the Project site.
Euphydryas editha quino quino checkerspot butterfly	Fed: CA:	**END** none	Occurs in chaparral and coastal sage scrublands, containing the proper host plants (i.e. dwarf plantain, white snapdragon, woolly plantain, and chinese houses) and abundant nectar resources.	**Presumed Absent.** No suitable habitat is present within the Project site. No host plants were observed. There were no CNDDB occurrences within five miles of the project site.
Rhaphiomidas terminatus abdominalis Delhi Sands flower-loving fly	Fed: CA:	**END** none	Occur in Delhi Sands series soils. Indicator plant species include telegraph weed (*Heterotheca grandiflora*), California buckwheat (*Eriogonum fasciculatum*), and California croton (*Croton californica*).	**Presumed Absent.** No suitable Delhi Sands soils are present on the Project site. There were no CNDDB occurrences within five miles of the project site.
Fish				
Catostomus santaanae Santa Ana sucker	Fed: CA:	**THR** none	Occurs in clean, shallow portions of rivers and streams. They occur in water systems that experience a range of currents from swift to sluggish.	**Presumed Absent.** No suitable river habitat is present within the Project site. There were no CNDDB occurrences within five miles of the Project site.
Gila orcuttii arroyo chub	Fed: CA:	none SSC	Occurs primarily in the warm streams and rivers of the Los Angeles plain.	**Presumed Absent.** No suitable stream habitat is present within the Project site. There were no CNDDB occurrences within five miles of the Project site.
Oncorhynchus mykiss irideus pop. 10 steelhead- southern California DPS	Fed: CA:	**END** **CAN END**	Occur in warmer water temperatures, up to 77°F. They depend on winter rains to provide passage through seasonal waterways.	**Presumed Absent.** No suitable river habitat is present within the Project site. There were no CNDDB occurrences within five miles of the Project site.
Rhinichthys osculus ssp. 8 Santa Ana speckled dace	Fed: CA:	none SSC	Occur in a variety of aquatic habitats including small springs, streams, large rivers, and deep lakes. They are found in waters that are clear, well oxygenated, and with currents or waves. Vegetative cover allows for protection against predation.	**Presumed Absent.** No suitable river or stream habitat is present within the Project site. There were no CNDDB occurrences within five miles of the Project site.
Amphibians				
Anaxyrus californicus Arroyo toad	Fed: CA:	**END** SSC	Occur in desert washes, riparian scrub, riparian woodland, south coast flowing waters, and south coast standing waters. Require sandy stream sides with stable terraces for burrowing and scattered vegetation for shelter. Typically found within wide, terraced riparian floodplains, rather than in narrow, rocky channels with “plunge” pools. Sandy river washes are an integral component of their habitat and they typically prefer an open, rather than closed, riparian canopy.	**Presumed Absent.** No suitable riparian habitat is present within the Project site. There were no CNDDB occurrences within five miles of the Project site.
Rana boylii pop. 6 foothill yellow-legged frog south coast DPS	Fed: CA:	**PR END** **END**	Occur in aquatic habitats, riparian forest, riparian scrub, riparian woodland, and south coast flowing waters. Found in rock perennial streams with open sunny banks.	**Presumed Absent.** No suitable aquatic habitat is present within the Project site. There were no CNDDB occurrences within five miles of the Project site.
Rana muscosa southern mountain yellow-legged frog	Fed: CA:	**END** **END**	Occur in glaciated, alpine lakes, ponds, springs, and streams. Lakes usually have grassy or muddy margins.	**Presumed Absent.** No suitable aquatic habitat is present within the Project site. There were no CNDDB occurrences within five miles of the Project site.

Appendix E - Wildlife Potential for Occurrence Table

Scientific Name Common Name	**Status**		**Habitat Requirements**	**Potential for Occurrence**
Spea hammondii western spadefoot	Fed: CA:	none SSC	Typically occurs in scrub, chaparral, vernal pools, and rivers with sandy banks, willows, cottonwoods, and sycamores with loose, gravelly areas of streams in drier parts of range.	**Presumed Absent.** No suitable habitat is present within the Project site. There were no CNDDB occurrences within five miles of the Project site.
Taricha torosa Coast Range newt	Fed: CA:	none SSC	Occur in oak woodlands, chaparral, and open grasslands. Breed in seasonal or permanent streams and deposit eggs to undersides of rocks.	**Presumed Absent.** No suitable habitat is present within the Project site. There were no CNDDB occurrences within five miles of the Project site.
Reptiles				
Anniella stebbinsi Southern California legless lizard	Fed: CA:	none SSC	Typically occurs in moist warm loose soil with plant cover in sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks.	**Moderate Potential.** Marginally suitable habitat in the sparsely vegetated areas. Two historical CNDDB records were identified within five miles of the Project site, including OCC 11 from 1993 located approximately 0.5 miles south of the Project site and OCC 135 from 1938, which has a polygon that overlaps with the Project site centered around Cucamonga Creek. However, this observation was recorded when Cucamonga Creek was a natural channel that meandered through agriculture lands. Since that time, it has been completely channelized and concrete lined, and no longer represents suitable habitat for the species.
Arizona elegans occidentalis California glossy snake	Fed: CA:	none SSC	Typically occurs in rocky washes, chaparral, scrub and grassland habitat, often with loose or sandy soils.	**Low Potential.** Marginally suitable disturbed California buckwheat scrub is present on site, however, the site is disturbed and surrounded by roadways and development reducing the likelihood of the species presence on the Project site. Only historical CNDDB records have been documented within five miles of the project site (OCC 220, 94, 95). The closest occurrence is over 100 years old and documented 1.7 miles away (OCC 94).
Aspidoscelis tigris stejnegeri coastal whiptail	Fed: CA:	none SSC	Found in a variety of habitats. They prefer hot, dry open areas that have little cover. Common habitats include chaparral, woodland, and riparian.	**Low Potential.** Marginally suitable habitat is present within the disturbed California buckwheat scrub and eucalyptus groves vegetation. However, there were no CNDDB occurrences within five miles of the Project site.
Charina umbratica southern rubber boa	Fed: CA:	none **THR**	Occurs in coniferous forests within riparian areas in the San Bernardino and San Jacinto Mountains. Preferred habitat is damp woodland, coniferous forests, grassy meadows, and moist sandy areas near streams. Downed logs and forest litter area also crucial habitat qualities.	**Presumed Absent.** The Project is outside the known range for this species and there is no suitable habitat. There were no CNDDB occurrences within five miles of the Project site.
Coleonyx variegatus abbotti San Diego banded gecko	Fed: CA:	none SSC	Occur within rocky areas in coastal sage scrub and chaparral habitats.	**Presumed Absent.** The Project is outside the known range for this species and there is no suitable habitat. There were no CNDDB occurrences within five miles of the Project site.
Crotalus ruber red-diamond rattlesnake	Fed: CA:	none SSC	Occur in arid scrub, coastal chaparral, oak and pine woodlands, rocky grasslands, and cultivated areas. Within desert slopes on mountains, often found within rocky desert flats.	**Low Potential.** Marginally suitable habitat is present within the disturbed California buckwheat scrub and eucalyptus groves vegetation. However, there were no CNDDB occurrences within five miles of the Project site.

Appendix E - Wildlife Potential for Occurrence Table

Scientific Name Common Name	**Status**		**Habitat Requirements**	**Potential for Occurrence**
Emys marmorata western pond turtle	Fed: CA:	none SSC	Occurs in aquatic, artificial flowing waters, Klamath/North coast flowing waters, Klamath/North coast standing waters, marsh & swamp, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, south coast flowing waters, south coast standing waters, and wetland habitats. Needs basking sites (logs, rocks, and exposed banks) and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	**Presumed Absent.** No suitable aquatic habitat on the Project site. There were no CNDDB occurrences within five miles of the Project site.
Phrynosoma blainvillii coast horned lizard	Fed: CA:	none SSC	Occurs in chaparral, cismontane woodland, coastal bluff scrub, coastal scrub, desert wash, pinon & juniper woodlands, riparian scrub, riparian woodland, and valley & foothill grassland habitats. Requires open areas for sunning, bushes to provide cover, and loose soil for burial. Diet consists mainly of ants and also small invertebrates. Most commonly found in lowlands along sandy washes with scattered low bushes.	**Low potential**. Marginally suitable habitat is present within the disturbed California buckwheat scrub and eucalyptus groves vegetation. There were three historical records of the species within five miles of the Project site (OCC 38, 437, 712). The closes occurrence was recorded 1.7 miles away in 1998 (OCC 437) and the furthest was recorded 4.3 miles away in 1999 (OCC 712).
Thamnophis hammondii two-striped gartersnake	Fed: CA:	none SSC	Typically occurs near permanent or semi-permanent water sources in a variety of habitats.	**Presumed Absent.** No suitable aquatic habitat is present on the site. There were no CNDDB occurrences within five miles of the Project.
Birds				
Agelaius tricolor tricolored blackbird (nesting colony)	Fed: CA:	none **THR**/SSC	Occurs in freshwater marsh, swamp, and wetland habitats. Largely endemic to California. Highly colonial species, most numerous in Central Valley & vicinity. Requires open water, protected nesting substrate, and foraging area with insect prep within a few kilometers of the colony. Forages in open habitat such as cultivated fields and pastures.	**Presumed Absent.** No suitable aquatic habitat is present on the site. There was one recent CNDDB occurrence of the species 3 miles from the Project site recorded in 2014 (OCC 414).
Aquila chrysaetos golden eagle (nesting & wintering)	Fed: CA:	none **FP**	Occurs in broadleaved upland forest, cismontane woodland, coastal prairie, Great Basin grassland, Great Basin scrub, lower montane coniferous forest, pinon & juniper woodlands, upper montane coniferous forest, and valley & foothill grassland habitats. Found in rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also large trees such as eucalyptus or oak in open areas.	**Presumed Absent.** The Project site is outside of this species known breeding range. The species is not expected to nest on the Project site due to its urban nature and proximity to the Ontario Airport and other high level disturbances. There was one recent CNDDB occurrence 4.6 miles from the Project site recorded in 2007 (OCC 125).
Ammodramus savannarum grasshopper sparrow	Fed: CA:	none SSC	Occur in valley and foothill grassland.	**Presumed Absent.** No suitable vally and foothill grassland habitat was present on the Project site and there were no CNDDB occurrences within five miles of the Project site.
Asio otus long-eared owl	Fed: CA:	none SSC	Occur in cismontane woodland, great basin scrub, riparian forest, riparian woodland, and upper montane coniferous forest. Forage in open landcover and nest in dense wooded areas.	**Presumed Absent.** No suitable habitat on the Project site. There were no CNDDB occurrences within five miles of the Project site.

Appendix E - Wildlife Potential for Occurrence Table

Scientific Name Common Name	**Status**		**Habitat Requirements**	**Potential for Occurrence**
Athene cunicularia burrowing owl (burrow & some wintering sites)	Fed: CA:	none **CAN**	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Occurs in coastal prairie, coastal scrub, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, and valley & foothill grassland habitats. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel. Also found in vacant lots and airports.	**Moderate Potential**. Suitable habitat exists due to the Project being a vacant lot with small mammal burrows (California ground squirrel) and low-growing vegetation. There were 20 recent CNDDB occurrences of the species within five miles of the Project site (OCC 636, 664, 1788, 561, 565, 1045, 1789, 940, 956, 957, 1198, 1199, 1787, 1044, 1935, 1936, 1937, 1046, 1790, 1792). The most recent occurrence was recorded 1.7 miles away from the Project in 2016 (OCC 561) and the closest was recorded 1.6 miles away in 2004 (OCC 1045).
Buteo swainsoni Swainson's hawk (nesting)	Fed: CA:	none **THR**	Occurs in Great Basin grassland, riparian forest, riparian woodland, and valley & foothill grassland habitats. Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees. Nests in solitary bush or tree, or in small groves. Requires adjacent suitable foraging areas such as grasslands or alfalfa/grain fields supporting rodent populations.	**Presumed Absent.** Due to the high level of disturbance, the sites proximity to development, and its generally urban nature would preclude this species from nesting on the site. Additionally the site is small and does not represent typical foraging habitat. There were no CNDDB records of the species within five miles of the Project.
Campylorhynchus brunneicapillus sandiegensis coastal cactus wren	Fed: CA:	none SSC	Occurs in coastal scrub. Require healthy stands of cactus for nesting.	**Presumed Absent.** No suitable habitat is present on the Project site. There were no CNDDB occurrences within five miles of the Project site.
Coccyzus americanus occidentalis western yellow-billed cuckoo (nesting)	Fed: CA:	**THR** **END**	Occurs in riparian forest habitat. Nests along the broad (≥ 12.4 acres) patches of multi-layered riparian woodland, often dominated by willows and cottonwoods of lower flood bottoms of larger river systems.	**Presumed Absent.** No suitable riparian habitat Is present on the Project site. There were no CNDDB occurrences within five miles of the Project site.
Coturnicops noveboracensis yellow rail	Fed: CA:	none SSC	Occur in freshwater marshes, meadows. Often nest is areas with shallow water and short vegetation.	**Presumed Absent.** No suitable aquatic habitat is present on the Project site. There were no CNDDB occurrences within five miles of the Project site.
Cypseloides niger black swift	Fed: CA:	none SSC	Coastal belt of Santa Cruz and Monterey counties; central & southern Sierra Nevada; San Bernardino & San Jacinto mountains. Often breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea-bluffs above the surf; forages widely.	**Presumed Absent.** No suitable cliff habitat is present on the Project site. There were no CNDDB occurrences within five miles of the Project site.
Elanus leucurus white-tailed kite	Fed: CA:	none **FP**	Occur in savannas, open woodlands, marshes, desert grasslands, cultivated fields, and other partially cleared areas. They will avoid areas that are too heavily grazed.	**Presumed Absent.** No suitable habitat is present on the Project site. There were no CNDDB occurrences within five miles of the Project site.
Empidonax traillii extimus southwestern willow flycatcher (nesting)	Fed: CA:	**END** **END**	Occurs in riparian woodland habitat in Southern California. Nests in densest areas of riparian tree and shrub communities associated with rivers, swamps, and other wetlands, including lakes and reservoirs. Nests are often in nonnative tamarisk (*Tamarisk* spp.) and native willow (*Salix* spp.), typically in vegetation stands of 4-7 m in height.	**Presumed Absent.** No suitable riparian habitat is present on the Project site. There were no CNDDB occurrences within five miles of the Project site.
Icteria virens yellow-breasted chat	Fed: CA:	none SSC	Occurs in riparian forest, riparian scrub, and riparian woodland habitats. Nests in low, dense riparian, consisting of willow, blackberry, wild grape along streams or at the edges of ponds or swamps. Forages and nests within 10 ft of ground.	**Presumed Absent.** No suitable riparian habitat is present on the Project site. There were no CNDDB occurrences within five miles of the Project site.

Appendix E - Wildlife Potential for Occurrence Table

Scientific Name Common Name	**Status**		**Habitat Requirements**	**Potential for Occurrence**
Laterallus jamaicensis coturniculus California black rail	Fed: CA:	none **THR/FP**	Occurs in marshes, wet meadows, riparian marshes, coastal prairies, saltmarshes, and impounded wetlands. Water levels are usually shallow, less than 2 inches deep. American glasswort (Salicornia *sp.*), bulrush species (*Typha angustifolia*), and alkali seaheath (*Frankenia salina*) are common plant species.	**Presumed Absent.** No suitable aquatic habitat is present on the Project site. There was one historical CNDDB occurrences over 80 years old within five miles of the Project site (OCC 63).
polioptila californica californica coastal California gnatcatcher	Fed: CA:	**THR** SSC	Occurs in coastal bluff scrub and coastal scrub.	**Presumed Absent.** No suitable habitat coastal bluff scrub or coastal scrub is present on the Project site. The disturbed California buckwheat scrub on site was very immature and sparse due to historical disturbances on site inculding a long history of agriculture and mowing and disking fro weed abatement. Additionally, there was only one historical CNDDB occurrences over 20 years old within five miles of the Project site (OCC 876).
Setophaga petechia yellow warbler (nesting)	Fed: CA:	none SSC	Occurs in riparian forest, riparian scrub, and riparian woodland habitats. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders. Diet consists primarily of insects.	**Presumed Absent.** No suitable riparian habitat is present on the Project site. There were no CNDDB occurrences within five miles of the Project site.
Vireo bellii pusillus least Bell's vireo (nesting)	Fed: CA:	**END** **END**	Occurs in riparian forest, riparian scrub, and riparian woodland habitats. Summer resident of Southern California in low riparian vegetation in the vicinity of water or in dry river bottoms, below 2,000 ft msl. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, mule fat, and mesquite.	**Presumed Absent.** No suitable riparian habitat is present on the Project site. There were no CNDDB occurrences within five miles of the Project site.
Mammals				
Antrozous pallidus pallid bat	Fed: CA:	none SSC	Occurs in chaparral, coastal scrub, desert wash, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, riparian woodland, Sonoran desert scrub, upper montane coniferous forest, and valley & foothill grassland habitats. Most commonly found in open, dry habitats with rocky areas for roosting. Day roosts are in caves, crevices, mines, and occasionally in hollow trees and buildings.	**Presumed Absent.** No suitable cave or crevice roosting habitat is present within the Project site. Additionally, there is a lot of disturbance near the Project site as it is surrounded by human development, including the Ontario Airport to the south. There was one historical CNDDB occurrence (OCC 243) approximately two miles from the Project site.
Chaetodipus fallax fallax northwestern San Diego pocket mouse	Fed: CA:	none SSC	Occur in sandy herbaceous areas, usually associated with rocks or coarse gravel in southwestern California. Primarily occurs in arid coastal and desert borders. Typical habitats include sandy desert fans and shrub communities such as coastal sage scrub, chaparral, sagebrush, desert wash, desert scrub, desert succulent scrub, pinyon-juniper, and annual grassland.	**Moderate Potential.** There is marginally suitable habitat in the shrub vegetation and rocky coarse gravel. There were two recent CNDDB occurrences within five miles of the Project site (64, 65).
Chaetodipus fallax pallidus pallid San Diego pocket mouse	Fed: CA:	none SSC	Occur in desert wash, pinon & juniper woodlands, and Sonoran desert scrub.	**Presumed Absent.** No suitable habitat is present on the Project site. There were no CNDDB occurrences within five miles of the Project site.
Dipodomys merriami parvus San Bernardino kangaroo rat	Fed: CA:	**END** **END**/SSC	Occur on the gentle slopes of alluvial fans, flood plains, washes, and adjacent habitats. Common habitats include alluvial sage scrub, coastal sage scrub, and chaparral.	**Presumed Absent.** No suitable alluvial wash habitat was present on or adjacent to the Project site. The Project site is outside of the area where this species occurs. No recent CNDDB records within five miles of the Project site.

Appendix E - Wildlife Potential for Occurrence Table

Scientific Name Common Name	Status		Habitat Requirements	Potential for Occurrence
Dipodomys stephensi Stephens' kangaroo rat	Fed: CA:	**END** **THR**	Occur in arid and semi-arid grasslands. Prefer open areas where the cover is less than 50%.	**Presumed Absent.** No suitable grassland habitat was present on or adjacent to the Project site. The Project site is outside of the area where this species occurs. No recent CNDDB records within five miles of the Project site.
Eumops perotis californicus western mastiff bat	Fed: CA:	none SSC	Occurs in open areas that have potential roosting areas. Primarily roosts in cliffs and rock crevices. Found in semi-arid to arid habitats.	**Presumed Absent.** No suitable cliff or rock crevice habitat is present on the Project site. There was one historical CNDDB occurrence within five miles of the Project site over 30 years old (OCC 134).
Lasiurus xanthinus western yellow bat	Fed: CA:	none SSC	Occurs within riparian woodland habitats with tree species such as Fremont cottonwood (*Populus fremontii*), Arizona sycamore (*Platanus wrightii*), and Arizona white oak (*Quercus arizonica*).	**Presumed Absent.** No suitable riparian habitat is present on the Project site. There was one historical CNDDB occurrence within five miles of the Project site over 30 years old (OCC 134).
Neotoma lepida intermedia San Diego desert woodrat	Fed: CA:	none SSC	Occur in a variety of habitats such as desert scrub. They are known to prefer rock outcroppings and cactus patches.	**Presumed Absent.** No suitable desert scrub habitat is present on the Project site. No woodrat middens were observed during the biological survey. There were two recent CNDDB occurrences within five miles of the Project site (OCC 52 and 49).
Nyctinomops femorosaccus pocketed free-tailed bat	Fed: CA:	none SSC	Occurs in pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oasis habitat. Primarily roosts in cliffs and rock crevices. This species is not known to roost in bridges.	**Presumed Absent**. No suitable roosting habitat is present within the Project site. There were no CNDDB occurrences of this species within five miles of the Project site.
Nyctinomops macrotis big free-tailed bat	Fed: CA:	none SSC	Occur in rocky arid landscapes including desert scrub, woodlands, and evergreen forests. Primarily roosts on rocky cliffs, but also in caves, buildings, and ocassionally in large tree cavities.	**Presumed Absent.** No suitable rocky cliff or cave habitat is present within the Project site and no large tree cavities were observed in the Eucalyptus tress on site. Additionally, there is a lot of disturbance near the Project site as it is surrounded by human development, including the Ontario Airport to the south. There were no CNDDB occurrences of this species within five miles of the Project site.
Ovis canadensis nelsoni desert bighorn sheep	Fed: CA:	none **FP**	Occurs in alpine, alpine dwarf scrub, chaparral, chenopod scrub, great basin scrub, mojavean desert scrub, montane dwarf scrub, pinon & juniper woodlands, riparian woodland, and Sonoran desert scrub. Prefer steep rocky terrain and require freestanding water.	**Presumed Absent**. No suitable montane habitat is present on the Project site. There were no CNDDB occurrences of this species within five miles of the Project site.
Perognathus longimembris brevinasus Los Angeles pocket mouse	Fed: CA:	none SSC	Occurs in low elevational grassland, alluvial sage scrub, and coastal sage scrub.	**Moderate Potential.** Marginally suitable habitat was present within the disturbed California buckwheat scrub. There were three historic CNDDB occurrences (OCC 33, 36, 45) and one recent occurrence (OCC 44) of this species within five miles of the Project site.

Federal Designations:
(Federal Endangered Species Act, U.S. Fish
END: Federally-listed, Endangered
THR: Federally-listed,
FC: Federal Candidate Species
DL: Federally-delisted
PR EN: Proposed Endangered

State designations:
(California Endangered Species Act, CDFW)
END: State-listed, Endangered
THR: State-listed, Threatened
PR EN: State-listed, Proposed Endangered
CAN EN: State- listed, Candidate Endangered
CAN: Candidate for state listing
SSC: Species of Special Concern
FP: Fully Protected Species

Source: California Natural Diversity Data Base (CNDDB) Guasti, Fontana, Riverside West, Corona North, Prado Dam, Ontario, Mt. Baldy, Cucamonga Peak, and Devore 7.5-minute quads.

Appendix D
Archaeological Resources Report

Archaeological Resources Inventory and Evaluation Report for the Ontario Hotel Project on the East Corner of Holt Boulevard and Guasti Road

San Bernardino County, California

Prepared For:

Diversified Pacific Communities
10621 Civic Center Drive
Rancho Cucamonga, California 91730

Prepared By:

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August 2023

MANAGEMENT SUMMARY

Diversified Pacific Communities retained ECORP Consulting, Inc. in 2023 to conduct an archaeological resources inventory for the Ontario Hotel Project in San Bernardino County, California. Diversified Pacific Communities proposes to construct a 1,073,671-square-foot hotel complex and parking structure on Assessor's Parcel Number 0110-322-33-000, which is a 10.47-acre lot located at the intersection of Holt Boulevard and Guasti Road in the City of Ontario, California.

The inventory included a records search, literature review, and field survey. The records search results indicated that 22 previous cultural resources studies have been conducted within the Project Area or the 1-mile search radius. As a result of those studies, no archaeological resources have been previously recorded within the Project Area. Consultation with Ontario Heritage indicated the possible presence of a historic building in the Project Area; however, no structure was identified through the literature review, historic aerial and topographic map review, or field survey.

As a result of the field survey, ECORP recorded a single isolated artifact within the Project Area, OH-1, a small shard of sun-colored amethyst glass. The resource has been evaluated using the National Register of Historic Places and California Register of Historical Resources eligibility criteria and found not eligible for listing under any criteria. Recommendations for the management of unanticipated discoveries are provided.

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LIST OF ACRONYMS AND ABBREVIATIONS

Term	Definition
AB	Assembly Bill
ACHP	Advisory Council on Historic Preservation
APE	Area of Potential Effects
APN	Assessor's Parcel Number
BLM	Bureau of Land Management
BP	Years Before present
Caltrans	California Department of Transportation
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CHL	California Historical Landmarks
CHRIS	California Historical Resources Information System
CRHR	California Register of Historical Resources
DPR	Department of Parks and Recreation
GLO	General Land Office
MLD	Most Likely Descendant
NAHC	Native American Heritage Commission
n.d.	No Date
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPS	National Park Service
NRHP	National Register of Historic Places
OHP	Office of Historic Preservation
PRC	Public Resources Code
Project	Ontario Hotel Project
RPA	Registered Professional Archaeologist
SCA	Sun-Colored Amethyst
SCCIC	South Central Coastal Information Center
SHPO	State Historic Preservation Officer
TCRs	Tribal Cultural Resources
USC	U.S. Code

1.0 INTRODUCTION

Diversified Pacific Communities retained ECORP Consulting, Inc. in 2023 to conduct an archaeological resources inventory for the Ontario Hotel Project in the City of Ontario, San Bernardino County, California. A survey of the Proposed Project Area was required to identify potentially eligible cultural resources (i.e., archaeological sites and historic buildings, structures, and objects) that could be affected by the Project.

1.1 Project Location

The Project Area consists of approximately 10.47 acres of property located in the southeastern quarter of the southwestern quarter, and the southwestern quarter of the southeastern quarter of Section 22 of Township 1 South, Range 7 West, San Bernardino Base and Meridian as depicted on the 1966 Guasti, California U.S. Geological Survey 7.5-minute topographic quadrangle map (Figure 1). It is also known as Assessor's Parcel Number (APN) 0110-322-33-000. The Project Area is located at the intersection of Holt Boulevard and Guasti Road in the City of Ontario, California.

1.2 Project Description

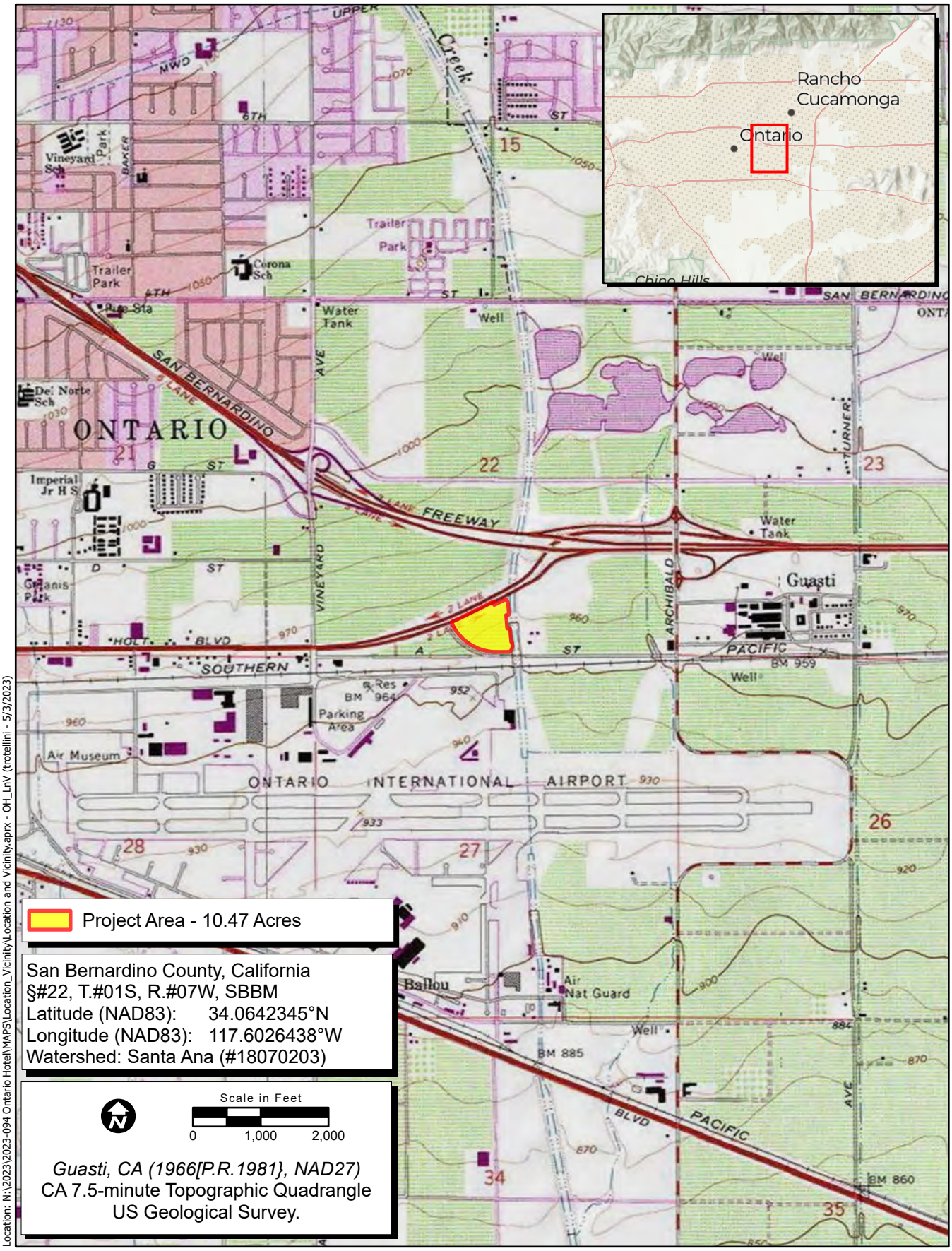
The Proposed Project currently entails the construction of a 1,073,671-square-foot hotel complex and parking structure. The facility will include between 600 and 640 rooms and may also include suites, conference and meeting spaces, a pool, an event lawn, two ballrooms, retail and restaurant spaces, including a destination rooftop restaurant bar. Final design has not been completed at this time.

1.3 Area of Potential Effects

The Area of Potential Effects (APE) consists of the horizontal and vertical limits of a project and includes the area within which significant impacts or adverse effects to Historical Resources or Historic Properties could occur as a result of the project. The APE is defined for projects subject to regulations implementing Section 106 (federal law and regulations). For projects subject to the California Environmental Quality Act (CEQA) review, the term Project Area is used rather than APE. The terms Project Area and APE are interchangeable for the purpose of this document.

The horizontal APE consists of all areas where activities associated with a project are proposed and, in the case of this Project, equals the Project Area subject to environmental review under the National Environmental Policy Act (NEPA) and CEQA. This includes areas proposed for construction, vegetation removal, grading, trenching, stockpiling, staging, paving, over-excavation, and other elements in the official Project description. The horizontal APE (i.e., the Project Area) is illustrated in Figure 1 and represents the survey coverage area.

The vertical APE is described as the maximum depth below the surface to which excavations for project foundations and facilities will extend. Therefore, the vertical APE for this Project includes all subsurface areas where archaeological deposits could be affected. The subsurface vertical APE varies across the Project Area but could extend as deep as 20 feet below the current surface; therefore, a review of geologic and soils maps was necessary to determine the potential for buried archaeological sites that cannot be seen on the surface.



Location: N:\2023\2023-094 Ontario Hotel\MAPS\Location_Vicinity\Location and Vicinity.aprx - OH_LnV (trotellini - 5/3/2023)

Map Date: 5/3/2023
Sources: ESRI, USGS

Figure 1. Project Location and Vicinity

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

2023-094 Ontario Hotel

The vertical APE also is described as the maximum height of structures that could impact the physical integrity and integrity of setting of cultural resources, including districts and traditional cultural properties. For this Project, the above-surface vertical APE is as high as 130 feet above the surface, which is the maximum height of the proposed building.

1.4 Regulatory Context

The CEQA lead agency for this Project is the City of Ontario, California. A review of the regulatory context is provided below; however, the inclusion of any of these laws and regulations in this report does not make a law or regulation apply when it otherwise would not. Similarly, the omission of any other laws and regulations from this section does not mean that they do not apply. Rather, the purpose of this section is to provide context in explaining why the study was carried out in the manner documented herein.

1.4.1 National Environmental Policy Act

NEPA establishes national policy for the protection and enhancement of the environment. Part of the function of the federal government in protecting the environment is to "preserve important historic, cultural, and natural aspects of our national heritage." Cultural resources need not be determined eligible for the National Register of Historic Places (NRHP) through the National Historic Preservation Act (NHPA) of 1966 (as amended) to receive consideration under NEPA. NEPA is implemented by regulations of the Council on Environmental Quality (40 Code of Federal Regulations [CFR] 1500-1508).

The definition of *effects* in the NEPA regulations includes adverse and beneficial effects on historic and cultural resources (40 CFR 1508.8). Therefore, the *Environmental Consequences* section of an Environmental Impact Statement [see 40 CFR 1502.16(f))] must analyze potential effects to historic or cultural resources that could result from the proposed action and each alternative. In considering whether an alternative may "significantly affect the quality of the human environment," a federal agency must consider, among other things:

- Unique characteristics of the geographic area, such as proximity to historic or cultural resources (40 CFR 1508.27(b)(3)), and
- The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the NRHP (40 CFR 1508.27(b)(8)).

Therefore, because historic properties are a subset of *cultural resources*, they are one aspect of the *human environment* defined by NEPA regulations.

1.4.2 National Historic Preservation Act

The federal law that covers cultural resources that could be affected by federal undertakings is the NHPA of 1966, as amended. Section 106 of the NHPA requires that federal agencies take into account the effects of a federal undertaking on properties listed in or eligible for the NRHP. The agencies must afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on the undertaking. A federal undertaking is defined in 36 CFR 800.16(y):

> "A federal undertaking means a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a federal agency, including those carried out by or on behalf of a federal agency; those carried out with Federal financial assistance; and those requiring a Federal permit, license, or approval."

The regulations that stipulate the procedures for complying with Section 106 are in 36 CFR 800. The Section 106 regulations require:

- definition of the APE;
- identification of cultural resources within the APE;
- evaluation of the identified resources in the APE using NRHP eligibility criteria;
- determination of whether the effects of the undertaking or project on eligible resources will be adverse; and
- agreement on and implementation of efforts to resolve adverse effects, if necessary.

The federal agency must seek comment from the State Historic Preservation Officer (SHPO) and, in some cases, the ACHP, for its determinations of eligibility, effects, and proposed mitigation measures. Section 106 procedures for a specific project can be modified by negotiation of a Memorandum of Agreement or Programmatic Agreement between the federal agency, the SHPO, and, in some cases, the project proponent.

Effects to a cultural resource are potentially adverse if the lead federal agency, with the SHPO's concurrence, determines the resource eligible for the NRHP, making it a Historic Property, and if application of the Criteria of Adverse Effects (36 CFR 800.5[a][2] et seq.) results in the conclusion that the effects will be adverse. The NRHP eligibility criteria, contained in 36 CFR 63, are as follows:

> The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of state and local importance that possess aspects of integrity of location, design, setting, materials, workmanship, feeling, association, and
>
> A. that are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> B. that are associated with the lives of persons significant in our past; or
>
> C. that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
>
> D. that have yielded, or may be likely to yield, information important in prehistory.

In addition, the resource must be at least 50 years old, barring exceptional circumstances (36 CFR 60.4). Resources that are eligible for, or listed on, the NRHP are *historic properties*.

Regulations implementing Section 106 of the NHPA (36 CFR 800.5) require that the federal agency, in consultation with the SHPO, apply the Criteria of Adverse Effect to historic properties within the APE. According to 36 CFR 800.5(a)(1):

> "An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling or association."

1.4.3 California Environmental Quality Act

CEQA is the state law that applies to a project's impacts on cultural resources. A project is an activity that may cause a direct or indirect physical change in the environment and that is undertaken or funded by a state or local agency, or requires a permit, license, or lease from a state or local agency. CEQA requires that impacts to Historical Resources be identified and, if the impacts will be significant, then apply mitigation measures to reduce the impacts.

A Historical Resource is a resource that 1) is listed in or has been determined eligible for listing in the California Register of Historical Resources (CRHR) by the State Historical Resources Commission, or has been determined historically significant by the CEQA lead agency because it meets the eligibility criteria for the CRHR, 2) is included in a local register of historical resources, as defined in Public Resources Code (PRC) 5020.1(k), or 3), and has been identified as significant in a historical resources survey, as defined in PRC 5024.1(g) (California Code of Regulations [CCR] Title 14, Section 15064.5(a)).

The eligibility criteria for the CRHR are as follows (CCR Title 14, Section 4852(b)):

(1) It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;

(2) It is associated with the lives of persons important to local, California, or national history;

(3) It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or

(4) It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

In addition, the resource must retain integrity, which is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association (CCR Title 14, Section 4852(c)). Resources that have been determined eligible for the NRHP are automatically eligible for the CRHR.

Impacts to a Historical Resource, as defined by CEQA (listed in an official historic inventory or survey or eligible for the CRHR), are significant if the resource is demolished or destroyed or if the characteristics that made the resource eligible are materially impaired (CCR Title 14, Section 15064.5(b)). Demolition or alteration of eligible buildings, structures, and features that they would no longer be eligible would result in a significant impact. Whole or partial destruction of eligible archaeological sites would result in a

significant impact. In addition to impacts from construction resulting in destruction or physical alteration of an eligible resource, impacts to the integrity of setting (sometimes termed *visual impacts*) of physical features in the Project Area could also result in significant impacts.

Tribal cultural resources (TCRs) are defined in Section 21074 of the California PRC as sites, features, places, cultural landscapes (geographically defined in terms of the size and scope), sacred places, and objects with cultural value to a California Native American tribe that are either included in or determined to be eligible for inclusion in the CRHR, or are included in a local register of historical resources as defined in subdivision (k) of Section 5020.1, or are a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. Section 1(b)(4) of Assembly Bill (AB) 52 established that only California Native American tribes, as defined in Section 21073 of the California PRC, are experts in the identification of TCRs and impacts thereto. Because ECORP does not meet the definition of a California Native American tribe, it only addresses information in this report for which it is qualified to identify and evaluate, and that which is needed to inform the cultural resources section of CEQA documents. This report, therefore, does not identify or evaluate TCRs. Should California Native American tribes ascribe additional importance to or interpretation of archaeological resources described herein, or provide information about non-archeological TCRs, that information is documented separately in the AB 52 tribal consultation record between the tribe(s) and lead agency and summarized in the TCRs section of the CEQA document, if applicable.

1.5 Report Organization

The following report documents the study and its findings and was prepared in conformance with the California Office of Historic Preservation's (OHP) *Archaeological Resource Management Reports: Recommended Contents and Format*. Appendix A includes the CHRIS record search request and historical society coordination. Appendix B contains documentation of a search of the Sacred Lands File. Appendix C presents photographs of the Project Area. Appendix D contains confidential cultural resource site location and site record.

Sections 6253, 6254, and 6254.10 of the California Code authorize state agencies to exclude archaeological site information from public disclosure under the Public Records Act. In addition, the California Public Records Act (Government Code Section 6250 et seq.) and California's open meeting laws (The Brown Act, Government Code Section 54950 et seq.) protect the confidentiality of Native American cultural place information. Because the disclosure of information about the location of cultural resources is prohibited by the Archaeological Resources Protection Act of 1979 (16 U.S. Code [USC] 552 470hh) and Section 307103 of the NHPA, it is exempted from disclosure under Exemption 3 of the federal Freedom of Information Act (5 USC 552) Likewise, the Information Centers of the California Historical Resources Information System (CHRIS) maintained by the OHP prohibit public dissemination of records search information. In compliance with these requirements, the results of this cultural resource investigation were prepared as a confidential document, which is not intended for public distribution.

2.0 SETTING

2.1 Environmental Setting

Elevations within the Project Area range from 954 to 970 feet above mean sea level. The Project Area is located immediately adjacent to a channelized portion of Cucamonga Creek.

2.2 Geology and Soils

According to Cox and Morton (1978), the Project Area is late Pleistocene and early Holocene alluvium, which is characterized by slightly to moderately consolidated deposits consisting mostly of fine to coarse-grained sand, but with thin beds of pebbles, gravels, or silt. Most of the vicinity is alluvial fans and stream valleys removed from mountains.

A search of the Natural Resources Conservation Service Web Soil Survey (2023) indicated that the soil of the Project Area consists entirely of Tujunga loamy sand, 0 to 5 percent slopes. This soil is classified as farmland of statewide importance, is derived from granite, and forms alluvial fans. The depth to water and restrictive feature is both more than 80 inches.

There exists the potential for buried pre-contact archaeological sites within the Project Area due to the presence of deep soils deposited during the Holocene period, when humans were present on this continent, and the likelihood of pre-contact archaeological sites located along perennial waterways such as Cucamonga Creek, which is currently restrained in a constructed channel that forms the eastern boundary of the Project Area.

2.3 Vegetation and Wildlife

The Project Area is located in an urban environment. Former use as vineyards, and modern planting practice has eliminated the majority of native species from the Project Area. The dominant plant community within the Project Area includes eucalyptus trees, ragweed, and Russian thistle. Wildlife species that may occur within the Project Area include ground squirrels, raccoons, possums, crows, and pigeons.

3.0 CULTURAL CONTEXT

3.1 Regional Pre-Contact History

3.1.1 Paleo-Indian Period/Terminal Pleistocene (12,000 to 10,000 BP)

The first inhabitants of southern California were big game hunters and gatherers exploiting extinct species of Pleistocene megafauna (e.g., mammoth and other Rancholabrean fauna). Local "fluted point" assemblages comprised of large spear points or knives are stylistically and technologically similar to the Clovis Paleo-Indian cultural tradition dated to this period elsewhere in North America (Moratto 1984). Archaeological evidence for this period in southern California is limited to a few small temporary camps with fluted points found around late Pleistocene lake margins in the Mojave Desert and around Tulare

Lake in the southern San Joaquin Valley. Single points are reported from Ocotillo Wells and Cuyamaca Pass in eastern San Diego County and from the Yuha Desert in Imperial County (Rondeau et al. 2007).

3.1.2 Early Archaic Period/Early Holocene (10,000 to 8,500 BP)

Approximately 10,000 years ago, at the beginning of the Holocene, warming temperatures, and the extinction of the megafauna resulted in changing subsistence strategies with an emphasis hunting smaller game and increasing reliance on plant gathering. Previously, Early Holocene sites were represented by only a few sites and isolates from the Lake Mojave and San Dieguito complexes found along former lakebeds and grasslands of the Mojave Desert and in inland San Diego County. More recently, southern California Early Holocene sites have been found along the Santa Barbara Channel (Erlandson 1994), in western Riverside County (Goldberg 2001; Grenda 1997), and along the San Diego County coast (Gallegos 1991; Koerper et al. 1991; Warren 1967).

The San Dieguito Complex was defined based on material found at the Harris site (CA-SDI-149) on the San Dieguito River near Lake Hodges in San Diego County. San Dieguito artifacts include large leaf-shaped points; leaf-shaped knives; large ovoid, domed, and rectangular end and side scrapers; engraving tools; and crescents (Koerper et al. 1991). The San Dieguito Complex at the Harris site dates to 9,000 to 7,500 BP (Gallegos 1991). However, sites from this time period in coastal San Diego County have yielded artifacts and subsistence remains characteristic of the succeeding Encinitas Tradition, including manos, metates, core-cobble tools, and marine shell (Gallegos 1991; Koerper et al. 1991).

3.1.3 Encinitas Tradition or Milling Stone Period/Middle Holocene (8,500 to 1,250 BP)

The Encinitas Tradition (Warren 1968) and the Milling Stone Period (Wallace 1955) refer to a long period of time during which small mobile bands of people who spoke an early Hokan language foraged for a wide variety of resources including hard seeds, berries, and roots/tubers (yucca in inland areas), rabbits and other small animals, and shellfish and fish in coastal areas. Sites from the Encinitas Tradition consist of residential bases and resource acquisition locations with no evidence for overnight stays. Residential bases have hearths and fire-affected rock indicating overnight stays and food preparation. Residential bases along the coast have large amounts of shell and are often termed shell middens.

The Encinitas Tradition as originally defined (Warren 1968) applied to all of the non-desert areas of southern California. Recently, four patterns within the Encinitas Tradition have been proposed which apply to different regions of southern California (Sutton and Gardner 2010). The Topanga Pattern includes archaeological material from the Los Angeles Basin and Orange County. The Greven Knoll Pattern pertains to southwestern San Bernardino County and western Riverside County (Sutton and Gardner 2010). Each of the patterns is divided into temporal phases. The Topanga Pattern included the Los Angeles Basin and Orange County. The Topanga I phase extends from 8,500 to 5,000 Years Before Present (BP) and Topanga II runs from 5,000 to 3,500 BP. The Topanga Pattern ended about 3,500 BP with the arrival of Takic speakers, except in the Santa Monica Mountains where the Topanga III phase lasted until about 2,000 BP.

The Encinitas Tradition in inland areas east of the Topanga Pattern (southwestern San Bernardino County and western Riverside County) is the Greven Knoll Pattern (Sutton and Gardner 2010). Greven Knoll I

(9,400 to 4,000 BP) has abundant manos and metates. Projectile points are few and are mostly Pinto points. Greven Knoll II (4,000 to 3,000 BP) has abundant manos and metates and core tools. Projectile points are mostly Elko points. The Elsinore site on the east shore of Lake Elsinore was occupied during Greven Knoll I and Greven Knoll II. During Greven Knoll I faunal processing (butchering) took place at the lakeshore and floral processing (seed grinding), cooking, and eating took place farther from the shore. The primary foods were rabbit meat and seeds from grasses, sage, and ragweed. A few deer, waterfowl, and reptiles were consumed. The recovered archaeological material suggests that a highly mobile population visited the site at a specific time each year. It is possible that their seasonal round included the ocean coast at other times of the year. These people had an unspecialized technology as exemplified by the numerous crescents, a multi-purpose tool. The few projectile points suggest that most of the small game was trapped using nets and snares (Grenda 1997:279). During Greven Knoll II, which included a warmer drier climatic episode known as the Altithermal, it is thought that populations in interior southern California concentrated at oases and that Lake Elsinore was one of them. The Elsinore site (CA-RIV-2798) is one of five known Middle Holocene residential sites around Lake Elsinore. Tools were mostly manos, metates, and hammerstones. Scraper planes were absent. Flaked-stone tools consisted mostly of utilized flakes used as scrapers. The Elsinore site during the Middle Holocene was a "recurrent extended encampment" which could have been occupied during much of the year.

The Encinitas Tradition lasted longer in inland areas because Takic speakers did not move east into these areas until circa 1,000 BP. Greven Knoll III (3,000 to 1,000 BP) is present at the Liberty Grove site in Cucamonga (Salls 1983) and at sites in Cajon Pass that were defined as part of the Sayles Complex (Kowta 1969). Greven Knoll III sites have a large proportion of manos and metates and core tools as well as scraper planes. Kowta (1969) suggested the scraper planes may have been used to process yucca and agave. The faunal assemblage consists of large quantities of lagomorphs (rabbits and hares) and lesser quantities of deer, rodents, birds, carnivores, and reptiles.

3.1.4 Palomar Tradition (1,250 to 150 BP)

The native people of southern California (north of a line from Agua Hedionda to Lake Henshaw in San Diego County) spoke Takic languages which form a branch or subfamily of the Uto-Aztecan language family. The Takic languages are divided into the Gabrielino-Fernandeño language, the Serrano-Kitanemuk group (the Serrano [includes the Vanyume dialect] and Kitanemuk languages), the Tataviam language, and the Cupan group (the Luiseño-Juaneño language, the Cahuilla Language, and the Cupeño language) (Golla 2011). According to Sutton (2009), Takic speakers occupied the southern San Joaquin Valley before 3,500 BP. Perhaps as a result of the arrival of Yokutsan speakers (a language in the Penutian language family) from the north, Takic speakers moved southeast. The ancestors of the Kitanemuk moved into the Tehachapi Mountains and the ancestors of the Tataviam moved into the upper Santa Clara River drainage. The ancestors of the Gabrielino (Tongva) moved into the Los Angeles Basin about 3,500 BP, replacing the native Hokan speakers. Speakers of proto-Gabrielino reached the southern Channel Islands by 3,200 BP (Sutton 2009) and moved as far south as Aliso Creek in Orange County by 3,000 BP.

Takic people moved south into southern Orange County after 1,250 BP and became the ancestors of the Juaneño. Takic people moved inland from southern Orange County about 1,000 BP, becoming the ancestors of the Luiseño, Cupeño, and Cahuilla. Takic people from the Kitanemuk area moved east along

the northern slopes of the San Gabriel Mountains and spread into the San Bernardino Mountains and along the Mojave River becoming the ancestors of the Serrano and the Vanyume.

The material culture of the inland areas where Takic languages were spoken at the time of Spanish contact is part of the Palomar Tradition (Sutton 2011). San Luis Rey I Phase (1,000 to 500 BP) and San Luis Rey II Phase (500 to 150 BP) pertain to the area occupied by the Luiseño at the time of Spanish contact. The Peninsular I (1,000 to 750 BP), II (750 to 300 BP), and III (300 to 150 BP) Phases are used in the areas occupied by the Cahuilla and Serrano (Sutton 2011).

San Luis Rey I is characterized by Cottonwood Triangular arrow points, use of bedrock mortars, stone pendants, shell beads, quartz crystals, and bone tools. San Luis Rey II sees the addition of ceramics, including ceramic cremation urns, red pictographs on boulders in village sites, and steatite arrow straighteners. San Luis Rey II represents the archaeological manifestation of the antecedents of the historically known Luiseño (Goldberg 2001). During San Luis Rey I there were a series of small permanent residential bases at water sources, each occupied by a kin group (probably a lineage). During San Luis Rey II people from several related residential bases moved into a large village located at the most reliable water source (Waugh 1986). Each village had a territory that included acorn harvesting camps at higher elevations. Villages have numerous bedrock mortars, large dense midden areas with a full range of flaked and ground stone tools, rock art, and a cemetery.

3.2 Ethnohistory

Ethnographic accounts of Native Americans indicate that the Gabrieliño (also known as Gabrieleno, or Tongva) once occupied the region that encompasses the Project Area. At the time of contact with Europeans, the Gabrieliño were the main occupants of the southern Channel Islands, the Los Angeles Basin, much of Orange County, and extended as far east as the western San Bernardino Valley. The term "Gabrieliño" came from the group's association with Mission San Gabriel Arcángel, established in 1771. The Gabrieliño are believed to have been one of the most populous and wealthy Native American tribes In southern California prior to European contact, (Bean and Smith 1978; McCawley 1996; Moratto 1984) and spoke a Takic language. The Takic group of languages is part of the Uto-Aztecan language family.

The Gabrieliño occupied villages located along rivers and at the mouths of canyons. Populations ranged from 50 to 200 inhabitants. Residential structures within the villages were domed, circular, and made from thatched tule or other available wood. Gabrieliño society was organized by kinship groups, with each group composed of several related families who together owned hunting and gathering territories. Settlement patterns varied according to the availability of floral and faunal resources (Bean and Smith 1978; McCawley 1996; Miller 1991).

Vegetal staples consisted of acorns, chia, seeds, piñon nuts, sage, cacti, roots, and bulbs. Animals hunted included deer, antelope, coyote, rabbits, squirrels, rodents, birds, and snakes. The Gabrieliño also fished and collected marine shellfish (Bean and Smith 1978; McCawley 1996; Miller 1991).

By the late 18th century, Gabrieliño population had significantly dwindled due to introduced European diseases and dietary deficiencies. Gabrieliño communities disintegrated as families were taken to the

missions (Bean and Smith 1978; McCawley 1996; Miller 1991). However, current descendants of the Gabrieliño are preserving Gabrieliño culture.

3.3 Southern California Regional History

The first European to visit California was Spanish maritime explorer Juan Rodriguez Cabrillo in 1542. Cabrillo was sent north by the Viceroy of New Spain (Mexico) to look for the Northwest Passage. Cabrillo visited San Diego Bay, Catalina Island, San Pedro Bay, and the northern Channel Islands. The English adventurer Francis Drake visited the Miwok Native American group at Drake's Bay or Bodega Bay in 1579. Sebastian Vizcaíno explored the coast as far north as Monterey in 1602. He reported that Monterey was a11xcellent location for a port (Castillo 1978). Vizcaíno also named San Diego Bay to commemorate Saint Didacus. The name began to appear on European maps of the New World by 1624 (Gudde 1998:332).

Colonization of California began with the Spanish Portolá land expedition. The expedition, led by Captain Gaspar de Portolá of the Spanish army and Father Junipero Serra, a Franciscan missionary, explored the California coast from San Diego to the Monterrey Bay Area in 1769. As a result of this expedition, Spanish missions to convert the native population, presidios (forts), and towns were established. The Franciscan missionary friars established 21 missions in Alta California (the area north of Baja California) beginning with Mission San Diego in 1769 and ending with the mission in Sonoma established in 1823. The purpose of the missions and presidios was to establish Spanish economic, military, political, and religious control over the Alta California territory. Mission San Diego was established to convert the Native Americans that lived in the area, known as the Kumeyaay or Diegueño. Mission San Gabriel Archangel was founded in 1771 east of what is now Los Angeles to convert the Tongva or Gabrielino. Mission San Fernando, also in Tongva/Gabrielino territory, was established in 1797. Mission San Juan Capistrano was established in 1776 on San Juan Creek (in what is now southern Orange County) to convert the Acjachemen or Juaneño. Mission San Luis Rey was established in 1798 on the San Luis Rey River (in what is now northern San Diego County) to convert the Luiseño. Missions San Buenaventura and Santa Barbara were founded in Chumash territory in 1782 and 1786, respectively (Castillo 1978:100).

Some missions later established outposts in inland areas. An *assistencia* (mission outpost) of Mission San Luis Rey, known as San Antonio de Pala, was built in Luiseño territory along the upper San Luis Rey River near Mount Palomar in 1810 (Pourade 1961). A chapel administered by Mission San Gabriel Archangel was established in the San Bernardino area in 1819 (Bean and Smith 1978). The present Asistencia within the western outskirts of present-day Redlands was built circa 1830 (Haenszel and Reynolds 1975). The missions sustained themselves through cattle ranching and traded hides and tallow for supplies brought by ship. Large cattle ranches were established by Mission San Luis Rey at Temecula and San Jacinto (Gunther 1984). The Spanish also constructed presidios, or forts, at San Diego and Santa Barbara, and a pueblo, or town, was established at Los Angeles. The Spanish period in California began in 1769 with the Portola expedition and ended in 1821 with Mexican independence.

After Mexico became independent from Spain in 1821, what is now California became the Mexican province of Alta California. The Mexican government closed the missions in the 1830s and former mission lands were granted to retired soldiers and other Mexican citizens for use as cattle ranches. Much of the land along the coast and in the interior valleys became part of Mexican land grants or "ranchos"

(Robinson 1948). During the Mexican period there were small towns at San Diego (near the presidio), San Juan Capistrano (around the mission), and Los Angeles. The rancho owners lived in one of the towns or in an adobe house on the rancho. The Mexican Period includes the years 1821 to 1848.

The American period began when the Treaty of Guadalupe Hidalgo was signed between Mexico and the United States in 1848. As a result of the treaty, Alta California became part of the United States as the territory of California. Rapid population increase occasioned by the Gold Rush of 1849 allowed California to become a state in 1850. Most Mexican land grants were confirmed to the grantees by U.S. courts, but usually with more restricted boundaries which were surveyed by the U.S. Surveyor General's office. Land that was not part of a land grant was owned by the U.S. government until it was acquired by individuals through purchase or homesteading. Floods and drought in the 1860s greatly reduced the cattle herds on the ranchos, making it difficult to pay the new American taxes on the thousands of acres they owned. Many Mexican-American cattle ranchers borrowed money at usurious rates from newly arrived Anglo-Americans. The resulting foreclosures and land sales transferred most of the land grants into the hands of Anglo-Americans (Cleland 1941:137-138).

3.4 Ontario History

The Project Area is located just to the northeast of the Santa Ana Del Chino Land Grant and to the South of the Rancho Cucamonga Land Grant but was not in private hands at the time California achieved statehood.

The project is located within the present-day city limits of Ontario, California. In 1881, Canadian engineer George Chaffey saw the potential of this area, then known as the Cucamonga Desert. Believing that this land, if properly irrigated, could become profitable, he designed a pipe irrigation system and created the Etiwanda Water Company, which became the standard for Southern California water management. George Chaffey and his brother William established then established the Etiwanda Colony in 1881, eventually becoming Upland. Following their initial success, in 1882 they purchased land encompassing an area known as the "San Antonio lands" to form the Ontario Colony, named after their previous home, the province of Ontario, Canada (City of Ontario n.d.a and n.d.b; Upland Heritage 2021).

In 1887, the Atchison, Topeka, and Santa Fe Railroad reached Ontario and Etiwanda colonies and a railway station was subsequently constructed by the Bedford Brothers. This helped spur growth in the area (Upland Heritage 2021). On December 10, 1891, Ontario was incorporated as a city.

Ontario initially developed as an agricultural community dominated by the citrus industry (City of Ontario n.d.b) and continued to grow. In 1901, Chaffey College was established by the Chaffey brothers as an agricultural and general education college. Recognizing Ontario's success, an act of congress in 1903 declared Ontario a "Model Irrigation Colony" (City of Ontario n.d.b), noting innovations in standards of urban living, and it served as an example of a successful irrigation project. Concrete irrigation systems and municipal water schemes like those of the Chaffey brothers would be copied in nearby areas for years to come (City of Ontario n.d.b). In 1923, taking advantage of some flat, unused crop land, Latimer Field was established by Waldo Waterman and Archie Mitchell. Continued development forced Mitchell and Waterman to move their aviation facilities farther east, finally taking up their permanent location in an area south of the intersection of Vineyard Avenue and Holt Boulevard. The airfield went on to serve as a

vital training ground for pilots during World War II. After World War II, in response to the growth of the area, the airport developed into Ontario International Airport (City of Ontario n.d. b)

During the latter half of the Twentieth Century, the citrus groves were gradually supplanted by residential development as Ontario transformed into a suburban community. Today, Ontario is a diverse community with a population of approximately 173,000, with an economy centered on manufacturing and industrial (City of Ontario n.d. a, and n.d. b).

4.0 METHODS

4.1 Personnel Qualifications

Registered Professional Archaeologist (RPA) Sonia Sifuentes, M.S., who meets the Secretary of the Interior's Professional Qualifications Standards for prehistoric and historical archaeology, supervised this cultural resource investigation. Staff Archaeologist Robert Cunningham conducted the fieldwork. Associate Archaeologists Nicholas Bizzell and Steve Wintergerst prepared the technical report. Lisa Westwood, RPA provided technical report review and quality assurance.

Sonia Sifuentes, RPA is a Senior Archaeologist and the Southern California Cultural Resources Manager at ECORP and has more than 15 years of experience in cultural resources management, primarily in southern California. Ms. Sifuentes holds a M.S. in Archaeology of the North. She has participated in and supervised numerous surveys, test programs, and data recovery excavations for both prehistoric and historical sites; and has cataloged, identified, and curated thousands of artifacts. She has conducted evaluations of cultural resources for eligibility for the NRHP and CRHR. Ms. Sifuentes is experienced in the organization and execution of field projects in compliance with Section 106 of the NHPA and CEQA. She has contributed to and authored numerous cultural resources technical reports, research designs, and cultural resources management plans.

Robert Cunningham has 17 years of experience in cultural resources management, with an emphasis on the recordation, analysis, and evaluation of historic-period resources. He has participated in all aspects of archaeological fieldwork, including survey, test excavation, and construction monitoring. He has served as Field Director for archaeological inventories and site evaluation projects. He has recorded and mapped numerous prehistoric and historic-period archaeological sites and has identified and documented hundreds of prehistoric and historic artifacts. Mr. Cunningham has prepared numerous archaeological site records and has authored and contributed to a variety of cultural resources technical reports.

Nicholas Bizzell is an Associate Archaeologist with ECORP and has over 12 years of experience in cultural resources management. He holds a B.A. in Anthropology from Sonoma State University in Rohnert Park, California. Mr. Bizzell has participated in numerous archaeological projects throughout California, experience that includes working with clients in both public and private sectors. Mr. Bizzell has substantial archaeological experience with cultural resources monitoring, inventory surveys, excavation and subsurface testing, and laboratory analysis for projects in northern and southern California. Additionally, Mr. Bizzell is cross trained as a paleontological monitor for projects requiring both archaeological and paleontological monitoring.

Steve Wintergerst is an Associate Archaeologist with 13 years of experience in cultural resources management. He holds a B.A. in Anthropology. Mr. Wintergerst has participated in all aspects of archaeological fieldwork and laboratory process, with extensive experience throughout California and western Arizona. His experience has involved working as an archaeological crew chief, archaeological technician, archaeological monitor, paleontological monitor, and paleontological preparator. He is experienced in the organization and execution of field projects in compliance with CEQA and Section 106 of the NHPA. completed expeditiously.

Lisa Westwood, RPA has 28 years of experience and meets the Secretary of the Interior's Professional Qualifications Standards for prehistoric and historical archaeology. She holds a B.A. in Anthropology and an M.A. in Anthropology (Archaeology). She is the Director of Cultural Resources for ECORP.

4.2 Records Search Methods

ECORP conducted a records search for the Project Area at the South-Central Coastal Information Center (SCCIC) of the CHRIS at California State University, Fullerton on May 25, 2023 (Appendix A). The purpose of the records search was to determine the extent of previous surveys within a 1-mile (1,600-meter) radius of the Proposed Project Area, and whether previously documented pre-contact or historic archaeological sites, architectural resources, or traditional cultural properties exist within this area.

In addition to the official records and maps for archaeological sites and surveys in San Bernardino County, the following historic references were also reviewed: Built Environment Resource Directory (OHP 2023a); the National Register Information System (National Park Service [NPS] 2023); Office of Historic Preservation, California Historical Landmarks [CHL] OHP 2023b); California Points of Historical Interest (OHP 2023c) Caltrans State Bridge Inventory (California Department of Transportation [Caltrans] 2015); and *Historic Spots in California* (Kyle 2002).

Other references examined include a RealQuest Property Search and historic General Land Office (GLO) land patent records (Bureau of Land Management [BLM] 2023). Historic maps reviewed include:

- 1858 BLM GLO Plat map for Township 1 South, Range 7 West;
- 1865 BLM GLO Plat map for Township 1 South, Range 7 West;
- 1897 Cucamonga, California topographic quadrangle map (1:62,500 scale);
- 1900 Cucamonga, California topographic quadrangle map (1:62,500 scale);
- 1903 Cucamonga, California topographic quadrangle map (1:62,500 scale);
- 1944 Cucamonga, California topographic quadrangle map (1:62,500 scale);
- 1953 Guasti, California topographic quadrangle map (1:24,000 scale);
- 1954 Ontario, California topographic quadrangle map (1:62,500 scale);
- 1966 Guasti, California topographic quadrangle map (1:24,000 scale); and
- 2021 Guasti, California topographic quadrangle map (1:24,000 scale).

ECORP reviewed historic aerial photographs taken in 1938, 1948, 1959, 1980, and from 1985 to 2020 for any indications of property usage and built environment.

ECORP conducted a search for a local historical registry. Ontario Heritage is the nearest historical society, which is in the City of Ontario.

4.3 Sacred Lands File Coordination Methods

In addition to the records search, ECORP contacted the California Native American Heritage Commission (NAHC) on May 3, 2023 to request a search of the Sacred Lands File for the Project Area (Appendix B). This search determines whether the California Native American tribes within the Project Area have recorded Sacred Lands, because the Sacred Lands File is populated by members of the Native American community with knowledge about the locations of tribal resources. In requesting a search of the Sacred Lands File, ECORP solicited information from the Native American community regarding TCRs, but the responsibility to formally consult with the Native American community lies exclusively with the federal and local agencies under applicable state and federal laws. The lead agencies do not delegate government-to-government authority to any private entity to conduct tribal consultation.

4.4 Other Interested Party Consultation Methods

ECORP emailed a letter to Ontario Heritage on May 9, 2023 to solicit comments or obtain historical information that the repository might have regarding events, people, or resources of historical significance in the area (Appendix A).

4.5 Field Methods

ECORP subjected the Project Area to an intensive pedestrian survey on June 1, 2023 under the guidance of the *Secretary of the Interior's Standards for the Identification of Historic Properties* (NPS 1983) using 15-meter-spaced transects. ECORP expended one person-day in the field. ECORP examined the ground surface for indications of surface or subsurface cultural resources and inspected the general morphological characteristics of the ground surface for indications of subsurface deposits that may be manifested on the surface, such as circular depressions or ditches. Whenever possible, ECORP examined the locations of subsurface exposures caused by such factors as rodent activity, water or soil erosion, or vegetation disturbances for artifacts or for indications of buried deposits. ECORP did not conduct subsurface investigations or artifact collections during the pedestrian survey.

Standard professional practice requires that all cultural resources encountered during the survey be recorded using Department of Parks and Recreation (DPR) 523-series forms approved by the California OHP. The resources are usually photographed, mapped using a handheld Global Positioning System receiver, and sketched as necessary to document their presence using appropriate DPR forms.

5.0 RESULTS

5.1 Records Search

The records search consisted of a review of previous research and literature, records on file with the SCCIC for previously recorded resources, and historical aerial photographs and maps of the vicinity.

5.1.1 Previous Research

Twenty-two previous cultural resource investigations have been conducted within the Project Area or the 1-mile search radius, covering approximately 25 percent of the total area surrounding the Project Area within the records search radius (Table 1). Of the 22 studies conducted within the 1-mile search radius, two overlapped a portion of the Project Area. Appendix A lists the reports located within 1 mile of the Project Area. These studies revealed the presence of historical sites, including historic buildings, a historic railroad, and historic drainage channels, and a multicomponent site containing both historic and prehistoric artifacts, none of which are located within the Project Area. The previous studies were conducted between 1976 and 2016 and vary in size from 0.1 to 280 acres.

Table 1. Previous Cultural Studies within 1 Mile of the Project Area

Report Number	Author(s)	Report Title	Year	Includes Portion of the Project Area?
SB-00317	Martz, Patricia	Description and Evaluation of the Cultural Resources: Cucamonga, Demens, Deer and Hillside Creek Channels, San Bernardino and Riverside Counties, California	1976	Yes
SB-02863	Wlodarski, Robert J.	Negative Archaeological Survey Report, Provide High Occupancy Vehicle (HOV) Lanes on I-10 Between Mills and I-15	1993	No
SB-03248	Smith, Francesca and Robert Wlodarski	Historic Property Survey Report: Provide High Occupancy Vehicle Lanes on I-10 Between the Los Angeles/San Bernardino County Line & I-15 in San Bernardino County, California	1994	No
SB-03586	Love, Bruce	Ontario to Colton Pipeline, San Bernardino County, California	2000	No
SB-04138	Tang, Bai	Identification & Evaluation of Historic Properties: Fourth St Recycled Water Pipeline in And Near the Cities of Ontario & Rancho Cucamonga, San Bernardino County, California	2002	No
SB-04151	Budinger, Fred E.	Verizon Wireless Site: Turner B Cow, 200 E. Holt Ave, Ontario, California	2001	No

Table 1. Previous Cultural Studies within 1 Mile of the Project Area

Report Number	Author(s)	Report Title	Year	Includes Portion of the Project Area?
SB-04152	Billat, Lorna	Nextel Communications Proposed Wireless Telecommunications Service Facilities in Southern California—-CA 6685E Ontario	2002	No
SB-04167	Dahdul, Miriam	Identification and Evaluation of Historic Properties: Ontario Senior Housing Project, 1449 East D St, City of Ontario, San Bernardino County, California	2003	No
SB-04671	Dice, Michael	Cultural Resource Records Search and Site Visit Results for the Proposed Ontario Airport TIS Transmitter Site, Located Near Parking Lot D & F of the Ontario International Airport, Ontario, San Bernardino County, California	2005	No
SB-04678	Encarnacion, Deirdre, Bai Tang, Michael Hogan, John J. Eddy, And Daniel Ballester	Historical/Archaeological Resources Survey Report: San Antonio Channel (West Edison) Recycled Water Pipeline Project in the Cities of Montclair and Ontario, San Bernardino County, California	2005	No
SB-05358	Sider, W.A.	Cucamonga Creek 1776-1976 After 200 Years	1976	Yes
SB-05367	Marvin, Judith and Riordan Goodwin	Cultural Resource Assessment: Hofer Ranch Airport Business Park Specific Plan Amendment, City of Ontario, San Bernardino County, California	2004	No
SB-05481	Budinger, Fred E.	Proposed Wireless Device Monopalm and Associated Equipment; Branding Site, 1175 North Del Rio Place, Ontario, California, 91761	2005	No
SB-06072	Bonner, Wayne H. and Marnie Aislin-Kay	Cultural Resource Records Search Results for Royal Street Communications, California LLC Candidate LA0726A (Ontario Corporate Center), 430 North Vineyard Avenue, Ontario, San Bernardino County, California	2008	No
SB-06522	Bonner, Wayne H. And Sarah A. Williams	Cultural Resources Records Search and Site Visit for T-Mobile USA Candidate IE 25501F (Hellman Row), 6th Street and Hellman Avenue, Ontario, San Bernardino County, California	2009	No
SB-07006	Puckett, Heather R.	Yale, 2235 East 4th Street, Ontario, California	2011	No

Table 1. Previous Cultural Studies within 1 Mile of the Project Area

Report Number	Author(s)	Report Title	Year	Includes Portion of the Project Area?
SB-07755	McKenna, Jeanette A.	A Phase I Cultural Resources Investigation of the Meredith International Centre Project Area in the City of Ontario, San Bernardino County, California	2014	No
SB-07853	Fulton, Phil and Casey Tibbett	Cultural Resource Assessment Class III Inventory: Verizon Wireless Services Elma Facility, City of Ontario, County of San Bernardino, California	2014	No
SB-08071	McKenna, Jeanette A.	Archaeological/Paleontological Monitoring, Vineyard Industrial, LLC, Project Area, Ontario, San Bernardino County, California	2015	No
SB-08204	McKenna, Jeanette A.	Archaeological/Paleontological Monitoring, Vineyard Industrial I, LLC, Building 3 Project Area, Ontario, San Bernardino County, California	2015	No
SB-08228	McKenna, Jeanette A.	Archaeological/Paleontological Monitoring Program, 4th Street Sewer Pipe Installation Between Vineyard Avenue and Archibald Avenue, Ontario, San Bernardino County, California	2016	No
SB-08257	Tang, Bai	Due-Diligence Historical/Archaeological Resources Study Inland Empire Utilities Agency Recharge Basin Maintenance Plan Chino Basin Area, San Bernardino and Riverside Counties, California CRM TECH Contract No. 2989	2016	No

The results of the records search indicate that less than 5 percent of the Project Area has been previously surveyed for cultural resources. The most recent survey that overlapped the Project Area was conducted in 1976. For these reasons, a survey of the entire Project Area was warranted.

The records search also determined that nine resources have been previously recorded within 1 mile of the Project Area (Table 2). Of these, one multi-component site (CA-SBR-016708/H) is believed to be associated with Native American and European occupation of the vicinity. The other eight historic-era resources consist of one mixed agricultural and residential historic district, one mansion, one church building, Ontario Airport Terminal One, a segment of the Union Pacific Railroad, a drainage channel, and two sites associated with early European-American agriculture. There are no previously recorded cultural resources within the Project Area.

Table 2. Previously Recorded Cultural Resources within 1 Mile of the Project Area				
Site Number	**Primary Number**	**Recorder and Year**	**Age/ Period**	**Site Description**
CA-SBR-010330H	P-36-010330	S. Ashkar, Jones & Stokes Associates, Inc. 1999; Goodwin, R., LSA Associates, Inc. 2002; Harper, C.D., SWCA 2008; Tibbet, C., LSA Associates, Inc. 2010; Paul, Daniel D., ICF International 2012	Historic	Union Pacific Railroad
–	P-36-012630	Taniguchi+Taniguchi, Galvin & Associates 2005; Shannon Davis and Marilyn Novell, ASM 2016	Historic	Ontario International Airport Terminal; Terminal One
–	P-36-015469	Clement Meighan 1975	Historic	Guasti/Brookside Winery
–	P-36-015471	Clement Meighan 1975; Warner, Solie, Ontario Planning Department 1985	Historic	Church of San Secondo d'Asti
–	P-36-015990	Jim Warner, Ontario Planning Dept 1985	Historic	Guasti Historic District
–	P-36-016279	Warner, Solie, Ontario Planning Dept 1985	Historic	Guasti Mansion
CA-SBR-016708/H	P-36-026315	Jeanette McKenna, McKenna et al. 2014; Jeanette McKenna, McKenna et al. 2015; Jeanette McKenna, McKenna et al. 2015; Jeanette McKenna, McKenna et al. 2017	Prehistoric, Historic	Historic Agricultural site
–	P-36-031377	Jeanette McKenna, McKenna et al. 2017	Historic	Rock Lined Drainage Channel
CA-SBR-033067H	P-36-033067	Jeanette McKenna, McKenna et al. 2018	Historic	Romolo Winery

5.1.2 Records

The OHP's Built Environment Resource Directory for San Bernardino County (dated May 9, 2023) included four built environment resources within 1 mile of the Project Area (OHP 2023a):

- the Bob Hope United Service Organizations building, located at 1940 East Moore Way, approximately 0.54 mile southwest of the Project Area;
- the Guasti Mansion, located at 2903 East Guasti Road, approximately 0.91 mile east of the Project Area;
- Hangar 20, which is currently the Southwest Airlines cargo building, located approximately 0.24 mile south of the Project Area; and
- Hangar 21, located approximately 0.21 mile south of the Project Area.

The National Register Information System (NPS 2023) failed to reveal any eligible or listed properties within the Project Area. The nearest National Register property is Hofer Ranch, located at 11248 South Turner Avenue, approximately 1.15 miles southwest of the Project Area.

ECORP reviewed resources listed as CHLs by the OHP (2023b) on May 3, 2023.The nearest listed landmark is #490, the Cucamonga Rancho Winder. The plaque is located 2.91 miles north of the Project Area.

Historic Spots in California (Kyle 2002) mentions Euclid Avenue in the cities of Ontario and Upland, approximately 2.5 miles west of the Project Area. Kyle notes four historic trails that cross Euclid Avenue: the Mojave trail, which crossed Euclid Avenue around Foothill Boulevard; the Anza trail, which crossed Euclid Avenue near Phillips Street; the old Emigrant Trail, which crossed Euclid Avenue at the same place as Anza trail, near Phillips Street; and the Colorado Road trail, which crossed Euclid Avenue and became the Butterfield Overland Mail stagecoach line. Any one of these roads may pass near the Project Area.

Historic GLO land patent records from the BLM's patent information database (BLM 2023) revealed that the western half of Section 22 was patented to Patrizio Marsicano on March 20, 1886 and was listed as a cash sale entry.

A RealQuest online property search for APN 0110-322-33-000 shows that the Project Area is owned by J.C. Horizon Ltd. And was purchased in 2018 for $8,000,000 by way of a Corporation Grant Deed from Qualco, Inc. The property is described as 10.47 acres of vacant land. No other information is available.

The Caltrans Bridge Local and State Inventories (Caltrans 2018, 2019) lists seven historic-period bridges within 1 mile of the Project Area.

- Local Bridge 54C0202 is located 0.84-mile northeast of the Project Area and carries Archibald Avenue over Archibald Reservoir Channel, south of Fourth Street and north of Inland Empire Boulevard. It was constructed in 1970 and was evaluated by Caltrans as a Category 5 bridge, not eligible for the NRHP under Criterion C.
- Local Bridge 54C0397 is located 0.42 mile north-northeast of the Project Area and carries Inland Empire Boulevard over Cucamonga Creek, east of QVC Way and west of Archibald Avenue. It was constructed in 1967 and was evaluated by Caltrans as a Category 5 bridge, not eligible for the NRHP under Criterion C.
- State Bridge 54-0438L, the Cucamonga Wash overpass, carries Interstate 10 westbound lanes over Cucamonga Wash and is located 0.27 miles north-northwest of the Project Area. It was constructed in 1953 and was evaluated by Caltrans as a Category 5 bridge, not eligible for the NRHP under Criterion C.
- State Bridge 54-0438R, the Cucamonga Wash overpass, carries Interstate 10 eastbound lanes over Cucamonga Wash and is located 0.23 mile north-northwest of the Project Area. It was constructed in 1953 and was evaluated by Caltrans as a Category 5 bridge, not eligible for the NRHP under Criterion C.
- State Bridge 54-0437R, the Holt Boulevard off ramp undercrossing westbound, carries Interstate 10 over Holt Boulevard and is located 0.31 mile north-northwest of the Project Area. It was

constructed in 1953 and was evaluated by Caltrans as a Category 5 bridge, not eligible for the NRHP under Criterion C.

- State Bridge 54-0437L, the Holt Boulevard off ramp undercrossing westbound, carries Interstate 10 over Holt Boulevard and is located 0.30 mile north-northwest of the Project Area. It was constructed in 1966 and was evaluated by Caltrans as a Category 5 bridge, not eligible for the NRHP under Criterion C.
- State Bridge 54-0439, the Vineyard Avenue overcrossing, carries Vineyard Avenue over Interstate 10 and is located 0.67 mile northwest of the Project Area. It was constructed in 1966 and was evaluated by Caltrans as a Category 5 bridge, not eligible for the NRHP under Criterion C.

The *Handbook of North American Indians* (Lowell and Bean 1978) does not list any nearby Native Villages. The Project Area is approximately 25 miles east of Mission San Gabriel and approximately 28 miles west of the San Bernardino Asistencia.

5.1.3 Map Review and Aerial Photographs

The review of historical aerial photographs and maps of the Project Area provides information on the past land uses of the property and potential for buried archaeological sites. This information shows the Project Area was initially used for farming. Following is a summary of the review of historical maps and photographs.

- The 1858 BLM GLO Plat map for Township 1 South, Range 7 West depicts a wagon road from Los Angeles to San Bernardino roughly following the alignment of present-day Interstate 10, north of the Project Area. Cucamonga Creek is depicted as an unnamed dry wash just east of the Project Area.
- The 1865 BLM GLO Plat map for Township 1 South, Range 7 West shows the same information as the 1858 GLO Plat map.
- The 1897 Cucamonga, California topographic quadrangle map (1:62,500 scale) depicts the Project Area as undeveloped. The Southern Pacific Railroad is south of the Project Area.
- The 1900 Cucamonga, California topographic quadrangle map (1:62,500 scale) depicts the same information as the 1897 Cucamonga, California topographic quadrangle map.
- The 1903 Cucamonga, California topographic quadrangle map (1:62,500 scale) depicts the same information as the 1900 and 1897 Cucamonga, California topographic quadrangle maps.
- Aerial photographs from 1938 show that the Project Area is agricultural groves. "A Street", which roughly follows the alignment of East Guasti Road, and the Southern Pacific Railroad can be seen to the immediate south of the Project Area. No structures are visible within the Project Area.
- The 1944 Cucamonga, California topographic quadrangle map (1:62,500 scale) depicts an unnamed east–west-oriented road, which roughly follows the alignment of present-day East

Guasti Road, immediately north of the railroad tracks. Holt Boulevard is shown as part of Highway 99/70.

- Aerial photographs from 1948 show that Cucamonga Creek has been channelized, which indicated that it was channelized sometime between 1938 and 1948. No structures are visible within the Project Area.
- The 1953 Guasti, California topographic quadrangle map (1:24,000 scale) depicts the same information within the Project Area as the 1944 Cucamonga, California topographic quadrangle map. The map depicts Ontario International Airport southwest of the Project Area.
- The 1954 Ontario, California topographic quadrangle map (1:62,500 scale) depicts the same information as the 1953 Guasti, California topographic quadrangle map.
- Aerial photographs from 1959 depict Highway 99/70 in roughly the same alignment as present-day Interstate 10, north of the Project Area.
- The 1966 Guasti, California topographic quadrangle map (1:24,000 scale) depicts "A Street", which roughly follows the alignment of East Guasti Road. Highway 99/70 has been relabeled as Interstate 10.
- Aerial photographs from 1980 show the addition of East Guasti Road, which forms the southwest border of the Project Area.
- All other aerial photographs from 1985 to 2020 show the Project Area in its current state and indicate that the Project Area has never been developed.
- The 2021 Guasti, California topographic quadrangle map (1:24,000 scale) depicts the Project Area in its current undeveloped state.

In sum, the Project Area has been used for agricultural purposes with no visible structures present until the early to mid-1980s and is located adjacent to the Ontario International Airport.

5.2 Sacred Lands File Results

A search of the Sacred Lands File by the NAHC failed to indicate the presence of Native American cultural resources within the Project Area. A record of all correspondence is provided in Appendix B.

5.3 Other Interested Party Consultation Results

ECORP reached out to Ontario Heritage via email on May 9, 2023 to solicit any information about the history of the Project Area. Ontario Mayor pro tempore Debi Porada responded via email on June 27, 2023 offering the following information about the property.

The land originally belonged to the Italian Vineyard Company, also known as Guasti Winery. The company owned over 5,000 acres of vineyards and was known as the largest winery in the world in the 1930s and 1940s. With the onsite of Prohibition, Guasti Winery struggled to stay in business and decided to shifted to grape juice production. Ms. Porada also reported there was once a mission-style building made of

concrete on or near the property which was called the Bond House. This building was reportedly used to store distilled spirits until they were ready for sale. In the late 1950s, the Interstate 10 Freeway was built through the property.

5.4 Field Survey Results

ECORP Archaeologist Robert Cunningham surveyed the Project Area for cultural resources on June 1, 2023. The Project Area is fenced-off from the surrounding area and several large eucalyptus trees are in the center of the property (Figures 2 and 3). The ground cover within the Project Area is covered with weeds, which reduced visibility to 40 to 50 percent. The lowest visibility was in the center of the Project Area; the higher visibility areas were along the southern and western margins of the Project Area. The westernmost quarter of the Project Area had been cleared and compacted. The southern half of the Project Area has been utilized for dumping, as evidenced by piles of modern sand and concrete present in this area. Other impacts to the Project Area include modern refuse dumping throughout the area, with the greatest concentration of modern refuse being in the area surrounding the trees in the center of the Project Area. This refuse consists of modern cans, clothing, tires, a shopping cart, and other modern refuse.



Figure 2. Project Area from Northeastern Corner (view southwest; June 1, 2023).



Figure 3. Project Area Overview (view southwest; June 1, 2023).

The Project Area is a former agricultural grove; however, the trees have been removed and ECORP did not identify any irrigation features during the survey. Furthermore, the archaeological survey did not identify any evidence of previous structures, or foundations,. The archaeologist identified one isolate archaeological resource, which was recorded as OH-1 (Figure 4). This resource is discussed in the next subsection.

5.4.1 Cultural Resources

As a result of previous investigations by other firms, no resources had previously been recorded within the Project Area. ECORP recorded one isolate (OH-1) during the pedestrian survey on June 1, 2023.

OH-1 is a historic-period isolated find consisting of a single shard of SCA glass. The shard measures 7/8 inch long, 5/8 inch wide, and 1/4 inch thick and contains a few gas seeds (Figure 4). The archaeologist found it on the surface in a heavily disturbed area, which has been cleared and graded repeatedly over several years. A resource overview map is included in confidential Appendix D.

One of the basic ingredients of glass is sand, and most sand contains iron impurities that result in various hues of glass that range from green to dark amber. Beginning in the mid-1870s, the market for colorless glass was growing. Because low iron sand was not commonly available, glass makers added manganese to decolorize the final products like tableware and flat window glass (Lockhart 2006). When manganese-containing glass is exposed to ultraviolet (UV) radiation from sunlight over an extended period, however, a chemical reaction occurs. The UV radiation interacts with the manganese ions in the glass, causing them to change their oxidation state. This leads to the formation of tiny particles of amorphous manganese dioxide within the glass, which impart a purple or amethyst color to the glass's appearance. This color change is known as "sun-purpled" glass and can be observed in glassware that has been exposed to sunlight for many years. During World War I, manganese was more difficult to obtain and technological

changes in glassmaking led to the use of other decoloring agents like selenium. Although some specialty bottles were still using manganese glass until the 1930s, the use of manganese in glassmaking precipitously dropped after 1920 and is generally concurrent with the end of mouth-blown bottle production (Lockhart 2006).



Figure 4. Closeup View of OH-1, an Isolated Sun-Colored Amethyst Glass Fragment (detail view; June 1, 2023)

6.0 EVALUATION CRITERIA

6.1 Federal Evaluation Criteria

Under Federal law, resources are evaluated using the NRHP eligibility criteria following the regulations implementing Section 106 of the NHPA (36 CFR Part 800). The eligibility criteria for the NRHP are as follows (36 CFR 60.4):

> "The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of state and local importance that possess aspects of integrity of location, design, setting, materials, workmanship, feeling, association, and
>
> (a) that are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> (b) that are associated with the lives of persons significant in our past; or

(c) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

(d) that have yielded, or may be likely to yield, information important in prehistory or history.

In addition, the resource must be at least 50 years old, except in exceptional circumstances (36 CFR 60.4).

Historical buildings, structures, and objects are usually eligible under Criteria A, B, and C based on historical research and architectural or engineering characteristics. Archaeological sites are usually eligible under Criterion D, the potential to yield information important in prehistory or history. The lead federal agency makes the determination of eligibility and seeks concurrence from the SHPO.

Effects to NRHP-eligible resources (historic properties) are adverse if the project may alter, directly or indirectly, any of the characteristics of a Historic Property that qualify the property for inclusion in the NRHP in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association.

6.1.1 State Evaluation Criteria

Under State law (CEQA), cultural resources are evaluated using CRHR eligibility criteria in order to determine whether any of the sites are Historical Resources, as defined by CEQA. CEQA requires that impacts to Historical Resources be identified and, if the impacts would be significant, that mitigation measures to reduce the impacts be applied.

A Historical Resource is a resource that:

1. is listed in or has been determined eligible for listing in the CRHR by the State Historical Resources Commission;

2. is included in a local register of historical resources, as defined in PRC 5020.1(k);

3. has been identified as significant in a historical resources survey, as defined in PRC 5024.1(g); or

4. is determined to be historically significant by the CEQA lead agency CCR Title 14, Section 15064.5(a)]. In making this determination, the CEQA lead agency usually applies the CRHR eligibility criteria.

The eligibility criteria for the CRHR (CCR Title 14, Section 4852(b)) state that a resource is eligible if:

1. it is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the U.S.;

2. it is associated with the lives of persons important to local, California, or national history.

3. it embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or

4. it has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the Nation.

In addition, the resource must retain integrity. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association (CCR Title 14, Section 4852(c)).

Historical buildings, structures, and objects are usually eligible under Criteria 1, 2, and 3 based on historical research and architectural or engineering characteristics. Archaeological sites are usually eligible under Criterion 4, the potential to yield information important in prehistory or history. The CEQA lead agency makes the determination of eligibility. Cultural resources determined eligible for the NRHP by a federal agency are automatically eligible for the CRHR.

Impacts to a Historical Resource (as defined by CEQA) are significant if the resource is demolished or destroyed or if the characteristics that made the resource eligible are materially impaired (CCR Title 14, Section 15064.5(a)).

Lastly, a Tribal Cultural Resource, as defined in Section 21074 of the California PRC, can only be identified and evaluated by culturally-affiliated California Native American tribes through government-to-government consultation. As such, only the consultation record of the CEQA lead agency, and not this technical report, addresses Tribal Cultural Resources.

7.0 EVALUATION

OH-1 is a historic-age isolate and does not require further study. Isolates are unassociated artifacts or minor features that represent either accidental inclusion or are otherwise disconnected from the human activity that produced it. Isolates typically do not individually contribute to the broad patterns of history because they cannot be connected to a particular event (NRHP Criterion A/CRHR Criterion 1). Isolates are similarly difficult to associate with specific individuals due to their lack of association with archaeological or historical sites, and generally no information exists in the archival record to associate isolates with important individuals in history (NRHP Criterion B/CRHR Criterion 2). OH-1 is a non-diagnostic glass shard. Isolates like this do not, therefore, embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possess high artistic values (NRHP Criterion C/CRHR Criterion 3). Finally, isolates in general do not provide important information in history or prehistory (NRHP Criterion D/CRHR Criterion 4). Therefore, isolate OH-1 does not meet the eligibility criteria for inclusion in the NRHP or CRHR as an individual resource. The isolate does not contribute to any known or suspected historic districts; and is neither considered to be a Historic Property for the purpose of Section 106 NHPA, nor a Historical Resource under CEQA.

Lastly, OH-1 is not listed in the local register of historical resources, as defined in PRC 5020.1(k), has not been identified as significant in a historical resources survey, as defined in PRC 5024.1(g), and has not been determined to be historically significant by the CEQA lead agency [CCR Title 14, Section 15064.5(a)]. Therefore, it is not a historical resource under CEQA and is not a historic property under Section 106 of the NHPA.

8.0 MANAGEMENT CONSIDERATIONS

8.1 Conclusions

The records search did not yield any historic-period or pre-contact cultural resources within the Project Area. Although outreach with the Ontario Heritage reported a possible structure previously within the Project Area, there is no evidence of a structure indicated in reviews of historic aerials or the field survey. The field survey identified a single historic-period isolated find. Isolated finds are not considered Historic Properties under Section 106, nor are they considered historic properties under CEQA. Therefore, no Historic Properties under Section 106 of the NHPA or Historical Resources under CEQA will be affected by the Proposed Project. Until the lead agencies concur with the identification and evaluation of eligibility of cultural resources, no Project activity should occur.

8.2 Likelihood for Subsurface Cultural Resources

Due to the Project Area being covered by Holocene alluvium deposited during the period of human occupation in the Americas and the proximity to Cucamonga Creek, which was channelized during the historic period, there exists a potential for buried pre-contact and historic archaeological sites within the Project Area. However, due to the past agricultural use of the Project Area and the presence of only a single pre-contact resource within a 1-mile radius of the Project Area, the potential for intact precontact subsurface cultural deposits is low. A request for information from Ontario Heritage suggests a historic

structure may have been located on this site. However, review of historic topographical maps and aerial photographs suggest the area was used only for agricultural purposes, with no historic structures. Field investigation showed no indication of historic structures and found only one historic isolate. Due to a history of agricultural usage, and evidence of earthmoving activities related to the canal, the Interstate 10 freeway, and the onramp, the potential for intact historic subsurface cultural deposits is low.

8.3 Recommendations

8.3.1 Post-Review Discoveries

There always remains the potential for ground-disturbing activities to expose previously unrecorded cultural resources. Both CEQA and Section 106 of the NHPA require the lead agency to address any unanticipated cultural resource discoveries during Project construction. Therefore, ECORP recommends the following procedures.

- If subsurface deposits believed to be cultural or human in origin are discovered during construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:
    - If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately and no agency notifications are required.
    - If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, the archaeologist shall immediately notify the lead agencies. The agencies shall consult on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined by CEQA or a historic property under Section 106 NHPA, if applicable. Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the site either: 1) is not a Historical Resource under CEQA or a Historic Property under Section 106; or 2) that the treatment measures have been completed to their satisfaction.
    - If the find includes human remains, or remains that are potentially human, they shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641). The archaeologist shall notify the San Bernardino County Coroner (per Section 7050.5 of the Health and Safety Code). The provisions of Section 7050.5 of the California Health and Safety Code, Section 5097.98 of the California PRC, and AB 2641 will be implemented. If the coroner determines the remains are Native American and not the result of a crime scene, the coroner will notify the NAHC, which then will designate a Native American Most Likely Descendant (MLD) for the Project (Section 5097.98 of the PRC). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the

recommendations of the MLD, the NAHC can mediate (Section 5097.94 of the PRC). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (Section 5097.98 of the PRC). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.

The lead agency is responsible for ensuring compliance with these mitigation measures. Section 15097 of Title 14, Chapter 3, Article 7 of CEQA, *Mitigation Monitoring or Reporting*, "The public agency shall adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects. A public agency may delegate reporting or monitoring responsibilities to another public agency or to a private entity which accepts the delegation; however, until mitigation measures have been completed the lead agency remains responsible for ensuring compliance with these measures.

9.0 REFERENCES CITED

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LIST OF APPENDICES

Appendix A –Records Search Confirmation and Historical Society Coordination

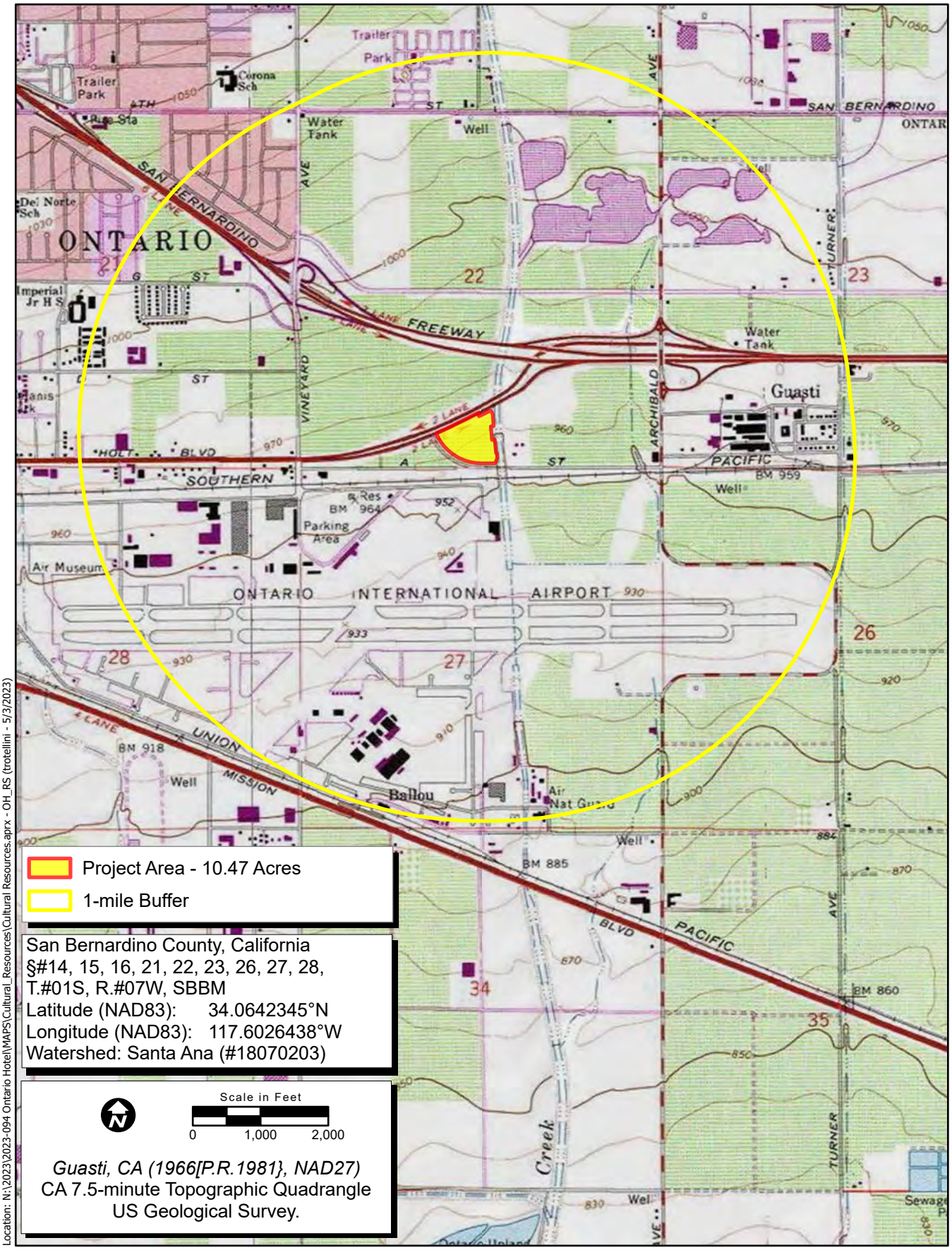
Appendix B – Sacred Lands File Coordination

Appendix C – Project Area Photographs

Appendix D – ***Confidential*** Cultural Resource Site Locations and Site Records

APPENDIX A

Records Search Confirmation and Historical Society Coordination



Location: N:\2023\2023-094 Ontario Hotel\MAPS\Cultural_Resources\Cultural Resources.aprx - OH_RS (trotellini - 5/3/2023)

Map Date: 5/3/2023
Sources: ESRI, USGS

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Records Search

2023-094 Ontario Hotel

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
SB-00317	NADB-R - 1060317; Voided - 76-4.2	1976	MARTZ, PATRICIA	DESCRIPTION AND EVALUATION OF THE CULTURAL RESOURCES: CUCAMONGA, DEMENS, DEER AND HILLSIDE CREEK CHANNELS, SAN BERNARDINO AND RIVERSIDE COUNTIES, CALIFORNIA	ARCHAEOLOGICAL RESEARCH UNIT, UCR	36-000270, 36-000895, 36-000897, 36-000898, 36-000899, 36-000900, 36-000901, 36-000902, 36-015231
SB-02863	NADB-R - 1062863	1993	WLODARSKI, ROBERT J.	NEGATIVE ARCHAEOLOGICAL SURVEY REPORT, PROVIDE HIGH OCCUPANCY VEHICLE (HOV) LANES ON I-10 BETWEEN MILLS AND I-15	HEART	
SB-03248	NADB-R - 1063248	1994	SMITH, FRANCESCA and ROBERT WLODARSKI	HISTORIC PROPERTY SURVEY REPORT: PROVIDE HIGH OCCUPANCY VEHICLE LANES ON I-10 BETWEEN THE LOS ANGELES/SAN BERNARDINO COUNTY LINE & I-15 IN SAN BERNARDINO COUNTY, CA	MYRA L. FRANK & ASSOCIATES	
SB-03586	NADB-R - 1063586	2000	LOVE, BRUCE	ONTARIO TO COLTON PIPELINE, SAN BERNARDINO COUNTY, CA. 26PP	CRM TECH	36-006859
SB-04138	NADB-R - 1064138	2002	TANG, BAI	IDENTIFICATION & EVALUATION OF HISTORIC PROPERTIES: FOURTH ST RECYCLED WATER PIPELINE IN AND NEAR THE CITIES OF ONTARIO & RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CA. 29PP	CRM TECH	
SB-04151	NADB-R - 1064151	2001	BUDINGER, FRED E.	VERIZON WIRELESS SITE: TURNER B COW, 200 E. HOLT AVE, ONTARIO, CA. 9PP	TETRA TECH, INC	
SB-04152	NADB-R - 1064152	2002	BILLAT, LORNA	NEXTEL COMMUNICATIONS PROPOSED WIRELESS TELECOMMUNICATIONS SERVICE FACILITIES IN SOUTHERN CALIFORNIA--CA 6685E ONTARIO. 13PP	EARTHTOUCH, LLC	
SB-04167	NADB-R - 1064167	2003	DAHDUL, MIRIAM	IDENTIFICATION AND EVALUATION OF HISTORIC PROPERTIES: ONTARIO SENIOR HOUSING PROJECT, 1449 EAST D ST, CITY OF ONTARIO, SAN BERNARDINO COUNTY, CA. 15PP	CRM TECH	
SB-04671	NADB-R - 1064671	2005	Dice, Michael	Cultural Resource Records Search and Site Visit Results for the Proposed Ontario Airport TIS Transmitter Site, Located near Parking Lot D & F of the Ontario International Airport, Ontario, San Bernardino County, California.		

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
SB-04678	NADB-R - 1064678	2005	Encarnacion, Deirdre, Bai Tang, Michael Hogan, John J. Eddy, and Daniel Ballester	Historical/Archaeological Resources Survey Report: San Antonio Channel (West Edison) Recycled Water Pipeline Project in the Cities of Montclair and Ontario, San Bernardino County, California.	CRM TECH	36-015982, 36-016417
SB-05358	NADB-R - 1065358	1976	Sider, W.A.	Cucamonga Creek 1776-1976 After 200 Years.		
SB-05367	NADB-R - 1065367	2004	Marvin, Judith and Riordan Goodwin	Cultural Resource Assessment: Hofer Ranch Airport Business Park Specific Plan Amendment, City of Ontario, San Bernardino County, California.	LSA	36-016249, 36-016261
SB-05481	NADB-R - 1065481	2005	Budinger, Fred E.	Proposed Wireless Device Monopalm and Associated Equipment; Branding Site, 1175 N. Del Rio Place, Ontario, California, 91761.		
SB-06072	NADB-R - 1066072	2008	Bonner, Wayne H. and Marnie Aislin-Kay	Cultural Resource Records Search Results for Royal Street Communications, California LLC Candidate LA0726A (Ontario Corporate Center), 430 North Vineyard Avenue, Ontario, San Bernardino County, California.		
SB-06522	NADB-R - 1066522	2009	Bonner, Wayne H. and Sarah A. Williams	Cultural Resources Records Search and Site Visit for T-Mobile USA Candidate IE 25501F (Hellman Row), 6th Street and Hellman Avenue, Ontario, San Bernardino County, California.		
SB-07006	NADB-R - 1067006	2011	Puckett, Heather R.	Yale, 2235 E. 4th Street, Ontario, California.		
SB-07755	NADB-R - 1067756	2014	McKenna, Jeanette A.	A Phase I Cultural Resources Investigation of the Meredity Internationall Centre Project Area in the City of Ontario, San Bernardino County, California.	McKenna et al	
SB-07853	NADB-R - 1067853	2014	Fulton, Phil and Casey Tibbett	Cultural Resource Assessment Class III Inventory: Verizon Wireless Services Elma Facility, City of Ontario, County of San Bernardino, California.	LSA	
SB-08071	Paleo -	2015	McKenna, Jeanette A.	ARCHAEOLOGICAL/PALEONTOLOGICAL MONITORING, VINEYARD INDUSTRIAL II, LLC, PROJECT AREA, ONTARIO, SAN BERNARDINO COUNTY, CALIFORNIA	McKENNA et al.	36-026315

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
SB-08204		2015	McKenna, Jeanette A.	ARCHAEOLOGICAL/PALEONTOLOGICAL MONITORING, VINEYARD INDUSTRIAL I, LLC, BUILDING 3 PROJECT AREA, ONTARIO, SAN BERNARDINO COUNTY, CALIFORNIA	McKENNA et al.	36-026315
SB-08228	Paleo -	2016	McKenna, Jeanette A.	ARCHAEOLOGICAL/PALEONTOLOGICAL MONITORING PROGRAM, 4TH STREET SEWER PIPE INSTALLATION BETWEEN VINEYARD AVENUE AND ARCHIBALD AVENUE, ONTARIO, SAN BERNARDINO COUNTY, CALIFORNIA	McKenna et al.	
SB-08257		2016	Tang, Bai	Due-Diligence Historical/Archaeological Resources Study Inland Empire Utilities Agency Recharge Basin Maintenance Plan Chino Basin Area, San Bernardino and Riverside Counties, California CRM TECH Contract No. 2989	CRM TECH	

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

May 9, 2023

Ontario Historical Society
Ontario, CA 91762
Sent via email: Info@ontarioheritage.org

RE: Cultural Resources Identification Effort for the Ontario Hotel Project, San Bernardino County, California

Dear Ontario Heritage:

ECORP Consulting, Inc. has been retained to assist in the planning of the development on the project indicated above. The proposed project area consists of a roughly triangular area comprising a total of approximately 10.47 acres located in the City of Ontario This area Is located between the Holt Boulevard on-ramp, the Southern pacific Railroad, and a creek in the Southeast quarter of the southwest quarter of section 22 in Township 1 south, Range 7 west as depicted on the 1981 Photo revised version of the 1966 Guasti, California 7.5 minute topographical map, as shown in the highlighted area on the enclosed map. As part of the identification effort, we are seeking information from all parties that may have knowledge of or concerns with historic properties or cultural resources in the area of potential effect.

Included is a map showing the project area outlined. We would appreciate input on this undertaking from the historical society with concerns about possible cultural properties or potential impacts within or adjacent to the area of potential effect. If you have any questions, please contact me at (909) 307-0046 or ssifuentes@ecorpconsulting.com.

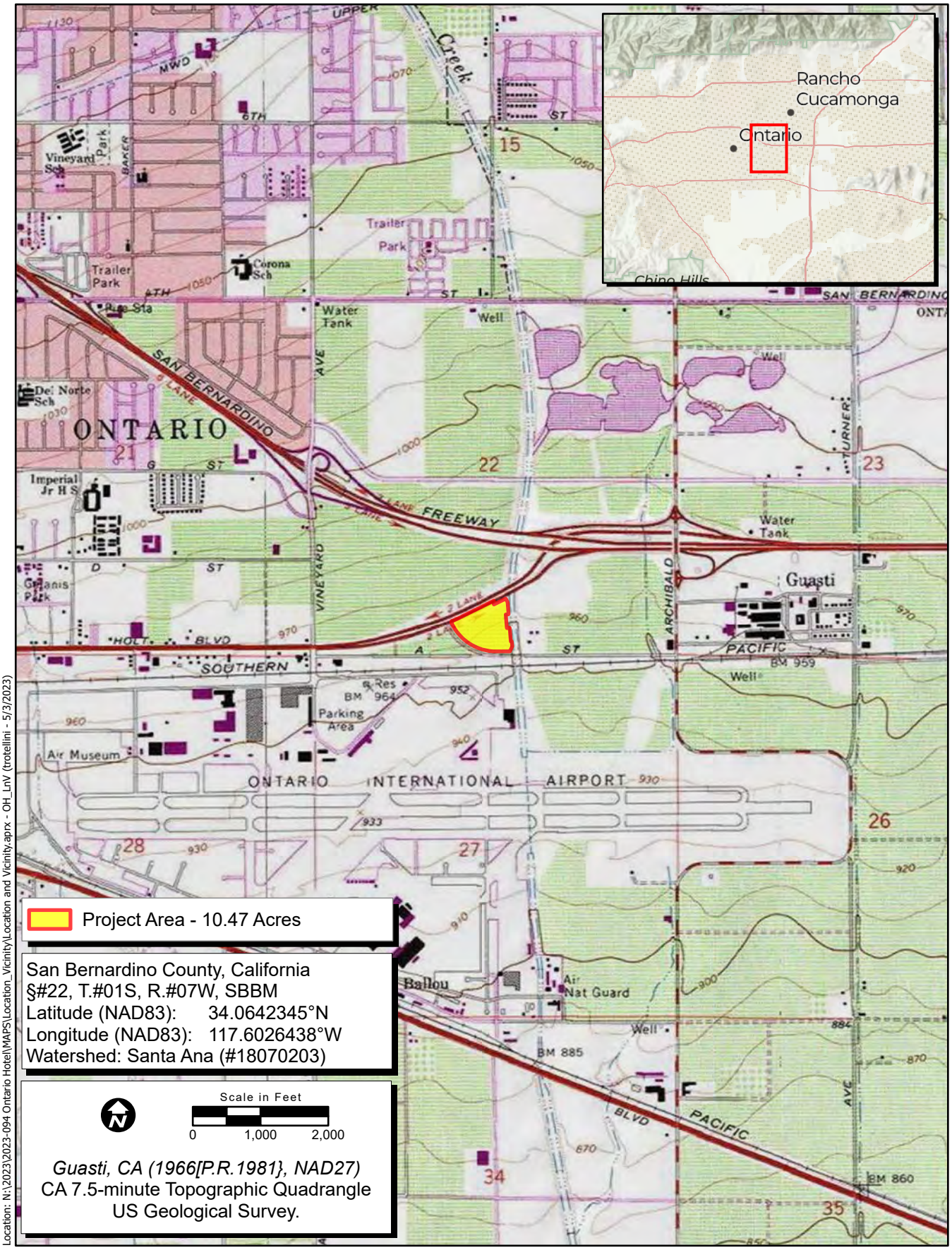
Thank you in advance for your assistance in our cultural resource management study.

Sincerely,

Sonia Sifuentes

Southern California Cultural
Resources Manager/Senior
Archaeologist

Attachment:
Project Location and Vicinity Map



Location: N:\2023\2023-094 Ontario Hotel\MAPS\Location_Vicinity\Location and Vicinity.aprx - OH_LnV (trotellini - 5/3/2023)

Map Date: 5/3/2023
Sources: ESRI, USGS

Figure 1. Project Location and Vicinity

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

2023-094 Ontario Hotel

APPENDIX B

Sacred Lands File Coordination

Sacred Lands File & Native American Contacts List Request

Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691
916-373-3710
916-373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: 2023-094 Ontario Hotel

County: San Bernardino

USGS Quadrangle Name: Guasti, California

Township: 1 South **Range:** 7 West **Section(s):** 22

Company/Firm/Agency: ECORP Consulting, Inc.

Street Address: 215 North 5th Street

City: Redlands, CA **Zip:** 92374

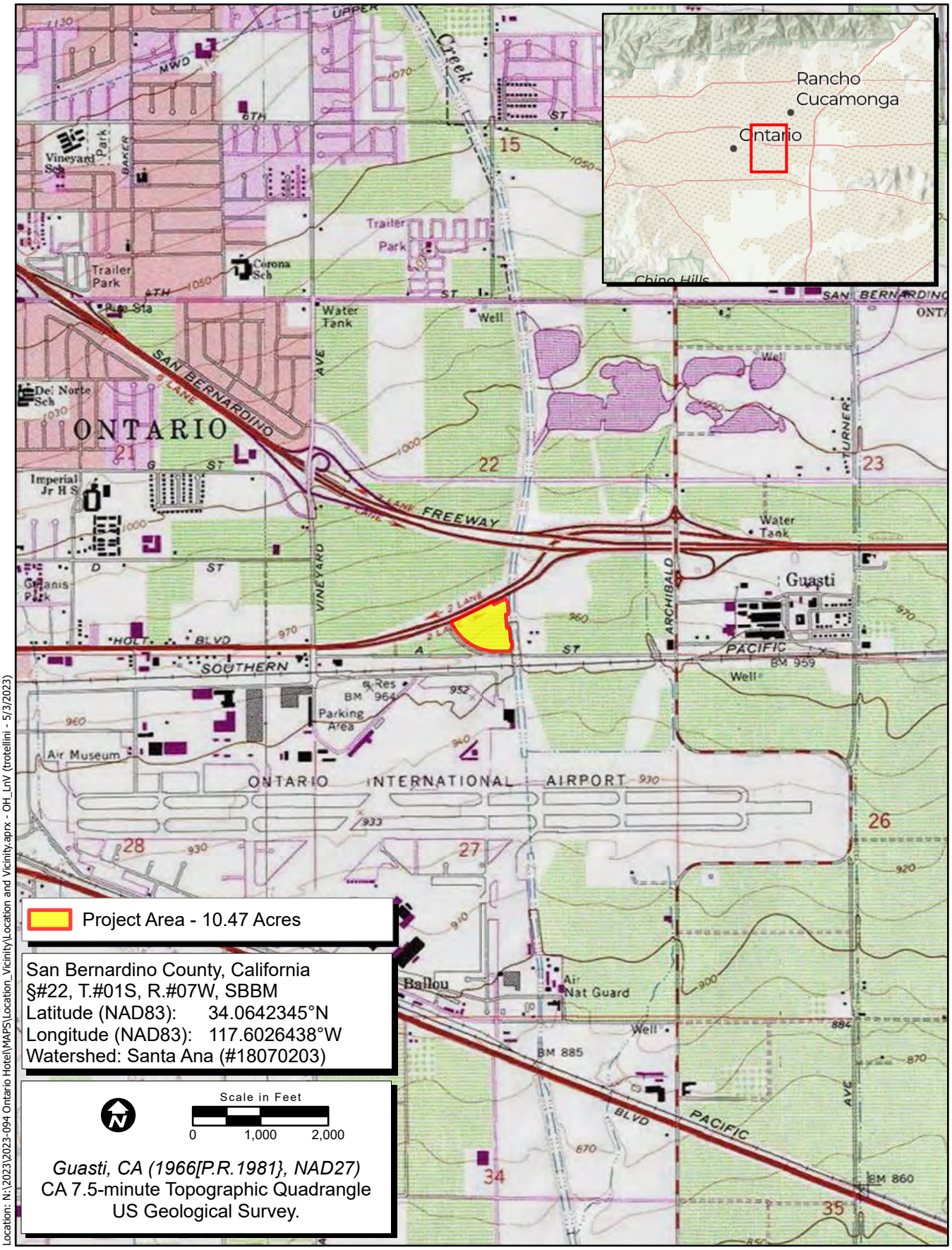
Phone: (909)307-0046

Fax: (909)307-0056

Email: rjcunningham@ecorpconsulting.com

Project Description:

Diversified Pacific Communities proposes the development of a 1,073,671 square foot hotel and parking facility located on an 10.47 acre lot also known as APN(0110-322-33).Please refer to project number 2023-094 and CC rjcunningham@ecorpconsulting.com and ssifuentes@ecorpconsulting.com in all correspenence.



Location: N:\2023\2023-094 Ontario Hotel\MAPS\Location_Vicinity\Location and Vicinity.aprx - OH_LnV (trotellini - 5/3/2023)

Map Date: 5/3/2023
Sources: ESRI, USGS

Figure 1. Project Location and Vicinity

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

2023-094 Ontario Hotel

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
[Vacant]

VICE CHAIRPERSON
Reginald Pagaling
Chumash

SECRETARY
Sara Dutschke
Miwok

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

COMMISSIONER
Wayne Nelson
Luiseño

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
[Vacant]

COMMISSIONER
[Vacant]

EXECUTIVE SECRETARY
Raymond C.
Hitchcock
Miwok/Nisenan

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

June 4, 2023

Robert Cunningham
ECORP Consulting, Inc.

Via Email to: rjcunningham@ecorpconsulting.com

Re: 2023-094 Ontario Hotel Project, San Bernardino County

Dear Mr. Cunningham:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Cameron.vela@nahc.ca.gov.

Sincerely,

Cameron Vela

Cameron Vela
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
San Bernardino County
6/4/2023

Agua Caliente Band of Cahuilla Indians
Reid Milanovich, Chairperson
5401 Dinah Shore Drive — Cahuilla
Palm Springs, CA, 92264
Phone: (760) 699 - 6800
Fax: (760) 699-6919
laviles@aguacaliente.net

Agua Caliente Band of Cahuilla Indians
Patricia Garcia-Plotkin, Director
5401 Dinah Shore Drive — Cahuilla
Palm Springs, CA, 92264
Phone: (760) 699 - 6907
Fax: (760) 699-6924
ACBCI-THPO@aguacaliente.net

Augustine Band of Cahuilla Mission Indians
Amanda Vance, Chairperson
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This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed 2023-094 Ontario Hotel Project, San Bernardino County.

Native American Heritage Commission
Native American Contact List
San Bernardino County
6/4/2023

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This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed 2023-094 Ontario Hotel Project, San Bernardino County.

APPENDIX C

Project Area Photographs

PHOTOGRAPH RECORD

Page 1 **of** 1 **Project Name or #: Ontario Hotel 2023-094** **Year** 2023
Camera Format: Digital Lens Size: 35mm
Film Type and Speed: Digital Negatives Kept at: ECORP Consulting, Inc.

Mo.	Day	Time	Exp./Frame	Subject/Description	View Toward	Accession #
6	1		1846	Project Area overview from southeast corner	North	
6	1		1847	Project overview from SE corner	Northwest	
6	1		1848	Project overview from SE corner	West	
6	1		1849	Ground disturbance along southern boundary	Ground	
6	1		1850	Project Area overview from NE corner	South	
6	1		1851	Project Area overview from northest corner	Southwest	
6	1		1852	Ground conditions	Ground	
6	1		1853	Eucalyptus trees in center of property	Northwest	
6	1		1854	Modern dumping	West	
6	1		1855	Roots of felled tree	West	
6	1		1856	Soil and concrete debris piles	West	
6	1		1857	Stump of felled tree	East	
6	1		1858	Overview from center of Project Area	North	
6	1		1859	Overview from center of Project Area	East	
6	1		1860	Overview from center of Project Area	South	
6	1		1861	Overview from center of Project Area	West	
6	1		1862	OH-1 SCA glass shard	Ground	
6	1		1863	OH-1 SCA glass shard	Ground	
6	1		1864	Project Area overview from western end	Northeast	
6	1		1865	Project Area overview from western end	East	
6	1		1866	Project Area overview from western end	South	
6	1		1867	Overview of cleared and graded western ¼ of Project Area	Southeast	
6	1		1868	Ground conditions in cleared ¼ of Project Area	Ground	

IMG_1846.JPG

IMG_1847.JPG

IMG_1848.JPG

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IMG_1850.JPG

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Confidential Cultural Resource Site Location and Site Record

This Attachment contains information on the specific location of cultural resources. This information is not for publication or release to the general public. It is for planning, management and research purposes only. Information on the specific location of pre-contact and historic sites is exempt from the Freedom of Information Act and California Public Records Act.

Appendix E
Energy Analysis

Energy Calculations
Electricty and Natural Gas Usage

Land Use	Electricity Use		Natural Gas Use	
	(kWh/yr)	(MWh/yr)	(kBTU/yr)	(Therms/yr)
Hotel	10,364,336	10,364	19,400,828	194,008
Enclosed Parking with Elevator	1,610,978	1,611	0	0
Total	***11,975,314***	***11,975***	***19,400,828***	***194,008***

Source: Refer to CalEEMod outputs for assumptions used in this analysis.

Energy Type	Project Annual Energy Consumption	San Bernardino County Annual Energy Consumption (2022)[1,2]	Percentage Increase Countywide
Electricity (MWh)	11,975	16,629,614	0.0720%
Natural Gas (therms)	194,008	562,123,065	0.0345%

Notes:

1. County annual electricity consumption data source: California Energy Commission, *Electricity Consumption by County* , http://www.ecdms.energy.ca.gov/elecbycounty.aspx.
2. County annual natural gas consumption data source: California Energy Commission, *Gas Consumption by County* , http://www.ecdms.energy.ca.gov/gasbycounty.aspx.

Source: Refer to CalEEMod outputs for assumptions used in this analysis.

Energy Calculations
Construction Off-Road (Equipment)
Fuel Consumption

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	Fuel Consumption Rate (gallon/hour)[1]	Duration (total hours/day)	# days	Total Fuel Consumption (gallon)
Site Preparation	Rubber Tired Dozers	3	8	367	0.4	5.87	24	10	1,409.28
Site Preparation	Crawler Tractors	4	8	87	0.43	1.50	32	10	478.85
Grading	Graders	1	8	148	0.41	2.43	8	30	582.53
Grading	Excavators	2	8	36	0.38	0.55	16	30	262.66
Grading	Scrapers	2	8	423	0.48	8.12	16	30	3,898.37
Grading	Rubber Tired Dozers	1	8	367	0.4	5.87	8	30	1,409.28
Grading	Crawler Tractors	2	8	87	0.43	1.50	16	30	718.27
Building Construction	Forklifts	3	8	82	0.2	0.66	24	300	4,723.20
Building Construction	Generator Sets	1	8	14	0.74	0.41	8	300	994.56
Building Construction	Cranes	1	8	367	0.29	4.26	8	300	10,217.28
Building Construction	Welders	1	8	46	0.45	0.83	8	300	1,987.20
Building Construction	Tractors/Loaders/Backhoes	3	8	84	0.37	1.24	24	300	8,951.04
Paving	Pavers	2	8	81	0.42	1.36	16	20	435.46
Paving	Paving Equipment	2	8	89	0.36	1.28	16	20	410.11
Paving	Rollers	2	8	36	0.38	0.55	16	20	175.10
Architectural Coating	Air Compressors	1	8	37	0.48	0.71	8	90	511.49
								Total Construction Off-Road Fuel Consumption (gallon)	***37,164.67***
								Countywide Off-Road Fuel Consumption (2024) (gallon)[2]	***18,336,278.40***
								Percentage Increase Countywide	***0.2027%***

Notes:

1. Fuel Consumption Rate = Horsepower x Load Factor x Fuel Consumption Factor

Where:

Fuel Consumption Factor for a diesel engine is 0.04 gallons per horsepower per hour (gal/hp/hr) and a gasoline engine is 0.06 gal/hp/hr.

2. Countywide operational fuel consumption, off-road construction equipment diesel fuel consumption, and on-road fuel consumption are from CARB's OFFROAD2021 (v1.0.5) Emissions Inventory.

Source: Refer to CalEEMod outputs for assumptions used in this analysis.

Energy Calculations
Constrution On-Road (Mobile) Fuel Consumption

WORKER TRIPS						
Phase	**Phase Length (# days)**	**# Worker Trips**	**Worker Trip Length**	**Total VMT**	**Fuel Consumption Factor (Miles/Gallon/Day)**	**Total Fuel Consumption (gallon)**
Site Preparation	10	17.5	18.5	3,238		130.01
Grading	30	20	18.5	11,100		445.73
Building Construction	300	456	18.5	2,530,800	**24.90284233**	101,626.95
Paving	20	15	18.5	5,550		222.87
Architectural Coating	90	91.2	18.5	151,848		6,097.62
					Worker Trips Total	*108,523.17*
VENDOR TRIPS						
Phase	**Phase Length (# days)**	**# Vendor Trips**	**Vendor Trip Length**	**Total VMT**	**Fuel Consumption Factor (Miles/Gallon/Day)**	**Total Fuel Consumption (gallon)**
Site Preparation	10	5	10.2	510		61.12
Grading	30	16	10.2	4,896		586.78
Building Construction	300	157	10.2	480,420	**8.343886151**	57,577.49
Paving	20	0	10.2	0		0.00
Architectural Coating	90	0	10.2	0		0.00
					Vendor Trips Total	*58,225.39*
HAULING TRIPS						
Phase	**Phase Length (# days)**	**# Hauling Trips**	**Hauling Trip Length**	**Total VMT**	**Fuel Consumption Factor (Miles/Gallon/Day)[1]**	**Total Fuel Consumption (gallon)**
Site Preparation	10	0	20	0		0.00
Grading	30	542	20	325,200		38,974.64
Building Construction	300	0	20	0	**8.343886151**	0.00
Paving	20	0	20	0		0.00
Architectural Coating	90	0	20	0		0.00
					Hauling Trips Total	*38,974.64*
					Total Construction On-Road (Mobile) Fuel Consumption (gallon)	**205,723.21**
					Countywide On-Road Fuel Consumption (2024) (gallon) [1]	*205,723,206*
					Percentage Increase Countywide	***0.1000%***

Notes:

1. Countywide operational fuel consumption, off-road construction equipment diesel fuel consumption, and on-road fuel consumption are from CARB's EMFAC2021.

Source: Refer to CalEEMod outputs for assumptions used in this analysis.

Empire Groves Specific Plan

Energy Calculations

Operation On-Road (Mobile) Fuel Consumption

Vehicle Type	Percent of Vehicle Trips[1]	Daily Trips[2]	Annual Vehicle Miles Traveled	Average Fuel Economy (miles per gallon)[3]	Total Annual Fuel Consumption (gallon)[4]
Passenger Cars	0.49	2,382	8,455,972	22	384,362
Light/Medium Trucks	0.48	2,319	8,229,813	17.3	475,712
Heavy Trucks/Other	0.03	141	500,909	6.4	78,267
Total	***1.00***	**4,842**	***17,186,694***	**--**	***938,341***
				Total Operational On-Road (Mobile) Fuel Consumption (gallon)	**938,341**
				Countywide On-Road Fuel Consumption (2025) (gallon)[5]	*1,110,012,646*
				Percentage Increase Countywide	***0.0845%***

Notes:

1. Percent of Vehicle Trip distribution based on trip characteristics within the CalEEMod model.
2. Daily Trips taken from Traffic Study
3. Average fuel economy derived from the Department of Transportation.
4. Total Daily Fuel Consumption calculated by dividing the daily VMT by the average fuel economy (i.e., VMT/Average Fuel Economy).
5. Countywide operational fuel consumption, off-road construction equipment diesel fuel consumption, and on-road fuel consumption are from CARB's EMFAC2021.

Source: Refer to CalEEMod outputs for assumptions used in this analysis.

Appendix F
Geotechnical Evaluation

PRELIMINARY GEOTECHNICAL EVALUATION
PROPOSED EMPIRE RESORT AND SPA PROJECT
APPROXIMATELY 10.4 ACRES OF VACANT LAND AT SOUTHEAST CORNER OF
E. HOLT BOULEVARD AND E. GUASTI ROAD, APN 011 032 233
CITY OF ONTARIO, SAN BERNARDINO, CALIFORNIA

DIVERSIFIED PACIFIC COMMUNITIES

February 10, 2023
J.N. 22-398

DRAFT

February 10, 2023
J.N. 22-398

DIVERSIFIED PACIFIC COMMUNITIES
10621 Civic Center Drive
Rancho Cucamonga, California 91730

Attention: Mr. Nolan Leggio

Subject: **Preliminary Geotechnical Evaluation, Proposed Empire Resort and Spa Project, Approximately 10.4 Acres of Vacant Land at Southeast Corner of E. Holt Boulevard and E. Guasti Road, APN 011 032 233, City of Ontario, San Bernardino, California**

Dear Mr. Leggio:

Petra Geosciences, Inc. (Petra) is submitting herewith our preliminary geotechnical evaluation report for the proposed Empire Resort and Spa project in the city of Ontario, California. This evaluation was performed in accordance with the scope of work outlined in our Proposal No. 22-398P dated November 18, 2022. This report is prepared based on the requirements of the 2022 California Building Code (2022 CBC) and presents our findings, engineering judgment, opinions, conclusions, and recommendations pertaining to geotechnical design aspects of the proposed development. It should be noted that this geotechnical and geological evaluation does not address soil contamination or other environmental issues, which may affect the property.

It has been a pleasure to be of service to you on this project. Please contact us if you have any questions regarding the contents of this report or require additional information.

Respectfully submitted,

PETRA GEOSCIENCES, INC.

Douglass Johnston, CEG
Senior Associate Geologist

Siamak Jafroudi, PhD, GE
Senior Principal Engineer

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FIGURE 1 – SITE LOCATION MAP
FIGURE 2 – EXPLORATION LOCATION MAP
APPENDIX A – EXPLORATION LOGS (BORINGS, TEST PITS, SEISMIC LINE AND CPT'S)
APPENDIX B – LABORATORY TESTING PROCEDURES / LABORATORY DATA SUMMARY
APPENDIX C – STANDARD GRADING SPECIFICATIONS

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PRELIMINARY GEOTECHNICAL EVALUATION REPORT
PROPOSED EMPIRE RESORT AND SPA PROJECT
APPROXIMATELY 10.4 ACRES OF VACANT LAND AT SOUTHEAST CORNER OF
E. HOLT BOULEVARD AND E. GUASTI ROAD, APN 011 032 233
CITY OF ONTARIO, SAN BERNARDINO, CALIFORNIA

INTRODUCTION

Petra Geosciences, Inc. (Petra) is presenting herein the results of our preliminary geotechnical evaluation for the proposed development of a 10-story hotel building with 2-levels of subterranean parking and appurtenant facilities within the subject 10.4-acre property situated at the southeast corner of E. Holt Boulevard and E. Guasti Road in the city of Ontario, California. The purpose of this study was to obtain subsurface and subsurface information on the general geologic and geotechnical conditions within the project area in order to provide preliminary conclusions and recommendations for the feasibility of the proposed project, as well as preliminary geotechnical recommendations for site preparation, grading and general site improvements. As grading plans, foundation and basement plans, and structural building loads are still being developed at this time, geotechnical recommendations for the building foundations will be provided under a separate cover at the appropriate time.

SCOPE OF WORK

The scope of our evaluation consisted of the following.

- Review of available published and unpublished reports, maps and data concerning geologic and soil conditions within the site and nearby area that could have an impact on the proposed development (see References).
- Review of readily available satellite imagery of the site and surrounding area.
- Coordinate with Underground Service Alert [USA] to obtain an underground-utility clearance, prior to commencement of the subsurface exploration.
- Geotechnical excavation, logging, and sampling of 12 exploratory test pits utilizing a conventional backhoe, 6 exploratory borings utilizing a hollow-stem auger drill rig, 3 Cone Penetrometer Test (CPT) soundings and performing one geophysical survey. Log and visually classify soil and materials encountered in the borings and test pits in accordance with the Unified Soil Classification System (USCS).
- Conducting laboratory testing of representative in-situ drive and bulk samples obtained from the borings and test pits to determine their engineering properties.
- Engineering and geologic analysis of the research, field exploration findings and laboratory data with respect to the proposed site development.
- Preparation of this preliminary geotechnical report presenting the results of our evaluation and providing recommendations for the proposed site development in general conformance with the requirements of the 2022 CBC, as well as in accordance with applicable state and local jurisdictional requirements.

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LOCATION AND SITE DESCRIPTION

The subject property is roughly triangular-shaped and 10.4 acres± in size, situated south of E. Holt Boulevard, north and east of E. Guasti Road and west of the concrete-lined Cucamonga Creek flood control channel. Figure 1 depicts the general site location. The property is surrounded by chain link fencing; however, two gates are present along Guasti Road on the southwest. A graded slope and dirt pathway is present along the eastern property line allowing access to the flood control channel to a concrete ramp. Structures are not known to be present however surface of the site appears to have been generally disturbed most notably in the western corner. Overhead power lines are also present along the very southern portion along Guasti and underground utilities are likely to be present adjacent to Guasti and Road and Holt Boulevard.

The property is relatively flat, sloping very gently towards the south-southeast with site elevations ranging from approximately 968 feet above mean sea level (msl) in the northwest corner to approximately 954 feet in the southeast corner. The site is essentially vacant with the exception of a number of mature trees that are present in the central potions of the site. The remainder of the site is covered with a light growth of grasses and weeds, a few remnant tree trunks as well as scattered dumped debris and trash and occasional scattered cobbles.

PROPOSED DEVELOPMENT

Based on the conceptual planning and massing exhibits prepared by Gensler dated January 9, 2023, the planned development is a mixed-use resort complex including a 10-story, 672,850 square-foot hotel, spa, convention center and retail building with 2-stories of underground parking. Ancillary site improvements are expected to include driveway and parking lot pavements, underground utilities (sewer, water, storm drain and dry utilities), an outdoor pool complex, perimeter masonry walls, sidewalks and landscaping. The building types and loads are currently unknown.

Conceptual grading plans and proposed building and underground garage elevations are not currently developed, however based on the topography of the site, we expected cuts or fills from existing grades to be on the order of 4 feet or less, with the exception of the areas for the underground parking garage. No notable cut or fills slopes are anticipated.

Literature and Online Imagery Review

Petra researched and reviewed available published and unpublished geologic data pertaining to regional geology, faulting and geologic hazards that may affect the site, see references. Available online aerial

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imagery and historic aerial photos were reviewed to assess previous land use. Based on historic aerial photos reviewed, the subject site appears to have been utilized for agricultural row crops since at least 1938. Holt Boulevard, a paved single lane road, was present on the north by 1938 and Cucamonga Creek on the east was essentially an uncontrolled natural stream channel. By 1949 Holt Boulevard was widened to a two-lane road which included a culvert just northeast of the site; Cucamonga Creek was graded as a linear earthen channel and another culvert was built to the southeast of the site. Ontario airport had also been built to the south/southwest of the site. In 1953 the site conditions were the same.

By 1977 Guasti Road was paved on the south and west and Cucamonga Creek was further graded and widened as an earthen channel which included a new culvert under Guasti Road just off the southeast property corner. Row crops were still present in 1977. By 1994 the row crops were absent, a number of mature trees were present in the center of the site, and Cucamonga Creek had been fully improved as a concrete-lined channel including additional grading along the eastern property line area and the adjacent descending concrete access ramp. The site appears to have been essentially unchanged since that time other than surficial ground disturbance, mostly notably on the west.

Field Exploration and Testing

Subsurface explorations were conducted under the supervision of an engineering geologist from Petra between December 12 and 30, 2022. Subsurface exploration involved exploration consisted of 6 hollow-stem auger borings (B-1 to B-6) utilizing a conventional drill rig equipped with 8-inch diameter augers. The borings were drilled and sampled to depths ranging from 51.5 to 101.5 feet below grades. Twelve exploratory test pits (TP-1 through TP-12) were excavated to depths between 8 to 15 feet below existing site grades utilizing a conventional backhoe. The test trenches were loosely backfilled. Earth materials encountered within the exploratory borings and test pits were classified and logged in accordance with the visual-manual procedures of the Unified Soil Classification System (USCS).

Additionally, 3 Cone Penetration Test soundings (CPT-1 to CPT-3) were advanced to approximate depths between 10 and 24 feet below surface grades utilizing a truck-mounted CPT rig where they encountered refusal at all three locations on subsurface gravels or cobbles. Lastly, the fieldwork included performing one surface seismic shear-wave survey (SW-1) by a registered geophysicist to characterize the shear wave velocity to a depth of at least 100 feet beneath the site. The approximate locations of the points of explorations are shown on the attached Figure 2 including the outline of the hotel tower location and descriptive logs are presented in Appendix A.

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Associated with the subsurface exploration was the collection of bulk and relatively undisturbed samples of the soil materials for laboratory testing. Disturbed bulk samples and relatively undisturbed ring samples of soil materials were collected for classification, laboratory testing and engineering analyses. Undisturbed samples were obtained using a 3-inch outside diameter modified California split-spoon soil sampler lined with brass rings. The soil sampler was driven with successive 30-inch drops of a free-fall, 140-pound automatic trip hammer. The central portions of the driven-core samples were placed in sealed containers and transported to our laboratory for testing. The number of blows required to drive the split-spoon sampler 18 inches into the soil were recorded for each 6-inch driving increment and are noted in the boring logs as *Blows per 6 inches*.

Standard Penetration Tests (SPT) were also performed at selected depth intervals in accordance with ASTM D 1586. This method consists of mechanically driving an unlined, 2.5-inch outside diameter (OD) standard split-barrel sampler 18 inches into the soil with successive 30-inch drops of the 140-pound automatic trip hammer. Blow counts for each 6-inch driving increment were recorded on the exploration logs. The number of blows required to drive the standard split-spoon sampler for each 6 inch increment are identified as the uncorrected standard penetration resistance (N). Disturbed soil samples from the unlined standard split-spoon samplers were placed in sealed plastic bags and transported to our laboratory for testing.

Laboratory Testing

Laboratory testing for selected samples of onsite soils materials included in-situ dry density and moisture content, maximum dry density and optimum moisture content, expansion index, plasticity index, consolidation potential, grain-size sieve analysis and general soil corrosivity screening potential (sulfate content, chloride content, pH/resistivity). A description of laboratory test methods and laboratory testing are presented in Appendix B and the in-site dry density and moisture content results are presented on the boring logs (Appendix A).

FINDINGS

Regional Geologic Setting

The subject property is situated within the northernmost portion of the Peninsular Ranges Geomorphic Province. Bedrock underlying the site at significant depths is part of the Perris Block which is composed of Cretaceous-age granitic and Mesozoic-age metamorphic crystalline bedrock. The Perris Block is bounded on the east by the San Jacinto fault zone, on the west by the Elsinore-Chino fault zone, on the north by the Cucamonga fault and the San Gabriel Mountains. The southern boundary of the block is vague, with an approximate boundary coincident with the hills south of Temecula, California.

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Locally, the subject site is located on the medial portion of several large coalescing alluvial fans related to San Antonio Creek, Cucamonga Creek, Deer Creek and Day Canyon washes, extending southward from the flanks of the San Gabriel Mountain range further to the north. The alluvial-fan deposits in the general vicinity of the site reportedly extend to depths of approximately 300 feet or more. The former natural stream Cucamonga Creek has been improved as a concrete-line flood control channel along the eastern boundary of the site involving unknown extent of earthwork grading.

Local Geology and Subsurface Soil Conditions

Based on the earth units encountered within our field evaluation, the surface of the site is mantled by shallow undocumented fill generally ranging in depth from 2 to 4 feet below ground surface (bgs). The surficial artificial fills are underlain by natural younger alluvial fan deposits and further underlain by older alluvial fan deposits related to the ancestral alluvial fan to the total depth explored. The onsite soil units are discussed in detail below and a generalized geologic cross section is attached as Figure 3.

- Artificial Fill – Undocumented, artificial fills soils were observed mantling the site and overlying natural alluvial soils. The fills were found to range in depth from approximately 2 to 4 feet bgs, averaging approximately 3 below grades and slightly deeper in the westerly side of the site. These soils were generally composed of dry and loose, silty fine to medium sands to occasional layers of sand with varying amount of gravels and occasional small cobbles, debris and fine roots.

- Younger Alluvial Fan Deposits – Young alluvial fan deposits were observed beneath the surface fills to approximate depths between 20 and 25 feet bgs. These upper alluvial fan deposits primarily consisted of medium dense, moist, silty sand with gravels and occasional small to medium cobbles with some thin to thickly interbedded sand with silt to poorly grades sand layers also with gravels and occasional small cobbles. Minor caving was observed in the deeper test pit excavations around 13 to 15 feet bgs.

- Older Alluvial Fan Deposits – Older alluvial fan deposits are present beneath the younger alluvium beginning at an approximate depth of 20 to 25 feet bgs and extending to the total depth explored. These soil materials consisted of dense to very dense, moist, thickly bedded silty sands with variable gravel content and several poorly graded sands/sand with silt interbeds. A notable moist and hard sandy silt bed is present at approximately 50 to 60 feet bgs and again at approximately 70 to 75 feet. Difficult drilling with apparent caving was encountered around 80 to 83 feet bgs.

Groundwater

Neither groundwater nor seepage was encountered in the borings during our subsurface exploration to a maximum depth of 101.5 feet bgs. Based on our research and review of published geotechnical literature including the Chino Basin Watermaster, the current depths to groundwater in the general area is reported to be in excess of 300 feet bgs. Regional groundwater is not anticipated to affect the proposed development.

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Faulting

Based on our review of published and unpublished geotechnical maps and literature pertaining to site geology, no active or potentially active faults are known to project through the site and the site does not lie within the bounds of an "Earthquake Fault Zone" as defined by the State of California in the Alquist-Priolo (AP) Earthquake Fault Hazard Zoning Act (Bryant and Hart, 2007) nor within a San Bernardino County fault zone. In addition, we did not observe any features in the field that would indicate active faulting. The closest known Quaternary fault is the Red Hill – Etiwanda fault which lies approximately 1,500 feet to the north. The potential for active fault rupture at the site is considered to be very low.

Secondary Seismic Effects

Secondary effects of seismic activity normally considered as possible hazards to a site include several types of ground failure and seismically induced flooding. Various general types of ground failures, which might occur as a consequence of severe ground shaking at the site, include landsliding, ground subsidence, ground lurching and lateral spreading. The probability of occurrence of each type of ground failure depends on the severity of the earthquake, distance from faults, topography, subsurface soil and groundwater conditions, in addition to other factors. The subject property proposed for development exhibits nearly level topography that is not subject to landsliding, and the potential for ground lurching and lateral spreading are considered very low. The potential for seismically-induced flooding due to tsunami or seiche (i.e., a wave-like oscillation of the surface of water in an enclosed basin) is considered negligible at this site.

Liquefaction and Seismically Induced Settlement

Liquefaction occurs when strong seismic shaking of a saturated sand or silt causes intergranular fluid (pore-water) pressures to increase to levels where grain-to-grain contact is lost, and material temporarily behaves as a viscous fluid. Liquefaction can cause settlement of the ground surface, loss of bearing, settlement and tilting of structures, lateral movement of soil masses, flotation and buoyancy of buried structures and fissuring of the ground surface. A common surface manifestation of liquefaction is the formation of sand boils – short-lived fountains of soil and water that emerge from fissures or vents and leave freshly deposited, usually conical mounds of sand or silt on the ground surface.

For sandy soils above the water table, strong seismic shaking can also result in rearrangement of the granular soil structure leading to densification of sandy soils, ground settlement and settlement and tilting of superstructures. Assessment of liquefaction or dry sand settlement potential for a particular site requires knowledge of a number of regional as well as site-specific parameters, including the estimated design earthquake magnitude, and the associated probable peak horizontal ground acceleration at the site,

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subsurface stratigraphy and soil characteristics. Parameters such as estimated probable peak horizontal ground acceleration can readily be determined using published references, or by utilizing a commercially available computer program specifically designed to perform a probabilistic analysis. On the other hand, stratigraphy and soil characteristics can only be accurately determined by means of a site-specific subsurface investigation combined with appropriate laboratory analysis of representative samples of onsite soils.

Propagating earthquake waves induce shearing stresses and strains in soil materials during strong ground shaking. This process rearranges the structure of granular soils such that there is an increase in density, with a corresponding decrease in volume, which results in vertical settlement. Dynamic settlement has been well documented in wet, sandy deposits undergoing liquefaction (see Tokimatsu and Seed, 1987) and in relatively dry sediments as well (Stewart et al, 1996). Specific methods to analyze potential wet and dry dynamic settlement are reported in Tokimatsu and Seed (1987), and specifically dry settlement in Pradel (1998) and Stewart et al. (2001; 2002) respectively. Most of the referenced papers focus on the seismic effects on dry, clean sands of a uniform grain size, though several reports extend the literature to fine-grained soils (Stewart et al., 2001 & 2002). State guidelines for evaluating dynamic settlement are provided in the California Geological Survey Special Publication 117A (CGS, 2008).

San Bernardino County has identified the general subject area within a low liquefaction zone. Groundwater is currently reported at depths of great that 300 feet bgs and considering the very dense underlying older alluvial fans deposits, liquefaction-induced settlement is considered negligible.

Dynamic Settlement Potential Analysis

A stated above, propagating earthquake waves induce shearing stresses and strains in soil materials during strong ground shaking. This process rearranges the structure of granular soils such that there is an increase in density, with a corresponding decrease in volume, which results in vertical settlement. To determine the estimated seismically induced settlement from the SPT blow counts, an idealized soil profile was constructed using the SPT blow count results from Borings B-1 through B-6. Using the dry sand settlement method presented by Pradel (1998), the total calculated settlement was significantly less than ¼ inch based on the peak ground acceleration, PGA, of 0.75g and an earthquake magnitude of 6.9. Therefore, total seismic settlement of dry soils constitutes an insignificant portion of the total settlement.

Compressible Soils

A notable geotechnical factor affecting the project site is the presence of existing artificial fills and low-density and dry, younger alluvial soils. For relatively light-weight structures, these upper materials, ranging

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in depth from approximately 6 to 10 feet bgs across the majority site, in their current state are not considered suitable for support of anticipated loads. Therefore, these materials should be removed to an approximate depth of 10 feet and replaced with engineered fill. Any such building may be supported on a shallow spread footing system embedded in compacted fill soils. The removed soils are considered to be suitable for re-use as engineered fill.

The lower approximately 10 feet of the younger alluvial soils are not expected to be suitable for the support of the main, moderate- to high-rise structure, however a portion of the proposed structure is expected to be supported on footings that are within the 2-story subterranean parking. As such, no remedial grading, i.e., over-excavation and replacement is deemed necessary in this area. Conversely, depending on the anticipated loads, considerations maybe given to removing the upper approximately 15 to 20 feet of soils consisting of younger alluvial fan deposits to support the other parts of the proposed main structure. Accordingly, these materials will require removal (over-excavation) to expose the underlying competent older alluvial fan deposits, to be verified in the field by the geotechnical consultant. The removed soils are considered to be suitable for re-use as engineered fill.

CONCLUSIONS AND RECOMMENDATIONS

Development Feasibility

Based on our field explorations, research and review of pertinent geologic literature, and preliminary laboratory testing and analysis, development of the project site is considered feasible for the proposed mixed-use development from a soils engineering, geologic and geotechnical standpoint. When grading plans and foundation/structural plans for the proposed development are available, a comprehensive plan review should be performed by this firm. The following geotechnical factors should be considered during the preliminary design process.

Seismic Shaking

The site is located within an active tectonic area of southern California with several significant faults capable of producing moderate to strong earthquakes. The site will likely be subjected to very strong seismically related ground shaking during the anticipated life span of the project and structures within the site should therefore be designed and constructed to resist the effects of strong ground motion in accordance with the most current edition of the 2022 California Building Code.

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Earthwork Recommendations

General Recommendations

Earthwork should be performed in accordance with the Grading Code of the City of Ontario and to the applicable provisions of the 2022 CBC and should also be performed in accordance with the following site-specific recommendations prepared by Petra herein based on the proposed construction.

Geotechnical Observations and Testing

Prior to the start of earthwork, a meeting should be held at the site with the owner, contractor and geotechnical consultant to discuss the work schedule and geotechnical aspects of the grading. Earthwork, which in this instance will generally entail removal and re-compaction of existing unsuitable soils, over-excavation, subterranean parking excavation and, if applicable, shoring elements installation, should be accomplished under full-time observation and testing of the geotechnical consultant. A representative of the project geotechnical consultant should be present onsite during all earthwork operations to document proper placement and compaction of fills, as well as to document compliance with the other recommendations presented herein.

Clearing and Grubbing

All existing trees and vegetation throughout the site should be removed from the site. Clearing operations should also include the removal of any trash, debris, vegetation and similar deleterious materials including the root balls for any trees. Any cavities or excavations created upon removal of any unknown subsurface structures should be cleared of loose soil, shaped to provide access for backfilling and compaction equipment and then backfilled with engineered fill. Note that buried deleterious materials may be encountered within the site (i.e., buried debris) due to the past site usage and may need to be removed by hand (i.e. root pickers), during grading operations.

The project geotechnical consultant should provide periodic observation and testing services during final clearing and grubbing operations to document compliance with the above recommendations. In addition, should unusual or adverse soil conditions or buried structures be encountered during grading that are not described herein, these conditions should be brought to the immediate attention of the project geotechnical consultant for corrective recommendations.

Suitability of On-Site Materials for Use as Engineered Fill

Based on our field observations and subsurface soil conditions encountered in our test pits, the onsite soil materials would be suitable for use as engineered fill, provided they are clean of organics, construction

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debris or other deleterious materials and oversize rock fragments greater than 12 inches in diameter. Soils exposed at or near the surface will likely require moisture-conditioning, i.e. pre-watering, to near optimum moisture for use as engineered fill during the onset of grading.

Excavation Characteristics

The existing site soils consisting of native older and younger alluvial fan deposits are expected to be readily excavated with conventional earthmoving equipment. The presence of concentrated gravels. cobble layers or low-cohesion sand layers may prohibit vertical excavation in localized areas.

Ground Preparation

Geotechnical Observations

A representative of the project geotechnical consultant should also be present on site during major grading operations to document that proper placement and adequate compaction of fills has been achieved, as well as to observe compliance with the other recommendations presented herein. Exposed bottom surfaces in remedial removal areas should be observed and approved by a representative of the project geotechnical consultant ***prior to the placement of fill***. It is the grading contractor's responsibility to notify the project geotechnical consultant at least 24 hours prior to requiring observation (including excavation bottom verification).

Unsuitable Soil Removals and Bottom Processing

The existing roughly 6 to 10 feet of upper soils are not considered suitable for support of proposed fills, structures and other improvements and should be removed to underlying competent alluvial materials as approved by the project geotechnical consultant. Further, due to anticipated large structural building loads, considerations should be given to removing the upper approximately 15 to 20 feet of soils consisting of younger alluvial fan deposits to support these anticipated heavy buildings loads on a shallow spread footing system. No removal and over-excavation is expected in areas where the building will consist of a subterranean parking.

Soil removals may need to be locally deeper depending in other areas upon the exposed conditions encountered during grading. Remedial removals should extend horizontally at least 10 feet beyond the limits of the building foundations. The actual depths and horizontal limits of removals and over-excavations should be evaluated during grading on the basis of observations and testing performed by the project geotechnical consultant.

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Remedial soil removals in parking lot, driveways and other non-building pad or retaining wall areas may be reduced to a minimum of 4 feet below existing site grades.

Prior to placing engineered fill or processing, the exposed bottom surfaces in the removal areas should be approved by a representative of project geotechnical consultant first. The exposed bottom(s) should then be scarified to a minimum depth of 12 inches, moisture-conditioned or air-dried to achieve approximately two percent above optimum moisture content and then compacted with a heavy construction equipment prior to placement of fill. Minimum compaction of the upper 12 inches of the removal bottom should meet or exceed 90 percent relative compaction. The laboratory maximum dry density, the standard for determining relative compaction, and optimum moisture content for each change in soil type should be determined in accordance with Test Method ASTM D 1557.

Fill Placement

Clean onsite soils free of oversize rocks and used for fill materials supporting the building structures should be placed in approximately 6- to 8-inch thick loose lifts, watered or air-dried as necessary to achieve a moisture content of at least 2 above optimum moisture condition, and then compacted in-place to a minimum relative compaction of 95 percent The laboratory maximum dry density and optimum moisture content for each change in soil type should be determined in accordance with ASTM D 1557. Fill materials in non-building structure areas should follow the same procedures as above but may be compacted in-place to a minimum relative compaction of 90 percent.

Temporary Excavations

Temporary excavations varying up to a depth of up to roughly 20 feet below existing grades may be required to accomplish the recommended over-excavation of existing soils and possibly deeper for construction of basement foundations and walls. Based on the physical properties of the onsite soils, temporary excavations which are constructed exceeding 4 feet in height should be cut /laid back to an inclination of 1:1 (h:v) or flatter for the duration of the over-excavation of unsuitable soil material and replacement as compacted fill, as well as placement of underground utilities. The 1:1 (h:v) recommendation may possibly be steepened, depending on conditions observed by a representative of the project geotechnical consultant. Other factors which should be considered with respect to the stability of the temporary slopes include construction traffic and/or storage of materials on or near the tops of the slopes, construction scheduling, presence of nearby walls or structures on adjacent properties and weather conditions at the time of construction. Applicable requirements of the California Construction and General Industry Safety Orders, the Occupational Safety and Health act of 1970 and the Construction Safety Act should also be followed.

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Shoring Considerations

Based on the construction scheduling and available adjacent space for excavation of the subterranean parking area, it may not be possible to cut and lay back the excavated slopes of the subterranean parking at a 1:1 (h:v) gradient. As such, the excavation may require shoring support. Recommendations for design and construction of the shoring system will be provided once more detailed project specifications and requirements are available.

Import Soils for Grading

If imported soils are needed to attain proposed design grades, they should be free of deleterious materials, oversize rock and any hazardous materials. The soils should also be essentially low or non-expansive, and essentially non-corrosive and approved by the project geotechnical consultant *prior* to being brought onsite. The geotechnical consultant should visit the potential borrow site(s) and conduct testing of the soil at least three days before the commencement of import operations.

Volumetric Changes - Shrinkage and Subsidence

Volumetric changes in earth quantities will occur when onsite soils are excavated and replaced as properly compacted fill. Based on our observations of earth materials encountered in the borings, an *estimated* shrinkage factor on the order of 10 to 15 percent may be considered during removal and re-compaction of the upper native alluvial fan soils. The actual shrinkage that will occur during grading will depend on the average degree of relative compaction achieved. A subsidence of approximately 0.1 feet may be anticipated as a result of the scarification and re-compaction of the exposed bottom surfaces within the removal areas.

The above estimates of shrinkage and subsidence are intended for use by project planners in estimating earthwork quantities and should not be considered absolute values. Contingencies should be made for balancing earthwork quantities based on actual shrinkage and subsidence that will occur during site grading.

Seismic Design Parameters

Earthquake loads on earthen structures and buildings are a function of ground acceleration which may be determined from the site-specific ground motion analysis. Owing to the conceptual structural details, i.e., structures with stories in excess of 10, it is expected that the structure's natural vibration period to be in excess of 0.5 second. As such, a site-specific ground motion analysis is currently in progress, the results of which will be published under a separate cover.

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General Corrosivity Screening

As a screening level study, limited chemical and electrical tests were performed on samples considered representative of the onsite soils to identify potential corrosive characteristics of these soils. The common indicators associated with soil corrosivity include water-soluble sulfate and chloride levels, pH (a measure of acidity), and minimum electrical resistivity.

> *It should be noted that Petra does not practice corrosion engineering; therefore, the test results, opinion and engineering judgment provided herein should be considered as general guidelines only. Additional analyses would be warranted, especially, for cases where buried metallic building materials (such as copper and cast or ductile iron pipes) in contact with site soils are planned for the project. In many cases, the project geotechnical engineer may not be informed of these choices. Therefore, for conditions where such elements are considered, we recommend that other, relevant project design professionals (e.g., the architect, landscape architect, civil and/or structural engineer) also consider recommending a qualified corrosion engineer to conduct additional sampling and testing of near-surface soils during the final stages of site grading to provide a complete assessment of soil corrosivity. Recommendations to mitigate the detrimental effects of corrosive soils on buried metallic and other building materials that may be exposed to corrosive soils should be provided by the corrosion engineer as deemed appropriate.*

In general, a soil's water-soluble sulfate levels and pH relate to the potential for concrete degradation; water-soluble chlorides in soils impact ferrous metals embedded or encased in concrete, e.g., reinforcing steel; and electrical resistivity is a measure of a soil's corrosion potential to a variety of buried metals used in the building industry, such as copper tubing and cast or ductile iron pipes. Table 2, below, presents the range of each category of individual test results with an interpretation of current code indicators and guidelines that are commonly used in this industry. The table includes the code-related classifications of the soils as they relate to the various tests, as well as a general recommendation for possible mitigation measures in view of the potential adverse impact on various components of the proposed structures in direct contact with site soils. The guidelines provided herein should be evaluated and confirmed, or modified, in their entirety by the project structural engineer, corrosion engineer and/or the contractor responsible for concrete placement for structural concrete used in exterior and interior footings, interior slabs on-ground, garage slabs, wall foundations and concrete exposed to weather such as driveways, patios, porches, walkways, ramps, steps, curbs, etc.

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TABLE 2

Soil Corrosivity Screening Results

Test	Test Results	Classification	General Recommendations
Soluble Sulfates (Cal 417)	0.002 percent	S0[(1)]	Type II cement; min. f'c= 2,500 psi; no water/cement ratio restrictions
pH (Cal 643)	7.8 to 8.1	Slightly to Moderately Alkaline	No special recommendations
Soluble Chloride (Cal 422)	240 to 262 ppm	C1[(2)]	No special recommendations
Resistivity (Cal 643)	4,600 to 5,000 ohm-cm	Corrosive to Moderately Corrosive[3]	Consult with professional corrosion engineer

Notes:
1. ACI 318-14, Section 19.3
2. ACI 318-14, Section 19.3
3. Pierre R. Roberge, "Handbook of Corrosion Engineering"

Post-Grading Considerations

Utility Trenches

All utility trench backfill should be compacted to a minimum relative compaction of 90 percent. Trench backfill materials should be screened on rocks greater than 6-inches in diameter and placed in lifts no greater than approximately 12 inches in thickness, watered or air-dried as necessary to achieve near optimum moisture conditions, and then mechanically compacted in place to a minimum relative compaction of 90 percent. A representative of the project geotechnical consultant should probe and test the backfills to verify adequate compaction.

As an alternative for shallow trenches where pipe or utility lines may be damaged by mechanical compaction equipment, such as under building floor slabs, clean sand having a sand equivalent (SE) value of 30 or greater may be utilized. The sand backfill materials should be watered to achieve near optimum moisture conditions and then tamped into place. No specific relative compaction will be required; however, observation, probing, and if deemed necessary, testing should be performed by a representative of the project geotechnical consultant to verify an adequate degree of compaction.

If clean, imported sand is to be used for backfill of exterior utility trenches, it is recommended that the upper 12 inches of trench backfill materials consist of properly compacted onsite soil materials. This is to mitigate infiltration of irrigation and rainwater into granular trench backfill materials.

Where an exterior and/or interior utility trench is proposed in a direction parallel to a building footing, the bottom of the trench should not extend below a 1:1 (horizontal to vertical) plane projected downward from

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the bottom edge of the adjacent footing. Where this condition occurs, the adjacent footing should be deepened or the utility constructed and the trench backfilled and compacted prior to footing construction. Where utility trenches cross under a building footing, these trenches should be backfilled with on-site soils at the point where the trench crosses under the footing to reduce the potential for water to migrate under the floor slabs.

Site Drainage

Positive surface drainage systems consisting of a combination of sloped concrete flatwork/asphalt pavement, sheet flow gradients, swales and surface area drains (where needed) should be provided around all buildings, structures and within the planter areas to collect and direct all surface waters to an appropriate drainage facility as determined by the project civil engineer. The ground surfaces of planter and landscape areas that are located within 10 feet of building foundations should be sloped at a minimum gradient of 5 percent away from the foundations and towards the nearest area drains. The ground surface of planter and landscape areas that are located more than 10 feet away from building foundations may be sloped at a minimum gradient of 2 percent away from the foundations and towards the nearest area drains.

Concrete flatwork surfaces that are located within 10 feet of building foundations should be inclined at a minimum gradient of one percent away from the building foundations and towards the nearest area drains. Concrete flatwork surfaces that are located more than 10 feet away from building foundations may be sloped at a minimum gradient of 1 percent towards the nearest area drains. Surface waters should not be allowed to collect or pond against building foundations and within the level areas of the site. All drainage devices should be properly maintained throughout the lifetime of the development. Future changes to site improvements, or planting and watering practices, should not be allowed to cause over-saturation of site soils adjacent to the structures.

RETAINING WALLS

Conventional Retaining Walls

The design and construction of any proposed conventional retaining walls, those that are not a part of the subterranean parking, should be performed in general compliance with the following recommendations.

Footing Embedment

The base of retaining-wall footings constructed on level ground may be founded at a depth of 12 inches or more below the lowest adjacent final grade for low height walls. Where retaining walls are proposed on or within 15 feet from the top of adjacent descending fill slope, the footings should be deepened such that a

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horizontal clearance of 5 feet or more is maintained between the outside bottom edges of the footings and the face of the slope. Footing trenches should be observed by the project geotechnical representative to document that the footing trenches have been excavated into competent bearing soils and to the embedment recommended above. These observations should be performed prior to placing forms or reinforcing steel.

Allowable Bearing Capacity and Lateral Resistance

In the areas where light-weight structures are proposed, a basic allowable soil bearing capacity of 1,500 pounds per square foot, including dead and live loads, may be utilized for design of 12-inch-wide continuous footings founded at a minimum depth of 12 inches below the lowest adjacent final grade. This value may be increased by 20 percent for each additional foot of depth and by 10 percent for each additional foot of width to a maximum value of 2,500 pounds per square foot. Recommended allowable bearing values include both dead and live loads and may be increased by one-third for short duration wind and seismic forces.

In the areas where moderate- to heavy-weight structures are proposed, an allowable soil bearing capacity of 3,500 pounds per square foot, including dead and live loads, may be utilized for design of 24-inch-wide continuous footings founded at a minimum depth of 24 inches below the lowest adjacent final grade. This value may be increased by 20 percent for each additional foot of depth and by 10 percent for each additional foot of width to a maximum value of 6,000 pounds per square foot. Recommended allowable bearing values include both dead and live loads and may be increased by one-third for short duration wind and seismic forces.

A passive earth pressure of 300 pounds per square foot per foot of depth, to a maximum value of 3,000 pounds per square foot, may be used to determine lateral bearing resistance for footings. In addition, a coefficient of friction of 0.35 times the dead load forces may be used between concrete and the supporting soils to determine lateral sliding resistance. The above values may be increased by one-third when designing for transient wind or seismic forces.

It should be noted that the above values are based on the condition where footings are cast in direct contact with compacted fill or competent native soils. In cases where the footing sides are formed, all backfill placed against the footings upon removal of forms should be compacted to at least 90 percent of the applicable maximum dry density. Lateral support derived from the upper 6 inches of soil placed against the outside edge of the footing, however, should be ignored, except where the ground surface is paved or covered by concrete flatwork.

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Active Earth Pressures

Onsite Soils Used for Backfill

Onsite soils are sandy and silty with generally a very low to low expansive potential and maybe used for retaining wall backfill.

Utilizing this range of expansion potential soils for wall backfill, an active lateral earth pressure equivalent fluid having a density of 45 pounds per cubic foot (pcf) should be used for design of cantilevered walls retaining a drained level backfill. Where the wall backfill slopes upward at 2:1 (h:v), the above value should be increased to 65 pcf. For top-restrained retaining walls, above values should be increased by 50 percent.

Retaining walls should be constructed with a proper subdrain system (see Figure RW-1). All walls should be designed to support any adjacent structural surcharge loads imposed by other nearby walls or footings in addition to the above recommended active and at-rest earth pressures.

All structural calculations and details should be provided to the project geotechnical consultant for verification purposes prior to construction.

Import Soils Used for Backfill

Very low or low expansive soils may be imported into the site for use as retaining wall backfill and should be tested prior to placement to verify they exhibit a very low to low expansion potential.

Utilizing very low to low expansion potential soils for wall backfill, an active lateral earth pressure equivalent fluid having a density of 40 pounds per cubic foot (pcf) should be used for design of cantilevered walls retaining a drained level backfill. Where the wall backfill slopes upward at 2:1 (h:v), the above value should be increased to 61 pcf. For top-restrained retaining walls, above values should be increased by 50 percent.

Retaining walls should be constructed with a proper subdrain system (see Figure RW-1). All walls should be designed to support any adjacent structural surcharge loads imposed by other nearby walls or footings in addition to the above recommended active and at-rest earth pressures.

All structural calculations and details should be provided to the project geotechnical consultant for verification purposes prior to construction.

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Imported Sand, Pea Gravel or Rock Used for Wall Backfill

Imported clean sand exhibiting a sand equivalent value (SE) of 30 or greater, or pea gravel or crushed rock may also be considered for wall backfill. The sand, pea gravel or rock backfill materials should extend behind the walls to a minimum horizontal distance of 2 feet at the base of the wall or to a horizontal distance equal to the heel width of the footing, whichever is greater (see Figures RW-2 and RW-3).

For the above conditions, an active lateral earth pressure equivalent fluid having a density of 30 pounds per cubic foot (pcf) should be used for design of cantilevered walls retaining a drained level backfill. Where the wall backfill slopes upward at 2:1 (h:v), the above value should be increased to 41 pcf. The above values should be increased by 50 percent for top-restrained retaining walls. These values are also for retaining walls supplied with a proper subdrain system. Furthermore, as with imported soil backfill, the walls should be designed to support any adjacent structural surcharge loads imposed by other nearby walls or footings in addition to the recommended active and at-rest earth pressures.

Earthquake Loads

Section 1803.5.12 of the 2019 CBC requires the determination of lateral loads on retaining walls from earthquake forces for structures in seismic design categories D through E that are supporting in excess of 6 feet of retained height. Since the exact retaining walls configurations are not known, design recommendations for retaining walls supporting in excess of 6 feet of backfill will provided once the structural details are further determined.

Geotechnical Observation and Testing

All grading associated with retaining wall construction, including backcut excavations, observation of the footing trenches, installation of the backdrain systems, and placement of backfill should be provided by a representative of the project geotechnical consultant.

Backdrains

To reduce the likelihood of the entrapment of water in the backfill soils, weepholes or open vertical masonry joints may be considered for retaining walls not exceeding a height of 3 feet. Weepholes, if used, should be 3-inches minimum diameter and provided at intervals of 6 feet or less along the wall. Open vertical masonry joints, if used, should be provided at 32-inch intervals. A continuous gravel fill, 3 inches by 12 inches, should be placed behind the weepholes or open masonry joints. The gravel should be wrapped in filter fabric to prevent infiltration of fines and subsequent clogging of the gravel. Filter fabric may consist of Mirafi 140N or equivalent.

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A perforated pipe-and-gravel backdrain should be constructed behind retaining walls exceeding a height of 3 feet (see Figures RW-1, RW-2 and RW-3). Perforated pipe should consist of 4-inch-minimum diameter PVC Schedule 40, or ABS SDR-35, with the perforations laid down. The pipe should be encased in a 1-foot-wide column of ¾-inch to 1½-inch open-graded gravel. The open-graded gravel should be completely wrapped in filter fabric consisting of Mirafi 140N or equivalent. Solid outlet pipes should be connected to the subdrains and then routed to a suitable area for discharge of accumulated water.

Waterproofing

The backfilled sides of retaining walls should be coated with an approved waterproofing compound or covered with a similar material to inhibit migration of moisture through the walls.

Temporary Excavations

Temporary slopes may be cut at a gradient no steeper than 1:1 (h:v). However, the project geotechnical engineer should observe temporary slopes for evidence of potential instability. Depending on the results of these observations, flatter slopes may be necessary. The potential effects of various parameters such as weather, heavy equipment travel, storage near the tops of the temporary excavations and construction scheduling should also be considered in the stability of temporary slopes.

Wall Backfill Placement

Recommended active pressure for design of retaining walls are based on the physical and mechanical properties of the onsite soil materials. The backfill behind the proposed retaining walls, they should be placed in approximately 6- to 8-inch-thick maximum lifts, watered as necessary to achieve near optimum moisture conditions, and then mechanically compacted in place to a relative compaction of no less than 90 percent. Flooding or jetting of the backfill materials should be avoided. A representative of the project geotechnical consultant should observe the backfill procedures and test the wall backfill to verify adequate compaction.

Masonry Screen Walls

Construction on Level Ground

Where masonry walls are proposed on level ground and 5 feet or more from the tops of descending slopes, the footings for these walls may be founded 18 inches or more below the lowest adjacent final grade. These footings should also be reinforced with two No. 4 bars, one near top and one near bottom.

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Construction Joints

In order to reduce the potential for unsightly cracking related to the effects of differential settlement, positive separations (construction joints) should be provided in the walls at horizontal intervals of approximately 20 to 25 feet and at each corner. The separations should be provided in the blocks only and not extend through the footings. The footings should be placed monolithically with continuous rebars to serve as effective "grade beams" along the full lengths of the walls.

Preliminary Pavement Design Recommendations

The final pavement section should be designed once site rough grading has occurred and the R-Value of the resulting subgrade can be determined. For the purposes of this preliminary evaluation, we assumed an R-value of 70 based on the very sandy soil types encountered in near-surface soils. The following pavement sections have been computed in accordance with Caltrans design procedures and presented in the following tables, Table 3 and 4. Based upon our experience, the thicker pavement section is provided below is recommended due to increased performance and life.

TABLE 3

Preliminary Structural Asphalt Pavement Sections

Location	Preliminary Design R-value	Traffic Index	Pavement Section
Auto Parking Spaces	70	4.5	3 in. AC / 4 in. AB
Auto Driveways	70	5.0	3 in. AC / 4 in. AB
Truck Driveways/Parking	70	8.0	4 in. AC / 8 in. AB

Note: AC = Asphalt Concrete AB = Aggregate Base

TABLE 4

Preliminary Structural Concrete Pavement Sections

Location	Preliminary Design R-value	Traffic Index	Pavement Section
Heavy Truck Driveways/Parking	70	8.0	6 in. PCC

Note: PCC = Portland Cement Concrete

Final pavement design recommendations should be provided based on sampling and testing at the completion of rough grading and the values of traffic indices that should be provided by the project civil engineer. Subgrade soils should be properly compacted, smooth, and non-yielding prior to pavement construction. The subgrade soils should be compacted to at least 95 percent of ASTM D 1557.

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Aggregate base materials should be Crushed Aggregate Base, Crushed Miscellaneous Base, or Processed Miscellaneous Base conforming to Section 200-2 of the Standard Specifications for Public Works Construction (Greenbook). The base materials should be brought to uniform moisture near optimum moisture then compacted to at least 95 percent of the applicable maximum density standard as determined per ASTM D 1557. Asphaltic concrete materials and construction should conform to Section 203 of the Greenbook.

Concrete Loading Docks

1. The slab subgrade should be graded such that it accommodates placement of 7-inch thick concrete pavement section. Subgrade compaction shall be no less than 95 percent relative compaction with reference to ASTM D 1557.

2. Prior to placing concrete, the subgrade soils below the slab should be pre-watered to achieve a moisture content that is at least optimum moisture content, but not overly wet.

3. The concrete pavement section should be a minimum 7 inches thick and reinforced with No. 4 bars spaced a maximum of 18 inches on centers (both ways). The reinforcement should be properly positioned near the middle of the slabs.

4. Concrete shall exhibit an unconfined compressive strength of no less than 3,250 psi.

5. The minimum dimensions and reinforcement recommended herein for equipment slab may be modified (increased or decreased subject to the constraints of the 2022 CBC) by the Structural Engineer based on his/her calculations, engineering experience and judgment.

Non-Pavement Exterior Concrete Flatwork

General

Near-surface compacted fill soils within the site are expected to exhibit an expansion index of 0 to 20, i.e. non-expansive. We recommend that all exterior concrete flatwork such as sidewalks, patio slabs, large decorative slabs, concrete subslabs that will be covered with decorative pavers within and adjacent to the site be designed by the project architect and/or structural engineer with consideration given to mitigating the potential cracking and uplift that can develop in soils exhibiting expansion index values that fall in the very low category.

The guidelines that follow should be considered as minimums and are subject to review and revision by the project architect, structural engineer and/or landscape consultant as deemed appropriate.

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Thickness and Joint Spacing

To reduce the potential of unsightly cracking, concrete walkways, patio-type slabs, large decorative slabs and concrete subslabs to be covered with decorative pavers should be at least 4 inches thick and provided with construction joints or expansion joints every 6 feet or less.

Reinforcement

All concrete flatwork having their largest plan-view panel dimension exceeding 10 feet should be reinforced with a minimum of No. 3 bars spaced 24 inches on centers, both ways. Alternatively, the slab reinforcement may consist of welded wire mesh of the sheet type (not rolled) with 6x6/W1.4xW1.4 designation in accordance with the Wire Reinforcement Institute (WRI). The reinforcement should be properly positioned near the middle of the slabs.

> *The reinforcement recommendations provided herein are intended as guidelines to achieve adequate performance for anticipated soil conditions. The project architect, civil and/or structural engineer should make appropriate adjustments in reinforcement type, size and spacing to account for concrete internal (e.g., shrinkage and thermal) and external (e.g., applied loads) forces as deemed necessary.*

Subgrade Preparation

Compaction

To reduce the potential for distress to concrete flatwork, the subgrade soils below concrete flatwork areas to a minimum depth of 12 inches (or deeper, as either prescribed elsewhere in this report or determined in the field) should be moisture conditioned to at least equal to, or slightly greater than, the optimum moisture content and then compacted to a relative compaction of no less than 90 percent. Where concrete public roads, concrete segments of roads and/or concrete access driveways are proposed, the upper 6 inches of subgrade soil should be compacted to no less than 95 percent relative compaction.

Pre-Moistening

As a further measure to reduce the potential for concrete flatwork cracking, subgrade soils should be thoroughly moistened prior to placing concrete. The moisture content of the soils should be approximately 1.2 times the optimum moisture content and penetrate to a minimum depth of 12 inches into the subgrade. Flooding or ponding of the subgrade is not considered feasible to achieve the above moisture conditions since this method would likely require construction of numerous earth berms to contain the water. Therefore, moisture conditioning should be achieved with a light spray applied to the subgrade over a period

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of few to several days just prior to pouring concrete. Pre-watering of the soils is intended to promote uniform curing of the concrete, reduce the development of shrinkage cracks and reduce the potential for differential expansion pressure on freshly poured flatwork. A representative of the project geotechnical consultant should observe and verify the density and moisture content of the soils, and the depth of moisture penetration prior to pouring concrete.

Drainage

Drainage from patios and other flatwork areas should be directed to local area drains and/or graded earth swales designed to carry runoff water to the adjacent streets or other approved drainage structures. The concrete flatwork should be sloped at a minimum gradient of one percent, or as prescribed by project civil engineer or local codes, away from building foundations, retaining walls, masonry garden walls and slope areas.

Tree Wells

Tree wells are not recommended in concrete flatwork areas since they introduce excessive water into the subgrade soils and allow root invasion, both of which can cause heaving and cracking of the flatwork.

GRADING, EXCAVATION AND STRUCTURAL PLAN REVIEWS

This report is based on the existing site conditions and the current Gensler conceptual planning and massing exhibits. We recommend that our firm be retained to review the grading plan, basement wall plan and structural foundation plans once when they become available. Additional recommendations and/or modification of the recommendations provided herein will be provided if necessary, depending on the results of the plan reviews.

If additional or alternative improvements are considered in the future, our firm should be notified so that we may provide design recommendations. It is further recommended that we be engaged to review the final design drawings, specifications and grading plan prior to any new construction. If we are not provided the opportunity to review these documents with respect to the geotechnical aspects of new construction and grading, it should not be assumed that the recommendations provided herein are wholly or in part applicable to the proposed construction.

We recommend that Petra be retained to provide soil-engineering services during excavation, grading, construction and foundation phases of the work. This is to observe compliance with the design,

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specifications or recommendations and to allow design changes in the event that subsurface conditions differ from those anticipated prior to start of construction.

REPORT LIMITATIONS

This report is based on the project site and our field explorations, laboratory testing and geotechnical analysis performed to date. The materials encountered on the project site and utilized in our laboratory evaluations are believed representative of the total area; however, soil types, gravel and cobble percentages and soil moisture conditions can vary in characteristics between excavations, both laterally and vertically.

The conclusions and opinions contained in this report are based on the results of the described geotechnical evaluations and represent our professional judgment. This report has been prepared consistent with that level of care being provided by other professionals providing similar services at the same locale and in the same time period. The contents of this report are professional opinions and as such, are not to be considered a guaranty or warranty. This report has not been prepared for use by parties or projects other than those named or described herein. This report may not contain sufficient information for other parties or other purposes. In addition, this report should be reviewed and updated after a period of 1 year or if the site ownership or project concept changes from that described herein.

It has been a pleasure to be of service to you on this project. Should you have questions regarding the contents of this report or should you require additional information, please contact this office.

Respectfully submitted,

PETRA GEOSCIENCES, INC.

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GE 2024

DJ/SJ/MS/lv

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FIGURES

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Reference: Google Earth, 2021 image

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PHONE: (951) 600-9271
COSTA MESA TEMECULA VALENCIA PALM DESERT CORONA

Site Location Map

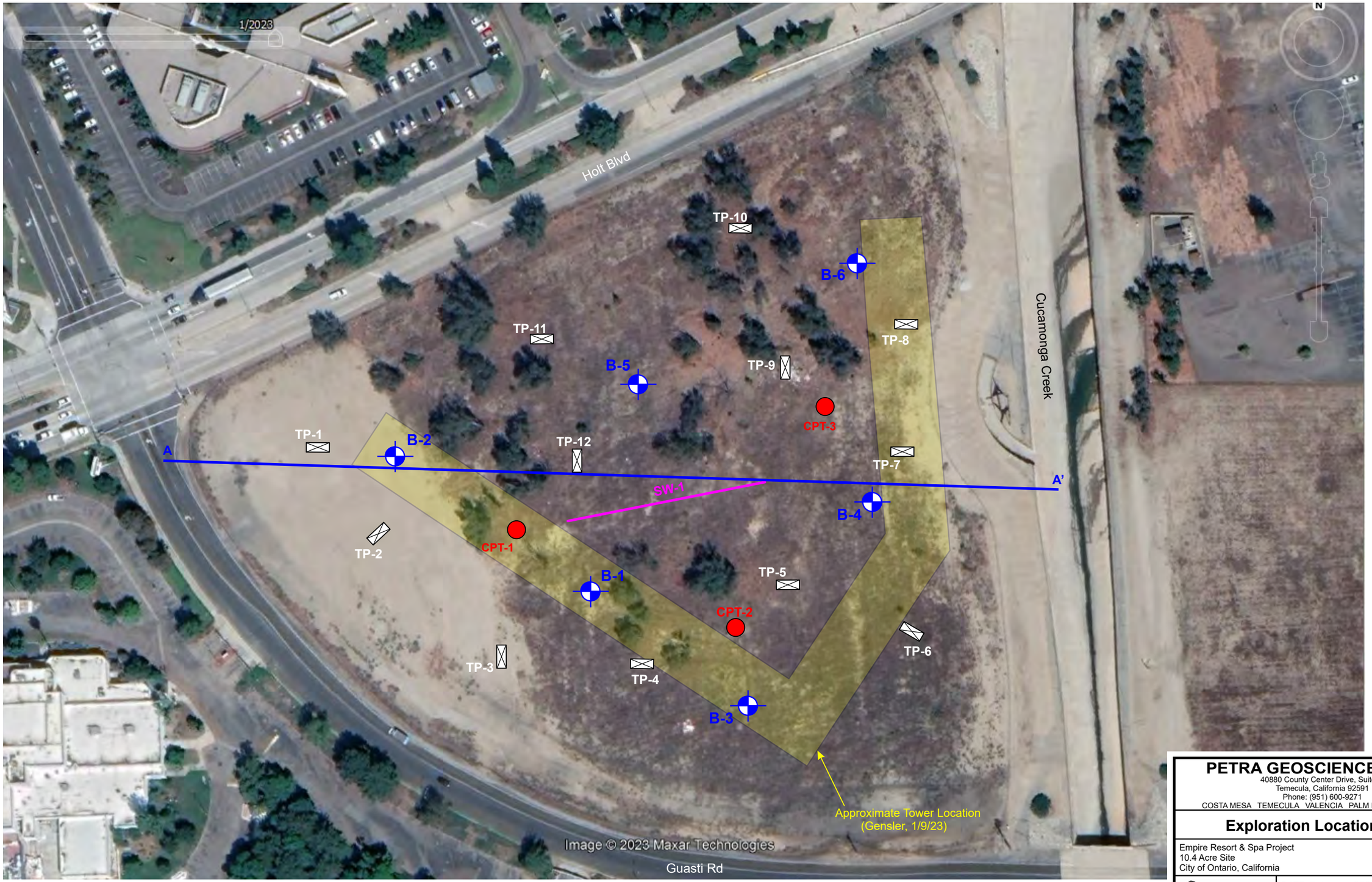
Empire Resort & Spa Project
10.4 Acre Site
City of Ontario, California

PETRA GEOSCIENCES INC.

DATE: February 2023

J.N.: 22-398

Figure 1



Reference: Google Earth, 9/15/22 Image

Approximate Scale: 1" = 100'

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Phone: (951) 600-9271
COSTA MESA TEMECULA VALENCIA PALM DESERT CORONA

Exploration Location Map

Empire Resort & Spa Project
10.4 Acre Site
City of Ontario, California

PETRA GEOSCIENCES INC

DATE: February 2023
J.N.: 22-398

Figure 2

APPENDIX A

EXPLORATION LOGS
(Borings, Test Pits, Seismic Line and CPT's)

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EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **B-1**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **967±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/12/22**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **130 lbs/ 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**YOUNG ALLUVIAL FAN DEPOSITS (Qyf)** Silty Sand (SM): Light brown, dry to slightly moist, medium- to coarse-grained, trace gravel.							
5		medium dense, no gravel.		11 14 20	■		2.1	110.0	DS
10		with gravel.		8 14 20	■		1.8		
15		Sand with Silt (SP-SM): Very light brown, dry, dense, medium- to coarse-grained, with gravel, trace broken cobble.		15 19 24	■		1.0		
20		**OLDER ALLUVIAL FAN DEPOSITS (Qof)** Silty Sand to Sandy Silt (SM-ML): Red brown, dry, dense, fine- to medium-grained, trace gravel.		40 21 31	■		4.0	113.8	DS
25		Silty Sand (SM): Red brown, dry, dense, medium- to coarse-grained, trace gravel.		12 13 19	◪		2.5		
30		very dense.		39 50/5"	◪		2.6		

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PLATE

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EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **B-1**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **967±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/12/22**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **130 lbs/ 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
35		Light brown.		19 30 50/5"	■		2.3		
40		Light brown to brown.		30 50/5"	■		3.7		
45		Sand with Silt (SP-SM): Light brown to brown, dry, very dense, medium- to coarse-grained, trace gravel.		38 50/2"	■		3.5		
50		Sandy Silt (ML): Brown, dry, hard, fine-grained.		15 29 34	■		9.8		
55		dry to slightly moist.		32 50/4"	■		8.4	105.2	CON, DS
60		Sand (SP): Light gray to light brown, dry, dense, fine- to coarse-grained.		15 23 22	■		3.5		
		Clayey Sand (SC): Red brown, dry, hard, fine- to coarse-grained, trace silt.							
65		: slightly moist.		15 23 34	■		14.5	117.7	DS

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Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **B-1**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **967±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/12/22**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **130 lbs/ 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
70		Sandy Silt: Red brown, dry, hard, fine- to medium-grained, trace clay.		14 16 24	■				
75		Silty Sand (SM): Light red brown.		10 19 24	■		11.6		
80		Sand with Silt (SP-SM): Light brown to gray, dry, very dense, fine- to medium-grained.		20 29 32	■		5.6		
85		Silty Sand (SM): Red brown, dry, dense, fine- to coarse-grained.		15 18 26	■		14.0		
90		medium dense, fine- to medium-grained.		15 16 24	■		6.4		
95		Light red brown, very dense, less silt.		15 24 28	■		6.2		
100		trace gravel.		17 24 40	■		5.9		
		Total Depth = 101.5' No ground water encountered Boring backfilled with cuttings.							

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Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **B-2**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **966±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/12/22**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **130" lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): Light red brown, dry to slightly moist, with gravel, trace cobble, trace asphalt pieces.							
		YOUNG ALLUVIAL FAN DEPOSITS (Qyf) (SM).							
5		Silty Sand (SM): Light red brown, dry to slightly moist, medium dense, trace gravel.		9 14 21			6.2	117.2	
10		with gravel, little recovery possible due to cobble.		12 13 14			3.4		
15		Sand w/ Silt (SP-SM): Light brown to gray, dry, medium dense, fine- to coarse-grained, trace gravel.		8 9 8			1.6		
20		Sand (SP): Light gray, dry, dense, medium- to coarse-grained, with gravel.		20 34 22			1.4		
25		**OLDER ALLUVIAL FAN DEPOSITS (Qof)** Silty Sand (SM): Red brown, dry to slightly moist, very dense, medium- to coarse-grained, trace gravel.		20 29 34			3.8		
30				18 34 50			3.5	115.7	

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PLATE A-2

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **B-2**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **966±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/12/22**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **130" lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
35				18 28 31			3.2		
40		Sand with Silt (SP-SM): Red brown, dry to slightly moist, very dense, medium- to coarse-grained, with gravel.		50/3"			4.8	116.0	
45		Silty Sand (SM): Red brown to light gray, dry to slightly moist, very dense, medium- to coarse-grained, with gravel.		24 38 38			3.4		
50		fine- to medium-grained.		50/6"			7.7		
55		Total Depth = 51.5' No ground water encountered Boring backfilled with cuttings.							
60									
65									

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PLATE A-2

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **B-3**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **958±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/13/22**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **130 lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**YOUNG ALLUVIAL FAN DEPOSITS (Qyf)** Silty Sand (SM): Light brown, dry to slightly moist, fine- to medium-grained, trace gravel, trace cobble.							
5		medium dense, fine-grained, with gravel, no cobble.		6 8 10	■		3.6		
10		light brown to gray, dense.		14 16 21	◪		1.5		
15		Sand with Silt (SP-SM): Light Brown to gray, dry, very dense, fine-grained, with gravel.		24 35 28	■		1.4		
20		**OLDER ALLUVIAL FAN DEPOSITS (Qof)** Silty Sand (SM): Red brown, dry to slightly moist, loose, medium- to coarse-grained, trace gravel.		7 8 13	◪		6.3		
25		Orange brown, dense, no trace gravel.		7 14 29	■		7.4	113.1	CON
30		Red brown, medium dense.		8 14 12	◪		11.9		

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PLATE A-3

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **B-3**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **958±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/13/22**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **130 lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
35		very dense, with gravel.		50/6"	■		2.6		
40		Light brown to tan.		34 50/5"	◪		4.7		
45		Red brown.		50/6"	■		4.3	118.1	
50		Sandy Silt (ML): Red brown, dry to slightly moist, hard, fine-grained.		17 18 21	◪		12.7		ATT
		Total Depth = 51.5' No ground water encountered Boring backfilled with cuttings.							
55									
60									
65									

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PLATE A-3

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **B-4**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **959±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/13/22**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **130 lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ASPHALT (A/C)** 4" Thick.							
		YOUNG ALLUVIAL FAN DEPOSITS (Qyf) Silty Sand (SM): Brown, slightly moist, fine- to medium-grained, trace gravel.							
5		medium dense.		7 11 13	■		4.3	110.2	
10		dry to slightly moist, medium- to coarse-grained.		6 6 7	◪		4.5		
15		Light brown to tan, very dense, with gravel.		30 39 38	■		1.4		
20		**OLDER ALLUVIAL FAN DEPOSITS (Qof)** Silty Sand (SM): Red brown, slightly moist, medium dense, medium- to coarse-grained, with gravel.		7 11 10	◪		10.5		
25		Orange brown to tan, very dense, with gravel.		29 36 34	■		4.5	118.4	
30		Sand with Silt (SP-SM): Light brown to tan, dry to slightly moist, dense, medium- to coarse-grained, with gravel.		18 24 24	◪		3.3		

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PLATE A-4

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **B-4**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **959±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/13/22**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **130 lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
35		Silty Sand (SM): Orange brown, dry to slightly moist, very dense, medium- to coarse-grained, with gravel.		50/6"	■		2.8		
40		medium dense.		16 16 14	▨		4.7		
45		dense.		12 16 30	■		5.3	119.2	
50		Sandy Silt (ML): Red brown, slightly moist, very stiff, fine-grained.		5 10 17	▨		18.7		
		Total Depth = 51.5' No ground water encountered Boring backfilled with cuttings.							
55									
60									
65									

DRAFT

PLATE A-4

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **B-5**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **967±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/13/22**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **130 lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**YOUNG ALLUVIAL FAN DEPOSITS (Qyf)** Silty Sand (SM): Light brown, dry to slightly moist, fine- to medium-grained, trace gravel, trace cobble.							
5		Light brown to brown, dense, no cobble, no gravel.		12 16 22	■		3.1	116.1	
10		No recovery.		12 16 32	▨				
15		medium- to coarse-grained, with gravel, trace cobble.		12 21 23	◪		1.1		
20		Sand with Silt (SP-SM): Light brown to gray, dry, very dense, medium- to coarse-grained, with gravel.		23 40 40	■		1.0		
25		**OLDER ALLUVIAL FAN DEPOSITS (Qof)** Silty Sand (SM): Red brown to orange, dry to slightly moist, dense, medium- to coarse-grained, trace gravel.		13 21 19	◪		4.2		
30		No recovery.		30 50/5"	▨				

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PLATE A-5

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **B-5**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **967±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/13/22**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **130 lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
35		very dense, no gravel.		22 26 30			2.8		
40		with gravel.		50/6"			2.3		
45		Light red brown.		19 50/3"			3.1		
50				50/6"			3.8		
		Total Depth = 51.5' No ground water encountered Backfilled with cuttings.							
55									
60									
65									

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PLATE A-5

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **B-6**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **963±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/13/22**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **130 lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**YOUNG ALLUVIAL FAN DEPOSITS (Qyf)** Silty Sand (SM): Light brown, dry to slightly moist, fine- to medium-grained, trace sand, trace gravel.							
5		no gravel, no cobbles.		14 16 24	■		2.9	112.8	
10		No recovery - loose gravel, trace cobble.		16 19 26	▨				
15		Light brown gray, dry, very dense, medium- to coarse-grained, with gravel, trace cobbles.		15 18 32	◪		1.3		
20		**OLDER ALLUVIAL FAN DEPOSITS (Qof)** Silty Sand (SM): Red brown, slightly moist, dense.		14 17 23	■		9.2	121.2	DS
25		Orange brown, medium dense, no gravel.		12 8 7	◪		6.9		
30		Light orange brown, very dense, with gravel, trace cobble.		50/6"	■		2.0		

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PLATE A-6

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **B-6**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **963±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/13/22**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **130 lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
35		No recovery.		20 31 41					
40		very dense.		50"6	■		5.4	112.6	
45		Red brown, slightly moist, dense, fine- to medium-grained, no gravel.		10 12 19	■		9.5		
50		Sandy Silt (ML): Orange brown, slightly moist, hard, fine-grained.		14 28 44	■		9.9	118.6	CON
55		Silty Sand (SM): Light brown to brown, dry to slightly moist, dense, medium- to coarse-grained.		12 23 32	■		4.8		
60				48 50/6"	■		6.4	112.5	
65									

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PLATE A-6

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **TP-1**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **967±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/27/22**
Drill Method:	**Backhoe**	Driving Weight:	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)**							
		Silty Sand (SM): Light brown, dry, fine- to medium-grained, with gravel (20-30%).							
		Sand (SP): Light brown to gray, dry, fine- to medium-grained, with gravel (20-30%).							
		YOUNG ALLUVIAL FAN DEPOSITS (Qyf)							
5		Silty Sand (SM): Orangish brown, dry, fine- to medium-grained, with gravel.				■			MAX, EI, MA, pH., CL, SO4 RES
		moist.							
		Total Depth = 8'							
		Trench backfilled with cuttings							
		No groundwater encountered							
10		No caving.							
15									
20									
25									
30									

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PLATE A-7

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **TP-2**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **965±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/27/22**
Drill Method:	**Backhoe**	Driving Weight:	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)**							
		Silty Sand (SM): Light brown, dry, fine- to medium-grained, with gravel (20-30%), trace cobbles.							
		Sand (SP): Light brown to gray, dry, fine- to medium-grained, with gravel (20-30%), trace cobbles.							
		YOUNG ALLUVIAL FAN DEPOSITS (Qyf)							
		Sand with Silt (SP-SM): Orangeish brown, dry, fine- to medium-grained, with gravel.							
5		slightly moist.							
10		with 3-4" cobbles (15-25%), trace 8-12" cobbles.							
		minor caving.							
15						■			MA
		Total Depth = 15'							
		Trench backfilled with cuttings							
		No groundwater encountered.							
20									
25									
30									

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PLATE A-8

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **TP-3**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **961±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/27/22**
Drill Method:	**Backhoe**	Driving Weight:	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): Light brown to brown, dry, fine- to medium-grained, with gravel (20-30%), with 3-4" cobbles (20-30%).							
		YOUNG ALLUVIAL FAN DEPOSITS (Qyf) Silty Sand (SM): Light brown to brown, dry, fine- to medium-grained, with gravel, no cobbles.							
5		dry to slightly moist.							
		Total Depth = 8' Trench backfilled with cuttings No groundwater encountered No caving.							
10									
15									
20									
25									
30									

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PLATE A-9

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **TP-4**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **965±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/27/22**
Drill Method:	**Backhoe**	Driving Weight:	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): Orangish-brown, dry, fine- to medium-grained, with gravel (20-30%), trace cobble.							
		with gravel (10-20%), with 4-6" cobble (15-25%).							
		YOUNG ALLUVIAL FAN DEPOSITS (Qyf) Silty Sand (SM): Brown to gray, dry, fine- to medium-grained, with gravel, no cobbles.							
5		trace cobbles.							
		Total Depth = 8' Trench backfilled with cuttings No groundwater encountered No caving.							
10									
15									
20									
25									
30									

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PLATE A-10

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **TP-5**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **961±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/27/22**
Drill Method:	**Backhoe**	Driving Weight:	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): Light brown to orange, dry, fine- to medium-grained, with gravel (20-30%),trace cobbles.							
5		**YOUNG ALLUVIAL FAN DEPOSITS (Qyf)** Silty Sand (SM): Light brown to orange, dry, fine- to medium-grained, with gravel, no cobbles.							
		trace cobbles.							
10		minor caving.							
15		Total Depth = 15' Trench backfilled with cuttings No groundwater encountered.				■			MA, pH, CL, SO4, RES
20									
25									
30									

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PLATE A-11

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **TP-6**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **956±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/27/22**
Drill Method:	**Backhoe**	Driving Weight:	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): Light brown to brown, dry, fine- to medium-grained, with gravel (10-20%), trace cobble.							
5		**YOUNG ALLUVIAL FAN DEPOSITS (Qyf)** Silty Sand (SM): Brown to gray, dry, fine- to medium-grained, with gravel, no cobbles.							
10		Total Depth = 8' Trench backfilled with cuttings No groundwater encountered No caving.							
15									
20									
25									
30									

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PLATE A-12

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **TP-7**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **961±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/27/22**
Drill Method:	**Backhoe**	Driving Weight:	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): Light brown to brown, dry, fine- to medium-grained, with gravel (10-20%), trace cobbles.							
		YOUNG ALLUVIAL FAN DEPOSITS (Qyf) Silty Sand (SM): Light brown to brown, dry, fine- to medium-grained, with gravel, no cobbles.							
5									
		Total Depth = 8' Trench backfilled with cuttings No groundwater encountered No caving.							
10									
15									
20									
25									
30									

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PLATE A-13

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **TP-8**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **962±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/27/22**
Drill Method:	**Backhoe**	Driving Weight:	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Sand with Silt (SP-SM): Light brown to brown, dry, fine- to medium-grained, with gravel.							MA
		Silty Sand (SM): Light brown to brown, dry, fine- to medium-grained, with gravel (10-20%), trace cobbles.							
5		**YOUNG ALLUVIAL FAN DEPOSITS (Qyf)** silty Sand (SM): Light Brown to brown, dry, fine- to medium-grained, with gravel, no cobbles.							
		with cobbles.							
		Total Depth = 8' Trench backfilled with cuttings No groundwater encountered No caving.							
10									
15									
20									
25									
30									

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PLATE A-14

Petra Geosciences, Inc.

3576

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **TP-9**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **965±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/27/22**
Drill Method:	**Backhoe**	Driving Weight:	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): Light brown to brown, dry, fine- to medium-grained, with gravel (20-30%), trace cobbles.							
5		**YOUNG ALLUVIAL FAN DEPOSITS (Qyf)** Silty Sand (SM): Light brown to brown, dry, fine- to medium-grained, with gravel, no cobbles.							
10		Total Depth = 8' Trench backfilled with cuttings No groundwater encountered No caving.							
15									
20									
25									
30									

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PLATE A-15

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **TP-10**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **970±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/27/22**
Drill Method:	**Backhoe**	Driving Weight:	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): Light brown to brown, dry, fine- to medium-grained, with gravel (10-20%), trace cobbles.							
		YOUNG ALLUVIAL FAN DEPOSITS (Qyf) Silty Sand (SM): Light brown to brown, dry, fine- to medium-grained, with gravel, no cobbles.							
5									
		Light brown, with gravel (10-15%), trace cobbles.							
10		with 4-6" cobbles (20-30%).							
		minor caving.							
15		Total Depth = 15' Trench backfilled with cuttings No groundwater encountered.							
20									
25									
30									

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PLATE A-16

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **TP-11**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **959±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/27/22**
Drill Method:	**Backhoe**	Driving Weight:	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): Light brown to brown, slightly moist, fine- to medium-grained, with gravel (20-30%), trace cobbles. 12" concrete chunk, 18" asphalt chunk.							
5		**YOUNG ALLUVIAL FAN DEPOSITS (Qyf)** Silty Sand (SM): Light brown to brown, dry, fine- to medium-grained, with gravel, no cobbles. trace cobbles.							
10		Total Depth = 8' Trench backfilled with cuttings No groundwater encountered No caving.							
15									
20									
25									
30									

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PLATE A-17

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **TP-12**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **966±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/27/22**
Drill Method:	**Backhoe**	Driving Weight:	Logged By: **SS**

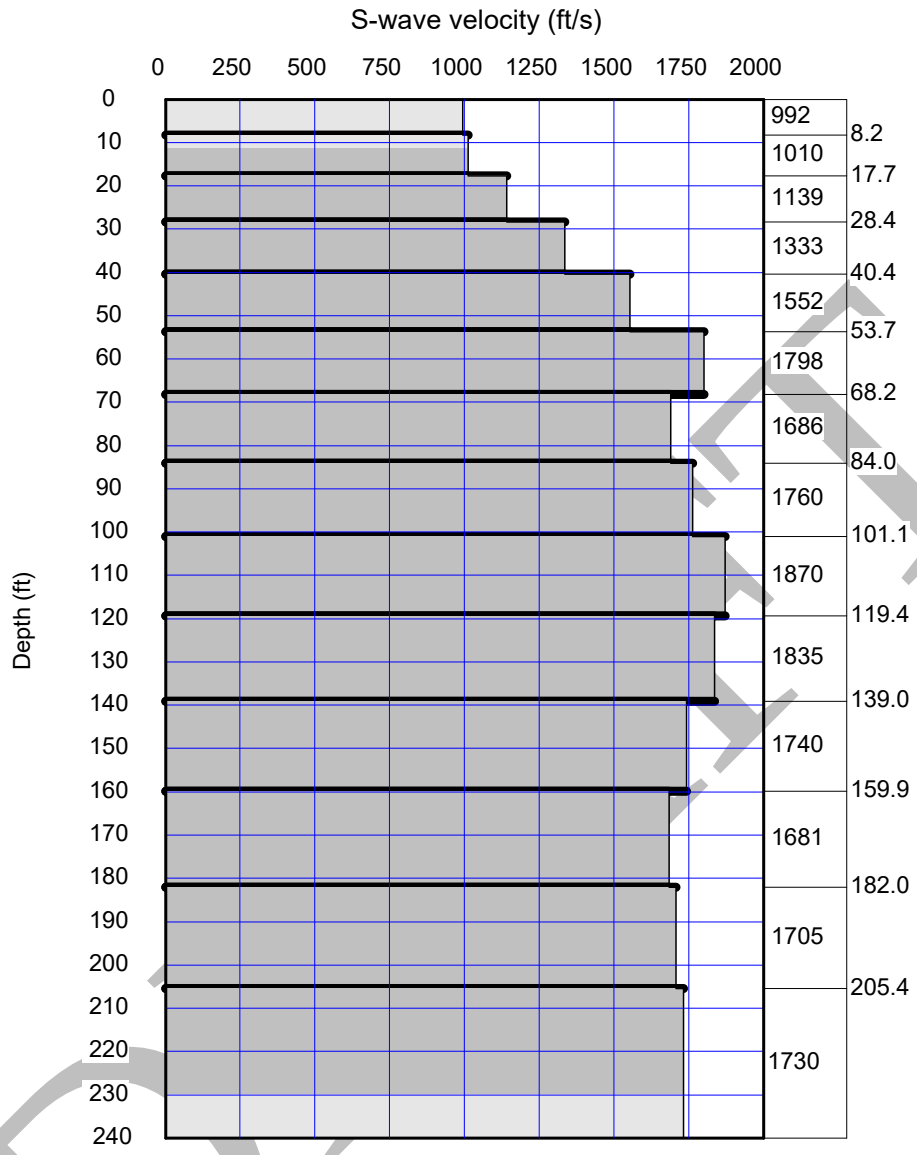
Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): Orange to brown, dry, fine- to medium-grained, with gravel (20-30%), trace cobbles.							
5		**YOUNG ALLUVIAL FAN DEPOSITS (Qyf)** Silty Sand (SM): Brown to gray, dry, fine- to medium-grained, trace gravel, no cobbles.							
10		Total Depth = 8' Trench backfilled with cuttings No groundwater encountered No caving.							
15									
20									
25									
30									

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PLATE A-18

Petra Geosciences, Inc.

SEISMIC LINE SW-1
SHEAR-WAVE MODEL



SHEAR-WAVE VELOCITY MODEL: Average Vs 100ft = 1,405.6 ft/sec

Site Classification (ASCE 7-16 Ch. 20)- "C" ("Very Dense Soil and Soft Rock")

Client: Petra Geosciences, Inc. **Petra Job No. 22-398**

Project Name: Ontario Hotel Project, Ontario, California

Survey Line End Coordinates: 34.064180, -117.602930 / 34.064255, -117.602331

Date: 12/30/22

PROFESSIONAL GEOPHYSICIST
DONN C. SCHWARTZKOPF
No. 1002
STATE OF CALIFORNIA

TERRA GEOSCIENCES
P.O. Box 1090
Loma Linda, CA 92354

TG Project No. 223907-1

3581

SUMMARY

OF

CONE PENETRATION TEST DATA

Project:

2236 E. Holt Blvd.
Ontario, CA
December 29, 2022

Prepared for:

Mr. Doug Johnston
Petra Geosciences, Inc.
40880 County Center Drive, Ste M
Temecula, CA 92591
Office (951) 600-9271 / Fax (951) 600-9215

DRAFT

Prepared by:

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3. **FIELD EQUIPMENT & PROCEDURES**
4. **CONE PENETRATION TEST DATA & INTERPRETATION**

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- CPT Plots
- CPT Classification/Soil Behavior Chart
- Summary of Shear Wave Velocities
- CPT Data Files (sent via email)

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SUMMARY
OF
CONE PENETRATION TEST DATA

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1. INTRODUCTION

This report presents the results of a Cone Penetration Test (CPT) program carried out for the project located at 2236 E. Holt Blvd. in Ontario, California. The work was performed by Kehoe Testing & Engineering (KTE) on December 29, 2022. The scope of work was performed as directed by Petra Geosciences, Inc. personnel.

2. SUMMARY OF FIELD WORK

The fieldwork consisted of performing CPT soundings at five locations to determine the soil lithology. A summary is provided in **TABLE 2.1**.

LOCATION	DEPTH OF CPT (ft)	COMMENTS/NOTES:
CPT-1	1	Refusal
CPT-1A	10	Refusal
CPT-1B	10	Refusal
CPT-2	13	Refusal
CPT-3	24	Refusal

TABLE 2.1 - Summary of CPT Soundings

3. FIELD EQUIPMENT & PROCEDURES

The CPT soundings were carried out by **KTE** using an integrated electronic cone system manufactured by Vertek. The CPT soundings were performed in accordance with ASTM standards (D5778). The cone penetrometers were pushed using a 30-ton CPT rig. The cone used during the program was a 15 cm^2 cone with a cone net area ratio of 0.83. The following parameters were recorded at approximately 2.5 cm depth intervals:

- Cone Resistance (qc)
- Sleeve Friction (fs)
- Dynamic Pore Pressure (u)
- Inclination
- Penetration Speed

At locations CPT-1A, CPT-2 and CPT-3, shear wave measurements were obtained at various depths. The shear wave is generated using an air-actuated hammer, which is located inside the front jack of the CPT rig. The cone has a triaxial geophone, which recorded the shear wave signal generated by the air hammer.

The above parameters were recorded and viewed in real time using a laptop computer. Data is stored at the KTE office for up to 2 years for future analysis and reference. A complete set of baseline readings was taken prior to each sounding to determine temperature shifts and any zero load offsets. Monitoring base line readings ensures that the cone electronics are operating properly.

4. CONE PENETRATION TEST DATA & INTERPRETATION

The Cone Penetration Test data is presented in graphical form in the attached Appendix. These plots were generated using the CPeT-IT program. Penetration depths are referenced to ground surface. The soil behavior type on the CPT plots is derived from the attached CPT SBT plot (Robertson, "Interpretation of Cone Penetration Test…", 2009) and presents major soil lithologic changes. The stratigraphic interpretation is based on relationships between cone resistance (qc), sleeve friction (fs), and penetration pore pressure (u). The friction ratio (Rf), which is sleeve friction divided by cone resistance, is a calculated parameter that is used along with cone resistance to infer soil behavior type. Generally, cohesive soils (clays) have high friction ratios, low cone resistance and generate excess pore water pressures. Cohesionless soils (sands) have lower friction ratios, high cone bearing and generate little (or negative) excess pore water pressures.

The CPT data files have also been provided. These files can be imported in CPeT-IT (software by GeoLogismiki) and other programs to calculate various geotechnical parameters.

It should be noted that it is not always possible to clearly identify a soil type based on qc, fs and u. In these situations, experience, judgement and an assessment of the pore pressure data should be used to infer the soil behavior type.

If you have any questions regarding this information, please do not hesitate to call our office at (714) 901-7270.

Sincerely,

KEHOE TESTING & ENGINEERING

Steven P. Kehoe
President

01/03/23-aga-4983

DRAFT

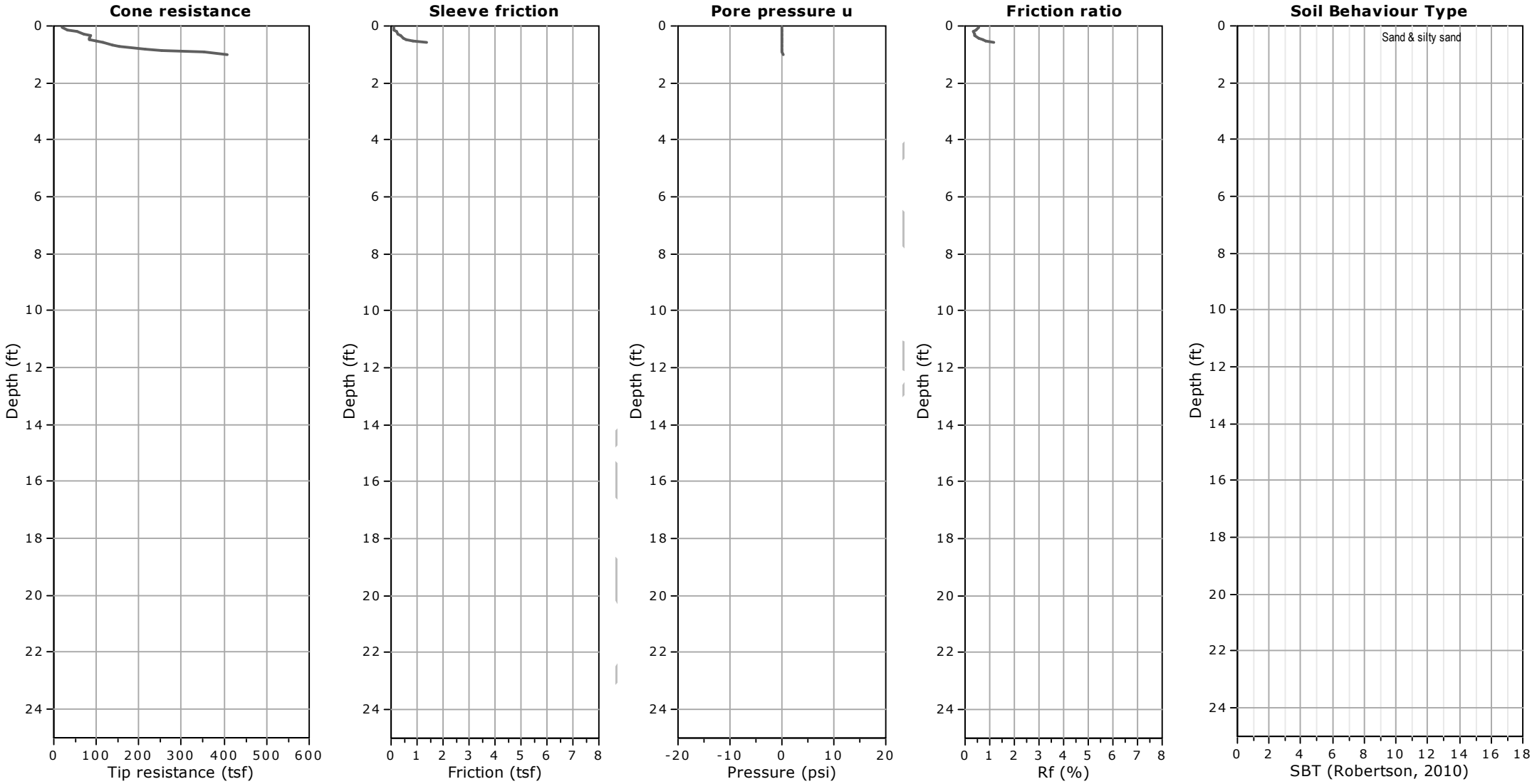
APPENDIX

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Kehoe Testing and Engineering
714-901-7270
steve@kehoetesting.com
www.kehoetesting.com

Project: **Petra Geosicences**
Location: **2236 E. Holt Blvd, Ontario, CA**

CPT-1
Total depth: 0.99 ft, Date: 12/29/2022

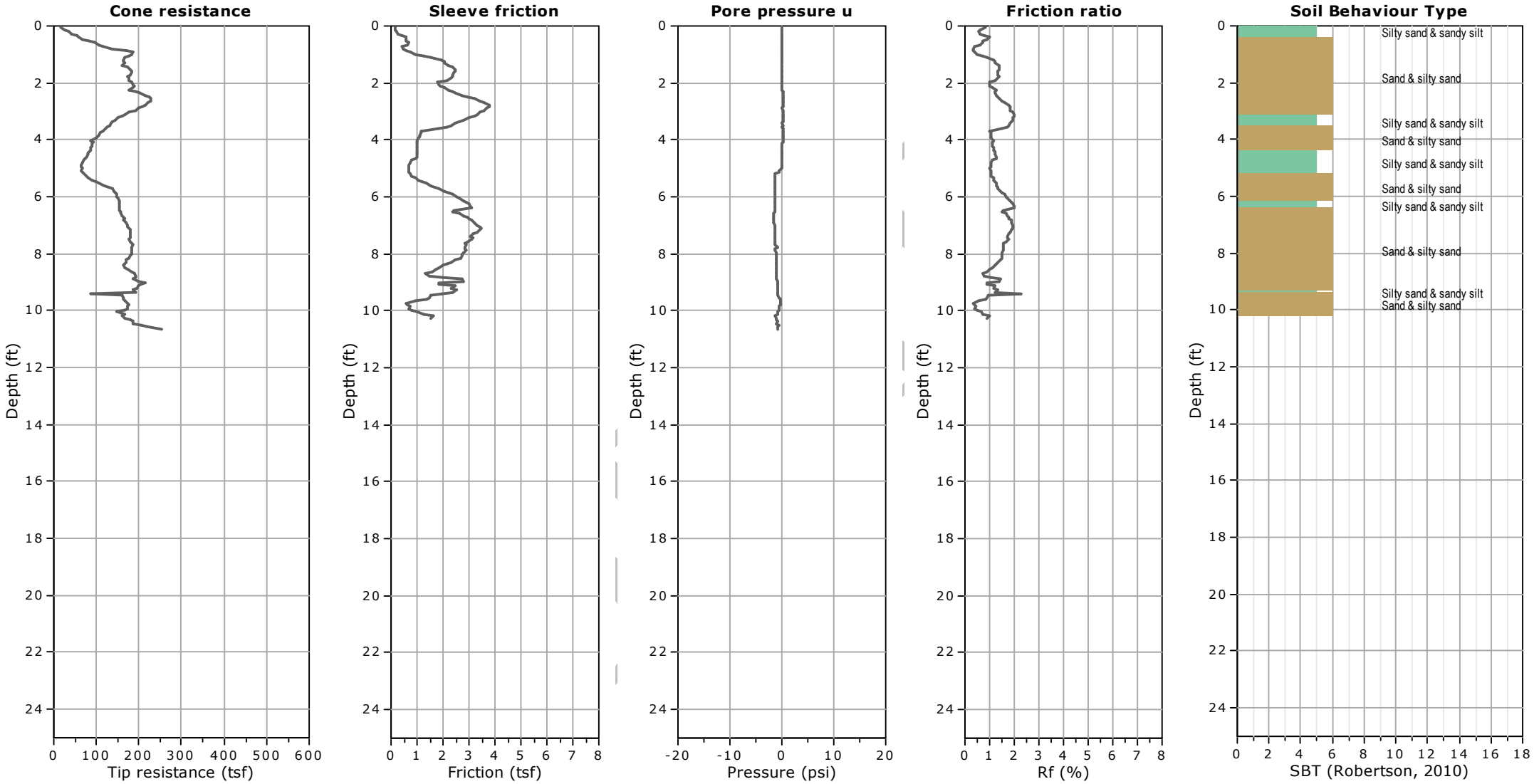


3587

Kehoe Testing and Engineering
714-901-7270
steve@kehoetesting.com
www.kehoetesting.com

Project: **Petra Geosicences**
Location: **2236 E. Holt Blvd, Ontario, CA**

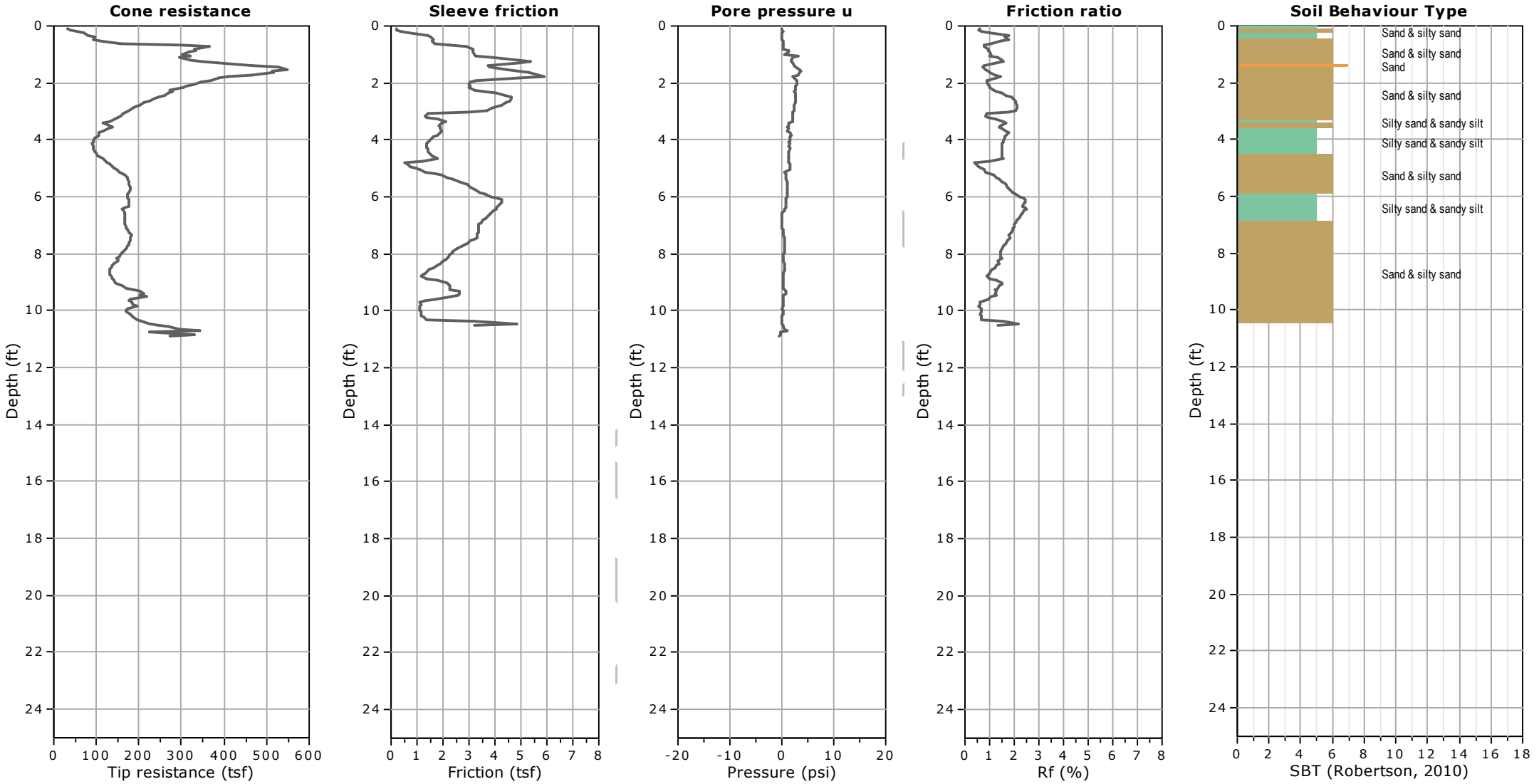
CPT-1A
Total depth: 10.64 ft, Date: 12/29/2022



Kehoe Testing and Engineering
714-901-7270
steve@kehoetesting.com
www.kehoetesting.com

Project: **Petra Geosicences**
Location: **2236 E. Holt Blvd, Ontario, CA**

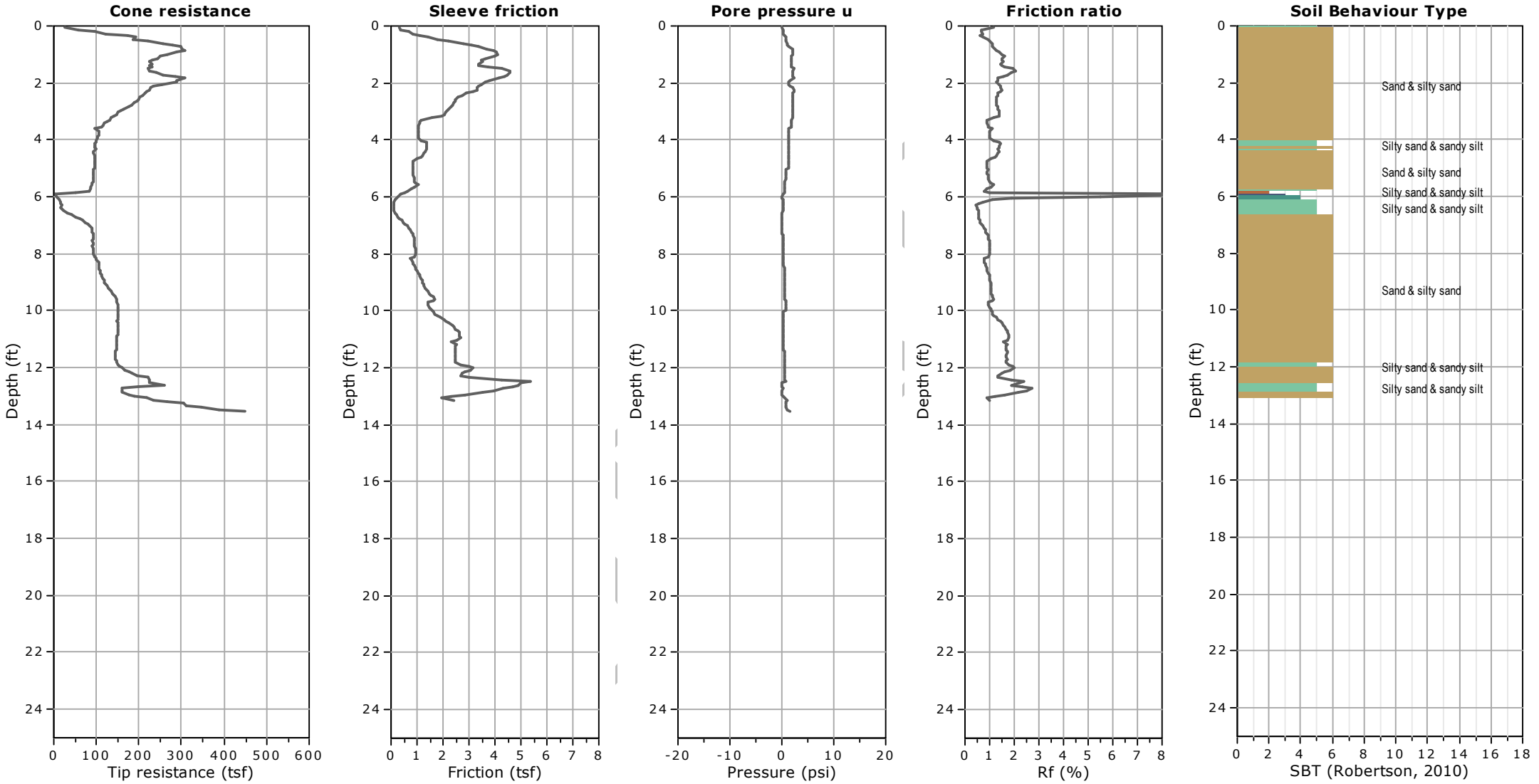
CPT-1B
Total depth: 10.90 ft, Date: 12/29/2022



Kehoe Testing and Engineering
714-901-7270
steve@kehoetesting.com
www.kehoetesting.com

Project: **Petra Geosicences**
Location: **2236 E. Holt Blvd, Ontario, CA**

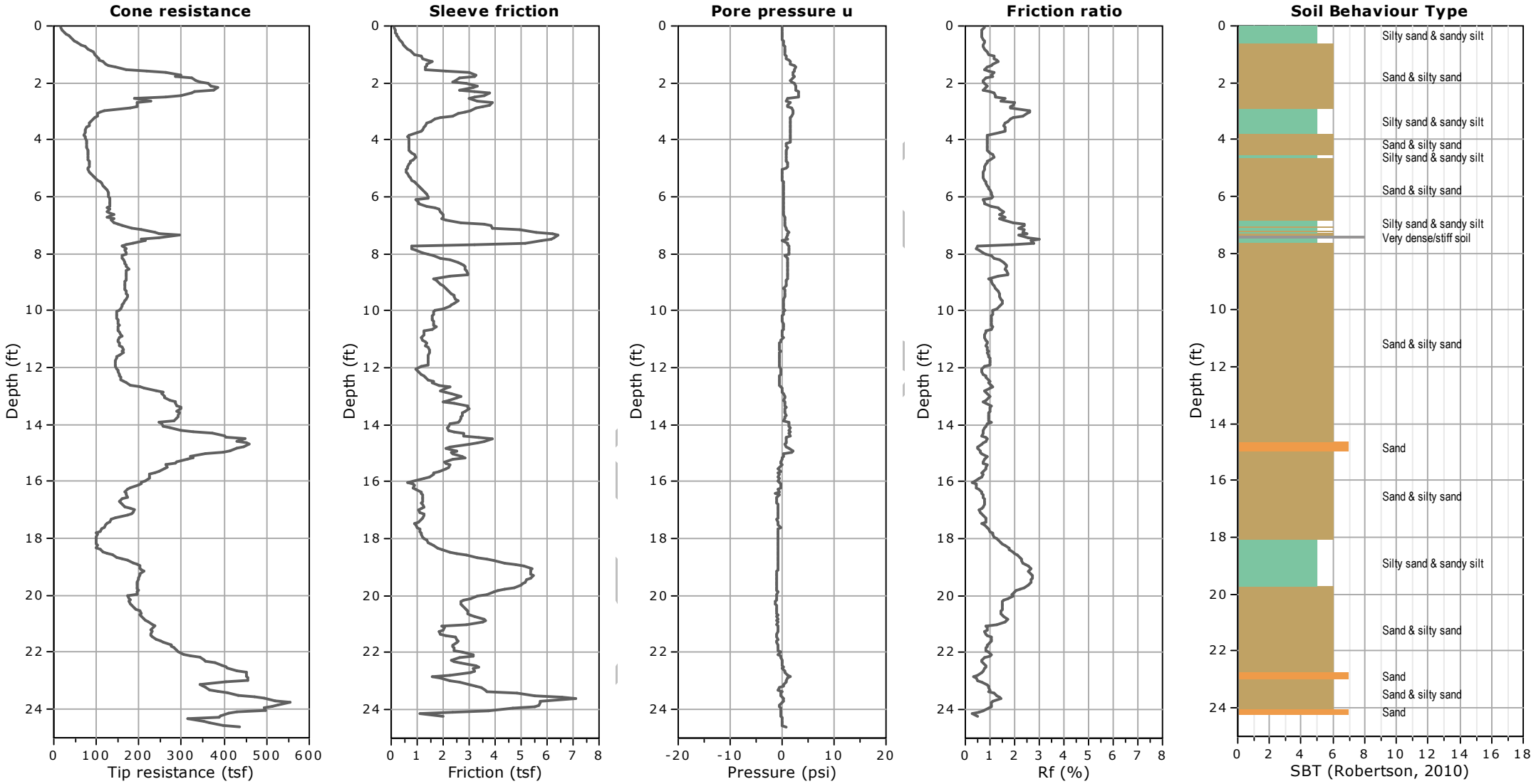
CPT-2
Total depth: 13.52 ft, Date: 12/29/2022



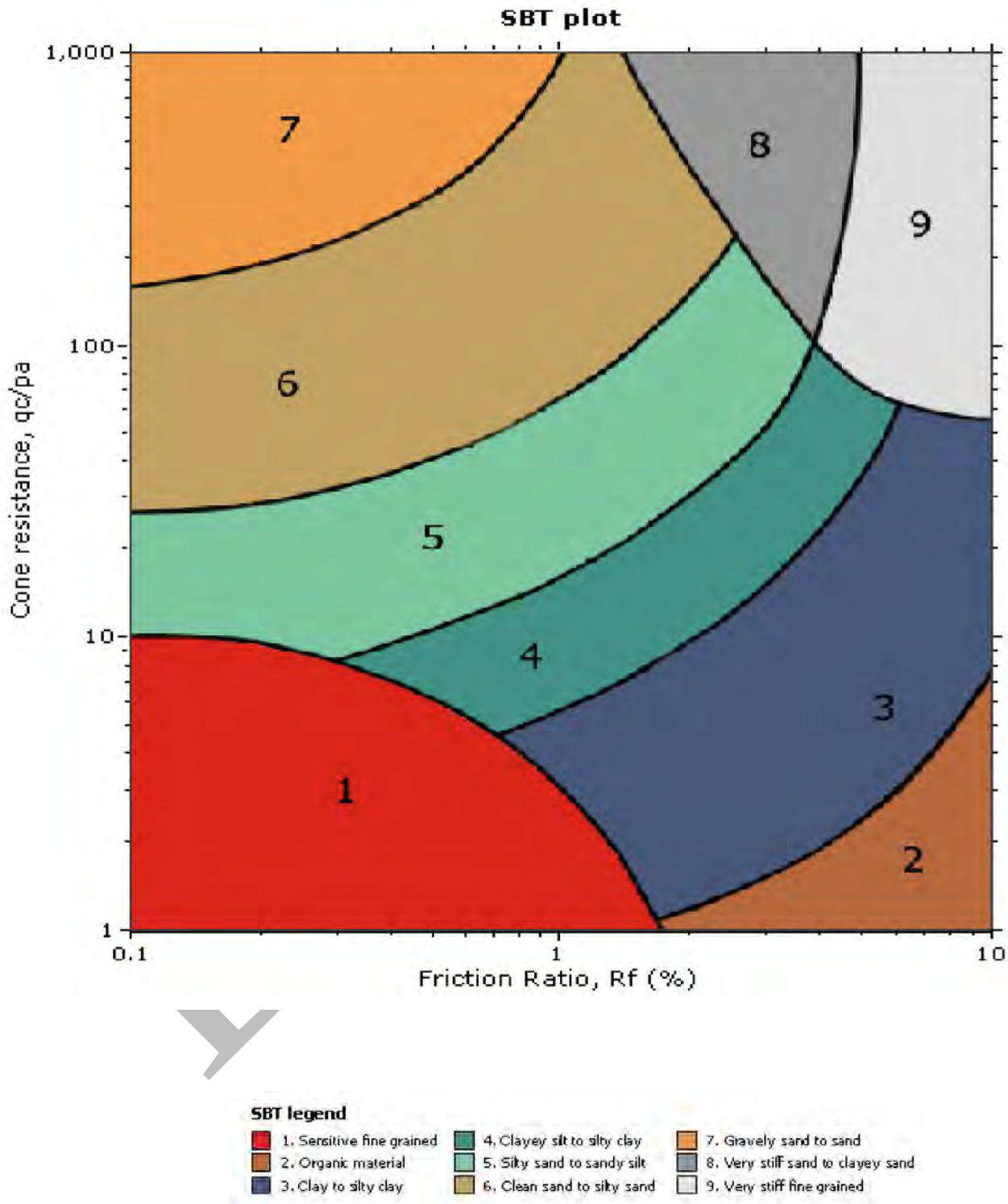
Kehoe Testing and Engineering
714-901-7270
steve@kehoetesting.com
www.kehoetesting.com

Project: **Petra Geosicences**
Location: **2236 E. Holt Blvd, Ontario, CA**

CPT-3
Total depth: 24.61 ft, Date: 12/29/2022



Kehoe Testing and Engineering
714-901-7270
rich@kehoetesting.com
www.kehoetesting.com



Petra Geosciences
2236 E. Holt Blvd.
Ontario, CA

CPT Shear Wave Measurements

Location	Tip Depth (ft)	Geophone Depth (ft)	Travel Distance (ft)	S-Wave Arrival (msec)	S-Wave Velocity from Surface (ft/sec)	Interval S-Wave Velocity (ft/sec)
CPT-1A	4.99	3.99	4.46	2.96	1508	
	10.01	9.01	9.23	7.14	1293	1140
CPT-2	5.02	4.02	4.49	3.08	1458	
	10.01	9.01	9.23	7.60	1214	1049
	13.55	12.55	12.71	10.60	1199	1160
CPT-3	5.02	4.02	4.49	3.32	1352	
	10.01	9.01	9.23	7.46	1237	1145
	15.03	14.03	14.17	12.28	1154	1025
	20.01	19.01	19.11	17.56	1089	936
	24.67	23.67	23.75	20.76	1144	1450

Shear Wave Source Offset - 2 ft

S-Wave Velocity from Surface = Travel Distance/S-Wave Arrival
Interval S-Wave Velocity = (Travel Dist2-Travel Dist1)/(Time2-Time1)

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APPENDIX B

LABORATORY TEST PROCEDURES

LABORATORY DATA SUMMARY

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LABORATORY TEST PROCEDURES

Soil Classification

Soils encountered within the exploration borings were initially classified in the field in general accordance with the visual-manual procedures of the Unified Soil Classification System (ASTM D 2488). The samples were re-examined in the laboratory and the classifications revised if appropriate. The assigned group symbols are presented on the exploration logs, Appendix A.

In Situ Moisture and Density

Moisture content and dry density of the in place soils were determined in representative strata in the borings in accordance with test method ASTM D 2216. Test data are presented in the boring logs, Appendix A.

Expansion Index

An expansion index test was performed on a selected sample of soil in accordance with ASTM D 4829. The expansion potential classification was determined from 2019 CBC Section 1802.3.2 on the basis of the expansion index value. The test result and expansion potentials are presented on Plate B-1.

Atterberg Limits

Atterberg limit tests (Liquid Limit, Plastic Limit and Plasticity Index) were performed on selected samples to verify visual classifications. These tests were performed in accordance with ASTM D 4318. Test results are presented on Plate B-1.

Soil Corrosivity

Chemical analyses were performed on a selected sample of soil to determine concentrations of soluble sulfate and chloride, as well as pH and resistivity. These tests were performed in accordance with California Test Method Nos. 417 (sulfate), 422 (chloride) and 643 (pH and resistivity). Test results are included on Plate B-1.

Laboratory Maximum Dry Density/Optimum Moisture

The maximum dry density and optimum moisture content of the on-site soils were determined for a selected sample in accordance with ASTM D 1557. The result of this test is presented on Plate B-1.

Grain-Size Analysis

Grain-size analyses were performed on selected samples to verify visual classifications performed in the field. These tests were performed in accordance with ASTM D 422 or 1140. Test results are presented on Plate B-2 thru B-5.

Direct Shear

The Coulomb shear strength parameters, angle of internal friction and cohesion, were determined for undisturbed and disturbed (bulk) samples remolded to approximately 90 percent of maximum dry density. These tests were performed in general accordance with ASTM D3080. Three specimens were prepared for each test. The test specimens were artificially saturated, and then sheared under varied normal loads at a maximum constant rate of strain of 0.05 inches per minute. Results are summarized on Plates B-6 thru B-10.

Consolidation

Volume change (settlement or heave) characteristics of select undisturbed soils were determined by one-dimensional consolidation tests. These tests were performed in general accordance with the latest version of the Test Method ASTM D 2435. Additionally, heave or hydro-consolidation tests were performed in general accordance with the latest version of Test Method ASTM D 4546, or ASTM D 5333 respectively. Axial loads were applied in several increments to laterally restrained 1-inch-high samples. The resulting deformations were recorded at selected time intervals. The test samples were inundated at the approximate in-situ and/or anticipated design overburden pressure in order to evaluate the effect of an increase in moisture content, e.g., hydro-consolidation potential or heave. Results of these tests are graphically presented on Plate B-11 thru B-13.

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LABORATORY DATA SUMMARY														
Boring/ Test Pit Number	Sample Depth (ft.)	Soil Description[1]	Compaction[2]		Expansion[3]		Atterberg Limits[4]			Corrosivity Screening				Percent Passing No. 200 Sieve[8]
			Maximum Dry Unit Weight (pcf)	Optimum Moisture (%)	Index	Potential	LL	PL	PI	Soluble Sulfate Content[5] (%)	Chloride Content[6] (ppm)	pH[7] (Acidity)	Minimum Resistivity[7] (Ohm-cm)	
TP-1	4	Sily Sand	118.0	10.5	0	Very Low	--	--	--	0.002	262	7.8	5,000	22
TP-2	15	Sand with Silt	--	--	--	--	--	--	--	--	--	--	--	7
TP-5	15	Silty Sand	--	--	--	--	--	--	--	0.002	240	8.1	4,600	26
TP-8	2	Sand with Silt	--	--	--	--	--	--	--	--	--	--	--	9
B-5	50	Sandy Silt	--	--	--	--	28	22	6	--	--	--	--	--

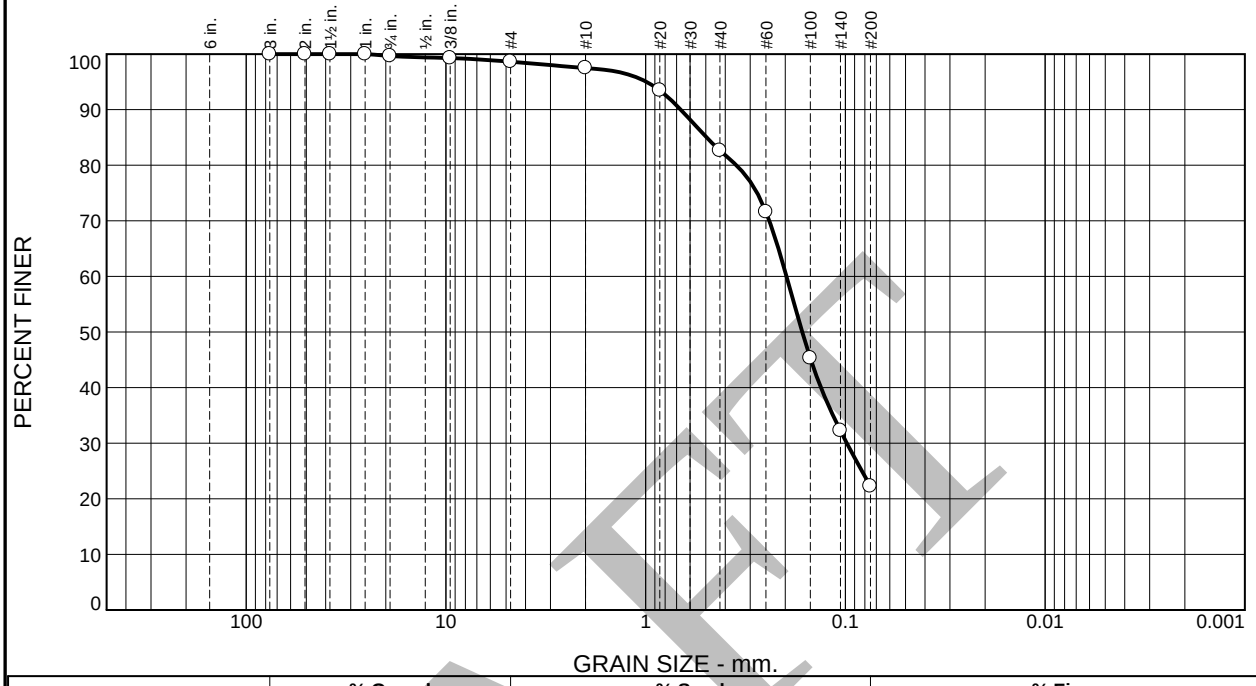
(--) Tests Not Performed

Test Procedures:

[1] Per Test Method ASTM D 2488
[2] Per Test Method ASTM D 1557
[3] Per Test Method ASTM D 4829
[4] Per Test Method ASTM D 4318
[5] Per California Test Method CTM 417
[6] Per California Test Method CTM 422
[7] Per California Test Method CTM 643
[8] Per Test Method ASTM C 117

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Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.3	1.1	1.1	14.9	60.4	22.2	

TEST RESULTS

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	99.7		
.375	99.3		
#4	98.6		
#10	97.5		
#20	93.5		
#40	82.6		
#60	71.6		
#100	45.3		
#140	32.3		
#200	22.2		

* (no specification provided)

Material Description

Olive Brown Fine to Medium Sand with Silt

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 0.6679 D_{85}= 0.4953 D_{60}= 0.1972
D_{50}= 0.1645 D_{30}= 0.0984 D_{15}=
D_{10}= C_u= C_c=

Remarks

Date Received: **Date Tested:** 1/11/2023

Tested By: DI

Checked By:

Title:

Source of Sample: 22L363 **Depth:** 4 **Date Sampled:**

Sample Number: TP-1

Laboratory:
1251 West Pomona Road, Unit #103, Corona, Ca 92882 Phone #: 714.549.8921

PETRA GEOSCIENCES INC.

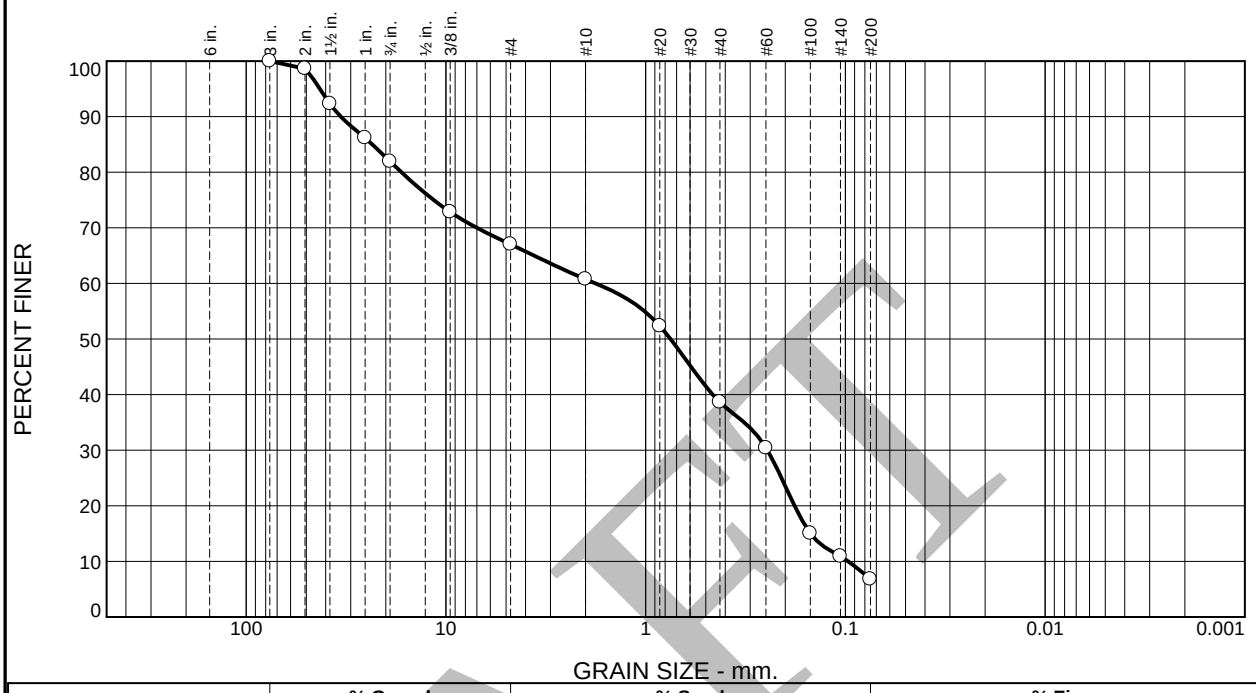
Client: Diversified Pacific Communities

Project: Ontario Hotel

Project No: 22-398 **Figure** B-2

DRAFT

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	18.1	14.9	6.3	22.1	31.8	6.8	

TEST RESULTS

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3	100.0		
2	98.6		
1.5	92.3		
1	86.2		
.75	81.9		
.375	72.9		
#4	67.0		
#10	60.7		
#20	52.3		
#40	38.6		
#60	30.4		
#100	15.1		
#140	10.9		
#200	6.8		

* (no specification provided)

Material Description

Olive Brown Gravelly Fine to Medium Sand

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 33.6170 D_{85}= 23.3855 D_{60}= 1.7847
D_{50}= 0.7510 D_{30}= 0.2462 D_{15}= 0.1496
D_{10}= 0.0969 C_u= 18.41 C_c= 0.35

Remarks

Date Received: _____ **Date Tested:** 1/11/2023

Tested By: DI

Checked By: _____

Title: _____

Source of Sample: 22L363 **Depth:** 15 **Date Sampled:**

Sample Number: TP-2

Laboratory:
1251 West Pomona Road, Unit #103, Corona, Ca 92882 Phone #: 714.549.8921

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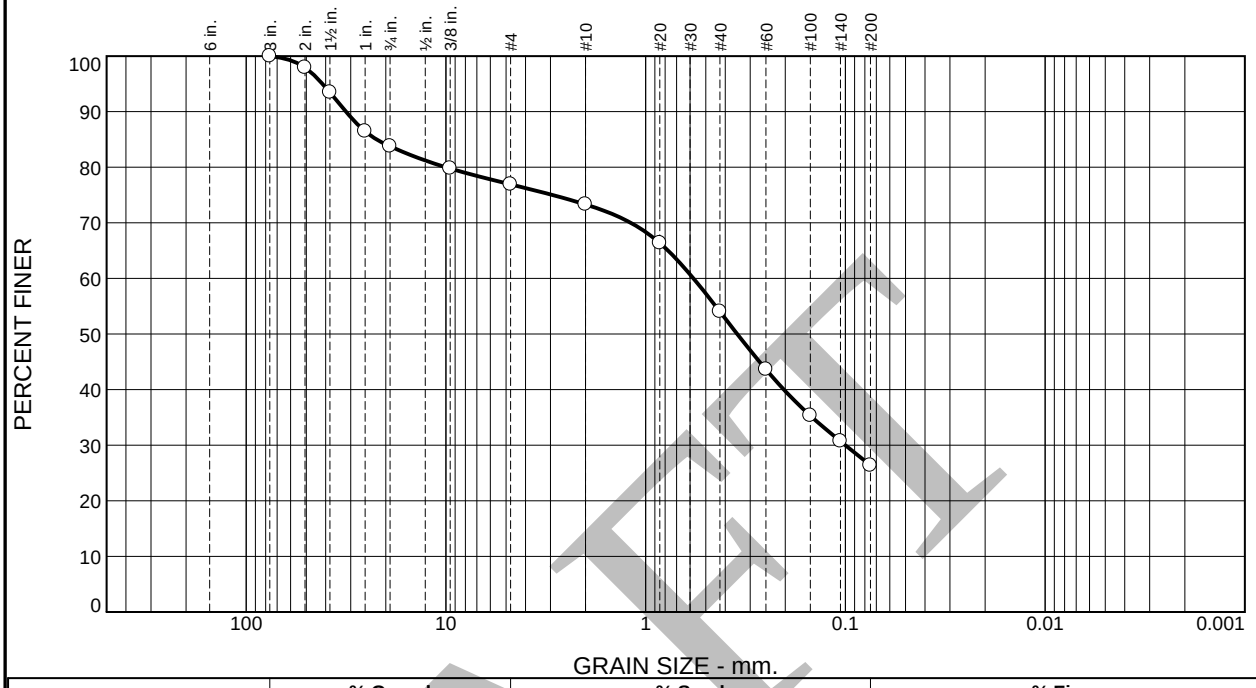
Client: Diversified Pacific Communities

Project: Ontario Hotel

Project No: 22-398 **Figure** B-3

DRAFT

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	16.2	6.9	3.6	19.3	27.6	26.4	

TEST RESULTS

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3	100.0		
2	97.9		
1.5	93.4		
1	86.5		
.75	83.8		
.375	79.8		
#4	76.9		
#10	73.3		
#20	66.4		
#40	54.0		
#60	43.6		
#100	35.3		
#140	30.7		
#200	26.4		

* (no specification provided)

Material Description

Brown Gravelly Silty Fine to Medium Sand

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 31.6767 D_{85}= 22.2486 D_{60}= 0.5768
D_{50}= 0.3480 D_{30}= 0.1001 D_{15}=
D_{10}= C_u= C_c=

Remarks

Date Received: **Date Tested:** 1/11/2023

Tested By: DI

Checked By:

Title:

Source of Sample: 22L363 **Depth:** 15 **Date Sampled:**

Sample Number: TP-5

Laboratory:
1251 West Pomona Road, Unit #103, Corona, Ca 92882 Phone #: 714.549.8921

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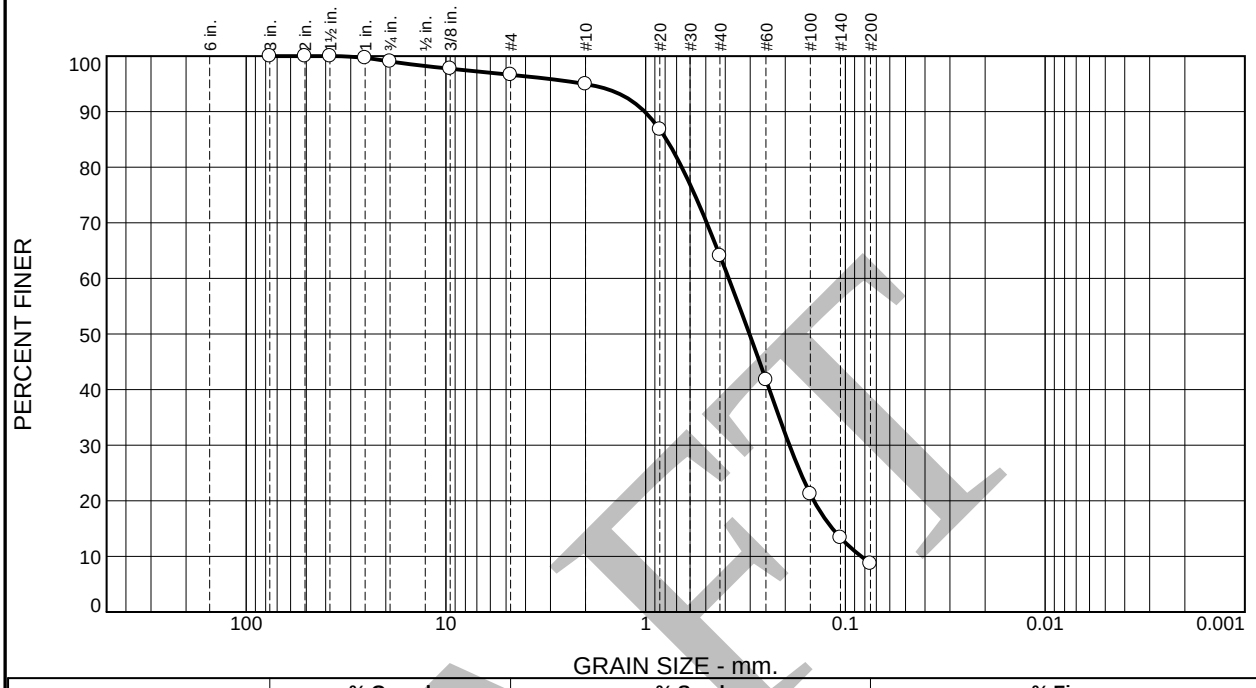
Client: Diversified Pacific Communities

Project: Ontario Hotel

Project No: 22-398 **Figure** B-4

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Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	1.0	2.4	1.7	30.8	55.4	8.7	

TEST RESULTS

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3	100.0		
2	100.0		
1.5	100.0		
1	99.7		
.75	99.0		
.375	97.7		
#4	96.6		
#10	94.9		
#20	86.8		
#40	64.1		
#60	41.7		
#100	21.2		
#140	13.4		
#200	8.7		

* (no specification provided)

Material Description

Brown Silty Fine to Medium Sand

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 1.0115 D_{85}= 0.7879 D_{60}= 0.3841
D_{50}= 0.3024 D_{30}= 0.1907 D_{15}= 0.1163
D_{10}= 0.0834 C_u= 4.60 C_c= 1.13

Remarks

Date Received: _____ **Date Tested:** 1/11/2023

Tested By: DI

Checked By: _____

Title: _____

Source of Sample: 22L363 **Depth:** 2 **Date Sampled:**

Sample Number: TP-8

Laboratory:
1251 West Pomona Road, Unit #103, Corona, Ca 92882 Phone #: 714.549.8921

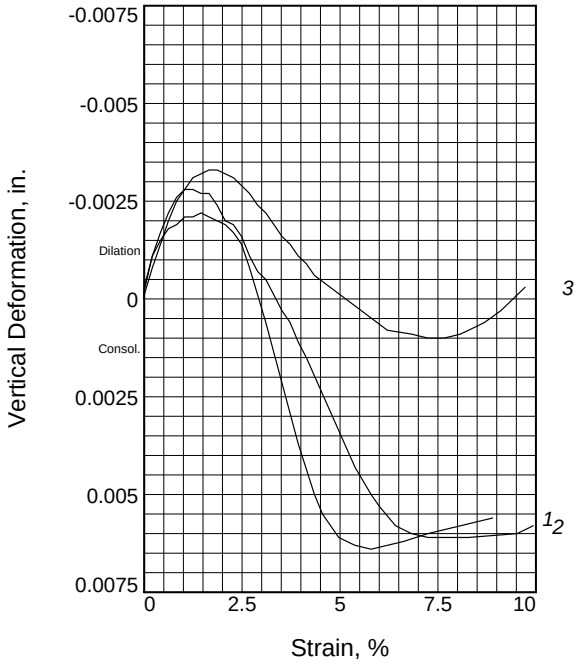
PETRA GEOSCIENCES INC.

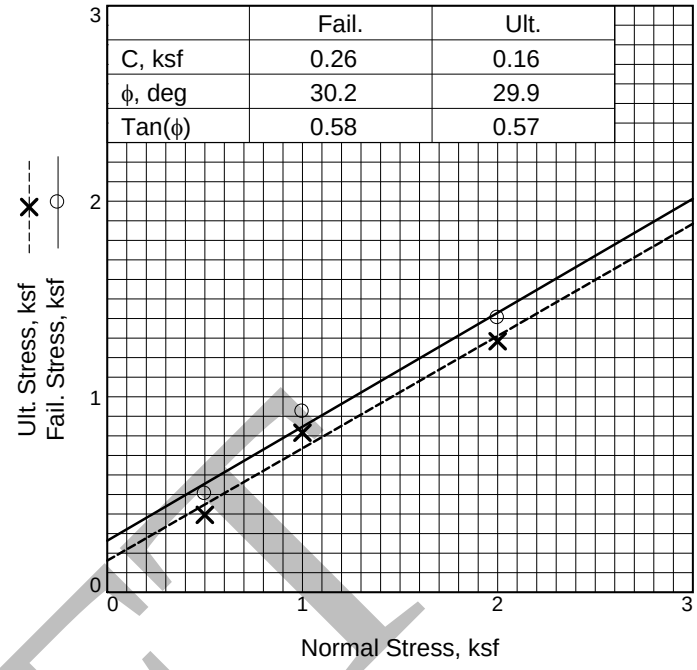
Client: Diversified Pacific Communities

Project: Ontario Hotel

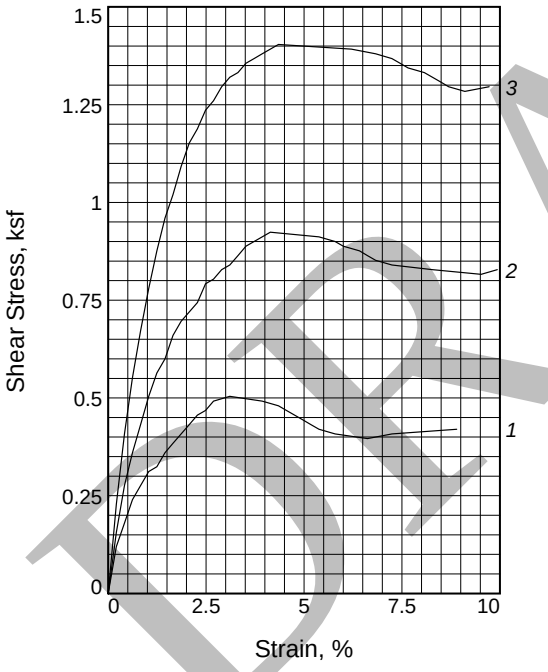
Project No: 22-398 **Figure** B-5

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	Fail.	Ult.
C, ksf	0.26	0.16
ϕ, deg	30.2	29.9
Tan(ϕ)	0.58	0.57



Sample No.		1	2	3
Initial	Water Content, %	2.1	2.1	2.1
	Dry Density, pcf	107.4	108.1	108.1
	Saturation, %	10.2	10.3	10.4
	Void Ratio	0.5410	0.5310	0.5310
	Diameter, in.	2.42	2.42	2.42
	Height, in.	1.01	1.00	1.01
At Test	Water Content, %	20.4	20.0	20.0
	Dry Density, pcf	107.4	108.1	108.1
	Saturation, %	100.0	99.7	99.6
	Void Ratio	0.5410	0.5310	0.5310
	Diameter, in.	2.42	2.42	2.42
	Height, in.	1.01	1.00	1.01
Normal Stress, ksf		0.50	1.00	2.00
Fail. Stress, ksf		0.50	0.92	1.40
Strain, %		3.1	4.1	4.3
Ult. Stress, ksf		0.40	0.82	1.28
Strain, %		6.6	9.5	9.1
Strain rate, in./min.		0.040	0.040	0.040

Sample Type:

Description: Brown fine to coarse Sand with Silt

Specific Gravity= 2.65

Remarks:

Client: Diversified Pacific Communities

Project: Ontario Hotel

Source of Sample: 22L363 **Depth:** 5

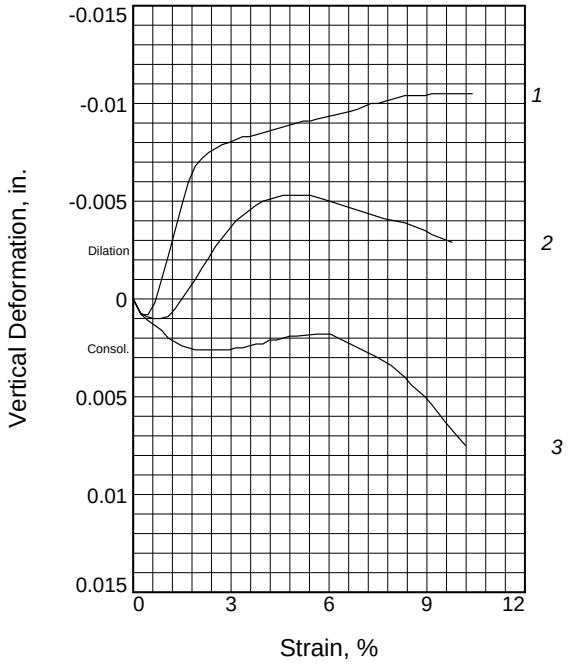
Sample Number: B-1

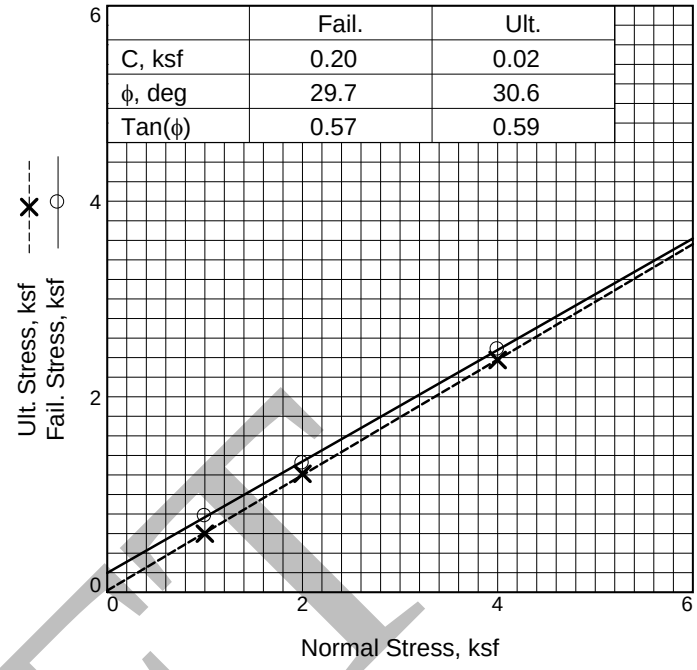
Proj. No.: 22-398 **Date Sampled:**

PETRA GEOSCIENCES INC.

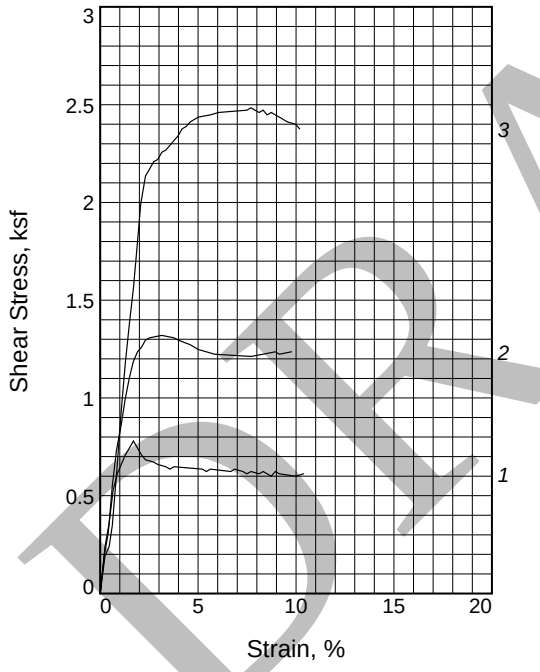
Figure B-6

DRAFT





	Fail.	Ult.
C, ksf	0.20	0.02
ϕ, deg	29.7	30.6
Tan(ϕ)	0.57	0.59



Sample No.		1	2	3
Initial	Water Content, %	4.0	4.0	4.0
	Dry Density, pcf	120.4	118.9	112.2
	Saturation, %	28.1	26.8	22.1
	Void Ratio	0.3738	0.3912	0.4744
	Diameter, in.	2.42	2.42	2.42
	Height, in.	1.02	1.01	1.01
At Test	Water Content, %	13.4	14.7	17.8
	Dry Density, pcf	120.4	118.9	112.2
	Saturation, %	95.2	99.5	99.2
	Void Ratio	0.3738	0.3912	0.4744
	Diameter, in.	2.42	2.42	2.42
	Height, in.	1.02	1.01	1.01
Normal Stress, ksf		1.00	2.00	4.00
Fail. Stress, ksf		0.78	1.32	2.48
Strain, %		1.7	3.1	7.7
Ult. Stress, ksf		0.60	1.21	2.38
Strain, %		10.0	7.7	10.2
Strain rate, in./min.		5.000	0.040	0.040

Sample Type:
Description: Yellowish brown Silty Sand

Specific Gravity= 2.65
Remarks:

Client: Diversified Pacific Communities

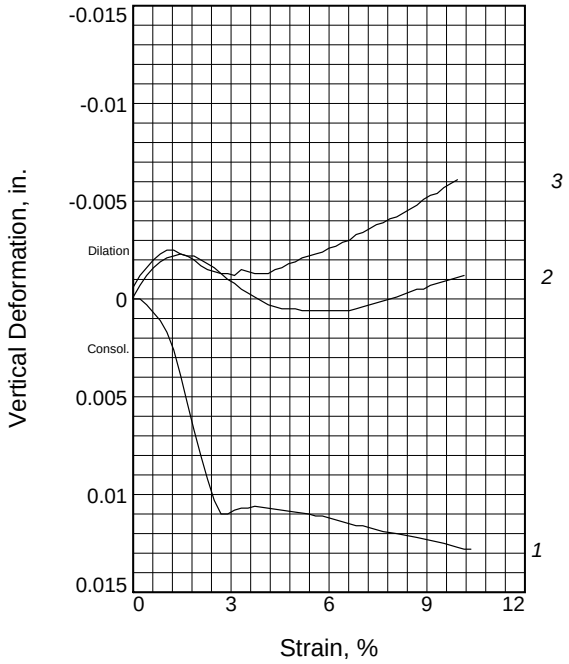
Project: Ontario Hotel

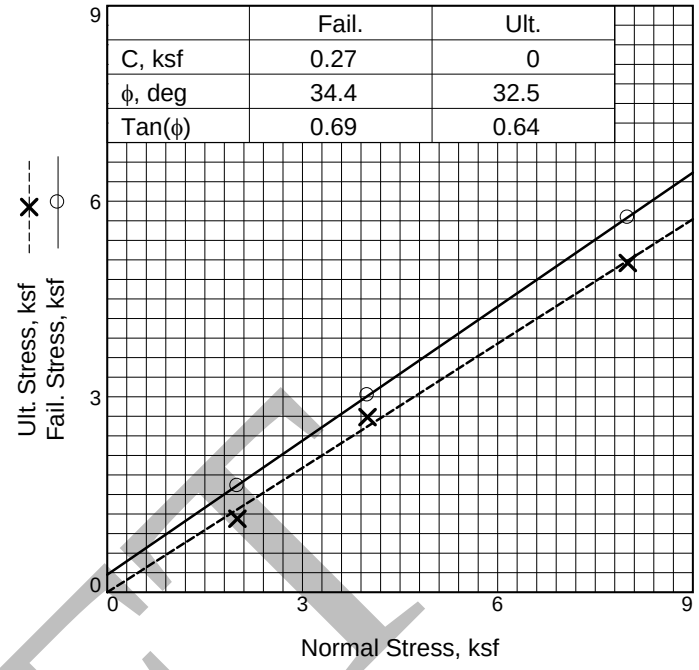
Source of Sample: 22L363 **Depth:** 20
Sample Number: B-1
Proj. No.: 22-398 **Date Sampled:** 12/21/2022

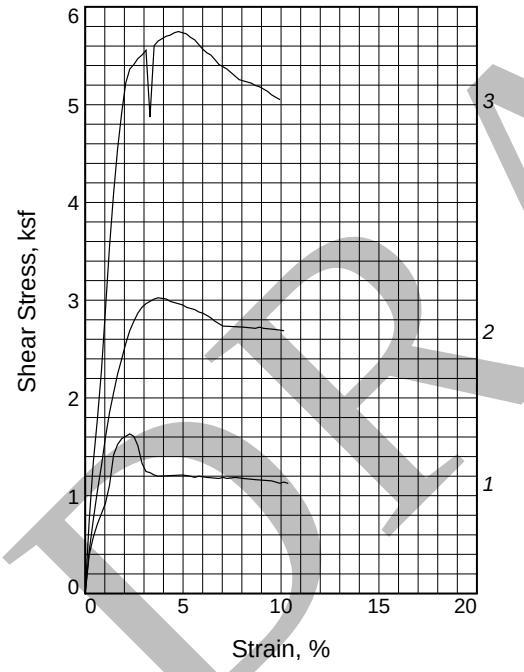
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Figure B-7

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Sample No.		1	2	3
Initial	Water Content, %	8.4	8.4	8.4
	Dry Density, pcf	110.4	98.8	101.6
	Saturation, %	44.7	33.0	35.5
	Void Ratio	0.4979	0.6752	0.6277
	Diameter, in.	2.42	2.42	2.42
	Height, in.	1.02	1.01	1.02
At Test	Water Content, %	18.7	25.3	23.5
	Dry Density, pcf	110.4	98.8	101.6
	Saturation, %	99.5	99.2	99.2
	Void Ratio	0.4979	0.6752	0.6277
	Diameter, in.	2.42	2.42	2.42
	Height, in.	1.02	1.01	1.02
Normal Stress, ksf		2.00	4.00	8.00
Fail. Stress, ksf		1.63	3.02	5.75
Strain, %		2.3	3.7	4.8
Ult. Stress, ksf		1.13	2.69	5.05
Strain, %		10.3	10.1	9.9
Strain rate, in./min.		0.040	0.040	0.040

Sample Type:

Description: Light olive brown Silty fine to medium Sand

Specific Gravity= 2.65

Remarks:

Client: Diversified Pacific Communities

Project: Ontario Hotel

Source of Sample: 22L363 **Depth:** 55

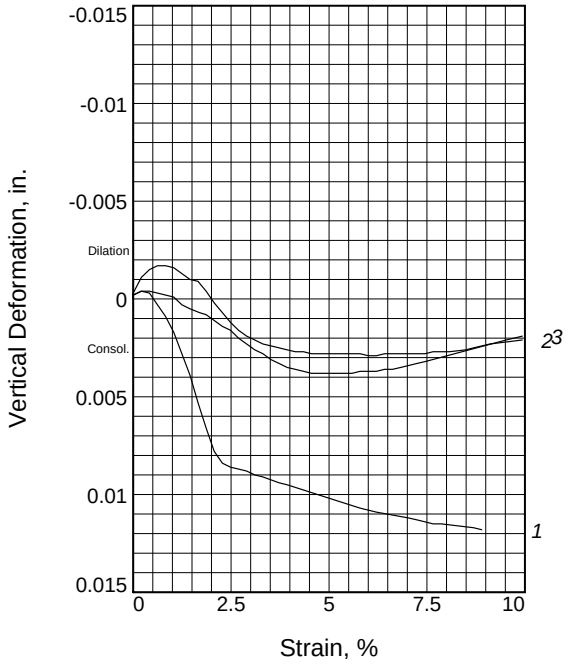
Sample Number: B-1

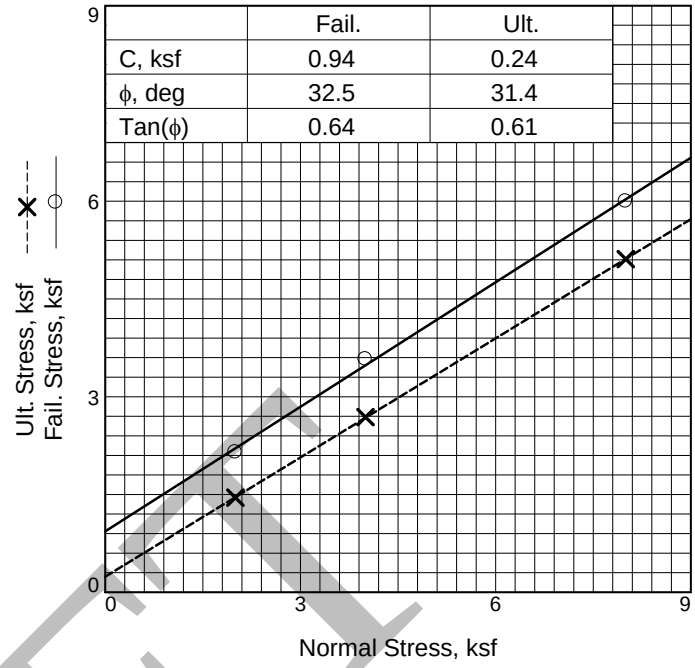
Proj. No.: 22-398 **Date Sampled:**

PETRA GEOSCIENCES INC.

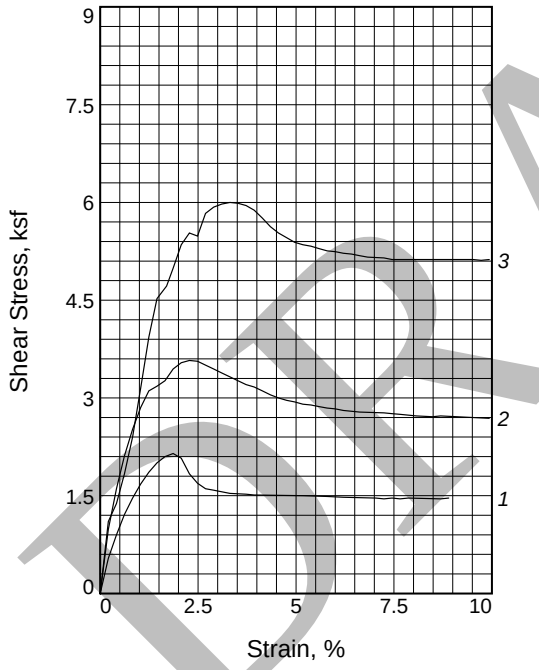
Figure B-8

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	Fail.	Ult.
C, ksf	0.94	0.24
ϕ, deg	32.5	31.4
Tan(ϕ)	0.64	0.61



Sample No.		1	2	3
Initial	Water Content, %	14.5	14.5	N/A
	Dry Density, pcf	N/A	N/A	N/A
	Saturation, %	N/A	N/A	N/A
	Void Ratio	N/A	N/A	N/A
	Diameter, in.	2.42	2.42	2.42
	Height, in.	0.00	0.00	0.00
At Test	Water Content, %	N/A	N/A	N/A
	Dry Density, pcf			
	Saturation, %			
	Void Ratio			
	Diameter, in.			
	Height, in.			
Normal Stress, ksf		2.00	4.00	8.00
Fail. Stress, ksf		2.15	3.58	6.00
Strain, %		1.9	2.3	3.3
Ult. Stress, ksf		1.45	2.69	5.11
Strain, %		8.7	9.9	9.7
Strain rate, in./min.		0.040	0.040	0.040

Sample Type:

Description: Light brrown Silty fine to coarse Sand

Specific Gravity=

Remarks:

Figure B-9

Client: Diversified Pacific Communities

Project: Ontario Hotel

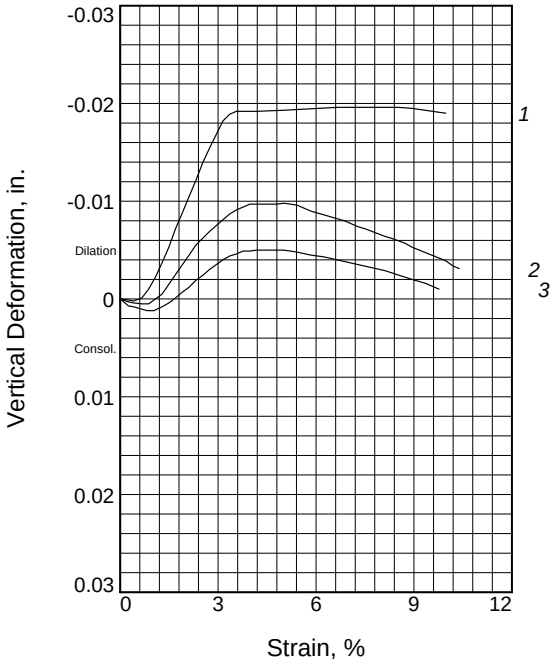
Source of Sample: 22L363 **Depth:** 65

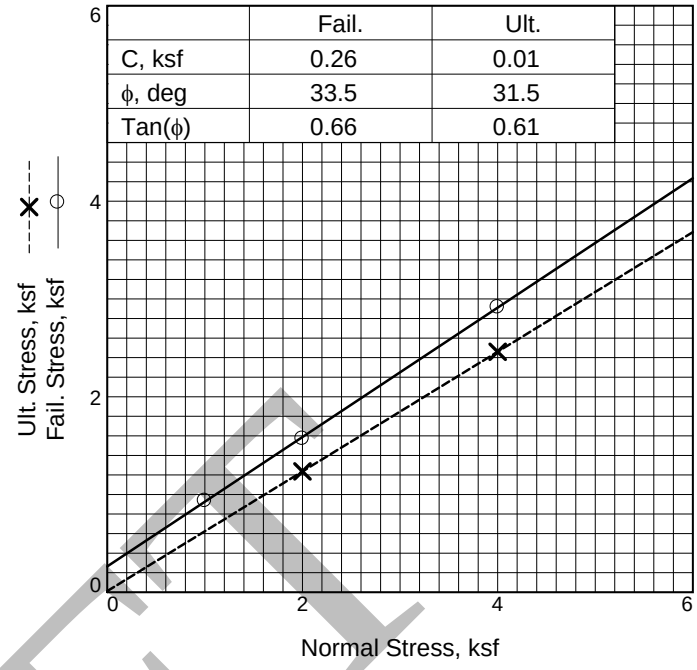
Sample Number: B-1

Proj. No.: 22-398 **Date Sampled:**

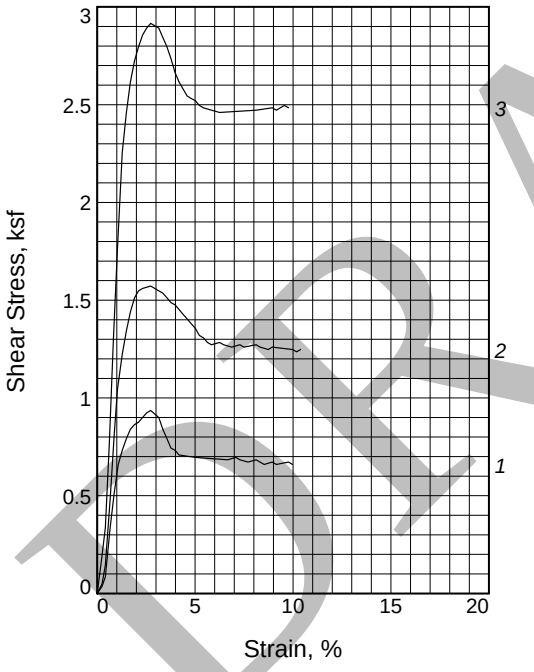
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	Fail.	Ult.
C, ksf	0.26	0.01
ϕ, deg	33.5	31.5
Tan(ϕ)	0.66	0.61



Sample No.		1	2	3
Initial	Water Content, %	9.2	9.2	9.2
	Dry Density, pcf	N/A	N/A	N/A
	Saturation, %	N/A	N/A	N/A
	Void Ratio	N/A	N/A	N/A
	Diameter, in.	2.42	2.42	2.42
	Height, in.	0.00	0.00	0.00
At Test	Water Content, %	N/A	N/A	N/A
	Dry Density, pcf			
	Saturation, %			
	Void Ratio			
	Diameter, in.			
	Height, in.			
Normal Stress, ksf		1.00	2.00	4.00
Fail. Stress, ksf		0.94	1.57	2.92
Strain, %		2.7	2.7	2.7
Ult. Stress, ksf			1.24	2.46
Strain, %			10.2	6.3
Strain rate, in./min.		0.040	0.040	0.040

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Sample Type:
Description:

Specific Gravity=
Remarks:

Figure B-10

Client: Diversified Pacific Communities

Project: Ontario Hotel

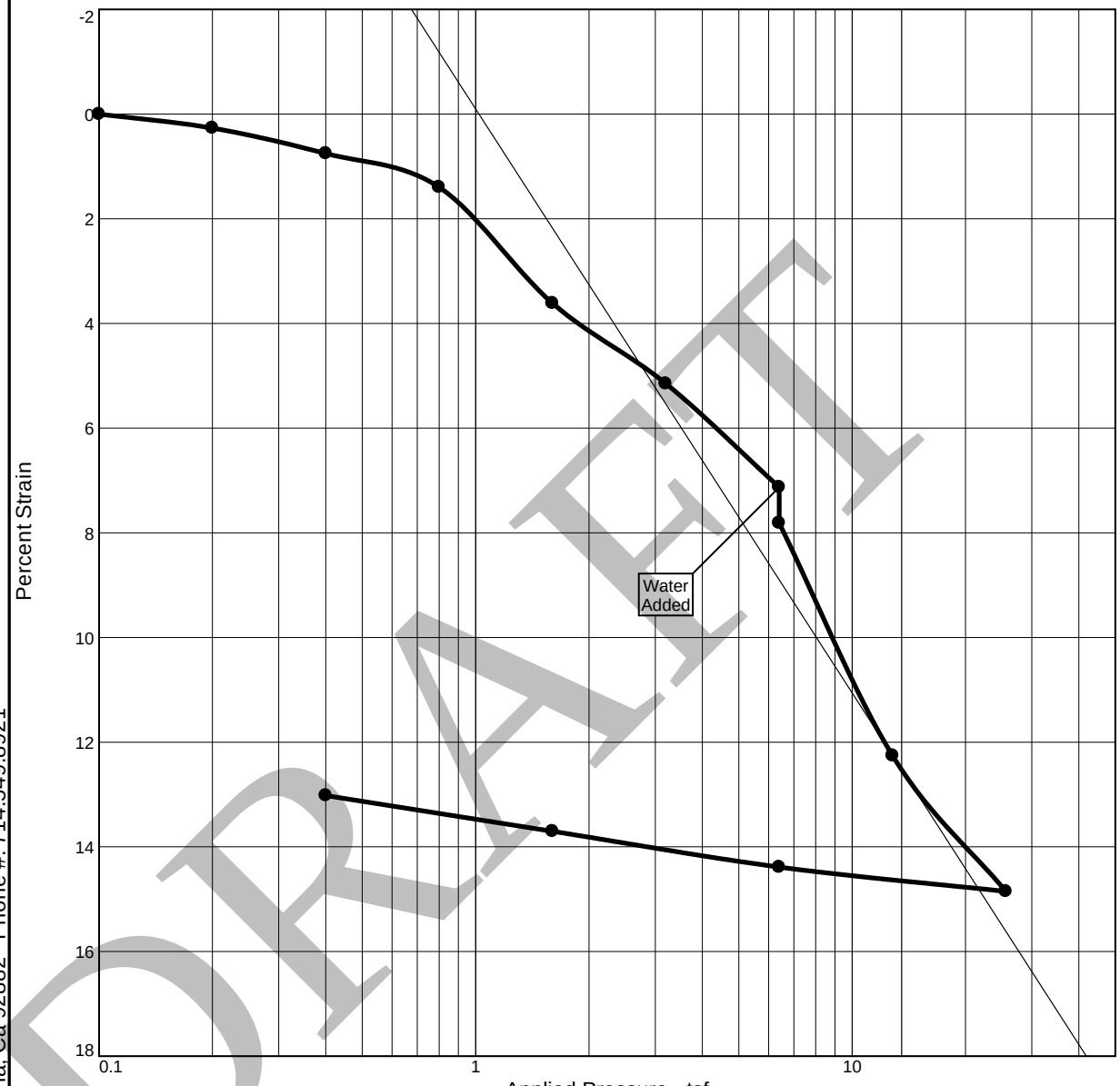
Source of Sample: 22L363 **Depth:** 20

Sample Number: B-6

Proj. No.: 22-398 **Date Sampled:**

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CONSOLIDATION TEST REPORT



Natural Saturation	Natural Moisture	Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (tsf)	P_c (tsf)	C_c	C_r	Initial Void Ratio
	8.4 %	93.2				5.556584	13.6			

MATERIAL DESCRIPTION	USCS	AASHTO
Light olive brown Silty fine to medium Sand		

Project No. 22-398 **Client:** Diversified Pacific Communities

Project: Ontario Hotel

Source of Sample: 22L363 **Depth:** 55 **Sample Number:** B-1

Remarks:

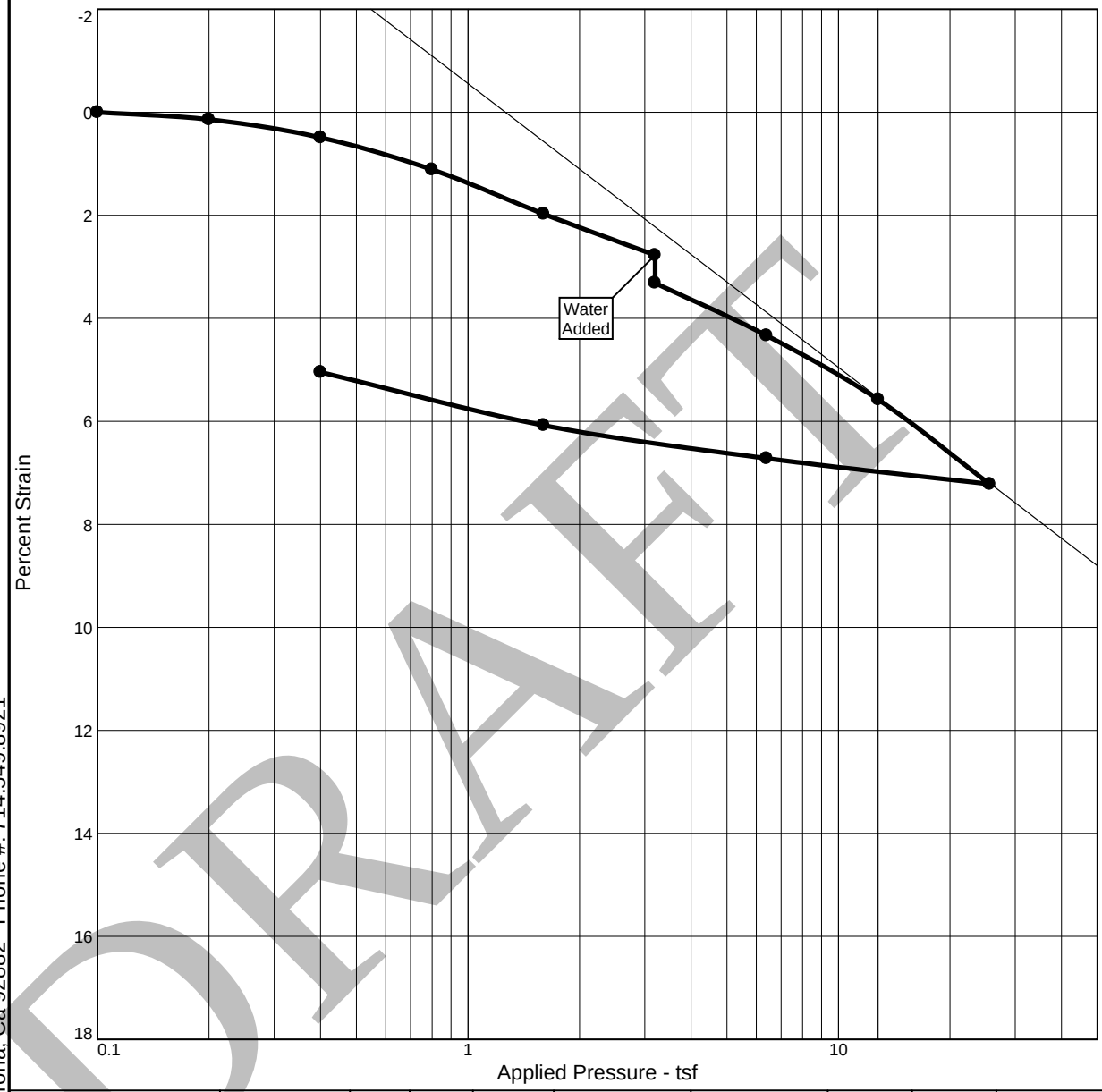
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Figure B-11

Laboratory:
1251 West Pomona Road, Unit #103, Corona, Ca 92882 Phone #. 714.549.8921

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CONSOLIDATION TEST REPORT



Natural Saturation	Natural Moisture	Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (tsf)	P_c (tsf)	C_c	C_r	Initial Void Ratio
37.7 %	7.4 %	108.8			2.65	2.92128	13.1	0.08	0.02	0.520

MATERIAL DESCRIPTION	USCS	AASHTO
Light brown Silty fine to coarse Sand		

Project No. 22-398 **Client:** Diversified Pacific Communities

Project: Ontario Hotel

Source of Sample: 22L363 **Depth:** 25 **Sample Number:** B-3

Remarks:

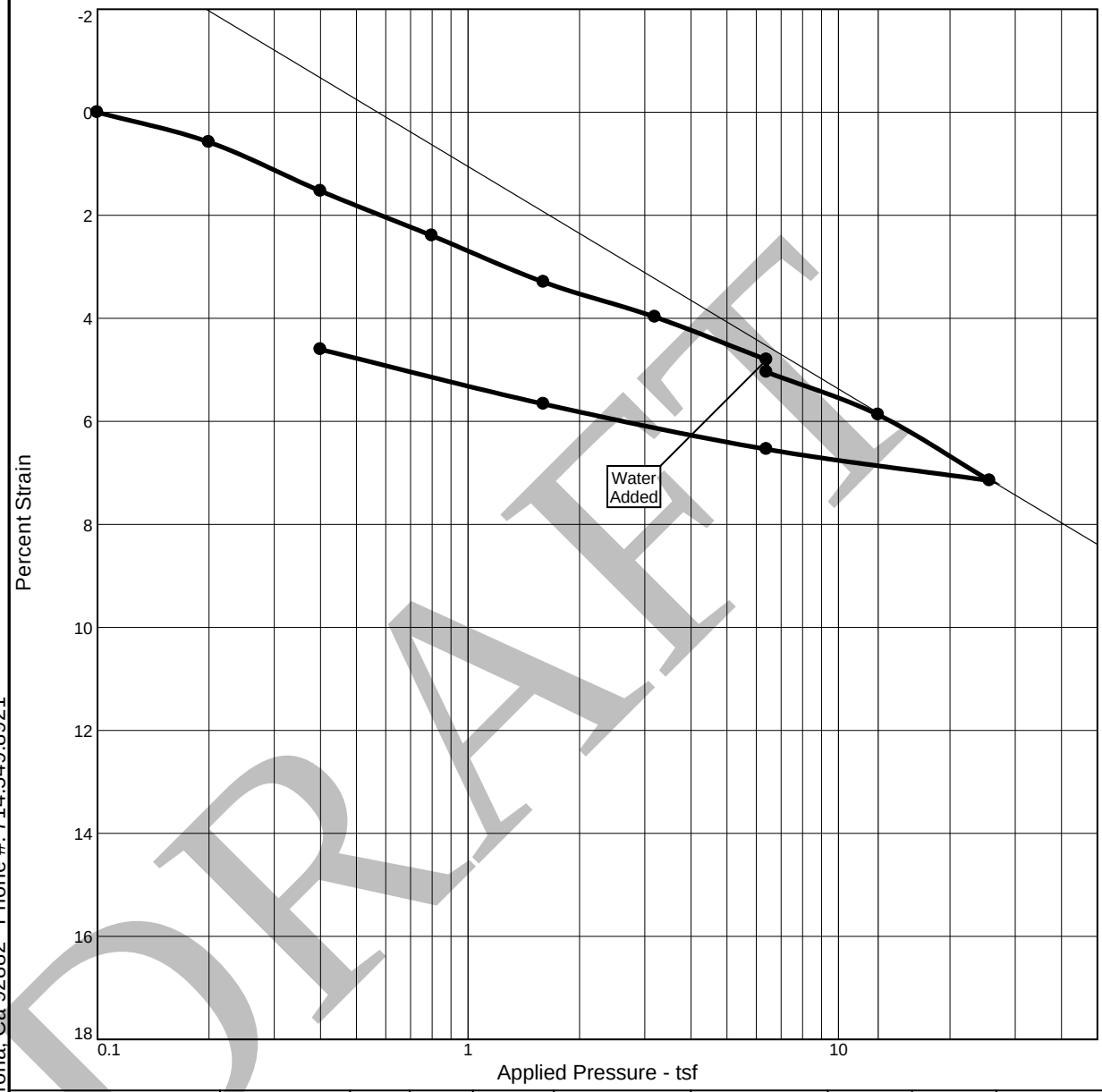
PETRA GEOSCIENCES INC.

Figure B-12

Laboratory:
1251 West Pomona Road, Unit #103, Corona, Ca 92882 Phone #. 714.549.8921

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CONSOLIDATION TEST REPORT



Natural Saturation	Natural Moisture	Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (tsf)	P_c (tsf)	C_c	C_r	Initial Void Ratio
71.2 %	9.9 %	121.0			2.65	6.64895	13.3	0.06	0.02	0.367

MATERIAL DESCRIPTION	USCS	AASHTO
Yellowish brown Silty fine to coarse Sand		

Project No. 22-398 **Client:** Diversified Pacific Communities

Project: Ontario Hotel

Source of Sample: 22L363 **Depth:** 50 **Sample Number:** B-6

Remarks:

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Figure B-13

Laboratory:
1251 West Pomona Road, Unit #103, Corona, Ca 92882 Phone #. 714.549.8921

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APPENDIX C

STANDARD GRADING SPECIFICATIONS

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STANDARD GRADING SPECIFICATIONS

These specifications present the usual and minimum requirements for projects on which Petra Geosciences, Inc. (Petra) is the geotechnical consultant. No deviation from these specifications will be allowed, except where specifically superseded in the preliminary geology and soils report, or in other written communication signed by the Soils Engineer and Engineering Geologist of record (Geotechnical Consultant).

I. GENERAL

A. The Geotechnical Consultant is the Owner's or Builder's representative on the project. For the purpose of these specifications, participation by the Geotechnical Consultant includes that observation performed by any person or persons employed by, and responsible to, the licensed Soils Engineer and Engineering Geologist signing the soils report.

B. The contractor should prepare and submit to the Owner and Geotechnical Consultant a work plan that indicates the sequence of earthwork grading, the number of "spreads" and the estimated quantities of daily earthwork to be performed prior to the commencement of grading. This work plan should be reviewed by the Geotechnical Consultant to schedule personnel to perform the appropriate level of observation, mapping, and compaction testing as necessary.

C. All clearing, site preparation, or earthwork performed on the project shall be conducted by the Contractor in accordance with the recommendations presented in the geotechnical report and under the observation of the Geotechnical Consultant.

D. It is the Contractor's responsibility to prepare the ground surface to receive the fills to the satisfaction of the Geotechnical Consultant and to place, spread, mix, water, and compact the fill in accordance with the specifications of the Geotechnical Consultant. The Contractor shall also remove all material considered unsatisfactory by the Geotechnical Consultant.

E. It is the Contractor's responsibility to have suitable and sufficient compaction equipment on the job site to handle the amount of fill being placed. If necessary, excavation equipment will be shut down to permit completion of compaction to project specifications. Sufficient watering apparatus will also be provided by the Contractor, with due consideration for the fill material, rate of placement, and time of year.

F. After completion of grading a report will be submitted by the Geotechnical Consultant.

II. SITE PREPARATION

A. Clearing and Grubbing

1. All vegetation such as trees, brush, grass, roots, and deleterious material shall be disposed of offsite. This removal shall be concluded prior to placing fill.

2. Any underground structures such as cesspools, cisterns, mining shafts, tunnels, septic tanks, wells, pipe lines, etc., are to be removed or treated in a manner prescribed by the Geotechnical Consultant.

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III. FILL AREA PREPARATION

A. Remedial Removals/Overexcavations

1. Remedial removals, as well as overexcavation for remedial purposes, shall be evaluated by the Geotechnical Consultant. Remedial removal depths presented in the geotechnical report and shown on the geotechnical plans are estimates only. The actual extent of removal should be determined by the Geotechnical Consultant based on the conditions exposed during grading. All soft, loose, dry, saturated, spongy, organic-rich, highly fractured or otherwise unsuitable ground shall be overexcavated to competent ground as determined by the Geotechnical Consultant.

2. Soil, alluvium, or bedrock materials determined by the Soils Engineer as being unsuitable for placement in compacted fills shall be removed from the site. Any material incorporated as a part of a compacted fill must be approved by the Geotechnical Consultant.

3. Should potentially hazardous materials be encountered, the Contractor should stop work in the affected area. An environmental consultant specializing in hazardous materials should be notified immediately for evaluation and handling of these materials prior to continuing work in the affected area.

B. Evaluation/Acceptance of Fill Areas

All areas to receive fill, including removal and processed areas, key bottoms, and benches, shall be observed, mapped, elevations recorded, and/or tested prior to being accepted by the Geotechnical Consultant as suitable to receive fill. The contractor shall obtain a written acceptance from the Geotechnical Consultant prior to fill placement. A licensed surveyor shall provide sufficient survey control for determining locations and elevations of processed areas, keys, and benches.

C. Processing

After the ground surface to receive fill has been declared satisfactory for support of fill by the Geotechnical Consultant, it shall be scarified to a minimum depth of 6 inches and until the ground surface is uniform and free from ruts, hollows, hummocks, or other uneven features which may prevent uniform compaction.

The scarified ground surface shall then be brought to optimum moisture, mixed as required, and compacted to a minimum relative compaction of 90 percent.

D. Subdrains

Subdrainage devices shall be constructed in compliance with the ordinances of the controlling governmental agency, and/or with the recommendations of the Geotechnical Consultant. (Typical Canyon Subdrain details are given on Plate SG-1).

E. Cut/Fill & Deep Fill/Shallow Fill Transitions

In order to provide uniform bearing conditions in cut/fill and deep fill/shallow fill transition lots, the cut and shallow fill portions of the lot should be overexcavated to the depths and the horizontal limits discussed in the approved geotechnical report and replaced with compacted fill. (Typical details are given on Plate SG-7.)

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IV. COMPACTED FILL MATERIAL

A. General

Materials excavated on the property may be utilized in the fill, provided each material has been determined to be suitable by the Geotechnical Consultant. Material to be used for fill shall be essentially free of organic material and other deleterious substances. Roots, tree branches, and other matter missed during clearing shall be removed from the fill as recommended by the Geotechnical Consultant. Material that is spongy, subject to decay, or otherwise considered unsuitable shall not be used in the compacted fill.

Soils of poor quality, such as those with unacceptable gradation, high expansion potential, or low strength shall be placed in areas acceptable to the Geotechnical Consultant or mixed with other soils to achieve satisfactory fill material.

B. Oversize Materials

Oversize material defined as rock, or other irreducible material with a maximum dimension greater than 12 inches in diameter, shall be taken offsite or placed in accordance with the recommendations of the Geotechnical Consultant in areas designated as suitable for rock disposal (Typical details for Rock Disposal are given on Plate SG-4).

Rock fragments less than 12 inches in diameter may be utilized in the fill provided, they are not nested or placed in concentrated pockets; they are surrounded by compacted fine grained soil material and the distribution of rocks is approved by the Geotechnical Consultant.

C. Laboratory Testing

Representative samples of materials to be utilized as compacted fill shall be analyzed by the laboratory of the Geotechnical Consultant to determine their physical properties. If any material other than that previously tested is encountered during grading, the appropriate analysis of this material shall be conducted by the Geotechnical Consultant as soon as possible.

D. Import

If importing of fill material is required for grading, proposed import material should meet the requirements of the previous section. The import source shall be given to the Geotechnical Consultant at least 2 working days prior to importing so that appropriate tests can be performed and its suitability determined.

V. FILL PLACEMENT AND COMPACTION

A. Fill Layers

Material used in the compacting process shall be evenly spread, watered, processed, and compacted in thin lifts not to exceed 6 inches in thickness to obtain a uniformly dense layer. The fill shall be placed and compacted on a horizontal plane, unless otherwise approved by the Geotechnical Consultant.

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B. Moisture Conditioning

Fill soils shall be watered, dried back, blended, and/or mixed, as necessary to attain a relatively uniform moisture content at or slightly above optimum moisture content.

C. Compaction

Each layer shall be compacted to 90 percent of the maximum density in compliance with the testing method specified by the controlling governmental agency. (In general, ASTM D 1557-02, will be used.)

If compaction to a lesser percentage is authorized by the controlling governmental agency because of a specific land use or expansive soils condition, the area to received fill compacted to less than 90 percent shall either be delineated on the grading plan or appropriate reference made to the area in the soils report.

D. Failing Areas

If the moisture content or relative density varies from that required by the Geotechnical Consultant, the Contractor shall rework the fill until it is approved by the Geotechnical Consultant.

E. Benching

All fills shall be keyed and benched through all topsoil, colluvium, alluvium or creep material, into sound bedrock or firm material where the slope receiving fill exceeds a ratio of 5 horizontal to 1 vertical, in accordance with the recommendations of the Geotechnical Consultant.

VI. SLOPES

A. Fill Slopes

The contractor will be required to obtain a minimum relative compaction of 90 percent out to the finish slope face of fill slopes, buttresses, and stabilization fills. This may be achieved by either overbuilding the slope and cutting back to the compacted core, or by direct compaction of the slope face with suitable equipment, or by any other procedure that produces the required compaction.

B. Side Hill Fills

The key for side hill fills shall be a minimum of 15 feet within bedrock or firm materials, unless otherwise specified in the soils report. (See detail on Plate SG-5.)

C. Fill-Over-Cut Slopes

Fill-over-cut slopes shall be properly keyed through topsoil, colluvium or creep material into rock or firm materials, and the transition shall be stripped of all soils prior to placing fill. (see detail on Plate SG-6).

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D. Landscaping

All fill slopes should be planted or protected from erosion by other methods specified in the soils report.

E. Cut Slopes

1. The Geotechnical Consultant should observe all cut slopes at vertical intervals not exceeding 10 feet.

2. If any conditions not anticipated in the preliminary report such as perched water, seepage, lenticular or confined strata of a potentially adverse nature, unfavorably inclined bedding, joints or fault planes are encountered during grading, these conditions shall be evaluated by the Geotechnical Consultant, and recommendations shall be made to treat these problems (Typical details for stabilization of a portion of a cut slope are given in Plates SG-2 and SG-3.).

3. Cut slopes that face in the same direction as the prevailing drainage shall be protected from slope wash by a non-erodible interceptor swale placed at the top of the slope.

4. Unless otherwise specified in the soils and geological report, no cut slopes shall be excavated higher or steeper than that allowed by the ordinances of controlling governmental agencies.

5. Drainage terraces shall be constructed in compliance with the ordinances of controlling governmental agencies, or with the recommendations of the Geotechnical Consultant.

VII. GRADING OBSERVATION

A. General

All cleanouts, processed ground to receive fill, key excavations, subdrains, and rock disposals must be observed and approved by the Geotechnical Consultant prior to placing any fill. It shall be the Contractor's responsibility to notify the Geotechnical Consultant when such areas are ready.

B. Compaction Testing

Observation of the fill placement shall be provided by the Geotechnical Consultant during the progress of grading. Location and frequency of tests shall be at the Consultants discretion based on field conditions encountered. Compaction test locations will not necessarily be selected on a random basis. Test locations may be selected to verify adequacy of compaction levels in areas that are judged to be susceptible to inadequate compaction.

C. Frequency of Compaction Testing

In general, density tests should be made at intervals not exceeding 2 feet of fill height or every 1000 cubic yards of fill placed. This criteria will vary depending on soil conditions and the size of the job. In any event, an adequate number of field density tests shall be made to verify that the required compaction is being achieved.

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VIII. CONSTRUCTION CONSIDERATIONS

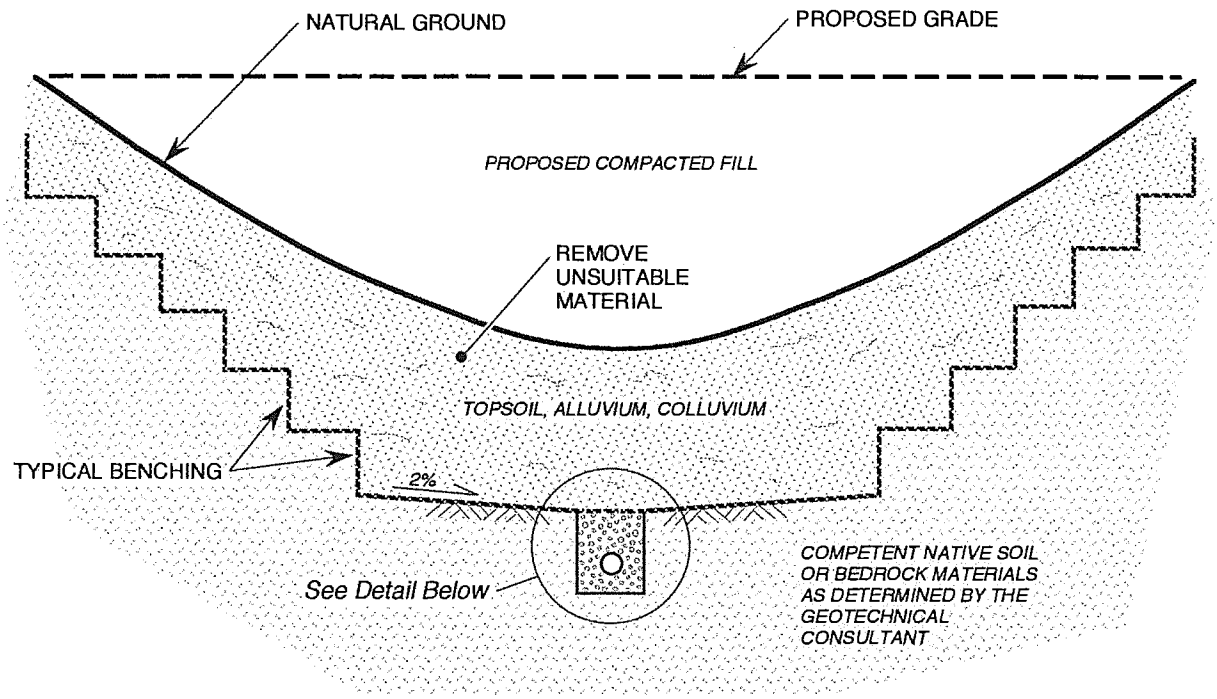
A. Erosion control measures, when necessary, shall be provided by the Contractor during grading and prior to the completion and construction of permanent drainage controls.

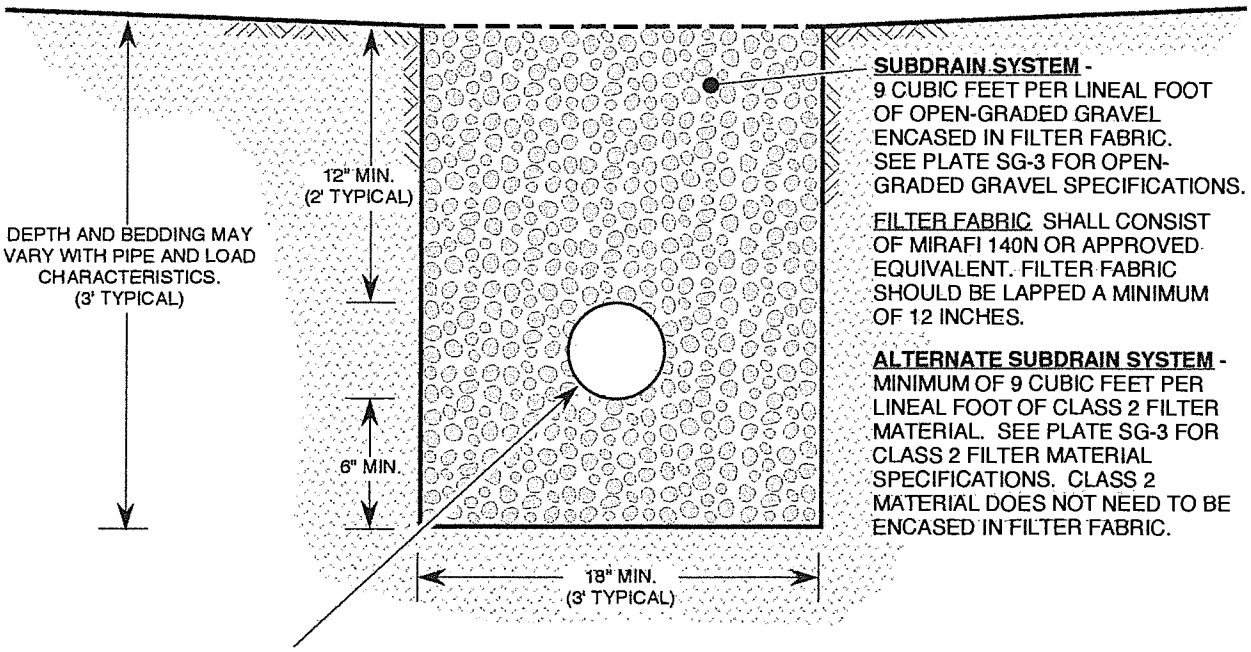
B. Upon completion of grading and termination of observations by the Geotechnical Consultant, no further filling or excavating, including that necessary for footings, foundations, large tree wells, retaining walls, or other features shall be performed without the approval of the Geotechnical Consultant.

C. Care shall be taken by the Contractor during final grading to preserve any berms, drainage terraces, interceptor swales, or other devices of permanent nature on or adjacent to the property.

S:\!BOILERS-WORK\REPORT INSERTS\STANDARD GRADING SPECS

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SUBDRAIN SYSTEM - 9 CUBIC FEET PER LINEAL FOOT OF OPEN-GRADED GRAVEL ENCASED IN FILTER FABRIC. SEE PLATE SG-3 FOR OPEN-GRADED GRAVEL SPECIFICATIONS.

FILTER FABRIC SHALL CONSIST OF MIRAFI 140N OR APPROVED EQUIVALENT. FILTER FABRIC SHOULD BE LAPPED A MINIMUM OF 12 INCHES.

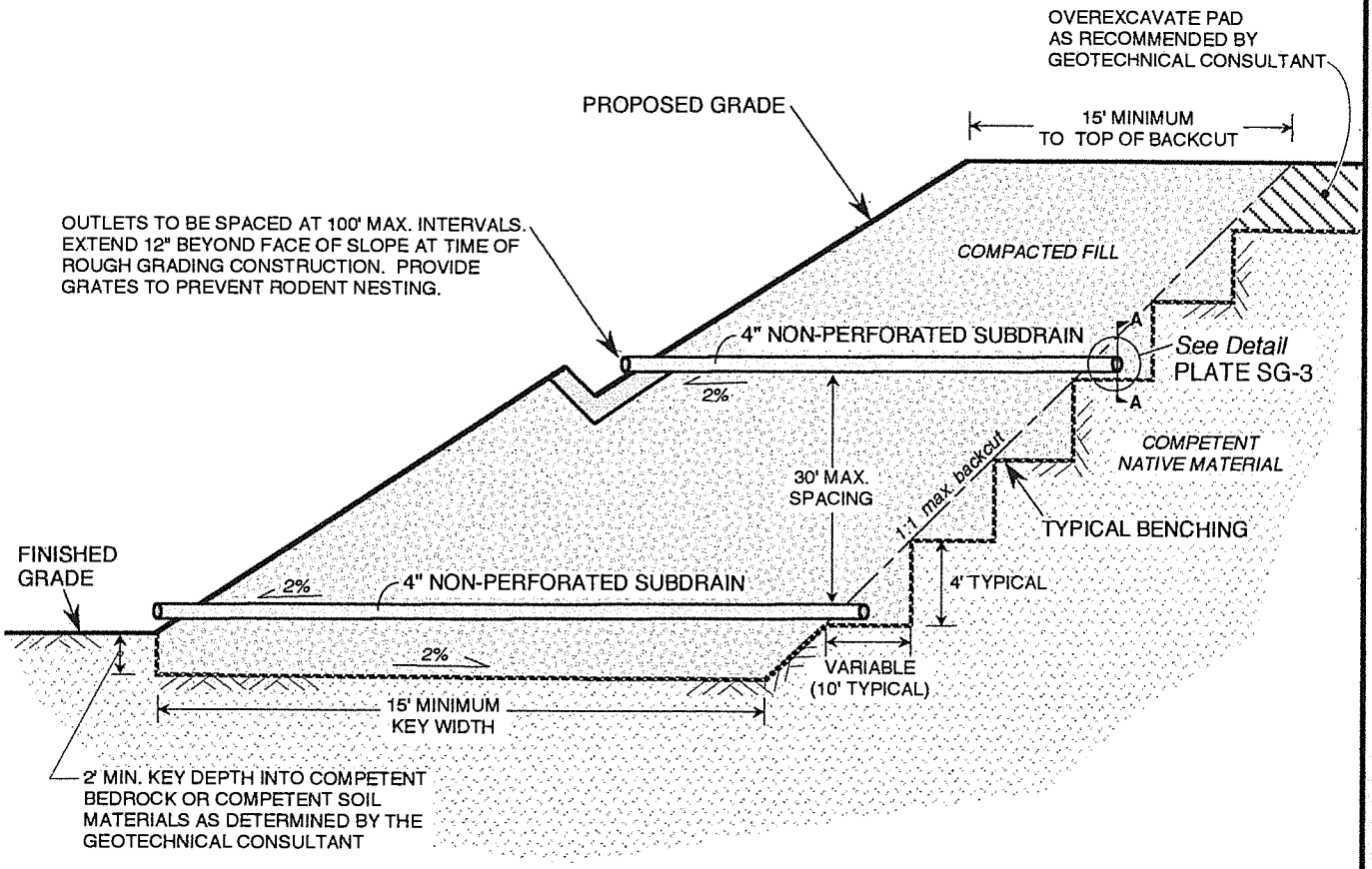
ALTERNATE SUBDRAIN SYSTEM - MINIMUM OF 9 CUBIC FEET PER LINEAL FOOT OF CLASS 2 FILTER MATERIAL. SEE PLATE SG-3 FOR CLASS 2 FILTER MATERIAL SPECIFICATIONS. CLASS 2 MATERIAL DOES NOT NEED TO BE ENCASED IN FILTER FABRIC.

MINIMUM 6-INCH DIAMETER PVC SCHEDULE 40, OR ABS SDR-35 WITH A MINIMUM OF EIGHT 1/4-INCH DIAMETER PERFORATIONS PER LINEAL FOOT IN BOTTOM HALF OF PIPE. PIPE TO BE LAID WITH PERFORATIONS FACING DOWN.

NOTES:

1. FOR CONTINUOUS RUNS IN EXCESS OF 500 FEET USE 8-INCH DIAMETER PIPE.
2. FINAL 20 FEET OF PIPE AT OUTLET SHALL BE NON-PERFORATED AND BACKFILLED WITH FINE-GRAINED MATERIAL.

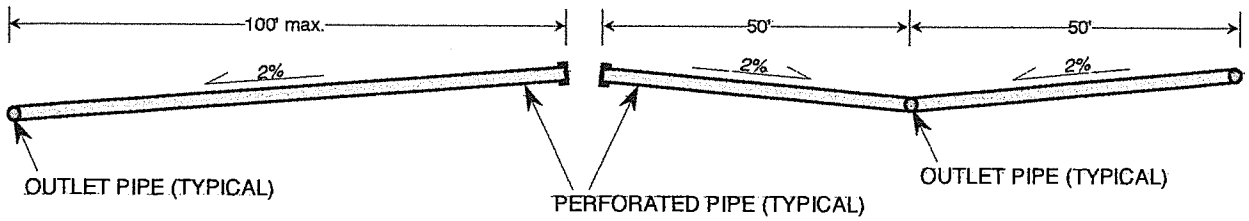
PETRA	CANYON SUBDRAIN DETAIL	PLATE SG-1



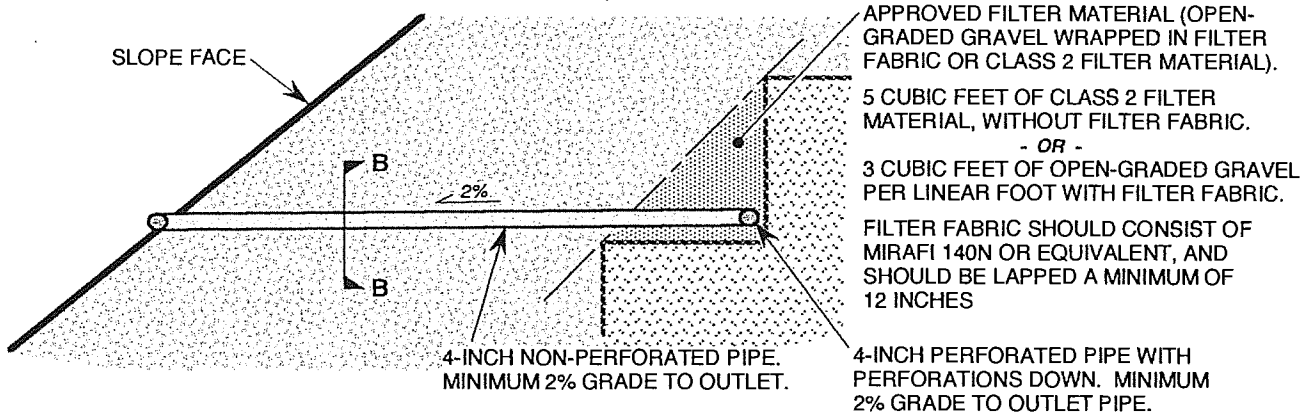
NOTES:

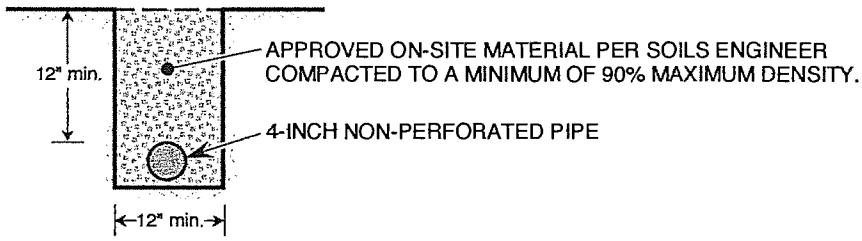
1. 30' MAXIMUM VERTICAL SPACING BETWEEN SUBDRAIN SYSTEMS.
2. 100' MAXIMUM HORIZONTAL DISTANCE BETWEEN NON-PERFORATED OUTLET PIPES. *(See Below)*
3. MINIMUM GRADIENT OF 2% FOR ALL PERFORATED AND NON-PERFORATED PIPE.

SECTION A-A (PERFORATED PIPE PROFILE)



PETRA	BUTTRESS OR STABILIZATION FILL DETAIL	PLATE SG-2





SECTION B-B (OUTLET PIPE)

PIPE SPECIFICATIONS:

1. 4-INCH MINIMUM DIAMETER, PVC SCHEDULE 40 OR ABS SDR-35.
2. FOR PERFORATED PIPE, MINIMUM 8 PERFORATIONS PER FOOT ON BOTTOM HALF OF PIPE.

FILTER MATERIAL/FABRIC SPECIFICATIONS:

OPEN-GRADED GRAVEL ENCASED IN FILTER FABRIC.
(MIRAFI 140N OR EQUIVALENT)

OPEN-GRADED GRAVEL

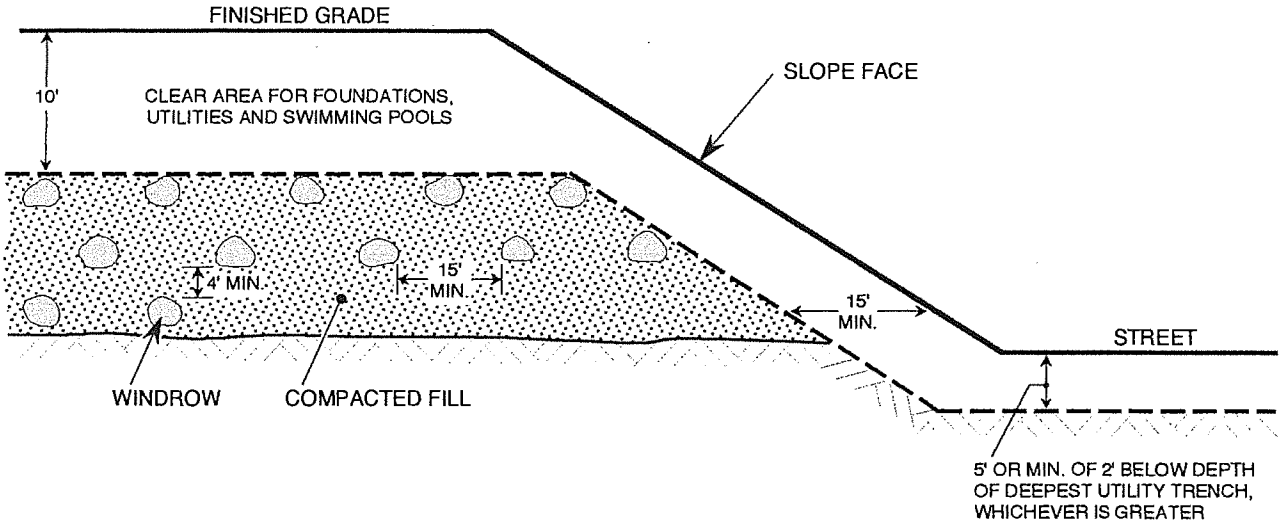
SIEVE SIZE	PERCENT PASSING
1 1/2-INCH	88 - 100
1-INCH	5 - 40
3/4-INCH	0 - 17
3/8-INCH	0 - 7
No. 200	0 - 3

ALTERNATE:

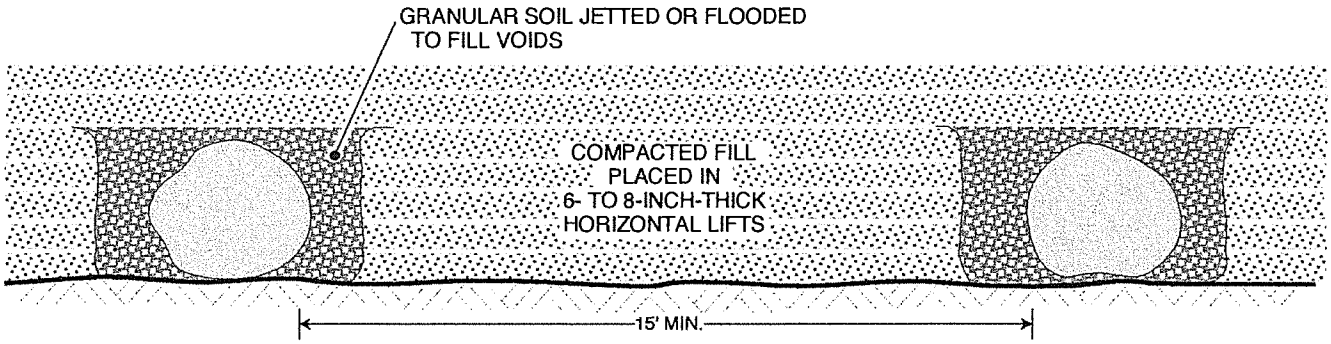
CLASS 2 PERMEABLE FILTER MATERIAL PER CALTRANS STANDARD SPECIFICATION 68-1.025.

CLASS 2 FILTER MATERIAL

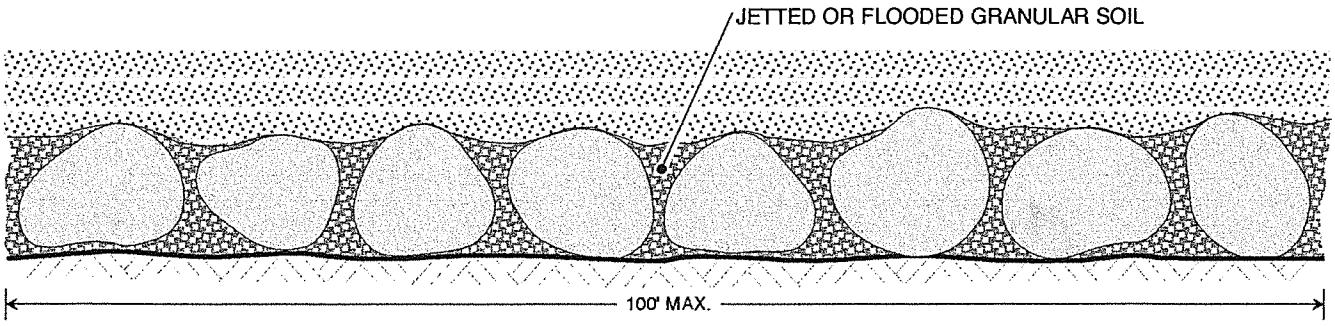
SIEVE SIZE	PERCENT PASSING
1-INCH	100
3/4-INCH	90 - 100
3/8-INCH	40 - 100
No. 4	25 - 40
No. 8	18 - 33
No. -30	5 - 15
No. -50	0 - 7
No. 200	0 - 3



TYPICAL WINDROW DETAIL (END VIEW)

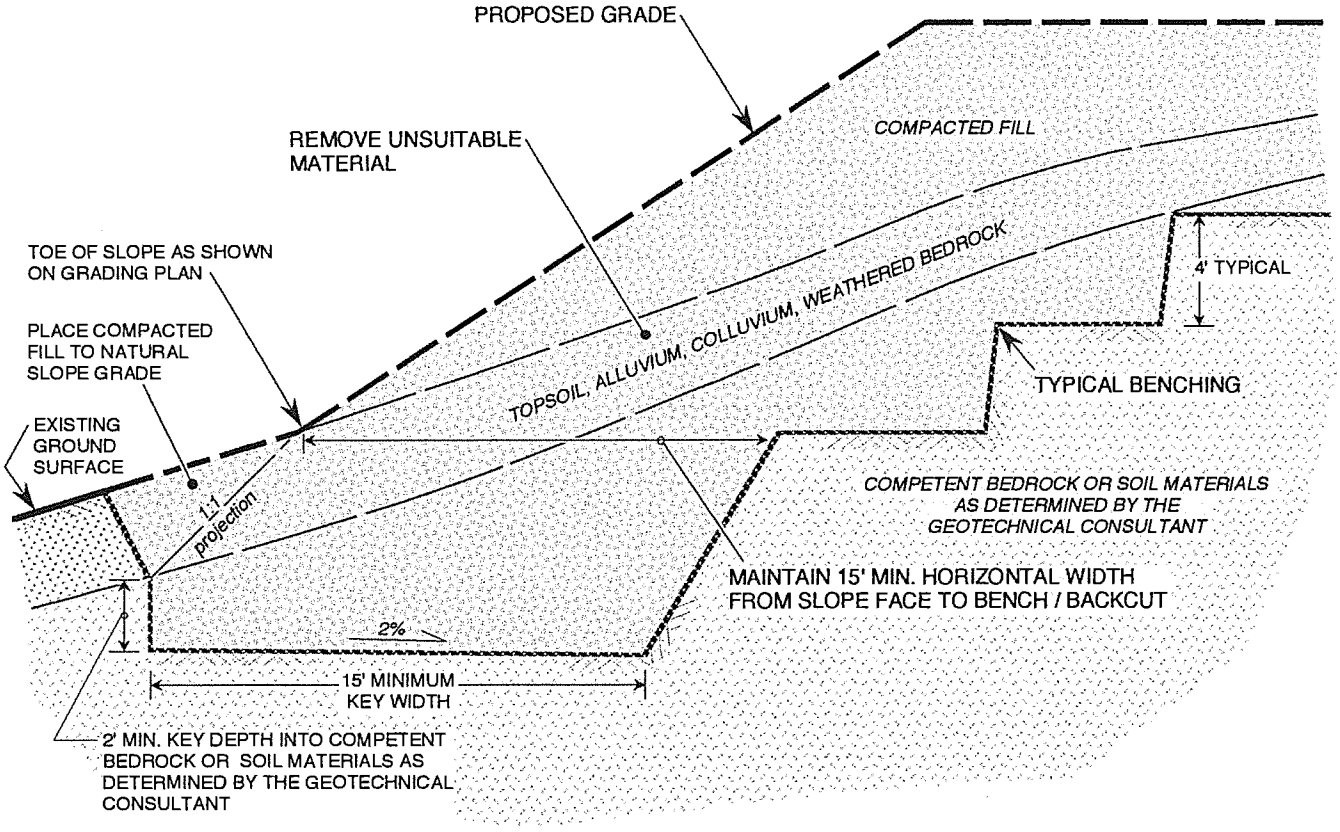


TYPICAL WINDROW DETAIL (PROFILE VIEW)



NOTE: OVERSIZE ROCK IS DEFINED AS CLASTS HAVING A MAXIMUM DIMENSION OF 12" OR LARGER

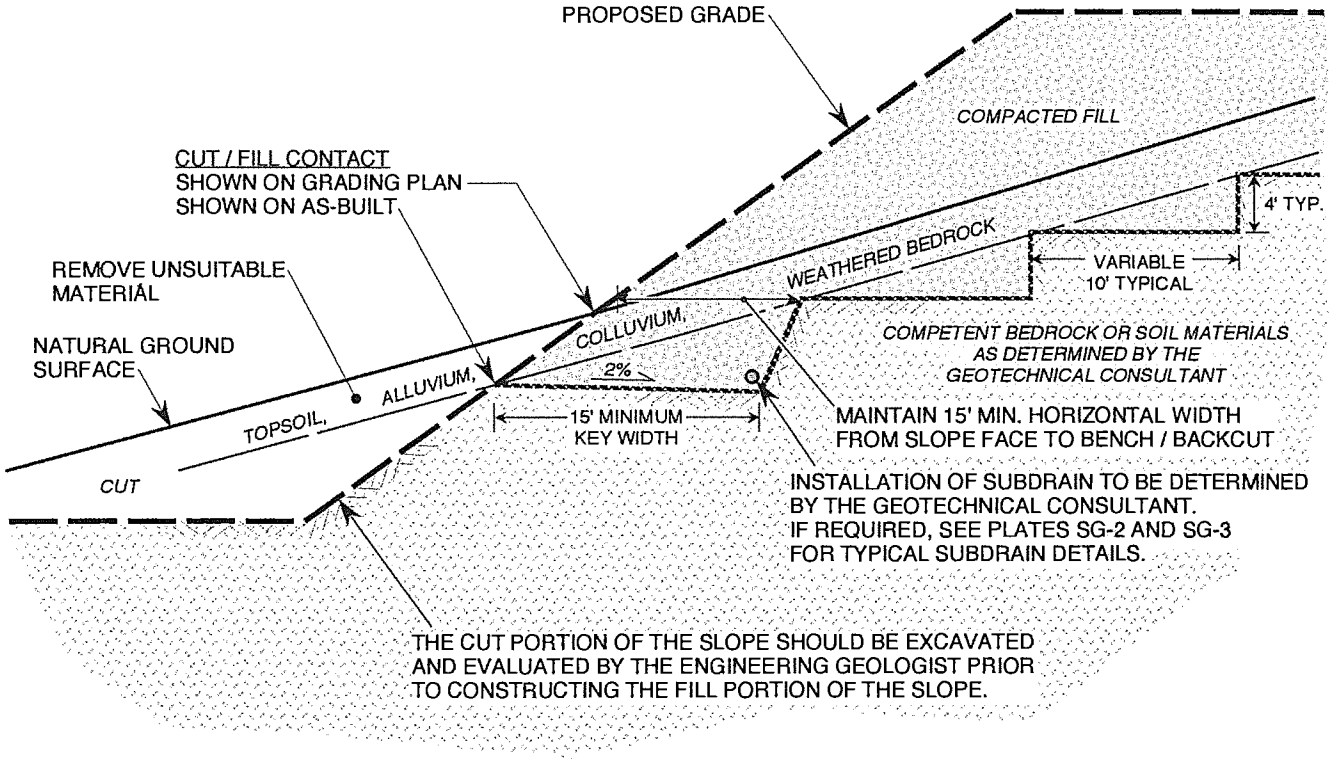
PETRA	TYPICAL ROCK DISPOSAL DETAIL	PLATE SG-4



NOTES:

1. WHERE NATURAL SLOPE GRADIENT IS 5:1 OR LESS, BENCHING IS NOT NECESSARY; HOWEVER, FILL IS NOT TO BE PLACED ON COMPRESSIBLE OR UNSUITABLE MATERIAL.
2. SOILS ENGINEER TO DETERMINE IF SUBDRAIN IS REQUIRED.

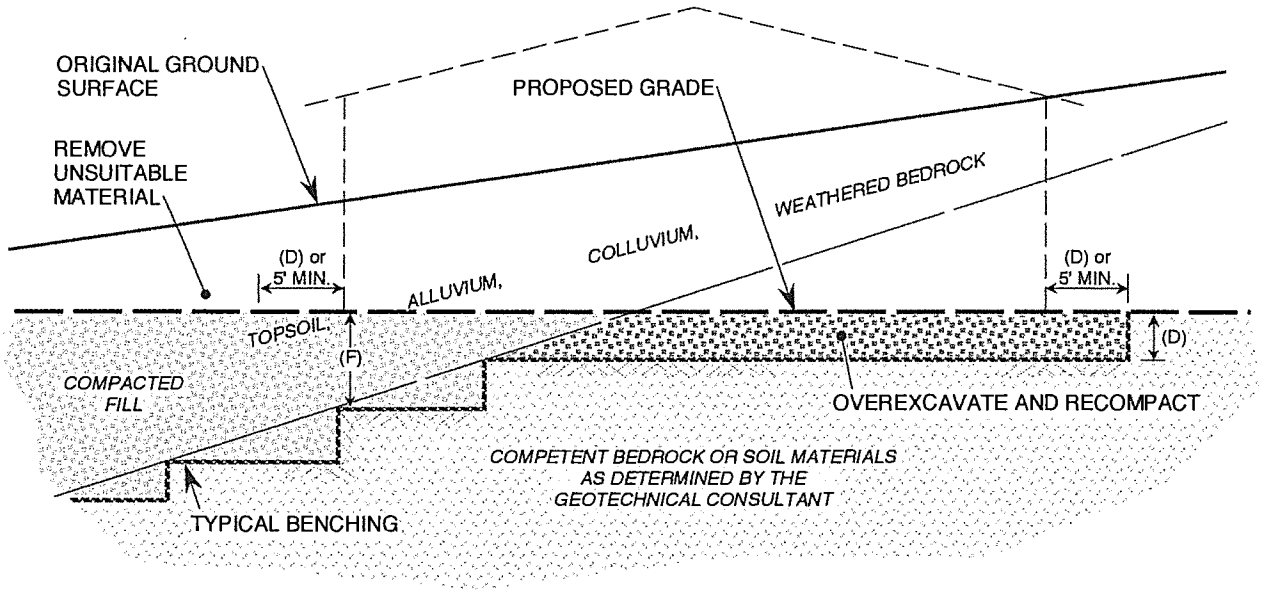
PETRA	FILL SLOPE ABOVE NATURAL SLOPE	PLATE SG-5



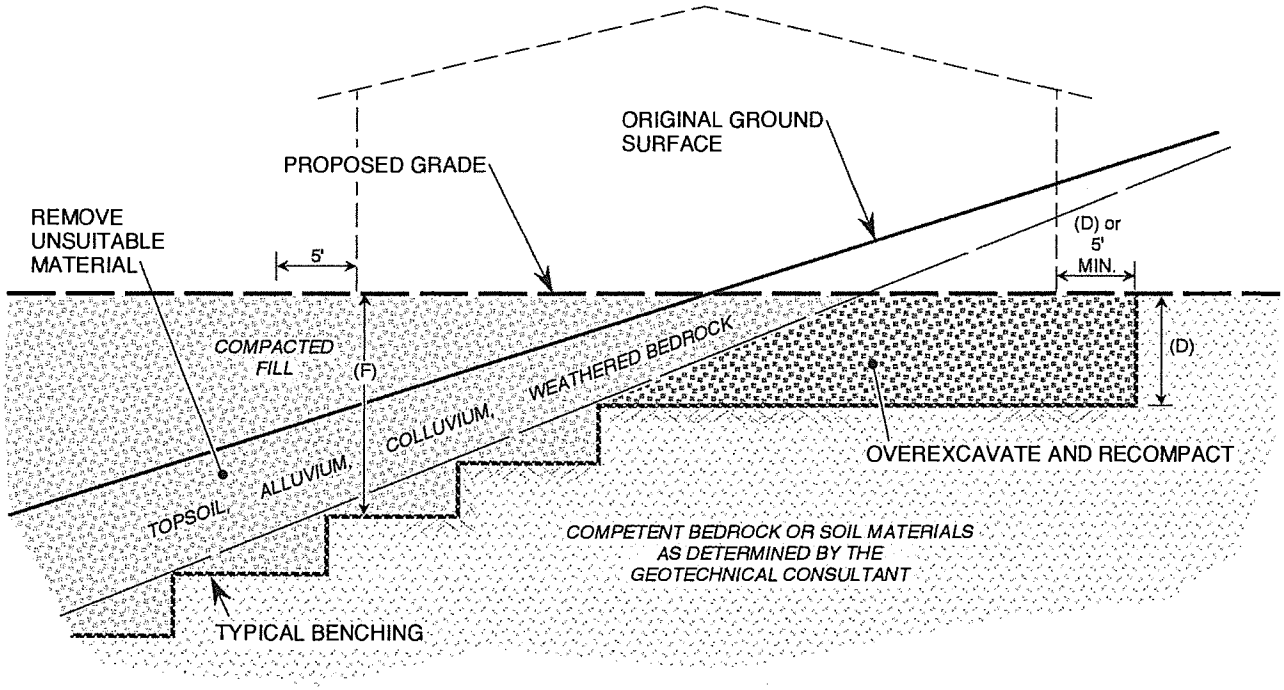
PETRA	FILL SLOPE ABOVE CUT SLOPE	PLATE SG-6

CUT LOT

UNSUITABLE MATERIAL EXPOSED IN PORTION OF CUT PAD

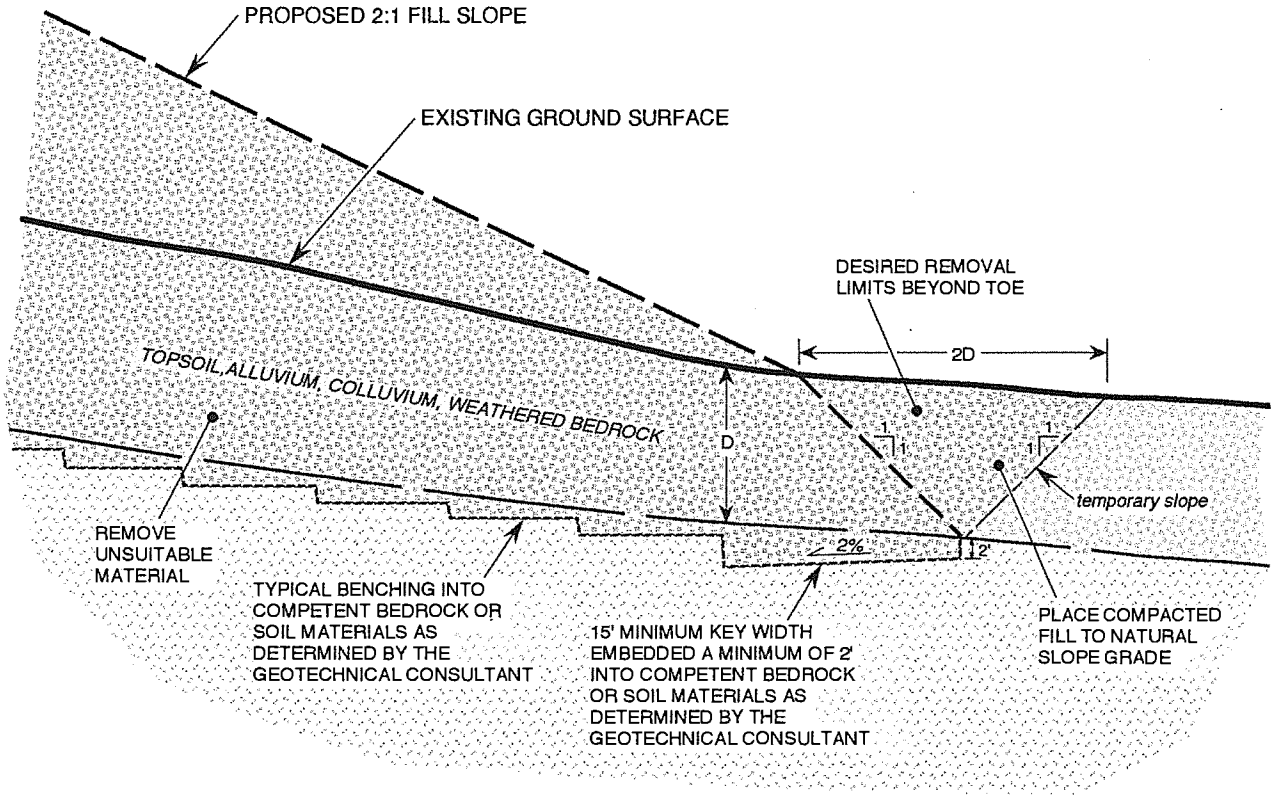


CUT-FILL TRANSITION LOT



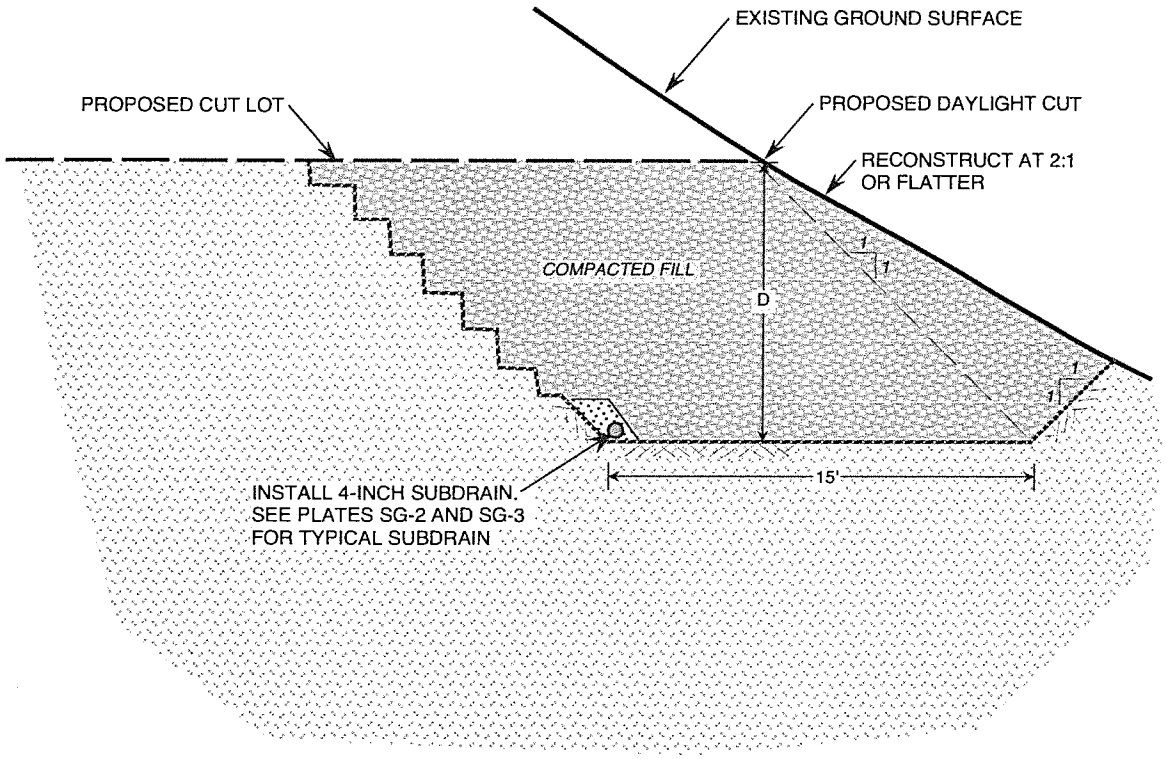
MAXIMUM FILL THICKNESS (F)	DEPTH OF OVEREXCAVATION (D)
FOOTING DEPTH TO 3 FEET	EQUAL DEPTH
3 TO 6 FEET	3 FEET
GREATER THAN 6 FEET	1/2 THE THICKNESS OF DEEPEST FILL PLACED WITHIN THE "FILL" PORTION (F) TO 15 FEET MAXIMUM

PETRA	CUT LOTS AND CUT-FILL TRANSITION LOTS	PLATE SG-7



D = RECOMMENDED DEPTH OF REMOVAL PER GEOTECHNICAL REPORT

PETRA	TYPICAL REMOVALS BEYOND TOE OF PROPOSED FILL SLOPE	PLATE SG-8



NOTE:

1. "D" SHALL BE 10 FEET MINIMUM OR AS DETERMINED BY SOILS ENGINEER.

PETRA	SHEAR KEY ON DAYLIGHT CUT LOTS	PLATE SG-9

Empire Groves Hotel

GREENHOUSE GAS ANALYSIS

CITY OF ONTARIO

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SEPTEMBER 9, 2024

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LIST OF ABBREVIATED TERMS

%	Percent
°C	Degrees Celsius
°F	Degrees Fahrenheit
(1)	Reference
2017 Scoping Plan	*Final 2017 Scoping Plan Update*
AB	Assembly Bill
AB 32	Global Warming Solutions Act of 2006
AB 1493	Pavley Fuel Efficiency Standards
AB 1881	California Water Conservation Landscaping Act of 2006
Annex I	Industrialized Nations
AQIA	*Empire Groves Hotel Air Quality Impact Analysis*
BAU	Business as Usual
C_2F_6	Hexafluoroethane
C_2H_6	Ethane
$C_2H_2F_4$	Tetrafluroethane
$C_2H_4F_2$	Ethylidene Fluoride
CAA	Federal Clean Air Act
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGAPS	California LBNL GHG Analysis of Policies Spreadsheet
CALGreen	California Green Building Standards Code
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resource Board
CEC	California Energy Commission
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CEQA Guidelines	*CEQA Statute and Guidelines*
CDFA	California Department of Food and Agriculture
CF_4	Tetrafluoromethane
CFC	Chlorofluorocarbons
CFC-113	Trichlorotrifluoroethane
CH_4	Methane
City	City of Ontario
CNRA	California Natural Resources Agency
CNRA 2009	*2009 California Climate Adaptation Strategy*
CO_2	Carbon Dioxide

CO_2e	Carbon Dioxide Equivalent
Convention	United Nation's Framework Convention on Climate Change
COP	Conference of the Parties
CPUC	California Public Utilities Commission
DWR	Department of Water Resources
EMFAC	Emission Factor Model
EPA	Environmental Protection Agency
EV	Electric Vehicle
GCC	Global Climate Change
Gg	Gigagram
GHGA	Greenhouse Gas Analysis
gpd	Gallons Per Day
gpm	Gallons Per Minute
GWP	Global Warming Potential
H_2O	Water
HFC	Hydrofluorocarbons
HDT	Heavy-Duty Trucks
HFC-23	Fluoroform
HFC-134a	1,1,1,2-tetrafluoroethane
HFC-152a	1,1-difluoroethane
HHDT	Heavy-Heavy-Duty Trucks
hp	Horsepower
IPCC	Intergovernmental Panel on Climate Change
ISO	Independent System Operator
ITE	Institute of Transportation Engineers
kWh	Kilowatt Hours
lbs	Pounds
LBNL	Lawrence Berkeley National Laboratory
LCA	Life-Cycle Analysis
LCD	Liquid Crystal Display
LCFS	Low Carbon Fuel Standard or Executive Order S-01-07
LDA	Light-Duty Auto
LDT1/LDT2	Light-Duty Trucks
LEV III	Low-Emission Vehicle
LHDT1/LHDT2	Light-Heavy-Duty Trucks
LULUCF	Land-Use, Land-Use Change and Forestry
MCY	Motorcycles
MDT	Medium-Duty Trucks

MDV	Medium-Duty Vehicles
MHDT	Medium-Heavy-Duty Tucks
$MMTCO_2e$	Million Metric Ton of Carbon Dioxide Equivalent
mpg	Miles Per Gallon
MPOs	Metropolitan Planning Organizations
$MMTCO_2e/yr$	Million Metric Ton of Carbon Dioxide Equivalent Per Year
MT/yr	Metric Tons Per Year
$MTCO_2e$	Metric Ton of Carbon Dioxide Equivalent
$MTCO_2e/yr$	Metric Ton of Carbon Dioxide Equivalent Per Year
MW	Megawatts
MWh	Megawatts Per Hour
MWELO	California Department of Water Resources' Model Water Efficient
N_2O	Nitrous Oxide
NDC	Nationally Determined Contributions
NF_3	Nitrogen Trifluoride
NHTSA	National Highway Traffic Safety Administration
NIOSH	National Institute for Occupational Safety and Health
NO_X	Nitrogen Oxides
Non-Annex I	Developing Nations
OAL	Office of Administrative Law
OPR	Office of Planning and Research
PFC	Perfluorocarbons
ppb	Parts Per Billion
ppm	Parts Per Million
ppt	Parts Per Trillion
Project	Empire Groves Hotel
RTP	Regional Transportation Plan
SAFE	Safer Affordable Fuel-Efficient Vehicles Rule
SB	Senate Bill
SB 32	California Global Warming Solutions Act of 2006
SB 375	Regional GHG Emissions Reduction Targets/Sustainable Communities Strategies
SB 1078	Renewable Portfolio Standards
SB 1368	Statewide Retail Provider Emissions Performance Standards
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments

SCAQMD	South Coast Air Quality Management District
Scoping Plan	California Air Resources Board Climate Change Scoping Plan
SCS	Sustainable Communities Strategy
sf	Square Feet
SF_6	Sulfur Hexaflouride
SLPS	Short-Lived Climate Pollutant Strategy
SP	Service Population
TDM	Transportation Demand Measures
Title 20	Appliance Energy Efficiency Standards
Title 24	California Building Code
U.N.	United Nations
U.S.	United States
UNFCCC	United Nations' Framework Convention on Climate Change
VMT	Vehicle Miles Traveled
WCI	Western Climate Initiative
WRI	World Resources Institute
ZE/NZE	Zero and Near-Zero Emissions
ZEV	Zero-Emissions Vehicles

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EXECUTIVE SUMMARY

ES.1 SUMMARY OF FINDINGS

The results of this *Empire Groves Hotel Greenhouse Gas Analysis* (GHGA) are summarized below based on the significance criteria in Section 3 of this report consistent with Appendix G of the *Guidelines for Implementation of the California Environmental Quality Act* (*CEQA Guidelines*) (1). Table ES-1 shows the findings of significance for potential greenhouse gas (GHG) impacts under the California Environmental Quality Act (CEQA).

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS

Analysis	Report Section	Significance Findings	
		Unmitigated	Mitigated
GHG Impact #1: Would the Project generate GHG emissions either directly or indirectly, that may have a significant impact on the environment?	3.7	*Less Than Significant*	*n/a*
GHG Impact #2: Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?	3.7	*Less Than Significant*	*n/a*

ES.2 PROJECT REQUIREMENTS

The Project would be required to comply with regulations imposed by the State of California, the South Coast Air Quality Management District (SCAQMD), and the City of Perris aimed at the reduction of air pollutant emissions. Those that are directly and indirectly applicable to the Project and that would assist in the reduction of GHG emissions include:

- Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32) (2).
- Regional GHG Emissions Reduction Targets/Sustainable Communities Strategies (Senate Bill [SB] 375) (3).
- Pavley Fuel Efficiency Standards (AB 1493). Establishes fuel efficiency ratings for new vehicles (4).
- California Building Code (Title 24 California Code of Regulations [CCR]). Establishes energy efficiency requirements for new construction (5).
- Appliance Energy Efficiency Standards (Title 20 CCR). Establishes energy efficiency requirements for appliances (6).
- Low Carbon Fuel Standard (LCFS). Requires carbon content of fuel sold in California to be 10 percent (%) less by 2020 (7).

- Statewide Retail Provider Emissions Performance Standards (SB 1368). Requires energy generators to achieve performance standards for GHG emissions (8).
- Renewable Portfolio Standards (RPS). Requires electric corporations to increase the amount of energy obtained from eligible renewable energy resources to 20% by 2010 and 33% by 2020. SB 350 mandated a 50% RPS by 2030. SB 100 increased the RPS requirements to 60% by 2030 with new interim targets of 44% by 2024 and 52% by 2027 (9).
- California Global Warming Solutions Act of 2006 (SB 32). Requires the state to reduce statewide GHG emissions to 40% below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15 (10).

Promulgated regulations that would affect the Project's emissions are accounted for in the Project's GHG calculations provided in this report. In particular, AB 1493, LCFS, and RPS are accounted for in the Project's emission calculations.

ES.3 PROJECT DESIGN FEATURES

PDF GHG-1

Project development proposals shall implement Screening Table Measures that achieve the requisite points per the City's Community Climate Action Plan (CCAP) Screening Tables. The City shall verify that Screening Table Measures achieving the requisite points are incorporated in development plans prior to the issuance of building permit(s) and/or site plans (as applicable). The City shall verify implementation of the selected Screening Table Measures prior to the issuance of Certificate(s) of Occupancy. At the discretion of the City, measures that provide GHG reductions equivalent to GHG emissions reductions achieved via the Screening Table Measures may be implemented. Alternatively, the Project shall demonstrate that annual GHG emissions would not exceed the target thresholds or other alternative compliance mechanisms in the CCAP or subsequent updates. Appendix 3.2 includes the CCAP Screening Tables measures anticipated to be implemented by the proposed Project.

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1 INTRODUCTION

This report presents the results of the GHGA prepared by Urban Crossroads, Inc., for the proposed Empire Groves Hotel Project (Project). The purpose of this GHGA is to evaluate Project-related construction and operational emissions and determine the level of GHG impacts as a result of constructing and operating the Project.

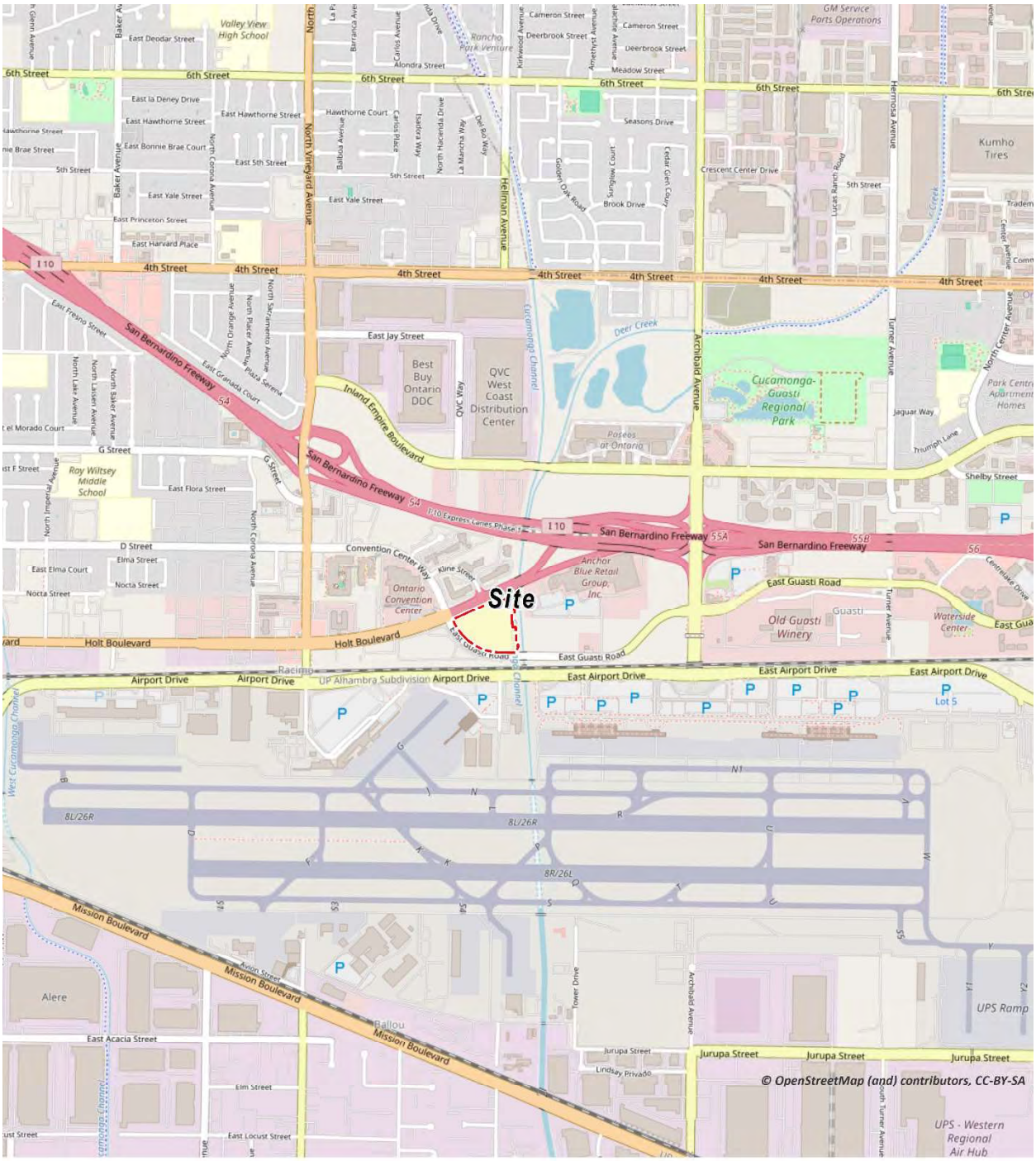
1.1 SITE LOCATION

The proposed Project site is located at the northeast corner of Holt Boulevard and Guasti Road in the City of Ontario, as shown in Exhibit 1-A.

1.2 PROJECT DESCRIPTION

The Project consists of a hotel that includes 600 rooms and suites, 2 ballrooms, a spa & fitness center, meeting and conference rooms as well as an outdoor pool and event lawn on 10.43 acres. A preliminary site plan for the proposed hotel development is shown on Exhibit 1-B. The Project will be developed within a single phase with an anticipated opening year of 2025.

EXHIBIT 1-A: LOCATION MAP



LEGEND:

N

Site Boundary

EXHIBIT 1-B: SITE PLAN



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2 CLIMATE CHANGE SETTING

2.1 INTRODUCTION TO GLOBAL CLIMATE CHANGE (GCC)

GCC is defined as the change in average meteorological conditions on the earth with respect to temperature, precipitation, and storms. The majority of scientists believe that the climate shift taking place since the Industrial Revolution is occurring at a quicker rate and magnitude than in the past. Scientific evidence suggests that GCC is the result of increased concentrations of GHGs in the earth's atmosphere, including carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated gases. The majority of scientists believe that this increased rate of climate change is the result of GHGs resulting from human activity and industrialization over the past 200 years.

An individual project, like the Project evaluated in this GHGA, cannot generate enough GHG emissions to affect a discernible change in global climate. However, the Project may participate in the potential for GCC by its incremental contribution of GHGs combined with the cumulative increase of all other sources of GHGs, which when taken together constitute potential influences on GCC. Because these changes may have serious environmental consequences, Section 3 will evaluate the potential for the Project to have a significant effect upon the environment as a result of its potential contribution to the greenhouse effect.

2.2 GLOBAL CLIMATE CHANGE DEFINED

GCC refers to the change in average meteorological conditions on the earth with respect to temperature, wind patterns, precipitation, and storms. Global temperatures are regulated by naturally occurring atmospheric gases such as water vapor, CO_2, N_2O, CH_4, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). These particular gases are important due to their residence time (duration they stay) in the atmosphere, which ranges from 10 years to more than 100 years. These gases allow solar radiation into the earth's atmosphere, but prevent radiative heat from escaping, thus warming the earth's atmosphere. GCC can occur naturally as it has in the past with the previous ice ages.

Gases that trap heat in the atmosphere are often referred to as GHGs. GHGs are released into the atmosphere by both natural and anthropogenic activity. Without the natural GHG effect, the earth's average temperature would be approximately 61 degrees Fahrenheit (°F) cooler than it is currently. The cumulative accumulation of these gases in the earth's atmosphere is considered to be the cause for the observed increase in the earth's temperature.

2.3 GHGS

2.3.1 GHGS AND HEALTH EFFECTS

GHGs trap heat in the atmosphere, creating a GHG effect that results in global warming and climate change. Many gases demonstrate these properties as discussed in Table 2-1. For the purposes of this analysis, emissions of CO_2, CH_4, and N_2O were evaluated because these gases are the primary contributors to GCC from development projects. Although there are other substances such as fluorinated gases that also contribute to GCC, these fluorinated gases were

not evaluated as their sources are not well-defined and do not contain accepted emissions factors or methodology to accurately calculate these gases.

TABLE 2-1: GHGS

GHGs	Description	Sources	Health Effects
Water	Water is the most abundant, important, and variable GHG in the atmosphere. Water vapor is not considered a pollutant; in the atmosphere, it maintains a climate necessary for life. Changes in its concentration are primarily considered to be a result of climate feedbacks related to the warming of the atmosphere rather than a direct result of industrialization. Climate feedback is an indirect, or secondary, change, either positive or negative, that occurs within the climate system in response to a forcing mechanism. The feedback loop in which water is involved is critically important to projecting future climate change. As the temperature of the atmosphere rises, more water is evaporated from ground storage (rivers, oceans, reservoirs, soil). Because the air is warmer, the relative humidity can be higher (in essence, the air is able to 'hold' more water when it is warmer), leading to more water vapor in the atmosphere. As a GHG, the higher concentration of water vapor is then able to absorb more thermal indirect energy radiated from the earth, thus further warming the atmosphere. The warmer atmosphere can then hold more water vapor and so on. This is referred to as a "positive feedback loop." The extent to which this positive feedback loop would continue is unknown as there are also dynamics that hold the positive feedback loop	The main source of water vapor is evaporation from the oceans (approximately 85%). Other sources include evaporation from other water bodies, sublimation (change from solid to gas) from sea ice and snow, and transpiration from plant leaves.	There are no known direct health effects related to water vapor at this time. It should be noted however that when some pollutants react with water vapor, the reaction forms a transport mechanism for some of these pollutants to enter the human body through water vapor.

GHGs	Description	Sources	Health Effects
	in check. As an example, when water vapor increases in the atmosphere, more of it would eventually condense into clouds, which are more able to reflect incoming solar radiation (thus allowing less energy to reach the earth's surface and heat it up) (11).		
CO_2	CO_2 is an odorless and colorless GHG. Since the industrial revolution began in the mid-1700s, the sort of human activity that increases GHG emissions has increased dramatically in scale and distribution. Data from the past 50 years suggests a corollary increase in levels and concentrations. As an example, prior to the industrial revolution, CO_2 concentrations were fairly stable at 280 parts per million (ppm). Today, they are around 370 ppm, an increase of more than 30%. Left unchecked, the concentration of CO_2 in the atmosphere is projected to increase to a minimum of 540 ppm by 2100 as a direct result of anthropogenic sources (12).	CO_2 is emitted from natural and manmade sources. Natural sources include: the decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources include: the burning of coal, oil, natural gas, and wood. CO_2 is naturally removed from the air by photosynthesis, dissolution into ocean water, transfer to soils and ice caps, and chemical weathering of carbonate rocks (13).	Outdoor levels of CO_2 are not high enough to result in negative health effects. According to the National Institute for Occupational Safety and Health (NIOSH) high concentrations of CO_2 can result in health effects such as: headaches, dizziness, restlessness, difficulty breathing, sweating, increased heart rate, increased cardiac output, increased blood pressure, coma, asphyxia, and/or convulsions. It should be noted that current concentrations of CO_2 in the earth's atmosphere are estimated to be approximately 370 ppm, the actual reference exposure level (level at which adverse health effects typically occur) is at exposure levels of 5,000 ppm averaged over 10 hours in a 40-hour workweek and short-term reference exposure levels of 30,000 ppm averaged over a 15-minute period (14).

GHGs	Description	Sources	Health Effects
CH_4	CH_4 is an extremely effective absorber of radiation, although its atmospheric concentration is less than CO_2 and its lifetime in the atmosphere is brief (10-12 years), compared to other GHGs.	CH_4 in the atmosphere is generated by many different sources, such as fossil fuel production, transport and use, from the decay of organic matter in wetlands, and as a byproduct of digestion by ruminant animals such as cows. Determining which specific sources are responsible for variations in annual increases of CH_4 is complex, but scientists estimate that fossil fuel production and use contributes roughly 30% of the total CH_4 emissions. These industrial sources of CH_4 are relatively simple to pinpoint and control using current technology (15).	CH_4 is extremely reactive with oxidizers, halogens, and other halogen-containing compounds. Exposure to elevated levels of CH_4 can cause asphyxiation, loss of consciousness, headache and dizziness, nausea and vomiting, weakness, loss of coordination, and an increased breathing rate.
N_2O	N_2O, also known as laughing gas, is a colorless GHG. Concentrations of N_2O also began to rise at the beginning of the industrial revolution. In 1998, the global concentration was 314 parts per billion (ppb).	N_2O is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions)	N_2O can cause dizziness, euphoria, and sometimes slight hallucinations. In small doses, it is considered harmless. However, in some cases, heavy and extended use can cause Olney's Lesions (brain damage) (16).

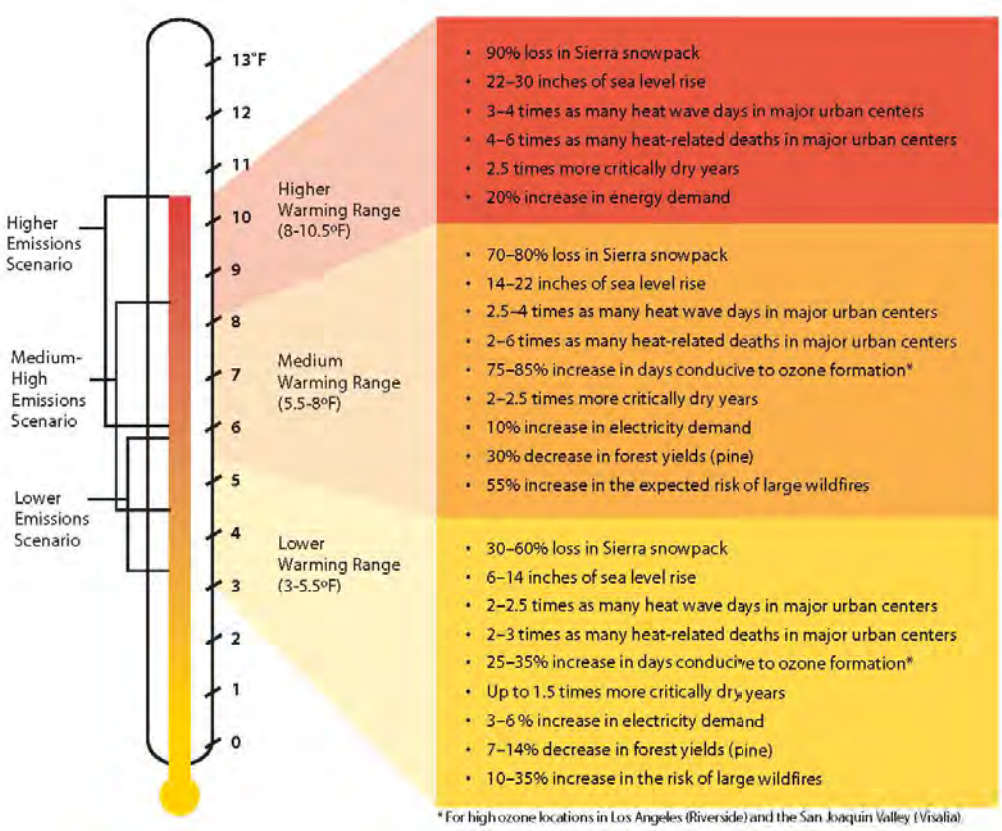
GHGs	Description	Sources	Health Effects
		also contribute to its atmospheric load. It is used as an aerosol spray propellant, i.e., in whipped cream bottles. It is also used in potato chip bags to keep chips fresh. It is used in rocket engines and in race cars. N_2O can be transported into the stratosphere, be deposited on the earth's surface, and be converted to other compounds by chemical reaction (16).	
Chlorofluorocarbons (CFCs)	CFCs are gases formed synthetically by replacing all hydrogen atoms in CH_4 or ethane (C_2H_6) with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble and chemically unreactive in the troposphere (the level of air at the earth's surface).	CFCs have no natural source. They are found in aerosol sprays, blowing agents for foams and packing materials, as solvents, and as refrigerants. (17).	In confined indoor locations, working with CFC-113 or other CFCs is thought to result in death by cardiac arrhythmia (heart frequency too high or too low) or asphyxiation.
HFCs	HFCs are synthetic, man-made chemicals that are used as a substitute for CFCs. Out of all the GHGs, they are one of three groups with the highest global warming potential (GWP). The HFCs with the largest measured atmospheric abundances are (in order), Fluoroform (HFC-23), 1,1,1,2-tetrafluoroethane (HFC-134a), and 1,1-difluoroethane (HFC-152a). Prior to 1990, the only significant emissions were of HFC-23. HCF-134a emissions are increasing due to its use as a refrigerant.	HFCs are manmade for applications such as automobile air conditioners and refrigerants.	No health effects are known to result from exposure to HFCs.

GHGs	Description	Sources	Health Effects
PFCs	PFCs have stable molecular structures and do not break down through chemical processes in the lower atmosphere. High-energy ultraviolet rays, which occur about 60 kilometers above earth's surface, are able to destroy the compounds. Because of this, PFCs have exceptionally long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane (CF_4) and hexafluoroethane (C_2F_6). The EPA estimates that concentrations of CF_4 in the atmosphere are over 70 parts per trillion (ppt).	The two main sources of PFCs are primary aluminum production and semiconductor manufacture.	No health effects are known to result from exposure to PFCs.
SF_6	SF_6 is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It also has the highest GWP of any gas evaluated (23,900) (18). The EPA indicates that concentrations in the 1990s were about 4 ppt.	SF_6 is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.	In high concentrations in confined areas, the gas presents the hazard of suffocation because it displaces the oxygen needed for breathing.

GHGs	Description	Sources	Health Effects
Nitrogen Trifluoride (NF_3)	NF_3 is a colorless gas with a distinctly moldy odor. The World Resources Institute (WRI) indicates that NF_3 has a 100-year GWP of 17,200 (19).	NF_3 is used in industrial processes and is produced in the manufacturing of semiconductors, Liquid Crystal Display (LCD) panels, types of solar panels, and chemical lasers.	Long-term or repeated exposure may affect the liver and kidneys and may cause fluorosis (20).

The potential health effects related directly to the emissions of CO_2, CH_4, and N_2O as they relate to development projects, such as the Project, are still being debated in the scientific community. Their cumulative effects to GCC have the potential to cause adverse effects to human health. Increases in Earth's ambient temperatures would result in more intense heat waves, causing more heat-related deaths. Exhibit 2-A presents the potential impacts of global warming (21).

EXHIBIT 2-A: SUMMARY OF PROJECTED GLOBAL WARMING IMPACT, 2070-2099 (AS COMPARED WITH 1961-1990)



Source: Barbara H. Allen-Diaz. "Climate change affects us all." *University of California, Agriculture and Natural Resources*, 2009.

2.4 GLOBAL WARMING POTENTIAL (GWP)

GHGs have varying GWP values. GWP of a GHG indicates the amount of warming a gas cause over a given period of time and represents the potential of a gas to trap heat in the atmosphere. CO_2 is utilized as the reference gas for GWP, and thus has a GWP of 1. CO_2 equivalent (CO_2e) is a term used for describing the different GHGs in a common unit. CO_2e signifies the amount of CO_2 which would have the equivalent GWP.

The Intergovernmental Panel on Climate Change (IPCC) is the international body for assessing the science related to climate change. IPCC Assessment Reports cover the full scientific, technical and socio-economic assessment of climate change. The atmospheric lifetime and GWP of selected GHGs are summarized at Table 2-2. As shown in the table below, GWP for the 2nd Assessment Report range from 1 for CO_2 to 23,900 for SF_6 and GWP for the 6th Assessment Report range from 1 for CO_2 to 25,200 for SF_6 (22).

TABLE 2-2: GWP AND ATMOSPHERIC LIFETIME OF SELECT GHGS

Gas	Atmospheric Lifetime (years)	GWP (100-year time horizon)	
		2nd Assessment Report	6th Assessment Report
CO_2	Multiple	1	1
CH_4	11.8	21	28
N_2O	109	310	273
HFC-23	228	11,700	14,600
HFC-134a	14	1,300	1,526
HFC-152a	1.6	140	164
SF_6	3,200	23,900	25,200

Source: IPCC Second Assessment Report, 1995 and IPCC Sixth Assessment Report, 2022

2.5 GHG EMISSIONS INVENTORIES

2.5.1 GLOBAL

Worldwide anthropogenic GHG emissions are tracked by the IPCC for industrialized nations (referred to as Annex I) and developing nations (referred to as Non-Annex I). Human GHG emissions data for Annex I nations are available through 2021. Based on the latest available data, the sum of these emissions totaled approximately 28,272,940 gigagram (Gg) CO_2e[1] (23) (24) as summarized on Table 2-3.

[1] The global emissions are the sum of Annex I and non-Annex I countries, without counting Land-Use, Land-Use Change and Forestry (LULUCF). For countries without 2021 data, the United Nations' Framework Convention on Climate Change (UNFCCC) data for the most recent year were used U.N. Framework Convention on Climate Change, "Annex I Parties – GHG total without LULUCF," The most recent GHG emissions for China and India are from 2014 and 2016, respectively.

2.5.2 UNITED STATES

As noted in Table 2-3, the United States, as a single country, was the number two producer of GHG emissions in 2021.

TABLE 2-3: TOP GHG PRODUCING COUNTRIES AND THE EUROPEAN UNION

Emitting Countries	GHG Emissions (Gg CO_2e)
China	12,300,200
United States	6,340,228
European Union (27-member countries)	3,468,394
India	2,839,425
Russian Federation	2,156,599
Japan	1,168,094
Total	**28,272,940**

2.5.3 STATE OF CALIFORNIA

California has significantly slowed the rate of growth of GHG emissions due to the implementation of energy efficiency programs as well as adoption of strict emission controls but is still a substantial contributor to the United States (U.S.) emissions inventory total (16). The California Air Resource Board (CARB) compiles GHG inventories for the State of California. Based upon the 2023 GHG inventory data (i.e., the latest year for which data are available) for the 2000-2021 GHG emissions period, California emitted an average 381.3 million metric tons of CO_2e per year ($MMTCO_2e/yr$) or 381,300 Gg CO_2e (6.01% of the total United States GHG emissions) (25). Based on data published by the U.S. Energy Information Administration, California's per capita (9.12 metric tons) GHG emissions are much less than the nationwide per capita (15.8 metric ton) average (26).

2.6 EFFECTS OF CLIMATE CHANGE IN CALIFORNIA

2.6.1 PUBLIC HEALTH

Higher temperatures may increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to ozone formation could increase from 25 to 35% under the lower warming range to 75 to 85% under the medium warming range. In addition, if global background ozone levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances, depending on wind conditions. Based on *Our Changing Climate Assessing the Risks to California by the California Climate Change Center*, large wildfires could become up to 55% more frequent if GHG emissions are not significantly reduced (27).

In addition, under the higher warming range scenario, there could be up to 100 more days per year with temperatures above 90°F in Los Angeles and 95°F in Sacramento by 2100. This is a

significant increase over historical patterns and approximately twice the increase projected if temperatures remain within or below the lower warming range. Rising temperatures could increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat.

2.6.2 WATER RESOURCES

A vast network of man-made reservoirs and aqueducts captures and transports water throughout the state from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snowpack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snowpack, increasing the risk of summer water shortages.

If temperatures continue to increase, more precipitation could fall as rain instead of snow, and the snow that does fall could melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90%. Under the lower warming range scenario, snowpack losses could be only half as large as those possible if temperatures were to rise to the higher warming range. How much snowpack could be lost depends in part on future precipitation patterns, the projections for which remain uncertain. However, even under the wetter climate projections, the loss of snowpack could pose challenges to water managers and hamper hydropower generation. It could also adversely affect winter tourism. Under the lower warming range, the ski season at lower elevations could be reduced by as much as a month. If temperatures reach the higher warming range and precipitation declines, there might be many years with insufficient snow for skiing and snowboarding.

The State's water supplies are also at risk from rising sea levels. An influx of saltwater could degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta – a major fresh water supply.

2.6.3 AGRICULTURE

Increased temperatures could cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products statewide. First, California farmers could possibly lose as much as 25% of the water supply needed. Although higher CO_2 levels can stimulate plant production and increase plant water-use efficiency, California's farmers could face greater water demand for crops and a less reliable water supply as temperatures rise. Crop growth and development could change, as could the intensity and frequency of pest and disease outbreaks. Rising temperatures could aggravate ozone pollution, which makes plants more susceptible to disease and pests and interferes with plant growth.

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development for many crops, so rising temperatures could worsen the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits, and nuts.

In addition, continued GCC could shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion could occur in many species while range contractions may be less likely in rapidly evolving species with significant populations already established. Should range contractions occur, new or different weed species could fill the emerging gaps. Continued GCC could alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates.

2.6.4 FORESTS AND LANDSCAPES

GCC has the potential to intensify the current threat to forests and landscapes by increasing the risk of wildfire and altering the distribution and character of natural vegetation. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55%, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors, including precipitation, winds, temperature, and landscape and vegetation conditions, future risks would not be uniform throughout the state. In contrast, wildfires in northern California could increase by up to 90% due to decreased precipitation.

Moreover, continued GCC has the potential to alter natural ecosystems and biological diversity within the state. For example, alpine and subalpine ecosystems could decline by as much as 60 to 80% by the end of the century as a result of increasing temperatures. The productivity of the state's forests has the potential to decrease as a result of GCC.

2.6.5 RISING SEA LEVELS

Rising sea levels, more intense coastal storms, and warmer water temperatures could increasingly threaten the state's coastal regions. Under the higher warming range scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Elevations of this magnitude would inundate low-lying coastal areas with saltwater, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats. Under the lower warming range scenario, sea level could rise 12-14 inches.

2.7 REGULATORY SETTING

2.7.1 INTERNATIONAL

Climate change is a global issue involving GHG emissions from all around the world; therefore, countries such as the ones discussed below have made an effort to reduce GHGs.

IPCC

In 1988, the United Nations (U.N.) and the World Meteorological Organization established the IPCC to assess the scientific, technical, and socioeconomic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation.

UNITED NATION'S FRAMEWORK CONVENTION ON CLIMATE CHANGE (UNFCCC)

On March 21, 1994, the U.S. joined a number of countries around the world in signing the Convention. Under the UNFCCC, governments gather and share information on GHG emissions, national policies, and best practices; launch national strategies for addressing GHG emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of climate change.

INTERNATIONAL CLIMATE CHANGE TREATIES

The Kyoto Protocol is an international agreement linked to the UNFCCC. The major feature of the Kyoto Protocol is that it sets binding targets for 37 industrialized countries and the European community for reducing GHG emissions at an average of 5% against 1990 levels over the five-year period 2008–2012. The Convention (as discussed above) encouraged industrialized countries to stabilize emissions; however, the Protocol commits them to do so. Developed countries have contributed more emissions over the last 150 years; therefore, the Protocol places a heavier burden on developed nations under the principle of "common but differentiated responsibilities."

In 2001, President George W. Bush indicated that he would not submit the treaty to the U.S. Senate for ratification, which effectively ended American involvement in the Kyoto Protocol. In December 2009, international leaders met in Copenhagen to address the future of international climate change commitments post-Kyoto. No binding agreement was reached in Copenhagen; however, the UN Climate Change Committee identified the long-term goal of limiting the maximum global average temperature increase to no more than 2 degrees Celsius (°C) above pre-industrial levels, subject to a review in 2015. The Committee held additional meetings in Durban, South Africa in November 2011; Doha, Qatar in November 2012; and Warsaw, Poland in November 2013. The meetings gradually gained consensus among participants on individual climate change issues.

On September 23, 2014, more than 100 Heads of State and Government and leaders from the private sector and civil society met at the Climate Summit in New York hosted by the U.N. At the Summit, heads of government, business and civil society announced actions in areas that would have the greatest impact on reducing emissions, including climate finance, energy, transport, industry, agriculture, cities, forests, and building resilience.

Parties to the UNFCCC reached a landmark agreement on December 12, 2015, in Paris, charting a fundamentally new course in the two-decade-old global climate effort. Culminating a four-year negotiating round, the new treaty ends the strict differentiation between developed and developing countries that characterized earlier efforts, replacing it with a common framework that commits all countries to put forward their best efforts and to strengthen them in the years ahead. This includes, for the first time, requirements that all parties report regularly on their emissions and implementation efforts and undergo international review.

The agreement and a companion decision by parties were the key outcomes of the conference, known as the 21st session of the UNFCCC Conference of the Parties (COP) 21. Together, the Paris Agreement and the accompanying COP decision:

- Reaffirm the goal of limiting global temperature increase well below 2°C, while urging efforts to limit the increase to 1.5 degrees;
- Establish binding commitments by all parties to make "nationally determined contributions" (NDCs), and to pursue domestic measures aimed at achieving them;
- Commit all countries to report regularly on their emissions and "progress made in implementing and achieving" their NDCs, and to undergo international review;
- Commit all countries to submit new NDCs every five years, with the clear expectation that they would "represent a progression" beyond previous ones;
- Reaffirm the binding obligations of developed countries under the UNFCCC to support the efforts of developing countries, while for the first time encouraging voluntary contributions by developing countries too;
- Extend the current goal of mobilizing $100 billion a year in support by 2020 through 2025, with a new, higher goal to be set for the period after 2025;
- Extend a mechanism to address "loss and damage" resulting from climate change, which explicitly would not "involve or provide a basis for any liability or compensation;"
- Require parties engaging in international emissions trading to avoid "double counting;" and
- Call for a new mechanism, similar to the Clean Development Mechanism under the Kyoto Protocol, enabling emission reductions in one country to be counted toward another country's NDC (C2ES 2015a) (28).

Following President Biden's day one executive order, the United States officially rejoined the landmark Paris Agreement on February 19, 2021, positioning the country to once again be part of the global climate solution. Meanwhile, city, state, business, and civic leaders across the country and around the world have been ramping up efforts to drive the clean energy advances needed to meet the goals of the agreement and put the brakes on dangerous climate change.

2.7.2 NATIONAL

Prior to the last decade, there have been no concrete federal regulations of GHGs or major planning for climate change adaptation. The following are actions regarding the federal government, GHGs, and fuel efficiency.

GHG ENDANGERMENT

In *Massachusetts v. Environmental Protection Agency* 549 U.S. 497 (2007), decided on April 2, 2007, the United States Supreme Court (Supreme Court) found that four GHGs, including CO_2, are air pollutants subject to regulation under Section 202(a)(1) of the Clean Air Act (CAA). The Supreme Court held that the EPA Administrator must determine whether emissions of GHGs from new motor vehicles cause or contribute to air pollution, which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned

decision. On December 7, 2009, the EPA Administrator signed two distinct findings regarding GHGs under Section 202(a) of the CAA:

- Endangerment Finding: The Administrator finds that the current and projected concentrations of the six key well-mixed GHGs— CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6—in the atmosphere threaten the public health and welfare of current and future generations.
- Cause or Contribute Finding: The Administrator finds that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution, which threatens public health and welfare.

These findings do not impose requirements on industry or other entities. However, this was a prerequisite for implementing GHG emissions standards for vehicles, as discussed in the section "Clean Vehicles" below. After a lengthy legal challenge, the Supreme Court declined to review an Appeals Court ruling that upheld the EPA Administrator's findings (29).

CLEAN VEHICLES

Congress first passed the Corporate Average Fuel Economy law in 1975 to increase the fuel economy of cars and light duty trucks. The law has become more stringent over time. On May 19, 2009, President Obama put in motion a new national policy to increase fuel economy for all new cars and trucks sold in the U.S. On April 1, 2010, the EPA, and the Department of Transportation's National Highway Traffic Safety Administration (NHTSA) announced a joint final rule establishing a national program that would reduce GHG emissions and improve fuel economy for new cars and trucks sold in the U.S.

The first phase of the national program applies to passenger cars, light-duty trucks, and medium-duty (MD) passenger vehicles, covering model years 2012 through 2016. They require these vehicles to meet an estimated combined average emissions level of 250 grams of CO_2 per mile, equivalent to 35.5 miles per gallon (mpg) if the automobile industry were to meet this CO_2 level solely through fuel economy improvements. Together, these standards would cut CO_2 emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012–2016). In August 2012, the EPA and the NHTSA issued final rules on a second-phase joint rulemaking establishing national standards for light-duty vehicles for model years 2017 through 2025. The new standards apply to passenger cars, light-duty trucks, and MD passenger vehicles. The final standards are projected to result in an average industry fleetwide level of 163 grams/mile of CO_2 in model year 2025, which is equivalent to 54.5 mpg if achieved exclusively through fuel economy improvements.

The EPA and the U.S. Department of Transportation issued final rules for the first national standards to reduce GHG emissions and improve fuel efficiency of heavy-duty trucks (HDT) and buses on September 15, 2011, effective November 14, 2011. For combination tractors, the agencies are proposing engine and vehicle standards that begin in the 2014 model year and achieve up to a 20% reduction in CO_2 emissions and fuel consumption by the 2018 model year. For HDT and vans, the agencies are proposing separate gasoline and diesel truck standards, which phase in starting in the 2014 model year and achieve up to a 10% reduction for gasoline vehicles and a 15% reduction for diesel vehicles by the 2018 model year (12 and 17%, respectively if accounting for air conditioning leakage). Lastly, for vocational vehicles, the engine and vehicle

standards would achieve up to a 10% reduction in fuel consumption and CO_2 emissions from the 2014 to 2018 model years.

On April 2, 2018, the EPA signed the Mid-term Evaluation Final Determination, which declared that the MY 2022-2025 GHG standards are not appropriate and should be revised (30). This Final Determination serves to initiate a notice to further consider appropriate standards for MY 2022-2025 light-duty vehicles. On August 2, 2018, the NHTSA in conjunction with the EPA, released a notice of proposed rulemaking, the *Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks* (SAFE Vehicles Rule). The SAFE Vehicles Rule was proposed to amend existing Corporate Average Fuel Economy (CAFE) and tailpipe CO_2 standards for passenger cars and light trucks and to establish new standards covering model years 2021 through 2026. As of March 31, 2020, the NHTSA and EPA finalized the SAFE Vehicle Rule which increased stringency of CAFE and CO_2 emissions standards by 1.5% each year through model year 2026 (31). On December 21, 2021, after reviewing all the public comments submitted on NHTSA's April 2021 Notice of Proposed Rulemaking, NHTSA finalizes the CAFE Preemption rulemaking to withdraw its portions of the so-called SAFE I Rule. The final rule concludes that the SAFE I Rule overstepped the agency's legal authority and established overly broad prohibitions that did not account for a variety of important state and local interests. The final rule ensures that the SAFE I Rule will no longer form an improper barrier to states exploring creative solutions to address their local communities' environmental and public health challenges (32).

On March 31, 2022, NHTSA finalized CAFE standards for MY 2024-2026. The standards for passenger cars and light trucks for MYs 2024-2025 were increased at a rate of 8% per year and then increased at a rate of 10% per year for MY 2026 vehicles. NHTSA currently projects that the revised standards would require an industry fleet-wide average of roughly 49 mpg in MY 2026 and would reduce average fuel outlays over the lifetimes of affected vehicles that provide consumers hundreds of dollars in net savings. These standards are directly responsive to the agency's statutory mandate to improve energy conservation and reduce the nation's energy dependence on foreign sources (33).

MANDATORY REPORTING OF GHGS

The Consolidated Appropriations Act of 2008, passed in December 2007, requires the establishment of mandatory GHG reporting requirements. On September 22, 2009, the EPA issued the Final Mandatory Reporting of GHGs Rule, which became effective January 1, 2010. The rule requires reporting of GHG emissions from large sources and suppliers in the U.S. and is intended to collect accurate and timely emissions data to inform future policy decisions. Under the rule, suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons per year (MT/yr) or more of GHG emissions are required to submit annual reports to the EPA.

NEW SOURCE REVIEW

The EPA issued a final rule on May 13, 2010, that establishes thresholds for GHGs that define when permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities. This final rule

"tailors" the requirements of these CAA permitting programs to limit which facilities would be required to obtain Prevention of Significant Deterioration and Title V permits. In the preamble to the revisions to the Federal Code of Regulations, the EPA states:

> *"This rulemaking is necessary because without it the Prevention of Significant Deterioration and Title V requirements would apply, as of January 2, 2011, at the 100 or 250 tons per year levels provided under the CAA, greatly increasing the number of required permits, imposing undue costs on small sources, overwhelming the resources of permitting authorities, and severely impairing the functioning of the programs. EPA is relieving these resource burdens by phasing in the applicability of these programs to GHG sources, starting with the largest GHG emitters. This rule establishes two initial steps of the phase-in. The rule also commits the agency to take certain actions on future steps addressing smaller sources but excludes certain smaller sources from Prevention of Significant Deterioration and Title V permitting for GHG emissions until at least April 30, 2016."*

The EPA estimates that facilities responsible for nearly 70% of the national GHG emissions from stationary sources would be subject to permitting requirements under this rule. This includes the nation's largest GHG emitters—power plants, refineries, and cement production facilities.

STANDARDS OF PERFORMANCE FOR GHG EMISSIONS FOR NEW STATIONARY SOURCES: ELECTRIC UTILITY GENERATING UNITS

As required by a settlement agreement, the EPA proposed new performance standards for emissions of CO_2 for new, affected, fossil fuel-fired electric utility generating units on March 27, 2012. New sources greater than 25 megawatts (MW) would be required to meet an output-based standard of 1,000 pounds (lbs) of CO_2 per MW-hour (MWh), based on the performance of widely used natural gas combined cycle technology. It should be noted that on February 9, 2016, the Supreme Court issued a stay of this regulation pending litigation. Additionally, the current EPA Administrator has also signed a measure to repeal the Clean Power Plan, including the CO_2 standards. The Clean Power Plan was officially repealed on June 19, 2019, when the EPA issued the final Affordable Clean Energy rule (ACE). Under ACE, new state-specific emission guidelines were established that provided existing coal-fired electric utility generating units with achievable standards.

On January 19, 2021, the D.C. Circuit Court of Appeals ruled that the EPA's ACE Rule for GHG emissions from power plants rested on an erroneous interpretation of the CAA that barred EPA from considering measures beyond those that apply at and to an individual source. The court therefore vacated and remanded the ACE Rule and adopted a replacement rule which regulates CO_2 emissions from existing power plants, potentially again considering generation shifting and other measures to more aggressively target power sector emissions.

CAP-AND-TRADE

Cap-and-trade refers to a policy tool where emissions are limited to a certain amount and can be traded or provides flexibility on how the emitter can comply. Successful examples in the U.S. include the Acid Rain Program and the N_2O Budget Trading Program and Clean Air Interstate Rule in the northeast. There is no federal GHG cap-and-trade program currently; however, some states have joined to create initiatives to provide a mechanism for cap-and-trade.

The Regional GHG Initiative is an effort to reduce GHGs among the states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. Each state caps CO_2 emissions from power plants, auctions CO_2 emission allowances, and invests the proceeds in strategic energy programs that further reduce emissions, save consumers money, create jobs, and build a clean energy economy. The Initiative began in 2008 and has retained all participating states as of 2020.

The Western Climate Initiative (WCI) partner jurisdictions have developed a comprehensive initiative to reduce regional GHG emissions to 15% below 2005 levels by 2020. The partners were originally California, British Columbia, Manitoba, Ontario, and Quebec. However, Manitoba and Ontario are not currently participating. California linked with Quebec's cap-and-trade system January 1, 2014, and joint offset auctions took place in 2015. While the WCI has yet to publish whether it has successfully reached the 2020 emissions goal initiative set in 2007, SB 32 requires that California, a major partner in the WCI, adopt the goal of reducing statewide GHG emissions to 40% below the 1990 level by 2030.

SMARTWAY PROGRAM

The SmartWay Program is a public-private initiative between the EPA, large and small trucking companies, rail carriers, logistics companies, commercial manufacturers, retailers, and other federal and state agencies. Its purpose is to improve fuel efficiency and the environmental performance (reduction of both GHG emissions and air pollution) of the goods movement supply chains. SmartWay is comprised of four components (34):

1. SmartWay Transport Partnership: A partnership in which freight carriers and shippers commit to benchmark operations, track fuel consumption, and improve performance annually.
2. SmartWay Technology Program: A testing, verification, and designation program to help freight companies identify equipment, technologies, and strategies that save fuel and lower emissions.
3. SmartWay Vehicles: A program that ranks light-duty cars and small trucks and identifies superior environmental performers with the SmartWay logo.
4. SmartWay International Interests: Guidance and resources for countries seeking to develop freight sustainability programs modeled after SmartWay.

SmartWay effectively refers to requirements geared towards reducing fuel consumption. Most large trucking fleets driving newer vehicles are compliant with SmartWay design requirements. Moreover, over time, all HDTs would have to comply with the CARB GHG Regulation that is designed with the SmartWay Program in mind, to reduce GHG emissions by making them more fuel-efficient. For instance, in 2015, 53 foot or longer dry vans or refrigerated trailers equipped

with a combination of SmartWay-verified low-rolling resistance tires and SmartWay-verified aerodynamic devices would obtain a total of 10% or more fuel savings over traditional trailers.

Through the SmartWay Technology Program, the EPA has evaluated the fuel-saving benefits of various devices through grants, cooperative agreements, emissions, and fuel economy testing, demonstration projects and technical literature review. As a result, the EPA has determined the following types of technologies provide fuel saving and/or emission reducing benefits when used properly in their designed applications, and has verified certain products:

- Idle reduction technologies – less idling of the engine when it is not needed would reduce fuel consumption.
- Aerodynamic technologies minimize drag and improve airflow over the entire tractor-trailer vehicle. Aerodynamic technologies include gap fairings that reduce turbulence between the tractor and trailer, side skirts that minimize wind under the trailer, and rear fairings that reduce turbulence and pressure drop at the rear of the trailer.
- Low rolling resistance tires can roll longer without slowing down, thereby reducing the amount of fuel used. Rolling resistance (or rolling friction or rolling drag) is the force resisting the motion when a tire rolls on a surface. The wheel would eventually slow down because of this resistance.
- Retrofit technologies include things such as diesel particulate filters, emissions upgrades (to a higher tier), etc., which would reduce emissions.
- Federal excise tax exemptions.

EXECUTIVE ORDER 13990

On January 20, 2021, Federal agencies were directed to immediately review, and take action to address, Federal regulations promulgated and other actions taken during the last 4 years that conflict with national objectives to improve public health and the environment; ensure access to clean air and water; limit exposure to dangerous chemicals and pesticides; hold polluters accountable, including those who disproportionately harm communities of color and low-income communities; reduce GHG emissions; bolster resilience to the impacts of climate change; restore and expand our national treasures and monuments; and prioritize both environmental justice and employment.

2.7.3 CALIFORNIA

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California's energy consumption relatively flat even with rapid population growth.

2.7.3.1 LEGISLATIVE ACTIONS TO REDUCE GHGS

The State of California legislature has enacted a series of bills that constitute the most aggressive program to reduce GHGs of any state in the nation. Some legislation, such as the landmark AB 32, was specifically enacted to address GHG emissions. Other legislation, such as Title 24 and Title 20 energy standards, were originally adopted for other purposes such as energy and water conservation, but also provide GHG reductions. This section describes the major provisions of the legislation.

AB 1881

The Water Conservation in Landscaping Act of 2006 requires local agencies to adopt the updated DWR model ordinance or equivalent. AB 1881 also requires the CEC to consult with the DWR to adopt, by regulation, performance standards and labeling requirements for landscape irrigation equipment, including irrigation controllers, moisture sensors, emission devices, and valves to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy or water.

SB 1368

California SB 1368 adds Sections 8340 and 8341 to the Public Utilities Code (effective January 1, 2007) with the intent "to prevent long-term investments in power plants with GHG emissions in excess of those produced by a combined-cycle natural gas power plant" with the aim of "reducing emissions of GHGs from the state's electricity consumption, not just the state's electricity production." SB 1368 provides a mechanism for reducing the GHG emissions of electricity providers, both in-state and out-of-state, thereby assisting CARB in meeting its mandate under AB 32, the Global Warming Solutions Act of 2006.

AB 32

The California State Legislature enacted AB 32, which required that GHGs emitted in California be reduced to 1990 levels by the year 2020 (this goal has been met[2]). GHGs, as defined under AB 32, include CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6. Since AB 32 was enacted, a seventh chemical, NF_3, has also been added to the list of GHGs. CARB is the state agency charged with monitoring and regulating sources of GHGs. Pursuant to AB 32, CARB adopted regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 states the following:

> *"Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems."*

SB 375

On September 30, 2008, SB 375 was signed by Governor Schwarzenegger. According to SB 375, the transportation sector is the largest contributor of GHG emissions, which emits over 40% of the total GHG emissions in California. SB 375 states, "Without improved land use and transportation policy, California would not be able to achieve the goals of AB 32." SB 375 does the following: it (1) requires metropolitan planning organizations (MPOs) to include sustainable community strategies in their

[2] Based upon the 2023 GHG inventory data (i.e., the latest year for which data are available) for the 2000-2021 GHG emissions period, California emitted an average 381.3 $MMTCO_2e$ (25). This is less than the 2020 emissions target of 431 $MMTCO_2e$. This is less than the 2020 emissions target of 431 $MMTCO_2e$.

regional transportation plans for reducing GHG emissions; (2) aligns planning for transportation and housing; and (3) creates specified incentives for the implementation of the strategies.

SB 375 requires MPOs to prepare a Sustainable Communities Strategy (SCS) within the Regional Transportation Plan (RTP) that guides growth while taking into account the transportation, housing, environmental, and economic needs of the region. SB 375 uses CEQA streamlining as an incentive to encourage residential projects, which help achieve AB 32 goals to reduce GHG emissions. Although SB 375 does not prevent CARB from adopting additional regulations, such actions are not anticipated in the foreseeable future.

Concerning CEQA, SB 375, as codified in Public Resources Code Section 21159.28, states that CEQA findings for certain projects are not required to reference, describe, or discuss (1) growth inducing impacts, or (2) any project-specific or cumulative impacts from cars and light-duty truck trips generated by the project on global warming or the regional transportation network, if the project:

1. Is in an area with an approved sustainable communities strategy or an alternative planning strategy that CARB accepts as achieving the GHG emission reduction targets.
2. Is consistent with that strategy (in designation, density, building intensity, and applicable policies).
3. Incorporates the MMs required by an applicable prior environmental document.

AB 1493 - PAVLEY FUEL EFFICIENCY STANDARDS

The second phase of the implementation for the Pavley bill was incorporated into Amendments to the Low-Emission Vehicle Program (LEV III) or the Advanced Clean Cars (ACC) program. The ACC program combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of requirements for MY 2017 through 2025. The regulation will reduce GHGs from new cars by 34% from 2016 levels by 2025. The new rules will clean up gasoline and diesel-powered cars, and deliver increasing numbers of zero-emission technologies, such as full battery electric cars, newly emerging plug-in hybrid EV and hydrogen fuel cell cars. The package will also ensure adequate fueling infrastructure is available for the increasing numbers of hydrogen fuel cell vehicles planned for deployment in California. On March 9, EPA reinstated California's authority under the Clean Air Act to implement its own GHG emission standards for cars and light trucks, which other states can also adopt and enforce. With this authority restored, EPA will continue partnering with states to advance the next generation of clean vehicle technologies.

CLEAN ENERGY AND POLLUTION REDUCTION ACT OF 2015 (SB 350)

In October 2015, the legislature approved, and Governor Jerry Brown signed SB 350, which reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the RPS, higher energy efficiency requirements for buildings, initial strategies towards a regional electricity grid, and improved infrastructure for EV charging stations. Provisions for a 50% reduction in the use of petroleum statewide were removed from the Bill because of opposition and concern that it would prevent the Bill's passage. Specifically, SB 350 requires the following to reduce statewide GHG emissions:

- Increase the amount of electricity procured from renewable energy sources from 33% to 50% by 2030, with interim targets of 40% by 2024, and 45% by 2027.
- Double the energy efficiency in existing buildings by 2030. This target would be achieved through the California Public Utilities Commission (CPUC), the California Energy Commission (CEC), and local publicly owned utilities.
- Reorganize the Independent System Operator (ISO) to develop more regional electrify transmission markets and to improve accessibility in these markets, which would facilitate the growth of renewable energy markets in the western United States.

SB 32

On September 8, 2016, Governor Brown signed SB 32 and its companion bill, AB 197. SB 32 requires the state to reduce statewide GHG emissions to 40% below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15. The new legislation builds upon the AB 32 goal and provides an intermediate goal to achieving S-3-05, which sets a statewide GHG reduction target of 80% below 1990 levels by 2050. AB 197 creates a legislative committee to oversee regulators to ensure that CARB not only responds to the Governor, but also the Legislature (10).

2017 CARB SCOPING PLAN

In November 2017, CARB released the *Final 2017 Scoping Plan Update* (*2017 Scoping Plan*), which identifies the State's post-2020 reduction strategy. The *2017 Scoping Plan* reflects the 2030 target of a 40% reduction below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. Key programs that the proposed Second Update builds upon include the Cap-and-Trade Regulation, the LCFS, and much cleaner cars, trucks, and freight movement, utilizing cleaner, renewable energy, and strategies to reduce CH_4 emissions from agricultural and other wastes.

The *2017 Scoping Plan* establishes a new emissions limit of 260 $MMTCO_2e$ for the year 2030, which corresponds to a 40% decrease in 1990 levels by 2030 (35).

California's climate strategy would require contributions from all sectors of the economy, including the land base, and would include enhanced focus on zero and near-zero emission (ZE/NZE) vehicle technologies; continued investment in renewables, including solar roofs, wind, and other distributed generation; greater use of low carbon fuels; integrated land conservation and development strategies; coordinated efforts to reduce emissions of short-lived climate pollutants (CH_4, black carbon, and fluorinated gases); and an increased focus on integrated land use planning to support livable, transit-connected communities and conservation of agricultural and other lands. Requirements for direct GHG reductions at refineries would further support air quality co-benefits in neighborhoods, including in disadvantaged communities historically located adjacent to these large stationary sources, as well as efforts with California's local air pollution control and air quality management districts (air districts) to tighten emission limits on a broad spectrum of industrial sources. Major elements of the *2017 Scoping Plan* framework include:

- Implementing and/or increasing the standards of the Mobile Source Strategy, which include increasing zero-emission vehicles (ZEV) buses and trucks.

- LCFS, with an increased stringency (18% by 2030).
- Implementing SB 350, which expands the RPS to 50% RPS and doubles energy efficiency savings by 2030.
- California Sustainable Freight Action Plan, which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of ZEV trucks.
- Implementing the proposed Short-Lived Climate Pollutant Strategy (SLPS), which focuses on reducing CH_4 and HCF emissions by 40% and anthropogenic black carbon emissions by 50% by year 2030.
- Continued implementation of SB 375.
- Post-2020 Cap-and-Trade Program that includes declining caps.
- 20% reduction in GHG emissions from refineries by 2030.
- Development of a Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

Note, however, that the *2017 Scoping Plan* acknowledges that:

> *"[a]chieving net zero increases in GHG emissions, resulting in no contribution to GHG impacts, may not be feasible or appropriate for every project, however, and the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA."*

In addition to the statewide strategies listed above, the *2017 Scoping Plan* also identifies local governments as essential partners in achieving the State's long-term GHG reduction goals and identifies local actions to reduce GHG emissions. As part of the recommended actions, CARB recommends that local governments achieve a community-wide goal to achieve emissions of no more than 6 metric tons of CO_2e ($MTCO_2e$) or less per capita by 2030 and 2 $MTCO_2e$ or less per capita by 2050. For CEQA projects, CARB states that lead agencies may develop evidence-based bright-line numeric thresholds—consistent with the *2017 Scoping Plan* and the State's long-term GHG goals—and projects with emissions over that amount may be required to incorporate on-site design features and MMs that avoid or minimize project emissions to the degree feasible; or a performance-based metric using a CAP or other plan to reduce GHG emissions is appropriate.

According to research conducted by the Lawrence Berkeley National Laboratory (LBNL) and supported by CARB, California, under its existing and proposed GHG reduction policies, could achieve the 2030 goals under SB 32. The research utilized a new, validated model known as the California LBNL GHG Analysis of Policies Spreadsheet (CALGAPS), which simulates GHG and criteria pollutant emissions in California from 2010 to 2050 in accordance to existing and future GHG-reducing policies. The CALGAPS model showed that by 2030, emissions could range from 211 to 428 $MTCO_2e$ per year ($MTCO_2e$/yr), indicating that "even if all modeled policies are not implemented, reductions could be sufficient to reduce emissions 40% below the 1990 level [of SB 32]." CALGAPS analyzed emissions through 2050 even though it did not generally account for policies that might be put in place after 2030. Although the research indicated that the emissions

would not meet the State's 80% reduction goal by 2050, various combinations of policies could allow California's cumulative emissions to remain very low through 2050 (36) (37).

CAP-AND-TRADE PROGRAM

The *2017 Scoping Plan* identifies a Cap-and-Trade Program as one of the key strategies for California to reduce GHG emissions. According to CARB, a cap-and-trade program would help put California on the path to meet its goal of achieving a 40% reduction in GHG emissions from 1990 levels by 2030. Under cap-and-trade, an overall limit on GHG emissions from capped sectors is established, and facilities subject to the cap would be able to trade permits to emit GHGs within the overall limit.

CARB adopted a California Cap-and-Trade Program pursuant to its authority under AB 32. The Cap-and-Trade Program is designed to reduce GHG emissions from regulated entities by more than 16% between 2013 and 2020, and by an additional 40% by 2030. The statewide cap for GHG emissions from the capped sectors (e.g., electricity generation, petroleum refining, and cement production) commenced in 2013 and would decline over time, achieving GHG emission reductions throughout the program's duration.

Covered entities that emit more than 25,000 $MTCO_2e$/yr must comply with the Cap-and-Trade Program. Triggering of the 25,000 $MTCO_2e$/yr "inclusion threshold" is measured against a subset of emissions reported and verified under the California Regulation for the Mandatory Reporting of GHG Emissions (Mandatory Reporting Rule or "MRR").

Under the Cap-and-Trade Program, CARB issues allowances equal to the total amount of allowable emissions over a given compliance period and distributes these to regulated entities. Covered entities are allocated free allowances in whole or part (if eligible), and may buy allowances at auction, purchase allowances from others, or purchase offset credits. Each covered entity with a compliance obligation is required to surrender "compliance instruments" for each $MTCO_2e$ of GHG they emit. There also are requirements to surrender compliance instruments covering 30% of the prior year's compliance obligation by November of each year (38).

The Cap-and-Trade Program provides a firm cap, which provides the highest certainty of achieving the 2030 target. An inherent feature of the Cap-and-Trade program is that it does not guarantee GHG emissions reductions in any discrete location or by any particular source. Rather, GHG emissions reductions are only guaranteed on an accumulative basis. As summarized by CARB in the *First Update to the Climate Change Scoping Plan*:

> *"The Cap-and-Trade Regulation gives companies the flexibility to trade allowances with others or take steps to cost-effectively reduce emissions at their own facilities. Companies that emit more have to turn in more allowances or other compliance instruments. Companies that can cut their GHG emissions have to turn in fewer allowances. But as the cap declines, aggregate emissions must be reduced. In other words, a covered entity theoretically could increase its GHG emissions every year and still comply with the Cap-and-Trade Program if there is a reduction in GHG emissions from other covered entities. Such a focus on aggregate GHG emissions*

> *is considered appropriate because climate change is a global phenomenon, and the effects of GHG emissions are considered cumulative."* (39)

The Cap-and-Trade Program covers approximately 80% of California's GHG emissions (35). The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, whether generated in-state or imported. Accordingly, GHG emissions associated with CEQA projects' electricity usage are covered by the Cap-and-Trade Program. The Cap-and-Trade Program also covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and from combustion of other fossil fuels not directly covered at large sources in the Program's first compliance period. The Cap-and-Trade Program covers the GHG emissions associated with the combustion of transportation fuels in California, whether refined in-state or imported.

2022 CARB SCOPING PLAN

On December 15, 2022, CARB adopted the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) (40). The 2022 Scoping Plan builds on the 2017 Scoping Plan as well as the requirements set forth by AB 1279, which directs the state to become carbon neutral no later than 2045. To achieve this statutory objective, the 2022 Scoping Plan lays out how California can reduce GHG emissions by 85% below 1990 levels and achieve carbon neutrality by 2045. The Scoping Plan scenario to do this is to "deploy a broad portfolio of existing and emerging fossil fuel alternatives and clean technologies, and align with statutes, Executive Orders, Board direction, and direction from the governor." The 2022 Scoping Plan sets one of the most aggressive approaches to reach carbon neutrality in the world. Unlike the 2017 Scoping Plan, CARB no longer includes a numeric per capita threshold and instead advocates for compliance with a local GHG reduction strategy (CAP) consistent with *CEQA Guidelines* section 15183.5.

The key elements of the 2022 CARB Scoping Plan focus on transportation - the regulations that will impact this sector are adopted and enforced by CARB on vehicle manufacturers and outside the jurisdiction and control of local governments. As stated in the Plan's executive summary:

> "The major element of this unprecedented transformation is the aggressive reduction of fossil fuels wherever they are currently used in California, building on and accelerating carbon reduction programs that have been in place for a decade and a half. That means rapidly moving to zero-emission transportation; electrifying the cars, buses, trains, and trucks that now constitute California's single largest source of planet-warming pollution."
>
> "[A]pproval of this plan catalyzes a number of efforts, including the development of new regulations as well as amendments to strengthen regulations and programs already in place, not just at CARB but across state agencies."

Under the 2022 Scoping Plan, the State will lead efforts to meet the 2045 carbon neutrality goal through implementation of the following objectives:

- Reimagine roadway projects that increase VMT in a way that meets community needs and reduces the need to drive.

- Double local transit capacity and service frequencies by 2030.
- Complete the High-Speed Rail (HSR) System and other elements of the intercity rail network by 2040.
- Expand and complete planned networks of high-quality active transportation infrastructure.
- Increase availability and affordability of bikes, e-bikes, scooters, and other alternatives to light-duty vehicles, prioritizing needs of underserved communities.
- Shift revenue generation for transportation projects away from the gas tax into more durable sources by 2030.
- Authorize and implement roadway pricing strategies and reallocate revenues to equitably improve transit, bicycling, and other sustainable transportation choices.
- Prioritize addressing key transit bottlenecks and other infrastructure investments to improve transit operational efficiency over investments that increase VMT.
- Develop and implement a statewide transportation demand management (TDM) framework with VMT mitigation requirements for large employers and large developments.
- Prevent uncontrolled growth of autonomous vehicle (AV) VMT, particularly zero-passenger miles.
- Channel new mobility services towards pooled use models, transit complementarity, and lower VMT outcomes.
- Establish an integrated statewide system for trip planning, booking, payment, and user accounts that enables efficient and equitable multimodal systems.
- Provide financial support for low-income and disadvantaged Californians' use of transit and new mobility services.
- Expand universal design features for new mobility services.
- Accelerate infill development in existing transportation-efficient places and deploy strategic resources to create more transportation-efficient locations.
- Encourage alignment in land use, housing, transportation, and conservation planning in adopted regional plans (RTP/SCS and RHNA) and local plans (e.g., general plans, zoning, and local transportation plans).
- Accelerate production of affordable housing in forms and locations that reduce VMT and affirmatively further fair housing policy objectives.
- Reduce or eliminate parking requirements (and/or enact parking maximums, as appropriate) and promote redevelopment of excess parking, especially in infill locations.
- Preserve and protect existing affordable housing stock and protect existing residents and businesses from displacement and climate risk.

Included in the 2022 Scoping Plan is a set of Local Actions (Appendix D to the 2022 Scoping Plan) aimed at providing local jurisdictions with tools to reduce GHGs and assist the state in meeting the ambitious targets set forth in the 2022 Scoping Plan. Appendix D to the 2022 Scoping Plan includes a section on evaluating plan-level and project-level alignment with the State's Climate Goals in CEQA GHG analyses. In this section, CARB identifies several recommendations and strategies that should be considered for new development in order to determine consistency with the 2022 Scoping Plan. Notably, this section is focused on Residential and Mixed-Use Projects, in fact CARB states in Appendix D (page 4): "…focuses primarily on climate action plans

(CAPs) and local authority over new residential development. It does not address other land use types (e.g., industrial) or air permitting."

Additionally on Page 21 in Appendix D, CARB states: "The recommendations outlined in this section apply only to residential and mixed-use development project types. California currently faces both a housing crisis and a climate crisis, which necessitates prioritizing recommendations for residential projects to address the housing crisis in a manner that simultaneously supports the State's GHG and regional air quality goals. CARB plans to continue to explore new approaches for other land use types in the future." As such, it would be inappropriate to apply the requirements contained in Appendix D of the 2022 Scoping Plan to any land use types other than residential or mixed-use residential development.

2.7.3.2 EXECUTIVE ORDERS RELATED TO GHG EMISSIONS

California's Executive Branch has taken several actions to reduce GHGs through the use of Executive Orders. Although not regulatory, they set the tone for the state and guide the actions of state agencies.

EXECUTIVE ORDER S-3-05

California Governor Arnold Schwarzenegger announced on June 1, 2005, through Executive Order S-3-05, the following reduction targets for GHG emissions:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80% below 1990 levels.

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that would stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an executive order, the goals are not legally enforceable for local governments or the private sector.

EXECUTIVE ORDER S-01-07 (LCFS)

Governor Schwarzenegger signed Executive Order S-01-07 on January 18, 2007. The order mandates that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10% by 2020. CARB adopted the LCFS on April 23, 2009.

After a series of legal changes, in order to address the Court ruling, CARB was required to bring a new LCFS regulation to the Board for consideration in February 2015. The proposed LCFS regulation was required to contain revisions to the 2010 LCFS as well as new provisions designed to foster investments in the production of the low-carbon intensity fuels, offer additional flexibility to regulated parties, update critical technical information, simplify and streamline program operations, and enhance enforcement. On November 16, 2015, the Office of Administrative Law (OAL) approved the Final Rulemaking Package. The new LCFS regulation became effective on January 1, 2016.

In 2018, CARB approved amendments to the regulation, which included strengthening the carbon intensity benchmarks through 2030 in compliance with the SB 32 GHG emissions reduction target for 2030. The amendments included crediting opportunities to promote zero emission vehicle adoption, alternative jet fuel, carbon capture and sequestration, and advanced technologies to achieve deep decarbonization in the transportation sector (41).

EXECUTIVE ORDER S-13-08

Executive Order S-13-08 states that "climate change in California during the next century is expected to shift precipitation patterns, accelerate sea level rise and increase temperatures, thereby posing a serious threat to California's economy, to the health and welfare of its population and to its natural resources." Pursuant to the requirements in the Order, the *2009 California Climate Adaptation Strategy* (*CNRA 2009*) was adopted, which is the "…first statewide, multi-sector, region-specific, and information-based climate change adaptation strategy in the United States." Objectives include analyzing risks of climate change in California, identifying, and exploring strategies to adapt to climate change, and specifying a direction for future research.

EXECUTIVE ORDER B-30-15

On April 29, 2015, Governor Brown issued an executive order to establish a California GHG reduction target of 40% below 1990 levels by 2030. The Governor's executive order aligned California's GHG reduction targets with those of leading international governments ahead of the U.N. Climate Change Conference in Paris late 2015. The Order sets a new interim statewide GHG emission reduction target to reduce GHG emissions to 40% below 1990 levels by 2030 in order to ensure California meets its target of reducing GHG emissions to 80% below 1990 levels by 2050 and directs CARB to update the *2017 Scoping Plan* to express the 2030 target in terms of $MMTCO_2e$. The Order also requires the state's climate adaptation plan to be updated every three years, and for the State to continue its climate change research program, among other provisions. As with Executive Order S-3-05, this Order is not legally enforceable to local governments and the private sector. Legislation that would update AB 32 to make post 2020 targets and requirements a mandate is in process in the State Legislature.

EXECUTIVE ORDER B-55-18 AND SB 100

SB 100 and Executive Order B-55-18 were signed by Governor Brown on September 10, 2018. Under the existing RPS, 25% of retail sales of electricity are required to be from renewable sources by December 31, 2016, 33% by December 31, 2020, 40% by December 31, 2024, 45% by December 31, 2027, and 50% by December 31, 2030. SB 100 raises California's RPS requirement to 50% renewable resources target by December 31, 2026, and to achieve a 60% target by December 31, 2030. SB 100 also requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt hours (kWh) of those products sold to their retail end-use customers achieve 44% of retail sales by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030. In addition to targets under AB 32 and SB 32, Executive Order B-55-18 establishes a carbon neutrality goal for the state of California by 2045; and sets a goal to maintain net negative emissions thereafter. The Executive Order directs the California Natural

Resources Agency (CNRA), California EPA (CalEPA), the California Department of Food and Agriculture (CDFA), and CARB to include sequestration targets in the Natural and Working Lands Climate Change Implementation Plan consistent with the carbon neutrality goal.

2.7.3.3 California Regulations and Building Codes

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California's energy consumption relatively flat even with rapid population growth.

Title 20 CCR Sections 1601 et seq. – Appliance Efficiency Regulations

The Appliance Efficiency Regulations regulate the sale of appliances in California. The Appliance Efficiency Regulations include standards for both federally regulated appliances and non-federally regulated appliances. Twenty-three categories of appliances are included in the scope of these regulations. The standards within these regulations apply to appliances that are sold or offered for sale in California, except those sold wholesale in California for final retail sale outside the state and those designed and sold exclusively for use in recreational vehicles (RV) or other mobile equipment (CEC 2012).

Title 24 Energy Efficiency Standards and California Green Building Standards

California Code of Regulations (CCR) Title 24 Part 6: The California Energy Code was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption.

The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. CCR, Title 24, Part 11: California Green Building Standards Code (CALGreen) is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on August 1, 2009, and is administered by the California Building Standards Commission.

CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2022 California Green Building Code Standards that became effective on January 1, 2023. The CEC anticipates that the 2022 energy code will provide $1.5 billion in consumer benefits and reduce GHG emissions by 10 million metric tons (42). The Project would be required to comply with the applicable standards in place at the time plan check submittals are made. These require, among other items (43):

Residential Mandatory Measures

- Electric vehicle (EV) charging stations. New construction shall comply with Section 4.106.4.1, 4.106.4.2, 4.106.4.3, to facilitate future installation and use of EV chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the *California Electrical Code*, Article 625. (4.106.4).
    - New one- and two-family dwellings and town-houses with attached private garages. For each dwelling unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location

of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces. The service panel and/or subpanel shall provide capacity to install a 40-ampere 208/240-volt minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.

- New hotels and motels. All newly constructed hotels and motels shall provide EV spaces capable of supporting future installation of EVSE. The construction documents shall identify the location of the EV spaces. The number of required EV spaces shall be based on the total number of parking spaces provided for all types of parking facilities in accordance with Table 4.106.4.3.1.

- Water conserving plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with Sections 4.303.1.1, 4.303.1.2, 4.303.1.3, and 4.303.1.4.
- Outdoor potable water use in landscape areas. Residential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent.
- Operation and maintenance manual. At the time of final inspection, a manual, compact disc, web-based reference or other media acceptable to the enforcing agency which includes all of the following shall be placed in the building:
  - Directions to the owner or occupant that the manual shall remain with the building throughout the life cycle of the structure.
  - Operations and maintenance instructions for the following:
    - Equipment and appliances, including water-saving devices and systems, HVAC systems, photovoltaic systems, EV chargers, water-heating systems and other major appliances and equipment.
    - Roof and yard drainage, including gutter and downspouts.
    - Space conditioning systems, including condensers and air filters.
    - Landscape irrigation systems.
    - Water reuse systems.
  - Information from local utility, water and waste recovery providers on methods to further reduce future resource consumption, including recycling programs and locations.
  - Public transportation and/or carpool options available in the area.
  - Educational material on the positive impacts of an interior relative humidity between 30-60% and what methods occupants may use to maintain the relative humidity level in that range.
  - Information about water-conserving landscape and irrigation design and controllers which conserve water.
  - Instructions for maintaining gutters and downspouts and the importance of diverting water at least 5 feet away from the foundation.
  - Information about state solar energy and incentive programs available.
  - A copy of all special inspection verifications required by the enforcing agency of this code.
  - Information from CALFIRE on maintenance of defensible space around residential structures.

- Any installed gas fireplace shall be direct-vent sealed-combustion type. Any installed woodstove or pellet stove shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as applicable, and shall have a permanent label indicating they are certified to meet the emission limits. Woodstoves, pellet stoves and fireplaces shall also comply with applicable local ordinances.
- Paints and coatings. Architectural paints and coatings shall comply with VOC limits in Table 1 of the CARB Architectural Suggested Control Measure, as shown in Table 4.504.3, unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 4.504.3 shall be determined by classifying the coating as a Flat, Nonflat, or Nonflat-high Gloss coating, based on its glass, as defined in subsections 4.21, 4.36, and 4.37 of the 2007 CARB, Suggested Control Measure, and the corresponding Flat, Nonflat, Nonflat-high Gloss VOC limit in Table 4.504.3 shall apply.

CARB REFRIGERANT MANAGEMENT PROGRAM

CARB adopted a regulation in 2009 to reduce refrigerant GHG emissions from stationary sources through refrigerant leak detection and monitoring, leak repair, system retirement and retrofitting, reporting and recordkeeping, and proper refrigerant cylinder use, sale, and disposal. The regulation is set forth in sections 95380 to 95398 of Title 17, CCR. The rules implementing the regulation establish a limit on statewide GHG emissions from stationary facilities with refrigeration systems with more than 50 pounds of a high GWP refrigerant. The refrigerant management program is designed to (1) reduce emissions of high-GWP GHG refrigerants from leaky stationary, non-residential refrigeration equipment; (2) reduce emissions from the installation and servicing of refrigeration and air-conditioning appliances using high-GWP refrigerants; and (3) verify GHG emission reductions.

TRACTOR-TRAILER GHG REGULATION

The tractors and trailers subject to this regulation must either use EPA SmartWay certified tractors and trailers or retrofit their existing fleet with SmartWay verified technologies. The regulation applies primarily to owners of 53-foot or longer box-type trailers, including both dry-van and refrigerated-van trailers, and owners of the HD tractors that pull them on California highways. These owners are responsible for replacing or retrofitting their affected vehicles with compliant aerodynamic technologies and low rolling resistance tires. Sleeper cab tractors MY 2011 and later must be SmartWay certified. All other tractors must use SmartWay verified low rolling resistance tires. There are also requirements for trailers to have low rolling resistance tires and aerodynamic devices.

PHASE I AND 2 HEAVY-DUTY VEHICLE GHG STANDARDS

In September 2011, CARB adopted a regulation for GHG emissions from HDTs and engines sold in California. It establishes GHG emission limits on truck and engine manufacturers and harmonizes with the EPA rule for new trucks and engines nationally. Existing HD vehicle regulations in California include engine criteria emission standards, tractor-trailer GHG requirements to implement SmartWay strategies (i.e., the Heavy-Duty Tractor-Trailer GHG Regulation), and in-use fleet retrofit requirements such as the Truck and Bus Regulation. The EPA rule has compliance requirements for new compression and spark ignition engines, as well

as trucks from Class 2b through Class 8. Compliance requirements began with MY 2014 with stringency levels increasing through MY 2018. The rule organizes truck compliance into three groupings, which include a) HD pickups and vans; b) vocational vehicles; and c) combination tractors. The EPA rule does not regulate trailers.

CARB staff has worked jointly with the EPA and the NHTSA on the next phase of federal GHG emission standards for medium-duty trucks (MDT) and HDT vehicles, called federal Phase 2. The federal Phase 2 standards were built on the improvements in engine and vehicle efficiency required by the Phase 1 emission standards and represent a significant opportunity to achieve further GHG reductions for 2018 and later MY HDT vehicles, including trailers. The EPA and NHTSA have proposed to roll back GHG and fuel economy standards for cars and light-duty trucks, which suggests a similar rollback of Phase 2 standards for MDT and HDT vehicles may be pursued.

SB 97 AND THE CEQA GUIDELINES UPDATE

Passed in August 2007, SB 97 added Section 21083.05 to the Public Resources Code. The code states "(a) On or before July 1, 2009, the Office of Planning and Research (OPR) shall prepare, develop, and transmit to the Resources Agency guidelines for the mitigation of GHG emissions or the effects of GHG emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption. (b) On or before January 1, 2010, the Resources Agency shall certify and adopt guidelines prepared and developed by the OPR pursuant to subdivision (a)."

In 2012, Public Resources Code Section 21083.05 was amended to state:

> *"The Office of Planning and Research and the Natural Resources Agency shall periodically update the guidelines for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption, to incorporate new information or criteria established by the State Air Resources Board pursuant to Division 25.5 (commencing with Section 38500) of the Health and Safety Code."*

On December 28, 2018, the Natural Resources Agency announced the OAL approved the amendments to the *CEQA Guidelines* for implementing CEQA. The CEQA Amendments provide guidance to public agencies regarding the analysis and mitigation of the effects of GHG emissions in CEQA documents. The CEQA Amendments fit within the existing CEQA framework by amending existing *CEQA Guidelines* to reference climate change.

Section 15064.4 was added to the *CEQA Guidelines* and states that in determining the significance of a project's GHG emissions, the lead agency should focus its analysis on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change. A project's incremental contribution may be cumulatively considerable even if it appears relatively insignificant compared to statewide, national, or global emissions. The agency's analysis should consider a timeframe that is appropriate for the project. The agency's analysis also must reasonably reflect evolving scientific knowledge and state regulatory schemes. Additionally, a lead agency may use a model or methodology to estimate GHG emissions resulting

from a project. The lead agency has discretion to select the model or methodology it considers most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change. The lead agency must support its selection of a model or methodology with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use (44).

2.7.4 REGIONAL

The Project site is located within the South Coast Air Basin (SCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD).

SCAQMD

The SCAQMD is the agency responsible for air quality planning and regulation in the SCAB. The SCAQMD addresses the impacts to climate change of projects subject to SCAQMD permit as a lead agency if they are the only agency having discretionary approval for the project and acts as a responsible agency when a land use agency must also approve discretionary permits for the project. The SCAQMD acts as an expert commenting agency for impacts to air quality. This expertise carries over to GHG emissions, so the agency helps local land use agencies through the development of models and emission thresholds that can be used to address GHG emissions.

The SCAQMD has been evaluating GHG significance thresholds since April 2008. On December 5, 2008, the SCAQMD Governing Board adopted an Interim CEQA Greenhouse Gas Significance Threshold of 10,000 $MTCO_2e$ per year for stationary source/industrial projects for which the SCAQMD is the lead agency. The SCAQMD has continued to consider then adoption of significance thresholds for projects where the SCAQMD is not the lead agency. The most recent proposal issued in September 2010 uses the following tiered approach to evaluate potential GHG impacts from various uses:

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.
- Tier 2 consists of determining whether the project is consistent with a locally adopted GHG reduction plan. If a project is consistent with a qualifying locally adopted GHG reduction plan, it does not have significant GHG emissions.
- Tier 3 consists of screening thresholds, which the lead agency can choose, but must be consistent with all projects within its jurisdiction. A project's construction emissions are averaged over 30 years and are added to the project's operational emissions. If a project's emissions are below one of the following screening thresholds, then the project is less than significant:
  - Residential and commercial land use: 3,000 $MTCO_2e$/yr
  - Industrial land use: 10,000 $MTCO_2e$/yr
  - Option 1: Based on land use type: residential: 3,500 $MTCO_2e$/yr; commercial: 1,400 $MTCO_2e$/yr; or mixed use: 3,000 $MTCO_2e$/yr
  - Option 2: All non-indstural alnd uses: 3,000 $MTCO_2e$/yr
- Tier 4 has the following options:
  - Option 1: Percent emission reduction target; this percentage is currently undefined.

- Option 2: Early implementation of applicable AB 32 Scoping Plan measures
- Option 3: 2020 target for service populations (SP), which includes residents and employees: 4.8 $MTCO_2e$ per SP per year for projects and 6.6 $MTCO_2e$ per SP per year for plans;
- Option 3, 2035 target: 3.0 $MTCO_2e$ per SP per year for projects and 4.1 $MTCO_2e$ per SP per year for plans

- Tier 5 involves mitigation offsets to achieve target significance threshold.

The SCAQMD's draft thresholds used the Executive Order S-3-05-year 2050 goal as the basis for the Tier 3 screening level. Achieving the Executive Order's objective would contribute to worldwide efforts to cap CO_2 concentrations at 450 ppm, thus stabilizing global climate.

SCAQMD Regulation XXVII, adopted in 2009 includes the following rules:

- Rule 2700 defines terms and post global warming potentials.
- Rule 2701, SoCal Climate Solutions Exchange, establishes a voluntary program to encourage, quantify, and certify voluntary, high quality certified GHG emission reductions in the SCAQMD.
- Rule 2702, GHG Reduction Program created a program to produce GHG emission reductions within the SCAQMD. The SCAQMD would fund projects through contracts in response to requests for proposals or purchase reductions from other parties.

2.7.5 CITY OF ONTARIO COMMUNITY CLIMATE ACTION PLAN

The City of Ontario adopted the Community Climate Action Plan (CCAP) on December 16, 2014. The CAP contains further guidance on the City of Ontario's GHG Inventory reduction goals, policies, guidelines, and implementation programs. The purpose of the CAP is to provide guidance on how to analyze GHG emissions and determine significance during the CEQA review of proposed development projects within the City of Ontario (45). The CAP builds upon the Reduction Plan to address City-specific information and City-specific GHG reduction measures. To address the state's requirement to reduce GHG emissions, the City prepared its CAP with the goal of reducing GHG emissions within the City by 15% below 2008 levels by the year 2020. The City's target is consistent with the AB 32 target and ensures that the City of Ontario achieves GHG reductions locally that complement and are consistent with state efforts to reduce GHG emissions.

As part of the CAP, the City of Ontario published a guidance document titled "Greenhouse Gas Emissions, CEQA Thresholds and Screening Tables" (December 2014). As part of this guidance, the City determined that if GHG emissions of a given project exceeds 3,000 $MTCO_2e$/yr, then project emissions would need to be reduced by 25 percent when compared to year 2008 emissions levels. Alternatively, the project would need to achieve a minimum of 100 points pursuant to measures identified in the Screening Tables.

The Ontario Plan (TOP) 2050 includes an update to the City's Community Climate Action Plan (CCAP Update) which was adopted in 2014. The CCAP Update is a plan to reduce greenhouse gas (GHG) emissions and improve community resilience to hazardous conditions associated with climate change. The update to the CCAP includes updated emissions inventories; updated emissions forecasts; identifies GHG emissions reduction targets to achieve the GHG reduction

goals of the City of Ontario consistent with Senate Bill 32, Executive Order S-03-05, and substantial progress toward the State's carbon neutrality goals of Executive Order B-55-18; and measures, that when quantified, achieve the GHG reduction targets for the City. As noted in *The Ontario Plan 2050 Final Supplemental Environmental Impact Report* (SCH No. 2021070364) certified by the City in 2022 (TOP 2050 SEIR), the measures included in the 2022 CCAP Update are not substantially different than that of the 2014 CCAP and therefore there is no change in the environmental impacts associated with the CCAP.

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3 PROJECT GHG IMPACT

3.1 INTRODUCTION

The Project has been evaluated to determine if it will result in a significant GHG impact. The significance of these potential impacts is described in the following sections.

3.2 STANDARDS OF SIGNIFICANCE

The criteria used to determine the significance of potential Project-related GHG impacts are taken from the Initial Study Checklist in Appendix G of the State *CEQA Guidelines* (14 CCR of Regulations §§15000, et seq.). Based on these thresholds, the following questions are utilized to determine if a project would result in a significant impact related to GHG (46):

- **Would the project generate direct or indirect GHG emissions that would result in a significant impact on the environment (see Impact GHG-1)?**
- **Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of GHGs (see Impact GHG-2)?**

The evaluation of an impact under CEQA requires measuring data from a project against both existing conditions and a "threshold of significance." For establishing significance thresholds, the Office of Planning and Research's amendments to the CEQA Guidelines Section 15064.7(c) state "[w]hen adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence."

CEQA Guidelines Section 15064.4(a) further states, ". . . A lead agency shall have discretion to determine, in the context of a particular project, whether to: (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use . . .; or (2) Rely on a qualitative analysis or performance-based standards."

CEQA Guidelines Section 15064.4 provides that a lead agency should consider the following factors, among others, in assessing the significance of impacts from greenhouse gas emissions:

- **Consideration #1**: The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.
- **Consideration #2**: Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- **Consideration #3**: The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. In determining the significance of impacts, the lead agency may consider a project's consistency with the State's long-term climate goals or strategies, provided that substantial

> evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable.

As noted above in Section 2.7.5, the update to the CCAP includes updated emissions inventories; updated emissions forecasts; identifies GHG emissions reduction targets to achieve the GHG reduction goals of the City of Ontario consistent with Senate Bill 32, Executive Order S-03-05, and substantial progress toward the State's carbon neutrality goals of Executive Order B-55-18; and measures, that when quantified, achieve the GHG reduction targets for the City. As noted in the TOP EIR, the measures included in the 2022 update to the CCAP are not substantially different than that of the 2014 CCAP. Because the 2022 Update to the CCAP addresses GHG emissions reductions and is consistent with the requirements of AB 32, SB 32, and international efforts to reduce GHG emissions, Projects that comply with the CCAP Update would have a less than significant GHG impact.

3.3 MODELS EMPLOYED TO ANALYZE GHGS

3.3.1 CALIFORNIA EMISSIONS ESTIMATOR MODEL (CALEEMOD)

In August 2023, the California Air Pollution Control Officers Association (CAPCOA) in conjunction with other California air districts including the SCAQMD, released the latest version of the California Emissions Estimator Model (CalEEMod) version 2022.1.1.22. The purpose of this model is to calculate construction-source and operational-source criteria pollutants and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures (47). Accordingly, the latest version of CalEEMod has been used for this Project to determine GHG emissions. Output from the model runs for construction and operational activity are provided in Appendix 3.1. CalEEMod includes GHG emissions from the following source categories: construction, area, energy, mobile, waste, water, and refrigerants.

3.4 LIFE-CYCLE ANALYSIS NOT REQUIRED

A full life-cycle analysis (LCA) for construction and operational activity is not included in this analysis due to the lack of consensus guidance on LCA methodology at this time (48). Life-cycle analysis (i.e., assessing economy-wide GHG emissions from the processes in manufacturing and transporting all raw materials used in the Project development, infrastructure, and on-going operations) depends on emission factors or econometric factors that are not well established for all processes. At this time, an LCA would be extremely speculative and thus has not been prepared.

Additionally, the SCAQMD recommends analyzing direct and indirect project GHG emissions generated within California and not life-cycle emissions because the life-cycle effects from a project could occur outside of California, might not be very well understood, or documented, and would be challenging to mitigate (49). Additionally, the science to calculate life cycle emissions is not yet established or well defined; therefore, the SCAQMD has not recommended, and is not requiring, life-cycle emissions analysis.

3.5 CONSTRUCTION EMISSIONS

Project construction activities would generate CO_2 and CH_4 emissions. The *Empire Groves Hotel Air Quality Impact Analysis* (AQIA) report contains detailed information regarding Project construction activities (50). As discussed in the AQIA, construction-related emissions are expected from the following activities:

- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

3.5.1 CONSTRUCTION DURATION

For purposes of analysis, construction of Project is expected to commence June 2026 and would last through September 2025. The construction schedule utilized in the analysis, shown in Table 3-1, represents a "conservative" analysis scenario should construction occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent.[3] The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per the *CEQA Guidelines* (51).

TABLE 3-1: CONSTRUCTION DURATION

Construction Activity	Start Date	End Date	Working Days
Site Preparation	6/3/2024	6/14/2024	10
Grading	6/17/2024	7/26/2024	30
Building Construction	7/29/2024	9/19/2025	300
Paving	8/25/2025	9/19/2025	20
Architectural Coating	5/19/2025	9/19/2025	90

3.5.2 CONSTRUCTION EQUIPMENT

Consistent with industry standards and typical construction practices, each piece of equipment listed in Table 3-2 is assumed to operate up to a total of eight (8) hours per day, or more than two-thirds of the period during which construction activities are allowed pursuant to the City code.

TABLE 3-2: CONSTRUCTION EQUIPMENT ASSUMPTIONS

[3] As shown in the CalEEMod User's Guide Version 2022, Appendix G "Table G-11. Statewide Average Annual Offoad Equipment Emission Factors" as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

Construction Activity	Equipment	Amount	Hours Per Day
Site Preparation	Rubber Tired Dozers	3	8
	Crawler Tractors	4	8
Grading	Graders	1	8
	Excavators	2	8
	Scrapers	2	8
	Rubber Tired Dozers	1	8
	Crawler Tractors	1	8
Building Construction	Forklifts	2	8
	Generator Sets	3	8
	Cranes	1	8
	Welders	1	8
	Tractors/Loaders/Backhoes	1	8
Paving	Pavers	2	8
	Paving Equipment	2	8
	Rollers	2	8
Architectural Coating	Air Compressors	1	8

3.5.3 CONSTRUCTION EMISSIONS SUMMARY

For construction phase Project emissions, GHGs are quantified and amortized over the life of the Project. To amortize the emissions over the life of the Project, the SCAQMD recommends calculating the total GHG emissions for the construction activities, dividing it by a 30-year Project life then adding that number to the annual operational phase GHG emissions (52). As such, construction emissions were amortized over a 30-year period and added to the annual operational phase GHG emissions. The amortized construction emissions are presented in Table 3-3.

TABLE 3-3: AMORTIZED ANNUAL CONSTRUCTION EMISSIONS

Year	Emissions (MT/yr)				
	CO_2	CH_4	N_2O	Refrigerants	Total CO_2e[4]
2024	1,337.97	0.10	0.14	1.36	1,382.21
2025	1,213.29	0.07	0.09	1.46	1,241.89
Total GHG Emissions	2,551.26	0.17	0.22	2.82	2,624.10
Amortized Construction Emissions	**85.04**	**5.65E-03**	**7.36E-03**	**9.40E-02**	**87.47**

[4] CalEEMod reports the most common GHGs emitted which include CO_2, CH_4, and N_2O. These GHGs are then converted into the CO_2e by multiplying the individual GHG by the GWP.

Source: CalEEMod annual construction-source emissions are presented in Appendix 3.1.

3.6 OPERATIONAL EMISSIONS

Operational activities associated with the Project would result in emissions of CO_2, CH_4, N_2O, and Refrigerant emissions from the following primary sources:

- Area Source Emissions
- Energy Source Emissions
- Mobile Source Emissions
- Water Supply, Treatment, and Distribution
- Solid Waste
- Refrigerants

3.6.1 AREA SOURCE EMISSIONS

LANDSCAPE MAINTENANCE EQUIPMENT

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shedders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the Project. It should be noted that on October 9, 2021, Governor Gavin Newsom signed AB 1346. The bill aims to ban the sale of new gasoline-powered equipment under 25 gross horsepower (known as small off-road engines [SOREs]) by 2024, which is now effective. For purposes of analysis, the emissions associated with landscape maintenance equipment were calculated based on assumptions provided in CalEEMod.

3.6.2 ENERGY SOURCE EMISSIONS

COMBUSTION EMISSIONS ASSOCIATED WITH NATURAL GAS AND ELECTRICITY

GHGs are emitted from buildings as a result of activities for which electricity and natural gas are typically used as energy sources. Combustion of any type of fuel emits CO_2 and other GHGs directly into the atmosphere; these emissions are considered direct emissions associated with a building; the building energy use emissions do not include street lighting.[5] GHGs are also emitted during the generation of electricity from fossil fuels; these emissions are considered to be indirect emissions. Electricity and natural gas usage associated with the Project was calculated by CalEEMod using default parameters.

3.6.3 MOBILE SOURCE EMISSIONS

The Project related GHG emissions derive primarily from vehicle trips generated by the Project, including employee trips to and from the site associated with the proposed uses. Trip

[5] The CalEEMod emissions inventory model does not include indirect emission related to street lighting. Indirect emissions related to street lighting are expected to be negligible and cannot be accurately quantified at this time as there is insufficient information as to the number and type of street lighting that would occur.

characteristics available from the *Empire Groves Hotel Traffic Analysis* were utilized in this analysis (53).

3.6.4 WATER SUPPLY, TREATMENT, AND DISTRIBUTION

Indirect GHG emissions result from the production of electricity used to convey, treat, and distribute water and wastewater. The amount of electricity required to convey, treat, and distribute water depends on the volume of water as well as the sources of the water. Unless otherwise noted, CalEEMod default parameters were used.

3.6.5 SOLID WASTE

The proposed land uses would result in the generation and disposal of solid waste. A percentage of this waste would be diverted from landfills by a variety of means, such as reducing the amount of waste generated, recycling, and/or composting. The remainder of the waste not diverted would be disposed of at a landfill. GHG emissions from landfills are associated with the anaerobic breakdown of material. GHG emissions associated with the disposal of solid waste associated with the proposed Project were calculated by CalEEMod using default parameters.

3.6.6 REFRIGERANTS

Air conditioning (A/C) and refrigeration equipment associated with the buildings are anticipated to generate GHG emissions. CalEEMod automatically generates a default A/C and refrigeration equipment inventory for each project land use subtype based on industry data from the USEPA (2016b). CalEEMod quantifies refrigerant emissions from leaks during regular operation and routine servicing over the equipment lifetime and then derives average annual emissions from the lifetime estimate. Note that CalEEMod does not quantify emissions from the disposal of refrigeration and A/C equipment at the end of its lifetime. Per 17 CCR 95371, new facilities with refrigeration equipment containing more than 50 pounds of refrigerant are prohibited from utilizing refrigerants with a GWP of 150 or greater as of January 1, 2022. Additionally, beginning January 1, 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater. GHG emissions associated with refrigerants were calculated by CalEEMod using default parameters.

3.6.7 EMISSIONS SUMMARY

The estimated Project-related GHG emissions are summarized in Table 3-4. Detailed operation model outputs for the Project are presented in Appendix 3.1. As shown in Table 3-4, construction and operation of the Project would generate approximately 9,661.88 $MTCO_2e$/yr.

TABLE 3-4: PROJECT GHG EMISSIONS

Emission Source	Emissions (MT/yr)				
	CO_2	CH_4	N_2O	Refrigerants	Total CO_2e
Annual construction-related emissions amortized over 30 years	85.04	5.65E-03	7.36E-03	9.40E-02	87.47
Mobile Source	6302.52	0.32	0.32	10.69	6415.24
Area Source	22.02	0.00	0.00	0.00	22.10
Energy Source	2923.18	0.27	0.02	0.00	2936.99
Water Usage	21.21	0.50	0.01	0.00	37.19
Waste	29.31	2.93	0.00	0.00	102.55
Refrigerants	0.00	0.00	0.00	60.33	60.33
Total CO_2e (All Sources)	**9,661.88**				

Source: CalEEMod output, See Appendix 3.1 for detailed model outputs.

3.7 GHG EMISSIONS FINDINGS AND RECOMMENDATIONS

GHG -1: Would the Project generate GHG emissions either directly or indirectly, that may have a significant impact on the environment?

GHG-2: Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

The purpose of the 2022 CCAP Update is to provide guidance on how to analyze GHG emissions and determine significance during the CEQA review of proposed development projects within the City. Because the 2022 CCAP Update addresses GHG emissions reductions and is consistent with the requirements of AB 32, SB 32, and international efforts to reduce GHG emissions, compliance with the CAP Update fulfills the description of mitigation found in the State CEQA Guidelines.

The Project will implement Screening Table Measures that achieve the requisite points pursuant to PDF GHG-1. The City shall verify that Screening Table Measures achieving the requisite points are incorporated in development plans prior to the issuance of building permit(s) and/or site plans (as applicable). The City shall verify implementation of the selected Screening Table Measures prior to the issuance of Certificate(s) of Occupancy. At the discretion of the City, measures that provide GHG reductions equivalent to GHG emissions reductions achieved via the Screening Table Measures may be implemented. Alternatively, the Project shall demonstrate that annual GHG emissions would not exceed the target thresholds or other alternative compliance mechanisms in the CCAP or subsequent updates. As such, the Project would be consistent with the GHG Development Review Process' requirement to achieve the requisite amount of points and thus the Project is considered to have a less than significant individual and cumulatively considerable impact on GHG emissions. Appendix 3.2 includes the CCAP Screening Tables measures anticipated to be implemented by the proposed Project.

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5 CERTIFICATIONS

The contents of this GHG study report represent an accurate depiction of the GHG impacts associated with the proposed Empire Groves Hotel Project. The information contained in this GHG report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at hqureshi@urbanxroads.com.

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EDUCATION

Master of Science in Environmental Studies
California State University, Fullerton • May 2010

Bachelor of Arts in Environmental Analysis and Design
University of California, Irvine • June, 2006

PROFESSIONAL AFFILIATIONS

AEP – Association of Environmental Professionals
AWMA – Air and Waste Management Association
ASTM – American Society for Testing and Materials

PROFESSIONAL CERTIFICATIONS

Planned Communities and Urban Infill – Urban Land Institute • June 2011
Indoor Air Quality and Industrial Hygiene – EMSL Analytical • April 2008
Principles of Ambient Air Monitoring – California Air Resources Board • August 2007
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APPENDIX 3.1:

CALEEMOD PROJECT EMISSIONS MODEL OUTPUTS

15693 - Guasti and Holt Detailed Report

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1.1. Basic Project Information

Data Field	Value
Project Name	15693 - Guasti and Holt
Construction Start Date	6/3/2024
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.80
Precipitation (days)	20.8
Location	34.064251, -117.602592
County	San Bernardino-South Coast
City	Ontario
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5246
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Hotel	600	Room	6.90	649,498	0.00	—	—	—
Enclosed Parking with Elevator	436	1000sqft	3.53	436,410	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.90	39.4	85.1	72.3	0.32	2.50	13.2	15.7	2.12	3.84	5.96	—	45,639	45,639	4.53	6.28	82.8	47,705
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.54	3.67	20.7	46.5	0.06	0.61	7.30	7.91	0.57	1.77	2.33	—	13,573	13,573	0.77	0.98	1.04	13,886
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.34	10.3	14.7	25.6	0.05	0.45	4.00	4.30	0.40	0.96	1.32	—	8,081	8,081	0.61	0.82	8.83	8,349
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.43	1.88	2.68	4.67	0.01	0.08	0.73	0.78	0.07	0.18	0.24	—	1,338	1,338	0.10	0.14	1.46	1,382

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

3698

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	9.90	4.86	85.1	59.6	0.32	2.50	13.2	15.7	2.12	3.84	5.96	—	45,639	45,639	4.53	6.28	82.8	47,705
2025	5.95	39.4	27.8	72.3	0.08	0.92	8.69	9.62	0.85	2.09	2.95	—	17,086	17,086	0.88	1.05	43.0	17,464
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.54	3.67	20.7	46.5	0.06	0.61	7.30	7.91	0.57	1.77	2.33	—	13,573	13,573	0.77	0.98	1.04	13,886
2025	4.11	3.30	19.1	43.8	0.06	0.54	7.30	7.84	0.50	1.77	2.27	—	13,368	13,368	0.76	0.98	0.97	13,681
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	2.34	1.64	14.7	20.5	0.05	0.45	3.44	3.89	0.40	0.92	1.32	—	8,081	8,081	0.61	0.82	8.21	8,349
2025	2.31	10.3	10.7	25.6	0.03	0.30	4.00	4.30	0.28	0.96	1.25	—	7,328	7,328	0.41	0.52	8.83	7,501
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.43	0.30	2.68	3.74	0.01	0.08	0.63	0.71	0.07	0.17	0.24	—	1,338	1,338	0.10	0.14	1.36	1,382
2025	0.42	1.88	1.96	4.67	0.01	0.06	0.73	0.78	0.05	0.18	0.23	—	1,213	1,213	0.07	0.09	1.46	1,242

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	30.6	43.3	23.8	224	0.44	0.76	35.0	35.7	0.72	8.88	9.60	206	60,032	60,238	24.3	2.13	521	62,001
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	20.8	34.1	24.8	148	0.42	0.68	35.0	35.6	0.66	8.88	9.54	206	57,197	57,403	24.4	2.19	368	59,034

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	25.5	38.4	24.5	179	0.40	0.72	33.0	33.7	0.69	8.37	9.06	206	55,956	56,162	24.3	2.12	429	57,830
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.66	7.02	4.48	32.8	0.07	0.13	6.01	6.15	0.13	1.53	1.65	34.1	9,264	9,298	4.02	0.35	71.0	9,574

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	21.7	19.7	18.2	172	0.41	0.28	35.0	35.2	0.27	8.88	9.14	—	42,082	42,082	1.97	1.91	157	42,858
Area	8.40	23.3	0.40	47.2	< 0.005	0.08	—	0.08	0.06	—	0.06	—	194	194	0.01	< 0.005	—	195
Energy	0.57	0.29	5.21	4.38	0.03	0.40	—	0.40	0.40	—	0.40	—	17,656	17,656	1.63	0.14	—	17,740
Water	—	—	—	—	—	—	—	—	—	—	—	29.2	99.0	128	3.00	0.07	—	225
Waste	—	—	—	—	—	—	—	—	—	—	—	177	0.00	177	17.7	0.00	—	619
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	364	364
Total	30.6	43.3	23.8	224	0.44	0.76	35.0	35.7	0.72	8.88	9.60	206	60,032	60,238	24.3	2.13	521	62,001
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	20.2	18.2	19.6	144	0.38	0.28	35.0	35.2	0.27	8.88	9.14	—	39,442	39,442	2.05	1.98	4.06	40,086
Area	—	15.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.57	0.29	5.21	4.38	0.03	0.40	—	0.40	0.40	—	0.40	—	17,656	17,656	1.63	0.14	—	17,740
Water	—	—	—	—	—	—	—	—	—	—	—	29.2	99.0	128	3.00	0.07	—	225
Waste	—	—	—	—	—	—	—	—	—	—	—	177	0.00	177	17.7	0.00	—	619
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	364	364

3700

Total	20.8	34.1	24.8	148	0.42	0.68	35.0	35.6	0.66	8.88	9.54	206	57,197	57,403	24.4	2.19	368	59,034
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	19.2	17.3	19.0	143	0.37	0.27	33.0	33.2	0.25	8.37	8.62	—	38,068	38,068	1.96	1.90	64.6	38,748
Area	5.75	20.9	0.27	32.3	< 0.005	0.06	—	0.06	0.04	—	0.04	—	133	133	0.01	< 0.005	—	134
Energy	0.57	0.29	5.21	4.38	0.03	0.40	—	0.40	0.40	—	0.40	—	17,656	17,656	1.63	0.14	—	17,740
Water	—	—	—	—	—	—	—	—	—	—	—	29.2	99.0	128	3.00	0.07	—	225
Waste	—	—	—	—	—	—	—	—	—	—	—	177	0.00	177	17.7	0.00	—	619
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	364	364
Total	25.5	38.4	24.5	179	0.40	0.72	33.0	33.7	0.69	8.37	9.06	206	55,956	56,162	24.3	2.12	429	57,830
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.50	3.15	3.48	26.1	0.07	0.05	6.01	6.06	0.05	1.53	1.57	—	6,303	6,303	0.32	0.32	10.7	6,415
Area	1.05	3.81	0.05	5.90	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.0	22.0	< 0.005	< 0.005	—	22.1
Energy	0.10	0.05	0.95	0.80	0.01	0.07	—	0.07	0.07	—	0.07	—	2,923	2,923	0.27	0.02	—	2,937
Water	—	—	—	—	—	—	—	—	—	—	—	4.83	16.4	21.2	0.50	0.01	—	37.2
Waste	—	—	—	—	—	—	—	—	—	—	—	29.3	0.00	29.3	2.93	0.00	—	103
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60.3	60.3
Total	4.66	7.02	4.48	32.8	0.07	0.13	6.01	6.15	0.13	1.53	1.65	34.1	9,264	9,298	4.02	0.35	71.0	9,574

3. Construction Emissions Details

3.1. Site Preparation (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	5.35	4.49	42.5	35.3	0.05	2.25	—	2.25	2.07	—	2.07	—	5,529	5,529	0.22	0.04	—	5,548
Dust From Material Movemen	—	—	—	—	—	—	5.66	5.66	—	2.69	2.69	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.16	0.97	< 0.005	0.06	—	0.06	0.06	—	0.06	—	151	151	0.01	< 0.005	—	152
Dust From Material Movemen	—	—	—	—	—	—	0.16	0.16	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.21	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	25.1	25.1	< 0.005	< 0.005	—	25.2
Dust From Material Movemen	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.08	1.48	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	252	252	0.01	0.01	1.01	256

Vendor	0.02	< 0.005	0.18	0.10	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	157	157	0.01	0.02	0.44	164
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.42	6.42	< 0.005	< 0.005	0.01	6.51
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.30	4.30	< 0.005	< 0.005	0.01	4.50
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.06	1.06	< 0.005	< 0.005	< 0.005	1.08
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.71	0.71	< 0.005	< 0.005	< 0.005	0.75
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.69	3.94	37.6	31.4	0.06	1.77	—	1.77	1.63	—	1.63	—	6,715	6,715	0.27	0.05	—	6,738
Dust From Material Movemen:	—	—	—	—	—	—	2.74	2.74	—	0.99	0.99	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.39	0.32	3.09	2.58	0.01	0.15	—	0.15	0.13	—	0.13	—	552	552	0.02	< 0.005	—	554
Dust From Material Movemen:	—	—	—	—	—	—	0.22	0.22	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.56	0.47	< 0.005	0.03	—	0.03	0.02	—	0.02	—	91.4	91.4	< 0.005	< 0.005	—	91.7
Dust From Material Movemen:	—	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.10	1.69	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	288	288	0.01	0.01	1.15	292
Vendor	0.05	0.01	0.58	0.31	< 0.005	0.01	0.14	0.14	0.01	0.04	0.05	—	502	502	0.04	0.07	1.40	526
Hauling	5.04	0.80	46.9	26.2	0.25	0.72	10.0	10.8	0.48	2.75	3.23	—	38,134	38,134	4.20	6.14	80.3	40,149
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	22.0	22.0	< 0.005	< 0.005	0.04	22.3
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	41.2	41.2	< 0.005	0.01	0.05	43.2
Hauling	0.41	0.06	4.06	2.16	0.02	0.06	0.82	0.88	0.04	0.22	0.26	—	3,135	3,135	0.35	0.50	2.84	3,297
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.64	3.64	< 0.005	< 0.005	0.01	3.69
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.83	6.83	< 0.005	< 0.005	0.01	7.15
Hauling	0.08	0.01	0.74	0.39	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	519	519	0.06	0.08	0.47	546

3.5. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.55	1.30	12.2	14.2	0.03	0.54	—	0.54	0.49	—	0.49	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.55	1.30	12.2	14.2	0.03	0.54	—	0.54	0.49	—	0.49	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.40	3.72	4.34	0.01	0.16	—	0.16	0.15	—	0.15	—	803	803	0.03	0.01	—	806

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.07	0.68	0.79	< 0.005	0.03	—	0.03	0.03	—	0.03	—	133	133	0.01	< 0.005	—	133
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.61	2.39	2.21	38.6	0.00	0.00	5.96	5.96	0.00	1.40	1.40	—	6,566	6,566	0.28	0.23	26.3	6,667
Vendor	0.52	0.14	5.65	3.03	0.04	0.07	1.34	1.41	0.07	0.37	0.44	—	4,922	4,922	0.38	0.73	13.7	5,164
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.48	2.25	2.60	29.2	0.00	0.00	5.96	5.96	0.00	1.40	1.40	—	6,018	6,018	0.29	0.23	0.68	6,094
Vendor	0.51	0.13	5.88	3.07	0.04	0.07	1.34	1.41	0.07	0.37	0.44	—	4,925	4,925	0.38	0.73	0.36	5,153
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.75	0.68	0.80	9.35	0.00	0.00	1.80	1.80	0.00	0.42	0.42	—	1,863	1,863	0.09	0.07	3.46	1,889
Vendor	0.16	0.04	1.81	0.93	0.01	0.02	0.41	0.43	0.02	0.11	0.13	—	1,503	1,503	0.12	0.22	1.80	1,574
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.12	0.15	1.71	0.00	0.00	0.33	0.33	0.00	0.08	0.08	—	308	308	0.01	0.01	0.57	313
Vendor	0.03	0.01	0.33	0.17	< 0.005	< 0.005	0.07	0.08	< 0.005	0.02	0.02	—	249	249	0.02	0.04	0.30	261
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.45	1.21	11.3	14.1	0.03	0.47	—	0.47	0.43	—	0.43	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.45	1.21	11.3	14.1	0.03	0.47	—	0.47	0.43	—	0.43	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74	0.62	5.80	7.25	0.01	0.24	—	0.24	0.22	—	0.22	—	1,349	1,349	0.05	0.01	—	1,353
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	1.06	1.32	< 0.005	0.04	—	0.04	0.04	—	0.04	—	223	223	0.01	< 0.005	—	224
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.32	2.09	2.01	35.5	0.00	0.00	5.96	5.96	0.00	1.40	1.40	—	6,426	6,426	0.27	0.23	23.8	6,524
Vendor	0.48	0.14	5.38	2.91	0.04	0.07	1.34	1.41	0.07	0.37	0.44	—	4,843	4,843	0.38	0.73	13.6	5,085
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.19	1.96	2.21	26.8	0.00	0.00	5.96	5.96	0.00	1.40	1.40	—	5,892	5,892	0.28	0.23	0.62	5,967
Vendor	0.47	0.13	5.62	2.92	0.04	0.07	1.34	1.41	0.07	0.37	0.44	—	4,846	4,846	0.38	0.73	0.35	5,074
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.11	0.99	1.23	14.5	0.00	0.00	3.02	3.02	0.00	0.71	0.71	—	3,064	3,064	0.14	0.12	5.28	3,107
Vendor	0.24	0.07	2.90	1.48	0.02	0.04	0.68	0.72	0.04	0.19	0.22	—	2,484	2,484	0.19	0.38	3.03	2,604
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.18	0.22	2.64	0.00	0.00	0.55	0.55	0.00	0.13	0.13	—	507	507	0.02	0.02	0.87	514
Vendor	0.04	0.01	0.53	0.27	< 0.005	0.01	0.12	0.13	0.01	0.03	0.04	—	411	411	0.03	0.06	0.50	431
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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Off-Road Equipment	0.95	0.80	7.45	9.98	0.01	0.35	—	0.35	0.32	—	0.32	—	1,511	1,511	0.06	0.01	—	1,517
Paving	—	0.46	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.41	0.55	< 0.005	0.02	—	0.02	0.02	—	0.02	—	82.8	82.8	< 0.005	< 0.005	—	83.1
Paving	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.7	13.7	< 0.005	< 0.005	—	13.8
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.07	1.17	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	211	211	0.01	0.01	0.78	215
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.8	10.8	< 0.005	< 0.005	0.02	10.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.78	1.78	< 0.005	< 0.005	< 0.005	1.81
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.17	1.18	1.52	< 0.005	0.04	—	0.04	0.03	—	0.03	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	—	34.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.29	0.37	< 0.005	0.01	—	0.01	0.01	—	0.01	—	43.9	43.9	< 0.005	< 0.005	—	44.0
Architectural Coatings	—	8.40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3710

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.27	7.27	< 0.005	< 0.005	—	7.29
Architectural Coatings	—	1.53	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.42	0.40	7.10	0.00	0.00	1.19	1.19	0.00	0.28	0.28	—	1,285	1,285	0.05	0.05	4.77	1,305
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.12	1.39	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	295	295	0.01	0.01	0.51	299
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.25	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	48.8	48.8	< 0.005	< 0.005	0.08	49.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	21.7	19.7	18.2	172	0.41	0.28	35.0	35.2	0.27	8.88	9.14	—	42,082	42,082	1.97	1.91	157	42,858
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	21.7	19.7	18.2	172	0.41	0.28	35.0	35.2	0.27	8.88	9.14	—	42,082	42,082	1.97	1.91	157	42,858
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	20.2	18.2	19.6	144	0.38	0.28	35.0	35.2	0.27	8.88	9.14	—	39,442	39,442	2.05	1.98	4.06	40,086
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	20.2	18.2	19.6	144	0.38	0.28	35.0	35.2	0.27	8.88	9.14	—	39,442	39,442	2.05	1.98	4.06	40,086
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	3.50	3.15	3.48	26.1	0.07	0.05	6.01	6.06	0.05	1.53	1.57	—	6,303	6,303	0.32	0.32	10.7	6,415
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Total	3.50	3.15	3.48	26.1	0.07	0.05	6.01	6.06	0.05	1.53	1.57	—	6,303	6,303	0.32	0.32	10.7	6,415

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	9,900	9,900	0.94	0.11	—	9,957
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	1,539	1,539	0.15	0.02	—	1,548
Total	—	—	—	—	—	—	—	—	—	—	—	—	11,438	11,438	1.08	0.13	—	11,505
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	9,900	9,900	0.94	0.11	—	9,957
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	1,539	1,539	0.15	0.02	—	1,548
Total	—	—	—	—	—	—	—	—	—	—	—	—	11,438	11,438	1.08	0.13	—	11,505
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	1,639	1,639	0.16	0.02	—	1,648
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	255	255	0.02	< 0.005	—	256
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,894	1,894	0.18	0.02	—	1,905

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	0.57	0.29	5.21	4.38	0.03	0.40	—	0.40	0.40	—	0.40	—	6,218	6,218	0.55	0.01	—	6,235
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.57	0.29	5.21	4.38	0.03	0.40	—	0.40	0.40	—	0.40	—	6,218	6,218	0.55	0.01	—	6,235
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	0.57	0.29	5.21	4.38	0.03	0.40	—	0.40	0.40	—	0.40	—	6,218	6,218	0.55	0.01	—	6,235
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.57	0.29	5.21	4.38	0.03	0.40	—	0.40	0.40	—	0.40	—	6,218	6,218	0.55	0.01	—	6,235
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	0.10	0.05	0.95	0.80	0.01	0.07	—	0.07	0.07	—	0.07	—	1,029	1,029	0.09	< 0.005	—	1,032
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.10	0.05	0.95	0.80	0.01	0.07	—	0.07	0.07	—	0.07	—	1,029	1,029	0.09	< 0.005	—	1,032

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	13.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	8.40	7.75	0.40	47.2	< 0.005	0.08	—	0.08	0.06	—	0.06	—	194	194	0.01	< 0.005	—	195
Total	8.40	23.3	0.40	47.2	< 0.005	0.08	—	0.08	0.06	—	0.06	—	194	194	0.01	< 0.005	—	195
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	13.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	15.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	2.54	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landsca Equipment	1.05	0.97	0.05	5.90	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.0	22.0	< 0.005	< 0.005	—	22.1
Total	1.05	3.81	0.05	5.90	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.0	22.0	< 0.005	< 0.005	—	22.1

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	29.2	99.0	128	3.00	0.07	—	225
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	29.2	99.0	128	3.00	0.07	—	225
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	29.2	99.0	128	3.00	0.07	—	225
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	29.2	99.0	128	3.00	0.07	—	225
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	4.83	16.4	21.2	0.50	0.01	—	37.2

Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4.83	16.4	21.2	0.50	0.01	—	37.2

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	177	0.00	177	17.7	0.00	—	619
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	177	0.00	177	17.7	0.00	—	619
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	177	0.00	177	17.7	0.00	—	619
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	177	0.00	177	17.7	0.00	—	619
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	29.3	0.00	29.3	2.93	0.00	—	103

Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	29.3	0.00	29.3	2.93	0.00	—	103

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	364	364
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	364	364
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	364	364
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	364	364
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60.3	60.3
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60.3	60.3

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipme Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	6/3/2024	6/14/2024	5.00	10.0	—
Grading	Grading	6/17/2024	7/26/2024	5.00	30.0	—
Building Construction	Building Construction	7/29/2024	9/19/2025	5.00	300	—
Paving	Paving	8/25/2025	9/19/2025	5.00	20.0	—
Architectural Coating	Architectural Coating	5/19/2025	9/19/2025	5.00	90.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Crawler Tractors	Diesel	Average	4.00	8.00	87.0	0.43
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Crawler Tractors	Diesel	Average	2.00	8.00	87.0	0.43
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	5.00	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	16.0	10.2	HHDT,MHDT
Grading	Hauling	542	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	456	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	157	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	91.2	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT

Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	980,480	325,442	8,311

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	35.0	0.00	—
Grading	—	130,000	120	0.00	—
Paving	0.00	0.00	0.00	0.00	3.53

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt

Hotel	0.00	0%
Enclosed Parking with Elevator	3.53	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	349	0.03	< 0.005
2024	0.00	349	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Hotel	4,794	4,842	3,564	1,688,177	48,806	49,295	36,284	17,186,694
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	981,167	325,518	9,226

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Hotel	10,364,336	349	0.0330	0.0040	19,400,828
Enclosed Parking with Elevator	1,610,978	349	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Hotel	15,220,062	0.00
Enclosed Parking with Elevator	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Hotel	329	—
Enclosed Parking with Elevator	0.00	—

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5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Hotel	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Hotel	Other commercial A/C and heat pumps	User Defined	750	1.80	4.00	4.00	18.0
Hotel	User Defined	User Defined	150	< 0.005	7.50	7.50	20.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	20.2	annual days of extreme heat
Extreme Precipitation	5.10	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2

Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	88.8
AQ-PM	97.4
AQ-DPM	86.0
Drinking Water	93.3
Lead Risk Housing	97.4
Pesticides	14.9
Toxic Releases	71.7
Traffic	47.3
Effect Indicators	—
CleanUp Sites	96.3

Groundwater	83.7
Haz Waste Facilities/Generators	96.6
Impaired Water Bodies	43.8
Solid Waste	92.8
Sensitive Population	—
Asthma	70.1
Cardio-vascular	82.9
Low Birth Weights	67.4
Socioeconomic Factor Indicators	—
Education	95.7
Housing	89.8
Linguistic	96.3
Poverty	94.2
Unemployment	19.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	5.184139612
Employed	38.86821506
Median HI	6.518670602
Education	—
Bachelor's or higher	4.157577313
High school enrollment	100
Preschool enrollment	44.43731554
Transportation	—

Auto Access	53.75336841
Active commuting	60.25920698
Social	—
2-parent households	47.31168998
Voting	7.776209419
Neighborhood	—
Alcohol availability	22.98216348
Park access	54.67727448
Retail density	38.34210189
Supermarket access	66.63672527
Tree canopy	31.84909534
Housing	—
Homeownership	26.45964327
Housing habitability	7.55806493
Low-inc homeowner severe housing cost burden	3.284999358
Low-inc renter severe housing cost burden	23.90606955
Uncrowded housing	9.611189529
Health Outcomes	—
Insured adults	1.796484024
Arthritis	48.2
Asthma ER Admissions	30.2
High Blood Pressure	56.0
Cancer (excluding skin)	94.8
Asthma	7.7
Coronary Heart Disease	28.5
Chronic Obstructive Pulmonary Disease	11.3
Diagnosed Diabetes	10.7

Life Expectancy at Birth	49.6
Cognitively Disabled	70.6
Physically Disabled	78.7
Heart Attack ER Admissions	7.4
Mental Health Not Good	2.6
Chronic Kidney Disease	20.1
Obesity	4.2
Pedestrian Injuries	85.8
Physical Health Not Good	2.6
Stroke	22.5
Health Risk Behaviors	—
Binge Drinking	73.8
Current Smoker	3.5
No Leisure Time for Physical Activity	3.6
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	33.8
Elderly	95.7
English Speaking	3.6
Foreign-born	91.6
Outdoor Workers	9.3
Climate Change Adaptive Capacity	—
Impervious Surface Cover	63.3
Traffic Density	55.4
Traffic Access	70.1
Other Indices	—

Hardship	94.8
Other Decision Support	—
2016 Voting	30.3

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	100
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Taken from site plan
Construction: Construction Phases	Taken from client data Building Construction, Paving, and Architectural Coating overlap to present a conservative analysis

Construction: Off-Road Equipment	T/L/B replaced with Crawler Tractor to accurately calculate disturbance for Site Preparation and Grading phases. Standard 8 hours work days
Construction: Trips and VMT	Vendor Trips adjusted based on CalEEMod defaults for Building Construction and number of days for Demolition, Site Preparation, Grading, and Building Construction
Construction: Architectural Coatings	SCAQMD Rule 1113
Operations: Vehicle Data	Taken from trip generation
Operations: Refrigerants	As of 1 January 2022, new commercial refrigeration equipment may not use refrigerants with a GWP of 150 or greater. Further, R-404A (the CalEEMod default) is unacceptable for new supermarket and cold storage systems as of 1 January 2019 and 2023, respectively Beginning 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater

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APPENDIX 3.2:

CCAP SCREENING TABLES

Table 6. Screening Table for Implementing GHG Performance Standards for Commercial, Office, Medical, Hotel, Fitness, Industrial, and Retail Development, 2030 (Circle Applicable Project Points, 100 points minimum)

Description	Feature	Project Points
Reduction Measure 1: Building Electrification		
Replacement of gas appliance with efficient electric appliance (select all that apply)	Electric space heater	8
	Electric water heater	10
	Electric stove	4
	Electric Dryer	4
	Electric pool heater	2
	Electric spa heater	2
Lack of natural gas infrastructure	Project site does not have any natural gas infrastructure.	8
	Total for measure	*34*
Reduction Measure 2: Solar Energy Systems for all other non-residential land use types *(required for all other non-residential projects)*[21]		
Installation of rooftop solar energy systems at new non-residential buildings (select one option)	Installation of rooftop solar energy system which generates enough electricity to meet 45% of annual electricity demand.	3
	Installation of rooftop solar energy system which generates enough electricity to meet 90% of annual electricity demand.	6
Installation of battery storage at new non-residential buildings (select one option)	Solar battery storage installation with a capacity of 200-799 kW (DC).	1
	Solar battery storage installation with a capacity of 800-1200 kW (DC).	2
	Total for measure	*8*
Reduction Measure 3: Green Roofs		
Installation of a roof with a planted layer of vegetation over a waterproof surface for non-residential buildings (select one option)	Medium Green Roof – Total vegetated area makes up 50% of combined non-residential floor area (in square feet).	1
	Large Green Roof – Total vegetated area makes up 100% or	2

[21] Measure 2 requires solar photovoltaic panels or other appropriate onsite renewable energy generation systems for the following types of projects:

New commercial and office buildings, or existing commercial and office building expansions greater or equal to 45,000 square feet in size and

New industrial or existing industrial buildings expansions greater or equal to 100,000 square feet in size.

Description	Feature	Project Points
	more of combined non-residential floor area (in square feet).	
	Total for measure	2
Reduction Measure 4: Urban Cooling		
On-site tree planting (select one option)[22]	1 tree per each required on-site vehicle parking space.	6
	2 trees per each required on-site vehicle parking space.	12
	3 trees per each required on-site vehicle parking space.	18
	Total for measure	*18*
Reduction Measure 5: Transit Oriented Communities (TOCs)		
New development is located in a transit-oriented community (TOC)	Development site is located within ½ mile radius of one or more of the following: a Bus Rapid Transit (BRT) stop, bus transit center, light rail station, the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods, and/or High-Quality Transit Corridor defined as a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.[23]	2
	Total for measure	2
Reduction Measure 6: Increase Transit Ridership		
Provision of free transit passes in a quantity equivalent to the expected number of employees at the non-	One free annual transit pass for every employee.	6

[22] This strategy specifies the ratio of additional trees per required vehicle parking spaces. Based upon total on-site vehicle parking spaces required per the City of Ontario Development Code for the project, the Applicant will calculate the number of trees required to meet this measure and obtain points. The landscape plan will show onsite trees and the tree matrix shall identify all trees associated with the Urban Cooling Measure compliance. The City code requires trees onsite and within paved areas to reduce the associated heat build-up from development. The Landscape Planning Division will consider these trees in the calculation to be counted toward the Urban Cooling Measure.

[23] A project shall be considered to be within one-half mile of a major transit stop or high-quality transit corridor if all parcels within the project have no more than 25 percent of their area farther than one-half mile from the stop or corridor and if not more than 10 percent of the residential units or 100 units, whichever is less, in the project are farther than one-half mile from the stop or corridor.

Description	Feature	Project Points
residential building. Transit passes shall be provided for a period of 5 years after completion of construction [24]		
	Total for measure	*6*
Reduction Measure 7: Vehicle Electrification[25]		
Installation of EV charging stations for employee vehicle parking spaces (select one option)	Installation of Level 2 or higher EV charging stations at a rate of 5-9% of planned employee vehicle parking spaces.	3
	Installation of Level 2 or higher EV charging stations at a rate of 10-19% of planned employee vehicle parking spaces with Level 2 EV charging stations.	5
	Installation of Level 2 or higher EV charging stations at a rate of 20% or more of planned employee vehicle parking spaces Level 2 EV charging stations.	10
	Total for measure	*10*
Reduction Measure 8: Active Transportation		
Installation or improvement of bicycle facilities (select all that apply)	Bicycle parking facilities with 1:20 ratio of bicycle parking to employee vehicle parking space	3
	Construct or improve a single bicycle lane facility (only Class I, II, or IV) that 1) connects to a larger existing bikeway network or 2) closes an existing bikeway network gap that is at least 0.5 miles long.	4
Installation or improvement of pedestrian facilities (select one option)	Two or three pedestrian infrastructure improvements to street design on private streets, including, but not limited to curb extensions, raised crosswalks, speed humps/bumps, street tree plantings in parkways or street medians, and elevated pavement markings.	4
	Four or more pedestrian infrastructure improvements to	8

[24] Provision for annual transit passes to be incorporated into CC&R's bylaws or separate parking agreement, as appropriate.

[25] EV charging station levels 1-3 are defined in the California Green Building Standards or CALGreen Code, accessed at https://www.dgs.ca.gov/BSC/CALGreen.

Description	Feature	Project Points
	street design on private streets, including, but not limited to curb extensions, raised crosswalks, speed humps/bumps, street tree plantings in parkways or street medians, and elevated pavement markings.	
	Total for measure	*15*
Reduction Measure 9: Parking Policy		
Require that employee vehicle parking spaces be purchased at an additional cost. This does not include client/visitor vehicle parking spaces [26]	Unbundle, or separate, 100% of non-residential project's parking costs from property costs, requiring those who wish to purchase parking spaces to do so at an additional cost.	1
	Total for measure	*1*
Reduction Measure 10: Electric construction equipment[27]		
Use electric construction equipment for a portion of the construction project (select one option)	One-third (33%) of construction equipment used for construction (during building phase, not including grading phase), measured by number of hours of operation, is zero emission equipment.	4
	Half (50%) of construction equipment used for construction (during the building phase, not including the grading phase), measured by the number of hours of operation, is zero emission equipment.	7
	Two-thirds (66%) or more of construction equipment used for construction (during the building phase, not including the grading phase), measured by number of hours of operation, is zero emission equipment.	11
	Total for measure	*11*

[26] Provision to unbundle parking shall be incorporated into CC&R's bylaws or separate parking agreement, as appropriate.

[27] Electric construction equipment includes electric compact excavators, electric motors, electric generators, and mobile charging equipment.

Description	Feature	Project Points
Reduction Measure 11: Waste diversion		
Design and plan commercial, office, and industrial developments to include onsite areas for municipal compost/green waste and recycling bins	Site design allocates sufficient space for storage and collection of green waste, organic waste, and recyclables.	30
	Total for measure	*30*
Reduction Measure 12: Water conservation		
Implement indoor water efficiency measures (select all that apply)	Install water-efficient faucets and showerheads.	3
	Install on-demand water circulators on commercial sinks or dishwashing equipment.	3
Incorporate outdoor water efficiency measures	Design and plan outdoor landscapes planted with drought-tolerant, low maintenance plants with a 1) drip irrigation system or 2) sprinkler irrigation system with a weather-based irrigation controller.	8
	Total for measure	*14*
	Commercial/etc. Total for all measures	***151***
	Commercial/etc. Project Points Subtotal	
Additional Recommended Measures		
AR-1: Meet CalGreen voluntary tiers (selected one)	CalGreen Tier 1 compliance	5
	CalGreen Tier 2 compliance	10
AR-2: Recycled Water	Use recycled water for at least 80% of outdoor water needs	5
AR-3: Reflective Paving	Use high-reflectivity pavement for all hardscaped areas, including parking areas, walking paths, and patios.	5
AR-4: Zero Emission Cargo Equipment	Use of zero emission offroad cargo handling equipment for a minimum of 50% of building phase (measured in number of hours).	4
AR-5: Alternative Fueling conduit	Installation of conduit for zero emission vehicle charging so that facilities are prepared for the transition to electric fleets.	4
AR-6: Alternative Fueling Facility	Installation of alternative fuel facilities, such as CNG, biofuels, or hydrogen fueling stations.	8

Description	Feature	Project Points
	Total additional recommended measures	36
	Commercial/etc. Project Points Subtotal	
	Total Commercial/etc. Points Possible	***187***
	COMMERCIAL/etc. PROJECT POINTS TOTAL	

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Appendix H
Hydrology Report/WQMP

Preliminary Hydrology Report

for

Diversified Empire Hotel

APN: 0110-322-33

Southeast of Holt Blvd and Guasti Road

OCTOBER 2023

PREPARED FOR:

Diversified Pacific Communities
10621 Civic Center Drive
Rancho Cucamonga, CA 91730

PREPARED BY:

Kimley»Horn

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KHA Project # 195256007

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3747

Certification by Engineer

_____ _____

Robert Otte, PE Date

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References

San Bernardino Hydrology Manual, August 1986.

INTRODUCTION

Kimley-Horn and Associates has been retained to prepare a Preliminary Hydrology Report for the proposed Diversified Empire Hotel in Ontario, California. The purpose of this report is to demonstrate preliminary analysis of the hydrologic and hydraulic conditions associated with the development of the project site. To do so, the following is the scope of this report:

- Discuss the pre-development discharge patterns and points
- Discuss the post-development discharge patterns and points
- Determine the offsite flow rates for the 10-year and 100-year events
- Determine the pre-development onsite flow rates for the 10-year and 100-year events
- Determine the post-development un-mitigated flow rates for the 10-year and 100-year events
- Determine required post-development onsite mitigation for the 100-year event

Even though this report discusses stormwater, this report is not a Stormwater Pollution Prevention Plan (SWPPP), a Groundwater Study, a Geotechnical Report, nor a Water Quality Management Plan (WQMP). Each of these separate reports discusses separate aspects of stormwater. Portions of the Geotechnical Report are utilized and referenced for the purpose of this report. Similarly, the requirements of the WQMP are considered for the stormwater mitigation and sizing of outlet structures for this project.

PROJECT DESCRIPTION

The existing vacant lot will be developed into the proposed Diversified Empire Hotel. The proposed development will include a hotel with 11 levels, loading docks, pools, above and below ground parking, offices, ballrooms, lobbies, courtyards, storage rooms, kitchens, etc. Site improvements will include landscaping, concrete hardscape, and asphalt paving. The associated improvements include, but are not limited to onsite grading, domestic water service, sanitary sewer service, storm drain infrastructure, concrete and asphalt pavement, landscaping, and irrigation. The project site is approximately 10.43 acres and is located in the City of Ontario, within San Bernadino County. The APN for the project site area: is 0110-322-33. Appendix A contains an aerial photograph that depicts the project location.

LOCATION

The site is located in the southeast corner of Holt Blvd and Guasti Road in the City of Ontario, within San Bernardino County. The project site is bordered by Ontario Gateway Hotel to the west, Holt Blvd to the north, Cucamonga Creek Channel to east, and the Ontario airport to the south. For reference see Appendix A and Figure 1 for the Location Map.

FIGURE 1: LOCATION MAP



METHODOLOGY

The hydrologic and hydraulic analyses were completed following the methods outlined in the San Bernadino County Hydrology Manual. The rational method was used to estimate time of concentrations and peak flow rates generated from the existing and proposed 10-year and 100-year storm events. The synthetic unit hydrograph method was used to determine the onsite existing and proposed hydrographs for the 24-hour duration of the 100-year storm event. The CivilDesign (CivilD) Engineering Software – 2018 Version 9.0 was used to complete the rational method and synthetic unit hydrograph analyses. The results of the rational method analyses are included in Appendix H and the results of the synthetic unit hydrograph analyses are included in Appendix I. Complete onsite and offsite drainage system analyses will be provided in the Final Hydrology Report.

The rainfall data used for the analyses is important for the flow and runoff results. NOAA Atlas 14 for Ontario, CA was used for the rational method and unit hydrograph analysis. See Appendix D and F for rainfall data.

The type of soil and soil conditions are major factors affecting infiltration/detention and resultant storm water runoff. The Natural Resources Conservation Service (NRCS) has classified soil into one general hydrologic soil group for comparing infiltration and runoff rates. The group is based on properties that influence runoff, such as water infiltration rate, texture, natural discharge, and moisture condition. The runoff potential is based on the amount of runoff at the end of a long duration storm that occurs after wetting and swelling of

the soil not protected by vegetation. Using the United States Department of Agriculture Natural Resources Conservation Service Web Soil Survey online tool, it was determined that the hydrologic soil group classification onsite is A. Soil type A is defined as soils having high infiltration rates (low runoff potential). Similarly, per the Geotechnical Engineering Investigation prepared by Petra Geosciences, Inc. dated April 24, 2023, the site is considered to have good percolation rates, with the observed an design percolation rate of 15.38 in/hr. See Appendix D and L for the soil information.

In addition, antecedent moisture condition (AMC) II was used to calculate the 10-year peak flows and AMC III was used to calculate the 100-year peak flows based on the hydrology manual. The land use for the proposed drainage subareas were selected based on the characteristics of the proposed development. See

DRAINAGE CHARACTERISTICS

FEMA MAPPING

The site is mainly located in Zone X-unshaded and Zone X-shaded per the Federal Emergency Management Administration (FEMA) Flood Insurance Rate Map (FIRM) panel 06071C8628J, dated February 18, 2015. Flood Zone X-unshaded is defined by FEMA to have minimal flood hazard. Flood Zone X-shaded is defined by FEMA to have a 0.2% annual change flood hazard, and areas of 1% annual chance flood average depth less than one foot or with drainage areas of less than one square mile. For reference, see Appendix B, FIRM Map.

PRE-DEVELOPMENT CONDITION

The existing site is currently vacant, approximately 10.43 acres, and generally drains in the southeast direction. The existing site consists of two main drainage area (DA 1 & DA 2). Runoff for DA 1 flow southeast towards Guasti Road. Guasti Road does not have existing curb and gutter for the side of the road adjacent to the project but does have curb and gutter on the other side of the road with an existing catch basin. Guasti Road also has a 108" public line that collects stormwater for nearby properties. DA 2 runoff flows to the east towards the Cucamonga Channel. **See Appendix G** for the existing hydrology map, **Appendix H** for the rational method calculations, and **Table 1** below for a summary of the pre-development flows.

Table 1: Pre-Development Flows

Drainage Area	Drainage Area (AC)	Q_{10} (cfs)	Q_{100} (cfs)
DA 1	9.00	7.04	15.74
DA 2	1.43	3.41	5.37
Total	10.43	10.45	21.11

POST-DEVELOPMENT CONDITION

The post-development condition for the project site consists of one main drainage area which is comprised of five (5) sub-areas. Runoff from drainage sub-areas DA 1, DA 2, DA 3, DA 4, and DA 5 is intercepted by a combination of trench drains, area drains, and curb inlets which stormwater is then conveyed into the proposed underground detention system located southeast of the site. Due to the proposed elevations in the southeast side, a stormwater pump is required to pump DA 4's runoff into the proposed underground detention system. The treated runoff will then be conveyed into the 108" storm drain pipe located in Guasti Road. See **Table 2 below for** a summary of the post-development flows without detention, **Appendix G** for the Proposed Drainage Map, and **Appendix H** for the rational method calculations.

Table 2: Post-Development Flows (Un-mitigated)

Drainage Area/s	Drainage Area (AC)	Q_{10} (cfs)	Q_{100} (cfs)
DA 1	4.51	17.09	25.48
DA 2	2.29	5.99	8.97
DA 3	2.25	7.10	10.60
DA 4	0.85	3.37	5.02
DA 5	0.53	1.95	2.91
Total	10.43	35.50	52.98

STORMWATER MITIGATION

For proposed onsite flows, stormwater mitigation is needed to ensure the proposed flows do not negatively impact the existing downstream drainage facilities. By comparing the results from **Table 1** and **Table 2**, the proposed development increases onsite flows discharging from the site. To mitigate the increase in flows, an underground stormwater detention system is proposed.

The volume of storage provided in the underground detention system along with the size of the outflow riser structure is intended to restrict peak flows in the proposed condition to levels equal to or less than the existing flows. Based on 100-year 24-hr duration of the 100-year storm event, the highest routed (mitigated) onsite outflows from the underground detention system result in proposed flows that are less than the existing flows for the onsite. Basin routing will be provided in final engineering.

HYDRAULIC ANALYSIS

The calculated peak flows from the analyses discussed above will be used to size the onsite drainage devices. All drainage devices will be sized in the Final Hydrology Report.

CONCLUSION

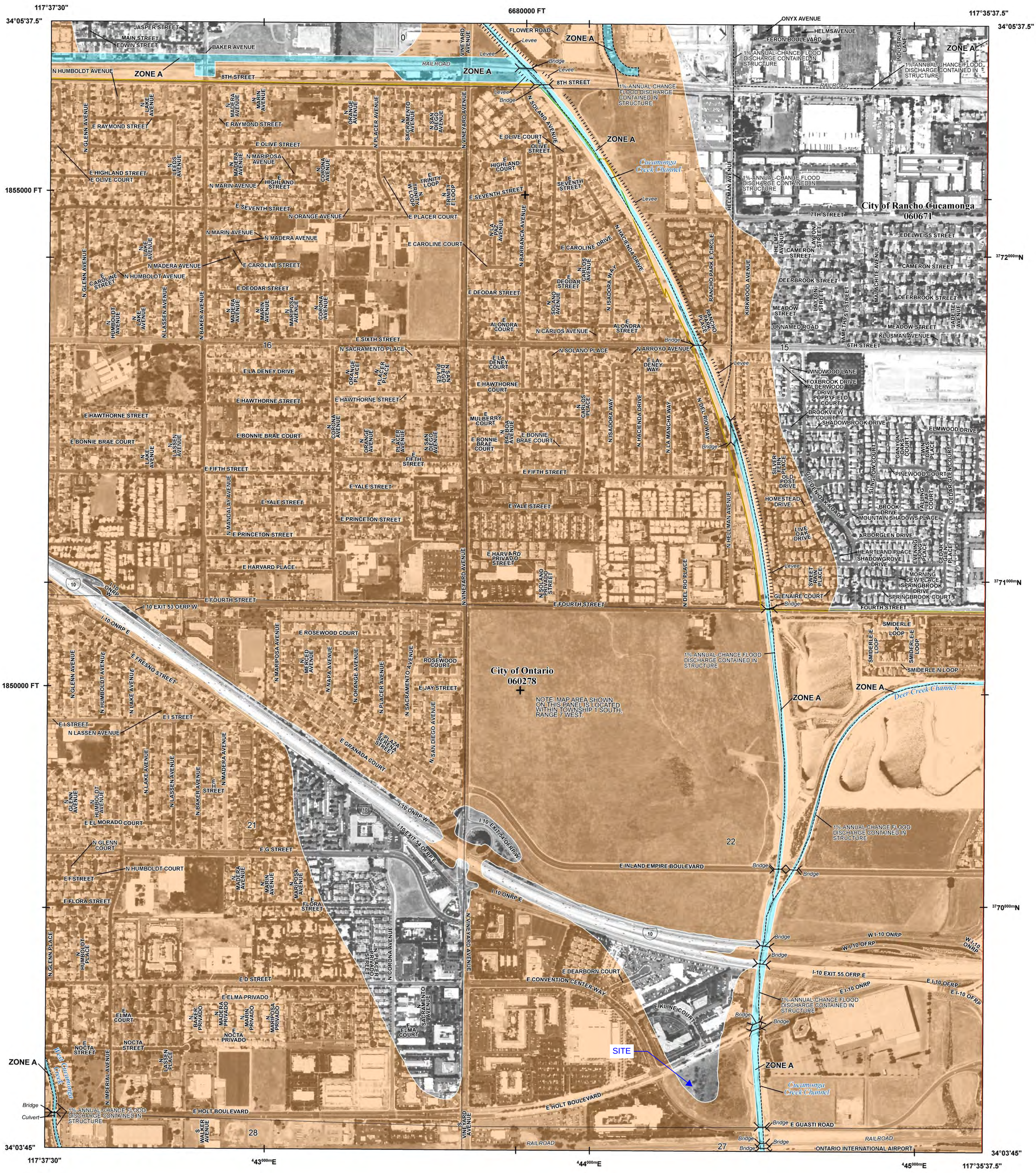
In conclusion, the following was covered in this report:

- The pre-development discharge patterns and points were discussed
- The post-development discharge patterns and points were discussed
- The pre-development flow rates for the 10-year and 100-year events were determined
- The post-development un-mitigated flow rates for the 10-year and 100-year events were determined
- The post-development stormwater mitigation for the 100-year event was analyzed
- The post-development final flow rate was proven to be less than the existing design flowrate for the downstream systems

As discussed in the contents of this report, the development of the existing vacant site into the proposed development is not expected to cause a significant impact to downstream systems for storms up to the 100-year condition. The mitigated development discharges less stormwater flows than the existing site conditions.

Appendix A - Location Map

Appendix B - FIRM MAP



FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT HTTP://MSC.FEMA.GOV

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Change Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee See Notes *Zone X*

OTHER AREAS
- NO SCREEN Areas of Minimal Flood Hazard *Zone X*
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert or Storm Sewer
- Accredited or Provisionally Accredited Levee, Dike or Floodwall
- Non-accredited Levee, Dike or Floodwall
- 18.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation (BFE)
- Coastal Transect
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature
- 513 Base Flood Elevation Line (BFE)

OTHER FEATURES
- Limit of Study
- Jurisdiction Boundary

NOTES TO USERS

For information and questions about this map, available products associated with this FIRM including historic versions of this FIRM, how to order products or the National Flood Insurance Program in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Map Service Center website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website. Users may determine the current map date for each FIRM panel by visiting the FEMA Map Service Center website or by calling the FEMA Map Information eXchange.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Map Service Center at the number listed above.

For community and countywide map dates refer to the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Base map information shown on this FIRM was derived from digital orthophotography collected by the U.S. Department of Agriculture Farm Service Agency. This imagery was flown in 2012 and was produced with a 1-meter ground sample distance.

SCALE

N

Map Projection:
UTM Zone 11N; North American Datum 1983;
Western Hemisphere; Vertical Datum: North American Vertical Datum of 1988

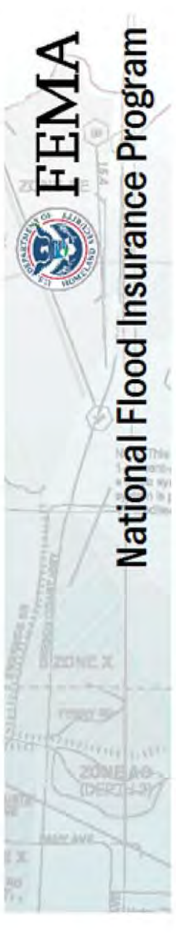
1 inch = 500 feet 1:6,000

0 250 500 750 1,000 2,000 Feet

0 125 250 500 Meters

PANEL LOCATOR





NATIONAL FLOOD INSURANCE PROGRAM

FLOOD INSURANCE RATE MAP

SAN BERNARDINO COUNTY, CALIFORNIA
and Incorporated Areas
Panel 8628 of 9400

FEMA

Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
ONTARIO, CITY OF	060278	8628	J
RANCHO CUCAMONGA, CITY OF	060671	8628	J

VERSION NUMBER
2.3.2.3

MAP NUMBER
06071C8628J

MAP REVISED
FEBRUARY 18, 20[illegible]

Appendix C - Hydrology Manual Reference Material

Curve (1) Numbers of Hydrologic Soil-Cover Complexes For Pervious Areas-AMC II

Cover Type (3)	Quality of Cover (2)	Soil Group A	B	C	D
NATURAL COVERS -					
Barren (Rockland, eroded and graded land)		78	86	91	93
Chaparral, Broadleaf (Manzonita, ceanothus and scrub oak)	Poor	53	70	80	85
	Fair	40	63	75	81
	Good	31	57	71	78
Chaparral, Narrowleaf (Chamise and redshank)	Poor	71	82	88	91
	Fair	55	72	81	86
Grass, Annual or Perennial	Poor	67	78	86	89
	Fair	50	69	79	84
	Good	38	61	74	80
Meadows or Cienegas (Areas with seasonally high water table, principal vegetation is sod forming grass)	Poor	63	77	85	88
	Fair	51	70	80	84
	Good	30	58	71	78
Open Brush (Soft wood shrubs - buckwheat, sage, etc.)	Poor	62	76	84	88
	Fair	46	66	77	83
	Good	41	63	75	81
Woodland (Coniferous or broadleaf trees predominate. Canopy density is at least 50 percent.)	Poor	45	66	77	83
	Fair	36	60	73	79
	Good	25	55	70	77
Woodland, Grass (Coniferous or broadleaf trees with canopy density from 20 to 50 percent)	Poor	57	73	82	86
	Fair	44	65	77	82
	Good	33	58	72	79
URBAN COVERS -					
Residential or Commercial Landscaping (Lawn, shrubs, etc.)	Good	32	56	69	75
Turf (Irrigated and mowed grass)	Poor	58	74	83	87
	Fair	44	65	77	82
	Good	33	58	72	79
AGRICULTURAL COVERS -					
Fallow (Land plowed but not tilled or seeded)		77	86	91	94

SAN BERNARDINO COUNTY
HYDROLOGY MANUAL

CURVE NUMBERS FOR PERVIOUS AREAS

Figure C-3 (1 of 2)

Appendix D - NOAA Rain Data

NOAA Atlas 14, Volume 6, Version 2
Location name: Ontario, California, USA*
Latitude: 34.0643°, Longitude: -117.6027°
Elevation: 965 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.115 (0.096-0.140)	0.156 (0.130-0.189)	0.206 (0.171-0.250)	0.244 (0.201-0.299)	0.293 (0.233-0.372)	0.328 (0.255-0.425)	0.361 (0.274-0.481)	0.394 (0.290-0.540)	0.436 (0.307-0.623)	0.466 (0.317-0.691)
10-min	0.166 (0.138-0.200)	0.224 (0.186-0.271)	0.295 (0.245-0.359)	0.350 (0.288-0.429)	0.419 (0.334-0.533)	0.469 (0.365-0.609)	0.518 (0.393-0.689)	0.565 (0.416-0.774)	0.624 (0.441-0.894)	0.668 (0.455-0.991)
15-min	0.200 (0.167-0.242)	0.271 (0.225-0.328)	0.357 (0.296-0.434)	0.423 (0.348-0.519)	0.507 (0.403-0.644)	0.568 (0.442-0.737)	0.626 (0.475-0.833)	0.683 (0.503-0.936)	0.755 (0.533-1.08)	0.808 (0.550-1.20)
30-min	0.306 (0.255-0.370)	0.414 (0.344-0.501)	0.545 (0.453-0.663)	0.646 (0.532-0.793)	0.775 (0.616-0.984)	0.867 (0.675-1.13)	0.956 (0.726-1.27)	1.04 (0.769-1.43)	1.15 (0.814-1.65)	1.23 (0.840-1.83)
60-min	0.449 (0.374-0.544)	0.607 (0.505-0.736)	0.800 (0.665-0.973)	0.949 (0.781-1.16)	1.14 (0.905-1.44)	1.27 (0.991-1.65)	1.40 (1.06-1.87)	1.53 (1.13-2.10)	1.69 (1.20-2.42)	1.81 (1.23-2.69)
2-hr	0.673 (0.562-0.816)	0.898 (0.748-1.09)	1.17 (0.972-1.42)	1.38 (1.14-1.69)	1.64 (1.30-2.08)	1.83 (1.42-2.37)	2.01 (1.52-2.67)	2.18 (1.61-2.99)	2.40 (1.70-3.44)	2.56 (1.74-3.80)
3-hr	0.844 (0.704-1.02)	1.12 (0.931-1.36)	1.45 (1.20-1.76)	1.70 (1.40-2.09)	2.02 (1.61-2.57)	2.25 (1.75-2.92)	2.47 (1.87-3.29)	2.68 (1.97-3.67)	2.94 (2.08-4.21)	3.13 (2.13-4.65)
6-hr	1.20 (0.998-1.45)	1.58 (1.32-1.91)	2.04 (1.70-2.48)	2.39 (1.97-2.94)	2.84 (2.26-3.60)	3.16 (2.46-4.10)	3.46 (2.62-4.60)	3.75 (2.76-5.14)	4.11 (2.90-5.89)	4.38 (2.98-6.49)
12-hr	1.55 (1.30-1.88)	2.05 (1.71-2.49)	2.66 (2.21-3.24)	3.13 (2.58-3.84)	3.72 (2.96-4.72)	4.14 (3.22-5.37)	4.54 (3.44-6.04)	4.93 (3.63-6.76)	5.42 (3.82-7.76)	5.77 (3.93-8.56)
24-hr	2.06 (1.82-2.38)	2.75 (2.44-3.18)	3.60 (3.18-4.17)	4.26 (3.73-4.97)	5.09 (4.31-6.14)	5.69 (4.72-7.00)	6.27 (5.08-7.90)	6.84 (5.39-8.86)	7.56 (5.72-10.2)	8.08 (5.91-11.3)
2-day	2.45 (2.17-2.83)	3.35 (2.96-3.86)	4.46 (3.93-5.16)	5.32 (4.66-6.21)	6.44 (5.45-7.76)	7.26 (6.02-8.93)	8.06 (6.52-10.1)	8.84 (6.97-11.4)	9.85 (7.45-13.3)	10.6 (7.75-14.8)
3-day	2.62 (2.32-3.02)	3.63 (3.21-4.19)	4.90 (4.32-5.68)	5.90 (5.16-6.88)	7.20 (6.10-8.68)	8.16 (6.77-10.0)	9.10 (7.37-11.5)	10.0 (7.91-13.0)	11.3 (8.52-15.2)	12.2 (8.90-17.0)
4-day	2.83 (2.50-3.26)	3.96 (3.50-4.57)	5.39 (4.76-6.24)	6.52 (5.71-7.61)	8.01 (6.78-9.65)	9.11 (7.56-11.2)	10.2 (8.26-12.9)	11.3 (8.90-14.6)	12.7 (9.62-17.2)	13.8 (10.1-19.2)
7-day	3.28 (2.90-3.78)	4.68 (4.13-5.40)	6.46 (5.70-7.48)	7.89 (6.90-9.20)	9.78 (8.28-11.8)	11.2 (9.30-13.8)	12.6 (10.2-15.9)	14.1 (11.1-18.2)	16.0 (12.1-21.6)	17.4 (12.7-24.3)
10-day	3.52 (3.12-4.06)	5.08 (4.49-5.87)	7.09 (6.25-8.20)	8.70 (7.61-10.2)	10.9 (9.20-13.1)	12.5 (10.4-15.4)	14.2 (11.5-17.8)	15.8 (12.5-20.5)	18.1 (13.7-24.4)	19.8 (14.5-27.6)
20-day	4.24 (3.75-4.88)	6.18 (5.47-7.14)	8.75 (7.72-10.1)	10.8 (9.49-12.7)	13.7 (11.6-16.5)	15.9 (13.2-19.6)	18.2 (14.8-23.0)	20.6 (16.2-26.7)	23.8 (18.0-32.1)	26.3 (19.3-36.7)
30-day	4.98 (4.41-5.74)	7.24 (6.40-8.35)	10.3 (9.05-11.9)	12.8 (11.2-14.9)	16.3 (13.8-19.6)	19.0 (15.8-23.4)	21.8 (17.7-27.5)	24.8 (19.6-32.1)	28.9 (21.9-39.0)	32.2 (23.6-45.0)
45-day	6.07 (5.37-7.00)	8.68 (7.68-10.0)	12.2 (10.8-14.2)	15.2 (13.3-17.8)	19.5 (16.5-23.5)	22.9 (19.0-28.1)	26.4 (21.4-33.3)	30.2 (23.8-39.2)	35.6 (26.9-48.0)	39.9 (29.2-55.7)
60-day	7.15 (6.33-8.25)	10.0 (8.86-11.6)	14.0 (12.3-16.2)	17.4 (15.2-20.3)	22.3 (18.8-26.8)	26.2 (21.7-32.2)	30.4 (24.6-38.3)	34.9 (27.5-45.2)	41.4 (31.3-55.8)	46.7 (34.1-65.1)

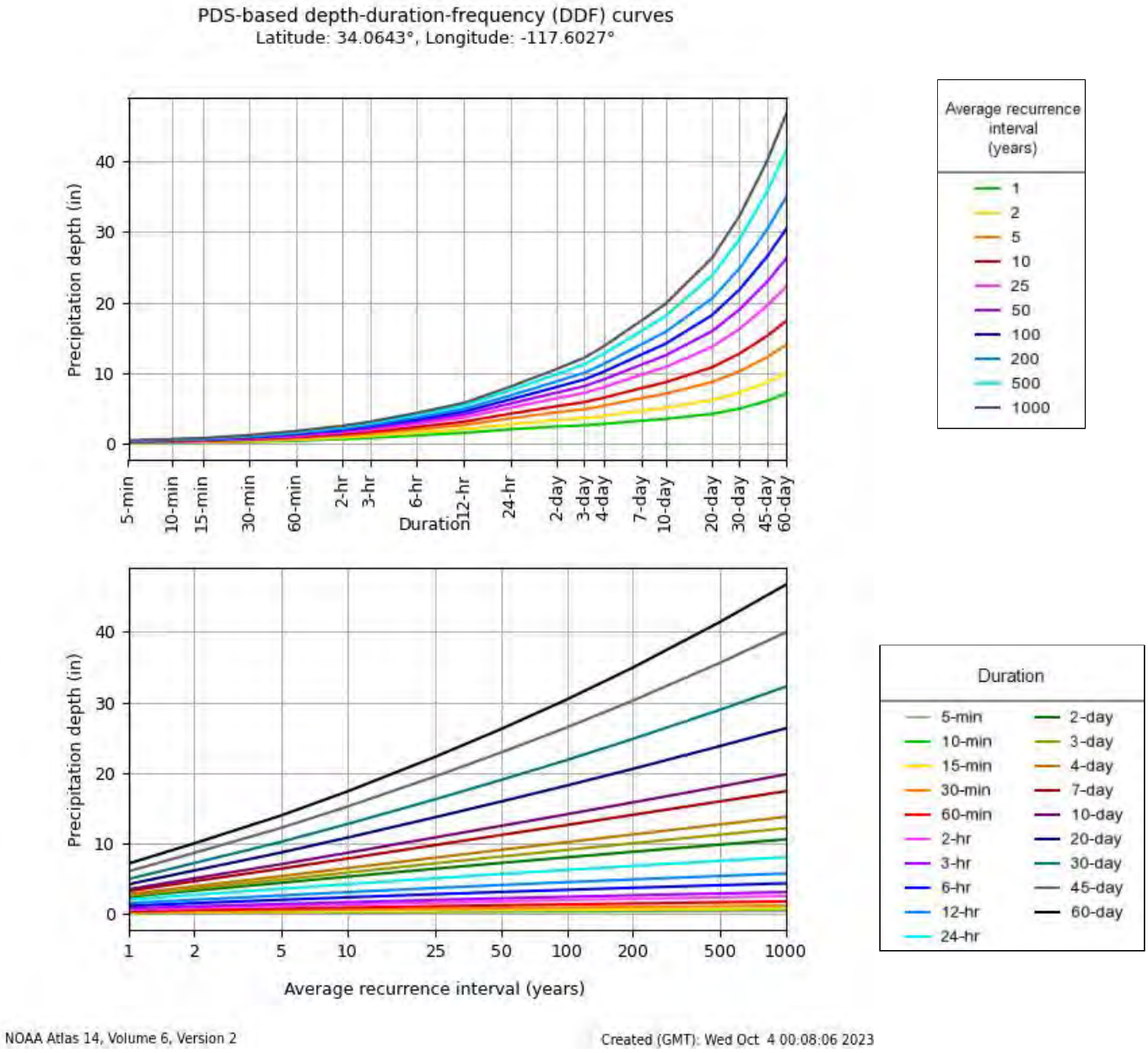
[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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PF graphical



Back to Top

Maps & aerials

Small scale terrain



Large scale terrain



Large scale map



Large scale aerial



Back to Top

US Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service
National Water Center
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

Disclaimer

Appendix E - Web Soils Report



Map Scale: 1:2,320 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 30 60 120 180

Feet
0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Bernardino County Southwestern Part, California
Survey Area Data: Version 15, Aug 30, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 17, 2022—Jun 12, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
TuB	Tujunga loamy sand, 0 to 5 percent slopes	A	12.3	100.0%
Totals for Area of Interest			**12.3**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Appendix F - Reference As-Built Plans

Q = 803 c.f.s.

Q = 827 c.f.s.

STA 12+00

MATCH LINE

950

940

11+85 M.H."B" Set Top of M.H. 6" Above Exist. Surface

Exist Surface Over ℄ Storm Drain

Finish Surface Over ℄ Storm Drain

H.G. LINE

S=0.0055

S=0.0040

S=0.0040

El. 942.76

El. 940.70

El. 940.73

13'

300'

480'
Alternate 108" R.C.P.-1050 D
Alternate 7'-6" × 9'-0" R.C.B. "B"
Alternate 108" C.I.P.P.

PROFILE SCALES
Horiz. 1"=40'
Vert. 1"=8'

404'
Alternate 108" R.C.P.-850 D
Alternate 7'-6" × 9'-0" R.C.B "C"
Alternate 108" C.I.P.P.

2+05.04 End Transition Structure

2+05.04 End Transition Structure

13.07'
Alternate
108" R.C.P.-300 D
Alternate
7'-6" × 9'-0" R.C.B.
No C.I.P.P. Alt.

T.S. "A"

2+81.61 M.H."B"

3+05 Inlet No. 1 (Single) D-24"/18" R.C.P. H.G.E.

Inlet #1 (Single) Q = 2.4"

WALL OF EXIST CHANNEL

El. 931.50 Min

El. 930.82

Note
T = 10 1/2" For C.I.P.P. Wall Thickness
5000 PSI

℄ GUASTI ROAD

Exist Edison M.H.

Const 8" A.C. Pavement

2+92.88 E.C.

P.C. COLLAR

SEE DETAIL AT RIGHT

Remove & Dispose of Exist. Guard Rail

Install 45.1 LF 30" R.C.P.-1750 D

℄ Connect To Exist Inlet

See Detail At Right

P.P. #61932 E

Plug Exist 30" C.M.P. w/1" Conc (Abandon

Exist S.D. M.H.-Remove & Dispose

Exist Bridge Guardrail-Remove & Reconstruct or Protect In Place

CUCAMONGA CREEK CHANNEL

2+05.04 END TRANSITION STRUCTURE

1+51.68 B.C.-BEGIN TRANSITION TO 108" EXIST "B" R.C.P.

Remove & Salvage 40 L.F. of Exist. 90" R.C.P.

1+69.54 ℄ EXIST OUTLET TO CHANNEL

EXIST PAVEMENT
EXIST INLET
℄ GUASTI RD.
8"
12" W.M.
S.C.E. 12 KV
M.H. NOT SHOWN
S = 0.0100
P.C.C. COLLAR
30" R.C.P. (LOWERED TO CLEAR UTILITIES)
El. 943.90

DETAIL
CONNECTOR PIPE
STA 2+81.61
NO SCALE

FILL DITCH W/NATIVE SOIL TO 90% MAX DENSITY
EXIST A.C. PAVEMENT

SECTION A-A
NO SCALE

SEE SHT 3 FOR LINE

"A" (VACATED) ST

120' TEMPORARY CONSTRUCTION EASEMENT

11+85 M.H."B"

1" = 40'

12+00.00 MATCH

20' WIDE EASEMENT FOR STORM DRAIN PURPOSES

R.R. R/W

EASEMENT LINE

EASEMENT LINE

6+90 M.H."B"

N01°55'51"W 15.00'

N00°51'44"W 17.42'

100'

4+91.59 E.C.

4+76.09

B.C.

Exist Drainage Structure w/ Manhole & Fence Remove & Dispose

Exist 30" R.C.P. Remove & Salvage

Exist C.L. Gate

Exist Conc. Rip-Rap

Exist 36" C.M.P.

ACCESS ROAD

Exist E.P.

Exist E.P.

F.L.-Ex. Swale

SCE 12KV

SCE 12KV

NOTE	DESCRIPTION	RCP	RCB ALTERNATE	CIPP ALTERNATE
(2)	Manhole "B"	Manhole No 2	Manhole No 3 Junction Str No. 3	Manhole No. 2
(5)	Junction Str "A"	Junction Str. No 4	Junction Str. No. 3	Junction Str. No. 2
(7)	Transition Str "A" L=14'	Trans. Str. No 3	Trans. Str No. 1	----

STORM DRAIN ℄ CURVE DATA				
○	Δ	R	L	T
1	64°30'58"	90'	101.34'	56.80'
2	7°24'04"	120'	15.50'	7.76'

AS BUILTS PLOTTED - 6 SEPT, '84 BY RLW - SYMBOL ■

D10795

EDA NO 07-2100015

REVISIONS			
MARK	DATE	BY	APPROVED/RCE NO

DIETERICH POST 6532B FILM

DESIGNED BY _____ DATE _____
DRAWN BY _____ DATE _____
CHECKED BY _____ DATE _____

CITY OF ONTARIO

RECOMMENDED BY Roy A. Maddock, ASS'T CITY ENGINEER — 23087 C.E. No — 11-8-83 DATE
APPROVED BY Larry D. Bonelli, CITY ENGINEER — 22880 C.E. No — 11-8-83 DATE

BENCH MARK No. 1250 ELEV 964.98
LOCATION. HOLT BLVD E/O VINEYARD AVE
NAIL & WASHER IN TOP OF DRAINAGE STRUCTURE, IN CENTER MEDIAN OF HOLT 870'± E/O VINEYARD AVE

LDKING
L D KING, INC
517 N EUCLID AVENUE
ONTARIO, CALIF 91762
(714) 988-5492

D H Mauk 10/28/83
BRANCH MANAGER - R.C.E. No 21062 DATE
Project Engineer 10-28-83
PROJECT ENGINEER - R.C.E. No 5324 DATE

DESIGNED BY DW
DATE 10-28-83
DRAWN BY N.O.
DATE 10-28-83
CHECKED BY DW
DATE 10-28-83

PLAN & PROFILE

HOLT BLVD. STORM DRAIN

STA 12+00.00 TO CUCAMONGA CREEK CHANNEL

PROJECT LIMITS CUCAMONGA CREEK CHANNEL TO IMPERIAL AVENUE

SHEET 2 OF 15
CONTRACT 83B4-13
ACCOUNT 2177484
DWG NO D-608

MICROFILMED 9-5-89

MICROFILMED SEP 05 1989

110-32

3771

I17 I18 I19 3772

DEARBORN CT
CONVENTION CENTER WY
KLINE CT
HOLT BL
I-10 E/B OFFRAMP
I-10 E/B ON RAMP
Cucamonga Creek Channel
GUASTI RD
AIRPORT DR

2131 2131 2147 2143 2155 2151 2501 2200 2345 2445 0

39" RCP 69' D10790
24" RCP 27' D10790
39" RCP 231.32' D10790
39" RCP 120' D10790
24" RCP 35' D10790
39" RCP D10790
30" RCP 47.43' D10790
39" RCP D10790
24" RCP 76.08' D10417
18" RCP 54.18' D10417
24" RCP 10' D10790
24" RCP 200' D10416
108" RCP 498' D10796
108" RCP 300' D10796
108" RCP D10795
108" RCP 490' D10795
108" RCP 404' D10795
108" RCP 86' D10795
RIPRAP
(2) 36" RCP 203' R15788

J17 J19

K17 J18 K18 J18 K19

1 inch = 200 feet

0 100 200 Feet

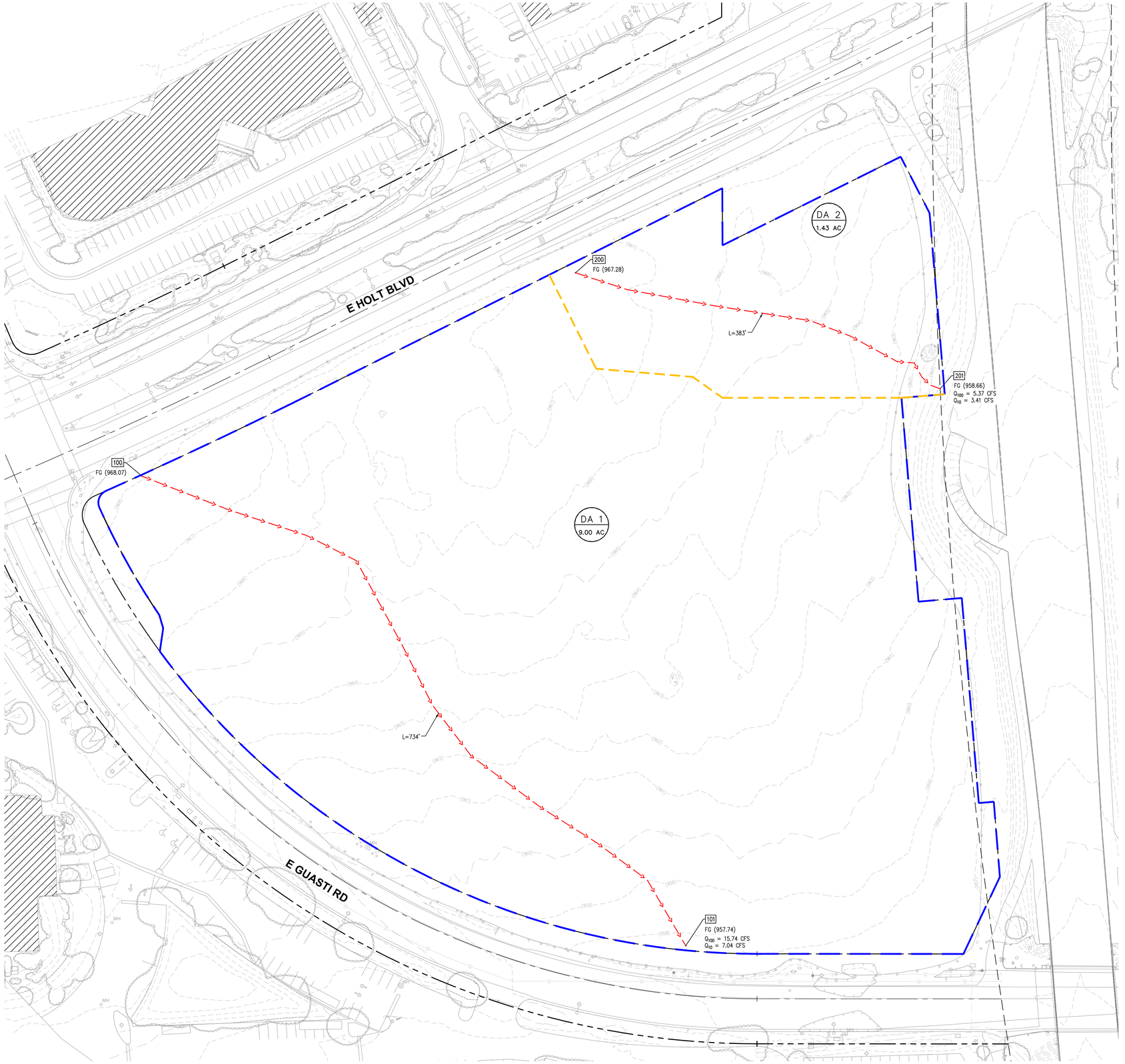
STORM DRAIN ATLAS

This map rapresents a visual aid to assist City personnel with the managament of the Storm Drain System. Data provided heron is not a guarantee of actual field conditions nor a substituta for record drawings and field verification.

PRINTED: March 13, 2014

N

Appendix G - Existing and Proposed Drainage Maps



LEGEND

DMA ID
DA XX
XX AC
ACREAGE

DMA ID
XXX

L=XXX' FLOW PATH LENGTH (FEET)

OVERALL DMA BOUNDARY
SUB-DMA BOUNDARY
FLOWLINE
EX MAJOR CONTOURS
EX MINOR CONTOURS

NORTH

GRAPHIC SCALE IN FEET
0 20 40 80

THE EMPIRE GROVES HOTEL

Ontario CA 91730

Gensler

500 South Figueroa Street
Los Angeles, California 90071
United States

Tel 213.327.3600
Fax 213.327.3601

Kimley»Horn

© 2023 KIMLEY-HORN AND ASSOCIATES, INC.
3801 UNIVERSITY AVENUE, SUITE 300, RIVERSIDE, CA 92501
PHONE: (951) 543-9868
WWW.KIMLEY-HORN.COM

△ Date	Description

Seal / Signature

NOT FOR CONSTRUCTION

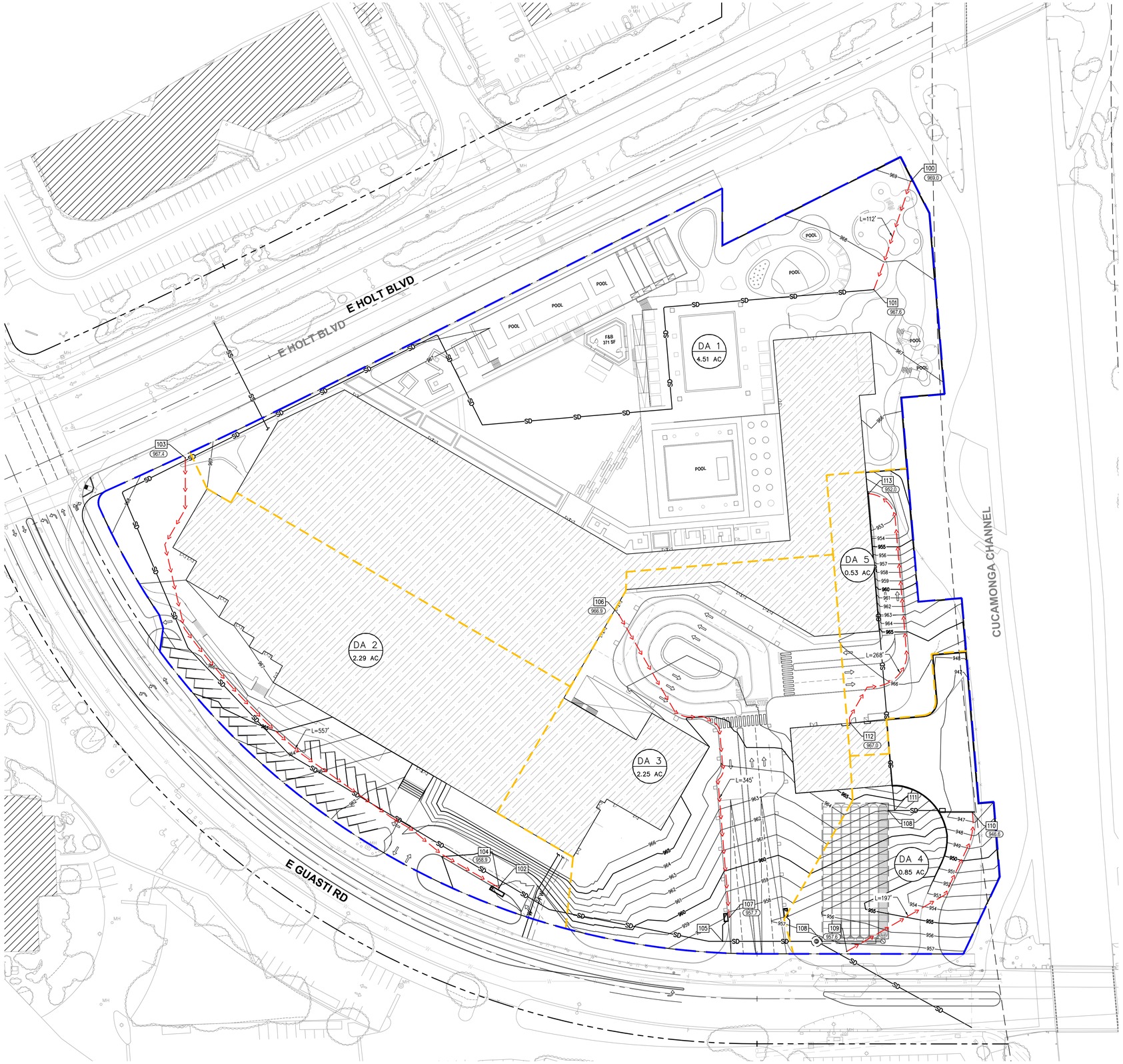
Project Name
Diversified Pacific Communities

Project Number
05.4382.000

Description
EXISTING DRAINAGE MAP

Scale
PER PLAN

9/26/2023 10:32:52 AM Autodesk Docs://005.4382.000 - DPH/Sheets - 05.4382.000 - DPH.rvt



LEGEND

DMA ID
DA XX
XX AC
ACREAGE

DMA ID

L=XXX' FLOW PATH LENGTH (FEET)

OVERALL DMA BOUNDARY

SUB-DMA BOUNDARY

FLOWLINE

EX MAJOR CONTOURS

EX MINOR CONTOURS

SUMMARY TABLE:

DA #	AREA (AC)	Q_{100} (CFS)	Q_{10} (CFS)
DA 1	4.51	25.48	17.09
DA 2	2.29	8.97	5.99
DA 3	2.25	10.60	7.10
DA 4	0.85	5.02	3.37
DA 5	0.53	2.91	1.95
TOTAL	10.43	52.98	35.50

NORTH

GRAPHIC SCALE IN FEET
0 20 40 80

THE EMPIRE GROVES HOTEL

Ontario CA 91730

Gensler

500 South Figueroa Street
Los Angeles, California 90071
United States

Tel 213.327.3600
Fax 213.327.3601

Kimley»Horn

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3801 UNIVERSITY AVENUE, SUITE 300, RIVERSIDE, CA 92501
PHONE: (951) 543-9868
WWW.KIMLEY-HORN.COM

△ Date	Description

Seal / Signature

NOT FOR CONSTRUCTION

Project Name
Diversified Pacific Communities

Project Number
05.4382.000

Description
PROPOSED DRAINAGE MAP

Scale
PER PLAN

9/26/2023 10:32:52 AM Autodesk Docs://005.4382.000 - DPH/Sheets - 05.4382.000 - DPH.rvt

Appendix H - Rational Method Analysis

San Bernardino County Rational Hydrology Program

(Hydrology Manual Date - August 1986)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2018 Version 9.0
Rational Hydrology Study Date: 10/03/23

DIVERSIFIED EMPIRE HOTEL
EXISITING CONDITION RATIONAL METHOD ANALYSIS
10-YR - 1 HR DESIGN STORM
BY LUIS PEREZ 10/03/23

Program License Serial Number 6443

********* Hydrology Study Control Information **********

Rational hydrology study storm event year is 10.0
Computed rainfall intensity:
Storm year = 10.00 1 hour rainfall = 0.949 (In.)
Slope used for rainfall intensity curve b = 0.6000
Soil antecedent moisture condition (AMC) = 2

++

Process from Point/Station 100.000 to Point/Station 101.000
**** INITIAL AREA EVALUATION ****

UNDEVELOPED (average cover) subarea
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 50.00
Pervious ratio(Ap) = 1.0000 Max loss rate(Fm)= 0.810(In/Hr)
Initial subarea data:
Initial area flow distance = 734.000(Ft.)
Top (of initial area) elevation = 968.070(Ft.)
Bottom (of initial area) elevation = 957.740(Ft.)
Difference in elevation = 10.330(Ft.)
Slope = 0.01407 s(%)= 1.41
TC = k(0.706)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 23.195 min.
Rainfall intensity = 1.678(In/Hr) for a 10.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.466
Subarea runoff = 7.039(CFS)

```
Total initial stream area =        9.000(Ac.)
Pervious area fraction = 1.000
Initial area Fm value =    0.810(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      200.000 to Point/Station      201.000
**** INITIAL AREA EVALUATION ****
________________________________________________________________________
RESIDENTIAL(8 - 10 dwl/acre)
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Pervious ratio(Ap) = 0.4000     Max loss rate(Fm)=     0.391(In/Hr)
Initial subarea data:
Initial area flow distance =   383.000(Ft.)
Top (of initial area) elevation =   967.280(Ft.)
Bottom (of initial area) elevation =   958.660(Ft.)
Difference in elevation =     8.620(Ft.)
Slope =    0.02251  s(%)=       2.25
TC = k(0.374)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    8.624 min.
Rainfall intensity =      3.039(In/Hr) for a    10.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.784
Subarea runoff =      3.408(CFS)
Total initial stream area =        1.430(Ac.)
Pervious area fraction = 0.400
Initial area Fm value =    0.391(In/Hr)
End of computations, Total Study Area =           10.43 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.
Note: These figures do not consider reduced effective area
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 0.918
Area averaged SCS curve number =  47.5
```

```
                San Bernardino County Rational Hydrology Program

                    (Hydrology Manual Date - August 1986)

 CIVILCADD/CIVILDESIGN  Engineering Software, (c) 1989-2018 Version 9.0
        Rational Hydrology Study        Date: 10/03/23
------------------------------------------------------------------------
DIVERSIFIED EMPIRE HOTEL
EXISITING CONDITION RATIONAL METHOD ANALYSIS
100-YR - 1 HR DESIGN STORM
BY LUIS PEREZ 10/03/23
------------------------------------------------------------------------


Program License Serial Number 6443

------------------------------------------------------------------------
 *********   Hydrology Study Control Information **********

------------------------------------------------------------------------
Rational hydrology study storm event year is   100.0
Computed rainfall intensity:
Storm year =   100.00   1 hour rainfall =     1.400 (In.)
Slope used for rainfall intensity curve b =  0.6000
Soil antecedent moisture condition (AMC) = 3


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      100.000 to Point/Station      101.000
**** INITIAL AREA EVALUATION ****
________________________________________________________________________
UNDEVELOPED (average cover) subarea
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 50.00
Adjusted SCS curve number for AMC 3 = 70.00
Pervious ratio(Ap) = 1.0000     Max loss rate(Fm)=     0.532(In/Hr)
Initial subarea data:
Initial area flow distance =   734.000(Ft.)
Top (of initial area) elevation =   968.070(Ft.)
Bottom (of initial area) elevation =   957.740(Ft.)
Difference in elevation =    10.330(Ft.)
Slope =    0.01407  s(%)=       1.41
TC = k(0.706)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   23.195 min.
Rainfall intensity =      2.476(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.706
```

```
Subarea runoff =     15.744(CFS)
Total initial stream area =        9.000(Ac.)
Pervious area fraction = 1.000
Initial area Fm value =    0.532(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      200.000 to Point/Station      201.000
**** INITIAL AREA EVALUATION ****
________________________________________________________________________
RESIDENTIAL(8 - 10 dwl/acre)
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Adjusted SCS curve number for AMC 3 = 52.00
Pervious ratio(Ap) = 0.4000     Max loss rate(Fm)=     0.314(In/Hr)
Initial subarea data:
Initial area flow distance =   383.000(Ft.)
Top (of initial area) elevation =   967.280(Ft.)
Bottom (of initial area) elevation =   958.660(Ft.)
Difference in elevation =     8.620(Ft.)
Slope =    0.02251  s(%)=       2.25
TC = k(0.374)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    8.624 min.
Rainfall intensity =      4.483(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.837
Subarea runoff =      5.366(CFS)
Total initial stream area =        1.430(Ac.)
Pervious area fraction = 0.400
Initial area Fm value =    0.314(In/Hr)
End of computations, Total Study Area =           10.43 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.
Note: These figures do not consider reduced effective area
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 0.918
Area averaged SCS curve number =  47.5
```

San Bernardino County Rational Hydrology Program

(Hydrology Manual Date - August 1986)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2018 Version 9.0
Rational Hydrology Study Date: 10/04/23

DIVERSIFIED EMPIRE HOTEL
PROPOSED CONDITION RATIONAL METHOD ANALYSIS
10-YR DESIGN STORM
BY LUIS PEREZ 10/03/23

Program License Serial Number 6443

********* Hydrology Study Control Information **********

Rational hydrology study storm event year is 10.0
Computed rainfall intensity:
Storm year = 10.00 1 hour rainfall = 0.949 (In.)
Slope used for rainfall intensity curve b = 0.6000
Soil antecedent moisture condition (AMC) = 2

++

Process from Point/Station 100.000 to Point/Station 101.000
**** INITIAL AREA EVALUATION ****

COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 32.00
Pervious ratio(Ap) = 0.1000 Max loss rate(Fm)= 0.098(In/Hr)
Initial subarea data:
Initial area flow distance = 112.000(Ft.)
Top (of initial area) elevation = 969.000(Ft.)
Bottom (of initial area) elevation = 967.600(Ft.)
Difference in elevation = 1.400(Ft.)
Slope = 0.01250 s(%)= 1.25
TC = k(0.304)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 4.821 min.
Rainfall intensity = 4.308(In/Hr) for a 10.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.880
Subarea runoff = 17.088(CFS)

```
Total initial stream area =        4.510(Ac.)
Pervious area fraction = 0.100
Initial area Fm value =    0.098(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      101.000 to Point/Station      102.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =   966.000(Ft.)
Downstream point/station elevation =   958.570(Ft.)
Pipe length  =  1486.00(Ft.)   Manning's N = 0.012
No. of pipes = 11  Required pipe flow  =    17.088(CFS)
Nearest computed pipe diameter  =     12.00(In.)
Calculated individual pipe flow  =     1.553(CFS)
Normal flow depth in pipe =    6.49(In.)
Flow top width inside pipe =   11.96(In.)
Critical Depth =    6.35(In.)
Pipe flow velocity =      3.59(Ft/s)
Travel time through pipe =    6.90 min.
Time of concentration (TC) =    11.73 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      102.000 to Point/Station      102.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =      4.510(Ac.)
Runoff from this stream =     17.088(CFS)
Time of concentration =   11.73 min.
Rainfall intensity =     2.527(In/Hr)
Area averaged loss rate (Fm) =    0.0978(In/Hr)
Area averaged Pervious ratio (Ap) = 0.1000


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      103.000 to Point/Station      104.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Pervious ratio(Ap) = 0.1000     Max loss rate(Fm)=     0.098(In/Hr)
Initial subarea data:
Initial area flow distance =   557.000(Ft.)
Top (of initial area) elevation =   967.400(Ft.)
```

```
Bottom (of initial area) elevation =   958.900(Ft.)
Difference in elevation =     8.500(Ft.)
Slope =    0.01526  s(%)=       1.53
TC = k(0.304)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    8.800 min.
Rainfall intensity =      3.002(In/Hr) for a    10.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.871
Subarea runoff =      5.986(CFS)
Total initial stream area =        2.290(Ac.)
Pervious area fraction = 0.100
Initial area Fm value =    0.098(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      104.000 to Point/Station      102.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =   958.900(Ft.)
Downstream point/station elevation =   958.570(Ft.)
Pipe length  =     9.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     5.986(CFS)
Nearest computed pipe diameter  =     12.00(In.)
Calculated individual pipe flow  =     5.986(CFS)
Normal flow depth in pipe =    8.19(In.)
Flow top width inside pipe =   11.17(In.)
Critical depth could not be calculated.
Pipe flow velocity =     10.48(Ft/s)
Travel time through pipe =    0.01 min.
Time of concentration (TC) =     8.81 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      102.000 to Point/Station      102.000
**** CONFLUENCE OF MINOR STREAMS ****
________________________________________________________________________
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      2.290(Ac.)
Runoff from this stream =      5.986(CFS)
Time of concentration =    8.81 min.
Rainfall intensity =     2.999(In/Hr)
Area averaged loss rate (Fm) =    0.0978(In/Hr)
Area averaged Pervious ratio (Ap) = 0.1000
Summary of stream data:

Stream Flow rate    Area    TC     Fm       Rainfall Intensity
 No.    (CFS)   (Ac.)       (min) (In/Hr)     (In/Hr)


1     17.09     4.510     11.73    0.098      2.527
2      5.99     2.290      8.81    0.098      2.999
```

```
Qmax(1) =
           1.000 *    1.000 *    17.088) +
           0.837 *    1.000 *     5.986) + =      22.101
Qmax(2) =
           1.194 *    0.752 *    17.088) +
           1.000 *    1.000 *     5.986) + =      21.328

Total of 2 streams to confluence:
Flow rates before confluence point:
      17.088       5.986
Maximum flow rates at confluence using above data:
       22.101       21.328
Area of streams before confluence:
        4.510        2.290
Effective area values after confluence:
        6.800        5.680
Results of confluence:
Total flow rate =     22.101(CFS)
Time of concentration =    11.725 min.
Effective stream area after confluence =      6.800(Ac.)
Study area average Pervious fraction(Ap) =  0.100
Study area average soil loss rate(Fm) =    0.098(In/Hr)
Study area total (this main stream) =       6.80(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      102.000 to Point/Station      105.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =   958.570(Ft.)
Downstream point/station elevation =   957.440(Ft.)
Pipe length  =   226.00(Ft.)   Manning's N = 0.012
No. of pipes = 3  Required pipe flow  =    22.101(CFS)
Nearest computed pipe diameter  =     18.00(In.)
Calculated individual pipe flow  =     7.367(CFS)
Normal flow depth in pipe =   13.55(In.)
Flow top width inside pipe =   15.53(In.)
Critical Depth =   12.61(In.)
Pipe flow velocity =      5.16(Ft/s)
Travel time through pipe =    0.73 min.
Time of concentration (TC) =    12.45 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      105.000 to Point/Station      105.000
**** CONFLUENCE OF MINOR STREAMS ****
________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =      6.800(Ac.)
Runoff from this stream =     22.101(CFS)
```

```
Time of concentration =   12.45 min.
Rainfall intensity =     2.438(In/Hr)
Area averaged loss rate (Fm) =    0.0978(In/Hr)
Area averaged Pervious ratio (Ap) = 0.1000


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      106.000 to Point/Station      107.000
**** INITIAL AREA EVALUATION ****
________________________________________________________________________
COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Pervious ratio(Ap) = 0.1000     Max loss rate(Fm)=     0.098(In/Hr)
Initial subarea data:
Initial area flow distance =   345.000(Ft.)
Top (of initial area) elevation =   966.900(Ft.)
Bottom (of initial area) elevation =   957.700(Ft.)
Difference in elevation =     9.200(Ft.)
Slope =    0.02667  s(%)=       2.67
TC = k(0.304)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    6.498 min.
Rainfall intensity =      3.601(In/Hr) for a    10.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.876
Subarea runoff =      7.095(CFS)
Total initial stream area =        2.250(Ac.)
Pervious area fraction = 0.100
Initial area Fm value =    0.098(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      107.000 to Point/Station      105.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =   957.700(Ft.)
Downstream point/station elevation =   957.440(Ft.)
Pipe length  =    21.00(Ft.)   Manning's N = 0.012
No. of pipes = 2  Required pipe flow  =     7.095(CFS)
Nearest computed pipe diameter  =     12.00(In.)
Calculated individual pipe flow  =     3.547(CFS)
Normal flow depth in pipe =    8.32(In.)
Flow top width inside pipe =   11.07(In.)
Critical Depth =    9.65(In.)
Pipe flow velocity =      6.11(Ft/s)
Travel time through pipe =    0.06 min.
Time of concentration (TC) =     6.56 min.
```

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Process from Point/Station      105.000 to Point/Station      105.000
**** CONFLUENCE OF MINOR STREAMS ****
________________________________________________________________________
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      2.250(Ac.)
Runoff from this stream =      7.095(CFS)
Time of concentration =    6.56 min.
Rainfall intensity =     3.582(In/Hr)
Area averaged loss rate (Fm) =    0.0978(In/Hr)
Area averaged Pervious ratio (Ap) = 0.1000
Summary of stream data:

Stream Flow rate    Area    TC     Fm       Rainfall Intensity
 No.    (CFS)   (Ac.)       (min) (In/Hr)     (In/Hr)


1     22.10     6.800     12.45    0.098      2.438
2      7.09     2.250      6.56    0.098      3.582
Qmax(1) =
           1.000 *    1.000 *    22.101) +
           0.671 *    1.000 *     7.095) + =      26.865
Qmax(2) =
           1.489 *    0.526 *    22.101) +
           1.000 *    1.000 *     7.095) + =      24.420

Total of 2 streams to confluence:
Flow rates before confluence point:
      22.101       7.095
Maximum flow rates at confluence using above data:
       26.865       24.420
Area of streams before confluence:
        6.800        2.250
Effective area values after confluence:
        9.050        5.829
Results of confluence:
Total flow rate =     26.865(CFS)
Time of concentration =    12.455 min.
Effective stream area after confluence =      9.050(Ac.)
Study area average Pervious fraction(Ap) =  0.100
Study area average soil loss rate(Fm) =    0.098(In/Hr)
Study area total (this main stream) =       9.05(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      105.000 to Point/Station      108.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =   957.440(Ft.)
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Downstream point/station elevation =   956.950(Ft.)
Pipe length  =    87.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =    26.865(CFS)
Nearest computed pipe diameter  =     30.00(In.)
Calculated individual pipe flow  =    26.865(CFS)
Normal flow depth in pipe =   20.39(In.)
Flow top width inside pipe =   28.00(In.)
Critical Depth =   21.21(In.)
Pipe flow velocity =      7.56(Ft/s)
Travel time through pipe =    0.19 min.
Time of concentration (TC) =    12.65 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      108.000 to Point/Station      108.000
**** CONFLUENCE OF MAIN STREAMS ****
________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =      9.050(Ac.)
Runoff from this stream =     26.865(CFS)
Time of concentration =   12.65 min.
Rainfall intensity =     2.415(In/Hr)
Area averaged loss rate (Fm) =    0.0978(In/Hr)
Area averaged Pervious ratio (Ap) = 0.1000
Program is now starting with Main Stream No. 2


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      109.000 to Point/Station      110.000
**** INITIAL AREA EVALUATION ****
________________________________________________________________________
COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Pervious ratio(Ap) = 0.1000     Max loss rate(Fm)=     0.098(In/Hr)
Initial subarea data:
Initial area flow distance =   197.000(Ft.)
Top (of initial area) elevation =   957.600(Ft.)
Bottom (of initial area) elevation =   946.600(Ft.)
Difference in elevation =    11.000(Ft.)
Slope =    0.05584  s(%)=       5.58
TC = k(0.304)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    4.480 min.
Rainfall intensity =      4.502(In/Hr) for a    10.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.880
Subarea runoff =      3.369(CFS)
```

```
Total initial stream area =        0.850(Ac.)
Pervious area fraction = 0.100
Initial area Fm value =    0.098(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      110.000 to Point/Station      111.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =   943.600(Ft.)
Downstream point/station elevation =   943.380(Ft.)
Pipe length  =    44.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     3.369(CFS)
Nearest computed pipe diameter  =     15.00(In.)
Calculated individual pipe flow  =     3.369(CFS)
Normal flow depth in pipe =    9.08(In.)
Flow top width inside pipe =   14.66(In.)
Critical Depth =    8.88(In.)
Pipe flow velocity =      4.34(Ft/s)
Travel time through pipe =    0.17 min.
Time of concentration (TC) =     4.65 min.


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Process from Point/Station      111.000 to Point/Station      111.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 2 in normal stream number 1
Stream flow area =      0.850(Ac.)
Runoff from this stream =      3.369(CFS)
Time of concentration =    4.65 min.
Rainfall intensity =     4.403(In/Hr)
Area averaged loss rate (Fm) =    0.0978(In/Hr)
Area averaged Pervious ratio (Ap) = 0.1000


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      112.000 to Point/Station      113.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Pervious ratio(Ap) = 0.1000     Max loss rate(Fm)=     0.098(In/Hr)
Initial subarea data:
Initial area flow distance =   268.000(Ft.)
Top (of initial area) elevation =   967.000(Ft.)
```

```
Bottom (of initial area) elevation =   952.000(Ft.)
Difference in elevation =    15.000(Ft.)
Slope =    0.05597  s(%)=       5.60
TC = k(0.304)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    5.064 min.
Rainfall intensity =      4.182(In/Hr) for a    10.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.879
Subarea runoff =      1.948(CFS)
Total initial stream area =        0.530(Ac.)
Pervious area fraction = 0.100
Initial area Fm value =    0.098(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      113.000 to Point/Station      111.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =   952.000(Ft.)
Downstream point/station elevation =   941.970(Ft.)
Pipe length  =   283.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     1.948(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     1.948(CFS)
Normal flow depth in pipe =    4.90(In.)
Flow top width inside pipe =    8.96(In.)
Critical Depth =    7.63(In.)
Pipe flow velocity =      7.91(Ft/s)
Travel time through pipe =    0.60 min.
Time of concentration (TC) =     5.66 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      111.000 to Point/Station      111.000
**** CONFLUENCE OF MINOR STREAMS ****
________________________________________________________________________
Along Main Stream number: 2 in normal stream number 2
Stream flow area =      0.530(Ac.)
Runoff from this stream =      1.948(CFS)
Time of concentration =    5.66 min.
Rainfall intensity =     3.912(In/Hr)
Area averaged loss rate (Fm) =    0.0978(In/Hr)
Area averaged Pervious ratio (Ap) = 0.1000
Summary of stream data:

Stream Flow rate    Area    TC     Fm       Rainfall Intensity
 No.    (CFS)   (Ac.)       (min) (In/Hr)     (In/Hr)


1      3.37     0.850      4.65    0.098      4.403
2      1.95     0.530      5.66    0.098      3.912
```

```
Qmax(1) =
          1.000 *    1.000 *     3.369) +
          1.129 *    0.821 *     1.948) + =       5.175
Qmax(2) =
          0.886 *    1.000 *     3.369) +
          1.000 *    1.000 *     1.948) + =       4.934

Total of 2 streams to confluence:
Flow rates before confluence point:
       3.369       1.948
Maximum flow rates at confluence using above data:
        5.175        4.934
Area of streams before confluence:
        0.850        0.530
Effective area values after confluence:
        1.285        1.380
Results of confluence:
Total flow rate =      5.175(CFS)
Time of concentration =     4.649 min.
Effective stream area after confluence =      1.285(Ac.)
Study area average Pervious fraction(Ap) =  0.100
Study area average soil loss rate(Fm) =    0.098(In/Hr)
Study area total (this main stream) =       1.38(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      111.000 to Point/Station      108.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =   943.380(Ft.)
Downstream point/station elevation =   943.350(Ft.)
Pipe length  =     6.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     5.175(CFS)
Nearest computed pipe diameter  =     18.00(In.)
Calculated individual pipe flow  =     5.175(CFS)
Normal flow depth in pipe =   10.50(In.)
Flow top width inside pipe =   17.75(In.)
Critical Depth =   10.50(In.)
Pipe flow velocity =      4.84(Ft/s)
Travel time through pipe =    0.02 min.
Time of concentration (TC) =     4.67 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      108.000 to Point/Station      108.000
**** CONFLUENCE OF MAIN STREAMS ****
________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =      1.285(Ac.)
```

```
Runoff from this stream =      5.175(CFS)
Time of concentration =    4.67 min.
Rainfall intensity =     4.391(In/Hr)
Area averaged loss rate (Fm) =    0.0978(In/Hr)
Area averaged Pervious ratio (Ap) = 0.1000
Summary of stream data:

Stream Flow rate    Area    TC     Fm       Rainfall Intensity
 No.    (CFS)   (Ac.)       (min) (In/Hr)     (In/Hr)


1     26.86     9.050     12.65    0.098      2.415
2      5.18     1.285      4.67    0.098      4.391
Qmax(1) =
           1.000 *    1.000 *    26.865) +
           0.540 *    1.000 *     5.175) + =      29.658
Qmax(2) =
           1.853 *    0.369 *    26.865) +
           1.000 *    1.000 *     5.175) + =      23.552

Total of 2 main streams to confluence:
Flow rates before confluence point:
      27.865       6.175
Maximum flow rates at confluence using above data:
       29.658       23.552
Area of streams before confluence:
        9.050        1.285
Effective area values after confluence:
       10.335        4.627


Results of confluence:
Total flow rate =     29.658(CFS)
Time of concentration =    12.647 min.
Effective stream area after confluence  =     10.335(Ac.)
Study area average Pervious fraction(Ap) =  0.100
Study area average soil loss rate(Fm) =    0.098(In/Hr)
Study area total =      10.34(Ac.)
End of computations, Total Study Area =           10.43 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.
Note: These figures do not consider reduced effective area
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 0.100
Area averaged SCS curve number =  32.0
```

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                San Bernardino County Rational Hydrology Program

                    (Hydrology Manual Date - August 1986)

 CIVILCADD/CIVILDESIGN  Engineering Software, (c) 1989-2018 Version 9.0
        Rational Hydrology Study        Date: 10/04/23
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DIVERSIFIED EMPIRE HOTEL
PROPOSED CONDITION RATIONAL METHOD ANALYSIS
100-YR DESIGN STORM
BY LUIS PEREZ 10/03/23
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Program License Serial Number 6443

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 *********   Hydrology Study Control Information **********

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Rational hydrology study storm event year is   100.0
Computed rainfall intensity:
Storm year =   100.00   1 hour rainfall =     1.400 (In.)
Slope used for rainfall intensity curve b =  0.6000
Soil antecedent moisture condition (AMC) = 3


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Process from Point/Station      100.000 to Point/Station      101.000
**** INITIAL AREA EVALUATION ****
________________________________________________________________________
COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Adjusted SCS curve number for AMC 3 = 52.00
Pervious ratio(Ap) = 0.1000     Max loss rate(Fm)=     0.079(In/Hr)
Initial subarea data:
Initial area flow distance =   112.000(Ft.)
Top (of initial area) elevation =   969.000(Ft.)
Bottom (of initial area) elevation =   967.600(Ft.)
Difference in elevation =     1.400(Ft.)
Slope =    0.01250  s(%)=       1.25
TC = k(0.304)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    4.821 min.
Rainfall intensity =      6.355(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.889
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Subarea runoff =     25.476(CFS)
Total initial stream area =        4.510(Ac.)
Pervious area fraction = 0.100
Initial area Fm value =    0.079(In/Hr)


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Process from Point/Station      101.000 to Point/Station      102.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =   966.000(Ft.)
Downstream point/station elevation =   958.570(Ft.)
Pipe length  =  1486.00(Ft.)   Manning's N = 0.012
No. of pipes = 11  Required pipe flow  =    25.476(CFS)
Nearest computed pipe diameter  =     12.00(In.)
Calculated individual pipe flow  =     2.316(CFS)
Normal flow depth in pipe =    8.48(In.)
Flow top width inside pipe =   10.92(In.)
Critical Depth =    7.81(In.)
Pipe flow velocity =      3.90(Ft/s)
Travel time through pipe =    6.35 min.
Time of concentration (TC) =    11.17 min.


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Process from Point/Station      102.000 to Point/Station      102.000
**** CONFLUENCE OF MINOR STREAMS ****
________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =      4.510(Ac.)
Runoff from this stream =     25.476(CFS)
Time of concentration =   11.17 min.
Rainfall intensity =     3.838(In/Hr)
Area averaged loss rate (Fm) =    0.0785(In/Hr)
Area averaged Pervious ratio (Ap) = 0.1000


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Process from Point/Station      103.000 to Point/Station      104.000
**** INITIAL AREA EVALUATION ****
________________________________________________________________________
COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Adjusted SCS curve number for AMC 3 = 52.00
Pervious ratio(Ap) = 0.1000     Max loss rate(Fm)=     0.079(In/Hr)
Initial subarea data:
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Initial area flow distance =   557.000(Ft.)
Top (of initial area) elevation =   967.400(Ft.)
Bottom (of initial area) elevation =   958.900(Ft.)
Difference in elevation =     8.500(Ft.)
Slope =    0.01526  s(%)=       1.53
TC = k(0.304)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    8.800 min.
Rainfall intensity =      4.429(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.884
Subarea runoff =      8.967(CFS)
Total initial stream area =        2.290(Ac.)
Pervious area fraction = 0.100
Initial area Fm value =    0.079(In/Hr)


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Process from Point/Station      104.000 to Point/Station      102.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =   958.900(Ft.)
Downstream point/station elevation =   958.570(Ft.)
Pipe length  =     9.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     8.967(CFS)
Nearest computed pipe diameter  =     15.00(In.)
Calculated individual pipe flow  =     8.967(CFS)
Normal flow depth in pipe =    8.98(In.)
Flow top width inside pipe =   14.71(In.)
Critical Depth =   13.85(In.)
Pipe flow velocity =     11.70(Ft/s)
Travel time through pipe =    0.01 min.
Time of concentration (TC) =     8.81 min.


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Process from Point/Station      102.000 to Point/Station      102.000
**** CONFLUENCE OF MINOR STREAMS ****
________________________________________________________________________
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      2.290(Ac.)
Runoff from this stream =      8.967(CFS)
Time of concentration =    8.81 min.
Rainfall intensity =     4.425(In/Hr)
Area averaged loss rate (Fm) =    0.0785(In/Hr)
Area averaged Pervious ratio (Ap) = 0.1000
Summary of stream data:

Stream Flow rate    Area    TC     Fm       Rainfall Intensity
 No.    (CFS)   (Ac.)       (min) (In/Hr)     (In/Hr)
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1     25.48     4.510     11.17    0.079      3.838
2      8.97     2.290      8.81    0.079      4.425
Qmax(1) =
           1.000 *    1.000 *    25.476) +
           0.865 *    1.000 *     8.967) + =      33.231
Qmax(2) =
           1.156 *    0.789 *    25.476) +
           1.000 *    1.000 *     8.967) + =      32.200

Total of 2 streams to confluence:
Flow rates before confluence point:
      25.476       8.967
Maximum flow rates at confluence using above data:
       33.231       32.200
Area of streams before confluence:
        4.510        2.290
Effective area values after confluence:
        6.800        5.847
Results of confluence:
Total flow rate =     33.231(CFS)
Time of concentration =    11.173 min.
Effective stream area after confluence =      6.800(Ac.)
Study area average Pervious fraction(Ap) =  0.100
Study area average soil loss rate(Fm) =    0.079(In/Hr)
Study area total (this main stream) =       6.80(Ac.)


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Process from Point/Station      102.000 to Point/Station      105.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =   958.570(Ft.)
Downstream point/station elevation =   957.440(Ft.)
Pipe length  =   226.00(Ft.)   Manning's N = 0.012
No. of pipes = 3  Required pipe flow  =    33.231(CFS)
Nearest computed pipe diameter  =     21.00(In.)
Calculated individual pipe flow  =    11.077(CFS)
Normal flow depth in pipe =   15.75(In.)
Flow top width inside pipe =   18.19(In.)
Critical Depth =   14.88(In.)
Pipe flow velocity =      5.72(Ft/s)
Travel time through pipe =    0.66 min.
Time of concentration (TC) =    11.83 min.


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Process from Point/Station      105.000 to Point/Station      105.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
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Stream flow area =      6.800(Ac.)
Runoff from this stream =     33.231(CFS)
Time of concentration =   11.83 min.
Rainfall intensity =     3.708(In/Hr)
Area averaged loss rate (Fm) =    0.0785(In/Hr)
Area averaged Pervious ratio (Ap) = 0.1000


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Process from Point/Station      106.000 to Point/Station      107.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Adjusted SCS curve number for AMC 3 = 52.00
Pervious ratio(Ap) = 0.1000     Max loss rate(Fm)=     0.079(In/Hr)
Initial subarea data:
Initial area flow distance =   345.000(Ft.)
Top (of initial area) elevation =   966.900(Ft.)
Bottom (of initial area) elevation =   957.700(Ft.)
Difference in elevation =     9.200(Ft.)
Slope =    0.02667  s(%)=       2.67
TC = k(0.304)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    6.498 min.
Rainfall intensity =      5.313(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.887
Subarea runoff =     10.600(CFS)
Total initial stream area =        2.250(Ac.)
Pervious area fraction = 0.100
Initial area Fm value =    0.079(In/Hr)


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Process from Point/Station      107.000 to Point/Station      105.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =   957.700(Ft.)
Downstream point/station elevation =   957.440(Ft.)
Pipe length  =    21.00(Ft.)   Manning's N = 0.012
No. of pipes = 2  Required pipe flow  =    10.600(CFS)
Nearest computed pipe diameter  =     15.00(In.)
Calculated individual pipe flow  =     5.300(CFS)
Normal flow depth in pipe =    9.08(In.)
Flow top width inside pipe =   14.66(In.)
Critical Depth =   11.19(In.)
Pipe flow velocity =      6.83(Ft/s)
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Travel time through pipe =    0.05 min.
Time of concentration (TC) =     6.55 min.


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Process from Point/Station      105.000 to Point/Station      105.000
**** CONFLUENCE OF MINOR STREAMS ****
________________________________________________________________________
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      2.250(Ac.)
Runoff from this stream =     10.600(CFS)
Time of concentration =    6.55 min.
Rainfall intensity =     5.288(In/Hr)
Area averaged loss rate (Fm) =    0.0785(In/Hr)
Area averaged Pervious ratio (Ap) = 0.1000
Summary of stream data:

Stream Flow rate    Area    TC     Fm       Rainfall Intensity
 No.    (CFS)   (Ac.)       (min) (In/Hr)     (In/Hr)


1     33.23     6.800     11.83    0.079      3.708
2     10.60     2.250      6.55    0.079      5.288
Qmax(1) =
           1.000 *    1.000 *    33.231) +
           0.697 *    1.000 *    10.600) + =      40.617
Qmax(2) =
           1.435 *    0.554 *    33.231) +
           1.000 *    1.000 *    10.600) + =      37.001

Total of 2 streams to confluence:
Flow rates before confluence point:
      33.231      10.600
Maximum flow rates at confluence using above data:
       40.617       37.001
Area of streams before confluence:
        6.800        2.250
Effective area values after confluence:
        9.050        6.014
Results of confluence:
Total flow rate =     40.617(CFS)
Time of concentration =    11.832 min.
Effective stream area after confluence =      9.050(Ac.)
Study area average Pervious fraction(Ap) =  0.100
Study area average soil loss rate(Fm) =    0.079(In/Hr)
Study area total (this main stream) =       9.05(Ac.)


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Process from Point/Station      105.000 to Point/Station      108.000
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**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
_____________________________________________________________________
Upstream point/station elevation =   957.440(Ft.)
Downstream point/station elevation =   956.950(Ft.)
Pipe length  =    87.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =    40.617(CFS)
Nearest computed pipe diameter  =     33.00(In.)
Calculated individual pipe flow  =    40.617(CFS)
Normal flow depth in pipe =   25.55(In.)
Flow top width inside pipe =   27.60(In.)
Critical Depth =   25.45(In.)
Pipe flow velocity =      8.23(Ft/s)
Travel time through pipe =    0.18 min.
Time of concentration (TC) =    12.01 min.


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Process from Point/Station      108.000 to Point/Station      108.000
**** CONFLUENCE OF MAIN STREAMS ****
_____________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =      9.050(Ac.)
Runoff from this stream =     40.617(CFS)
Time of concentration =   12.01 min.
Rainfall intensity =     3.676(In/Hr)
Area averaged loss rate (Fm) =    0.0785(In/Hr)
Area averaged Pervious ratio (Ap) = 0.1000
Program is now starting with Main Stream No. 2


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Process from Point/Station      109.000 to Point/Station      110.000
**** INITIAL AREA EVALUATION ****
_____________________________________________________________________
COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Adjusted SCS curve number for AMC 3 = 52.00
Pervious ratio(Ap) = 0.1000     Max loss rate(Fm)=     0.079(In/Hr)
Initial subarea data:
Initial area flow distance =   197.000(Ft.)
Top (of initial area) elevation =   957.600(Ft.)
Bottom (of initial area) elevation =   946.600(Ft.)
Difference in elevation =    11.000(Ft.)
Slope =    0.05584  s(%)=       5.58
TC = k(0.304)*[(length^3)/(elevation change)]^0.2
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Initial area time of concentration =    4.480 min.
Rainfall intensity =      6.641(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.889
Subarea runoff =      5.021(CFS)
Total initial stream area =        0.850(Ac.)
Pervious area fraction = 0.100
Initial area Fm value =    0.079(In/Hr)


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Process from Point/Station      110.000 to Point/Station      111.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =   943.600(Ft.)
Downstream point/station elevation =   943.380(Ft.)
Pipe length  =    44.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     5.021(CFS)
Nearest computed pipe diameter  =     18.00(In.)
Calculated individual pipe flow  =     5.021(CFS)
Normal flow depth in pipe =   10.30(In.)
Flow top width inside pipe =   17.81(In.)
Critical Depth =   10.34(In.)
Pipe flow velocity =      4.80(Ft/s)
Travel time through pipe =    0.15 min.
Time of concentration (TC) =     4.63 min.


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Process from Point/Station      111.000 to Point/Station      111.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 2 in normal stream number 1
Stream flow area =      0.850(Ac.)
Runoff from this stream =      5.021(CFS)
Time of concentration =    4.63 min.
Rainfall intensity =     6.509(In/Hr)
Area averaged loss rate (Fm) =    0.0785(In/Hr)
Area averaged Pervious ratio (Ap) = 0.1000


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Process from Point/Station      112.000 to Point/Station      113.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
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Adjusted SCS curve number for AMC 3 = 52.00
Pervious ratio(Ap) = 0.1000     Max loss rate(Fm)=     0.079(In/Hr)
Initial subarea data:
Initial area flow distance =   268.000(Ft.)
Top (of initial area) elevation =   967.000(Ft.)
Bottom (of initial area) elevation =   952.000(Ft.)
Difference in elevation =    15.000(Ft.)
Slope =    0.05597  s(%)=       5.60
TC = k(0.304)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    5.064 min.
Rainfall intensity =      6.170(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.889
Subarea runoff =      2.906(CFS)
Total initial stream area =        0.530(Ac.)
Pervious area fraction = 0.100
Initial area Fm value =    0.079(In/Hr)


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Process from Point/Station      113.000 to Point/Station      111.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =   952.000(Ft.)
Downstream point/station elevation =   941.970(Ft.)
Pipe length  =   283.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     2.906(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     2.906(CFS)
Normal flow depth in pipe =    6.44(In.)
Flow top width inside pipe =    8.12(In.)
Critical depth could not be calculated.
Pipe flow velocity =      8.59(Ft/s)
Travel time through pipe =    0.55 min.
Time of concentration (TC) =     5.61 min.


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Process from Point/Station      111.000 to Point/Station      111.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 2 in normal stream number 2
Stream flow area =      0.530(Ac.)
Runoff from this stream =      2.906(CFS)
Time of concentration =    5.61 min.
Rainfall intensity =     5.801(In/Hr)
Area averaged loss rate (Fm) =    0.0785(In/Hr)
Area averaged Pervious ratio (Ap) = 0.1000
Summary of stream data:

Stream Flow rate    Area    TC     Fm       Rainfall Intensity
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 No.    (CFS)   (Ac.)       (min) (In/Hr)     (In/Hr)


1      5.02     0.850      4.63    0.079      6.509
2      2.91     0.530      5.61    0.079      5.801
Qmax(1) =
           1.000 *    1.000 *     5.021) +
           1.124 *    0.825 *     2.906) + =       7.715
Qmax(2) =
           0.890 *    1.000 *     5.021) +
           1.000 *    1.000 *     2.906) + =       7.373

Total of 2 streams to confluence:
Flow rates before confluence point:
       5.021       2.906
Maximum flow rates at confluence using above data:
        7.715        7.373
Area of streams before confluence:
        0.850        0.530
Effective area values after confluence:
        1.287        1.380
Results of confluence:
Total flow rate =      7.715(CFS)
Time of concentration =     4.633 min.
Effective stream area after confluence =      1.287(Ac.)
Study area average Pervious fraction(Ap) =  0.100
Study area average soil loss rate(Fm) =    0.079(In/Hr)
Study area total (this main stream) =       1.38(Ac.)


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Process from Point/Station      111.000 to Point/Station      108.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =   943.380(Ft.)
Downstream point/station elevation =   943.350(Ft.)
Pipe length  =     6.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     7.715(CFS)
Nearest computed pipe diameter  =     18.00(In.)
Calculated individual pipe flow  =     7.715(CFS)
Normal flow depth in pipe =   14.13(In.)
Flow top width inside pipe =   14.79(In.)
Critical Depth =   12.91(In.)
Pipe flow velocity =      5.19(Ft/s)
Travel time through pipe =    0.02 min.
Time of concentration (TC) =     4.65 min.


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Process from Point/Station      108.000 to Point/Station      108.000
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**** CONFLUENCE OF MAIN STREAMS ****

The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area = 1.287(Ac.)
Runoff from this stream = 7.715(CFS)
Time of concentration = 4.65 min.
Rainfall intensity = 6.493(In/Hr)
Area averaged loss rate (Fm) = 0.0785(In/Hr)
Area averaged Pervious ratio (Ap) = 0.1000
Summary of stream data:

Stream No.	Flow rate (CFS)	Area (Ac.)	TC (min)	Fm (In/Hr)	Rainfall Intensity (In/Hr)
1	40.62	9.050	12.01	0.079	3.676
2	7.72	1.287	4.65	0.079	6.493

Qmax(1) =
1.000 * 1.000 * 40.617) +
0.561 * 1.000 * 7.715) + = 44.944
Qmax(2) =
1.783 * 0.387 * 40.617) +
1.000 * 1.000 * 7.715) + = 35.775

Total of 2 main streams to confluence:
Flow rates before confluence point:
41.617 8.715
Maximum flow rates at confluence using above data:
44.944 35.775
Area of streams before confluence:
9.050 1.287
Effective area values after confluence:
10.337 4.793

Results of confluence:
Total flow rate = 44.944(CFS)
Time of concentration = 12.008 min.
Effective stream area after confluence = 10.337(Ac.)
Study area average Pervious fraction(Ap) = 0.100
Study area average soil loss rate(Fm) = 0.079(In/Hr)
Study area total = 10.34(Ac.)
End of computations, Total Study Area = 10.43 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.
Note: These figures do not consider reduced effective area
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 0.100

Area averaged SCS curve number = 32.0

Appendix I - Unit Hydrograph Analysis

U n i t H y d r o g r a p h A n a l y s i s

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Study date 10/05/23

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San Bernardino County Synthetic Unit Hydrology Method
Manual date - August 1986

Program License Serial Number 6443

DIVERSIFIED EMPIRE HOTEL
UNIT HYDROGRAPH ANALYSIS
100-YR EXISTING DESIGN STORM
BY LUIS PEREZ 10/05/23

Storm Event Year = 100

Antecedent Moisture Condition = 3

English (in-lb) Input Units Used

English Rainfall Data (Inches) Input Values Used

English Units used in output format

Area averaged rainfall intensity isohyetal data:

Sub-Area (Ac.)	Duration (hours)	Isohyetal (In)
Rainfall data for year 10		
10.43	1	0.95
Rainfall data for year 2		
10.43	6	1.58
Rainfall data for year 2		
10.43	24	2.75

Rainfall data for year 100

```
            10.43            1            1.40
-------------------------------------------------------------------------
Rainfall data for year 100
            10.43            6            3.46
-------------------------------------------------------------------------
Rainfall data for year 100
            10.43           24            6.27
-------------------------------------------------------------------------
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******** Area-averaged max loss rate, Fm ********


SCS curve  SCS curve     Area     Area     Fp(Fig C6)    Ap      Fm
No.(AMCII) NO.(AMC 3)    (Ac.)    Fraction     (In/Hr)  (dec.)   (In/Hr)
 32.0      52.0         10.43      1.000     0.785    1.000    0.785

Area-averaged adjusted loss rate Fm (In/Hr) =  0.785

********* Area-Averaged low loss rate fraction, Yb **********

Area       Area          SCS CN    SCS CN      S     Pervious
 (Ac.)      Fract         (AMC2)    (AMC3)           Yield Fr
    10.43   1.000         32.0      52.0       9.23     0.229

Area-averaged catchment yield fraction, Y =  0.229
Area-averaged low loss fraction, Yb =  0.771
Direct entry of lag time by user
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Watershed area =      10.43(Ac.)
Catchment Lag time =   0.309 hours
Unit interval =   5.000 minutes
Unit interval percentage of lag time = 26.9426
Hydrograph baseflow =     0.00(CFS)
Average maximum watershed loss rate(Fm) =  0.785(In/Hr)
Average low loss rate fraction (Yb) = 0.771 (decimal)
VALLEY DEVELOPED S-Graph Selected
Computed peak 5-minute rainfall =  0.518(In)
Computed peak 30-minute rainfall =  1.061(In)
Specified peak 1-hour rainfall =  1.400(In)
Computed peak 3-hour rainfall =  2.438(In)
Specified peak 6-hour rainfall =  3.460(In)
Specified peak 24-hour rainfall =  6.270(In)


Rainfall depth area reduction factors:
Using a total area of      10.43(Ac.) (Ref: fig. E-4)

5-minute factor = 1.000     Adjusted rainfall =  0.518(In)
30-minute factor = 1.000    Adjusted rainfall =  1.060(In)
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1-hour factor = 1.000 Adjusted rainfall = 1.399(In)
3-hour factor = 1.000 Adjusted rainfall = 2.438(In)
6-hour factor = 1.000 Adjusted rainfall = 3.460(In)
24-hour factor = 1.000 Adjusted rainfall = 6.270(In)

U n i t H y d r o g r a p h

Interval Number	'S' Graph Mean values	Unit Hydrograph ((CFS))
	(K = 126.14 (CFS))	
1	1.695	2.139
2	8.881	9.064
3	24.008	19.081
4	44.467	25.806
5	67.606	29.187
6	81.667	17.736
7	90.303	10.893
8	94.934	5.842
9	97.441	3.162
10	98.407	1.219
11	98.892	0.612
12	99.377	0.612
13	100.000	0.306

Peak Unit Number	Adjusted mass rainfall (In)	Unit rainfall (In)
1	0.5179	0.5179
2	0.6834	0.1655
3	0.8037	0.1203
4	0.9017	0.0980
5	0.9859	0.0842
6	1.0605	0.0746
7	1.1279	0.0674
8	1.1898	0.0619
9	1.2472	0.0574
10	1.3009	0.0537
11	1.3515	0.0506
12	1.3993	0.0479
13	1.4571	0.0578
14	1.5127	0.0556
15	1.5664	0.0537
16	1.6183	0.0519
17	1.6686	0.0503
18	1.7175	0.0489
19	1.7651	0.0476
20	1.8115	0.0464
21	1.8567	0.0452

22	1.9009	0.0442
23	1.9440	0.0432
24	1.9863	0.0423
25	2.0277	0.0414
26	2.0683	0.0406
27	2.1081	0.0398
28	2.1472	0.0391
29	2.1856	0.0384
30	2.2234	0.0378
31	2.2606	0.0372
32	2.2971	0.0366
33	2.3331	0.0360
34	2.3686	0.0355
35	2.4036	0.0350
36	2.4380	0.0345
37	2.4720	0.0340
38	2.5055	0.0335
39	2.5386	0.0331
40	2.5713	0.0327
41	2.6035	0.0323
42	2.6354	0.0319
43	2.6669	0.0315
44	2.6980	0.0311
45	2.7288	0.0308
46	2.7593	0.0305
47	2.7894	0.0301
48	2.8192	0.0298
49	2.8488	0.0295
50	2.8780	0.0292
51	2.9069	0.0289
52	2.9355	0.0286
53	2.9639	0.0284
54	2.9920	0.0281
55	3.0199	0.0279
56	3.0475	0.0276
57	3.0748	0.0274
58	3.1020	0.0271
59	3.1289	0.0269
60	3.1555	0.0267
61	3.1820	0.0265
62	3.2082	0.0262
63	3.2343	0.0260
64	3.2601	0.0258
65	3.2857	0.0256
66	3.3111	0.0254
67	3.3364	0.0252
68	3.3614	0.0251
69	3.3863	0.0249
70	3.4110	0.0247
71	3.4355	0.0245

72	3.4599	0.0244
73	3.4804	0.0205
74	3.5008	0.0204
75	3.5210	0.0202
76	3.5411	0.0201
77	3.5610	0.0199
78	3.5807	0.0198
79	3.6003	0.0196
80	3.6198	0.0195
81	3.6391	0.0193
82	3.6583	0.0192
83	3.6774	0.0191
84	3.6963	0.0189
85	3.7152	0.0188
86	3.7338	0.0187
87	3.7524	0.0186
88	3.7708	0.0184
89	3.7892	0.0183
90	3.8074	0.0182
91	3.8254	0.0181
92	3.8434	0.0180
93	3.8613	0.0179
94	3.8790	0.0178
95	3.8967	0.0176
96	3.9142	0.0175
97	3.9316	0.0174
98	3.9490	0.0173
99	3.9662	0.0172
100	3.9833	0.0171
101	4.0004	0.0170
102	4.0173	0.0169
103	4.0341	0.0168
104	4.0509	0.0168
105	4.0676	0.0167
106	4.0841	0.0166
107	4.1006	0.0165
108	4.1170	0.0164
109	4.1333	0.0163
110	4.1495	0.0162
111	4.1657	0.0161
112	4.1817	0.0161
113	4.1977	0.0160
114	4.2136	0.0159
115	4.2294	0.0158
116	4.2451	0.0157
117	4.2608	0.0157
118	4.2764	0.0156
119	4.2919	0.0155
120	4.3073	0.0154
121	4.3226	0.0154

122	4.3379	0.0153
123	4.3531	0.0152
124	4.3683	0.0151
125	4.3834	0.0151
126	4.3984	0.0150
127	4.4133	0.0149
128	4.4282	0.0149
129	4.4430	0.0148
130	4.4577	0.0147
131	4.4724	0.0147
132	4.4870	0.0146
133	4.5015	0.0145
134	4.5160	0.0145
135	4.5305	0.0144
136	4.5448	0.0144
137	4.5591	0.0143
138	4.5734	0.0142
139	4.5875	0.0142
140	4.6017	0.0141
141	4.6157	0.0141
142	4.6297	0.0140
143	4.6437	0.0140
144	4.6576	0.0139
145	4.6714	0.0138
146	4.6852	0.0138
147	4.6990	0.0137
148	4.7126	0.0137
149	4.7263	0.0136
150	4.7399	0.0136
151	4.7534	0.0135
152	4.7669	0.0135
153	4.7803	0.0134
154	4.7937	0.0134
155	4.8070	0.0133
156	4.8203	0.0133
157	4.8335	0.0132
158	4.8467	0.0132
159	4.8598	0.0131
160	4.8729	0.0131
161	4.8859	0.0130
162	4.8989	0.0130
163	4.9119	0.0129
164	4.9248	0.0129
165	4.9376	0.0129
166	4.9504	0.0128
167	4.9632	0.0128
168	4.9759	0.0127
169	4.9886	0.0127
170	5.0012	0.0126
171	5.0138	0.0126

172	5.0264	0.0126
173	5.0389	0.0125
174	5.0514	0.0125
175	5.0638	0.0124
176	5.0762	0.0124
177	5.0885	0.0123
178	5.1008	0.0123
179	5.1131	0.0123
180	5.1253	0.0122
181	5.1375	0.0122
182	5.1497	0.0122
183	5.1618	0.0121
184	5.1739	0.0121
185	5.1859	0.0120
186	5.1979	0.0120
187	5.2099	0.0120
188	5.2218	0.0119
189	5.2337	0.0119
190	5.2456	0.0119
191	5.2574	0.0118
192	5.2692	0.0118
193	5.2809	0.0118
194	5.2927	0.0117
195	5.3043	0.0117
196	5.3160	0.0116
197	5.3276	0.0116
198	5.3392	0.0116
199	5.3507	0.0115
200	5.3622	0.0115
201	5.3737	0.0115
202	5.3852	0.0114
203	5.3966	0.0114
204	5.4080	0.0114
205	5.4193	0.0114
206	5.4306	0.0113
207	5.4419	0.0113
208	5.4532	0.0113
209	5.4644	0.0112
210	5.4756	0.0112
211	5.4868	0.0112
212	5.4979	0.0111
213	5.5090	0.0111
214	5.5201	0.0111
215	5.5312	0.0110
216	5.5422	0.0110
217	5.5532	0.0110
218	5.5641	0.0110
219	5.5751	0.0109
220	5.5860	0.0109
221	5.5968	0.0109

222	5.6077	0.0108
223	5.6185	0.0108
224	5.6293	0.0108
225	5.6401	0.0108
226	5.6508	0.0107
227	5.6615	0.0107
228	5.6722	0.0107
229	5.6828	0.0107
230	5.6935	0.0106
231	5.7041	0.0106
232	5.7147	0.0106
233	5.7252	0.0106
234	5.7357	0.0105
235	5.7462	0.0105
236	5.7567	0.0105
237	5.7672	0.0104
238	5.7776	0.0104
239	5.7880	0.0104
240	5.7983	0.0104
241	5.8087	0.0103
242	5.8190	0.0103
243	5.8293	0.0103
244	5.8396	0.0103
245	5.8498	0.0103
246	5.8601	0.0102
247	5.8703	0.0102
248	5.8805	0.0102
249	5.8906	0.0102
250	5.9008	0.0101
251	5.9109	0.0101
252	5.9210	0.0101
253	5.9310	0.0101
254	5.9411	0.0100
255	5.9511	0.0100
256	5.9611	0.0100
257	5.9710	0.0100
258	5.9810	0.0100
259	5.9909	0.0099
260	6.0008	0.0099
261	6.0107	0.0099
262	6.0206	0.0099
263	6.0304	0.0098
264	6.0403	0.0098
265	6.0501	0.0098
266	6.0598	0.0098
267	6.0696	0.0098
268	6.0793	0.0097
269	6.0891	0.0097
270	6.0988	0.0097
271	6.1084	0.0097

272	6.1181	0.0097
273	6.1277	0.0096
274	6.1373	0.0096
275	6.1469	0.0096
276	6.1565	0.0096
277	6.1661	0.0096
278	6.1756	0.0095
279	6.1851	0.0095
280	6.1946	0.0095
281	6.2041	0.0095
282	6.2136	0.0095
283	6.2230	0.0094
284	6.2324	0.0094
285	6.2418	0.0094
286	6.2512	0.0094
287	6.2606	0.0094
288	6.2699	0.0093

Unit Period (number)	Unit Rainfall (In)	Unit Soil-Loss (In)	Effective Rainfall (In)
1	0.0093	0.0072	0.0021
2	0.0094	0.0072	0.0021
3	0.0094	0.0073	0.0021
4	0.0094	0.0073	0.0022
5	0.0095	0.0073	0.0022
6	0.0095	0.0073	0.0022
7	0.0095	0.0073	0.0022
8	0.0095	0.0074	0.0022
9	0.0096	0.0074	0.0022
10	0.0096	0.0074	0.0022
11	0.0096	0.0074	0.0022
12	0.0097	0.0074	0.0022
13	0.0097	0.0075	0.0022
14	0.0097	0.0075	0.0022
15	0.0098	0.0075	0.0022
16	0.0098	0.0075	0.0022
17	0.0098	0.0076	0.0022
18	0.0098	0.0076	0.0023
19	0.0099	0.0076	0.0023
20	0.0099	0.0076	0.0023
21	0.0100	0.0077	0.0023
22	0.0100	0.0077	0.0023
23	0.0100	0.0077	0.0023
24	0.0100	0.0077	0.0023
25	0.0101	0.0078	0.0023
26	0.0101	0.0078	0.0023
27	0.0102	0.0078	0.0023
28	0.0102	0.0079	0.0023

29	0.0102	0.0079	0.0023
30	0.0103	0.0079	0.0023
31	0.0103	0.0079	0.0024
32	0.0103	0.0080	0.0024
33	0.0104	0.0080	0.0024
34	0.0104	0.0080	0.0024
35	0.0104	0.0081	0.0024
36	0.0105	0.0081	0.0024
37	0.0105	0.0081	0.0024
38	0.0106	0.0081	0.0024
39	0.0106	0.0082	0.0024
40	0.0106	0.0082	0.0024
41	0.0107	0.0082	0.0024
42	0.0107	0.0083	0.0024
43	0.0108	0.0083	0.0025
44	0.0108	0.0083	0.0025
45	0.0108	0.0084	0.0025
46	0.0109	0.0084	0.0025
47	0.0109	0.0084	0.0025
48	0.0110	0.0085	0.0025
49	0.0110	0.0085	0.0025
50	0.0110	0.0085	0.0025
51	0.0111	0.0086	0.0025
52	0.0111	0.0086	0.0025
53	0.0112	0.0086	0.0026
54	0.0112	0.0087	0.0026
55	0.0113	0.0087	0.0026
56	0.0113	0.0087	0.0026
57	0.0114	0.0088	0.0026
58	0.0114	0.0088	0.0026
59	0.0115	0.0089	0.0026
60	0.0115	0.0089	0.0026
61	0.0116	0.0089	0.0026
62	0.0116	0.0090	0.0027
63	0.0117	0.0090	0.0027
64	0.0117	0.0090	0.0027
65	0.0118	0.0091	0.0027
66	0.0118	0.0091	0.0027
67	0.0119	0.0092	0.0027
68	0.0119	0.0092	0.0027
69	0.0120	0.0093	0.0027
70	0.0120	0.0093	0.0028
71	0.0121	0.0093	0.0028
72	0.0122	0.0094	0.0028
73	0.0122	0.0094	0.0028
74	0.0123	0.0095	0.0028
75	0.0123	0.0095	0.0028
76	0.0124	0.0096	0.0028
77	0.0125	0.0096	0.0029
78	0.0125	0.0097	0.0029

79	0.0126	0.0097	0.0029
80	0.0126	0.0097	0.0029
81	0.0127	0.0098	0.0029
82	0.0128	0.0098	0.0029
83	0.0129	0.0099	0.0029
84	0.0129	0.0100	0.0029
85	0.0130	0.0100	0.0030
86	0.0130	0.0101	0.0030
87	0.0131	0.0101	0.0030
88	0.0132	0.0102	0.0030
89	0.0133	0.0102	0.0030
90	0.0133	0.0103	0.0030
91	0.0134	0.0104	0.0031
92	0.0135	0.0104	0.0031
93	0.0136	0.0105	0.0031
94	0.0136	0.0105	0.0031
95	0.0137	0.0106	0.0031
96	0.0138	0.0106	0.0032
97	0.0139	0.0107	0.0032
98	0.0140	0.0108	0.0032
99	0.0141	0.0109	0.0032
100	0.0141	0.0109	0.0032
101	0.0142	0.0110	0.0033
102	0.0143	0.0110	0.0033
103	0.0144	0.0111	0.0033
104	0.0145	0.0112	0.0033
105	0.0146	0.0113	0.0033
106	0.0147	0.0113	0.0034
107	0.0148	0.0114	0.0034
108	0.0149	0.0115	0.0034
109	0.0150	0.0116	0.0034
110	0.0151	0.0116	0.0034
111	0.0152	0.0117	0.0035
112	0.0153	0.0118	0.0035
113	0.0154	0.0119	0.0035
114	0.0155	0.0120	0.0035
115	0.0157	0.0121	0.0036
116	0.0157	0.0121	0.0036
117	0.0159	0.0123	0.0036
118	0.0160	0.0123	0.0037
119	0.0161	0.0124	0.0037
120	0.0162	0.0125	0.0037
121	0.0164	0.0126	0.0037
122	0.0165	0.0127	0.0038
123	0.0167	0.0129	0.0038
124	0.0168	0.0129	0.0038
125	0.0169	0.0131	0.0039
126	0.0170	0.0131	0.0039
127	0.0172	0.0133	0.0039
128	0.0173	0.0134	0.0040

129	0.0175	0.0135	0.0040
130	0.0176	0.0136	0.0040
131	0.0179	0.0138	0.0041
132	0.0180	0.0139	0.0041
133	0.0182	0.0140	0.0042
134	0.0183	0.0141	0.0042
135	0.0186	0.0143	0.0042
136	0.0187	0.0144	0.0043
137	0.0189	0.0146	0.0043
138	0.0191	0.0147	0.0044
139	0.0193	0.0149	0.0044
140	0.0195	0.0150	0.0045
141	0.0198	0.0152	0.0045
142	0.0199	0.0154	0.0046
143	0.0202	0.0156	0.0046
144	0.0204	0.0157	0.0047
145	0.0244	0.0188	0.0056
146	0.0245	0.0189	0.0056
147	0.0249	0.0192	0.0057
148	0.0251	0.0193	0.0057
149	0.0254	0.0196	0.0058
150	0.0256	0.0198	0.0059
151	0.0260	0.0201	0.0059
152	0.0262	0.0202	0.0060
153	0.0267	0.0206	0.0061
154	0.0269	0.0207	0.0061
155	0.0274	0.0211	0.0063
156	0.0276	0.0213	0.0063
157	0.0281	0.0217	0.0064
158	0.0284	0.0219	0.0065
159	0.0289	0.0223	0.0066
160	0.0292	0.0225	0.0067
161	0.0298	0.0230	0.0068
162	0.0301	0.0232	0.0069
163	0.0308	0.0238	0.0070
164	0.0311	0.0240	0.0071
165	0.0319	0.0246	0.0073
166	0.0323	0.0249	0.0074
167	0.0331	0.0255	0.0076
168	0.0335	0.0259	0.0077
169	0.0345	0.0266	0.0079
170	0.0350	0.0270	0.0080
171	0.0360	0.0278	0.0082
172	0.0366	0.0282	0.0084
173	0.0378	0.0291	0.0086
174	0.0384	0.0296	0.0088
175	0.0398	0.0307	0.0091
176	0.0406	0.0313	0.0093
177	0.0423	0.0326	0.0097
178	0.0432	0.0333	0.0099

179	0.0452	0.0349	0.0103
180	0.0464	0.0358	0.0106
181	0.0489	0.0377	0.0112
182	0.0503	0.0388	0.0115
183	0.0537	0.0414	0.0123
184	0.0556	0.0429	0.0127
185	0.0479	0.0369	0.0109
186	0.0506	0.0390	0.0116
187	0.0574	0.0443	0.0131
188	0.0619	0.0477	0.0141
189	0.0746	0.0575	0.0170
190	0.0842	0.0649	0.0192
191	0.1203	0.0654	0.0549
192	0.1655	0.0654	0.1000
193	0.5179	0.0654	0.4525
194	0.0980	0.0654	0.0326
195	0.0674	0.0520	0.0154
196	0.0537	0.0414	0.0123
197	0.0578	0.0446	0.0132
198	0.0519	0.0401	0.0119
199	0.0476	0.0367	0.0109
200	0.0442	0.0341	0.0101
201	0.0414	0.0319	0.0095
202	0.0391	0.0302	0.0089
203	0.0372	0.0287	0.0085
204	0.0355	0.0274	0.0081
205	0.0340	0.0262	0.0078
206	0.0327	0.0252	0.0075
207	0.0315	0.0243	0.0072
208	0.0305	0.0235	0.0070
209	0.0295	0.0228	0.0067
210	0.0286	0.0221	0.0065
211	0.0279	0.0215	0.0064
212	0.0271	0.0209	0.0062
213	0.0265	0.0204	0.0060
214	0.0258	0.0199	0.0059
215	0.0252	0.0195	0.0058
216	0.0247	0.0191	0.0056
217	0.0205	0.0158	0.0047
218	0.0201	0.0155	0.0046
219	0.0196	0.0151	0.0045
220	0.0192	0.0148	0.0044
221	0.0188	0.0145	0.0043
222	0.0184	0.0142	0.0042
223	0.0181	0.0140	0.0041
224	0.0178	0.0137	0.0041
225	0.0174	0.0134	0.0040
226	0.0171	0.0132	0.0039
227	0.0168	0.0130	0.0039
228	0.0166	0.0128	0.0038

229	0.0163	0.0126	0.0037
230	0.0161	0.0124	0.0037
231	0.0158	0.0122	0.0036
232	0.0156	0.0120	0.0036
233	0.0154	0.0118	0.0035
234	0.0151	0.0117	0.0035
235	0.0149	0.0115	0.0034
236	0.0147	0.0114	0.0034
237	0.0145	0.0112	0.0033
238	0.0144	0.0111	0.0033
239	0.0142	0.0109	0.0032
240	0.0140	0.0108	0.0032
241	0.0138	0.0107	0.0032
242	0.0137	0.0106	0.0031
243	0.0135	0.0104	0.0031
244	0.0134	0.0103	0.0031
245	0.0132	0.0102	0.0030
246	0.0131	0.0101	0.0030
247	0.0129	0.0100	0.0030
248	0.0128	0.0099	0.0029
249	0.0127	0.0098	0.0029
250	0.0126	0.0097	0.0029
251	0.0124	0.0096	0.0028
252	0.0123	0.0095	0.0028
253	0.0122	0.0094	0.0028
254	0.0121	0.0093	0.0028
255	0.0120	0.0092	0.0027
256	0.0119	0.0091	0.0027
257	0.0118	0.0091	0.0027
258	0.0116	0.0090	0.0027
259	0.0115	0.0089	0.0026
260	0.0114	0.0088	0.0026
261	0.0114	0.0088	0.0026
262	0.0113	0.0087	0.0026
263	0.0112	0.0086	0.0026
264	0.0111	0.0085	0.0025
265	0.0110	0.0085	0.0025
266	0.0109	0.0084	0.0025
267	0.0108	0.0083	0.0025
268	0.0107	0.0083	0.0025
269	0.0107	0.0082	0.0024
270	0.0106	0.0082	0.0024
271	0.0105	0.0081	0.0024
272	0.0104	0.0080	0.0024
273	0.0103	0.0080	0.0024
274	0.0103	0.0079	0.0023
275	0.0102	0.0079	0.0023
276	0.0101	0.0078	0.0023
277	0.0101	0.0078	0.0023
278	0.0100	0.0077	0.0023

279	0.0099	0.0077	0.0023
280	0.0099	0.0076	0.0023
281	0.0098	0.0076	0.0022
282	0.0097	0.0075	0.0022
283	0.0097	0.0075	0.0022
284	0.0096	0.0074	0.0022
285	0.0096	0.0074	0.0022
286	0.0095	0.0073	0.0022
287	0.0094	0.0073	0.0022
288	0.0094	0.0072	0.0021

Total soil rain loss = 4.40(In)
Total effective rainfall = 1.87(In)
Peak flow rate in flood hydrograph = 17.06(CFS)

++

24 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	5.0	10.0	15.0	20.0
0+ 5	0.0000	0.00	Q				
0+10	0.0002	0.02	Q				
0+15	0.0006	0.06	Q				
0+20	0.0015	0.12	Q				
0+25	0.0027	0.18	Q				
0+30	0.0043	0.22	Q				
0+35	0.0059	0.25	Q				
0+40	0.0077	0.26	Q				
0+45	0.0095	0.27	Q				
0+50	0.0114	0.27	Q				
0+55	0.0133	0.27	Q				
1+ 0	0.0152	0.27	Q				
1+ 5	0.0170	0.28	Q				
1+10	0.0189	0.28	Q				
1+15	0.0209	0.28	Q				
1+20	0.0228	0.28	Q				
1+25	0.0247	0.28	Q				
1+30	0.0266	0.28	Q				
1+35	0.0285	0.28	Q				
1+40	0.0305	0.28	Q				
1+45	0.0324	0.28	Q				
1+50	0.0344	0.28	Q				
1+55	0.0363	0.28	Q				
2+ 0	0.0383	0.28	Q				
2+ 5	0.0403	0.29	Q				

2+10	0.0422	0.29	QV	|	|	|	|
2+15	0.0442	0.29	QV	|	|	|	|
2+20	0.0462	0.29	QV	|	|	|	|
2+25	0.0482	0.29	QV	|	|	|	|
2+30	0.0502	0.29	QV	|	|	|	|
2+35	0.0522	0.29	QV	|	|	|	|
2+40	0.0542	0.29	QV	|	|	|	|
2+45	0.0562	0.29	QV	|	|	|	|
2+50	0.0583	0.29	QV	|	|	|	|
2+55	0.0603	0.30	QV	|	|	|	|
3+ 0	0.0624	0.30	QV	|	|	|	|
3+ 5	0.0644	0.30	QV	|	|	|	|
3+10	0.0665	0.30	QV	|	|	|	|
3+15	0.0685	0.30	QV	|	|	|	|
3+20	0.0706	0.30	QV	|	|	|	|
3+25	0.0727	0.30	QV	|	|	|	|
3+30	0.0748	0.30	QV	|	|	|	|
3+35	0.0769	0.30	QV	|	|	|	|
3+40	0.0790	0.31	QV	|	|	|	|
3+45	0.0811	0.31	Q V	|	|	|	|
3+50	0.0832	0.31	Q V	|	|	|	|
3+55	0.0853	0.31	Q V	|	|	|	|
4+ 0	0.0875	0.31	Q V	|	|	|	|
4+ 5	0.0896	0.31	Q V	|	|	|	|
4+10	0.0918	0.31	Q V	|	|	|	|
4+15	0.0939	0.31	Q V	|	|	|	|
4+20	0.0961	0.32	Q V	|	|	|	|
4+25	0.0983	0.32	Q V	|	|	|	|
4+30	0.1005	0.32	Q V	|	|	|	|
4+35	0.1027	0.32	Q V	|	|	|	|
4+40	0.1049	0.32	Q V	|	|	|	|
4+45	0.1071	0.32	Q V	|	|	|	|
4+50	0.1093	0.32	Q V	|	|	|	|
4+55	0.1116	0.32	Q V	|	|	|	|
5+ 0	0.1138	0.33	Q V	|	|	|	|
5+ 5	0.1161	0.33	Q V	|	|	|	|
5+10	0.1183	0.33	Q V	|	|	|	|
5+15	0.1206	0.33	Q V	|	|	|	|
5+20	0.1229	0.33	Q V	|	|	|	|
5+25	0.1252	0.33	Q V	|	|	|	|
5+30	0.1275	0.33	Q V	|	|	|	|
5+35	0.1298	0.34	Q V	|	|	|	|
5+40	0.1321	0.34	Q V	|	|	|	|
5+45	0.1344	0.34	Q V	|	|	|	|
5+50	0.1368	0.34	Q V	|	|	|	|
5+55	0.1391	0.34	Q V	|	|	|	|
6+ 0	0.1415	0.34	Q V	|	|	|	|
6+ 5	0.1439	0.34	Q V	|	|	|	|
6+10	0.1462	0.35	Q V	|	|	|	|
6+15	0.1486	0.35	Q V	|	|	|	|

```
 6+20       0.1510      0.35  Q  V      |          |          |          |
 6+25       0.1535      0.35  Q  V      |          |          |          |
 6+30       0.1559      0.35  Q  V      |          |          |          |
 6+35       0.1583      0.35  Q  V      |          |          |          |
 6+40       0.1608      0.36  Q  V      |          |          |          |
 6+45       0.1633      0.36  Q   V     |          |          |          |
 6+50       0.1657      0.36  Q   V     |          |          |          |
 6+55       0.1682      0.36  Q   V     |          |          |          |
 7+ 0       0.1707      0.36  Q   V     |          |          |          |
 7+ 5       0.1732      0.37  Q   V     |          |          |          |
 7+10       0.1758      0.37  Q   V     |          |          |          |
 7+15       0.1783      0.37  Q   V     |          |          |          |
 7+20       0.1809      0.37  Q   V     |          |          |          |
 7+25       0.1834      0.37  Q   V     |          |          |          |
 7+30       0.1860      0.38  Q   V     |          |          |          |
 7+35       0.1886      0.38  Q   V     |          |          |          |
 7+40       0.1912      0.38  Q   V     |          |          |          |
 7+45       0.1939      0.38  Q   V     |          |          |          |
 7+50       0.1965      0.38  Q   V     |          |          |          |
 7+55       0.1992      0.39  Q   V     |          |          |          |
 8+ 0       0.2018      0.39  Q   V     |          |          |          |
 8+ 5       0.2045      0.39  Q    V    |          |          |          |
 8+10       0.2072      0.39  Q    V    |          |          |          |
 8+15       0.2099      0.39  Q    V    |          |          |          |
 8+20       0.2127      0.40  Q    V    |          |          |          |
 8+25       0.2154      0.40  Q    V    |          |          |          |
 8+30       0.2182      0.40  Q    V    |          |          |          |
 8+35       0.2210      0.40  Q    V    |          |          |          |
 8+40       0.2238      0.41  Q    V    |          |          |          |
 8+45       0.2266      0.41  Q    V    |          |          |          |
 8+50       0.2294      0.41  Q    V    |          |          |          |
 8+55       0.2323      0.41  Q    V    |          |          |          |
 9+ 0       0.2351      0.42  Q    V    |          |          |          |
 9+ 5       0.2380      0.42  Q    V    |          |          |          |
 9+10       0.2409      0.42  Q    V    |          |          |          |
 9+15       0.2439      0.43  Q     V   |          |          |          |
 9+20       0.2468      0.43  Q     V   |          |          |          |
 9+25       0.2498      0.43  Q     V   |          |          |          |
 9+30       0.2528      0.43  Q     V   |          |          |          |
 9+35       0.2558      0.44  Q     V   |          |          |          |
 9+40       0.2588      0.44  Q     V   |          |          |          |
 9+45       0.2619      0.44  Q     V   |          |          |          |
 9+50       0.2649      0.45  Q     V   |          |          |          |
 9+55       0.2680      0.45  Q     V   |          |          |          |
10+ 0       0.2711      0.45  Q     V   |          |          |          |
10+ 5       0.2743      0.46  Q     V   |          |          |          |
10+10       0.2775      0.46  Q     V   |          |          |          |
10+15       0.2806      0.46  Q     V   |          |          |          |
10+20       0.2839      0.47  Q      V  |          |          |          |
10+25       0.2871      0.47  Q      V  |          |          |          |
```

```
10+30       0.2904      0.47  Q      V  |          |          |          |
10+35       0.2937      0.48  Q      V  |          |          |          |
10+40       0.2970      0.48  Q      V  |          |          |          |
10+45       0.3003      0.49  Q      V  |          |          |          |
10+50       0.3037      0.49  Q      V  |          |          |          |
10+55       0.3071      0.49  Q      V  |          |          |          |
11+ 0       0.3106      0.50  Q      V  |          |          |          |
11+ 5       0.3140      0.50  |Q     V  |          |          |          |
11+10       0.3175      0.51  |Q     V  |          |          |          |
11+15       0.3211      0.51  |Q     V  |          |          |          |
11+20       0.3246      0.52  |Q      V |          |          |          |
11+25       0.3282      0.52  |Q      V |          |          |          |
11+30       0.3319      0.53  |Q      V |          |          |          |
11+35       0.3355      0.53  |Q      V |          |          |          |
11+40       0.3393      0.54  |Q      V |          |          |          |
11+45       0.3430      0.54  |Q      V |          |          |          |
11+50       0.3468      0.55  |Q      V |          |          |          |
11+55       0.3506      0.56  |Q      V |          |          |          |
12+ 0       0.3545      0.56  |Q      V |          |          |          |
12+ 5       0.3584      0.57  |Q      V |          |          |          |
12+10       0.3624      0.58  |Q      V |          |          |          |
12+15       0.3666      0.61  |Q       V|          |          |          |
12+20       0.3710      0.63  |Q       V|          |          |          |
12+25       0.3755      0.67  |Q       V|          |          |          |
12+30       0.3803      0.69  |Q       V|          |          |          |
12+35       0.3851      0.70  |Q       V|          |          |          |
12+40       0.3901      0.72  |Q       V|          |          |          |
12+45       0.3951      0.73  |Q       V|          |          |          |
12+50       0.4002      0.74  |Q       V|          |          |          |
12+55       0.4053      0.75  |Q        V          |          |          |
13+ 0       0.4105      0.76  |Q        V          |          |          |
13+ 5       0.4158      0.77  |Q        V          |          |          |
13+10       0.4211      0.78  |Q        V          |          |          |
13+15       0.4266      0.79  |Q        V          |          |          |
13+20       0.4320      0.80  |Q        V          |          |          |
13+25       0.4376      0.81  |Q        V          |          |          |
13+30       0.4432      0.82  |Q        V          |          |          |
13+35       0.4490      0.83  |Q         |V         |          |          |
13+40       0.4548      0.84  |Q         |V         |          |          |
13+45       0.4607      0.86  |Q         |V         |          |          |
13+50       0.4667      0.87  |Q         |V         |          |          |
13+55       0.4728      0.89  |Q         |V         |          |          |
14+ 0       0.4790      0.90  |Q         |V         |          |          |
14+ 5       0.4853      0.92  |Q         | V        |          |          |
14+10       0.4917      0.93  |Q         | V        |          |          |
14+15       0.4983      0.95  |Q         | V        |          |          |
14+20       0.5050      0.97  |Q         | V        |          |          |
14+25       0.5118      0.99  |Q         | V        |          |          |
14+30       0.5188      1.01  | Q        | V        |          |          |
14+35       0.5259      1.04  | Q        |  V       |          |          |
```

14+40	0.5332	1.06	Q	V			
14+45	0.5407	1.09	Q	V			
14+50	0.5484	1.12	Q	V			
14+55	0.5563	1.15	Q	V			
15+ 0	0.5644	1.18	Q	V			
15+ 5	0.5728	1.22	Q	V			
15+10	0.5815	1.26	Q	V			
15+15	0.5905	1.31	Q	V			
15+20	0.5998	1.36	Q	V			
15+25	0.6095	1.41	Q	V			
15+30	0.6195	1.45	Q	V			
15+35	0.6296	1.47	Q	V			
15+40	0.6399	1.49	Q	V			
15+45	0.6504	1.52	Q	V			
15+50	0.6615	1.61	Q	V			
15+55	0.6741	1.83	Q	V			
16+ 0	0.6908	2.43	Q	V			
16+ 5	0.7215	4.45	Q	V			
16+10	0.7811	8.66	Q V				
16+15	0.8763	13.83	V Q				
16+20	0.9917	16.75	V Q				
16+25	1.1091	17.06	V Q				
16+30	1.1867	11.27	Q V				
16+35	1.2381	7.46	Q V				
16+40	1.2707	4.73	Q V				
16+45	1.2926	3.19	Q V				
16+50	1.3073	2.14	Q V				
16+55	1.3192	1.73	Q V				
17+ 0	1.3302	1.59	Q V				
17+ 5	1.3395	1.35	Q V				
17+10	1.3474	1.14	Q V				
17+15	1.3548	1.08	Q V				
17+20	1.3618	1.03	Q V				
17+25	1.3686	0.98	Q V				
17+30	1.3751	0.94	Q V				
17+35	1.3814	0.91	Q V				
17+40	1.3874	0.88	Q V				
17+45	1.3933	0.85	Q V				
17+50	1.3990	0.82	Q V				
17+55	1.4045	0.80	Q V				
18+ 0	1.4099	0.78	Q V				
18+ 5	1.4151	0.76	Q V				
18+10	1.4201	0.73	Q V				
18+15	1.4250	0.70	Q V				
18+20	1.4295	0.66	Q V				
18+25	1.4338	0.62	Q V				
18+30	1.4379	0.60	Q V				
18+35	1.4419	0.57	Q V				
18+40	1.4457	0.56	Q V				
18+45	1.4494	0.54	Q V				

```
18+50       1.4531      0.53  |Q        |         |         |    V    |
18+55       1.4567      0.52  |Q        |         |         |     V   |
19+ 0       1.4602      0.51  |Q        |         |         |     V   |
19+ 5       1.4636      0.50  |Q        |         |         |     V   |
19+10       1.4670      0.49  Q         |         |         |     V   |
19+15       1.4704      0.48  Q         |         |         |     V   |
19+20       1.4736      0.48  Q         |         |         |     V   |
19+25       1.4769      0.47  Q         |         |         |     V   |
19+30       1.4800      0.46  Q         |         |         |     V   |
19+35       1.4832      0.45  Q         |         |         |     V   |
19+40       1.4862      0.45  Q         |         |         |     V   |
19+45       1.4893      0.44  Q         |         |         |     V   |
19+50       1.4923      0.43  Q         |         |         |     V   |
19+55       1.4952      0.43  Q         |         |         |      V  |
20+ 0       1.4981      0.42  Q         |         |         |      V  |
20+ 5       1.5010      0.42  Q         |         |         |      V  |
20+10       1.5039      0.41  Q         |         |         |      V  |
20+15       1.5067      0.41  Q         |         |         |      V  |
20+20       1.5094      0.40  Q         |         |         |      V  |
20+25       1.5122      0.40  Q         |         |         |      V  |
20+30       1.5149      0.39  Q         |         |         |      V  |
20+35       1.5175      0.39  Q         |         |         |      V  |
20+40       1.5202      0.38  Q         |         |         |      V  |
20+45       1.5228      0.38  Q         |         |         |      V  |
20+50       1.5254      0.38  Q         |         |         |      V  |
20+55       1.5280      0.37  Q         |         |         |      V  |
21+ 0       1.5305      0.37  Q         |         |         |      V  |
21+ 5       1.5330      0.36  Q         |         |         |      V  |
21+10       1.5355      0.36  Q         |         |         |       V |
21+15       1.5379      0.36  Q         |         |         |       V |
21+20       1.5404      0.35  Q         |         |         |       V |
21+25       1.5428      0.35  Q         |         |         |       V |
21+30       1.5452      0.35  Q         |         |         |       V |
21+35       1.5475      0.34  Q         |         |         |       V |
21+40       1.5499      0.34  Q         |         |         |       V |
21+45       1.5522      0.34  Q         |         |         |       V |
21+50       1.5545      0.33  Q         |         |         |       V |
21+55       1.5568      0.33  Q         |         |         |       V |
22+ 0       1.5590      0.33  Q         |         |         |       V |
22+ 5       1.5613      0.33  Q         |         |         |       V |
22+10       1.5635      0.32  Q         |         |         |       V |
22+15       1.5657      0.32  Q         |         |         |       V |
22+20       1.5679      0.32  Q         |         |         |       V |
22+25       1.5701      0.32  Q         |         |         |       V |
22+30       1.5722      0.31  Q         |         |         |       V |
22+35       1.5744      0.31  Q         |         |         |       V |
22+40       1.5765      0.31  Q         |         |         |        V|
22+45       1.5786      0.31  Q         |         |         |        V|
22+50       1.5807      0.30  Q         |         |         |        V|
22+55       1.5828      0.30  Q         |         |         |        V|
```

```
   23+ 0       1.5848      0.30  Q          |          |          |         V|
   23+ 5       1.5869      0.30  Q          |          |          |         V|
   23+10       1.5889      0.30  Q          |          |          |         V|
   23+15       1.5909      0.29  Q          |          |          |         V|
   23+20       1.5929      0.29  Q          |          |          |         V|
   23+25       1.5949      0.29  Q          |          |          |         V|
   23+30       1.5969      0.29  Q          |          |          |         V|
   23+35       1.5989      0.29  Q          |          |          |         V|
   23+40       1.6008      0.28  Q          |          |          |         V|
   23+45       1.6028      0.28  Q          |          |          |         V|
   23+50       1.6047      0.28  Q          |          |          |         V|
   23+55       1.6066      0.28  Q          |          |          |         V|
   24+ 0       1.6085      0.28  Q          |          |          |         V|
   24+ 5       1.6104      0.27  Q          |          |          |         V|
   24+10       1.6121      0.25  Q          |          |          |         V|
   24+15       1.6135      0.21  Q          |          |          |         V|
   24+20       1.6145      0.15  Q          |          |          |         V|
   24+25       1.6151      0.09  Q          |          |          |         V|
   24+30       1.6155      0.05  Q          |          |          |         V|
   24+35       1.6156      0.03  Q          |          |          |         V|
   24+40       1.6157      0.01  Q          |          |          |         V|
   24+45       1.6158      0.01  Q          |          |          |         V|
   24+50       1.6158      0.00  Q          |          |          |         V|
   24+55       1.6158      0.00  Q          |          |          |         V|
   25+ 0       1.6158      0.00  Q          |          |          |          V
-------------------------------------------------------------------------
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U n i t H y d r o g r a p h A n a l y s i s

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Study date 10/05/23

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San Bernardino County Synthetic Unit Hydrology Method
Manual date - August 1986

Program License Serial Number 6443

Storm Event Year = 100

Antecedent Moisture Condition = 3

English (in-lb) Input Units Used

English Rainfall Data (Inches) Input Values Used

English Units used in output format

Area averaged rainfall intensity isohyetal data:

Sub-Area (Ac.)	Duration (hours)	Isohyetal (In)
Rainfall data for year 10		
10.43	1	0.95
Rainfall data for year 2		
10.43	6	1.58
Rainfall data for year 2		
10.43	24	2.75
Rainfall data for year 100		

```
            10.43            1           1.40
-------------------------------------------------------------------
Rainfall data for year 100
            10.43            6           3.46
-------------------------------------------------------------------
Rainfall data for year 100
            10.43           24           6.27
-------------------------------------------------------------------
+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

******** Area-averaged max loss rate, Fm ********


SCS curve  SCS curve     Area     Area     Fp(Fig C6)    Ap      Fm
No.(AMCII) NO.(AMC 3)    (Ac.)    Fraction     (In/Hr)  (dec.)   (In/Hr)
 32.0      52.0         10.43      1.000     0.785    0.200    0.157

Area-averaged adjusted loss rate Fm (In/Hr) =  0.157

********* Area-Averaged low loss rate fraction, Yb **********

Area       Area          SCS CN    SCS CN      S     Pervious
 (Ac.)      Fract         (AMC2)    (AMC3)           Yield Fr
     2.09   0.200         32.0      52.0       9.23     0.229
     8.34   0.800         98.0      98.0       0.20     0.962

Area-averaged catchment yield fraction, Y =  0.815
Area-averaged low loss fraction, Yb =  0.185
Direct entry of lag time by user
+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Watershed area =      10.43(Ac.)
Catchment Lag time =   0.160 hours
Unit interval =  15.000 minutes
Unit interval percentage of lag time = 156.1524
Hydrograph baseflow =     0.00(CFS)
Average maximum watershed loss rate(Fm) =  0.157(In/Hr)
Average low loss rate fraction (Yb) = 0.185 (decimal)
VALLEY DEVELOPED S-Graph Selected
Computed peak 5-minute rainfall =  0.518(In)
Computed peak 30-minute rainfall =  1.061(In)
Specified peak 1-hour rainfall =  1.400(In)
Computed peak 3-hour rainfall =  2.438(In)
Specified peak 6-hour rainfall =  3.460(In)
Specified peak 24-hour rainfall =  6.270(In)


Rainfall depth area reduction factors:
Using a total area of      10.43(Ac.) (Ref: fig. E-4)

5-minute factor = 1.000     Adjusted rainfall =  0.518(In)
```

30-minute factor = 1.000 Adjusted rainfall = 1.060(In)
1-hour factor = 1.000 Adjusted rainfall = 1.399(In)
3-hour factor = 1.000 Adjusted rainfall = 2.438(In)
6-hour factor = 1.000 Adjusted rainfall = 3.460(In)
24-hour factor = 1.000 Adjusted rainfall = 6.270(In)

U n i t H y d r o g r a p h

Interval Number	'S' Graph Mean values	Unit Hydrograph ((CFS))
	(K = 42.05 (CFS))	
1	36.342	15.280
2	96.001	25.084
3	100.000	1.682

Peak Unit Number	Adjusted mass rainfall (In)	Unit rainfall (In)
1	0.8037	0.1203
2	1.0605	0.0746
3	1.2472	0.0574
4	1.3993	0.0479
5	1.5664	0.0537
6	1.7175	0.0489
7	1.8567	0.0452
8	1.9863	0.0423
9	2.1081	0.0398
10	2.2234	0.0378
11	2.3331	0.0360
12	2.4380	0.0345
13	2.5386	0.0331
14	2.6354	0.0319
15	2.7288	0.0308
16	2.8192	0.0298
17	2.9069	0.0289
18	2.9920	0.0281
19	3.0748	0.0274
20	3.1555	0.0267
21	3.2343	0.0260
22	3.3111	0.0254
23	3.3863	0.0249
24	3.4599	0.0244
25	3.5210	0.0202
26	3.5807	0.0198
27	3.6391	0.0193
28	3.6963	0.0189
29	3.7524	0.0186
30	3.8074	0.0182

31	3.8613	0.0179
32	3.9142	0.0175
33	3.9662	0.0172
34	4.0173	0.0169
35	4.0676	0.0167
36	4.1170	0.0164
37	4.1657	0.0161
38	4.2136	0.0159
39	4.2608	0.0157
40	4.3073	0.0154
41	4.3531	0.0152
42	4.3984	0.0150
43	4.4430	0.0148
44	4.4870	0.0146
45	4.5305	0.0144
46	4.5734	0.0142
47	4.6157	0.0141
48	4.6576	0.0139
49	4.6990	0.0137
50	4.7399	0.0136
51	4.7803	0.0134
52	4.8203	0.0133
53	4.8598	0.0131
54	4.8989	0.0130
55	4.9376	0.0129
56	4.9759	0.0127
57	5.0138	0.0126
58	5.0514	0.0125
59	5.0885	0.0123
60	5.1253	0.0122
61	5.1618	0.0121
62	5.1979	0.0120
63	5.2337	0.0119
64	5.2692	0.0118
65	5.3043	0.0117
66	5.3392	0.0116
67	5.3737	0.0115
68	5.4080	0.0114
69	5.4419	0.0113
70	5.4756	0.0112
71	5.5090	0.0111
72	5.5422	0.0110
73	5.5751	0.0109
74	5.6077	0.0108
75	5.6401	0.0108
76	5.6722	0.0107
77	5.7041	0.0106
78	5.7357	0.0105
79	5.7672	0.0104
80	5.7983	0.0104

81	5.8293	0.0103
82	5.8601	0.0102
83	5.8906	0.0102
84	5.9210	0.0101
85	5.9511	0.0100
86	5.9810	0.0100
87	6.0107	0.0099
88	6.0403	0.0098
89	6.0696	0.0098
90	6.0988	0.0097
91	6.1277	0.0096
92	6.1565	0.0096
93	6.1851	0.0095
94	6.2136	0.0095
95	6.2418	0.0094
96	6.2699	0.0093

Unit Period (number)	Unit Rainfall (In)	Unit Soil-Loss (In)	Effective Rainfall (In)
1	0.0281	0.0052	0.0229
2	0.0284	0.0052	0.0231
3	0.0286	0.0053	0.0233
4	0.0289	0.0053	0.0236
5	0.0292	0.0054	0.0238
6	0.0294	0.0054	0.0240
7	0.0297	0.0055	0.0243
8	0.0300	0.0055	0.0245
9	0.0304	0.0056	0.0247
10	0.0307	0.0057	0.0250
11	0.0310	0.0057	0.0253
12	0.0313	0.0058	0.0255
13	0.0317	0.0059	0.0258
14	0.0320	0.0059	0.0261
15	0.0324	0.0060	0.0264
16	0.0328	0.0061	0.0267
17	0.0332	0.0061	0.0270
18	0.0336	0.0062	0.0274
19	0.0340	0.0063	0.0277
20	0.0344	0.0064	0.0281
21	0.0349	0.0064	0.0284
22	0.0353	0.0065	0.0288
23	0.0358	0.0066	0.0292
24	0.0363	0.0067	0.0296
25	0.0368	0.0068	0.0300
26	0.0374	0.0069	0.0305
27	0.0380	0.0070	0.0309
28	0.0385	0.0071	0.0314
29	0.0392	0.0072	0.0319

30	0.0398	0.0073	0.0324
31	0.0405	0.0075	0.0330
32	0.0412	0.0076	0.0336
33	0.0419	0.0077	0.0342
34	0.0427	0.0079	0.0348
35	0.0435	0.0080	0.0355
36	0.0443	0.0082	0.0362
37	0.0453	0.0084	0.0369
38	0.0462	0.0085	0.0377
39	0.0473	0.0087	0.0385
40	0.0483	0.0089	0.0394
41	0.0495	0.0091	0.0404
42	0.0507	0.0094	0.0414
43	0.0521	0.0096	0.0425
44	0.0535	0.0099	0.0436
45	0.0551	0.0102	0.0449
46	0.0567	0.0105	0.0462
47	0.0586	0.0108	0.0478
48	0.0605	0.0112	0.0493
49	0.0737	0.0136	0.0601
50	0.0761	0.0141	0.0621
51	0.0789	0.0146	0.0644
52	0.0819	0.0151	0.0667
53	0.0854	0.0158	0.0696
54	0.0892	0.0165	0.0727
55	0.0938	0.0173	0.0765
56	0.0989	0.0183	0.0806
57	0.1054	0.0195	0.0859
58	0.1127	0.0208	0.0919
59	0.1227	0.0227	0.1000
60	0.1348	0.0249	0.1099
61	0.1529	0.0282	0.1247
62	0.1540	0.0284	0.1256
63	0.1939	0.0358	0.1581
64	0.3700	0.0393	0.3307
65	0.6834	0.0393	0.6441
66	0.1634	0.0302	0.1332
67	0.1331	0.0246	0.1086
68	0.1117	0.0206	0.0911
69	0.0981	0.0181	0.0800
70	0.0886	0.0164	0.0722
71	0.0814	0.0150	0.0664
72	0.0758	0.0140	0.0618
73	0.0602	0.0111	0.0491
74	0.0564	0.0104	0.0460
75	0.0533	0.0098	0.0434
76	0.0505	0.0093	0.0412
77	0.0482	0.0089	0.0393
78	0.0461	0.0085	0.0376
79	0.0442	0.0082	0.0361

80	0.0426	0.0079	0.0347
81	0.0411	0.0076	0.0335
82	0.0397	0.0073	0.0324
83	0.0384	0.0071	0.0313
84	0.0373	0.0069	0.0304
85	0.0362	0.0067	0.0295
86	0.0353	0.0065	0.0287
87	0.0344	0.0063	0.0280
88	0.0335	0.0062	0.0273
89	0.0327	0.0060	0.0267
90	0.0320	0.0059	0.0261
91	0.0313	0.0058	0.0255
92	0.0306	0.0057	0.0250
93	0.0300	0.0055	0.0245
94	0.0294	0.0054	0.0240
95	0.0288	0.0053	0.0235
96	0.0283	0.0052	0.0231

Total soil rain loss = 1.04(In)
Total effective rainfall = 5.23(In)
Peak flow rate in flood hydrograph = 18.75(CFS)

++

24 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 15 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	5.0	10.0	15.0	20.0
0+15	0.0072	0.35	Q	|	|	|	|
0+30	0.0264	0.93	VQ	|	|	|	|
0+45	0.0466	0.98	VQ	|	|	|	|
1+ 0	0.0669	0.98	VQ	|	|	|	|
1+15	0.0874	0.99	VQ	|	|	|	|
1+30	0.1082	1.00	V Q	|	|	|	|
1+45	0.1291	1.01	|VQ	|	|	|	|
2+ 0	0.1502	1.02	|VQ	|	|	|	|
2+15	0.1716	1.03	|VQ	|	|	|	|
2+30	0.1931	1.04	|VQ	|	|	|	|
2+45	0.2149	1.05	|VQ	|	|	|	|
3+ 0	0.2370	1.07	| Q	|	|	|	|
3+15	0.2592	1.08	| Q	|	|	|	|
3+30	0.2817	1.09	| Q	|	|	|	|
3+45	0.3045	1.10	| Q	|	|	|	|
4+ 0	0.3275	1.11	| Q	|	|	|	|
4+15	0.3508	1.13	| QV	|	|	|	|
4+30	0.3744	1.14	| QV	|	|	|	|

4+45	0.3983	1.16	QV				
5+ 0	0.4225	1.17	QV				
5+15	0.4469	1.18	QV				
5+30	0.4718	1.20	Q V				
5+45	0.4969	1.22	Q V				
6+ 0	0.5224	1.23	Q V				
6+15	0.5482	1.25	Q V				
6+30	0.5744	1.27	Q V				
6+45	0.6010	1.29	Q V				
7+ 0	0.6281	1.31	Q V				
7+15	0.6555	1.33	Q V				
7+30	0.6834	1.35	Q V				
7+45	0.7117	1.37	Q V				
8+ 0	0.7405	1.40	Q V				
8+15	0.7699	1.42	Q V				
8+30	0.7997	1.45	Q V				
8+45	0.8301	1.47	Q V				
9+ 0	0.8611	1.50	Q V				
9+15	0.8928	1.53	Q V				
9+30	0.9251	1.56	Q V				
9+45	0.9580	1.60	Q V				
10+ 0	0.9918	1.63	Q V				
10+15	1.0263	1.67	Q V				
10+30	1.0616	1.71	Q V				
10+45	1.0979	1.75	Q V				
11+ 0	1.1351	1.80	Q V				
11+15	1.1733	1.85	Q V				
11+30	1.2127	1.91	Q V				
11+45	1.2533	1.96	Q V				
12+ 0	1.2952	2.03	Q V				
12+15	1.3414	2.24	Q V				
12+30	1.3939	2.54	Q V				
12+45	1.4485	2.64	Q V				
13+ 0	1.5050	2.74	Q V				
13+15	1.5639	2.85	Q V				
13+30	1.6252	2.97	Q V				
13+45	1.6895	3.11	Q V				
14+ 0	1.7571	3.27	Q V				
14+15	1.8286	3.46	Q V				
14+30	1.9050	3.70	Q V				
14+45	1.9872	3.98	Q V				
15+ 0	2.0769	4.34	Q V				
15+15	2.1767	4.83	Q V				
15+30	2.2848	5.23	Q V				
15+45	2.4041	5.77	Q V				
16+ 0	2.5948	9.23	Q V				
16+15	2.9750	18.40	V	Q			
16+30	3.3624	18.75	V	Q			
16+45	3.4881	6.08	Q V				
17+ 0	3.5777	4.34	Q V				

```
  17+15       3.6540      3.69  |      Q  |         |         | V       |
  17+30       3.7214      3.26  |     Q   |         |         | V       |
  17+45       3.7826      2.96  |    Q    |         |         |  V      |
  18+ 0       3.8390      2.73  |    Q    |         |         |  V      |
  18+15       3.8888      2.41  |   Q     |         |         |   V     |
  18+30       3.9309      2.04  |   Q     |         |         |   V     |
  18+45       3.9702      1.90  |  Q      |         |         |   V     |
  19+ 0       4.0073      1.80  |  Q      |         |         |    V    |
  19+15       4.0426      1.71  |  Q      |         |         |    V    |
  19+30       4.0762      1.63  |  Q      |         |         |    V    |
  19+45       4.1085      1.56  |  Q      |         |         |     V   |
  20+ 0       4.1394      1.50  | Q       |         |         |     V   |
  20+15       4.1692      1.44  | Q       |         |         |     V   |
  20+30       4.1980      1.39  | Q       |         |         |     V   |
  20+45       4.2258      1.35  | Q       |         |         |      V  |
  21+ 0       4.2528      1.31  | Q       |         |         |      V  |
  21+15       4.2789      1.27  | Q       |         |         |      V  |
  21+30       4.3044      1.23  | Q       |         |         |      V  |
  21+45       4.3291      1.20  | Q       |         |         |       V |
  22+ 0       4.3533      1.17  | Q       |         |         |       V |
  22+15       4.3768      1.14  | Q       |         |         |       V |
  22+30       4.3998      1.11  | Q       |         |         |       V |
  22+45       4.4223      1.09  | Q       |         |         |       V |
  23+ 0       4.4443      1.06  | Q       |         |         |        V|
  23+15       4.4658      1.04  | Q       |         |         |        V|
  23+30       4.4870      1.02  | Q       |         |         |        V|
  23+45       4.5077      1.00  | Q       |         |         |        V|
  24+ 0       4.5280      0.98  |Q        |         |         |        V|
-------------------------------------------------------------------------
```

Appendix J - Basin Routing Analysis

User Inputs

Chamber Model:	MC-3500
Outlet Control Structure:	No
Project Name:	
Engineer:	N/A
Project Location:	
Measurement Type:	Imperial
Required Storage Volume:	40200 cubic ft.
Stone Porosity:	40%
Stone Foundation Depth:	12 in.
Stone Above Chambers:	12 in.
Average Cover Over Chambers:	18 in.
Design Constraint Dimensions:	(110 ft. x 150 ft.)

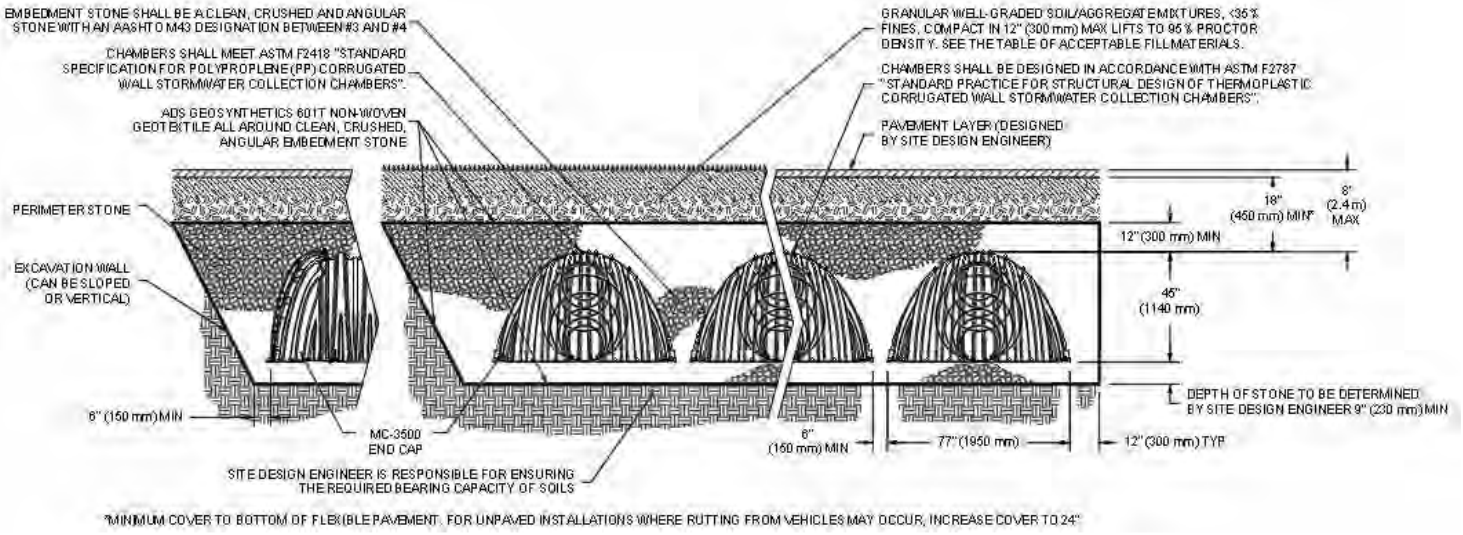
Results

System Volume and Bed Size

Installed Storage Volume:	40932.80 cubic ft.
Storage Volume Per Chamber:	109.90 cubic ft.
Number Of Chambers Required:	214
Number Of End Caps Required:	22
Chamber Rows:	11
Maximum Length:	153.57 ft.
Maximum Width:	77.58 ft.
Approx. Bed Size Required:	11576.07 square ft.

System Components

Amount Of Stone Required:	1583 cubic yards
Volume Of Excavation (Not Including Fill):	2466 cubic yards
Total Non-woven Geotextile Required:	3442 square yards
Woven Geotextile Required (excluding Isolator Row):	151 square yards
Woven Geotextile Required (Isolator Row):	172 square yards
Total Woven Geotextile Required:	323 square yards
Impervious Liner Required:	0 square yards



Advanced Drainage Systems, Inc.

SiteAssist®
FOR STORMTECH INSTALLATION INSTRUCTIONS VISIT OUR APP

MC-3500 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH MC-3500.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 450 LBS/FT/%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
   - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
   - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
   - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-3500 CHAMBER SYSTEM

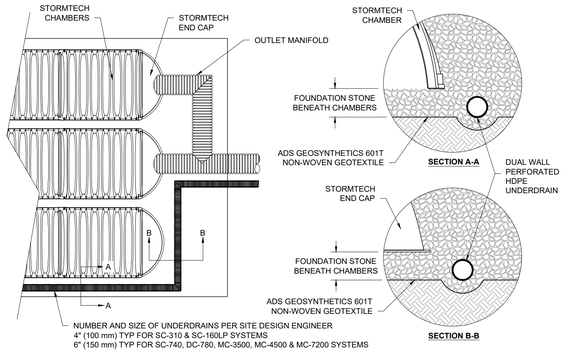
1. STORMTECH MC-3500 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONESHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
8. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
9. STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
10. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
11. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

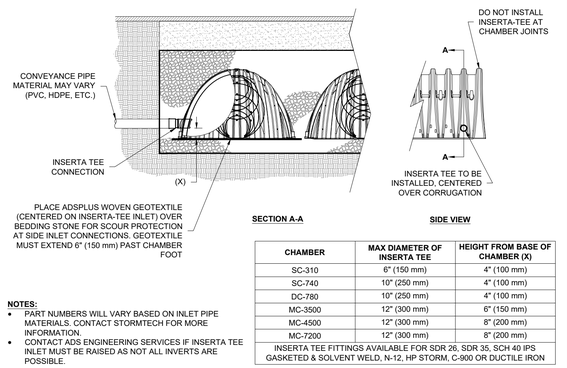
1. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
2. THE USE OF EQUIPMENT OVER MC-3500 CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.



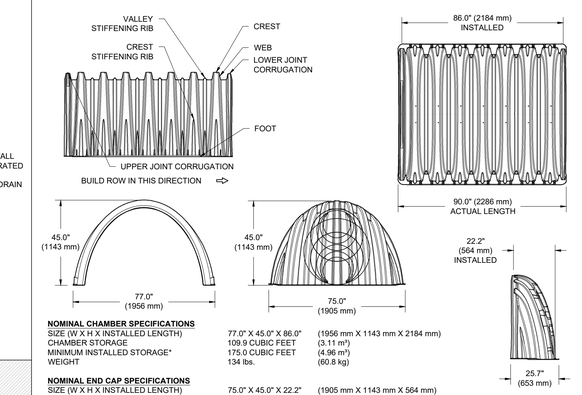
5 UNDERDRAIN DETAIL



CHAMBER	MAX DIAMETER OF INSERTA TEE	HEIGHT FROM BASE OF CHAMBER (X)
SC-310	6" (150 mm)	4" (100 mm)
SC-740	10" (250 mm)	4" (100 mm)
DC-780	10" (250 mm)	4" (100 mm)
MC-3500	12" (300 mm)	6" (150 mm)
MC-4500	12" (300 mm)	8" (200 mm)
MC-7200	12" (300 mm)	8" (200 mm)
INSERTA TEE FITTINGS AVAILABLE FOR SDR 26, SDR 35, SCH 40 IPS GASKETED & SOLVENT WELD, N-12, HP STORM, C-900 OR DUCTILE IRON		

NOTES:
- PART NUMBERS WILL VARY BASED ON INLET PIPE MATERIALS. CONTACT STORMTECH FOR MORE INFORMATION.
- CONTACT ADS ENGINEERING SERVICES IF INSERTA TEE INLET MUST BE RAISED AS NOT ALL INVERTS ARE POSSIBLE.

6 INSERTA-TEE SIDE INLET DETAIL



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	77.0" X 45.0" X 86.0"	(1956 mm X 1143 mm X 2184 mm)
CHAMBER STORAGE	109.9 CUBIC FEET	(3.11 m³)
MINIMUM INSTALLED STORAGE*	175.0 CUBIC FEET	(4.96 m³)
WEIGHT	134 lbs.	(60.8 kg)

NOMINAL END CAP SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	75.0" X 45.0" X 22.2"	(1905 mm X 1143 mm X 564 mm)
END CAP STORAGE	14.9 CUBIC FEET	(0.42 m³)
MINIMUM INSTALLED STORAGE*	45.1 CUBIC FEET	(1.28 m³)
WEIGHT	49 lbs.	(22.2 kg)

*ASSUMES 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION, 6" (152 mm) STONE BETWEEN CHAMBERS, 6" (152 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY.

PARTIAL CUT HOLES AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
PARTIAL CUT HOLES AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
END CAPS WITH A PREFABRICATED WELDED STUB END WITH "W"
END CAPS WITH A WELDED CROWN PLATE END WITH "C"

PART #	STUB	B	C
MC3500IEPP06T	6" (150 mm)	33.21" (844 mm)	---
MC3500IEPP06B		---	0.66" (17 mm)
MC3500IEPP08T	8" (200 mm)	31.16" (791 mm)	---
MC3500IEPP08B		---	0.81" (21 mm)
MC3500IEPP10T	10" (250 mm)	29.04" (738 mm)	---
MC3500IEPP10B		---	0.93" (24 mm)
MC3500IEPP12T	12" (300 mm)	26.36" (670 mm)	---
MC3500IEPP12B		---	1.35" (34 mm)
MC3500IEPP15T	15" (375 mm)	23.39" (594 mm)	---
MC3500IEPP15B		---	1.50" (38 mm)
MC3500IEPP18TC	18" (450 mm)	20.03" (509 mm)	---
MC3500IEPP18TW			
MC3500IEPP18BC		---	1.77" (45 mm)
MC3500IEPP18BW			
MC3500IEPP24TC	24" (600 mm)	14.48" (368 mm)	---
MC3500IEPP24TW			
MC3500IEPP24BC		---	2.06" (52 mm)
MC3500IEPP24BW			
MC3500IEPP30BC	30" (750 mm)	---	2.75" (70 mm)

NOTE: ALL DIMENSIONS ARE NOMINAL

CUSTOM PARTIAL CUT INVERTS ARE AVAILABLE UPON REQUEST. INVENTORIED MANIFOLDS INCLUDE 12-24" (300-600 mm) SIZE ON SIZE AND 15-48" (375-1200 mm) ECCENTRIC MANIFOLDS. CUSTOM INVERT LOCATIONS ON THE MC-3500 END CAP CUT IN THE FIELD ARE NOT RECOMMENDED FOR PIPE SIZES GREATER THAN 10" (250 mm). THE INVERT LOCATION IN COLUMN 'B' ARE THE HIGHEST POSSIBLE FOR THE PIPE SIZE.

2 MC-3500 TECHNICAL SPECIFICATIONS

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

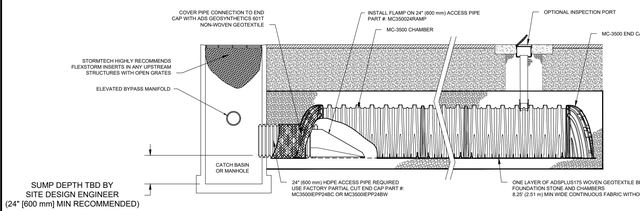
STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

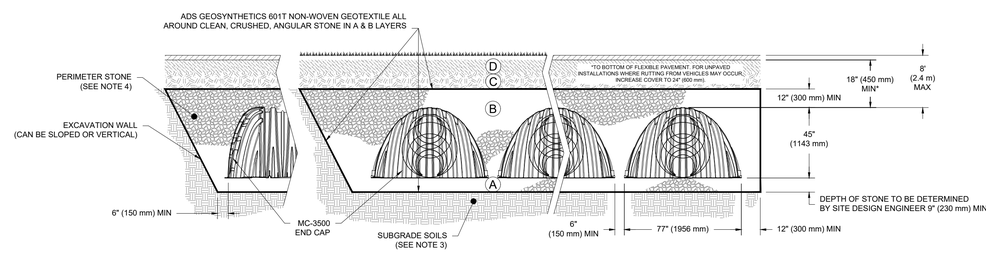


3 MC-3500 ISOLATOR ROW PLUS DETAIL

ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 4	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

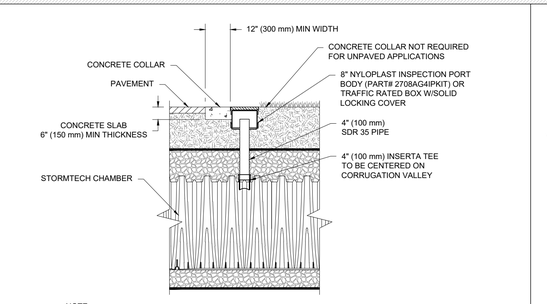
PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



NOTES:

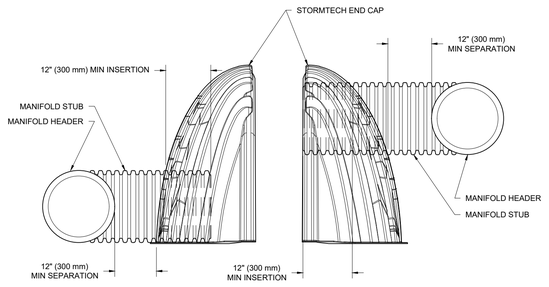
1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
2. MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 500 LBS/FT/%. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

1 MC-3500 CROSS SECTION DETAIL



NOTE:
INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CORRUGATION VALLEY.

4 4" PVC INSPECTION PORT DETAIL (MC SERIES CHAMBER)



NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING.

7 MC-SERIES END CAP INSERTION DETAIL

DRAWN: | DATE:
REVIEWED: | PROJECT NO:
REV: | NOT TO SCALE

MC-3500 STANDARD DETAILS

StormTech® Chamber System
888-892-2694 | WWW.STORMTECH.COM

4640 TRUEMAN BLVD
HILLIARD, OH 43026

Advanced Drainage Systems, Inc.

SHEET

3837

ADVANCED DRAINAGE SYSTEMS, INC. ("ADS") HAS PREPARED THIS DETAIL BASED ON REFERENCED STANDARDS. ADS HAS NOT PERFORMED ANY ENGINEERING OR DESIGN SERVICES FOR THIS PROJECT. NOR HAS ADS INDEPENDENTLY VERIFIED THE INFORMATION SUPPLIED. THE INSTALLATION DETAILS PROVIDED HEREIN ARE GENERAL RECOMMENDATIONS AND ARE NOT SPECIFIC FOR THIS PROJECT. UNLESS THE PLANS ARE SIGNED AND SEALED BY THE SITE DESIGN ENGINEER. THE SITE DESIGN ENGINEER SHALL REVIEW THESE DETAILS PRIOR TO CONSTRUCTION AND SEALING THE DOCUMENT. IT IS THE SITE DESIGN ENGINEER'S RESPONSIBILITY TO ENSURE THE DETAILS PROVIDED HEREIN MEETS OR EXCEEDS THE APPLICABLE NATIONAL, STATE, OR LOCAL REQUIREMENTS AND TO ENSURE THAT THE DETAILS PROVIDED HEREIN ARE ACCEPTABLE FOR THIS PROJECT.

Appendix K - Sizing Calculations

TO BE PROVIDED IN FINAL ENGINEERING

Appendix L - Hydraulic Calculations

TO BE PROVIDED IN FINAL ENGINEERING

Appendix M - Excerpt from Geotechnical Report

April 24, 2023
J.N. 22-398

DIVERSIFIED PACIFIC COMMUNITIES
10621 Civic Center Drive
Rancho Cucamonga, California 91730

Attention: Mr. Nolan Leggio

Subject: **Field Percolation Tests Results, Proposed Empire Resort and Spa Project, Approximately 10.4 Acres of Vacant Land at Southeast Corner of E. Holt Boulevard and E. Guasti Road, City of Ontario, San Bernardino, California**

Reference: Petra Geosciences, Inc. 2023, DRAFT Preliminary Geotechnical Evaluation, Proposed Empire Resort and Spa Project, Approximately 10.4 Acres of Vacant Land at Southeast Corner of E. Holt Boulevard and E. Guasti Road, APN 011 032 233, City of Ontario, San Bernardino, California, J.N. 22-398 dated February 10.

Dear Mr. Leggio:

Petra Geosciences, Inc. (Petra) has prepared this letter report presenting the results of our percolation testing for the subject project.

Objective

The objective of this investigation was to evaluate infiltration rates of the site soils, consisting of upper younger alluvial deposits, for the preliminary design of onsite infiltration facilities. To achieve this objective, we have drilled five test borings on the order of 5 to 15 feet using a hollow-stem drill equipment, conducted borehole percolation tests of the lower part of each borehole, and calculated the infiltration rate. The project site and the locations of the percolation boreholes are shown in Figure 1.

Test Method and Scope of Services

Percolation test to evaluate site infiltration rate was performed in conformance with Design Handbook for Low Impact Development, Best Management Practices, by Riverside County Flood Control and Water Conservation District, dated September 2011 (RCFFCWCD, 2011). As such, our scope of work included the following:

1. Collect and review readily available literature and maps about soil and geologic conditions within and adjacent to the site including our prior soil and boring data, see reference.

2. Consult with project civil engineer on targeted test locations and depths.

3. Drill 5 exploratory borings using the hollow-stem auger drilling method and perform falling-head percolation test in each borehole. The percolation tests results and infiltration rate calculations are presented in Appendix A.

4. Log and field-classify soil materials encountered in each boring in accordance with the visual-manual procedures outlined in the Unified Soil Classification System and the American Society for Testing and Materials (ASTM) Procedure D 2488-90. All field activities were performed by or under the direct observation of a State of California Certified Engineering Geologist.

5. Collect representative bulk soil samples near the bottom of each borehole utilizing a 1.4- inch inside diameter Standard Penetration Test (SPT) split-spoon sampler. Perform a laboratory derived grain size analysis (sieve) on each sample.

6. Prepare this letter report presenting the results of our evaluations.

Test Description and Results

The falling head percolation testing method was used in accordance with the cited reference. The borings for the percolation tests were advanced using an 8-inch diameter hollow-stem auger to depths between approximately 5 and 15 feet below the existing ground surface. As anticipated, surficial fills underlain by alluvial deposits were encountered in each test borings. The excavated materials in the generally upper 5 to 8 consisted of silty fine to medium sands with variable gravels that were medium-dense and slightly moist. The soil materials below approximately 8 feet generally consisted of interbedded silty sand with less fines to sand with silts also with variable gravel content that were medium dense and slightly moist. Percolation testing was performed in the bottom 4 to 5 feet of the boreholes. The locations of the percolation test borings are shown on the Test Location Map (Figure 1) and the boring logs are presented in Appendix A.

Following a presoaking period, field testing was conducted in a perforated pipe lowered into the borehole, with ¾-inch gravel surrounding the pipe, at 10-minute intervals for a period of approximately 1 hour. The falling-head percolation test data were utilized in determining the test infiltration rate, I_t, expressed in units of inches/hour, utilizing the Porchet Method (RCFCWCD, 2011). The infiltration rate, I_t, was calculated by determining the volumetric water flow rate through the wetted borehole surface area, expressed in terms of inches per hour. The un-factored test results are summarized in the following table, Table 1 and the field test data and laboratory test results are presented in Appendix B and C.

TABLE 1

Un-Factored Infiltration Test Results

Test No.	Borehole Total Depth (feet)	Approximate Test Zone (feet below existing grade)	Geologic Unit / Soil Description	Infiltration Test Rate, I_t (in/hr)
P-1	5	1-5	Qal (SM)	0.9
P-2	15	10-15	Qal (SP-SM)	49.3
P-3	10	5-10	Qal (SP-SM)	50.6
P-4	7	2-7	Qal (SM)	2.3
P-5	5	1-5	Qal (SM)	2.1

The test data indicates the alluvial deposits greater than approximately 9 feet below existing site grades are considered permeable. As observed, the shallow subsurface native soils, for containing high fines content, exhibit variable permeability, as measured by percolation tests at different depths. As such, it is our professional opinion that the infiltration rates approximately 9 feet below surface are more suitable for the intended infiltration purposes.

Discussion

Suitability Assessment

In view of the test data, certain jurisdictions consider such factors as infiltration assessment method, soil texture, site soils variability, and depth to groundwater/impervious layer to assign a Suitability Assessment Safety Factor that should be applied to the infiltration rates.

To perform such an evaluation, we have adopted a procedure provided by Santa Ana Regional Water Quality Control Board (SARWQCB) in their Technical Guidance Document (TGD) for the Preparation of Conceptual/Preliminary and/or Project Water Quality Management Plans (WQMPs), with Appendices, For Santa Ana Regional Board consideration, dated December 20, 2013 (SARWQCB, 2013). Based on Appendix D of this document, using Table VII.3: Suitability Assessment Related Considerations for Infiltration Facility Safety Factors, and Worksheet H: Factor of Safety and Design Infiltration Rate and Worksheet, of the Orange County BMP Design Manual, the following is presented.

TABLE 2

Site Suitability Reduction Factor (Category A) for Infiltration Rate

Considerations		Concern		Reduction Factor
Description	**Weight**	**Level**	**Safety Factor**	**Weight x Safety Factor**
Soil Assessment Method	0.25	Low	1.0	0.25
Predominant Soil Texture	0.25	Low	1.0	0.25
Site Soil Variability	0.25	medium	2.0	0.50
Depth to Groundwater/Impervious Layer	0.25	Low	1.0	0.25
Reduction Factor (sum of individual Reduction Factors)				**1.25**

Based on the information provided in Table 2, a Reduction Factor of 1.25 should be applied to the values of Infiltration Rate, I_t, provided in Table 1, above, for Site Suitability considerations.

Construction Procedure

The infiltration rates provided herein are considered representative of the native soils in the vicinity of the percolation test locations. Care should be taken to minimize disturbance of the exposed bottom surface of the basins as fill placement or any compaction effort applied to the area will have a detrimental effect on the anticipated infiltration rate of the proposed infiltration areas.

Environmental Impact

It should be noted that clean, potable water was used for the test. Surface runoff usually carries with it debris and fine particles that are typically expected to reduce the calculated infiltration rate.

Factor of Safety

The values of infiltration rate provided in Table 1 are raw test values. As discussed above, these values should be corrected for site Suitability considerations by applying a Reduction factor as provided in Table 2. Further, the project civil engineer needs to consider a Design Safety Factor, which incorporates such items as tributary area size, level of pretreatment/expected sediment load, redundancy/contingency plan and compaction during construction, in combination with the Suitability Assessment Safety/Reduction Factor for the design of the system.

This report may be subject to review by the controlling agency.

Respectfully submitted,

PETRA GEOSCIENCES, INC.

Douglass Johnston
Senior Associate Geologist
CEG 2477

PROFESSIONAL GEOLOGIST
DOUGLASS L. JOHNSTON
NO. 2477
CERTIFIED
ENGINEERING
GEOLOGIST
STATE OF CALIFORNIA

4/24/23

Siamak Jafroudi, PhD
Senior Principal Engineer
GE 2024

REGISTERED PROFESSIONAL ENGINEER
SIAMAK JAFROUDI
No. GE002024
GEOTECHNICAL
STATE OF CALIFORNIA

DJ/SJ/lv

Attachments: Figure 1 – Test Location Map
Appendix A – Boring Logs
Appendix B – Percolation Test Data
Appendix C – Sieve Analysis Graphs

W:\2020-2025\2022\300\22-398\Reports\22-398 120 Field Percolation Test Report.docx

FIGURE



Reference: Google Earth, 2020 Image

PETRA GEOSCIENCES, INC.
40880 County Center Drive, Suite M
Temecula, California 92591
Phone: (951) 600-9271
COSTA MESA TEMECULA VALENCIA PALM DESERT CORONA

Percolation Test Location Map

Empire Hotel Project
City of Ontario, California

PETRA GEOSCIENCES INC.

DATE: April 2023
J.N.: 22-398

Figure 1

APPENDIX A

BORING LOGS

Key to Soil and Bedrock Symbols and Terms

PETRA

Unified Soil Classification System

Coarse-grained Soils > 1/2 of materials is larger than #200 sieve	The No. 200 U.S. Standard Sieve is about the smallest particle visible to the naked eye	**GRAVELS** more than half of coarse fraction is larger than #4 sieve	Clean Gravels (less than 5% fines)	**GW**	Well-graded gravels, gravel-sand mixtures, little or no fines
				GP	Poorly-graded gravels, gravel-sand mixtures, little or no fines
			Gravels with fines	**GM**	Silty Gravels, poorly-graded gravel-sand-silt mixtures
				GC	Clayey Gravels, poorly-graded gravel-sand-clay mixtures
		SANDS more than half of coarse fraction is smaller than #4 sieve	Clean Sands (less than 5% fines)	**SW**	Well-graded sands, gravelly sands, little or no fines
				SP	Poorly-graded sands, gravelly sands, little or no fines
			Sands with fines	**SM**	Silty Sands, poorly-graded sand-gravel-silt mixtures
				SC	Clayey Sands, poorly-graded sand-gravel-clay mixtures
Fine-grained Soils > 1/2 of materials is smaller than #200 sieve		**SILTS & CLAYS** Liquid Limit Less Than 50		**ML**	Inorganic silts & very fine sands, silty or clayey fine sands, clayey silts with slight plasticity
				CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
				OL	Organic silts & clays of low plasticity
		SILTS & CLAYS Liquid Limit Greater Than 50		**MH**	Inorganic silts, micaceous or diatomaceous fine sand or silt
				CH	Inorganic clays of high plasticity, fat clays
				OH	Organic silts and clays of medium-to-high plasticity
Highly Organic Soils				**PT**	Peat, humus swamp soils with high organic content

Grain Size

Description		Sieve Size	Grain Size	Approximate Size
Boulders		>12"	>12"	Larger than basketball-sized
Cobbles		3 - 12"	3 - 12"	Fist-sized to basketball-sized
Gravel	coarse	3/4 - 3"	3/4 - 3"	Thumb-sized to fist-sized
	fine	#4 - 3/4"	0.19 - 0.75"	Pea-sized to thumb-sized
Sand	coarse	#10 - #4	0.079 - 0.19"	Rock salt-sized to pea-sized
	medium	#40 - #10	0.017 - 0.079"	Sugar-sized to rock salt-sized
	fine	#200 - #40	0.0029 - 0.017"	Flour-sized to sugar-sized to
Fines		Passing #200	<0.0029"	Flour-sized and smaller

Modifiers

Trace	< 1 %
Few	1 - 5%
Some	5 - 12 %
Numerous	12 - 20 %

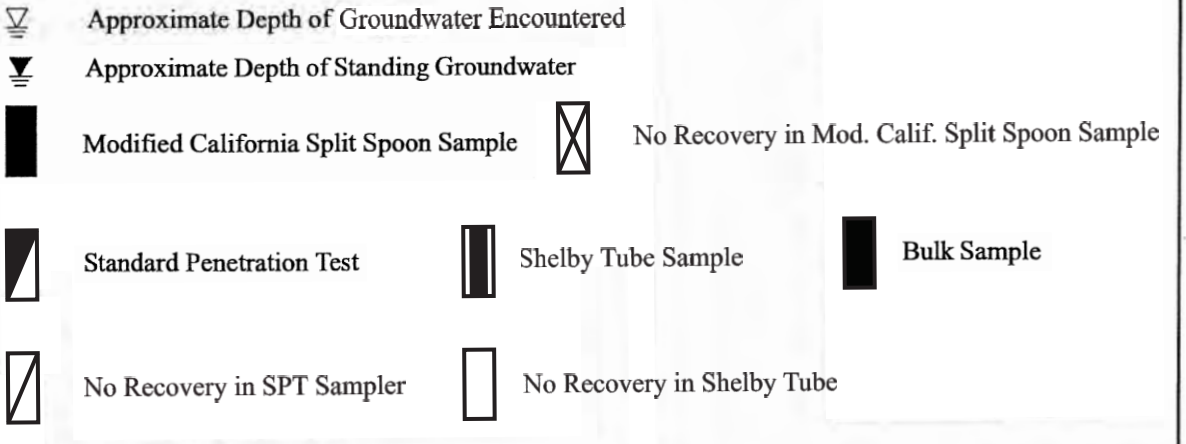
Laboratory Test Abbreviations

MAX	Maximum Dry Density	MA	Mechanical (Particle Size) Analysis
EXP	Expansion Potential	AT	Atterberg Limits
SO4	Soluble Sulfate Content	#200	#200 Screen Wash
RES	Resistivity	DSU	Direct Shear (Undisturbed Sample)
pH	Acidity	DSR	Direct Shear (Remolded Sample)
CON	Consolidation	HYD	Hydrometer Analysis
SW	Swell	SE	Sand Equivalent
CL	Chloride Content	OC	Organic Content
RV	R-Value	COMP	Mortar Cylinder Compression

Bedrock Hardness

Soft	Can be crushed and granulated by hand; "soil like" and structureless
Moderately Hard	Can be grooved with fingernails; gouged easily with butter knife; crumbles under light hammer blows
Hard	Cannot break by hand; can be grooved with a sharp knife; breaks with a moderate hammer blow
Very Hard	Sharp knife leaves scratch; chips with repeated hammer blows

Sampler and Symbol Descriptions



Notes:
Blows Per Foot: Number of blows required to advance sampler 1 foot (unless a lesser distance is specified). Samplers in general were driven into the soil or bedrock at the bottom of the hole with a standard (140 lb.) hammer dropping a standard 30 inches unless noted otherwise in Log Notes. Drive samples collected in bucket auger borings may be obtained by dropping non-standard weight from variable heights. When a SPT sampler is used the blow count conforms to ASTM D-1586

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EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **P-1**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **±953**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **4/13/23**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **140 lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): Light brown, slightly moist, fine- to coarse-grained, some cobbles, some gravel.							
		YOUNG ALLUVIAL FAN DEPOSITS (Qyf) Silty Sand (SM): Light Brown to brown, slightly moist, fine- to coarse-grained, trace gravel. slightly moist, loose.		2 3 2					MA
5		Total Depth = 5' No groundwater encountered Boring was backfilled with cuttings after percolation testing.							
10									
15									
20									
25									
30									

PLATE A-19

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **P-2**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **±952**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **4/13/23**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **140 lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): Light Brown, slightly moist, fine- to coarse-grained, some cobles, some gravel.							
		YOUNG ALLUVIAL FAN DEPOSITS (Qyf) Silty Sand (SM): Light brown to brown, slightly moist, fine- to coarse-grained, few gravel.							
5									
10		Light brown.							
		Sand w/ Silt (SP-SM): Light brown to gray, slightly moist, medium dense, fine- to coarse-grained, few gravel.		12 9 9					MA
15		Total Depth = 15' No groundwater encountered Boring was backfilled with cuttings after percolation testing.							
20									
25									
30									

PLATE A-20

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **P-3**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **±951**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **4/13/23**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **140 lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): Light brown, slightly moist, fine- to coarse-grained, some cobbles, some gravel.							
		YOUNG ALLUVIAL FAN DEPOSITS (Qyf) Silty Sand (SM): light brown to brown, slightly moist, fine- to coarse-grained, few gravel.							
5									
		Sand with Silt (SP-SM): light brown, slightly moist, medium dense, fine- to coarse-grained.		3 5 7					MA
10		Total Depth = 10' No groundwater encountered Boring was backfilled with cuttings after percolation testing.							
15									
20									
25									
30									

PLATE A-21

Petra Geosciences, Inc.

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EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **P-4**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **±959**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **4/13/23**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **140 lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): Light brown, slightly moist, fine- to coarse-grained, some cobbles, some gravel.							
		YOUNG ALLUVIAL FAN DEPOSITS (Qyf) Silty Sand (SM): Light brown to brown, slightly moist, fine- to coarse-grained, few gravel.							
5		loose.		3 3 4					MA
		Total Depth = 7' No groundwater encountered Boring was backfilled with cuttings after percolation testing.							
10									
15									
20									
25									
30									

PLATE A-22

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **P-5**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **±960**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **4/13/23**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **140 lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): light brown, slightly moist, fine- to coarse-grained, some cobbles, some gravel.							
		YOUNG ALLUVIAL FAN DEPOSITS (Qyf) Silty Sand (SM): light brown to brown, slightly moist, loose, fine- to coarse-grained, trace gravel.		4 5 3					MA
5		Total Depth = 5' No groundwater encountered Boring was backfilled with cuttings after percolation testing.							
10									
15									
20									
25									
30									

PLATE

Petra Geosciences, Inc.

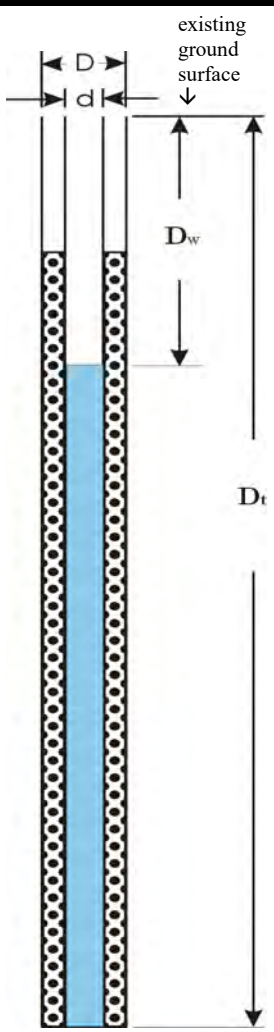
3854

APPENDIX B

PERCOLATION TEST DATA

Boring/Test Number: P-1

Total Depth of Boring, D_T (ft):	5	**Test Date:**	4/14/2023
Diameter of Hole, D (in):	8	**Tested By:**	SS
Diameter of Casing, d (in):	3	**USCS Soil Type:**	SM
Depth of Slotted Casing (ft):	0 to 5	**Depth to Groundwater (ft):**	N/A
Porosity of Annulus Material, *n* :	0.44	**Ground Elevation (msl ft):**	±953
Depth from Existing Ground Surface to Bottom of Prop. Inflitration System (ft):			0.0



SANDY SOIL CRITERIA TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔD (in.)	Change in Height of Water Greater Than or Equal to 6"? (Yes/No)*
		Initial, D_o (ft.)	Final, D_f (ft.)		
1	25	3.00	3.58	6.96	yes
2	25	3.00	3.53	6.36	yes
Standard Time Interval Between Readings (min.), [* if yes = 10, if no = 30]:					10

PERCOLATION TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔH (in.)	Percolation Rate	
		Initial, D_o (ft.)	Final, D_f (ft.)		(min/in.)	(gal/day/ft^2)
1	10	3.00	3.24	2.88	3.47	10.92
2	10	3.00	3.23	2.76	3.62	10.44
3	10	3.00	3.23	2.76	3.62	10.44
4	10	3.00	3.23	2.76	3.62	10.44
5	10	3.00	3.23	2.76	3.62	10.44
6	10	3.00	3.23	2.76	3.62	10.44
7	10	3.00	3.23	2.76	3.62	10.44
8	10	3.00	3.23	2.76	3.62	10.44

TEST RESULTS**

Inflitration Rate [Porchet Method]# (inches/hour)	Percolation Rate	
	(min/in.)	(gal/day/ft^2)
0.90	**3.62**	**10.44**

**Raw Results. Does Not Include a Factor of Safety

FACTOR OF SAFETY WORKSHEET

Factor Category[Φ]		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = (w) x (v)
A	Suitability Assessment	Soil Assessment Methods	0.25		0
		Predominant Soil Texture	0.25		0
		Site Soil Variability	0.25		0
		Depth to Groundwater / Impervious Layer	0.25		0
		Suitability Assessment Safety Factor, S_A = Σp			**0**

[Φ] Factor Category B Should Be Provided and Calculated by Project Civil Engineer

[#] Where Infiltration Rate, It = ΔH (60r) / Δt (r + 2Havg)

$r = D / 2$

$Ho = D_T - Do$

$H_f = D_T - D_f$

$\Delta H = \Delta D = H_o - H_f$

$H_{avg} = (H_o + H_f) / 2$

Reference:

RCFCWCD, Design Handbook for LID, dated June, 2014

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Costa Mesa, California 92626
PHONE: (714) 549-8921
COSTA MESA TEMECULA LOS ANGELES PALM DESERT CORONA ESCONDIDO

PERCOLATION TEST SUMMARY

2236 E Holt Blvd
Ontario, California

PETRA GEOSCIENCES

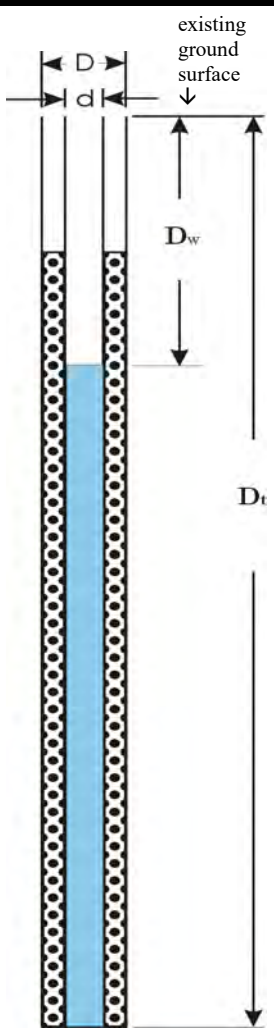
DATE: April , 2023

J.N.: 22-398

Appendix B

Boring/Test Number: P-2

Total Depth of Boring, D_T (ft):	15	**Test Date:**	4/17/2023
Diameter of Hole, D (in):	8	**Tested By:**	SS
Diameter of Casing, d (in):	3	**USCS Soil Type:**	SM
Depth of Slotted Casing (ft):	10 to 15	**Depth to Groundwater (ft):**	N/A
Porosity of Annulus Material, *n* :	0.44	**Ground Elevation (msl ft):**	±952
Depth from Existing Ground Surface to Bottom of Prop. Inflitration System (ft):			0.0



SANDY SOIL CRITERIA TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔD (in.)	Change in Height of Water Greater Than or Equal to 6"? (Yes/No)*
		Initial, D_o (ft.)	Final, D_f (ft.)		
1	25	13.00	4.40	-103.2	yes
2	25	13.00	4.28	-104.64	yes
Standard Time Interval Between Readings (min.), [* if yes = 10, if no = 30]:					10

PERCOLATION TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔH (in.)	Percolation Rate	
		Initial, D_o (ft.)	Final, D_f (ft.)		(min/in.)	(gal/day/ft^2)
1	1.02	13.00	14.00	12.00	0.08	549.63
2	1.00	13.00	14.00	12.00	0.08	558.79
3	1.00	13.00	14.00	12.00	0.08	558.79
4	0.98	13.00	14.00	12.00	0.08	568.27
5	0.98	13.00	14.00	12.00	0.08	568.27
6	0.98	13.00	14.00	12.00	0.08	568.27
7	1.00	13.00	14.00	12.00	0.08	558.79
8	1.00	13.00	14.00	12.00	0.08	558.79
9	0.98	13.00	14.00	12.00	0.08	568.27
10	1.00	13.00	14.00	12.00	0.08	558.79
11	0.98	13.00	14.00	12.00	0.08	568.27
12	0.98	13.00	14.00	12.00	0.08	568.27

TEST RESULTS**

Inflitration Rate [Porchet Method]# (inches/hour)	Percolation Rate	
	(min/in.)	(gal/day/ft^2)
49.32	**0.08**	**568.27**

**Raw Results. Does Not Include a Factor of Safety

FACTOR OF SAFETY WORKSHEET

Factor Category[Φ]		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = (w) x (v)
A	Suitability Assessment	Soil Assessment Methods	0.25		0
		Predominant Soil Texture	0.25		0
		Site Soil Variability	0.25		0
		Depth to Groundwater / Impervious Layer	0.25		0
		Suitability Assessment Safety Factor, $S_A = \Sigma p$			**0**

[Φ] Factor Category B Should Be Provided and Calculated by Project Civil Engineer

[#] Where Infiltration Rate, It = ΔH (60r) / Δt (r + 2Havg)

$r = D / 2$

$Ho = D_T - Do$

$H_f = D_T - D_f$

$\Delta H = \Delta D = H_o - H_f$

$H_{avg} = (H_o + H_f) / 2$

Reference:

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PERCOLATION TEST SUMMARY

2236 E Holt Blvd
Ontario, California

PETRA GEOSCIENCES

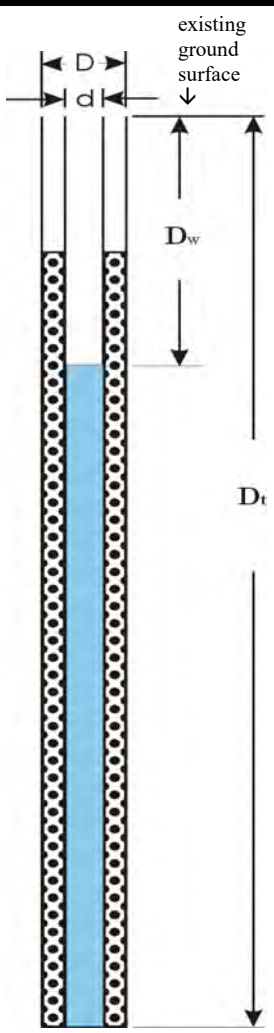
DATE: April , 2023

J.N.: 22-398

Appendix B

Boring/Test Number: P-3

Total Depth of Boring, D_T (ft):	10	**Test Date:**	4/17/2023
Diameter of Hole, D (in):	8	**Tested By:**	SS
Diameter of Casing, d (in):	3	**USCS Soil Type:**	SM
Depth of Slotted Casing (ft):	5 to 10	**Depth to Groundwater (ft):**	N/A
Porosity of Annulus Material, *n* :	0.44	**Ground Elevation (msl ft):**	±951
Depth from Existing Ground Surface to Bottom of Prop. Inflitration System (ft):			0.0



SANDY SOIL CRITERIA TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔD (in.)	Change in Height of Water Greater Than or Equal to 6"? (Yes/No)*
		Initial, D_o (ft.)	Final, D_f (ft.)		
1	25	9.50	11.36	22.32	yes
2	25	9.50	11.08	18.96	yes
Standard Time Interval Between Readings (min.), [* if yes = 10, if no = 30]:					10

PERCOLATION TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔH (in.)	Percolation Rate	
		Initial, D_o (ft.)	Final, D_f (ft.)		(min/in.)	(gal/day/ft^2)
1	10	9.50	10.49	11.88	0.84	537.09
2	10	9.50	10.43	11.16	0.90	429.49
3	10	9.50	10.43	11.16	0.90	429.49
4	10	9.50	10.43	11.16	0.90	429.49
5	10	9.50	10.43	11.16	0.90	429.49
6	10	9.50	10.43	11.16	0.90	429.49
7	10	9.50	10.44	11.28	0.89	445.14
8	10	9.50	10.43	11.16	0.90	429.49

TEST RESULTS**

Inflitration Rate [Porchet Method]# (inches/hour)	Percolation Rate	
	(min/in.)	(gal/day/ft^2)
50.61	**0.90**	**429.49**

**Raw Results. Does Not Include a Factor of Safety

FACTOR OF SAFETY WORKSHEET

Factor Category[Φ]		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = (w) x (v)
A	Suitability Assessment	Soil Assessment Methods	0.25		0
		Predominant Soil Texture	0.25		0
		Site Soil Variability	0.25		0
		Depth to Groundwater / Impervious Layer	0.25		0
		Suitability Assessment Safety Factor, $S_A = \Sigma p$			**0**

[Φ] Factor Category B Should Be Provided and Calculated by Project Civil Engineer

[#] Where Infiltration Rate, It = ΔH (60r) / Δt (r + 2Havg)

$r = D / 2$

$Ho = D_T - Do$

$H_f = D_T - D_f$

$\Delta H = \Delta D = H_o - H_f$

$H_{avg} = (H_o + H_f) / 2$

Reference:

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PERCOLATION TEST SUMMARY

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Ontario, California

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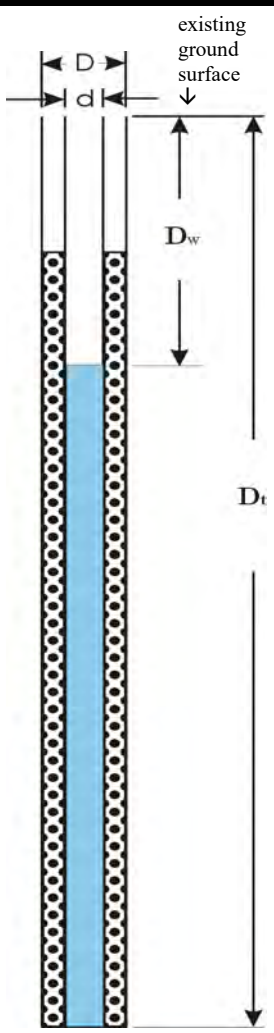
DATE: April , 2023

J.N.: 22-398

Appendix B

Boring/Test Number: P-4

Total Depth of Boring, D_T (ft):	7	**Test Date:**	4/14/2023
Diameter of Hole, D (in):	8	**Tested By:**	SS
Diameter of Casing, d (in):	3	**USCS Soil Type:**	SM
Depth of Slotted Casing (ft):	2 to 7	**Depth to Groundwater (ft):**	N/A
Porosity of Annulus Material, *n* :	0.44	**Ground Elevation (msl ft):**	±959
Depth from Existing Ground Surface to Bottom of Prop. Inflitration System (ft):			0.0



SANDY SOIL CRITERIA TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔD (in.)	Change in Height of Water Greater Than or Equal to 6"? (Yes/No)*
		Initial, D_o (ft.)	Final, D_f (ft.)		
1	25	6.00	6.83	9.96	yes
2	25	6.00	6.58	6.96	yes
Standard Time Interval Between Readings (min.), [* if yes = 10, if no = 30]:					10

PERCOLATION TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔH (in.)	Percolation Rate	
		Initial, D_o (ft.)	Final, D_f (ft.)		(min/in.)	(gal/day/ft^2)
1	10	6.00	6.29	3.48	2.87	26.44
2	10	6.00	6.30	3.60	2.78	27.48
3	10	6.00	6.30	3.60	2.78	27.48
4	10	6.00	6.29	3.48	2.87	26.44
5	10	6.00	6.29	3.48	2.87	26.44
6	10	6.00	6.29	3.48	2.87	26.44
7	10	6.00	6.29	3.48	2.87	26.44
8	10	6.00	6.29	3.48	2.87	26.44

TEST RESULTS**

Inflitration Rate [Porchet Method]# (inches/hour)	Percolation Rate	
	(min/in.)	(gal/day/ft^2)
2.35	**2.87**	**26.44**

**Raw Results. Does Not Include a Factor of Safety

FACTOR OF SAFETY WORKSHEET

Factor Category[Φ]		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = (w) x (v)
A	Suitability Assessment	Soil Assessment Methods	0.25		0
		Predominant Soil Texture	0.25		0
		Site Soil Variability	0.25		0
		Depth to Groundwater / Impervious Layer	0.25		0
		Suitability Assessment Safety Factor, S_A = Σp			**0**

[Φ] Factor Category B Should Be Provided and Calculated by Project Civil Engineer

[#] Where Infiltration Rate, It = ΔH (60r) / Δt (r + 2Havg)

$r = D / 2$

$Ho = D_T - Do$

$H_f = D_T - D_f$

$\Delta H = \Delta D = H_o - H_f$

$H_{avg} = (H_o + H_f) / 2$

Reference:

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Costa Mesa, California 92626
PHONE: (714) 549-8921
COSTA MESA TEMECULA LOS ANGELES PALM DESERT CORONA ESCONDIDO

PERCOLATION TEST SUMMARY

2236 E Holt Blvd
Ontario, California

PETRA GEOSCIENCES

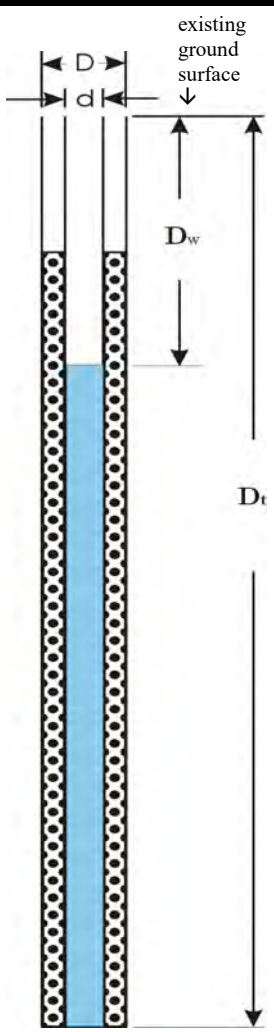
DATE: April , 2023

J.N.: 22-398

Appendix B

Boring/Test Number: P-5

Total Depth of Boring, D_T (ft):	5	**Test Date:**	4/14/2023
Diameter of Hole, D (in):	8	**Tested By:**	SS
Diameter of Casing, d (in):	3	**USCS Soil Type:**	SM
Depth of Slotted Casing (ft):	0 to 5	**Depth to Groundwater (ft):**	N/A
Porosity of Annulus Material, *n* :	0.44	**Ground Elevation (msl ft):**	±960
Depth from Existing Ground Surface to Bottom of Prop. Inflitration System (ft):			0.0



SANDY SOIL CRITERIA TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔD (in.)	Change in Height of Water Greater Than or Equal to 6"? (Yes/No)*
		Initial, D_o (ft.)	Final, D_f (ft.)		
1	25	3.00	4.40	16.8	yes
2	25	3.00	4.28	15.36	yes
Standard Time Interval Between Readings (min.), [* if yes = 10, if no = 30]:					10

PERCOLATION TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔH (in.)	Percolation Rate	
		Initial, D_o (ft.)	Final, D_f (ft.)		(min/in.)	(gal/day/ft^2)
1	10	3.00	3.56	6.72	1.49	27.64
2	10	3.00	3.53	6.36	1.57	25.96
3	10	3.00	3.52	6.24	1.60	25.40
4	10	3.00	3.54	6.48	1.54	26.52
5	10	3.00	3.52	6.24	1.60	25.40
6	10	3.00	3.51	6.12	1.63	24.85
7	10	3.00	3.51	6.12	1.63	24.85
8	10	3.00	3.51	6.12	1.63	24.85

TEST RESULTS**

Inflitration Rate [Porchet Method]# (inches/hour)	Percolation Rate	
	(min/in.)	(gal/day/ft^2)
2.15	**1.63**	**24.85**

**Raw Results. Does Not Include a Factor of Safety

FACTOR OF SAFETY WORKSHEET

Factor Category[Φ]		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = (w) x (v)
A	Suitability Assessment	Soil Assessment Methods	0.25		0
		Predominant Soil Texture	0.25		0
		Site Soil Variability	0.25		0
		Depth to Groundwater / Impervious Layer	0.25		0
		Suitability Assessment Safety Factor, S_A = Σp			**0**

[Φ] Factor Category B Should Be Provided and Calculated by Project Civil Engineer

[#] Where Infiltration Rate, It = ΔH (60r) / Δt (r + 2Havg)

$r = D / 2$

$Ho = D_T - Do$

$H_f = D_T - D_f$

$\Delta H = \Delta D = H_o - H_f$

$H_{avg} = (H_o + H_f) / 2$

Reference:

RCFCWCD, Design Handbook for LID, dated June, 2014

PETRA GEOSCIENCES, INC.
3186 Airway Avenue, Suite K
Costa Mesa, California 92626
PHONE: (714) 549-8921
COSTA MESA TEMECULA LOS ANGELES PALM DESERT CORONA ESCONDIDO

PERCOLATION TEST SUMMARY

2236 E Holt Blvd
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DATE: April , 2023

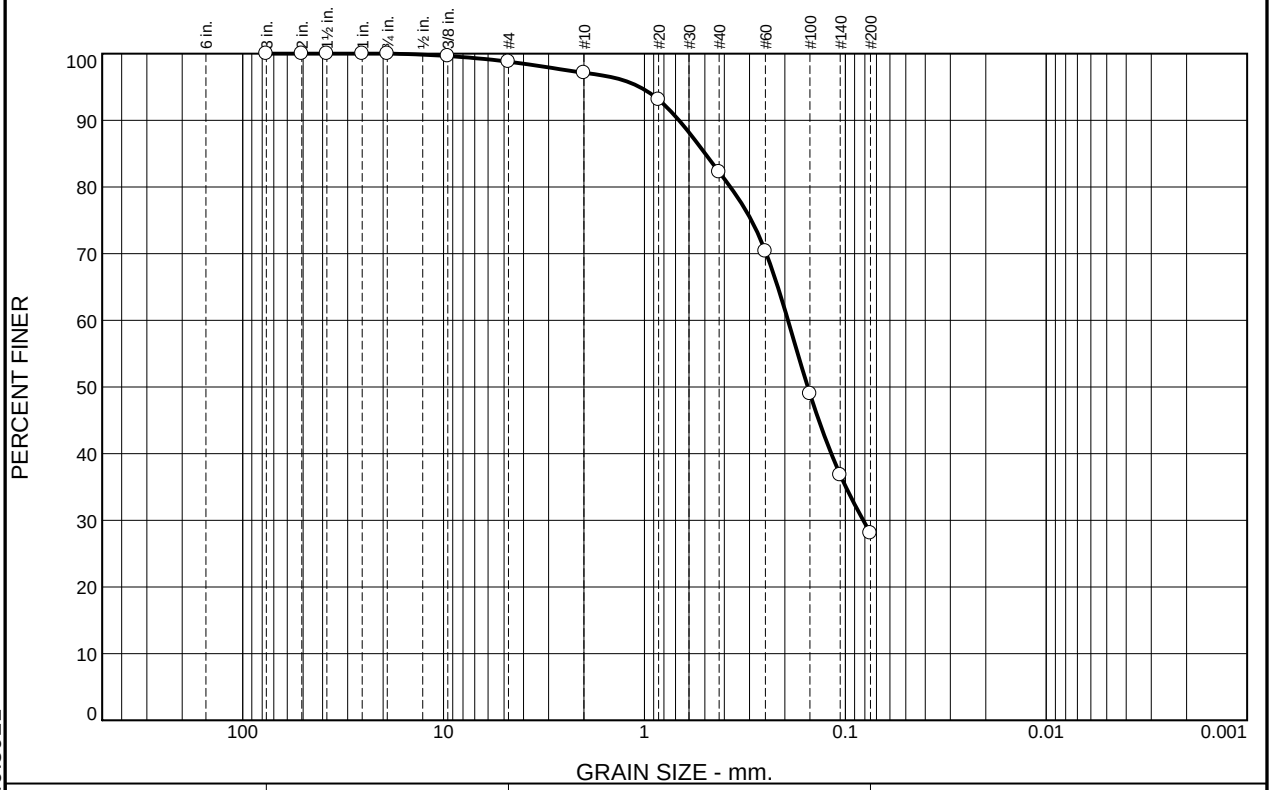
J.N.: 22-398

Appendix B

APPENDIX C

SIEVE ANALYSIS GRAPHS

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	1.2	1.7	14.9	54.1	28.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.375	99.6		
#4	98.8		
#10	97.1		
#20	93.1		
#40	82.2		
#60	70.4		
#100	49.0		
#140	36.8		
#200	28.1		

* (no specification provided)

Material Description

Brown Silty Fine to Medium Sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.6728 D_{85}= 0.4980 D_{60}= 0.1930
D_{50}= 0.1537 D_{30}= 0.0814 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Source of Sample: 23L085 **Depth:** 3.5
Sample Number: P-1 **Date:** 4/20/2023

Laboratory:
1251 West Pomona Road, Unit #103, Corona, Ca 92882 Phone #. 714.549.8921

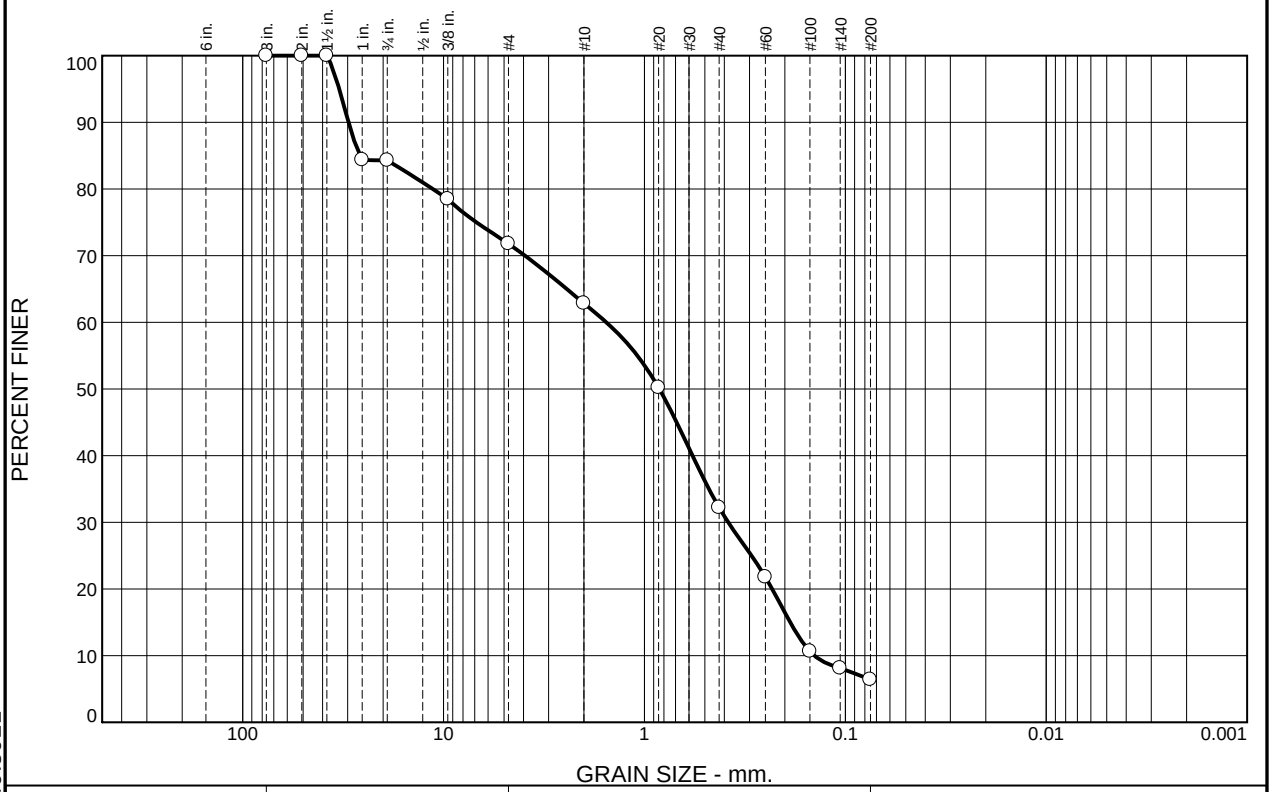
PETRA GEOSCIENCES INC.

Client: Diversified Pacific Communities
Project: Ontario Hotel

Project No: 22-398 **Figure**

Tested By: DI

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	15.7	12.5	8.9	30.7	25.8	6.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	84.4		
.75	84.3		
.375	78.5		
#4	71.8		
#10	62.9		
#20	50.2		
#40	32.2		
#60	21.8		
#100	10.6		
#140	8.1		
#200	6.4		

* (no specification provided)

Material Description

Gray Brown Gravelly Fine to Coarse Sand with Silt

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 29.6943 D_{85}= 26.0677 D_{60}= 1.5491
D_{50}= 0.8423 D_{30}= 0.3827 D_{15}= 0.1881
D_{10}= 0.1427 C_u= 10.86 C_c= 0.66

Classification

USCS= AASHTO=

Remarks

Source of Sample: 23L085 **Depth:** 13.5
Sample Number: P-2

Date: 4/20/2023

Laboratory:
1251 West Pomona Road, Unit #103, Corona, Ca 92882 Phone #. 714.549.8921

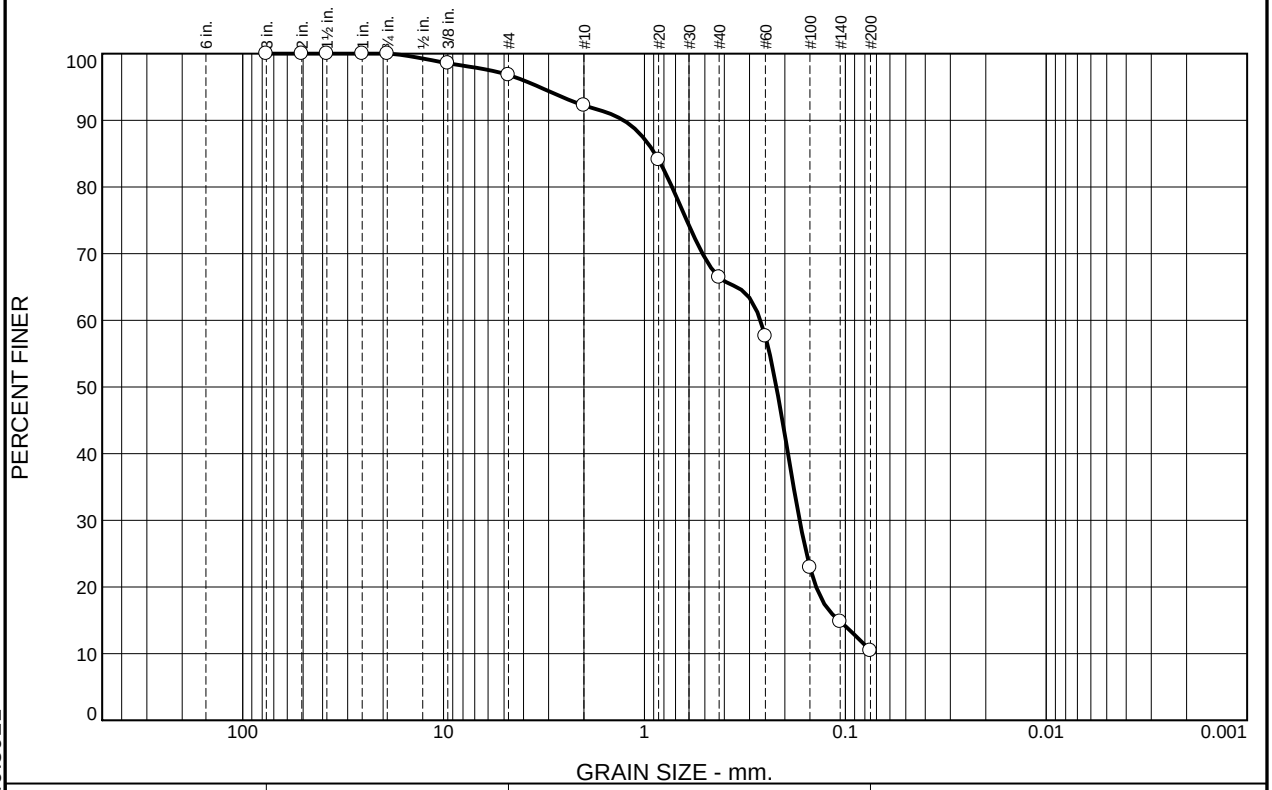
PETRA GEOSCIENCES INC.

Client: Diversified Pacific Communities
Project: Ontario Hotel

Project No: 22-398 **Figure**

Tested By: DI

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	3.2	4.6	25.7	56.0	10.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.375	98.6		
#4	96.8		
#10	92.2		
#20	84.1		
#40	66.5		
#60	57.6		
#100	22.9		
#140	14.8		
#200	10.5		

* (no specification provided)

Material Description

Olive Brown Fine to Medium Sand with Silt

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 1.2713 D_{85}= 0.8857 D_{60}= 0.2643
D_{50}= 0.2205 D_{30}= 0.1688 D_{15}= 0.1077
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Source of Sample: 23L085 **Depth:** 8.5
Sample Number: P-3

Date: 4/20/2023

Laboratory:
1251 West Pomona Road, Unit #103, Corona, Ca 92882 Phone #. 714.549.8921

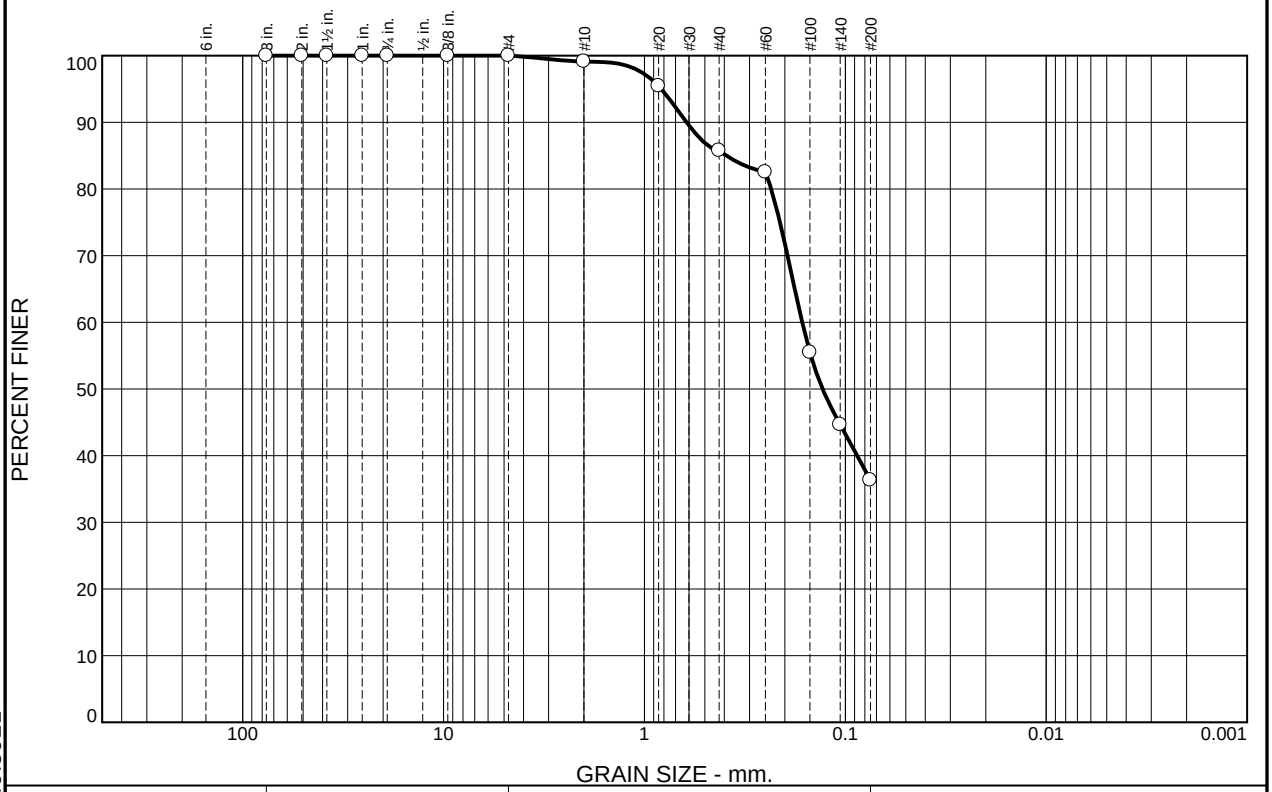
PETRA GEOSCIENCES INC.

Client: Diversified Pacific Communities
Project: Ontario Hotel

Project No: 22-398 **Figure**

Tested By: DI

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.9	13.4	49.4	36.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.375	100.0		
#4	100.0		
#10	99.1		
#20	95.4		
#40	85.7		
#60	82.5		
#100	55.5		
#140	44.6		
#200	36.3		

* (no specification provided)

Material Description

Brown Silty Fine to Medium Sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.6164 D_{85}= 0.3909 D_{60}= 0.1638
D_{50}= 0.1299 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Source of Sample: 23L085 **Depth:** 5.5
Sample Number: P-4

Date: 4/20/2023

Laboratory:
1251 West Pomona Road, Unit #103, Corona, Ca 92882 Phone #. 714.549.8921

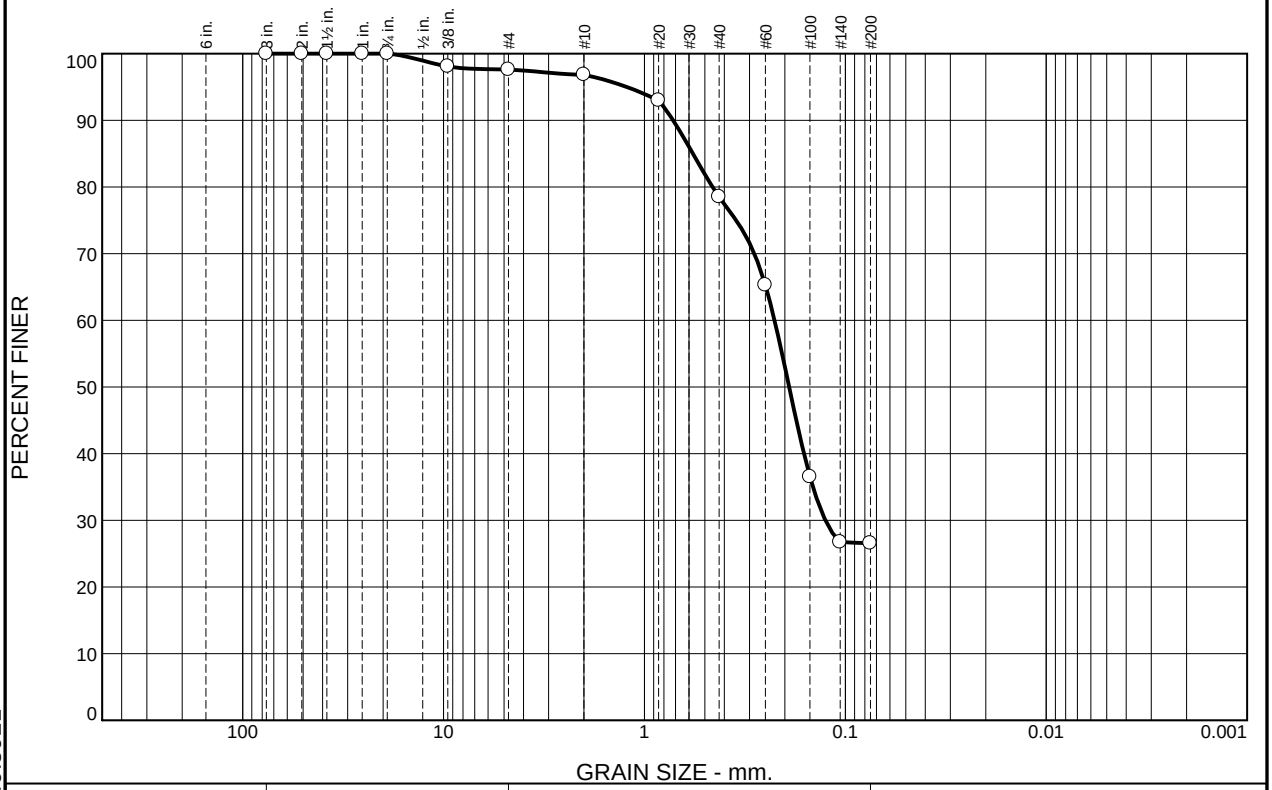
PETRA GEOSCIENCES INC.

Client: Diversified Pacific Communities
Project: Ontario Hotel

Project No: 22-398 **Figure**

Tested By: DI

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	2.4	0.8	18.3	52.0	26.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.375	98.1		
#4	97.6		
#10	96.8		
#20	93.0		
#40	78.5		
#60	65.3		
#100	36.5		
#140	26.7		
#200	26.5		

* (no specification provided)

Material Description

Brown Silty Fine to Medium Sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.7197 D_{85}= 0.5737 D_{60}= 0.2252
D_{50}= 0.1904 D_{30}= 0.1258 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Source of Sample: 23L085 **Depth:** 3.5
Sample Number: P-5

Date: 4/20/2023

Laboratory:
1251 West Pomona Road, Unit #103, Corona, Ca 92882 Phone #. 714.549.8921

PETRA GEOSCIENCES INC.

Client: Diversified Pacific Communities
Project: Ontario Hotel

Project No: 22-398 **Figure**

Tested By: DI

Water Quality Management Plan

For:

EMPIRE HOTEL

APN: 011032233

Prepared for:

Diversified Pacific Communities

10621 Civic Center Drive

Rancho Cucamonga, CA 91730

909-481-1150

Prepared by:

Kimley-Horn and Associates

3801 University Avenue, Suite 300

Riverside, CA 92501

(951)-543-9868

Submittal Date:

Revision Date:

Approval Date:_____

Project Owner's Certification

This Water Quality Management Plan (WQMP) has been prepared for Diversified Pacific by Kimley-Horn and Associates. The WQMP is intended to comply with the requirements of the City of Ontario, San Bernardino County and the NPDES Areawide Stormwater Program requiring the preparation of a WQMP. The undersigned, while it owns the subject property, is responsible for the implementation of the provisions of this plan and will ensure that this plan is amended as appropriate to reflect up-to-date conditions on the site consistent with San Bernardino County's Municipal Storm Water Management Program and the intent of the NPDES Permit for San Bernardino County and the incorporated cities of San Bernardino County within the Santa Ana Region. Once the undersigned transfers its interest in the property, its successors in interest and the city/county shall be notified of the transfer. The new owner will be informed of its responsibility under this WQMP. A copy of the approved WQMP shall be available on the subject site in perpetuity.

"I certify under a penalty of law that the provisions (implementation, operation, maintenance, and funding) of the WQMP have been accepted and that the plan will be transferred to future successors."

.

Project Data			
Permit/Application Number(s):		Grading Permit Number(s):	
Tract/Parcel Map Number(s):		Building Permit Number(s):	
CUP, SUP, and/or APN (Specify Lot Numbers if Portions of Tract):			APN: 011032233

Owner's Signature			
Owner Name: Nolan C. Leggio			
Title	Owner		
Company	Diversified Pacific Communities		
Address	10621 Civic Center Drive, Rancho Cucamonga, CA 91730		
Email	NLeggio@DiversifiedPacific.com		
Telephone #	(909)-373-2628		
Signature		Date	

Preparer's Certification

Project Data			
Permit/Application Number(s):		Grading Permit Number(s):	
Tract/Parcel Map Number(s):		Building Permit Number(s):	
CUP, SUP, and/or APN (Specify Lot Numbers if Portions of Tract):			APN: 011032233

"The selection, sizing and design of stormwater treatment and other stormwater quality and quantity control measures in this plan were prepared under my oversight and meet the requirements of Regional Water Quality Control Board Order No. R8-2010-0036."

Engineer: Robert Otte		PE Stamp Below
Title	Civil Engineer	
Company	Kimley-Horn and Associates, Inc.	
Address	3801 University Avenue, Suite 300, Riverside, CA 92501	
Email	Rob.Otte@kimley-horn.com	
Telephone #	(951) 534-5630	
Signature		
Date		

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APPENDIX C - CALCULATIONS

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APPENDIX F - EDUCATIONAL MATERIALS

APPENDIX G - 303d LIST

APPENDIX H - OPERATIONS AND MAINTENANCE PLAN

Section 1 Discretionary Permit(s)

Form 1-1 Project Information					
Project Name	Empire Hotel				
Project Owner Contact Name:	Nolan C. Leggio				
Mailing Address:	10621 Civic Center Drive, Rancho Cucamonga, CA 91730	E-mail Address:	NLeggio@DiversifiedPacific.com	Telephone:	(909)-373-2628
Permit/Application Number(s):			Tract/Parcel Map Number(s):		
Additional Information/ Comments:					
Description of Project:	The development site is approximately 10.4 acres in size. The site is located at the southeast corner of E. Holt Boulevard and E. Gausti Road, in the City of Ontario, San Bernardino County, California. The development will include a hotel, pool, and outdoor recreation spaces, and subterrainian parking.				
Provide summary of Conceptual WQMP conditions (if previously submitted and approved). Attach complete copy.					

Section 2 Project Description

2.1 Project Information

This section of the WQMP should provide the information listed below. The information provided for Conceptual/ Preliminary WQMP should give sufficient detail to identify the major proposed site design and LID BMPs and other anticipated water quality features that impact site planning. Final Project WQMP must specifically identify all BMP incorporated into the final site design and provide other detailed information as described herein.

The purpose of this information is to help determine the applicable development category, pollutants of concern, watershed description, and long-term maintenance responsibilities for the project, and any applicable water quality credits. This information will be used in conjunction with the information in Section 3, Site Description, to establish the performance criteria and to select the LID BMP or other BMP for the project or other alternative programs that the project will participate in, which are described in Section 4.

Form 2.1-1 Description of Proposed Project

1 Development Category (Select all that apply):

☐ Significant re-development involving the addition or replacement of 5,000 ft² or more of impervious surface on an already developed site	☒ New development involving the creation of 10,000 ft² or more of impervious surface collectively over entire site	☐ Automotive repair shops with standard industrial classification (SIC) codes 5013, 5014, 5541, 7532- 7534, 7536-7539	☐ Restaurants (with SIC code 5812) where the land area of development is 5,000 ft² or more
☐ Hillside developments of 5,000 ft² or more which are located on areas with known erosive soil conditions or where the natural slope is 25 percent or more	☐ Developments of 2,500 ft² of impervious surface or more adjacent to (within 200 ft) or discharging directly into environmentally sensitive areas or waterbodies listed on the CWA Section 303(d) list of impaired waters.	☐ Parking lots of 5,000 ft² or more exposed to storm water	☐ Retail gasoline outlets that are either 5,000 ft² or more, or have a projected average daily traffic of 100 or more vehicles per day

☐ Non-Priority / Non-Category Project *May require source control LID BMPs and other LIP requirements. Please consult with local jurisdiction on specific requirements*.

2 Project Area (ft2):	454,257	**3** Number of Dwelling Units:		**4** SIC Code:	7011

5 Is Project going to be phased? Yes ☐ No ☐ *If yes, ensure that the WQMP evaluates each phase as a distinct DA, requiring LID BMPs to address runoff at time of completion.*

6 Does Project include roads? Yes ☐ No ☐ *If yes, ensure that applicable requirements for transportation projects are addressed (see Appendix A of TGD for WQMP)*

2.2 Property Ownership/Management

Describe the ownership/management of all portions of the project and site. State whether any infrastructure will transfer to public agencies (City, County, Caltrans, etc.) after project completion. State if a homeowners or property owners association will be formed and be responsible for the long-term maintenance of project stormwater facilities. Describe any lot-level stormwater features that will be the responsibility of individual property owners.

Form 2.2-1 Property Ownership/Management

Describe property ownership/management responsible for long-term maintenance of WQMP stormwater facilities:
Ownership, managment and maintenance of WQMP facililites will be the responsibility of the private owner.

2.3 Potential Stormwater Pollutants

Determine and describe expected stormwater pollutants of concern based on land uses and site activities (refer to Table 3-3 in the TGD for WQMP).

Form 2.3-1 Pollutants of Concern			
Pollutant	Please check: E=Expected, N=Not Expected		Additional Information and Comments
Pathogens (Bacterial / Virus)	E ☒	N ☐	Expected in commercial development per WQMP TGD Table 3-3
Nutrients - Phosphorous	E ☒	N ☐	Expected in commercial development per WQMP TGD Table 3-3
Nutrients - Nitrogen	E ☒	N ☐	Expected in commercial development per WQMP TGD Table 3-3
Noxious Aquatic Plants	E ☒	N ☐	Expected in commercial development per WQMP TGD Table 3-3
Sediment	E ☒	N ☐	Expected in commercial development per WQMP TGD Table 3-3
Metals	E ☒	N ☐	Expected in commercial development per WQMP TGD Table 3-3
Oil and Grease	E ☒	N ☐	Expected in commercial development per WQMP TGD Table 3-3
Trash/Debris	E ☒	N ☐	Expected in commercial development per WQMP TGD Table 3-3
Pesticides / Herbicides	E ☒	N ☐	Expected in commercial development per WQMP TGD Table 3-3
Organic Compounds	E ☒	N ☐	Expected in commercial development per WQMP TGD Table 3-3
Other:	E ☐	N ☐	
Other:	E ☐	N ☐	
Other:	E ☐	N ☐	
Other:	E ☐	N ☐	
Other:	E ☐	N ☐	

2.4 Water Quality Credits

A water quality credit program is applicable for certain types of development projects if it is not feasible to meet the requirements for on-site LID. Proponents for eligible projects, as described below, can apply for water quality credits that would reduce project obligations for selecting and sizing other treatment BMP or participating in other alternative compliance programs. Refer to Section 6.2 in the TGD for WQMP to determine if water quality credits are applicable for the project.

Form 2.4-1 Water Quality Credits

1 Project Types that Qualify for Water Quality Credits: *Select all that apply*			
☐ Redevelopment projects that reduce the overall impervious footprint of the project site. [Credit = % impervious reduced]	Higher density development projects ☐ Vertical density [20%] ☐ 7 units/ acre [5%]	☐ Mixed use development, (combination of residential, commercial, industrial, office, institutional, or other land uses which incorporate design principles that demonstrate environmental benefits not realized through single use projects) [20%]	☐ Brownfield redevelopment (redevelop real property complicated by presence or potential of hazardous contaminants) [25%]
☐ Redevelopment projects in established historic district, historic preservation area, or similar significant core city center areas [10%]	☒ Transit-oriented developments (mixed use residential or commercial area designed to maximize access to public transportation) [20%]	☐ In-fill projects (conversion of empty lots & other underused spaces < 5 acres, substantially surrounded by urban land uses, into more beneficially used spaces, such as residential or commercial areas) [10%]	☐ Live-Work developments (variety of developments designed to support residential and vocational needs) [20%]
2 Total Credit % *(Total all credit percentages up to a maximum allowable credit of 50 percent)*			
Description of Water Quality Credit Eligibility (if applicable)			

Section 3 Site and Watershed Description

Describe the project site conditions that will facilitate the selection of BMP through an analysis of the physical conditions and limitations of the site and its receiving waters. Identify distinct drainage areas (DA) that collect flow from a portion of the site and describe how runoff from each DA (and sub-watershed DMAs) is conveyed to the site outlet(s). Refer to Section 3.2 in the TGD for WQMP. The form below is provided as an example. Then complete Forms 3.2 and 3.3 for each DA on the project site. ***If the project has more than one drainage area for stormwater management, then complete additional versions of these forms for each DA / outlet.***

Form 3-1 Site Location and Hydrologic Features

Site coordinates *take GPS measurement at approximate center of site*	Latitude 34° 3'51.12"N	Longitude 117°36'10.53"W	Thomas Bros Map page
1 San Bernardino County climatic region: ☒ Valley ☐ Mountain			
2 Does the site have more than one drainage area (DA): Yes☐ No☒ *If no, proceed to Form 3-2. If yes, then use this form to show a conceptual schematic describing DMAs and hydrologic feature connecting DMAs to the site outlet(s).*			

Conveyance	Briefly describe on-site drainage features to convey runoff that is not retained within a DMA
DA1 DMA A flows to Outlet 1	*Onsite drainage flows via network of local storm drains to underground infiltration system and then to existing 108" storm drain located south of Guasti Avenue. 108" SD connects to Cucamonga Creek.*

Form 3-2 Existing Hydrologic Characteristics for Drainage Area 1

For Drainage Area 1's sub-watershed DMA, provide the following characteristics	DMA A	DMA B	DMA C	DMA D
1 DMA drainage area (ft^2)	454,257			
2 Existing site impervious area (ft^2)	0			
3 Antecedent moisture condition *For desert areas, use* *http://www.sbcounty.gov/dpw/floodcontrol/pdf/20100412_map.pdf*	II			
4 Hydrologic soil group *Refer to Watershed Mapping Tool – http://permitrack.sbcounty.gov/wap/*	**A**			
5 Longest flowpath length (ft)	890			
6 Longest flowpath slope (ft/ft)	0.0124			
7 Current land cover type(s) *Select from Fig C-3 of Hydrology Manual*	Grass, Annual			
8 Pre-developed pervious area condition: *Based on the extent of wet season vegetated cover good >75%; Fair 50-75%; Poor <50% Attach photos of site to support rating*	Fair			

Form 3-3 Watershed Description for Drainage Area

Receiving waters *Refer to Watershed Mapping Tool - http://permitrack.sbcounty.gov/wap/ See 'Drainage Facilities" link at this website*	Cucamonga Creek Reach 1 (Valley Reach), Santa Ana River Reach 4, 3, 2 and 1,
Applicable TMDLs *Refer to Local Implementation Plan*	TMDL required - Cadmium (2016) TMDL required - Copper (2016) TMDL required - Lead (2016) TMDL required - Zinc (2016)
303(d) listed impairments *Refer to Local Implementation Plan and Watershed Mapping Tool – http://permitrack.sbcounty.gov/wap/ and State Water Resources Control Board website – http://www.waterboards.ca.gov/santaana/water_issues/programs/tmdl/index.shtml*	Cadmium, Copper, Lead, Zinc
Environmentally Sensitive Areas (ESA) *Refer to Watershed Mapping Tool – http://permitrack.sbcounty.gov/wap/*	None
Unlined Downstream Water Bodies *Refer to Watershed Mapping Tool – http://permitrack.sbcounty.gov/wap/*	Santa Ana River
Hydrologic Conditions of Concern	☐ Yes *Complete Hydrologic Conditions of Concern (HCOC) Assessment. Include Forms 4.2-2 through Form 4.2-5 and Hydromodification BMP Form 4.3-10 in submittal* ☒ No
Watershed–based BMP included in a RWQCB approved WAP	☐ Yes *Attach verification of regional BMP evaluation criteria in WAP* • *More Effective than On-site LID* • *Remaining Capacity for Project DCV* • *Upstream of any Water of the US* • *Operational at Project Completion* • *Long-Term Maintenance Plan* ☒ No

Section 4 Best Management Practices (BMP)

4.1 Source Control BMP

4.1.1 Pollution Prevention

Non-structural and structural source control BMP are required to be incorporated into all new development and significant redevelopment projects. Form 4.1-1 and 4.1-2 are used to describe specific source control BMPs used in the WQMP or to explain why a certain BMP is not applicable. Table 7-3 of the TGD for WQMP provides a list of applicable source control BMP for projects with specific types of potential pollutant sources or activities. The source control BMP in this table must be implemented for projects with these specific types of potential pollutant sources or activities.

The preparers of this WQMP have reviewed the source control BMP requirements for new development and significant redevelopment projects. The preparers have also reviewed the specific BMP required for project as specified in Forms 4.1-1 and 4.1-2. All applicable non-structural and structural source control BMP shall be implemented in the project.

Form 4.1-1 Non-Structural Source Control BMPs

Identifier	Name	Check One		Describe BMP Implementation OR, if not applicable, state reason
		Included	Not Applicable	
N1	Education of Property Owners, Tenants and Occupants on Stormwater BMPs	☒	☐	provide environmental awareness education materials, made available by the municipalities, to maintenance staff. Among other things, these materials will describe the use of chemicals (including household type) that should be limited to the property, with no discharge of wastes via hosing or other direct discharge to gutters, catch basins and storm drains. Educational materials available from the San Bernardino Stormwater Program and can be downloaded at: http://www.sbcountystormwater.org/gov_out.html
N2	Activity Restrictions	☒	☐	Use restrictions will be developed by building operator through lease terms, and City restrictions will be imposed via permits and local ordinance
N3	Landscape Management BMPs	☒	☐	Identify on-going landscape maintenance requirements consistent with applicable local ordinances that may include fertilizer and/or pesticide usage
N4	BMP Maintenance	☒	☐	Identify responsibility for implementation and scheduled cleaning/maintenance of BMPs. (See Section 5)
N5	Title 22 CCR Compliance (How development will comply)	☐	☒	No community care facility is proposed
N6	Local Water Quality Ordinances	☒	☐	Site must comply with any applicable local water quality ordinances set by the local jurisdiction
N7	Spill Contingency Plan	☒	☐	Prepare spill contingency plan and provide to maintenance staff
N8	Underground Storage Tank Compliance	☐	☒	No underground storage tanks proposed
N9	Hazardous Materials Disclosure Compliance	☒	☐	

Form 4.1-1 Non-Structural Source Control BMPs

Identifier	Name	Check One		Describe BMP Implementation OR, if not applicable, state reason
		Included	Not Applicable	
N10	Uniform Fire Code Implementation	☒	☐	Adhere to requirements of UFC
N11	Litter/Debris Control Program	☒	☐	implement trash management and litter control procedures in the common areas aimed at reducing pollution of drainage water. The owner may contract with their landscape maintenance firms to provide this service during regularly scheduled maintenance, which should consist of litter patrol, emptying of trash receptacles in common areas,
N12	Employee Training	☒	☐	Implement training program
N13	Housekeeping of Loading Docks	☒	☐	Maintain loading docks in accordance with CASQA standards
N14	Catch Basin Inspection Program	☒	☐	The owner is required to have at least 80 percent of drainage facilities inspected, cleaned and maintained on an annual basis with 100 percent of the facilities included in a two-year period. Cleaning should take place in the late summer/early fall prior to the start of the rainy season. Drainage facilities include catch basins (storm drain inlets), detention basins, retention basins, sediment basins, open drainage channels and lift stations.
N15	Vacuum Sweeping of Private Streets and Parking Lots	☒	☐	Streets and parking lots are required to be swept on a regular frequency based on usage and field observations of waste accumulation, using a vacuum assisted sweeper. At a minimum all paved areas of a business shall be swept, in late summer or early fall, prior to the start of the rainy season or equivalent, as required by the governing jurisdiction
N16	Other Non-structural Measures for Public Agency Projects	☐	☒	No public agency projects associated.

Form 4.1-1 Non-Structural Source Control BMPs				
N17	Comply with all other applicable NPDES permits	☒	☐	Permittees shall comply with other NPDES permits such as General Industrial permits, etc., to include BMPs that are required as a part of a SWPPP

Form 4.1-2 Structural Source Control BMPs

Identifier	Name	Check One		Describe BMP Implementation OR, If not applicable, state reason
		Included	Not Applicable	
S1	Provide storm drain system stencilling and signage (CASQA New Development BMP Handbook SD-13)	☒	☐	Provide stenciling or labeling on all storm drain inlets and catch basins. Post signs and prohibitive language and/or graphical icons that prohibit illegal dumping
S2	Design and construct outdoor material storage areas to reduce pollution introduction (CASQA New Development BMP Handbook SD-34)	☐	☒	No outdoor material storage is proposed
S3	Design and construct trash and waste storage areas to reduce pollution introduction (CASQA New Development BMP Handbook SD-32)	☒	☐	All trash container areas shall be paved with an impervious surface with no run-on from adjoining areas and bins will have attached lids to prevent exposure to precipitation
S4	Use efficient irrigation systems & landscape design, water conservation, smart controllers, and source control (Statewide Model Landscape Ordinance; CASQA New Development BMP Handbook SD-12)	☒	☐	Landscape should employ rain shutoff devices, flow reducers or shutoff valves triggered by a pressure drop, mulches, appropriate plant material, etc. The timing and application methods of irrigation water must be designed to minimize the runoff of excess irrigation water into the municipal storm drain system.
S5	Finish grade of landscaped areas at a minimum of 1-2 inches below top of curb, sidewalk, or pavement	☒	☐	All landscaping shall be finish-graded at a minimum of 1-2 inches below top of curb, sidewalk or pavement.
S6	Protect slopes and channels and provide energy dissipation (CASQA New Development BMP Handbook SD-10)	☒	☐	Vegetate slopes with native drought tolerant vegetation and, if necessary, provide water efficient irrigation.
S7	Covered dock areas (CASQA New Development BMP Handbook SD-31)	☒	☐	Dock is located at basement level
S8	Covered maintenance bays with spill containment plans (CASQA New Development BMP Handbook SD-31)	☐	☒	No maintenance bays proposed
S9	Vehicle wash areas with spill containment plans (CASQA New Development BMP Handbook SD-33)	☐	☒	No vehicle wash areas proposed

S10	Covered outdoor processing areas (CASQA New Development BMP Handbook SD-36)	☐	☐	

Form 4.1-2 Structural Source Control BMPs

Identifier	Name	Check One		Describe BMP Implementation OR, If not applicable, state reason
		Included	Not Applicable	
S11	Equipment wash areas with spill containment plans (CASQA New Development BMP Handbook SD-33)	☐	☒	No equipment wash area proposed
S12	Fueling areas (CASQA New Development BMP Handbook SD-30)	☐	☒	No fueling area proposed
S13	Hillside landscaping (CASQA New Development BMP Handbook SD-10)	☐	☒	Not a hillside project
S14	Wash water control for food preparation areas	☒	☐	Food preparation within restaurants per health code requirements
S15	Community car wash racks (CASQA New Development BMP Handbook SD-33)	☐	☒	No community car wash proposed

4.1.2 Preventative LID Site Design Practices

Site design practices associated with new LID requirements in the MS4 Permit should be considered in the earliest phases of a project. Preventative site design practices can result in smaller DCV for LID BMP and hydromodification control BMP by reducing runoff generation. Describe site design and drainage plan including:

- A narrative of site design practices utilized or rationale for not using practices
- A narrative of how site plan incorporates preventive site design practices
- Include an attached Site Plan layout which shows how preventative site design practices are included in WQMP

Refer to Section 5.2 of the TGD for WQMP for more details.

Form 4.1-3 Preventative LID Site Design Practices Checklist

Site Design Practices *If yes, explain how preventative site design practice is addressed in project site plan. If no, other LID BMPs must be selected to meet targets*
Minimize impervious areas: Yes ☒ No ☐ Explanation: Impervious areas have been minimized by designing those surfaces to minimum widths while still meeting City and accessibility requirements.
Maximize natural infiltration capacity: Yes ☒ No ☐ Explanation: Limit compaction in landscape areas to maximize infiltration capacity
Preserve existing drainage patterns and time of concentration: Yes ☐ No ☒ Explanation: Area DA1, will be developed and provide hotel building and infrastructure and cannot maintain existing time of concentration but does maintain the overall drainage pattern direction towards the southeast corner of the development
Disconnect impervious areas: Yes ☒ No ☐ Explanation: Recreational open spaces provided and greenbelt surrounds the proposed structure.
Protect existing vegetation and sensitive areas: Yes ☐ No ☒ Explanation: Area DA1 will be developed and is barren; scattered grass onsite will be removed.
Re-vegetate disturbed areas: Yes ☒ No ☐ Explanation: The project proposes extensive landscape of open recreation areas.
Minimize unnecessary compaction in stormwater retention/infiltration basin/trench areas: Yes ☐ No ☒ Explanation: No basin is proposed. Project will utilize underground storage.
Utilize vegetated drainage swales in place of underground piping or imperviously lined swales: Yes ☒ No ☐ Explanation: Where feasible, drainage swales will be incorporated
Stake off areas that will be used for landscaping to minimize compaction during construction: Yes ☒ No ☐ Explanation: The proposed landscape areas will be staked off during construction

4.2 Project Performance Criteria

The purpose of this section of the Project WQMP is to establish targets for post-development hydrology based on performance criteria specified in the MS4 Permit. These targets include runoff volume for water quality control (referred to as LID design capture volume), and runoff volume, time of concentration, and peak runoff for protection of any downstream waterbody segments with a HCOC. ***If the project has more than one outlet for stormwater runoff, then complete additional versions of these forms for each DA / outlet.***

Methods applied in the following forms include:

- For LID BMP Design Capture Volume (DCV), the San Bernardino County Stormwater Program requires use of the P_6 method (MS4 Permit Section XI.D.6a.ii) – Form 4.2-1
- For HCOC pre- and post-development hydrologic calculation, the San Bernardino County Stormwater Program requires the use of the Rational Method (San Bernardino County Hydrology Manual Section D). Forms 4.2-2 through Form 4.2-5 calculate hydrologic variables including runoff volume, time of concentration, and peak runoff from the project site pre- and post-development using the Hydrology Manual Rational Method approach. For projects greater than 640 acres (1.0 mi^2), the Rational Method and these forms should not be used. For such projects, the Unit Hydrograph Method (San Bernardino County Hydrology Manual Section E) shall be applied for hydrologic calculations for HCOC performance criteria.

Refer to Section 4 in the TGD for WQMP for detailed guidance and instructions.

Form 4.2-1 LID BMP Performance Criteria for Design Capture Volume (DA 1)

1 Project area DA 1 (ft^2): 454,257	**2** Imperviousness after applying preventative site design practices (Imp%): 80%	**3** Runoff Coefficient (Rc): 0.5933 *$R_c = 0.858(Imp\%)^{\wedge 3}-0.78(Imp\%)^{\wedge 2}+0.774(Imp\%)+0.04$*
4 Determine 1-hour rainfall depth for a 2-year return period $P_{2yr\text{-}1hr}$ (in): 0.609 *http://hdsc.nws.noaa.gov/hdsc/pfds/sa/sca_pfds.html*		
5 Compute P_6, Mean 6-hr Precipitation (inches): 0.902 *P_6 = Item 4 *C_1, where C_1 is a function of site climatic region specified in Form 3-1 Item 1 (Valley = 1.4807; Mountain = 1.909; Desert = 1.2371)*		
6 Drawdown Rate *Use 48 hours as the default condition. Selection and use of the 24 hour drawdown time condition is subject to approval by the local jurisdiction. The necessary BMP footprint is a function of drawdown time. While shorter drawdown times reduce the performance criteria for LID BMP design capture volume, the depth of water that can be stored is also reduced.*		24-hrs ☐ 48-hrs ☒
7 Compute design capture volume, DCV (ft^3): 40,157 *DCV = 1/12 * [Item 1* Item 3 *Item 5 * C_2], where C_2 is a function of drawdown rate (24-hr = 1.582; 48-hr = 1.963)* *Compute separate DCV for each outlet from the project site per schematic drawn in Form 3-1 Item 2*		

Form 4.2-2 Summary of HCOC Assessment (DA 1)

Does project have the potential to cause or contribute to an HCOC in a downstream channel: Yes No

Go to: http://permitrack.sbcounty.gov/wap/

If "Yes", then complete HCOC assessment of site hydrology for 2yr storm event using Forms 4.2-3 through 4.2-5 and insert results below

(Forms 4.2-3 through 4.2-5 may be replaced by computer software analysis based on the San Bernardino County Hydrology Manual)

If "No," then proceed to Section 4.3 Project Conformance Analysis

NOT APPLICABLE

Condition	Runoff Volume (ft^3)	Time of Concentration (min)	Peak Runoff (cfs)
Pre-developed	1 *Form 4.2-3 Item 12*	2 *Form 4.2-4 Item 13*	3 *Form 4.2-5 Item 10*
Post-developed	4 *Form 4.2-3 Item 13*	5 *Form 4.2-4 Item 14*	6 *Form 4.2-5 Item 14*
Difference	7 *Item 4 – Item 1*	8 *Item 2 – Item 5*	9 *Item 6 – Item 3*
Difference (as % of pre-developed)	10 % *Item 7 / Item 1*	11 % *Item 8 / Item 2*	12 % *Item 9 / Item 3*

Form 4.2-3 HCOC Assessment for Runoff Volume (DA 1)

Weighted Curve Number Determination for: Pre-developed DA	DMA A	DMA B	DMA C	DMA D	DMA E	DMA F	DMA G	DMA H
1a Land Cover type								
2a Hydrologic Soil Group (HSG)								
3a DMA Area, ft² *sum of areas of DMA should equal area of DA*								
4a Curve Number (CN) *use Items 1 and 2 to select the appropriate CN from Appendix C-2 of the TGD for WQMP*								
Weighted Curve Number Determination for: Post-developed DA	DMA A	DMA B	DMA C	DMA D	DMA E	DMA F	DMA G	DMA H
1b Land Cover type								
2b Hydrologic Soil Group (HSG)								
3b DMA Area, ft² *sum of areas of DMA should equal area of DA*								
4b Curve Number (CN) *use Items 5 and 6 to select the appropriate CN from Appendix C-2 of the TGD for WQMP*								

5 Pre-Developed area-weighted CN:	**7** Pre-developed soil storage capacity, S (in): *S = (1000 / Item 5) – 10*	**9** Initial abstraction, I_a (in): *I_a = 0.2 * Item 7*
6 Post-Developed area-weighted CN:	**8** Post-developed soil storage capacity, S (in): *S = (1000 / Item 6) – 10*	**10** Initial abstraction, I_a (in): *I_a = 0.2 * Item 8*

11 Precipitation for 2 yr, 24 hr storm (in):
Go to: http://hdsc.nws.noaa.gov/hdsc/pfds/sa/sca_pfds.html

12 Pre-developed Volume (ft³):
*V_{pre} =(1 / 12) * (Item sum of Item 3) * (Item 11 – Item 9)^2 / ((Item 11 – Item 9 + Item 7)*

13 Post-developed Volume (ft³):
*V_{pre} =(1 / 12) * (Item sum of Item 3) * ((Item 11 – Item 10)^2 / ((Item 11 – Item 10 + Item 8)*

14 Volume Reduction needed to meet HCOC Requirement, (ft³):
*V_{HCOC} = (Item 13 * 0.95) – Item 12*

NOT APPLICABLE

Form 4.2-4 HCOC Assessment for Time of Concentration (DA 1)

Compute time of concentration for pre and post developed conditions for each DA *(For projects using the Hydrology Manual complete the form below)*

Variables	Pre-developed DA1 *Use additional forms if there are more than 4 DMA*				Post-developed DA1 *Use additional forms if there are more than 4 DMA*			
	DMA A	DMA B	DMA C	DMA D	DMA A	DMA B	DMA C	DMA D
1 Length of flowpath (ft) *Use Form 3-2 Item 5 for pre-developed condition*								
2 Change in elevation (ft)								
3 Slope (ft/ft), S_o = *Item 2 / Item 1*								
4 Land cover								
5 Initial DMA time of concentration (min) *Appendix [illegible] of the TGD for WQMP*								
6 Length of conveyance from DMA outlet to project site outlet (ft) *May be zero if DMA outlet is at project site outlet*								
7 Cross-sectional area of channel (ft^2)								
8 Wetted perimeter of channel (ft)								
9 Manning's roughness of channel (n)								
10 Channel flow velocity (ft/sec) V_{fps} = *(1.49 / Item 9) * (Item 7/Item 8)^0.67 * (Item 3)^0.5*								
11 Travel time to outlet (min) T_t = *Item 6 / (Item 10 * 60)*								
12 Total time of concentration (min) T_c = *Item 5 + Item 11*								

13 Pre-developed time of concentration (min): *Minimum of Item 12 pre-developed DMA*

14 Post-developed time of concentration (min): *Minimum of Item 12 post-developed DMA*

15 Additional time of concentration needed to meet HCOC requirement (min): $T_{C\text{-}HCOC}$ = *(Item 13 * 0.95) – Item 14*

NOT APPLICABLE

Form 4.2-5 HCOC Assessment for Peak Runoff (DA 1)

NOT APPLICABLE

Compute peak runoff for pre- and post-developed conditions

Variables		Pre-developed DA to Project Outlet (*Use additional forms if more than 3 DMA*)			Post-developed DA to Project Outlet (*Use additional forms if more than 3 DMA*)		
		DMA A	DMA B	DMA C	DMA A	DMA B	DMA C
1 Rainfall Intensity for storm duration equal to time of concentration *I_{peak} = 10^(LOG Form 4.2-1 Item 4 - 0.6 LOG Form 4.2-4 Item 5 /60)*							
2 Drainage Area of each DMA (Acres) *For DMA with outlet at project site outlet, include upstream DMA (Using example schematic in Form 3-1, DMA A will include drainage from DMA C)*							
3 Ratio of pervious area to total area *For DMA with outlet at project site outlet, include upstream DMA (Using example schematic in Form 3-1, DMA A will include drainage from DMA C)*							
4 Pervious area infiltration rate (in/hr) *Use pervious area CN and antecedent moisture condition with Appendix C-3 of the TGD for WQMP*							
5 Maximum loss rate (in/hr) *F_m = Item 3 * Item 4* *Use area-weighted F_m from DMA with outlet at project site outlet, include upstream DMA (Using example schematic in Form 3-1, DMA A will include drainage from DMA C)*							
6 Peak Flow from DMA (cfs) *Q_p =Item 2 * 0.9 * (Item 1 - Item 5)*							
7 Time of concentration adjustment factor for other DMA to site discharge point *Form 4.2-4 Item 12 DMA / Other DMA upstream of site discharge point (If ratio is greater than 1.0, then use maximum value of 1.0)*	DMA A	*n/a*			*n/a*		
	DMA B		*n/a*			*n/a*	
	DMA C			*n/a*			*n/a*

8 Pre-developed Q_p at T_c for DMA A: *Q_p = Item 6_{DMAA} + [Item 6_{DMAB} * (Item 1_{DMAA} - Item 5_{DMAB})/(Item 1_{DMAB} - Item 5_{DMAB})* Item $7_{DMAA/2}$] + [Item 6_{DMAC} * (Item 1_{DMAA} - Item 5_{DMAC})/(Item 1_{DMAC} - Item 5_{DMAC})* Item $7_{DMAA/3}$]*	**9** Pre-developed Q_p at T_c for DMA B: *Q_p = Item 6_{DMAB} + [Item 6_{DMAA} * (Item 1_{DMAB} - Item 5_{DMAA})/(Item 1_{DMAA} - Item 5_{DMAA})* Item $7_{DMAB/1}$] + [Item 6_{DMAC} * (Item 1_{DMAB} - Item 5_{DMAC})/(Item 1_{DMAC} - Item 5_{DMAC})* Item $7_{DMAB/3}$]*	**10** Pre-developed Q_p at T_c for DMA C: *Q_p = Item 6_{DMAC} + [Item 6_{DMAA} * (Item 1_{DMAC} - Item 5_{DMAA})/(Item 1_{DMAA} - Item 5_{DMAA})* Item $7_{DMAC/1}$] + [Item 6_{DMAB} * (Item 1_{DMAC} - Item 5_{DMAB})/(Item 1_{DMAB} - Item 5_{DMAB})* Item $7_{DMAC/2}$]*
10 Peak runoff from pre-developed condition confluence analysis (cfs):		*Maximum of Item 8, 9, and 10 (including additional forms as needed)*
11 Post-developed Q_p at T_c for DMA A: *Same as Item 8 for post-developed values*	**12** Post-developed Q_p at T_c for DMA B: *Same as Item 9 for post-developed values*	**13** Post-developed Q_p at T_c for DMA C: *Same as Item 10 for post-developed values*
14 Peak runoff from post-developed condition confluence analysis (cfs):		*Maximum of Item 11, 12, and 13 (including additional forms as needed)*
15 Peak runoff reduction needed to meet HCOC Requirement (cfs):		*$Q_{p\text{-}HCOC}$ = (Item 14 * 0.95) – Item 10*

4.3 Project Conformance Analysis

Complete the following forms for each project site DA to document that the proposed LID BMPs conform to the project DCV developed to meet performance criteria specified in the MS4 Permit (WQMP Template Section 4.2). For the LID DCV, the forms are ordered according to hierarchy of BMP selection as required by the MS4 Permit (see Section 5.3.1 in the TGD for WQMP). The forms compute the following for on-site LID BMP:

- Site Design and Hydrologic Source Controls (Form 4.3-2)
- Retention and Infiltration (Form 4.3-3)
- Harvested and Use (Form 4.3-4) or
- Biotreatment (Form 4.3-5).

At the end of each form, additional fields facilitate the determination of the extent of mitigation provided by the specific BMP category, allowing for use of the next category of BMP in the hierarchy, if necessary.

The first step in the analysis, using Section 5.3.2.1 of the TGD for WQMP, is to complete Forms 4.3-1 and 4.3-3) to determine if retention and infiltration BMPs are infeasible for the project. For each feasibility criterion in Form 4.3-1, if the answer is "Yes," provide all study findings that includes relevant calculations, maps, data sources, etc. used to make the determination of infeasibility.

Next, complete Forms 4.3-2 and 4.3-4 to determine the feasibility of applicable HSC and harvest and use BMPs, and, if their implementation is feasible, the extent of mitigation of the DCV.

If no site constraints exist that would limit the type of BMP to be implemented in a DA, evaluate the use of combinations of LID BMPs, including all applicable HSC BMPs to maximize on-site retention of the DCV. If no combination of BMP can mitigate the entire DCV, implement the single BMP type, or combination of BMP types, that maximizes on-site retention of the DCV within the minimum effective area.

If the combination of LID HSC, retention and infiltration, and harvest and use BMPs are unable to mitigate the entire DCV, then biotreatment BMPs may be implemented by the project proponent. If biotreatment BMPs are used, then they must be sized to provide sufficient capacity for effective treatment of the remainder of the volume-based performance criteria that cannot be achieved with LID BMPs (TGD for WQMP Section 5.4.4.2). **Under no circumstances shall any portion of the DCV be released from the site without effective mitigation and/or treatment**.

Form 4.3-1 Infiltration BMP Feasibility (DA 1)

Feasibility Criterion – Complete evaluation for each DA on the Project Site

[1] Would infiltration BMP pose significant risk for groundwater related concerns? Yes ☐ No ☒
Refer to Section 5.3.2.1 of the TGD for WQMP

If Yes, Provide basis: (attach)

[2] Would installation of infiltration BMP significantly increase the risk of geotechnical hazards? Yes ☐ No ☒
(Yes, if the answer to any of the following questions is yes, as established by a geotechnical expert):

- The location is less than 50 feet away from slopes steeper than 15 percent
- The location is less than eight feet from building foundations or an alternative setback.
- A study certified by a geotechnical professional or an available watershed study determines that stormwater infiltration would result in significantly increased risks of geotechnical hazards.

If Yes, Provide basis: (attach)

[3] Would infiltration of runoff on a Project site violate downstream water rights? Yes ☐ No ☒

If Yes, Provide basis: (attach)

[4] Is proposed infiltration facility located on hydrologic soil group (HSG) D soils or does the site geotechnical investigation indicate presence of soil characteristics, which support categorization as D soils? Yes ☐ No ☒

If Yes, Provide basis: (attach)

[5] Is the design infiltration rate, after accounting for safety factor of 2.0, below proposed facility less than 0.3 in/hr (accounting for soil amendments)? Yes ☐ No ☒

If Yes, Provide basis: (attach)

[6] Would on-site infiltration or reduction of runoff over pre-developed conditions be partially or fully inconsistent with watershed management strategies as defined in the WAP, or impair beneficial uses? Yes ☐ No ☒
See Section 3.5 of the TGD for WQMP and WAP

If Yes, Provide basis: (attach)

[7] Any answer from Item 1 through Item 3 is "Yes": Yes ☐ No ☐
If yes, infiltration of any volume is not feasible onsite. Proceed to Form 4.3-4, Harvest and Use BMP. If no, then proceed to Item 8 below.

[8] Any answer from Item 4 through Item 6 is "Yes": Yes ☐ No ☐
If yes, infiltration is permissible but is not required to be considered. Proceed to Form 4.3-2, Hydrologic Source Control BMP.
If no, then proceed to Item 9, below.

[9] All answers to Item 1 through Item 6 are "No":
Infiltration of the full DCV is potentially feasible, LID infiltration BMP must be designed to infiltrate the full DCV to the MEP.
Proceed to Form 4.3-2, Hydrologic Source Control BMP.

4.3.1 Site Design Hydrologic Source Control BMP

Section XI.E. of the Permit emphasizes the use of LID preventative measures; and the use of LID HSC BMPs reduces the portion of the DCV that must be addressed in downstream BMPs. Therefore, all applicable HSC shall be provided except where they are mutually exclusive with each other, or with other BMPs. Mutual exclusivity may result from overlapping BMP footprints such that either would be potentially feasible by itself, but both could not be implemented. Please note that while there are no numeric standards regarding the use of HSC, if a project cannot feasibly meet BMP sizing requirements or cannot fully address HCOCs, feasibility of all applicable HSC must be part of demonstrating that the BMP system has been designed to retain the maximum feasible portion of the DCV. Complete Form 4.3-2 to identify and calculate estimated retention volume from implementing site design HSC BMP. Refer to Section 5.4.1 in the TGD for more detailed guidance.

Form 4.3-2 Site Design Hydrologic Source Control BMPs (DA 1)

1 Implementation of Impervious Area Dispersion BMP (i.e. routing runoff from impervious to pervious areas), excluding impervious areas planned for routing to on-lot infiltration BMP: Yes ☐ No ☒ *If yes, complete Items 2-5; If no, proceed to Item 6*	DA DMA BMP Type	DA DMA BMP Type	DA DMA BMP Type *(Use additional forms for more BMPs)*
2 Total impervious area draining to pervious area (ft^2)			
3 Ratio of pervious area receiving runoff to impervious area			
4 Retention volume achieved from impervious area dispersion (ft^3) *V = Item2 * Item 3 * (0.5/12), assuming retention of 0.5 inches of runoff*			
5 Sum of retention volume achieved from impervious area dispersion (ft^3):		$V_{retention}$ *=Sum of Item 4 for all BMPs*	
6 Implementation of Localized On-lot Infiltration BMPs (e.g. on-lot rain gardens): Yes ☐ No ☒ *If yes, complete Items 7-13 for aggregate of all on-lot infiltration BMP in each DA; If no, proceed to Item 14*	DA DMA BMP Type	DA DMA BMP Type	DA DMA BMP Type *(Use additional forms for more BMPs)*
7 Ponding surface area (ft^2)			
8 Ponding depth (ft)			
9 Surface area of amended soil/gravel (ft^2)			
10 Average depth of amended soil/gravel (ft)			
11 Average porosity of amended soil/gravel			
12 Retention volume achieved from on-lot infiltration (ft^3) $V_{retention}$ *= (Item 7 *Item 8) + (Item 9 * Item 10 * Item 11)*			
13 Runoff volume retention from on-lot infiltration (ft^3):		$V_{retention}$ *=Sum of Item 12 for all BMPs*	

Form 4.3-2 Site Design Hydrologic Source Control BMPs (DA 1)

Form 4.3-2 cont. Site Design Hydrologic Source Control BMPs (DA 1)

14 Implementation of evapotranspiration BMP (green, brown, or blue roofs): Yes ☐ No ☒ *If yes, complete Items 15-20. If no, proceed to Item 21*	DA DMA BMP Type	DA DMA BMP Type	DA DMA BMP Type *(Use additional forms for more BMPs)*
15 Rooftop area planned for ET BMP (ft^2)			
16 Average wet season ET demand (in/day) *Use local values, typical ~ 0.1*			
17 Daily ET demand (ft^3/day) *Item 15 * (Item 16 / 12)*			
18 Drawdown time (hrs) *Copy Item 6 in Form 4.2-1*			
19 Retention Volume (ft^3) $V_{retention}$ *= Item 17 * (Item 18 / 24)*			
20 Runoff volume retention from evapotranspiration BMPs (ft^3): $V_{retention}$ *=Sum of Item 19 for all BMPs*			
21 Implementation of Street Trees: Yes ☐ No ☒ *If yes, complete Items 22-25. If no, proceed to Item 26*	DA DMA BMP Type	DA DMA BMP Type	DA DMA BMP Type *(Use additional forms for more BMPs)*
22 Number of Street Trees			
23 Average canopy cover over impervious area (ft^2)			
24 Runoff volume retention from street trees (ft^3) $V_{retention}$ *= Item 22 * Item 23 * (0.05/12) assume runoff retention of 0.05 inches*			
25 Runoff volume retention from street tree BMPs (ft^3): $V_{retention}$ *= Sum of Item 24 for all BMPs*			
26 Implementation of residential rain barrel/cisterns: Yes ☐ No ☒ *If yes, complete Items 27-29; If no, proceed to Item 30*	DA DMA BMP Type	DA DMA BMP Type	DA DMA BMP Type *(Use additional forms for more BMPs)*
27 Number of rain barrels/cisterns			
28 Runoff volume retention from rain barrels/cisterns (ft^3) $V_{retention}$ *= Item 27 * 3*			
29 Runoff volume retention from residential rain barrels/Cisterns (ft3): $V_{retention}$ *=Sum of Item 28 for all BMPs*			
30 Total Retention Volume from Site Design Hydrologic Source Control BMPs: 0 *Sum of Items 5, 13, 20, 25 and 29*			

4.3.2 Infiltration BMPs

Use Form 4.3-3 to compute on-site retention of runoff from proposed retention and infiltration BMPs. Volume retention estimates are sensitive to the percolation rate used, which determines the amount of runoff that can be infiltrated within the specified drawdown time. The infiltration safety factor reduces field measured percolation to account for potential inaccuracy associated with field measurements, declining BMP performance over time, and compaction during construction. Appendix D of the TGD for WQMP provides guidance on estimating an appropriate safety factor to use in Form 4.3-3.

If site constraints limit the use of BMPs to a single type and implementation of retention and infiltration BMPs mitigate no more than 40% of the DCV, then they are considered infeasible and the Project Proponent may evaluate the effectiveness of BMPs lower in the LID hierarchy of use (Section 5.5.1 of the TGD for WQMP)

If implementation of infiltrations BMPs is feasible as determined using Form 4.3-1, then LID infiltration BMPs shall be implemented to the MEP (section 4.1 of the TGD for WQMP).

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Form 4.3-3 Infiltration LID BMP - including underground BMPs (DA 1)

1 Remaining LID DCV not met by site design HSC BMP (ft^3): 40,157 *V_{unmet} = Form 4.2-1 Item 7 - Form 4.3-2 Item 30*

BMP Type *Use columns to the right to compute runoff volume retention from proposed infiltration BMP (select BMP from Table 5-4 in TGD for WQMP) - Use additional forms for more BMPs*	DA 1 DMA A BMP Type Chambers	DA DMA BMP Type	DA DMA BMP Type *(Use additional forms for more BMPs)*
2 Infiltration rate of underlying soils (in/hr) *See Section 5.4.2 and Appendix D of the TGD for WQMP for minimum requirements for assessment methods*	50		
3 Infiltration safety factor *See TGD Section 5.4.2 and Appendix D*	3.25		
4 Design percolation rate (in/hr) *P_{design} = Item 2 / Item 3*	15.38		
5 Ponded water drawdown time (hr) *Copy Item 6 in Form 4.2-1*	48		
6 Maximum ponding depth (ft) *BMP specific, see Table 5-4 of the TGD for WQMP for BMP design details*	0		
7 Ponding Depth (ft) *d_{BMP} = Minimum of (1/12*Item 4*Item 5) or Item 6*	0		
8 Infiltrating surface area, SA_{BMP} (ft^2) *the lesser of the area needed for infiltration of full DCV or minimum space requirements from Table 5.7 of the TGD for WQMP*	0		
9 Amended soil depth, d_{media} (ft) *Only included in certain BMP types, see Table 5-4 in the TGD for WQMP for reference to BMP design details*	0		
10 Amended soil porosity	0		
11 Gravel depth, d_{media} (ft) *Only included in certain BMP types, see Table 5-4 of the TGD for WQMP for BMP design details*	0		
12 Gravel porosity	0		
13 Duration of storm as basin is filling (hrs) *Typical ~ 3hrs*	3		
14 Above Ground Retention Volume (ft^3) *$V_{retention}$ = Item 8 * [Item7 + (Item 9 * Item 10) + (Item 11 * Item 12) + (Item 13 * (Item 4 / 12))]*	0		
15 Underground Retention Volume (ft^3) *Volume determined using manufacturer's specifications and calculations*	40,933		

16 Total Retention Volume from LID Infiltration BMPs: 40,933 *(Sum of Items 14 and 15 for all infiltration BMP included in plan)*

17 Fraction of DCV achieved with infiltration BMP: 102% *Retention% = Item 16 / Form 4.2-1 Item 7*

18 Is full LID DCV retained onsite with combination of hydrologic source control and LID retention/infiltration BMPs? Yes ☒ No ☐

If yes, demonstrate conformance using Form 4.3-10; If no, then reduce Item 3, Factor of Safety to 2.0 and increase Item 8, Infiltrating Surface Area, such that the portion of the site area used for retention and infiltration BMPs equals or exceeds the minimum effective area thresholds (Table 5-7 of the TGD for WQMP) for the applicable category of development and repeat all above calculations.

4.3.3 Harvest and Use BMP

Harvest and use BMP may be considered if the full LID DCV cannot be met by maximizing infiltration BMPs. Use Form 4.3-4 to compute on-site retention of runoff from proposed harvest and use BMPs.

Volume retention estimates for harvest and use BMPs are sensitive to the on-site demand for captured stormwater. Since irrigation water demand is low in the wet season, when most rainfall events occur in San Bernardino County, the volume of water that can be used within a specified drawdown period is relatively low. The bottom portion of Form 4.3-4 facilitates the necessary computations to show infeasibility if a minimum incremental benefit of 40 percent of the LID DCV would not be achievable with MEP implementation of on-site harvest and use of stormwater (Section 5.5.4 of the TGD for WQMP).

Form 4.3-4 Harvest and Use BMPs (DA 1)

1 Remaining LID DCV not met by site design HSC or infiltration BMP (ft^3): 0 *V_{unmet} = Form 4.2-1 Item 7 - Form 4.3-2 Item 30 – Form 4.3-3 Item 16*			
BMP Type(s) *Compute runoff volume retention from proposed harvest and use BMP (Select BMPs from Table 5-4 of the TGD for WQMP) - Use additional forms for more BMPs*	DA DMA BMP Type	DA DMA BMP Type	DA DMA BMP Type *(Use additional forms for more BMPs)*
2 Describe cistern or runoff detention facility			
3 Storage volume for proposed detention type (ft^3) *Volume of cistern*			
4 Landscaped area planned for use of harvested stormwater (ft^2)			
5 Average wet season daily irrigation demand (in/day) Use local values, typical ~ 0.1 in/day			
6 Daily water demand (ft^3/day) *Item 4 * (Item 5 / 12)*			
7 Drawdown time (hrs) *Copy Item 6 from Form 4.2-1*			
8 Retention Volume (ft^3) *$V_{retention}$ = Minimum of (Item 3) or (Item 6 * (Item 7 / 24))*			
9 Total Retention Volume (ft^3) from Harvest and Use BMP *Sum of Item 8 for all harvest and use BMP included in plan*			
10 Is the full DCV retained with a combination of LID HSC, retention and infiltration, and harvest & use BMPs? Yes No *If yes, demonstrate conformance using Form 4.3-10. If no, then re-evaluate combinations of all LID BMP and optimize their implementation such that the maximum portion of the DCV is retained on-site (using a single BMP type or combination of BMP types). If the full DCV cannot be mitigated after this optimization process, proceed to Section 4.3.4.*			

NOT APPLICABLE

4.3.4 Biotreatment BMP

Biotreatment BMPs may be considered if the full LID DCV cannot be met by maximizing retention and infiltration, and harvest and use BMPs. A key consideration when using biotreatment BMP is the effectiveness of the proposed BMP in addressing the pollutants of concern for the project (see Table 5-5 of the TGD for WQMP).

Use Form 4.3-5 to summarize the potential for volume based and/or flow based biotreatment options to biotreat the remaining unmet LID DCV w. Biotreatment computations are included as follows:

- Use Form 4.3-6 to compute biotreatment in small volume based biotreatment BMP (e.g. bioretention w/underdrains);
- Use Form 4.3-7 to compute biotreatment in large volume based biotreatment BMP (e.g. constructed wetlands);
- Use Form 4.3-8 to compute sizing criteria for flow-based biotreatment BMP (e.g. bioswales)

Form 4.3-5 Selection and Evaluation of Biotreatment BMP (DA 1)

1 Remaining LID DCV not met by site design HSC, infiltration, or harvest and use BMP for potential biotreatment (ft³): 0 *Form 4.2-1 Item 7 - Form 4.3-2 Item 30 – Form 4.3-3 Item 16- Form 4.3-4 Item 9*	List pollutants of concern *Copy from Form 2.3-1.*	
2 Biotreatment BMP Selected *(Select biotreatment BMP(s) necessary to ensure all pollutants of concern are addressed through Unit Operations and Processes, described in Table 5-5 of the TGD for WQMP)*	Volume-based biotreatment *Use Forms 4.3-6 and 4.3-7 to compute treated volume*	Flow-based biotreatment *Use Form 4.3-8 to compute treated volume*
	Bioretention with underdrain Planter box with underdrain Constructed wetland Wet extended detention Dry extended detention	Vegetated swale Vegetated filter strip Proprietary biotreatment
3 Volume biotreated in volume based biotreatment BMP (ft³): *Form 4.3-6 Item 15 + Form 4.3-7 Item*	4 Compute remaining LID DCV with implementation of volume based biotreatment BMP (ft³): *Item 1 – Item 3*	5 Remaining fraction of LID DCV for sizing flow based biotreatment BMP: % *Item 4 / Item 1*
6 Flow-based biotreatment BMP capacity provided (cfs): *Use Figure 5-2 of the TGD for WQMP to determine flow capacity required to provide biotreatment of remaining percentage of unmet LID DCV (Item 5), for the project's precipitation zone (Form 3.1 Item 1)*		
7 Metrics for MEP determination: • Provided a WQMP with the portion of site area used for suite of LID BMP equal to minimum thresholds in Table 5-7 of the TGD for WQMP for the proposed category of development: *If maximized on-site retention BMPs is feasible for partial capture, then LID BMP implementation must be optimized to retain and infiltrate the maximum portion of the DCV possible within the prescribed minimum effective area. The remaining portion of the DCV shall then be mitigated using biotreatment BMP.*		

NOT APPLICABLE

Form 4.3-6 Volume Based Biotreatment (DA 1) – Bioretention and Planter Boxes with Underdrains

Biotreatment BMP Type *(Bioretention w/underdrain, planter box w/underdrain, other comparable BMP)*	DA DMA BMP Type	DA DMA BMP Type	DA DMA BMP Type *(Use additional forms for more BMPs)*
1 Pollutants addressed with BMP *List all pollutant of concern that will be effectively reduced through specific Unit Operations and Processes described in Table 5-5 of the TGD for WQMP*			
2 Amended soil infiltration rate *Typical ~ 5.0*			
3 Amended soil infiltration safety factor *Typical ~ 2.0*			
4 Amended soil design percolation rate (in/hr) $P_{Amended}$ = *Item 2 / Item 3*			
5 Ponded water drawdown time (hr) *Copy Item 6 from Form 4.2-1*			
6 Maximum ponding depth (ft) *see Table 5-6 of the TGD for WQMP for reference to BMP design details*			
7 Ponding Depth (ft) d_{BMP} = *Minimum of (1/12 * Item 4 * Item 5) or Item 6*			
8 Amended soil surface area (ft²)			
9 Amended soil depth (ft) *See Table 5-6 of the TGD for WQMP for reference to BMP design details*			
10 Amended soil porosity, *n*			
11 Gravel depth (ft) *see Table 5-6 of the TGD for WQMP for reference to BMP design details*			
12 Gravel porosity, *n*			
13 Duration of storm as basin is filling (hrs) *Typical ~ 3hrs*			
14 Biotreated Volume (ft³) $V_{biotreated}$ = *Item 8 * [(Item 7/2) + (Item 9 * Item 10) +(Item 11 * Item 12) + (Item 13 * (Item 4 / 12))]*			
15 Total biotreated volume from bioretention and/or planter box with underdrains BMP: *Sum of Item 14 for all volume-based BMPs included in this form*			

NOT APPLICABLE

Form 4.3-7 Volume Based Biotreatment (DA 1) – Constructed Wetlands and Extended Detention

Biotreatment BMP Type *Constructed wetlands, extended wet detention, extended dry detention, or other comparable proprietary BMP. If BMP includes multiple modules (e.g. forebay and main basin), provide separate estimates for storage and pollutants treated in each module.*	DA DMA BMP Type		DA DMA BMP Type *(Use additional forms for more BMPs)*	
	Forebay	Basin	Forebay	Basin
1 Pollutants addressed with BMP forebay and basin *List all pollutant of concern that will be effectively reduced through specific Unit Operations and Processes described in Table 5-5 of the TGD for WQMP*				
2 Bottom width (ft)				
3 Bottom length (ft)				
4 Bottom area (ft^2) A_{bottom} = *Item 2 * Item 3*				
5 Side slope (ft/ft)				
6 Depth of storage (ft)				
7 Water surface area (ft^2) $A_{surface}$ =*(Item 2 + (2 * Item 5 * Item 6)) * (Item 3 + (2 * Item 5 * Item 6))*				
8 Storage volume (ft^3) *For BMP with a forebay, ensure fraction of total storage is within ranges specified in BMP specific fact sheets, see Table 5-6 of the TGD for WQMP for reference to BMP design details* V =*Item 6 / 3 * [Item 4 + Item 7 + (Item 4 * Item 7)^0.5]*				
9 Drawdown Time (hrs) *Copy Item 6 from Form 2.1*				
10 Outflow rate (cfs) Q_{BMP} = *(Item $8_{forebay}$ + Item 8_{basin}) / (Item 9 * 3600)*				
11 Duration of design storm event (hrs)				
12 Biotreated Volume (ft^3) $V_{biotreated}$ = *(Item $8_{forebay}$ + Item 8_{basin}) +(Item 10 * Item 11 * 3600)*				

13 Total biotreated volume from constructed wetlands, extended dry detention, or extended wet detention :
(Sum of Item 12 for all BMP included in plan)

NOT APPLICABLE

Form 4.3-8 Flow Based Biotreatment (DA 1)

Biotreatment BMP Type *Vegetated swale, vegetated filter strip, or other comparable proprietary BMP*	DA DMA BMP Type	DA DMA BMP Type	DA DMA BMP Type *(Use additional forms for more BMPs)*
1 Pollutants addressed with BMP *List all pollutant of concern that will be effectively reduced through specific Unit Operations and Processes described in TGD Table 5-5*			
2 Flow depth for water quality treatment (ft) *BMP specific, see Table 5-6 of the TGD for WQMP for reference to BMP design details*			
3 Bed slope (ft/ft) *BMP specific, see Table 5-6 of the TGD for WQMP for reference to BMP design details*			
4 Manning's roughness coefficient			
5 Bottom width (ft) b_w = *(Form 4.3-5 Item 6 * Item 4) / (1.49 * Item 2^1.67 * Item 3^0.5)*			
6 Side Slope (ft/ft) *BMP specific, see Table 5-6 of the TGD for WQMP for reference to BMP design details*			
7 Cross sectional area (ft^2) *A = (Item 5 * Item 2) + (Item 6 * Item 2^2)*			
8 Water quality flow velocity (ft/sec) *V = Form 4.3-5 Item 6 / Item 7*			
9 Hydraulic residence time (min) *Pollutant specific, see Table 5-6 of the TGD for WQMP for reference to BMP design details*			
10 Length of flow based BMP (ft) *L = Item 8 * Item 9 * 60*			
11 Water surface area at water quality flow depth (ft^2) SA_{top} = *(Item 5 + (2 * Item 2 * Item 6)) * Item 10*			

NOT APPLICABLE

4.3.5 Conformance Summary

Complete Form 4.3-9 to demonstrate how on-site LID DCV is met with proposed site design hydrologic source control, infiltration, harvest and use, and/or biotreatment BMP. The bottom line of the form is used to describe the basis for infeasibility determination for on-site LID BMP to achieve full LID DCV, and provides methods for computing remaining volume to be addressed in an alternative compliance plan. If the project has more than one outlet, then complete additional versions of this form for each outlet.

Form 4.3-9 Conformance Summary and Alternative Compliance Volume Estimate (DA 1)

1 Total LID DCV for the Project DA-1 (ft^3):40,157 *Copy Item 7 in Form 4.2-1*

2 On-site retention with site design hydrologic source control LID BMP (ft^3): 0 *Copy Item 30 in Form 4.3-2*

3 On-site retention with LID infiltration BMP (ft^3):40,933 *Copy Item 16 in Form 4.3-3*

4 On-site retention with LID harvest and use BMP (ft^3): 0 *Copy Item 9 in Form 4.3-4*

5 On-site biotreatment with volume based biotreatment BMP (ft^3): 0 *Copy Item 3 in Form 4.3-5*

6 Flow capacity provided by flow based biotreatment BMP (cfs): 0 *Copy Item 6 in Form 4.3-5*

7 LID BMP performance criteria are achieved if answer to any of the following is "Yes":

- Full retention of LID DCV with site design HSC, infiltration, or harvest and use BMP: Yes ☒ No ☐
  If yes, sum of Items 2, 3, and 4 is greater than Item 1
- Combination of on-site retention BMPs for a portion of the LID DCV and volume-based biotreatment BMP that address all pollutants of concern for the remaining LID DCV: Yes ☐ No ☐
  If yes, a) sum of Items 2, 3, 4, and 5 is greater than Item 1, and Items 2, 3 and 4 are maximized; or b) Item 6 is greater than Form 4.3--5 Item 6 and Items 2, 3 and 4 are maximized
- On-site retention and infiltration is determined to be infeasible and biotreatment BMP provide biotreatment for all pollutants of concern for full LID DCV: Yes ☐ No ☐
  If yes, Form 4.3-1 Items 7 and 8 were both checked yes

8 If the LID DCV is not achieved by any of these means, then the project may be allowed to develop an alternative compliance plan. Check box that describes the scenario which caused the need for alternative compliance:

- Combination of HSC, retention and infiltration, harvest and use, and biotreatment BMPs provide less than full LID DCV capture: ☐
  Checked yes for Form 4.3-5 Item 7, Item 6 is zero, and sum of Items 2, 3, 4, and 5 is less than Item 1. If so, apply water quality credits and calculate volume for alternative compliance, V_{alt} *= (Item 1 – Item 2 – Item 3 – Item 4 – Item 5) * (100 - Form 2.4-1 Item 2)%*
- An approved Watershed Action Plan (WAP) demonstrates that water quality and hydrologic impacts of urbanization are more effective when managed in at an off-site facility: ☐
  Attach appropriate WAP section, including technical documentation, showing effectiveness comparisons for the project site and regional watershed

4.3.6 Hydromodification Control BMP

Use Form 4.3-10 to compute the remaining runoff volume retention, after LID BMP are implemented, needed to address HCOC, and the increase in time of concentration and decrease in peak runoff necessary to meet targets for protection of waterbodies with a potential HCOC. Describe hydromodification control BMP that address HCOC, which may include off-site BMP and/or in-stream controls. Section 5.6 of the TGD for WQMP provides additional details on selection and evaluation of hydromodification control BMP.

Form 4.3-10 Hydromodification Control BMPs (DA 1)

1 Volume reduction needed for HCOC performance criteria (ft^3): *(Form 4.2-2 Item 4 * 0.95) – Form 4.2-2 Item 1*	2 On-site retention with site design hydrologic source control, infiltration, and harvest and use LID BMP (ft^3): *Sum of Form 4.3-9 Items 2, 3, and 4 Evaluate option to increase implementation of on-site retention in Forms 4.3-2, 4.3-3, and 4.3-4 in excess of LID DCV toward achieving HCOC volume reduction*
3 Remaining volume for HCOC volume capture (ft^3): *Item 1 – Item 2*	4 Volume capture provided by incorporation of additional on-site or off-site retention BMPs (ft^3): *Existing downstream BMP may be used to demonstrate additional volume capture (if so, attach to this WQMP a hydrologic analysis showing how the additional volume would be retained during a 2-yr storm event for the regional watershed)*

5 If Item 4 is less than Item 3, incorporate in-stream controls on downstream waterbody segment to prevent impacts due to hydromodification *Attach in-stream control BMP selection and evaluation to this WQMP*

6 Is Form 4.2-2 Item 11 less than or equal to 5%: Yes No

If yes, HCOC performance criteria is achieved. If no, select one or more mitigation options below:

- Demonstrate increase in time of concentration achieved by proposed LID site design, LID BMP, and additional on-site or off-site retention BMP

  BMP upstream of a waterbody segment with a potential HCOC may be used to demonstrate increased time of concentration through hydrograph attenuation (if so, show that the hydraulic residence time provided in BMP for a 2-year storm event is equal or greater than the addition time of concentration requirement in Form 4.2-4 Item 15)
- Increase time of concentration by preserving pre-developed flow path and/or increase travel time by reducing slope and increasing cross-sectional area and roughness for proposed on-site conveyance facilities
- Incorporate appropriate in-stream controls for downstream waterbody segment to prevent impacts due to hydromodification, in a plan approved and signed by a licensed engineer in the State of California

7 Form 4.2-2 Item 12 less than or equal to 5%: Yes No

If yes, HCOC performance criteria is achieved. If no, select one or more mitigation options below:

- Demonstrate reduction in peak runoff achieved by proposed LID site design, LID BMPs, and additional on-site or off-site retention BMPs

  BMPs upstream of a waterbody segment with a potential HCOC may be used to demonstrate additional peak runoff reduction through hydrograph attenuation (if so, attach to this WQMP, a hydrograph analysis showing how the peak runoff would be reduced during a 2-yr storm event)
- Incorporate appropriate in-stream controls for downstream waterbody segment to prevent impacts due to hydromodification, in a plan approved and signed by a licensed engineer in the State of California

NOT APPLICABLE

4.4 Alternative Compliance Plan (if applicable)

Describe an alternative compliance plan (if applicable) for projects not fully able to infiltrate, harvest and use, or biotreat the DCV via on-site LID practices. A project proponent must develop an alternative compliance plan to address the remainder of the LID DCV. Depending on project type some projects may qualify for water quality credits that can be applied to reduce the DCV that must be treated prior to development of an alternative compliance plan (see Form 2.4-1, Water Quality Credits). Form 4.3-9 Item 8 includes instructions on how to apply water quality credits when computing the DCV that must be met through alternative compliance. Alternative compliance plans may include one or more of the following elements:

- On-site structural treatment control BMP - All treatment control BMP should be located as close to possible to the pollutant sources and should not be located within receiving waters;
- Off-site structural treatment control BMP - Pollutant removal should occur prior to discharge of runoff to receiving waters;
- Urban runoff fund or In-lieu program, if available

Depending upon the proposed alternative compliance plan, approval by the executive officer may or may not be required (see Section 6 of the TGD for WQMP).

Section 5 Inspection and Maintenance Responsibility for Post Construction BMP

All BMP included as part of the project WQMP are required to be maintained through regular scheduled inspection and maintenance (refer to Section 8, Post Construction BMP Requirements, in the TGD for WQMP). Fully complete Form 5-1 summarizing all BMP included in the WQMP. Attach additional forms as needed. The WQMP shall also include a detailed Operation and Maintenance Plan for all BMP and may require a Maintenance Agreement (consult the jurisdiction's LIP). If a Maintenance Agreement is required, it must also be attached to the WQMP.

Form 5-1 BMP Inspection and Maintenance (use additional forms as necessary)

BMP	Reponsible Party(s)	Inspection/ Maintenance Activities Required	Minimum Frequency of Activities
Litter/Debris Control Program SD-32, N11, N15, S3	Owner	Litter shall be picked up, trash enclosure areas shall be swept and cleaned, dumpsters shall be emptied.	Weekly
Housekeeping of Loading Docks N13	Owner	Loading docks shall be inspected to ensure proper maintenance is completed.	Weekly
Catch Basin Inspection Program SD-11, N14, S1	Owner	Catch basins shall be inspected to ensure proper operation.	Monthly during rainy season (Oct-May) and before and after each storm event
Parking Lot Sweeping SC-43, SC-71	Owner	Parking lots must be swept	Quarterly (Minimum), Weekly during rainy season (Oct-May)
Landscape Management SC-73, SD-10, SD-12, N3, S4, S5	Owner	Gardening and lawn care practices to prevent landscape waste to exit project site per SC-73	Weekly

Underground Infiltration Chambers N4	Owner	See manufacturer information in O&M information. See Appendix D	See manufacturer information in O&M information. See Appendix D
N1, N2, N6, N12, N17	Owner	Educational material distributed to maintain compliance of activity restrictions, local water quality ordinances, and employee training	As Needed

Section 6 WQMP Attachments

6.1. Site Plan and Drainage Plan

Include a site plan and drainage plan sheet set containing the following minimum information:

- Project location
- Site boundary
- Land uses and land covers, as applicable
- Suitability/feasibility constraints
- Structural Source Control BMP locations
- Site Design Hydrologic Source Control BMP locations
- LID BMP details
- Drainage delineations and flow information
- Drainage connections

6.2 Electronic Data Submittal

Minimum requirements include submittal of PDF exhibits in addition to hard copies. Format must not require specialized software to open. If the local jurisdiction requires specialized electronic document formats (as described in their local Local Implementation Plan), this section will describe the contents (e.g., layering, nomenclature, geo-referencing, etc.) of these documents so that they may be interpreted efficiently and accurately.

6.3 Post Construction

Attach all O&M Plans and Maintenance Agreements for BMP to the WQMP.

6.4 Other Supporting Documentation

- BMP Educational Materials
- Activity Restriction – C, C&R's & Lease Agreements

Attachment A – Site Plan

Attachment B – HCOC Map

Attachment C – Calculations

Worksheet H: Factor of Safety and Design Infiltration Rate and Worksheet

Factor Category		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = w x v
A	Suitability Assessment	Soil assessment methods	0.25	1	0.25
		Predominant soil texture	0.25	1	0.25
		Site soil variability	0.25	2	0.50
		Depth to groundwater / impervious layer	0.25	1	0.25
		Suitability Assessment Safety Factor, $S_A = \Sigma p$			1.25
B	Design	Tributary area size	0.25	2	0.5
		Level of pretreatment/ expected sediment loads	0.25	2	0.5
		Redundancy	0.25	2	0.5
		Compaction during construction	0.25	2	0.5
		Design Safety Factor, $S_B = \Sigma p$			2.0
Combined Safety Factor, $S_{TOT} = S_A \times S_B$					3.25
Measured Infiltration Rate, inch/hr, K_M (corrected for test-specific bias)					50
Design Infiltration Rate, in/hr, $K_{DESIGN} = S_{TOT} \times K_M$					15.38

Supporting Data

Briefly describe infiltration test and provide reference to test forms:

Note: The minimum combined adjustment factor shall not be less than 2.0 and the maximum combined adjustment factor shall not exceed 9.0.

NOAA Atlas 14, Volume 6, Version 2 GUASTI PARK
Station ID: 79-1075
Location name: Ontario, California, USA*
Latitude: 34.0719°, Longitude: -117.5928°
Elevation:
Elevation (station metadata): 995 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	**0.115** (0.096-0.139)	**0.157** (0.131-0.191)	**0.208** (0.173-0.253)	**0.247** (0.203-0.303)	**0.295** (0.235-0.375)	**0.330** (0.257-0.428)	**0.363** (0.275-0.483)	**0.394** (0.290-0.540)	**0.434** (0.306-0.621)	**0.462** (0.314-0.685)
10-min	**0.165** (0.137-0.200)	**0.225** (0.188-0.273)	**0.298** (0.248-0.363)	**0.354** (0.291-0.434)	**0.423** (0.337-0.538)	**0.473** (0.368-0.614)	**0.520** (0.394-0.692)	**0.565** (0.416-0.775)	**0.621** (0.439-0.889)	**0.662** (0.451-0.982)
15-min	**0.199** (0.166-0.241)	**0.272** (0.227-0.330)	**0.361** (0.300-0.439)	**0.428** (0.352-0.525)	**0.512** (0.407-0.650)	**0.572** (0.445-0.742)	**0.629** (0.477-0.837)	**0.683** (0.503-0.937)	**0.752** (0.530-1.08)	**0.800** (0.545-1.19)
30-min	**0.304** (0.253-0.368)	**0.415** (0.346-0.504)	**0.550** (0.457-0.669)	**0.653** (0.537-0.801)	**0.781** (0.621-0.992)	**0.872** (0.679-1.13)	**0.959** (0.727-1.28)	**1.04** (0.768-1.43)	**1.15** (0.809-1.64)	**1.22** (0.831-1.81)
60-min	**0.445** (0.371-0.539)	**0.609** (0.507-0.738)	**0.806** (0.670-0.981)	**0.956** (0.788-1.17)	**1.14** (0.910-1.45)	**1.28** (0.995-1.66)	**1.40** (1.07-1.87)	**1.53** (1.12-2.09)	**1.68** (1.18-2.40)	**1.79** (1.22-2.65)
2-hr	**0.670** (0.559-0.812)	**0.899** (0.749-1.09)	**1.17** (0.975-1.43)	**1.38** (1.14-1.70)	**1.64** (1.30-2.08)	**1.82** (1.42-2.37)	**2.00** (1.52-2.66)	**2.16** (1.59-2.97)	**2.37** (1.67-3.39)	**2.52** (1.71-3.73)
3-hr	**0.843** (0.703-1.02)	**1.12** (0.934-1.36)	**1.46** (1.21-1.77)	**1.71** (1.41-2.10)	**2.02** (1.61-2.57)	**2.25** (1.75-2.92)	**2.46** (1.86-3.27)	**2.66** (1.96-3.64)	**2.90** (2.05-4.16)	**3.08** (2.10-4.57)
6-hr	**1.20** (1.00-1.46)	**1.59** (1.32-1.93)	**2.06** (1.71-2.50)	**2.41** (1.98-2.95)	**2.84** (2.26-3.61)	**3.15** (2.45-4.09)	**3.44** (2.61-4.58)	**3.72** (2.74-5.10)	**4.07** (2.87-5.82)	**4.31** (2.94-6.40)
12-hr	**1.57** (1.31-1.90)	**2.08** (1.73-2.52)	**2.69** (2.24-3.28)	**3.16** (2.60-3.88)	**3.74** (2.98-4.76)	**4.16** (3.24-5.40)	**4.55** (3.45-6.06)	**4.92** (3.63-6.75)	**5.39** (3.80-7.72)	**5.72** (3.90-8.49)
24-hr	**2.08** (1.85-2.40)	**2.80** (2.48-3.23)	**3.67** (3.24-4.25)	**4.33** (3.79-5.05)	**5.16** (4.37-6.22)	**5.76** (4.78-7.08)	**6.33** (5.12-7.97)	**6.87** (5.42-8.90)	**7.56** (5.72-10.2)	**8.05** (5.89-11.2)
2-day	**2.50** (2.21-2.88)	**3.42** (3.03-3.95)	**4.56** (4.02-5.28)	**5.44** (4.76-6.35)	**6.56** (5.55-7.90)	**7.36** (6.10-9.05)	**8.13** (6.59-10.2)	**8.88** (7.00-11.5)	**9.84** (7.44-13.3)	**10.5** (7.70-14.7)
3-day	**2.68** (2.37-3.09)	**3.73** (3.30-4.31)	**5.04** (4.44-5.83)	**6.05** (5.29-7.05)	**7.34** (6.22-8.85)	**8.29** (6.87-10.2)	**9.20** (7.45-11.6)	**10.1** (7.95-13.1)	**11.2** (8.50-15.1)	**12.1** (8.82-16.8)
4-day	**2.89** (2.56-3.34)	**4.08** (3.61-4.71)	**5.56** (4.90-6.44)	**6.71** (5.87-7.83)	**8.20** (6.94-9.88)	**9.29** (7.70-11.4)	**10.3** (8.38-13.0)	**11.4** (8.98-14.8)	**12.7** (9.63-17.2)	**13.7** (10.0-19.1)
7-day	**3.33** (2.94-3.84)	**4.81** (4.25-5.55)	**6.67** (5.88-7.72)	**8.14** (7.12-9.50)	**10.1** (8.52-12.1)	**11.5** (9.54-14.1)	**12.9** (10.5-16.3)	**14.3** (11.3-18.5)	**16.2** (12.2-21.8)	**17.5** (12.8-24.5)
10-day	**3.57** (3.16-4.11)	**5.22** (4.62-6.02)	**7.32** (6.46-8.48)	**9.00** (7.87-10.5)	**11.2** (9.50-13.5)	**12.9** (10.7-15.8)	**14.5** (11.8-18.3)	**16.2** (12.8-21.0)	**18.4** (13.9-24.8)	**20.1** (14.7-28.0)
20-day	**4.26** (3.78-4.92)	**6.32** (5.59-7.29)	**9.00** (7.94-10.4)	**11.2** (9.78-13.0)	**14.1** (12.0-17.0)	**16.4** (13.6-20.2)	**18.7** (15.2-23.6)	**21.1** (16.6-27.3)	**24.3** (18.4-32.8)	**26.8** (19.6-37.5)
30-day	**5.03** (4.46-5.80)	**7.41** (6.55-8.55)	**10.6** (9.32-12.2)	**13.2** (11.5-15.4)	**16.8** (14.2-20.2)	**19.6** (16.2-24.1)	**22.5** (18.2-28.3)	**25.5** (20.1-33.0)	**29.7** (22.5-40.1)	**33.0** (24.1-46.1)
45-day	**6.15** (5.45-7.09)	**8.86** (7.83-10.2)	**12.5** (11.0-14.5)	**15.6** (13.7-18.2)	**20.0** (16.9-24.1)	**23.5** (19.5-28.9)	**27.1** (21.9-34.1)	**31.0** (24.4-40.1)	**36.5** (27.6-49.2)	**40.9** (29.9-57.0)
60-day	**7.27** (6.44-8.38)	**10.2** (9.02-11.8)	**14.2** (12.6-16.5)	**17.7** (15.5-20.7)	**22.7** (19.2-27.3)	**26.7** (22.2-32.9)	**31.0** (25.1-39.1)	**35.6** (28.1-46.1)	**42.3** (32.0-57.0)	**47.7** (34.9-66.6)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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PF graphical

Curve (1) Numbers of Hydrologic Soil-Cover Complexes For Pervious Areas-AMC II

Cover Type (3)	Quality of Cover (2)	Soil Group A	B	C	D
NATURAL COVERS -					
Barren (Rockland, eroded and graded land)		78	86	91	93
Chaparral, Broadleaf (Manzonita, ceanothus and scrub oak)	Poor	53	70	80	85
	Fair	40	63	75	81
	Good	31	57	71	78
Chaparral, Narrowleaf (Chamise and redshank)	Poor	71	82	88	91
	Fair	55	72	81	86
Grass, Annual or Perennial	Poor	67	78	86	89
	Fair	50	69	79	84
	Good	38	61	74	80
Meadows or Cienegas (Areas with seasonally high water table, principal vegetation is sod forming grass)	Poor	63	77	85	88
	Fair	51	70	80	84
	Good	30	58	71	78
Open Brush (Soft wood shrubs - buckwheat, sage, etc.)	Poor	62	76	84	88
	Fair	46	66	77	83
	Good	41	63	75	81
Woodland (Coniferous or broadleaf trees predominate. Canopy density is at least 50 percent.)	Poor	45	66	77	83
	Fair	36	60	73	79
	Good	25	55	70	77
Woodland, Grass (Coniferous or broadleaf trees with canopy density from 20 to 50 percent)	Poor	57	73	82	86
	Fair	44	65	77	82
	Good	33	58	72	79
URBAN COVERS -					
Residential or Commercial Landscaping (Lawn, shrubs, etc.)	Good	32	56	69	75
Turf (Irrigated and mowed grass)	Poor	58	74	83	87
	Fair	44	65	77	82
	Good	33	58	72	79
AGRICULTURAL COVERS -					
Fallow (Land plowed but not tilled or seeded)		77	86	91	94

SAN BERNARDINO COUNTY
HYDROLOGY MANUAL

CURVE NUMBERS FOR PERVIOUS AREAS

Figure C-3 (1 of 2)

User Inputs

Chamber Model:	MC-3500
Outlet Control Structure:	No
Project Name:	
Engineer:	N/A
Project Location:	
Measurement Type:	Imperial
Required Storage Volume:	40200 cubic ft.
Stone Porosity:	40%
Stone Foundation Depth:	12 in.
Stone Above Chambers:	12 in.
Average Cover Over Chambers:	18 in.
Design Constraint Dimensions:	(110 ft. x 150 ft.)

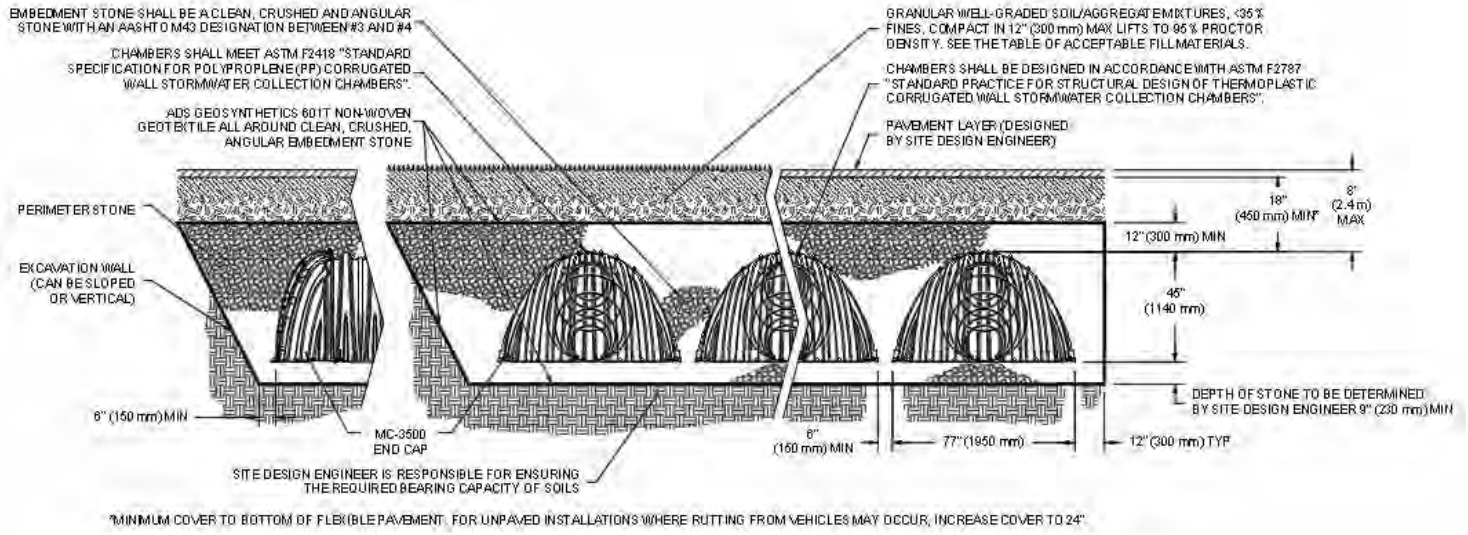
Results

System Volume and Bed Size

Installed Storage Volume:	40932.80 cubic ft.
Storage Volume Per Chamber:	109.90 cubic ft.
Number Of Chambers Required:	214
Number Of End Caps Required:	22
Chamber Rows:	11
Maximum Length:	153.57 ft.
Maximum Width:	77.58 ft.
Approx. Bed Size Required:	11576.07 square ft.

System Components

Amount Of Stone Required:	1583 cubic yards
Volume Of Excavation (Not Including Fill):	2466 cubic yards
Total Non-woven Geotextile Required:	3442 square yards
Woven Geotextile Required (excluding Isolator Row):	151 square yards
Woven Geotextile Required (Isolator Row):	172 square yards
Total Woven Geotextile Required:	323 square yards
Impervious Liner Required:	0 square yards



Advanced Drainage Systems, Inc.

SiteAssist®
FOR STORMTECH INSTALLATION INSTRUCTIONS VISIT OUR APP

MC-3500 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH MC-3500.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 450 LBS/FT/%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
   - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
   - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
   - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-3500 CHAMBER SYSTEM

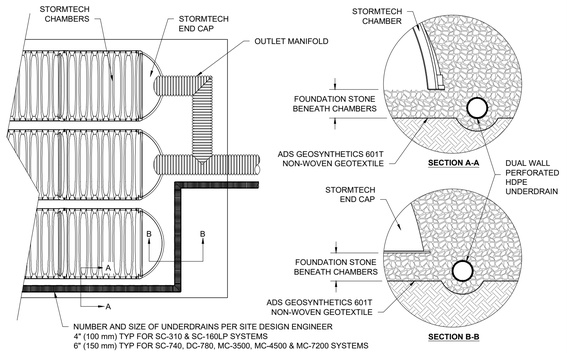
1. STORMTECH MC-3500 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONESHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
8. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
9. STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
10. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
11. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

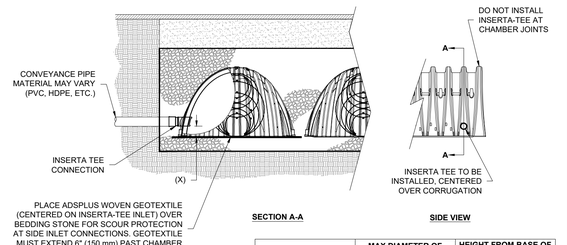
1. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
2. THE USE OF EQUIPMENT OVER MC-3500 CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.



5 UNDERDRAIN DETAIL

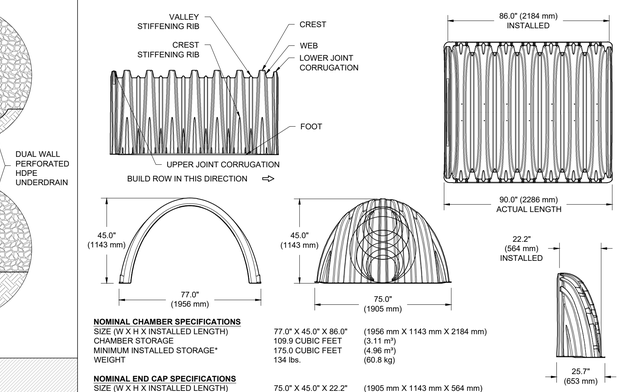


CHAMBER	MAX DIAMETER OF INSERTA TEE	HEIGHT FROM BASE OF CHAMBER (X)
SC-310	6" (150 mm)	4" (100 mm)
SC-740	10" (250 mm)	4" (100 mm)
DC-780	10" (250 mm)	4" (100 mm)
MC-3500	12" (300 mm)	6" (150 mm)
MC-4500	12" (300 mm)	8" (200 mm)
MC-7200	12" (300 mm)	8" (200 mm)

INSERTA TEE FITTINGS AVAILABLE FOR SDR 26, SDR 35, SCH 40 IPS GASKETED & SOLVENT WELD, N-12, HP STORM, C-900 OR DUCTILE IRON

NOTES:
- PART NUMBERS WILL VARY BASED ON INLET PIPE MATERIALS. CONTACT STORMTECH FOR MORE INFORMATION.
- CONTACT ADS ENGINEERING SERVICES IF INSERTA TEE INLET MUST BE RAISED AS NOT ALL INVERTS ARE POSSIBLE.

6 INSERTA-TEE SIDE INLET DETAIL



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	77.0" X 45.0" X 86.0"	(1956 mm X 1143 mm X 2184 mm)
CHAMBER STORAGE	109.9 CUBIC FEET	(3.11 m³)
MINIMUM INSTALLED STORAGE*	175.0 CUBIC FEET	(4.96 m³)
WEIGHT	134 lbs.	(60.8 kg)

NOMINAL END CAP SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	75.0" X 45.0" X 22.2"	(1905 mm X 1143 mm X 564 mm)
END CAP STORAGE	14.9 CUBIC FEET	(0.42 m³)
MINIMUM INSTALLED STORAGE*	45.1 CUBIC FEET	(1.28 m³)
WEIGHT	49 lbs.	(22.2 kg)

*ASSUMES 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION, 6" (152 mm) STONE BETWEEN CHAMBERS, 6" (152 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY.

PARTIAL CUT HOLES AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
PARTIAL CUT HOLES AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
END CAPS WITH A PREFABRICATED WELDED STUB END WITH "W"
END CAPS WITH A WELDED CROWN PLATE END WITH "C"

PART #	STUB	B	C
MC3500IEPP06T	6" (150 mm)	33.21" (844 mm)	---
MC3500IEPP06B		---	0.66" (17 mm)
MC3500IEPP08T	8" (200 mm)	31.16" (791 mm)	---
MC3500IEPP08B		---	0.81" (21 mm)
MC3500IEPP10T	10" (250 mm)	29.04" (738 mm)	---
MC3500IEPP10B		---	0.93" (24 mm)
MC3500IEPP12T	12" (300 mm)	26.36" (670 mm)	---
MC3500IEPP12B		---	1.35" (34 mm)
MC3500IEPP15T	15" (375 mm)	23.39" (594 mm)	---
MC3500IEPP15B		---	1.50" (38 mm)
MC3500IEPP18TC	18" (450 mm)	20.03" (509 mm)	---
MC3500IEPP18TW			
MC3500IEPP18BC		---	1.77" (45 mm)
MC3500IEPP18BW			
MC3500IEPP24TC	24" (600 mm)	14.48" (368 mm)	---
MC3500IEPP24TW			
MC3500IEPP24BC		---	2.06" (52 mm)
MC3500IEPP24BW			
MC3500IEPP30BC	30" (750 mm)	---	2.75" (70 mm)

NOTE: ALL DIMENSIONS ARE NOMINAL

CUSTOM PARTIAL CUT INVERTS ARE AVAILABLE UPON REQUEST. INVENTORIED MANIFOLDS INCLUDE 12-24" (300-600 mm) SIZE ON SIZE AND 15-48" (375-1200 mm) ECCENTRIC MANIFOLDS. CUSTOM INVERT LOCATIONS ON THE MC-3500 END CAP CUT IN THE FIELD ARE NOT RECOMMENDED FOR PIPE SIZES GREATER THAN 10" (250 mm). THE INVERT LOCATION IN COLUMN 'B' ARE THE HIGHEST POSSIBLE FOR THE PIPE SIZE.

2 MC-3500 TECHNICAL SPECIFICATIONS

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

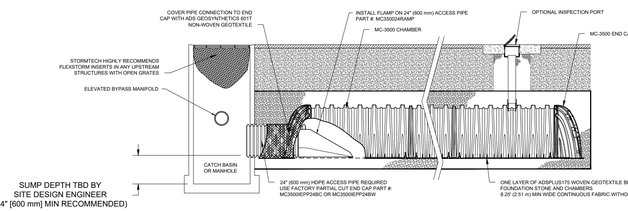
STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

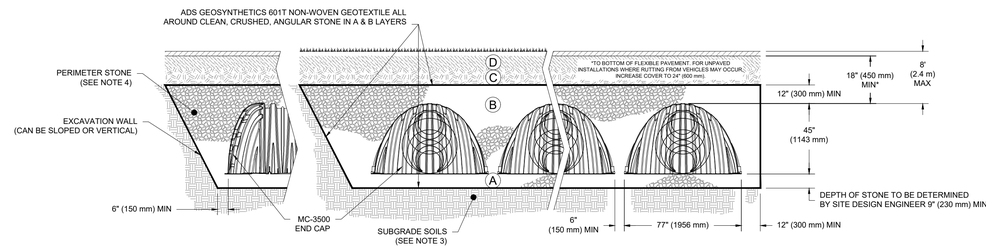


3 MC-3500 ISOLATOR ROW PLUS DETAIL

ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 4	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

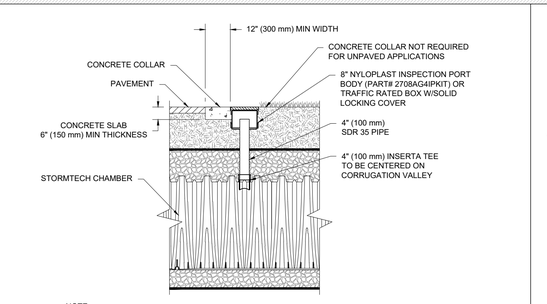
PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



NOTES:

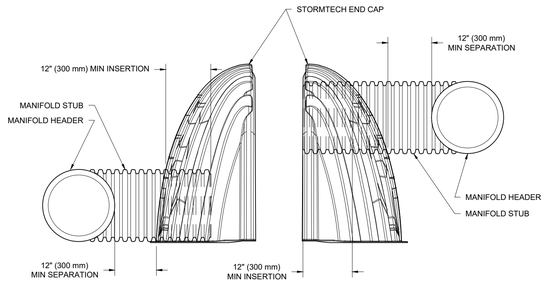
1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
2. MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 500 LBS/FT/%. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

1 MC-3500 CROSS SECTION DETAIL



NOTE:
INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CORRUGATION VALLEY.

4 4" PVC INSPECTION PORT DETAIL (MC SERIES CHAMBER)



NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING.

7 MC-SERIES END CAP INSERTION DETAIL

DRAWN: | DATE:
REVIEWED: | PROJECT NO:
REV: | NOT TO SCALE

MC-3500 STANDARD DETAILS

StormTech® Chamber System
888-892-2694 | WWW.STORMTECH.COM

4640 TRUEMAN BLVD
HILLIARD, OH 43026

Advanced Drainage Systems, Inc.

SHEET

3917

ADVANCED DRAINAGE SYSTEMS, INC. ("ADS") HAS PREPARED THIS DETAIL BASED ON REFERENCED STANDARDS. ADS HAS NOT PERFORMED ANY ENGINEERING OR DESIGN SERVICES FOR THIS PROJECT, NOR HAS ADS INDEPENDENTLY VERIFIED THE INFORMATION SUPPLIED. THE INSTALLATION DETAILS PROVIDED HEREIN ARE GENERAL RECOMMENDATIONS AND ARE NOT SPECIFIC FOR THIS PROJECT. UNLESS THE PLANS ARE SIGNED AND SEALED BY THE SITE DESIGN ENGINEER. THE SITE DESIGN ENGINEER SHALL REVIEW THESE DETAILS PRIOR TO CONSTRUCTION AND SEALING THE DOCUMENT. IT IS THE SITE DESIGN ENGINEER'S RESPONSIBILITY TO ENSURE THE DETAILS PROVIDED HEREIN MEETS OR EXCEEDS THE APPLICABLE NATIONAL, STATE, OR LOCAL REQUIREMENTS AND TO ENSURE THAT THE DETAILS PROVIDED HEREIN ARE ACCEPTABLE FOR THIS PROJECT.

Attachment D – BMP Fact Sheet

Attachment E – Geotechnical Report

April 24, 2023
J.N. 22-398

DIVERSIFIED PACIFIC COMMUNITIES
10621 Civic Center Drive
Rancho Cucamonga, California 91730

Attention: Mr. Nolan Leggio

Subject: **Field Percolation Tests Results, Proposed Empire Resort and Spa Project, Approximately 10.4 Acres of Vacant Land at Southeast Corner of E. Holt Boulevard and E. Guasti Road, City of Ontario, San Bernardino, California**

Reference: Petra Geosciences, Inc. 2023, DRAFT Preliminary Geotechnical Evaluation, Proposed Empire Resort and Spa Project, Approximately 10.4 Acres of Vacant Land at Southeast Corner of E. Holt Boulevard and E. Guasti Road, APN 011 032 233, City of Ontario, San Bernardino, California, J.N. 22-398 dated February 10.

Dear Mr. Leggio:

Petra Geosciences, Inc. (Petra) has prepared this letter report presenting the results of our percolation testing for the subject project.

Objective

The objective of this investigation was to evaluate infiltration rates of the site soils, consisting of upper younger alluvial deposits, for the preliminary design of onsite infiltration facilities. To achieve this objective, we have drilled five test borings on the order of 5 to 15 feet using a hollow-stem drill equipment, conducted borehole percolation tests of the lower part of each borehole, and calculated the infiltration rate. The project site and the locations of the percolation boreholes are shown in Figure 1.

Test Method and Scope of Services

Percolation test to evaluate site infiltration rate was performed in conformance with Design Handbook for Low Impact Development, Best Management Practices, by Riverside County Flood Control and Water Conservation District, dated September 2011 (RCFFCWCD, 2011). As such, our scope of work included the following:

1. Collect and review readily available literature and maps about soil and geologic conditions within and adjacent to the site including our prior soil and boring data, see reference.

2. Consult with project civil engineer on targeted test locations and depths.

3. Drill 5 exploratory borings using the hollow-stem auger drilling method and perform falling-head percolation test in each borehole. The percolation tests results and infiltration rate calculations are presented in Appendix A.

4. Log and field-classify soil materials encountered in each boring in accordance with the visual-manual procedures outlined in the Unified Soil Classification System and the American Society for Testing and Materials (ASTM) Procedure D 2488-90. All field activities were performed by or under the direct observation of a State of California Certified Engineering Geologist.

5. Collect representative bulk soil samples near the bottom of each borehole utilizing a 1.4- inch inside diameter Standard Penetration Test (SPT) split-spoon sampler. Perform a laboratory derived grain size analysis (sieve) on each sample.

6. Prepare this letter report presenting the results of our evaluations.

Test Description and Results

The falling head percolation testing method was used in accordance with the cited reference. The borings for the percolation tests were advanced using an 8-inch diameter hollow-stem auger to depths between approximately 5 and 15 feet below the existing ground surface. As anticipated, surficial fills underlain by alluvial deposits were encountered in each test borings. The excavated materials in the generally upper 5 to 8 consisted of silty fine to medium sands with variable gravels that were medium-dense and slightly moist. The soil materials below approximately 8 feet generally consisted of interbedded silty sand with less fines to sand with silts also with variable gravel content that were medium dense and slightly moist. Percolation testing was performed in the bottom 4 to 5 feet of the boreholes. The locations of the percolation test borings are shown on the Test Location Map (Figure 1) and the boring logs are presented in Appendix A.

Following a presoaking period, field testing was conducted in a perforated pipe lowered into the borehole, with ¾-inch gravel surrounding the pipe, at 10-minute intervals for a period of approximately 1 hour. The falling-head percolation test data were utilized in determining the test infiltration rate, I_t, expressed in units of inches/hour, utilizing the Porchet Method (RCFCWCD, 2011). The infiltration rate, I_t, was calculated by determining the volumetric water flow rate through the wetted borehole surface area, expressed in terms of inches per hour. The un-factored test results are summarized in the following table, Table 1 and the field test data and laboratory test results are presented in Appendix B and C.

TABLE 1

Un-Factored Infiltration Test Results

Test No.	Borehole Total Depth (feet)	Approximate Test Zone (feet below existing grade)	Geologic Unit / Soil Description	Infiltration Test Rate, I_t (in/hr)
P-1	5	1-5	Qal (SM)	0.9
P-2	15	10-15	Qal (SP-SM)	49.3
P-3	10	5-10	Qal (SP-SM)	50.6
P-4	7	2-7	Qal (SM)	2.3
P-5	5	1-5	Qal (SM)	2.1

The test data indicates the alluvial deposits greater than approximately 9 feet below existing site grades are considered permeable. As observed, the shallow subsurface native soils, for containing high fines content, exhibit variable permeability, as measured by percolation tests at different depths. As such, it is our professional opinion that the infiltration rates approximately 9 feet below surface are more suitable for the intended infiltration purposes.

Discussion

Suitability Assessment

In view of the test data, certain jurisdictions consider such factors as infiltration assessment method, soil texture, site soils variability, and depth to groundwater/impervious layer to assign a Suitability Assessment Safety Factor that should be applied to the infiltration rates.

To perform such an evaluation, we have adopted a procedure provided by Santa Ana Regional Water Quality Control Board (SARWQCB) in their Technical Guidance Document (TGD) for the Preparation of Conceptual/Preliminary and/or Project Water Quality Management Plans (WQMPs), with Appendices, For Santa Ana Regional Board consideration, dated December 20, 2013 (SARWQCB, 2013). Based on Appendix D of this document, using Table VII.3: Suitability Assessment Related Considerations for Infiltration Facility Safety Factors, and Worksheet H: Factor of Safety and Design Infiltration Rate and Worksheet, of the Orange County BMP Design Manual, the following is presented.

TABLE 2

Site Suitability Reduction Factor (Category A) for Infiltration Rate

Considerations		Concern		Reduction Factor
Description	**Weight**	**Level**	**Safety Factor**	**Weight x Safety Factor**
Soil Assessment Method	0.25	Low	1.0	0.25
Predominant Soil Texture	0.25	Low	1.0	0.25
Site Soil Variability	0.25	medium	2.0	0.50
Depth to Groundwater/Impervious Layer	0.25	Low	1.0	0.25
Reduction Factor (sum of individual Reduction Factors)				**1.25**

Based on the information provided in Table 2, a Reduction Factor of 1.25 should be applied to the values of Infiltration Rate, I_t, provided in Table 1, above, for Site Suitability considerations.

Construction Procedure

The infiltration rates provided herein are considered representative of the native soils in the vicinity of the percolation test locations. Care should be taken to minimize disturbance of the exposed bottom surface of the basins as fill placement or any compaction effort applied to the area will have a detrimental effect on the anticipated infiltration rate of the proposed infiltration areas.

Environmental Impact

It should be noted that clean, potable water was used for the test. Surface runoff usually carries with it debris and fine particles that are typically expected to reduce the calculated infiltration rate.

Factor of Safety

The values of infiltration rate provided in Table 1 are raw test values. As discussed above, these values should be corrected for site Suitability considerations by applying a Reduction factor as provided in Table 2. Further, the project civil engineer needs to consider a Design Safety Factor, which incorporates such items as tributary area size, level of pretreatment/expected sediment load, redundancy/contingency plan and compaction during construction, in combination with the Suitability Assessment Safety/Reduction Factor for the design of the system.

This report may be subject to review by the controlling agency.

Respectfully submitted,

PETRA GEOSCIENCES, INC.

Douglass Johnston
Senior Associate Geologist
CEG 2477

PROFESSIONAL GEOLOGIST
DOUGLASS L. JOHNSTON
NO. 2477
CERTIFIED
ENGINEERING
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STATE OF CALIFORNIA

4/24/23

Siamak Jafroudi, PhD
Senior Principal Engineer
GE 2024

REGISTERED PROFESSIONAL ENGINEER
SIAMAK JAFROUDI
No. GE002024
GEOTECHNICAL
STATE OF CALIFORNIA

DJ/SJ/lv

Attachments: Figure 1 – Test Location Map
Appendix A – Boring Logs
Appendix B – Percolation Test Data
Appendix C – Sieve Analysis Graphs

W:\2020-2025\2022\300\22-398\Reports\22-398 120 Field Percolation Test Report.docx

FIGURE



Reference: Google Earth, 2020 Image

PETRA GEOSCIENCES, INC.
40880 County Center Drive, Suite M
Temecula, California 92591
Phone: (951) 600-9271
COSTA MESA TEMECULA VALENCIA PALM DESERT CORONA

Percolation Test Location Map

Empire Hotel Project
City of Ontario, California

PETRA GEOSCIENCES INC.

DATE: April 2023
J.N.: 22-398

Figure 1

APPENDIX A

BORING LOGS

Key to Soil and Bedrock Symbols and Terms

PETRA

Unified Soil Classification System

Coarse-grained Soils > 1/2 of materials is larger than #200 sieve	The No. 200 U.S. Standard Sieve is about the smallest particle visible to the naked eye	**GRAVELS** more than half of coarse fraction is larger than #4 sieve	Clean Gravels (less than 5% fines)	**GW**	Well-graded gravels, gravel-sand mixtures, little or no fines
				GP	Poorly-graded gravels, gravel-sand mixtures, little or no fines
			Gravels with fines	**GM**	Silty Gravels, poorly-graded gravel-sand-silt mixtures
				GC	Clayey Gravels, poorly-graded gravel-sand-clay mixtures
		SANDS more than half of coarse fraction is smaller than #4 sieve	Clean Sands (less than 5% fines)	**SW**	Well-graded sands, gravelly sands, little or no fines
				SP	Poorly-graded sands, gravelly sands, little or no fines
			Sands with fines	**SM**	Silty Sands, poorly-graded sand-gravel-silt mixtures
				SC	Clayey Sands, poorly-graded sand-gravel-clay mixtures
Fine-grained Soils > 1/2 of materials is smaller than #200 sieve		**SILTS & CLAYS** Liquid Limit Less Than 50		**ML**	Inorganic silts & very fine sands, silty or clayey fine sands, clayey silts with slight plasticity
				CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
				OL	Organic silts & clays of low plasticity
		SILTS & CLAYS Liquid Limit Greater Than 50		**MH**	Inorganic silts, micaceous or diatomaceous fine sand or silt
				CH	Inorganic clays of high plasticity, fat clays
				OH	Organic silts and clays of medium-to-high plasticity
Highly Organic Soils				**PT**	Peat, humus swamp soils with high organic content

Grain Size

Description		Sieve Size	Grain Size	Approximate Size
Boulders		>12"	>12"	Larger than basketball-sized
Cobbles		3 - 12"	3 - 12"	Fist-sized to basketball-sized
Gravel	coarse	3/4 - 3"	3/4 - 3"	Thumb-sized to fist-sized
	fine	#4 - 3/4"	0.19 - 0.75"	Pea-sized to thumb-sized
Sand	coarse	#10 - #4	0.079 - 0.19"	Rock salt-sized to pea-sized
	medium	#40 - #10	0.017 - 0.079"	Sugar-sized to rock salt-sized
	fine	#200 - #40	0.0029 - 0.017"	Flour-sized to sugar-sized to
Fines		Passing #200	<0.0029"	Flour-sized and smaller

Modifiers

Trace	< 1 %
Few	1 - 5%
Some	5 - 12 %
Numerous	12 - 20 %

Laboratory Test Abbreviations

MAX	Maximum Dry Density	MA	Mechanical (Particle Size) Analysis
EXP	Expansion Potential	AT	Atterberg Limits
SO4	Soluble Sulfate Content	#200	#200 Screen Wash
RES	Resistivity	DSU	Direct Shear (Undisturbed Sample)
pH	Acidity	DSR	Direct Shear (Remolded Sample)
CON	Consolidation	HYD	Hydrometer Analysis
SW	Swell	SE	Sand Equivalent
CL	Chloride Content	OC	Organic Content
RV	R-Value	COMP	Mortar Cylinder Compression

Bedrock Hardness

Soft	Can be crushed and granulated by hand; "soil like" and structureless
Moderately Hard	Can be grooved with fingernails; gouged easily with butter knife; crumbles under light hammer blows
Hard	Cannot break by hand; can be grooved with a sharp knife; breaks with a moderate hammer blow
Very Hard	Sharp knife leaves scratch; chips with repeated hammer blows

Sampler and Symbol Descriptions


Approximate Depth of Groundwater Encountered


Approximate Depth of Standing Groundwater


Modified California Split Spoon Sample


No Recovery in Mod. Calif. Split Spoon Sample


Standard Penetration Test


Shelby Tube Sample


Bulk Sample


No Recovery in SPT Sampler


No Recovery in Shelby Tube

Notes:
Blows Per Foot: Number of blows required to advance sampler 1 foot (unless a lesser distance is specified). Samplers in general were driven into the soil or bedrock at the bottom of the hole with a standard (140 lb.) hammer dropping a standard 30 inches unless noted otherwise in Log Notes. Drive samples collected in bucket auger borings may be obtained by dropping non-standard weight from variable heights. When a SPT sampler is used the blow count conforms to ASTM D-1586

3928

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **P-1**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **±953**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **4/13/23**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **140 lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): Light brown, slightly moist, fine- to coarse-grained, some cobbles, some gravel.							
		YOUNG ALLUVIAL FAN DEPOSITS (Qyf) Silty Sand (SM): Light Brown to brown, slightly moist, fine- to coarse-grained, trace gravel. slightly moist, loose.		2 3 2					MA
5		Total Depth = 5' No groundwater encountered Boring was backfilled with cuttings after percolation testing.							
10									
15									
20									
25									
30									

PLATE A-19

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **P-2**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **±952**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **4/13/23**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **140 lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): Light Brown, slightly moist, fine- to coarse-grained, some cobles, some gravel.							
		YOUNG ALLUVIAL FAN DEPOSITS (Qyf) Silty Sand (SM): Light brown to brown, slightly moist, fine- to coarse-grained, few gravel.							
5									
10		Light brown.							
		Sand w/ Silt (SP-SM): Light brown to gray, slightly moist, medium dense, fine- to coarse-grained, few gravel.		12 9 9					MA
15		Total Depth = 15' No groundwater encountered Boring was backfilled with cuttings after percolation testing.							
20									
25									
30									

PLATE A-20

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **P-3**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **±951**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **4/13/23**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **140 lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): Light brown, slightly moist, fine- to coarse-grained, some cobbles, some gravel.							
		YOUNG ALLUVIAL FAN DEPOSITS (Qyf) Silty Sand (SM): light brown to brown, slightly moist, fine- to coarse-grained, few gravel.							
5									
		Sand with Silt (SP-SM): light brown, slightly moist, medium dense, fine- to coarse-grained.		3 5 7					MA
10		Total Depth = 10' No groundwater encountered Boring was backfilled with cuttings after percolation testing.							
15									
20									
25									
30									

PLATE A-21

Petra Geosciences, Inc.

3931

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **P-4**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **±959**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **4/13/23**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **140 lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): Light brown, slightly moist, fine- to coarse-grained, some cobbles, some gravel.							
		YOUNG ALLUVIAL FAN DEPOSITS (Qyf) Silty Sand (SM): Light brown to brown, slightly moist, fine- to coarse-grained, few gravel.							
5		loose.		3 3 4					MA
		Total Depth = 7' No groundwater encountered Boring was backfilled with cuttings after percolation testing.							
10									
15									
20									
25									
30									

PLATE A-22

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **P-5**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **±960**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **4/13/23**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **140 lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): light brown, slightly moist, fine- to coarse-grained, some cobbles, some gravel.							
		YOUNG ALLUVIAL FAN DEPOSITS (Qyf) Silty Sand (SM): light brown to brown, slightly moist, loose, fine- to coarse-grained, trace gravel.		4 5 3					MA
5		Total Depth = 5' No groundwater encountered Boring was backfilled with cuttings after percolation testing.							
10									
15									
20									
25									
30									

PLATE

Petra Geosciences, Inc.

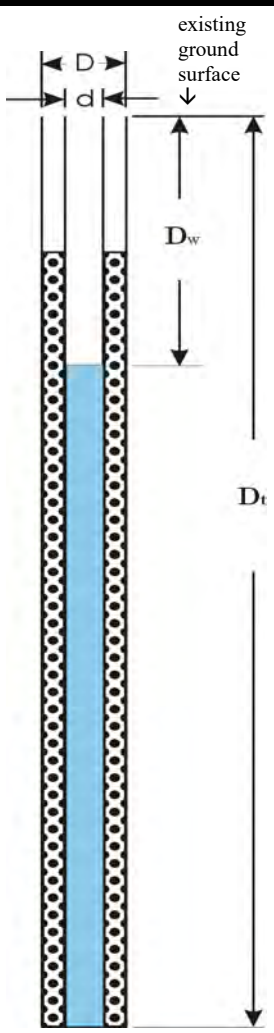
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APPENDIX B

PERCOLATION TEST DATA

Boring/Test Number: P-1

Total Depth of Boring, D_T (ft):	5	**Test Date:**	4/14/2023
Diameter of Hole, D (in):	8	**Tested By:**	SS
Diameter of Casing, d (in):	3	**USCS Soil Type:**	SM
Depth of Slotted Casing (ft):	0 to 5	**Depth to Groundwater (ft):**	N/A
Porosity of Annulus Material, *n* :	0.44	**Ground Elevation (msl ft):**	±953
Depth from Existing Ground Surface to Bottom of Prop. Inflitration System (ft):			0.0



SANDY SOIL CRITERIA TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔD (in.)	Change in Height of Water Greater Than or Equal to 6"? (Yes/No)*
		Initial, D_o (ft.)	Final, D_f (ft.)		
1	25	3.00	3.58	6.96	yes
2	25	3.00	3.53	6.36	yes
Standard Time Interval Between Readings (min.), [* if yes = 10, if no = 30]:					10

PERCOLATION TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔH (in.)	Percolation Rate	
		Initial, D_o (ft.)	Final, D_f (ft.)		(min/in.)	(gal/day/ft^2)
1	10	3.00	3.24	2.88	3.47	10.92
2	10	3.00	3.23	2.76	3.62	10.44
3	10	3.00	3.23	2.76	3.62	10.44
4	10	3.00	3.23	2.76	3.62	10.44
5	10	3.00	3.23	2.76	3.62	10.44
6	10	3.00	3.23	2.76	3.62	10.44
7	10	3.00	3.23	2.76	3.62	10.44
8	10	3.00	3.23	2.76	3.62	10.44

TEST RESULTS**

Inflitration Rate [Porchet Method]# (inches/hour)	Percolation Rate	
	(min/in.)	(gal/day/ft^2)
0.90	**3.62**	**10.44**

**Raw Results. Does Not Include a Factor of Safety

FACTOR OF SAFETY WORKSHEET

Factor Category[Φ]		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = (w) x (v)
A	Suitability Assessment	Soil Assessment Methods	0.25		0
		Predominant Soil Texture	0.25		0
		Site Soil Variability	0.25		0
		Depth to Groundwater / Impervious Layer	0.25		0
		Suitability Assessment Safety Factor, S_A = Σp			**0**

[Φ] Factor Category B Should Be Provided and Calculated by Project Civil Engineer

[#] Where Infiltration Rate, It = ΔH (60r) / Δt (r + 2Havg)

$r = D / 2$

$Ho = D_T - Do$

$H_f = D_T - D_f$

$\Delta H = \Delta D = H_o - H_f$

$H_{avg} = (H_o + H_f) / 2$

Reference:

RCFCWCD, Design Handbook for LID, dated June, 2014

PETRA GEOSCIENCES, INC.
3186 Airway Avenue, Suite K
Costa Mesa, California 92626
PHONE: (714) 549-8921
COSTA MESA TEMECULA LOS ANGELES PALM DESERT CORONA ESCONDIDO

PERCOLATION TEST SUMMARY

2236 E Holt Blvd
Ontario, California

PETRA GEOSCIENCES

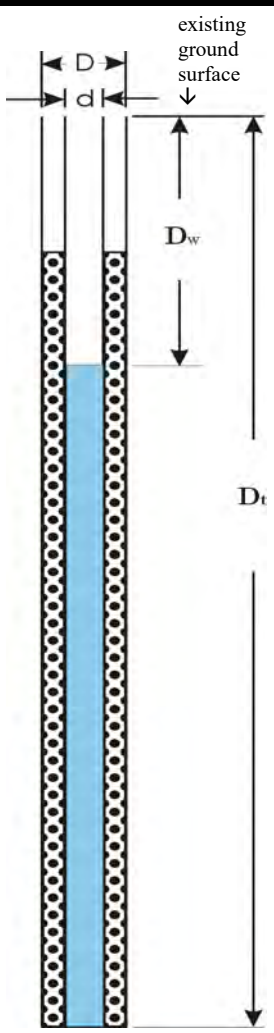
DATE: April , 2023

J.N.: 22-398

Appendix B

Boring/Test Number: P-2

Total Depth of Boring, D_T (ft):	15	**Test Date:**	4/17/2023
Diameter of Hole, D (in):	8	**Tested By:**	SS
Diameter of Casing, d (in):	3	**USCS Soil Type:**	SM
Depth of Slotted Casing (ft):	10 to 15	**Depth to Groundwater (ft):**	N/A
Porosity of Annulus Material, *n* :	0.44	**Ground Elevation (msl ft):**	±952
Depth from Existing Ground Surface to Bottom of Prop. Inflitration System (ft):			0.0



SANDY SOIL CRITERIA TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔD (in.)	Change in Height of Water Greater Than or Equal to 6"? (Yes/No)*
		Initial, D_o (ft.)	Final, D_f (ft.)		
1	25	13.00	4.40	-103.2	yes
2	25	13.00	4.28	-104.64	yes
Standard Time Interval Between Readings (min.), [* if yes = 10, if no = 30]:					10

PERCOLATION TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔH (in.)	Percolation Rate	
		Initial, D_o (ft.)	Final, D_f (ft.)		(min/in.)	(gal/day/ft^2)
1	1.02	13.00	14.00	12.00	0.08	549.63
2	1.00	13.00	14.00	12.00	0.08	558.79
3	1.00	13.00	14.00	12.00	0.08	558.79
4	0.98	13.00	14.00	12.00	0.08	568.27
5	0.98	13.00	14.00	12.00	0.08	568.27
6	0.98	13.00	14.00	12.00	0.08	568.27
7	1.00	13.00	14.00	12.00	0.08	558.79
8	1.00	13.00	14.00	12.00	0.08	558.79
9	0.98	13.00	14.00	12.00	0.08	568.27
10	1.00	13.00	14.00	12.00	0.08	558.79
11	0.98	13.00	14.00	12.00	0.08	568.27
12	0.98	13.00	14.00	12.00	0.08	568.27

TEST RESULTS**

Inflitration Rate [Porchet Method]# (inches/hour)	Percolation Rate	
	(min/in.)	(gal/day/ft^2)
49.32	**0.08**	**568.27**

**Raw Results. Does Not Include a Factor of Safety

FACTOR OF SAFETY WORKSHEET

Factor Category[Φ]		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = (w) x (v)
A	Suitability Assessment	Soil Assessment Methods	0.25		0
		Predominant Soil Texture	0.25		0
		Site Soil Variability	0.25		0
		Depth to Groundwater / Impervious Layer	0.25		0
		Suitability Assessment Safety Factor, $S_A = \Sigma p$			**0**

[Φ] Factor Category B Should Be Provided and Calculated by Project Civil Engineer

[#] Where Infiltration Rate, It = ΔH (60r) / Δt (r + 2Havg)

$r = D / 2$

$Ho = D_T - Do$

$H_f = D_T - D_f$

$\Delta H = \Delta D = H_o - H_f$

$H_{avg} = (H_o + H_f) / 2$

Reference:

RCFCWCD, Design Handbook for LID, dated June, 2014

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PHONE: (714) 549-8921
COSTA MESA TEMECULA LOS ANGELES PALM DESERT CORONA ESCONDIDO

PERCOLATION TEST SUMMARY

2236 E Holt Blvd
Ontario, California

PETRA GEOSCIENCES

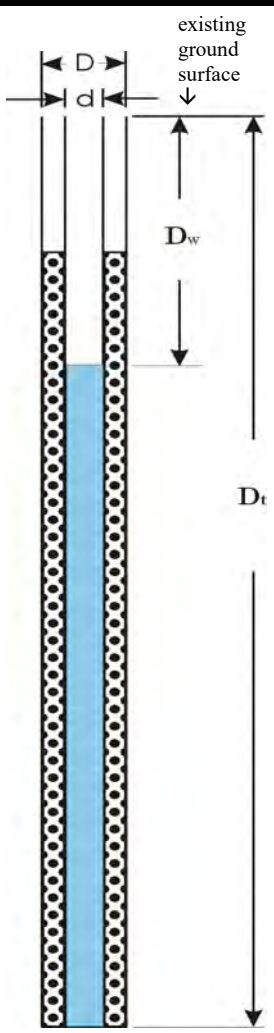
DATE: April , 2023

J.N.: 22-398

Appendix B

Boring/Test Number: P-3

Total Depth of Boring, D_T (ft):	10	**Test Date:**	4/17/2023
Diameter of Hole, D (in):	8	**Tested By:**	SS
Diameter of Casing, d (in):	3	**USCS Soil Type:**	SM
Depth of Slotted Casing (ft):	5 to 10	**Depth to Groundwater (ft):**	N/A
Porosity of Annulus Material, *n* :	0.44	**Ground Elevation (msl ft):**	±951
Depth from Existing Ground Surface to Bottom of Prop. Inflitration System (ft):			0.0



SANDY SOIL CRITERIA TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔD (in.)	Change in Height of Water Greater Than or Equal to 6"? (Yes/No)*
		Initial, D_o (ft.)	Final, D_f (ft.)		
1	25	9.50	11.36	22.32	yes
2	25	9.50	11.08	18.96	yes
Standard Time Interval Between Readings (min.), [* if yes = 10, if no = 30]:					10

PERCOLATION TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔH (in.)	Percolation Rate	
		Initial, D_o (ft.)	Final, D_f (ft.)		(min/in.)	(gal/day/ft^2)
1	10	9.50	10.49	11.88	0.84	537.09
2	10	9.50	10.43	11.16	0.90	429.49
3	10	9.50	10.43	11.16	0.90	429.49
4	10	9.50	10.43	11.16	0.90	429.49
5	10	9.50	10.43	11.16	0.90	429.49
6	10	9.50	10.43	11.16	0.90	429.49
7	10	9.50	10.44	11.28	0.89	445.14
8	10	9.50	10.43	11.16	0.90	429.49

TEST RESULTS**

Inflitration Rate [Porchet Method]# (inches/hour)	Percolation Rate	
	(min/in.)	(gal/day/ft^2)
50.61	**0.90**	**429.49**

**Raw Results. Does Not Include a Factor of Safety

FACTOR OF SAFETY WORKSHEET

Factor Category[Φ]		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = (w) x (v)
A	Suitability Assessment	Soil Assessment Methods	0.25		0
		Predominant Soil Texture	0.25		0
		Site Soil Variability	0.25		0
		Depth to Groundwater / Impervious Layer	0.25		0
		Suitability Assessment Safety Factor, $S_A = \Sigma p$			**0**

[Φ] Factor Category B Should Be Provided and Calculated by Project Civil Engineer

[#] Where Infiltration Rate, It = ΔH (60r) / Δt (r + 2Havg)

$r = D / 2$

$Ho = D_T - Do$

$H_f = D_T - D_f$

$\Delta H = \Delta D = H_o - H_f$

$H_{avg} = (H_o + H_f) / 2$

Reference:

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PERCOLATION TEST SUMMARY

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Ontario, California

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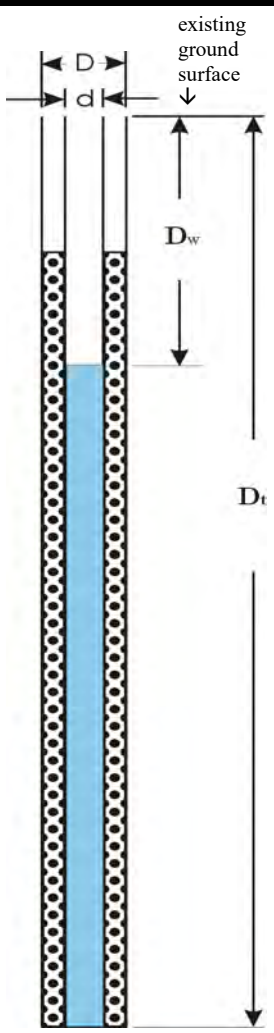
DATE: April , 2023

J.N.: 22-398

Appendix B

Boring/Test Number: P-4

Total Depth of Boring, D_T (ft):	7	**Test Date:**	4/14/2023
Diameter of Hole, D (in):	8	**Tested By:**	SS
Diameter of Casing, d (in):	3	**USCS Soil Type:**	SM
Depth of Slotted Casing (ft):	2 to 7	**Depth to Groundwater (ft):**	N/A
Porosity of Annulus Material, *n* :	0.44	**Ground Elevation (msl ft):**	±959
Depth from Existing Ground Surface to Bottom of Prop. Inflitration System (ft):			0.0



SANDY SOIL CRITERIA TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔD (in.)	Change in Height of Water Greater Than or Equal to 6"? (Yes/No)*
		Initial, D_o (ft.)	Final, D_f (ft.)		
1	25	6.00	6.83	9.96	yes
2	25	6.00	6.58	6.96	yes
Standard Time Interval Between Readings (min.), [* if yes = 10, if no = 30]:					10

PERCOLATION TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔH (in.)	Percolation Rate	
		Initial, D_o (ft.)	Final, D_f (ft.)		(min/in.)	(gal/day/ft^2)
1	10	6.00	6.29	3.48	2.87	26.44
2	10	6.00	6.30	3.60	2.78	27.48
3	10	6.00	6.30	3.60	2.78	27.48
4	10	6.00	6.29	3.48	2.87	26.44
5	10	6.00	6.29	3.48	2.87	26.44
6	10	6.00	6.29	3.48	2.87	26.44
7	10	6.00	6.29	3.48	2.87	26.44
8	10	6.00	6.29	3.48	2.87	26.44

TEST RESULTS**

Inflitration Rate [Porchet Method]# (inches/hour)	Percolation Rate	
	(min/in.)	(gal/day/ft^2)
2.35	**2.87**	**26.44**

**Raw Results. Does Not Include a Factor of Safety

FACTOR OF SAFETY WORKSHEET

Factor Category[Φ]		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = (w) x (v)
A	Suitability Assessment	Soil Assessment Methods	0.25		0
		Predominant Soil Texture	0.25		0
		Site Soil Variability	0.25		0
		Depth to Groundwater / Impervious Layer	0.25		0
		Suitability Assessment Safety Factor, S_A = Σp			**0**

[Φ] Factor Category B Should Be Provided and Calculated by Project Civil Engineer

[#] Where Infiltration Rate, It = ΔH (60r) / Δt (r + 2Havg)

$r = D / 2$

$Ho = D_T - Do$

$H_f = D_T - D_f$

$\Delta H = \Delta D = H_o - H_f$

$H_{avg} = (H_o + H_f) / 2$

Reference:

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PERCOLATION TEST SUMMARY

2236 E Holt Blvd
Ontario, California

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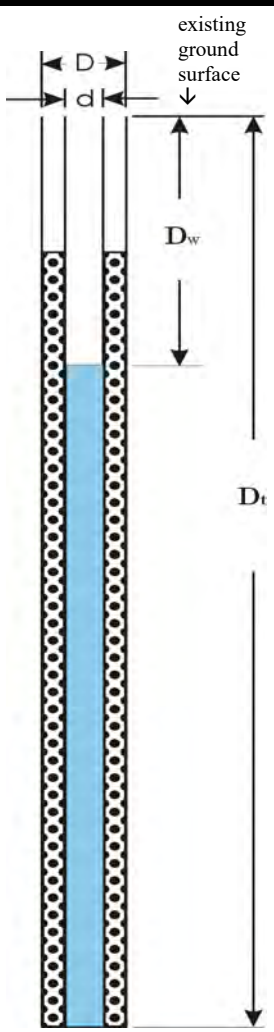
DATE: April , 2023

J.N.: 22-398

Appendix B

Boring/Test Number: P-5

Total Depth of Boring, D_T (ft):	5	**Test Date:**	4/14/2023
Diameter of Hole, D (in):	8	**Tested By:**	SS
Diameter of Casing, d (in):	3	**USCS Soil Type:**	SM
Depth of Slotted Casing (ft):	0 to 5	**Depth to Groundwater (ft):**	N/A
Porosity of Annulus Material, *n* :	0.44	**Ground Elevation (msl ft):**	±960
Depth from Existing Ground Surface to Bottom of Prop. Inflitration System (ft):			0.0



SANDY SOIL CRITERIA TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔD (in.)	Change in Height of Water Greater Than or Equal to 6"? (Yes/No)*
		Initial, D_o (ft.)	Final, D_f (ft.)		
1	25	3.00	4.40	16.8	yes
2	25	3.00	4.28	15.36	yes
Standard Time Interval Between Readings (min.), [* if yes = 10, if no = 30]:					10

PERCOLATION TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔH (in.)	Percolation Rate	
		Initial, D_o (ft.)	Final, D_f (ft.)		(min/in.)	(gal/day/ft^2)
1	10	3.00	3.56	6.72	1.49	27.64
2	10	3.00	3.53	6.36	1.57	25.96
3	10	3.00	3.52	6.24	1.60	25.40
4	10	3.00	3.54	6.48	1.54	26.52
5	10	3.00	3.52	6.24	1.60	25.40
6	10	3.00	3.51	6.12	1.63	24.85
7	10	3.00	3.51	6.12	1.63	24.85
8	10	3.00	3.51	6.12	1.63	24.85

TEST RESULTS**

Inflitration Rate [Porchet Method]# (inches/hour)	Percolation Rate	
	(min/in.)	(gal/day/ft^2)
2.15	**1.63**	**24.85**

**Raw Results. Does Not Include a Factor of Safety

FACTOR OF SAFETY WORKSHEET

Factor Category[Φ]		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = (w) x (v)
A	Suitability Assessment	Soil Assessment Methods	0.25		0
		Predominant Soil Texture	0.25		0
		Site Soil Variability	0.25		0
		Depth to Groundwater / Impervious Layer	0.25		0
		Suitability Assessment Safety Factor, S_A = Σp			**0**

[Φ] Factor Category B Should Be Provided and Calculated by Project Civil Engineer

[#] Where Infiltration Rate, It = ΔH (60r) / Δt (r + 2Havg)

$r = D / 2$

$Ho = D_T - Do$

$H_f = D_T - D_f$

$\Delta H = \Delta D = H_o - H_f$

$H_{avg} = (H_o + H_f) / 2$

Reference:

RCFCWCD, Design Handbook for LID, dated June, 2014

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Costa Mesa, California 92626
PHONE: (714) 549-8921
COSTA MESA TEMECULA LOS ANGELES PALM DESERT CORONA ESCONDIDO

PERCOLATION TEST SUMMARY

2236 E Holt Blvd
Ontario, California

PETRA GEOSCIENCES

DATE: April , 2023

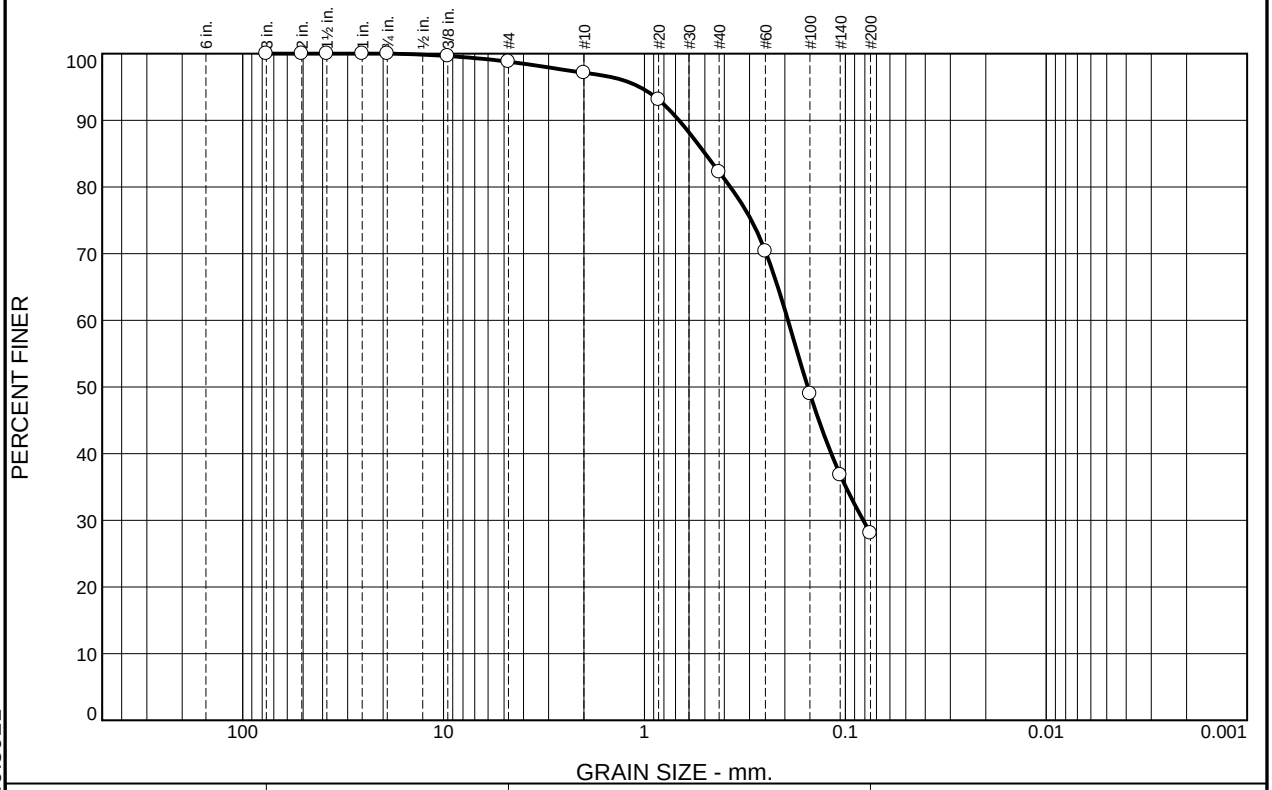
J.N.: 22-398

Appendix B

APPENDIX C

SIEVE ANALYSIS GRAPHS

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	1.2	1.7	14.9	54.1	28.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.375	99.6		
#4	98.8		
#10	97.1		
#20	93.1		
#40	82.2		
#60	70.4		
#100	49.0		
#140	36.8		
#200	28.1		

* (no specification provided)

Material Description

Brown Silty Fine to Medium Sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.6728 D_{85}= 0.4980 D_{60}= 0.1930
D_{50}= 0.1537 D_{30}= 0.0814 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Source of Sample: 23L085 **Depth:** 3.5
Sample Number: P-1 **Date:** 4/20/2023

Laboratory:
1251 West Pomona Road, Unit #103, Corona, Ca 92882 Phone #. 714.549.8921

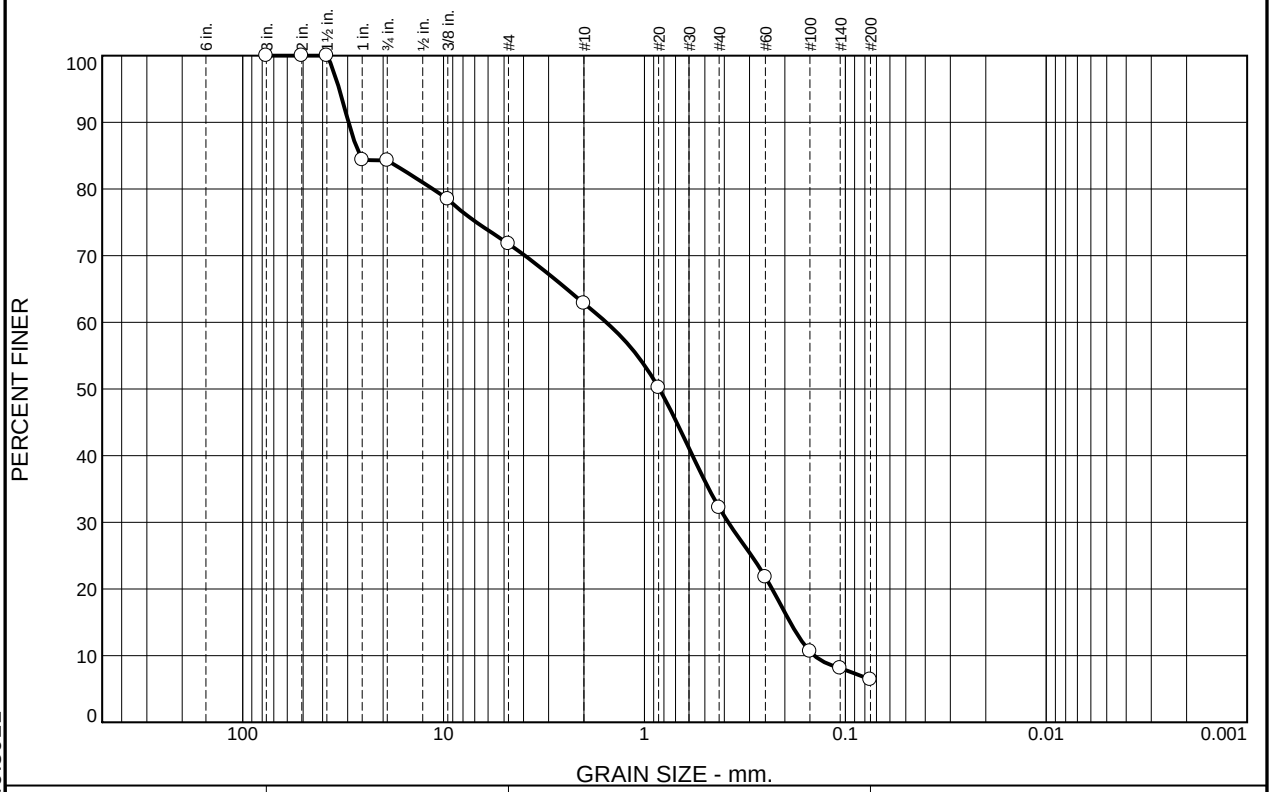
PETRA GEOSCIENCES INC.

Client: Diversified Pacific Communities
Project: Ontario Hotel

Project No: 22-398 **Figure**

Tested By: DI

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	15.7	12.5	8.9	30.7	25.8	6.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	84.4		
.75	84.3		
.375	78.5		
#4	71.8		
#10	62.9		
#20	50.2		
#40	32.2		
#60	21.8		
#100	10.6		
#140	8.1		
#200	6.4		

* (no specification provided)

Material Description

Gray Brown Gravelly Fine to Coarse Sand with Silt

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 29.6943 D_{85}= 26.0677 D_{60}= 1.5491
D_{50}= 0.8423 D_{30}= 0.3827 D_{15}= 0.1881
D_{10}= 0.1427 C_u= 10.86 C_c= 0.66

Classification

USCS= AASHTO=

Remarks

Source of Sample: 23L085 **Depth:** 13.5
Sample Number: P-2

Date: 4/20/2023

Laboratory:
1251 West Pomona Road, Unit #103, Corona, Ca 92882 Phone #. 714.549.8921

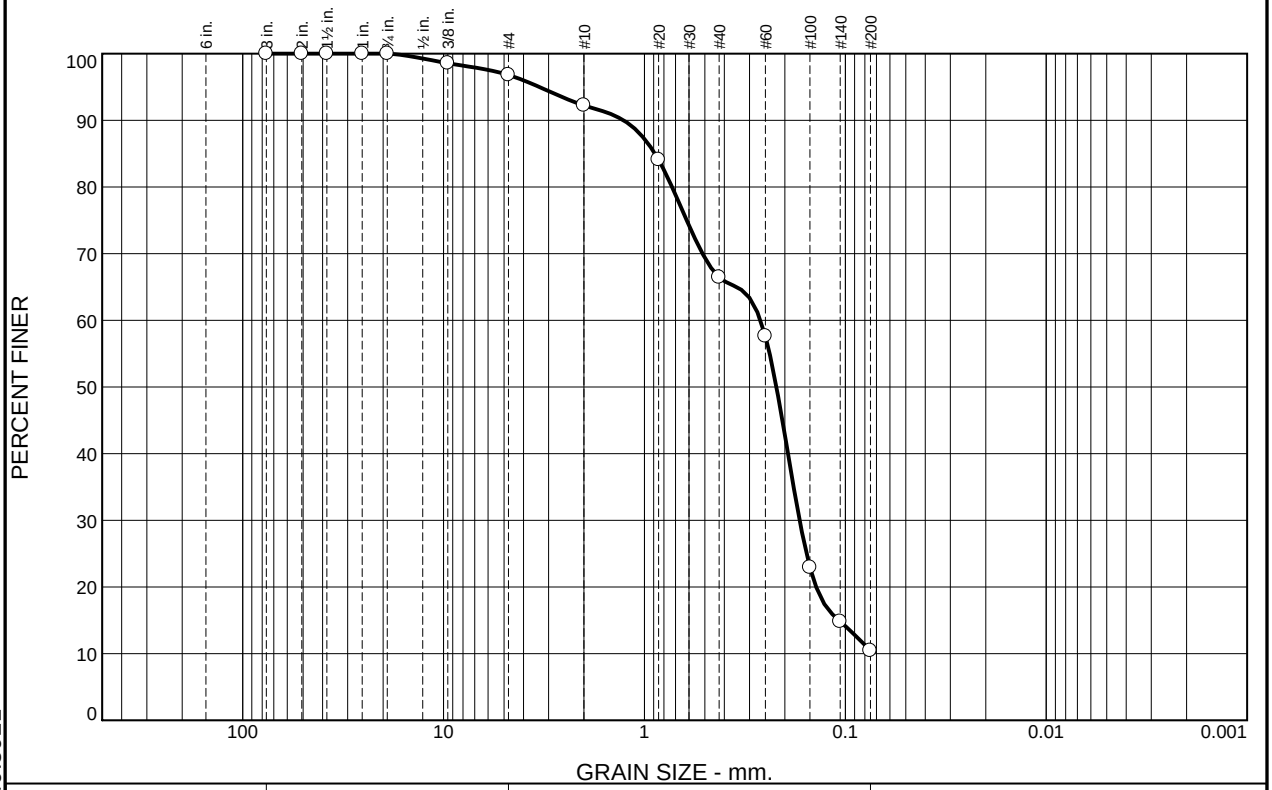
PETRA GEOSCIENCES INC.

Client: Diversified Pacific Communities
Project: Ontario Hotel

Project No: 22-398 **Figure**

Tested By: DI

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	3.2	4.6	25.7	56.0	10.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.375	98.6		
#4	96.8		
#10	92.2		
#20	84.1		
#40	66.5		
#60	57.6		
#100	22.9		
#140	14.8		
#200	10.5		

* (no specification provided)

Material Description

Olive Brown Fine to Medium Sand with Silt

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 1.2713 D_{85}= 0.8857 D_{60}= 0.2643
D_{50}= 0.2205 D_{30}= 0.1688 D_{15}= 0.1077
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Source of Sample: 23L085 **Depth:** 8.5
Sample Number: P-3

Date: 4/20/2023

Laboratory:
1251 West Pomona Road, Unit #103, Corona, Ca 92882 Phone #. 714.549.8921

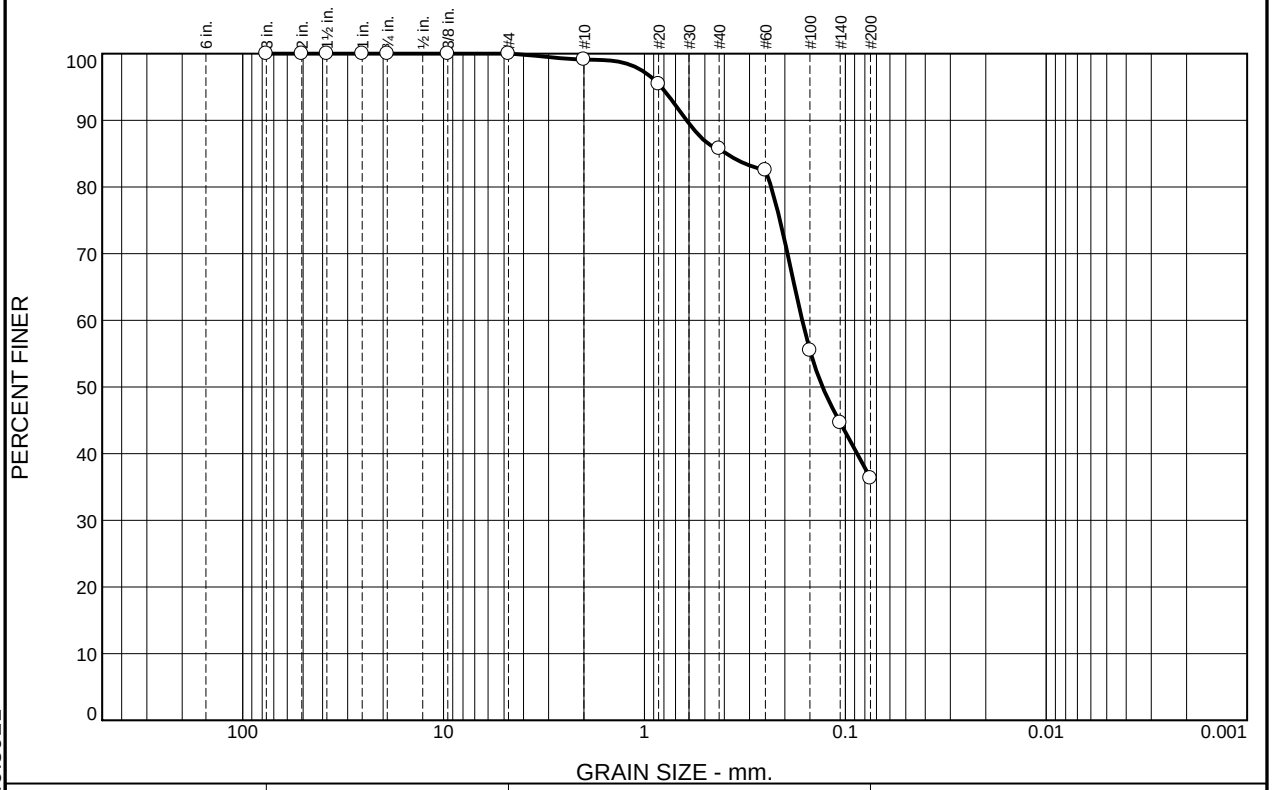
PETRA GEOSCIENCES INC.

Client: Diversified Pacific Communities
Project: Ontario Hotel

Project No: 22-398 **Figure**

Tested By: DI

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.9	13.4	49.4	36.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.375	100.0		
#4	100.0		
#10	99.1		
#20	95.4		
#40	85.7		
#60	82.5		
#100	55.5		
#140	44.6		
#200	36.3		

* (no specification provided)

Material Description

Brown Silty Fine to Medium Sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.6164 D_{85}= 0.3909 D_{60}= 0.1638
D_{50}= 0.1299 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Source of Sample: 23L085 **Depth:** 5.5
Sample Number: P-4 **Date:** 4/20/2023

Laboratory:
1251 West Pomona Road, Unit #103, Corona, Ca 92882 Phone #. 714.549.8921

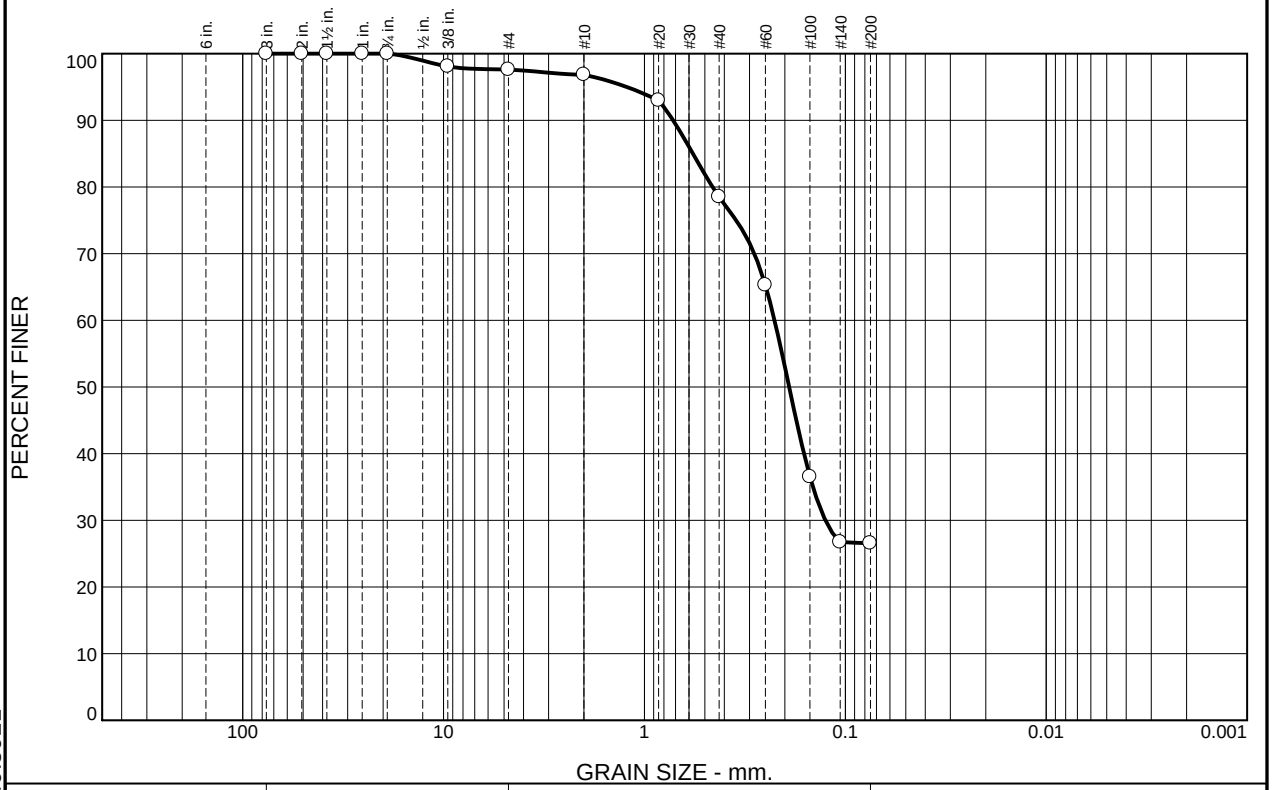
PETRA GEOSCIENCES INC.

Client: Diversified Pacific Communities
Project: Ontario Hotel

Project No: 22-398 **Figure**

Tested By: DI

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	2.4	0.8	18.3	52.0	26.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.375	98.1		
#4	97.6		
#10	96.8		
#20	93.0		
#40	78.5		
#60	65.3		
#100	36.5		
#140	26.7		
#200	26.5		

* (no specification provided)

Material Description

Brown Silty Fine to Medium Sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.7197 D_{85}= 0.5737 D_{60}= 0.2252
D_{50}= 0.1904 D_{30}= 0.1258 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Source of Sample: 23L085 **Depth:** 3.5
Sample Number: P-5 **Date:** 4/20/2023

Laboratory:
1251 West Pomona Road, Unit #103, Corona, Ca 92882 Phone #. 714.549.8921

PETRA GEOSCIENCES INC.

Client: Diversified Pacific Communities
Project: Ontario Hotel

Project No: 22-398 **Figure**

Tested By: DI

Attachment F – Educational Materials

Attachment G – 303d List

Cucamonga Creek Reach 1 (Valley Reach)	River & Stream	80121000 / 18070203	• Cadmium ◦ Source Unknown	9.6 Miles	2010	5A	2021
			• Coliform Bacteria ◦ Unknown Nonpoint Source	9.6 Miles	1998	5B	2007
			• Copper ◦ Source Unknown	9.6 Miles	2010	5A	2021
			• Lead ◦ Source Unknown	9.6 Miles	2010	5A	2021
			• Zinc ◦ Source Unknown	9.6 Miles	2010	5A	202

Attachment H – Operation and Maintenance Plan

Appendix I
Noise Impact Analysis

EMPIRE GROVES HOTEL

NOISE IMPACT ANALYSIS

CITY OF ONTARIO

PREPARED BY:

William Maddux
bmaddux@urbanxroads.com
(619) 778-1971

MAY 13, 2024

15693-02 Noise Study.docx

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LIST OF ABBREVIATED TERMS

(1)	Reference
ADT	Average Daily Traffic
CEQA	California Environmental Quality Act
CNEL	Community Noise Equivalent Level
dBA	A-weighted decibels
EPA	Environmental Protection Agency
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
INCE	Institute of Noise Control Engineering
L_{eq}	Equivalent continuous (average) sound level
L_{max}	Maximum level measured over the time interval
L_{min}	Minimum level measured over the time interval
mph	Miles per hour
NR	Noise Reduction
Project	Empire Groves Hotel
REMEL	Reference Energy Mean Emission Level
TNM	Traffic Noise Model
STC	Sound Transmission Class

EXECUTIVE SUMMARY

Urban Crossroads, Inc. has prepared this noise study to determine the noise exposure and the necessary noise abatement measures for the proposed Empire Groves Hotel development ("Project"). The Project site is located at the northeast corner of Holt Boulevard and Guasti Road in the City of Ontario. The Project includes the development of a hotel that includes 600 rooms, 2 ballrooms, a spa and fitness center, meeting and conference rooms as well as an outdoor pool and event lawn. This noise impact analysis was prepared to satisfy the City of Ontario noise level standards and ensure that adequate noise abatement measures are incorporated into the Project's development. In addition, recommendations for exterior and interior noise abatement are identified based on the latest Project site plans.

SUMMARY OF CEQA SIGNIFICANCE FINDINGS

The results of this Empire Groves Hotel Noise Impact Analysis are summarized below based on the significance criteria in Section 4 of this report consistent with Appendix G of the California Environmental Quality Act (CEQA) Guidelines. (1)(1) Table ES-1 shows the findings of significance for each potential noise and/or vibration impact under CEQA.

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS

Analysis	Report Section	Significance Findings	
		Unmitigated	Mitigated
On-Site Traffic Noise	7	*Less Than Significant*	-
On-Site Rail Noise		*Less Than Significant*	-
Aircraft Noise		*Less Than Significant*	-
Off-Site Traffic Noise	8	*Less Than Significant*	-
Operational Noise	10	*Less Than Significant*	-
Construction Noise	11	*Less Than Significant*	-
Construction Vibration		*Less Than Significant*	-

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1 INTRODUCTION

This noise analysis has been completed to determine the noise impacts associated with the development of the proposed Empire Groves Hotel ("Project"). This noise study briefly describes the proposed Project, provides information regarding noise fundamentals, sets out the local regulatory setting, presents the study methods and procedures noise analysis, evaluates the potential noise impacts from operation and construction of the Project, and as necessary, identifies mitigation measures to reduce impacts.

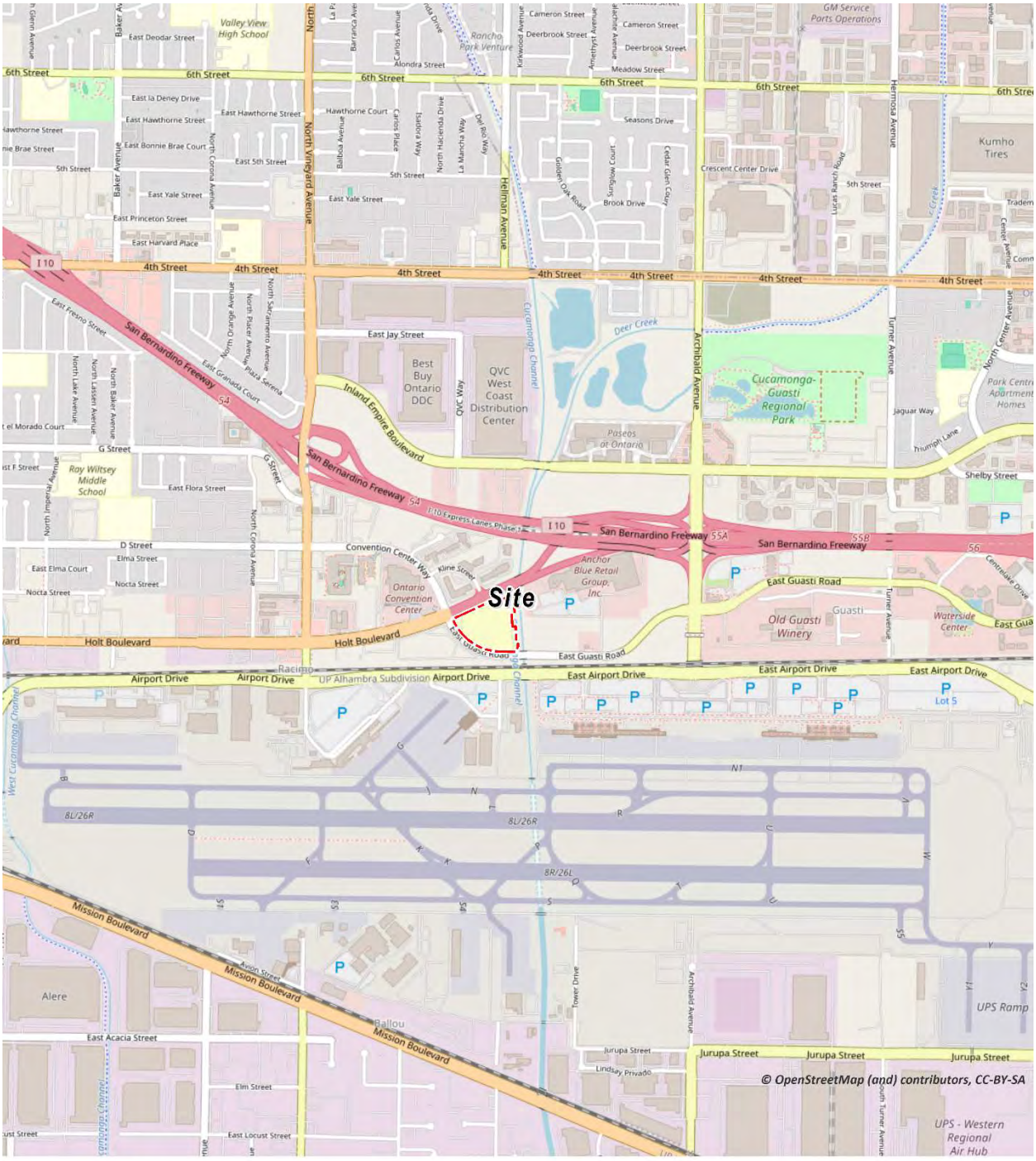
1.1 SITE LOCATION

The proposed Empire Groves Hotel site is located at the northeast corner of Holt Boulevard and Guasti Road in the City of Ontario, as shown on Exhibit 1-A. The project site is approximately 834 feet south of Interstate 10, and approximately 325 feet north of Ontario International Airport.

1.2 PROJECT DESCRIPTION

The Project consists of a hotel that includes 600 rooms, 2 ballrooms, a spa and fitness center, meeting and conference rooms as well as an outdoor pool and event lawn on 10.43 acres. A preliminary site plan for the proposed hotel development is shown on Exhibit 1-B.

EXHIBIT 1-A: LOCATION MAP



LEGEND:

N

Site Boundary

EXHIBIT 1-B: SITE PLAN



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2 FUNDAMENTALS

Noise is simply defined as "unwanted sound." Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm or when it has adverse effects on health. Noise is measured on a logarithmic scale of sound pressure level known as a decibel (dB). A-weighted decibels (dBA) approximate the subjective response of the human ear to broad frequency noise source by discriminating against very low and very high frequencies of the audible spectrum. They are adjusted to reflect only those frequencies which are audible to the human ear. Exhibit 2-A presents a summary of the typical noise levels and their subjective loudness and effects that are described in more detail below.

EXHIBIT 2-A: TYPICAL NOISE LEVELS

COMMON OUTDOOR ACTIVITIES	COMMON INDOOR ACTIVITIES	A - WEIGHTED SOUND LEVEL dBA	SUBJECTIVE LOUDNESS	EFFECTS OF NOISE
THRESHOLD OF PAIN		140	INTOLERABLE OR DEAFENING	HEARING LOSS
NEAR JET ENGINE		130		
		120		
JET FLY-OVER AT 300m (1000 ft)	ROCK BAND	110		
LOUD AUTO HORN		100	VERY NOISY	
GAS LAWN MOWER AT 1m (3 ft)		90		
DIESEL TRUCK AT 15m (50 ft), at 80 km/hr (50 mph)	FOOD BLENDER AT 1m (3 ft)	80		SPEECH INTERFERENCE
NOISY URBAN AREA, DAYTIME	VACUUM CLEANER AT 3m (10 ft)	70	LOUD	
HEAVY TRAFFIC AT 90m (300 ft)	NORMAL SPEECH AT 1m (3 ft)	60		
QUIET URBAN DAYTIME	LARGE BUSINESS OFFICE	50	MODERATE	SLEEP DISTURBANCE
QUIET URBAN NIGHTTIME	THEATER, LARGE CONFERENCE ROOM (BACKGROUND)	40		
QUIET SUBURBAN NIGHTTIME	LIBRARY	30	FAINT	NO EFFECT
QUIET RURAL NIGHTTIME	BEDROOM AT NIGHT, CONCERT HALL (BACKGROUND)	20		
	BROADCAST/RECORDING STUDIO	10	VERY FAINT	
LOWEST THRESHOLD OF HUMAN HEARING	LOWEST THRESHOLD OF HUMAN HEARING	0		

Source: Environmental Protection Agency Office of Noise Abatement and Control, Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety (EPA/ONAC 550/9-74-004) March 1974.

2.1 RANGE OF NOISE

Since the range of intensities that the human ear can detect is so large, the scale frequently used to measure intensity is a scale based on multiples of 10, the logarithmic scale. The scale for measuring intensity is the decibel scale. Each interval of 10 decibels indicates a sound energy ten times greater than before, which is perceived by the human ear as being roughly twice as loud. (2) The most common sounds vary between 40 dBA (very quiet) to 100 dBA (very loud). Normal conversation at three feet is roughly at 60 dBA, while loud jet engine noises equate to 110 dBA

at approximately 100 feet, which can cause serious discomfort. (3) Another important aspect of noise is the duration of the sound and the way it is described and distributed in time.

2.2 NOISE DESCRIPTORS

Environmental noise descriptors are generally based on averages, rather than instantaneous, noise levels. The most used figure is the equivalent level (L_{eq}). Equivalent sound levels are not measured directly but are calculated from sound pressure levels typically measured in A-weighted decibels (dBA). The equivalent sound level (L_{eq}) represents a steady state sound level containing the same total energy as a time varying signal over a given sample period (typically one hour) and is commonly used to describe the "average" noise levels within the environment.

Peak hour or average noise levels, while useful, do not completely describe a given noise environment. Noise levels lower than peak hour may be disturbing if they occur during times when quiet is most desirable, namely evening and nighttime (sleeping) hours. To account for this, the Community Noise Equivalent Level (CNEL), representing a composite 24-hour noise level is utilized. The CNEL is the weighted average of the intensity of a sound, with corrections for time of day, and averaged over 24 hours. The time-of-day corrections require the addition of 5 decibels to dBA L_{eq} sound levels in the evening from 7:00 p.m. to 10:00 p.m., and the addition of 10 decibels to dBA L_{eq} sound levels at night between 10:00 p.m. and 7:00 a.m. These additions are made to account for the noise sensitive time periods during the evening and night hours when sound appears louder. CNEL does not represent the actual sound level heard at any time, but rather represents the total sound exposure. The City of Ontario relies on the 24-hour CNEL level to assess land use compatibility with transportation related noise sources.

2.3 SOUND PROPAGATION

When sound propagates over a distance, it changes in level and frequency content. The way noise reduces with distance depends on the following factors.

2.3.1 GEOMETRIC SPREADING

Sound from a localized source (i.e., a stationary point source) propagates uniformly outward in a spherical pattern. The sound level attenuates (or decreases) at a rate of 6 dB for each doubling of distance from a point source. Highways consist of several localized noise sources on a defined path and hence can be treated as a line source, which approximates the effect of several point sources. Noise from a line source propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of 3 dB for each doubling of distance from a line source. (2)

2.3.2 GROUND ABSORPTION

The propagation path of noise from a highway to a receiver is usually very close to the ground. Noise attenuation from ground absorption and reflective wave canceling adds to the attenuation associated with geometric spreading. Traditionally, the excess attenuation has also been expressed in terms of attenuation per doubling of distance. This approximation is usually

sufficiently accurate for distances of less than 200 ft. For acoustically hard sites (i.e., sites with a reflective surface between the source and the receiver, such as a parking lot or body of water), no excess ground attenuation is assumed. For acoustically absorptive or soft sites (i.e., those sites with an absorptive ground surface between the source and the receiver such as soft dirt, grass, or scattered bushes and trees), an excess ground attenuation value of 1.5 dB per doubling of distance is normally assumed. When added to the cylindrical spreading, the excess ground attenuation results in an overall drop-off rate of 4.5 dB per doubling of distance from a line source. (4)

2.3.3 ATMOSPHERIC EFFECTS

Receivers located downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels. Sound levels can be increased at large distances (e.g., more than 500 feet) due to atmospheric temperature inversion (i.e., increasing temperature with elevation). Other factors such as air temperature, humidity, and turbulence can also have significant effects. (2)

2.3.4 SHIELDING

A large object or barrier in the path between a noise source and a receiver can substantially attenuate noise levels at the receiver. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Shielding by trees and other such vegetation typically only has an "out of sight, out of mind" effect. That is, the perception of noise impact tends to decrease when vegetation blocks the line-of-sight to nearby residents. However, for vegetation to provide a substantial, or even noticeable, noise reduction, the vegetation area must be at least 15 feet in height, 100 feet wide and dense enough to completely obstruct the line-of sight between the source and the receiver. This size of vegetation may provide up to 5 dBA of noise reduction. The Federal Highway Administration (FHWA) does not consider the planting of vegetation to be a noise abatement measure (4).

2.4 NOISE CONTROL

Noise control is the process of obtaining an acceptable noise environment for an observation point or receiver by controlling the noise source, transmission path, receiver, or all three. This concept is known as the source-path-receiver concept. In general, noise control measures can be applied to these three elements.

2.5 NOISE BARRIER ATTENUATION

Effective noise barriers can reduce noise levels by up to 10 to 15 dBA, cutting the loudness of traffic noise in half. A noise barrier is most effective when placed close to the noise source or receiver. Noise barriers, however, do have limitations. For a noise barrier to work, it must be high enough and long enough to block the path of the noise source (4).

2.6 LAND USE COMPATIBILITY WITH NOISE

Some land uses are more tolerant of noise than others. For example, schools, hospitals, churches, and residences are more sensitive to noise intrusion than are commercial or industrial developments and related activities. As ambient noise levels affect the perceived amenity or livability of a development, so too can the mismanagement of noise impacts impair the economic health and growth potential of a community by reducing the area's desirability as a place to live, shop and work. For this reason, land use compatibility with the noise environment is an important consideration in the planning and design process. The FHWA encourages State and Local government to regulate land development in such a way that noise-sensitive land uses are either prohibited from being located adjacent to a highway, or that the developments are planned, designed, and constructed in such a way that noise impacts are minimized (5).

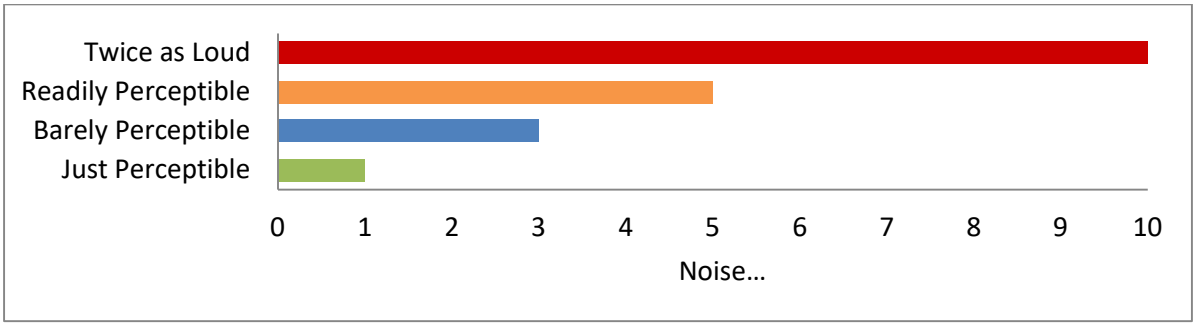
2.7 COMMUNITY RESPONSE TO NOISE

Community responses to noise may range from registering a complaint by telephone or letter, to initiating court action, depending upon everyone's susceptibility to noise and personal attitudes about noise. Several factors are related to the level of community annoyance including:

- Fear associated with noise producing activities;
- Socio-economic status and educational level;
- Perception that those affected are being unfairly treated;
- Attitudes regarding the usefulness of the noise-producing activity;
- Belief that the noise source can be controlled.

Approximately ten percent of the population has a very low tolerance for noise and will object to any noise not of their making. Consequently, even in the quietest environment, some complaints will occur. Twenty-five percent of the population will not complain even in very severe noise environments. Thus, a variety of reactions can be expected from people exposed to any given noise environment. (6) Surveys have shown that about ten percent of the people exposed to traffic noise of 60 dBA will report being highly annoyed with the noise, and each increase of one dBA is associated with approximately two percent more people being highly annoyed. When traffic noise exceeds 60 dBA or aircraft noise exceeds 55 dBA, people may begin to complain. (6) Despite this variability in behavior on an individual level, the population can be expected to exhibit the following responses to changes in noise levels as shown on Exhibit 2-B. A change of 3 dBA is considered *barely perceptible*, and changes of 5 dBA are considered *readily perceptible*. (4)

EXHIBIT 2-B: NOISE LEVEL INCREASE PERCEPTION



2.8 VIBRATION

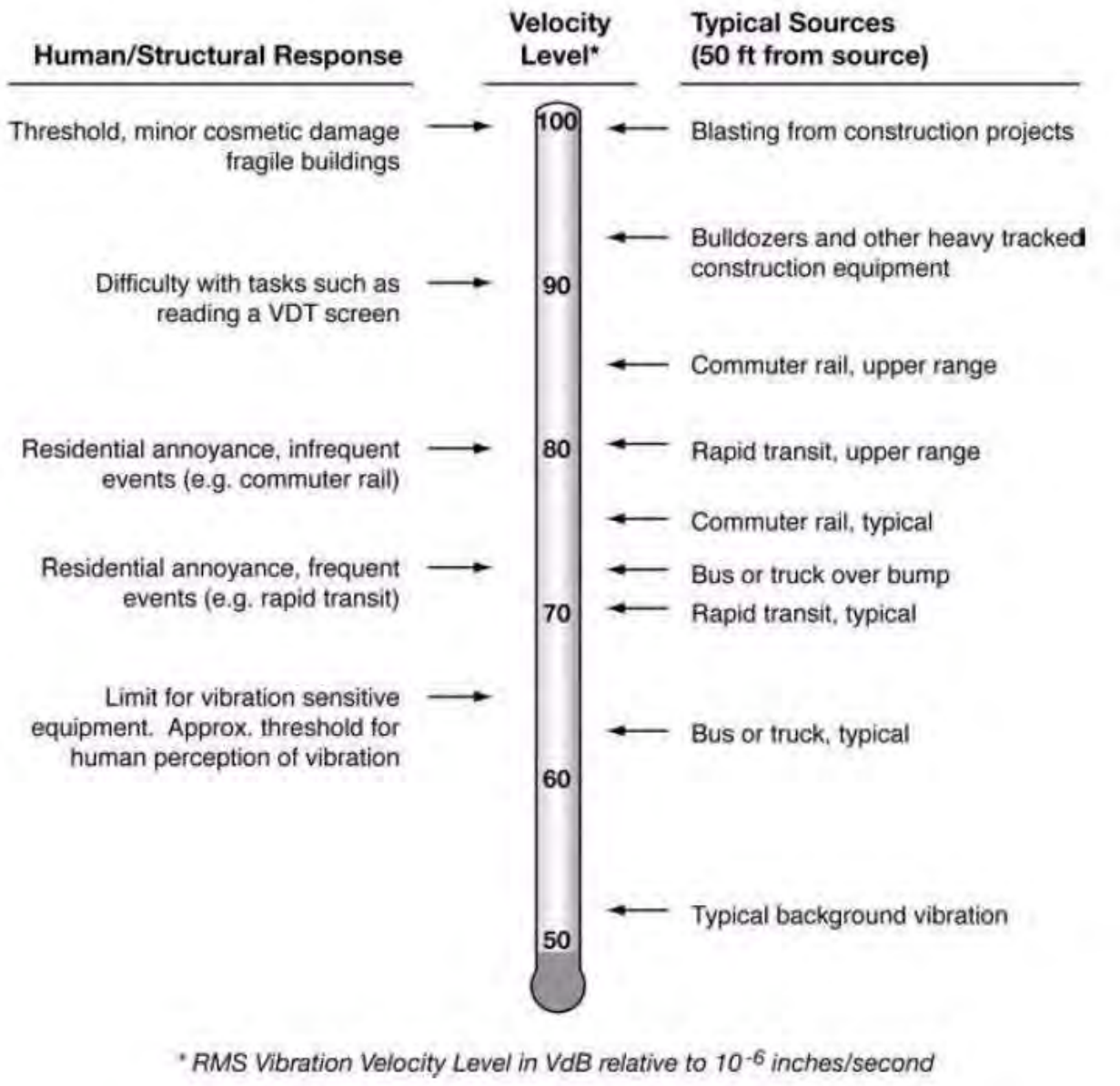
Per the Federal Transit Administration (FTA) *Transit Noise and Vibration Impact Assessment Manual* (7), vibration is the periodic oscillation of a medium or object. Vibration is the periodic oscillation of a medium or object. The rumbling sound caused by the vibration of room surfaces is called structure-borne noise. Sources of ground-borne vibrations include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or human-made causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, such as factory machinery, or transient, such as explosions. As is the case with airborne sound, ground-borne vibrations may be described by amplitude and frequency.

There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings but is not always suitable for evaluating human response (annoyance) because it takes some time for the human body to respond to vibration signals. Instead, the human body responds to average vibration amplitude often described as the root mean square (RMS). The RMS amplitude is defined as the average of the squared amplitude of the signal and is most frequently used to describe the effect of vibration on the human body. However, the RMS amplitude and PPV are related mathematically, and the RMS amplitude can be calculated from the PPV. The RMS amplitude is approximately 70% of the PPV (in/sec) (8). Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration. Sensitive receivers for vibration include structures (especially older masonry structures), people (especially residents, the elderly, and sick), and vibration-sensitive equipment and/or activities.

While not universally accepted, vibration decibel notation (VdB) is used by the FTA in their guidance manual to describe vibration levels and provide a background of common vibration levels (9). As stated in the FTA guidance manual, the background vibration-velocity level in residential areas is generally 50 VdB. Ground-borne vibration is normally perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground-borne vibration is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background

vibration-velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings. Exhibit 2-C illustrates common vibration sources and the human and structural response to ground-borne vibration.

EXHIBIT 2-C: TYPICAL LEVELS OF GROUND-BORNE VIBRATION



Source: Federal Transit Administration (FTA) Transit Noise Impact and Vibration Assessment Manual

3 REGULATORY SETTING

The federal government, the State of California, various county governments, and most municipalities in the state have established standards and ordinances to control noise. In most areas, automobile and truck traffic is the major source of environmental noise. Traffic activity generally produces an average sound level that remains constant with time. Air and rail traffic, and commercial and industrial activities are also major sources of noise in some areas. Federal, state, and local agencies regulate different aspects of environmental noise. Federal and state agencies generally set noise standards for mobile sources such as aircraft and motor vehicles, while regulation of stationary sources is left to local agencies.

3.1 STATE OF CALIFORNIA NOISE REQUIREMENTS

The State of California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards, and provides guidance for local land use compatibility. State law requires that each county and city adopt a General Plan that includes a Noise Element which is to be prepared per guidelines adopted by the Governor's Office of Planning and Research (OPR). (10) The purpose of the Noise Element is to *limit the exposure of the community to excessive noise levels*. In addition, the California Environmental Quality Act (CEQA) requires that all known environmental effects of a project be analyzed, including environmental noise impacts.

3.2 STATE OF CALIFORNIA BUILDING CODE

The State of California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards, and provides guidance for local land use compatibility. State law requires that each county and city adopt a General Plan that includes a Noise Element which is to be prepared per guidelines adopted by the Governor's Office of Planning and Research (OPR). (11) The purpose of the Noise Element is to *limit the exposure of the community to excessive noise levels*. In addition, the California Environmental Quality Act (CEQA) requires that all known environmental effects of a project be analyzed, including environmental noise impacts.

3.2.1 RESIDENTIAL CONSTRUCTION

The State of California's noise insulation standards for all residential units are codified in the California Code of Regulations (CCR), Title 24, Building Standards Administrative Code, Chapter 12, Section 1206. These noise standards are applied to new construction that contains dwelling units or sleeping units, such as residential and hotel or motel uses, in California for controlling interior noise levels resulting from exterior noise sources. For new buildings, the acceptable interior noise limit is 45 dBA CNEL in habitable rooms (12).

3.2.2 NON-RESIDENTIAL CONSTRUCTION

The State of California's Green Building Standards Code contains mandatory measures for non-residential building construction in Section 5.507 on Environmental Comfort. (13) These noise

standards are applied to new construction in California for controlling interior noise levels resulting from exterior noise sources. The regulations specify that acoustical studies must be prepared when non-residential structures are developed in areas where the exterior noise levels exceed 65 dBA CNEL, such as within a noise contour of an airport, freeway, railroad, and other noise source. If the development falls within an airport or freeway 65 dBA CNEL noise contour, buildings shall be construction to provide an interior noise level environment attributable to exterior sources that does not exceed an hourly equivalent level of 50 dBA L_{eq} in occupied areas during any hour of operation.

3.3 CITY OF ONTARIO GENERAL PLAN NOISE ELEMENT

The City of Ontario General Plan (Policy Plan) identifies several policies to minimize the impacts of excessive noise levels throughout the community. Policy Plan Section S4, Noise Hazards, establishes a goal of maintaining *an environment where noise does not adversely affect the public's health, safety, and welfare.* (14) To satisfy this goal, the Policy Plan identifies seven policies related to: noise mitigation; coordination with transportation authorities; noise mitigation; truck traffic; roadway design; airport noise compatibility and rail noise mitigation. The noise criteria identified on Table 5-13-3 of The Ontario Plan 2050 Final Supplemental Environmental Impact Report (FSEIR) (15) provide guidelines to evaluate land use compatibility within various noise environments. Table 5-13-3 is reproduced here as Exhibit 3-A *Ontario Noise Level Exposure and Land Use Compatibility Guidelines*.

EXHIBIT 3-A: ONTARIO NOISE LEVEL EXPOSURE AND LAND USE COMPATIBILITY GUIDELINES

Land Use Categories		Community Noise Equivalent Level (CNEL)			
Category	Uses	Clearly Acceptable[1]	Normally Acceptable[2]	Normally Unacceptable[3]	Clearly Unacceptable[4]
Residential/Lodging	Single Family/Duplex	<60	60-65	65-70	70-85
	Multifamily	<60	60-65	65-75	75-85
	Mobile Homes	<60	60-65	-	65-85
	Hotel/Motel	<65	65-70	70-80	80-85
Public/Institutional	Schools/Hospitals	<60	60-65	65-70	70-85
	Churches/Libraries	<60	60-65	65-70	70-85
	Auditoriums/Concert Halls	<55	55-60	60-70	70-85
Commercial	Offices	<65	65-75	75-80	80-85
	Retail	<70	70-75	75-80	80-85
Industrial	Manufacturing	<70	70-75	75-85	-
	Warehousing	<70	70-80	80-85	-
Recreational/Open Space	Parks/Playgrounds	<65	65-70	70-75	75-85
	Golf Course/Riding Stables	<65	65-70	70-75	75-85
	Outdoor Spectator Sports	<60	60-65	65-70	
	Outdoor Music Shells/Amphitheaters	-	<60	60-65	65-85
	Livestock/Wildlife Preserves	<70	-	70-75	75-85
	Crop Agriculture	<55-85	-	-	-

Source: Ontario 2010.
1 No special noise insulation required, assuming buildings of normal conventional construction.
2 Acoustical reports will be required for major new residential construction. Conventional construction with closed windows and fresh air supply systems of air conditions will normally suffice.
3 New construction should be discouraged. Noise/aviation easements required for all new construction. If new construction does proceed, a detailed analysis of noise reduction requirements must be made, and necessary noise insulation features included.
4 No new construction should be permitted.

Source: The Ontario Plan 2050 Draft SEIR (Table 5.13-3).

3.3 OPERATIONAL NOISE STANDARDS

To analyze noise impacts originating from a designated fixed location or private property such as the Empire Groves Hotel, stationary-source (operational) noise levels are evaluated against standards established under a City's Municipal Code. The City of Ontario requires that noise from new stationary sources in the City comply with the City's Noise Ordinance, which limits the acceptable noise at the property line of the impacted property, to reduce nuisances to sensitive land uses. Compliance with the City's Noise Ordinance would result in noise levels that are acceptable to the City and would result in less than significant noise impacts from stationary sources. The City of Ontario Municipal Code, Title 5, Chapter 29 noise standards are included in Appendix 3.1.

Section 5-29.04(a) identifies the allowable daytime and nighttime ambient exterior noise standards for each land use type. For Manufacturing and Industrial land uses (Noise Zone V), such as the Project, ambient exterior noise levels may not exceed 65 dBA L_{eq} during the daytime hours (7:00 a.m. to 10:00 p.m.) and may not exceed 60 dBA L_{eq} during the nighttime hours (10:00 p.m. to 7:00 a.m.). For residential land uses (Noise Zone I), ambient exterior noise levels may not exceed 65 dBA L_{eq} during the daytime hours (7:00 a.m. to 10:00 p.m.) and may not exceed 45 dBA L_{eq} during the nighttime hours (10:00 p.m. to 7:00 a.m.) (16). The lower noise level standard shall apply on the boundary between two (2) different noise zones. If the ambient noise level exceeds the resulting standard, the ambient noise level shall be the standard. The maximum acceptable Project-related operational noise levels received at off-site land uses in the City of Ontario are identified on Table 3-1.

TABLE 3-1: OPERATIONAL NOISE STANDARDS

Noise Zone	Land Use	Exterior Noise Levels (dBA Leq)[2]	
		Daytime (7am-10pm)	Nighttime (10pm-7am)
I	Single-Family Residential	65	45
II	Multi-Family Residential	65	50
III	Commercial	65	60
IV	Residential Mixed-Use	70	70
V	Manufacturing and Industrial	70	70

[1] Source: Section 5-29.04 of the City of Ontario Municipal Code (Appendix 3.1).
[2] L_{eq} represents a steady state sound level containing the same total energy as a time varying signal over a given period.

3.4 CONSTRUCTION NOISE STANDARDS

The City of Ontario has set restrictions to control noise impacts associated with construction. Section 5-29.09 of the Municipal Code states: *No person, while engaged in construction, remodeling, digging, grading, demolition or any other related building activity, shall operate any tool, equipment or machine in a manner that produces loud noise that disturbs a person of normal sensitivity who works or resides in the vicinity, or a Police or Code Enforcement Officer, on any weekday except between the hours of 7:00 a.m. and 6:00 p.m. or on Saturday or Sunday between*

the hours of 9:00 a.m. and 6:00 p.m. (16) While the City Section 5-29.09 stablishes limits to the hours during which construction activity may take place, it does not identify specific noise level limits for construction noise levels at potentially affected receiver locations for CEQA analysis purposes.

Construction noise would be considered significant if construction activities occurring outside of the hours specified (7:00 AM and 6:00 PM weekdays and 9:00 AM to 6:00 PM weekends, excluding federal holidays) or if construction activities substantially elevate the ambient noise environment at noise-sensitive uses for a substantial period. It is assumed that the Modified Project construction activities would comply with the City's hour of activity restrictions, thereby precluding construction activities during noise-sensitive time periods. However, neither the City of Ontario General Plan Noise Element or Municipal Codes establish numeric maximum acceptable construction source noise levels at potentially affected receivers, which would allow for a quantified determination of what CEQA constitutes a *substantial temporary or permanent increase in ambient noise levels*. Therefore, a numerical construction threshold based on Federal Transit Administration (FTA) *Transit Noise and Vibration Impact Assessment Manual* is used for analysis of daytime construction impacts. The FTA considers a daytime exterior construction noise level of 80 dBA L_{eq} as a reasonable threshold for noise sensitive land uses and 85 dBA L_{eq} for non-noise sensitive commercial land uses. (17)

3.5 VIBRATION STANDARDS

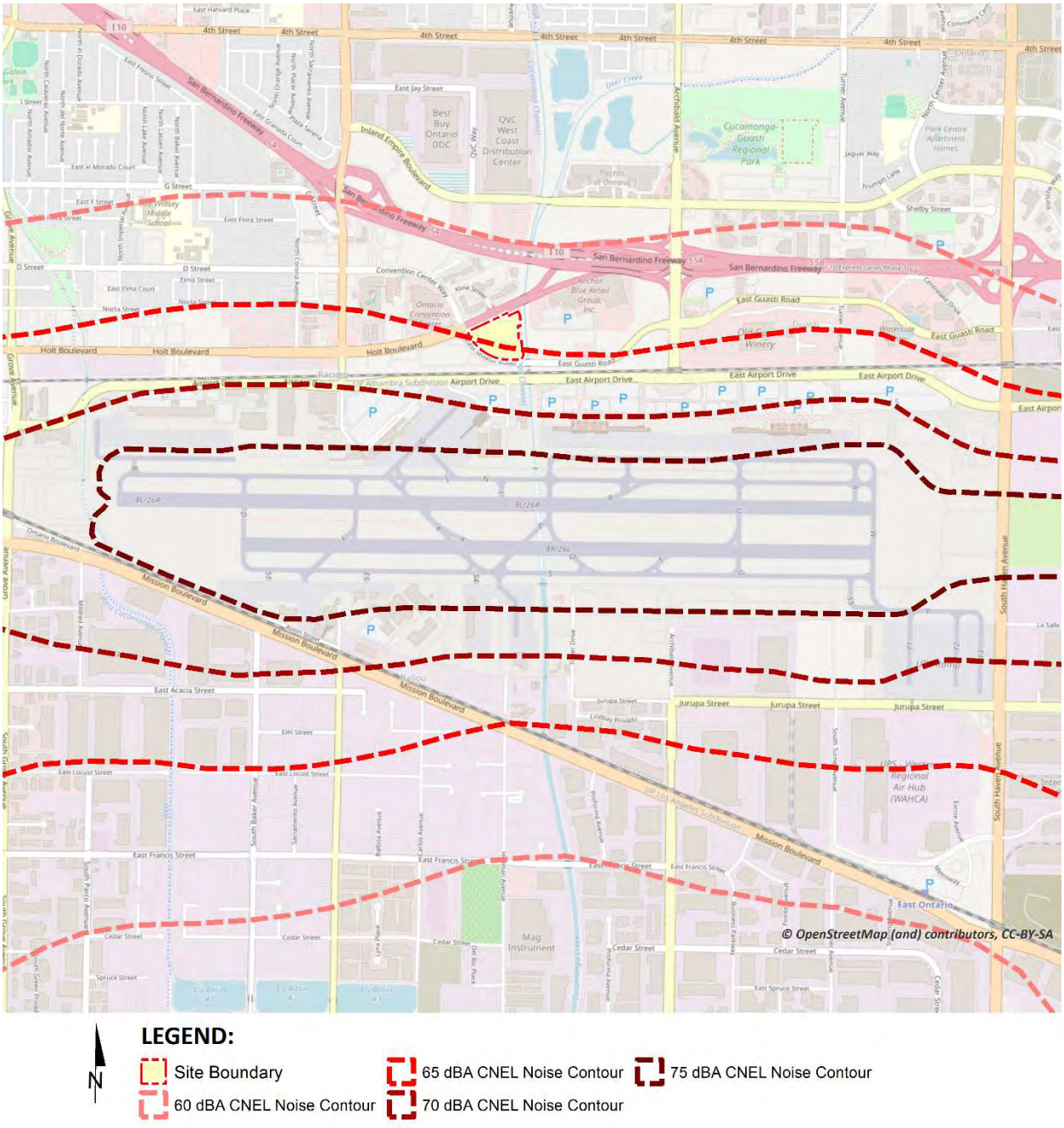
To analyze vibration impacts originating from the operation and construction of Empire Groves Hotel, vibration-generating activities are appropriately evaluated against standards established under a City's Municipal Code, if such standards exist. However, the City of Ontario does not identify specific vibration level limits. Therefore, for analysis purposes, the Caltrans *Transportation and Construction Vibration Guidance Manual* (8), vibration damage criteria are used in this noise study to assess potential vibration-related impacts at adjacent building locations. The nearest buildings adjacent to the Project site can best be described as "modern industrial/commercial buildings" with a maximum acceptable continuous vibration threshold of 0.5 PPV (in/sec).

3.6 AIRPORT LAND USE COMPATIBILITY

The Project site is located approximately 350 feet north of the Ontario International Airport (ONT). This places the Project site within the ONT Airport Influence Area according to Policy Map 2-1 of the *Ontario International Airport Land Use Compatibility Plan (ONT ALUCP).* The ONT ALUCP was amended July 2018 to promote compatibility between airport and the land uses that surround it (18). Since the Project site is located within the ONT Airport Influence Area, the Project is subject to the Noise Criteria established on Table 2-3 in the ONT ALUCP (Appendix 3.2). As shown on Exhibit 3-B, the Project site is located within the 60 to 70 dBA CNEL airport noise level contours. According to Table 2-3 of the ONT ALUCP, the short-term lodging land uses located within the 60 to 70 dBA CNEL, are considered a conditionally compatible land use which must demonstrate compliance with the interior noise standards of 45 CNEL for residential and 50 CNEL for . For "*conditional"* land use*,* the *building structure must be capable of attenuating*

exterior noise from all noise sources to the indoor CNEL indicated by the number in the cell (either 45 or 50), and *caution should be exercised with regard to noise-sensitive outdoor uses; these uses are likely to be disrupted by aircraft noise events; acceptability is dependent upon characteristics of the specific use*. The ONT ALUCP identifies the noise-sensitive uses as *residential, hospitals, nursing facilities, intermediate care facilities, educational facilities, libraries, museums, places of worship, child-care facilities, and certain types of passive recreational parks and open space*.

EXHIBIT 3-B: ONTARIO INTERNATIONAL AIRPORT NOISE LEVEL CONTOURS AND THE PROJECT SITE



4 SIGNIFICANCE CRITERIA

The following significance criteria are based on currently adopted guidance provided by Appendix G of the California Environmental Quality Act (CEQA) Guidelines. (19) For the purposes of this report, impacts would be potentially significant if the Project results in or causes:

A. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

B. Generation of excessive ground-borne vibration or ground-borne noise levels?

C. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

4.1 NOISE LEVEL INCREASES (THRESHOLD A)

Noise level increases resulting from the Project are evaluated based on the Appendix G CEQA Guidelines described above at the closest sensitive receiver locations. Under CEQA, consideration must be given to the magnitude of the increase, the existing baseline ambient noise levels, and the location of noise-sensitive receivers to determine if a noise increase represents a significant adverse environmental impact. This approach recognizes *that there is no single noise increase that renders the noise impact significant.* (20) This is primarily because of the wide variation in individual thresholds of annoyance and differing individual experiences with noise. Thus, an important way of determining a person's subjective reaction to a new noise is the comparison of it to the existing environment to which one has adapted—the so-called *ambient* environment. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will typically be judged.

4.1.1 NOISE-SENSITIVE RECEIVERS

The Federal Interagency Committee on Noise (FICON) (21) developed guidance to be used for the assessment of project-generated increases in noise levels that consider the ambient noise level. The FICON recommendations are based on studies that relate aircraft noise levels to the percentage of persons highly annoyed by aircraft noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, these recommendations are often used in environmental noise impact assessments involving the use of cumulative noise exposure metrics, such as the average-daily noise level (CNEL) and equivalent continuous noise level (L_{eq}).

As previously stated, the approach used in this noise study recognizes *that there is no single noise increase that renders the noise impact significant*, based on a 2008 California Court of Appeal ruling on Gray v. County of Madera. (20) For example, if the ambient noise environment is quiet (<60 dBA) and the new noise source greatly increases the noise levels, an impact may occur if the noise criteria may be exceeded. Therefore, for this analysis, a *readily perceptible* 5 dBA or greater project-related noise level increase is considered a significant impact when the without project noise levels are below 60 dBA. Per the FICON, in areas where the without project noise levels

range from 60 to 65 dBA, a 3 dBA *barely perceptible* noise level increase appears to be appropriate for most people. When the without project noise levels already exceed 65 dBA, any increase in community noise louder than 1.5 dBA or greater is considered a significant impact if the noise criteria for a given land use is exceeded, since it likely contributes to an existing noise exposure exceedance. The FICON guidance provides an established source of criteria to assess the impacts of substantial temporary or permanent increase in baseline ambient noise levels. Based on the FICON criteria, the amount to which a given noise level increase is considered acceptable is reduced when the without Project (baseline) noise levels are already shown to exceed certain land-use specific exterior noise level criteria. The specific levels are based on typical responses to noise level increases of 5 dBA or *readily perceptible*, 3 dBA or *barely perceptible*, and 1.5 dBA depending on the underlying without Project noise levels for noise-sensitive uses. These levels of increases and their perceived acceptance are consistent with guidance provided by both the Federal Highway Administration (22 p. 9) and Caltrans (23 p. 2_48).

4.1.2 NON-NOISE-SENSITIVE RECEIVERS

The *Ontario Noise Level Exposure and Land Use Compatibility Guidelines* were used to establish the satisfactory noise levels of significance for the non-noise-sensitive land uses in the Project study area. As previously shown on Exhibit 3-A, the *normally acceptable* exterior noise level for non-noise-sensitive general industrial land uses is 75 dBA CNEL. Noise levels greater than 75 dBA CNEL are considered *normally unacceptable.* (14)

To determine if Project-related traffic noise level increases are significant at off-site non-noise-sensitive general industrial land uses, a *barely perceptible* 3 dBA criteria is used. When the without Project noise levels are greater than the *normally acceptable* 75 dBA CNEL land use compatibility criteria, a *barely perceptible* 3 dBA or greater noise level increase is considered a significant impact since the noise level criteria is already exceeded. The noise level increases used to determine significant impacts for non-noise-sensitive land uses is generally consistent with the FICON noise level increase thresholds for noise-sensitive land uses but instead rely on *Ontario Noise Level Exposure and Land Use Compatibility Guidelines normally acceptable* 75 dBA CNEL exterior noise level criteria for non-noise sensitive general industrial land uses.

4.2 VIBRATION (THRESHOLD B)

As described in Section 3.5, the vibration impacts originating from the construction of the Empire Groves Hotel, vibration-generating activities are appropriately evaluated using the Caltrans vibration damage thresholds to assess potential temporary construction-related impacts at adjacent building locations. The nearest noise sensitive buildings adjacent to the Project site can best be described as “modern industrial/commercial buildings” with a maximum acceptable continuous vibration threshold of 0.5 PPV (in/sec).

4.3 CEQA GUIDELINES NOT FURTHER ANALYZED (THRESHOLD C)

CEQA Noise Threshold C applies when there are nearby public and private airports and/or air strips and focuses on land use compatibility of the Project to nearby airports and airstrips. The

closest airport which would require additional noise analysis under CEQA guideline C is the Ontario International Airport. As previously indicated in Section 3.6, the Project site is located within the ONT Airport Influence Area and between the 60 and 70 dBA CNEL airport noise impact zones.

4.4 SIGNIFICANCE CRITERIA SUMMARY

Noise impacts shall be considered significant if any of the following occur as a direct result of the proposed development. Table 4-1 shows the significance criteria summary matrix that includes the allowable criteria used to identify potentially significant incremental noise level increases.

TABLE 4-1: SIGNIFICANCE CRITERIA SUMMARY

Analysis	Land Use	Condition(s)	Significance Criteria	
			Daytime	Nighttime
On-Site Traffic Noise	All	Exterior Noise Level Criteria	See Exhibit 3-A	
	Residential	Interior Noise Level Standard	45 dBA CNEL[1]	
	Non-Residential	Interior Noise Level Standard	50 dBA CNEL[2]	
Off-Site	Noise-Sensitive	if ambient is < 60 dBA CNEL	≥ 5 dBA CNEL Project increase[3]	
		if ambient is 60 - 65 dBA CNEL	≥ 3 dBA CNEL Project increase[3]	
		if ambient is > 65 dBA CNEL	≥ 1.5 dBA CNEL Project increase[3]	
	Non-Noise Sensitive	if ambient is > 75 dBA CNEL	≥ 3 dBA CNEL Project increase	
Operational	Residential	Exterior Noise Level Limit[4]	55 dBA L_{eq}	45 dBA L_{eq}
	Commercial		65 dBA L_{eq}	60 dBA L_{eq}
	Noise-Sensitive	if ambient is < 60 dBA L_{eq}	≥ 5 dBA L_{eq} Project increase[3]	
		if ambient is 60 - 65 dBA L_{eq}	≥ 3 dBA L_{eq} Project increase[3]	
		if ambient is > 65 dBA L_{eq}	≥ 1.5 dBA L_{eq} Project increase[3]	
Construction	Residential	Noise Level Threshold[5]	80 dBA L_{eq}	70 dBA L_{eq}
	Commercial		85 dBA L_{eq}	80 dBA L_{eq}
	Commercial	Vibration Level Threshold[6]	0.5 PPV (in/sec)	n/a
Airport Noise	Long- and Short-Term Lodging	Exterior Noise Level Criteria	70 dBA CNEL[7]	
		Interior Noise Level Standard	45 dBA CNEL[7]	

[1] CCR, Title 24, Part 2, Volume 1, Chapter 12, Section 1206.4
[2] CALGreen Code, Section 5.507.
[3] FICON, 1992.
[4] City of Ontario Municipal Code Section 5-29.09(a)(Appendix 3.2)
[5] Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual.
[6] Caltrans Transportation and Construction Vibration Manual.
[7] The Ontario Plan 2050, LU-07 Noise Level Exposure and Land Use Compatibility Guidelines.
"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m. "n/a" = construction activities are not planned during the nighttime hours; "PPV" = peak particle velocity.

5 EXISTING NOISE LEVEL MEASUREMENTS

To assess the existing noise level environment, 24-hour noise level measurements were taken at five locations in the Project study area. The receiver locations were selected to describe and document the existing noise environment within the Project study area. Exhibit 5-A provides the boundaries of the Project study area and the noise level measurement locations. To fully describe the existing noise conditions, noise level measurements were collected by Urban Crossroads, Inc. on Wednesday, April 24, 2024. Appendix 5.1 includes study area photos.

5.1 MEASUREMENT PROCEDURE AND CRITERIA

To describe the existing noise environment, the hourly noise levels were measured during typical weekday conditions over a 24-hour period. By collecting individual hourly noise level measurements, it is possible to describe the daytime and nighttime hourly noise levels and calculate the 24-hour CNEL. The long-term noise readings were recorded using Piccolo Type 2 integrating sound level meter and dataloggers. The Piccolo sound level meters were calibrated using a Larson-Davis calibrator, Model CAL 150. All noise meters were programmed in "slow" mode to record noise levels in "A" weighted form. The sound level meters and microphones were equipped with a windscreen during all measurements. All noise level measurement equipment satisfies the American National Standards Institute (ANSI) standard specifications for sound level meters ANSI S1.4-2014/IEC 61672-1:2013. (24)

5.2 NOISE MEASUREMENT LOCATIONS

The long-term noise level measurements were positioned as close to the nearest sensitive receiver locations as possible to assess the existing ambient hourly noise levels surrounding the Project site. Both Caltrans and the FTA recognize that it is not reasonable to collect noise level measurements that can fully represent every part of a private yard, patio, deck, or balcony normally used for human activity when estimating impacts for new development projects. This is demonstrated in the Caltrans general site location guidelines which indicate that, *sites must be free of noise contamination by sources other than sources of interest. Avoid sites located near sources such as barking dogs, lawnmowers, pool pumps, and air conditioners unless it is the express intent of the analyst to measure these sources*. (2) Further, FTA guidance states, t*hat it is not necessary nor recommended that existing noise exposure be determined by measuring at every noise-sensitive location in the project area. Rather, the recommended approach is to characterize the noise environment for clusters of sites based on measurements or estimates at representative locations in the community*. (17)

EXHIBIT 5-A: NOISE MEASUREMENT LOCATIONS



Based on recommendations of Caltrans and the FTA, it is not necessary to collect measurements at each individual building or residence, because each receiver measurement represents a group of buildings that share acoustical equivalence. (17) In other words, the area represented by the receiver shares similar shielding, terrain, and geometric relationship to the reference noise source. Receivers represent a location of noise sensitive areas and are used to estimate the future noise level impacts. Collecting reference ambient noise level measurements at the nearby sensitive receiver locations allows for a comparison of the before and after Project noise levels and is necessary to assess potential noise impacts due to the Project's contribution to the ambient noise levels.

5.3 NOISE MEASUREMENT RESULTS

The noise measurements presented below focus on the average or equivalent sound levels (L_{eq}). The equivalent sound level (L_{eq}) represents a steady state sound level containing the same total energy as a time varying signal over a given sample period. Table 5-1 identifies the hourly daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) noise levels at each noise level measurement location.

TABLE 5-1: 24-HOUR AMBIENT NOISE LEVEL MEASUREMENTS

Location[1]	Description	Energy Average Noise Level (dBA L_{eq})[2]	
		Daytime	Nighttime
L1	Located west of the site near the hotel at 2200 Holt Blvd.	64.2	61.2
L2	Located west of the site near the residence at 304 N Placer Privado	59.1	58.3
L3	Located north of the site near the residence at 2155 Convention Center Way	62.0	58.3
L4	Located northeast of the site near the residence at 2505 Date Palm Paseo	71.7	67.7
L5	Located northeast of the site near the residence at 3045 Inland Empire Blvd	66.5	61.7

[1] See Exhibit 5-A for the noise level measurement locations.
[2] Energy (logarithmic) average levels. The long-term 24-hour measurement worksheets are included in Appendix 5.2.
"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

Table 5-1 provides the (energy average) noise levels used to describe the daytime and nighttime ambient conditions. These daytime and nighttime energy average noise levels represent the average of all hourly noise levels observed during these time periods expressed as a single number. Appendix 5.2 provides summary worksheets of the noise levels for each hour as well as the minimum, maximum, L_1, L_2, L_5, L_8, L_{25}, L_{50}, L_{90}, L_{95}, and L_{99} percentile noise levels observed during the daytime and nighttime periods.

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6 TRAFFIC NOISE METHODS AND PROCEDURES

The following section outlines the methods and procedures used to estimate and analyze the future traffic noise environment. Consistent with City of Ontario *Noise Level Exposure and Land Use Compatibility Guidelines* (see Exhibit 3-A), all transportation related noise levels are presented in terms of the 24-hour CNEL's.

6.1 FHWA TRAFFIC NOISE PREDICTION MODEL

The estimated roadway noise impacts from vehicular traffic were calculated using a computer program that replicates the Federal Highway Administration (FHWA) Traffic Noise Prediction Model- FHWA-RD-77-108. (25) The FHWA Model arrives at a predicted noise level through a series of adjustments to the Reference Energy Mean Emission Level (REMEL). In California the national REMELs are substituted with the California Vehicle Noise (Calveno) Emission Levels. (26) Adjustments are then made to the REMEL to account for: the roadway classification (e.g., collector, secondary, major or arterial), the roadway active width (i.e., the distance between the center of the outermost travel lanes on each side of the roadway), the total average daily traffic (ADT), the travel speed, the percentages of automobiles, medium trucks, and heavy trucks in the traffic volume, the roadway grade, the angle of view (e.g., whether the roadway view is blocked), the site conditions ("hard" or "soft" relates to the absorption of the ground, pavement, or landscaping), and the percentage of total ADT which flows each hour throughout a 24-hour period.

6.1.1 OFF-SITE TRAFFIC NOISE PREDICTION MODEL INPUTS

Table 6-1 presents the roadway parameters used to assess the Project's off-site transportation noise impacts for Existing, Opening Year (2025), and General Plan Buildout (2045) Conditions, with and without Project Conditions. Table 6-1 identifies the twenty-one (21) study area roadway segments, the distance from the centerline to adjacent land use based on the functional roadway classifications per the City of Ontario General Plan and the posted vehicle speeds.

The average daily traffic volumes used for this study are presented on Table 6-2 and are based on *Empire Groves Hotel Traffic Impact Analysis* prepared by Translations, Inc. (27)

TABLE 6-1: OFF-SITE ROADWAY PARAMETERS

ID	Roadway	Segment	Classification	Distance from Centerline to Nearest Adjacent Land Use (Feet)[2]	Vehicle Speed (mph)[3]
1	Vineyard Ave.	Inland Empire Blvd.	Principal Arterial	76'	45
2	Vineyard Ave.	Inland Empire Blvd.	Principal Arterial	76'	45
3	Vineyard Ave.	I-10 WB Ramp	Principal Arterial	76'	45
4	Vineyard Ave.	I-10 EB Ramp	Principal Arterial	76'	45
5	Vineyard Ave.	G St.	Principal Arterial	76'	45
6	Vineyard Ave.	D St.	Principal Arterial	76'	45
7	Vineyard Ave.	Holt Blvd.	Principal Arterial	76'	45
8	Archibold Ave.	I-10 Ramps	Principal Arterial	76'	50
9	Archibold Ave.	I-10 Ramps	Principal Arterial	76'	50
10	Archibold Ave.	Guasti Rd.	Principal Arterial	76'	50
11	Inland Empire Blvd.	Vineyard Ave.	Minor Arterial	50'	45
12	G St.	Vineyard Ave.	Local Roadway	30'	40
13	D St.	Vineyard Ave.	Local Roadway	30'	40
14	Convention Center Way	Vineyard Ave.	Collector	50'	40
15	Convention Center Way	Kline St.	Collector	50'	40
16	Guasti Rd.	Holt Blvd.	Minor Arterial	50'	40
17	Guasti Rd.	Cardena's Dwy.	Minor Arterial	50'	40
18	Guasti Rd.	Archibold Ave.	Minor Arterial	50'	40
19	Holt Blvd.	Vineyard Ave.	Principal Arterial	60'	45
20	Holt Blvd.	Vineyard Ave.	Principal Arterial	60'	45
21	Holt Blvd.	Convention Center Way	Principal Arterial	60'	45

[1] Source: City of Ontario Land Use Element.
[2] Distance to adjacent land use is based upon the right-of-way distances for each functional roadway classification.
[3] Posted speed limits in the Project study area.

TABLE 6-2: AVERAGE DAILY TRAFFIC VOLUMES

ID	Roadway	Segment	Existing		OY 2026		Cumulative 2050	
			Without Project	With Project	Without Project	With Project	Without Project	With Project
1	Vineyard Ave.	Inland Empire Blvd.	7,630	7,740	9,490	9,600	11,540	11,650
2	Vineyard Ave.	Inland Empire Blvd.	16,530	16,630	19,230	19,330	23,190	23,290
3	Vineyard Ave.	I-10 WB Ramp	13,580	13,980	16,220	16,620	19,380	19,780
4	Vineyard Ave.	I-10 EB Ramp	10,050	10,450	12,380	12,780	18,590	18,990
5	Vineyard Ave.	G St.	8,540	8,960	10,290	10,710	18,300	18,720
6	Vineyard Ave.	D St.	5,750	5,800	6,720	6,770	12,380	12,430
7	Vineyard Ave.	Holt Blvd.	5,400	5,710	5,820	6,130	6,920	7,230
8	Archibold Ave.	I-10 Ramps	15,020	15,230	20,360	20,570	23,770	23,980
9	Archibold Ave.	I-10 Ramps	14,350	14,550	18,920	19,120	23,350	23,550
10	Archibold Ave.	Guasti Rd.	11,510	11,690	12,090	12,270	18,410	18,590
11	Inland Empire Blvd.	Vineyard Ave.	2,250	2,250	4,890	4,890	5,140	5,140
12	G St.	Vineyard Ave.	2,860	2,880	3,690	3,710	3,870	3,890
13	D St.	Vineyard Ave.	2,490	2,560	3,140	3,210	3,300	3,370
14	Convention Center Way	Vineyard Ave.	2,910	3,350	3,650	4,090	7,150	7,590
15	Convention Center Way	Kline St.	2,670	3,130	3,400	3,860	7,580	8,040
16	Guasti Rd.	Holt Blvd.	1,590	2,840	2,890	4,140	10,710	11,960
17	Guasti Rd.	Cardena's Dwy.	1,340	1,800	2,600	3,060	10,490	10,950
18	Guasti Rd.	Archibold Ave.	3,090	3,160	7,550	7,620	10,130	10,200
19	Holt Blvd.	Vineyard Ave.	9,400	9,650	12,070	12,320	18,040	18,290
20	Holt Blvd.	Vineyard Ave.	10,300	10,890	10,600	11,190	14,990	15,580
21	Holt Blvd.	Convention Center Way	10,090	10,300	10,710	10,920	13,130	13,340

[1] Empire Gove Hotel Traffic Impact Analysis, Translutions, Inc.

Table 6-3 presents the time-of-day vehicle splits by vehicle type, and Table 6-4 presents the total traffic flow distributions (vehicle mixes) used for this analysis. The vehicle mix provides the hourly distribution percentages of automobile, medium trucks, and heavy trucks for input into the FHWA Model based on roadway types. To predict the future noise environment at each building within the Project site, coordinate information was collected to identify the noise transmission path between the noise source and receiver. The coordinate information is based on the Project site plan showing the plotting of each Project building in relationship to surrounding roadways, as shown in Exhibit 1-B and in Appendix 6.1.

TABLE 6-3: TIME OF DAY VEHICLE SPLITS

Time Period	Vehicle Type		
	Autos	Medium Trucks	Heavy Trucks
Daytime (7:00 a.m. - 7:00 p.m.)	77.5%	84.8%	86.5%
Evening (7:00 p.m. - 10:00 p.m.)	12.9%	4.9%	2.7%
Nighttime (10:00 p.m. - 7:00 a.m.)	9.6%	10.3%	10.8%
Total:	100.0%	100.0%	100.0%

Source: Typical Southern California vehicle mix.

TABLE 6-4: DISTRIBUTION OF FLOW BY VEHICLE TYPE (VEHICLE MIX)

Roadway	Total % Traffic Flow			Total
	Autos	Medium Trucks	Heavy Trucks	
All Roadways	97.42%	1.84%	0.74%	100.00%

Source: Typical Southern California vehicle mix.

6.1.2 ON-SITE TRAFFIC NOISE PREDICTION MODEL INPUTS

The on-site roadway parameters including the average daily traffic (ADT) volumes used for this study are presented on Table 6-5. Future average daily traffic volumes needed to assess the future on-site traffic noise environment and to identify the appropriate noise abatement measures that address the worst-case future noise conditions, shown on Table 6-5, were obtained from the *Empire Groves Hotel Traffic Impact Analysis*. (28) The vehicle speed is based on the posted speed limit for Lampson Avenue. Soft site conditions were used to analyze the traffic noise impacts within the Project study area which account for the sound propagation loss over natural surfaces such as normal earth and ground vegetation. Research conducted by Caltrans has shown that due to the mix of ground types in actual situations, the hard site condition over predicted traffic noise levels and the use of soft site conditions is more appropriate for the application of the FHWA traffic noise prediction model. (29)

TABLE 6-5: ON SITE ROADWAY PARAMATERS

Location	Classification[1]	Lanes	Average Daily Traffic Volume[2]	Speed Limit (mph)[3]	Site Conditions
Holt Boulevard	Principal Arterial	4	13,340	50	Soft
Guasti Road	Minor Arterial	2	11,960	45	Soft

[1] Road classifications based upon the City of Ontario General Plan Mobility Element.
[2] Empire Groves Hotel Traffic Impact Analysis. Translutions, Inc.
[3] Posted Speed Limit

6.2 ON-SITE RAIL NOISE PREDICTION MODEL

The estimated railroad noise impacts from the railroad lines south of the Project site are calculated using the Federal Transit Administration (FTA) General Transit Noise Assessment

Model. The FTA Model calculates the predicted noise level based on the type of train, distance to receiver, number of trains per hour, speed, number of cars per train, and type of railroad tracks. The planned future train volumes and speeds are shown on Table 6-5 and were obtained from the *Ontario Gateway Specific Plan Environmental Impact Report* (EIR) prepared by the City of Ontario. (30) According to the EIR noise section, by future Year 2030 conditions, the UPRR railroad is expected to support a combination of approximately 46 Metrolink trains and 65 Freight trains daily. The EIR did not have a projection for Amtrack train activity, however, based on the Amtrack schedules, Amtrack operates the Sunset Limited and Texas Eagle trains, which would equate to approximately 5 train pass-byes per day on average.

TABLE 6-6: ON-SITE RAILROAD PARAMETERS

Rail Activity1	Speed (mph)	Future Trains Per Day			
		Daytime (7am-7pm)	Evening (7pm-10pm)	Nighttime (10pm-7am)	Total (24 Hours)
Amtrak	50	5	0	0	5
Metrolink	50	27	8	12	46
Freight	50	25	3	36	65
Totals:		57	11	48	116

[1] Source: Gateway Specific Plan Environmental Impact Report.

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7 OFF-SITE TRANSPORTATION NOISE IMPACTS

To assess the off-site traffic CNEL noise level impacts associated with development of the proposed Project, noise level contours were developed based on *Empire Groves Hotel Traffic Impact Analysis.* (28) Noise level contour boundaries represent the equal levels of noise exposure and are measured in CNEL from the center of the roadway. Noise level contours were developed for the following traffic scenarios:

- Existing Conditions: This scenario refers to existing traffic conditions.
- Existing Plus Project Conditions (E+P): This scenario refers to existing traffic conditions plus project traffic increases.
- Opening Year (2025) Conditions (OY 2025): This scenario includes Existing traffic volumes plus an ambient growth factor of 8.24% plus traffic from pending and approved but not yet constructed known development projects in the area.
- Opening Year (2025) Plus Project Conditions (OY 2025+P): This scenario includes Opening Year Cumulative (2025) Without Project volumes plus Project traffic increases.
- General Plan Buildout (2045) Without Project Conditions (GBPO): This scenario includes Existing traffic volumes plus an ambient growth factor of 14% plus traffic from pending and approved but not yet constructed known development projects in the area.
- General Plan Buildout (2045) With Project Conditions (GBPO+P): This scenario includes General Plan Buildout Without Project volumes plus Project traffic increases.

7.1 TRAFFIC NOISE LEVEL CONTOURS

Noise contours were used to assess the Project's incremental 24-hour dBA CNEL traffic-related noise impacts at land uses adjacent to roadways conveying Project traffic. The noise contours represent the distance to noise levels of a constant value and are measured from the center of the roadway for the 70, 65, and 60 dBA CNEL noise levels. The noise contours do not consider the effect of any existing noise barriers or topography that may attenuate ambient noise levels. In addition, because the noise contours reflect modeling of vehicular noise on area roadways, they appropriately do not reflect noise contributions from the surrounding stationary noise sources within the Project study area.

Tables 7-1 through 7-6 present a summary of the exterior dBA CNEL traffic noise levels. Roadway segments are analyzed in each of the following timeframes: Existing, Opening Year 2022 with and without Project Buildout, General Plan Buildout (2045) with and without Project conditions. Appendix 7.1 includes a summary of the dBA CNEL traffic noise level contours for each of the traffic scenarios.

TABLE 7-1: EXISTING WITHOUT PROJECT CONDITIONS NOISE LEVEL CONTOURS

ID	Road	Segment	Receiving Land Use[1]	CNEL at Nearest Receiving Land Use (dBA)[2]	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Vineyard Ave.	Inland Empire Blvd.	Residential	63.6	RW	RW	131
2	Vineyard Ave.	Inland Empire Blvd.	Residential	66.9	RW	102	220
3	Vineyard Ave.	I-10 WB Ramp	Residential	66.1	RW	89	193
4	Vineyard Ave.	I-10 EB Ramp	Commercial	64.8	RW	RW	158
5	Vineyard Ave.	G St.	Commercial	64.0	RW	RW	141
6	Vineyard Ave.	D St.	Commercial	62.3	RW	RW	109
7	Vineyard Ave.	Holt Blvd.	Commercial	62.1	RW	RW	104
8	Archibold Ave.	I-10 Ramps	Residential	67.6	RW	114	246
9	Archibold Ave.	I-10 Ramps	Commercial	67.5	RW	111	239
10	Archibold Ave.	Guasti Rd.	Institutional	66.5	RW	96	206
11	Inland Empire Blvd.	Vineyard Ave.	Residential	61.0	RW	RW	58
12	G St.	Vineyard Ave.	Residential	63.2	RW	RW	49
13	D St.	Vineyard Ave.	Residential	62.6		RW	44
14	Convention Center Wy	Vineyard Ave.	Commercial	60.3	RW	RW	52
15	Convention Center Wy	Kline St.	Commercial	59.9	RW	RW	50
16	Guasti Rd.	Holt Blvd.	Commercial	58.2	RW	RW	RW
17	Guasti Rd.	Cardena's Dwy.	Commercial	57.5	RW	RW	RW
18	Guasti Rd.	Archibold Ave.	Commercial	61.1	RW	RW	59
19	Holt Blvd.	Vineyard Ave.	Commercial	65.4	RW	64	138
20	Holt Blvd.	Vineyard Ave.	Commercial	65.8	RW	68	147
21	Holt Blvd.	Convention Center Wy	Commercial	65.7	RW	67	145

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest receiving land use.
"RW" = Location of the respective noise contour falls within the right-of-way of the road.

TABLE 7-2: EXISTING WITH PROJECT CONDITIONS NOISE LEVEL CONTOURS

ID	Road	Segment	Receiving Land Use[1]	CNEL at Nearest Receiving Land Use (dBA)[2]	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Vineyard Ave.	Inland Empire Blvd.	Residential	63.6	RW	RW	132
2	Vineyard Ave.	Inland Empire Blvd.	Residential	66.9	RW	102	221
3	Vineyard Ave.	I-10 WB Ramp	Residential	66.2	RW	91	196
4	Vineyard Ave.	I-10 EB Ramp	Commercial	64.9	RW	RW	162
5	Vineyard Ave.	G St.	Commercial	64.3	RW	RW	146
6	Vineyard Ave.	D St.	Commercial	62.4	RW	RW	109
7	Vineyard Ave.	Holt Blvd.	Commercial	62.3	RW	RW	108
8	Archibold Ave.	I-10 Ramps	Residential	67.7	RW	115	248
9	Archibold Ave.	I-10 Ramps	Commercial	67.5	RW	112	241
10	Archibold Ave.	Guasti Rd.	Institutional	66.6	RW	97	208
11	Inland Empire Blvd.	Vineyard Ave.	Residential	61.0	RW	RW	58
12	G St.	Vineyard Ave.	Residential	63.2	RW	RW	49
13	D St.	Vineyard Ave.	Residential	62.7		RW	45
14	Convention Center Wy	Vineyard Ave.	Commercial	60.9	RW	RW	58
15	Convention Center Wy	Kline St.	Commercial	60.6	RW	RW	55
16	Guasti Rd.	Holt Blvd.	Commercial	60.7	RW	RW	56
17	Guasti Rd.	Cardena's Dwy.	Commercial	58.7	RW	RW	RW
18	Guasti Rd.	Archibold Ave.	Commercial	61.2	RW	RW	60
19	Holt Blvd.	Vineyard Ave.	Commercial	65.5	RW	65	140
20	Holt Blvd.	Vineyard Ave.	Commercial	66.1	RW	71	152
21	Holt Blvd.	Convention Center Wy	Commercial	65.8	RW	68	147

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest receiving land use.
"RW" = Location of the respective noise contour falls within the right-of-way of the road.

TABLE 7-3: OY 2026 WITHOUT PROJECT CONDITIONS NOISE LEVEL CONTOURS

ID	Road	Segment	Receiving Land Use[1]	CNEL at Nearest Receiving Land Use (dBA)[2]	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Vineyard Ave.	Inland Empire Blvd.	Residential	64.5	RW	RW	152
2	Vineyard Ave.	Inland Empire Blvd.	Residential	67.6	RW	113	243
3	Vineyard Ave.	I-10 WB Ramp	Residential	66.8	RW	101	217
4	Vineyard Ave.	I-10 EB Ramp	Commercial	65.7	RW	84	181
5	Vineyard Ave.	G St.	Commercial	64.9	RW	RW	160
6	Vineyard Ave.	D St.	Commercial	63.0	RW	RW	121
7	Vineyard Ave.	Holt Blvd.	Commercial	62.4	RW	RW	110
8	Archibold Ave.	I-10 Ramps	Residential	69.0	RW	140	301
9	Archibold Ave.	I-10 Ramps	Commercial	68.7	RW	133	287
10	Archibold Ave.	Guasti Rd.	Institutional	66.7	RW	99	213
11	Inland Empire Blvd.	Vineyard Ave.	Residential	64.4	RW	RW	98
12	G St.	Vineyard Ave.	Residential	64.3	RW	RW	58
13	D St.	Vineyard Ave.	Residential	63.6		RW	52
14	Convention Center Wy	Vineyard Ave.	Commercial	61.3	RW	RW	61
15	Convention Center Wy	Kline St.	Commercial	61.0	RW	RW	58
16	Guasti Rd.	Holt Blvd.	Commercial	60.8	RW	RW	57
17	Guasti Rd.	Cardena's Dwy.	Commercial	60.3	RW	RW	53
18	Guasti Rd.	Archibold Ave.	Commercial	65.0	RW	50	107
19	Holt Blvd.	Vineyard Ave.	Commercial	66.5	RW	76	163
20	Holt Blvd.	Vineyard Ave.	Commercial	65.9	RW	69	149
21	Holt Blvd.	Convention Center Wy	Commercial	66.0	RW	70	150

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest receiving land use.
"RW" = Location of the respective noise contour falls within the right-of-way of the road.

TABLE 7-4: OY 2026 WITH PROJECT CONDITIONS NOISE LEVEL CONTOURS

ID	Road	Segment	Receiving Land Use[1]	CNEL at Nearest Receiving Land Use (dBA)[2]	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Vineyard Ave.	Inland Empire Blvd.	Residential	64.6	RW	RW	153
2	Vineyard Ave.	Inland Empire Blvd.	Residential	67.6	RW	113	244
3	Vineyard Ave.	I-10 WB Ramp	Residential	66.9	RW	102	220
4	Vineyard Ave.	I-10 EB Ramp	Commercial	65.8	RW	86	185
5	Vineyard Ave.	G St.	Commercial	65.0	RW	76	164
6	Vineyard Ave.	D St.	Commercial	63.0	RW	RW	121
7	Vineyard Ave.	Holt Blvd.	Commercial	62.6	RW	RW	113
8	Archibold Ave.	I-10 Ramps	Residential	69.0	RW	141	303
9	Archibold Ave.	I-10 Ramps	Commercial	68.7	RW	134	289
10	Archibold Ave.	Guasti Rd.	Institutional	66.8	RW	100	215
11	Inland Empire Blvd.	Vineyard Ave.	Residential	64.4	RW	RW	98
12	G St.	Vineyard Ave.	Residential	64.3	RW	RW	58
13	D St.	Vineyard Ave.	Residential	63.7		RW	53
14	Convention Center Wy	Vineyard Ave.	Commercial	61.8	RW	RW	66
15	Convention Center Wy	Kline St.	Commercial	61.5	RW	RW	63
16	Guasti Rd.	Holt Blvd.	Commercial	62.4	RW	RW	72
17	Guasti Rd.	Cardena's Dwy.	Commercial	61.0	RW	RW	59
18	Guasti Rd.	Archibold Ave.	Commercial	65.0	RW	50	108
19	Holt Blvd.	Vineyard Ave.	Commercial	66.6	RW	77	165
20	Holt Blvd.	Vineyard Ave.	Commercial	66.2	RW	72	155
21	Holt Blvd.	Convention Center Wy	Commercial	66.1	RW	71	152

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest receiving land use.
"RW" = Location of the respective noise contour falls within the right-of-way of the road.

TABLE 7-5: CUMULATIVE 2050 WITHOUT PROJECT CONDITIONS NOISE LEVEL CONTOURS

ID	Road	Segment	Receiving Land Use[1]	CNEL at Nearest Receiving Land Use (dBA)[2]	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Vineyard Ave.	Inland Empire Blvd.	Residential	65.4	RW	80	173
2	Vineyard Ave.	Inland Empire Blvd.	Residential	68.4	RW	128	275
3	Vineyard Ave.	I-10 WB Ramp	Residential	67.6	RW	113	244
4	Vineyard Ave.	I-10 EB Ramp	Commercial	67.4	RW	110	238
5	Vineyard Ave.	G St.	Commercial	67.4	RW	109	235
6	Vineyard Ave.	D St.	Commercial	65.7	RW	84	181
7	Vineyard Ave.	Holt Blvd.	Commercial	63.1	RW	RW	123
8	Archibold Ave.	I-10 Ramps	Residential	69.6	RW	155	334
9	Archibold Ave.	I-10 Ramps	Commercial	69.6	RW	153	330
10	Archibold Ave.	Guasti Rd.	Institutional	68.5	RW	131	282
11	Inland Empire Blvd.	Vineyard Ave.	Residential	64.6	RW	RW	101
12	G St.	Vineyard Ave.	Residential	64.5	RW	RW	60
13	D St.	Vineyard Ave.	Residential	63.8		RW	54
14	Convention Center Wy	Vineyard Ave.	Commercial	64.2	RW	RW	96
15	Convention Center Wy	Kline St.	Commercial	64.5	RW	RW	99
16	Guasti Rd.	Holt Blvd.	Commercial	66.5	RW	63	135
17	Guasti Rd.	Cardena's Dwy.	Commercial	66.4	RW	62	134
18	Guasti Rd.	Archibold Ave.	Commercial	66.2	RW	61	130
19	Holt Blvd.	Vineyard Ave.	Commercial	68.2	RW	99	213
20	Holt Blvd.	Vineyard Ave.	Commercial	67.4	RW	87	188
21	Holt Blvd.	Convention Center Wy	Commercial	66.9	RW	80	172

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest receiving land use.
"RW" = Location of the respective noise contour falls within the right-of-way of the road.

TABLE 7-6: CUMULATIVE 2050 WITH PROJECT CONDITIONS NOISE LEVEL CONTOURS

ID	Road	Segment	Receiving Land Use[1]	CNEL at Nearest Receiving Land Use (dBA)[2]	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Vineyard Ave.	Inland Empire Blvd.	Residential	65.4	RW	81	174
2	Vineyard Ave.	Inland Empire Blvd.	Residential	68.4	RW	128	276
3	Vineyard Ave.	I-10 WB Ramp	Residential	67.7	RW	115	248
4	Vineyard Ave.	I-10 EB Ramp	Commercial	67.5	RW	112	241
5	Vineyard Ave.	G St.	Commercial	67.5	RW	111	239
6	Vineyard Ave.	D St.	Commercial	65.7	RW	84	182
7	Vineyard Ave.	Holt Blvd.	Commercial	63.3	RW	RW	127
8	Archibold Ave.	I-10 Ramps	Residential	69.7	RW	156	336
9	Archibold Ave.	I-10 Ramps	Commercial	69.6	RW	154	332
10	Archibold Ave.	Guasti Rd.	Institutional	68.6	RW	132	283
11	Inland Empire Blvd.	Vineyard Ave.	Residential	64.6	RW	RW	101
12	G St.	Vineyard Ave.	Residential	64.5	RW	RW	60
13	D St.	Vineyard Ave.	Residential	63.9		RW	54
14	Convention Center Wy	Vineyard Ave.	Commercial	64.5	RW	RW	99
15	Convention Center Wy	Kline St.	Commercial	64.7	RW	RW	103
16	Guasti Rd.	Holt Blvd.	Commercial	67.0	RW	68	146
17	Guasti Rd.	Cardena's Dwy.	Commercial	66.6	RW	64	137
18	Guasti Rd.	Archibold Ave.	Commercial	66.3	RW	61	131
19	Holt Blvd.	Vineyard Ave.	Commercial	68.3	RW	100	215
20	Holt Blvd.	Vineyard Ave.	Commercial	67.6	RW	90	193
21	Holt Blvd.	Convention Center Wy	Commercial	66.9	RW	81	174

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest receiving land use.
"RW" = Location of the respective noise contour falls within the right-of-way of the road.

7.2 EXISTING CONDITION PROJECT TRAFFIC NOISE LEVELS

Table 7-1 presents the Existing without Project conditions CNEL noise levels, which are expected to range from 57.5 to 67.6 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 7-2 shows the Existing with Project conditions will range from 58.7 to 67.7 dBA CNEL. As shown on Table 7-7 the Existing with Project will generate a noise level increase of up to 2.5 dBA CNEL on the study area roadway segments. Based on the significance criteria in Section 4.2 for off-site traffic noise impacts, the Project-related noise level increases are considered less than significant under Existing conditions at the land uses adjacent to roadways conveying Project traffic.

7.3 OY 2026 TRAFFIC NOISE LEVEL INCREASES

Table 7-3 presents the OY 2026 without Project conditions CNEL noise levels, which are expected to range from 60.3 to 69.0 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 7-4 shows the OY 2026 with Project conditions will range from 61.0 to 69.0 dBA CNEL. Table 7-8 shows that the OY 2026 Project off-site traffic noise level increases of up to 1.6 dBA CNEL. Based on the significance criteria for off-site traffic noise presented in Section 4.2 for off-site traffic noise impacts, land uses adjacent to the study area roadway segments would experience *less than significant* noise level increases due to unmitigated OY 2026 Project-related traffic noise levels.

7.4 CUMULATIVE 2050 TRAFFIC NOISE LEVEL INCREASES

Table 7-5 presents the Cumulative 2050 without Project conditions CNEL noise levels, which are expected to range from 63.1 to 69.6 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 7-6 shows the Cumulative 2050 with Project conditions will range from 66.3 to 69.7 CNEL. Table 7-9 shows that the Project off-site contribution to cumulative traffic noise level increases up to 0.5 dBA CNEL. Based on the significance criteria for off-site traffic noise presented in Section 4.2 for off-site traffic noise impacts, land uses adjacent to the study area roadway segments would not experience substantial noise level increases due to Project-related traffic noise level increases and would be considered a *less than significant impact*.

TABLE 7-7: EXISTING OFF-SITE PROJECT-RELATED TRAFFIC NOISE IMPACTS

ID	Road	Segment	Receiving Land Use[1]	CNEL at Receiving Land Use (dBA)[2]			Noise-Sensitive Land Use?	Incremental Noise Level Increase Threshold[3]	
				No Project	With Project	Project Addition		Limit	Exceeded?
1	Vineyard Ave.	Inland Empire Blvd.	Residential	63.6	63.6	0.1	Yes	3.0	No
2	Vineyard Ave.	Inland Empire Blvd.	Residential	66.9	66.9	0.0	Yes	1.5	No
3	Vineyard Ave.	I-10 WB Ramp	Residential	66.1	66.2	0.1	Yes	1.5	No
4	Vineyard Ave.	I-10 EB Ramp	Commercial	64.8	64.9	0.2	No	n/a	No
5	Vineyard Ave.	G St.	Commercial	64.0	64.3	0.2	No	n/a	No
6	Vineyard Ave.	D St.	Commercial	62.3	62.4	0.0	No	n/a	No
7	Vineyard Ave.	Holt Blvd.	Commercial	62.1	62.3	0.2	No	n/a	No
8	Archibold Ave.	I-10 Ramps	Residential	67.6	67.7	0.1	Yes	1.5	No
9	Archibold Ave.	I-10 Ramps	Commercial	67.5	67.5	0.1	No	n/a	No
10	Archibold Ave.	Guasti Rd.	Institutional	66.5	66.6	0.1	No	n/a	No
11	Inland Empire Blvd.	Vineyard Ave.	Residential	61.0	61.0	0.0	Yes	3.0	No
12	G St.	Vineyard Ave.	Residential	63.2	63.2	0.0	Yes	3.0	No
13	D St.	Vineyard Ave.	Residential	62.6	62.7	0.1	Yes	3.0	No
14	Convention Center Wy	Vineyard Ave.	Commercial	60.3	60.9	0.6	No	n/a	No
15	Convention Center Wy	Kline St.	Commercial	59.9	60.6	0.7	No	n/a	No
16	Guasti Rd.	Holt Blvd.	Commercial	58.2	60.7	2.5	No	n/a	No
17	Guasti Rd.	Cardena's Dwy.	Commercial	57.5	58.7	1.3	No	n/a	No
18	Guasti Rd.	Archibold Ave.	Commercial	61.1	61.2	0.1	No	n/a	No
19	Holt Blvd.	Vineyard Ave.	Commercial	65.4	65.5	0.1	No	n/a	No
20	Holt Blvd.	Vineyard Ave.	Commercial	65.8	66.1	0.2	No	n/a	No
21	Holt Blvd.	Convention Center Wy	Commercial	65.7	65.8	0.1	No	n/a	No

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.
[3] Does the Project create an incremental noise level increase exceeding the significance criteria (Table 4-1)?

TABLE 7-8: OY 2026 OFF-SITE PROJECT-RELATED TRAFFIC NOISE IMPACTS

ID	Road	Segment	Receiving Land Use[1]	CNEL at Receiving Land Use (dBA)[2]			Noise-Sensitive Land Use?	Incremental Noise Level Increase Threshold[3]	
				No Project	With Project	Project Addition		Limit	Exceeded?
1	Vineyard Ave.	Inland Empire Blvd.	Residential	64.5	64.6	0.1	Yes	3.0	No
2	Vineyard Ave.	Inland Empire Blvd.	Residential	67.6	67.6	0.0	Yes	1.5	No
3	Vineyard Ave.	I-10 WB Ramp	Residential	66.8	66.9	0.1	Yes	1.5	No
4	Vineyard Ave.	I-10 EB Ramp	Commercial	65.7	65.8	0.1	No	n/a	No
5	Vineyard Ave.	G St.	Commercial	64.9	65.0	0.2	No	n/a	No
6	Vineyard Ave.	D St.	Commercial	63.0	63.0	0.0	No	n/a	No
7	Vineyard Ave.	Holt Blvd.	Commercial	62.4	62.6	0.2	No	n/a	No
8	Archibold Ave.	I-10 Ramps	Residential	69.0	69.0	0.0	Yes	1.5	No
9	Archibold Ave.	I-10 Ramps	Commercial	68.7	68.7	0.0	No	n/a	No
10	Archibold Ave.	Guasti Rd.	Institutional	66.7	66.8	0.1	No	n/a	No
11	Inland Empire Blvd.	Vineyard Ave.	Residential	64.4	64.4	0.0	Yes	3.0	No
12	G St.	Vineyard Ave.	Residential	64.3	64.3	0.0	Yes	3.0	No
13	D St.	Vineyard Ave.	Residential	63.6	63.7	0.1	Yes	3.0	No
14	Convention Center Wy	Vineyard Ave.	Commercial	61.3	61.8	0.5	No	n/a	No
15	Convention Center Wy	Kline St.	Commercial	61.0	61.5	0.6	No	n/a	No
16	Guasti Rd.	Holt Blvd.	Commercial	60.8	62.4	1.6	No	n/a	No
17	Guasti Rd.	Cardena's Dwy.	Commercial	60.3	61.0	0.7	No	n/a	No
18	Guasti Rd.	Archibold Ave.	Commercial	65.0	65.0	0.0	No	n/a	No
19	Holt Blvd.	Vineyard Ave.	Commercial	66.5	66.6	0.1	No	n/a	No
20	Holt Blvd.	Vineyard Ave.	Commercial	65.9	66.2	0.2	No	n/a	No
21	Holt Blvd.	Convention Center Wy	Commercial	66.0	66.1	0.1	No	n/a	No

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.
[3] Does the Project create an incremental noise level increase exceeding the significance criteria (Table 4-1)?

TABLE 7-9: CUMUALTIVE 2050 OFF-SITE PROJECT-RELATED TRAFFIC NOISE IMPACTS

ID	Road	Segment	Receiving Land Use[1]	CNEL at Receiving Land Use (dBA)[2]			Noise-Sensitive Land Use?	Incremental Noise Level Increase Threshold[3]	
				No Project	With Project	Project Addition		Limit	Exceeded?
1	Vineyard Ave.	Inland Empire Blvd.	Residential	65.4	65.4	0.0	Yes	1.5	No
2	Vineyard Ave.	Inland Empire Blvd.	Residential	68.4	68.4	0.0	Yes	1.5	No
3	Vineyard Ave.	I-10 WB Ramp	Residential	67.6	67.7	0.1	Yes	1.5	No
4	Vineyard Ave.	I-10 EB Ramp	Commercial	67.4	67.5	0.1	No	n/a	No
5	Vineyard Ave.	G St.	Commercial	67.4	67.5	0.1	No	n/a	No
6	Vineyard Ave.	D St.	Commercial	65.7	65.7	0.0	No	n/a	No
7	Vineyard Ave.	Holt Blvd.	Commercial	63.1	63.3	0.2	No	n/a	No
8	Archibold Ave.	I-10 Ramps	Residential	69.6	69.7	0.0	Yes	1.5	No
9	Archibold Ave.	I-10 Ramps	Commercial	69.6	69.6	0.0	No	n/a	No
10	Archibold Ave.	Guasti Rd.	Institutional	68.5	68.6	0.0	No	n/a	No
11	Inland Empire Blvd.	Vineyard Ave.	Residential	64.6	64.6	0.0	Yes	3.0	No
12	G St.	Vineyard Ave.	Residential	64.5	64.5	0.0	Yes	3.0	No
13	D St.	Vineyard Ave.	Residential	63.8	63.9	0.1	Yes	3.0	No
14	Convention Center Wy	Vineyard Ave.	Commercial	64.2	64.5	0.3	No	n/a	No
15	Convention Center Wy	Kline St.	Commercial	64.5	64.7	0.3	No	n/a	No
16	Guasti Rd.	Holt Blvd.	Commercial	66.5	67.0	0.5	No	n/a	No
17	Guasti Rd.	Cardena's Dwy.	Commercial	66.4	66.6	0.2	No	n/a	No
18	Guasti Rd.	Archibold Ave.	Commercial	66.2	66.3	0.0	No	n/a	No
19	Holt Blvd.	Vineyard Ave.	Commercial	68.2	68.3	0.1	No	n/a	No
20	Holt Blvd.	Vineyard Ave.	Commercial	67.4	67.6	0.2	No	n/a	No
21	Holt Blvd.	Convention Center Wy	Commercial	66.9	66.9	0.1	No	n/a	No

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.
[3] Does the Project create an incremental noise level increase exceeding the significance criteria (Table 4-1)?

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8 ON-SITE NOISE ANALYSIS

An on-site exterior noise impact analysis has been completed to determine the noise exposure levels that would result from adjacent transportation noise sources in the Project study area, and to identify potential noise attenuation measures that would achieve acceptable Project exterior and interior noise levels. The primary source of transportation noise affecting the Project site is anticipated to be from Holt Avenue and Guasti Road.

8.1 ON-SITE TRAFFIC NOISE ANALYSIS

Using the FHWA traffic noise prediction model and the parameters outlined in Tables 6-1 to 6-4, the expected future exterior noise levels for the on-site Project land uses were estimated. Table 8-1 presents a summary of future on-site exterior traffic noise levels at future building facades. The on-site traffic noise analysis calculations are provided in Appendix 8.1.

TABLE 8-1: EXTERIOR TRAFFIC NOISE LEVELS

Location[1]	Roadway	Unmitigated Exterior Noise Level (dBA CNEL)	Land Use Compatibility[2]
R1	Holt Boulevard	65.2	*Normally Unacceptable*
R2	Holt Boulevard	58.9	*Clearly Acceptable*
R3	Guasti Road	61.3	*Clearly Acceptable*
R4	Guasti Road	61.1	*Clearly Acceptable*
R5	Guasti Road	59.5	*Clearly Acceptable*
R6	Guasti Road	58.2	*Clearly Acceptable*
R7	Holt Boulevard	58.4	*Clearly Acceptable*
R8	Holt Boulevard	62.5	*Clearly Acceptable*
R9	Guasti Road	60.5	*Clearly Acceptable*
R10	Holt Boulevard	62.0	*Clearly Acceptable*

[1] Locations are shown in Exhibit 8-A.
[2] Based on Exhibit 3-A.

8.2 ON-SITE TRAIN NOISE ANALYSIS

The Union Pacific Railroad (UPRR) is located approximately 350 feet south of the Project site. Using the train parameters outlined in Table 6-5, the expected future exterior noise levels for the on-site Project land uses were estimated. Table 8-2 presents a summary of future on-site exterior train noise levels at future building facades. The on-site train noise analysis calculations are provided in Appendix 8.2.

TABLE 8-2: EXTERIOR TRAIN NOISE LEVELS

Location[1]	Distance (feet)	Noise Level dBA CNEL
O3	552'	66.4
O4	468'	67.1
O5	347'	68.4
O6	370'	68.1
O9	613'	65.9

Source: Federal Transit Administration

8.3 ON-SITE AIRCRAFT NOISE ANALYSIS

The ONT is located approximately 350 feet south of the Project site. Exhibit 3-B shows the Project site in relation to the airport's projected noise level contour boundaries (31). As shown on Exhibit 8-A, the 65 dBA CNEL noise level contours cross the southern portion of the Project site, while the remainder of Project site would be located between the 60 and 65 CNEL noise level contours of Ontario Airport.

8.4 ON-SITE NOISE ANALYSIS

The on-site exterior traffic noise analysis indicates that on-site locations will experience exterior noise levels ranging from 65.9 to 69.8 CNEL from all transportation sources.

TABLE 8-4: TOTAL TRANSPORTATION NOISE LEVELS

Location[1]	Traffic Noise Level (dBA CNEL)	Aircraft Noise Level (dBA CNEL)	Train Noise Level (dBA CNEL)	Total Noise Level (dBA CNEL)
O1	65.2	65.0	0.0	68.1
O2	58.9	65.0	0.0	66.0
O3	61.3	65.0	65.4	69.0
O4	61.1	65.0	66.1	69.3
O5	59.5	65.0	67.4	69.8
O6	58.2	65.0	67.1	69.5
O7	58.4	65.0	0.0	65.9
O8	62.5	65.0	0.0	66.9
O9	60.5	65.0	64.9	68.7
O10	62.0	65.0	0.0	66.8

8.5 EXTERIOR NOISE LEVEL COMPATIBILITY

Based on City of Ontario *Land Use Compatibility for Community Noise Exposure* shown on Exhibit 3-A, the commercial and lodging land uses are considered as *clearly acceptable to normally acceptable* with unmitigated exterior noise levels of less than 70 dBA CNEL. This noise analysis shows that the Project will satisfy the City of Ontario 70 dBA CNEL exterior noise level standards for lodging land uses without additional noise abatement measures.

8.6 INTERIOR NOISE ANALYSIS

To ensure that the interior noise levels comply with the interior noise level standards, future exterior noise levels were calculated at the estimated at the first through ninth floor building façade locations. On-site receiver locations are shown in Exhibit 8-A.

8.6.1 NOISE REDUCTION METHODOLOGY

The interior noise level is the difference between the predicted exterior noise level at the building facade and the noise reduction of the structure. Typical building construction will provide a Noise Reduction (NR) of approximately 12 dBA with "windows open" and a minimum 25 dBA noise reduction with "windows closed." (22) (32) However, sound leaks, cracks and openings within the window assembly can greatly diminish its effectiveness in reducing noise. Several methods are used to improve interior noise reduction, including: [1] weather-stripped solid core exterior doors; [2] upgraded dual glazed windows; [3] mechanical ventilation/air conditioning; and [4] exterior wall/roof assembles free of cut outs or openings.

8.6.2 INTERIOR NOISE LEVEL ASSESSMENT

To provide the necessary interior noise level reduction, Tables 8-4 through 8-12 indicate that Project land uses adjacent to Holt Avenue and Guasti Road will require a windows-closed condition and a means of mechanical ventilation (e.g. air conditioning). Tables 8-4 through 8-12 show that the future unmitigated interior traffic noise levels at the first through ninth floor are expected to range from 40.9 to 44.8 dBA CNEL. The interior noise assessment shows that the City of Ontario interior noise level standard can be satisfied using standard construction techniques.

8.6.3 INTERIOR TRAFFIC NOISE LEVEL COMPLIANCE

Tables 8-4 through 8-12 shows that on-site interior traffic noise levels will not exceed the 45 dBA CNEL interior noise level standard for lodging rooms or the 50 CNEL standard for non-residential areas and additional noise abatement measures are not needed.

EXHIBIT 8-A: ON-SITE RECEIVER LOCATIONS



TABLE 8-4: FIRST FLOOR INTERIOR NOISE LEVELS (CNEL)

Location[1]	Roadway	Noise Level at Façade[2]	Required Interior Noise Reduction[3]	Estimated Interior Noise Reduction[4]	Upgraded Windows[5]	Interior Noise Level[6]	Threshold[7]	Threshold Exceeded?
O1	Holt Boulevard	68.1	18.1	25.0	No	43.1	50	No
O2	Holt Boulevard	66.0	16.0	25.0	No	41.0	50	No
O3	Guasti Road	69.0	19.0	25.0	No	44.0	50	No
O4	Guasti Road	69.3	19.3	25.0	No	44.3	50	No
O5	Guasti Road	69.8	19.8	25.0	No	44.8	50	No
O6	Guasti Road	69.5	19.5	25.0	No	44.5	50	No
O7	Holt Boulevard	65.9	15.9	25.0	No	40.9	50	No
O8	Holt Boulevard	66.9	16.9	25.0	No	41.9	50	No
O9	Guasti Road	68.7	18.7	25.0	No	43.7	50	No
O10	Holt Boulevard	66.8	16.8	25.0	No	41.8	50	No

[1] Locations shown on Exhibit 10-A.
[2] Exterior noise level at the facade with a windows closed condition requiring a means of mechanical ventilation (e.g. air conditioning). See Appendix 8.1.
[3] Noise reduction to satisfy the interior noise level threshold.
[4] A minimum of 30 dBA noise reduction is assumed with standard building construction.
[5] Does the required interior noise reduction trigger upgraded windows?
[6] Estimated interior noise level with minimum STC rating for all windows.
[7] Interior noise level threshold: 50 dBA CNEL for non-residential use (CALGreen Code)

TABLE 8-5: SECOND FLOOR INTERIOR NOISE LEVELS (CNEL)

Location[1]	Roadway	Noise Level at Façade[2]	Required Interior Noise Reduction[3]	Estimated Interior Noise Reduction[4]	Upgraded Windows[5]	Interior Noise Level[6]	Threshold[7]	Threshold Exceeded?
O5	Guasti Road	69.8	24.8	25.0	No	44.8	45	No
O6	Guasti Road	69.5	24.5	25.0	No	44.5	45	No
O7	Holt Boulevard	65.9	20.9	25.0	No	40.9	45	No
O8	Holt Boulevard	66.8	21.8	25.0	No	41.8	45	No
O9	Guasti Road	68.7	23.7	25.0	No	43.7	45	No
O10	Holt Boulevard	66.7	20.7	25.0	No	41.7	46	No

[1] Locations shown on Exhibit 10-A.
[2] Exterior noise level at the facade with a windows closed condition requiring a means of mechanical ventilation (e.g. air conditioning). See Appendix 8.1.
[3] Noise reduction to satisfy the interior noise level threshold.
[4] A minimum of 25 dBA noise reduction is assumed with standard building construction and approximately 2 dBA less than the STC rating for upgraded windows.
[5] Does the required interior noise reduction trigger upgraded windows?
[6] Estimated interior noise level with minimum STC rating for all windows.
[7] Interior noise level threshold: 45 dBA CNEL for residential use (California Code of Regulations, Title 24, Building Standards Administrative Code)

TABLE 8-6: THIRD FLOOR INTERIOR NOISE LEVELS (CNEL)

Location[1]	Roadway	Noise Level at Façade[2]	Required Interior Noise Reduction[3]	Estimated Interior Noise Reduction[4]	Upgraded Windows[5]	Interior Noise Level[6]	Threshold[7]	Threshold Exceeded?
O5	Guasti Road	69.8	24.8	25.0	No	44.8	45	No
O6	Guasti Road	69.5	24.5	25.0	No	44.5	45	No
O7	Holt Boulevard	65.9	20.9	25.0	No	40.9	45	No
O8	Holt Boulevard	66.8	21.8	25.0	No	41.8	45	No
O9	Guasti Road	68.7	23.7	25.0	No	43.7	45	No
O10	Holt Boulevard	66.7	20.7	25.0	No	41.7	46	No

[1] Locations shown on Exhibit 10-A.
[2] Exterior noise level at the facade with a windows closed condition requiring a means of mechanical ventilation (e.g. air conditioning). See Appendix 8.1.
[3] Noise reduction to satisfy the interior noise level threshold.
[4] A minimum of 25 dBA noise reduction is assumed with standard building construction and approximately 2 dBA less than the STC rating for upgraded windows.
[5] Does the required interior noise reduction trigger upgraded windows?
[6] Estimated interior noise level with minimum STC rating for all windows.
[7] Interior noise level threshold: 45 dBA CNEL for residential use (California Code of Regulations, Title 24, Building Standards Administrative Code)

TABLE 8-7: FOURTH FLOOR INTERIOR NOISE LEVELS (CNEL)

Location[1]	Roadway	Noise Level at Façade[2]	Required Interior Noise Reduction[3]	Estimated Interior Noise Reduction[4]	Upgraded Windows[5]	Interior Noise Level[6]	Threshold[7]	Threshold Exceeded?
O5	Guasti Road	69.8	24.8	25.0	No	44.8	45	No
O6	Guasti Road	69.5	24.5	25.0	No	44.5	45	No
O7	Holt Boulevard	65.9	20.9	25.0	No	40.9	45	No
O8	Holt Boulevard	66.8	21.8	25.0	No	41.8	45	No
O9	Guasti Road	68.7	23.7	25.0	No	43.7	45	No
O10	Holt Boulevard	66.7	20.7	25.0	No	41.7	46	No

[1] Locations shown on Exhibit 10-A.
[2] Exterior noise level at the facade with a windows closed condition requiring a means of mechanical ventilation (e.g. air conditioning). See Appendix 8.1.
[3] Noise reduction to satisfy the interior noise level threshold.
[4] A minimum of 25 dBA noise reduction is assumed with standard building construction and approximately 2 dBA less than the STC rating for upgraded windows.
[5] Does the required interior noise reduction trigger upgraded windows?
[6] Estimated interior noise level with minimum STC rating for all windows.
[7] Interior noise level threshold: 45 dBA CNEL for residential use (California Code of Regulations, Title 24, Building Standards Administrative Code)

TABLE 8-8: FIFTH FLOOR INTERIOR NOISE LEVELS (CNEL)

Location[1]	Roadway	Noise Level at Façade[2]	Required Interior Noise Reduction[3]	Estimated Interior Noise Reduction[4]	Upgraded Windows[5]	Interior Noise Level[6]	Threshold[7]	Threshold Exceeded?
O5	Guasti Road	69.8	24.8	25.0	No	44.8	45	No
O6	Guasti Road	69.5	24.5	25.0	No	44.5	45	No
O7	Holt Boulevard	65.9	20.9	25.0	No	40.9	45	No
O8	Holt Boulevard	66.8	21.8	25.0	No	41.8	45	No
O9	Guasti Road	68.7	23.7	25.0	No	43.7	45	No
O10	Holt Boulevard	66.7	20.7	25.0	No	41.7	46	No

[1] Locations shown on Exhibit 10-A.
[2] Exterior noise level at the facade with a windows closed condition requiring a means of mechanical ventilation (e.g. air conditioning). See Appendix 8.1.
[3] Noise reduction to satisfy the interior noise level threshold.
[4] A minimum of 25 dBA noise reduction is assumed with standard building construction and approximately 2 dBA less than the STC rating for upgraded windows.
[5] Does the required interior noise reduction trigger upgraded windows?
[6] Estimated interior noise level with minimum STC rating for all windows.
[7] Interior noise level threshold: 45 dBA CNEL for residential use (California Code of Regulations, Title 24, Building Standards Administrative Code)

TABLE 8-9: SIXTH FLOOR INTERIOR NOISE LEVELS (CNEL)

Location[1]	Roadway	Noise Level at Façade[2]	Required Interior Noise Reduction[3]	Estimated Interior Noise Reduction[4]	Upgraded Windows[5]	Interior Noise Level[6]	Threshold[7]	Threshold Exceeded?
O5	Guasti Road	69.8	24.8	25.0	No	44.8	45	No
O6	Guasti Road	69.5	24.5	25.0	No	44.5	45	No
O7	Holt Boulevard	65.9	20.9	25.0	No	40.9	45	No
O8	Holt Boulevard	66.8	21.8	25.0	No	41.8	45	No
O9	Guasti Road	68.7	23.7	25.0	No	43.7	45	No
O10	Holt Boulevard	66.7	20.7	25.0	No	41.7	46	No

[1] Locations shown on Exhibit 10-A.
[2] Exterior noise level at the facade with a windows closed condition requiring a means of mechanical ventilation (e.g. air conditioning). See Appendix 8.1.
[3] Noise reduction to satisfy the interior noise level threshold.
[4] A minimum of 25 dBA noise reduction is assumed with standard building construction and approximately 2 dBA less than the STC rating for upgraded windows.
[5] Does the required interior noise reduction trigger upgraded windows?
[6] Estimated interior noise level with minimum STC rating for all windows.
[7] Interior noise level threshold: 45 dBA CNEL for residential use (California Code of Regulations, Title 24, Building Standards Administrative Code)

TABLE 8-10: SEVENTH FLOOR INTERIOR NOISE LEVELS (CNEL)

Location[1]	Roadway	Noise Level at Façade[2]	Required Interior Noise Reduction[3]	Estimated Interior Noise Reduction[4]	Upgraded Windows[5]	Interior Noise Level[6]	Threshold[7]	Threshold Exceeded?
O5	Guasti Road	69.8	24.8	25.0	No	44.8	45	No
O6	Guasti Road	69.5	24.5	25.0	No	44.5	45	No
O7	Holt Boulevard	65.9	20.9	25.0	No	40.9	45	No
O8	Holt Boulevard	66.8	21.8	25.0	No	41.8	45	No
O9	Guasti Road	68.7	23.7	25.0	No	43.7	45	No
O10	Holt Boulevard	66.7	20.7	25.0	No	41.7	46	No

[1] Locations shown on Exhibit 10-A.
[2] Exterior noise level at the facade with a windows closed condition requiring a means of mechanical ventilation (e.g. air conditioning). See Appendix 8.1.
[3] Noise reduction to satisfy the interior noise level threshold.
[4] A minimum of 25 dBA noise reduction is assumed with standard building construction and approximately 2 dBA less than the STC rating for upgraded windows.
[5] Does the required interior noise reduction trigger upgraded windows?
[6] Estimated interior noise level with minimum STC rating for all windows.
[7] Interior noise level threshold: 45 dBA CNEL for residential use (California Code of Regulations, Title 24, Building Standards Administrative Code)

TABLE 8-11: EIGTH FLOOR INTERIOR NOISE LEVELS (CNEL)

Location[1]	Roadway	Noise Level at Façade[2]	Required Interior Noise Reduction[3]	Estimated Interior Noise Reduction[4]	Upgraded Windows[5]	Interior Noise Level[6]	Threshold[7]	Threshold Exceeded?
O5	Guasti Road	69.8	24.8	25.0	No	44.8	45	No
O6	Guasti Road	69.5	24.5	25.0	No	44.5	45	No
O7	Holt Boulevard	65.9	20.9	25.0	No	40.9	45	No
O8	Holt Boulevard	66.8	21.8	25.0	No	41.8	45	No
O9	Guasti Road	68.7	23.7	25.0	No	43.7	45	No
O10	Holt Boulevard	66.7	20.7	25.0	No	41.7	46	No

[1] Locations shown on Exhibit 10-A.
[2] Exterior noise level at the facade with a windows closed condition requiring a means of mechanical ventilation (e.g. air conditioning). See Appendix 8.1.
[3] Noise reduction to satisfy the interior noise level threshold.
[4] A minimum of 25 dBA noise reduction is assumed with standard building construction and approximately 2 dBA less than the STC rating for upgraded windows.
[5] Does the required interior noise reduction trigger upgraded windows?
[6] Estimated interior noise level with minimum STC rating for all windows.
[7] Interior noise level threshold: 45 dBA CNEL for residential use (California Code of Regulations, Title 24, Building Standards Administrative Code)

TABLE 8-12: NINTH FLOOR INTERIOR NOISE LEVELS (CNEL)

Location[1]	Roadway	Noise Level at Façade[2]	Required Interior Noise Reduction[3]	Estimated Interior Noise Reduction[4]	Upgraded Windows[5]	Interior Noise Level[6]	Threshold[7]	Threshold Exceeded?
O5	Guasti Road	69.8	24.8	25.0	No	44.8	45	No
O6	Guasti Road	69.5	24.5	25.0	No	44.5	45	No
O7	Holt Boulevard	65.9	20.9	25.0	No	40.9	45	No
O8	Holt Boulevard	66.8	21.8	25.0	No	41.8	45	No
O9	Guasti Road	68.7	23.7	25.0	No	43.7	45	No
O10	Holt Boulevard	66.7	20.7	25.0	No	41.7	46	No

[1] Locations shown on Exhibit 10-A.
[2] Exterior noise level at the facade with a windows closed condition requiring a means of mechanical ventilation (e.g. air conditioning). See Appendix 8.1.
[3] Noise reduction to satisfy the interior noise level threshold.
[4] A minimum of 25 dBA noise reduction is assumed with standard building construction and approximately 2 dBA less than the STC rating for upgraded windows.
[5] Does the required interior noise reduction trigger upgraded windows?
[6] Estimated interior noise level with minimum STC rating for all windows.
[7] Interior noise level threshold: 45 dBA CNEL for residential use (California Code of Regulations, Title 24, Building Standards Administrative Code)

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9 SENSITIVE RECEIVER LOCATIONS

To assess the potential for off-site operational and short-term construction noise impacts, the following receiver locations, as shown on Exhibit 9-A, were identified as representative locations for analysis. Sensitive receiver locations are generally defined as "[a]n area where noise interferes with normal activities associated with its use. Normally, noise sensitive areas include residential, educational, health, and religious structures and sites, and parks, recreational areas, areas with wilderness characteristics, wildlife refuges, and cultural and historical sites (33)." Moderately noise-sensitive land uses typically include multi-family dwellings, hotels, motels, dormitories, out-patient clinics, cemeteries, golf courses, country clubs, athletic/tennis clubs, and equestrian clubs. Land uses that are considered relatively insensitive to noise include business, commercial, and professional developments. Land uses that are typically not affected by noise include: industrial, manufacturing, utilities, agriculture, undeveloped land, parking lots, warehousing, liquid and solid waste facilities, salvage yards, and transit terminals.

To describe the potential off-site Project noise levels, five receiver locations in the vicinity of the Project site were identified. All distances are measured from the Project site boundary to the outdoor living areas (e.g., private backyards) or at the building façade, whichever is closer to the Project site. Other sensitive land uses in the Project study area that are located at greater distances than those identified in this noise study will experience lower noise levels than those presented in this report due to the additional attenuation from distance and the shielding of intervening structures. Distance is measured in a straight line from the project boundary to each receiver location.

R1: Location R1 represents an existing hotel Ontario Gateway Hotel located at 2200 E Holt Boulevard, approximately 176 feet south of the Project site. A 24-hour noise measurement was taken near this location, L1, to describe the existing ambient noise environment.

R2: Location R2 represents an existing residence at located 1795 E D St, approximately 2,802 feet west of the Project site. The 24-hour noise measurement L2 is representative the existing ambient noise environment.

R3: Location R3 represents the Frontier Center located at 2151 E Convention Center Way, approximately 237 feet northwest of the Project site. A 24-hour noise measurement was taken near this location, L4, to describe the existing ambient noise environment.

R4: Location R4 represents the Paseos Apartment located at 2505 E Date Palm Paseo, approximately 1,968 feet north of the Project site. A 24-hour noise measurement was taken near this location, L4, to describe the existing ambient noise environment.

R5: Location R5 represents an existing residence located at 705 Via Dolcetto, approximately 3,593 feet northeast of the Project site. A 24-hour noise measurement was taken near this location, L5, to describe the existing ambient noise environment.

EXHIBIT 9-A: RECEIVER LOCATIONS



10 OPERATIONAL NOISE IMPACTS

This section analyzes the potential operational noise impacts resulting from the operation of events with amplified sound, outdoor activities, swimming pool/spa activities, roof-mounted air conditioning units, loading dock activities, and parking lot vehicle movement

10.1 OPERATIONAL NOISE SOURCES

This operational noise analysis is intended to describe noise level impacts associated with the expected typical of daytime and nighttime activities at the Project site. To analyze noise impacts originating from the Project, the operational noise levels are evaluated against standards established in the City of Ontario Municipal Code, 5-29.04(a). Section 5-29.04(a) of the City of Ontario Municipal Code (included in Appendix 3.1) sets a stationary-source average L_{eq} exterior noise limit for not to be exceeded 65 dBA L_{eq} during daytime hours and 45 dBA L_{eq} during nighttime hours at residential properties and 65 dBA L_{eq} during daytime hours and 60 dBA L_{eq} during nighttime hours at commercial properties, such as those nearest the Project site.

10.2 REFERENCE NOISE LEVELS

To estimate the Project operational noise impacts, reference noise levels were collected from sample manufacturers specifications for similar equipment, published research, and/or measurements of similar activities that represent the noise levels expected with the development of the Project. This section provides a detailed description of the reference noise level shown on Table 11-1, which are used to estimate the Project operational noise impacts. It is important to note that the following predicted noise levels assume the worst-case noise environment with the events with amplified sound, outdoor activities, swimming pool/spa activities, roof-mounted air conditioning units, loading dock activities, and parking lot vehicle movement all operating continuously. These sources of noise activity will likely vary throughout the day.

EXHIBIT 10-A: OPERATIONAL NOISE SOURCE LOCATIONS

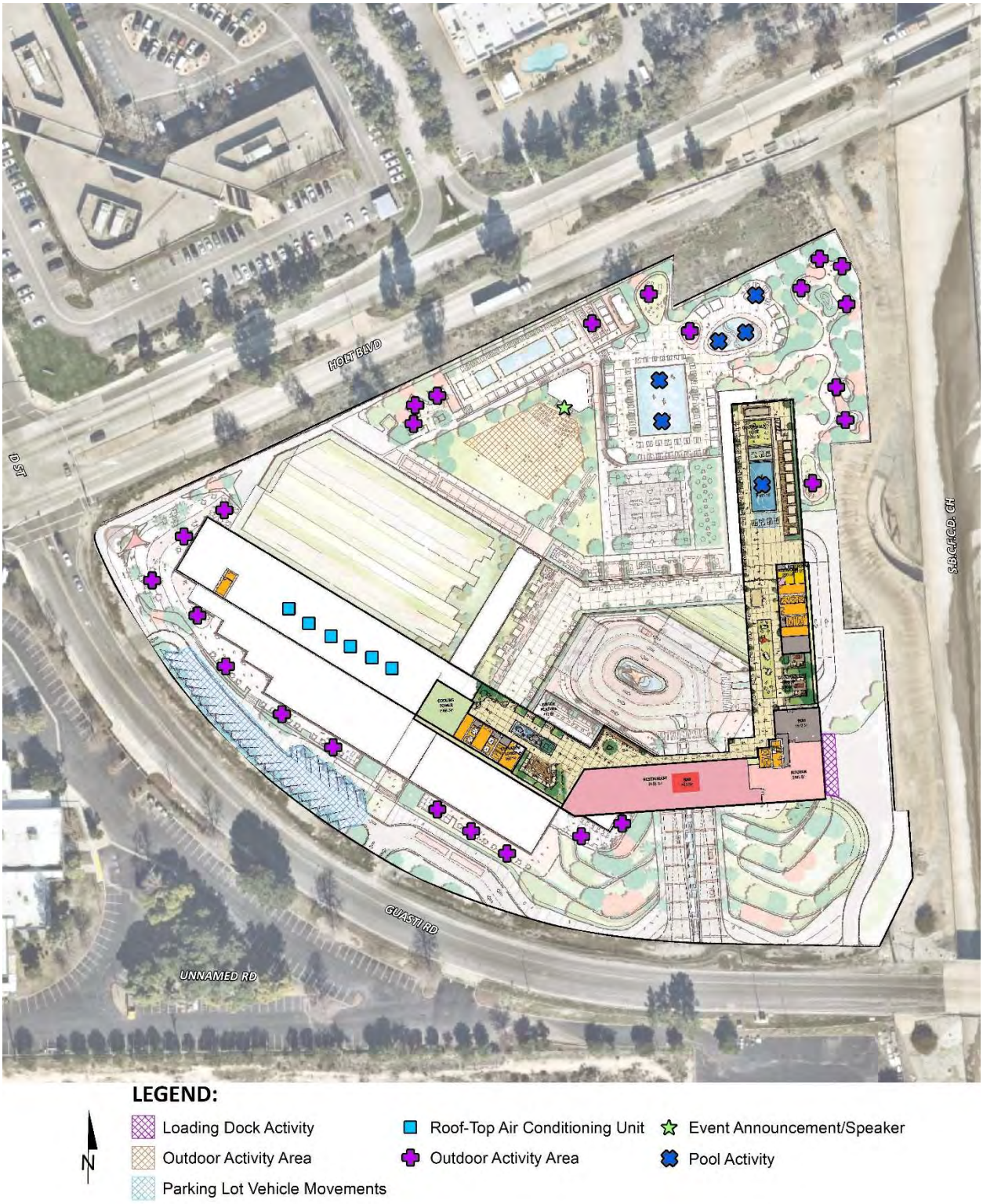


TABLE 10-1: REFERENCE NOISE LEVELS

Noise Source[1]	Noise Source Height (Feet)	Min./ Hour[2]		Reference Noise Level (dBA L_{eq}) @ 50 Feet	Sound Power Level (dBA)[3]
		Day	Night		
Event/Announcement Speaker	5'	60	60	75.6	107.2
Outdoor Gatherings	5'	60	60	59.9	91.5
Swimming Pool Activities	5'	60	60	63.0	94.6
Roof-Top Air Conditioning Units	5'	45	30	77.4	109.0
Loading Dock Activities	8'	60	60	71.8	103.4
Parking Lot Vehicle Movements	0'	60	60	31.4	63.0

[1] As measured by Urban Crossroads, Inc.
[2] Anticipated duration (minutes within the hour) of noise activity during typical hourly conditions expected at the Project site. "Daytime" = 7:00 a.m. - 10:00 p.m.; "Nighttime" = 10:00 p.m. - 7:00 a.m.
[3] Sound power level represents the total amount of acoustical energy (noise level) produced by a sound source independent of distance or surroundings. Sound power levels calculated using the CadnaA noise model at the reference distance to the noise source. Numbers may vary due to size differences between point and area noise sources.

10.2.1 MEASUREMENT PROCEDURES

The reference noise level measurements presented in this section were collected using a Larson Davis LxT Type 1 precisions sound level meter (serial number 01146). The LxT sound level meter was calibrated using a Larson-Davis calibrator, Model CAL 200, was programmed in "slow" mode to record noise levels in "A" weighted form and was located at approximately five feet above the ground elevation for each measurement. The sound level meters and microphones were equipped with a windscreen during all measurements. All noise level measurement equipment satisfies the American National Standards Institute (ANSI) standard specifications for sound level meters ANSI S1.4-2014/IEC 61672-1:2013. (24)

10.2.2 EVENT ANNOUNCEMENTS/SPEAKERS

To describe the potential noise level impacts associated with potential activities at the event yard, a reference noise level measurements were collected of dancing, with a MC and amplified speakers; and outdoor dining and a wedding venue. The dancing included several common wedding dance songs, cheering, shouting, dancing, and announcements by the MC. Based on reference noise level measurements collected by Urban Crossroads, Inc. these activities averaged 75.6 dBA L_{eq} at a uniform reference distance of 50 feet. The dining and wedding included announcements, groups of guests talking and eating in an outdoor setting. The event announcements and music may occur after 10:00 p.m. Therefore, event announcements activity is modeled as occurring the full hour during the nighttime hours. Based on reference noise level measurements collected by Urban Crossroads, Inc. these activities averaged 85 dBA L_{eq} at a uniform reference distance of 50 feet.

10.2.3 OUTDOOR GATHERING ACTIVITY

To represent the noise levels associated with outdoor gathering activities, Urban Crossroads, Inc. collected a reference noise level measurement at an existing conference hotel in Anaheim. The

outdoor gathering activities included people dining, drinking, with background music etc. on outdoor patio /seating areas. The outdoor activities and events may be expected to occur after 10:00 p.m. Therefore, outdoor activities are modeled as occurring the full hour during the nighttime hours. The measured reference noise level at the uniform 50-foot reference distance is 59.9 dBA L_{eq}.

10.2.4 SWIMMING POOL ACTIVITY

To represent the noise levels associated with pool activities, Urban Crossroads collected a reference noise level measurement at an existing outdoor pool and spa. The measured reference noise level at the uniform 50-foot reference distance is 54.7 dBA Leq for pool activity. The pool activity noise levels include kids playing, running, screaming, splashing, playing with a ball, and parents talking. Typically, noise associated with pool activities is expected to occur between 7:00 a.m. and 10:00 p.m. however, due to the type of land use pool activity may be expected to occur after 10:00 p.m. Therefore, pool activity is modeled as occurring the full hour during the nighttime hours.

10.2.5 ROOF-TOP AIR CONDITIONING UNITS

Mechanical equipment, such as generators, trash compactors, heating, ventilation and air conditioning (HVAC) units would be included as part of the proposed improvements. Mechanical equipment would be utilized in commercial as well as institutional areas. The noise level measurements describe a single mechanical roof-top air conditioning unit. The reference noise level represents a Trane Quiet Curb Series 130-ton model packaged air conditioning unit (Appendix 10.1). At the uniform reference distance of 50 feet, the reference noise level is 77.4 dBA L_{eq}. Based on the typical operating conditions, the roof-top air conditioning units are estimated to operate for and average 45 minutes per hour during the daytime hours, and 30 minutes per hour during the nighttime hours. These operating conditions reflect peak cooling requirements. For this noise analysis, the air conditioning units are expected to be located on the roof of the Project buildings.

10.2.6 LOADING DOCK ACTIVITY

To describe the noise levels associated with a loading dock activity, Urban Crossroads collected a reference noise level measurement at an existing loading dock. The loading dock activity noise levels describe two trucks idling, deliveries, backup alarms, unloading/loading a truck, docking including a combination of tractor trailer semi-trucks, two-axle delivery trucks, and background forklift operations. The measured reference noise level at the uniform 50-foot reference distance is 71.8 dBA L_{eq} for the loading dock activity. The loading dock activity and events may be expected to occur after 10:00 p.m. Therefore, loading dock activity is modeled as occurring the full hour during the nighttime hours.

10.2.7 PARKING LOT ACTIVITY

Parking activities are based on the area of the parking spaces. The Project includes approximately 30 new surface parking spaces, which are assumed to have a maximum of 4 movements per hour for a total of 120 events in an hour. Based on studies conducted in Europe and Australia, the

average parking procedure, which included movement associated with either entering or exiting the parking area, parking the vehicles, and opening and closing doors resulted in a sound power level of approximately 63 dBA L_w/square meter per event (34) (35). Parking lot activity is assumed to occur during the daytime and nighttime hours.

10.3 CADNAA NOISE PREDICTION MODEL

To fully describe the exterior operational noise levels from the Project, Urban Crossroads, Inc. developed a noise prediction model using the CadnaA (Computer Aided Noise Abatement) computer program. CadnaA can analyze multiple types of noise sources using the spatially accurate Project site plan, georeferenced Nearmap aerial imagery, topography, buildings, and barriers in its calculations to predict outdoor noise levels.

Using the ISO 9613 protocol, CadnaA will calculate the distance from each noise source to the noise receiver locations, using the ground absorption, distance, and barrier/building attenuation inputs to provide a summary of noise level at each receiver and the partial noise level contributions by noise source. Consistent with the ISO 9613 protocol, the CadnaA noise prediction model relies on the reference sound power level (L_w) to describe individual noise sources. While sound pressure levels (e.g., L_{eq}) quantify in decibels the intensity of given sound sources at a reference distance, sound power levels (L_w) are connected to the sound source and are independent of distance. Sound pressure levels vary substantially with distance from the source and diminish because of intervening obstacles and barriers, air absorption, wind, and other factors. Sound power is the acoustical energy emitted by the sound source and is an absolute value that is not affected by the environment.

The operational noise level calculations provided in this noise study account for the distance attenuation provided due to geometric spreading, when sound from a localized stationary source (i.e., a point source) propagates uniformly outward in a spherical pattern. A default ground attenuation factor of 0.5 was used in the CadnaA noise analysis to account for mixed ground representing a combination of hard and soft surfaces. Appendix 10.2 includes the detailed noise model inputs used to estimate the Project operational noise levels presented in this section.

10.4 PROJECT OPERATIONAL NOISE LEVELS

Using the reference noise levels to represent the proposed Project operations that include events with amplified sound, outdoor activities, swimming pool/spa activities, roof-mounted air conditioning units, loading dock activities, and parking lot vehicle movement, Urban Crossroads, Inc. calculated the operational source noise levels that are expected to be generated at the Project site and the Project-related noise level increases that would be experienced at each of the sensitive receiver locations. Table 10-2 shows the Project operational noise levels during the daytime hours of 7:00 a.m. to 10:00 p.m. The daytime hourly noise levels at the off-site receiver locations are expected to range from 37.9 to 56.3 dBA L_{eq}.

TABLE 10-2: DAYTIME PROJECT OPERATIONAL NOISE LEVELS

Noise Source[1]	Operational Noise Levels by Receiver Location (dBA Leq)				
	R1	R2	R3	R4	R5
Event/Announcement Speaker	22.1	31.0	51.8	34.8	29.1
Outdoor Gatherings	49.4	31.3	49.6	34.0	27.7
Swimming Pool Activities	18.5	28.2	48.1	32.3	27.0
Roof-Top Air Conditioning Units	52.8	38.6	50.8	40.3	35.5
Loading Dock Activities	20.8	5.0	22.0	33.1	28.5
Parking Lot Vehicle Movements	30.2	5.2	0.0	0.0	0.0
Total (All Noise Sources)	**54.4**	**40.2**	**56.3**	**43.0**	**37.9**

[1] See Exhibit 11-A for the noise source locations. CadnaA noise model calculations are included in Appendix 11.1.

Table 10-3 shows the Project operational noise levels during the nighttime hours of 10:00 p.m. to 7:00 a.m. The nighttime hourly noise levels at the off-site receiver locations are expected to range from 36.1 to 55.0 dBA L_{eq}.

TABLE 10-3: NIGHTTIME PROJECT OPERATIONAL NOISE LEVELS

Noise Source[1]	Operational Noise Levels by Receiver Location (dBA Leq)				
	R1	R2	R3	R4	R5
Event/Announcement Speaker	21.1	30.1	50.8	33.9	28.2
Outdoor Gatherings	48.4	30.4	48.8	33.1	26.8
Swimming Pool Activities	17.6	27.2	47.2	31.3	26.0
Roof-Top Air Conditioning Units	50.1	35.9	48.1	37.6	32.7
Loading Dock Activities	20.8	5.0	22.0	33.1	28.5
Parking Lot Vehicle Movements	30.2	5.2	0.0	0.0	0.0
Total (All Noise Sources)	**52.4**	**38.2**	**55.0**	**41.3**	**36.1**

[1] See Exhibit 10-A for the noise source locations. CadnaA noise model calculations are included in Appendix 10.1.

10.5 PROJECT OPERATIONAL NOISE LEVEL COMPLIANCE

To demonstrate compliance with local noise regulations, the Project-only operational noise levels are evaluated against exterior noise level thresholds based on the City of Ontario exterior noise level standards at nearby noise-sensitive receiver locations. Table 10-4 shows the operational noise levels associated with Empire Groves Hotel Project will satisfy the City of Ontario 65 dBA L_{eq} exterior noise level standards at all nearby receiver locations. Therefore, the operational noise impacts are considered *less than significant* at the nearby noise-sensitive receiver locations.

TABLE 10-4: OPERATIONAL NOISE LEVEL COMPLIANCE

Receiver Location[1]	Project Operational Noise Levels (dBA Leq)[2]		Noise Level Standards (dBA Leq)[3]		Noise Level Standards Exceeded?[4]	
	Daytime	Nighttime	Daytime	Nighttime	Daytime	Nighttime
R1	54.4	52.4	65.0	60.0	No	No
R2	40.2	38.2	65.0	45.0	No	No
R3	56.3	55.0	65.0	60.0	No	No
R4	43.0	41.3	65.0	45.0	No	No
R5	37.9	36.1	65.0	45.0	No	No

[1] See Exhibit 9-A for the receiver locations.
[2] Proposed Project operational noise level calculations are included in Appendix 10.2.
[3] Section 5-29.04 of the City of Ontario Municipal Code (Appendix 3.1).
[4] Do the estimated Project operational noise source activities exceed the noise level standards? "Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

10.6 PROJECT OPERATIONAL NOISE LEVEL INCREASES

To describe the Project operational noise level increases, the Project operational noise levels are combined with the existing ambient noise levels measurements for the nearest receiver locations potentially impacted by Project operational noise sources. Since the units used to measure noise, decibels (dB), are logarithmic units, the Project-operational and existing ambient noise levels cannot be combined using standard arithmetic equations. (2) Instead, they must be logarithmically added using the following base equation:

$$SPL_{Total} = 10\log_{10}[10^{SPL1/10} + 10^{SPL2/10} + \ldots 10^{SPLn/10}]$$

Where "SPL1," "SPL2," etc. are equal to the sound pressure levels being combined, or in this case, the Project-operational and existing ambient noise levels. The difference between the combined Project and ambient noise levels describes the Project noise level increases to the existing ambient noise environment. As indicated on Tables 10-5 and 10-6, the Project will generate daytime and nighttime operational noise level increases are expected to range up to 1.7 dBA L_{eq} at the nearest receiver locations. Project-related operational noise level increases will satisfy the operational noise level increase significance criteria presented on Table 4-1. Therefore, the incremental Project operational noise level increase is considered *less than significant* at all receiver locations.

TABLE 10-5: DAYTIME PROJECT OPERATIONAL NOISE LEVEL INCREASES

Receiver Location[1]	Total Project Operational Noise Level[2]	Measurement Location[3]	Reference Ambient Noise Levels[4]	Combined Project and Ambient[5]	Project Increase[6]	Increase Criteria	Increase Criteria Exceeded?
R1	54.4	L1	64.2	64.6	0.4	3.0	No
R2	40.2	L2	59.1	59.2	0.1	5.0	No
R3	56.3	L3	62.0	63.0	1.0	3.0	No
R4	43.0	L4	71.7	71.7	0.0	1.5	No
R5	37.9	L5	66.5	66.5	0.0	1.5	No

[1] See Exhibit 9-A for the receiver locations.
[2] Total Project daytime operational noise levels as shown on Table 10-2.
[3] Reference noise level measurement locations as shown on Exhibit 5-A.
[4] Observed nighttime ambient noise levels as shown on Table 5-1.
[5] Represents the combined ambient conditions plus the Project activities.
[6] The noise level increase expected with the addition of the proposed Project activities.

TABLE 10-6: NIGHTTIME OPERATIONAL NOISE LEVEL INCREASES

Receiver Location[1]	Total Project Operational Noise Level[2]	Measurement Location[3]	Reference Ambient Noise Levels[4]	Combined Project and Ambient[5]	Project Increase[6]	Increase Criteria	Increase Criteria Exceeded?
R1	52.4	L1	61.2	61.7	0.5	3.0	No
R2	38.2	L2	58.3	58.3	0.0	5.0	No
R3	55.0	L3	58.3	60.0	1.7	5.0	No
R4	41.3	L4	67.7	67.7	0.0	1.5	No
R5	36.1	L5	61.7	61.7	0.0	3.0	No

[1] See Exhibit 9-A for the receiver locations.
[2] Total Project nighttime operational noise levels as shown on Table 10-3.
[3] Reference noise level measurement locations as shown on Exhibit 5-A.
[4] Observed nighttime ambient noise levels as shown on Table 5-1.
[5] Represents the combined ambient conditions plus the Project activities.
[6] The noise level increase expected with the addition of the proposed Project activities.

11 CONSTRUCTION IMPACTS

This section analyzes potential impacts resulting from the short-term construction activities associated with the development of the Project. Exhibit 11-A shows the construction activity boundaries in relation to the nearest sensitive receiver locations previously described in Section 8. According to Section 5-29.09 of the Municipal Code states: *No person, while engaged in construction, remodeling, digging, grading, demolition or any other related building activity, shall operate any tool, equipment or machine in a manner that produces loud noise that disturbs a person of normal sensitivity who works or resides in the vicinity, or a Police or Code Enforcement Officer, on any weekday except between the hours of 7:00 a.m. and 6:00 p.m. or on Saturday or Sunday between the hours of 9:00 a.m. and 6:00 p.m.* (16)

In addition, since neither the City of Ontario General Plan or Municipal Code establish numeric maximum acceptable construction source noise levels at potentially affected receivers for CEQA analysis purposes. Therefore, a numerical construction threshold based on Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual is used for analysis of daytime construction impacts. The FTA considers a daytime exterior construction noise level of 80 dBA L_{eq} as a reasonable threshold for noise sensitive residential land use. (17).

11.1 CONSTRUCTION NOISE LEVELS

Noise generated by the Project construction equipment will include a combination of trucks, power tools, concrete mixers, and portable generators that when combined can reach high levels. The number and mix of construction equipment are expected to occur in the following stages:

- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

11.2 TYPICAL CONSTRUCTION REFERENCE NOISE LEVELS

To describe construction noise activities, this construction noise analysis was prepared using reference construction equipment noise levels from the Federal Highway Administration (FHWA) published the Roadway Construction Noise Model (RCNM), which includes a national database of construction equipment reference noise emission levels. (36) The RCNM equipment database, provides a comprehensive list of the noise generating characteristics for specific types of construction equipment. In addition, the database provides an acoustical usage factor to estimate the fraction of time each piece of construction equipment is operating at full power (i.e., its loudest condition) during a construction operation. The equipment shown Table 11-1 represents the loudest pieces of equipment anticipated during each phase of construction.

EXHIBIT 11-A: CONSTRUCTION NOISE SOURCE AND RECEIVER LOCATIONS



TABLE 11-1: CONSTRUCTION REFERENCE NOISE LEVELS

Construction Stage	Reference Construction Activity	Reference Noise Level @ 50 Feet (dBA L_{eq})[1]	Combined Noise Level (dBA L_{eq})[2]
Site Preparation	Crawler Tractors	78	80
	Hauling Trucks	72	
	Rubber Tired Dozers	75	
Grading	Graders	81	83
	Excavators	77	
	Compactors	76	
Building Construction	Cranes	73	81
	Tractors	80	
	Welders	70	
Paving	Pavers	74	83
	Paving Equipment	82	
	Rollers	73	
Architectural Coating	Cranes	73	77
	Air Compressors	74	
	Generator Sets	70	

[1] FHWA Roadway Construction Noise Model (RCNM).
[2] Represents the combined noise level for all equipment assuming they operate at the same time consistent with FTA Transit Noise and Vibration Impact Assessment guidance.
[3] Sound power level represents the total amount of acoustical energy (noise level) produced by a sound source independent of distance or surroundings. Sound power levels calibrated using the CadnaA noise model at the reference distance to the noise source.

11.3 CONSTRUCTION NOISE ANALYSIS

Using the reference construction equipment noise levels and the CadnaA noise prediction model, calculations of the Project construction noise level impacts at the nearby sensitive receiver locations were completed. For construction noise assessment, construction equipment can be considered to operate in two modes: stationary and mobile. As defined, stationary equipment operates in a single location for one or more days at a time, with either fixed-power operation (e.g., pumps, generators, and compressors) or variable-power operation (e.g., pile drivers, rock drills, and pavement breakers). Mobile equipment moves around the construction site with power applied in cyclic fashion, such as bulldozers, graders, and loaders (FTA 2018). The FTA and FHWA recommend noise impacts from stationary equipment be assessed from the center of the equipment location, while noise impacts from mobile construction equipment should be assessed from the center of the equipment activity area (e.g., construction site). Thus, to assess a more realistic and reasonable worst-case construction scenario while accounting for the dynamic nature of construction activities, this Project construction noise analysis models the equipment combination with the highest reference combined level as a moving point within the construction area (Project site boundary). Construction impacts are based on the highest noise level calculated at each receiver location. As shown on Table 11-2, the construction noise levels

are expected to range from 34.4 to 60.0 dBA L_{eq}, and the highest construction levels are expected to range from 40.4 to 60.0 dBA L_{eq} at the nearest receiver locations. Appendix 11.1 includes the detailed CadnaA construction noise model inputs.

TABLE 11-2: CONSTRUCTION EQUIPMENT NOISE LEVEL SUMMARY

Receiver Location[1]	Construction Noise Levels (dBA L_{eq})					
	Site Preparation	Grading	Building Construction	Paving	Architectural Coating	Highest Levels[2]
R1	57.0	60.0	58.0	60.0	54.0	60.0
R2	39.5	42.5	40.5	42.5	36.5	42.5
R3	56.3	59.3	57.3	59.3	53.3	59.3
R4	42.5	45.5	43.5	45.5	39.5	45.5
R5	37.4	40.4	38.4	40.4	34.4	40.4

[1] Noise receiver locations are shown on Exhibit 9-A.
[2] Construction noise level calculations based on distance from the construction activity, which is measured from the Project site boundary to the nearest receiver locations. CadnaA construction noise model inputs are included in Appendix 11.1.

11.4 CONSTRUCTION NOISE LEVEL COMPLIANCE

To evaluate whether the Project will generate potentially significant short-term noise levels at nearest receiver locations, a construction-related daytime noise level threshold of 80 dBA L_{eq} is used as a reasonable threshold to assess the daytime construction noise level impacts at residential locations. The construction noise analysis shows that the nearest receiver locations will satisfy the reasonable daytime significance thresholds shown in Table 4-1 during Project construction activities as shown on Table 11-3. Therefore, the noise impacts due to Project construction noise is considered *less than significant* at all receiver locations.

TABLE 11-3: CONSTRUCTION NOISE LEVEL COMPLIANCE

Receiver Location[1]	Construction Noise Levels (dBA L_{eq})		
	Highest Construction Noise Levels[2]	Threshold[3]	Threshold Exceeded?[4]
R1	60.0	80	No
R2	42.5	80	No
R3	59.3	80	No
R4	45.5	80	No
R5	40.4	80	No

[1] Noise receiver locations are shown on Exhibit 9-A.
[2] Highest construction noise level calculations based on distance from the construction noise source activity to the nearest receiver locations as shown on Table 11-2.
[3] Construction noise level thresholds as shown on Table 4-1.
[4] Do the estimated Project construction noise levels exceed the construction noise level threshold?

11.5 CONSTRUCTION VIBRATION ANALYSIS

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods used, distance to the affected structures and soil type. It is expected that ground-borne vibration from Project construction activities would cause only intermittent, localized intrusion. Ground-borne vibration levels resulting from typical construction activities occurring within the Project site were estimated by data published by the Federal Transit Administration (FTA) (17) and Caltrans (8). However, while vehicular traffic is rarely perceptible, construction has the potential to result in varying degrees of temporary ground vibration, depending on the specific construction activities and equipment used.

Ground vibration levels associated with various types of construction equipment are summarized on Table 11-4. Based on the representative vibration levels presented for various construction equipment types, it is possible to estimate the potential Project construction vibration levels using the following vibration assessment methods defined by Caltrans. Caltrans provides the following equation: $PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$ (8).

TABLE 11-4: VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT

Equipment	PPV (in/sec) at 25 feet
Small bulldozer	0.003
Jackhammer	0.035
Loaded Trucks	0.076
Large bulldozer	0.089

Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual

Table 11-5 presents the expected Project related vibration levels at the nearby receiver locations. At distances ranging from 176 feet to 3,593 feet from Project construction activities (at the Project site boundary), construction vibration levels are estimated to be less than 0.01 PPV (in/sec) at the nearest vibration sensitive receiver. Based on maximum acceptable continuous vibration threshold of 0.50 PPV (in/sec), the typical Project construction vibration levels will fall below the building damage thresholds at all the receiver locations. Therefore, the Project-related vibration impacts are considered less than significant during typical construction activities at the Project site.

Further, vibration levels at the site of the closest sensitive receiver are unlikely to be sustained during the entire construction period but will occur rather only during the times that heavy construction equipment is operating simultaneously adjacent to the Project site perimeter.

TABLE 11-5: PROJECT CONSTRUCTION VIBRATION LEVELS

Receiver[1]	Distance to Const. Activity (Feet)[2]	Typical Construction Vibration Levels PPV (in/sec)[3]					Thresholds PPV (in/sec)[4]	Thresholds Exceeded?[5]
		Small bulldozer	Jackhammer	Loaded Trucks	Large bulldozer	Highest Vibration Level		
R1	176'	0.00	0.00	0.00	0.00	0.00	0.50	No
R2	2,802'	0.00	0.00	0.00	0.00	0.00	0.50	No
R3	237'	0.00	0.00	0.00	0.00	0.00	0.50	No
R4	1,968'	0.00	0.00	0.00	0.00	0.00	0.50	No
R5	3,593'	0.00	0.00	0.00	0.00	0.00	0.50	No

[1] Receiver locations are shown on Exhibit 10-A.
[2] Distance from receiver location to Project construction boundary (Project site boundary).
[3] Based on the Vibration Source Levels of Construction Equipment (Table 12-4).
[4] Caltrans Transportation and Construction Vibration Manual, April 2020 Table 19.
[5] Does the peak vibration exceed the acceptable vibration thresholds?
"PPV" = Peak Particle Velocity

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13 CERTIFICATION

The contents of this noise study report represent an accurate depiction of the noise environment and impacts associated with the proposed Empire Groves Hotel Project. The information contained in this noise study report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at (619) 778-1971.

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EDUCATION

Bachelor of Science in Urban and Regional Planning
California Polytechnic State University, Pomona • June 2000

PROFESSIONAL AFFILIATIONS

ASA – Acoustical Society of America
AEP – Association of Environmental Planners
AWMA – Air and Waste Management Association
INCE – Institute of Noise Control Engineers

PROFESSIONAL CERTIFICATIONS

Approved Acoustical Consultant • County of San Diego
FHWA Traffic Noise Model of Training • November 2004
CadnaA Basic and Advanced Training Certificate • October 2008.

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APPENDIX 3.1:

CITY OF ONTARIO MUNICIPAL CODE

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CHAPTER 29: NOISE

5-29.01 Declaration of findings and policy

5-29.02 Definitions

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5-29.18 Enforcement and administration

5-29.19 City Manager waiver

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Sec. 5-29.01. Declaration of findings and policy.

It is hereby found and declared that:

(a) The making and creation of excessive, unnecessary or unusually loud noises within the limits of the City is a condition that has existed for some time, however, the extent and volume of such noises is increasing;

(b) The making, creation or maintenance of such excessive, unnecessary, unnatural or unusually loud noises that are prolonged, unusual and unnatural in their time, place and use affect and are a detriment to public health, comfort, convenience, safety, welfare and prosperity of the residents of the City; and

(c) The necessity in the public interest for the provisions and prohibitions hereinafter contained and enacted, is declared as a matter of legislative determination and public policy, and it is further declared that the provisions and prohibitions hereinafter contained and enacted are in pursuance of and for the purpose of securing and promoting the public health, comfort, convenience, safety, welfare and prosperity and the peace and quiet of the residents of the City.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.02. Definitions.

As used in this chapter, specific words and phrases are defined as follows:

(a) "Ambient noise level" shall mean the all-encompassing noise level associated with a given environment and is a composite of sounds from all sources, excluding the alleged offensive noise or excessive sound, at the location and approximate time at which a comparison with the alleged offensive noise is to be made.

(b) "Applicable (noise) zone" shall mean the noise zone category based on the actual use of the property, provided that the actual use is a legal use in the City.

(c) "A-weighted sound level" shall mean the sound pressure level in decibels (dBAs) as measured with a sound level meter using the A-weighted filter network (scale) at slow response and at a pressure of twenty (20) micropascals. The A-weighted filter de-emphasizes the very low and a very high frequency component of sound in a manner similar to the response of the human ear, and is a numerical method of rating human judgment of loudness.

(d) "Decibel (dBA)" shall mean a unit for measuring the amplitude of a sound, equal to twenty (20) times the logarithm to the base ten (10) of the ratio of pressure of the sound measured to the reference pressure of twenty (20) micropascals.

(e) "Equivalent sound or noise level (Leq)" shall mean the International Electrotechnical Commission (IEC) 60804 Standard for measurement, or the most recent revision thereof, for the sound level corresponding to a steady state noise level over a given sample period with the same amount of acoustic energy as the actual time varying noise level or the energy average noise level during the sample period. The measurement period for the purposes of this chapter is fifteen (15) minutes.

(f) "Impulsive noise" shall mean a noise of short duration usually less than one (1) second and of high intensity, with an abrupt onset and rapid decay. Such objectionable noises may also be repetitive.

(g) "Intrusive noise" shall mean that noise that intrudes over and above the ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, time of occurrence and tonal information content, as well as the prevailing ambient noise level.

(h) "Maintenance" shall mean the upkeep, repair or preservation of existing property or structures.

(i) "Noise" shall mean any unwanted sound or sound that is undesirable because it interferes with speech and hearing, or is intense enough to damage hearing or is otherwise annoying.

(j) "Noise level (sound level)" shall mean the weighted sound pressure level obtained by use of a sound level meter having a standard frequency filter for attenuating part of the sound spectrum. For purposes of this chapter, all noise levels (sound levels) shall be A-weighted sound pressure level.

(k) "Noise (sound) level meter" shall mean an instrument, including a microphone, an amplifier, an output meter and frequency weighting networks for the measurement and determination of noise and sound levels. For the purposes of this chapter, the sound level meter must meet the International Electrotechnical Commission (IEC) 60651 and 60804 Standards, or the most recent revisions thereof, for Type 1 sound level meters or an instrument and the associated recording and analyzing equipment that will provide equivalent data.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.03. Designated noise zones.

The properties hereinafter described shall be assigned to the following noise zones:

Noise Zone I:	All single-family residential properties;
Noise Zone II:	All multi-family residential properties and mobile home parks;

Noise Zone III:	All commercial property;
Noise Zone IV:	The residential portion of mixed use properties;
Noise Zone V:	All manufacturing or industrial properties and all other uses.

The actual use of the property, and not necessarily its zoning designation, shall be the determining factor in establishing whether a property is in Noise Zone I, II, III, IV or V, provided that the actual use is a legal use within the applicable zone.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.04. Exterior noise standards.

(a) The following exterior noise standards, unless otherwise specifically indicated, shall apply to all properties within a designated noise zone.

Allowable Exterior Noise Level (1)		***Allowed Equivalent Noise Level, Leq. (2)***	
Noise Zone	***Type of Land Use***	***7 a.m. to 10 p.m.***	***10 p.m. to 7 a.m.***
I	Single-Family Residential	65 dBA	45 dBA
II	Multi-Family Residential, Mobile Home Parks	65 dBA	50 dBA
III	Commercial Property	65 dBA	60 dBA
IV	Residential Portion of Mixed Use	70 dBA	70 dBA
V	Manufacturing and Industrial, Other Uses	70 dBA	70 dBA

(1) If the ambient noise level exceeds the resulting standard, the ambient noise level shall be the standard.

(2) Measurements for compliance are made on the affected property pursuant to § 5-29.15.

(b) It is unlawful for any person at any location within the incorporated area of the City to create noise, or to allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person, which noise causes the noise level, when measured at any location on any other property, to exceed either of the following:

(1) The noise standard for the applicable zone for any fifteen-minute (15) period; and

(2) A maximum instantaneous (single instance) noise level equal to the value of the noise standard plus twenty (20) dBA for any period of time (measured using A-weighted slow response).

(c) In the event the ambient noise level exceeds the noise standard, the maximum allowable noise level under such category shall be increased to reflect the maximum ambient noise level.

(d) The Noise Zone IV standard shall apply to that portion of residential property falling within one hundred (100) feet of a commercial property or use, if the noise originates from that commercial property or use.

(e) If the measurement location is on a boundary between two (2) different noise zones, the lower noise level standard applicable to the noise zone shall apply.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.05. Interior noise standards.

(a) The following interior noise standards, unless otherwise specifically indicated, shall apply to all properties within a designated noise zone.

Allowable Interior Noise Level (1)		**Allowed Equivalent Noise Level, Leq.** (2)	
Noise Zone	***Type of Land Use***	***7 a.m. to 10 p.m.***	***10 p.m. to 7 a.m.***
I	Single-Family Residential	45 dBA	40 dBA
II	Multi-Family Residential, Mobile Home Parks	45 dBA	40 dBA
IV	Residential Portion of Mixed Use	45 dBA	40 dBA

(1) If the ambient noise level exceeds the resulting standard, the ambient noise level shall be the standard.

(2) Measurements for compliance are made on the affected property pursuant to § 5-29.15.

(b) It is unlawful for any person at any location within the incorporated area of the City to create noise, or to allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person, which noise causes the noise level, when measured at any location on any other property, to exceed either of the following:

(1) The noise standard for the applicable zone for any fifteen-minute (15) period;

(2) A maximum instantaneous (single instance) noise level equal to the value of the noise standard plus twenty (20) dBA for any period of time (measured using A-weighted slow response).

(c) In the event the ambient noise level exceeds the noise standard, the maximum allowable noise level under such category shall be increased to reflect the maximum ambient noise level.

(d) The Noise Zone IV standard shall apply to that portion of residential property falling within one hundred (100) feet of a commercial property or use, if the noise originates from that commercial property or use.

(e) If the measurement location is on a boundary between two (2) different noise zones, the lower noise level standard applicable to the noise zone shall apply.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.06. Exemptions.

The following activities shall be exempted from the provisions of this chapter:

(a) Any activity conducted on public property, or on private property with the consent of the owner, by any public entity or its officers, employees, representatives, agents, subcontractors, permittees, licensees or lessees that the public entity has authorized are exempt from the provisions of this chapter. This includes, without limitation, sporting and recreational activities that are sponsored, co-sponsored, permitted or allowed by the City or any school district within the City's jurisdictional boundaries. This also includes, without limitation, occasional outdoor gatherings, public dances, shows or sporting and entertainment events, provided such events are conducted pursuant to an approval, authorization, contract, lease, permit or sublease by the appropriate public entity, specifically the planning commission or City Council;

(b) Occasional outdoor gatherings, public dances, show, sporting and entertainment events, provided said events are conducted pursuant to a permit or license issued by the appropriate jurisdiction relative to the staging of said events;

(c) Any mechanical device, apparatus or equipment used, related to or connected with emergency machinery, vehicle, work or warning alarm or bell, provided the sounding of any bell or alarm on any building or motor vehicle shall terminate its operation within forty-five (45) minutes in any hour of its being activated;

(d) Noise sources associated with construction, repair, remodeling, demolition or grading of any real property. Such activities shall instead be subject to the provisions of § 5-29.09;

(e) Noise sources associated with construction, repair, remodeling, demolition or grading of public rights-of-way or during authorized seismic surveys;

(f) All mechanical devices, apparatus or equipment associated with agriculture operations provided that:

(1) Operations do not take place between 8:00 p.m. and 7:00 a.m.;

(2) Such operations and equipment are utilized for the protection or salvage of agricultural crops during periods of potential or actual frost damage or other adverse weather conditions; or

(3) Such operations and equipment are associated with agricultural pest control through pesticide application, provided the application is made in accordance with permits issued by or regulations enforced by the California Department of Agriculture;

(g) Noise sources associated with the maintenance of real property. Such activities shall instead be subject to the provisions of § 5-29.08;

(h) Any activity to the extent regulation thereof has been preempted by state or federal law;

(i) Any noise sources associated with people and/or music associated with a party at a residential property. Such noise shall be subject to the provisions of OMC § 5-29.07;

(j) Any noise source emanating from an ice cream truck within the City. Such noise shall be subject to the provisions of OMC § 4-18.04;

(k) Any noise sources associated with barking dogs or other intermittent noises made by animals on any properly within the City. Such noise shall be subject to the provisions of OMC Chapter 1, Title 6;

(l) Noise sources related to uses approved by a permit or development agreement adopted prior to the date of adoption of this chapter and that contains acoustic or noise standard conditions of approval. This exemption shall only be applicable during the effective period of the City-approved permit or development agreement.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.07. Loud and disturbing noise.

(a) It is unlawful for any person or property owner within the City to make, cause or allow to be made any loud, excessive, impulsive or intrusive noise, disturbance or commotion that disturbs the peace or quiet of any area or that causes discomfort or annoyance to any reasonable person of normal sensitivities in the area, after a Police or Code Enforcement Officer has first requested that the person or property owner cease and desist from making such noise. The types of loud, disturbing, excessive, impulsive or intrusive noise may include, but shall not be limited to, yelling, shouting, hooting, whistling, singing, playing a musical instrument, or emitting or transmitting any loud music or noise from any mechanical or electrical sound making or sound-amplifying device.

(b) The factors, standards, and conditions that may be considered in determining whether a violation of the provisions of this section has been committed, included, but not limited to, the following:

(1) The level of the noise;

(2) The level and intensity of the background (ambient) noise, if any;

(3) The proximity of the noise to residential or commercial sleeping areas;

(4) The nature and zoning of the area within which the noise emanates;

(5) The density of inhabitation of the area within which the noise emanates;

(6) The time of day and night the noise occurs;

(7) The duration of the noise;

(8) Whether the noise is constant, recurrent or intermittent;

(9) Whether the noise is produced by a commercial or noncommercial activity; and

(10) Whether the use is lawful under the provisions of Title 5 of this Code and whether the noise is one that could reasonably be expected from the activity or allowed use.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.08. Real property maintenance noise regulations.

(a) No person, while engaged in maintenance of real property, shall operate any tool, equipment or machine in a manner that produces loud noise that disturbs a person of normal sensitivity who works or resides in the vicinity, or a Police or Code Enforcement Officer, except between the hours of 8:00 a.m. and 6:00 p.m.

(b) Trimming or pruning that requires the use of chainsaws or mulching machines shall only be allowed between the hours of 8:00 a.m. and 6:00 p.m. on a weekday and between the hours of 9:00 a.m. and 5:00 p.m. on Saturday or Sunday.

(c) The use of electrical or gasoline powered blowers, such as commonly used by gardeners or other persons for cleaning lawns, yards, driveways, gutters and other property shall only be allowed between the hours of 8:00 a.m. and 6:00 p.m. on a weekday and between the hours of 9:00 a.m. and 5:00 p.m. on Saturday or Sunday.

(d) No landowner, gardener, property maintenance service, contractor, subcontractor or employer shall permit or allow any person or persons working under his or her direction or control to operate any tool, equipment or machine in violation of the provisions of this section.

(e) Exceptions. The provisions of this section shall not apply to the following:

(1) Emergency property maintenance required by the building official;

(2) The maintenance, repair or improvement of any public work or facility by public employees, by any person or persons acting pursuant to a public works contract, or by any person or persons performing such work or pursuant to the direction of, or on behalf of, any public agency; provided, however, this exception shall not apply to the City, or its employees, contractors or agents, unless:

(i) The City Manager or department head determines that the maintenance, repair or improvement is immediately necessary to maintain public service,

(ii) The maintenance, repair or improvement is of a nature that cannot feasibly be conducted during normal business hours, or

(iii) The City Council has approved project specifications, contract provisions, or an environmental document that specifically authorizes maintenance during hours of the day that would otherwise be prohibited pursuant to this section; and

(3) Any maintenance that complies with the noise limits specified in § 5-29.04.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.09. Construction activity noise regulations.

(a) No person, while engaged in construction, remodeling, digging, grading, demolition or any other related building activity, shall operate any tool, equipment or machine in a manner that produces loud noise that disturbs a person of normal sensitivity who works or resides in the vicinity, or a Police or Code Enforcement Officer, on any weekday except between the hours of 7:00 a.m. and 6:00 p.m. or on Saturday or Sunday between the hours of 9:00 a.m. and 6:00 p.m.

(b) No landowner, construction company owner, contractor, subcontractor, or employer shall permit or allow any person or persons working under their direction and control to operate any tool, equipment or machine in violation of the provisions of this section.

(c) Exceptions.

(1) The provisions of this section shall not apply to emergency construction work performed by a private party when authorized by the City Manager or his or her designee;

(2) The maintenance, repair or improvement of any public work or facility by public employees, by any person or persons acting pursuant to a public works contract, or by any person or persons performing such work or pursuant to the direction of, or on behalf of, any public agency; provided, however, this exception shall not apply to the City, or its employees, contractors or agents, unless:

(i) The City Manager or a department head determines that the maintenance, repair or improvement is immediately necessary to maintain public services,

(ii) The maintenance, repair or improvement is of a nature that cannot feasibly be conducted during normal business hours, or

(iii) The City Council has approved project specifications, contract provisions, or an environmental document that specifically authorizes construction during hours of the day that would otherwise be prohibited pursuant to this section; and

(3) Any construction that complies with the noise limits specified in §§ 5-29.04 or 5-29.05.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.10. Other public agency exceptions.

The provisions of this chapter shall not be construed to prohibit any work at different hours by or under the direction of any other public agency or public or private utility companies in cases of necessity or emergency.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.11. Schools, day care centers, churches, libraries, museums, health care institutions; Special provisions.

It is unlawful for any person to create any noise that causes the outdoor noise level at any school, day care center, hospital or similar health care institution, church, library or museum while the same is in use, to exceed the noise standards specified in § 5-29.04 prescribed for the assigned Noise Zone I.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.12. Sound amplifying equipment.

Loudspeakers, sound amplifiers, public address systems or similar devices used to amplify sounds shall be subject to the provisions of § 5-29.13. Such sound amplifying equipment shall not be construed to include electronic devices, including but not limited to, radios, tape players, tape recorders, compact disc players, MP3 players, electric keyboards, music synthesizers, record players or televisions, which are designed and operated for personal use, or used entirely within a building and are not designed or used to convey the human voice, music or any other sound to an audience outside such building, or which are used in vehicles and heard only by occupants of the vehicle in which installed.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.13. Amplified sound.

(a) The City Council enacts the following legislation for the sole purpose of securing and promoting the public health, comfort, safety and welfare for its citizenry. While recognizing that the use of sound amplifying equipment may be entitled to certain protection by the constitutional rights of freedom of speech and assembly, the City Council finds that in order to protect the public safety and the correlative rights of the citizens of this community to privacy and freedom from public nuisance of loud and unnecessary noise, reasonable regulation of the time, place and manner of the use of amplifying equipment is necessary. In no event shall approval or authorization

required herein be withheld by reason of the constitutionally protected content of any material proposed to be broadcast through amplifying equipment.

(b) It is unlawful for any person, other than personnel of law enforcement or governmental agencies, to install, use or operate a loudspeaker or sound amplifying device in a fixed or movable position or mounted upon any vehicle within the City for the purpose of giving instructions, directions, talks, addresses or lectures to any persons or assemblages of persons in or upon any street, alley, sidewalk, park, place or public property without a permit to do so from the Police Chief or his or her designee. Notwithstanding any other provision of this chapter, the provisions of this section shall also apply to the use of sound amplifying equipment upon public or private property when used in connection with outdoor or indoor public or private events, whether or not admission is charged or food or beverages are sold, when such activity is to be attended by more than one hundred (100) persons and the noise emanating from the event will be audible at the property plane, or in the case of a street dance or concert on the nearest residential property. Those activities listed in § 5-29.06(a) are exempt from the requirements of this section.

(c) The Police Chief or his or her designee is authorized to approve and issue permits under this section.

(d) An application for a permit required by this section shall be filed with the Police Chief at least sixteen (16) days and no more than one hundred twenty (120) days prior to the date on which the sound amplifying equipment is intended to be used. Applications for events covered by the First Amendment of the United States Constitution are exempt from the time requirements of this section if it is shown that circumstances require a shorter filing period and the event will not constitute an unsafe condition. The application shall contain the following information:

(1) The name, address and telephone number of both the owner and the user of the sound amplifying equipment;

(2) The license number, if a sound truck is to be used;

(3) A general description of the sound amplifying equipment which is to be used;

(4) Whether sound amplifying equipment will be used for commercial or noncommercial purpose;

(5) The dates and times upon and within which, and the streets or property over or upon which, the equipment is proposed to be operated;

(6) The name or names of one (1) or more persons who will be present during the conduct of any activities for which registration is sought and who will have authority to reduce the volume of any sound amplifying equipment during the course of the activities if required pursuant to this chapter and, otherwise, to insure compliance with the provisions of this chapter;

(7) A statement by the applicant that he or she is willing and able to comply with the provisions of this chapter and the conditions of the permit; and

(8) A sketch of the area or facilities within which the activities are to be conducted, with approximate dimensions and illustration of the location and orientation of all sound-amplifying equipment.

(e) The Police Chief shall deny the permit application or revoke any permit if the chief finds any of the following:

(1) The application contains materially false or intentionally misleading information;

(2) The use of sound amplifying equipment at an event or activity proposed will be located in or upon a premises, building or structure that is hazardous to the health or safety of the employees or patrons of the premises, business, activity, or event, or the general public, under the standards established by the Uniform Building or Fire Codes, or other applicable codes, as set forth in OMC Titles 4 and 8;

(3) The use of sound amplifying equipment at an event or activity proposed in or upon a premises, building or structure that lacks adequate on-site parking for participants attending the proposed event or activity under the applicable standards set forth in OMC Title 9;

(4) The conditions of any motor vehicle movement are such that, in his or her opinion, the use of the equipment would constitute an unreasonable interference with traffic safety;

(5) The conditions of pedestrian movement are such that the use of the equipment would constitute a detriment to traffic safety;

(6) The application submitted by the applicant reveals that the applicant would violate the provisions of this section or any other provision of federal, state and/or local law;

(7) The applicant is unwilling or unable to comply with the provisions of this chapter or any conditions imposed upon any permit issued;

(8) There had already been a permitted event at the intended location, or within a two hundred (200) yard radius of the intended location and the prior permitted event was located on residentially zoned property or on a street, alley, public parking lot or neighborhood park within three (3) months prior to the intended event. Community parks are exempt from this subsection (8); or

(9) The applicant or location has had previous violations within the past calendar year, and in the judgment of the Police Chief, issuance would be contrary to the intent of this section.

(f) In determining whether the use of the equipment would constitute an unreasonable interference with or detriment to traffic safety, the Police Chief shall consider, but shall not necessarily be limited to:

(1) The volumes, patterns and speed of vehicular and pedestrian traffic in the proposed area of use;

(2) The relationship of the proposed use of equipment and potential impacts upon traffic patterns;

(3) Availability of sufficient room for the operation of the equipment without significantly interfering with the traffic patterns;

(4) Proximity to schools, playgrounds and similar facilities where use of such equipment might attract children into traffic patterns; or

(5) Proximity to busy intersections or other potentially hazardous conditions where use of such equipment might constitute a hazard by reason of its tendency to distract drivers of vehicles or pedestrians.

(g) Issuance or denial.

(1) If the application is approved, the Police Chief shall return an approved copy of the application to the applicant and shall issue a permit. The permit shall constitute permission for the use of the sound amplifying equipment as requested.

(2) Any application filed shall be either approved or disapproved within five (5) days of the filing thereof.

(3) If the application is disapproved, the Police Chief shall return a disapproved copy forthwith to the applicant with a written statement on the reason for disapproval.

(i) Any person aggrieved by a decision of the Police Chief or his or her designee may file an appeal to the City Manager. A complete and proper appeal shall be filed with the City Clerk within ten (10) calendar days of the action that is the subject of the appeal. If the applicant fails to file an appeal within the ten (10) day filing period provided herein, denial shall take effect immediately upon expiration of such filing period. All appeals shall be in writing and shall contain the following information: (a) name(s) of the person filing the appeal, (b) a brief statement in ordinary and concise language of the relief sought, and (c) the signatures of all parties named as appellants and their mailing addresses. After receiving the appeal, the City Clerk shall immediately forward the matter to the City Manager for handling.

(ii) The City Manager shall, upon receipt of the appeal, set the matter for hearing before the City Manager or a hearing officer. Any hearing officer shall be a licensed attorney or recognized mediator designated by the City Manager. The hearing shall be set for not more than ten (10) calendar days after the receipt of the appeal unless a longer time is requested or consented to by the appellant. Notice of such hearing shall be given in writing and mailed at least five (5) calendar days prior to the date of the hearing, by U.S. mail, with a proof of service attached, addressed to the address listed on the permit application, or the written appeal if differer

the permit application. The notice shall state the grounds of the complaint or reason for the denial and shall state the time and place where such hearing will be held.

(iii) The City Manager or hearing officer shall, within ten (10) calendar days following the conclusion of the hearing, make a written finding and decision, which shall be delivered to the City and the appellant by first class mail. Notwithstanding any provision in this Code, the decision of the City Manager or hearing officer shall be the final administrative decision of the City. Any party dissatisfied with the decision of the City Manager or hearing officer may seek review of such decision under the provisions of Code Civil Procedure, §§ 1094.5 and 1094.8, as amended from time to time.

(h) In addition to any other provisions of this Code, the use of sound-amplifying equipment and sound trucks in the City shall be subject to the following regulations:

(1) The only sounds permitted are music and human speech;

(2) Sound shall not be emitted within one hundred (100) yards of hospitals, churches, schools and City Hall;

(3) The volume of sound shall be controlled so that it will not be audible for a distance in excess of one hundred (100) feet from the sound amplifying equipment or sound truck, and so that the volume is not unreasonably loud, raucous, jarring, disturbing or a nuisance to persons within the range of allowed audibility; or

(4) The sound amplifying equipment or sound truck shall not be used between the hours of 8:00 p.m. and 8:00 a.m.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.14. Motor vehicles.

The use of any motor vehicle in such a condition as to create excessive, impulsive or intrusive noises is prohibited. The discharge into the open air of the exhaust of any internal combustion engine, stationary or mounted on wheels, motorboat or motor vehicle, including motor cycle, whether or not discharged through a muffler or other similar device, which discharge creates excessive, unusual, impulsive or intrusive noise is prohibited. Motor vehicles shall comply with the noise regulations of the California Vehicle Code.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.15. Noise level measurement.

(a) The location selected for measuring exterior noise levels in a residential area shall be at any part of a private yard, patio, deck or balcony normally used for human activity and identified by the owner or, if occupied by someone other than the owner, the occupant of the affected property as suspected of exceeding the noise level standard. This location may be the closest point in the private yard or patio, or on the deck or balcony, to the noise source, but should not be located in nonhuman activity areas such as trash container storage areas, planter beds, above or contacting a property line fence, or other areas not normally used as part of the yard, patio, deck or balcony. The location selected for measuring exterior noise levels in a nonresidential area shall be at the closest point to the noise source. The measurement microphone height shall be five (5) feet above finish elevation or, in the case of a deck or balcony, the measurement microphone height shall be five (5) feet above the finished floor level.

(b) The location selected for measuring interior noise levels shall be made within the affected residential unit. The measurements shall be made at a point at least four (4) feet from the wall, ceiling or floor, or within the frame of a window opening, nearest the noise source. The measurements shall be made with windows in an open position.

(c) Any decibel measurement made pursuant to the provisions of this chapter shall be measured in decibels (dBAs) as measured with a sound level meter using the A-weighted sound pressure level.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.16. Prima facie violation.

Any noise exceeding the noise level standard as specified in §§ 5-29.04 and 5-29.05, shall be deemed to be prima facie evidence of a violation of the provisions of this chapter.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.17. Penalty.

(a) Any person who negligently or knowingly violates any provision of this chapter shall be guilty of an infraction and upon conviction shall be punishable by a fine specified in OMC § 1-2.01. Each day a violation occurs shall constitute a separate offense and shall be punishable as such.

(b) Any person who negligently or knowingly violates any provision of this chapter may also be subject to fine(s) specified in the administrative citation schedule of fines set forth in OMC § 1-5.04. The manner of issuing administrative citations shall comply with all the procedures specified in OMC Chapter 5, Title 1.

(c) As an additional remedy, the operation or maintenance of any device, instrument, vehicle or machinery in violation of any provisions of this chapter, which operation or maintenance causes or creates sound levels exceeding the allowable standards as specified in this chapter, shall be deemed and is declared to be a public nuisance and may be subject to abatement by a restraining order or injunction issued by a court of competent jurisdiction.

(d) Any violation of this chapter is declared to be a public nuisance and may be abated in accordance with law. The expense of enforcing this chapter is declared to be public nuisance and may be by resolution of the City Council declared to be a lien and special assessment against the property on which such nuisance is maintained, and any such charge shall also be a personal obligation of the property owner.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.18. Enforcement and administration.

(a) It shall be the responsibility of Police or Code Enforcement Officers to enforce the provisions of this chapter and to perform all other functions required by this chapter. Such duties shall include, but not be limited to investigating potential violations, issuing warning notices and citations, and providing evidence to the City prosecutor for legal action.

(b) For violations of § 5-29.07, Police or Code Enforcement Officers shall obtain a declaration under penalty of perjury from two (2) declarants living in separate households within a sixty (60) day period stating in detail all of the following:

(1) That the declarant is a resident of a residential neighborhood located within two hundred (200) yards of the noise source; and

(2) Within the past month declarant has heard noise for substantially long periods to the extreme annoyance of the declarant.

(3) Declarations from two (2) declarants are required to prove a violation of § 5-29.07, but are not required to prove that a person has violated any other provision of this chapter.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.19. City Manager waiver.

The City Manager is authorized to grant a temporary waiver to the provisions of this chapter for a period of time necessary to correct the violations of this chapter, if such temporary waiver would be in the public interest and there is no feasible and prudent alternative to the activity, or the method of conducting the activity, for which the temporary waiver is sought. This time period may include a commitment to a program that includes placing necessary orders and entering into necessary contracts within thirty (30) days for repair or installation.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.20. Noise abatement program.

(a) In circumstances where adopted community-wide noise standards and policies prove impractical in controlling noise generated from a specific source, the City Council may establish a noise abatement program that recognizes the characteristics of the noise source and affected property and that incorporates specialized mitigation measures.

(b) Noise abatement programs shall set forth in detail the approved terms, conditions and requirements for achieving maximum compliance with noise standards and policies. Said terms, conditions and requirements may include, but shall not be limited to, limitations, restrictions, or prohibitions on operating hours, location of operations, and the types of equipment.

(§ 2, Ord. 2888, eff. March 6, 2008)

APPENDIX 3.2:

ONTARIO INTERNATIONAL AIRPORT
ALUC NOISE CRITERIA

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Table 2-3
Noise Criteria

Legend: Land use compatibility
(A detailed explanation of each land use acceptability category is provided on pg. 2-50 of this table.)

Normally Compatible Land Use	Conditional Land Use (45/50)	Incompatible Land Use

- Cells that are conditionally compatible that have a number, indicate the interior noise level standard condition for use consistency.

Land Use Category [1] *Note: Multiple land use categories and compatibility criteria may apply to a project*	Noise Impact Zones Exterior Noise Exposure [2] (CNEL dB) ≤ 60	60-65	65-70	70-75	≥ 75	Criteria for Conditional Uses *Note: Interior noise level limits shown in yellow cells also apply (See **Policy N4**)*
Outdoor Uses (limited or no activities in buildings)						
Natural Land Areas: desert, brush lands						Compatible at levels indicated, but noise disruption of natural quiet will occur
Water: flood plains, wetlands, lakes, reservoirs						
Agriculture (except residences and livestock): crops, orchards, vineyards, pasture, range land						
Livestock Uses: feed lots, stockyards, breeding, fish hatcheries, horse stables						Exercise caution with uses involving noise-sensitive animals
Outdoor Major Assembly Facilities: spectator-oriented outdoor stadiums, amphitheaters, fairgrounds, zoos [3]						Exercise caution if clear audibility by users is essential
Group Recreation (limited spectator stands): athletic fields, water recreation facilities, picnic areas						Exercise caution if clear audibility by users is essential
Small/Non-Group Recreation: golf courses, tennis courts, shooting ranges						Exercise caution if clear audibility by users is essential
Local Parks: children-oriented neighborhood parks, playgrounds						Exercise caution if clear audibility by users is essential
Camping: campgrounds, recreational vehicle/motor home parks						
Cemeteries (excluding chapels)						Compatible at levels indicated, but noise disruption of outdoor activities will occur
Residential and Lodging Uses						
Residential (<8 d.u./acre): individual dwellings, townhouses, mobile homes, bed & breakfast inns [4]		45				
Residential (≥8 d.u./acre) [4]		45	45			
Long-Term Lodging (>30 nights): extended-stay hotels, dormitories		45	45			
Short-Term Lodging (≤ 30 nights): hotels, motels, other transient lodging (except conference/assembly facilities)		45	45			

Table 2-3
Noise Criteria

Legend: Land use compatibility
(A detailed explanation of each land use acceptability category is provided on pg. 2-50 of this table.)

Normally Compatible Land Use	Conditional Land Use (45/50)	Incompatible Land Use

- Cells that are conditionally compatible that have a number, indicate the interior noise level standard condition for use consistency.

Land Use Category [1] *Note: Multiple land use categories and compatibility criteria may apply to a project*	Noise Impact Zones Exterior Noise Exposure [2] (CNEL dB) ≤ 60	60-65	65-70	70-75	≥ 75	Criteria for Conditional Uses *Note: Interior noise level limits shown in yellow cells also apply (See **Policy N4**)*
Congregate Care: retirement homes, assisted living, nursing homes, intermediate care facilities		45	45			
Educational and Institutional Uses						
Family day care homes (≤14 children) [4]		45				
Children's Schools: K-12, day care centers (>14 children); school libraries		45				
Adult Education classroom space: adult schools, colleges, universities		45	45			Applies only to classrooms; offices, laboratory facilities, gymnasiums, outdoor athletic facilities, and other uses to be evaluated as indicated for those land use categories
Community Libraries		45				
Indoor Major Assembly Facilities: auditoriums, conference centers, concert halls, indoor arenas [3]		45	45			
Indoor Large Assembly Facilities: movie theaters, places of worship, cemetery chapels, mortuaries [3]		45	45			
Indoor Recreation: gymnasiums, club houses, athletic clubs, dance studios			50			
In-Patient Medical: hospitals, mental hospitals		45	45			
Out-Patient Medical: health care centers, clinics		45	45	45		
Penal Institutions: prisons, reformatories		45	45			
Public Safety Facilities: police, fire stations			50	50		
Commercial, Office, and Service Uses						
Major Retail: regional shopping centers, 'big box' retail			50	50		Outdoor dining or gathering places incompatible above CNEL 70 dB
Local Retail: community/neighborhood shopping centers, grocery stores			50	50		Outdoor dining or gathering places incompatible above CNEL 70 dB
Eating/Drinking Establishments: restaurants, fast-food dining, bars			50	50		Outdoor dining or gathering places incompatible above CNEL 70 dB
Limited Retail/Wholesale: furniture, automobiles, heavy equipment, lumber yards, nurseries			50	50		

Table 2-3
Noise Criteria

Legend: Land use compatibility
(A detailed explanation of each land use acceptability category is provided on pg. 2-50 of this table.)

Normally Compatible Land Use	Conditional Land Use (45/50)	Incompatible Land Use

- Cells that are conditionally compatible that have a number, indicate the interior noise level standard condition for use consistency.

Land Use Category [1] *Note: Multiple land use categories and compatibility criteria may apply to a project*	Noise Impact Zones Exterior Noise Exposure [2] (CNEL dB) ≤ 60	60-65	65-70	70-75	≥ 75	Criteria for Conditional Uses *Note: Interior noise level limits shown in yellow cells also apply (See **Policy N4**)*
Offices: professional services, doctors, finance, civic; radio, television & recording studios, office space associated with other listed uses			50	50		
Personal & Miscellaneous Services: barbers, car washes, print shops			50	50		
Vehicle Fueling: gas stations, trucking & transportation terminals				50	50	
Industrial, Manufacturing, and Storage Uses						
Hazardous Materials Production: oil refineries, chemical plants (≥6,000 gallons)						
Heavy Industrial						
Light Industrial, High Intensity: food products preparation, electronic equipment				50	50	
Light Industrial, Low Intensity: machine shops, wood products, auto repair				50	50	
Research & Development			50	50		
Indoor Storage: wholesale sales, warehouses, mini/other indoor storage, barns, greenhouses						
Outdoor Storage: public works yards, automobile dismantling						
Mining & Extraction						
Transportation, Communication, and Utilities						
Rail & Bus Stations				50	50	
Transportation Routes: road & rail rights-of-way, bus stops						
Auto Parking: surface lots, structures						
Communications Facilities: emergency communications, broadcast & cell towers						
Power Plants						
Electrical Substations						
Wastewater Facilities: treatment, disposal						
Solid Waste Disposal Facilities: landfill, incineration						
Solid Waste Transfer Facilities, Recycle Centers						

Land Use Compatibility	Interpretation/Comments
Normally Compatible	*Indoor Uses:* Either the activities associated with the land use are inherently noisy or standard construction methods will sufficiently attenuate exterior noise to an acceptable indoor community noise equivalent level (CNEL); for land use types that are compatible because of inherent noise levels, sound attenuation must be provided for associated office, retail, and other noise-sensitive indoor spaces sufficient to reduce exterior noise to an interior maximum of CNEL 50 dB *Outdoor Uses:* Except as noted in the table, activities associated with the land use may be carried out with minimal interference from aircraft noise
Conditional	*Indoor Uses:* Building structure must be capable of attenuating exterior noise from all noise sources to the indoor CNEL indicated by the number in the cell (either 45 or 50) *Outdoor Uses:* Caution should be exercised with regard to noise-sensitive outdoor uses; these uses are likely to be disrupted by aircraft noise events; acceptability is dependent upon characteristics of the specific use [5]
Incompatible	*Indoor Uses:* Unacceptable noise interference if windows are open; at exposures above CNEL 65 dB, extensive mitigation techniques required to make the indoor environment acceptable for performance of activities associated with the land use *Outdoor Uses:* Severe noise interference makes the outdoor environment unacceptable for performance of activities associated with the land use

Notes

[1] Land uses not specifically listed shall be evaluated using the criteria for similar uses.

[2] For the purposes of these criteria, the exterior noise exposure generated by aircraft activity at ONT is defined by the projected noise impact zones illustrated on **Map 2-3** of this *Compatibility Plan*.

[3] A *Major Assembly Facility* is defined as having a capacity of ≥1,000 people, while a *Large Assembly Facility* has a capacity of 300 to 999 people. Source: International Building Code.

[4] In accordance with **Policies S1, N2,** and **SP2**, construction of a single-family home, including a second dwelling unit as defined by state law, is allowed on a legal lot of record if such use is permitted by local land use regulations. A family day care home (serving ≤14 children) may be established in any dwelling.

[5] Noise-sensitive land uses are ones for which the associated primary activities, whether indoor or outdoor, are susceptible to disruption by loud noise events. The most common types of noise-sensitive land uses include, but are not limited to, the following: residential, hospitals, nursing facilities, intermediate care facilities, educational facilities, libraries, museums, places of worship, child-care facilities, and certain types of passive recreational parks and open space.

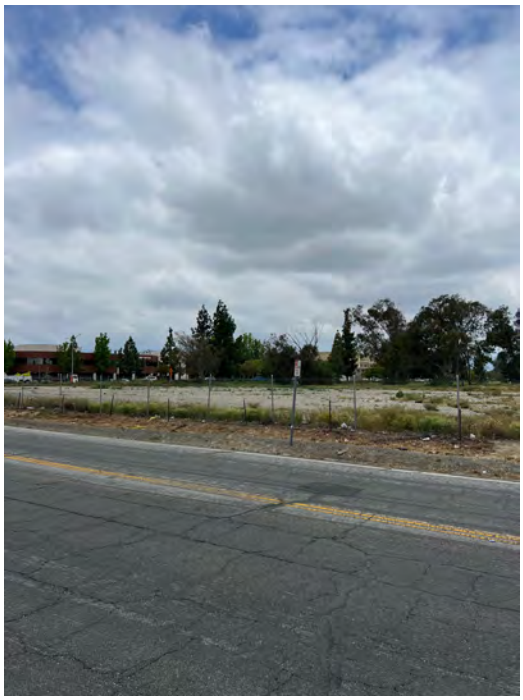
APPENDIX 5.1:

STUDY AREA PHOTOS

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15693 - Empire Grove Hotel

15693_L1_A 1.North
34, 3' 49.520000"117, 36' 14.500000"



15693_L1_A 2.South
34, 3' 49.410000"117, 36' 14.360000"



15693_L1_A 3.East
34, 3' 49.350000"117, 36' 14.280000"



15693_L1_A 4.West
34, 3' 49.390000"117, 36' 14.440000"

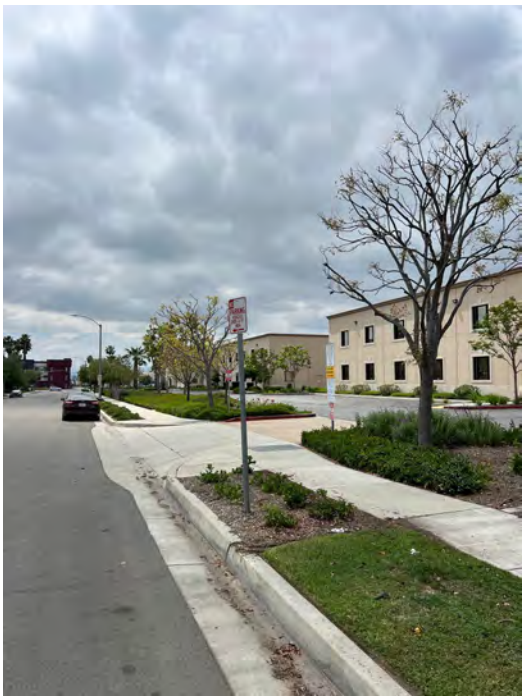


15693 - Empire Grove Hotel

15693_L2_B 1.North
34, 3' 55.400000"117, 36' 48.470000"



15693_L2_B 2.South
34, 3' 55.350000"117, 36' 48.420000"



15693_L2_B 3.East
34, 3' 55.420000"117, 36' 48.200000"



15693_L2_B 4.West
34, 3' 55.230000"117, 36' 48.170000"



15693 - Empire Grove Hotel

15693_L3_C 1.North
34, 3' 57.840000"117, 36' 12.380000"



15693_L3_C 2.South
34, 3' 57.850000"117, 36' 12.410000"



15693_L3_C 3.East
34, 3' 57.730000"117, 36' 12.190000"



15693_L3_C 4.West
34, 3' 57.650000"117, 36' 12.380000"



15693 - Empire Grove Hotel

15693_L4_D 1.North
34, 4' 13.170000"117, 35' 58.480000"



15693_L4_D 2.South
34, 4' 13.110000"117, 35' 58.480000"



15693_L4_D 3.East
34, 4' 13.100000"117, 35' 58.480000"



15693_L4_D 4.West
34, 4' 13.140000"117, 35' 58.810000"



15693 - Empire Grove Hotel

15693_L5_E 1.North
34, 4' 13.700000"117, 35' 30.190000"



15693_L5_E 2.South
34, 4' 13.390000"117, 35' 30.220000"



15693_L5_E 3.East
34, 4' 13.340000"117, 35' 30.190000"



15693_L5_E 4.West
34, 4' 13.370000"117, 35' 30.280000"



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APPENDIX 7.1:

OFF-SITE TRAFFIC NOISE CALCULATIONS

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: Existing
Road Name: Vineyard Ave.
Road Segment: Inland Empire Blvd.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	7,630 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	763 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-3.13	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-20.36	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-24.32	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.3	60.4	58.6	52.6	61.2	61.8
Medium Trucks:	56.0	54.5	48.2	46.6	55.1	55.3
Heavy Trucks:	56.9	55.5	46.4	47.7	56.0	56.2
Vehicle Noise:	64.1	62.4	59.2	54.6	63.1	63.6

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	26	57	122	263
CNEL:	28	61	131	283

Monday, May 6, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: Existing
Road Name: Vineyard Ave.
Road Segment: Inland Empire Blvd.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	16,530 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,653 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	0.23	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-17.01	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-20.96	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	65.6	63.8	62.0	55.9	64.6	65.2
Medium Trucks:	59.4	57.9	51.5	50.0	58.5	58.7
Heavy Trucks:	60.2	58.8	49.8	51.0	59.4	59.5
Vehicle Noise:	67.5	65.7	62.6	57.9	66.5	66.9

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	44	95	205	441
CNEL:	47	102	220	473

Monday, May 6, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: Existing
Road Name: Vineyard Ave.
Road Segment: I-10 WB Ramp

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,580 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,358 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-0.62	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-17.86	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-21.82	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.8	62.9	61.1	55.1	63.7	64.3
Medium Trucks:	58.6	57.0	50.7	49.1	57.6	57.8
Heavy Trucks:	59.4	58.0	48.9	50.2	58.5	58.7
Vehicle Noise:	66.6	64.9	61.7	57.1	65.6	66.1

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	39	83	180	387
CNEL:	42	89	193	415

Monday, May 6, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: Existing
Road Name: Vineyard Ave.
Road Segment: I-10 EB Ramp

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	10,050 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,005 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.93	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-19.17	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-23.12	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	63.5	61.6	59.8	53.8	62.4	63.0
Medium Trucks:	57.2	55.7	49.4	47.8	56.3	56.5
Heavy Trucks:	58.1	56.7	47.6	48.9	57.2	57.4
Vehicle Noise:	65.3	63.6	60.4	55.8	64.3	64.8

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	32	68	147	317
CNEL:	34	73	158	340

Monday, May 6, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: Existing
Road Name: Vineyard Ave.
Road Segment: G St.

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	8,540 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	854 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-2.64	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-19.87	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-23.83	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.8	60.9	59.1	53.1	61.7	62.3
Medium Trucks:	56.5	55.0	48.7	47.1	55.6	55.8
Heavy Trucks:	57.4	56.0	46.9	48.2	56.5	56.7
Vehicle Noise:	64.6	62.9	59.7	55.0	63.6	64.0

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	28	61	132	284
CNEL:	30	66	141	305

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: Existing
Road Name: Vineyard Ave.
Road Segment: D St.

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	5,750 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	575 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-4.35	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-21.59	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-25.55	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	54.8	53.3	47.0	45.4	53.9	54.1
Heavy Trucks:	55.7	54.2	45.2	46.5	54.8	54.9
Vehicle Noise:	62.9	61.2	58.0	53.3	61.9	62.3

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	22	47	101	218
CNEL:	23	50	109	234

Monday, May 6, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: Existing
Road Name: Vineyard Ave.
Road Segment: Holt Blvd.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	5,400 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	540 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-4.63	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-21.87	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-25.82	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.8	58.9	57.1	51.1	59.7	60.3
Medium Trucks:	54.5	53.0	46.7	45.1	53.6	53.8
Heavy Trucks:	55.4	54.0	44.9	46.2	54.5	54.7
Vehicle Noise:	62.6	60.9	57.7	53.1	61.6	62.1

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	21	45	97	209
CNEL:	22	48	104	224

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: Existing
Road Name: Archibold Ave.
Road Segment: I-10 Ramps

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,020 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,502 vehicles
Vehicle Speed:	50 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	70.20	-0.64	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	81.00	-17.88	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	85.38	-21.84	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	66.5	64.6	62.9	56.8	65.4	66.0
Medium Trucks:	60.1	58.6	52.2	50.7	59.1	59.4
Heavy Trucks:	60.5	59.1	50.0	51.3	59.6	59.8
Vehicle Noise:	68.2	66.5	63.4	58.6	67.2	67.6

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	49	106	229	493
CNEL:	53	114	246	530

Monday, May 6, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: Existing
Road Name: Archibold Ave.
Road Segment: I-10 Ramps

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	14,350 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,435 vehicles
Vehicle Speed:	50 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	70.20	-0.84	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	81.00	-18.08	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	85.38	-22.03	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	66.3	64.4	62.7	56.6	65.2	65.8
Medium Trucks:	59.9	58.4	52.0	50.5	58.9	59.2
Heavy Trucks:	60.3	58.9	49.8	51.1	59.4	59.6
Vehicle Noise:	68.0	66.3	63.2	58.4	67.0	67.5

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	48	103	222	478
CNEL:	51	111	239	514

Monday, May 6, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: Existing
Road Name: Archibold Ave.
Road Segment: Guasti Rd.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,510 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,151 vehicles
Vehicle Speed:	50 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	70.20	-1.80	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	81.00	-19.04	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	85.38	-22.99	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	65.4	63.5	61.7	55.6	64.3	64.9
Medium Trucks:	58.9	57.4	51.1	49.5	58.0	58.2
Heavy Trucks:	59.3	57.9	48.9	50.1	58.5	58.6
Vehicle Noise:	67.1	65.3	62.3	57.5	66.0	66.5

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	41	89	192	413
CNEL:	44	96	206	444

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: Existing
Road Name: Inland Empire Blvd.
Road Segment: Vineyard Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	2,250 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	225 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	52 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	50.0 feet
Centerline Dist. to Observer:	50.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	43.000
Medium Trucks:	42.794
Heavy Trucks:	42.814

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-8.43	0.88	-1.20	*-4.65*	0.000	0.000
Medium Trucks:	79.45	-25.67	0.91	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-29.62	0.91	-1.20	*-5.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.7	57.8	56.0	50.0	58.6	59.2
Medium Trucks:	53.5	52.0	45.6	44.1	52.5	52.8
Heavy Trucks:	54.3	52.9	43.9	45.1	53.5	53.6
Vehicle Noise:	61.6	59.8	56.7	52.0	60.5	61.0

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	12	25	54	117
CNEL:	13	27	58	125

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: Existing
Road Name: G St.
Road Segment: Vineyard Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	2,860 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	286 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	30.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	29.816
Medium Trucks:	29.518
Heavy Trucks:	29.547

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-6.88	3.26	-1.20	*-4.49*	0.000	0.000
Medium Trucks:	77.72	-24.11	3.33	-1.20	*-4.86*	0.000	0.000
Heavy Trucks:	82.99	-28.07	3.32	-1.20	*-5.77*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.7	59.8	58.0	52.0	60.6	61.2
Medium Trucks:	55.7	54.2	47.9	46.3	54.8	55.0
Heavy Trucks:	57.0	55.6	46.6	47.8	56.2	56.3
Vehicle Noise:	63.7	62.0	58.7	54.2	62.7	63.2

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	10	21	45	98
CNEL:	10	23	49	105

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: Existing
Road Name: D St.
Road Segment: Vineyard Ave.

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	2,490 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	249 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	30.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	29.816
Medium Trucks:	29.518
Heavy Trucks:	29.547

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-7.48	3.26	-1.20	*-4.49*	0.000	0.000
Medium Trucks:	77.72	-24.72	3.33	-1.20	*-4.86*	0.000	0.000
Heavy Trucks:	82.99	-28.67	3.32	-1.20	*-5.77*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.4	60.0	60.6
Medium Trucks:	55.1	53.6	47.3	45.7	54.2	54.4
Heavy Trucks:	56.4	55.0	46.0	47.2	55.6	55.7
Vehicle Noise:	63.1	61.4	58.1	53.6	62.1	62.6

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	9	19	41	89
CNEL:	10	21	44	96

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: Existing
Road Name: Convention Center Way
Road Segment: Vineyard Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	2,910 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	291 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	38 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	50.0 feet
Centerline Dist. to Observer:	50.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	46.519
Medium Trucks:	46.328
Heavy Trucks:	46.347

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-6.80	0.37	-1.20	*-4.65*	0.000	0.000
Medium Trucks:	77.72	-24.04	0.39	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	82.99	-27.99	0.39	-1.20	*-5.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.9	57.0	55.2	49.2	57.8	58.4
Medium Trucks:	52.9	51.4	45.0	43.5	51.9	52.1
Heavy Trucks:	54.2	52.8	43.7	45.0	53.3	53.5
Vehicle Noise:	60.9	59.2	55.9	51.3	59.9	60.3

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	11	23	49	106
CNEL:	11	24	52	113

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: Existing
Road Name: Convention Center Way
Road Segment: Kline St.

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	2,670 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	267 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	38 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	50.0 feet
Centerline Dist. to Observer:	50.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	46.519
Medium Trucks:	46.328
Heavy Trucks:	46.347

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-7.17	0.37	-1.20	*-4.65*	0.000	0.000
Medium Trucks:	77.72	-24.41	0.39	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	82.99	-28.37	0.39	-1.20	*-5.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.5	56.6	54.8	48.8	57.4	58.0
Medium Trucks:	52.5	51.0	44.6	43.1	51.5	51.8
Heavy Trucks:	53.8	52.4	43.4	44.6	53.0	53.1
Vehicle Noise:	60.5	58.8	55.5	51.0	59.5	59.9

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	10	21	46	100
CNEL:	11	23	50	107

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: Existing
Road Name: Guasti Rd.
Road Segment: Holt Blvd.

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	1,590 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	159 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	52 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	50.0 feet
Centerline Dist. to Observer:	50.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	43.000
Medium Trucks:	42.794
Heavy Trucks:	42.814

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-9.43	0.88	-1.20	*-4.65*	0.000	0.000
Medium Trucks:	77.72	-26.66	0.91	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	82.99	-30.62	0.91	-1.20	*-5.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	56.8	54.9	53.1	47.0	55.7	56.3
Medium Trucks:	50.8	49.3	42.9	41.3	49.8	50.0
Heavy Trucks:	52.1	50.7	41.6	42.9	51.2	51.4
Vehicle Noise:	58.8	57.1	53.8	49.2	57.8	58.2

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	8	16	35	76
CNEL:	8	18	38	82

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: Existing
Road Name: Guasti Rd.
Road Segment: Cardena's Dwy.

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	1,340 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	134 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	52 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	50.0 feet
Centerline Dist. to Observer:	50.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	43.000
Medium Trucks:	42.794
Heavy Trucks:	42.814

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-10.17	0.88	-1.20	*-4.65*	0.000	0.000
Medium Trucks:	77.72	-27.41	0.91	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	82.99	-31.36	0.91	-1.20	*-5.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	56.0	54.1	52.4	46.3	54.9	55.5
Medium Trucks:	50.0	48.5	42.1	40.6	49.1	49.3
Heavy Trucks:	51.3	49.9	40.9	42.1	50.5	50.6
Vehicle Noise:	58.0	56.3	53.0	48.5	57.0	57.5

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	7	15	32	68
CNEL:	7	16	34	73

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: Existing
Road Name: Guasti Rd.
Road Segment: Archibold Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	3,090 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	309 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	52 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	50.0 feet
Centerline Dist. to Observer:	50.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	43.000
Medium Trucks:	42.794
Heavy Trucks:	42.814

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-6.54	0.88	-1.20	*-4.65*	0.000	0.000
Medium Trucks:	77.72	-23.78	0.91	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	82.99	-27.73	0.91	-1.20	*-5.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.7	57.8	56.0	49.9	58.6	59.2
Medium Trucks:	53.6	52.1	45.8	44.2	52.7	52.9
Heavy Trucks:	55.0	53.5	44.5	45.8	54.1	54.2
Vehicle Noise:	61.7	59.9	56.7	52.1	60.6	61.1

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	12	26	55	119
CNEL:	13	27	59	127

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: Existing
Road Name: Holt Blvd.
Road Segment: Vineyard Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,400 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	940 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	42 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	60.0 feet
Centerline Dist. to Observer:	60.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	56.427
Medium Trucks:	56.270
Heavy Trucks:	56.285

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-2.22	-0.89	-1.20	*-4.69*	0.000	0.000
Medium Trucks:	79.45	-19.46	-0.87	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	84.25	-23.41	-0.87	-1.20	*-5.34*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.1	62.3	60.5	54.4	63.1	63.7
Medium Trucks:	57.9	56.4	50.0	48.5	57.0	57.2
Heavy Trucks:	58.8	57.3	48.3	49.6	57.9	58.0
Vehicle Noise:	66.0	64.2	61.1	56.4	65.0	65.4

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	28	60	129	277
CNEL:	30	64	138	297

Monday, May 6, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: Existing
Road Name: Holt Blvd.
Road Segment: Vineyard Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	10,300 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,030 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	42 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	60.0 feet
Centerline Dist. to Observer:	60.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	56.427
Medium Trucks:	56.270
Heavy Trucks:	56.285

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.82	-0.89	-1.20	*-4.69*	0.000	0.000
Medium Trucks:	79.45	-19.06	-0.87	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	84.25	-23.02	-0.87	-1.20	*-5.34*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.5	62.6	60.9	54.8	63.4	64.1
Medium Trucks:	58.3	56.8	50.4	48.9	57.4	57.6
Heavy Trucks:	59.2	57.7	48.7	50.0	58.3	58.4
Vehicle Noise:	66.4	64.6	61.5	56.8	65.4	65.8

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	29	63	137	294
CNEL:	32	68	147	316

Monday, May 6, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: Existing
Road Name: Holt Blvd.
Road Segment: Convetion Center Way

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	10,090 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,009 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	42 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	60.0 feet
Centerline Dist. to Observer:	60.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	56.427
Medium Trucks:	56.270
Heavy Trucks:	56.285

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.91	-0.89	-1.20	*-4.69*	0.000	0.000
Medium Trucks:	79.45	-19.15	-0.87	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	84.25	-23.11	-0.87	-1.20	*-5.34*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.5	62.6	60.8	54.7	63.4	64.0
Medium Trucks:	58.2	56.7	50.4	48.8	57.3	57.5
Heavy Trucks:	59.1	57.6	48.6	49.9	58.2	58.3
Vehicle Noise:	66.3	64.6	61.4	56.7	65.3	65.7

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	29	63	135	290
CNEL:	31	67	145	311

Monday, May 6, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 109
Road Name: Vineyard Ave.
Road Segment: Inland Empire Blvd.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	7,740 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	774 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-3.06	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-20.30	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-24.26	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.4	60.5	58.7	52.6	61.3	61.9
Medium Trucks:	56.1	54.6	48.2	46.7	55.2	55.4
Heavy Trucks:	57.0	55.5	46.5	47.7	56.1	56.2
Vehicle Noise:	64.2	62.4	59.3	54.6	63.2	63.6

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	27	57	123	266
CNEL:	29	61	132	285

Monday, May 6, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 109
Road Name: Vineyard Ave.
Road Segment: Inland Empire Blvd.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	16,630 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,663 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	0.26	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-16.98	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-20.94	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	65.7	63.8	62.0	56.0	64.6	65.2
Medium Trucks:	59.4	57.9	51.6	50.0	58.5	58.7
Heavy Trucks:	60.3	58.9	49.8	51.1	59.4	59.5
Vehicle Noise:	67.5	65.8	62.6	57.9	66.5	66.9

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	44	95	206	443
CNEL:	48	102	221	475

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 109
Road Name: Vineyard Ave.
Road Segment: I-10 WB Ramp
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,980 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,398 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-0.50	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-17.73	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-21.69	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.9	63.0	61.3	55.2	63.8	64.4
Medium Trucks:	58.7	57.2	50.8	49.3	57.7	58.0
Heavy Trucks:	59.5	58.1	49.1	50.3	58.7	58.8
Vehicle Noise:	66.8	65.0	61.9	57.2	65.7	66.2

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	39	85	183	395
CNEL:	42	91	196	423

Monday, May 6, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 109
Road Name: Vineyard Ave.
Road Segment: I-10 EB Ramp

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	10,450 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,045 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.76	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-19.00	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-22.95	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	63.7	61.8	60.0	53.9	62.6	63.2
Medium Trucks:	57.4	55.9	49.5	48.0	56.5	56.7
Heavy Trucks:	58.3	56.8	47.8	49.0	57.4	57.5
Vehicle Noise:	65.5	63.8	60.6	55.9	64.5	64.9

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	32	70	151	325
CNEL:	35	75	162	349

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 109
Road Name: Vineyard Ave.
Road Segment: G St.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	8,960 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	896 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-2.43	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-19.67	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-23.62	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	63.0	61.1	59.3	53.3	61.9	62.5
Medium Trucks:	56.7	55.2	48.9	47.3	55.8	56.0
Heavy Trucks:	57.6	56.2	47.1	48.4	56.7	56.9
Vehicle Noise:	64.8	63.1	59.9	55.3	63.8	64.3

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	29	63	136	293
CNEL:	31	68	146	315

Monday, May 6, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 109
Road Name: Vineyard Ave.
Road Segment: D St.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	5,800 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	580 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-4.32	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-21.56	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-25.51	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.4	60.0	60.6
Medium Trucks:	54.9	53.4	47.0	45.4	53.9	54.1
Heavy Trucks:	55.7	54.3	45.2	46.5	54.8	55.0
Vehicle Noise:	62.9	61.2	58.0	53.4	61.9	62.4

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	22	47	102	219
CNEL:	24	51	109	235

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 109
Road Name: Vineyard Ave.
Road Segment: Holt Blvd.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	5,710 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	571 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	Day	Evening	Night	Daily
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	68.46	-4.38	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-21.62	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-25.58	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	61.0	59.1	57.4	51.3	59.9	60.5
Medium Trucks:	54.8	53.3	46.9	45.4	53.8	54.1
Heavy Trucks:	55.6	54.2	45.2	46.4	54.8	54.9
Vehicle Noise:	62.9	61.1	58.0	53.3	61.8	62.3

Centerline Distance to Noise Contour (in feet)

	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	22	47	101	217
CNEL:	23	50	108	233

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 109
Road Name: Archibold Ave.
Road Segment: I-10 Ramps

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,230 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,523 vehicles
Vehicle Speed:	50 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	70.20	-0.58	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	81.00	-17.82	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	85.38	-21.78	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	66.6	64.7	62.9	56.9	65.5	66.1
Medium Trucks:	60.1	58.6	52.3	50.7	59.2	59.4
Heavy Trucks:	60.6	59.1	50.1	51.4	59.7	59.8
Vehicle Noise:	68.3	66.5	63.5	58.7	67.2	67.7

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	50	107	231	498
CNEL:	53	115	248	535

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 109
Road Name: Archibold Ave.
Road Segment: I-10 Ramps

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	14,550 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,455 vehicles
Vehicle Speed:	50 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	70.20	-0.78	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	81.00	-18.02	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	85.38	-21.97	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	66.4	64.5	62.7	56.7	65.3	65.9
Medium Trucks:	59.9	58.4	52.1	50.5	59.0	59.2
Heavy Trucks:	60.4	58.9	49.9	51.2	59.5	59.6
Vehicle Noise:	68.1	66.3	63.3	58.5	67.0	67.5

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	48	104	224	483
CNEL:	52	112	241	519

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 109
Road Name: Archibold Ave.
Road Segment: Guasti Rd.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,690 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,169 vehicles
Vehicle Speed:	50 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	70.20	-1.73	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	81.00	-18.97	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	85.38	-22.92	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	65.4	63.5	61.8	55.7	64.3	64.9
Medium Trucks:	59.0	57.5	51.1	49.6	58.0	58.3
Heavy Trucks:	59.4	58.0	49.0	50.2	58.6	58.7
Vehicle Noise:	67.1	65.4	62.3	57.5	66.1	66.6

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	42	90	194	417
CNEL:	45	97	208	448

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 109
Road Name: Inland Empire Blvd.
Road Segment: Vineyard Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	2,250 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	225 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	52 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	50.0 feet
Centerline Dist. to Observer:	50.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	43.000
Medium Trucks:	42.794
Heavy Trucks:	42.814

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-8.43	0.88	-1.20	*-4.65*	0.000	0.000
Medium Trucks:	79.45	-25.67	0.91	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-29.62	0.91	-1.20	*-5.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.7	57.8	56.0	50.0	58.6	59.2
Medium Trucks:	53.5	52.0	45.6	44.1	52.5	52.8
Heavy Trucks:	54.3	52.9	43.9	45.1	53.5	53.6
Vehicle Noise:	61.6	59.8	56.7	52.0	60.5	61.0

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	12	25	54	117
CNEL:	13	27	58	125

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 109
Road Name: G St.
Road Segment: Vineyard Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	2,880 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	288 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	30.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	29.816
Medium Trucks:	29.518
Heavy Trucks:	29.547

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-6.85	3.26	-1.20	*-4.49*	0.000	0.000
Medium Trucks:	77.72	-24.08	3.33	-1.20	*-4.86*	0.000	0.000
Heavy Trucks:	82.99	-28.04	3.32	-1.20	*-5.77*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.7	59.8	58.1	52.0	60.6	61.2
Medium Trucks:	55.8	54.3	47.9	46.3	54.8	55.0
Heavy Trucks:	57.1	55.7	46.6	47.9	56.2	56.4
Vehicle Noise:	63.8	62.0	58.7	54.2	62.7	63.2

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	10	21	46	98
CNEL:	11	23	49	105

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 109
Road Name: D St.
Road Segment: Vineyard Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	2,560 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	256 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	30.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	29.816
Medium Trucks:	29.518
Heavy Trucks:	29.547

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-7.36	3.26	-1.20	*-4.49*	0.000	0.000
Medium Trucks:	77.72	-24.60	3.33	-1.20	*-4.86*	0.000	0.000
Heavy Trucks:	82.99	-28.55	3.32	-1.20	*-5.77*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.2	59.3	57.6	51.5	60.1	60.7
Medium Trucks:	55.2	53.7	47.4	45.8	54.3	54.5
Heavy Trucks:	56.6	55.1	46.1	47.4	55.7	55.8
Vehicle Noise:	63.2	61.5	58.2	53.7	62.2	62.7

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	9	20	42	91
CNEL:	10	21	45	97

Monday, May 6, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 109
Road Name: Convention Center Way
Road Segment: Vineyard Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	3,350 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	335 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	38 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	50.0 feet
Centerline Dist. to Observer:	50.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	46.519
Medium Trucks:	46.328
Heavy Trucks:	46.347

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-6.19	0.37	-1.20	*-4.65*	0.000	0.000
Medium Trucks:	77.72	-23.43	0.39	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	82.99	-27.38	0.39	-1.20	*-5.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.5	57.6	55.8	49.8	58.4	59.0
Medium Trucks:	53.5	52.0	45.6	44.1	52.5	52.8
Heavy Trucks:	54.8	53.4	44.3	45.6	53.9	54.1
Vehicle Noise:	61.5	59.8	56.5	51.9	60.5	60.9

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	12	25	54	116
CNEL:	12	27	58	124

Monday, May 6, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 109
Road Name: Convention Center Way
Road Segment: Kline St.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	3,130 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	313 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	38 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	50.0 feet
Centerline Dist. to Observer:	50.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	46.519
Medium Trucks:	46.328
Heavy Trucks:	46.347

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-6.48	0.37	-1.20	*-4.65*	0.000	0.000
Medium Trucks:	77.72	-23.72	0.39	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	82.99	-27.68	0.39	-1.20	*-5.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.2	57.3	55.5	49.5	58.1	58.7
Medium Trucks:	53.2	51.7	45.3	43.8	52.2	52.5
Heavy Trucks:	54.5	53.1	44.0	45.3	53.7	53.8
Vehicle Noise:	61.2	59.5	56.2	51.7	60.2	60.6

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	11	24	51	111
CNEL:	12	26	55	119

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 109
Road Name: Guasti Rd.
Road Segment: Holt Blvd.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	2,840 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	284 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	52 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	50.0 feet
Centerline Dist. to Observer:	50.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	43.000
Medium Trucks:	42.794
Heavy Trucks:	42.814

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-6.91	0.88	-1.20	*-4.65*	0.000	0.000
Medium Trucks:	77.72	-24.14	0.91	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	82.99	-28.10	0.91	-1.20	*-5.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.3	57.4	55.6	49.6	58.2	58.8
Medium Trucks:	53.3	51.8	45.4	43.9	52.3	52.6
Heavy Trucks:	54.6	53.2	44.1	45.4	53.7	53.9
Vehicle Noise:	61.3	59.6	56.3	51.7	60.3	60.7

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	11	24	52	112
CNEL:	12	26	56	120

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 109
Road Name: Guasti Rd.
Road Segment: Cardena's Dwy.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	1,800 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	180 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	52 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	50.0 feet
Centerline Dist. to Observer:	50.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	Day	Evening	Night	Daily
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	43.000
Medium Trucks:	42.794
Heavy Trucks:	42.814

FHWA Noise Model Calculations

VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	66.51	-8.89	0.88	-1.20	*-4.65*	0.000	0.000
Medium Trucks:	77.72	-26.13	0.91	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	82.99	-30.08	0.91	-1.20	*-5.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	57.3	55.4	53.6	47.6	56.2	56.8
Medium Trucks:	51.3	49.8	43.4	41.9	50.3	50.6
Heavy Trucks:	52.6	51.2	42.2	43.4	51.8	51.9
Vehicle Noise:	59.3	57.6	54.3	49.8	58.3	58.7

Centerline Distance to Noise Contour (in feet)

	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	8	18	39	83
CNEL:	9	19	41	89

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 109
Road Name: Guasti Rd.
Road Segment: Archibold Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	3,160 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	316 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	52 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	50.0 feet
Centerline Dist. to Observer:	50.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	43.000
Medium Trucks:	42.794
Heavy Trucks:	42.814

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-6.44	0.88	-1.20	*-4.65*	0.000	0.000
Medium Trucks:	77.72	-23.68	0.91	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	82.99	-27.64	0.91	-1.20	*-5.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.7	57.8	56.1	50.0	58.7	59.3
Medium Trucks:	53.7	52.2	45.9	44.3	52.8	53.0
Heavy Trucks:	55.1	53.6	44.6	45.9	54.2	54.3
Vehicle Noise:	61.8	60.0	56.8	52.2	60.7	61.2

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	12	26	56	121
CNEL:	13	28	60	129

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 109
Road Name: Holt Blvd.
Road Segment: Vineyard Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,650 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	965 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	42 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	60.0 feet
Centerline Dist. to Observer:	60.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	56.427
Medium Trucks:	56.270
Heavy Trucks:	56.285

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-2.11	-0.89	-1.20	*-4.69*	0.000	0.000
Medium Trucks:	79.45	-19.34	-0.87	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	84.25	-23.30	-0.87	-1.20	*-5.34*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.3	62.4	60.6	54.5	63.2	63.8
Medium Trucks:	58.0	56.5	50.2	48.6	57.1	57.3
Heavy Trucks:	58.9	57.5	48.4	49.7	58.0	58.2
Vehicle Noise:	66.1	64.4	61.2	56.5	65.1	65.5

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	28	61	131	282
CNEL:	30	65	140	302

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 109
Road Name: Holt Blvd.
Road Segment: Vineyard Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	10,890 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,089 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	42 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	60.0 feet
Centerline Dist. to Observer:	60.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	56.427
Medium Trucks:	56.270
Heavy Trucks:	56.285

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.58	-0.89	-1.20	*-4.69*	0.000	0.000
Medium Trucks:	79.45	-18.82	-0.87	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	84.25	-22.77	-0.87	-1.20	*-5.34*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.8	62.9	61.1	55.1	63.7	64.3
Medium Trucks:	58.6	57.0	50.7	49.1	57.6	57.8
Heavy Trucks:	59.4	58.0	48.9	50.2	58.5	58.7
Vehicle Noise:	66.6	64.9	61.7	57.1	65.6	66.1

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	31	66	142	305
CNEL:	33	71	152	328

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 109
Road Name: Holt Blvd.
Road Segment: Convetion Center Way
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	10,300 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,030 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	42 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	60.0 feet
Centerline Dist. to Observer:	60.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	56.427
Medium Trucks:	56.270
Heavy Trucks:	56.285

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.82	-0.89	-1.20	*-4.69*	0.000	0.000
Medium Trucks:	79.45	-19.06	-0.87	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	84.25	-23.02	-0.87	-1.20	*-5.34*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.5	62.6	60.9	54.8	63.4	64.1
Medium Trucks:	58.3	56.8	50.4	48.9	57.4	57.6
Heavy Trucks:	59.2	57.7	48.7	50.0	58.3	58.4
Vehicle Noise:	66.4	64.6	61.5	56.8	65.4	65.8

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	29	63	137	294
CNEL:	32	68	147	316

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 210
Road Name: Vineyard Ave.
Road Segment: Inland Empire Blvd.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,490 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	949 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-2.18	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-19.42	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-23.37	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	63.2	61.3	59.6	53.5	62.1	62.7
Medium Trucks:	57.0	55.5	49.1	47.6	56.0	56.3
Heavy Trucks:	57.8	56.4	47.4	48.6	57.0	57.1
Vehicle Noise:	65.1	63.3	60.2	55.5	64.0	64.5

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	30	66	141	305
CNEL:	33	70	152	327

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 210
Road Name: Vineyard Ave.
Road Segment: Inland Empire Blvd.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	19,230 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,923 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	0.89	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-16.35	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-20.31	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	66.3	64.4	62.6	56.6	65.2	65.8
Medium Trucks:	60.1	58.6	52.2	50.6	59.1	59.3
Heavy Trucks:	60.9	59.5	50.4	51.7	60.1	60.2
Vehicle Noise:	68.1	66.4	63.3	58.6	67.1	67.6

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	49	105	227	488
CNEL:	52	113	243	523

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 210
Road Name: Vineyard Ave.
Road Segment: I-10 WB Ramp

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	16,220 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,622 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	0.15	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-17.09	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-21.04	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	65.6	63.7	61.9	55.8	64.5	65.1
Medium Trucks:	59.3	57.8	51.5	49.9	58.4	58.6
Heavy Trucks:	60.2	58.7	49.7	51.0	59.3	59.4
Vehicle Noise:	67.4	65.7	62.5	57.8	66.4	66.8

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	44	94	202	436
CNEL:	47	101	217	467

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 210
Road Name: Vineyard Ave.
Road Segment: I-10 EB Ramp

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	12,380 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,238 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.02	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-18.26	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-22.22	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.4	62.5	60.7	54.7	63.3	63.9
Medium Trucks:	58.2	56.6	50.3	48.7	57.2	57.4
Heavy Trucks:	59.0	57.6	48.5	49.8	58.1	58.3
Vehicle Noise:	66.2	64.5	61.3	56.7	65.2	65.7

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	36	78	169	364
CNEL:	39	84	181	390

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 210
Road Name: Vineyard Ave.
Road Segment: G St.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	10,290 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,029 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.83	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-19.07	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-23.02	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	63.6	61.7	59.9	53.9	62.5	63.1
Medium Trucks:	57.3	55.8	49.5	47.9	56.4	56.6
Heavy Trucks:	58.2	56.8	47.7	49.0	57.3	57.5
Vehicle Noise:	65.4	63.7	60.5	55.9	64.4	64.9

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	32	69	149	322
CNEL:	35	74	160	345

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 210
Road Name: Vineyard Ave.
Road Segment: D St.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	6,720 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	672 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-3.68	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-20.92	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-24.87	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.7	59.8	58.1	52.0	60.6	61.2
Medium Trucks:	55.5	54.0	47.6	46.1	54.5	54.8
Heavy Trucks:	56.3	54.9	45.9	47.1	55.5	55.6
Vehicle Noise:	63.6	61.8	58.7	54.0	62.5	63.0

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	24	52	112	242
CNEL:	26	56	121	260

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 210
Road Name: Vineyard Ave.
Road Segment: Holt Blvd.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	5,820 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	582 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-4.30	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-21.54	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-25.50	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.5	51.4	60.0	60.6
Medium Trucks:	54.9	53.4	47.0	45.5	53.9	54.2
Heavy Trucks:	55.7	54.3	45.3	46.5	54.9	55.0
Vehicle Noise:	63.0	61.2	58.1	53.4	61.9	62.4

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	22	47	102	220
CNEL:	24	51	110	236

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 210
Road Name: Archibold Ave.
Road Segment: I-10 Ramps
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	20,360 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	2,036 vehicles
Vehicle Speed:	50 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	70.20	0.68	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	81.00	-16.56	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	85.38	-20.51	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	67.8	65.9	64.2	58.1	66.7	67.3
Medium Trucks:	61.4	59.9	53.5	52.0	60.5	60.7
Heavy Trucks:	61.8	60.4	51.4	52.6	61.0	61.1
Vehicle Noise:	69.5	67.8	64.7	60.0	68.5	69.0

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	60	130	280	604
CNEL:	65	140	301	649

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 210
Road Name: Archibold Ave.
Road Segment: I-10 Ramps

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	18,920 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,892 vehicles
Vehicle Speed:	50 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	70.20	0.36	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	81.00	-16.88	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	85.38	-20.83	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	67.5	65.6	63.9	57.8	66.4	67.0
Medium Trucks:	61.1	59.6	53.2	51.7	60.1	60.4
Heavy Trucks:	61.5	60.1	51.0	52.3	60.6	60.8
Vehicle Noise:	69.2	67.5	64.4	59.6	68.2	68.7

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	58	124	267	575
CNEL:	62	133	287	618

Monday, May 6, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 210
Road Name: Archibold Ave.
Road Segment: Guasti Rd.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	12,090 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,209 vehicles
Vehicle Speed:	50 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	70.20	-1.58	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	81.00	-18.82	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	85.38	-22.78	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	65.6	63.7	61.9	55.9	64.5	65.1
Medium Trucks:	59.1	57.6	51.3	49.7	58.2	58.4
Heavy Trucks:	59.6	58.1	49.1	50.3	58.7	58.8
Vehicle Noise:	67.3	65.5	62.5	57.7	66.2	66.7

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	43	92	198	427
CNEL:	46	99	213	458

Monday, May 6, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 210
Road Name: Inland Empire Blvd.
Road Segment: Vineyard Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	4,890 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	489 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	52 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	50.0 feet
Centerline Dist. to Observer:	50.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	43.000
Medium Trucks:	42.794
Heavy Trucks:	42.814

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-5.06	0.88	-1.20	*-4.65*	0.000	0.000
Medium Trucks:	79.45	-22.30	0.91	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-26.25	0.91	-1.20	*-5.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	63.1	61.2	59.4	53.4	62.0	62.6
Medium Trucks:	56.9	55.4	49.0	47.4	55.9	56.1
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	64.9	63.2	60.0	55.4	63.9	64.4

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	20	42	91	196
CNEL:	21	45	98	210

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 210
Road Name: G St.
Road Segment: Vineyard Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	3,690 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	369 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	30.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	29.816
Medium Trucks:	29.518
Heavy Trucks:	29.547

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-5.77	3.26	-1.20	*-4.49*	0.000	0.000
Medium Trucks:	77.72	-23.01	3.33	-1.20	*-4.86*	0.000	0.000
Heavy Trucks:	82.99	-26.96	3.32	-1.20	*-5.77*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.8	60.9	59.1	53.1	61.7	62.3
Medium Trucks:	56.8	55.3	49.0	47.4	55.9	56.1
Heavy Trucks:	58.2	56.7	47.7	48.9	57.3	57.4
Vehicle Noise:	64.8	63.1	59.8	55.3	63.8	64.3

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	12	25	54	116
CNEL:	12	27	58	124

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 210
Road Name: D St.
Road Segment: Vineyard Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	3,140 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	314 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	30.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	29.816
Medium Trucks:	29.518
Heavy Trucks:	29.547

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-6.47	3.26	-1.20	*-4.49*	0.000	0.000
Medium Trucks:	77.72	-23.71	3.33	-1.20	*-4.86*	0.000	0.000
Heavy Trucks:	82.99	-27.66	3.32	-1.20	*-5.77*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.1	60.2	58.4	52.4	61.0	61.6
Medium Trucks:	56.1	54.6	48.3	46.7	55.2	55.4
Heavy Trucks:	57.5	56.0	47.0	48.2	56.6	56.7
Vehicle Noise:	64.1	62.4	59.1	54.6	63.1	63.6

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	10	22	48	104
CNEL:	11	24	52	112

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 210
Road Name: Convention Center Way
Road Segment: Vineyard Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	3,650 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	365 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	38 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	50.0 feet
Centerline Dist. to Observer:	50.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	46.519
Medium Trucks:	46.328
Heavy Trucks:	46.347

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-5.82	0.37	-1.20	*-4.65*	0.000	0.000
Medium Trucks:	77.72	-23.05	0.39	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	82.99	-27.01	0.39	-1.20	*-5.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.9	58.0	56.2	50.1	58.8	59.4
Medium Trucks:	53.9	52.3	46.0	44.4	52.9	53.1
Heavy Trucks:	55.2	53.8	44.7	46.0	54.3	54.4
Vehicle Noise:	61.9	60.1	56.9	52.3	60.9	61.3

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	12	26	57	123
CNEL:	13	28	61	132

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 210
Road Name: Convention Center Way
Road Segment: Kline St.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	3,400 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	340 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	38 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	50.0 feet
Centerline Dist. to Observer:	50.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	46.519
Medium Trucks:	46.328
Heavy Trucks:	46.347

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-6.12	0.37	-1.20	*-4.65*	0.000	0.000
Medium Trucks:	77.72	-23.36	0.39	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	82.99	-27.32	0.39	-1.20	*-5.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.6	57.7	55.9	49.8	58.5	59.1
Medium Trucks:	53.5	52.0	45.7	44.1	52.6	52.8
Heavy Trucks:	54.9	53.4	44.4	45.7	54.0	54.1
Vehicle Noise:	61.6	59.8	56.6	52.0	60.5	61.0

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	12	25	54	117
CNEL:	13	27	58	125

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 210
Road Name: Guasti Rd.
Road Segment: Holt Blvd.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	2,890 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	289 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	52 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	50.0 feet
Centerline Dist. to Observer:	50.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	43.000
Medium Trucks:	42.794
Heavy Trucks:	42.814

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-6.83	0.88	-1.20	*-4.65*	0.000	0.000
Medium Trucks:	77.72	-24.07	0.91	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	82.99	-28.02	0.91	-1.20	*-5.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.4	57.5	55.7	49.6	58.3	58.9
Medium Trucks:	53.4	51.8	45.5	43.9	52.4	52.6
Heavy Trucks:	54.7	53.3	44.2	45.5	53.8	54.0
Vehicle Noise:	61.4	59.6	56.4	51.8	60.4	60.8

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	11	25	53	114
CNEL:	12	26	57	122

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 210
Road Name: Guasti Rd.
Road Segment: Cardena's Dwy.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	2,600 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	260 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	52 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	50.0 feet
Centerline Dist. to Observer:	50.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	43.000
Medium Trucks:	42.794
Heavy Trucks:	42.814

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-7.29	0.88	-1.20	*-4.65*	0.000	0.000
Medium Trucks:	77.72	-24.53	0.91	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	82.99	-28.48	0.91	-1.20	*-5.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.9	57.0	55.2	49.2	57.8	58.4
Medium Trucks:	52.9	51.4	45.0	43.5	51.9	52.2
Heavy Trucks:	54.2	52.8	43.8	45.0	53.4	53.5
Vehicle Noise:	60.9	59.2	55.9	51.4	59.9	60.3

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	11	23	49	106
CNEL:	11	24	53	114

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 210
Road Name: Guasti Rd.
Road Segment: Archibold Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	7,550 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	755 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	52 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	50.0 feet
Centerline Dist. to Observer:	50.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	43.000
Medium Trucks:	42.794
Heavy Trucks:	42.814

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-2.66	0.88	-1.20	*-4.65*	0.000	0.000
Medium Trucks:	77.72	-19.90	0.91	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	82.99	-23.85	0.91	-1.20	*-5.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	63.5	61.6	59.9	53.8	62.4	63.0
Medium Trucks:	57.5	56.0	49.7	48.1	56.6	56.8
Heavy Trucks:	58.8	57.4	48.4	49.6	58.0	58.1
Vehicle Noise:	65.5	63.8	60.5	56.0	64.5	65.0

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	22	46	100	216
CNEL:	23	50	107	231

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 210
Road Name: Holt Blvd.
Road Segment: Vineyard Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	12,070 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,207 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	42 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	60.0 feet
Centerline Dist. to Observer:	60.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	56.427
Medium Trucks:	56.270
Heavy Trucks:	56.285

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.13	-0.89	-1.20	*-4.69*	0.000	0.000
Medium Trucks:	79.45	-18.37	-0.87	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	84.25	-22.33	-0.87	-1.20	*-5.34*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	65.2	63.3	61.6	55.5	64.1	64.7
Medium Trucks:	59.0	57.5	51.1	49.6	58.1	58.3
Heavy Trucks:	59.8	58.4	49.4	50.6	59.0	59.1
Vehicle Noise:	67.1	65.3	62.2	57.5	66.0	66.5

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	33	70	152	327
CNEL:	35	76	163	351

Monday, May 6, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 210
Road Name: Holt Blvd.
Road Segment: Vineyard Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	10,600 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,060 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	42 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	60.0 feet
Centerline Dist. to Observer:	60.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	56.427
Medium Trucks:	56.270
Heavy Trucks:	56.285

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.70	-0.89	-1.20	*-4.69*	0.000	0.000
Medium Trucks:	79.45	-18.94	-0.87	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	84.25	-22.89	-0.87	-1.20	*-5.34*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.7	62.8	61.0	55.0	63.6	64.2
Medium Trucks:	58.4	56.9	50.6	49.0	57.5	57.7
Heavy Trucks:	59.3	57.9	48.8	50.1	58.4	58.6
Vehicle Noise:	66.5	64.8	61.6	56.9	65.5	65.9

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	30	65	139	300
CNEL:	32	69	149	322

Monday, May 6, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Parcel 210
Road Name: Holt Blvd.
Road Segment: Convetion Center Way
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	10,710 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,071 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	42 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	60.0 feet
Centerline Dist. to Observer:	60.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	56.427
Medium Trucks:	56.270
Heavy Trucks:	56.285

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.65	-0.89	-1.20	*-4.69*	0.000	0.000
Medium Trucks:	79.45	-18.89	-0.87	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	84.25	-22.85	-0.87	-1.20	*-5.34*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.7	62.8	61.1	55.0	63.6	64.2
Medium Trucks:	58.5	57.0	50.6	49.1	57.5	57.8
Heavy Trucks:	59.3	57.9	48.9	50.1	58.5	58.6
Vehicle Noise:	66.6	64.8	61.7	57.0	65.5	66.0

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	30	65	140	302
CNEL:	32	70	150	324

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Project
Road Name: Vineyard Ave.
Road Segment: Inland Empire Blvd.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,600 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	960 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-2.13	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-19.37	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-23.32	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	63.3	61.4	59.6	53.6	62.2	62.8
Medium Trucks:	57.0	55.5	49.2	47.6	56.1	56.3
Heavy Trucks:	57.9	56.5	47.4	48.7	57.0	57.2
Vehicle Noise:	65.1	63.4	60.2	55.6	64.1	64.6

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	31	66	143	307
CNEL:	33	71	153	329

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Project
Road Name: Vineyard Ave.
Road Segment: Inland Empire Blvd.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	19,330 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,933 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	0.91	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-16.33	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-20.28	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	66.3	64.4	62.7	56.6	65.2	65.8
Medium Trucks:	60.1	58.6	52.2	50.7	59.1	59.4
Heavy Trucks:	60.9	59.5	50.5	51.7	60.1	60.2
Vehicle Noise:	68.2	66.4	63.3	58.6	67.1	67.6

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	49	105	227	490
CNEL:	53	113	244	525

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Project
Road Name: Vineyard Ave.
Road Segment: I-10 WB Ramp

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	16,620 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,662 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	0.26	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-16.98	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-20.94	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	65.7	63.8	62.0	56.0	64.6	65.2
Medium Trucks:	59.4	57.9	51.6	50.0	58.5	58.7
Heavy Trucks:	60.3	58.8	49.8	51.1	59.4	59.5
Vehicle Noise:	67.5	65.8	62.6	57.9	66.5	66.9

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	44	95	206	443
CNEL:	47	102	220	475

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Project
Road Name: Vineyard Ave.
Road Segment: I-10 EB Ramp

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	12,780 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,278 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-0.89	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-18.12	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-22.08	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.5	62.6	60.9	54.8	63.4	64.0
Medium Trucks:	58.3	56.8	50.4	48.9	57.3	57.6
Heavy Trucks:	59.1	57.7	48.7	49.9	58.3	58.4
Vehicle Noise:	66.4	64.6	61.5	56.8	65.3	65.8

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	37	80	172	372
CNEL:	40	86	185	399

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Project
Road Name: Vineyard Ave.
Road Segment: G St.

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	10,710 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,071 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.65	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-18.89	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-22.85	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	63.8	61.9	60.1	54.0	62.7	63.3
Medium Trucks:	57.5	56.0	49.7	48.1	56.6	56.8
Heavy Trucks:	58.4	56.9	47.9	49.2	57.5	57.6
Vehicle Noise:	65.6	63.9	60.7	56.0	64.6	65.0

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	33	71	153	330
CNEL:	35	76	164	354

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Project
Road Name: Vineyard Ave.
Road Segment: D St.

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	6,770 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	677 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-3.65	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-20.88	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-24.84	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.8	59.9	58.1	52.1	60.7	61.3
Medium Trucks:	55.5	54.0	47.7	46.1	54.6	54.8
Heavy Trucks:	56.4	54.9	45.9	47.2	55.5	55.6
Vehicle Noise:	63.6	61.9	58.7	54.0	62.6	63.0

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	24	52	113	243
CNEL:	26	56	121	261

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Project
Road Name: Vineyard Ave.
Road Segment: Holt Blvd.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	6,130 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	613 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-4.08	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-21.31	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-25.27	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.3	59.4	57.7	51.6	60.2	60.8
Medium Trucks:	55.1	53.6	47.2	45.7	54.1	54.4
Heavy Trucks:	55.9	54.5	45.5	46.7	55.1	55.2
Vehicle Noise:	63.2	61.4	58.3	53.6	62.1	62.6

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	23	49	106	228
CNEL:	24	53	113	244

Monday, May 6, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Project
Road Name: Archibold Ave.
Road Segment: I-10 Ramps

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	20,570 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	2,057 vehicles
Vehicle Speed:	50 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	70.20	0.72	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	81.00	-16.51	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	85.38	-20.47	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	67.9	66.0	64.2	58.2	66.8	67.4
Medium Trucks:	61.4	59.9	53.6	52.0	60.5	60.7
Heavy Trucks:	61.9	60.4	51.4	52.7	61.0	61.1
Vehicle Noise:	69.6	67.8	64.8	60.0	68.5	69.0

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	61	131	282	608
CNEL:	65	141	303	653

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Project
Road Name: Archibold Ave.
Road Segment: I-10 Ramps

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	19,120 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,912 vehicles
Vehicle Speed:	50 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	70.20	0.41	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	81.00	-16.83	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	85.38	-20.79	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	67.6	65.7	63.9	57.8	66.5	67.1
Medium Trucks:	61.1	59.6	53.3	51.7	60.2	60.4
Heavy Trucks:	61.5	60.1	51.1	52.3	60.7	60.8
Vehicle Noise:	69.3	67.5	64.5	59.7	68.2	68.7

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	58	125	269	579
CNEL:	62	134	289	622

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Project
Road Name: Archibold Ave.
Road Segment: Guasti Rd.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	12,270 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,227 vehicles
Vehicle Speed:	50 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	70.20	-1.52	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	81.00	-18.76	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	85.38	-22.71	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	65.6	63.7	62.0	55.9	64.5	65.1
Medium Trucks:	59.2	57.7	51.3	49.8	58.3	58.5
Heavy Trucks:	59.6	58.2	49.2	50.4	58.8	58.9
Vehicle Noise:	67.3	65.6	62.5	57.8	66.3	66.8

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	43	93	200	431
CNEL:	46	100	215	463

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Project
Road Name: Inland Empire Blvd.
Road Segment: Vineyard Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	4,890 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	489 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	52 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	50.0 feet
Centerline Dist. to Observer:	50.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	43.000
Medium Trucks:	42.794
Heavy Trucks:	42.814

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-5.06	0.88	-1.20	*-4.65*	0.000	0.000
Medium Trucks:	79.45	-22.30	0.91	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-26.25	0.91	-1.20	*-5.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	63.1	61.2	59.4	53.4	62.0	62.6
Medium Trucks:	56.9	55.4	49.0	47.4	55.9	56.1
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	64.9	63.2	60.0	55.4	63.9	64.4

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	20	42	91	196
CNEL:	21	45	98	210

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Project
Road Name: G St.
Road Segment: Vineyard Ave.

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	3,710 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	371 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	30.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	29.816
Medium Trucks:	29.518
Heavy Trucks:	29.547

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-5.75	3.26	-1.20	*-4.49*	0.000	0.000
Medium Trucks:	77.72	-22.98	3.33	-1.20	*-4.86*	0.000	0.000
Heavy Trucks:	82.99	-26.94	3.32	-1.20	*-5.77*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.8	60.9	59.2	53.1	61.7	62.3
Medium Trucks:	56.9	55.4	49.0	47.4	55.9	56.1
Heavy Trucks:	58.2	56.8	47.7	49.0	57.3	57.5
Vehicle Noise:	64.9	63.1	59.8	55.3	63.8	64.3

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	12	25	54	117
CNEL:	12	27	58	125

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Project
Road Name: D St.
Road Segment: Vineyard Ave.

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	3,210 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	321 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	30.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	29.816
Medium Trucks:	29.518
Heavy Trucks:	29.547

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-6.37	3.26	-1.20	*-4.49*	0.000	0.000
Medium Trucks:	77.72	-23.61	3.33	-1.20	*-4.86*	0.000	0.000
Heavy Trucks:	82.99	-27.57	3.32	-1.20	*-5.77*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.2	60.3	58.5	52.5	61.1	61.7
Medium Trucks:	56.2	54.7	48.4	46.8	55.3	55.5
Heavy Trucks:	57.5	56.1	47.1	48.3	56.7	56.8
Vehicle Noise:	64.2	62.5	59.2	54.7	63.2	63.7

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	11	23	49	106
CNEL:	11	24	53	113

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Project
Road Name: Convention Center Way
Road Segment: Vineyard Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	4,090 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	409 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	38 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	50.0 feet
Centerline Dist. to Observer:	50.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	46.519
Medium Trucks:	46.328
Heavy Trucks:	46.347

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-5.32	0.37	-1.20	*-4.65*	0.000	0.000
Medium Trucks:	77.72	-22.56	0.39	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	82.99	-26.52	0.39	-1.20	*-5.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.4	58.5	56.7	50.6	59.3	59.9
Medium Trucks:	54.3	52.8	46.5	44.9	53.4	53.6
Heavy Trucks:	55.7	54.2	45.2	46.5	54.8	54.9
Vehicle Noise:	62.4	60.6	57.4	52.8	61.4	61.8

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	13	29	62	133
CNEL:	14	31	66	142

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Project
Road Name: Convention Center Way
Road Segment: Kline St.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	3,860 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	386 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	38 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	50.0 feet
Centerline Dist. to Observer:	50.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	46.519
Medium Trucks:	46.328
Heavy Trucks:	46.347

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-5.57	0.37	-1.20	*-4.65*	0.000	0.000
Medium Trucks:	77.72	-22.81	0.39	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	82.99	-26.77	0.39	-1.20	*-5.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.1	58.2	56.4	50.4	59.0	59.6
Medium Trucks:	54.1	52.6	46.2	44.7	53.1	53.4
Heavy Trucks:	55.4	54.0	45.0	46.2	54.6	54.7
Vehicle Noise:	62.1	60.4	57.1	52.6	61.1	61.5

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	13	27	59	128
CNEL:	14	29	63	137

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Project
Road Name: Guasti Rd.
Road Segment: Holt Blvd.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	4,140 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	414 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	52 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	50.0 feet
Centerline Dist. to Observer:	50.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	43.000
Medium Trucks:	42.794
Heavy Trucks:	42.814

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-5.27	0.88	-1.20	*-4.65*	0.000	0.000
Medium Trucks:	77.72	-22.51	0.91	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	82.99	-26.46	0.91	-1.20	*-5.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.9	59.0	57.3	51.2	59.8	60.4
Medium Trucks:	54.9	53.4	47.0	45.5	54.0	54.2
Heavy Trucks:	56.2	54.8	45.8	47.0	55.4	55.5
Vehicle Noise:	62.9	61.2	57.9	53.4	61.9	62.4

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	14	31	67	145
CNEL:	15	33	72	155

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Project
Road Name: Guasti Rd.
Road Segment: Cardena's Dwy.

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	3,060 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	306 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	52 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	50.0 feet
Centerline Dist. to Observer:	50.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	43.000
Medium Trucks:	42.794
Heavy Trucks:	42.814

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-6.58	0.88	-1.20	*-4.65*	0.000	0.000
Medium Trucks:	77.72	-23.82	0.91	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	82.99	-27.78	0.91	-1.20	*-5.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.6	57.7	55.9	49.9	58.5	59.1
Medium Trucks:	53.6	52.1	45.7	44.2	52.7	52.9
Heavy Trucks:	54.9	53.5	44.5	45.7	54.1	54.2
Vehicle Noise:	61.6	59.9	56.6	52.1	60.6	61.0

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	12	25	55	118
CNEL:	13	27	59	127

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Project
Road Name: Guasti Rd.
Road Segment: Archibold Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	7,620 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	762 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	52 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	50.0 feet
Centerline Dist. to Observer:	50.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	43.000
Medium Trucks:	42.794
Heavy Trucks:	42.814

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-2.62	0.88	-1.20	*-4.65*	0.000	0.000
Medium Trucks:	77.72	-19.86	0.91	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	82.99	-23.81	0.91	-1.20	*-5.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	63.6	61.7	59.9	53.9	62.5	63.1
Medium Trucks:	57.6	56.1	49.7	48.2	56.6	56.8
Heavy Trucks:	58.9	57.5	48.4	49.7	58.0	58.2
Vehicle Noise:	65.6	63.9	60.6	56.0	64.6	65.0

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	22	47	101	217
CNEL:	23	50	108	232

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Project
Road Name: Holt Blvd.
Road Segment: Vineyard Ave.

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	12,320 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,232 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	42 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	60.0 feet
Centerline Dist. to Observer:	60.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	56.427
Medium Trucks:	56.270
Heavy Trucks:	56.285

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.04	-0.89	-1.20	*-4.69*	0.000	0.000
Medium Trucks:	79.45	-18.28	-0.87	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	84.25	-22.24	-0.87	-1.20	*-5.34*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	65.3	63.4	61.7	55.6	64.2	64.8
Medium Trucks:	59.1	57.6	51.2	49.7	58.1	58.4
Heavy Trucks:	59.9	58.5	49.5	50.7	59.1	59.2
Vehicle Noise:	67.2	65.4	62.3	57.6	66.1	66.6

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	33	71	154	332
CNEL:	36	77	165	356

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Project
Road Name: Holt Blvd.
Road Segment: Vineyard Ave.

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,190 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,119 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	42 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	60.0 feet
Centerline Dist. to Observer:	60.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	56.427
Medium Trucks:	56.270
Heavy Trucks:	56.285

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.46	-0.89	-1.20	*-4.69*	0.000	0.000
Medium Trucks:	79.45	-18.70	-0.87	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	84.25	-22.66	-0.87	-1.20	*-5.34*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.9	63.0	61.2	55.2	63.8	64.4
Medium Trucks:	58.7	57.2	50.8	49.3	57.7	58.0
Heavy Trucks:	59.5	58.1	49.1	50.3	58.7	58.8
Vehicle Noise:	66.7	65.0	61.9	57.2	65.7	66.2

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	31	67	144	311
CNEL:	33	72	155	334

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + Project
Road Name: Holt Blvd.
Road Segment: Convetion Center Way
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	10,920 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,092 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	42 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	60.0 feet
Centerline Dist. to Observer:	60.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	56.427
Medium Trucks:	56.270
Heavy Trucks:	56.285

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.57	-0.89	-1.20	*-4.69*	0.000	0.000
Medium Trucks:	79.45	-18.81	-0.87	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	84.25	-22.76	-0.87	-1.20	*-5.34*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.8	62.9	61.1	55.1	63.7	64.3
Medium Trucks:	58.6	57.1	50.7	49.2	57.6	57.8
Heavy Trucks:	59.4	58.0	49.0	50.2	58.6	58.7
Vehicle Noise:	66.6	64.9	61.7	57.1	65.6	66.1

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	31	66	142	306
CNEL:	33	71	152	328

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY 2040
Road Name: Vineyard Ave.
Road Segment: Inland Empire Blvd.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,540 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,154 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.33	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-18.57	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-22.52	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.1	62.2	60.4	54.4	63.0	63.6
Medium Trucks:	57.8	56.3	50.0	48.4	56.9	57.1
Heavy Trucks:	58.7	57.3	48.2	49.5	57.8	58.0
Vehicle Noise:	65.9	64.2	61.0	56.4	64.9	65.4

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	35	75	161	347
CNEL:	37	80	173	372

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY 2040
Road Name: Vineyard Ave.
Road Segment: Inland Empire Blvd.

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	23,190 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	2,319 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	1.70	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-15.54	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-19.49	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	67.1	65.2	63.5	57.4	66.0	66.6
Medium Trucks:	60.9	59.4	53.0	51.5	59.9	60.2
Heavy Trucks:	61.7	60.3	51.3	52.5	60.9	61.0
Vehicle Noise:	69.0	67.2	64.1	59.4	67.9	68.4

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	55	119	257	553
CNEL:	59	128	275	593

Monday, May 6, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY 2040
Road Name: Vineyard Ave.
Road Segment: I-10 WB Ramp

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	19,380 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,938 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	0.92	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-16.32	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-20.27	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	66.3	64.4	62.7	56.6	65.2	65.8
Medium Trucks:	60.1	58.6	52.2	50.7	59.1	59.4
Heavy Trucks:	60.9	59.5	50.5	51.7	60.1	60.2
Vehicle Noise:	68.2	66.4	63.3	58.6	67.1	67.6

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	49	106	228	491
CNEL:	53	113	244	526

Monday, May 6, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY 2040
Road Name: Vineyard Ave.
Road Segment: I-10 EB Ramp

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	18,590 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,859 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	0.74	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-16.50	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-20.45	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	66.2	64.3	62.5	56.4	65.1	65.7
Medium Trucks:	59.9	58.4	52.0	50.5	59.0	59.2
Heavy Trucks:	60.8	59.3	50.3	51.5	59.9	60.0
Vehicle Noise:	68.0	66.3	63.1	58.4	67.0	67.4

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	48	103	221	477
CNEL:	51	110	238	512

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY 2040
Road Name: Vineyard Ave.
Road Segment: G St.

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	18,300 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,830 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	0.67	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-16.56	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-20.52	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	66.1	64.2	62.4	56.4	65.0	65.6
Medium Trucks:	59.8	58.3	52.0	50.4	58.9	59.1
Heavy Trucks:	60.7	59.3	50.2	51.5	59.8	60.0
Vehicle Noise:	67.9	66.2	63.0	58.4	66.9	67.4

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	47	102	219	472
CNEL:	51	109	235	506

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY 2040
Road Name: Vineyard Ave.
Road Segment: D St.

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	12,380 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,238 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.02	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-18.26	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-22.22	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.4	62.5	60.7	54.7	63.3	63.9
Medium Trucks:	58.2	56.6	50.3	48.7	57.2	57.4
Heavy Trucks:	59.0	57.6	48.5	49.8	58.1	58.3
Vehicle Noise:	66.2	64.5	61.3	56.7	65.2	65.7

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	36	78	169	364
CNEL:	39	84	181	390

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY 2040
Road Name: Vineyard Ave.
Road Segment: Holt Blvd.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	6,920 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	692 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-3.55	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-20.79	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-24.74	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.9	60.0	58.2	52.1	60.8	61.4
Medium Trucks:	55.6	54.1	47.8	46.2	54.7	54.9
Heavy Trucks:	56.5	55.0	46.0	47.3	55.6	55.7
Vehicle Noise:	63.7	62.0	58.8	54.1	62.7	63.1

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	25	53	115	247
CNEL:	26	57	123	265

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY 2040
Road Name: Archibold Ave.
Road Segment: I-10 Ramps

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	23,770 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	2,377 vehicles
Vehicle Speed:	50 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	70.20	1.35	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	81.00	-15.89	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	85.38	-19.84	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.5	66.6	64.8	58.8	67.4	68.0
Medium Trucks:	62.1	60.6	54.2	52.7	61.1	61.4
Heavy Trucks:	62.5	61.1	52.0	53.3	61.6	61.8
Vehicle Noise:	70.2	68.5	65.4	60.6	69.2	69.6

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	67	144	311	670
CNEL:	72	155	334	719

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY 2040
Road Name: Archibold Ave.
Road Segment: I-10 Ramps
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	23,350 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	2,335 vehicles
Vehicle Speed:	50 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	70.20	1.27	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	81.00	-15.96	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	85.38	-19.92	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.4	66.5	64.8	58.7	67.3	67.9
Medium Trucks:	62.0	60.5	54.1	52.6	61.0	61.3
Heavy Trucks:	62.4	61.0	52.0	53.2	61.6	61.7
Vehicle Noise:	70.1	68.4	65.3	60.5	69.1	69.6

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	66	143	307	662
CNEL:	71	153	330	711

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY 2040
Road Name: Archibold Ave.
Road Segment: Guasti Rd.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	18,410 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,841 vehicles
Vehicle Speed:	50 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	70.20	0.24	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	81.00	-17.00	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	85.38	-20.95	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	67.4	65.5	63.7	57.7	66.3	66.9
Medium Trucks:	61.0	59.5	53.1	51.6	60.0	60.2
Heavy Trucks:	61.4	60.0	50.9	52.2	60.5	60.7
Vehicle Noise:	69.1	67.3	64.3	59.5	68.1	68.5

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	56	122	262	565
CNEL:	61	131	282	607

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY 2040
Road Name: Inland Empire Blvd.
Road Segment: Vineyard Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	5,140 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	514 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	52 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	50.0 feet
Centerline Dist. to Observer:	50.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	43.000
Medium Trucks:	42.794
Heavy Trucks:	42.814

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-4.84	0.88	-1.20	*-4.65*	0.000	0.000
Medium Trucks:	79.45	-22.08	0.91	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-26.04	0.91	-1.20	*-5.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	63.3	61.4	59.6	53.6	62.2	62.8
Medium Trucks:	57.1	55.6	49.2	47.7	56.1	56.4
Heavy Trucks:	57.9	56.5	47.5	48.7	57.1	57.2
Vehicle Noise:	65.1	63.4	60.2	55.6	64.1	64.6

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	20	44	94	203
CNEL:	22	47	101	217

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY 2040
Road Name: G St.
Road Segment: Vineyard Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	3,870 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	387 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	30.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	29.816
Medium Trucks:	29.518
Heavy Trucks:	29.547

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-5.56	3.26	-1.20	*-4.49*	0.000	0.000
Medium Trucks:	77.72	-22.80	3.33	-1.20	*-4.86*	0.000	0.000
Heavy Trucks:	82.99	-26.76	3.32	-1.20	*-5.77*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	63.0	61.1	59.3	53.3	61.9	62.5
Medium Trucks:	57.0	55.5	49.2	47.6	56.1	56.3
Heavy Trucks:	58.4	56.9	47.9	49.2	57.5	57.6
Vehicle Noise:	65.0	63.3	60.0	55.5	64.0	64.5

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	12	26	56	120
CNEL:	13	28	60	128

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY 2040
Road Name: D St.
Road Segment: Vineyard Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	3,300 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	330 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	30.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	29.816
Medium Trucks:	29.518
Heavy Trucks:	29.547

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-6.25	3.26	-1.20	*-4.49*	0.000	0.000
Medium Trucks:	77.72	-23.49	3.33	-1.20	*-4.86*	0.000	0.000
Heavy Trucks:	82.99	-27.45	3.32	-1.20	*-5.77*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.3	60.4	58.7	52.6	61.2	61.8
Medium Trucks:	56.4	54.8	48.5	46.9	55.4	55.6
Heavy Trucks:	57.7	56.2	47.2	48.5	56.8	56.9
Vehicle Noise:	64.4	62.6	59.3	54.8	63.3	63.8

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	11	23	50	108
CNEL:	12	25	54	115

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY 2040
Road Name: Convention Center Way
Road Segment: Vineyard Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	7,150 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	715 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	38 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	50.0 feet
Centerline Dist. to Observer:	50.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	Day	Evening	Night	Daily
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	46.519
Medium Trucks:	46.328
Heavy Trucks:	46.347

FHWA Noise Model Calculations

VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	66.51	-2.90	0.37	-1.20	*-4.65*	0.000	0.000
Medium Trucks:	77.72	-20.13	0.39	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	82.99	-24.09	0.39	-1.20	*-5.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	62.8	60.9	59.1	53.1	61.7	62.3
Medium Trucks:	56.8	55.3	48.9	47.4	55.8	56.1
Heavy Trucks:	58.1	56.7	47.6	48.9	57.2	57.4
Vehicle Noise:	64.8	63.1	59.8	55.2	63.8	64.2

Centerline Distance to Noise Contour (in feet)

	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	19	41	89	192
CNEL:	21	44	96	206

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY 2040
Road Name: Convention Center Way
Road Segment: Kline St.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	7,580 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	758 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	38 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	50.0 feet
Centerline Dist. to Observer:	50.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	46.519
Medium Trucks:	46.328
Heavy Trucks:	46.347

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-2.64	0.37	-1.20	*-4.65*	0.000	0.000
Medium Trucks:	77.72	-19.88	0.39	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	82.99	-23.84	0.39	-1.20	*-5.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	63.0	61.1	59.4	53.3	61.9	62.5
Medium Trucks:	57.0	55.5	49.2	47.6	56.1	56.3
Heavy Trucks:	58.3	56.9	47.9	49.1	57.5	57.6
Vehicle Noise:	65.1	63.3	60.0	55.5	64.0	64.5

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	20	43	93	200
CNEL:	21	46	99	214

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY 2040
Road Name: Guasti Rd.
Road Segment: Holt Blvd.

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	10,710 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,071 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	52 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	50.0 feet
Centerline Dist. to Observer:	50.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	43.000
Medium Trucks:	42.794
Heavy Trucks:	42.814

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-1.14	0.88	-1.20	*-4.65*	0.000	0.000
Medium Trucks:	77.72	-18.38	0.91	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	82.99	-22.34	0.91	-1.20	*-5.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	65.0	63.2	61.4	55.3	64.0	64.6
Medium Trucks:	59.0	57.5	51.2	49.6	58.1	58.3
Heavy Trucks:	60.4	58.9	49.9	51.2	59.5	59.6
Vehicle Noise:	67.1	65.3	62.1	57.5	66.0	66.5

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	27	59	126	272
CNEL:	29	63	135	292

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY 2040
Road Name: Guasti Rd.
Road Segment: Cardena's Dwy.

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	10,490 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,049 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	52 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	50.0 feet
Centerline Dist. to Observer:	50.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	43.000
Medium Trucks:	42.794
Heavy Trucks:	42.814

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-1.23	0.88	-1.20	*-4.65*	0.000	0.000
Medium Trucks:	77.72	-18.47	0.91	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	82.99	-22.43	0.91	-1.20	*-5.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	65.0	63.1	61.3	55.2	63.9	64.5
Medium Trucks:	59.0	57.4	51.1	49.5	58.0	58.2
Heavy Trucks:	60.3	58.9	49.8	51.1	59.4	59.5
Vehicle Noise:	67.0	65.2	62.0	57.4	66.0	66.4

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	27	58	125	269
CNEL:	29	62	134	288

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY 2040
Road Name: Guasti Rd.
Road Segment: Archibold Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	10,130 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,013 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	52 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	50.0 feet
Centerline Dist. to Observer:	50.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	43.000
Medium Trucks:	42.794
Heavy Trucks:	42.814

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-1.38	0.88	-1.20	*-4.65*	0.000	0.000
Medium Trucks:	77.72	-18.62	0.91	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	82.99	-22.58	0.91	-1.20	*-5.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.8	62.9	61.1	55.1	63.7	64.3
Medium Trucks:	58.8	57.3	50.9	49.4	57.9	58.1
Heavy Trucks:	60.1	58.7	49.7	50.9	59.3	59.4
Vehicle Noise:	66.8	65.1	61.8	57.3	65.8	66.2

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	26	57	122	263
CNEL:	28	61	130	281

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY 2040
Road Name: Holt Blvd.
Road Segment: Vineyard Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	18,040 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,804 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	42 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	60.0 feet
Centerline Dist. to Observer:	60.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	56.427
Medium Trucks:	56.270
Heavy Trucks:	56.285

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	0.61	-0.89	-1.20	*-4.69*	0.000	0.000
Medium Trucks:	79.45	-16.63	-0.87	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	84.25	-20.58	-0.87	-1.20	*-5.34*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	67.0	65.1	63.3	57.3	65.9	66.5
Medium Trucks:	60.7	59.2	52.9	51.3	59.8	60.0
Heavy Trucks:	61.6	60.2	51.1	52.4	60.7	60.9
Vehicle Noise:	68.8	67.1	63.9	59.3	67.8	68.2

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	43	92	198	428
CNEL:	46	99	213	459

Monday, May 6, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY 2040
Road Name: Holt Blvd.
Road Segment: Vineyard Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	14,990 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,499 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	42 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	60.0 feet
Centerline Dist. to Observer:	60.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	56.427
Medium Trucks:	56.270
Heavy Trucks:	56.285

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-0.19	-0.89	-1.20	*-4.69*	0.000	0.000
Medium Trucks:	79.45	-17.43	-0.87	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	84.25	-21.39	-0.87	-1.20	*-5.34*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	66.2	64.3	62.5	56.5	65.1	65.7
Medium Trucks:	59.9	58.4	52.1	50.5	59.0	59.2
Heavy Trucks:	60.8	59.4	50.3	51.6	59.9	60.1
Vehicle Noise:	68.0	66.3	63.1	58.4	67.0	67.4

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	38	81	175	378
CNEL:	41	87	188	405

Monday, May 6, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY 2040
Road Name: Holt Blvd.
Road Segment: Convetion Center Way

Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,130 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,313 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	42 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	60.0 feet
Centerline Dist. to Observer:	60.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	56.427
Medium Trucks:	56.270
Heavy Trucks:	56.285

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-0.77	-0.89	-1.20	*-4.69*	0.000	0.000
Medium Trucks:	79.45	-18.01	-0.87	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	84.25	-21.96	-0.87	-1.20	*-5.34*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	65.6	63.7	61.9	55.9	64.5	65.1
Medium Trucks:	59.4	57.9	51.5	50.0	58.4	58.6
Heavy Trucks:	60.2	58.8	49.8	51.0	59.4	59.5
Vehicle Noise:	67.4	65.7	62.5	57.9	66.4	66.9

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	35	75	161	346
CNEL:	37	80	172	371

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY + Parcel 109
Road Name: Vineyard Ave.
Road Segment: Inland Empire Blvd.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,650 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,165 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.29	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-18.53	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-22.48	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.1	62.2	60.5	54.4	63.0	63.6
Medium Trucks:	57.9	56.4	50.0	48.5	56.9	57.2
Heavy Trucks:	58.7	57.3	48.3	49.5	57.9	58.0
Vehicle Noise:	66.0	64.2	61.1	56.4	64.9	65.4

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	35	75	162	349
CNEL:	37	81	174	375

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY + Parcel 109
Road Name: Vineyard Ave.
Road Segment: Inland Empire Blvd.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	23,290 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	2,329 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	1.72	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-15.52	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-19.47	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	67.1	65.2	63.5	57.4	66.0	66.6
Medium Trucks:	60.9	59.4	53.0	51.5	59.9	60.2
Heavy Trucks:	61.7	60.3	51.3	52.5	60.9	61.0
Vehicle Noise:	69.0	67.2	64.1	59.4	67.9	68.4

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	55	119	257	554
CNEL:	59	128	276	595

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY + Parcel 109
Road Name: Vineyard Ave.
Road Segment: I-10 WB Ramp
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	19,780 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,978 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	1.01	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-16.23	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-20.18	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	66.4	64.5	62.8	56.7	65.3	65.9
Medium Trucks:	60.2	58.7	52.3	50.8	59.2	59.5
Heavy Trucks:	61.0	59.6	50.6	51.8	60.2	60.3
Vehicle Noise:	68.3	66.5	63.4	58.7	67.2	67.7

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	50	107	231	497
CNEL:	53	115	248	533

Monday, May 6, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY + Parcel 109
Road Name: Vineyard Ave.
Road Segment: I-10 EB Ramp
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	18,990 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,899 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	0.83	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-16.40	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-20.36	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	66.3	64.4	62.6	56.5	65.2	65.8
Medium Trucks:	60.0	58.5	52.1	50.6	59.1	59.3
Heavy Trucks:	60.9	59.4	50.4	51.6	60.0	60.1
Vehicle Noise:	68.1	66.3	63.2	58.5	67.1	67.5

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	48	104	225	484
CNEL:	52	112	241	519

Monday, May 6, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY + Parcel 109
Road Name: Vineyard Ave.
Road Segment: G St.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	18,720 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,872 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	0.77	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-16.47	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-20.42	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	66.2	64.3	62.5	56.5	65.1	65.7
Medium Trucks:	59.9	58.4	52.1	50.5	59.0	59.2
Heavy Trucks:	60.8	59.4	50.3	51.6	59.9	60.1
Vehicle Noise:	68.0	66.3	63.1	58.5	67.0	67.5

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	48	103	222	479
CNEL:	51	111	239	514

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY + Parcel 109
Road Name: Vineyard Ave.
Road Segment: D St.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	12,430 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,243 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.01	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-18.24	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-22.20	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.4	62.5	60.7	54.7	63.3	63.9
Medium Trucks:	58.2	56.7	50.3	48.8	57.2	57.4
Heavy Trucks:	59.0	57.6	48.6	49.8	58.2	58.3
Vehicle Noise:	66.2	64.5	61.4	56.7	65.2	65.7

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	36	79	169	365
CNEL:	39	84	182	391

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY + Parcel 109
Road Name: Vineyard Ave.
Road Segment: Holt Blvd.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	7,230 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	723 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-3.36	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	79.45	-20.60	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	84.25	-24.55	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.1	60.2	58.4	52.3	61.0	61.6
Medium Trucks:	55.8	54.3	47.9	46.4	54.9	55.1
Heavy Trucks:	56.7	55.2	46.2	47.4	55.8	55.9
Vehicle Noise:	63.9	62.2	59.0	54.3	62.9	63.3

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	25	55	118	254
CNEL:	27	59	127	273

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY + Parcel 109
Road Name: Archibold Ave.
Road Segment: I-10 Ramps
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	23,980 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	2,398 vehicles
Vehicle Speed:	50 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	70.20	1.39	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	81.00	-15.85	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	85.38	-19.80	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.6	66.7	64.9	58.8	67.5	68.1
Medium Trucks:	62.1	60.6	54.2	52.7	61.2	61.4
Heavy Trucks:	62.5	61.1	52.1	53.3	61.7	61.8
Vehicle Noise:	70.2	68.5	65.5	60.7	69.2	69.7

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	67	145	313	674
CNEL:	72	156	336	724

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY + Parcel 109
Road Name: Archibold Ave.
Road Segment: I-10 Ramps
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	23,550 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	2,355 vehicles
Vehicle Speed:	50 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	70.20	1.31	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	81.00	-15.93	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	85.38	-19.88	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.5	66.6	64.8	58.8	67.4	68.0
Medium Trucks:	62.0	60.5	54.2	52.6	61.1	61.3
Heavy Trucks:	62.5	61.0	52.0	53.2	61.6	61.7
Vehicle Noise:	70.2	68.4	65.4	60.6	69.1	69.6

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	67	143	309	665
CNEL:	71	154	332	715

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY + Parcel 109
Road Name: Archibold Ave.
Road Segment: Guasti Rd.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	18,590 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,859 vehicles
Vehicle Speed:	50 mph
Near/Far Lane Distance:	78 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	76.0 feet
Centerline Dist. to Observer:	76.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	65.299
Medium Trucks:	65.238
Heavy Trucks:	65.300

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	70.20	0.28	-1.84	-1.20	*-4.86*	0.000	0.000
Medium Trucks:	81.00	-16.95	-1.84	-1.20	*-4.99*	0.000	0.000
Heavy Trucks:	85.38	-20.91	-1.84	-1.20	*-5.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	67.4	65.5	63.8	57.7	66.3	67.0
Medium Trucks:	61.0	59.5	53.1	51.6	60.1	60.3
Heavy Trucks:	61.4	60.0	51.0	52.2	60.6	60.7
Vehicle Noise:	69.1	67.4	64.3	59.6	68.1	68.6

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	57	122	264	568
CNEL:	61	132	283	611

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY + Parcel 109
Road Name: Inland Empire Blvd.
Road Segment: Vineyard Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	5,140 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	514 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	52 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	50.0 feet
Centerline Dist. to Observer:	50.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	43.000
Medium Trucks:	42.794
Heavy Trucks:	42.814

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-4.84	0.88	-1.20	*-4.65*	0.000	0.000
Medium Trucks:	79.45	-22.08	0.91	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-26.04	0.91	-1.20	*-5.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	63.3	61.4	59.6	53.6	62.2	62.8
Medium Trucks:	57.1	55.6	49.2	47.7	56.1	56.4
Heavy Trucks:	57.9	56.5	47.5	48.7	57.1	57.2
Vehicle Noise:	65.1	63.4	60.2	55.6	64.1	64.6

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	20	44	94	203
CNEL:	22	47	101	217

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY + Parcel 109
Road Name: G St.
Road Segment: Vineyard Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	3,890 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	389 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	30.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	29.816
Medium Trucks:	29.518
Heavy Trucks:	29.547

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-5.54	3.26	-1.20	*-4.49*	0.000	0.000
Medium Trucks:	77.72	-22.78	3.33	-1.20	*-4.86*	0.000	0.000
Heavy Trucks:	82.99	-26.73	3.32	-1.20	*-5.77*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	63.0	61.1	59.4	53.3	61.9	62.5
Medium Trucks:	57.1	55.6	49.2	47.7	56.1	56.3
Heavy Trucks:	58.4	57.0	47.9	49.2	57.5	57.7
Vehicle Noise:	65.1	63.3	60.0	55.5	64.0	64.5

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	12	26	56	120
CNEL:	13	28	60	129

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY + Parcel 109
Road Name: D St.
Road Segment: Vineyard Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	3,370 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	337 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	30.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	29.816
Medium Trucks:	29.518
Heavy Trucks:	29.547

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-6.16	3.26	-1.20	*-4.49*	0.000	0.000
Medium Trucks:	77.72	-23.40	3.33	-1.20	*-4.86*	0.000	0.000
Heavy Trucks:	82.99	-27.36	3.32	-1.20	*-5.77*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.4	60.5	58.7	52.7	61.3	61.9
Medium Trucks:	56.4	54.9	48.6	47.0	55.5	55.7
Heavy Trucks:	57.8	56.3	47.3	48.6	56.9	57.0
Vehicle Noise:	64.4	62.7	59.4	54.9	63.4	63.9

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	11	24	51	109
CNEL:	12	25	54	117

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY + Parcel 109
Road Name: Convention Center Way
Road Segment: Vineyard Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	7,590 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	759 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	38 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	50.0 feet
Centerline Dist. to Observer:	50.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	46.519
Medium Trucks:	46.328
Heavy Trucks:	46.347

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-2.64	0.37	-1.20	*-4.65*	0.000	0.000
Medium Trucks:	77.72	-19.88	0.39	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	82.99	-23.83	0.39	-1.20	*-5.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	63.0	61.1	59.4	53.3	61.9	62.5
Medium Trucks:	57.0	55.5	49.2	47.6	56.1	56.3
Heavy Trucks:	58.4	56.9	47.9	49.1	57.5	57.6
Vehicle Noise:	65.1	63.3	60.0	55.5	64.0	64.5

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	20	43	93	200
CNEL:	21	46	99	214

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY + Parcel 109
Road Name: Convention Center Way
Road Segment: Kline St.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	8,040 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	804 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	38 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	50.0 feet
Centerline Dist. to Observer:	50.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	46.519
Medium Trucks:	46.328
Heavy Trucks:	46.347

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-2.39	0.37	-1.20	*-4.65*	0.000	0.000
Medium Trucks:	77.72	-19.63	0.39	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	82.99	-23.58	0.39	-1.20	*-5.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	63.3	61.4	59.6	53.6	62.2	62.8
Medium Trucks:	57.3	55.8	49.4	47.9	56.3	56.6
Heavy Trucks:	58.6	57.2	48.1	49.4	57.8	57.9
Vehicle Noise:	65.3	63.6	60.3	55.8	64.3	64.7

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	21	45	97	208
CNEL:	22	48	103	223

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY + Parcel 109
Road Name: Guasti Rd.
Road Segment: Holt Blvd.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,196 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	52 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	50.0 feet
Centerline Dist. to Observer:	50.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	Day	Evening	Night	Daily
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	43.000
Medium Trucks:	42.794
Heavy Trucks:	42.814

FHWA Noise Model Calculations

VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	66.51	-0.66	0.88	-1.20	*-4.65*	0.000	0.000
Medium Trucks:	77.72	-17.90	0.91	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	82.99	-21.86	0.91	-1.20	*-5.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	65.5	63.6	61.9	55.8	64.4	65.0
Medium Trucks:	59.5	58.0	51.7	50.1	58.6	58.8
Heavy Trucks:	60.8	59.4	50.4	51.6	60.0	60.1
Vehicle Noise:	67.5	65.8	62.5	58.0	66.5	67.0

Centerline Distance to Noise Contour (in feet)

	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	29	63	136	293
CNEL:	31	68	146	314

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY + Parcel 109
Road Name: Guasti Rd.
Road Segment: Cardena's Dwy.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	10,950 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,095 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	52 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	50.0 feet
Centerline Dist. to Observer:	50.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	43.000
Medium Trucks:	42.794
Heavy Trucks:	42.814

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-1.05	0.88	-1.20	*-4.65*	0.000	0.000
Medium Trucks:	77.72	-18.28	0.91	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	82.99	-22.24	0.91	-1.20	*-5.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	65.1	63.2	61.5	55.4	64.0	64.7
Medium Trucks:	59.1	57.6	51.3	49.7	58.2	58.4
Heavy Trucks:	60.5	59.0	50.0	51.3	59.6	59.7
Vehicle Noise:	67.2	65.4	62.1	57.6	66.1	66.6

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	28	60	128	277
CNEL:	30	64	137	296

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY + Parcel 109
Road Name: Guasti Rd.
Road Segment: Archibold Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	10,200 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,020 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	52 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	50.0 feet
Centerline Dist. to Observer:	50.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	43.000
Medium Trucks:	42.794
Heavy Trucks:	42.814

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	-1.35	0.88	-1.20	*-4.65*	0.000	0.000
Medium Trucks:	77.72	-18.59	0.91	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	82.99	-22.55	0.91	-1.20	*-5.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.8	62.9	61.2	55.1	63.7	64.3
Medium Trucks:	58.8	57.3	51.0	49.4	57.9	58.1
Heavy Trucks:	60.2	58.7	49.7	50.9	59.3	59.4
Vehicle Noise:	66.9	65.1	61.8	57.3	65.8	66.3

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	26	57	122	264
CNEL:	28	61	131	282

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY + Parcel 109
Road Name: Holt Blvd.
Road Segment: Vineyard Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	18,290 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,829 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	42 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	60.0 feet
Centerline Dist. to Observer:	60.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	56.427
Medium Trucks:	56.270
Heavy Trucks:	56.285

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	0.67	-0.89	-1.20	*-4.69*	0.000	0.000
Medium Trucks:	79.45	-16.57	-0.87	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	84.25	-20.52	-0.87	-1.20	*-5.34*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	67.0	65.1	63.4	57.3	65.9	66.5
Medium Trucks:	60.8	59.3	52.9	51.4	59.9	60.1
Heavy Trucks:	61.7	60.2	51.2	52.4	60.8	60.9
Vehicle Noise:	68.9	67.1	64.0	59.3	67.9	68.3

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	43	93	200	432
CNEL:	46	100	215	463

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY + Parcel 109
Road Name: Holt Blvd.
Road Segment: Vineyard Ave.
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,580 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,558 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	42 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	60.0 feet
Centerline Dist. to Observer:	60.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	56.427
Medium Trucks:	56.270
Heavy Trucks:	56.285

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-0.03	-0.89	-1.20	*-4.69*	0.000	0.000
Medium Trucks:	79.45	-17.26	-0.87	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	84.25	-21.22	-0.87	-1.20	*-5.34*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	66.3	64.4	62.7	56.6	65.2	65.9
Medium Trucks:	60.1	58.6	52.2	50.7	59.2	59.4
Heavy Trucks:	61.0	59.5	50.5	51.8	60.1	60.2
Vehicle Noise:	68.2	66.4	63.3	58.6	67.2	67.6

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	39	84	180	388
CNEL:	42	90	193	416

Monday, May 6, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: HY + Parcel 109
Road Name: Holt Blvd.
Road Segment: Convetion Center Way
Project Name: Ontario Hotel
Job Number: 15693

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340 vehicles
Peak Hour Percentage:	10.00%
Peak Hour Volume:	1,334 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	42 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	60.0 feet
Centerline Dist. to Observer:	60.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	56.427
Medium Trucks:	56.270
Heavy Trucks:	56.285

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-0.70	-0.89	-1.20	*-4.69*	0.000	0.000
Medium Trucks:	79.45	-17.94	-0.87	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	84.25	-21.89	-0.87	-1.20	*-5.34*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	65.7	63.8	62.0	56.0	64.6	65.2
Medium Trucks:	59.4	57.9	51.6	50.0	58.5	58.7
Heavy Trucks:	60.3	58.9	49.8	51.1	59.4	59.6
Vehicle Noise:	67.5	65.8	62.6	57.9	66.5	66.9

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	35	75	162	350
CNEL:	38	81	174	375

Monday, May 6, 2024

APPENDIX 8.1:

ON-SITE TRAFFIC NOISE CALCULATIONS

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: First Floor With Wall
Road Name: Holt Boulevard
Lot No: R1

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,334	vehicles
Vehicle Speed:	50	mph
Near/Far Lane Distance:	52	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	93.0	feet
Centerline Dist. to Observer:	93.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	5.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	89.342
Medium Trucks:	89.297
Heavy Trucks:	89.342

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-3.88	-1.20	*-4.87*	0.000	0.000
Medium Trucks:	78.79	-18.40	-3.88	-1.20	*-4.97*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-3.88	-1.20	*-5.18*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.9	63.0	61.2	55.2	63.8	64.4
Medium Trucks:	55.3	53.8	47.4	45.9	54.4	54.6
Heavy Trucks:	55.6	54.2	45.1	46.4	54.7	54.9
Vehicle Noise:	65.8	64.0	61.5	56.1	64.7	65.2

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.9	63.0	61.2	55.2	63.8	64.4
Medium Trucks:	55.3	53.8	47.4	45.9	54.4	54.6
Heavy Trucks:	55.6	54.2	45.1	46.4	54.7	54.9
Vehicle Noise:	65.8	64.0	61.5	56.1	64.7	65.2

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: First Floor With Wall
Road Name: Holt Boulevard
Lot No: R2

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,334	vehicles
Vehicle Speed:	50	mph
Near/Far Lane Distance:	52	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	237.0	feet
Centerline Dist. to Observer:	237.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	5.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	235.589
Medium Trucks:	235.572
Heavy Trucks:	235.589

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-10.20	-1.20	*-4.88*	0.000	0.000
Medium Trucks:	78.79	-18.40	-10.20	-1.20	*-4.92*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-10.20	-1.20	*-5.01*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.6	56.7	54.9	48.8	57.5	58.1
Medium Trucks:	49.0	47.5	41.1	39.6	48.0	48.3
Heavy Trucks:	49.3	47.8	38.8	40.1	48.4	48.5
Vehicle Noise:	59.5	57.6	55.2	49.8	58.4	58.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.6	56.7	54.9	48.8	57.5	58.1
Medium Trucks:	49.0	47.5	41.1	39.6	48.0	48.3
Heavy Trucks:	49.3	47.8	38.8	40.1	48.4	48.5
Vehicle Noise:	59.5	57.6	55.2	49.8	58.4	58.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: First Floor With Wall
Road Name: Guasti Road
Lot No: R3

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,196	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	12	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	127.0	feet
Centerline Dist. to Observer:	127.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	5.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	126.894
Medium Trucks:	126.862
Heavy Trucks:	126.894

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-6.17	-1.20	*-4.87*	0.000	0.000
Medium Trucks:	77.62	-18.41	-6.17	-1.20	*-4.95*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-6.17	-1.20	*-5.10*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.8	58.9	57.1	51.1	59.7	60.3
Medium Trucks:	51.8	50.3	44.0	42.4	50.9	51.1
Heavy Trucks:	52.4	51.0	41.9	43.2	51.6	51.7
Vehicle Noise:	61.8	60.0	57.5	52.2	60.8	61.3

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.8	58.9	57.1	51.1	59.7	60.3
Medium Trucks:	51.8	50.3	44.0	42.4	50.9	51.1
Heavy Trucks:	52.4	51.0	41.9	43.2	51.6	51.7
Vehicle Noise:	61.8	60.0	57.5	52.2	60.8	61.3

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: First Floor With Wall
Road Name: Guasti Road
Lot No: R4

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,196	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	12	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	132.0	feet
Centerline Dist. to Observer:	132.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	5.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	131.898
Medium Trucks:	131.867
Heavy Trucks:	131.898

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-6.42	-1.20	*-4.87*	0.000	0.000
Medium Trucks:	77.62	-18.41	-6.42	-1.20	*-4.95*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-6.42	-1.20	*-5.10*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.5	58.6	56.9	50.8	59.5	60.1
Medium Trucks:	51.6	50.1	43.7	42.2	50.6	50.9
Heavy Trucks:	52.2	50.7	41.7	42.9	51.3	51.4
Vehicle Noise:	61.6	59.8	57.2	52.0	60.5	61.1

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.5	58.6	56.9	50.8	59.5	60.1
Medium Trucks:	51.6	50.1	43.7	42.2	50.6	50.9
Heavy Trucks:	52.2	50.7	41.7	42.9	51.3	51.4
Vehicle Noise:	61.6	59.8	57.2	52.0	60.5	61.1

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: First Floor With Wall
Road Name: Guasti Road
Lot No: R5

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,196	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	12	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	167.0	feet
Centerline Dist. to Observer:	167.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	5.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	166.919
Medium Trucks:	166.895
Heavy Trucks:	166.919

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-7.96	-1.20	*-4.88*	0.000	0.000
Medium Trucks:	77.62	-18.41	-7.96	-1.20	*-4.94*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-7.96	-1.20	*-5.05*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.0	57.1	55.3	49.3	57.9	58.5
Medium Trucks:	50.1	48.5	42.2	40.6	49.1	49.3
Heavy Trucks:	50.6	49.2	40.2	41.4	49.8	49.9
Vehicle Noise:	60.1	58.3	55.7	50.4	59.0	59.5

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.0	57.1	55.3	49.3	57.9	58.5
Medium Trucks:	50.1	48.5	42.2	40.6	49.1	49.3
Heavy Trucks:	50.6	49.2	40.2	41.4	49.8	49.9
Vehicle Noise:	60.1	58.3	55.7	50.4	59.0	59.5

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: First Floor With Wall
Road Name: Guasti Road
Lot No: R6

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,196	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	12	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	205.0	feet
Centerline Dist. to Observer:	205.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	5.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	204.934
Medium Trucks:	204.915
Heavy Trucks:	204.934

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-9.29	-1.20	*-4.88*	0.000	0.000
Medium Trucks:	77.62	-18.41	-9.29	-1.20	*-4.93*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-9.29	-1.20	*-5.02*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	57.7	55.8	54.0	48.0	56.6	57.2
Medium Trucks:	48.7	47.2	40.8	39.3	47.8	48.0
Heavy Trucks:	49.3	47.9	38.8	40.1	48.4	48.6
Vehicle Noise:	58.7	56.9	54.3	49.1	57.7	58.2

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	57.7	55.8	54.0	48.0	56.6	57.2
Medium Trucks:	48.7	47.2	40.8	39.3	47.8	48.0
Heavy Trucks:	49.3	47.9	38.8	40.1	48.4	48.6
Vehicle Noise:	58.7	56.9	54.3	49.1	57.7	58.2

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: First Floor With Wall
Road Name: Holt Boulevard
Lot No: R7

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,334	vehicles
Vehicle Speed:	50	mph
Near/Far Lane Distance:	52	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	257.0	feet
Centerline Dist. to Observer:	257.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	5.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	255.699
Medium Trucks:	255.683
Heavy Trucks:	255.699

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-10.73	-1.20	*-4.88*	0.000	0.000
Medium Trucks:	78.79	-18.40	-10.73	-1.20	*-4.92*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-10.73	-1.20	*-5.00*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.0	56.1	54.4	48.3	56.9	57.5
Medium Trucks:	48.5	47.0	40.6	39.0	47.5	47.7
Heavy Trucks:	48.7	47.3	38.3	39.5	47.9	48.0
Vehicle Noise:	58.9	57.1	54.6	49.3	57.9	58.4

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.0	56.1	54.4	48.3	56.9	57.5
Medium Trucks:	48.5	47.0	40.6	39.0	47.5	47.7
Heavy Trucks:	48.7	47.3	38.3	39.5	47.9	48.0
Vehicle Noise:	58.9	57.1	54.6	49.3	57.9	58.4

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: First Floor With Wall
Road Name: Holt Boulevard
Lot No: R8

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,334	vehicles
Vehicle Speed:	50	mph
Near/Far Lane Distance:	52	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	138.0	feet
Centerline Dist. to Observer:	138.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	5.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	135.562
Medium Trucks:	135.532
Heavy Trucks:	135.562

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-6.60	-1.20	*-4.87*	0.000	0.000
Medium Trucks:	78.79	-18.40	-6.60	-1.20	*-4.95*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-6.60	-1.20	*-5.09*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.2	60.3	58.5	52.4	61.1	61.7
Medium Trucks:	52.6	51.1	44.7	43.2	51.6	51.9
Heavy Trucks:	52.9	51.4	42.4	43.7	52.0	52.1
Vehicle Noise:	63.1	61.2	58.8	53.4	62.0	62.5

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.2	60.3	58.5	52.4	61.1	61.7
Medium Trucks:	52.6	51.1	44.7	43.2	51.6	51.9
Heavy Trucks:	52.9	51.4	42.4	43.7	52.0	52.1
Vehicle Noise:	63.1	61.2	58.8	53.4	62.0	62.5

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: First Floor With Wall
Road Name: Guasti Road
Lot No: R9

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,196	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	12	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	143.0	feet
Centerline Dist. to Observer:	143.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	5.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	142.906
Medium Trucks:	142.878
Heavy Trucks:	142.906

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-6.94	-1.20	*-4.87*	0.000	0.000
Medium Trucks:	77.62	-18.41	-6.94	-1.20	*-4.94*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-6.94	-1.20	*-5.08*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.0	58.1	56.4	50.3	58.9	59.5
Medium Trucks:	51.1	49.6	43.2	41.7	50.1	50.3
Heavy Trucks:	51.6	50.2	41.2	42.4	50.8	50.9
Vehicle Noise:	61.1	59.3	56.7	51.4	60.0	60.5

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.0	58.1	56.4	50.3	58.9	59.5
Medium Trucks:	51.1	49.6	43.2	41.7	50.1	50.3
Heavy Trucks:	51.6	50.2	41.2	42.4	50.8	50.9
Vehicle Noise:	61.1	59.3	56.7	51.4	60.0	60.5

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: First Floor With Wall
Road Name: Holt Boulevard
Lot No: R10

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,334	vehicles
Vehicle Speed:	50	mph
Near/Far Lane Distance:	52	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	149.0	feet
Centerline Dist. to Observer:	149.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	5.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	146.745
Medium Trucks:	146.717
Heavy Trucks:	146.745

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-7.12	-1.20	*-4.88*	0.000	0.000
Medium Trucks:	78.79	-18.40	-7.12	-1.20	*-4.94*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-7.12	-1.20	*-5.07*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.6	59.7	58.0	51.9	60.5	61.2
Medium Trucks:	52.1	50.6	44.2	42.7	51.1	51.4
Heavy Trucks:	52.4	50.9	41.9	43.1	51.5	51.6
Vehicle Noise:	62.5	60.7	58.3	52.9	61.5	62.0

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.6	59.7	58.0	51.9	60.5	61.2
Medium Trucks:	52.1	50.6	44.2	42.7	51.1	51.4
Heavy Trucks:	52.4	50.9	41.9	43.1	51.5	51.6
Vehicle Noise:	62.5	60.7	58.3	52.9	61.5	62.0

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Second Floor With Wall
Road Name: Holt Boulevard
Lot No: R1

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,334	vehicles
Vehicle Speed:	50	mph
Near/Far Lane Distance:	52	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	93.0	feet
Centerline Dist. to Observer:	93.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	14.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	90.094
Medium Trucks:	89.850
Heavy Trucks:	89.493

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-3.94	-1.20	*-12.96*	0.000	0.000
Medium Trucks:	78.79	-18.40	-3.92	-1.20	*-13.26*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-3.90	-1.20	*-13.85*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.8	62.9	61.2	55.1	63.7	64.3
Medium Trucks:	55.3	53.8	47.4	45.9	54.3	54.6
Heavy Trucks:	55.6	54.2	45.1	46.4	54.7	54.8
Vehicle Noise:	65.7	63.9	61.4	56.1	64.7	65.2

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.8	62.9	61.2	55.1	63.7	64.3
Medium Trucks:	55.3	53.8	47.4	45.9	54.3	54.6
Heavy Trucks:	55.6	54.2	45.1	46.4	54.7	54.8
Vehicle Noise:	65.7	63.9	61.4	56.1	64.7	65.2

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Second Floor With Wall
Road Name: Holt Boulevard
Lot No: R2

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,334	vehicles
Vehicle Speed:	50	mph
Near/Far Lane Distance:	52	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	237.0	feet
Centerline Dist. to Observer:	237.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	14.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	235.875
Medium Trucks:	235.782
Heavy Trucks:	235.646

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-10.21	-1.20	*-13.41*	0.000	0.000
Medium Trucks:	78.79	-18.40	-10.21	-1.20	*-13.52*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-10.20	-1.20	*-13.76*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.6	56.7	54.9	48.8	57.5	58.1
Medium Trucks:	49.0	47.5	41.1	39.6	48.0	48.3
Heavy Trucks:	49.3	47.8	38.8	40.1	48.4	48.5
Vehicle Noise:	59.4	57.6	55.2	49.8	58.4	58.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.6	56.7	54.9	48.8	57.5	58.1
Medium Trucks:	49.0	47.5	41.1	39.6	48.0	48.3
Heavy Trucks:	49.3	47.8	38.8	40.1	48.4	48.5
Vehicle Noise:	59.4	57.6	55.2	49.8	58.4	58.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Second Floor With Wall
Road Name: Guasti Road
Lot No: R3

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,196	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	12	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	127.0	feet
Centerline Dist. to Observer:	127.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	14.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	127.424
Medium Trucks:	127.252
Heavy Trucks:	127.000

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-6.20	-1.20	*-13.16*	0.000	0.000
Medium Trucks:	77.62	-18.41	-6.19	-1.20	*-13.37*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-6.18	-1.20	*-13.81*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.8	58.9	57.1	51.1	59.7	60.3
Medium Trucks:	51.8	50.3	44.0	42.4	50.9	51.1
Heavy Trucks:	52.4	51.0	41.9	43.2	51.5	51.7
Vehicle Noise:	61.8	60.0	57.4	52.2	60.8	61.3

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.8	58.9	57.1	51.1	59.7	60.3
Medium Trucks:	51.8	50.3	44.0	42.4	50.9	51.1
Heavy Trucks:	52.4	51.0	41.9	43.2	51.5	51.7
Vehicle Noise:	61.8	60.0	57.4	52.2	60.8	61.3

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Second Floor With Wall
Road Name: Guasti Road
Lot No: R4

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,196	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	12	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	132.0	feet
Centerline Dist. to Observer:	132.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	14.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	132.408
Medium Trucks:	132.242
Heavy Trucks:	132.000

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-6.45	-1.20	*-13.18*	0.000	0.000
Medium Trucks:	77.62	-18.41	-6.44	-1.20	*-13.39*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-6.43	-1.20	*-13.80*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.5	58.6	56.9	50.8	59.4	60.0
Medium Trucks:	51.6	50.1	43.7	42.2	50.6	50.8
Heavy Trucks:	52.1	50.7	41.7	42.9	51.3	51.4
Vehicle Noise:	61.6	59.8	57.2	51.9	60.5	61.0

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.5	58.6	56.9	50.8	59.4	60.0
Medium Trucks:	51.6	50.1	43.7	42.2	50.6	50.8
Heavy Trucks:	52.1	50.7	41.7	42.9	51.3	51.4
Vehicle Noise:	61.6	59.8	57.2	51.9	60.5	61.0

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Second Floor With Wall
Road Name: Guasti Road
Lot No: R5

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,196	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	12	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	167.0	feet
Centerline Dist. to Observer:	167.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	14.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	167.323
Medium Trucks:	167.192
Heavy Trucks:	167.000

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-7.97	-1.20	*-13.29*	0.000	0.000
Medium Trucks:	77.62	-18.41	-7.97	-1.20	*-13.45*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-7.96	-1.20	*-13.78*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.0	57.1	55.3	49.3	57.9	58.5
Medium Trucks:	50.0	48.5	42.2	40.6	49.1	49.3
Heavy Trucks:	50.6	49.2	40.2	41.4	49.8	49.9
Vehicle Noise:	60.0	58.2	55.7	50.4	59.0	59.5

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.0	57.1	55.3	49.3	57.9	58.5
Medium Trucks:	50.0	48.5	42.2	40.6	49.1	49.3
Heavy Trucks:	50.6	49.2	40.2	41.4	49.8	49.9
Vehicle Noise:	60.0	58.2	55.7	50.4	59.0	59.5

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Second Floor With Wall
Road Name: Guasti Road
Lot No: R6

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,196	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	12	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	205.0	feet
Centerline Dist. to Observer:	205.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	14.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	205.263
Medium Trucks:	205.156
Heavy Trucks:	205.000

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-9.30	-1.20	*-13.36*	0.000	0.000
Medium Trucks:	77.62	-18.41	-9.30	-1.20	*-13.50*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-9.30	-1.20	*-13.76*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	57.7	55.8	54.0	47.9	56.6	57.2
Medium Trucks:	48.7	47.2	40.8	39.3	47.8	48.0
Heavy Trucks:	49.3	47.9	38.8	40.1	48.4	48.6
Vehicle Noise:	58.7	56.9	54.3	49.1	57.7	58.2

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	57.7	55.8	54.0	47.9	56.6	57.2
Medium Trucks:	48.7	47.2	40.8	39.3	47.8	48.0
Heavy Trucks:	49.3	47.9	38.8	40.1	48.4	48.6
Vehicle Noise:	58.7	56.9	54.3	49.1	57.7	58.2

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Second Floor With Wall
Road Name: Holt Boulevard
Lot No: R7

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,334	vehicles
Vehicle Speed:	50	mph
Near/Far Lane Distance:	52	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	257.0	feet
Centerline Dist. to Observer:	257.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	14.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	255.963
Medium Trucks:	255.877
Heavy Trucks:	255.752

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-10.74	-1.20	*-13.43*	0.000	0.000
Medium Trucks:	78.79	-18.40	-10.74	-1.20	*-13.54*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-10.74	-1.20	*-13.75*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.0	56.1	54.4	48.3	56.9	57.5
Medium Trucks:	48.5	47.0	40.6	39.0	47.5	47.7
Heavy Trucks:	48.7	47.3	38.3	39.5	47.9	48.0
Vehicle Noise:	58.9	57.1	54.6	49.3	57.9	58.4

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.0	56.1	54.4	48.3	56.9	57.5
Medium Trucks:	48.5	47.0	40.6	39.0	47.5	47.7
Heavy Trucks:	48.7	47.3	38.3	39.5	47.9	48.0
Vehicle Noise:	58.9	57.1	54.6	49.3	57.9	58.4

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Second Floor With Wall
Road Name: Holt Boulevard
Lot No: R8

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,334	vehicles
Vehicle Speed:	50	mph
Near/Far Lane Distance:	52	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	138.0	feet
Centerline Dist. to Observer:	138.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	14.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	136.059
Medium Trucks:	135.897
Heavy Trucks:	135.661

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-6.62	-1.20	*-13.20*	0.000	0.000
Medium Trucks:	78.79	-18.40	-6.62	-1.20	*-13.40*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-6.61	-1.20	*-13.80*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.1	60.2	58.5	52.4	61.0	61.6
Medium Trucks:	52.6	51.1	44.7	43.2	51.6	51.9
Heavy Trucks:	52.9	51.4	42.4	43.7	52.0	52.1
Vehicle Noise:	63.0	61.2	58.8	53.4	62.0	62.5

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.1	60.2	58.5	52.4	61.0	61.6
Medium Trucks:	52.6	51.1	44.7	43.2	51.6	51.9
Heavy Trucks:	52.9	51.4	42.4	43.7	52.0	52.1
Vehicle Noise:	63.0	61.2	58.8	53.4	62.0	62.5

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario:	Second Floor With Wall	*Project Name:*	Empire Groves Hotel
Road Name:	Guasti Road	*Job Number:*	15693
Lot No:	R9	*Analyst:*	B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,196	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	12	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	143.0	feet
Centerline Dist. to Observer:	143.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	14.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	143.377
Medium Trucks:	143.224
Heavy Trucks:	143.000

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-6.97	-1.20	*-13.22*	0.000	0.000
Medium Trucks:	77.62	-18.41	-6.96	-1.20	*-13.41*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-6.95	-1.20	*-13.79*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.0	58.1	56.3	50.3	58.9	59.5
Medium Trucks:	51.1	49.5	43.2	41.6	50.1	50.3
Heavy Trucks:	51.6	50.2	41.2	42.4	50.8	50.9
Vehicle Noise:	61.1	59.2	56.7	51.4	60.0	60.5

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.0	58.1	56.3	50.3	58.9	59.5
Medium Trucks:	51.1	49.5	43.2	41.6	50.1	50.3
Heavy Trucks:	51.6	50.2	41.2	42.4	50.8	50.9
Vehicle Noise:	61.1	59.2	56.7	51.4	60.0	60.5

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Second Floor With Wall
Road Name: Holt Boulevard
Lot No: R10

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,334	vehicles
Vehicle Speed:	50	mph
Near/Far Lane Distance:	52	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	149.0	feet
Centerline Dist. to Observer:	149.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	14.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	147.204
Medium Trucks:	147.054
Heavy Trucks:	146.836

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-7.14	-1.20	*-13.24*	0.000	0.000
Medium Trucks:	78.79	-18.40	-7.13	-1.20	*-13.42*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-7.12	-1.20	*-13.79*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.6	59.7	58.0	51.9	60.5	61.1
Medium Trucks:	52.1	50.6	44.2	42.7	51.1	51.3
Heavy Trucks:	52.3	50.9	41.9	43.1	51.5	51.6
Vehicle Noise:	62.5	60.7	58.2	52.9	61.5	62.0

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.6	59.7	58.0	51.9	60.5	61.1
Medium Trucks:	52.1	50.6	44.2	42.7	51.1	51.3
Heavy Trucks:	52.3	50.9	41.9	43.1	51.5	51.6
Vehicle Noise:	62.5	60.7	58.2	52.9	61.5	62.0

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Third Floor With Wall
Road Name: Holt Boulevard
Lot No: R1

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,334	vehicles
Vehicle Speed:	50	mph
Near/Far Lane Distance:	52	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	93.0	feet
Centerline Dist. to Observer:	93.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	23.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	91.728
Medium Trucks:	91.291
Heavy Trucks:	90.542

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-4.06	-1.20	*-20.23*	0.000	0.000
Medium Trucks:	78.79	-18.40	-4.03	-1.20	*-20.71*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-3.97	-1.20	*-21.66*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.7	62.8	61.0	55.0	63.6	64.2
Medium Trucks:	55.2	53.7	47.3	45.8	54.2	54.5
Heavy Trucks:	55.5	54.1	45.0	46.3	54.6	54.8
Vehicle Noise:	65.6	63.8	61.3	56.0	64.6	65.1

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.7	62.8	61.0	55.0	63.6	64.2
Medium Trucks:	55.2	53.7	47.3	45.8	54.2	54.5
Heavy Trucks:	55.5	54.1	45.0	46.3	54.6	54.8
Vehicle Noise:	65.6	63.8	61.3	56.0	64.6	65.1

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Third Floor With Wall
Road Name: Holt Boulevard
Lot No: R2

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,334	vehicles
Vehicle Speed:	50	mph
Near/Far Lane Distance:	52	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	237.0	feet
Centerline Dist. to Observer:	237.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	23.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	236.504
Medium Trucks:	236.335
Heavy Trucks:	236.046

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-10.23	-1.20	*-21.60*	0.000	0.000
Medium Trucks:	78.79	-18.40	-10.22	-1.20	*-21.79*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-10.21	-1.20	*-22.17*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.5	56.6	54.9	48.8	57.4	58.0
Medium Trucks:	49.0	47.5	41.1	39.6	48.0	48.3
Heavy Trucks:	49.3	47.8	38.8	40.0	48.4	48.5
Vehicle Noise:	59.4	57.6	55.2	49.8	58.4	58.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.5	56.6	54.9	48.8	57.4	58.0
Medium Trucks:	49.0	47.5	41.1	39.6	48.0	48.3
Heavy Trucks:	49.3	47.8	38.8	40.0	48.4	48.5
Vehicle Noise:	59.4	57.6	55.2	49.8	58.4	58.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Third Floor With Wall
Road Name: Guasti Road
Lot No: R3

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,196	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	12	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	127.0	feet
Centerline Dist. to Observer:	127.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	23.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	128.585
Medium Trucks:	128.273
Heavy Trucks:	127.741

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-6.26	-1.20	*-20.83*	0.000	0.000
Medium Trucks:	77.62	-18.41	-6.24	-1.20	*-21.18*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-6.21	-1.20	*-21.89*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.7	58.8	57.0	51.0	59.6	60.2
Medium Trucks:	51.8	50.3	43.9	42.4	50.8	51.0
Heavy Trucks:	52.4	50.9	41.9	43.2	51.5	51.6
Vehicle Noise:	61.8	60.0	57.4	52.1	60.7	61.2

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.7	58.8	57.0	51.0	59.6	60.2
Medium Trucks:	51.8	50.3	43.9	42.4	50.8	51.0
Heavy Trucks:	52.4	50.9	41.9	43.2	51.5	51.6
Vehicle Noise:	61.8	60.0	57.4	52.1	60.7	61.2

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Third Floor With Wall
Road Name: Guasti Road
Lot No: R4

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,196	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	12	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	132.0	feet
Centerline Dist. to Observer:	132.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	23.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	133.525
Medium Trucks:	133.225
Heavy Trucks:	132.713

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-6.50	-1.20	*-20.89*	0.000	0.000
Medium Trucks:	77.62	-18.41	-6.49	-1.20	*-21.23*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-6.46	-1.20	*-21.91*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.5	58.6	56.8	50.7	59.4	60.0
Medium Trucks:	51.5	50.0	43.7	42.1	50.6	50.8
Heavy Trucks:	52.1	50.7	41.7	42.9	51.3	51.4
Vehicle Noise:	61.5	59.7	57.1	51.9	60.5	61.0

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.5	58.6	56.8	50.7	59.4	60.0
Medium Trucks:	51.5	50.0	43.7	42.1	50.6	50.8
Heavy Trucks:	52.1	50.7	41.7	42.9	51.3	51.4
Vehicle Noise:	61.5	59.7	57.1	51.9	60.5	61.0

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Third Floor With Wall
Road Name: Guasti Road
Lot No: R5

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,196	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	12	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	167.0	feet
Centerline Dist. to Observer:	167.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	23.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	168.208
Medium Trucks:	167.970
Heavy Trucks:	167.564

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-8.01	-1.20	*-21.23*	0.000	0.000
Medium Trucks:	77.62	-18.41	-8.00	-1.20	*-21.50*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-7.98	-1.20	*-22.03*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.0	57.1	55.3	49.2	57.9	58.5
Medium Trucks:	50.0	48.5	42.1	40.6	49.1	49.3
Heavy Trucks:	50.6	49.2	40.1	41.4	49.7	49.9
Vehicle Noise:	60.0	58.2	55.6	50.4	59.0	59.5

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.0	57.1	55.3	49.2	57.9	58.5
Medium Trucks:	50.0	48.5	42.1	40.6	49.1	49.3
Heavy Trucks:	50.6	49.2	40.1	41.4	49.7	49.9
Vehicle Noise:	60.0	58.2	55.6	50.4	59.0	59.5

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Third Floor With Wall
Road Name: Guasti Road
Lot No: R6

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,196	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	12	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	205.0	feet
Centerline Dist. to Observer:	205.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	23.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	205.985
Medium Trucks:	205.791
Heavy Trucks:	205.460

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-9.33	-1.20	*-21.46*	0.000	0.000
Medium Trucks:	77.62	-18.41	-9.32	-1.20	*-21.68*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-9.31	-1.20	*-22.12*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	57.6	55.7	54.0	47.9	56.5	57.2
Medium Trucks:	48.7	47.2	40.8	39.3	47.7	48.0
Heavy Trucks:	49.3	47.8	38.8	40.1	48.4	48.5
Vehicle Noise:	58.7	56.9	54.3	49.1	57.6	58.2

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	57.6	55.7	54.0	47.9	56.5	57.2
Medium Trucks:	48.7	47.2	40.8	39.3	47.7	48.0
Heavy Trucks:	49.3	47.8	38.8	40.1	48.4	48.5
Vehicle Noise:	58.7	56.9	54.3	49.1	57.6	58.2

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Third Floor With Wall
Road Name: Holt Boulevard
Lot No: R7

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,334	vehicles
Vehicle Speed:	50	mph
Near/Far Lane Distance:	52	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	257.0	feet
Centerline Dist. to Observer:	257.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	23.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	256.542
Medium Trucks:	256.386
Heavy Trucks:	256.121

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-10.76	-1.20	*-21.67*	0.000	0.000
Medium Trucks:	78.79	-18.40	-10.75	-1.20	*-21.85*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-10.75	-1.20	*-22.20*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.0	56.1	54.3	48.3	56.9	57.5
Medium Trucks:	48.4	46.9	40.6	39.0	47.5	47.7
Heavy Trucks:	48.7	47.3	38.3	39.5	47.9	48.0
Vehicle Noise:	58.9	57.1	54.6	49.3	57.8	58.4

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.0	56.1	54.3	48.3	56.9	57.5
Medium Trucks:	48.4	46.9	40.6	39.0	47.5	47.7
Heavy Trucks:	48.7	47.3	38.3	39.5	47.9	48.0
Vehicle Noise:	58.9	57.1	54.6	49.3	57.8	58.4

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Third Floor With Wall
Road Name: Holt Boulevard
Lot No: R8

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,334	vehicles
Vehicle Speed:	50	mph
Near/Far Lane Distance:	52	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	138.0	feet
Centerline Dist. to Observer:	138.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	23.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	137.146
Medium Trucks:	136.854
Heavy Trucks:	136.355

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-6.68	-1.20	*-20.96*	0.000	0.000
Medium Trucks:	78.79	-18.40	-6.66	-1.20	*-21.29*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-6.64	-1.20	*-21.94*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.1	60.2	58.4	52.4	61.0	61.6
Medium Trucks:	52.5	51.0	44.7	43.1	51.6	51.8
Heavy Trucks:	52.8	51.4	42.4	43.6	52.0	52.1
Vehicle Noise:	63.0	61.2	58.7	53.3	61.9	62.4

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.1	60.2	58.4	52.4	61.0	61.6
Medium Trucks:	52.5	51.0	44.7	43.1	51.6	51.8
Heavy Trucks:	52.8	51.4	42.4	43.6	52.0	52.1
Vehicle Noise:	63.0	61.2	58.7	53.3	61.9	62.4

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Third Floor With Wall
Road Name: Guasti Road
Lot No: R9

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,196	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	12	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	143.0	feet
Centerline Dist. to Observer:	143.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	23.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	144.409
Medium Trucks:	144.132
Heavy Trucks:	143.659

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-7.01	-1.20	*-21.02*	0.000	0.000
Medium Trucks:	77.62	-18.41	-7.00	-1.20	*-21.33*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-6.98	-1.20	*-21.96*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.0	58.1	56.3	50.2	58.9	59.5
Medium Trucks:	51.0	49.5	43.1	41.6	50.1	50.3
Heavy Trucks:	51.6	50.2	41.1	42.4	50.7	50.9
Vehicle Noise:	61.0	59.2	56.6	51.4	60.0	60.5

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.0	58.1	56.3	50.2	58.9	59.5
Medium Trucks:	51.0	49.5	43.1	41.6	50.1	50.3
Heavy Trucks:	51.6	50.2	41.1	42.4	50.7	50.9
Vehicle Noise:	61.0	59.2	56.6	51.4	60.0	60.5

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Third Floor With Wall
Road Name: Holt Boulevard
Lot No: R10

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,334	vehicles
Vehicle Speed:	50	mph
Near/Far Lane Distance:	52	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	149.0	feet
Centerline Dist. to Observer:	149.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	23.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	148.209
Medium Trucks:	147.939
Heavy Trucks:	147.478

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-7.18	-1.20	*-21.08*	0.000	0.000
Medium Trucks:	78.79	-18.40	-7.17	-1.20	*-21.38*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-7.15	-1.20	*-21.98*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.6	59.7	57.9	51.9	60.5	61.1
Medium Trucks:	52.0	50.5	44.2	42.6	51.1	51.3
Heavy Trucks:	52.3	50.9	41.9	43.1	51.5	51.6
Vehicle Noise:	62.5	60.7	58.2	52.8	61.4	61.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.6	59.7	57.9	51.9	60.5	61.1
Medium Trucks:	52.0	50.5	44.2	42.6	51.1	51.3
Heavy Trucks:	52.3	50.9	41.9	43.1	51.5	51.6
Vehicle Noise:	62.5	60.7	58.2	52.8	61.4	61.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Fourth Floor With Wall
Road Name: Holt Boulevard
Lot No: R1

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,334	vehicles
Vehicle Speed:	50	mph
Near/Far Lane Distance:	52	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	93.0	feet
Centerline Dist. to Observer:	93.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	32.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	94.197
Medium Trucks:	93.579
Heavy Trucks:	92.459

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-4.23	-1.20	*-26.71*	0.000	0.000
Medium Trucks:	78.79	-18.40	-4.19	-1.20	*-27.36*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-4.11	-1.20	*-28.67*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.5	62.6	60.9	54.8	63.4	64.0
Medium Trucks:	55.0	53.5	47.1	45.6	54.1	54.3
Heavy Trucks:	55.4	53.9	44.9	46.2	54.5	54.6
Vehicle Noise:	65.4	63.6	61.2	55.8	64.4	64.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.5	62.6	60.9	54.8	63.4	64.0
Medium Trucks:	55.0	53.5	47.1	45.6	54.1	54.3
Heavy Trucks:	55.4	53.9	44.9	46.2	54.5	54.6
Vehicle Noise:	65.4	63.6	61.2	55.8	64.4	64.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Fourth Floor With Wall
Road Name: Holt Boulevard
Lot No: R2

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,334	vehicles
Vehicle Speed:	50	mph
Near/Far Lane Distance:	52	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	237.0	feet
Centerline Dist. to Observer:	237.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	32.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	237.472
Medium Trucks:	237.228
Heavy Trucks:	236.788

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-10.25	-1.20	*-29.47*	0.000	0.000
Medium Trucks:	78.79	-18.40	-10.25	-1.20	*-29.73*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-10.23	-1.20	*-30.26*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.5	56.6	54.8	48.8	57.4	58.0
Medium Trucks:	49.0	47.4	41.1	39.5	48.0	48.2
Heavy Trucks:	49.2	47.8	38.8	40.0	48.4	48.5
Vehicle Noise:	59.4	57.6	55.1	49.8	58.3	58.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.5	56.6	54.8	48.8	57.4	58.0
Medium Trucks:	49.0	47.4	41.1	39.5	48.0	48.2
Heavy Trucks:	49.2	47.8	38.8	40.0	48.4	48.5
Vehicle Noise:	59.4	57.6	55.1	49.8	58.3	58.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Fourth Floor With Wall
Road Name: Guasti Road
Lot No: R3

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	1,196 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	127.0 feet
Centerline Dist. to Observer:	127.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	32.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	130.357
Medium Trucks:	129.912
Heavy Trucks:	129.107

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-6.35	-1.20	*-27.90*	0.000	0.000
Medium Trucks:	77.62	-18.41	-6.32	-1.20	*-28.39*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-6.28	-1.20	*-29.36*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.6	58.7	57.0	50.9	59.5	60.1
Medium Trucks:	51.7	50.2	43.8	42.3	50.7	51.0
Heavy Trucks:	52.3	50.9	41.8	43.1	51.4	51.6
Vehicle Noise:	61.7	59.9	57.3	52.1	60.6	61.1

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.6	58.7	57.0	50.9	59.5	60.1
Medium Trucks:	51.7	50.2	43.8	42.3	50.7	51.0
Heavy Trucks:	52.3	50.9	41.8	43.1	51.4	51.6
Vehicle Noise:	61.7	59.9	57.3	52.1	60.6	61.1

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario:	Fourth Floor With Wall	*Project Name:*	Empire Groves Hotel
Road Name:	Guasti Road	*Job Number:*	15693
Lot No:	R4	*Analyst:*	B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,196	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	12	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	132.0	feet
Centerline Dist. to Observer:	132.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	32.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	135.233
Medium Trucks:	134.804
Heavy Trucks:	134.029

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-6.59	-1.20	*-28.03*	0.000	0.000
Medium Trucks:	77.62	-18.41	-6.56	-1.20	*-28.49*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-6.53	-1.20	*-29.43*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.4	58.5	56.7	50.7	59.3	59.9
Medium Trucks:	51.4	49.9	43.6	42.0	50.5	50.7
Heavy Trucks:	52.0	50.6	41.6	42.8	51.2	51.3
Vehicle Noise:	61.4	59.6	57.1	51.8	60.4	60.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.4	58.5	56.7	50.7	59.3	59.9
Medium Trucks:	51.4	49.9	43.6	42.0	50.5	50.7
Heavy Trucks:	52.0	50.6	41.6	42.8	51.2	51.3
Vehicle Noise:	61.4	59.6	57.1	51.8	60.4	60.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Fourth Floor With Wall
Road Name: Guasti Road
Lot No: R5

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,196	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	12	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	167.0	feet
Centerline Dist. to Observer:	167.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	32.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	169.567
Medium Trucks:	169.225
Heavy Trucks:	168.608

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-8.06	-1.20	*-28.71*	0.000	0.000
Medium Trucks:	77.62	-18.41	-8.05	-1.20	*-29.08*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-8.02	-1.20	*-29.82*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.9	57.0	55.2	49.2	57.8	58.4
Medium Trucks:	50.0	48.5	42.1	40.6	49.0	49.2
Heavy Trucks:	50.6	49.1	40.1	41.3	49.7	49.8
Vehicle Noise:	60.0	58.2	55.6	50.3	58.9	59.4

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.9	57.0	55.2	49.2	57.8	58.4
Medium Trucks:	50.0	48.5	42.1	40.6	49.0	49.2
Heavy Trucks:	50.6	49.1	40.1	41.3	49.7	49.8
Vehicle Noise:	60.0	58.2	55.6	50.3	58.9	59.4

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Fourth Floor With Wall
Road Name: Guasti Road
Lot No: R6

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,196	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	12	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	205.0	feet
Centerline Dist. to Observer:	205.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	32.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	207.097
Medium Trucks:	206.816
Heavy Trucks:	206.312

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-9.36	-1.20	*-29.18*	0.000	0.000
Medium Trucks:	77.62	-18.41	-9.35	-1.20	*-29.48*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-9.34	-1.20	*-30.09*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	57.6	55.7	53.9	47.9	56.5	57.1
Medium Trucks:	48.7	47.1	40.8	39.2	47.7	47.9
Heavy Trucks:	49.2	47.8	38.8	40.0	48.4	48.5
Vehicle Noise:	58.7	56.9	54.3	49.0	57.6	58.1

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	57.6	55.7	53.9	47.9	56.5	57.1
Medium Trucks:	48.7	47.1	40.8	39.2	47.7	47.9
Heavy Trucks:	49.2	47.8	38.8	40.0	48.4	48.5
Vehicle Noise:	58.7	56.9	54.3	49.0	57.6	58.1

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Fourth Floor With Wall
Road Name: Holt Boulevard
Lot No: R7

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,334	vehicles
Vehicle Speed:	50	mph
Near/Far Lane Distance:	52	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	257.0	feet
Centerline Dist. to Observer:	257.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	32.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	257.435
Medium Trucks:	257.210
Heavy Trucks:	256.805

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-10.78	-1.20	*-29.61*	0.000	0.000
Medium Trucks:	78.79	-18.40	-10.77	-1.20	*-29.85*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-10.76	-1.20	*-30.34*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.0	56.1	54.3	48.3	56.9	57.5
Medium Trucks:	48.4	46.9	40.6	39.0	47.5	47.7
Heavy Trucks:	48.7	47.3	38.2	39.5	47.9	48.0
Vehicle Noise:	58.9	57.1	54.6	49.2	57.8	58.3

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.0	56.1	54.3	48.3	56.9	57.5
Medium Trucks:	48.4	46.9	40.6	39.0	47.5	47.7
Heavy Trucks:	48.7	47.3	38.2	39.5	47.9	48.0
Vehicle Noise:	58.9	57.1	54.6	49.2	57.8	58.3

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Fourth Floor With Wall
Road Name: Holt Boulevard
Lot No: R8

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,334	vehicles
Vehicle Speed:	50	mph
Near/Far Lane Distance:	52	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	138.0	feet
Centerline Dist. to Observer:	138.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	32.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	138.809
Medium Trucks:	138.391
Heavy Trucks:	137.636

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-6.76	-1.20	*-28.17*	0.000	0.000
Medium Trucks:	78.79	-18.40	-6.74	-1.20	*-28.61*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-6.70	-1.20	*-29.51*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.0	60.1	58.3	52.3	60.9	61.5
Medium Trucks:	52.5	51.0	44.6	43.0	51.5	51.7
Heavy Trucks:	52.8	51.3	42.3	43.6	51.9	52.0
Vehicle Noise:	62.9	61.1	58.6	53.3	61.8	62.4

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.0	60.1	58.3	52.3	60.9	61.5
Medium Trucks:	52.5	51.0	44.6	43.0	51.5	51.7
Heavy Trucks:	52.8	51.3	42.3	43.6	51.9	52.0
Vehicle Noise:	62.9	61.1	58.6	53.3	61.8	62.4

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Fourth Floor With Wall
Road Name: Guasti Road
Lot No: R9

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,196	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	12	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	143.0	feet
Centerline Dist. to Observer:	143.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	32.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	145.990
Medium Trucks:	145.592
Heavy Trucks:	144.875

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-7.08	-1.20	*-28.28*	0.000	0.000
Medium Trucks:	77.62	-18.41	-7.07	-1.20	*-28.71*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-7.03	-1.20	*-29.57*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.9	58.0	56.2	50.2	58.8	59.4
Medium Trucks:	50.9	49.4	43.1	41.5	50.0	50.2
Heavy Trucks:	51.5	50.1	41.1	42.3	50.7	50.8
Vehicle Noise:	60.9	59.1	56.6	51.3	59.9	60.4

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.9	58.0	56.2	50.2	58.8	59.4
Medium Trucks:	50.9	49.4	43.1	41.5	50.0	50.2
Heavy Trucks:	51.5	50.1	41.1	42.3	50.7	50.8
Vehicle Noise:	60.9	59.1	56.6	51.3	59.9	60.4

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Fourth Floor With Wall
Road Name: Holt Boulevard
Lot No: R10

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,334	vehicles
Vehicle Speed:	50	mph
Near/Far Lane Distance:	52	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	149.0	feet
Centerline Dist. to Observer:	149.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	32.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	149.750
Medium Trucks:	149.362
Heavy Trucks:	148.663

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-7.25	-1.20	*-28.40*	0.000	0.000
Medium Trucks:	78.79	-18.40	-7.23	-1.20	*-28.81*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-7.20	-1.20	*-29.64*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.5	59.6	57.8	51.8	60.4	61.0
Medium Trucks:	52.0	50.5	44.1	42.6	51.0	51.2
Heavy Trucks:	52.3	50.8	41.8	43.1	51.4	51.5
Vehicle Noise:	62.4	60.6	58.1	52.8	61.4	61.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.5	59.6	57.8	51.8	60.4	61.0
Medium Trucks:	52.0	50.5	44.1	42.6	51.0	51.2
Heavy Trucks:	52.3	50.8	41.8	43.1	51.4	51.5
Vehicle Noise:	62.4	60.6	58.1	52.8	61.4	61.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Fifth Floor With Wall
Road Name: Holt Boulevard
Lot No: R1

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,334	vehicles
Vehicle Speed:	50	mph
Near/Far Lane Distance:	52	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	93.0	feet
Centerline Dist. to Observer:	93.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	41.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	97.437
Medium Trucks:	96.654
Heavy Trucks:	95.192

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-4.45	-1.20	*-32.46*	0.000	0.000
Medium Trucks:	78.79	-18.40	-4.40	-1.20	*-33.26*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-4.30	-1.20	*-34.89*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.3	62.4	60.6	54.6	63.2	63.8
Medium Trucks:	54.8	53.3	46.9	45.4	53.8	54.1
Heavy Trucks:	55.2	53.7	44.7	46.0	54.3	54.4
Vehicle Noise:	65.2	63.4	60.9	55.6	64.2	64.7

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.3	62.4	60.6	54.6	63.2	63.8
Medium Trucks:	54.8	53.3	46.9	45.4	53.8	54.1
Heavy Trucks:	55.2	53.7	44.7	46.0	54.3	54.4
Vehicle Noise:	65.2	63.4	60.9	55.6	64.2	64.7

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Fifth Floor With Wall
Road Name: Holt Boulevard
Lot No: R2

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,334	vehicles
Vehicle Speed:	50	mph
Near/Far Lane Distance:	52	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	237.0	feet
Centerline Dist. to Observer:	237.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	41.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	238.776
Medium Trucks:	238.458
Heavy Trucks:	237.869

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-10.29	-1.20	*-37.00*	0.000	0.000
Medium Trucks:	78.79	-18.40	-10.28	-1.20	*-37.34*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-10.26	-1.20	*-38.01*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.5	56.6	54.8	48.8	57.4	58.0
Medium Trucks:	48.9	47.4	41.0	39.5	48.0	48.2
Heavy Trucks:	49.2	47.8	38.7	40.0	48.4	48.5
Vehicle Noise:	59.4	57.6	55.1	49.7	58.3	58.8

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.5	56.6	54.8	48.8	57.4	58.0
Medium Trucks:	48.9	47.4	41.0	39.5	48.0	48.2
Heavy Trucks:	49.2	47.8	38.7	40.0	48.4	48.5
Vehicle Noise:	59.4	57.6	55.1	49.7	58.3	58.8

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Fifth Floor With Wall
Road Name: Guasti Road
Lot No: R3

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,196	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	12	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	127.0	feet
Centerline Dist. to Observer:	127.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	41.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	132.718
Medium Trucks:	132.144
Heavy Trucks:	131.079

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-6.46	-1.20	*-34.40*	0.000	0.000
Medium Trucks:	77.62	-18.41	-6.43	-1.20	*-35.01*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-6.38	-1.20	*-36.24*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.5	58.6	56.8	50.8	59.4	60.0
Medium Trucks:	51.6	50.1	43.7	42.2	50.6	50.9
Heavy Trucks:	52.2	50.8	41.7	43.0	51.3	51.5
Vehicle Noise:	61.6	59.8	57.2	51.9	60.5	61.0

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.5	58.6	56.8	50.8	59.4	60.0
Medium Trucks:	51.6	50.1	43.7	42.2	50.6	50.9
Heavy Trucks:	52.2	50.8	41.7	43.0	51.3	51.5
Vehicle Noise:	61.6	59.8	57.2	51.9	60.5	61.0

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Fifth Floor With Wall
Road Name: Guasti Road
Lot No: R4

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,196	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	12	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	132.0	feet
Centerline Dist. to Observer:	132.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	41.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	137.510
Medium Trucks:	136.956
Heavy Trucks:	135.929

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-6.69	-1.20	*-34.61*	0.000	0.000
Medium Trucks:	77.62	-18.41	-6.67	-1.20	*-35.20*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-6.62	-1.20	*-36.38*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.3	58.4	56.6	50.6	59.2	59.8
Medium Trucks:	51.3	49.8	43.5	41.9	50.4	50.6
Heavy Trucks:	52.0	50.5	41.5	42.7	51.1	51.2
Vehicle Noise:	61.3	59.5	56.9	51.7	60.3	60.8

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.3	58.4	56.6	50.6	59.2	59.8
Medium Trucks:	51.3	49.8	43.5	41.9	50.4	50.6
Heavy Trucks:	52.0	50.5	41.5	42.7	51.1	51.2
Vehicle Noise:	61.3	59.5	56.9	51.7	60.3	60.8

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Fifth Floor With Wall
Road Name: Guasti Road
Lot No: R5

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,196	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	12	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	167.0	feet
Centerline Dist. to Observer:	167.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	41.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	171.388
Medium Trucks:	170.944
Heavy Trucks:	170.122

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-8.13	-1.20	*-35.73*	0.000	0.000
Medium Trucks:	77.62	-18.41	-8.11	-1.20	*-36.20*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-8.08	-1.20	*-37.14*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.8	56.9	55.2	49.1	57.7	58.4
Medium Trucks:	49.9	48.4	42.0	40.5	48.9	49.2
Heavy Trucks:	50.5	49.1	40.0	41.3	49.6	49.8
Vehicle Noise:	59.9	58.1	55.5	50.3	58.8	59.4

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.8	56.9	55.2	49.1	57.7	58.4
Medium Trucks:	49.9	48.4	42.0	40.5	48.9	49.2
Heavy Trucks:	50.5	49.1	40.0	41.3	49.6	49.8
Vehicle Noise:	59.9	58.1	55.5	50.3	58.8	59.4

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Fifth Floor With Wall
Road Name: Guasti Road
Lot No: R6

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,196	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	12	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	205.0	feet
Centerline Dist. to Observer:	205.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	41.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	208.591
Medium Trucks:	208.226
Heavy Trucks:	207.551

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-9.41	-1.20	*-36.53*	0.000	0.000
Medium Trucks:	77.62	-18.41	-9.40	-1.20	*-36.91*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-9.38	-1.20	*-37.69*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	57.6	55.7	53.9	47.8	56.5	57.1
Medium Trucks:	48.6	47.1	40.7	39.2	47.7	47.9
Heavy Trucks:	49.2	47.8	38.7	40.0	48.3	48.5
Vehicle Noise:	58.6	56.8	54.2	49.0	57.6	58.1

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	57.6	55.7	53.9	47.8	56.5	57.1
Medium Trucks:	48.6	47.1	40.7	39.2	47.7	47.9
Heavy Trucks:	49.2	47.8	38.7	40.0	48.3	48.5
Vehicle Noise:	58.6	56.8	54.2	49.0	57.6	58.1

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Fifth Floor With Wall
Road Name: Holt Boulevard
Lot No: R7

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,334	vehicles
Vehicle Speed:	50	mph
Near/Far Lane Distance:	52	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	257.0	feet
Centerline Dist. to Observer:	257.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	41.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	258.639
Medium Trucks:	258.345
Heavy Trucks:	257.801

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-10.81	-1.20	*-37.24*	0.000	0.000
Medium Trucks:	78.79	-18.40	-10.80	-1.20	*-37.55*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-10.79	-1.20	*-38.17*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.0	56.1	54.3	48.2	56.9	57.5
Medium Trucks:	48.4	46.9	40.5	39.0	47.4	47.7
Heavy Trucks:	48.7	47.3	38.2	39.5	47.8	48.0
Vehicle Noise:	58.8	57.0	54.6	49.2	57.8	58.3

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.0	56.1	54.3	48.2	56.9	57.5
Medium Trucks:	48.4	46.9	40.5	39.0	47.4	47.7
Heavy Trucks:	48.7	47.3	38.2	39.5	47.8	48.0
Vehicle Noise:	58.8	57.0	54.6	49.2	57.8	58.3

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Fifth Floor With Wall
Road Name: Holt Boulevard
Lot No: R8

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,334	vehicles
Vehicle Speed:	50	mph
Near/Far Lane Distance:	52	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	138.0	feet
Centerline Dist. to Observer:	138.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	41.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	141.028
Medium Trucks:	140.488
Heavy Trucks:	139.487

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-6.86	-1.20	*-34.84*	0.000	0.000
Medium Trucks:	78.79	-18.40	-6.83	-1.20	*-35.40*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-6.79	-1.20	*-36.54*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.9	60.0	58.2	52.2	60.8	61.4
Medium Trucks:	52.4	50.9	44.5	43.0	51.4	51.6
Heavy Trucks:	52.7	51.3	42.2	43.5	51.8	52.0
Vehicle Noise:	62.8	61.0	58.5	53.2	61.7	62.3

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.9	60.0	58.2	52.2	60.8	61.4
Medium Trucks:	52.4	50.9	44.5	43.0	51.4	51.6
Heavy Trucks:	52.7	51.3	42.2	43.5	51.8	52.0
Vehicle Noise:	62.8	61.0	58.5	53.2	61.7	62.3

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Fifth Floor With Wall
Road Name: Guasti Road
Lot No: R9

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,196	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	12	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	143.0	feet
Centerline Dist. to Observer:	143.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	41.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	148.101
Medium Trucks:	147.587
Heavy Trucks:	146.634

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-7.18	-1.20	*-35.02*	0.000	0.000
Medium Trucks:	77.62	-18.41	-7.15	-1.20	*-35.56*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-7.11	-1.20	*-36.66*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.8	57.9	56.1	50.1	58.7	59.3
Medium Trucks:	50.9	49.3	43.0	41.4	49.9	50.1
Heavy Trucks:	51.5	50.0	41.0	42.3	50.6	50.7
Vehicle Noise:	60.8	59.0	56.5	51.2	59.8	60.3

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.8	57.9	56.1	50.1	58.7	59.3
Medium Trucks:	50.9	49.3	43.0	41.4	49.9	50.1
Heavy Trucks:	51.5	50.0	41.0	42.3	50.6	50.7
Vehicle Noise:	60.8	59.0	56.5	51.2	59.8	60.3

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Fifth Floor With Wall
Road Name: Holt Boulevard
Lot No: R10

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,334	vehicles
Vehicle Speed:	50	mph
Near/Far Lane Distance:	52	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	149.0	feet
Centerline Dist. to Observer:	149.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	41.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	151.809
Medium Trucks:	151.308
Heavy Trucks:	150.378

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-7.34	-1.20	*-35.22*	0.000	0.000
Medium Trucks:	78.79	-18.40	-7.32	-1.20	*-35.74*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-7.28	-1.20	*-36.79*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.4	59.5	57.8	51.7	60.3	60.9
Medium Trucks:	51.9	50.4	44.0	42.5	50.9	51.2
Heavy Trucks:	52.2	50.8	41.7	43.0	51.3	51.5
Vehicle Noise:	62.3	60.5	58.0	52.7	61.3	61.8

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.4	59.5	57.8	51.7	60.3	60.9
Medium Trucks:	51.9	50.4	44.0	42.5	50.9	51.2
Heavy Trucks:	52.2	50.8	41.7	43.0	51.3	51.5
Vehicle Noise:	62.3	60.5	58.0	52.7	61.3	61.8

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Sixth Floor With Wall
Road Name: Holt Boulevard
Lot No: R1

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,334	vehicles
Vehicle Speed:	50	mph
Near/Far Lane Distance:	52	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	93.0	feet
Centerline Dist. to Observer:	93.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	50.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	101.376
Medium Trucks:	100.444
Heavy Trucks:	98.674

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-4.71	-1.20	*-37.54*	0.000	0.000
Medium Trucks:	78.79	-18.40	-4.65	-1.20	*-38.48*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-4.53	-1.20	*-40.41*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.1	62.2	60.4	54.3	63.0	63.6
Medium Trucks:	54.6	53.0	46.7	45.1	53.6	53.8
Heavy Trucks:	54.9	53.5	44.5	45.7	54.1	54.2
Vehicle Noise:	65.0	63.2	60.7	55.3	63.9	64.4

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.1	62.2	60.4	54.3	63.0	63.6
Medium Trucks:	54.6	53.0	46.7	45.1	53.6	53.8
Heavy Trucks:	54.9	53.5	44.5	45.7	54.1	54.2
Vehicle Noise:	65.0	63.2	60.7	55.3	63.9	64.4

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Sixth Floor With Wall
Road Name: Holt Boulevard
Lot No: R2

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,334	vehicles
Vehicle Speed:	50	mph
Near/Far Lane Distance:	52	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	237.0	feet
Centerline Dist. to Observer:	237.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	50.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	240.410
Medium Trucks:	240.019
Heavy Trucks:	239.283

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-10.33	-1.20	*-44.22*	0.000	0.000
Medium Trucks:	78.79	-18.40	-10.32	-1.20	*-44.63*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-10.30	-1.20	*-45.44*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.4	56.5	54.8	48.7	57.3	57.9
Medium Trucks:	48.9	47.4	41.0	39.5	47.9	48.2
Heavy Trucks:	49.2	47.7	38.7	40.0	48.3	48.4
Vehicle Noise:	59.3	57.5	55.0	49.7	58.3	58.8

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.4	56.5	54.8	48.7	57.3	57.9
Medium Trucks:	48.9	47.4	41.0	39.5	47.9	48.2
Heavy Trucks:	49.2	47.7	38.7	40.0	48.3	48.4
Vehicle Noise:	59.3	57.5	55.0	49.7	58.3	58.8

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Sixth Floor With Wall
Road Name: Guasti Road
Lot No: R3

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,196	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	12	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	127.0	feet
Centerline Dist. to Observer:	127.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	50.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	135.636
Medium Trucks:	134.941
Heavy Trucks:	133.628

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-6.60	-1.20	*-40.36*	0.000	0.000
Medium Trucks:	77.62	-18.41	-6.57	-1.20	*-41.08*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-6.51	-1.20	*-42.55*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.4	58.5	56.7	50.6	59.3	59.9
Medium Trucks:	51.4	49.9	43.6	42.0	50.5	50.7
Heavy Trucks:	52.1	50.6	41.6	42.9	51.2	51.3
Vehicle Noise:	61.4	59.6	57.0	51.8	60.4	60.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.4	58.5	56.7	50.6	59.3	59.9
Medium Trucks:	51.4	49.9	43.6	42.0	50.5	50.7
Heavy Trucks:	52.1	50.6	41.6	42.9	51.2	51.3
Vehicle Noise:	61.4	59.6	57.0	51.8	60.4	60.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Sixth Floor With Wall
Road Name: Guasti Road
Lot No: R4

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,196	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	12	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	132.0	feet
Centerline Dist. to Observer:	132.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	50.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	140.328
Medium Trucks:	139.657
Heavy Trucks:	138.389

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-6.83	-1.20	*-40.66*	0.000	0.000
Medium Trucks:	77.62	-18.41	-6.79	-1.20	*-41.36*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-6.74	-1.20	*-42.78*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.1	58.2	56.5	50.4	59.0	59.7
Medium Trucks:	51.2	49.7	43.3	41.8	50.3	50.5
Heavy Trucks:	51.8	50.4	41.4	42.6	51.0	51.1
Vehicle Noise:	61.2	59.4	56.8	51.6	60.1	60.7

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.1	58.2	56.5	50.4	59.0	59.7
Medium Trucks:	51.2	49.7	43.3	41.8	50.3	50.5
Heavy Trucks:	51.8	50.4	41.4	42.6	51.0	51.1
Vehicle Noise:	61.2	59.4	56.8	51.6	60.1	60.7

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Sixth Floor With Wall
Road Name: Guasti Road
Lot No: R5

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,196	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	12	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	167.0	feet
Centerline Dist. to Observer:	167.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	50.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	173.658
Medium Trucks:	173.116
Heavy Trucks:	172.094

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-8.21	-1.20	*-42.32*	0.000	0.000
Medium Trucks:	77.62	-18.41	-8.19	-1.20	*-42.88*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-8.16	-1.20	*-44.02*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.8	56.9	55.1	49.0	57.7	58.3
Medium Trucks:	49.8	48.3	41.9	40.4	48.9	49.1
Heavy Trucks:	50.4	49.0	40.0	41.2	49.6	49.7
Vehicle Noise:	59.8	58.0	55.4	50.2	58.8	59.3

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.8	56.9	55.1	49.0	57.7	58.3
Medium Trucks:	49.8	48.3	41.9	40.4	48.9	49.1
Heavy Trucks:	50.4	49.0	40.0	41.2	49.6	49.7
Vehicle Noise:	59.8	58.0	55.4	50.2	58.8	59.3

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Sixth Floor With Wall
Road Name: Guasti Road
Lot No: R6

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,196	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	12	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	205.0	feet
Centerline Dist. to Observer:	205.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	50.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	210.459
Medium Trucks:	210.012
Heavy Trucks:	209.171

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-9.47	-1.20	*-43.51*	0.000	0.000
Medium Trucks:	77.62	-18.41	-9.45	-1.20	*-43.97*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-9.43	-1.20	*-44.91*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	57.5	55.6	53.8	47.8	56.4	57.0
Medium Trucks:	48.6	47.0	40.7	39.1	47.6	47.8
Heavy Trucks:	49.1	47.7	38.7	39.9	48.3	48.4
Vehicle Noise:	58.6	56.8	54.2	48.9	57.5	58.0

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	57.5	55.6	53.8	47.8	56.4	57.0
Medium Trucks:	48.6	47.0	40.7	39.1	47.6	47.8
Heavy Trucks:	49.1	47.7	38.7	39.9	48.3	48.4
Vehicle Noise:	58.6	56.8	54.2	48.9	57.5	58.0

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Sixth Floor With Wall
Road Name: Holt Boulevard
Lot No: R7

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,334	vehicles
Vehicle Speed:	50	mph
Near/Far Lane Distance:	52	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	257.0	feet
Centerline Dist. to Observer:	257.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	50.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	260.148
Medium Trucks:	259.786
Heavy Trucks:	259.107

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-10.85	-1.20	*-44.58*	0.000	0.000
Medium Trucks:	78.79	-18.40	-10.84	-1.20	*-44.95*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-10.82	-1.20	*-45.71*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	57.9	56.0	54.3	48.2	56.8	57.4
Medium Trucks:	48.4	46.9	40.5	38.9	47.4	47.6
Heavy Trucks:	48.6	47.2	38.2	39.4	47.8	47.9
Vehicle Noise:	58.8	57.0	54.5	49.2	57.8	58.3

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	57.9	56.0	54.3	48.2	56.8	57.4
Medium Trucks:	48.4	46.9	40.5	38.9	47.4	47.6
Heavy Trucks:	48.6	47.2	38.2	39.4	47.8	47.9
Vehicle Noise:	58.8	57.0	54.5	49.2	57.8	58.3

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Sixth Floor With Wall
Road Name: Holt Boulevard
Lot No: R8

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,334	vehicles
Vehicle Speed:	50	mph
Near/Far Lane Distance:	52	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	138.0	feet
Centerline Dist. to Observer:	138.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	50.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	143.778
Medium Trucks:	143.122
Heavy Trucks:	141.886

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-6.98	-1.20	*-41.00*	0.000	0.000
Medium Trucks:	78.79	-18.40	-6.95	-1.20	*-41.67*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-6.90	-1.20	*-43.03*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.8	59.9	58.1	52.1	60.7	61.3
Medium Trucks:	52.2	50.7	44.4	42.8	51.3	51.5
Heavy Trucks:	52.6	51.1	42.1	43.4	51.7	51.8
Vehicle Noise:	62.7	60.9	58.4	53.0	61.6	62.1

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.8	59.9	58.1	52.1	60.7	61.3
Medium Trucks:	52.2	50.7	44.4	42.8	51.3	51.5
Heavy Trucks:	52.6	51.1	42.1	43.4	51.7	51.8
Vehicle Noise:	62.7	60.9	58.4	53.0	61.6	62.1

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Sixth Floor With Wall
Road Name: Guasti Road
Lot No: R9

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,196	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	12	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	143.0	feet
Centerline Dist. to Observer:	143.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	50.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	150.722
Medium Trucks:	150.097
Heavy Trucks:	148.918

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-7.29	-1.20	*-41.26*	0.000	0.000
Medium Trucks:	77.62	-18.41	-7.26	-1.20	*-41.91*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-7.21	-1.20	*-43.23*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.7	57.8	56.0	50.0	58.6	59.2
Medium Trucks:	50.7	49.2	42.9	41.3	49.8	50.0
Heavy Trucks:	51.4	49.9	40.9	42.2	50.5	50.6
Vehicle Noise:	60.7	58.9	56.3	51.1	59.7	60.2

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.7	57.8	56.0	50.0	58.6	59.2
Medium Trucks:	50.7	49.2	42.9	41.3	49.8	50.0
Heavy Trucks:	51.4	49.9	40.9	42.2	50.5	50.6
Vehicle Noise:	60.7	58.9	56.3	51.1	59.7	60.2

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: Sixth Floor With Wall
Road Name: Holt Boulevard
Lot No: R10

Project Name: Empire Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,334	vehicles
Vehicle Speed:	50	mph
Near/Far Lane Distance:	52	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	149.0	feet
Centerline Dist. to Observer:	149.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	50.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	2.000		
Medium Trucks:	4.000		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	154.366
Medium Trucks:	153.756
Heavy Trucks:	152.606

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-7.45	-1.20	*-41.56*	0.000	0.000
Medium Trucks:	78.79	-18.40	-7.42	-1.20	*-42.18*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-7.37	-1.20	*-43.45*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.3	59.4	57.7	51.6	60.2	60.8
Medium Trucks:	51.8	50.3	43.9	42.4	50.8	51.1
Heavy Trucks:	52.1	50.7	41.6	42.9	51.2	51.4
Vehicle Noise:	62.2	60.4	57.9	52.6	61.2	61.7

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.3	59.4	57.7	51.6	60.2	60.8
Medium Trucks:	51.8	50.3	43.9	42.4	50.8	51.1
Heavy Trucks:	52.1	50.7	41.6	42.9	51.2	51.4
Vehicle Noise:	62.2	60.4	57.9	52.6	61.2	61.7

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: First Floor With Wall
Road Name: Guasti Road
Lot No: R5

Project Name: Emprie Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	1,196 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	167.0 feet
Centerline Dist. to Observer:	167.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	59.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	0.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	171.365
Medium Trucks:	170.588
Heavy Trucks:	168.776

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-8.13	-1.20	*-47.48*	0.000	0.000
Medium Trucks:	77.62	-18.41	-8.10	-1.20	*-48.26*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-8.03	-1.20	*-50.21*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.8	56.9	55.2	49.1	57.7	58.4
Medium Trucks:	49.9	48.4	42.0	40.5	49.0	49.2
Heavy Trucks:	50.5	49.1	40.1	41.3	49.7	49.8
Vehicle Noise:	59.9	58.1	55.5	50.3	58.8	59.4

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.8	56.9	55.2	49.1	57.7	58.4
Medium Trucks:	49.9	48.4	42.0	40.5	49.0	49.2
Heavy Trucks:	50.5	49.1	40.1	41.3	49.7	49.8
Vehicle Noise:	59.9	58.1	55.5	50.3	58.8	59.4

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: First Floor With Wall
Road Name: Guasti Road
Lot No: R6

Project Name: Emprie Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	1,196 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	205.0 feet
Centerline Dist. to Observer:	205.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	59.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	0.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	207.475
Medium Trucks:	206.834
Heavy Trucks:	205.342

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-9.37	-1.20	*-49.35*	0.000	0.000
Medium Trucks:	77.62	-18.41	-9.35	-1.20	*-49.99*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-9.31	-1.20	*-51.59*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	57.6	55.7	53.9	47.9	56.5	57.1
Medium Trucks:	48.7	47.1	40.8	39.2	47.7	47.9
Heavy Trucks:	49.3	47.8	38.8	40.1	48.4	48.5
Vehicle Noise:	58.7	56.9	54.3	49.0	57.6	58.1

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	57.6	55.7	53.9	47.9	56.5	57.1
Medium Trucks:	48.7	47.1	40.8	39.2	47.7	47.9
Heavy Trucks:	49.3	47.8	38.8	40.1	48.4	48.5
Vehicle Noise:	58.7	56.9	54.3	49.0	57.6	58.1

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: First Floor With Wall
Road Name: Holt Boulevard
Lot No: R7

Project Name: Emprie Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	1,334 vehicles
Vehicle Speed:	50 mph
Near/Far Lane Distance:	52 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	257.0 feet
Centerline Dist. to Observer:	257.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	59.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	0.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	236.994
Medium Trucks:	236.432
Heavy Trucks:	235.128

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-10.24	-1.20	*-50.47*	0.000	0.000
Medium Trucks:	78.79	-18.40	-10.22	-1.20	*-51.03*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-10.19	-1.20	*-52.42*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.5	56.6	54.9	48.8	57.4	58.0
Medium Trucks:	49.0	47.5	41.1	39.6	48.0	48.3
Heavy Trucks:	49.3	47.9	38.8	40.1	48.4	48.6
Vehicle Noise:	59.4	57.6	55.1	49.8	58.4	58.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.5	56.6	54.9	48.8	57.4	58.0
Medium Trucks:	49.0	47.5	41.1	39.6	48.0	48.3
Heavy Trucks:	49.3	47.9	38.8	40.1	48.4	48.6
Vehicle Noise:	59.4	57.6	55.1	49.8	58.4	58.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: First Floor With Wall
Road Name: Holt Boulevard
Lot No: R8

Project Name: Emprie Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	1,334 vehicles
Vehicle Speed:	50 mph
Near/Far Lane Distance:	52 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	138.0 feet
Centerline Dist. to Observer:	138.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	59.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	0.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	123.891
Medium Trucks:	122.814
Heavy Trucks:	120.285

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-6.01	-1.20	*-43.45*	0.000	0.000
Medium Trucks:	78.79	-18.40	-5.96	-1.20	*-44.51*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-5.82	-1.20	*-47.18*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.7	60.8	59.1	53.0	61.7	62.3
Medium Trucks:	53.2	51.7	45.4	43.8	52.3	52.5
Heavy Trucks:	53.6	52.2	43.2	44.4	52.8	52.9
Vehicle Noise:	63.7	61.9	59.4	54.0	62.6	63.1

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.7	60.8	59.1	53.0	61.7	62.3
Medium Trucks:	53.2	51.7	45.4	43.8	52.3	52.5
Heavy Trucks:	53.6	52.2	43.2	44.4	52.8	52.9
Vehicle Noise:	63.7	61.9	59.4	54.0	62.6	63.1

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: First Floor With Wall
Road Name: Guasti Road
Lot No: R9

Project Name: Emprie Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	1,196 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	143.0 feet
Centerline Dist. to Observer:	143.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	59.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	0.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	149.044
Medium Trucks:	148.149
Heavy Trucks:	146.060

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-7.22	-1.20	*-45.82*	0.000	0.000
Medium Trucks:	77.62	-18.41	-7.18	-1.20	*-46.72*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-7.09	-1.20	*-48.97*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.8	57.9	56.1	50.0	58.7	59.3
Medium Trucks:	50.8	49.3	43.0	41.4	49.9	50.1
Heavy Trucks:	51.5	50.1	41.0	42.3	50.6	50.8
Vehicle Noise:	60.8	59.0	56.4	51.2	59.8	60.3

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.8	57.9	56.1	50.0	58.7	59.3
Medium Trucks:	50.8	49.3	43.0	41.4	49.9	50.1
Heavy Trucks:	51.5	50.1	41.0	42.3	50.6	50.8
Vehicle Noise:	60.8	59.0	56.4	51.2	59.8	60.3

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario:	First Floor With Wall	*Project Name:*	Emprie Groves Hotel
Road Name:	Holt Boulevard	*Job Number:*	15693
Lot No:	R10	*Analyst:*	B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,334	vehicles
Vehicle Speed:	50	mph
Near/Far Lane Distance:	52	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	149.0	feet
Centerline Dist. to Observer:	149.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	59.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	0.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	133.918
Medium Trucks:	132.922
Heavy Trucks:	130.589

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-6.52	-1.20	*-44.60*	0.000	0.000
Medium Trucks:	78.79	-18.40	-6.47	-1.20	*-45.57*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-6.36	-1.20	*-48.05*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.2	60.3	58.6	52.5	61.1	61.7
Medium Trucks:	52.7	51.2	44.9	43.3	51.8	52.0
Heavy Trucks:	53.1	51.7	42.7	43.9	52.3	52.4
Vehicle Noise:	63.2	61.3	58.9	53.5	62.1	62.6

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.2	60.3	58.6	52.5	61.1	61.7
Medium Trucks:	52.7	51.2	44.9	43.3	51.8	52.0
Heavy Trucks:	53.1	51.7	42.7	43.9	52.3	52.4
Vehicle Noise:	63.2	61.3	58.9	53.5	62.1	62.6

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Second Floor With Wall
Road Name: Guasti Road
Lot No: R5

Project Name: Emprie Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	1,196 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	167.0 feet
Centerline Dist. to Observer:	167.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	68.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	0.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	174.668
Medium Trucks:	173.787
Heavy Trucks:	171.710

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-8.25	-1.20	*-53.06*	0.000	0.000
Medium Trucks:	77.62	-18.41	-8.22	-1.20	*-53.94*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-8.14	-1.20	*-56.15*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.7	56.8	55.1	49.0	57.6	58.2
Medium Trucks:	49.8	48.3	41.9	40.4	48.8	49.1
Heavy Trucks:	50.4	49.0	40.0	41.2	49.6	49.7
Vehicle Noise:	59.8	58.0	55.4	50.2	58.7	59.2

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.7	56.8	55.1	49.0	57.6	58.2
Medium Trucks:	49.8	48.3	41.9	40.4	48.8	49.1
Heavy Trucks:	50.4	49.0	40.0	41.2	49.6	49.7
Vehicle Noise:	59.8	58.0	55.4	50.2	58.7	59.2

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Second Floor With Wall
Road Name: Guasti Road
Lot No: R6

Project Name: Emprie Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	1,196 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	205.0 feet
Centerline Dist. to Observer:	205.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	68.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	0.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	210.212
Medium Trucks:	209.480
Heavy Trucks:	207.760

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-9.46	-1.20	*-55.48*	0.000	0.000
Medium Trucks:	77.62	-18.41	-9.44	-1.20	*-56.21*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-9.38	-1.20	*-58.03*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	57.5	55.6	53.8	47.8	56.4	57.0
Medium Trucks:	48.6	47.1	40.7	39.2	47.6	47.9
Heavy Trucks:	49.2	47.8	38.7	40.0	48.3	48.5
Vehicle Noise:	58.6	56.8	54.2	48.9	57.5	58.0

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	57.5	55.6	53.8	47.8	56.4	57.0
Medium Trucks:	48.6	47.1	40.7	39.2	47.6	47.9
Heavy Trucks:	49.2	47.8	38.7	40.0	48.3	48.5
Vehicle Noise:	58.6	56.8	54.2	48.9	57.5	58.0

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Second Floor With Wall
Road Name: Holt Boulevard
Lot No: R7

Project Name: Emprie Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	1,334 vehicles
Vehicle Speed:	50 mph
Near/Far Lane Distance:	52 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	257.0 feet
Centerline Dist. to Observer:	257.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	68.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	0.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	239.393
Medium Trucks:	238.751
Heavy Trucks:	237.243

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-10.31	-1.20	*-56.94*	0.000	0.000
Medium Trucks:	78.79	-18.40	-10.29	-1.20	*-57.58*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-10.25	-1.20	*-59.17*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.5	56.6	54.8	48.7	57.4	58.0
Medium Trucks:	48.9	47.4	41.0	39.5	48.0	48.2
Heavy Trucks:	49.2	47.8	38.8	40.0	48.4	48.5
Vehicle Noise:	59.4	57.5	55.1	49.7	58.3	58.8

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.5	56.6	54.8	48.7	57.4	58.0
Medium Trucks:	48.9	47.4	41.0	39.5	48.0	48.2
Heavy Trucks:	49.2	47.8	38.8	40.0	48.4	48.5
Vehicle Noise:	59.4	57.5	55.1	49.7	58.3	58.8

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Second Floor With Wall
Road Name: Holt Boulevard
Lot No: R8

Project Name: Emprie Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	1,334 vehicles
Vehicle Speed:	50 mph
Near/Far Lane Distance:	52 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	138.0 feet
Centerline Dist. to Observer:	138.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	68.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	0.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	128.421
Medium Trucks:	127.220
Heavy Trucks:	124.368

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-6.25	-1.20	*-47.92*	0.000	0.000
Medium Trucks:	78.79	-18.40	-6.19	-1.20	*-49.09*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-6.04	-1.20	*-52.08*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.5	60.6	58.8	52.8	61.4	62.0
Medium Trucks:	53.0	51.5	45.1	43.6	52.1	52.3
Heavy Trucks:	53.4	52.0	43.0	44.2	52.6	52.7
Vehicle Noise:	63.4	61.6	59.1	53.8	62.4	62.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.5	60.6	58.8	52.8	61.4	62.0
Medium Trucks:	53.0	51.5	45.1	43.6	52.1	52.3
Heavy Trucks:	53.4	52.0	43.0	44.2	52.6	52.7
Vehicle Noise:	63.4	61.6	59.1	53.8	62.4	62.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Second Floor With Wall
Road Name: Guasti Road
Lot No: R9

Project Name: Emprie Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	1,196 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	143.0 feet
Centerline Dist. to Observer:	143.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	68.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	0.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	152.830
Medium Trucks:	151.822
Heavy Trucks:	149.440

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-7.38	-1.20	*-50.93*	0.000	0.000
Medium Trucks:	77.62	-18.41	-7.34	-1.20	*-51.93*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-7.24	-1.20	*-54.47*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.6	57.7	55.9	49.9	58.5	59.1
Medium Trucks:	50.7	49.2	42.8	41.3	49.7	50.0
Heavy Trucks:	51.3	49.9	40.9	42.1	50.5	50.6
Vehicle Noise:	60.7	58.9	56.3	51.0	59.6	60.1

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.6	57.7	55.9	49.9	58.5	59.1
Medium Trucks:	50.7	49.2	42.8	41.3	49.7	50.0
Heavy Trucks:	51.3	49.9	40.9	42.1	50.5	50.6
Vehicle Noise:	60.7	58.9	56.3	51.0	59.6	60.1

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Second Floor With Wall
Road Name: Holt Boulevard
Lot No: R10

Project Name: Emprie Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	1,334 vehicles
Vehicle Speed:	50 mph
Near/Far Lane Distance:	52 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	149.0 feet
Centerline Dist. to Observer:	149.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	68.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	0.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	138.120
Medium Trucks:	137.003
Heavy Trucks:	134.359

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-6.72	-1.20	*-49.37*	0.000	0.000
Medium Trucks:	78.79	-18.40	-6.67	-1.20	*-50.46*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-6.54	-1.20	*-53.23*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.0	60.1	58.4	52.3	60.9	61.5
Medium Trucks:	52.5	51.0	44.7	43.1	51.6	51.8
Heavy Trucks:	52.9	51.5	42.5	43.7	52.1	52.2
Vehicle Noise:	63.0	61.1	58.7	53.3	61.9	62.4

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.0	60.1	58.4	52.3	60.9	61.5
Medium Trucks:	52.5	51.0	44.7	43.1	51.6	51.8
Heavy Trucks:	52.9	51.5	42.5	43.7	52.1	52.2
Vehicle Noise:	63.0	61.1	58.7	53.3	61.9	62.4

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Third Floor With Wall
Road Name: Guasti Road
Lot No: R5

Project Name: Emprie Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	1,196 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	167.0 feet
Centerline Dist. to Observer:	167.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	77.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	0.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	178.365
Medium Trucks:	177.385
Heavy Trucks:	175.058

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-8.39	-1.20	*-58.25*	0.000	0.000
Medium Trucks:	77.62	-18.41	-8.35	-1.20	*-59.22*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-8.27	-1.20	*-61.68*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.6	56.7	54.9	48.9	57.5	58.1
Medium Trucks:	49.7	48.1	41.8	40.2	48.7	48.9
Heavy Trucks:	50.3	48.9	39.8	41.1	49.5	49.6
Vehicle Noise:	59.6	57.8	55.3	50.0	58.6	59.1

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.6	56.7	54.9	48.9	57.5	58.1
Medium Trucks:	49.7	48.1	41.8	40.2	48.7	48.9
Heavy Trucks:	50.3	48.9	39.8	41.1	49.5	49.6
Vehicle Noise:	59.6	57.8	55.3	50.0	58.6	59.1

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario:	Third Floor With Wall	*Project Name:*	Emprie Groves Hotel
Road Name:	Guasti Road	*Job Number:*	15693
Lot No:	R6	*Analyst:*	B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,196	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	12	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	205.0	feet
Centerline Dist. to Observer:	205.0	feet
Barrier Distance to Observer:	0.0	feet
Observer Height (Above Pad):	77.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	0.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	213.293
Medium Trucks:	212.475
Heavy Trucks:	210.535

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-9.55	-1.20	*-61.27*	0.000	0.000
Medium Trucks:	77.62	-18.41	-9.53	-1.20	*-62.08*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-9.47	-1.20	*-64.12*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	57.4	55.5	53.8	47.7	56.3	56.9
Medium Trucks:	48.5	47.0	40.6	39.1	47.5	47.8
Heavy Trucks:	49.1	47.7	38.6	39.9	48.3	48.4
Vehicle Noise:	58.5	56.7	54.1	48.8	57.4	57.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	57.4	55.5	53.8	47.7	56.3	56.9
Medium Trucks:	48.5	47.0	40.6	39.1	47.5	47.8
Heavy Trucks:	49.1	47.7	38.6	39.9	48.3	48.4
Vehicle Noise:	58.5	56.7	54.1	48.8	57.4	57.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Third Floor With Wall
Road Name: Holt Boulevard
Lot No: R7

Project Name: Emprie Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	1,334 vehicles
Vehicle Speed:	50 mph
Near/Far Lane Distance:	52 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	257.0 feet
Centerline Dist. to Observer:	257.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	77.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	0.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	242.103
Medium Trucks:	241.383
Heavy Trucks:	239.677

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-10.38	-1.20	*-63.11*	0.000	0.000
Medium Trucks:	78.79	-18.40	-10.36	-1.20	*-63.82*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-10.31	-1.20	*-65.61*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.4	56.5	54.7	48.7	57.3	57.9
Medium Trucks:	48.8	47.3	41.0	39.4	47.9	48.1
Heavy Trucks:	49.2	47.7	38.7	39.9	48.3	48.4
Vehicle Noise:	59.3	57.5	55.0	49.6	58.2	58.8

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.4	56.5	54.7	48.7	57.3	57.9
Medium Trucks:	48.8	47.3	41.0	39.4	47.9	48.1
Heavy Trucks:	49.2	47.7	38.7	39.9	48.3	48.4
Vehicle Noise:	59.3	57.5	55.0	49.6	58.2	58.8

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Third Floor With Wall
Road Name: Holt Boulevard
Lot No: R8

Project Name: Emprie Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	1,334 vehicles
Vehicle Speed:	50 mph
Near/Far Lane Distance:	52 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	138.0 feet
Centerline Dist. to Observer:	138.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	77.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	0.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	133.405
Medium Trucks:	132.093
Heavy Trucks:	128.950

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-6.50	-1.20	*-51.94*	0.000	0.000
Medium Trucks:	78.79	-18.40	-6.43	-1.20	*-53.22*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-6.28	-1.20	*-56.49*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.3	60.4	58.6	52.5	61.2	61.8
Medium Trucks:	52.8	51.3	44.9	43.4	51.8	52.0
Heavy Trucks:	53.2	51.8	42.7	44.0	52.3	52.5
Vehicle Noise:	63.2	61.4	58.9	53.5	62.1	62.7

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.3	60.4	58.6	52.5	61.2	61.8
Medium Trucks:	52.8	51.3	44.9	43.4	51.8	52.0
Heavy Trucks:	53.2	51.8	42.7	44.0	52.3	52.5
Vehicle Noise:	63.2	61.4	58.9	53.5	62.1	62.7

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Third Floor With Wall
Road Name: Guasti Road
Lot No: R9

Project Name: Emprie Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,960 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	1,196 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	143.0 feet
Centerline Dist. to Observer:	143.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	77.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	0.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	157.041
Medium Trucks:	155.928
Heavy Trucks:	153.275

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-1.17	-7.56	-1.20	*-55.62*	0.000	0.000
Medium Trucks:	77.62	-18.41	-7.51	-1.20	*-56.72*	0.000	0.000
Heavy Trucks:	82.14	-22.37	-7.40	-1.20	*-59.53*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.4	57.5	55.7	49.7	58.3	58.9
Medium Trucks:	50.5	49.0	42.6	41.1	49.5	49.8
Heavy Trucks:	51.2	49.8	40.7	42.0	50.3	50.4
Vehicle Noise:	60.5	58.7	56.1	50.9	59.4	59.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.4	57.5	55.7	49.7	58.3	58.9
Medium Trucks:	50.5	49.0	42.6	41.1	49.5	49.8
Heavy Trucks:	51.2	49.8	40.7	42.0	50.3	50.4
Vehicle Noise:	60.5	58.7	56.1	50.9	59.4	59.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Third Floor With Wall
Road Name: Holt Boulevard
Lot No: R10

Project Name: Emprie Groves Hotel
Job Number: 15693
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,340 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	1,334 vehicles
Vehicle Speed:	50 mph
Near/Far Lane Distance:	52 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	149.0 feet
Centerline Dist. to Observer:	149.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	77.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	0.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	142.766
Medium Trucks:	141.540
Heavy Trucks:	138.612

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	71.12	-1.16	-6.94	-1.20	*-53.70*	0.000	0.000
Medium Trucks:	78.79	-18.40	-6.88	-1.20	*-54.90*	0.000	0.000
Heavy Trucks:	83.02	-22.35	-6.75	-1.20	*-57.95*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.8	59.9	58.2	52.1	60.7	61.3
Medium Trucks:	52.3	50.8	44.4	42.9	51.4	51.6
Heavy Trucks:	52.7	51.3	42.3	43.5	51.9	52.0
Vehicle Noise:	62.7	60.9	58.4	53.1	61.7	62.2

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.8	59.9	58.2	52.1	60.7	61.3
Medium Trucks:	52.3	50.8	44.4	42.9	51.4	51.6
Heavy Trucks:	52.7	51.3	42.3	43.5	51.9	52.0
Vehicle Noise:	62.7	60.9	58.4	53.1	61.7	62.2

APPENDIX 8.2:

ON-SITE RAILROAD NOISE CALCULATIONS

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Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
Developed for Chicago Create Project
Copyright 2006, HMMH Inc.
Case: Empire Groves Hotel

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	68	69	58
Source 1	67	68	56
Source 2	60	60	50
Source 3	52	51	43
Source 4	48	51	15
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS								
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**	
Source Num.	Freight Locomotive	9	Freight Cars	10	RRT/LRT	4	RRT/LRT	4
Distance (source to receiver)	distance (ft)	300	distance (ft)	300	distance (ft)	300	distance (ft)	300
Daytime Hours	speed (mph)	50	speed (mph)	50	speed (mph)	50	speed (mph)	50
(7 AM - 10 PM)	trains/hour	4	trains/hour	4	trains/hour	2	trains/hour	1
	locos/train	2	length of cars (ft) / train	300	cars/train	3	cars/train	6
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	60	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.25	trains/hour	0.25	trains/hour	0.25	trains/hour	0
	locos/train	2	length of cars (ft) / train	300	cars/train	3	cars/train	0
Wheel Flats?		n	% of cars w/ wheel flats	n	% of cars w/ wheel flats	n	% of cars w/ wheel flats	n
Jointed Track?	Y/N	y	Y/N	y	Y/N	y	Y/N	y
Embedded Track?	Y/N	y	Y/N	y	Y/N	y	Y/N	y
Aerial Structure?	Y/N	n	Y/N	n	Y/N	n	Y/N	n
Barrier Present?	Y/N	n	Y/N	n	Y/N	n	Y/N	n
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0

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APPENDIX 10.1:
SAMPLE AIR CONDITIONING UNIT

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Sound Power and Sound Pressure Data for IntelliPak Large Rooftops

Table 1 - 20-55 Ton Large Commercial Packaged Rooftops - Sound Power Ratings S*FC-C20 THROUGH S*FC-C55 60 Hz MODELS

Table 1:

Octave Band (Hz)	Octave Band Sound Power Levels, dB re 1 pW					
	20 ton	25 ton	30 ton	40 ton	50 ton	55 ton
63	100	100	100	102	102	102
125	99	99	99	101	101	101
250	97	97	97	99	99	99
500	95	95	95	97	97	97
1000	92	92	92	94	94	94
2000	89	89	89	91	91	91
4000	85	85	85	87	87	87
8000	78	78	78	80	80	80
A-Weighted	97	97	97	99	99	99

Table 2 - 60-130 Ton Large Commercial Packaged Rooftops - Sound Power Ratings S*FC-C60 THROUGH S*GC-D13 60 Hz MODELS

Table 2:

Octave Band (Hz)	Octave Band Sound Power Levels, dB re 1 pW					
	60 ton	70/75 ton	90 ton	105 ton	115 ton	130 ton
63	102	102	103	104	105	106
125	101	98	100	101	102	103
250	99	98	103	104	105	106
500	97	98	101	102	103	104
1000	94	98	97	98	99	100
2000	91	92	96	97	98	99
4000	87	88	90	91	92	93
8000	80	81	85	86	87	88
A-Weighted	99	102	103	104	105	106

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APPENDIX 10.2:
CADNAA OPERATIONAL NOISE CALCULATIONS

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15693 - Empire Groves Hotel

CadnaA Noise Prediction Model: 15693-02_Operation.cna
Date: 07.05.24
Analyst: B. Maddux

Calculation Configuration

Configuration	
Parameter	**Value**
General	
Max. Error (dB)	**0.00**
Max. Search Radius (#(Unit,LEN))	**2000.01**
Min. Dist Src to Rcvr	**0.00**
Partition	
Raster Factor	**0.50**
Max. Length of Section (#(Unit,LEN))	**999.99**
Min. Length of Section (#(Unit,LEN))	**1.01**
Min. Length of Section (%)	**0.00**
Proj. Line Sources	**On**
Proj. Area Sources	**On**
Ref. Time	
Daytime Penalty (dB)	**0.00**
Recr. Time Penalty (dB)	**5.00**
Night-time Penalty (dB)	**10.00**
DTM	
Standard Height (m)	**0.00**
Model of Terrain	**Triangulation**
Reflection	
max. Order of Reflection	**2**
Search Radius Src	**100.00**
Search Radius Rcvr	**100.00**
Max. Distance Source - Rcvr	**1000.00 1000.00**
Min. Distance Rvcr - Reflector	**1.00 1.00**
Min. Distance Source - Reflector	**0.10**
Industrial (ISO 9613)	
Lateral Diffraction	**some Obj**
Obst. within Area Src do not shield	**On**
Screening	**Incl. Ground Att. over Barrier**
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	**3.0 20.0 0.0**
Temperature (#(Unit,TEMP))	**10**
rel. Humidity (%)	**70**
Ground Absorption G	**0.50**
Wind Speed for Dir. (#(Unit,SPEED))	**3.0**
Roads (TNM)	
Railways (FTA/FRA)	
Aircraft (???)	
Strictly acc. to AzB	

Receiver Noise Levels

Name	M.	ID	Level Lr			Limit. Value			Land Use			Height		Coordinates			
			Day	Night	CNEL	Day	Night	CNEL	Type	Auto	Noise Type			X	Y	Z	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)	
R1		R1	55.6	55.6	62.3	0.0	0.0	0.0		x	Total	5.00	a	6151417.97	2333367.85	5.00	
R2		R2	40.7	40.7	47.4	0.0	0.0	0.0		x	Total	5.00	a	6148699.36	2334028.62	5.00	
R3		R3	56.7	56.7	63.4	0.0	0.0	0.0		x	Total	5.00	a	6151917.46	2334107.68	5.00	
R4		R4	43.4	43.4	50.1	0.0	0.0	0.0		x	Total	5.00	a	6153006.91	2335790.62	5.00	
R5		R5	38.2	38.2	44.9	0.0	0.0	0.0		x	Total	5.00	a	6155375.83	2335784.02	5.00	

Point Source(s)

Name	M.	ID	Result. PWL			Lw / Li			Operating Time			Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Special	Night			X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(ft)		(ft)	(ft)	(ft)
POOL1		POOL1	95.1	95.1	95.1	Lw	95.1					5.00	a	6152192.55	2333889.26	5.00
POOL2		POOL2	95.1	95.1	95.1	Lw	95.1					5.00	a	6152181.44	2333848.98	5.00
POOL3		POOL3	95.1	95.1	95.1	Lw	95.1					5.00	a	6152152.27	2333839.26	5.00
POOL4		POOL4	95.1	95.1	95.1	Lw	95.1					5.00	a	6152087.69	2333796.90	5.00
POOL5		POOL5	95.1	95.1	95.1	Lw	95.1					5.00	a	6152090.47	2333752.46	5.00
POOL6		POOL6	95.1	95.1	95.1	Lw	95.1					5.00	g	6152199.49	2333683.71	78.00
OUTDOOR01		OUTDOOR01	95.1	95.1	95.1	Lw	95.1					5.00	a	6152254.35	2333685.09	5.00
OUTDOOR02		OUTDOOR02	95.1	95.1	95.1	Lw	95.1					5.00	a	6152076.58	2333890.65	5.00
OUTDOOR03		OUTDOOR03	95.1	95.1	95.1	Lw	95.1					5.00	a	6152121.02	2333850.37	5.00
OUTDOOR04		OUTDOOR04	95.1	95.1	95.1	Lw	95.1					5.00	a	6152261.99	2333928.84	5.00
OUTDOOR05		OUTDOOR05	95.1	95.1	95.1	Lw	95.1					5.00	a	6152286.30	2333920.51	5.00
OUTDOOR06		OUTDOOR06	95.1	95.1	95.1	Lw	95.1					5.00	a	6152241.85	2333896.90	5.00
OUTDOOR07		OUTDOOR07	95.1	95.1	95.1	Lw	95.1					5.00	a	6152291.16	2333879.54	5.00
OUTDOOR08		OUTDOOR08	95.1	95.1	95.1	Lw	95.1					5.00	a	6152280.05	2333789.26	5.00
OUTDOOR09		OUTDOOR09	95.1	95.1	95.1	Lw	95.1					5.00	a	6152289.77	2333753.84	5.00

Name	M.	ID	Result. PWL			Lw / Li			Operating Time			Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Special	Night			X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(ft)		(ft)	(ft)	(ft)
OUTDOOR10		OUTDOOR10	95.1	95.1	95.1	Lw	95.1					5.00	a	6152014.77	2333858.71	5.00
OUTDOOR11		OUTDOOR11	95.1	95.1	95.1	Lw	95.1					5.00	a	6151615.47	2333655.93	5.00
OUTDOOR12		OUTDOOR12	95.1	95.1	95.1	Lw	95.1					5.00	a	6151571.72	2333627.46	5.00
OUTDOOR13		OUTDOOR13	95.1	95.1	95.1	Lw	95.1					5.00	a	6151536.99	2333579.54	5.00
OUTDOOR14		OUTDOOR14	95.1	95.1	95.1	Lw	95.1					5.00	a	6151586.30	2333541.34	5.00
OUTDOOR15		OUTDOOR15	95.1	95.1	95.1	Lw	95.1					5.00	a	6151616.85	2333486.48	5.00
OUTDOOR16		OUTDOOR16	95.1	95.1	95.1	Lw	95.1					5.00	a	6151677.97	2333434.40	5.00
OUTDOOR17		OUTDOOR17	95.1	95.1	95.1	Lw	95.1					5.00	a	6151733.52	2333398.29	5.00
OUTDOOR18		OUTDOOR18	95.1	95.1	95.1	Lw	95.1					5.00	a	6151846.72	2333330.93	5.00
OUTDOOR19		OUTDOOR19	95.1	95.1	95.1	Lw	95.1					5.00	a	6151883.52	2333307.32	5.00
OUTDOOR20		OUTDOOR20	95.1	95.1	95.1	Lw	95.1					5.00	a	6151922.41	2333283.01	5.00
OUTDOOR21		OUTDOOR21	95.1	95.1	95.1	Lw	95.1					5.00	a	6152002.97	2333301.76	5.00
OUTDOOR22		OUTDOOR22	95.1	95.1	95.1	Lw	95.1					5.00	a	6152047.41	2333315.65	5.00
OUTDOOR23		OUTDOOR23	95.1	95.1	95.1	Lw	95.1					5.00	a	6151821.02	2333749.68	5.00
OUTDOOR24		OUTDOOR24	95.1	95.1	95.1	Lw	95.1					5.00	a	6151822.41	2333769.82	5.00
OUTDOOR25		OUTDOOR25	95.1	95.1	95.1	Lw	95.1					5.00	a	6151846.72	2333780.23	5.00
SPEAKER1		SPEAK1	105.0	105.0	105.0	Lw	105					5.00	a	6151984.91	2333767.73	5.00
AC1		AC1	109.0	109.0	109.0	Lw	109					5.00	g	6151797.41	2333484.17	98.00
AC2		AC2	109.0	109.0	109.0	Lw	109					5.00	g	6151775.88	2333495.97	98.00
AC3		AC3	109.0	109.0	109.0	Lw	109					5.00	g	6151752.27	2333507.78	98.00
AC4		AC4	109.0	109.0	109.0	Lw	109					5.00	g	6151731.44	2333518.89	98.00
AC5		AC5	109.0	109.0	109.0	Lw	109					5.00	g	6151707.13	2333532.78	98.00
AC6		AC6	109.0	109.0	109.0	Lw	109					5.00	g	6151685.60	2333548.75	98.00

Line Source(s)

Name	M.	ID	Result. PWL			Result. PWL'			Lw / Li			Operating Time			Moving Pt. Src				Height
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	Number			Speed	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	Day	Evening	Night	(mph)	(ft)

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Area Source(s)

Name	M.	ID	Result. PWL			Result. PWL''			Lw / Li			Operating Time			Height	
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	(ft)	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)		
OUT1		OUT1	94.5	94.5	94.5	66.0	66.0	66.0	Lw''	66					5	a
PARK1		PARK1	86.0	86.0	86.0	56.1	56.1	56.1	Lw	86					0	a
LOAD1		LOAD1	103.4	103.4	103.4	84.1	84.1	84.1	Lw	103.4					8	a

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
OUT1	OUT1	5.00 a		6151957.13	2333772.59	5.00	0.00
				6151998.10	2333752.46	5.00	0.00
				6152006.44	2333711.48	5.00	0.00
				6151966.85	2333667.73	5.00	0.00
				6151875.19	2333729.54	5.00	0.00
PARK1	PARK1	0.00 a		6151566.06	2333502.26	0.00	0.00
				6151577.78	2333507.90	0.00	0.00
				6151682.38	2333390.71	0.00	0.00
				6151687.59	2333397.66	0.00	0.00
				6151700.18	2333399.83	0.00	0.00
				6151765.28	2333351.65	0.00	0.00
				6151771.36	2333326.48	0.00	0.00
				6151763.98	2333314.76	0.00	0.00
				6151742.28	2333309.98	0.00	0.00
				6151720.58	2333324.74	0.00	0.00
				6151699.31	2333339.06	0.00	0.00
				6151670.66	2333361.20	0.00	0.00
				6151641.58	2333388.54	0.00	0.00
				6151622.49	2333406.34	0.00	0.00
				6151595.58	2333433.68	0.00	0.00
				6151549.57	2333494.44	0.00	0.00
				6151550.87	2333503.13	0.00	0.00
LOAD1	LOAD1	8.00 a		6152264.99	2333413.37	8.00	0.00
				6152278.18	2333413.37	8.00	0.00
				6152283.04	2333343.92	8.00	0.00
				6152269.15	2333346.70	8.00	0.00

Barrier(s)

Name	Sel.	M.	ID	Absorption		Z-Ext.	Cantilever		Height				Coordinates			
				left	right		horz.	vert.	Begin		End		x	y	z	Ground
						(ft)	(ft)	(ft)	(ft)		(ft)		(ft)	(ft)	(ft)	(ft)
									6.00	g			6151597.02	2333647.19	99.00	0.00
													6151563.52	2333592.83	99.00	0.00
													6151823.95	2333436.38	99.00	0.00
													6151854.92	2333490.74	99.00	0.00
													6151596.98	2333647.14	99.00	0.00

Building(s)

Name	Sel.	M.	ID	RB	Residents	Absorption	Height		Coordinates			
							Begin		x	y	z	Ground
							(ft)		(ft)	(ft)	(ft)	(ft)
1stFlr			1stFlr1	x	0		20.00	a	6152233.03	2333777.32	20.00	0.00
									6152257.24	2333412.55	20.00	0.00
									6152191.22	2333407.96	20.00	0.00
									6152187.54	2333495.38	20.00	0.00
									6152096.57	2333550.93	20.00	0.00
									6152004.90	2333543.64	20.00	0.00
									6151942.06	2333439.48	20.00	0.00
									6152012.19	2333397.11	20.00	0.00
									6152028.86	2333422.46	20.00	0.00
									6152082.68	2333389.48	20.00	0.00
									6152034.76	2333308.23	20.00	0.00
									6151983.37	2333339.82	20.00	0.00
									6151949.69	2333283.23	20.00	0.00
									6151658.03	2333458.92	20.00	0.00
									6151667.40	2333474.89	20.00	0.00
									6151636.50	2333494.34	20.00	0.00
									6151641.36	2333503.02	20.00	0.00
									6151606.29	2333523.50	20.00	0.00
									6151614.62	2333536.00	20.00	0.00
									6151575.39	2333560.66	20.00	0.00
									6151585.81	2333577.67	20.00	0.00
									6151562.54	2333592.25	20.00	0.00
									6151596.57	2333648.16	20.00	0.00
									6151619.83	2333635.31	20.00	0.00
									6151670.53	2333716.21	20.00	0.00
									6151732.33	2333743.64	20.00	0.00
									6152004.56	2333578.71	20.00	0.00
									6152165.67	2333589.13	20.00	0.00
									6152151.43	2333784.96	20.00	0.00
									6152192.40	2333787.74	20.00	0.00
									6152193.10	2333774.20	20.00	0.00
BUILDING			BUILDING00002	x	0		0.00	a	6152257.24	2333412.55	0.00	0.00
									6152261.41	2333348.67	0.00	0.00
									6152166.96	2333341.72	0.00	0.00
									6152162.45	2333405.96	0.00	0.00
BUILDING			BUILDING00003	x	0		73.00	g	6151562.54	2333592.25	93.00	0.00
									6151596.57	2333648.16	93.00	0.00
									6152012.19	2333397.11	93.00	0.00
									6152028.86	2333422.46	93.00	0.00
									6152082.68	2333389.48	93.00	0.00
									6152034.76	2333308.23	93.00	0.00
BUILDING			BUILDING00004	x	0		73.00	g	6152166.96	2333341.72	73.00	0.00
									6152162.45	2333405.96	73.00	0.00
									6152191.22	2333407.96	73.00	0.00
									6152167.03	2333770.99	73.00	0.00
									6152233.03	2333777.32	73.00	0.00
									6152261.41	2333348.67	73.00	0.00
BUILDING			BUILDING00005	x	0		14.00	g	6152244.81	2333599.80	14.00	0.00
									6152251.37	2333501.06	14.00	0.00
									6152221.76	2333498.94	14.00	0.00
									6152214.16	2333598.77	14.00	0.00
BUILDING			BUILDING00006	x	0		14.00	g	6152255.40	2333439.33	34.00	0.00
									6152261.82	2333340.65	34.00	0.00
									6151996.72	2333323.98	34.00	0.00
									6151979.66	2333333.59	34.00	0.00
									6152006.09	2333374.50	34.00	0.00
									6152194.63	2333387.53	34.00	0.00
									6152195.15	2333397.94	34.00	0.00
									6152206.57	2333398.03	34.00	0.00
									6152207.56	2333409.10	34.00	0.00
									6152212.96	2333409.47	34.00	0.00
									6152210.91	2333439.26	34.00	0.00
BUILDING			BUILDING00007	x	0		14.00	g	6151846.19	2333471.90	107.00	0.00
									6151886.30	2333447.42	107.00	0.00
									6151879.53	2333436.48	107.00	0.00
									6151943.59	2333396.90	107.00	0.00

Name	Sel.	M.	ID	RB	Residents	Absorption	Height	Coordinates			
							Begin	x	y	z	Ground
							(ft)	(ft)	(ft)	(ft)	(ft)
								6151928.52	2333372.13	107.00	0.00
								6151824.34	2333434.79	107.00	0.00

Ground Absorption(s)

Name	Sel.	M.	ID	G	Coordinates	
					x	y
					(ft)	(ft)

Contour(s)

Name	Sel.	M.	ID	OnlyPts	Height		Coordinates		
					Begin	End	x	y	z
					(ft)	(ft)	(ft)	(ft)	(ft)

Vertical Area Source(s)

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Rail

Name	Sel.	M.	ID	Lw'		Train Class	Correct.	Vmax
				Day	Night		Track	
				(dBA)	(dBA)		(dB)	(km(mph)

Sound Level Spectra

Name	ID	Type	Oktave Spectrum (dB)											Source
			Weight.	31.5	63	125	250	500	1000	2000	4000	8000	A	lin	

Roads

Name	Sel.	M.	ID	Lme			Count Data		exact Count Data						Speed Limit		SCS	Surface		Gradient	Mult. Reflection		
				Day	Evening	Night	DTV	Str.class.	M			p (%)			Auto	Truck	Dist.	Dstro	Type		Drefl	Hbuild	Dist.
				(dBA)	(dBA)	(dBA)			Day	Evening	Night	Day	Evening	Night	(mph)	(mph)		(dB)		(%)	(dB)	(ft)	(ft)

RoadsGeo

Name	Height		Coordinates				Dist	LSlope
	Begin	End	x	y	z	Ground	(ft)	(%)
	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)		

APPENDIX 11.1:

CADNAA CONSTRUCTION NOISE CALCULATIONS

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15693 - Empire Groves Hotel

CadnaA Noise Prediction Model: 15693-02_Construction.cna
Date: 06.05.24
Analyst: B. Maddux

Calculation Configuration

Configuration	
Parameter	**Value**
General	
Max. Error (dB)	**0.00**
Max. Search Radius (#(Unit,LEN))	**2000.01**
Min. Dist Src to Rcvr	**0.00**
Partition	
Raster Factor	**0.50**
Max. Length of Section (#(Unit,LEN))	**999.99**
Min. Length of Section (#(Unit,LEN))	**1.01**
Min. Length of Section (%)	**0.00**
Proj. Line Sources	**On**
Proj. Area Sources	**On**
Ref. Time	
Daytime Penalty (dB)	**0.00**
Recr. Time Penalty (dB)	**5.00**
Night-time Penalty (dB)	**10.00**
DTM	
Standard Height (m)	**0.00**
Model of Terrain	**Triangulation**
Reflection	
max. Order of Reflection	**2**
Search Radius Src	**100.00**
Search Radius Rcvr	**100.00**
Max. Distance Source - Rcvr	**1000.00 1000.00**
Min. Distance Rvcr - Reflector	**1.00 1.00**
Min. Distance Source - Reflector	**0.10**
Industrial (ISO 9613)	
Lateral Diffraction	**some Obj**
Obst. within Area Src do not shield	**On**
Screening	**Incl. Ground Att. over Barrier**
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	**3.0 20.0 0.0**
Temperature (#(Unit,TEMP))	**10**
rel. Humidity (%)	**70**
Ground Absorption G	**0.50**
Wind Speed for Dir. (#(Unit,SPEED))	**3.0**
Roads (TNM)	
Railways (FTA/FRA)	
Aircraft (???)	
Strictly acc. to AzB	

Receiver Noise Levels

Name	M.	ID	Level Lr			Limit. Value			Land Use			Height		Coordinates		
			Day	Night	CNEL	Day	Night	CNEL	Type	Auto	Noise Type			X	Y	Z
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)
R1		R1	60.0	-40.0	57.0	0.0	0.0	0.0		x	Total	5.00	a	6151417.97	2333367.85	5.00
R2		R2	42.5	-57.4	39.5	0.0	0.0	0.0		x	Total	5.00	a	6148699.36	2334028.62	5.00
R3		R3	59.3	-40.7	56.3	0.0	0.0	0.0		x	Total	5.00	a	6151917.46	2334107.68	5.00
R4		R4	45.5	-54.4	42.5	0.0	0.0	0.0		x	Total	5.00	a	6153006.91	2335790.62	5.00
R5		R5	40.4	-59.6	37.4	0.0	0.0	0.0		x	Total	5.00	a	6155375.83	2335784.02	5.00

Point Source(s)

Name	M.	ID	Result. PWL			Lw / Li			Operating Time			Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Special	Night			X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(ft)		(ft)	(ft)	(ft)

Line Source(s)

Name	M.	ID	Result. PWL			Result. PWL'			Lw / Li			Operating Time			Moving Pt. Src				Height	
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	Number			Speed		
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	Day	Evening	Night	(mph)	(ft)	

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Area Source(s)

Name	M.	ID	Result. PWL			Result. PWL''			Lw / Li			Operating Time			Height	
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	(ft)	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)		
ConstructionArea1		ConstructionArea1	115.6	15.6	15.6	69.3	-30.7	-30.7	PWL-Pt	115.6					8	a

Name	ID	Height				Coordinates			
		Begin		End		x	y	z	Ground
		(ft)		(ft)		(ft)	(ft)	(ft)	(ft)
ConstructionArea1	ConstructionArea1	8.00	a			6151518.66	2333658.47	8.00	0.00
						6151828.20	2333802.56	8.00	0.00
						6151968.09	2333869.30	8.00	0.00
						6152104.08	2333934.19	8.00	0.00
						6152103.80	2333911.16	8.00	0.00
						6152103.39	2333878.46	8.00	0.00
						6152123.88	2333888.23	8.00	0.00
						6152153.76	2333902.49	8.00	0.00
						6152185.83	2333917.79	8.00	0.00
						6152232.54	2333940.08	8.00	0.00
						6152279.05	2333962.27	8.00	0.00
						6152292.68	2333934.37	8.00	0.00
						6152306.17	2333906.77	8.00	0.00
						6152307.61	2333885.37	8.00	0.00
						6152310.00	2333849.88	8.00	0.00
						6152313.82	2333793.25	8.00	0.00
						6152318.11	2333729.49	8.00	0.00
						6152275.71	2333726.64	8.00	0.00
						6152289.15	2333527.08	8.00	0.00
						6152331.55	2333529.94	8.00	0.00
						6152337.30	2333444.69	8.00	0.00
						6152345.09	2333329.04	8.00	0.00
						6152359.56	2333330.02	8.00	0.00
						6152361.48	2333301.52	8.00	0.00
						6152364.51	2333256.50	8.00	0.00
						6152327.42	2333181.44	8.00	0.00
						6152283.92	2333182.21	8.00	0.00
						6152214.97	2333183.42	8.00	0.00
						6152125.90	2333184.98	8.00	0.00
						6152073.47	2333187.80	8.00	0.00
						6152048.27	2333190.51	8.00	0.00
						6151973.47	2333203.90	8.00	0.00
						6151900.47	2333225.04	8.00	0.00
						6151876.68	2333233.76	8.00	0.00
						6151830.08	2333253.69	8.00	0.00
						6151796.11	2333270.73	8.00	0.00
						6151724.68	2333314.46	8.00	0.00
						6151670.50	2333355.93	8.00	0.00
						6151597.82	2333426.48	8.00	0.00
						6151557.65	2333475.46	8.00	0.00
						6151496.69	2333571.70	8.00	0.00
						6151485.24	2333594.31	8.00	0.00
						6151474.59	2333617.31	8.00	0.00
						6151473.07	2333628.15	8.00	0.00
						6151484.09	2333643.36	8.00	0.00

Barrier(s)

Name	Sel.	M.	ID	Absorption		Z-Ext.	Cantilever		Height		Coordinates			
				left	right		horz.	vert.	Begin	End	x	y	z	Ground
						(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Building(s)

Name	Sel.	M.	ID	RB	Residents	Absorption	Height	Coordinates				
							Begin	x	y	z	Ground	
							(ft)	(ft)	(ft)	(ft)	(ft)	

Ground Absorption(s)

Name	Sel.	M.	ID	G	Coordinates	
					x	y
					(ft)	(ft)

Contour(s)

Name	Sel.	M.	ID	OnlyPts	Height		Coordinates		
					Begin	End	x	y	z
					(ft)	(ft)	(ft)	(ft)	(ft)

Vertical Area Source(s)

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Rail

Name	Sel.	M.	ID	Lw'		Train Class	Correct.	Vmax
				Day	Night		Track	
				(dBA)	(dBA)		(dB)	(km(mph)

Sound Level Spectra

Name	ID	Type	Oktave Spectrum (dB)											Source
			Weight.	31.5	63	125	250	500	1000	2000	4000	8000	A	lin	

Roads

Name	Sel.	M.	ID	Lme			Count Data		exact Count Data						Speed Limit		SCS	Surface		Gradient	Mult. Reflection		
				Day	Evening	Night	DTV	Str.class.	M			p (%)			Auto	Truck	Dist.	Dstro	Type		Drefl	Hbuild	Dist.
				(dBA)	(dBA)	(dBA)			Day	Evening	Night	Day	Evening	Night	(mph)	(mph)		(dB)		(%)	(dB)	(ft)	(ft)

RoadsGeo

Name	Height		Coordinates				Dist	LSlope
	Begin	End	x	y	z	Ground	(ft)	(%)
	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)		

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Appendix J
VMT Analysis

translutions, inc.
17632 Irvine Boulevard, Suite 200
Tustin, California 92780
(949) 656 3131
solutions@translutions.com

October 12, 2023

Mr. Jay Bautista, Traffic/Transportation Manager
City of Ontario
303 E. B Street
Ontario, California 91764

Subject: Empire Groves Hotel – VMT Analysis

Dear Mr. Bautista,

Translutions, Inc. (Translutions) is pleased to provide this letter discussing the Vehicle Miles Traveled (VMT) analysis for the proposed hotel and ancillary uses to be located south of Holt Boulevard and east of Guasti Road.

PROJECT DESCRIPTION

The proposed project includes a 600-room hotel and ancillary uses such as ball rooms, restaurants and a street facing retail component. Figure 1 shows the site plan for the proposed project.

VMT IMPACT THRESHOLDS

The City of Ontario has adopted guidelines to help ensure that land use development and transportation projects comply with the latest requirements of the California Environmental Quality Act (CEQA) regarding Vehicle Miles Traveled (VMT). The guidelines provide the City with standardized criteria and established thresholds of significance to be used for analyzing transportation impacts for CEQA. The guidelines were adopted on May 26, 2020 by the Planning Commission.

Based on the City Guidelines, a project would result in a significant project generated VMT impact if either of the following conditions are satisfied:

1. **Project Generated VMT:** A significant impact would occur if the project VMT/SP exceeds the Citywide average for Service Population under General Plan Buildout Conditions.
2. **Project Effect on VMT:** A significant impact would occur if the project causes total daily VMT within the City to be higher than the no project alternative under cumulative conditions.

MODELING METHODOLOGY

The analysis methodology for the project generated VMT and project effect of VMT were developed consistent with the City VMT guidelines. The analysis was conducted using the San Bernardino Transportation Analysis Model (SBTAM) with the City's General Plan socio-economic data.

Socio-Economic Data. The project socio-economic date (SED) for retail uses were based on the ratio of the ITE trip generation based on gross leasable area for retail uses (or the number of rooms for hotel) and employees.

Other Edits. No network edits were made for the project beyond aggregating zones to represent the project.

Model Runs. Each model was run for 5 loops, and the convergence criteria was set at 0.01. Final assignment runs were completed.

MODEL OUTPUTS

The analysis methodology for the project generated VMT and project effect of VMT were developed consistent with the City VMT guidelines. The model outputs were checked for reasonableness by comparing the trip generation of the modified zones and adjacent zones. The results were found to be consistent. VMT data was extracted using the time-of-day Origin-Destination (OD) matrices multiplied by the time-of-day skims. Per standard modeling practice, the data reported is daily weekday VMT. Table A shows the model outputs and calculations for the project generated VMT, and Table B shows the outputs for project effect on VMT.

Table A: Project Generated VMT (General Plan Buildout)

	General Plan Buildout	
	Project	**City**
Population		258,143
Employment	372	175,983
Retail Consumers	1,305	
Service Population	1,677	434,126
OD VMT	53,871	14,129,050
OD VMT per service population	**32.13**	**32.55**

Table B - Project Effect on VMT (General Plan Buildout)

	Future Year (2045)	
	Without Project	**With Project**
Roadway VMT	9,868,972	9,864,411
Service Population	434,126	435,803
VMT per service population	22.73	22.64

VMT EVALUATION

Future Year Project Generated VMT. As seen on Table A, the future year OD VMT forecast for the City is 32.55 VMT/SP whereas the project generated VMT is 32.13 VMT/SP which shows that the project will have a less than significant impact on VMT.

Future Year Project Effect on VMT. As seen on Table B, the forecast Citywide segment level VMT under no project conditions is 22.73 VMT/SP. The Citywide segment level VMT with the proposed project is forecast to be 22.64 VMT/SP. Therefore, the proposed project results in a lower VMT/SP and therefore, has a less than significant impact.

CONCLUSION

As seen above, the buildout project generated VMT of 32.13 is less than the City threshold of 32.55. The project effect on VMT is also lower than the threshold under buildout conditions, which means that the project will result in a reduction in overall VMT/SP for the City as well as VMT on the City roadways. Based on the adopted guidelines, the VMT impacts of the proposed project are anticipated to be less than significant.

We hope you will find this information helpful. Should you have any questions, please don't hesitate to call me at (949) 656-3131 or by email at sandipan@translutions.com.

Sincerely,

translutions, Inc.

Sandipan Bhattacharjee, P.E., T.E., AICP, ENV SP
Principal





Attachments:
Figure 1 – Site Plan

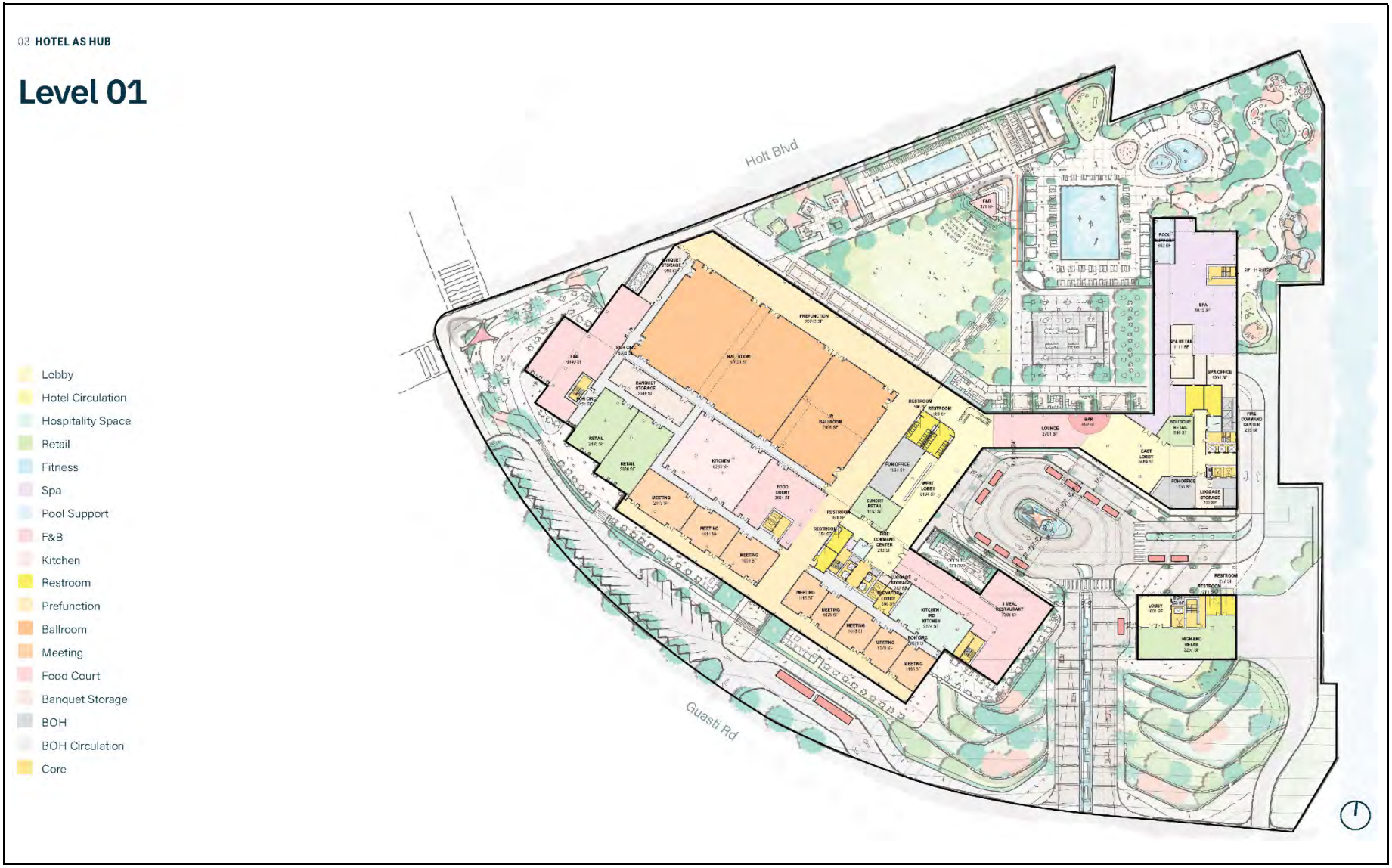


FIGURE 1

Empire Groves Hotel
Site Plan

translutions
the transportation solutions company...

P:\DP - Ontario Hotel\scope\Z30 Site Plan Landscape (9/26/2023)

August 2024

Water Supply Assessment and Written Verification of Sufficient Water Supply for the Empire Groves Hotel Specific Plan

City of Ontario

Prepared for:

City of Ontario
Ontario Municipal Utilities Company
Alexis Mascarinas, Associate Engineer
1425 S. Bon View Avenue
Ontario CA 91764
909.395.2694

Project Number:
OMUC-01.0

Prepared by:

PlaceWorks
Dina El Chammas Gass, P.E. Senior Engineer
3 MacArthur Place, Suite 1100
Santa Ana, CA 92707

PLACEWORKS

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1. Introduction

1.1 INTRODUCTION

This document prepared for the City of Ontario is a Water Supply Assessment and Written Verification of Sufficient Water Supply (WSA/WV) intended to meet the requirements of Senate Bill (SB) 610 and SB 221. The water demand for the Empire Groves Hotel Specific Plan ("proposed project") is calculated and the adequacy of water supplies to meet the proposed land use changes is evaluated.

SB 610 established the primary legal standards for assessing the sufficiency of water supplies for new development projects. This statute requires as part of the environmental review conducted for a qualifying project pursuant to the California Environmental Quality Act (CEQA), that the public water supplier or land use agency – in this case the City of Ontario – prepare a Water Supply Assessment (WSA) of the reliability of water supplies for the project, considering normal, single dry, and multiple dry years over a 20-year horizon. The basic requirement is that a WSA must "include a discussion with regard to whether the public water system's total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed project, in addition to the water system's existing and planned future uses, including agricultural and manufacturing uses." Since the proposed project includes the development of a hotel with more than 500 rooms, it meets the definition of a project as defined by Government Code Section 10912(a)(1) and requires the preparation of a WSA.

SB 221 mandates affirmative written verification from the water purveyor of the public water system that sufficient water supplies are available for certain residential subdivisions of property prior to approval of a tentative map. Since the proposed project requires the approval of a development agreement and includes the addition of more than 500 hotel rooms, it meets the definition of a subdivision in Government Code Section 66473.7(a)(1) and therefore triggers the need for a Written Verification of Sufficient Water Supply (WV) pursuant to SB 221.

References used in preparing this document include the following:

- Diversified Pacific, December 2023. *Empire Groves Hotel Specific Plan.*
- City of Ontario, June 2021. *2020 Urban Water Management Plan (UWMP).* Prepared by Stetson Engineering.
- AKM Consulting Engineers, June 2020. *Draft City of Ontario Water Master Plan Update.*
- Chino Basin Desalter Authority, June 2021. *2020 Urban Water Management Plan.* Prepared by Stetson Engineering.
- Inland Empire Utilities Agency, June 2021. *2020 Urban Water Management Plan.* Prepared by Kennedy Jenks.
- San Antonio Water Company, September 2021. *2020 Urban Water Management Plan.* Prepared by WSC.
- Metropolitan Water District of Southern California, June 2021. *2020 Urban Water Management Plan.*

- City of Ontario, May 2022. *The Ontario Plan (TOP) 2050 Supplemental Environmental Impact Report*. Prepared by PlaceWorks.

1.2 SITE LOCATION AND EXISTING CONDITIONS

The Empire Groves Hotel Specific Plan (proposed project) site is situated in the southeastern quadrant of the intersection of East Holt Boulevard and East Guasti Road in the City of Ontario. The project area is a triangular plot of land spanning 10.43 acres. The site is bounded to the north by Holt Boulevard and to the south and southwest by Guasti Road. The eastern boundary is defined by the existing flood channel and a trail called Cucamonga Creek Trail. Regional location is provided in Figure 1, *Regional Location Map*. The project site is currently vacant land with no temporary or permanent structures (see Figure 2, *Aerial Photograph*).

1.3 PROJECT DESCRIPTION AND HISTORY

The Empire Groves Hotel project comprises two primary zones: hotel and local-serving retail. The hotel component within the Specific Plan area comprises a 600-room, full-service hotel equipped with various guest amenities. These amenities include banquet halls, conference rooms, restaurants, a café, a day spa, pool facilities, and a rooftop terrace. The first floor of the hotel consists of the lobby, lounge, upscale restaurant and bar, spa, retail area, small meeting rooms, and a spacious banquet/conference center. The first-floor mezzanine level has a game room, fitness area, meeting rooms, and a board room in addition to mechanical and electrical equipment. The second-floor houses offices and a fitness center. The remaining floors are dedicated to spacious guest suites with a range of amenities. The hotel's rooftop is designed with a pool and lounge terrace that offers views and features a full-service restaurant and bar. The hotel's entrance includes a porte-cochere with decorative pavers and landscaping. This motor court is accessible from Guasti Road and offers check-in and valet services for guests. The local serving retails Small may include coffee shops, food and beverage outlets, retail, print shops, laundry or tailoring services that will serve the needs of the local community. The proposed buildout is shown in Table 1, *Proposed Buildout*, and Figure 3, *Conceptual Plan*.

Table 1 Proposed Buildout

Land Use	Total Square Feet	Notes
Hotel Rooms	366,808	600 rooms and secondary uses
Restaurants/Café/Bar/Lounge	30,839	3 meals and signature restaurants, rooftop bar and restaurant, and lobby bar and lounge
Day Spa	11, 357	
Gym	7,906	Including Lux Fitness – 5,415 SF and Business Hotel Fitness – 2,491 SF
Banquet/Meeting Rooms	45,882	25,528 SF Ballrooms, 20,354 SF Meeting Rooms
Admin/Office	4,262	
Lobby/Public Circulation/Prefunction/Public Bathrooms	98,598	
Local Serving Retail	11,946	
Covered Outdoor Area	20,813	

Table 1 Proposed Buildout

Utility Areas and Parking	452,491	
TOTAL	**1,050,902**	—

Source: Diversified Pacific, December 2023, Empire Groves Hotel Specific Plan.
SF = Square Feet

1.3.1 Landscaping

1.3.1.1 LEVEL 1 – STREET LEVEL

The Level 1 conceptual landscape plan includes an entrance area; edge treatment; a courtyard, pool, and spa areas; and pedestrian paths as shown in Figure 4, *Recreation and Open Space Concept - Level 1*.

The landscape concept for the entrance employs an array of elements, such as multiple palm varieties and landscaped features with varying heights and geometrical profiles to create a visually appealing entrance. The entranceway has a canal water feature that bisects the entrance roadway and leads to a spacious entrance plaza area. The entrance plaza area includes an arrival fountain and sculpture.

Street edge treatments within the Specific Plan area provide a transition between the surrounding uses and the proposed project specifically along Holt Boulevard and Guasti Road. The street edge treatments encompass an array of street trees and decorative flowering trees. The proposed meandering sidewalks will connect off-street parking areas along Guasti Road to a plaza area within the retail development at the intersection of Holt Boulevard and Guasti Road. This plaza features decorative pavers, accent plantings and raised planters, palm trees, and outdoor shaded seating areas.

The hotel courtyard, pool, and spa areas are in the northeastern section of the proposed project, encircled by Holt Boulevard to the north, the hotel itself to the south and west, and the Cucamonga Creek to the east. This outdoor can be accessed via the hotel lobby and comprises of three distinct pool areas, a water garden, large and small event spaces, a wellness garden, and a food and beverage pavilion. One of the three pool areas will include a splash pad and a jacuzzi. These amenities will also include passive covered seating areas and comfortable outdoor furnishings, interspersed with water features and landscaping. Landscaping within this outdoor space will be characterized by low hedges and accent plantings, deciduous canopy trees, and shade trees.

A series of interconnecting sidewalks and paths will be provided throughout the Specific Plan area to connect to the hotel amenities and public gathering spaces. Low hedge and accent plantings will be used to enhance the pedestrian paths, while deciduous canopy trees will be used to provide shade and visual comfort.

A buffer will be created between Cucamonga Creek and the eastern edge of the project site to ensure privacy from the trail users. To accomplish this, a dense, 6- to 7-foot-high hedge is proposed.

1. Introduction

1.3.1.2 LEVEL 3 – BUILDING THIRD FLOOR

The Level 3 conceptual landscape plan is shown in Figure 5, *Recreation and Open Space Concept - Level 3*. The plan uses a meadow concept of landscaping. Meadow-type landscaping refers to the design of outdoor spaces to mimic the characteristics of a natural meadow. A meadow is typically an open field or grassland area, often found in natural settings, which is characterized by a diverse growth of wildflowers, grasses, and other native vegetation.

1.3.1.3 LEVEL 9 – ROOFTOP

The Level 9 conceptual landscape plan is shown in Figure 6, *Recreation and Open Space Concept - Level 9*. The plan is divided into two distinct areas: Sky Island on the west and High Gardens on the east. These areas will be linked by a corridor.

The Sky Island will include a central water feature, a stone landscaping area, seating areas, and an expansive outdoor wooden deck. The High Gardens will include a VIP pool, various seating options and outdoor living rooms.

The total landscaping proposed is 133,374 square feet.[1] All proposed landscaping will utilize, to the greatest extent possible, sustainable landscaping practices and technology and water conservation methods. All plants will be water-conserving, drought-tolerant plants. Permanent and automatic irrigation or drip irrigation systems will be used for all landscaped areas. All landscape irrigation would be with recycled water. The canal, arrival fountain, and water features will be recirculated systems that use recycled water.

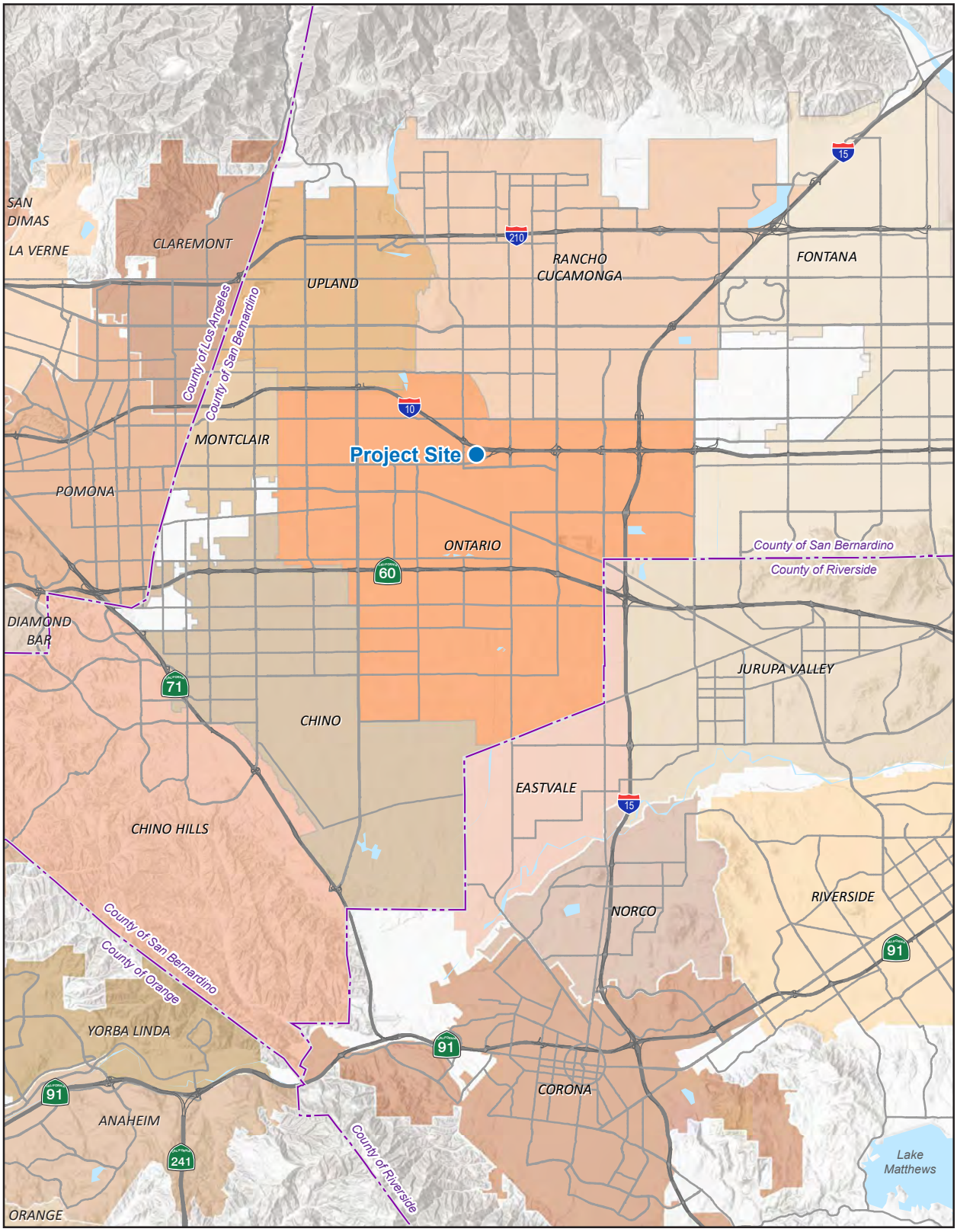
1.3.2 Infrastructure Improvements

An existing 6-inch water link is located under Holt Boulevard to the north and an existing 12-inch water line is located under Rio Hondo Avenue to the west. The proposed project will connect to the existing water line under Holt Boulevard through a new domestic water line that will run along the eastern, southern, and the southern half of the western boundary of the project site.

There are recycled water mains in the vicinity of the project site, with a point of connection located at the intersection of Guasti Road and Holt Boulevard. Recycled water infrastructure improvements will include installing an 8-inch recycled water main in Guasti Road that connects to the 8-inch recycled water main in Convention Center Way, north of Holt Boulevard.

[1] Emails from Alexis Mascarinas, Associate Engineer, dated May 13, 2024 and June 5, 2024.

Figure 1 - Regional Location



Project Boundary — County Boundary

Note: Unincorporated county areas are shown in white.

0 3
Scale (Miles)

Source: Generated using ArcMap 2023.

PlaceWorks

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Figure 2 - Aerial Photograph

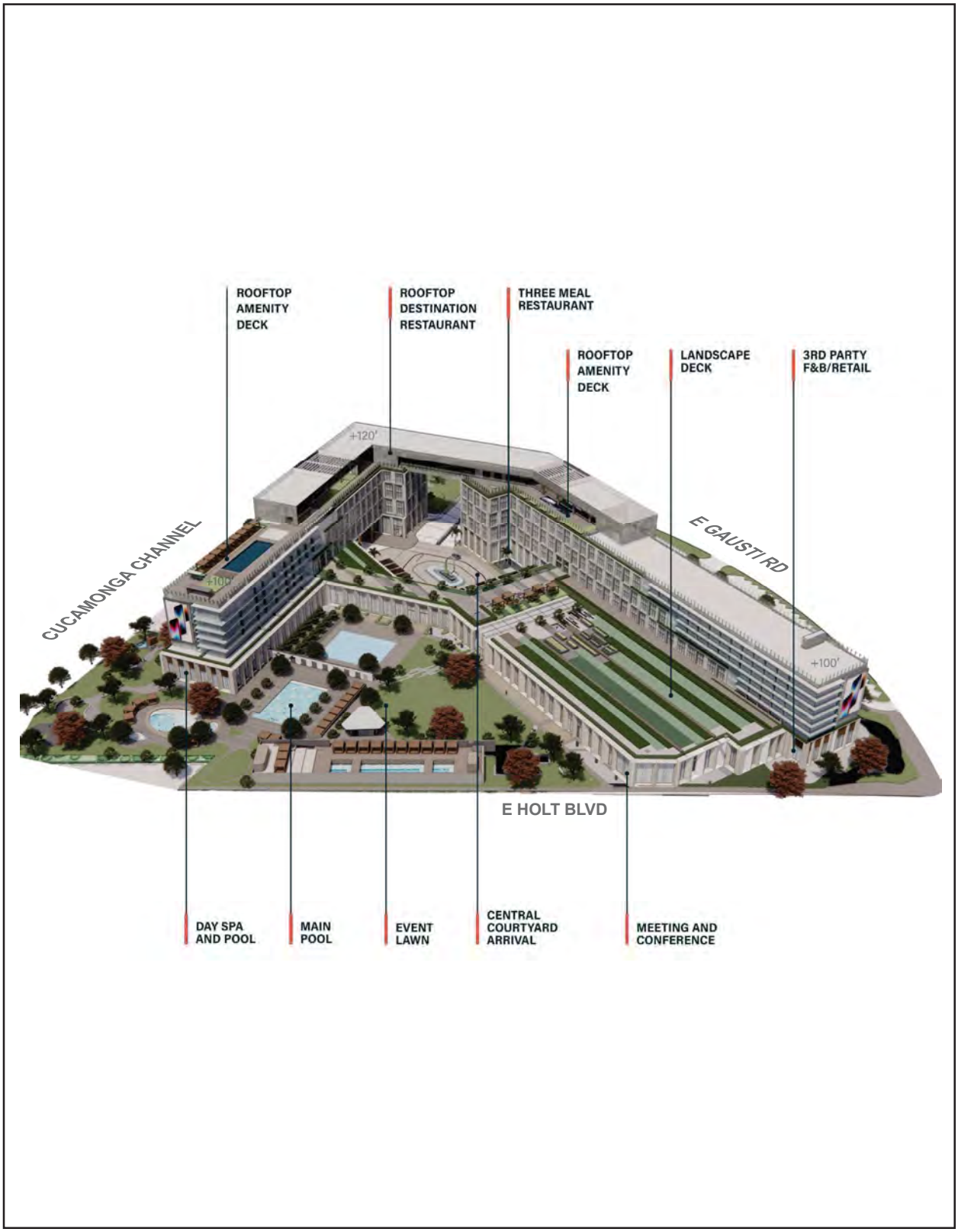


Source: Nearmap 2024.

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Figure 3 - Conceptual Plan



NO SCALE

Source: Diversified Pacific 2023.

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Figure 4 - Recreation and Open Space Concept - Level 1



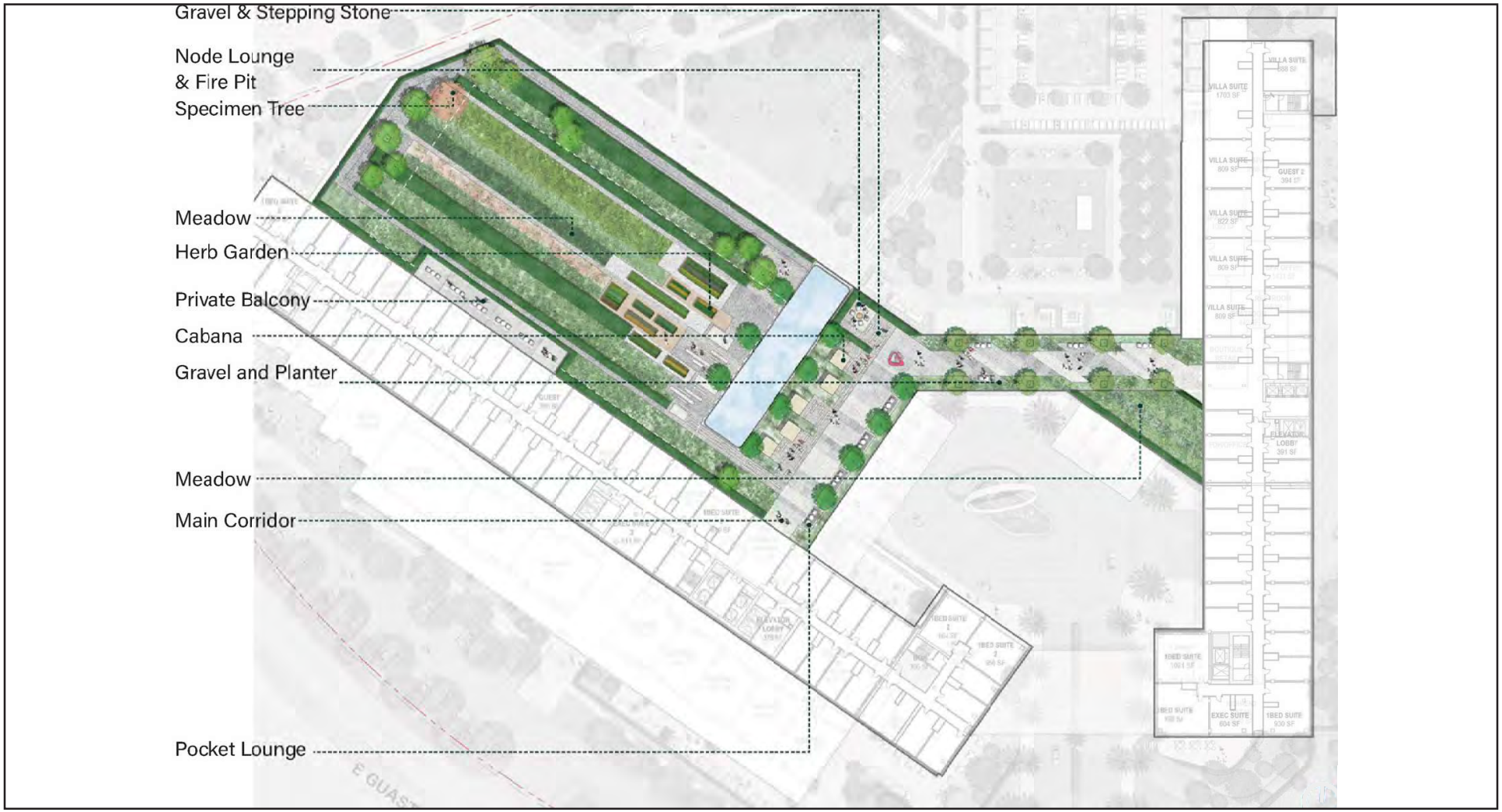
0 140
Scale (Feet)

Source: Diversified Pacific 2023.

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Figure 5 - Recreation and Open Space Concept - Level 3



Source: Diversified Pacific 2023.

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Figure 6 - Recreation and Open Space Concept - Level 9



Source: Diversified Pacific 2023.

1. Introduction

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2. Water Supply Assessment

2.1 WATER PURVEYOR

The Ontario Municipal Utilities Company (OMUC) provides water service to residents, businesses, and other users in the City of Ontario, including areas surrounding the project site. As of 2020, OMUC provided water to a population of approximately 181,107 people. The primary source of water is groundwater from the Chino Groundwater Basin (Chino Basin). Other water supplies include treated groundwater from the Chino Basin Desalter Authority (CDA), recycled water from Inland Empire Utilities Agency (IEUA), imported water from the Water Facilities Authority (WFA), and purchased water from the San Antonio Water Company (SAWCo).

According to the City's 2020 Water Master Plan Update[2] (WMP), the City's water system consists of the following:

- Five primary pressure zones (925, 1010, 1074, 1212, and 1348)
- Over 620 miles of water transmission and distribution pipelines ranging in size from 2 inches to 42 inches in diameter
- 7,277 fire hydrants
- 35,906 water meters
- 17 active wells
- Twelve reservoirs with a total volume of 75 million gallons
- Six active booster pump stations
- Fifteen pressure reducing stations
- Two connections to Water Facilities Authority
- Two connections to Chino Desalter Authority
- Five inter-agency connections
- Two ion exchange treatment facilities
- Four altitude valves

In 2023, potable water demands were 28,990 acre-feet per year (AFY) and recycled water demand was 9,088 AFY.[3] The total demands in the year 2045 are projected to be 73,668 AFY. Potable water demands are projected to be 57,609 AFY and recycled water demands are projected to be 16,059 AFY (including agricultural demands).

[2] AKM Consulting Engineers, June 2020. *Draft City of Ontario Water Master Plan Update.*
[3] Ontario Municipal Utilities Company. 2024. *2023 Water Production Summary.*

The passage of SB X7-7 (also known as the Water Conservation Act of 2009) resulted in increased efforts to reduce potable water usage by requiring all California urban water suppliers to achieve a 20 percent reduction in demands (from a historical baseline) by 2020. Using a 15-year base period of 1995 to 2004, the City's baseline water usage averaged 245 gallons per capita per day (GPCD). The City's per-capita water use during Fiscal Year 2019-20 was 161 GPCD, which is below the 2020 target of 196 GPCD.[4]

It is required that every urban water supplier assess the reliability to provide water service to its customers under normal, single dry, and multiple dry years. As discussed in the City's 2020 Urban Water Management Plan (UWMP), the City is capable of meeting the water demands of its customers in normal, single dry, and multiple dry years between 2020 and 2045.[5]

2.2 LEGAL REQUIREMENTS

SB 610 established the primary legal standards for assessing the sufficiency of water supplies for new development projects that qualify as a project pursuant to CEQA. Affected land developments are those that meet certain size thresholds. The proposed project meets the threshold for a proposed hotel of more than 500 rooms. Therefore, the proposed project, as described in Section 1.3, meets the criteria for preparation of a WSA.

SB 221 requires that a sufficient water supply shall be available prior to the approval of a tentative map that includes a subdivision. A subdivision is defined as a proposed residential development of more than 500 dwelling units, except for a public water system that has fewer than 5,000 service connections, in which case a subdivision means any proposed residential development that would account for an increase of 10 percent or more in the number of the public water system's existing service connections. OMUC has more than 5,000 service connections and the proposed project includes more than 500 hoel rooms. Therefore, as described in Section 1.3, the proposed project requires a WV.

The basic requirement is that a WSA/WV must "include a discussion with regard to whether the public water system's total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed project, in addition to the water system's existing and planned future uses, including agricultural and manufacturing uses." If the water demand for a proposed project is accounted for in an adopted UWMP, the WSA/WV preparer may incorporate that information into the WSA/WV.

The WSA/WV also requires additional analysis if any portion of the water purveyor's water supplies include groundwater. A description of any groundwater basin or basins from which the proposed project will be supplied in addition to a detailed description and analysis of the amount and location of groundwater pumped by the public water system for the past five years should be provided. The WSA/WV should also include an analysis of the sufficiency of the groundwater from the basin or basins from which the proposed project will be supplied to meet the projected water demand associated with the proposed project. For a basin for which a

[4] City of Ontario, 2021. *2020 Urban Water Management Plan.*
[5] City of Ontario, 2021. *2020 Urban Water Management Plan.*

court or the State Water Resources Control Board has adjudicated the rights to pump groundwater, the order or decree adopted by the court, or the State Water Resources Control Board should be included.

Upon adoption, the WSA/WV is incorporated into the CEQA document being prepared for the project, and the lead agency must determine, based on the entire record, whether projected water supplies will be sufficient to satisfy demands for the project, in addition to existing and future uses.

2.3 WATER DEMAND ANALYSIS

This section provides the current and projected future water demands for the City of Ontario, the estimated water demand for the proposed project, and assesses if the proposed project was included in the projection of future water demands for the City of Ontario, as described in the 2020 UWMP. As per Section 10910 (c) (2) of the California Water Code:

> *"if the projected water demand associated with the proposed project was accounted for in the most recently adopted urban water management plan, the public water system may incorporate the requested information from the urban water management plan in preparing the elements of the assessment required to comply with subdivisions (d), (e), (f), and (g)."*

2.3.1 City of Ontario Water Demands

The primary source of water for the proposed project would be existing water supplies used by the City to provide service to its customers. This section analyzes the water demands of existing and planned future City customers.

Current and projected potable and recycled water demands by customer class are presented in Table 2. The City's total 2020 demand was 39,921 AFY. Potable water demands were 32,109 AFY and recycled water demands were 7,812 AFY (including agricultural demands). The projected 2045 total demand is 73,668 AFY, with potable water demands projected to be 57,609 AFY and recycled water demands projected to be 16,059 AFY (including agricultural demands).

Table 2 Current and Projected Water Demands for the City of Ontario (AFY)

Use Type	2020	2025	2030	2035	2040	2045
Potable Water Demand						
Single Family	12,502	15,723	17,540	19,109	22,431	22,431
Multi-Family	5,068	6,374	7,110	7,746	9,093	9,093
Commercial	5,359	6,740	7,519	8,191	9,615	9,615
Industrial	2,078	2,613	2,915	3,176	3,728	3,728
Institutional/Governmental	538	677	755	822	965	965
Landscape	4,631	5,824	6,497	7,078	8,309	8,309
Losses	1,565	1,968	2,196	2,392	2,808	2,808
Other	368	463	516	562	660	660
Sub Total	**32,109**	**40,382**	**45,058**	**49,076**	**57,609**	**57,609**
Recycled Water Demand						
Recycled Water Demand	7,812	12,168	13,465	14,762	16,059	16,059

2. Water Supply Assessment

Table 2 Current and Projected Water Demands for the City of Ontario (AFY)

Use Type	2020	2025	2030	2035	2040	2045
Total	39,921	52,550	58,513	63,838	73,668	73,668

AFY = Acre-feet/year
Source: City of Ontario 2020 UWMP, 2021.

2.3.2 Proposed Project Water Demand

A description of the proposed project and buildout projections are provided in Table 1 above. The project site is vacant and there are no current uses on the site. Therefore, the proposed development would require connections to the City's water mains for potable and recycled water use.

Table 3 provides the total indoor water demand estimate for the proposed development. Indoor water demand was determined using potable water demand factors from the City's 2020 WMP. Since the 2020 WMP does not include a rate for restaurants and banquet halls, demand rates from the Jamul Casino Hotel and Event Center Project Assessment of Wastewater and Water Related Environmental Off-Site Impacts Report were used.[6] Occupancy rates, number of seats, days of operation, and the number of events per year were provided by the applicant.[7]

Table 3 Indoor Water Demand for the Proposed Project

Land Use	Units	Occupancy Rate (%)	Water Demand Rate	Water Demand (gpd)	Number of Operational Days or Events per Year[4]	Total Domestic Water Usage (afy)
Hotel Rooms	600 rooms	70	130 gpd/room[1]	54,600	365	61.15
Restaurants/Café/ Bar/Lounge	610 seats	40	30 gpd/seat[2]	7,320	350	7.86
Day Spa	11,357 sf	-	1,000 gpd/ac[1]	261	350	0.28
Gym	7,906 sf	-	11 gal/yr/sf[3]	238	350	0.26
Banquet/Meeting Rooms	100 seats	-	30 gpd/seat[2]	3,000	900	8.29
Admin/Office	4,262 sf	-	2,500 gpd/ac[1]	245	350	0.26
Local Serving Retail	11,946 sf	-	1,800 gpd/ac[1]	494	350	0.53
					Total	78.63

ac = acre; sf = square foot; gpd = gallons per day; yr=year.
[1] Source: AKM Consulting Engineers, June 2020. Draft City of Ontario Water Master Plan Update. Rates with recycled water from Table 4-8 were used. Hospitality rate used for hotel rooms. Office Commercial rate used for offices. Neighborhood Commercial rate used for retail. Open Space Recreational used for Day Spa.
[2] Source: EEC Environmental. September 26, 2022. Rates from Table 7 of the Jamul Casino Hotel and Event Center Project Assessment of Wastewater and Water Related Environmental Off-Site Impacts Report. Dining One rate used for restaurants/cafe/bar/lounge. Banquet Dining used for Banquet Hall/Conference Rooms.
[3] Rate for Fitness Center provided by OMUC in an Email from Alexis Mascarinas dated June 5, 2024.

[6] EEC Environmental. September 26, 2022. Jamul Casino Hotel and Event Center Project Assessment of Wastewater and Water Related Environmental Off-Site Impacts Report.
[7] Emails from Alexis Mascarinas, Associate Engineer, dated May 13, 2024 and June 5, 2024.

The proposed project also includes landscaping, pools, jacuzzies, a children's splash area, fountains, canals, and other water features. The potable and recycled water demands for these features are included in Table 4. The average water evaporation rate off the surface of the pools and jacuzzies was assumed to be about a quarter of an inch of water per day.[8] It is also assumed that the splash pad would be a recirculated spray park. A recirculating spray park only uses water to initially fill the holding tank and then water to make up for losses due to evaporation and bather carry off. It is assumed that the recirculated system would have a 1,500-gallon underground tank and that 25 percent is lost to evaporation and bather carry off.[9,10] For the fountains, canals, and other outdoor water features, a factor of 50% is added to the evaporation rate for pools when compared to the rate of a swimming pool to account for the spray.

The outdoor landscaping water demand is calculated using the Department of Water Resource's Water Budget Workbook for New and Rehabilitate Non-Residential Landscapes.[11] The Maximum Applied Water Allowance (MAWA) shown in Table 4 was calculated using a reference evapotranspiration (Eto) of 49.20 inches and a total annual precipitation of 10.68 inches/year[12] (see Attachment A). Since all irrigation would be with recycled water, the landscaped areas were entered into the workbook as Special Landscape Areas (SLA).

Table 4 Outdoor Water Demand for the Proposed Project

Land Use	Square Footage	Water Losses	Water Demand Rate (gpd)
Potable Water Demand			
Pools and Jacuzzies	8,789	0.021 ft/day	1,381[1]
Splash Pad	353	25%	375[2]
		Total	**1,756**
Recycled Water Demand			
Fountains/Canals/Other Water Features	5,844	0.032 ft/day	1,377[3]
Landscaping	133,374	-	10,542
		Total	**11,919**

ft = feet; gpd=gallons per day.

[1] Evaporation off the surface of the pools and jacuzzies is calculated by multiplying 0.021 ft/day (half an inch a day) by the surface area (8,789 square feet) for a total of 184.6 cubic feet per day of water lost to evaporation. 184.6 cubic feet per day is 1,381 gpd.

[2] It is assumed that the splash play area includes a recirculated spray park that is only drained when contamination occurs since the water quality in the tank must be tested daily in compliance with health codes. A recirculating spray park only uses water to initially fill the holding tank and then water to make up for losses due to evaporation and bather carry off. It is assumed that the recirculated system would have a 1,500-gallon underground tank and that 25 percent is lost to evaporation and bather carry off. Therefore, the daily water loss is 1,500 x 0.25 = 375 gpd.

[3] Evaporation off the surface of the fountains, canals, and other outdoor water features is calculated by multiplying 0.032 ft/day (150% of the pool evaporation rate) by the surface area (5,844 square feet) for a total of 187 cubic feet per day of water lost to evaporation. 187 cubic feet per day is 1,377 gpd.

As shown in Table 3, the total indoor water demand is estimated to be 78.63 AFY. As shown in Table 4, the total outdoor potable water demand is estimated to be 7,037 gpd or 1.97 AFY. Therefore, the total potable water demand for the project would be 80.60 AFY. The total recycled water use is 11,919 gpd or 13.35 AFY.

[8] American Leak Detection. 2022. *How Much Water Evaporates from a Pool Each Day?*
[9] CIRSA. 2004. *Water Spray Park Safety Guidelines.*
[10] Playquest. 2023. *Spray Park Frequently Asked Questions.*
[11] California Department of Water Resources, June 13, 2017. *Water Budget Workbook for New and Rehabilitate Non-Residential Landscapes.*

2. Water Supply Assessment

2.3.3 Proposed Project with Respect to the 2020 UWMP

To evaluate water supply reliability, California statutes require the consideration of water supplies and demands in three types of water conditions: normal, single dry, and multiple dry water years.[13] The 2020 UWMP indicates that the City can meet the water demands of its customers in normal, single dry, and multiple dry years between 2020 and 2045.

The 2020 UWMP projected water demands are based on future land uses as specified in the City's 2010 General Plan. The 2010 General Plan designates the project site as mixed-use within the "Multi-Modal" area.[14] The mixed-use land use category accommodates a horizontal and/or vertical mixture of retail, service, office, restaurant, entertainment, cultural, and residential uses.[15]

The 2010 General Plan includes buildout statistics for APN# 011032233 as shown in Table 5. Based on the land use for the project site included in the 2020 UWMP, the water demand for the project site that was included in the UWMP is shown in Table 5.

Table 5 Water Demand Estimate for the Project Site Based on Land Use in the 2020 UWMP

Land Use	Unit	Water Demand Rate	Total Domestic Water Usage (gpd)
Potable Water			
Multi-Family Residential	63 du	60 gpd/person[1]	12,814
Office	205,317 sf	2,500 gpd/ac[1]	11,784
Commercial	205,317 sf	1,800 gpd/ac[1]	8,484
Total	**-**	**-**	**33,082**
Recycled Water			
Multi-Family Residential	0.79 ac[2]	1,500 gpd/ac[3]	1,185
Office	205,317 sf	1,500 gpd/ac[3]	7,070
Commercial	205,317 sf	1,100 gpd/ac[3]	5,185
Total	**-**	**-**	**13,440**

Source: City of Ontario 2020 UWMP, 2021; PlaceWorks, 2024; United States Census, 2023.
sf = square feet; du = dwelling unit; ac = acre; gpd = gallons per day
[1] Table 4-8 of the City of Ontario's 2020 Water Master Plan (Appendix E of the UWMP) was used to establish the water demand rate. The Mixed Use "High Density Residential (w/ RW)" rate, "Non-Office (w/ RW)" rate, and "Office (w/RW)" rate were chosen to account for potable water demand. It is assumed that the multi-family units will accommodate 3.39 people/du.
[2] The 2010 General Plan allows a minimum of 20 du/acre and a maximum of 80 du/acre for residential units within the Mixed-Use designation. As a conservative approach, the maximum density of 80 du/acre is assumed for this analysis.
[3] Table 5-3 of the City of Ontario's Recycled Water Master Plan Update (Appendix K of the UWMP) was used to establish the water demand rate. The "Mixed Use" rate was chosen to account for recycled water demand for multi-family residential and office uses. The "General Commercial" rate was used for commercial uses.

As shown in Table 5, the total potable water demand within the site area that was accounted for in the 2020 UWMP is estimated to be 33,082 gpd (37.05 AFY). The proposed project's total potable water demand of

[13] Department of Water Resources, 2005. California Water Plan, Bulletin 160-05, Volume III ("Each district has different assumptions and policies that guide their planning").
[14] Email from Alexis Mascarinas, Associate Engineer, dated June 10, 2024.
[15] PlaceWorks. 2009. *The Ontario Plan Draft EIR*.

80.60 AFY results in a net increase of 43.55 AFY when compared to the water demand accounted for the site in the 2020 UWMP.

The total recycled water demand that was accounted for in the 2020 UWMP is estimated to be 13,440 gpd (15.06 AFY) resulting in a net decrease of 1.71 AFY.

2.4 WATER SUPPLY ANALYSIS

This section identifies the sources of water used by the City of Ontario and evaluates the water supplies that would be used by the City and the proposed project during normal, single-dry, and multiple-dry years through the year 2045. Water sources used by the City include groundwater from the Chino Basin, treated groundwater from CDA, recycled water from IEUA, imported water from WFA, and purchased water from SAWCo.

The City of Ontario extracts groundwater from 17 active wells within the Chino Basin. Groundwater from the Chino Basin is used by the City of Ontario either directly by pumping into its distribution system or by treating the groundwater at one of its two treatment plants and then pumping the treated groundwater into the City of Ontario's distribution system. The ultimate capacity of Ontario's existing and future wells is projected to be 98.5 million gallons per day (mgd) or 110,337 AFY. Additional information on the City's groundwater resources and groundwater rights is provided in Section 2.5.

In addition to its well production, the City of Ontario also purchases treated Chino Basin groundwater from the CDA. The CDA was formed in 2002 as a Joint Powers Authority consisting of IEUA; Jurupa Community Services District; Cities of Chino, Chino Hills, Norco and Ontario, and Santa Ana River Water Company. Western Municipal Water District joined in 2010.

CDA can produce up to 40,000 AF from the Chino Basin every year for the purpose of groundwater cleanup and control of contaminant migration. The member agencies have contract entitlements to receive a total of 35,200 AFY of treated water from CDA. The City's current contract entitlement is 8,533 AFY; however, this may increase in years where the amount of water produced is greater than the projected amount of 40,000 AF. The CDA currently owns and operates two desalters (Chino I and Chino II Desalters) that consist of groundwater extraction wells connected to pumps and pipelines that direct water to advanced treatment facilities. The final product is a high-quality drinking water, which is sold to member agencies through "take or pay" contracts.[16]

Recycled water is provided to the City of Ontario by IEUA, which owns and operates four regional water recycling plants that produce disinfected and filtered tertiary treated recycled water in compliance with California Title 22 regulations. IEUA provides recycled water to the City of Ontario and their local agencies through a distribution system consisting of pipelines, booster pump stations, pressure regulating station, and reservoirs.[17]

[16] City of Ontario, 2021. *2020 Urban Water Management Plan.*
[17] Inland Empire Utilities Agency. 2021. *2020 Urban Water Management Plan.*

2. Water Supply Assessment

The City has been obtaining recycled water from IEUA since 1972. Currently, recycled water is used in the City for agricultural irrigation, landscape irrigation, golf course irrigation, and industrial uses. As stated in the City's 2020 UWMP, the City has the right of first purchase of their Base Entitlement. Base Entitlement is defined as the total quantity of sewage delivered into the regional sewerage system by the City less normal processing losses resulting from the treatment of sewage. Based on the City's current Recycled Water Master Plan and the 2020 UWMP, the City has enough recycled water rights to meet future recycled water demands. In 2023, the City used 9,088 AFY of recycled water.[18] IEUA estimated that the Base Entitlement for the City during FY 2022-23 was approximately 13,853 AFY. In the same fiscal year, the City used 8,790 AF of recycled water for direct use and 3,517 AFY of recycled water for groundwater recharge.[19]

The City also obtains treated imported water from the WFA, which is a wholesale water supplier to the cities of Chino, Chino Hills, Ontario, Upland, and the Monte Vista Water District. The WFA purchases imported water from IEUA, which in turn purchases untreated water from the Metropolitan Water District (MWD).[20] The MWD obtains its water from the State Water Project (SWP) and has projected 100 percent water supply reliability over the next 20 years, as per its 2020 UWMP.[21]

WFA owns and operates the Agua de Lejos Treatment Plant located in the City of Upland. The Agua de Lejos Treatment Plant is a conventional surface water treatment facility that treats and disinfects imported water supplies from the SWP delivered by MWD through IEUA. The Agua de Lejos Treatment Plant began operating in 1988 and has a treatment capacity of 81 mgd.[22] The City owns 31.4 percent of the plant capacity (25.4 mgd, 28,500 AFY). The maximum capacity available to the City is 19,924 AFY, which equals the total capacity of 28,000 AFY less the Dry Year Yield shift obligation of 8,076 AFY.[23]

The City also purchases water from SAWCo which delivers potable and irrigation water to a variety of shareholders. These shareholders include most residents of San Antonio Heights (an unincorporated area of San Bernardino County), the Cities of Upland and Ontario, Monte Vista Water District, the United States Forest Service, the San Bernardino County Flood Control District, local golf courses, rock quarries, and grove irrigators. In 2020, SAWCo's total active share entitlement was 12,570 AF. The City has an entitlement of 600 AF. SAWCo's water supply sources include surface water obtained from the San Antonio Canyon, water from the San Antonio Tunnel, and groundwater sources from the Chino Basin, Six Basins, and Cucamonga Basin.[24]

Water supplies provided to the City for the year 2023 are summarized in Table 6.

[18] Ontario Municipal Utilities Company. 2024. 2023 Water Production Summary.
[19] Inland Empire Utilities Agency. 2023. *FY 2022-23 Exhibit for Recycled Water Reconciliation.*
[20] City of Ontario, 2021. *2020 Urban Water Management Plan.*
[21] Metropolitan Water District of Southern California. 2021. *2020 Urban Water Management Plan.*
[22] City of Ontario. 2021. *2020 Urban Water Management Plan.*
[23] City of Ontario. 2016. *2015 Urban Water Management Plan.*
[24] City of Ontario. 2016. *2015 Urban Water Management Plan.*

Table 6 Water Supply Sources for the City of Ontario in 2023

Water Supplier	Water Source	Amount (AFY)
City of Ontario	Groundwater	15,077
Chino Basin Desalter Authority (CDA)	Purchased/Imported Water	8,664
Water Facilities Authority (WFA)	Purchased/Imported Water	4,753
San Antonio Water Company (SAWCo)	Purchased/Imported Water	496
Inland Empire Utilities Authority (IEUA)	Recycled Water	9,088
Total		**38,078**

Source: City of Ontario 2023 Water Production Summary, 2024.
AFY = Acre-feet per year

It is required that every urban water supplier assess the reliability to provide water service to its customers under normal, dry, and multiple dry water years. This evaluation from the 2020 UWMP is provided in Table 7. The City depends on a combination of imported and local supplies to meet its water demands and has taken numerous steps to ensure that it has adequate supplies. The City's projected water supplies are based on historical long-term averages and supplies during previous dry year conditions obtained from CDA, SAWCo, WFA and groundwater supplies from the Chino Basin. In the event that water from CDA, SAWCo, and WFA may be limited, the City has the flexibility to increase groundwater production from the Chino Basin. Consequently, water supplies available to the City are projected to meet demands for the next 25 years during normal years, single-dry years, and multiple-dry years, as shown in Table 7.[25]

Table 7 Normal, Single Dry, and Multiple Dry Year Supply and Demand (AFY)

		2025	2030	2035	2040	2045
Normal Year						
Supply Totals		52,550	58,513	63,838	73,668	73,668
Demand Totals		52,550	58,513	63,838	73,668	73,668
Difference		0	0	0	0	0
Single Dry Year						
Supply Totals		57,058	63,534	68,847	79,989	79,989
Demand Totals		57,058	63,534	68,847	79,989	79,989
Difference		0	0	0	0	0
Multiple Dry Year						
First Year	Supply Totals	56,080	62,445	67,667	78,618	78,618
	Demand Totals	56,080	62,445	67,667	78,618	78,618
	Difference	0	0	0	0	0
Second Year	Supply Totals	56,248	62,632	67,870	78,853	78,853
	Demand Totals	56,248	62,632	67,870	78,853	78,853
	Difference	0	0	0	0	0
Third Year	Supply Totals	59,493	66,246	71,786	83,403	83,403
	Demand Totals	59,493	66,246	71,786	83,403	83,403
	Difference	0	0	0	0	0

[25] City of Ontario. 2021. *2020 Urban Water Management Plan*.

Table 7 Normal, Single Dry, and Multiple Dry Year Supply and Demand (AFY)

		2025	2030	2035	2040	2045
Fourth Year	Supply Totals	54,628	60,428	65,481	76,078	76,078
	Demand Totals	54,628	60,428	65,481	76,078	76,078
	Difference	0	0	0	0	0
Fifth Year	Supply Totals	47,463	52,820	57,237	66,500	66,500
	Demand Totals	47,463	52,820	57,237	66,500	66,500
	Difference	0	0	0	0	0

Source: City of Ontario 2020 UWMP, 2021.
Notes: Supply and demand are equal for years 2040 and 2045 because the City anticipates buildout to occur in 2040.

The City will increase its total normal-year water supply from 39,921 AF of water delivered in 2020 to 73,668 AF in 2045. The increased water supply will come from full utilization of the City's groundwater rights in the Chino Basin (including increased groundwater recharge with recycled water). The Chino Basin was adjudicated under the Chino Basin Judgment in 1978. During drought cycles, the Chino Basin has been managed to maintain sustainable groundwater levels. Therefore, based on historical and on-going management practices, the City will be able to rely on the Chino Basin for adequate supply over the next 25 years under single dry years and drought periods of five consecutive years. [26]

Additionally, an increase in imported water is assumed to be available in wet and normal years. With the ability for the City to store water in the Chino Basin, in its local and supplemental storage accounts as well as the MWD's Dry-Year Yield (DDY) Program storage account, the City has the capability and water supply available to reduce imported water deliveries in dry years and increase groundwater production to meet future demands. Section 2.5 provides a description of the management of groundwater resources in the Chino Basin, as well as information on basin management.

2.5 GROUNDWATER ANALYSIS

Since most of the potable water supplied by the City of Ontario comes from groundwater, SB 610 requires a groundwater analysis to be included as part of the WSA. The Water Code requires that the WSA include:

- Groundwater information from the 2020 UWMP
- Groundwater basin description including the legal rights to pump
- Historic use of groundwater from the 2020 UWMP
- Projected use of groundwater
- Sufficiency of groundwater from the Chino Basin

[26] City of Ontario. 2021. *2020 Urban Water Management Plan.*

Per SB 221, where a water supply for a proposed subdivision includes groundwater, the public water system serving the proposed subdivision needs to evaluate, based on substantial evidence, the extent to which it has the right to extract the additional groundwater needed to supply the proposed subdivision.[27]

The City of Ontario's legal right to pump water in an amount necessary to meet its demands has been adjudicated and the safe yield of the aquifer has been determined. The construction of Wells 45, 46, and 47, as part of the Dry Year Yield Storage Program, increases the City's groundwater pumping capacity to meet peak demands. The City also has stored water in the Chino Basin and participates in an ongoing groundwater recharge program, using stormwater, dry-weather runoff, and recycled water, that ensures the safe yield of the Chino Basin is not exceeded. In addition, the City participates in water conservation efforts, adopts ordinances pertaining to water shortage contingency planning and the prevention of water waste, conservation pricing, and various public outreach programs to encourage its customers to reduce their water consumption.

2.5.1 Groundwater Information from the 2020 UWMP

The 2020 UWMP adopted by the City in June 2021 contains a description of the Chino Groundwater Basin, the City's current and projected water supplies and demands, the reliability of the water supply, water shortage plans, the Optimum Basin Management Plan, and the adjudication judgment administered by the Chino Basin Watermaster. In addition, Appendix E of the UWMP explains the methods and calculations by which the future water demand of the City was estimated, based on the land use designations in the General Plan.

2.5.1.1 GROUNDWATER BASIN DESCRIPTION

The City of Ontario obtains its groundwater from the Chino Groundwater Basin. The Chino Basin encompasses about 235 square miles of the upper Santa Ana River watershed and lies within portions of San Bernardino, Riverside, and Los Angeles counties. The Chino Basin has approximately five to six million-acre feet of water in storage and an estimated one million acre-feet of storage capacity. The Chino Basin is divided into five management zones, based on similar hydrologic conditions, as shown in Figure 7, *Chino Groundwater Basin Management Zones*. The City of Ontario is located approximately in the center of the Chino Basin.

Groundwater quality in Chino Basin is generally good with better quality in the northern portion of the basin where recharge occurs. Salinity (TDS) and nitrate-nitrogen concentrations are higher in the southern portion of the basin. The Chino Basin has been extensively studied by the Chino Basin Watermaster. Reports are available at this website: http://www.cbwm.org/.

The Chino Basin Watermaster began development of the Optimum Basin Management Program (OBMP) in 1998 and completed it in 2000. The OBMP was updated in 2020. The purpose of the program is to address both water quality and water supply considerations. The southern portion of the Chino Basin requires groundwater treatment to control the outflow of salts and nitrates into the Santa Ana River. As such, one of the main benefits of the CDA is to remove salts and nitrates to clean up the Chino Basin. CDA operates 22 groundwater extraction wells that prevent brackish groundwater from flowing into the Santa Ana River. CDA removes salts from brackish groundwater extracted from the lower Chino Basin through the Chino I and II

[27] Government Code Section 66473.7(h).

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Desalter facilities. The Chino I Desalter is in the City of Chino and has a total capacity of 14.2 MGD. The Chino II Desalter is in Jurupa Valley and was expanded in 2017 to have a total capacity of 33 MGD.[28]

The OBMP and its implementation agreement, the Peace Agreement, was approved by the Court in October 2000. One of the stipulations of the OBMP requires member agencies to extract approximately 40,000 AFY of groundwater from the southern portion of the Chino Basin, treat it to potable water standards, and then deliver it to the member agencies. Member agencies have contract entitlements to receive a total of 35,200 AFY of treated water from CDA. The City's current contract entitlement is 8,533 AFY.[29]

2.5.1.1 LEGAL RIGHT TO PUMP FROM THE CHINO BASIN

Water rights to the Chino Basin were adjudicated in 1978 by the Superior Court of the State of California for San Bernardino County. Since that time, the Chino Basin has been sustainably managed, as required by the Judgment, under the direction of the court-appointed Watermaster. The original Watermaster was the Chino Basin Municipal Water District (now IEUA). Since 1998, the Watermaster has been the Chino Basin Watermaster.

Multiple cities and water purveyors pump groundwater from the Chino Basin for all or part of their municipal and industrial water supplies. Agricultural users also pump groundwater from the Basin. The safe yield of the Chino Basin is 131,000 AFY as of 2020. The safe yield quantity is allocated among three pools of right holders as follows:

- Overlying Agricultural Pool (dairymen, farmers, and the State of California)
- Overlying Non-Agricultural Pool (businesses and industries)
- Appropriative Pool (local cities, public water districts, and private water companies)

The Operating Safe Yield (OSY) is defined as the annual amount of groundwater which the Watermaster determines can be produced from the Appropriative Pool parties without replenishment obligation. The City of Ontario is a member of both the Overlying Non-Agricultural Pool and the Appropriative Pool and is therefore subject to the regulations imposed by the Chino Basin Watermaster. The Judgment allocates a portion of the safe yield to the Overlying Non-Agricultural Pool and a portion of the OSY to the Appropriative Pool.

Pursuant to the Judgment, the City has appropriative rights to approximately 21 percent of the OSY allocated to the Appropriative Pool and 53 percent of the safe yield assigned to the Overlying Non-Agricultural Pool.[30] With an OSY of 40,834 AFY, the City's current appropriative right is approximately 8,470 AFY as of July 2021. As of July 2021, the safe yield is allocated at 82,800 AFY to the Overlying Agricultural Pool and 7,350 AFY to the Overlying Non-Agricultural Pool. The City has purchased and has rights to 3,921 AF of Overlying Non-Agricultural Pool water.[31]

[28] City of Ontario. 2021. *2020 Urban Water Management Plan.*
[29] City of Ontario. 2021. *2020 Urban Water Management Plan.*
[30] City of Ontario. 2021. *2020 Urban Water Management Plan.*
[31] City of Ontario. 2021. *2020 Urban Water Management Plan.*

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The Judgment states that all Chino Basin users can pump enough water from the Basin to meet their requirements. If pumping by a party exceeds its share of the safe yield, assessments are levied by the Chino Basin Watermaster to replace overproduction. The Judgment also recognizes that there is a substantial amount of available unused groundwater storage capacity in the Chino Basin that can be used for storage and the conjunctive use of supplemental and basin waters.[32] The Chino Basin Watermaster has the authority to reallocate shares of unallocated safe yield water on an annual basis, as per the latest 2019 Watermaster Resolution No. 2019-03.[33] The Watermaster publishes an annual report that summarizes the status and management of the Chino Basin. A copy of the Chino Basin Judgment and latest Watermaster Annual Report can be found at www.cbwm.org.

The City of Ontario also participates in the Dry Year Yield (DYY) Storage Program, which is a cooperative conjunctive use program involving MWD, IEUA, Chino Basin Watermaster, Three Valleys Municipal Water District, and some of the Chino Basin groundwater producers. Under the DYY Program, MWD is allowed to store up to 100,000 AF of water in the Chino Basin when surplus water is available and the Chino Basin groundwater producers can extract 33,000 AFY for three years in dry, drought, or emergency periods. The City authorized execution of an agreement with IEUA to participate in the DYY program in 2003. Participation obligates the City to reduce its use of imported water compared to a baseline by a fixed amount, known as the "shift obligation." The City's shift obligation is 8,076 AFY. During years when MWD calls for extraction, the City's WFA purchases would be reduced by up to 8,076 AFY compared to the previous year. Because Jurupa Community Services District does not have an imported water connection, it has entered into an agreement with the City to meet its shift obligation. Under this agreement, Jurupa Community Services District conveys groundwater to the City in an amount equal to its shift obligation. This program allows the City to be less reliant upon imported water supplies and the additional groundwater capacity allows the City to increase the percentage of groundwater supply used to meet peak demands.[34]

In addition to the appropriative pool and overlying non-agricultural pool water rights, as well as the contract obligations through the DYY Program, the following is a summary of other groundwater rights for Chino Basin:

- **LAND USE CONVERSIONS**

  As of 2023, the City receives 5,586 AFY from the Chino Basin due to conversions from agricultural to non-agricultural land uses. The Chino Basin Watermaster reallocates the unused portion of the Chino Basin Safe Yield from the Overlying Agricultural Pool to the Appropriative Pool members as a supplement to the Appropriative Pool share of Operating Safe Yield rights in any year.[35,36]

[32] Wildermuth Environmental, Inc. September 2018. *2018 Recharge Master Plan. Prepared for the Chino Basin Watermaster and the Inland Empire Utilities Agency.*
[33] Chino Basin Watermaster. 2019. *Watermaster Resolution No. 2019-03. Resolution of the Chino Basin Watermaster Regarding 2018 Appropriative Pool Pooling Plan and CAMA Amendments.*
[34] City of Ontario. 2021. 2020 *Urban Water Management Plan.*
[35] City of Ontario. 2021. 2020 *Urban Water Management Plan.*
[36] Chino Basin Watermaster. 2023. *2023-2024 Assessment Package.*

2. Water Supply Assessment

- **FONTANA RECYCLED WATER RIGHTS**

  The City also has a long-term contract to purchase up to 3,000 AFY of recharged recycled water rights from the City of Fontana, which does not operate its own water system.[37]

- **CITY GROUNDWATER STORAGE**

  The City has rights to store water in the Chino Basin (Appropriative and Overlying Non- Agricultural) and has been increasing its various storage accounts in recent years. The City holds water in both local storage accounts and supplemental accounts. Local storage accounts hold unpumped OSY groundwater rights and stormwater that has been recharged into the Chino Basin. Supplemental accounts hold both imported water and recycled water that has been recharged into the Chino Basin. As of June 30, 2023, the City has 123,135 AF in storage pursuant to Appropriative rights and zero AF in storage pursuant to Overlying Non-Agricultural rights.[38,39]

- **INCREASED GROUNDWATER RECHARGE**

  The City is entitled to water rights due to groundwater recharge with stormwater and recycled water in the Chino Basin. The credited amount is based on the volume recharged and therefore varies annually but is projected to increase over time. In fiscal year 2022, 6,932 AF was recharged for the City including 3,000 AF from the city of Fontana. In fiscal year 2023, 6,420 was recharged for the City including 2,903 AF from the city of Fontana.[40,41]

The various groundwater rights held by the City of Ontario are summarized in Table 8.

Table 8 City of Ontario Groundwater Rights Summary

	Current as of 2023 (AFY)
Dry Year Storage Program	0
Appropriative Pool	8,470
Overlying Non-Agricultural Pool	3,921
Land Use Conversions	5,586
Groundwater Recharge Credits	Varies
Fontana Recycled Water Rights	Max. 3,000
Groundwater Storage Accounts	Appropriative Pool: 123,135
	Overlying Non-Agricultural: 0

Source: Chino Basin Watermaster 2023-2024 Assessment Package, 2023 and City of Ontario 2020 UWMP, 2021.

[37] City of Ontario. 2021. 2020 *Urban Water Management Plan.*
[38] City of Ontario. 2021. 2020 *Urban Water Management Plan.*
[39] Chino Basin Watermaster. 2023. *2023-2024 Assessment Package.*
[40] Inland Empire Utilities Agency. 2022. FY 2021-22 Exhibit for Recycled Water Reconciliation.
[41] Inland Empire Utilities Agency. 2023. FY 2022-23 Exhibit for Recycled Water Reconciliation.

2.5.2 Historic Use of Groundwater

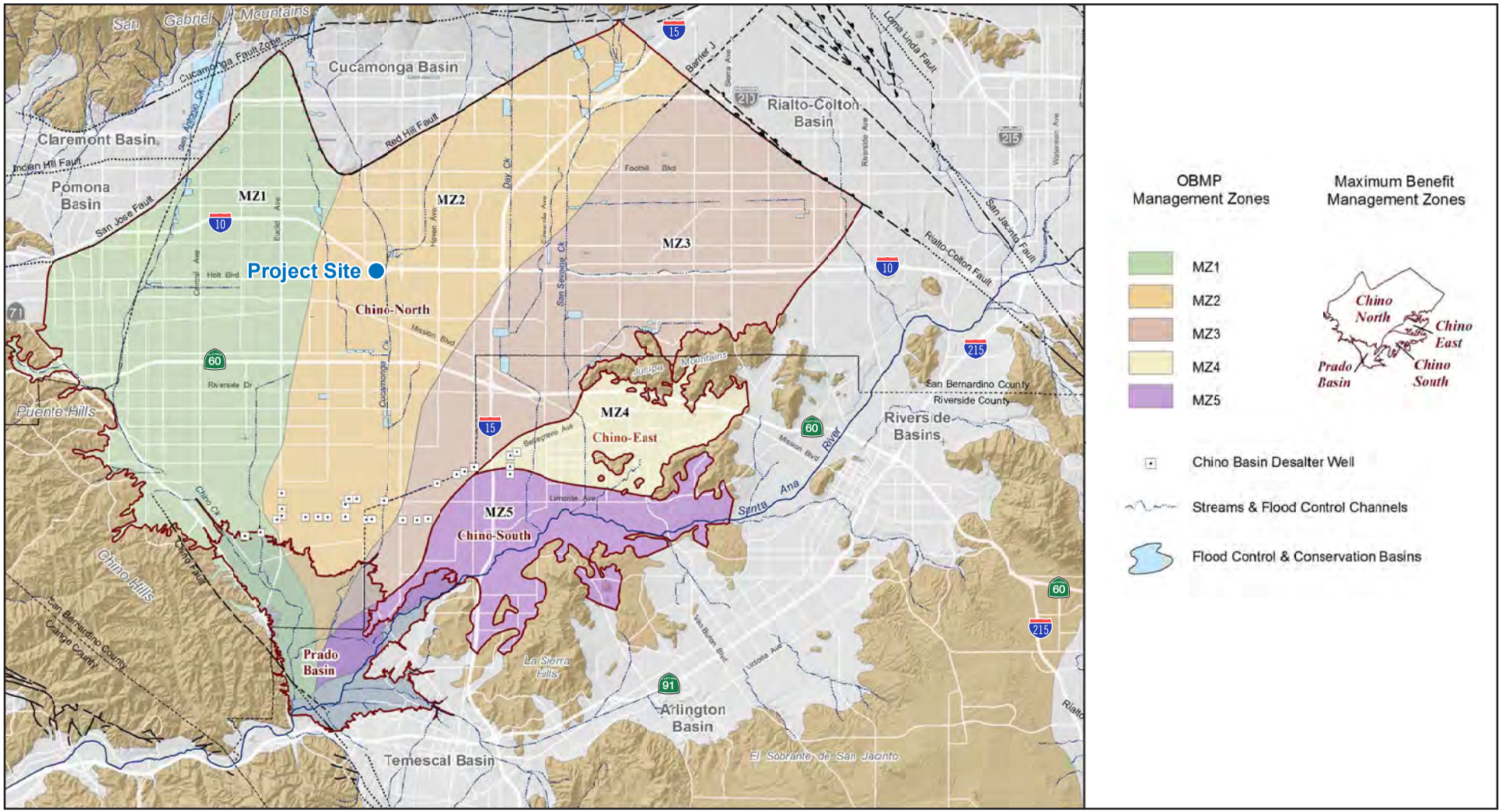
The City owns and operates 17 active groundwater wells. The amount of groundwater pumped by the City of Ontario from the Chino Basin since 2016 is listed below in Table 9. A map of the location of the groundwater wells and pressure zones is shown on Figure 8, *Ontario Ultimate Water System.*

Table 9 Historic Groundwater Production

Calendar Year	Groundwater produced (AFY)
2016	22,751
2017	24,672
2018	26,109
2019	19,604
2020	18,395
2021	17,171
2022	18,967
2023	15,077
Average	

Source: Chino Basin Watermaster 2021-2022 Assessment Package, 2021, Ontario Municipal Utilities Company 2022 Water Production Summary, 2023, Ontario Municipal Utilities Company 2023 Water Production Summary, 2024, and City of Ontario 2020 UWMP, 2021.

Figure 7 - Chino Groundwater Basin Management Zones



Source: Wildermuth International 2017.

2. Water Supply Assessment

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2.5.3 Projected Use of Groundwater

The proposed project will receive water from the City of Ontario, using groundwater extracted from the Chino Basin, treated groundwater from the CDA, recycled water from the IEUA, and imported water from the WFA.

Groundwater from the Chino Basin will be directly pumped by the City of Ontario into its distribution system or by treating the groundwater at the City's two ion-exchange facilities before pumping it into the distribution system. The City's current well capacity is 38,600 gallons per minute (gpm) or 55.6 mgd. The City's ultimate source of supply will be equal to or greater than 68,404 gpm, this includes the nine future wells.

The projected amount of groundwater pumped by the City of Ontario from the Chino Basin up to the year 2045 is listed below in Table 10.

Table 10 Projected Groundwater Production

Calendar Year	Groundwater produced (AFY)
2025	20,249
2030	22,915
2035	24,943
2040	31,476
2045	31,476

Source: City of Ontario 2020 UWMP, 2021.

2.5.4 Sufficiency of Groundwater from Chino Basin

According to the 2020 UWMP, the City's water supply (including conservation measures) will be sufficient to supply all its needs to residential, commercial, and industrial customers through the year 2045 during normal, single dry, and multiple dry years. The City of Ontario's legal right to pump water in an amount necessary to meet its demands has been adjudicated and will ensure the long-term reliability of the groundwater source as the safe yield of the aquifer has been determined.

Approximately two-thirds of the City's water supply is groundwater pumped through its own wells located in the Chino Basin. The construction of Wells 45, 46, and 47, as part of the DYY Storage Program, increases the City's groundwater pumping capacity to meet peak demands. The City also has 123,135 AF of stored water in the Chino Basin as of 2023 and participates in an ongoing groundwater recharge program, using stormwater, dry-weather runoff, and recycled water, that ensures the safe yield of the Chino Basin is not exceeded. The expansion of the groundwater desalter program and ongoing expansion of the recycled water program will reduce the City's dependence on groundwater pumping. In addition, the City adopts ordinances pertaining to water shortage contingency planning and the prevention of water waste, conservation pricing, and various public outreach programs to encourage its customers to reduce their water consumption.[42]

[42] City of Ontario. 2021. 2020 *Urban Water Management Plan*.

2.5.5 Ability of Water Supplies to Accommodate the Proposed Project

As noted in Section 2.3.3 the proposed project would result in a net increase of 43.55 AFY in potable water demand and decrease of 1.71 AFY in recycled water demand when compared to the water demand accounted for the site in the 2020 UWMP. The net increase in potable water is within the projected potable water demand increases shown in Table 7 for the years 2025 to 2030, the timeframe in which the proposed project is anticipated to be completed.

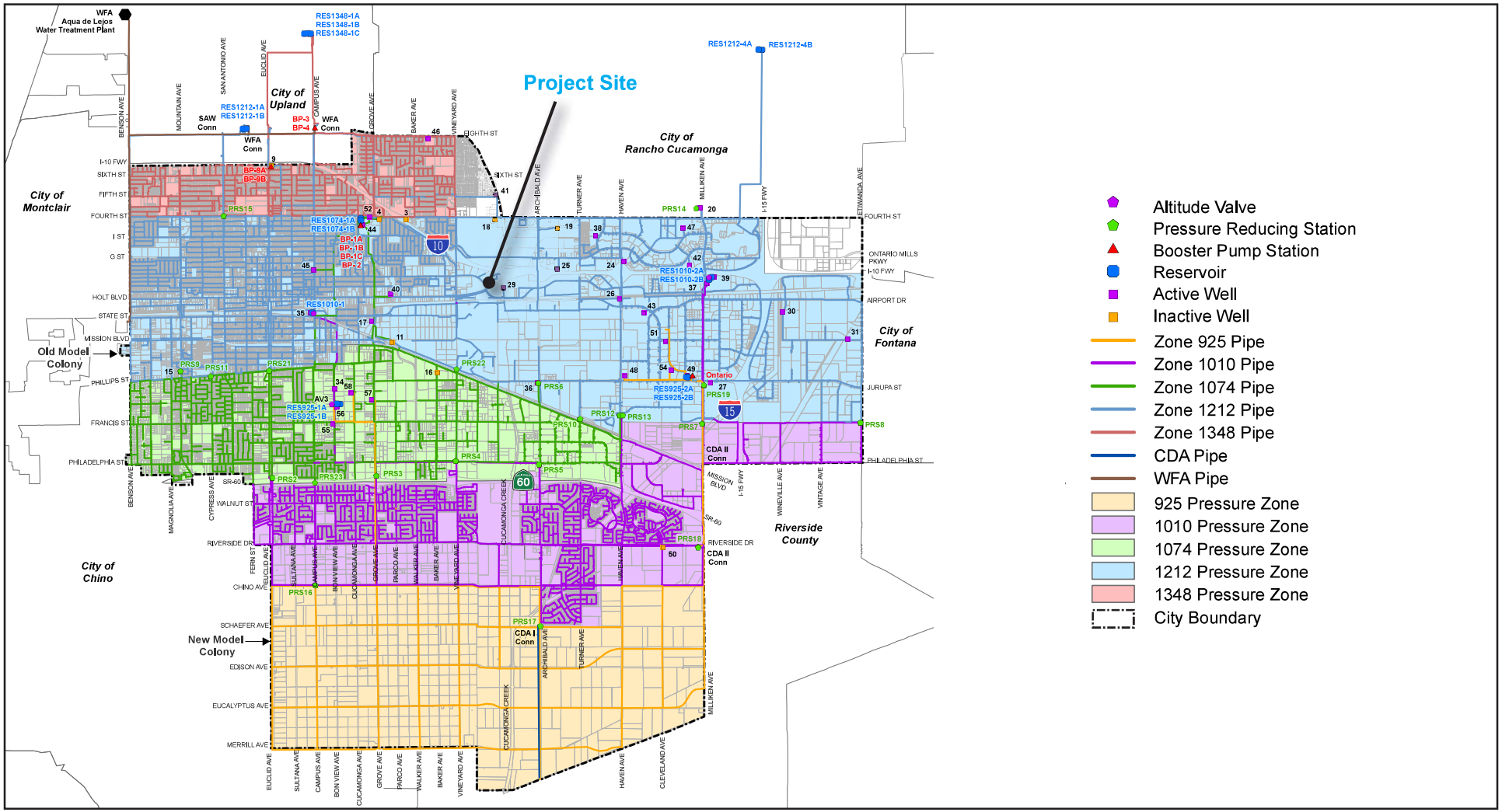
Furthermore, although Table 7 does not include any residual water supply capacities, the City has the flexibility to increase groundwater production from the Chino Basin. An increase in imported water is also available to the City in wet and normal years. Projected groundwater production is shown in Table 10 and capped at 31,476 AFY for the years 2040 and 2045. This amount is what is needed for the projected water demands. However, the City can increase this production as shown in Table 8. As of June 30, 2023, the City has 123,135 AF in storage pursuant to Appropriative rights. Along with the other groundwater supply allocations shown in Table 8, the City has the capability to accommodate the net increase in water demand associated with the proposed project.

2.6 WATER SHORTAGE CONTINGENCY PLANNING

To prepare for water shortages, the City adopted Ordinance No. 3027 on September 1, 2015, in response to the Emergency Conservation Regulations mandated by the State Water Resources Control Board. Under this ordinance, the Water Conservation Plan was updated with more stringent prohibitions and penalties. Ordinance 3027 updated the City's Water Conservation Plan that is codified in Chapter 8A, Title 6 of the City's Municipal Code ("Water Conservation Plan").

The City Council adopted its 2020 Water Shortage Contingency Plan in June 2021, which describes the methods to achieve and the implication of reducing water supplies to at least 50 percent. The City and OMUC implement various programs to reduce customer water consumption, including stringent use restrictions, actions, and penalties, as well as public outreach, education, and communication programs.

Figure 8 - Ontario Ultimate Water System



Source: AKM 2011.

2. Water Supply Assessment

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Depending on the initiative of the City's customers to voluntarily conserve water at times of crisis, the City can determine when and how quickly to implement the mandatory conservation phases. The severity of the water shortage will influence which methods will be implemented. The demand reduction stages that correspond to water shortage levels are as follows:

- Stage 1 – Water supply shortage of up to 10 percent or as otherwise directed by executive order or State agency regulation
- Stage 2 – Water supply shortage between 10 and 20 percent
- Stage 3 – Water supply shortage between 20 and 30 percent
- Stage 4 – Water supply shortage between 30 and 40 percent
- Stage 5 – Water supply shortage between 40 and 50 percent
- Stage 6 – Water supply shortage greater than 50 percent

As of May 2023, the City entered into a Voluntary Conservation Stage where the public is encouraged to voluntariy conserve water described in the Water Shortage Contingecy Plan.

2.7 WATER EFFICIENCY STRATEGIES

The City has implemented "Demand Management Measures" to reduce its water demands and achieve its water use targets. These measures include:

- Adoption of an ordinance to promote conservation and prevent water waste. The City adopted Ordinance No. 3027 in October 2015 to establish water conservation measures, staged water supply shortage demand management measures, and prevent water waste. The adoption of Ordinance No. 3027 was part of a comprehensive water shortage planning effort to manage the City's response to water supply challenges it may encounter.
- Metering of all customer connections, including separate metering for single-family residential, commercial, industrial, large landscape, and institutional/governmental facilities.
- Implementation of conservation pricing. The City's current water rate structure is tiered to promote water conservation by customers. In the event the customer uses more than the amount of water allotted for the budgeted allocation, a Drought Surcharge rate would apply.
- Development of public education and outreach programs regarding water conservation. The City developed a public information program to educate the public on the benefits of water conservation. The program involves the dissemination of information through literature provided at City Hall and other City of Ontario facilities and articles in the City of Ontario newsletter. The City includes periodic information flyers with the water bills to address water conservation and other important matters. The City also periodically holds public seminars and workshops with other local agencies to promote water conservation.
- Implementation of actions to assess and manage water distribution system losses. The City has water conservation literature that alerts customers to be on the lookout for water system leaks and to correct them promptly. As part of normal operation and maintenance of the water system, City staff performs preventive maintenance. This includes regular checks on valves and meters and pipeline maintenance. If leaks are encountered or suspected during routine inspection of the system, further evaluation is conducted

and leaks are subsequently repaired. The City also monitors the water system for loss by comparing water production to water sales.

- Provision of rebate programs. The City routinely hosts seminars and workshops in the community to promote landscape and offers a rebate program for the purchase of landscape-related items to both residential and commercial customers to promote water conservation. The City also offers a rebate program for the purchase of high-efficiency washing machines, high-efficiency toilets, and weather-based irrigation controllers. [43]

Furthermore, the City along with other IEUA member agencies implement a Regional Water Use Efficiency Business Plan. The Business Plan references SB X7-7 and the State Water Resources Control Board's Emergency Conservation Regulations that help guide the development of water reduction goals. The Business Plan describes in detail how the region and the City will achieve the water reduction goals. In addition, the City participates in water conservation efforts through the California Urban Water Conservation Council committing to implement Best Management Practices for more efficient use or conservation of water.[44]

2.8 SUMMARY

A WSA/WV was prepared to assess the water demand and supply conditions with implementation of the proposed project. As shown in Table 3 and 4, the total potable water demand for the proposed project is conservatively estimated to be 80.60 AFY and the total recycled water demand is estimated at 13.35 AFY.

According to the City's 2020 UWMP, the City has adequate supplies to serve 100 percent of its customers during normal, dry year, and multiple dry year demand through 2045 with projected population increases and future development projects. The proposed project would result in a net increase of 43.55 AFY in potable water demand and net 1.71 AFY decrease in recycled water demand when compared to the water demand accounted for the site in the 2020 UWMP. This net increase is within the 2020 UWMP projected potable and recycled water demand increases for the years 2025 to 2030, the timeframe in which the proposed project is anticipated to be completed. Furthermore, the City has the flexibility to increase groundwater production from the Chino Basin and increases in imported water is also available to the City in wet and normal years. As shown in Section 2.5.5, the City has adequate groundwater allocations to accommodate the net increase in water demand associated with the proposed project.

This WSA/WV concludes that the City will have sufficient water supplies available during normal, single dry, and multiple dry years through the year 2045 to meet all projected water demands associated with its existing and future customers, including the proposed project. In the unlikely event of a water shortage, implementation of the City's Water Conservation Plan and water efficiency strategies would ensure that sufficient water supplies were available to serve its customers, including the project and existing and future users.

[43] City of Ontario. 2021. *2020 Urban Water Management Plan.*
[44] Inland Empire Utilities Agency. 2022. Regional *Water Use Efficiency Business Plan FY 2022-24*.

2. Water Supply Assessment

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Attachment A – Detailed Landscaping Water Demand Calculations

Water Budget Workbook for New and Rehabilitated Non-Residential Landscapes

Beta Version 1.30

June 13, 2017

Califonia Department of Water Resources
Statewide Integrated Water Management
Water Use and Efficiency Branch

This program calculates Maximum Applied Water Allowance (MAWA) and Estimated Total Water Use (ETWU) based on reference evapotranspiration from Appendix A in the Model Water Efficiency Landscape Ordinance

All information provided by the Department of Water Resources is made available to provide immediate access for the convenience of interested persons. While the Department believes the information to be reliable, human or mechanical error remains a possibility. Therefore, the Department does not guarantee the accuracy, completeness, timeliness, or correct sequencing of the information. Neither the Department of Water Resources nor any of the sources of the information shall be responsible for any errors or omissions, or for the use or results obtained from the use of this information.

Instructions

This Worksheet for calculation of special landscape MAWA only

Cells with pale blue background are for entering data

Results show in cells with tan background

Messages and warnings are displayed in cells with yellow background

1) Select city by clicking on pale blue cell and choosing a city from the drop down menu

ETo appears in the tan cell below the name of the city

2) Enter Specila Landscape Area (SLA)

3) MAWA results appear in the tan cells

4) If you are considering effective precipitation (Eppt), enter the total annual precipition

5) Effective precipitation

6) For comparison, MAWA without effective precipitation is displayed below

4,067,907.00

MAWA without Eppt (Gallons)

Maximum Applied Water Allowance Calculations for New and Rehabilitated Special Landscapes

Enter value in Pale Blue Cells

Tan Cells Show Results

Messages and Warnings

Click on the blue cell on right to Pick City Name	Ontario	Name of City
ET_o of City from Appendix A	49.20	ET_o (inches/year)
Enter SLA	133,374.00	SLA (ft^2)
Results:		
MAWA = (ET_o) x (0.62) x [SLA)]	-	Gallons
	-	Cubic Feet
	-	HCF
	-	Acre-feet
	-	Millions of Gallons
MAWA calculation incorporating Effective Precipitation (Optional)		
ET_o of City from Appendix A	49.20	ET_o (inches/year)
Speical Landscape Area	133,374.00	SLA (ft^2)
	10.68	
Enter Effective Precipitation	2.67	Eppt (in/yr)
Results:		
MAWA=(ET_o - Eppt) x (0.62) x [SLA)]	3,847,839.90	Gallons
	514,383.09	Cubic Feet
	5,143.83	HCF
	11.81	Acre-feet
	3.85	Millions of Gallons

Attachment A – Detailed Water Demand Calculations

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RESOLUTION NO. PC25-007

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ONTARIO, CALIFORNIA, RECOMMENDING CITY COUNCIL APPROVE FILE NO. PDA23-005, A DEVELOPMENT AGREEMENT BETWEEN THE CITY OF ONTARIO AND DIVERSIFIED PACIFIC DEVELOPMENT GROUP, LLC, TO ESTABLISH THE TERMS AND CONDITIONS ASSOCIATED WITH A DEVELOPMENT PLAN (FILE NO. PDEV23-039), FOR A 10.43 ACRE PROPERTY LOCATED ON THE SOUTHEAST CORNER OF GUASTI ROAD AND HOLT BOULEVARD WITHIN THE PROPOSED PA1 (HOSPITALITY MIXED-USE) DISTRICT OF THE EMPIRE GROVES SPECIFIC PLAN, AND MAKING FINDINGS IN SUPPORT THEREOF—APN: 110-322-33

WHEREAS, Diversified Pacific Development Group, LLC (hereinafter referred to as "Applicant") has filed an Application for the approval of a Development Agreement, File No. PDA23-005, as described in the title of this Resolution (hereinafter referred to as "Application" or "Project"); and

WHEREAS, the Application applies to 10.43 acres of land generally located on southeast corner of Guasti Road and Holt Boulevard, within the proposed Empire Groves Specific Plan; and

WHEREAS, the properties to the north of the Project site are within the CCS (Convention Center Support Commercial) zoning district, and are developed with offices and hotel. The property to the east is within the UC (Utilities Corridor) zoning district and is developed with a flood control channel. The property to the south and west is within the CCS (Convention Center Support Commercial) zoning district, and is developed with hotel; and

WHEREAS, the applicant submitted a Development Plan (File No. PDEV23-039) to construct a 600,000 square foot hotel and commercial building consisting of 600 rooms; and

WHEREAS, in conjunction with the Project, the Applicant also filed an application for a Specific Plan (Empire Groves), File No. PSP23-001, to establish the land use district, development standards, guidelines, and infrastructure improvements for the development of up to 600,000 square feet of hospitality and commercial land uses on 10.43-acres of land located on the southeast corner of Guasti Road and Holt Boulevard, which requires City Council approval; and

WHEREAS, the Ontario Plan 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364) was certified on August 16, 2022 (hereinafter

referred to as "Certified EIR"), in which development and use of the Project site was discussed; and

WHEREAS, the Planning Director of the City of Ontario prepared and approved for attachment to the certified Environmental Impact Report, an Addendum to the Certified EIR (hereinafter referred to as "EIR Addendum") in accordance with the requirements of the California Environmental Quality Act of 1970, together with State and local guidelines implementing said Act, all as amended to date (collectively referred to as "CEQA"); and

WHEREAS, the environmental impacts of this Project were thoroughly analyzed in the EIR Addendum, which concluded that implementation of the Project could result in a number of significant effects on the environment that were previously analyzed in the Certified EIR, and that the Certified EIR identified mitigation measures that would reduce each of those significant effects to a less-than-significant level; and

WHEREAS, the City's "Local Guidelines for the Implementation of the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed; and

WHEREAS, the Application is a project pursuant to the California Environmental Quality Act — Public Resources Code Section 21000 et seq. — (hereinafter referred to as "CEQA") and an EIR Addendum has been prepared to determine possible environmental impacts; and

WHEREAS, Ontario Development Code Table 2.02-1 (Review Matrix) grants the Planning Commission the responsibility and authority to review and make a recommendation to the City Council on the subject Application; and

WHEREAS, the Project has been reviewed for consistency with the Housing Element of the Policy Plan component of The Ontario Plan 2050, as State Housing Element law (as prescribed in Government Code Sections 65580 through 65589.8) requires that development projects must be consistent with the Housing Element, if upon consideration of all its aspects, it is found to further the purposes, principals, goals, and policies of the Housing Element; and

WHEREAS, the Project is located within the Airport Influence Area of Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and is subject to, and must be consistent with, the policies and criteria set forth in the Ontario International Airport Land Use Compatibility Plan (hereinafter referred to as "ALUCP"), which applies only to jurisdictions within San Bernardino County, and addresses the noise, safety, airspace protection, and overflight impacts of current and future airport activity; and

WHEREAS, City of Ontario Development Code Division 2.03 (Public Hearings) prescribes the manner in which public notification shall be provided and hearing procedures to be followed, and all such notifications and procedures have been completed; and

WHEREAS, as the first action on the Project, on February 25, 2025, the Planning Commission issued a Resolution recommending the City Council adopt the EIR Addendum, finding that the proposed Project introduces no new significant environmental impacts and applying all previously adopted mitigation measures to the Project, which were incorporated by reference; and

WHEREAS, on February 25, 2025, the Planning Commission of the City of Ontario conducted a hearing to consider the Project, and concluded said hearing on that date; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED, AND RESOLVED by the Planning Commission of the City of Ontario, as follows:

SECTION 1: ***Environmental Determination and Findings.*** As the recommending body for the Project, the Planning Commission has reviewed and considered the information contained in the Addendum, the initial study, and the administrative record for the Project, including all written and oral evidence provided during the comment period. Based upon the facts and information contained in the Addendum, the initial study, and the administrative record, including all written and oral evidence presented to the Planning Commission, the Planning Commission finds as follows:

(1) The environmental impacts of this Project were reviewed in conjunction with an Addendum to TOP 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364), certified by the Ontario City Council on August 16, 2022, in conjunction with File No. PGPA20-002; and

(2) The EIR Addendum and administrative record have been completed in compliance with CEQA, the State CEQA Guidelines, and the City of Ontario Local CEQA Guidelines; and

(3) The City's "Guidelines for the Implementation of the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed. This Application introduces no new significant environmental impacts; and

(4) All previously adopted mitigation measures shall be a condition of Project approval, as they are applicable to the Project, and are incorporated herein by this reference; and

(5) The EIR Addendum contains a complete and accurate reporting of the environmental impacts associated with the Project, and reflects the independent judgment of the Planning Commission; and

(6) There is no substantial evidence in the administrative record supporting a fair argument that the Project may result in significant environmental impacts.

SECTION 2: ***Subsequent or Supplemental Environmental Review Not Required.*** Based on the EIR Addendum, all related information presented to the Planning Commission, and the specific findings set forth in Section 1, above, the Planning Commission finds that the preparation of a subsequent or supplemental Certified EIR is not required for the Project, as the Project:

(1) Does not constitute substantial changes to the Certified EIR that will require major revisions to the Certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and

(2) Does not constitute substantial changes with respect to the circumstances under which the Certified EIR was prepared, that will require major revisions to the Certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of the previously identified significant effects; and

(3) Does not contain new information of substantial importance that was not known and could not have been known with the exercise of reasonable diligence at the time the Certified EIR was certified/adopted, that shows any of the following:

(a) The Project will have one or more significant effects not discussed in the Certified EIR; or

(b) Significant effects previously examined will be substantially more severe than shown in the Certified EIR; or

(c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the City declined to adopt such measures; or

(d) Mitigation measures or alternatives considerably different from those analyzed in the Certified EIR would substantially reduce one or more significant effects on the environment, but which the City declined to adopt.

SECTION 3: ***Housing Element Compliance.*** Pursuant to the requirements of California Government Code Chapter 3, Article 10.6, commencing with Section 65580, as the recommending body for the Project, the Planning Commission finds that based upon the facts and information contained in the Application and supporting documentation, at the time of Project implementation, the Project is consistent with the Housing Element of the Policy Plan (General Plan) component of The Ontario Plan 2050, as the Project site is not one of the properties in the Housing Element Sites Inventory contained in Tables B-1 and B-2 of the Housing Element Technical Report.

SECTION 4: ***Airport Land Use Compatibility Plan ("ALUCP") Compliance.*** The California State Aeronautics Act (Public Utilities Code Section 21670 et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

(1) On April 19, 2011, the City Council of the City of Ontario approved and adopted the Ontario International Airport Land use Compatibility Plan, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the recommending body for the Project, the Planning Commission has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the Planning Commission therefore finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the ONT ALUCP; and

SECTION 5: ***Concluding Facts and Reasons.*** Based upon the substantial evidence presented to the Planning Commission during the above-referenced hearing, and upon the specific findings set forth in the Sections above, the Planning Commission hereby concludes as follows:

The provisions of the development agreement are consistent with the goals, policies, plans, and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan 2050, and any applicable specific plans. The Development Agreement applies to approximately 10.43 acres of land located on the southeast corner of Guasti Road and Holt Boulevard within the proposed Empire Groves Specific Plan (File No. PSP23-001). The Development Agreement establishes parameters for the development of land within the Empire Groves Specific Plan. The Development Agreement also grants the Applicant, the right to develop, the Project site. These terms and conditions are consistent with The Ontario Plan Policy Plan (General Plan), design guidelines and development standards for the proposed Empire Groves Specific Plan and will help further the vision of the Guasti District, the Multimodal Mixed-Use Land Use designation, and support the nearby Convention Center.

SECTION 6: ***Planning Commission Action.*** Based upon the findings and conclusions set forth in the Sections above, the Planning Commission hereby RECOMMENDS THE CITY COUNCIL APPROVES the herein described Application, subject to each and every condition set forth in the Department reports attached hereto as "Attachment A," and incorporated herein by this reference.

SECTION 7: ***Indemnification.*** The Applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void, or annul this approval. The City of Ontario shall promptly notify the Applicant of any such claim, action, or proceeding, and the City of Ontario shall cooperate fully in the defense.

SECTION 8: ***Custodian of Records.*** The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East "B" Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario.

SECTION 9: ***Certification to Adoption.*** The Secretary shall certify to the adoption of the Resolution.

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The Secretary Pro Tempore for the Planning Commission of the City of Ontario shall certify as to the adoption of this Resolution.

I hereby certify that the foregoing Resolution was duly and regularly introduced, passed and adopted by the Planning Commission of the City of Ontario at a regular meeting thereof held on the 25th day of February 2025, and the foregoing is a full, true and correct copy of said Resolution, and has not been amended or repealed.

Nicola Ricci
Planning Commission Chairman

ATTEST:

Henry K. Noh
Planning Director and
Secretary to the Planning Commission

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO)
CITY OF ONTARIO)

I, Gwen Berendsen, Secretary Pro Tempore of the Planning Commission of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. PC25-007, was duly passed and adopted by the Planning Commission of the City of Ontario at their regular meeting held on February 25, 2025, by the following roll call vote, to wit:

AYES: DeDiemar, Gage, Lampkin, Ricci

NOES: None

ABSENT: Anderson

ABSTAIN: None

Gwen Berendsen
Secretary Pro Tempore

ATTACHMENT A:

File No. PDA23-005
Development Agreement

(Development Agreement to follow this page)

RECORDING REQUESTED BY AND
WHEN RECORDED MAIL TO:

CITY OF ONTARIO
CITY CLERK / RECORDS MANAGEMENT
303 EAST "B" STREET
ONTARIO, CA 91764-4196

Exempt from Fees Per Gov. Code § 6103 and 27383

Space above this line for Recorder's Use Only

FILE NO. PDA_____

DEVELOPMENT AGREEMENT

By and Between

City of Ontario
a California municipal corporation

and

DIVERSIFIED PACIFIC DEVELOPMENT GROUP LLC,
a California limited liability company

_____, 2025

San Bernardino County, California

DRAFT

DEVELOPMENT AGREEMENT NO. PDA_____

This Development Agreement (hereinafter "Agreement") is dated as of _____, 2025, for reference purposes only, and is entered into by and between the City of Ontario, a California municipal corporation (hereinafter "CITY"), and DIVERSIFIED PACIFIC DEVELOPMENT GROUP LLC, a California limited liability company (hereinafter "OWNER"):

RECITALS

WHEREAS, CITY is authorized to enter into binding development agreements with persons having legal or equitable interests in real property for the development of such property, pursuant to Section 65864, et seq. of the Government Code and Section 4.01.015 of the Ontario Development Code; and

WHEREAS, OWNER and CITY desire that they enter into a development agreement and proceedings have been taken in accordance with the rules and regulations of CITY; and

WHEREAS, by electing to enter into this Agreement, CITY shall bind future City Councils of CITY by the obligations specified herein and limit the future exercise of certain governmental and proprietary powers of CITY; and

WHEREAS, the terms and conditions of this Agreement have undergone extensive review by CITY and the City Council and have been found to be fair, just and reasonable; and

WHEREAS, the best interests of the citizens of CITY and the public health, safety and welfare will be served by entering into this Agreement; and

WHEREAS, all of the procedures of the California Environmental Quality Act, Public Resources Code §§21000, et seq. ("CEQA") have been met with respect to the Hotel Project and the Agreement in that certain Addendum to the Final Supplemental Environmental Impact Report for the Ontario Plan 2050; Empire Groves Specific Plan (State Clearinghouse No. 2021070364 (the "Addendum").

WHEREAS, the City Council found and determined that the Addendum was prepared in accordance with the requirements of CEQA and adequately describes the impacts of the Hotel Project described in the Addendum, which included consideration of this Agreement; and

WHEREAS, CITY is currently engaged in the Ontario Convention Center Expansion & Renovation Project (as further defined in Section 4.6.1 as the "Convention Center Project"), which is slated to significantly expand and remodel the existing convention center. To support the Convention Center Project and other possible improvements that CITY is considering making, as discussed further in this Agreement, CITY and OWNER desire that OWNER develop, construct and operate a full service convention hotel ("Hotel") on the Property, which can support and enhance the Convention Center Project. For purposes of this Agreement, a full service convention hotel means a hotel that offers a range of onsite amenities, including a restaurant, pool, gym, laundry services, business center and meeting space or conference rooms; and

WHEREAS, CITY and OWNER agree that the Convention Center Project and Hotel Project are complementary and that the parties agree to use commercially reasonable efforts to

coordinate the reopening of Convention Center and opening of the Hotel Project. As part of the Convention Center Project, CITY intends to significantly expand the Convention Center and may construct a public parking structure and outdoor plaza as part of the Convention Center Project to provide new parking near the Convention Center and the proposed Hotel Project. To further the success of the Convention Center, CITY is considering the acquisition of some or all of the Surrounding Properties (described in Section 4.7 below), to establish thereon a vibrant high-end, luxury retail, commercial and residential uses that would enhance the economic viability of the Hotel Project and to further improve the tax base of CITY; and

WHEREAS, the Hotel Project will provide substantial public benefits to CITY, including the creation of job opportunities for local residents in hospitality, retail, management, construction and maintenance. The Hotel Project will support local entrepreneurs and small businesses by providing them with platforms to showcase and sell their products or services. The Hotel Project will generate tax revenue for CITY. The Hotel Project will attract visitors, host key events, provide support to the Convention Center and other local businesses, ultimately enhancing the overall cityscape, further benefiting local businesses and the local economy; and

WHEREAS, this Agreement and the Hotel Project are consistent with CITY'S Comprehensive General Plan and any specific plan applicable thereto; and

WHEREAS, all actions taken and approvals given by CITY have been duly taken or approved in accordance with all applicable legal requirements for notice, public hearings, findings, votes, and other procedural matters; and

WHEREAS, development of the Property, as defined in Section 1.1.21 and as more particularly described and depicted in the attached Exhibit "A" – Legal Description of the Property and Exhibit "B" - Map Showing Property and its Location, in accordance with this Agreement will provide substantial benefits to CITY and will further important policies and goals of CITY; and

WHEREAS, this Agreement will eliminate uncertainty in planning and provide for the orderly development of the Property, ensure progressive installation of necessary improvements, provide for public services appropriate to the development of the Hotel Project, and generally serve the purposes for which development agreements under Sections 65864 et seq. of the Government Code are intended; and

WHEREAS, OWNER has incurred and will in the future be incurring substantial costs to facilitate development of the Property in accordance with this Agreement; and

WHEREAS, OWNER has incurred and will in the future incur substantial costs in excess of the generally applicable requirements to assure vesting of legal rights to develop the Property in accordance with this Agreement.

COVENANTS

NOW, THEREFORE, in consideration of the above recitals and of the mutual covenants hereinafter contained and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. DEFINITIONS AND EXHIBITS.

1.1. Definitions. The following terms when used in this Agreement shall be defined as follows:

1.1.1. "Agreement" means this Development Agreement.

1.1.2. "CITY" means the City of Ontario, California, a California municipal corporation.

1.1.3. "Convention Center Project" is defined in the recitals to this Agreement and supplemented pursuant to Section 4.8.1 below.

1.1.4. "Development" means the improvement of the Property for the purposes of completing the Hotel Project, including the structures, improvements and facilities comprising the Hotel Project including, but not limited to: grading; the construction of public infrastructure and public facilities related to the Hotel Project whether located within or outside the Property; the construction of buildings and structures; and the installation of landscaping. "Development" does not include the maintenance, repair, reconstruction or redevelopment of any building, structure, improvement or facility after the construction and completion thereof.

1.1.5. "Development Approvals" means all permits and other entitlements for use subject to approval or issuance by CITY in connection with development of the Property including, but not limited to:

(a) specific plans and specific plan amendments;

(b) tentative and final subdivision and parcel maps;

(c) development plan review;

(d) conditional use permits, public use permits and plot plans;

(e) zoning;

(f) grading and building permits.

1.1.6. "Development Exaction" means any requirement of CITY in connection with or pursuant to any Land Use Regulation or Development Approval for the dedication of land, the construction of improvements or public facilities, or the payment of fees in order to lessen, offset, mitigate or compensate for the impacts of development on the environment or other public interests.

1.1.7. "Development Impact Fee" means a monetary exaction or other charge, other than a tax or special assessment, whether characterized as a fee or a tax and whether established for a broad class of projects by legislation of general applicability or imposed on a specific project on an ad hoc basis, that is charged by a local agency to the applicant in connection with approval of a development project for the purpose of defraying all or a portion of the cost of public facilities related to the development project, and, for purposes of this Agreement only, includes fees collected under development agreements adopted pursuant to Article 2.5 of the Government Code (commencing with Section 65864) of Chapter 4. For purposes of this Agreement only, "Development Impact Fee" shall not include processing fees and charges imposed by CITY to cover the estimated actual costs to CITY of processing applications for Development Approvals or for monitoring compliance with any Development Approvals granted or issued, including, without limitation, fees for zoning variances; zoning changes; use permits; building inspections; building permits; filing and processing applications

and petitions filed with the local agency formation commission or conducting preliminary proceedings or proceedings under the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000, Division 3 (commencing with Section 56000) of Title 5 of the Government Code; the processing of maps under the provisions of the Subdivision Map Act, Division 2 (commencing with Section 66410) of Title 7 of the Government Code; or planning services under the authority of Chapter 3 (commencing with Section 65100) of Division 1 of Title 7 of the Government Code, fees and charges as described in Sections 51287, 56383, 57004, 65104, 65456, 65863.7, 65909.5, 66013, 66014, and 66451.2 of the Government Code, Sections 17951, 19132.3, and 19852 of the Health and Safety Code, Section 41901 of the Public Resources Code, and Section 21671.5 of the Public Utilities Code, as such codes may be amended or superseded, including by amendment or replacement.

1.1.8. "Development Plan" means the Existing Development Approvals and the Existing Land Use Regulations applicable to development of the Property.

1.1.9. "Effective Date" means the date that the ordinance approving this Agreement goes into effect.

1.1.10. "Existing Development Approvals" means all Development Approvals approved or issued prior to the Effective Date. Existing Development Approvals includes the Approvals incorporated herein as **Exhibit "C"** and all other Approvals which are a matter of public record on the Effective Date.

1.1.11. "Existing Land Use Regulations" means all Land Use Regulations in effect on the Effective Date. Existing Land Use Regulations includes the Regulations incorporated herein as **Exhibit "D"** and all other Land Use Regulations that are in effect and a matter of public record on the Effective Date.

1.1.12. "Final Non-Appealable Date" means the date the Existing Development Approvals are final and non-appealable as set forth in the CITY Development Code and any applicable laws and the applicable statute of limitations has expired under the California Environmental Quality Act (Public Resources Code §21000 *et seq.)* and implementing Guidelines for CEQA (14 Cal. Code Regs. § 15000 *et seq.)* with respect to the Addendum, in each case without the filing of any third party challenge, appeal, or lawsuit or, if filed, such challenge, appeal, or lawsuit has been resolved in a manner satisfactory to OWNER. Promptly after the Final Non-Appealable Date occurs, the parties shall execute a joint memorandum or side letter confirming the final date of the Final Non-Appealable Date and, thereafter, the Final Non-Appealable Date shall be deemed to be the date agreed upon by the parties in such memorandum or side letter.

1.1.13. "Force Majeure" has the meaning set forth in Section 10.11.

1.1.14. "Full Service Convention Hotel" has the meaning as set forth in the Recitals and supplemented pursuant to Section 4.4.3 below.

1.1.15. "General Plan" means The Ontario Plan adopted on August 16, 2022, by Ordinance No.___ , as amended up to the date of the first reading of the ordinance adopting and approving this Agreement.

1.1.16. "Hotel Project" means the development of the Property contemplated by the Development Plan, as such Plan may be further defined, enhanced or modified pursuant to the provisions of this Agreement.

1.1.17. "Improvement" or "Improvements" means those public improvements required to support the development of the Hotel Project as described in the development conditions for the Hotel Project, as further described in **Exhibit "E"** and depicted in **Exhibit "F"** (together, the "Infrastructure Improvements Exhibit").

1.1.18. "Land Use Regulations" means all ordinances, resolutions, codes, rules, regulations and official policies of CITY governing the development and use of land, including, without limitation, the permitted use of land, the density or intensity of use, subdivision requirements, timing and phasing of development, the maximum height and size of buildings, the provisions for reservation or dedication of land for public purposes, and the design, improvement and construction standards and specifications applicable to the development of the Property. "Land Use Regulations" does not include any CITY ordinance, resolution, code, rule, regulation or official policy, governing:

(a) the conduct of businesses, professions, and occupations;

(b) taxes and assessments;

(c) the control and abatement of nuisances;

(d) the granting of encroachment permits and the conveyance of similar rights and interests that provide for the use of or the entry upon public property;

(e) the exercise of the power of eminent domain.

1.1.19. "Mortgagee" means a mortgagee of a mortgage, a beneficiary under a deed of trust or any other security-device lender, and their successors and assigns.

1.1.20. "OWNER" means the persons and entities listed as OWNER on page 1 of this Agreement and their permitted successors in interest to all or any part of the Property.

1.1.21. "Parking Tax" means the tax imposed by CITY for the renting of a parking space in a parking station in the City of Ontario pursuant to Title 3, Chapter 8 of the Ontario Municipal Code, as may be modified from time to time.

1.1.22. "Property" means the real property described on **Exhibit "A"** and shown on **Exhibit "B"** to this Agreement.

1.1.23. "Reservations of Authority" means the rights and authority excepted from the assurances and rights provided to OWNER under this Agreement and reserved to CITY under Section 3.7 of this Agreement.

1.1.24. "Specific Plan" means that certain specific plan adopted by CITY Council, and entitled, "Empire Groves Specific Plan."

1.1.25. "Subsequent Development Approvals" means all Development Approvals required subsequent to the Effective Date in connection with development of the Property. Subsequent Development Approvals shall be deemed to be subject to the provisions of this Agreement, without any further action needed on the part of either CITY or OWNER.

1.1.26. "Subsequent Land Use Regulations" means any Land Use Regulations adopted and effective after the Effective Date of this Agreement.

1.1.27. "Transient Occupancy Tax" or "TOT" means the tax imposed by CITY on the rent charged to guests for occupancy of hotel rooms within the development, as authorized by

Title 3, Chapter 6 of the Ontario Municipal Code or otherwise, as may be modified from time to time.

1.1.28. "Total Project Costs" means all costs and expenses incurred by OWNER to acquire, develop and construct the Hotel Project and all portions thereof, and to brand and open the Hotel Project to the public, inclusive of all hotel management and franchise costs, fees and charges.

1.2. Exhibits. The following documents are attached to, and by this reference made a part of, this Agreement:

1.2.1. Exhibit "A" — Legal Description of the Property.

1.2.2. Exhibit "B" — Map showing Property and its location.

1.2.3. Exhibit "C" — Existing Development Approvals.

1.2.4. Exhibit "D" — Existing Land Use Regulations.

1.2.5. Exhibit "E" — Description of Required Infrastructure Improvements.

1.2.6. Exhibit "F" — Depiction of Required Infrastructure Improvements.

1.2.7. Exhibit "H-1"— Surrounding Property.

1.2.8. Exhibit "H-2" — Miller Property.

1.2.9. Exhibit "I" – Conceptual Depiction of the Convention Center Expansion.

2. GENERAL PROVISIONS.

2.1. Binding Effect of Agreement. The Property is hereby made subject to this Agreement. Development of the Property is hereby authorized and shall be carried out in accordance with the terms of this Agreement.

2.2. Ownership of Property. OWNER represents and covenants that it is the owner of the fee simple title to the Property or a portion thereof, or the lessee of the Property or has the right to acquire fee simple title to the Property or a portion thereof from the current owner(s) thereof. To the extent OWNER does not own fee simple title to the Property, OWNER shall obtain written consent from the current fee owner of the Property agreeing to the terms of this Agreement and the recordation thereof.

2.3. Term. The term of this Agreement shall commence on the Effective Date and shall continue for an initial term of thirty (30) years thereafter unless this term is modified or extended pursuant to the provisions of this Agreement.

2.4. Assignment.

2.4.1. Right to Assign. OWNER shall have the right to sell, transfer or assign the Property (inclusive of all improvements thereon) in whole or in part (provided that no such partial transfer shall violate the Subdivision Map Act, Government Code Section 66410, et seq.), to any person, partnership, limited liability company, joint venture, firm or corporation at any time during the term of this Agreement; provided, however, that any such sale, transfer or assignment shall include the assignment and assumption of the rights, duties and obligations arising under or from this Agreement and be made in compliance with the following:

(a) No sale, transfer or assignment of any right or interest under this

Agreement shall be made unless made together with the sale, transfer or assignment of all or a part of the Property.

(b) Concurrent with any such sale, transfer or assignment, or within fifteen (15) business days thereafter, OWNER shall notify CITY'S City Manager, in writing, of such sale, transfer or assignment and shall provide CITY with: (1) an executed agreement providing therein that the purchaser, transferee or assignee expressly and unconditionally assumes all the duties and obligations of OWNER under this Agreement with respect to the portion of the Property so sold, transferred or assigned arising from and after the date of such sale, transfer or assignment; and (2) the payment of the applicable processing charge to cover CITY'S review and consideration of such sale, transfer or assignment.

(c) Any sale, transfer or assignment not made in compliance with the foregoing conditions shall constitute a default by OWNER under this Agreement. Notwithstanding the failure of any purchaser, transferee or assignee to execute the agreement required by Paragraph (b) of this Subsection 2.4.1, the benefits and burdens of this Agreement shall be binding upon and inure to such purchaser, transferee or assignee, arising from and after the date of such assignment. The City Manager shall have the authority to review, consider and either approve, conditionally approve, or deny any proposed sale, transfer or assignment that is not made in compliance with this Section 2.4.

2.4.2. Release of Transferring Owner. Notwithstanding any sale, transfer or assignment, a transferring OWNER shall continue to be obligated under this Agreement unless OWNER no longer has a legal or equitable interest in all or any part of the portion of the Property sold, transferred or assigned, or such transferring owner is given a release in writing by CITY, which release shall be provided by CITY upon the full satisfaction by such transferring owner of the following conditions:

(a) OWNER no longer has a legal or equitable interest in all or any part of the portion of the Property sold, transferred or assigned.

(b) OWNER is not then in default under this Agreement.

(c) OWNER has provided CITY with the notice and executed agreement required under Paragraph (b) of Subsection 2.4.1 above.

(d) The purchaser, transferee or assignee provides CITY with security equivalent to any security previously provided by OWNER to secure performance of its obligations hereunder.

(e) The provisions of this Section 2.4.2 and Section 2.4.3 below shall not apply to the holder of a mortgage (inclusive of a deed of trust) encumbering the Property as security for the provision of financing towards the improvement of the Property, but shall be governed pursuant to the terms of Section 9 of this Agreement.

2.4.3. Effect of Assignment and Release of Obligations. In the event of a sale, transfer or assignment pursuant to the provisions of Section 2.4.1 above and notwithstanding the release provisions of Section 2.4.2 above:

(a) The assignee shall be liable for the performance of all obligations of OWNER with respect to transferred property, but shall have no obligations with respect to the portions of the Property, if any, not transferred (the "Retained Property").

(b) The owner of the Retained Property shall remain liable for the performance of all obligations of OWNER with respect to Retained Property, but shall have no further obligations with respect to the transferred property.

(c) The assignee's exercise, use and enjoyment of the Property or portion thereof (but not any Retained Property) shall be subject to the terms of this Agreement to the same extent as if the assignee were OWNER from and after the date the assignee took title to the Property or portion thereof.

2.4.4. Subsequent Assignment. Any subsequent sale, transfer or assignment after an initial sale, transfer or assignment shall be made only in accordance with and subject to the terms and conditions of this Section 2.4.

2.4.5. Partial Assignment and Assumption. CITY and OWNER agree OWNER may partially assign its obligations and rights under this Agreement, and all amendments hereto, to a purchaser, transferee or assignee of a lot, which has been subdivided subject to provisions of a partial assignment and assumption agreement in a form reasonably approved by CITY. Any such complete and executed partial assignment and assumption of this Agreement shall be submitted to CITY for approval pursuant to Section 2.4.1 of this Agreement. Within thirty (30) days following such complete submittal, CITY shall review, and if the above conditions are satisfied, shall approve the partial assignment and release and notify the purchaser, transferee or assignee in writing thereof. If CITY shall fail to respond to such request for approval within such sixty (60) day period, CITY shall be deemed to have approved such request. No such release approved pursuant to this Subsection 2.4.5 shall cause, or otherwise affect, a release of OWNER from the duties and obligations under this Agreement that are retained by OWNER and excluded from the transfer or assignment.

2.5. Amendment or Cancellation of Agreement. This Agreement may be amended or cancelled in whole or in part only in the manner provided for in Government Code Section 65868.1. Any amendment of this Agreement, which amendment has been requested by OWNER, shall be considered by CITY only upon the payment of the applicable processing charge. This provision shall not limit any remedy of CITY or OWNER as provided by this Agreement. Either Party or successor in interest, may propose an amendment to or cancellation, in whole or in part, of this Agreement. Any amendment or cancellation shall be by mutual consent of the parties or their successors in interest except as provided otherwise in this Agreement or in Government Code Section 65865.1. For purposes of this section, the term "successor in interest" shall mean any person having a legal or equitable interest in the whole of the Property, or any portion thereof as to which such person wishes to amend or cancel this Agreement. The procedure for proposing and adopting an amendment to, or cancellation of, in whole or in part, this Agreement shall be the same as the procedure for adopting and entering into this Agreement in the first instance. Notwithstanding the foregoing sentence, if CITY initiates the proposed amendment to, or cancellation of, in whole or in part, this Agreement, CITY shall first give notice to OWNER of its intention to initiate such proceedings at least sixty (60) days in advance of the giving the public notice of intention to consider the amendment or cancellation.

2.6. Amendment to Reflect Consistency With Future Amendments to the Development Plan. To the extent any future amendment to the Development Plan (which shall occur only with OWNER prior written approval) provides for modifications to rights or

obligations that differ from or alter the same or similar rights or obligations contained in this Development Agreement, OWNER reserves the right to request an amendment to this Development Agreement to reflect and address any or all of such modifications.

2.7. Minor Modification. Upon the written application of OWNER, minor modifications and changes to the Development Plan including modifications to building design or footprint (not affecting minimum setbacks), parking layout and design, and landscape area design may be approved by the Director of the Planning Department without the need to amend this Development Agreement. Other changes in the Development Plan shall be processed pursuant to the CITY Zoning Ordinance. It is also contemplated by CITY and OWNER that OWNER may, from time to time, seek amendments to one or more of the Development Approvals. Any such amendments are contemplated by CITY and OWNER as being within the scope of this Agreement as long as they are consistent with the Land Use Regulations and shall, upon approval by CITY, continue to constitute the Development Approvals as referenced herein. The parties agree that any such modifications or amendments shall not constitute an amendment to this Agreement nor require an amendment to this Agreement.

2.8. Termination. This Agreement shall be deemed terminated and of no further effect upon the occurrence of any of the following events:

2.8.1. Expiration of the stated term of this Agreement as set forth in Section 2.3.

2.8.2. Entry of a final judgment setting aside, voiding or annulling the adoption of the ordinance approving this Agreement.

2.8.3. The adoption of a referendum measure overriding or repealing the ordinance approving this Agreement.

2.8.4. Termination of this Agreement based on any uncured default of OWNER and following the termination proceedings requirement by the Development Agreement policies.

Completion of the Hotel Project in accordance with the terms of this Agreement including issuance of all required occupancy permits and acceptance by CITY or applicable public agency of all required dedications, shall not terminate this Agreement or the rights of OWNER or CITY hereunder. Termination of this Agreement shall not constitute termination of any other land use entitlements approved for the Property. Upon the termination of this Agreement, no party shall have any further right or obligation hereunder except with respect to any obligation to have been performed prior to such termination or with respect to any default in the performance of the provisions of this Agreement which has occurred prior to such termination or with respect to any obligations which are specifically set forth as surviving this Agreement. Upon such termination, any public facilities and services mitigation fees paid pursuant to Section 4.2 of this Agreement by OWNER to CITY on which construction has not yet begun shall be refunded to OWNER by CITY within a reasonable period of time.

2.9. Notices.

2.9.1. As used in this Agreement, "notice" includes, but is not limited to, the communication of notice, request, demand, approval, statement, report, acceptance, consent, waiver, appointment or other communication required or permitted hereunder.

2.9.2. All notices shall be in writing and shall be considered given either: (i) when delivered in person, including, without limitation, by courier, to the recipient named

below; or (ii) on the date of delivery shown on the return receipt, after deposit in the United States mail in a sealed envelope as either registered or certified mail with return receipt requested, and postage and postal charges prepaid, and addressed to the recipient named below. All notices shall be addressed as follows. A copy of any notice may be sent via electronic mail to the email addresses as specified below:

If to CITY:	**If to OWNER:**
Scott Ochoa, City Manager	Jeff Burum and Matt Jordan
City of Ontario	Diversified Pacific Development Group LLC
303 East "B" Street	10621 Civic Center Drive
Ontario, CA 91764	Rancho Cucamonga, CA 91730
Email: SOchoa@ontarioca.gov	Email: JBurum@divpac.com
with a copy to:	**with a copy to:**
Ruben Duran, City Attorney	Guy Maisnik
Best Best & Krieger, LLP	Jeffer, Mangels, Butler & Mitchell LLP
2855 E Guasti Road, Suite 400	1900 Avenue of the Stars, 7th Floor
Ontario, CA 91761	Los Angeles, CA 90067
Email: ruben.duran@bbklaw.com	Email: mgm@jmbm.com

2.9.3. Either party may, by notice given at any time, require subsequent notices to be given to another person or entity, whether a party or an officer or representative of a party, or to a different address, or both. Notices given before actual receipt of notice of change shall not be invalidated by the change.

3. DEVELOPMENT OF THE PROPERTY.

3.1. Development of the Hotel Project; Rights to Develop.

3.1.1. Development of the Hotel Project. In consideration of the premises, purposes, and intentions set forth in this Agreement, and in consideration of the assurances for development of the Hotel Project pursuant to this Agreement, OWNER agrees to use commercially reasonable efforts to develop the Hotel Project, and development of the Hotel Project shall be in accordance with: (i) the terms and conditions of this Agreement; (ii) the terms and conditions established in the Development Approvals; and (iii) the Existing Land Use Regulations. OWNER further agrees that the use, density and intensity, maximum height and size of structures and provisions for the Property reservation and dedication of land for public purposes related to the Property shall be limited to those uses permitted by the Existing Land Use Regulations. Development of the Hotel Project shall be in accordance with the Development Approvals. Construction of the Hotel Project shall be in compliance with all applicable building codes and standards, as such may be modified from time to time.

3.1.2. Rights to Develop. Subject to the terms of this Agreement including the Reservations of Authority, OWNER shall have a vested right to develop the Property in accordance with the Existing Land Use Regulations, subject to the terms and conditions of this Agreement and the conditions established in the Development Approvals. The Hotel Project shall remain subject to all Subsequent Development Approvals required to complete the Hotel Project as contemplated by the Development Plan. Except as otherwise provided in this Agreement, the permitted uses of the Property, the density and intensity of use, the maximum height and size of proposed buildings, and provisions for reservation and dedication of land for public purposes shall be those set forth in the Existing Land Use Regulations.

3.2. Effect of Agreement on Land Use Regulations. Except as otherwise provided under the terms of this Agreement including the Reservations of Authority in Section 3.6 herein, the rules, regulations and official policies governing permitted uses of the Property, the density and intensity of use of the Property, the maximum height and size of proposed buildings, and the design, improvement and construction standards and specifications applicable to development of the Property shall be the Existing Land Use Regulations. In connection with any Subsequent Development Approval, CITY shall exercise discretion in accordance with the same manner as it exercises its discretion under its police powers, including the Reservations of Authority set forth herein; provided however, that such discretion shall not prevent development of the Property for the uses and to the density or intensity of development set forth in this Agreement.

3.3. Timing of Development. The parties acknowledge that OWNER cannot at this time predict when or the rate at which phases of the Property will be developed. Such decisions depend upon numerous factors which are not within the control of OWNER, such as market orientation and demand, interest rates, absorption, completion and other similar factors. Since the California Supreme Court held in Pardee Construction Co. v. City of Camarillo (1984) 37 Cal. 3d 465, that the failure of the parties therein to provide for the timing of development resulted in a later adopted initiative restricting the timing of development to prevail over such parties' agreement, it is the parties' intent to cure that deficiency by acknowledging and providing that OWNER shall have the right to develop the Property in such order and at such rate and at such times as OWNER deems appropriate within the exercise of its subjective business judgment, subject to any timing or phasing requirements set forth in the Development Plan or the Phasing Plan; provided, however, that OWNER and CITY acknowledge that it shall not be a default of OWNER under this Agreement or otherwise, if the following milestones dates or any dates set forth in the Development Plan or the Phasing Plan are not achieved:

Milestone Table:

	Event	Date
1.	Submission by OWNER of building plans to CITY for the Hotel Project	On or before three hundred sixty-five (365) days following the Final Non-Appealable Date.
2	Commencement of Construction of the Hotel Project	On or before two (2) years following the Final Non-Appealable Date.

2.	(Continued)	In order to achieve this milestone, CITY agrees to complete its review of (a) OWNER'S initial plan check submission within twenty-one (21) days after receipt of such initial submission by CITY (provided, however, prior to such submission OWNER and CITY shall meet to review the proposed application), and (b) any additional submissions required to obtain the required permits for the Hotel Project within fourteen (14) days following receipt of such additional submissions by CITY. There shall be a day-for-day extension of this Commencement of Construction milestone if CITY fails to timely respond to such submissions within the time periods set forth above (each, a "CITY Response Delay").

Notwithstanding anything to the contrary herein, subject to force majeure, if OWNER has not substantially completed the Hotel by the expiration of four (4) calendar years, with two (2) options to extend each for two (2) years for a total of eight (8) years in the event that both options are exercised, following the Final Non-Appealable Date, CITY shall have the right to terminate this Agreement, provided that the foregoing period shall be extended if OWNER has proceeded in good faith, but has not yet been able to obtain feasible financing on commercially reasonable terms and conditions for the construction of the Hotel Project or on account of a Force Majeure event for the number of days that the inability to obtain feasible financing event or the Force Majeure event was in effect. OWNER shall provide at least sixty (60) days advance written notice to CITY if OWNER exercises an option to extend the completion date of the Hotel Project.

3.4. Requirement for Public Infrastructure Improvements. OWNER shall comply with any conditions of the Development Approvals with respect to providing public infrastructure improvements or facilities, if any, to the extent required in connection with the Hotel Project. Notwithstanding any terms that may expressly identify, or the absence thereof to identify, any certain Public Infrastructure Improvements within the terms of this Agreement, the obligations of OWNER which are imposed by the conditions of the Development Approvals for the Hotel Project shall still be in effect and are not waived. Development of the Property is contingent in part on the phasing of area-wide infrastructure improvements over which OWNER has control and subject to the provisions of this Agreement. The issuance of building permits by CITY for the Development of the Property is, in general, contingent on OWNER'S completion of such needed infrastructure improvements to the extent provided herein and the availability of improvements and services to serve the Property.

3.4.1. Infrastructure Improvement Exhibit. Attached hereto as **Exhibits "E**" and **"F"** are a description and depiction, respectively, of the Improvements needed for the development of the Property. In the event of any discrepancy between **Exhibit "E"** and **Exhibit "F"**, **Exhibit "F"** shall control.

3.4.2. Infrastructure Improvement Plan. Subject to the prior submittal by OWNER and approval by CITY of a plan to provide sufficient public infrastructure for the construction of the Development of the Property. The plan to be submitted by OWNER for CITY approval shall describe the utilities and other infrastructure necessary to provide sufficient fire protection and other public health and safety requirements for the Development and other facilities for the Hotel Project. .

3.5. Phasing Plan. Development of the Property shall be subject to all timing and any phasing requirements established by the Development Plan, provided the same are consistent with the terms of this Agreement.

3.6. Changes and Amendments. The parties acknowledge that refinement and further development of the Hotel Project may require Subsequent Development Approvals and may demonstrate that changes are appropriate and mutually desirable in the Existing Development Approvals. In the event OWNER finds that a change in the Existing Development Approvals is necessary or appropriate, OWNER shall apply for a Subsequent Development Approval to effectuate such change and CITY shall process and act on such application in accordance with the Existing Land Use Regulations, except as otherwise provided by this Agreement including the Reservations of Authority. If approved, any such change in the Existing Development Approvals shall be incorporated herein as an addendum to **Exhibit "C"**, and may be further changed from time to time as provided in this Section. Unless otherwise required by law, as determined in CITY'S reasonable discretion, a change to the Existing Development Approvals shall be deemed "minor" and not require an amendment to this Agreement provided such change does not:

(a) Alter the permitted uses of the Property as a whole; or

(b) Increase the density or intensity of use of the Property as a whole; or

(c) Increase the maximum height and size of permitted buildings; or

(d) Delete a requirement for the reservation or dedication of land for public purposes within the Property as a whole; or

(d) Constitute a project requiring a subsequent or supplemental environmental impact report pursuant to Section 21166 of the Public Resources Code.

3.7. Reservations of Authority.

3.7.1. Limitations, Reservations and Exceptions. Notwithstanding any other provision of this Agreement, CITY shall not be prevented from applying new rules, regulations and policies upon OWNER, nor shall a development agreement prevent CITY from denying or conditionally approving any subsequent development project application on the basis of such new rules, regulations and policies where the new rules, regulations and policies consist of the following:

(a) Processing fees and charges of every kind and nature imposed by CITY to cover the costs of processing applications for Development Approvals or for monitoring

compliance with any Development Approvals

(b) Procedural regulations relating to hearing bodies, petitions, applications, notices, findings, records, hearings, reports, recommendations, appeals and any other matter of procedure;

(c) Regulations, policies and rules governing engineering and construction standards and specifications applicable to public and private improvements, including all uniform codes adopted by CITY and any local amendments to those codes adopted by CITY; provided however that, OWNER shall have a vested right to develop the Property in accordance with, and to the extent of, the standards and specifications that are expressly identified in the Specific Plan;

(d) Regulations that may conflict with this Agreement and the Development Plan but that are reasonably necessary to protect the residents of the project and/or of the immediate community from a condition perilous to their health or safety;

(e) Regulations that do not conflict with those rules, regulations and policies set forth in this Agreement or the Development Plan. Any regulation, whether adopted by initiative or otherwise, limiting the rate or timing of development of the Property shall be deemed to conflict with the Development Plan and shall therefore not be applicable to the development of the Property;

(f) Regulations that may conflict with this Agreement or the Development Plan, but to which OWNER consents in writing.

(g) Regulations imposing Development Exactions; provided, however, that no such subsequently adopted Development Exaction shall be applicable to development of the Property unless such Development Exaction is applied uniformly to development, either throughout the CITY or within a defined area of benefit which includes the Property. No such subsequently adopted Development Exaction shall apply if its application to the Property would physically prevent development of the Property for the uses and to the density or intensity of development set forth in the Development Plan. In the event any such subsequently adopted Development Exaction fulfills the same purposes, in whole or in part, as the fees set forth in Section 4 of this Agreement, CITY shall allow a credit against such subsequently adopted Development Exaction for the fees paid under Section 4 of this Agreement to the extent such fees fulfill the same purposes.

3.7.2. Subsequent Development Approvals. This Agreement shall not prevent CITY, in acting on Subsequent Development Approvals, from applying Subsequent Land Use Regulations that do not conflict with the Development Plan and/or Existing Development Approvals, nor shall this Agreement prevent CITY from denying or conditionally approving any Subsequent Development Approval on the basis of the Existing Land Use Regulations or any Subsequent Land Use Regulation not in conflict with the Development Plan and/or the Existing Development Approvals.

3.7.3. Modification or Suspension by State or Federal Law. In the event that State or Federal laws or regulations, enacted after the Effective Date of this Agreement, prevent or preclude compliance with one or more of the provisions of this Agreement, such provisions of this Agreement shall be modified or suspended as may be necessary to comply with such State or Federal laws or regulations, provided, however, that this Agreement shall remain in full force

and effect to the extent it is not inconsistent with such laws or regulations and to the extent such laws or regulations do not render such remaining provisions impractical to enforce. In the event OWNER alleges that such State or Federal laws or regulations preclude or prevent compliance with one or more provisions of this Agreement, and CITY does not agree, OWNER may, at its sole cost and expense, seek declaratory relief (or other similar non-monetary remedies); provided however, that nothing contained in this Section 3.7.3 shall impose on CITY any monetary liability for contesting such declaratory relief (or other similar non-monetary relief).

3.7.4. Intent. The parties acknowledge and agree that CITY is restricted in its authority to limit its police power by contract and that the foregoing limitations, reservations and exceptions are intended to reserve to CITY all of its police power which cannot be so limited. This Agreement shall be construed, contrary to its stated terms if necessary, to reserve to CITY all such power and authority which cannot be restricted by contract.

3.8. Public Works; Utilities. If OWNER is required by this Agreement or as a condition of the Hotel Project Development Approval to construct any public works facilities which will be dedicated to CITY or any other public agency upon completion, and if required by applicable laws to do so, OWNER shall perform such work in the same manner and subject to the same requirements as would be applicable to CITY or such other public agency should it have undertaken such construction. As a condition of development approval, and subject to the terms of this Agreement, OWNER shall connect the Hotel Project to all utilities necessary to provide adequate water, recycled water, sewer, gas, electric, and other utility service to the Hotel Project, as further described and depicted in the Infrastructure Improvements Exhibit. As a further condition of development approval, OWNER shall contract with CITY for CITY-owned or operated utilities for this purpose, for such price and on such terms as may be available to similarly situated customers in the City of Ontario. Notwithstanding the foregoing, OWNER is not responsible for a future or unreasonable requests to upsize or increase in capacity of any utilities to provide adequate water, recycled water, sewer, gas, electric and other utility service that are not directly related to or to service the Hotel Project. As further condition of development approval, to the extent OWNER does not own the Property in fee simple, OWNER must provide to CITY the written consent from the current fee owner of the Property agreeing to the terms of this Agreement and the recordation thereof, pursuant to Section 2.2.

3.8.1. OWNER agrees that development of the Hotel Project shall require the construction of storm drain improvements as described in **Exhibit "E"** and depicted in **Exhibit "F"**. OWNER shall be responsible for the construction of the necessary extension of storm drain facilities to the extent such storm drain facilities are needed for the Hotel Project.

3.8.2. OWNER agrees that development of the Hotel Project shall require the construction of street improvements as described in **Exhibit "E"** and depicted in **Exhibit "F".**

3.8.3. OWNER agrees that development of the Property shall require the extension of permanent water and recycled water improvements as described in **Exhibit "E"** and depicted in **Exhibit "F"** to serve the Property. OWNER also agrees that recycled water, if available, shall be utilized by OWNER for all construction-related water uses including prior to, and during, any grading of the Property. CITY agrees to work with OWNER to the construction and installation of the non-potable reuse system ("Reuse System"), and OWNER acknowledges that the Reuse System is subject to submittal to and approval by the State Regional Water Quality Control Board.

3.8.4. OWNER agrees that development of the Property shall require the sewer improvements, at OWNER'S sole cost and expense, subject to the terms of this Agreement, as described in **Exhibit "E"** and depicted in **Exhibit "F"**.

3.8.5. If imposed by CITY as a condition of approval for the Hotel Project, prior to the issuance of building permits for the Hotel Project, CITY agrees to enter into an agreement with San Bernardino County Flood Control District ("Flood Control") for fire access by emergency, fire and first responders vehicles and personnel on the east side of the Property boundary using the existing San Bernardino County Flood Control District's Access Road. Any modifications to the entitlement landscape plans to address Flood Control's requirements will be made to the landscape construction documents that will become part of the Development Plan. If the proposed alternative emergency access is determined to be unfeasible by the CITY, OWNER shall be responsible for providing a revised access plan that ensures sufficient access for Fire Department and other emergency vehicles and personnel to service the east tower of the Hotel Project to the satisfaction of the Fire Department and the CITY. CITY agrees to work cooperatively with OWNER to adjust the landscaping plan on the Property to ensure sufficient access for Fire Department and other emergency vehicles and personnel to service the east tower of the Hotel Project to the satisfaction of the Fire Department.

3.9. Acquisition of Offsite Provision of Real Property Interests. In any instance where OWNER is required by any Development Approval or Land Use Regulation and the Development Plan to construct any public improvement on land not owned by OWNER ("Offsite Improvements"), OWNER shall at its sole cost and expense provide or cause to be provided, the real property interests necessary for the construction of such public improvements (the "Offsite Property").

3.9.1. CITY Acquisition of Offsite Property. In the event OWNER is unable, after exercising reasonable and good faith efforts, including, but not limited to, the rights under Sections 1001 and 1002 of the Civil Code, to acquire the Offsite Property necessary for the construction of the Offsite Improvements, and following the written request by OWNER to CITY, CITY agrees to take reasonable and good faith efforts to acquire the Offsite Property from the owner or owners of record by negotiation to the extent permitted by law and consistent with this Agreement. If CITY is unable to acquire the Offsite Property by negotiation within thirty (30) days after OWNER'S written request, CITY shall, in accordance with the procedures established by law, use its power of eminent domain to acquire the required Offsite Property at a public hearing noticed and conducted in accordance with California Code of Civil Procedure Section 1245.235 for the purpose of considering the adoption of a resolution of necessity concerning the Offsite Property, subject to approval by the City Council and the conditions set forth in this Section 3.9.1. CITY and OWNER acknowledge that the timelines set forth in this Section 3.9.1 represent the maximum time periods which CITY and OWNER reasonably believe will be necessary to complete the acquisition of any Offsite Property. CITY agrees to use reasonable efforts to complete the actions described within lesser time periods, to the extent that it is reasonably able to do so, consistent with the legal constraints imposed upon CITY. OWNER shall pay all costs associated with such acquisition or condemnation proceedings for the required real property interests. This Section 3.9.1 is not intended by the parties to impose upon OWNER an enforceable duty to acquire land or construct any public improvements on land not owned by OWNER, except to the extent that OWNER elects to proceed with the development of the Hotel Project, and CITY is prevented by applicable law from acquiring such Offsite Property, and then

only in accordance with valid conditions imposed by CITY upon the development of the Hotel Project under the Subdivision Map Act (California Government Code Section 66410 et seq.), or other legal authority.

3.9.2. Owner's Option to Terminate Proceedings. CITY shall provide written notice to OWNER no later than fifteen (15) days prior to making an offer to the owner of the Offsite Property. At any time within that fifteen (15) day period, OWNER may, at its option, notify CITY that it wants CITY to cease all acquisition proceedings with respect to that Offsite Property, whereupon CITY shall cease such proceedings. CITY shall provide written notice to OWNER no later than fifteen (15) days prior to the date of the hearing on CITY'S intent to consider the adoption of a resolution of necessity as to any Offsite Property. At any time within that fifteen (15) day period, OWNER may, at its option, notify CITY that it wants CITY to cease condemnation proceedings, whereupon CITY shall cease such proceedings. If OWNER does not notify CITY to cease condemnation proceedings within said fifteen (15) day period, then CITY may proceed to consider and act upon the Offsite Property resolution of necessity. If CITY adopts such resolution of necessity, then CITY shall diligently institute condemnation proceedings and file a complaint in condemnation and seek an order of immediate possession with respect to the Offsite Property.

3.10. Regulation by Other Public Agencies. It is acknowledged by the parties that other public agencies not within the control of CITY possess authority to regulate aspects of the development of the Property separately from or jointly with CITY and this Agreement does not limit the authority of such other public agencies. CITY agrees to cooperate fully, at no cost to CITY, with OWNER in obtaining any required permits or compliance with the regulations of other public agencies provided such cooperation is not in conflict with any laws, regulations or policies of CITY.

4. PUBLIC BENEFITS.

4.1. Intent. The parties acknowledge and agree that development of the Property will result in substantial public needs that will not be fully met by the Development Plan and further acknowledge and agree that this Agreement confers substantial private benefits on OWNER that should be balanced by commensurate public benefits. Accordingly, the parties intend to provide consideration to the public to balance the private benefits conferred on OWNER by providing more fully for the satisfaction of the public needs resulting from the Project.

4.2. Development Impact Fees.

4.2.1. Amount and Components of Development Impact Fees. Development Impact Fees ("DIF") shall be paid by OWNER. The Development Impact Fee amounts to be paid by OWNER shall be the amounts that are in effect at the time such amounts are due. Nothing contained in this Agreement shall affect the ability of the CITY to impose new Development Impact Fees or amend the amounts of existing Development Impact Fees. Additionally, nothing contained in this Agreement shall affect the ability of other public agencies that are not controlled by CITY to impose and amend, from time to time, Development Impact Fees established or imposed by such other public agencies, even though such Development Impact Fees may be collected by CITY.

(a) Schools Obligations. OWNER shall satisfy its school obligations with the applicable school district by paying school impact fees. Written evidence of approval by

the applicable school district that OWNER has met its school obligations may be required by CITY as the condition to the issuance by CITY of any building permits for the Hotel Project.

(b) Inland Empire Utilities Agency ("IEUA") Sewer Connection Fees. OWNER shall satisfy the applicable obligations by paying IEUA fees.

4.2.2. Time of Payment. Development Impact Fees shall be paid to CITY prior to the issuance of any building permits for the Hotel Project. Notwithstanding the foregoing, deferral of the payment of any Development Impact Fees that are imposed by CITY may be granted pursuant to a separate agreement approved by CITY in accordance with Section 4.2.3 below and CITY policy. The parties understand and agree that the Development Impact Fees established or imposed by other public agencies that are not controlled by CITY even if such Development Impact Fees may be collected by CITY (including without limitation, if applicable, the Inland Empire Utilities Agency Sewer Connection Fees, Ontario-Montclair School District (K-12) Fees, Cucamonga School District and Chaffey Joint Union High School Fees) (collectively, the "Non-Deferrable Fees") must be paid when and as required in their standard course and schedule and may not be deferred hereunder. The DIF payment obligation shall be a covenant running with the land and shall survive the expiration or early termination of this Agreement indefinitely until the deferred DIFs are paid in full in accordance with this Agreement in the event that any of the above criteria or conditions have not been satisfied by the OWNER or the Deferral DIF Agreement in the event that OWNER elects to defer the CITY imposed DIF.

4.2.3. Election to Defer DIF imposed by CITY.

(a) OWNER shall have the right to elect (but is not obligated) to amortize the payment of up to fifty percent (50%) of the total amount of the Development Impact Fees that are due and payable for the Hotel Project (the amount so elected, the "Deferred DIF") over a period of thirty (30) years commencing from the Deferred DIF Repayment Date at an annual four percent (4%) simple interest rate. As used herein, "Deferred DIF Repayment Date" means the date of the issuance of a temporary or other certificate of occupancy for the Hotel Project and the Effective Date for DIF Deferral Agreement (as described below). For the avoidance of doubt, any of the Non-Deferrable Fees shall not be included in the amount that can be deferred; however, the amount of such Non-Deferrable Fees may be included in the calculation of the total amount of Development Impact Fees due and payable for the Hotel Project only for the purposes of calculating the fifty percent (50%) amount that OWNER may elect to defer as Deferred DIFs. By way of example only, if the amount of the DIFs imposed by the CITY are $2,500,000 and the amount of the Non-Deferrable Fees imposed by other agencies are $3,500,000, then the total amount of Development Impact Fees equal $6,000,000. Even though fifty percent of $6,000,000 is $3,000,000, the OWNER may only elect to defer up to $2,500,000, the amount of the CITY-imposed DIF. The $3,500,000 Non-Deferrable Fees imposed by other agencies are still due and payable as required in their standard course and schedule and may not be deferred hereunder. If OWNER elects to defer the payment of the DIF pursuant to this Section 4.2.3, then OWNER and CITY shall enter into a DIF Deferral Agreement that shall be executed with notarized signatures and recorded against the Property in the Official Records of the County of San Bernardino within five (5) days after full execution by the Parties.

(b) The DIF Deferral Agreement shall contain the following key terms: OWNER agrees that, commencing upon the Deferred DIF Repayment Date, OWNER

shall pay to the CITY, on the 1st day of the next following month and each and every successive month for three hundred sixty (360) consecutive months, an amount equal to the amortized principal and interest of the actual amount of the Deferred DIFs amortized over thirty (30) years at an annual 4 percent (4%) simple interest rate, without demand, notice or offset. The entire unpaid principal balance of the amortized Deferred DIFs and any accrued but unpaid interest shall be immediately due and payable to the CITY upon the occurrence of any of the following events: (1) the termination of this Agreement; (2) any uncured default by OWNER with regard to repayment of the amortized Deferred DIFs to the CITY (if such amounts have not been paid to the CITY within five (5) business days of OWNER'S receipt of written notice from the CITY); or (3) any sale, transfer or assignment of all or substantially all of the OWNER'S leasehold or fee interest (as applicable) in the Property that is not approved by the CITY in advance (which such approval shall not be unreasonably withheld, conditioned or delayed). Any monthly payment or portion thereof not paid to the CITY as and when due under the terms of this Agreement or the DIF Deferral Agreement shall accrue interest from the date on which such payment was due at the rate of ten percent (10%), and if not paid within the five (5) business day cure period described above, CITY may file a lien against the Property for such delinquent amounts including any accrued and unpaid interest. All payments under this Subsection will be applied first to penalties and late fees, then to interest, then to reduce the principal amount owed. The Deferred DIFs and any accrued but unpaid interest may be pre-paid to the CITY at any time without any pre-payment penalty.

(c) The Deferred DIF payment obligation shall be a covenant running with the land and shall survive the expiration or early termination of this Agreement indefinitely until the Deferred DIFs are paid in full in accordance with this Agreement or the DIF Deferral Agreement.

4.3. Responsibility for Construction of Public Improvements.

4.3.1. Timely Construction of Public Infrastructure. The phasing of the area wide infrastructure construction within the vicinity of the Hotel Project must be as approved by CITY. OWNER shall be responsible for the timely construction and completion of all public infrastructure required as a condition of approval for the Hotel Project as shown on the attached **Exhibit "F"** and any and all Hotel Project development conditions included in the Development Approvals. Unless otherwise specified in the Development Plan, all other required Improvements for the Hotel Project, shall be completed and operational for occupancy in accordance with a schedule approved by CITY and OWNER. All Infrastructure and Improvements shall be completed as required by the Development Plan.

4.3.2. Construction of DIF Program Infrastructure. To the extent OWNER is required to construct and completes construction of public improvements that are included in CITY'S Development Impact Fee Program, CITY agrees that CITY shall issue DIF Credit in accordance with the provisions of a separate Fee Credit Agreement between CITY and OWNER. Limitations on the use of DIF Credit issued to OWNER to offset OWNER'S DIF payment obligations shall also be subject to the provisions of a separate Fee Credit Agreement. CITY and OWNER agree that the Fee Credit Agreement between CITY and OWNER shall comply with CITY'S adopted policies applicable to such agreements.

4.4. Hotel Requirements. To balance any private benefit conferred upon OWNER under this Agreement, OWNER agrees to provide the following as consideration for such private

benefits:

4.4.1. For the duration of operating the Hotel that will be constructed as part of the Hotel Project, OWNER will maintain or caused to be maintained a booking policy that allows the Visitor and Convention Bureau to reserve a minimum number of hotel rooms to secure a convention;

4.4.2. OWNER will diligently pursue and demonstrate substantial progress to construct the Hotel to completion within the time periods provided in the Development Plan and this Agreement.

4.4.3. The new Hotel must:

(a) have at least [500] rooms;

(b) be a full-service convention hotel such that it will contain (i) appropriate meeting space for the number of hotel rooms; (ii) a full service bar; and (iii) at least one three meal restaurant on premises;

(c) must be a major brand; no non-brand affiliations, but may be associated with a brand that appears on at least _____ other properties worldwide

(d) be located on the Property, which is in the "Convention Center-Hotel District," which will soon be established and would generally be defined as the area bounded by Corona Avenue to the west, Turner Avenue to the east, I-10 to the north, and the BNSF railroad to the south.

4.5. Taxes. The Hotel Project will provide substantial public benefits from the increase in property taxes, retail sales taxes, transient occupancy taxes and parking taxes. The purpose of this section is to establish the terms and conditions under which CITY will rebate or reimburse a certain volume of gross tax revenue comprised of the Transient Occupancy Taxes and Parking Taxes (collectively referred to as the "Taxes") for a set period of years, provided certain conditions are met by OWNER and pursuant to the terms and conditions in this Section 4.5. The rebate or reimbursement is intended to support the financial feasibility of the Hotel Project and encourage economic growth within the City of Ontario. OWNER would not enter into this Agreement and take the risk of the Hotel Project without the provisions of this Section 4.5. The rebate or reimbursement of Taxes to OWNER provided in Section 4.5.1 shall be considered material consideration by CITY for OWNER to encourage OWNER to incur the significant risk and liability in connection with the Hotel Project and to encourage and facilitate economic growth in the City of Ontario.

4.5.1. Covenant to Rebate/Reimburse. CITY and OWNER agree that OWNER shall be entitled to the rebate and reimbursement of the Taxes on an annual basis commencing upon the date the Hotel opens for business to the public and continuing until the earlier of (a) the twentieth (20^{th}) anniversary of such opening date of the Hotel, or (b) the date that the Taxes rebated and received by OWNER meets the fifty percent (50%) of the Total Project Costs threshold, which rebate and reimbursement period shall be extended on a day for day basis for each day following the date that the Hotel opens for business that the Convention Center Project is not completed; but such rebate and reimbursement period shall not exceed thirty (30) years from the Effective Date. The rebate and reimbursement of Taxes will occur by CITY providing an annual rebate of such tax revenue to OWNER, without offset, deduction or abatement, up to limits provided in this Section 4.5.1.

4.5.2. Accounting and Audits. OWNER shall provide to CITY with all the necessary documentation to substantiate the amount of TOT and Parking Taxes otherwise collectable each year of the Covenant Period. CITY reserves the right to audit the books and records of OWNER exclusively related to the Total Project Costs and TOT, provided that (a) such audit shall not occur more than once in any twelve month period, (b) such audit shall be performed not later than ninety (90) days following the date OWNER delivers to CITY such documentation and (c) such auditor shall be a national and reputable auditor and not compensated in whole or part on a contingency basis, including any incentive payment based on a percentage of savings or revenues. OWNER shall make such records available to CITY upon reasonable written notice during such audit period.

4.6. Maintenance of Open Space. OWNER shall provide for ongoing maintenance of all parks, common areas, and open space areas within the Hotel Project as may be set forth in the Development Approvals.

4.7. Compliance with Public Benefits Requirements. In the event Owner fails or refuses to comply with any condition referenced in Section 4.1 through 4.6, or challenges (whether administratively or through legal proceedings) the imposition of such conditions, OWNER shall be deemed in default of this Agreement pursuant to Section 7. below, thereby entitling the CITY to any and all remedies permitted under this Agreement, including, without limitation, the right of the CITY to withhold OWNER'S Project-related building permits, certificates of occupancy, or discretionary approvals, without liability.

4.8. City Improvements. Notwithstanding anything to the contrary in this Agreement, it shall be a condition of CITY'S obligations, if such obligation exists in this Agrement, to acquire, design, develop, construct and operate the Convention Center Project that CITY completes all actions and procedures necessary to complete a public project, including without limitation, satisfying the requirements of the California Environmental Quality Act and applicable laws for a public work project and is subject to the availability and sufficiency of funding by the CITY, as determined by CITY in its sole discretion and good faith judgment.

4.8.1. Convention Center Expansion. (Still under negotiation).

4.8.2. Pedestrian Bridge. A pedestrian bridge ("Bridge") spanning Holt Boulevard is estimated to cost $6.5M. This cost to design and maintain the Bridge shall be at CITY'S cost and expense. The cost to construct the Bridge, not to exceed such estimated cost, shall be split equally between CITY and OWNER if, and only if, the Bridge is completed and open to the public by December 31, 2026; otherwise, CITY will bear one hundred percent of the cost to construct the Bridge. Notwithstanding the aforementioned agreement to share the cost of to construct the Bridge, CITY retains and shall have all rights and sole discretion to design and construct such improvements on CITY'S timing for and scope of the completion of the bridge improvements that has been determined by CITY.

4.8.3. Guasti Road. CITY agrees to make road improvements Guasti Road adjacent to the Property in accordance with CITY standards for road improvements. CITY retains and shall have all rights and sole discretion to design and construct such improvements on CITY'S scope of the completion of the road improvements on Guasti Road that has been determined by CITY. OWNER shall complete the improvements on the parkway behind the curb and gutter as shown on **Exhibit "B"**.

4.8.4. Holt Boulevard. CITY agrees to make road improvements to Holt Boulevard adjacent to the Property in accordance with CITY standards for road improvements. CITY retains and shall have all rights and sole discretion to design and construct such improvements on CITY'S timing for and scope of the completion of the road improvements on Holt Boulevard that has been determined by CITY. OWNER shall complete the improvements on the parkway behind the curb and gutter as shown on **Exhibit "B"**.

4.8.5. Cucamonga Creek Flood Control Channel. Improvements to the Cucamonga Creek Flood Control Channel is not part of CITY'S Capital Improvement Program. To include any such improvements to CITY'S Capital Improvement Program, CITY shall have the right and sole discretion to design and construct such improvements on CITY'S timing and scope that has been determined by CITY.

4.9. Acquisition Properties. The acquisition of any of the Surrounding Properties or the Miller Property are subject to compliance with all applicable laws and regulations, including but not limited to, laws pertaining to land use approvals, subdivisions of land, budgetary considerations, environmental reviews and the acquisition and disposition of real property by CITY and any subsequent required discretionary approvals by the City Council of the CITY. Nothing contained herein this Section 4.9 of the Agreement shall mean that CITY is set on a certain course or action pertaining to the acquisition of any or all of the Surrounding Properties or the Miller Property.

4.9.1. Surrounding Properties. CITY is exploring and assessing the feasibility of establishing an entertainment and convention district, located generally around the Ontario Convention Center ("Convention Center"), the Ontario International Airport ("Airport") and the Property, which may be comprised of a mix of high density residential housing, entertainment, retail, hospitality and commercial office-oriented uses. This may include the acquisition of several properties in the areas and certain capital improvements and infrastructure as part of the overall vision of creating key destination areas and high end amenities in this community to promote economic growth and development, whereby a number of properties surrounding the Convention Center have been preliminarily identified as potential sites for public purposes, as depicted in **Exhibit "H-1"** (individually or collectively, as applicable, "Surrounding Property").

In the event that CITY acquires any real property interest in the Surrounding Property located near the Convention Center , CITY conditionally grants OWNER, and OWNER shall have, a conditional first right of refusal to purchase any such Surrounding Property (whether now or later owned by CITY), subject to all applicable laws and regulations that must be complied with, including but not limited to, laws pertaining to land use approvals, subdivisions of land, budgetary considerations, environmental reviews and the acquisition and disposition of real property by CITY and provided the parties enter into a separate agreement or agreements for any Surrounding Property, subject to any subsequent required discretionary approvals by the City Council of the CITY. Notwithstanding the foregoing, the CITY retains all rights and discretion to use any or all of any acquired Surrounding Property for its own uses and purposes. Nothing contained herein this Agreement shall mean that CITY is set on a certain course or action pertaining to the Surrounding Property shown on **Exhibit "H-1"**, nor does it obligate CITY to purchase any of the Surrounding Property shown on **Exhibit "H-1"**, nor does it mean that CITY would be liable to OWNER should CITY not acquire any of the real property interests of said Surrounding Property shown on **Exhibit "H-1"**.

4.9.2. Miller Property. (Still under negotiation). Property identified as **Exhibit "H-1".**

(a) Reservation of CITY Discretion. If CITY is unable to negotiate the purchase of the Miller Property between itself and the Miller Property owners, CITY may consider initiating eminent domain proceedings to acquire the Miller Property, subject to and in accordance with all applicable laws and procedures. It is expressly acknowledged, understood and agreed by the Parties that CITY undertakes no obligation to adopt any resolution of necessity, and does not prejudge or commit to any person regarding the findings and determinations to be made by CITY with respect to any resolution of necessity. If CITY does not elect to or is unable to acquire title or the insurable right to possession of the Miller Property through exercise of its power of eminent domain or by negotiated purchase on or before [DATE], the Parties shall meet and confer for ninety (90) days to discuss in good faith alternative deal structures. If no such alternative is approved by the Parties within such ninety (90) day period, the Parties shall have no further obligations or liability to the other Party or to any person relative to the terms of this Section 4.9.2 in this Agreement and neither OWNER nor CITY shall be in Default under this Agreement.

(b) Independent Contract Consideration. Upon the Effective Date of this Agreement, OWNER shall deliver to CITY the sum of one hundred dollars ($100.00) ("Independent Contract Consideration"), which amount has been bargained for and agreed to as adequate consideration for OWNER'S option to purchase the Miller Property, or any portion thereof, during the time periods provided in Section 4.9.2 above and for CITY'S execution, delivery and performance of this Agreement. The Independent Contract Consideration is in addition to and independent of all other consideration provided in this Agreement and is nonrefundable to OWNER in all events.

(c) Exercise of Option. OWNER may exercise the Option, if at all, by delivering notice to CITY of OWNER'S intent to exercise the Option (the "Option Exercise Notice"). Upon CITY'S receipt of the Option Exercise Notice, the parties shall enter into a purchase and sale agreement for the applicable Option Property at the Option Price described below and on other terms and provisions consistent with the terms by which CITY acquired the Miller Property.

4.9.3. Insufficient Funds for Acquisition of Properties. In the event that CITY determines, in CITY'S sole and exclusive discretion, that CITY does not have sufficient funds to purchase any or all of the Surrounding Properties or the Miller Property, CITY shall provide Notice to OWNER of the amount that CITY requires to complete the acquisition of the Surrounding Properties or the Miller Property. OWNER may, but shall not be obligated to, provide the funds necessary to complete the acquisition of the Surrounding Properties or the Miller Property. If CITY determines that it has insufficient funds to acquire the Surrounding Properties or the Miller Property and Developer does not provide the funds necessary for CITY to acquire the Surrounding Properties or the Miller Property, CITY shall not be in default under this Agreement and shall be without liability to OWNER.

4.10. Signage. OWNER shall have the right to install and maintain or cause to be installed and maintained signage throughout the Hotel Project, and on improvements throughout the Hotel Project and other portions of the Specific Plan Area controlled or occupied by OWNER or any affiliate thereof in accordance with the Sign Program set forth in the Specific

Plan and as shown on the Development Plan, including the right to engage in advertising and marketing using display messages or images, utilizing a series or grid of lights that may, be changed by electronic means, including without limitation cathode ray, LED display, plasma screen, liquid crystal display (LCD), LED embedded, architectural glass fiber optic, or other electronic media or technology.

5. FINANCING OF PUBLIC IMPROVEMENTS.

5.1. Financing Mechanism(s). If deemed appropriate and acceptable to OWNER in its sole and absolute discretion based on its feasibility for the Hotel Project, CITY and OWNER will cooperate in the formation of any special assessment district, community facilities district or alternate financing mechanism to pay for the construction and/or maintenance and operation of public infrastructure facilities or Improvements required as part of the Development Plan. CITY also agrees that, to the extent any such district or other financing entity is formed and sells bonds in order to finance such infrastructure or Improvements, OWNER may be reimbursed to the extent that OWNER spends funds or dedicates land for the establishment of public facilities. Notwithstanding the foregoing, it is acknowledged and agreed by the parties that nothing contained in this Agreement shall be construed as requiring OWNER or CITY to form any such district or to issue and sell bonds.

6. REVIEW FOR COMPLIANCE.

6.1. Periodic and Special Reviews.

6.1.1. Time for and Initiation of Periodic Review. CITY shall review this Agreement every twelve (12) months from the Effective Date in order to ascertain the good faith compliance by OWNER with the terms of this Agreement. The OWNER shall submit an Annual Monitoring Report to CITY, in a form reasonably acceptable to the City Manager, along with any applicable processing charge within ten (10) days after each anniversary date of the Effective Date of this Agreement. Within thirty (30) days after the receipt of the Annual Monitoring Report, CITY shall review the Annual Monitoring Report. Prior to the expiration of the thirty (30) day review period, CITY shall either issue a notice of continuing compliance or a notice of non-compliance and a notice of CITY'S intent to conduct a Special Review pursuant to Sections 6.1.2 through 6.1.6. Issuance of a notice of continuing compliance may be issued by the City Manager or his designee. If CITY does not issue a notice of non-compliance within such thirty (30) day period, CITY shall be deemed to have issued a notice of compliance only for that year of review and shall not apply to any subsequent, future years in which a review and monitoring by be conducted by CITY.

6.1.2. Initiation of Special Review. A special review may be called either by agreement between the parties or by initiation in one or more of the following ways:

(a) Affirmative vote of at least four (4) members of the Planning Commission; or
(b) Affirmative vote of at least three (3) members of the City Council.

6.1.3. Notice of Special Review. The City Manager shall begin the special review proceeding by giving notice that CITY intends to undertake a special review of this Agreement to OWNER. Such notice shall be given at least ten (10) days in advance of the time at which the matter will be considered by the Planning Commission.

6.1.4. Public Hearing. The Planning Commission shall conduct a hearing at which OWNER must demonstrate good faith compliance with the terms of this Agreement. The burden of proof on this issue is upon OWNER.

6.1.5. Findings Upon Public Hearing. The Planning Commission shall determine upon the basis of substantial evidence whether or not OWNER has, for the period under review, complied in good faith with the terms and conditions of this Agreement.

6.1.6. Procedure Upon Findings.

(a) If the Planning Commission finds and determines on the basis of substantial evidence that OWNER has complied in good faith with the terms and conditions of this Agreement during the period under review, the review for that period is concluded.

(b) If the Planning Commission finds and determines on the basis of substantial evidence that OWNER has not complied in good faith with the terms and conditions of this Agreement during the period under review, the Planning Commission may recommend to the City Council to modify or terminate this Agreement.

(c) The OWNER may appeal a determination pursuant to paragraph (b) to the City Council in accordance with CITY'S rule for consideration of appeals in zoning matters generally.

6.2. Proceedings Upon Modification or Termination. If, upon a finding under Section 6.1.6(b), CITY determines to proceed with modification or termination of this Agreement, CITY shall give notice to the property OWNER of its intention so to do. The notice shall be given at least ten (10) calendar days prior to the scheduled hearing and contain:

6.2.1. The time and place of the hearing;

6.2.2. A statement as to whether or not CITY proposes to terminate or to modify this Agreement; and

6.2.3. Other information that CITY considers necessary to inform OWNER of the nature of the proceeding.

6.3. Hearing on Modification or Termination. At the time and place set for the hearing on modification or termination, OWNER shall be given an opportunity to be heard. The OWNER shall be required to demonstrate good faith compliance with the terms and conditions of this Agreement. The burden of proof on this issue shall be on OWNER. If the City Council finds, based upon substantial evidence in the administrative record, that OWNER has not complied in good faith with the terms and conditions of the agreement, the City Council may terminate or modify this Agreement and impose those conditions to the action it takes as it considers necessary to protect the interests of CITY. The decision of the City Council shall be final, subject only to judicial review pursuant to Section 1094.5 of the Code of Civil Procedure.

6.4. Certificate of Agreement Compliance. If, at the conclusion of a Periodic or Special Review, OWNER is found to be in compliance with this Agreement, CITY shall, upon written request by OWNER, issue a Certificate of Agreement Compliance ("Certificate") to OWNER stating that after the most recent Periodic or Special Review and based upon the information known or made known to the Planning Director and City Council that (1) this Agreement remains in effect and (2) OWNER is not in default. The Certificate shall be in recordable form, shall contain information necessary to communicate constructive record notice

of the finding of compliance, shall state whether the Certificate is issued after a Periodic or Special Review and shall state the anticipated date of commencement of the next Periodic Review. OWNER may record the Certificate with the County Recorder. Whether or not the Certificate is relied upon by assignees or other transferees or OWNER, CITY shall not be bound by a Certificate if a default existed at the time of the Periodic or Special Review, but was concealed from or otherwise not known to the Planning Director or City Council.

7. DEFAULT AND REMEDIES.

7.1. Remedies in General. It is acknowledged by the parties that CITY would not have entered into this Agreement if it were to be liable in damages under this Agreement, or with respect to this Agreement or the application thereof. Each of the parties hereto may pursue any remedy at law or equity available for the breach of any provision of this Agreement, except that CITY shall not be liable in damages to OWNER, or to any successor in interest of OWNER, or to any other person, and OWNER covenants not to sue for damages or claim any damages.

7.2. Specific Performance. The parties acknowledge that money damages and remedies at law generally are inadequate and specific performance and other non-monetary relief are particularly appropriate remedies for the enforcement of certain rights set forth in this Agreement and should be available for the following reasons:

7.2.1. Money damages are unavailable against CITY as provided in Section 7.1 above.

7.2.2 Due to the size, nature and scope of the Hotel Project, it may not be practical or possible to restore the Property to its natural condition once implementation of this Agreement has begun. After such implementation, OWNER may be foreclosed from other choices it may have had to utilize the Property or portions thereof. OWNER has invested significant time and resources and performed extensive planning and processing of the Hotel Project in agreeing to the terms of this Agreement and will be investing even more significant time and resources in implementing the Hotel Project in reliance upon the terms of this Agreement, and it is not possible to determine the sum of money which would adequately compensate OWNER for such efforts.

7.3. Release. Except for nondamage remedies, including the remedy of specific performance and judicial review as provided for in Sections 7.2 and 6.3, respectively, OWNER, for itself, its successors and assignees, hereby releases CITY, its officers, agents and employees from any and all claims, demands, actions, or suits of any kind or nature arising out of any liability, known or unknown, present or future, including, but not limited to, any claim or liability, based or asserted, pursuant to Article I, Section 19 of the California Constitution, the Fifth Amendment of the United States Constitution, or any other law or ordinance which seeks to impose any other liability or damage, whatsoever, upon CITY because it entered into this Agreement or because of the terms of this Agreement.

7.4. Termination or Modification of Agreement for Default of OWNER. Subject to the provisions contained in Subsection 6.3 herein, CITY may terminate or modify this Agreement for any failure of OWNER to perform any material duty or obligation of OWNER under this Agreement, or to comply in good faith with the terms of this Agreement (hereinafter referred to as "default"); provided, however, CITY may terminate or modify this Agreement pursuant to this Section only after providing written notice to OWNER of default setting forth the nature of the

default and the actions, if any, required by OWNER to cure such default and, where the default can be cured, OWNER has failed to take such actions and cure such default within 60 days after the effective date of such notice or, in the event that such default cannot be cured within such 60 day period but can be cured within a longer time, has failed to commence the actions necessary to cure such default within such 60 day period and to diligently proceed to complete such actions and cure such default.

7.5. Termination of Agreement for Default of CITY. OWNER may terminate this Agreement only in the event of a default by CITY in the performance of a material term of this Agreement and only after providing written notice to CITY of default setting forth the nature of the default and the actions, if any, required by CITY to cure such default and, where the default can be cured, CITY has failed to take such actions and cure such default within 60 days after the effective date of such notice or, in the event that such default cannot be cured within such 60 day period but can be cured within a longer time, has failed to commence the actions necessary to cure such default within such 60 day period and to diligently proceed to complete such actions and cure such default.

8. THIRD PARTY LITIGATION.

8.1. General Plan Litigation. CITY has determined that this Agreement is consistent with its Comprehensive General Plan, as such General Plan exists as of the Effective Date ("General Plan"), and that the General Plan meets all requirements of law. OWNER has reviewed the General Plan and concurs with CITY'S determination. CITY shall have no liability in damages under this Agreement for any failure of CITY to perform under this Agreement or the inability of OWNER to develop the Property as contemplated by the Development Plan of this Agreement as the result of a judicial determination that on the Effective Date, or at any time thereafter, the General Plan, or portions thereof, are invalid or inadequate or not in compliance with law.

8.2. Third Party Litigation Concerning Agreement. OWNER shall defend, at its expense, including reasonable attorneys' fees, indemnify, and hold harmless CITY, its agents, officers and employees from any claim, action or proceeding against CITY, its agents, officers, or employees to attack, set aside, void, or annul the approval of this Agreement or the approval of any permit granted pursuant to this Agreement. CITY shall defend, at its expense, including reasonable attorneys' fees, indemnify, and hold harmless OWNER, its agents, officers and employees from any claim, action or proceeding against OWNER, its agents, officers, or employees to attack, set aside, void, or annul the approval of this Agreement or the approval of any permit granted pursuant to this Agreement. The parties shall promptly notify each other of any such claim, action or proceeding, and shall cooperate in the defense.

8.3. Indemnity. In addition to the provisions of Section 8.2 above, OWNER shall indemnify and hold CITY, its officers, agents, employees and independent contractors free and harmless from any liability whatsoever, resulting from the negligence or willful misconduct of OWNER, its officers, agents, employees, subcontractors and independent contractors, for property damage, bodily injury, or death (OWNER'S employees included) or any other element of damage of any kind or nature, relating to or in any way connected with or arising from the activities contemplated hereunder, including, but not limited to, the study, design, engineering, construction, completion, failure and conveyance of the public improvements, save and except to the extent of any claims for damages arising through the negligence or willful misconduct of

CITY or any of its officers, employees, subcontractors and independent contractors. CITY shall cooperate with OWNER in the defense of any third party legal action.

8.4. Environment Assurances. OWNER shall indemnify and hold CITY, its officers, agents, and employees free and harmless from any liability, based or asserted, upon any negligent act or omission of OWNER, its officers, agents, employees, subcontractors, predecessors in interest, successors, assigns and independent contractors for any violation of any federal, state or local law, ordinance or regulation relating to the industrial hygiene or to environmental conditions on, under or about the Property, not complying with applicable law including, but not limited to, soil and groundwater conditions, and OWNER shall defend, at its expense, including attorneys' fees, CITY, its officers, agents and employees in any action based or asserted upon any such alleged negligent act or omission. CITY shall cooperate with OWNER in the defense of any third party legal action.

8.5. Survival. The provisions of this Sections 8.1 through 8.5, inclusive, shall survive the termination of this Agreement.

9. MORTGAGEE PROTECTION.

The parties hereto agree that this Agreement shall not prevent or limit OWNER, in any manner, at OWNER'S sole discretion, from encumbering the Property or any portion thereof or any improvement thereon by any mortgage, deed of trust or other security device securing financing with respect to the Property. CITY acknowledges that the Mortgagees providing such financing may require certain Agreement interpretations and modifications and agrees upon request, from time to time, to meet with OWNER and representatives of such lenders to negotiate in good faith any such request for interpretation or modification. CITY will not unreasonably withhold its consent to any such requested interpretation or modification provided such interpretation or modification is consistent with the intent and purposes of this Agreement. Any Mortgagee of the Property shall be entitled to the following rights and privileges:

9.1. Neither entering into this Agreement nor a breach of this Agreement shall defeat, render invalid, diminish or impair the lien of any mortgage on the Property made in good faith and for value, unless otherwise required by law.

9.2. The Mortgagee of any mortgage or deed of trust encumbering the Property, or any part thereof, which Mortgagee, has submitted a request in writing to CITY in the manner specified herein for giving notices, shall be entitled to receive written notification from CITY of any default by OWNER in the performance of OWNER'S obligations under this Agreement.

9.3. If CITY timely receives a request from a Mortgagee requesting a copy of any notice of default given to OWNER under the terms of this Agreement, CITY shall provide a copy of that notice to the Mortgagee within ten (10) days of sending the notice of default to OWNER. The Mortgagee shall have the right, but not the obligation, to cure the default during the remaining cure period allowed such party under this Agreement.

9.4. Any Mortgagee who comes into possession of the Property, or any part thereof, pursuant to foreclosure of the mortgage or deed of trust, or deed in lieu of such foreclosure, shall take the Property, or part thereof, subject to the terms of this Agreement. Notwithstanding any other provision of this Agreement to the contrary, no Mortgagee shall have an obligation or duty under this Agreement to perform any of OWNER'S obligations or other affirmative covenants of OWNER hereunder, or to guarantee such performance; provided, however, that to the extent that

any covenant to be performed by OWNER is a condition precedent to the performance of a covenant by CITY, the performance thereof shall continue to be a condition precedent to CITY'S performance hereunder, and further provided that any sale, transfer or assignment by any Mortgagee in possession shall be subject to the provisions of Section 2.4 of this Agreement.

9.5. Notwithstanding anything to the contrary in this Agreement, it shall be a condition of OWNER'S obligations to develop, construct and operate the Hotel Project that OWNER obtains construction financing from a Mortgage on commercially reasonable terms and provisions that make the Hotel Project feasible as determined by OWNER in its good faith judgment.

10. MISCELLANEOUS PROVISIONS.

10.1. Recordation of Agreement. This Agreement and any amendment or cancellation thereof shall be recorded with the San Bernardino County Recorder by the City Clerk within the ten (10) days after CITY executes this Agreement, as required by Section 65868.5 of the Government Code. If the parties to this Agreement or their successors in interest amend or cancel this Agreement as provided for herein and in Government Code Section 65868, or if CITY terminates or modifies the agreement as provided for herein and in Government Code Section 65865.1 for failure of the applicant to comply in good faith with the terms or conditions of this Agreement, the City Clerk shall have notice of such action recorded with the San Bernardino County Recorder.

10.2. Entire Agreement. This Agreement sets forth and contains the entire understanding and agreement of the parties with respect to the matters addressed in this Agreement, and there are no oral or written representations, understandings or ancillary covenants, undertakings or agreements which are not contained or expressly referred to herein. No testimony or evidence of any such representations, understandings or covenants shall be admissible in any proceeding of any kind or nature to interpret or determine the terms or conditions of this Agreement.

10.3. Severability. If any term, provision, covenant or condition of this Agreement shall be determined invalid, void or unenforceable, the remainder of this Agreement shall not be affected thereby to the extent such remaining provisions are not rendered impractical to perform taking into consideration the purposes of this Agreement. Notwithstanding the foregoing, the provision of the Public Benefits set forth in Section 4 of this Agreement, including the payment of the fees set forth therein, are essential elements of this Agreement and CITY would not have entered into this Agreement but for such provisions, and therefore in the event such provisions are determined to be invalid, void or unenforceable, this entire Agreement shall be null and void and of no force and effect whatsoever.

10.4. Interpretation and Governing Law. This Agreement and any dispute arising hereunder shall be governed and interpreted in accordance with the laws of the State of California. This Agreement shall be construed as a whole according to its fair language and common meaning to achieve the objectives and purposes of the parties hereto, and the rule of construction to the effect that ambiguities are to be resolved against the drafting party shall not be employed in interpreting this Agreement, all parties having been represented by counsel in the negotiation and preparation hereof.

10.5. Section Headings. All section headings and subheadings are inserted for

convenience only and shall not affect any construction or interpretation of this Agreement.

10.6. Singular and Plural. As used herein, the singular of any word includes the plural.

10.7. Joint and Several Obligations. Subject to Section 2.4, if at any time during the term of this Agreement the Property is owned, in whole or in part, by more than one owner, all obligations of such owners under this Agreement shall be joint and several, and the default of any such owner shall be the default of all such owners. Notwithstanding the foregoing, no owner of a single lot which has been finally subdivided and sold to such owner as a member of the public or otherwise as an ultimate user shall have any obligation under this Agreement except as provided under Section 4 hereof.

10.8. Time of Essence. Time is of the essence in the performance of the provisions of this Agreement as to which time is an element.

10.9. Waiver. Failure by a party to insist upon the strict performance of any of the provisions of this Agreement by the other party, or the failure by a party to exercise its rights upon the default of the other party, shall not constitute a waiver of such party's right to insist and demand strict compliance by the other party with the terms of this Agreement thereafter.

10.10. No Third Party Beneficiaries. This Agreement is made and entered into for the sole protection and benefit of the parties and their successors and assigns. No other person shall have any right of action based upon any provision of this Agreement.

10.11. Force Majeure. Neither party shall be deemed to be in default where failure or delay in performance of any of its obligations under this Agreement is caused by floods, earthquakes, other Acts of God, fires, wars, riots or similar hostilities, pandemics, strikes and other labor difficulties beyond the party's control, (including the party's employment force), government regulations, court actions (such as restraining orders or injunctions), means the (i) the unavailability of labor or supplies; a governmental moratorium or similar prohibition on construction; or a major disruption to the national, regional or international economies, capital markets and/or real estate markets or other causes beyond the party's control. If any such events shall occur, the term of this Agreement and the time for performance by either party of any of its obligations hereunder shall be extended by the for the period of time that such events prevented such performance, provided that the term of this Agreement shall not be extended under any circumstances for more than five (5) years**.**

10.12. Mutual Covenants. The covenants contained herein are mutual covenants and also constitute conditions to the concurrent or subsequent performance by the party benefited thereby of the covenants to be performed hereunder by such benefited party.

10.13. Successors in Interest. The burdens of this Agreement shall be binding upon, and the benefits of this Agreement shall inure to, all successors in interest to the parties to this Agreement. All provisions of this Agreement shall be enforceable as equitable servitudes and constitute covenants running with the land. Each covenant to do or refrain from doing some act hereunder with regard to development of the Property: (a) is for the benefit of and is a burden upon every portion of the Property; (b) runs with the Property and each portion thereof; and, (c) is binding upon each party and each successor in interest during ownership of the Property or any portion thereof.

10.14. Counterparts. This Agreement may be executed by the parties in counterparts, which counterparts shall be construed together and have the same effect as if all of the parties

had executed the same instrument.

10.15. Jurisdiction and Venue. Any action at law or in equity arising under this Agreement or brought by a party hereto for the purpose of enforcing, construing or determining the validity of any provision of this Agreement shall be filed and tried in the Superior Court of the County of San Bernardino, State of California, and the parties hereto waive all provisions of law providing for the filing, removal or change of venue to any other court.

10.16. Hotel Project as a Private Undertaking. It is specifically understood and agreed by and between the parties hereto that the development of the Hotel Project is a private development, that neither party is acting as the agent of the other in any respect hereunder, and that each party is an independent contracting entity with respect to the terms, covenants and conditions contained in this Agreement. No partnership, joint venture or other association of any kind is formed by this Agreement. The only relationship between CITY and OWNER is that of a government entity regulating the development of private property and the owner of such property.

10.17. Further Actions and Instruments. Each of the parties shall cooperate with and provide reasonable assistance to the other to the extent contemplated hereunder in the performance of all obligations under this Agreement and the satisfaction of the conditions of this Agreement. Upon the request of either party at any time, the other party shall promptly execute, with acknowledgment or affidavit if reasonably required, and file or record such required instruments and writings and take any actions as may be reasonably necessary under the terms of this Agreement to carry out the intent and to fulfill the provisions of this Agreement or to evidence or consummate the transactions contemplated by this Agreement. The City Manager may delegate his powers and duties under this Agreement to an Assistant City Manager or other management level employee of CITY.

10.18. Eminent Domain. No provision of this Agreement shall be construed to limit or restrict the exercise by CITY of its power of eminent domain.

10.19. Agent for Service of Process. In the event OWNER is not a resident of the State of California or it is an association, partnership or joint venture without a member, partner or joint venturer resident of the State of California, or it is a foreign corporation, then in any such event, OWNER shall file with the Planning Director, upon its execution of this Agreement, a designation of a natural person residing in the State of California, giving his or her name, residence and business addresses, as its agent for the purpose of service of process in any court action arising out of or based upon this Agreement, and the delivery to such agent of a copy of any process in any such action shall constitute valid service upon OWNER. If for any reason service of such process upon such agent is not feasible, then in such event OWNER may be personally served with such process out of this County and such service shall constitute valid service upon OWNER. OWNER is amenable to the process so served, submits to the jurisdiction of the Court so obtained and waives any and all objections and protests thereto. OWNER for itself, assigns and successors hereby waives the provisions of the Hague Convention (Convention on the Service Abroad of Judicial and Extra Judicial Documents in Civil or Commercial Matters, 20 U.S.T. 361, T.I.A.S. No. 6638).

10.20. Estoppel Certificate. Within thirty (30) business days following a written request by any of the parties, the other party shall execute and deliver to the requesting party a statement certifying that (i) either this Agreement is unmodified and in full force and effect or there have

been specified (date and nature) modifications to the Agreement, but it remains in full force and effect as modified; and (ii) either there are no known current uncured defaults under this Agreement or that the responding party alleges that specified (date and nature) defaults exist. The statement shall also provide any other reasonable information requested. The failure to timely deliver this statement shall constitute a conclusive presumption that this Agreement is in full force and effect without modification except as may be represented by the requesting party and that there are no uncured defaults in the performance of the requesting party, except as may be represented by the requesting party. OWNER shall pay to CITY all costs not to exceed $5,000, incurred by CITY in connection with the issuance of estoppel certificates under this Section 10.20 prior to CITY'S issuance of such certificates.

10.21 Authority to Execute. The person or persons executing this Agreement on behalf of OWNER warrants and represents that he or she/they have the authority to execute this Agreement on behalf of his or her/their corporation, partnership or business entity and warrants and represents that he or she/they has/have the authority to bind OWNER to the performance of its obligations hereunder.

10.22 Prevailing Wage. OWNER, for itself, and shall pass such obligation down to its successor and assigns, agrees, covenants and warrants that the development of the Property, if any, shall comply with all applicable federal and state labor laws (including, without limitation, the requirement under California law to pay prevailing wages and hire apprentices, applicable state prevailing wage requirements pursuant to Labor Code Sections 1720 et seq. and 1770 et seq., and the regulations pursuant thereto, ("Prevailing Wage Laws")), and all obligations as set forth herein with respect to any work performed on the Property and for the Hotel Project. CITY makes no representations concerning prevailing wages in compliance with California Labor Code Section 1770 et seq. OWNER acknowledges and agrees that it shall be responsible for reviewing the applicable laws and regulations with respect to the payment of prevailing wages and complying therewith. OWNER shall be solely responsible for determining and effectuating compliance with such laws. OWNER shall bear all risks of payment or non-payment of prevailing wages under California law and/or the implementation of Labor Code Section 1781, as the same may be amended from time to time, and/or any other similar law, with respect to the construction of improvements on the Property and the Hotel Project. OWNER shall indemnify, hold harmless and defends CITY, its officials, officers, employees, agents, from any and all claims, liabilities, penalties, damages, judgments, costs, expenses, and fees arising from, or out of, the acts or omissions of OWNER or any failure to comply with all applicable laws, rules or regulations pertaining to the Prevailing Wage Laws. The foregoing indemnity shall survive termination of this Agreement and shall continue after completion of the construction and development of the Hotel Project on the Property.

[SIGNATURES CONTAINED ON FOLLOWING PAGE]

SIGNATURE PAGE

TO DEVELOPMENT AGREEMENT NO. PDA _____

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day and year set forth below.

"CITY"

CITY OF ONTARIO, a California municipal corporation

By:_____

Scott Ochoa

City Manager

Date: _____

ATTEST:

_____

City Clerk, Ontario

APPROVED AS TO FORM:

BEST BEST & KRIEGER, LLP

_____

City Attorney

"OWNER"

DIVERSIFIED PACIFIC DEVELOPMENT GROUP, LLC

A California limited liability company

By: _____

Name:

Its: _____

Date: _____

ACKNOWLEDGEMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA)

COUNTY OF_____)

On _____, 20_____, before me,_____,

Date *Insert Name and Title of the Officer*

personally appeared _____

Name(s) of Signer(s)

_____, who proved to me on the basis of satisfactory evidence to be the person whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity, and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature_____

Signature of Notary Public

Place Notary Seal Above

ACKNOWLEDGEMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA)

COUNTY OF_____)

On _____, 20_____, before me_____,

Date *Insert Name and Title of the Officer*

personally appeared _____

Name(s) of Signer(s)

_____, who proved to me on the basis of satisfactory evidence to be the person whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity, and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature_____

Signature of Notary Public

Place Notary Seal Above

EXHIBIT "A"
TO DEVELOPMENT AGREEMENT

LEGAL DESCRIPTION OF THE PROPERTY

EXHIBIT "B"

TO DEVELOPMENT AGREEMENT

MAP SHOWING PROPERTY AND ITS LOCATION

EXHIBIT "C"

TO DEVELOPMENT AGREEMENT

EXISTING DEVELOPMENT APPROVALS

On _____, the Planning Commission:

a) Issued Resolution No. _____ recommending City Council adopt and certify the _____Specific Plan Environmental Impact Report (SCH #_____).

b) Issued Resolution No. _____ recommending City Council approval of the _____ Specific Plan (PSP_____).

On _____, the City Council:

a) Issued Resolution No. _____ certifying the _____ Specific Plan Environmental Impact Report.

On _____, the City Council:

a) Issued Ordinance No. _____ approving the _____Specific Plan (PSP_____).

EXHIBIT "D"
TO DEVELOPMENT AGREEMENT

EXISTING LAND USE REGULATIONS

EXHIBIT "E"

TO DEVELOPMENT AGREEMENT

DESCRIPTION OF REQUIRED IMPROVEMENTS

OWNER shall design, construct, and complete all improvements including but not limited to sewer, water, recycled water, storm drain, fiber, and street improvements necessary to serve the Property, prior to the request of any _____.

EXHIBIT "F"
TO DEVELOPMENT AGREEMENT

DEPICTION OF REQUIRED IMPROVEMENTS

EXHIBIT "H-1"

DEPICTION OF SURROUNDING PROPERTY

EXHIBIT "H-2"

DEPICTION OF MILLER PROPERTY

EXHIBIT "I"

CONCEPTUAL DEPICTION OF CONVENTION CENTER EXPANSION

RESOLUTION NO. PC25-008

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ONTARIO, CALIFORNIA, RECOMMENDING CITY COUNCIL APPROVE FILE NO. PSP23-001, A SPECIFIC PLAN (EMPIRE GROVES) TO ESTABLISH THE LAND USE DISTRICT, DEVELOPMENT STANDARDS, GUIDELINES, AND INFRASTRUCTURE IMPROVEMENTS FOR THE DEVELOPMENT OF UP TO 600,000 SQUARE FEET OF HOSPITALITY AND COMMERCIAL LAND USES ON 10.43-ACRES OF LAND LOCATED ON THE SOUTHEAST CORNER OF GUASTI ROAD AND HOLT BOULEVARD AND MAKING FINDINGS IN SUPPORT THEREOF—APN: 110-322-33

WHEREAS, Diversified Pacific Development Group, LLC (hereinafter referred to as "Applicant") has filed an Application for the approval of a Specific Plan, File No. PSP23-001, as described in the title of this Resolution (hereinafter referred to as "Application" or "Project"); and

WHEREAS, the Application applies to 10.43 acres of land generally located on southeast corner of Guasti Road and Holt Boulevard, within the proposed Empire Groves Specific Plan; and

WHEREAS, the properties to the north of the Project site are within the CCS (Convention Center Support Commercial) zoning district, and are developed with offices and hotel. The property to the east is within the UC (Utilities Corridor) zoning district and is developed with a flood control channel. The property to the south and west is within the CCS (Convention Center Support Commercial) zoning district, and is developed with hotel; and

WHEREAS, the Empire Groves Specific Plan serves to implement the City’s Policy Plan for the project site and provides zoning regulations for development of the Project site by establishing permitted land uses, development standards, infrastructure requirements, and implementation requirements for the development of 10.43 acres within the Specific Plan boundaries. The Empire Groves Specific Plan proposes a land use plan that includes one Planning Area for the Project site, the Hospitality Mixed Use (PA1); and

WHEREAS, the Hospitality Mixed-Use combines hotel uses, ancillary services and amenities with local-serving commercial uses on a single property. At buildout, the total development allowed for the project site will be 600,000 square feet; and

WHEREAS, the Hotel use is the primary component of Hospitality Mixed-Use and will occupy the majority of the FAR of the development (553,124 square feet). The hotel use includes 600 guest rooms, office space for hotel administration, and may also include

ancillary uses such as restaurants, bars, lounges, day spas, gyms, ballrooms and meeting rooms; and

WHEREAS, the local-serving retail uses (46,876 square feet) will occupy a smaller portion of the project site FAR. The local serving retail uses will be stand-alone uses not affiliated with the hotel and these businesses may include a combination of coffee shops, restaurants and retail that complement the hotel and convention center; and

WHEREAS, the Ontario Plan 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364) was certified on August 16, 2022 (hereinafter referred to as "Certified EIR"), in which development and use of the Project site was discussed; and

WHEREAS, the Planning Director of the City of Ontario prepared and approved for attachment to the certified Environmental Impact Report, an Addendum to the Certified EIR (hereinafter referred to as "EIR Addendum") in accordance with the requirements of the California Environmental Quality Act of 1970, together with State and local guidelines implementing said Act, all as amended to date (collectively referred to as "CEQA"); and

WHEREAS, the environmental impacts of this Project were thoroughly analyzed in the EIR Addendum, which concluded that implementation of the Project could result in a number of significant effects on the environment that were previously analyzed in the Certified EIR, and that the Certified EIR identified mitigation measures that would reduce each of those significant effects to a less-than-significant level; and

WHEREAS, the City's "Local Guidelines for the Implementation of the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed; and

WHEREAS, the Application is a project pursuant to the California Environmental Quality Act — Public Resources Code Section 21000 et seq. — (hereinafter referred to as "CEQA") and an EIR Addendum has been prepared to determine possible environmental impacts; and

WHEREAS, Ontario Development Code Table 2.02-1 (Review Matrix) grants the Planning Commission the responsibility and authority to review and make a recommendation to the City Council on the subject Application; and

WHEREAS, the Project has been reviewed for consistency with the Housing Element of the Policy Plan component of The Ontario Plan 2050, as State Housing Element law (as prescribed in Government Code Sections 65580 through 65589.8) requires that development projects must be consistent with the Housing Element, if upon

consideration of all its aspects, it is found to further the purposes, principals, goals, and policies of the Housing Element; and

WHEREAS, the Project is located within the Airport Influence Area of Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and is subject to, and must be consistent with, the policies and criteria set forth in the Ontario International Airport Land Use Compatibility Plan (hereinafter referred to as "ALUCP"), which applies only to jurisdictions within San Bernardino County, and addresses the noise, safety, airspace protection, and overflight impacts of current and future airport activity; and

WHEREAS, City of Ontario Development Code Division 2.03 (Public Hearings) prescribes the manner in which public notification shall be provided and hearing procedures to be followed, and all such notifications and procedures have been completed; and

WHEREAS, as the first action on the Project, on February 25, 2025, the Planning Commission issued a Resolution recommending the City Council adopt the EIR Addendum, finding that the proposed Project introduces no new significant environmental impacts and applying all previously adopted mitigation measures to the Project, which were incorporated by reference; and

WHEREAS, on February 25, 2025, the Planning Commission of the City of Ontario conducted a hearing to consider the Project, and concluded said hearing on that date; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED, AND RESOLVED by the Planning Commission of the City of Ontario, as follows:

SECTION 1: ***Environmental Determination and Findings.*** As the recommending body for the Project, the Planning Commission has reviewed and considered the information contained in the Addendum, the initial study, and the administrative record for the Project, including all written and oral evidence provided during the comment period. Based upon the facts and information contained in the Addendum, the initial study, and the administrative record, including all written and oral evidence presented to the Planning Commission, the Planning Commission finds as follows:

(1) The environmental impacts of this Project were reviewed in conjunction with an Addendum to TOP 2050 Supplemental Environmental Impact Report (State

Clearinghouse No. 2021070364), certified by the Ontario City Council on August 16, 2022, in conjunction with File No. PGPA20-002; and

(2) The EIR Addendum and administrative record have been completed in compliance with CEQA, the State CEQA Guidelines, and the City of Ontario Local CEQA Guidelines; and

(3) The City's "Guidelines for the Implementation of the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed. This Application introduces no new significant environmental impacts; and

(4) All previously adopted mitigation measures shall be a condition of Project approval, as they are applicable to the Project, and are incorporated herein by this reference; and

(5) The EIR Addendum contains a complete and accurate reporting of the environmental impacts associated with the Project, and reflects the independent judgment of the Planning Commission; and

(6) There is no substantial evidence in the administrative record supporting a fair argument that the Project may result in significant environmental impacts.

SECTION 2: ***Subsequent or Supplemental Environmental Review Not Required.*** Based on the EIR Addendum, all related information presented to the Planning Commission, and the specific findings set forth in Section 1, above, the Planning Commission finds that the preparation of a subsequent or supplemental Certified EIR is not required for the Project, as the Project:

(1) Does not constitute substantial changes to the Certified EIR that will require major revisions to the Certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and

(2) Does not constitute substantial changes with respect to the circumstances under which the Certified EIR was prepared, that will require major revisions to the Certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of the previously identified significant effects; and

(3) Does not contain new information of substantial importance that was not known and could not have been known with the exercise of reasonable diligence at the time the Certified EIR was certified/adopted, that shows any of the following:

(a) The Project will have one or more significant effects not discussed in the Certified EIR; or

(b) Significant effects previously examined will be substantially more severe than shown in the Certified EIR; or

(c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the City declined to adopt such measures; or

(d) Mitigation measures or alternatives considerably different from those analyzed in the Certified EIR would substantially reduce one or more significant effects on the environment, but which the City declined to adopt.

SECTION 3: ***Housing Element Compliance.*** Pursuant to the requirements of California Government Code Chapter 3, Article 10.6, commencing with Section 65580, as the recommending body for the Project, the Planning Commission finds that based upon the facts and information contained in the Application and supporting documentation, at the time of Project implementation, the Project is consistent with the Housing Element of the Policy Plan (General Plan) component of The Ontario Plan 2050, as the Project site is not one of the properties in the Housing Element Sites Inventory contained in Tables B-1 and B-2 of the Housing Element Technical Report.

SECTION 4: ***Airport Land Use Compatibility Plan ("ALUCP") Compliance.*** The California State Aeronautics Act (Public Utilities Code Section 21670 et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

(1) On April 19, 2011, the City Council of the City of Ontario approved and adopted the Ontario International Airport Land use Compatibility Plan, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the recommending body for the Project, the Planning Commission has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the Planning Commission therefore finds and determines

that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the ONT ALUCP; and

SECTION 5: ***Concluding Facts and Reasons.*** Based upon the substantial evidence presented to the Planning Commission during the above-referenced hearing, and upon the specific findings set forth in the Sections above, the Planning Commission hereby concludes as follows:

(1) ***The proposed Specific Plan, or amendment thereto, is consistent with the goals, policies, plans and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan 2050.*** The 10.43 Empire Groves Specific Plan is suitable for a hotel/commercial mixed-use development and is consistent with the goals and policies, plans and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of TOP 2050.

(2) ***The proposed Specific Plan, or amendment thereto, would not be detrimental to the public interest, health, safety, convenience, or general welfare of the City.*** The proposed Empire Groves Specific Plan is in conformance with the Land Use Policies and Goals of the Policy Plan and will provide standards and guidelines for the harmonious development of the Project site, in a manner consistent with the Policy Plan. The Specific Plan is proposing hotel/commercial mixed-use development for the 10.43 acre site, which is what is mandated by the land use plan of the Policy Plan; therefore, the proposed land uses will not be detrimental to the public interest, health, safety, convenience, or general welfare of the City because it will provide land uses that are consistent with the existing and future development of the surrounding area.

(3) ***In the case of an application affecting specific property(ies), the proposed Specific Plan, or amendment thereto, will not adversely affect the harmonious relationship with adjacent properties and land uses.*** The proposed Specific Plan will establish a hotel/commercial land use, which aligns with the Project site and surrounding land uses planned in TOP 2050.

(4) ***In the case of an application affecting specific property(ies), the subject site is physically suitable, including, but not limited to, parcel size, shape, access, and availability of utilities, for the request and anticipated development.*** Specific Plan will allow for hotel/commercial mixed-use on the subject site. When in conformance with the Specific Plan, the project site is suitable in size and shape, allows for sufficient access and availability of utilities to accommodate the anticipated development.

SECTION 6: ***Planning Commission Action.*** Based upon the findings and conclusions set forth in the Sections above, the Planning Commission hereby RECOMMENDS THE CITY COUNCIL APPROVES the herein described Application,

subject to each and every condition set forth in the Department reports attached hereto as "Attachment A," and incorporated herein by this reference.

SECTION 7: ***Indemnification.*** The Applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void, or annul this approval. The City of Ontario shall promptly notify the Applicant of any such claim, action, or proceeding, and the City of Ontario shall cooperate fully in the defense.

SECTION 8: ***Custodian of Records.*** The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East "B" Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario.

SECTION 9: ***Certification to Adoption.*** The Secretary shall certify to the adoption of the Resolution.

- - - - - - - - - - - - - -

The Secretary Pro Tempore for the Planning Commission of the City of Ontario shall certify as to the adoption of this Resolution.

I hereby certify that the foregoing Resolution was duly and regularly introduced, passed and adopted by the Planning Commission of the City of Ontario at a regular meeting thereof held on the 25th day of February 2025, and the foregoing is a full, true and correct copy of said Resolution, and has not been amended or repealed.

Nicola Ricci
Planning Commission Chairman

ATTEST:

Henry K. Noh
Planning Director and
Secretary to the Planning Commission

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO)
CITY OF ONTARIO)

I, Gwen Berendsen, Secretary Pro Tempore of the Planning Commission of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. PC25-008, was duly passed and adopted by the Planning Commission of the City of Ontario at their regular meeting held on February 25, 2025, by the following roll call vote, to wit:

AYES: DeDiemar, Gage, Lampkin, Ricci

NOES: None

ABSENT: Anderson

ABSTAIN: None

Gwen Berendsen
Secretary Pro Tempore

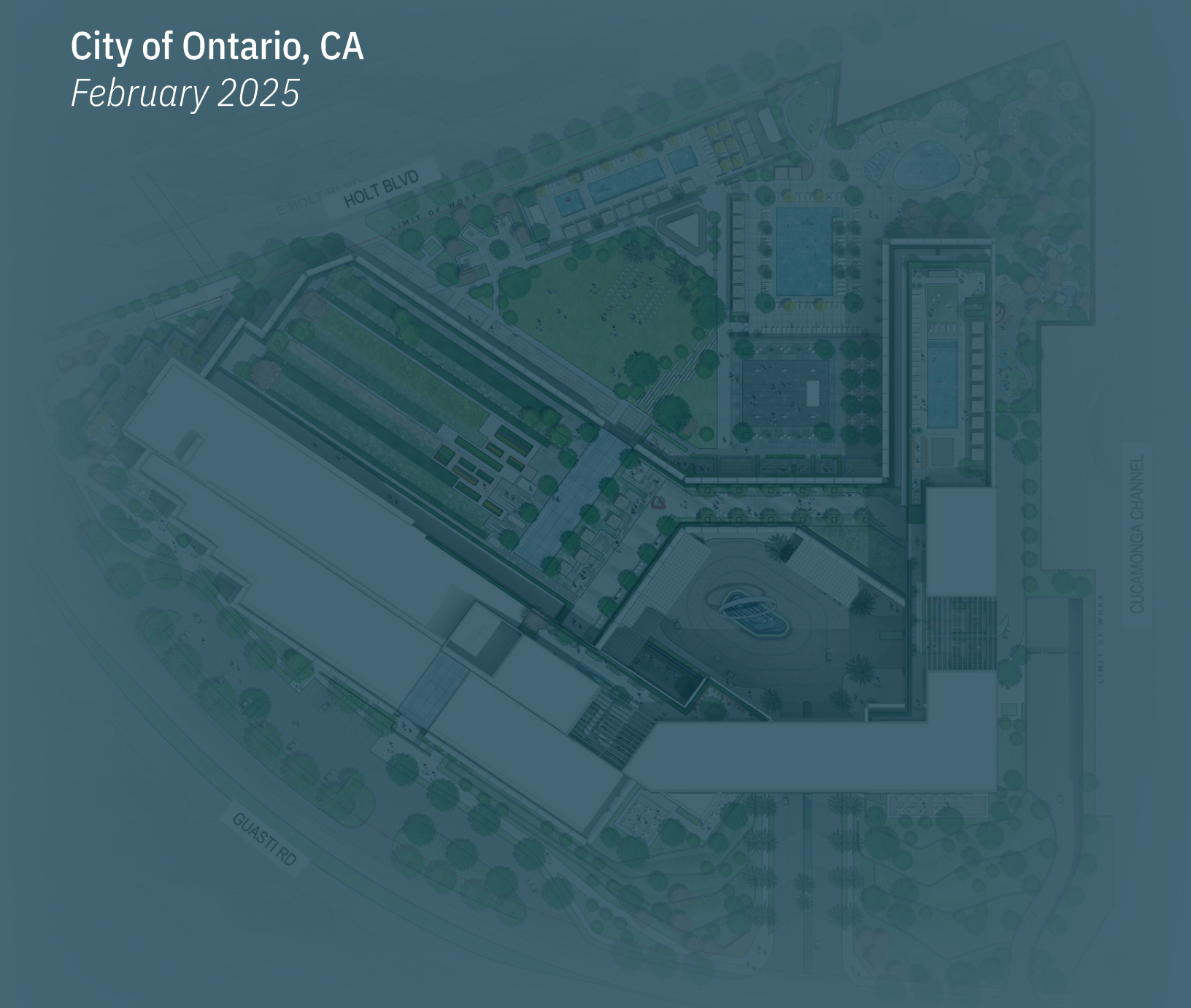
ATTACHMENT A:

File No. PSP23-001
Empire Groves Specific Plan

(Empire Groves Specific Plan follow this page)

Empire Groves
SPECIFIC PLAN

City of Ontario, CA
February 2025



DIVERSIFIED Pacific®

4402

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01 | Introduction

1.1 Project Location

The Empire Groves Specific Plan (project) site is situated in the southeastern quadrant of the intersection of East Holt Boulevard and East Guasti Road in the City of Ontario. The Specific Plan Area is a triangular plot of land spanning 10.43 acres.

To the north, it is bounded by Holt Boulevard, while East Guasti Road runs along its southern and southwestern edges. The eastern boundary is defined by an existing flood channel and the Cucamonga Creek Trail. To the south of the site lies the Ontario International Airport, which is separated by East Guasti Road, Airport Drive, and a set of railroad tracks. The Specific Plan Area has direct access from Interstate 10 (I-10), situated to the north of the site.

Directly north of the Specific Plan Area, across East Holt Boulevard, is the Frontier Center office building and the Holiday Inn. To the northwest is the Ontario Convention Center, and to the west is the Ontario Gateway Hotel.

The regional project location is shown in **Figure 1**, while **Figure 2** provides the local context. There are several hotels, office buildings, and car dealerships within a 1-mile radius of the Specific Plan Area as seen in **Figure 3.** The Specific Plan Area assessor's parcel number is 11032233.

Figure 1: Regional Project Location

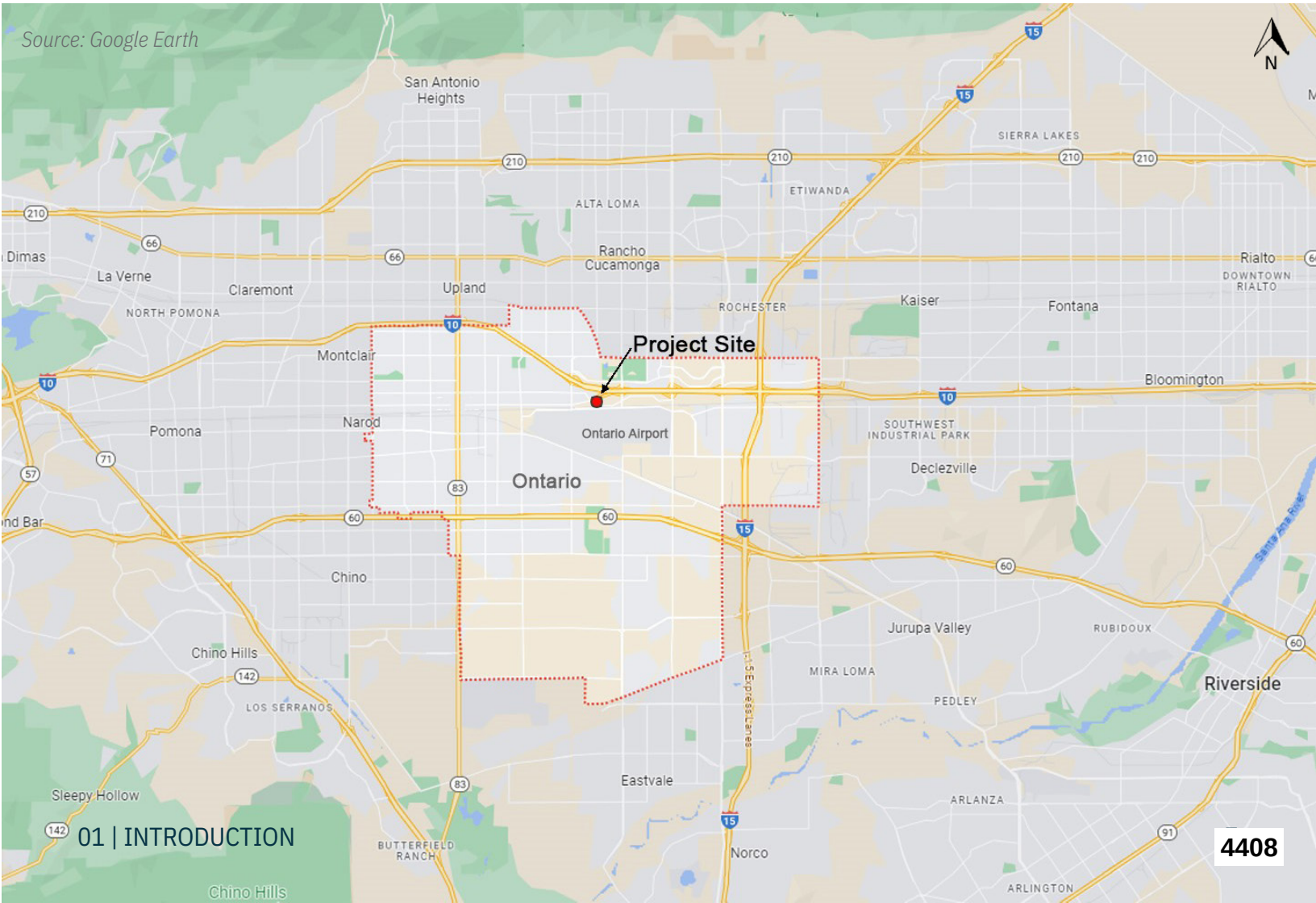
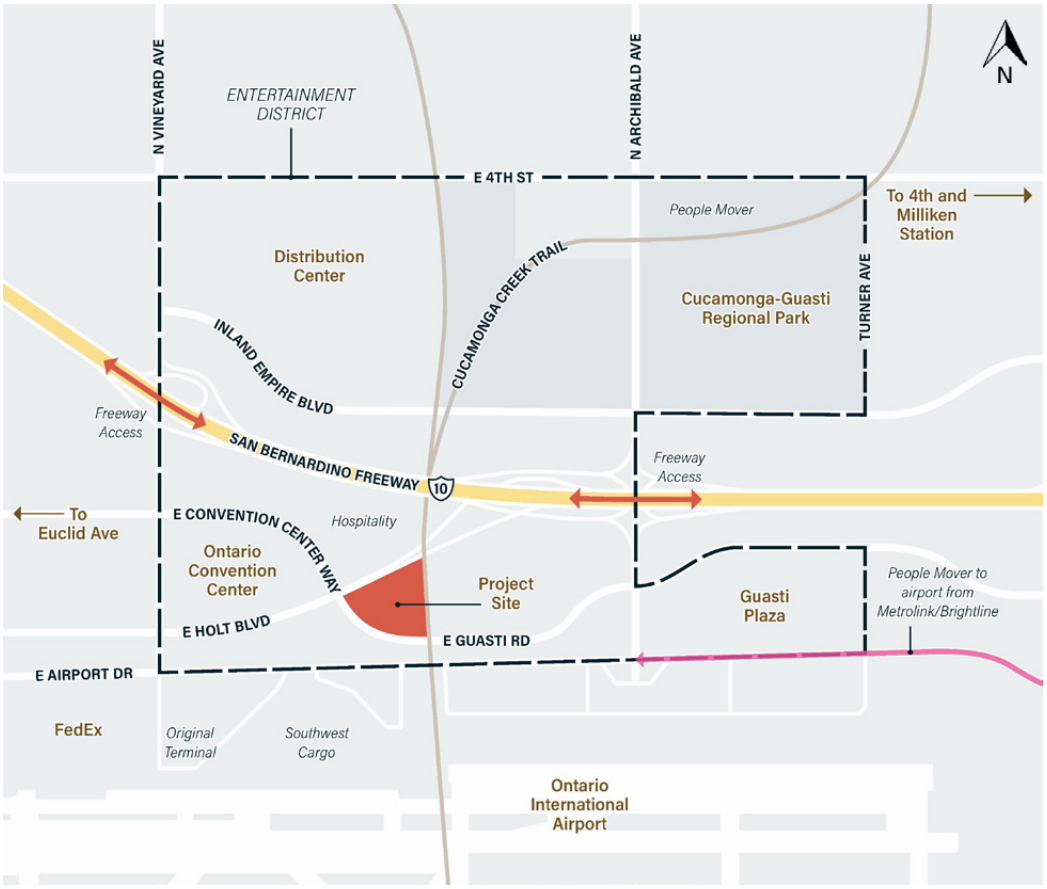


Figure 2: Project Location - Local Context



Source: City of Ontario

Figure 3: Vicinity Map



Source: Google Earth

1.2 The Vision

The vision of the project is as follows:

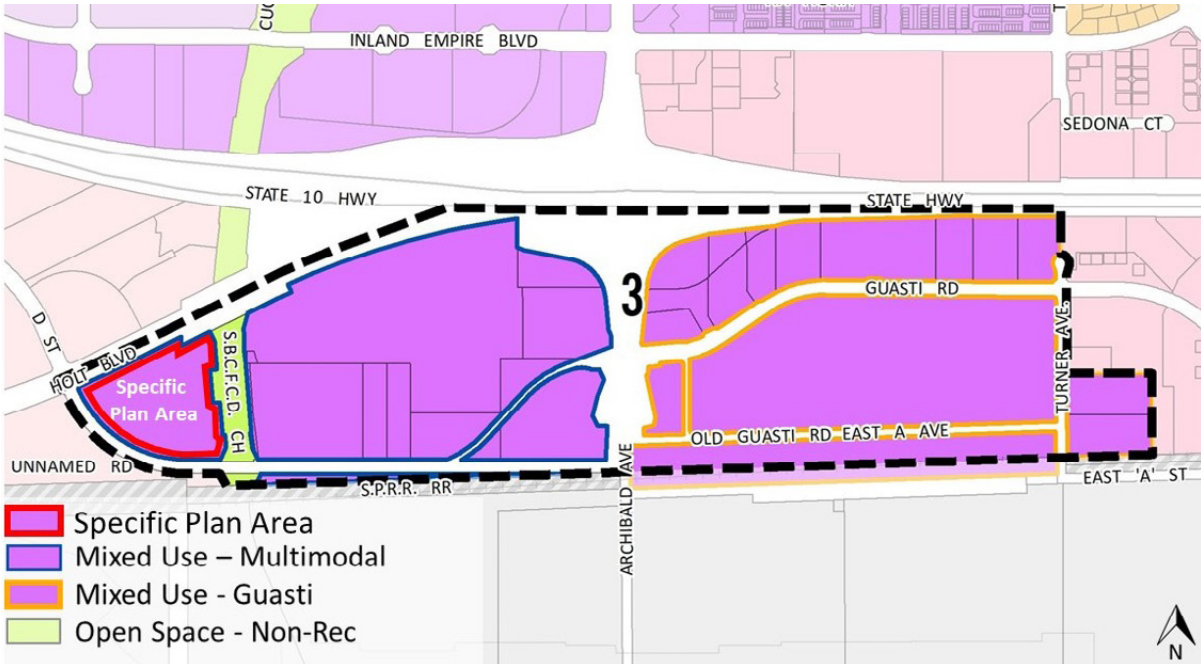
> ***"Establish a world-class hotel development that serves as a central hub, offering exceptional amenities, exclusive experiences, and a renowned brand. This hotel project will serve as a catalyst for the advancement of neighboring areas, fostering meaningful connections by promoting the revitalization of roadways and trails surrounding the Specific Plan Area."***

The Specific Plan Area is part of the Guasti District, according to the Community Design Element (CD-05 Guasti District Place Type) of the General Plan (also called The Ontario Plan). The district is envisioned to preserve and enhance the historic buildings as the focal point of a vibrant mixed-use area. The district will include intense office, commercial, and lodging uses along the I-10 corridor, and appropriately scaled residential, office, commercial, and lodging near the Guasti Village historic district core. The multimodal mixed-use area within the Guasti District is intended to leverage proximity to the future multimodal transportation center and link the Ontario Convention Center, Guasti compound , and Ontario International Airport through strong physical and visual design.

Further, the Guasti District is adjacent to the Entertainment District to the east, which is envisioned as a large-scale regional entertainment hub, leveraging attractions such as the Toyota Arena and Ontario Mills, and supported by a variety of retail and dining options alongside high-intensity office and residential development. This area will evolve into a walkable urban center through the addition of mixed-use infill development, a pedestrian-oriented road and trail network, key public realm improvements, and multiple transit options.

The critical infrastructure surrounding the Specific Plan Area provides connectivity between these districts and other parts of the City and includes easy access to I-10, major arterial streets, Ontario station, planned airport loop, existing BRT lines, Metrolink lines, and the airport. The development in the Specific Plan Area could spur future growth in the area and encourage further infrastructure investments and connectivity. Some ideas for infrastructure projects include the following:

Figure 4: Guasti District Extents - Community Design Element



Source: City of Ontario

- As a direct connection to the Convention Center and freeway, this high-traffic area could transform into a place to be enjoyed either by car or on foot, with interpretive/ kinetic art and grand gestures of innovative placemaking.

- Holt Boulevard could transform with the addition of tree-lined sidewalks, a landscaped median, outdoor seating areas, and kiosks. To enhance the area's appeal, digital beacons and adaptable signage within the median could create a distinct gateway effect.

- Guasti Road could be transformed into a multimodal roadway with sidewalks, and bike lanes. This road can also be used as an occasional pedestrian-only zone for pop-up events, markets, and street takeovers.

- A portion of the flood control channel could be re-imagined as a multimodal greenway that promotes outdoor activity. The greenway's potential is vast, with eight miles of northbound trail that end at the Rancho Cucamonga Creek trailhead.

Given the multitude of critical infrastructure components that could be implemented in the region, along with the visionary City planning efforts already in progress, this area is well-positioned for development projects that will optimize the region's potential for future growth.

1.3 Specific Plan Purpose

The Empire Groves Specific Plan establishes land use regulations, development standards, and design guidelines tailored to the unique goals of the hotel and retail development envisioned at this particular location. The Specific Plan defines the uses that are permitted and their locations, as well as design guidelines for buildings and related on-site improvements. The Specific Plan ensures that the area develops in a coordinated manner with adequate consideration of infrastructure, services, public safety, and project financing. The purpose of the Specific Plan is to:

- Provide a planning framework that responds to the physical and market-driven aspects of future development opportunities.

- Reclaim the site and transform it into a visually attractive living, working, and shopping environment.

- Determine the appropriate location, maximum intensity, and mix of uses through new development parameters.

- Encourage compatible land uses and interfaces with adjacent properties.

- Conform to state laws and local ordinances and policies for the preparation of specific plans.

1.4 Community Benefits

There are several community benefits to building a hotel complex with a retail component in the City of Ontario.

- Construction and operation of the hotel complex will create job opportunities for local residents, including positions in hospitality, retail, management, and maintenance.

- The inclusion of retail spaces can support local entrepreneurs and small businesses by providing them with platforms to showcase and sell their products or services.

- The development will generate tax revenue for the City, contributing to public funds for essential services like education, infrastructure, and public safety.

- A well-located and easily accessible hotel complex such as this will attract visitors and is a great candidate for hosting events and conferences, further benefiting local businesses and the economy.

The development of a hotel complex can also attract additional investment in the area, spurring further development and leading to improvements in local infrastructure, including road upgrades, sidewalks, and public transportation facilities, ultimately enhancing the overall cityscape as discussed in the Vision.

Public spaces within the complex can serve as gathering spots for residents and visitors, contributing to a sense of community. The presence of a well-maintained hotel complex can positively impact property values in the surrounding area.

1.5 California Environmental Quality Act Compliance

A CEQA analysis was conducted according to the City's Environmental Review Update Checklist Form for Projects with Previously Approved Environmental Documents to evaluate potential impacts resulting from the implementation of this Specific Plan. It was determined that the certified Final Environmental Impact Report (EIR) previously prepared to evaluate the General Plan update adequately covers this Specific Plan's potential impacts. Therefore, an Addendum to the Final EIR was determined to be the appropriate CEQA document to analyze this Specific Plan. The Addendum concluded that, since the General Plan update EIR was certified, there are no changes in the project, changes in circumstances under which the project is undertaken, and/or "new information of substantial importance" that would cause one or more significant effects.

1.6 Project Objectives

The Empire Groves Specific Plan reflects the City of Ontario's long-term objectives, which include the expansion of the City's economic base consistent with maintaining and enhancing the high quality of life for all residents. The following objectives, achieved through the implementation of the Specific Plan, have been identified as applicable to the project:

High-Quality Development: Implement high-quality development through the adoption of this Specific Plan that will provide a world-class hotel and local retail in this area.

Flexible Standards: Provide flexible standards that permit limited modifications between retail, restaurant, and hotel spaces that align with the ever-changing market conditions and allow for long-term financial stability.

Placemaking: Create a series of attractive, interconnected gathering spaces, including rooftop gardens, outdoor dining spaces, gardens, meadows, courtyards, pools, lounges, and other outdoor facilities to meet the recreational and social needs of visitors and guests.

Adequate Parking: Provide flexible parking standards to encourage parking facilities that sufficiently meet the parking demand for all uses at all times.

Reduce Per-Capita VMT: Design and locate new development adjacent to existing transportation infrastructure and services to reduce the need for vehicle trips and to minimize the distance of vehicle trips typically made by automobile.

1.7 Specific Plan Authority and Requirements

1.7.1 Authority

The California Government Code establishes the authority for a legislative body to adopt an ordinance or resolution requiring that a specific plan be prepared. As with general plans, the Planning Commission must hold a public hearing before the planning agency can recommend the adoption of a specific plan. The City Council may then adopt a specific plan by ordinance or resolution.

The Empire Groves Specific Plan is regulatory in nature and serves as zoning for the properties involved. Development plans, site plans, and tentative tract and parcel maps must be consistent with both the Empire Groves Specific Plan and the City of Ontario's General Plan, as amended.

The Empire Groves Specific Plan is prepared and established through the authority granted to the City of Ontario by the California Government Code, Title 7, Division 1, Chapter 3, Article 8, Sections 65450 through 65457 (Specific Plans). The City Code does not have any additional specific content requirements beyond that required by the Government Code.

1.7.2 Government Code Requirements

According to Section 65451, "a specific plan shall include a text and a diagram or diagrams which specify all of the following in detail:

- The distribution, location, and extent of the uses of land, including open space, within the area covered by the plan.
- The proposed distribution, location, and extent and intensity of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy, and other essential facilities proposed to be located within the area covered by the plan and needed to support the land uses described in the plan.
- Standards and criteria by which development will proceed, and standards for the conservation, development, and utilization of natural resources, where applicable.
- A program of implementation measures including regulations, public works projects, and financing measures necessary to carry out the project.
- The specific plan shall include a statement of the relationship of the specific plan to the general plan."

1.8 Relationship to Planning Documents

1.8.1 General Plan

In accordance with the California Government Code, the adoption and administration of specific plans are permitted as an implementation tool of a general plan. Specific plans must demonstrate consistency with the policies set forth in the general plan. An analysis of how the Empire Groves Specific Plan is consistent with the policies in the City's General Plan is contained in **Appendix A**. A General Plan Amendment will be requested as part of the project application to change the land use designation from Multimodal Mixed Use to a Specific Plan.

1.8.1.1 General Plan Policy Guidance

The following General Plan policies are useful in providing direction for the project and supporting the project objectives:

1.8.1.1.1 Land Use Element

Policy LU-1.1 Strategic Growth. We concentrate growth in strategic locations that help create place and identity, maximize available and planned infrastructure, foster the development of transit, and support the expansion of the active and multimodal transportation networks throughout the City.

Policy LU-1.6 Complete Community. We incorporate a variety of land uses and building types in our land use planning efforts that result in a complete community where residents at all stages of life, employers, workers, and visitors have a wide spectrum of choices of where they can live, work, shop and recreate within Ontario.

Policy LU-2.11 Context-Aware Transitions and Connections. We require new development projects and land-planning efforts to provide context-aware and appropriate transitions and connections between existing and planned neighborhoods, blocks, sites, and buildings.

1.8.1.1.2 Mobility Element

Policy M-2.1 Active Transportation. We maintain our Active Transportation Master Plan to create

a comprehensive system of on- and off-street bikeways and pedestrian facilities that are safe, comfortable, and accessible and connect residential areas, businesses, schools, parks, and other key destination points.

Policy M-2.3 Pedestrian Walkways. We require streets to include sidewalks and visible crosswalks at major intersections where necessary to promote safe and comfortable mobility between residential areas, businesses, schools, parks, recreation areas, and other key destination points.

Policy M-2.4 Network Opportunities. We use public rights-of-way and easements such as, utility easements, levees, drainage corridors, road rights-of-way, medians, and other potential options to maintain and expand our bicycle and pedestrian network. In urban, mixed-use, and transit-oriented Place Types, we encourage the use of underutilized public and private spaces to expand our public realm and improve pedestrian and bicycle connectivity.

1.8.1.1.3 Housing Element

Policy H-2.3 Ontario Airport Metro Center. We foster a vibrant, urban, intense, and highly amenitized community in the Ontario Airport Metro Center Area through a mix of residential, entertainment, retail, and office-oriented uses.

1.8.1.1.4 Community Economics Element

Policy CE-1.8 Regional Attraction. We encourage the development and programming of regional, cultural, and entertainment destinations in Ontario.

Policy CE-2.1 Development Projects. We require new development and redevelopment to create unique, high-quality places that add value to the community.

1.8.1.1.5 Community Design Element

Goal CD-1 A dynamic, progressive city containing distinct and complete places that foster a positive sense of identity and belonging among residents, visitors, and businesses.

Policy CD-1.1 City Identity. We take actions that are consistent with the City being a leading urban center in Southern California while recognizing, enhancing, and preserving the character of our existing viable neighborhoods.

Goal CD-2 A high level of design quality resulting in neighborhoods, commercial areas, public spaces, parks, and streetscapes that are attractive, safe, functional, human- scale, and distinct.

Policy CD-3.1 Unique Identity. We promote development that heightens the unique character and identity of each Place Type by requiring compatible land uses and land planning, site design, and building design that promotes an active public realm.

Policy CD-3.4 Context-Aware and Appropriate Design. We require appropriate building and site design that complements existing development, respects the intent and identity of the Place Type, and provides appropriate transitions and connections between adjacent uses to ensure compatibility of scale, maintain an appropriate level of privacy for each use, and minimize potential conflicts.

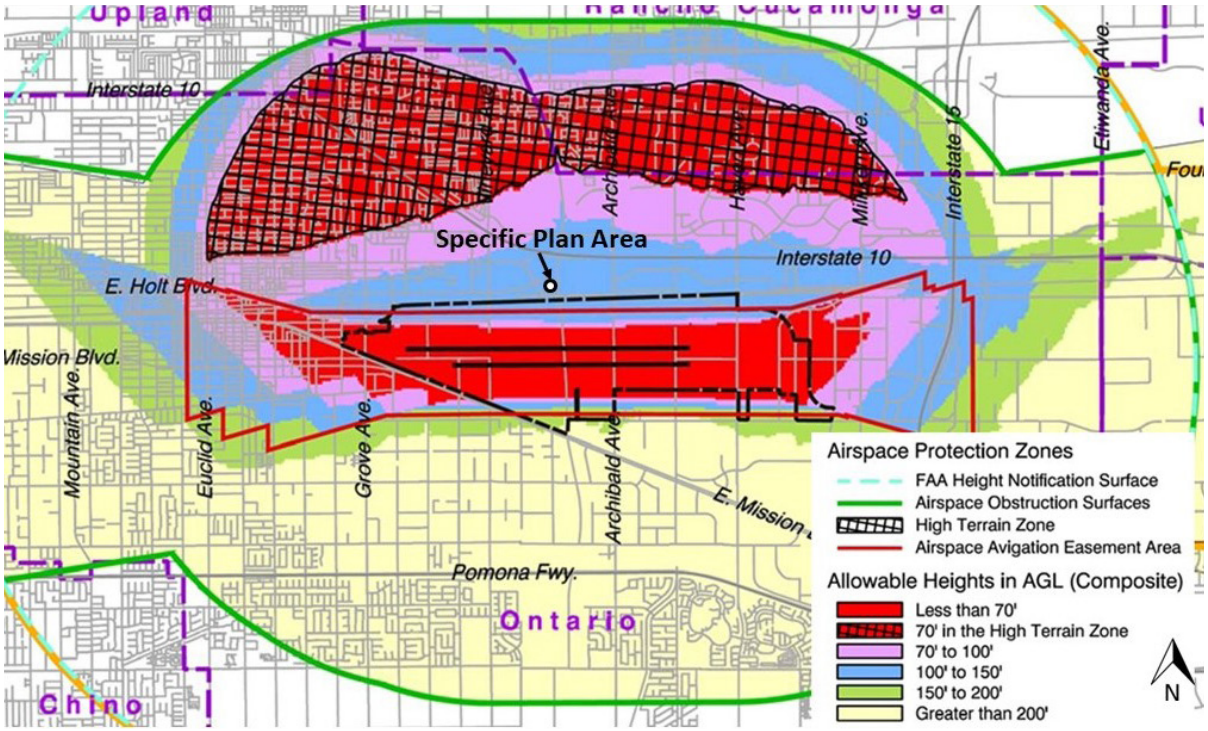
1.8.2 Zoning Code

Per the provisions of state law, the Specific Plan will establish the zoning and regulations for the site. In situations where the Specific Plan is silent, the City of Ontario's Zoning Code will prevail. The site is currently zoned as Specific Plan (SP) and will refer to this document for the development of the site.

1.8.3 Ontario Airport Land Use Compatibility Plan

The Ontario International Airport Land Use Compatibility Plan (ONT ALUCP) was adopted by the Ontario City Council on April 19, 2011. The basic function of the ONT ALUCP is to promote compatibility between ONT and the land uses that surround it. In accordance with state law, the ONT Airport Influence Area encompasses all lands that could be negatively impacted by ONT's present, or future aircraft operations or land uses that could negatively affect ONT's airport operations. The project area is located within the noise impact and airspace protection zones of the ONT ALUCP. All development proposals are required to be consistent with

Figure 5: Compatibility Policy Map - Airport Protection Zones



Source: Ontario International Airport Land Use Compatibility Plan, Policy Map 2-4

the Ontario International Airport Land Use Compatibility Plan policies and criteria.

In addition to safety and noise, the plan evaluates airspace protection compatibility to prevent creation of land use features that can be hazards to aircraft in flight and have the potential for causing an aircraft accident to occur. One such hazard is building height. To determine the allowable heights of future objects, the underlying ground elevation is compared with the elevation of the controlling portions of the Federal Aviation Regulations Part 77, Terminal Instrument Procedures, and One-Engine Inoperative surfaces. These are depicted as color bands in **Figure 5**. Each color band represents a range of distance, measured in vertical feet, between the ground and overlying surface.

The Specific Plan Area falls in an allowable height range of 100 to 150 feet. Based on the plan policies, the project proponent shall submit notification of the proposal to the Federal Aviation Administration, as required by the provisions of Federal Aviation Regulations Part 77, Subpart B, and by the California Public Utilities Code, Sections 21658 and 21659.

1.9 Specific Plan Organization

This Specific Plan is organized into the following six chapters.

Chapter 1 | Introduction

This chapter explains the role and function of specific plans. It articulates the vision and a synopsis of the community advantages that may accrue through the execution of this project. This chapter also delineates the Specific Plan's extent and authority, its adherence to the California Environmental Quality Act (CEQA), and its alignment with the City's General Plan and Zoning Ordinance, as well as the overarching guidance provided by General Plan policies. Moreover, this chapter establishes the groundwork for the subsequent chapters by elucidating the purpose and objectives of this Specific Plan.

Chapter 2| Existing Conditions

This chapter includes an analysis of the current conditions, encompassing the surrounding environment, land use, zoning, topography, geology, flooding, and noise levels.

Chapter 3| Development Plan

This chapter outlines the comprehensive land use framework, encompassing a summary of the project, and infrastructure plans, covering circulation, water supply, sewage, recycled water, and dry utilities.

Chapter 4| Development Standards

This chapter serves as the authoritative document that delineates the specific land use designations and regulatory guidelines for this Specific Plan. Upon the formal adoption of this Specific Plan, the provisions related to land use and development standards outlined in this chapter will assume the status of official zoning regulations for the designated area.

Chapter 5| Design Guidelines

This chapter outlines the fundamental guiding principles that underpin the architectural and urban design aspects of the Specific Plan. These guidelines are intended to provide a comprehensive framework for the aesthetic and functional aspects of the project, ensuring a harmonious and purposeful development that aligns with the overarching vision of the Specific Plan.

Chapter 6 | Implementation

This chapter outlines the guidelines for overseeing and administering the Specific Plan's development, encompassing procedures for amendments, the equivalency program, and the prioritization of implementation.

02

Existing Conditions

2.1 Existing Land Use

The Specific Plan Area is currently vacant land with no temporary or permanent structures. There is, however, some vegetation and trees on the site. **Figure 6** shows images of the existing site.

2.2 Existing General Plan Land Use

According to the City's General Plan Land Use Element, the Specific Plan Area has a Mixed Use–Multimodal land use (refer to **Figure 7**). The Specific Plan Area also falls in the Ontario Airport Metro Center Overlay (refer to **Figure 8**).

2.2.1 Multimodal Mixed-Use

The future multimodal transit station is under consideration within the Mixed-Use Area, which will link rail, regional, local, and airport transit. Intensive office, retail, and residential uses are envisioned to be integrated with the transit station. The transit center is envisioned as an iconic, convenient, and intuitively designed multimodal transportation center that will serve the City of Ontario and the region at large.

According to the General Plan full buildout summary, the total acreage under the Multimodal Mixed-Use Area (west of Archibald Avenue and south of I-10) is 72.56 acres, of which 10.43 acres fall in the Specific Plan Area. It is estimated that the entire Multimodal Mixed-Use area will absorb a total of 2,449,727 square feet of nonresidential development and will create 5,993 jobs. Of this, 553,124 square feet is allocated to lodging and the rest to retail and office development. The area will have an allowable density of 20.0 to 80.0 dwelling units per acre.

Figure 6: Existing Site Aerial and Context Photos

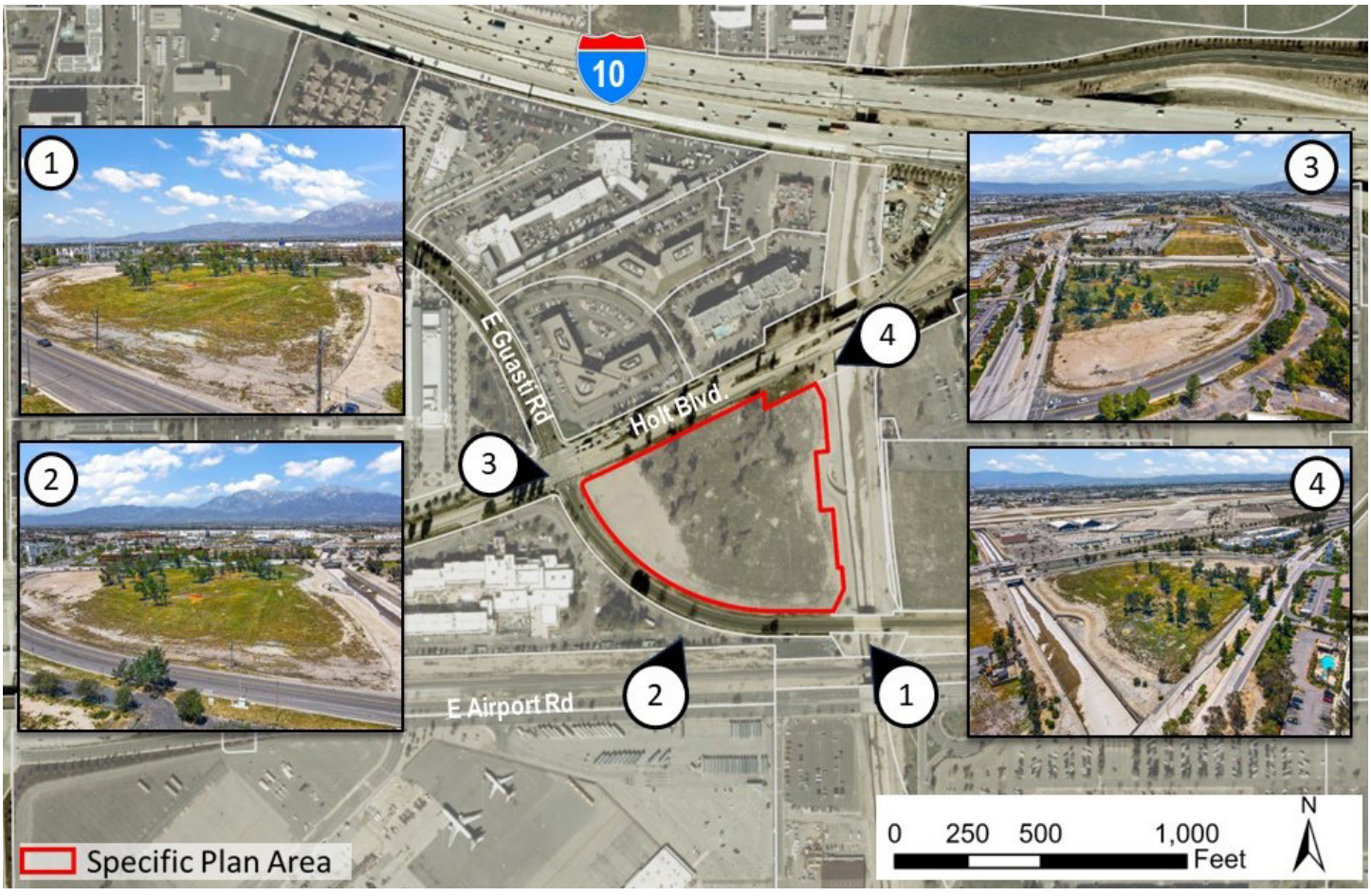
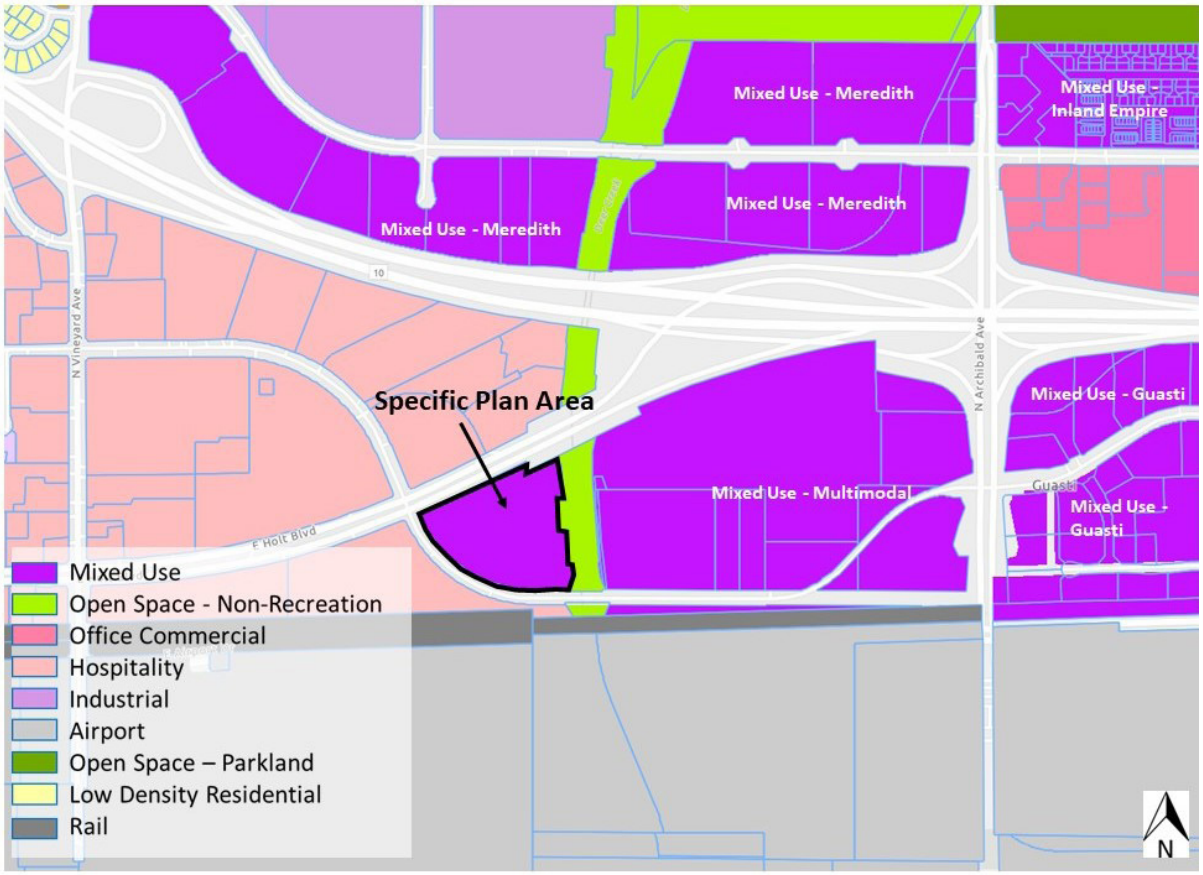
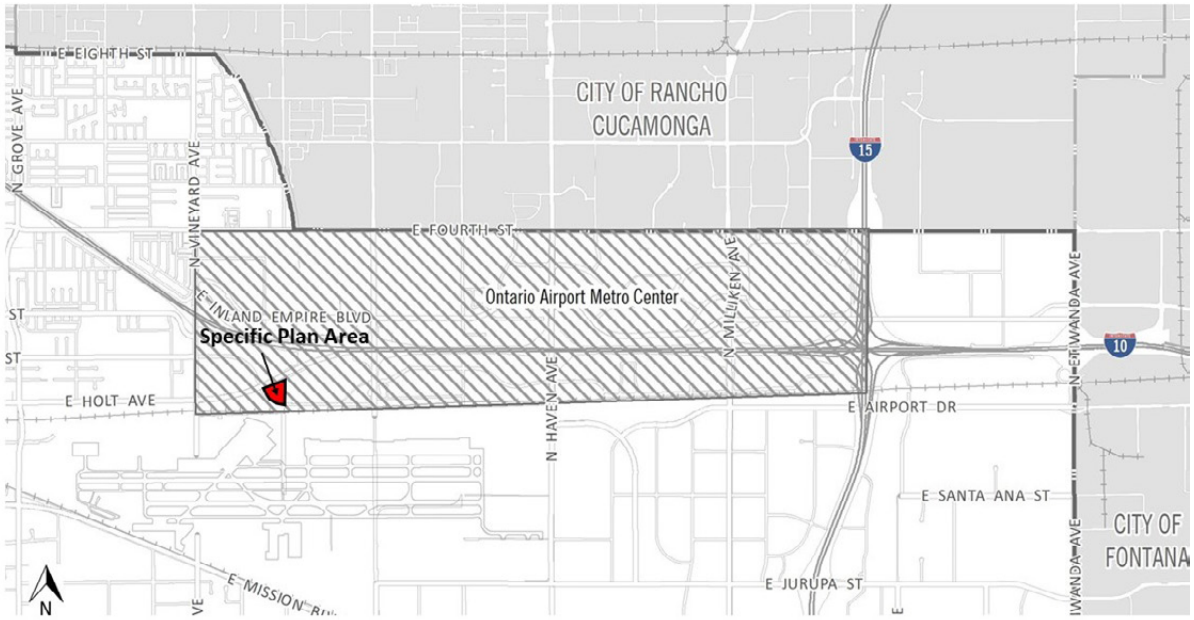


Figure 7: Existing General Plan Land Use



Source: City of Ontario

Figure 8: Existing Ontario Airport Metro Center Overlay



Source: City of Ontario

2.2.2 Ontario Airport Metro Center Overlay

The Ontario Airport Metro Center Overlay is envisioned as the most intensive area in the County with a vertical and horizontal mixture of regional-serving retail, office, restaurant, entertainment, cultural, and residential uses in low- to mid-rise buildings (i.e., 3-10 stories).

2.2.3 Surrounding Land Uses

The surrounding land uses include Hospitality (HOS) on the west with a floor area ratio (FAR) of 1:00; Mixed Use–Multimodal (MU-Multimodal) on the east of Specific Plan Area with a density of 20.0 to 80.0 dwelling units per acre and FAR of 1.0; Mixed Use - Meredith (MU-Meredith) in the north with a density of 14.0 to 125.0 dwelling units per acre and FAR of 3; and Airport (ARPT) in the south (refer to **Figure 7**).

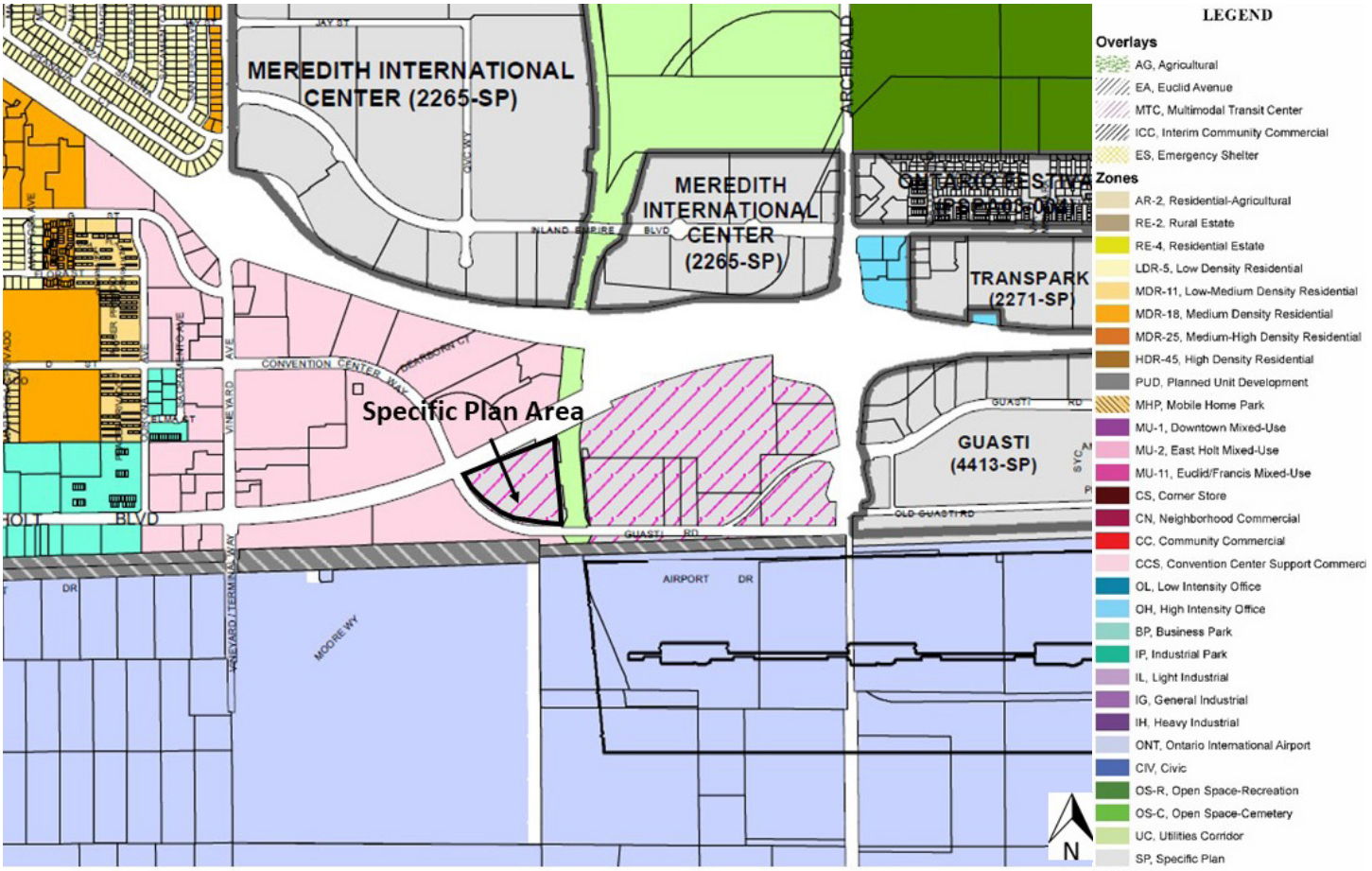
2.3 Existing Zoning

According to the City's Zoning Map, the existing zoning for the Specific Plan Area is a Specific Plan Zone with a Multimodal Transit Center overlay zone. Below are the descriptions of these zones.

2.3.1 SP (Special Plan) Zoning District

The SP zoning district is established to accommodate the adoption of specific plans pursuant to Exhibit LU-05 Overlay Areas (Additional Plans Map) of the Policy Plan component of The Ontario Plan. All land uses, activities, and facilities within the SP zoning district shall only be allowed pursuant to the applicable Specific Plan document.

Figure 9: Existing Zoning



Source: City of Ontario, The Ontario Plan 2050

2.3.2 MTC (Multimodal Transit Center) Overlay District

The Mhe MTC Overlay District was established to allow for the interim use of existing buildings located within the overlay district boundary (established pursuant to Paragraph 5.01.010.F.4 [MTC Overlay District] of the Development Code), while at the same time preserving the City's vision for development of a multimodal transit center and supporting mixed-use development. To this end, the below-listed land uses are permitted within existing buildings in the MTC Overlay District:

- General warehousing, storage, and distribution trades.
- Wholesale trades.
- Retail trades limited to 15 percent of the building's gross floor area or 8,000 square feet, whichever is less.
- Office administrative and business support services.
- Other uses approved by the Planning Director or his/her designee that are similar in nature to those uses listed above, provided all activities are wholly contained within the building and do not have the potential to negatively impact properties in the vicinity, or are inconsistent with the Vision and Policy Plan components of The Ontario Plan.

The Specific Plan Area is surrounded by parcels designated as a Specific Plan Zone with MTC overlay in the east and a CCS (Convention Center Support) Commercial Zone to the north, west, and south. Properties farther south are zoned RC (Railway Corridor) and Airport.

2.4 Topography

The Specific Plan Area is relatively flat with an approximately 1.25 percent slope from the north to the south (refer to **Figure 10**). The site elevation ranges from approximately 968 feet to 957 feet above mean sea level.

2.5 Geology and Soils

2.5.1 Fault Zones

The Specific Plan Area is not located within the boundaries of an earthquake fault zone for fault rupture hazards as defined by the Alquist-Priolo Earthquake Fault Zoning Act or identified in The Ontario Plan. The Alquist-Priolo Earthquake Fault Zoning Act is a California state law designed to reduce the risk of damage to building structures on or near active earthquake fault zones. The California Department of Conservation, in cooperation with local governments, is responsible for mapping the location of active earthquake fault zones. The act prohibits the construction of critical facilities (e.g., schools, and hospitals) and limits the construction of residential buildings within the mapped zones. The nearest earthquake fault zone is the Sierra Madre fault zone, which is more than 6 miles north of the Specific Plan Area. No other faults have been mapped in the City of Ontario, according to the City's General Plan.

2.5.2 Land Subsidence

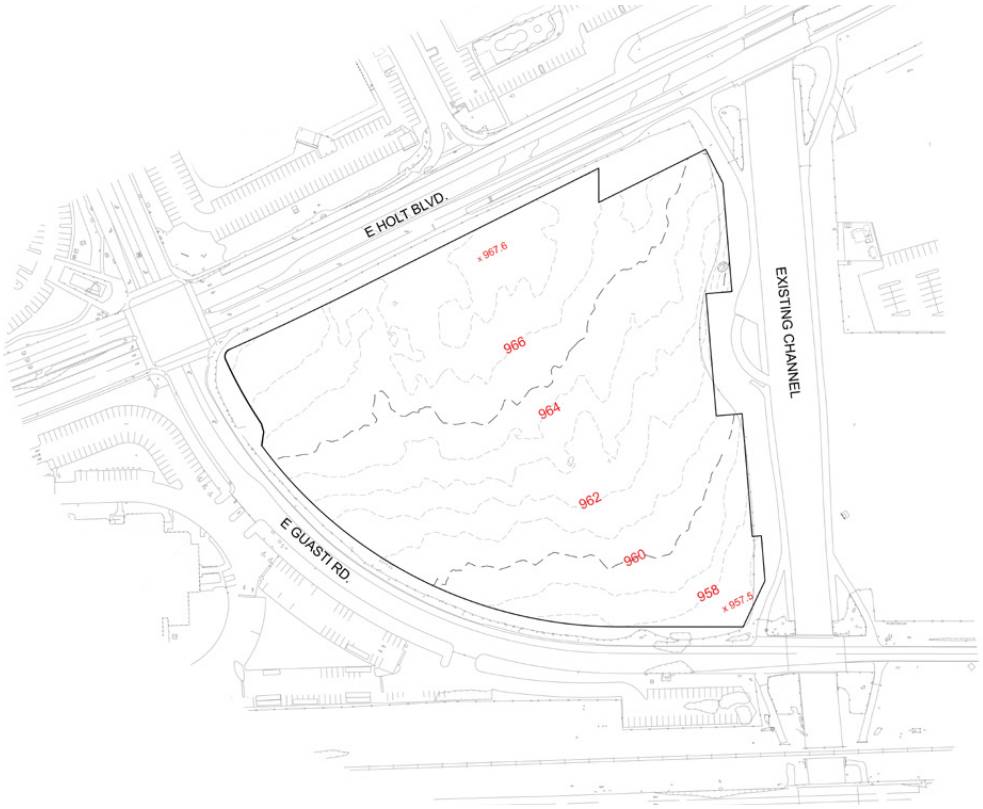
Land subsidence due to groundwater pumping is a gradual sinking or settling of the earth's surface caused by the excessive extraction of groundwater from underground aquifers. When groundwater is pumped from these aquifers at a rate faster than it can naturally be replenished, it creates a void or space underground.

Land subsidence due to groundwater pumping has been a long-standing issue in various parts of California, including Ontario. California's San Gabriel Valley, where Ontario is located, has experienced land subsidence as a result of excessive groundwater extraction for several decades. The entirety of the Specific Plan Area, similar to the majority of Ontario, is susceptible to land subsidence due to groundwater pumping.

2.5.3 Soils

The Specific Plan Area is underlain by Pleistocene/Holocene-aged Tujunga soils that typically develop from alluvial deposits, which are sediments carried and deposited by water,

Figure 10: Topography



often in areas near rivers, streams, or floodplains. The Tujunga soil series generally features a loamy texture, which means it has a balanced mixture of sand, silt, and clay. This texture is often suitable for agriculture and gardening. They usually have good to moderate drainage properties, making them suitable for a variety of land uses.

2.6 Flooding

2.6.1 FEMA Floodplain

The majority of the Specific Plan Area, as shown in **Figure 11**, is in a Federal Emergency Management Agency (FEMA) designated 500-year floodplain. The FEMA 500-year floodplain is a designated area that represents the land area at risk of flooding during a severe flood event with a 0.2 percent annual probability of occurrence, which is roughly equivalent to a 1-in-500 chance of occurring in any given year. This means that, on average, it has a low annual probability (0.2 percent) of occurring; such a flood might be expected to happen once every 500 years.

2.6.2 Dam Inundation

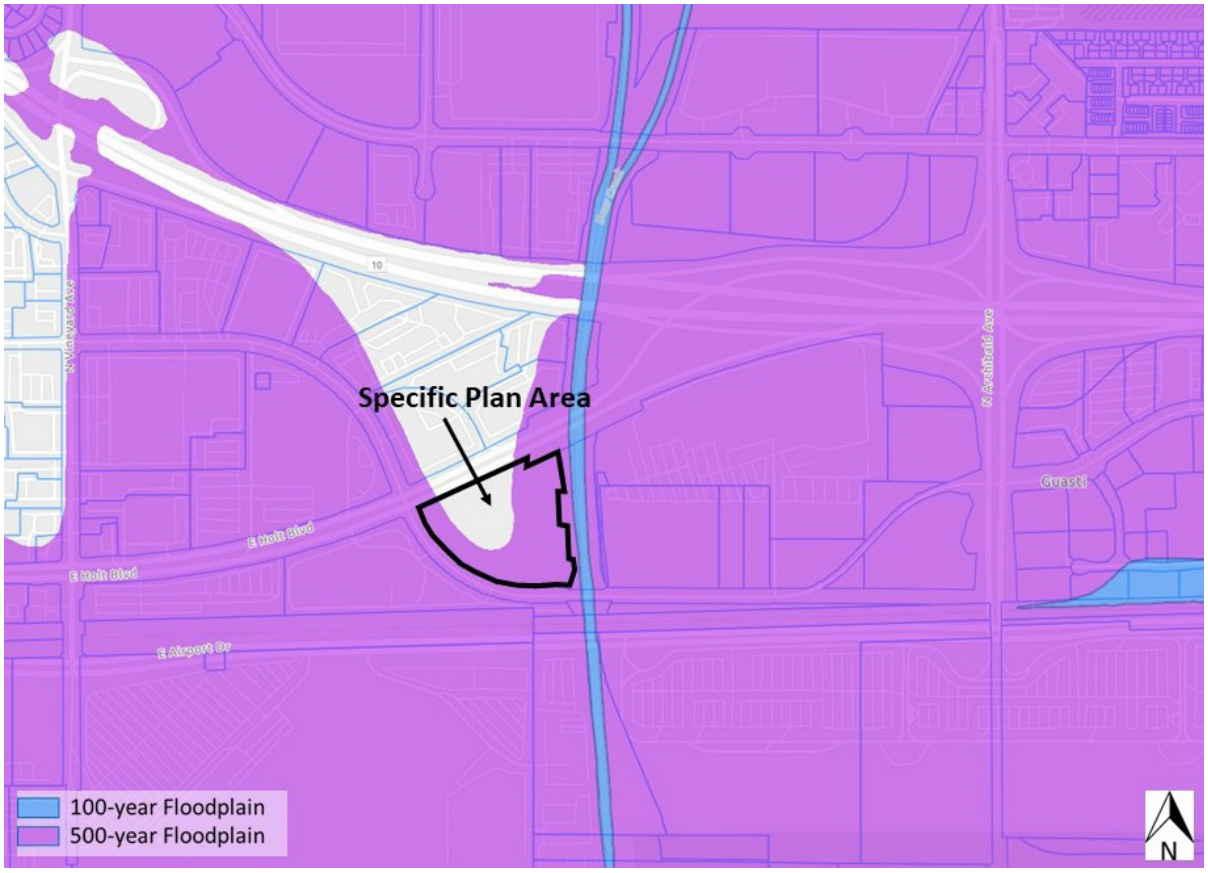
San Antonio Dam is an embankment flood control and debris dam on San Antonio Creek in San Bernardino County, California, about 5 miles (8.0 kilometers) north of Ontario. A potential breach of this dam could inundate most of the City, including the Specific Plan Area (refer to **Figure 12**). The reservoir behind the dam is usually dry but can fill up after large flooding events. The dam is owned by the US Army Corps of Engineers, Los Angeles District. The City periodically coordinates with the dam owners to monitor the condition of the dam.

2.6.3 Existing Storm Water and Drainage

The site is located immediately west of the Cucamonga Creek Channel. This fully improved facility provides regional flood control and storm conveyance to the surrounding area.

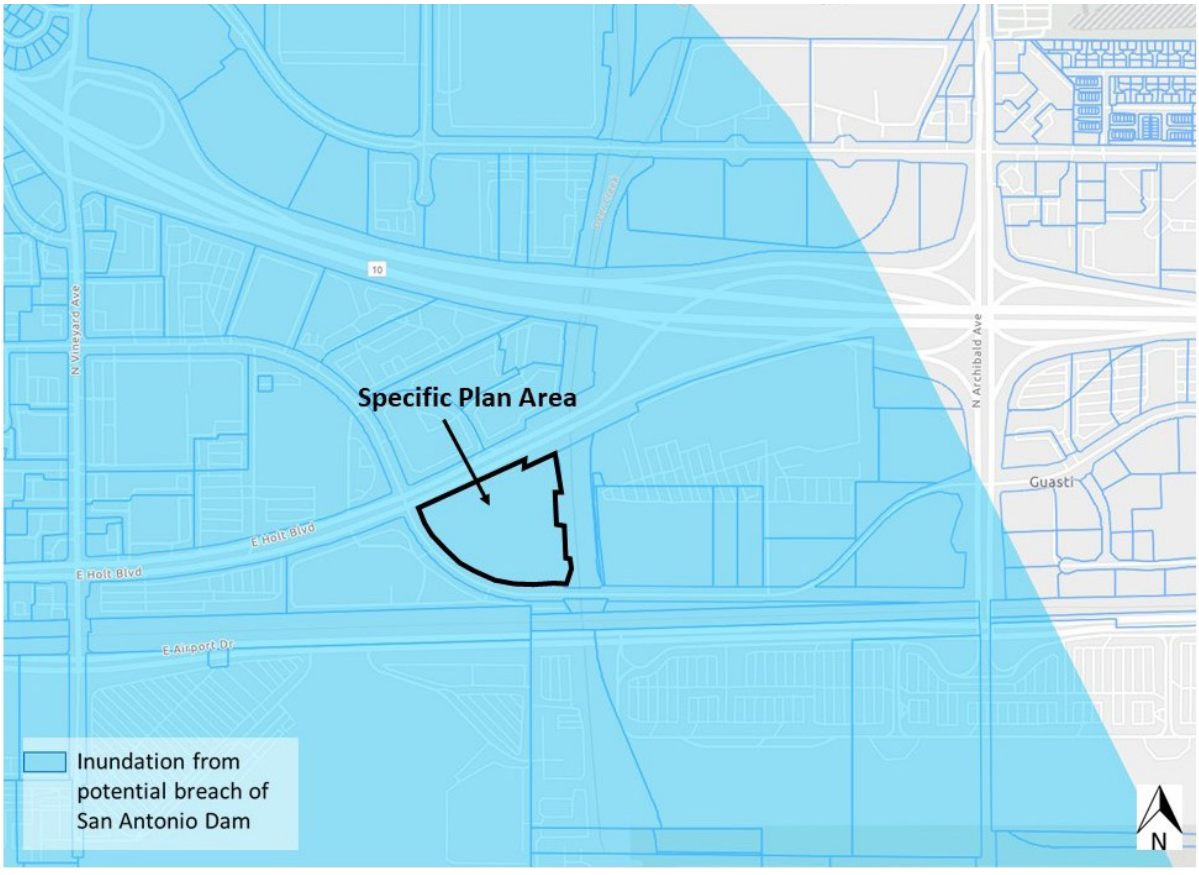
A 108" diameter storm drain extends westerly from the Cucamonga Creek Channel just south of Guasti Road. This facility provides storm conveyance for the adjacent property.

Figure 11: Floodplain



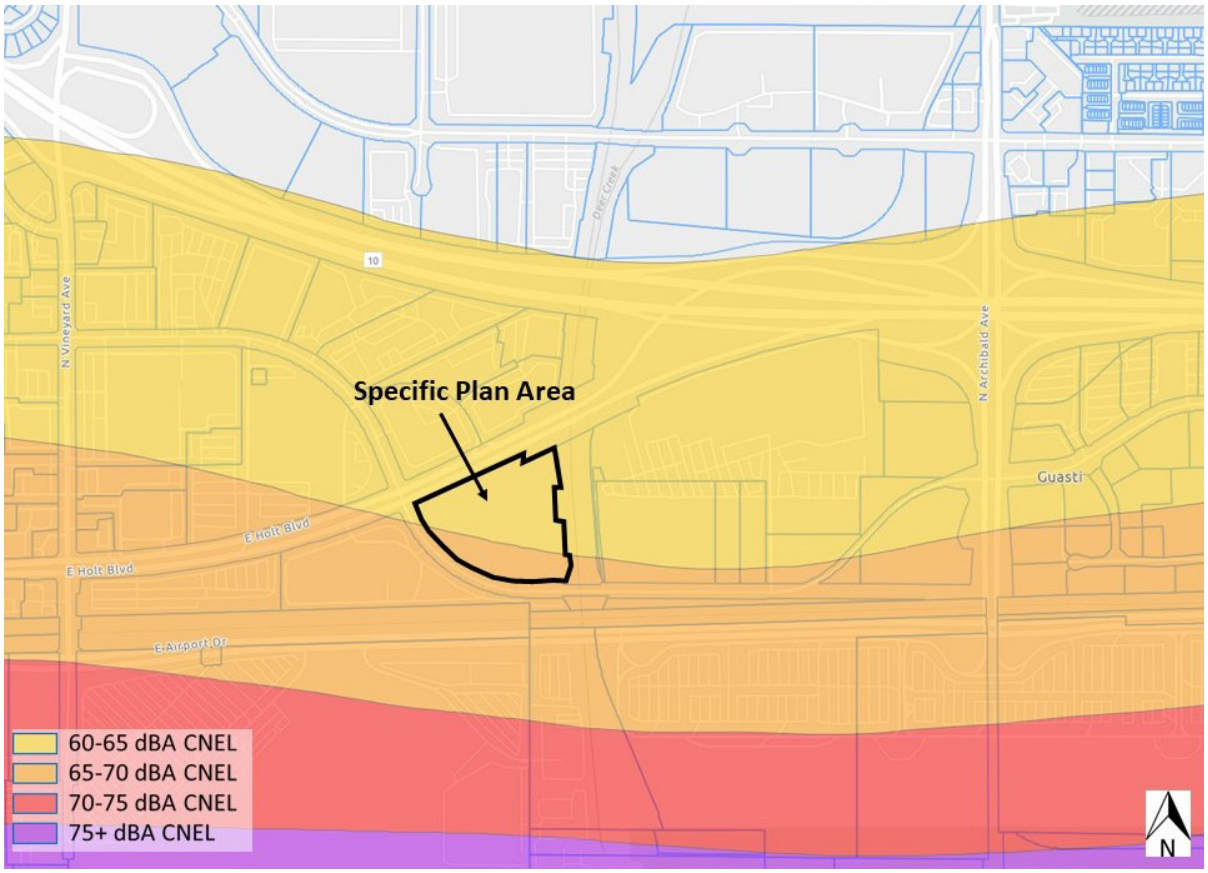
Source: City of Ontario, The Ontario Plan 2050, Safety Element

Figure 12: Dam Inundation



Source: City of Ontario, The Ontario Plan 2050, Safety Element

Figure 13: Noise Levels from Ontario Airport



Source: City of Ontario, The Ontario Plan 2050, Safety Element

The City of Ontario Master Plan of Drainage indicates a future 60" Storm Drain will be constructed within Holt Boulevard along the project frontage.

2.6.4 Existing NPDES Compliance

The project site is currently vacant / undeveloped and not subject to NPDES compliance.

2.7 Noise Levels

The City's Zoning Code provides exterior noise standards for the allowed equivalent noise levels for lodging facilities to be up to 70 dbA. The equivalent noise level is a measure used to represent a constant noise level over a specified period, usually one hour. It is a way of expressing a varying noise environment as a single, constant level for ease of comparison. The General Plan update also provides the existing noise level contours from traffic, railroad, and airport, all of which are within acceptable ranges. Noise from Ontario Airport is shown in **Figure 13**.

03

Development Plan

3.1 Introduction

The Development Plan provides for the development of vibrant communities that allow for a variety of lodging, commercial, entertainment, and open space opportunities that expand the Guasti area and strengthen the City of Ontario's economy. To achieve this, this Specific Plan encourages a variety of complementary land uses and community-accessible amenities and services to establish the Specific Plan Area as a key activity node.

This chapter provides the framework to guide the development in the Specific Plan Area and identifies the land uses, circulation, and infrastructure that implement the vision of the Empire Groves Specific Plan. It is important to note that even though the discussion and exhibits in this chapter are intended to guide development within the Specific Plan Area, the exhibits provided herein are conceptual in nature and may change, subject to the requirements in this Specific Plan.

3.2 Land Use Plan

The Specific Plan consists of one planning area (PA1)–Hospitality Mixed Use (refer to **Figure 14**).

3.2.1 Hospitality Mixed-Use

Hospitality Mixed-Use refers to a development that combines hotel uses, ancillary services and amenities with local-serving commercial uses within a single property. The allowable uses are listed in **Table 3**.

Integrating hotel uses with local-serving retail offers several benefits including, increased foot traffic, enhances guest experiences, and stronger community engagement. Additionally, it can lead to economic benefits and greater sustainability and efficiency. Hotels focus on providing hospitality and amenities for guests, while local-serving retail emphasizes practicality and convenience for both visitors and local residents. Combined, these uses create a dynamic, mutually beneficial environment that enhances the appeal and functionality of both. The area allotted to each use can be found in **Table 1.**

3.2.1.1 Hotel Uses (553,124 SF)

Hotel use is the primary component of Hospitality Mixed-Use and should occupy the majority of the FAR of the development. This includes guest rooms, office space

Figure 14: Land Use Map



Table 1: Buildout of Empire Groves Specific Plan

AREAS	TOTAL SQUARE FEET	NOTES
Hotel Use	553,124	See chapter 3.2.1.1 and Table 3 for details.
Local-Serving Retail	46,876	See chapter 3.2.1.2 and Table 3 for details.
Total Square Feet	600,000	
Note: The project FAR is based on gross project acreage of 10.43. Covered outdoor areas are calculated towards FAR but not towards parking calculation. Utility areas and parking are not calculated towards FAR and include all areas below grade, including parking, central plant, transformer yard, bicycle parking, main electrical/emergency/generator rooms, loading docks, trash rooms, vertical shafts, and stairs as well as spaces above grade including mechanical rooms, vertical shafts, and parking.		

Figure 15: Street Plan



Source: City of Ontario, The Ontario Plan 2050, Mobility Element

for hotel administration, (MAX SF-basic lodging 553,124SF) and may also include restaurant(minimal SF), bars, lounges, day spas, gyms, ballrooms, meeting rooms, and more (see **Table 3**).

At buildout, the total development for the project area will be approximately 600,000 square feet. **Table 1** provides the maximum buildout for each use.

3.2.1.2 Local-Serving Retail Uses (46,876 SF)

Local-serving retail, on the other hand, caters to the daily needs of the local community as well as the hotel use. These businesses may include coffee shops, restaurants, retail, print shops, laundry or tailoring services and similar types of uses (see Table 3). These types of uses can benefit shoppers visiting the surrounding area as well as nearby residents who can access these services by foot.

3.3 Circulation and Access

3.3.1 Vehicular Circulation in the Vicinity

The Circulation Plan complements the Land Use Plan by linking the hotel and retail uses to adjacent land uses and is designed to enhance connectivity and facilitate the movement of various transportation modes. Located south of the San Bernardino Freeway (I-10), the Specific Plan Area is generally bounded by Holt Boulevard to the north, East Guasti Road to the south and southwest, and hotel and light industrial uses to the west and east, respectively.

Holt Boulevard and East Guasti Road provide connections to I-10, which would be the primary regional access point to the Specific Plan Area. These thoroughfares also provide connectivity to Archibald Avenue and North Vineyard Avenue, located a block away to the east and west of the Specific Plan Area, respectively, and permit easy access to the airport to the south of the Specific Plan Area.

3.3.1.1 Potential Roadway Improvements in the Vicinity

While not a part of the Specific Plan, potential roadway improvements in the vicinity could enhance and stimulate future development of the area and improve connectivity between the Guasti District and Airport Metro/Entertainment District in the east as well as with the airport. **Figure 15**, Street Plan of the Mobility Element from The Ontario Plan 2050, reflects the city's vision for developing a comprehensive, multimodal transportation network. This network is designed to meet the mobility needs of residents, visitors, and businesses while maintaining a high quality of life.

Holt Boulevard: Holt Boulevard is a major connector and can be envisioned as a gateway to the Guasti District, as reflected in **Figure 17**. It currently has three lanes on the north side and two lanes on the south side of the roadway. A lane drops from each side as one travels east past the Holt Boulevard and Guasti Road intersection. The roadway has wide medians. It may be improved to make it visually appealing by adding attractive landscaping and shaded trees within the median and on the edges of the roadway. The existing sidewalks could be widened and enhanced, and gaps could be filled with new sidewalks for easier and continuous pedestrian access. Holt Boulevard along the project frontage is an on-ramp entrance for Interstate 10. Required roadway improvements associated with this development will need to be coordinated with the California Department of Transportation (Caltrans). Proposed final roadway design will be subject to City review and approval.

East Guasti Road: East Guasti Road provides ample right-of-way for improvements, as reflected in **Figure 16.** Proposed improvements from Holt Avenue to the east side of the bridge over the Cucamonga Creek include a four-lane roadway, a landscaped median, and a new sidewalk on the northeast side. Final roadway design and limits will be subject to the City's review and approval. There is an existing sidewalk on the southwest side that

covers roughly half of the total frontage, and the entire southwest side of the roadway is existing, while the northeast side is proposed. Additional roadway improvements could include a bike lane and sidewalk with shaded trees, complementing the future development of the area and connecting the Guasti District with the Airport Metro/Entertainment District.

Airport Drive: The Guasti District has many hotels and lodging facilities. A major part of the clientele comes from the airport, south of the Specific Plan Area. The district acts as the gateway to the City from the airport. Hence, investing in Airport Drive improvements and establishing better connectivity with the area north of the airport will both enhance the travel experience for visitors and help with future investments in the area. Airport Drive currently has three lanes in each direction with a median and a sidewalk on the south side of the roadway. The north side is bordered by railroad

Figure 16: Street Section: East Guasti Road

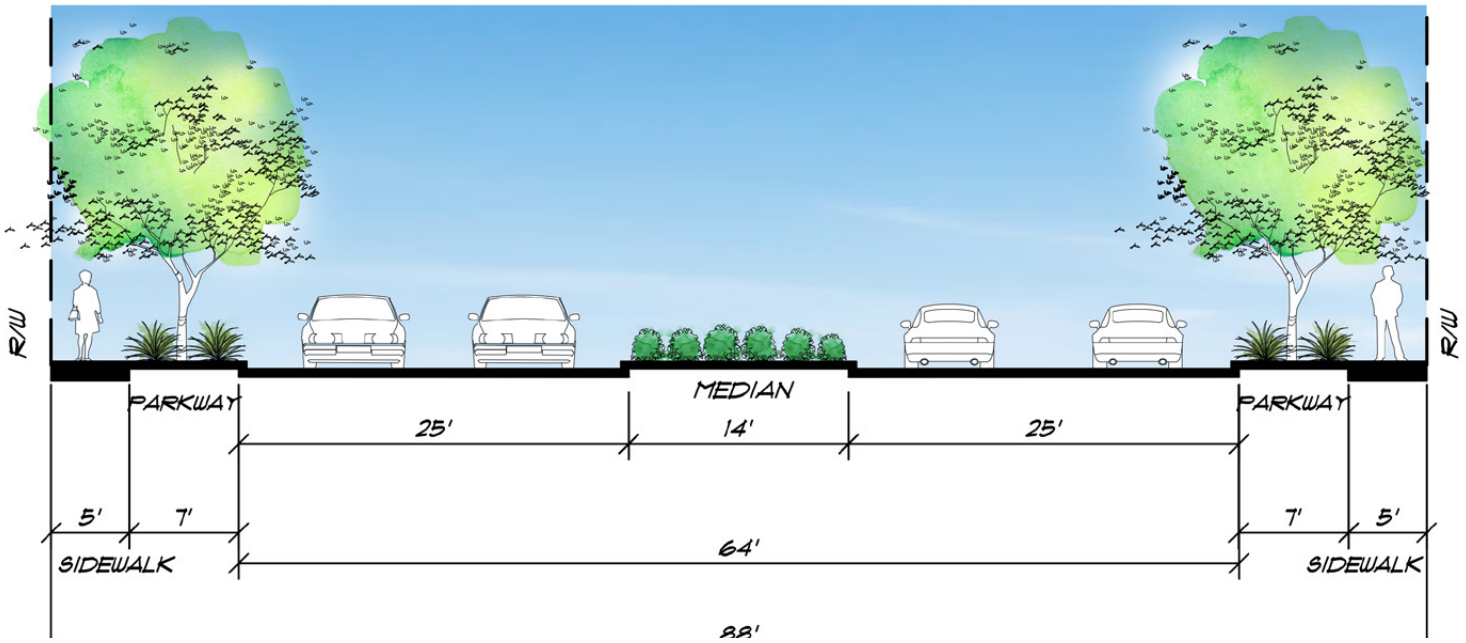
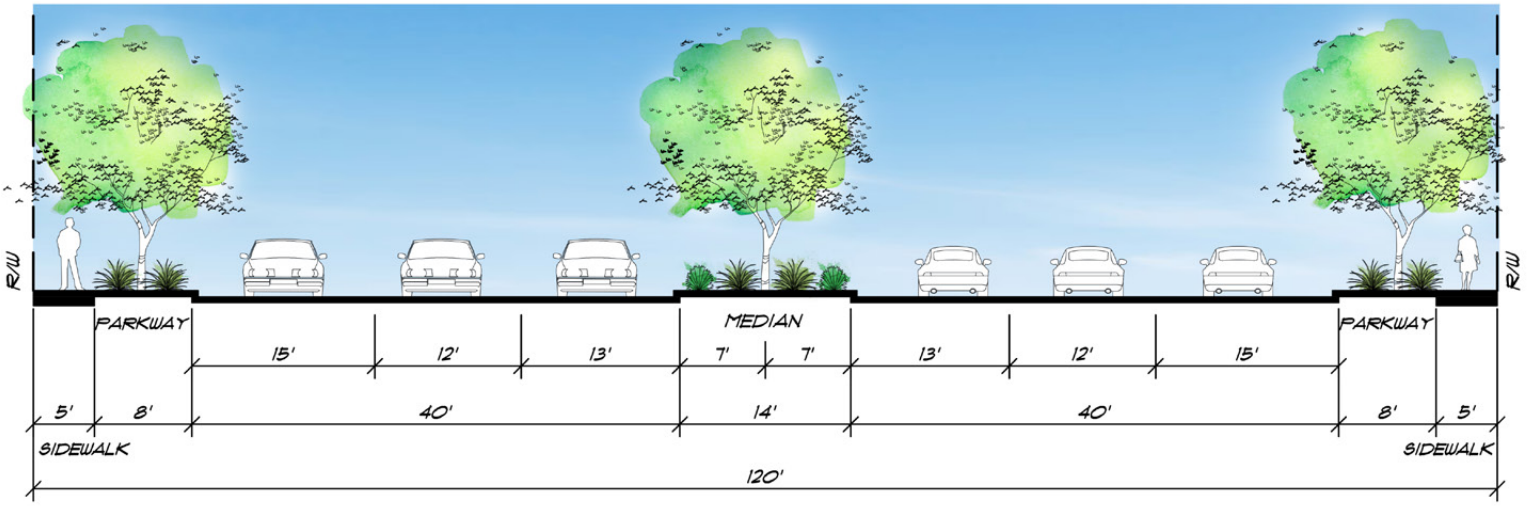


Figure 17: Street Section: Holt Boulevard and Bridge



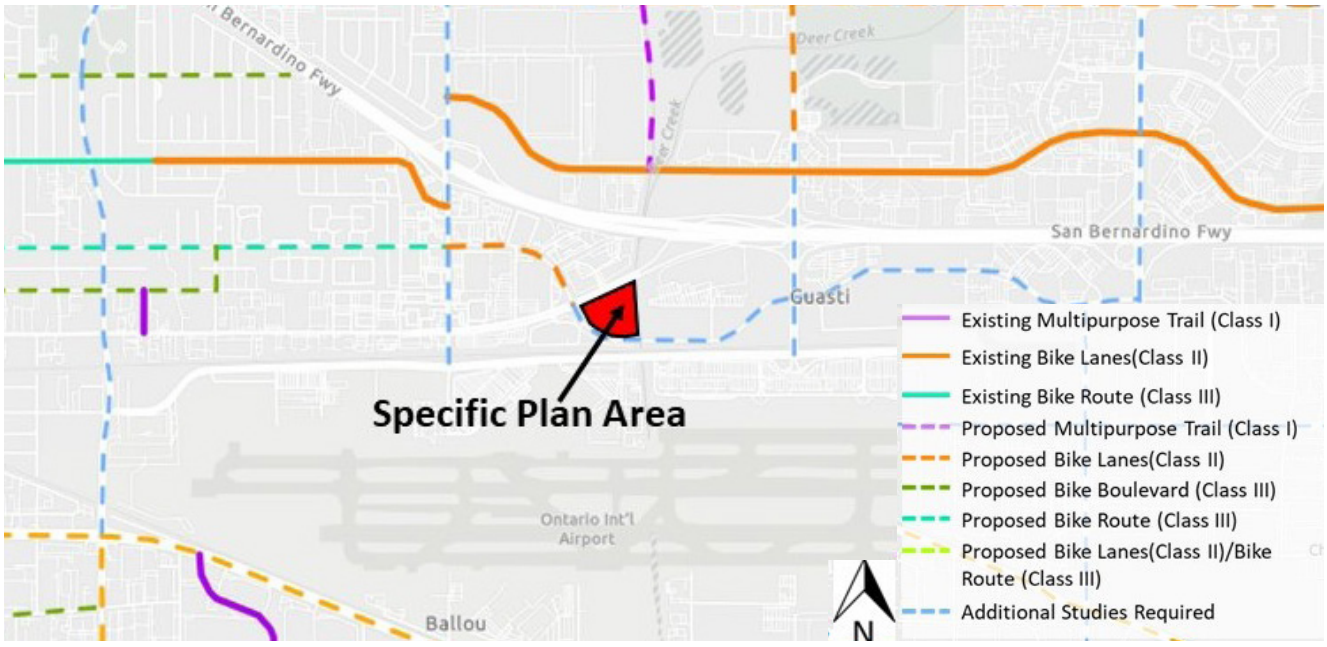
tracks. Enhancements could include adding landscaping to the median and sidewalks and filling any gaps in the sidewalks. Adding landscaping as a buffer between the railroad tracks and the roadway will add to the visual appeal of the roadway. In addition, pedestrian bridges could be added to connect the airport to the Guasti District.

3.3.2 Non-motorized Circulation in the Vicinity

The City is in the process of drafting its Active Transportation Master Plan. However, the City's General Plan Mobility Element provides insights into the current and proposed bike facilities in the City, as shown in **Figure 18.** There are several existing bike facilities north of the Specific Plan Area. These include bike lanes along the Ontario Mills Parkway and Del Norte Avenue. There are several proposed facilities in the vicinity of the Specific Plan Area, including along Guasti Road, Archibald Avenue, and Vineyard Avenue. A proposed multipurpose trail is contemplated along Cucamonga Creek that will eventually connect to the regional trail system. However, the trail currently terminates at the Ontario Mills Parkway. If extended to Guasti Road, this trail can become an important non-motorized link between the Guasti District and the rest of the City.

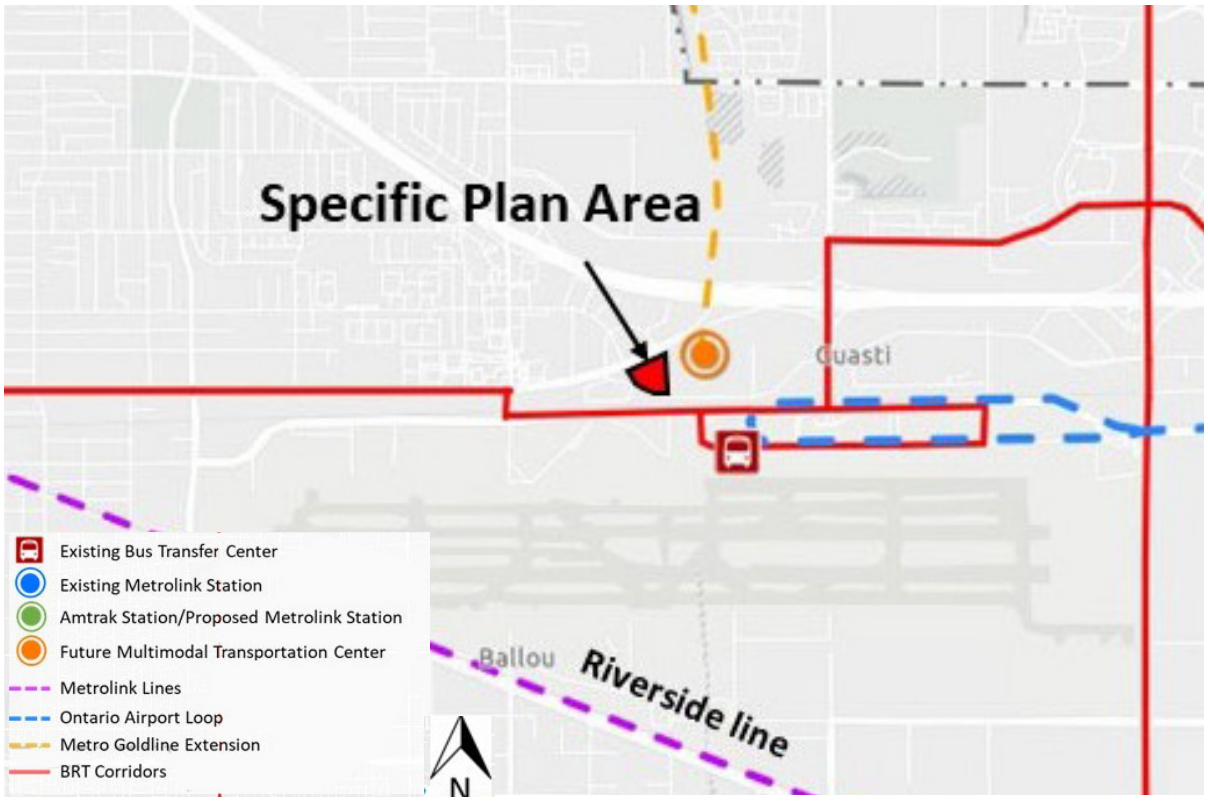
The pedestrian circulation around the Specific Plan Area is provided by sidewalks that currently have gaps at certain locations. The development of the Specific Plan Area will include sidewalks around the site and development of a plaza at the intersection of Holt Boulevard and Guasti Road. However, to enhance pedestrian connectivity, it is essential to envision the roadways in the vicinity with wider, shaded sidewalks, as described above in *Potential Roadway Improvements in the Vicinity* and reflected in **Figures 16 and 17**.

Figure 18: Multipurpose Trails and Bikeways



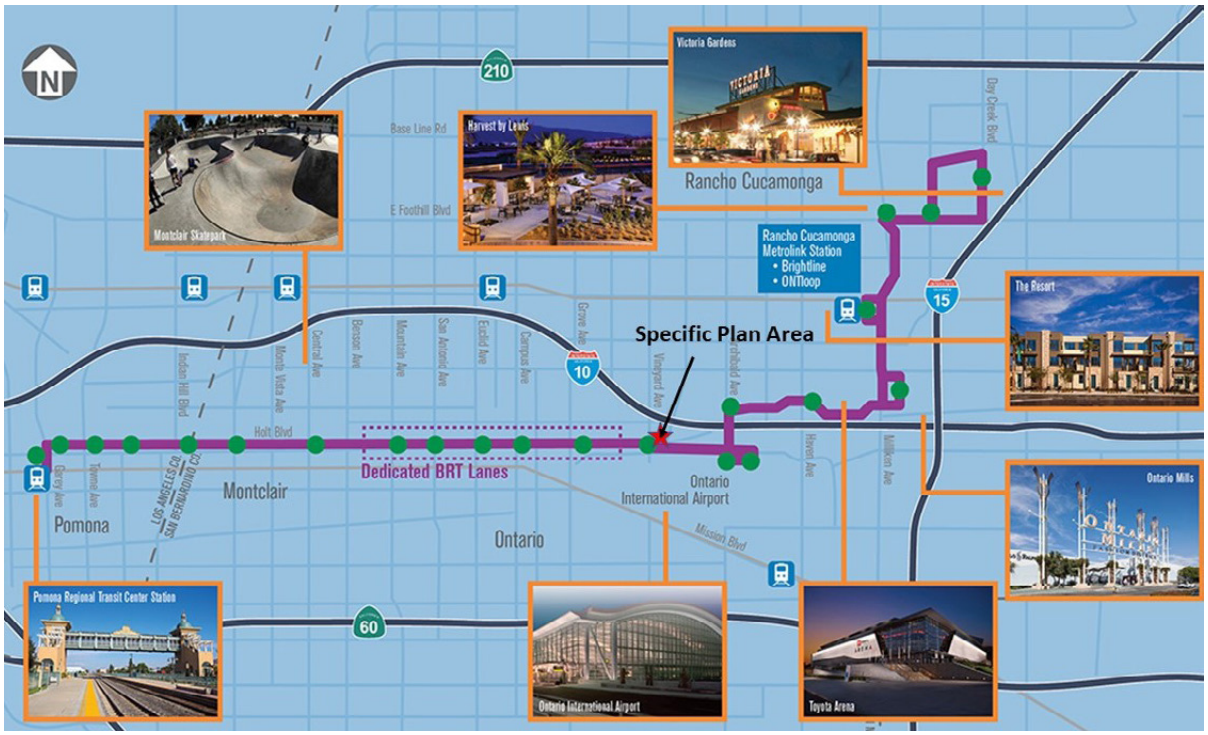
Source: City of Ontario, The Ontario Plan 2050, Mobility Element

Figure 19: Transit Access



Source: City of Ontario, The Ontario Plan 2050, Mobility Element

Figure 20: BRT Route



Source: Guida Geospatial Solutions; San Bernardino County Transportation Authority (SBCTA), West Valley Connector Project, Phase 1.

3.3.3 Transit Access

The Specific Plan Area enjoys ample access to a variety of transit facilities (see **Figure 19**).

Metrolink and Amtrak Stations: Two Metrolink lines serve the Specific Plan Area. South of the site is the Riverside Line, which provides east–west service between downtown Los Angeles and Riverside. North of the site is the San Bernardino Line, which provides east–west commuter rail service between downtown Los Angeles and San Bernardino.

The East Ontario Metrolink Station provides access to the Riverside Line and is the nearest Metrolink station to the Specific Plan Area, approximately 11 minutes by car. This station is on East Francis Street and can be reached via South Haven Avenue. The Ontario Station, an Amtrak station, is approximately 8 minutes away by car from the Specific Plan Area. It is also a proposed Metrolink station for the Riverside Line. This station is on East Emporia Street and can be conveniently reached by taking Euclid Avenue via East Transit Street.

Several stations are located north of the Specific Plan Area along the San Bernardino Line. The closest ones are the Rancho Cucamonga and Upland Stations.

BRT Routes: The West Valley Connector Bus Rapid Transit (BRT), which is under construction, is managed by the San Bernardino County Transit Authority. Phase I of the project is 19 miles and will upgrade a portion of existing Route 61, which runs along Holt Boulevard, adding approximately 3.5 miles as center-running, dedicated bus-only lanes (see **Figure 20**). There will be 21 stations in Phase I that will provide an improved transit connection to ONT and help build transit connectivity by linking ONT, two Metrolink lines (San Bernardino and Riverside), and multiple major activity centers along the route, including Ontario Mills and Victoria Gardens. Headways will be 10 minutes in the peak commute period and 15 minutes off-peak, providing a high level of service to the community.

It will traverse Airport Drive with its nearest station to the Specific Plan Area situated at the junction of Vineyard Avenue and Holt Boulevard. Although there are stations along Airport Drive, they are presently inaccessible due to a railroad between the Specific Plan Area and Airport Drive. A potential pedestrian bridge linking Guasti Road to Airport Drive would establish a direct and convenient route from Airport Drive to the Specific Plan Area.

Ontario Airport Loop: The Ontario Airport Loop project is a proposed tunnel to ONT that will feature a bi-directional system where passengers traveling to and from ONT will be transported in autonomous, zero-emission vehicles on an "on-demand" basis between the Cucamonga Metrolink Station and airport terminals. The project is considering the possibility of utilizing an elevated loop system to traverse Airport Drive, with potential stops along this route.

Metro Gold Line Extension: The current Metro Gold Line extension will reach San Bernardino County with new stations in the cities of Glendora, San Dimas, La Verne, Pomona, Claremont, and Montclair. The current terminus planned for Montclair, however, is just 6 miles short of ONT—a critical airport and economic driver for San Bernardino, Riverside, and parts of Los Angeles Counties. Metro Rail from Glendora to Pomona is currently under construction and is expected to be completed by 2025. Extension of the rail service further east from Pomona to Montclair is expected to be completed by 2028.

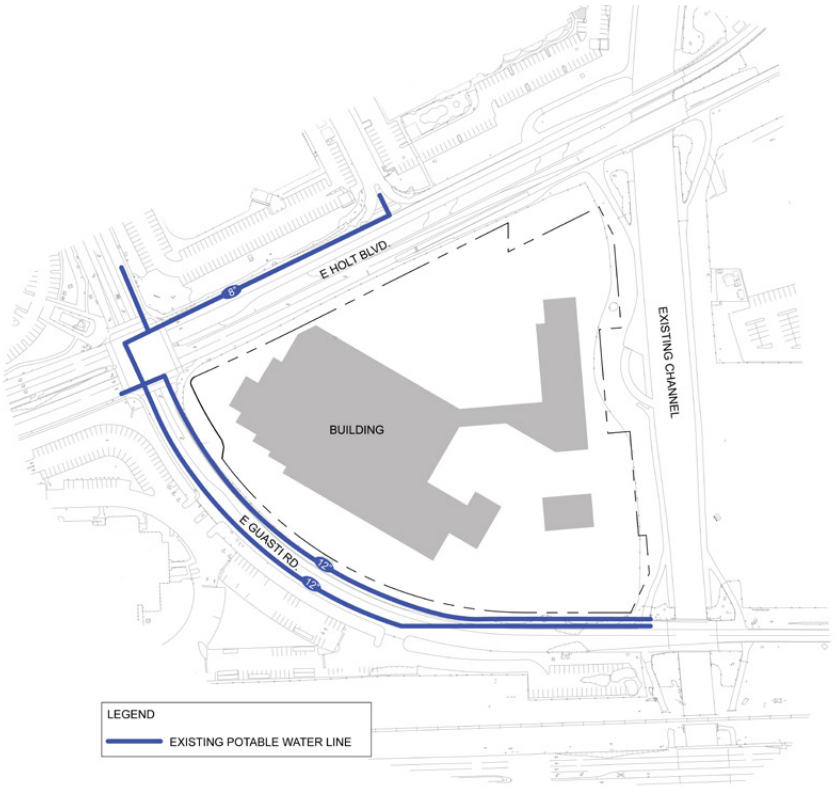
3.4 Infrastructure Plan

3.4.1 Potable Water

The City's ultimate potable water system will consist of five pressure zones. The Specific Plan Area is located within the 1212 Pressure Zone.

Water service to the Specific Plan Area will be provided by the City. Currently, there are water mains in the vicinity of the Specific Plan Area. There is an existing 12-inch water main in Guasti Road along the project frontage, and an existing 8-inch water main in Holt Boulevard along the project frontage, both available for connection. The future potable water system to serve the City is shown in **Figure 21**. Sizing and alignment of the potable water lines will be consistent with the City of Ontario Potable Water System Master Plan and/or a City-approved hydraulic analysis.

Figure 21: Specific Plan Area Potable Water Plan



3.4.2 Sewer

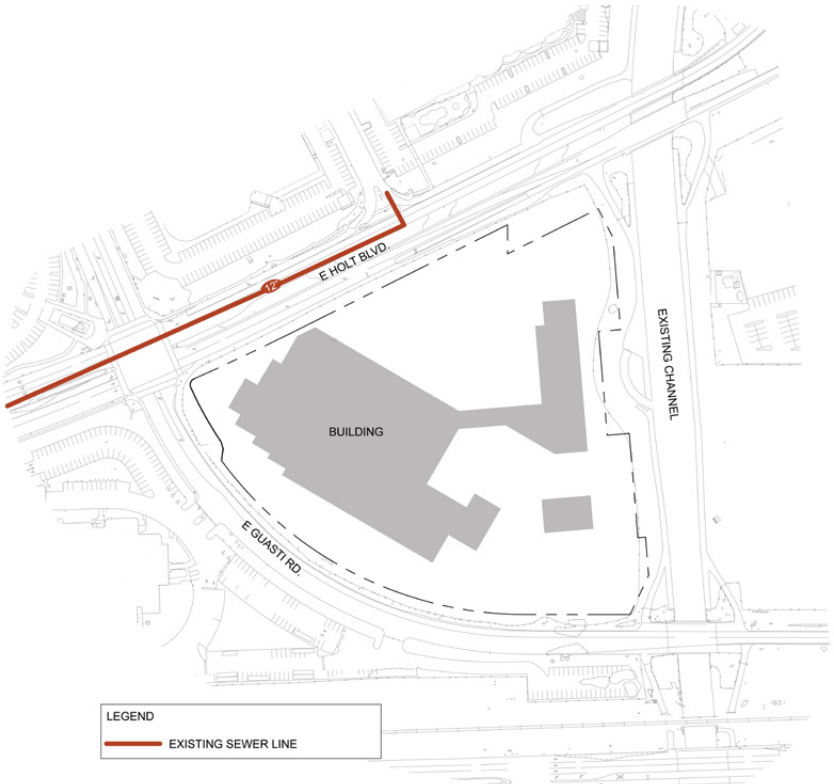
The project will connect to existing sewer mains. Sewer mains are maintained by the City of Ontario and wastewater is treated at the Inland Empire Utilities Agency (IEUA) Treatment Plant. Several regional trunk sewers collect sewage generated in the city and transport it to IEUA's Regional Plant No. 1 and Regional Plant No. 5 for treatment. The City of Ontario is divided into eight major sewersheds. The Specific Plan Area is in Sewershed 3. Sewage is collected by the City's system and generally flows from north to south towards the IEUA Upland Interceptor. The City's Sewer Master Plan is currently being updated.

All required sewer infrastructure will be consistent with the approved master plan. There is an existing sewer main located in Holt Boulevard available for connection. The sizing and alignment of existing and proposed sewer lines are shown in **Figure 22.** Sizing and alignment of the sewer lines will be consistent with the City of Ontario Sewer Master Plan and/or a City-approved hydraulic analysis.

3.4.3 Recycled Water Plan

Currently, there are recycled water mains in the vicinity of the Specific Plan Area, with a point of connection located at the intersection of Guasti Road and Holt Boulevard. Recycled water is provided to the City by the IEUA from its four wastewater reclamation plants. The entire

Figure 22: Specific Plan Area Sewer Plan



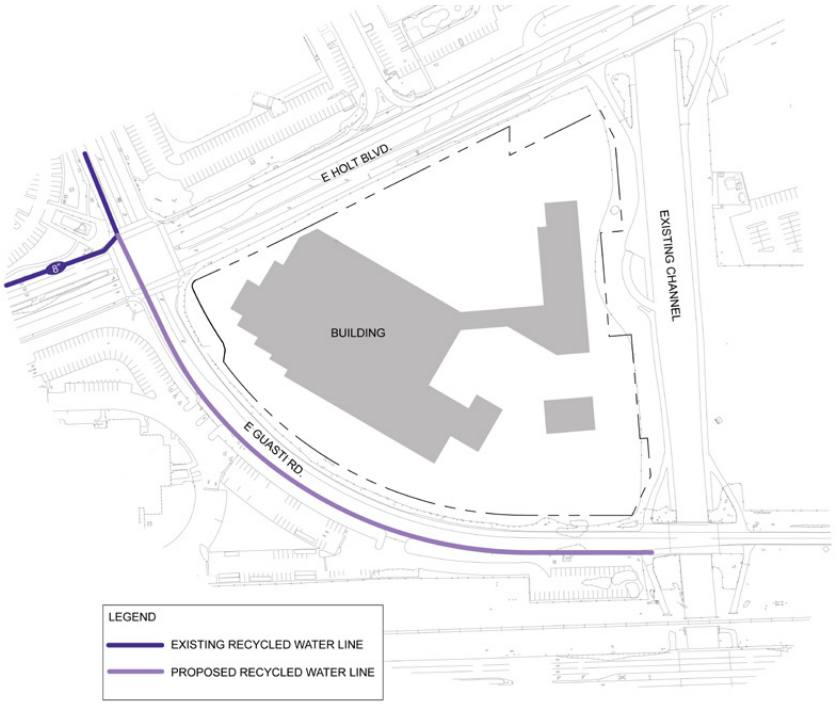
Specific Plan Area is within the City's master-planned 1299 Pressure Zone.

Recycled water infrastructure improvements for the Specific Plan Area require the planning, design, and construction of a 1299 Pressure Zone Recycled Water Master Plan main, which includes installing an 8-inch recycled water main in Guasti Road that connects to the 8-inch recycled water main in Convention Center Way, north of Holt Boulevard, and extends south in Guasti Road, ending east of the Cucamonga Creek Channel. The sizing and alignment of existing and proposed recycled water lines are shown in **Figure 23.** Sizing and alignment of the recycled water lines will be consistent with the City of Ontario Recycled Water System Master Plan and/or a City-approved hydraulic analysis.

3.4.4 Stormwater/Drainage NPDES Compliance

Drainage within the project area will be conveyed via a system of on-site drains to the southeast corner of the site where it will enter a series of underground detention / infiltration chambers. These chambers will provide attenuation of peak flows as well as detaining stormwater for infiltration/treatment as required by the most current San Bernardino County Area-Wide MS4 permit. Flows exceeding the required treatment volume will be conveyed southeasterly across Guasti Road to the existing 108" storm drain pipe, which in-turn conveys flows to Cucamonga Creek.

Figure 23: Specific Plan Area Recycled Water Plan



All Priority Land Use (PLU) areas within the Specific Plan Area shall comply with the statewide Trash Provisions adopted by the State Water Resources Control Board (SWRCB) and trash requirements in the most current San Bernardino County Area-Wide MS4 Permit.

Activities resulting in one acre or more land disturbances are required to obtain coverage under the Construction General Permit (CGP). The owner is the legally responsible person (LRP) of the site and shall have a Stormwater Pollution Prevention Plan (SWPPP) developed and submitted through the SMARTS website at https://smarts.waterboards.ca.gove/smarts/faces/SwSmartslogin.xhtml.

3.4.5 Dry Utilities

Electricity: Southern California Edison provides electricity to the Specific Plan Area and maintains aboveground power lines within the area. During construction, electrical lines will be placed underground. Utilities and maintenance facilities for the hotel will be installed on the first level of below-grade parking at the northern portion of the site.

Natural Gas: The Southern California Gas Company provides natural gas to the Specific Plan Area. As required, additional points of connection to existing gas lines will be provided.

Telephone: Telephone service is offered regionally by telecommunications providers, such as AT&T and Verizon. Infrastructure supporting telephone services will be provided and installed along with other utilities.

Cable: Cable television services are provided to the Specific Plan Area by local area cable providers, such as Time Warner Cable. Infrastructure supporting cable television services will be provided and installed along with other utilities.

Solid Waste Collection: Solid waste collection service will be contracted by the applicant with the City of Ontario Integrated Waste Division. All solid waste collected on-site will be required to comply with federal, state, and local regulations.

Fiber Optic: Fiber Optic broadband communication service will be offered to the Specific Plan area by Ontario Fiber. Infrastructure supporting fiber optic service will be installed.

3.5 Community Services

3.5.1 Fire Protection Services

The Specific Plan Area is served by the Ontario Fire Department. The nearest fire stations to the site are Fire Station No. 8 and Fire Station No. 10. Both fire stations are located within 5 miles from the Specific Plan Area, and each house an engine company and paramedic.

The applicant will work with the Ontario Fire Department, the Ontario Police Department, Public Works, and other City departments to provide appropriate access to the Specific Plan Area in a satisfactory manner that is feasible.

3.5.2 Police Services

The Ontario Police Department provides police protection services in the City of Ontario and will serve the Specific Plan Area. The main police station is located at 2500 S. Archibald Avenue, approximately 5.3 miles south of the Specific Plan Area.

04

Development Standards

4.1 Introduction

Development standards provide the zoning regulations for the Specific Plan Area, while the design guidelines provide design guidance. It is important to make a clear distinction between the two. Development standards are mandatory and are generally quantitative, objective, and measurable in nature, and use the word "shall." Design guidelines are suggestions and are generally qualitative and subjective in nature. They generally use the words "should" or "may."

4.2 Development Standards

4.2.1 Site Development

4.2.1.1 Setbacks

Building setbacks for the Specific Plan Area are shown in **Table 2**.

Projections and Elements into Setbacks:

- Architectural projections and overhangs may encroach into a setback up to a maximum of 3 feet. However, any such overhang or projection that is permanent in nature should have a minimum overhead clearance of 12 feet. With the exception of balconies which shall be allowed to encroach up to 5'. However, architectural projections shall not encroach into the public right- of-way.

- Landscape and hardscape design elements and features such as trees, benches, trellises, fountains, planter boxes, shade structures, fountains, movable/fixed seating, seating walls and steps, boundary walls, and fences are allowed in setback areas. However, at least 6 feet of clear space must be maintained for pedestrian movement.

- Outdoor eating areas are allowed within the setback areas. (Note: the setbacks are from ROW, there is pedestrian movement in the ROW already contemplated)

4.2.1.2 Height

The maximum building height will be regulated by Federal Aviation Administration and the Ontario International Airport Land Use Compatibility Plan, (ONT ALUCP). The allowable building heights for the Specific Plan boundary range from 110 to 140 feet in height. Any structure that is over 90 feet in height will be required to file an FAA Form 7460-1, Notice of Proposed Construction or Alteration and receive a determination of "No Hazard" consistent with the policies and criteria of the ONT ALUCP.

4.2.1.3 Floor Area Ratio

The Multimodal Mixed-use Area, which encompasses the Specific Plan Area, allows for approximately 553,000 square feet of lodging and 1.9 million square feet of office/retail (refer to **2.2.1, Multimodal Mixed-Use** section). The Specific Plan Area plans to use a portion of this allocated square footage for the development of Hospitality Mixed-Use in the project area (refer to **Table 1**).

The total FAR of the entire Multimodal Mixed-Use District shall not exceed 1.0.

- FAR is the ratio of a building's total floor area to the size of the piece of land upon which it is built.

- The FAR excludes soft and hard landscaped areas, subterranean parking, mechanical equipment areas, vertical shafts, and utility areas.

- The FAR includes covered outdoor areas.

4.2.1.4 Lot Coverage

The total lot coverage should not exceed 40 percent of the land area.

Table 2: Building Setbacks

SETBACKS TO PROPERTY BOUNDARY	MINIMUM SETBACK
Guasti Road	Building - 10 feet; Parking - 5 feet
Holt Boulevard	Building - 5 feet; Parking - 5 feet
Cucamonga Channel-Interior Setback	Building 10 feet; Parking - 5 feet
Note: Balconies that are considered private open space, (see section 4.2.4.2 Private Open Spaces below) shall be allowed to encroach up to 5'. Landscaping and water features for passive and active recreational activities are allowed in the setback areas. Temporary structures such as gazebos and other shade structures are also allowed in setback areas.	

4.2.2 Land Use Matrix

Table 3 lists allowable uses for Hotel and Local-Serving Retail, indicating which uses are permitted (P), and conditional review (C) within the Hospitality Mixed Use of the Specific Plan.

- Permitted Use (P) can be established as primary or secondary use without requiring discretionary approval. This includes ancillary or accessory uses that are typically incidental to the main use on the premises.
- Conditionally Permitted Use (C) is permitted upon the approval of a Conditional Use Permit by the Zoning Administrator.
- A land use not listed in Table 3 shall be considered a prohibited land use. For land uses similar to those listed in Table 3, but not expressly stated in this Specific Plan, the Planning Director or his/her designee shall be granted the authority to make a determination of the applicability of similar land uses.

4.2.3 Utilities

4.2.3.1 Mechanical Equipment

- Rooftop mechanical equipment shall be securely fastened to the roof and fully screened with architectural elements consistent with the overall design of the development.

4.2.4 Open Spaces

4.2.4.1 Public Open Spaces

Public open spaces include any sidewalk, landscaping, plaza areas, patios, decks, water features, or other passive recreational areas open to public.

- Public gathering spaces shall be accessible to adjacent uses and from public sidewalks.

4.2.4.2 Private Open Spaces

Private open spaces include any sidewalk, walkways, landscaped areas, plaza areas, water features, balconies, patios, decks and other active or passive recreational areas open only to the users of the development.

Legend: Permitted Use (P), Conditional Use Permit (C)

Table 3: Allowable Land Uses

HOSPITALITY MIXED-USES	ALLOWABLE USES	NOTES
Hotel Uses		
ATM	P	
Automobile Rental and Leasing Services	C	▪ No on-site vehicle storage allowed.
Banquet Halls and Conference Facilities	P	
Business Center	P	
Cafés and Restaurants (Alcohol sales not permitted)	P	▪ Includes Bakeries and Coffee Shops.
Cafés and Restaurants (Alcohol sales permitted)	C	▪ Includes Bakeries and Coffee Shops.
Child Day Care facilities	C	
Convenience Stores (Alcohol sales not permitted)	P	▪ Includes Sundry Shops. ▪ Catered towards guests.
Convenience Stores (Alcohol sales permitted)	C	▪ Includes Sundry Shops. ▪ Catered towards guests.
Day Spa and Massage studio	C	
Fitness Center and Gym	P	
Florist and Gift Shop	P	
Guest Services	P	▪ Includes Concierge, Baggage, and Valet Services.
Hotel Administrative Offices	P	
Hotel Lodging	P	
Live Entertainment	C	▪ Includes Night Clubs, Dancing, VIP Rooms, and Similar Uses.
Lounges and Bars	C	▪ Includes Lounges, Bars, or Rooftop Bars.
Outdoor Dining Areas (Alcohol sales not permitted)	P	
Outdoor Dining Areas (Alcohol sales permitted)	C	
Wireless Telecommunications Facilities	C	▪ Includes integrated building design. ▪ Must be Roof-Mounted. ▪ See Chapter 5.03.420 for Development Code.

Legend: Permitted Use (P), Conditional Use Permit (C)

HOSPITALITY MIXED-USES	ALLOWABLE USES	NOTES
Local-Serving Retail (Typical with Hospitality Mixed-Use)		
Antique Stores	P	
Art Gallery	P	▪ Includes Art Galleries or Art Supply Stores.
Banking/ATM	P	
Automobile Rental and Leasing Services	C	▪ No on-site vehicle storage allowed.
Beauty Services	P	▪ Includes Barber Shops, Beauty Salons, Nail Salons, Tanning Salons, and other similar uses.
Beauty Supply Store	P	
Bicycle/Segway Rentals	P	▪ Includes e-Bicycle and e-scooter Rentals or similar personal recreation devices.
Boutique or Specialty Wines and Liquor Stores	C	
Brew Pub and Micro-brewery	C	
Business Center	P	▪ Includes Mail/Shipping services, e.g. Fed Ex, UPS, and Amazon Locker.
Cafés and Restaurants (Alcohol sales not permitted)	P	▪ Includes Bakeries and Coffee Shops.
Cafés and Restaurants (Alcohol sales permitted)	C	▪ Includes Bakeries and Coffee Shops.
Clothing and Accessory Stores	P	
Convenience Stores (Alcohol sales not permitted)	P	▪ Includes Sundry Shops. ▪ Catered towards guests.
Convenience Stores (Alcohol sales permitted)	C	▪ Includes Sundry Shops. ▪ Catered towards guests.
Fast-Food Restaurants	P	▪ Drive-throughs not allowed.
Fitness Studio	C	
Food Kiosk	P	▪ Includes two or more food or beverage concession stands that operate together as a commercial establishment. ▪ Alcohol sales not permitted.
General Office	P	▪ Includes office spaces related to Administrative and Support Services, Retail, Finance and Insurance Offices, Management of Companies and Enterprises, Travel agency/arrangements, and Professional Services.

- Private open spaces can be located on upper floors and rooftop.

- Balconies, if provided, shall have a minimum area of 30 square feet and a minimum dimension of 5 feet length and width.

- As noted above in Table 2: Building Setbacks, balconies shall be allowed to encroach a maximum 5 feet into a required front, side, or rear yard setback.

4.2.4.3 Applicable to Both Public and Private Open Spaces

- Pedestrian zones designed to enhance access to outdoor public amenities must be identifiable by using robust, easy-to-maintain surface materials, such as decorative pavers or other comparable architectural enhancements.

- Pedestrian areas should be compliant with the Americans with Disabilities Act.

- Alternative sidewalk materials within public right-of-way and for sidewalks used for public access shall be subject to City review and approval.

4.2.5 Parking

4.2.5.1 Off-Street Parking

- 1.5 parking spaces per every 1,000 square feet of Hospitality Mixed-Use development shall be provided. Utility areas, parking, and covered outdoor areas shall be excluded from parking calculations.

- Up to 100 percent of parking can be provided as valet parking by a hospitality mixed use project.

- Off-street parking design standards and parking lot lighting shall comply with Sections 6.03.045 and 6.03.050 of the Ontario Development Code, respectively.

- Parking spaces specifically designated and conveniently located for fuel-efficient vehicles shall be provided in conjunction with development projects pursuant to current regulations contained in CALGreen (California Code of Regulations Title 24, Part 11).

- A parking analysis shall be provided with the entitlement package.

- Spillover parking may be provided off-site no more than one-half mile away from the development's main entrance. Parking analysis and an agreement with locations shall be provided.

- All parking facilities must have clearly designated markings for individual parking stalls, drive aisles, approach lanes, and maneuvering areas to facilitate efficient traffic flow.

- Digital parking guidance signs shall be installed for hotel parking to indicate the location of available parking spaces by level and assist in directing vehicles to available parking spaces.

4.2.5.2 Bike Parking

- Bicycle parking facilities, including bicycle racks, lockers, and other secure facilities, shall be provided in conjunction with development projects pursuant to current regulations contained in CALGreen (California Code of Regulations Title 24, Part 11).

- All bicycle parking facilities shall have lighting that provides high visibility. Lighting shall be maintained in operational condition at all times.

4.2.5.3 Loading

- Off-street loading standards shall comply with Section 6.03.055 of the Ontario Development Code.

- Each off-street loading space and its access shall be designed to avoid undue interference with the public use of streets and private drives and shall not be part of the off-street parking area required for each particular use.

- Loading areas shall be screened, enclosed, and/or located appropriately to minimize potential nuisances, such as odor and noise.

- Loading areas shall be clearly marked as being distinct from required parking spaces and aisles.

05

Design Guidelines

5.1 Introduction

These guidelines establish a clear set of qualitative guiding principles that form a basis for the City of Ontario to review the Specific Plan project. The guidelines serve two primary purposes:

1. To establish high-quality design for new development.

2. To facilitate the design review and planning approval process relative to building configuration and architecture that is appropriate for this development.

The guidelines are not intended as a literal requirement; instead, they serve as a framework for the design review process and cover key elements including building mass, entrances, façade design and composition, roof forms, materials, and colors. The City shall use the guidelines as part of the formal design review process, and qualitative findings shall be made by the decision-making body demonstrating such compliance.

5.2 Design Guidelines

5.2.1 Massing and Elevation Treatment

- Building facades should avoid a continuous single plane and break monotony by using at least two planes.

- The bottom levels and the top two levels may be treated differently in architectural style compared to other floors to break the monotony of elevation. See example in **Figure 24**.

- Vertical elements should be used to provide rhythm and continuity between the floors. See example in **Figure 25**.

Figure 24: Elevation Treatment



Figure 25: Vertical Elements Providing Continuity and Rhythm



- To achieve good building articulation, beyond the building facade and diversity of planes, there should be at least one additional color and one additional material across an elevation.

- To minimize heat gain, shading devices should be provided for glazed surfaces, particularly on the east, south, and west sides of the building. Shading can take the form of recessed windows using colonnade-type structure or devices fixed to the exterior wall that are harmonious with the building materials or color.

- Building massing shall consist of a mix of building heights and incorporate vertical plane breaks, changes in building/ridge height, or other accent roof forms to create visual interest.

- Free-standing architectural treatment may be used in front of the building walls to create layering.

- When used, parapet walls shall incorporate side/rear elevation returns to preclude an unfinished, "false front" appearance.

- Exposed downspouts and overflow holes on building front facades are prohibited.

- All rooftop mounted equipment shall be screened from public view using materials complementary to those used on the main structure (see Subsection 6.C.1.f, Functional Elements).

5.2.2 Elevation Material

- The elevation materials should be durable and require low maintenance.

- As far as possible, materials should be selected that can be reused or recycled easily at the end of their lives using existing recycling systems.

- Efficient and right-sized building design

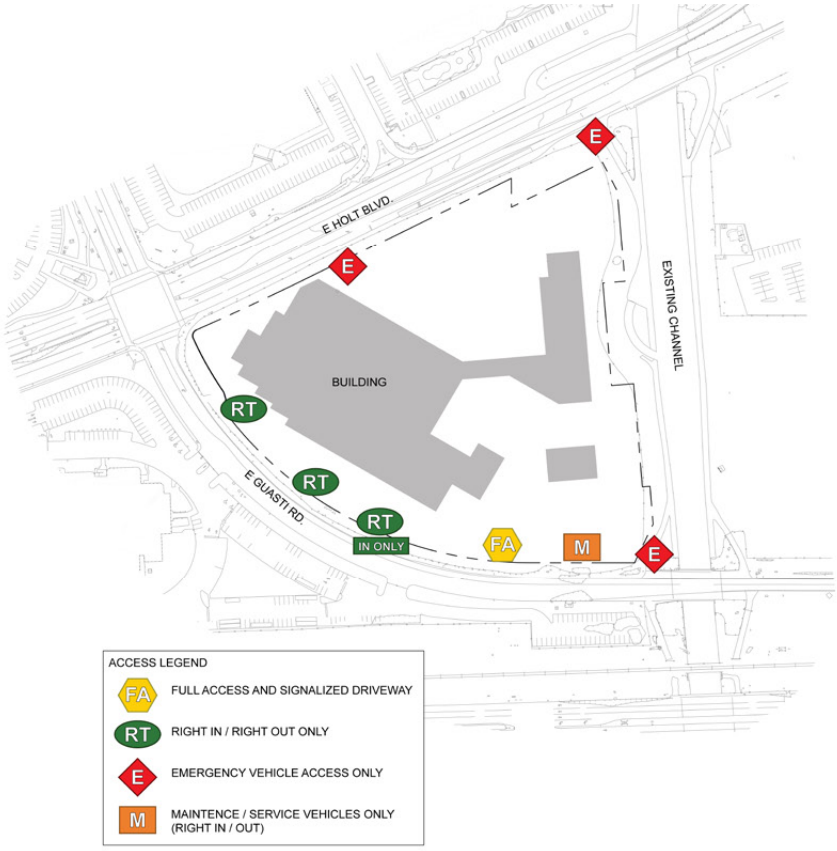
should be used to minimize wastage of materials.

5.2.3 Site Planning and Circulation

The following site planning and circulation design guidelines for hospitality mixed use promote aesthetic quality, efficient land use, and public safety. See **Figure 26** for an example illustrating safe ingress and egress options, including designated entrances for emergency vehicle and separate delivery access. The final improvement plans reflecting the location and details of these improvements will be reviewed and approved by the City Engineer.

- Service and delivery/loading zones should be separated from visitor, guest and customer parking, and pedestrian walkways where feasible. This helps reduce the risk of accidents by keeping heavy vehicles and delivery activities away from areas where pedestrians and regular vehicles are present.
- Ensure that all areas are accessible to emergency vehicles and personnel, with clearly marked routes and entrances.
- The main access to the hotel as well as to the hotel parking (basement levels 1 and 2) is from Guasti Road. The main access to the hotel will be full access with a traffic signal.
- Additional right-of-way may be required to accommodate an additional left turn and right turn lanes at intersection based on required queue lengths per the Traffic Impact Analysis/Specific Plan EIR.
- Additional traffic signals may be required based on locations of future access points and as identified in the Traffic Impact Analysis/Specific Plan EIR.

Figure 26: Site Access



5.2.4 Landscape Guidelines

The landscape will play an important role at many levels, primarily to soften transitions from the ground plane to the vertical plane; offer screening from the adjacent neighborhood; and add color and texture to the development. Examples of landscaping can be seen in **Figure 27** and **Figure 28.**

Below are general landscape guidelines.

- Standards for the provision and maintenance of landscaping within the Specific Plan Area shall comply with Section 6.05.010: *Landscape Design Principles*, Section 6.05.045: *Landscape Development Standards*, and Section 6.05.050: *Landscape Maintenance* of the Ontario Development Code.
- Trees and plant material should either be native to Southern California or adaptive and from regions with similar climates.
- Invasive plant species should be prohibited.
- All plants should be water-conserving, drought-tolerant plants to the maximum extent practical
- Trees, shrubs, hedges, and deciduous vines should be used to minimize solar heat gain during the summer and maximize heat gain during the winter.
- Tree branches should be pruned to at least 7 feet from the ground for street trees.
- Landscaping should not obstruct pedestrian movements and should be designed in a way so as not to block visibility of businesses and signage.
- Landscaping should not obstruct the sightlines of motorist or pedestrians.

5.2.4.1 Paving Materials

Paving materials contribute significantly to the overall outdoor experience. The style of landscape, maintenance requirements, and the specific purpose of the paved area should be considered when selecting paving materials.

- Paving materials should complement the architectural style as well as elevation materials of the building.
- Paving materials should serve both functionality and aesthetics. For example, slip-resistant concrete, decorative pavers, decomposed granite, or natural stone may work well in walkways and garden paths while bluestone, brick, or colored concrete may be more welcoming for a patio.
- Materials should be chosen that withstand weather conditions, foot traffic, and other wear.
- A combination of paving materials should be used to identify and define pedestrian paths and to provide variety. Changes in paving materials should be employed to demarcate areas, for example, to separate pedestrian walkways from other gathering spaces.

Examples of paving materials are shown in **Figure 29**.

5.2.3.2 Planting Materials

- Landscaping in the project area shall be done in accordance with Section 6.05—Landscaping, of the Ontario Development Code.
- All landscaping in the Specific Plan Area must be drought tolerant and California friendly.
- **Figure 30**, **Figure 31**, and **Figure 32** show examples of appropriate planting materials that may be used for landscape improvements within the Specific Plan Area.

5.2.5 Lighting

Effective site lighting is crucial for ensuring safety, enhancing visibility, and promoting energy efficiency in various environments. The following guidelines outline best practices for implementing a comprehensive lighting strategy that addresses these goals. Adherence to these principles helps create well-lit, secure, and aesthetically pleasing spaces that meet the needs of all users.

Figure 27: Specific Plan Area Landscaping Examples



Figure 28: Rooftop Landscaping Elements

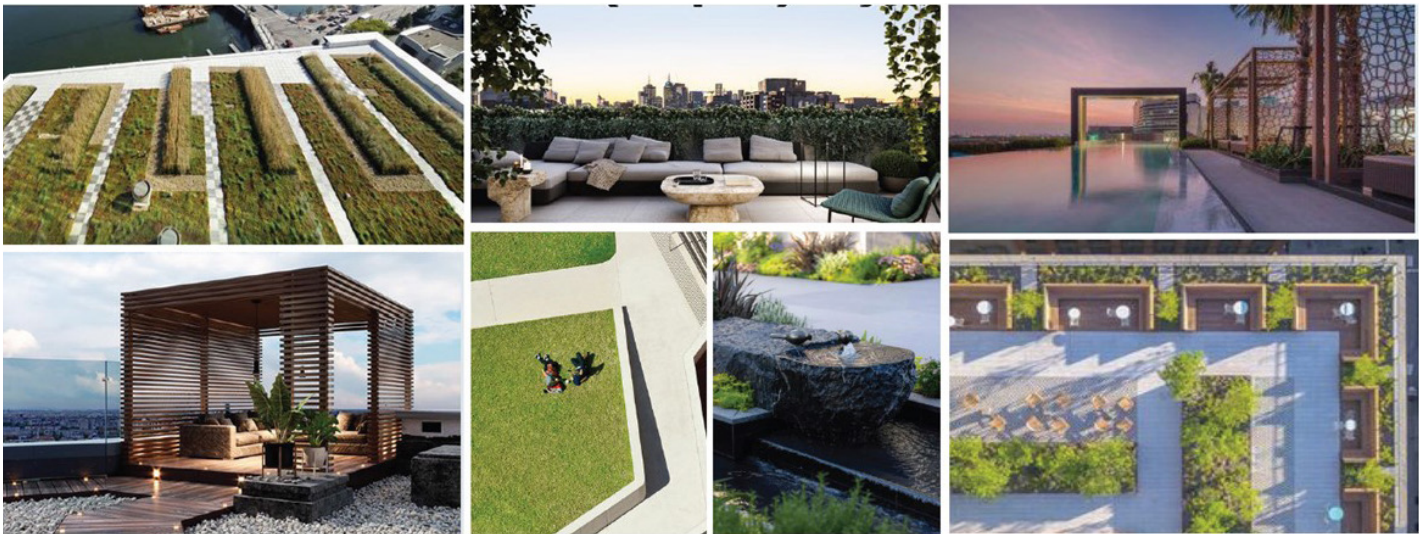


Figure 29: Examples of Paving Materials



Granite Paver
Large format dimensional
Color: Beige, Light Gray, Dark Gray Black
Finish: Flamed



Granite Cobblestone
Size: 4" x 4"
Pedestrian & vehicular thickness
Color: Dark Gray, Gray, Brown
Tumbled finish



Cast in Place Concrete
Fine aggregate
Color: Beige, Warm Gray,Light Gray, Gray,Medium Gray
Finish: Flamed
Finish: topcast #3



Sandstone Pavers
Large format dimensional Natural stone
Color: Light Cream, Light Gray
Finish: Sandblasted



Limestone Pavers
Large format dimensional
Natural stone
Color: "Desert White"
Finish: Sandblasted



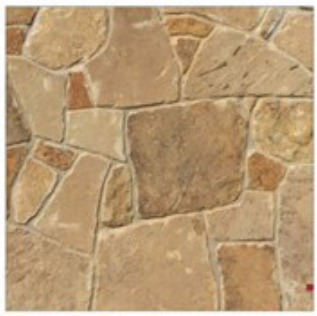
Asphalt



Travertine Pavers
Large format dimensional
Natural stone
Finish: Flamed



Limestone Pavers
Large format dimensional Natural stone
Color: Light Gray, Gray
Finish: Antique surface finish



Sandstone Flagstone
Natural stone
Color: Buff



Decomposed Granite
Stabilized
"Palm Springs Gold"



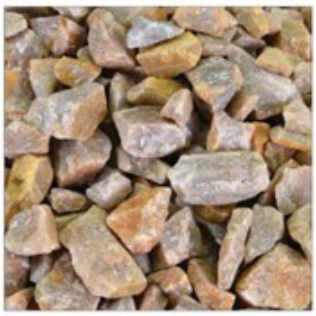
Large Aggregate Cast In Place Concrete
Color: Gray
Finish: Exposed Aggregate



Wood Decking
Modified Ash or Pine wood
Locally sourced



Encaustic Concrete
Pattern: Diagonal
Color: Gray, Light Gray



Crushed Stone
"Apache Sunset"

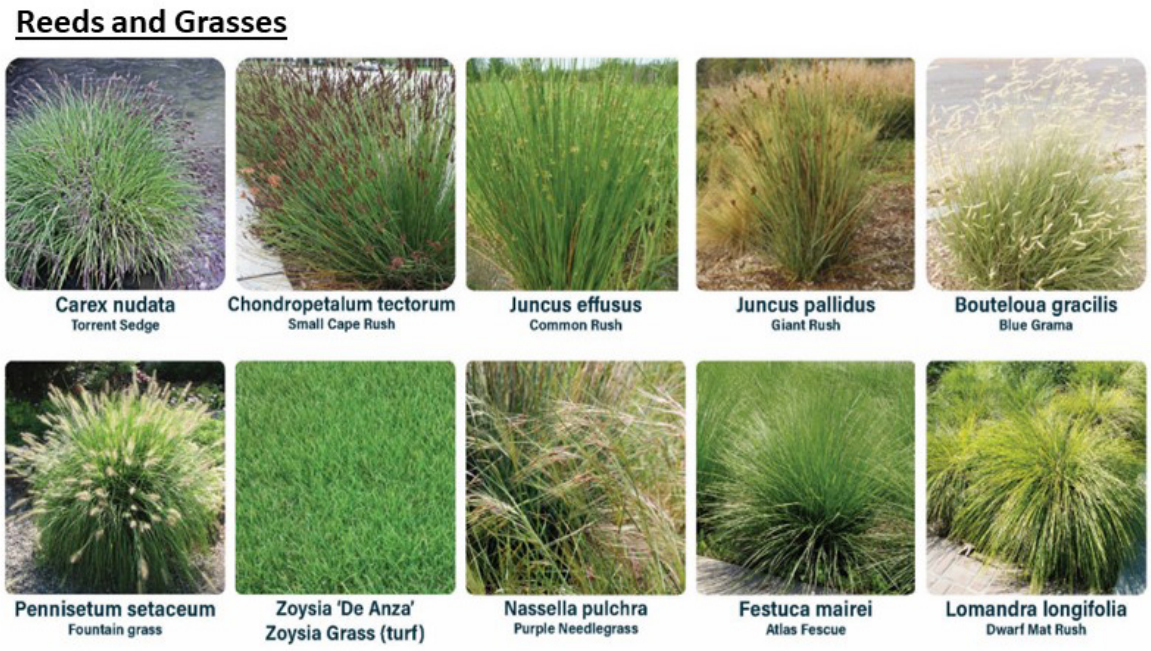
Figure 30: Shrubs and Ground Cover Palette



Figure 31: Evergreen, Deciduous, Flowering, and Palm Tree Palette



Figure 32: Reeds and Grasses Palette



The design, technology, and required photometrics will be determined during the final design stage. The fixture style, color and material should be decided in conjunction with other elements, such as benches and waste receptacles, to create a coordinated look and feel within the development. Below are some guidelines for selection and placement of lighting fixtures.

- Uniform lighting distribution should be employed to reduce dark spots and improve overall visibility.
- Adequate lighting should be provided along pathways, walkways, and pedestrian areas to ensure safe navigation. Use of low, bollard-type lighting and/or landscape accent lighting is encouraged, especially in pedestrian areas.
- Lighting should be provided in all parking, vehicular, and pedestrian circulation areas, and loading and storage areas.
- Site lighting should not be directed off-site. Light spill to the neighboring areas should be minimized where feasible.
- Shielded fixtures that minimize sky glow, glare, and light trespass should be used. While up-lighting may be allowed to accentuate certain architectural features and landscaping, care should be taken to make sure that such features minimize sky glow.
- Lighting fixtures should complement the façade and be of a style that suits the architectural style of the building.
- The use of energy-efficient light-emitting diode (LED) lighting fixtures should be considered to reduce energy consumption and maintenance costs.
- Motion sensors should be installed where appropriate to activate lighting only when needed, promoting energy conservation.
- Lighting provision during project construction should be in accordance with Ontario Municipal Code, Title 4, Chapter 11, Section 4-11.11, *Construction site security provisions.*

5.2.6 Sign Program

Informational signs may be installed throughout the Specific Plan Area to provide information about the businesses, such as development name, logo, conference center, and retail uses as well as for general advertising or marketing purposes. Other directional and wayfinding signage may be provided in addition to informational signs. Below are the signage guidelines to assist with the review and approval of proposed project signage. An exhibit detailing the locations and types of signs will be required as part of the review and approval process for the project's sign program which shall comply with Chapter 8 of the City of Ontario's Development Code, as further outlined in Chapter 5.2.6.2 Sign Program Approval Process, herein.

Digital Advertising Signs are allowed integrated into the design of the building. The Digital Advertising Signs may display products, brands, and businesses associated with the commercial uses in the development as well as offsite advertisements, City sponsored events, and public service announcements. An approved Development Agreement or Master Sign Program and user agreement shall be required in accordance with the Ontario Development Code to establish development standards for design, approved content, sign area, location and use.

5.2.6.1 Signage Guidelines

- Signage may display messages or images utilizing a series or grid of lights that may be changed by electronic means, including cathode ray, LED display, plasma screen, liquid crystal display (LCD), LED embedded, architectural glass fiber optic, or other electronic media or technology.
- Signs may be illuminated by external and/or internal light sources.
- Use of exposed neon lighting and fiber optics shall be prohibited.
- Signage colors, materials, and finishes shall complement those used on the architecture on-site.
- No sign shall be installed, relocated, or maintained so as to prevent entry or exit out of any door.
- No sign installation shall create a safety hazard by obstructing views of pedestrian and vehicular traffic.
- Any sign installation in a pedestrian pathway shall leave a clear 5-foot space for pedestrian movement.
- No signs shall be located within a required easement unless an encroachment permit has been authorized by the affected utility.
- No sign shall obstruct access to fire hydrants, fire department connection, or fire department access roads.
- Signs that audibly advertise, identify, or provide direction to a use or activity are prohibited.
- Signs exhibiting or displaying content of an obscene, indecent, or immoral nature or unlawful activity are prohibited.
- Entry monument signage may be used to identify each development in the Specific Plan Area. Entry monuments shall be designed in accordance with City of Ontario Traffic and Transportation Guidelines for monument placement.
- Signage shall be employed to identify a center and tenants within a center, direct vehicular traffic, and provide on-site wayfinding for pedestrians.
- Each business is permitted one wall sign on each side that is visible from the street, size and placement of these signs will be reviewed as part of the sign program approval process.

5.2.6.2 Sign Program Approval Process

The developer will submit a sign program for projects in the Specific Plan Area in accordance with City requirements. The discretionary approval of a sign program will be in accordance with the of the City of Ontario Development Code.

Deviations from the sign program may be allowed to accommodate the design guidelines in Section 5.2.5 Signage Guidelines of this document.

The developer will provide the following to the City:

1. Completed sign program application and filing fee.

2. Three copies of the sign program. The sign program shall be prepared in 8½" X 11" or 11" X 17" format, and shall include the following:

   a. A master plan, drawn to scale, delineating the site proposed to be included in the sign program and the general location of all signs.

   b. Drawings indicating the exterior surface details of all buildings within the site upon which wall signs, directory signs, or projecting signs are proposed to be located.

   c. Proposed color schemes of the signs.

5.2.7 Privacy and Security Screening

Privacy screening or fencing is designed to shield a property from external view, preventing onlookers from seeing into private spaces of the development. They are intended to safeguard a property by preventing unauthorized entry, trespassing, or intrusion.

- Peripheral walls and fences shall comply with Section 6.02.025 of the Ontario Development Code.

- Landscape screening, walls, or fencing shall be a minimum of 6 feet and a maximum of 8 feet high.

- Walls should use brick, slump stone, tile, textured concrete, stucco on masonry, or steel framing that is complementary to the building materials used in the façade of the building. Plain concrete block walls (i.e., precision block) or chain-link fencing with inserts are not permitted.

- Landscape hedges should be at least 2 feet wide.

- Wall, wrought iron, tubular steel fencing, or other transparent type of fencing or walls should use decorative columns, pilasters, or other architectural elements to provide relief and break the monotony.

- All non-transparent perimeter walls and/or fences should be treated with anti-graffiti paint or vines on the roadside and should incorporate landscaping whenever possible.

06 | Implementation

6.1 Applicability

The provisions and regulations contained in this Specific Plan provide the standards for land uses and development located within the Specific Plan Area. The Specific Plan supersedes otherwise applicable City of Ontario development standards and regulations unless stated otherwise in this document. Whenever the provisions and development standards contained in the Specific Plan conflict with those contained in the City of Ontario Zoning Code, the provisions of the Specific Plan shall take precedence. Where the Specific Plan does not address such provisions, the City of Ontario Zoning Code shall apply.

6.2 Severability

In the event that any provision of this Specific Plan or its application to any person or circumstance is held to be invalid or unconstitutional by any court of competent jurisdiction, such portions shall be deemed separate, distinct, and independent, and shall not affect the validity of the remaining provisions of this Specific Plan or applications thereof, which can be implemented without the invalid provision or application.

6.3 Interpretation

The Planning Director or his/her designee is authorized by the City of Ontario to interpret, administer, and enforce the provisions of the Empire Groves Specific Plan. The provisions of this Specific Plan shall be interpreted in a manner consistent with the goals, policies, purpose, and intent established in the Empire Groves Specific Plan.

6.4 Development Review

The procedures and regulatory provisions necessary to administer the development review procedures for applicable properties, structures, and uses located within the Empire Groves Specific Plan Area shall be subject to the requirements as set forth herein and in accordance with Chapter 6.0: Development and Subdivision Regulations of the City of Ontario Development Code.

The Specific Plan is reviewed by the Planning Director or his/her designee and Development Advisory Board. Any suggested revisions will be discussed and made as appropriate. It will then be reviewed by the City of Ontario Planning Commission and approved and adopted by the City Council. Once adopted, the Empire Groves Specific Plan forms the legal framework for the evaluation of development applications.

6.5 Financing

All on-site improvements will be undertaken and financed by the developer. The costs for related off-site improvements shall be the responsibility of either the developer or the City as defined further in the conditions of approval and Development Agreement.

6.6 Maintenance Responsibilities

Maintenance of all improvements within the Specific Plan Area, including private/quasi-public open space and recreation facilities; private driveways; circulation; landscape; and WQMP, BMPs, and private drainage infrastructure (underground infiltration chambers and CDS Units) will be the responsibility of the applicant. Maintenance of the public ROW including sidewalk areas in the immediate vicinity of the Specific Plan Area will also be the responsibility of the City.

6.7 Specific Plan Amendments

Amendments to the Empire Groves Specific Plan may be requested by the applicant or by the City at any time pursuant to Section

65453(a) of the California Government Code. Amendments shall be processed pursuant to the provisions of the Government Code for specific plan amendments. In the event the proposed amendment requires supplemental environmental analysis pursuant to CEQA, the applicant will be responsible for preparation of the necessary CEQA documentation. Below are the processes of minor and major amendments to this Specific Plan.

6.7.1 Minor Amendments

Minor amendments to the development standards and design guidelines of a Specific Plan are permitted under City of Ontario Municipal Code Sec. 4.02.080. These amendments require a discretionary review process, which can be initiated by either the developer or the City of Ontario. Approval may be granted by the Planning Director or their designee, as specified in the Ontario Development Code, Division 2.02, Table 2.02.1, (Section B, item 12). Any modifications must align with the intent of the originally approved Specific Plan, be in substantial conformance with it, and not be detrimental to public health, safety, and welfare. No further approval will be necessary.

Some examples of minor amendments are listed below.

- Changes to Specific Plan boundary, provided the total acreage of the affected area does not increase or decrease the total acreage by more than 15 percent.
- Additions, deletions, or modifications to Table 3, Allowable Uses, which lists the permitted and conditionally permitted uses in the Specific Plan Area, provided the Planning Director determines the changes to be consistent with the objectives and intent of the Specific Plan and therefore minor.
- Minor adjustments to design guidelines including conceptual architecture, landscape, signage, and lighting.
- Minor adjustments to landscape materials, wall materials, wall alignment, entry design and streetscape design that are consistent with the conceptual design set forth in the specific plan's development standards and design guidelines.
- Revisions to infrastructure facility sizing and precise location for dry utilities, water, sewer, and storm drainage improvements subject to approval of the City Engineer.
- Revisions to roadway alignments when the change results in a centerline shift of less than 250 feet.
- Other adjustments or revisions of similar nature to those listed above that do not substantially change the intent or character of the Specific Plan and are deemed minor by the Planning Director.

6.7.2 Major Amendments

Specific amendments that are more substantial in nature than minor adjustments and include changing any regulation, general provision, procedure, or other provision will be considered a major adjustment to the Specific Plan and shall be subject to a formal Specific Plan Amendment application process pursuant to Section 4.01.035 of the Ontario Development Code and California Government Code Section 65450, et seq.

If the proposed amendment requires supplemental environmental analysis pursuant to CEQA, the applicant shall adhere to the City's adopted procedures and CEQA Guidelines.

6.8 CEQA Review

City of Ontario is defined as the lead agency under CEQA based on its authority to approve the Empire Groves Specific Plan. Prior to an approval of a project within the Specific Plan Area, the City Council will be required to certify the associated environmental document.

California Public Resources Code Section 21081.6 also requires public agencies to adopt a Mitigation Monitoring and Reporting Program to ensure that mitigation measures are implemented. Prior to a Certification of Occupancy for any building located within the Specific Plan Area, the Planning Director or his/her designee, as appropriate, shall confirm that applicable mitigation measures have been implemented in accordance with the approved plans.

APPENDIX

A

Consistency with General Plan Update

Appendix A: General Plan Consistency Analysis

Land Use Element		
GOAL LU-1	**A community that has a spectrum of housing types and price ranges that match the jobs in the City and that make it possible for people to live and work in Ontario and maintain a quality of life.**	
Policies		
LU-1.1	Strategic Growth. We concentrate growth in strategic locations that help create place and identity, maximize available and planned infrastructure, foster the development of transit, and support the expansion of the active and multimodal transportation networks throughout the City. (Link to Mobility Element Policies M2-M-2.1, M3-M-3.3; Community Design Element Image and Identity Section; Community Design Policies CD-3.1, CD-3.3, CD-3.6)	Consistent: The Specific Plan is in a planned growth area (Guasti District) per the General Plan.
LU-1.2	Sustainable Community Strategy. We integrate state, regional, and local Sustainable Community/Smart Growth principles into the development and entitlement process.	Consistent: The Specific Plan integrates many sustainable and smart growth strategies. It supports multimodal transportation in the area.
LU-1.3	Adequate Capacity. We require adequate infrastructure and services for all development.	Consistent: Adequate existing infrastructure is available for the Specific Plan.
LU-1.4	Multimodal Mobility. We require development and urban design, where appropriate, that reduces reliance on the automobile and capitalizes on active transportation, transit, electric vehicles, and multimodal transportation opportunities (Link to Mobility Element Policies M-2.1, M-3.3; Community Design Element Policy CD-2.6, CD-3.1, CD-3.3, CD3.6).	Consistent: The Specific Plan is a mixed-use plan. It supports multimodal transportation planning projects in the area. It includes provisions for bicycle parking, electric vehicle charging stations, and other amenities.
LU-1.5	Jobs-Housing Balance. We coordinate land use, infrastructure, and transportation planning and analysis with regional, county, and other local agencies to further regional and subregional goals for jobs-housing balance. (Link to Community Economics Element Policy CE-1.1; Mobility Element Policy M-1.6)	Consistent: The Specific Plan is a mixed-use plan with Hotel and Local Serving Retail uses and will contribute to a substantial number of jobs in the area which leads to jobs-housing balance.
LU-1.6	Complete Community. We incorporate a variety of land uses and building types in our land use planning efforts that result in a complete community where residents at all stages of life, employers, workers, and visitors have a wide spectrum of choices of where they can live, work, shop and recreate within Ontario. (Link to Community Economics Element Complete Community Section; Community Design Element Urban, Mixed Use, and Transit-oriented Place Types Section)	Consistent: The Specific Plan is primarily commercial and does not include housing. However, it is designed to create job opportunities for residents within the City. This approach contributes to the development of complete communities by fostering local employment and supporting the overall economic growth of the area.

LU-1.7	Revenues and Costs. We require future amendments to our Land Use Plan to be accompanied by analyses of fiscal impacts. (Link to Community Economics Policy CE-3.2)	Consistent: The Specific Plan will be financed by the developer.
GOAL LU-2	**Compatibility between a wide range of uses and resultant urban patterns and forms.**	
Policies		
LU-2.1	Land Use Decisions. We minimize adverse impacts on adjacent properties when considering land use and zoning requests.	Consistent: The Specific Plan will not have any adverse impacts on the adjacent properties. It will contribute positively as the adjacent properties include a conference center, airport, and other hotel properties that are complementary to this development.
LU-2.2	Buffers. We require new uses to provide mitigation or buffers between existing uses where potential adverse impacts could occur. Additional mitigation is required when new uses could negatively impact environmental justice areas. (Link to Community Design Element)	Consistent: Although this area is classified as an environmental justice area according to Cal Enviroscreen 4.0, it is not residential. The high pollution burden, largely due to the nearby airport, contributes to its high score. The Specific Plan incorporates sustainable strategies and is a mixed-use plan. It supports multimodal transportation projects in the area and includes provisions for bicycle parking, electric vehicle charging stations, and other amenities.
LU-2.3	Hazardous Uses. We regulate the development of industrial and similar uses that use, store, produce, or transport toxic substances, air emissions, other pollutants, or hazardous materials. (Link to Safety Element Hazardous Materials & Waste Section, including Policies S-6.4 and S-6.5)	Consistent: There are no hazardous materials stored, produced, or transported to the site. Standard cleaning and laundry services for the hotel are provided.
LU-2.4	Regulation of Nuisances. We regulate the location, concentration, and operation of potential nuisances.	N/A
LU-2.5	Regulation of Uses. We regulate the location, concentration, and operation of uses that have impacts on surrounding land uses.	N/A
LU-2.6	Infrastructure Compatibility. We require infrastructure to be aesthetically pleasing and in context with the community character.	Consistent: The Specific Plan will add new sidewalks and landscaping along Holt Boulevard and Guasti Road, a corner plaza at the intersection and the entrance court with heavy landscaping, all of which will contribute to the aesthetically pleasing surroundings.
LU-2.7	Inter-jurisdictional Coordination. We maintain an ongoing liaison with ONT, Caltrans, Public Utilities Commission, the railroads, and other agencies to help minimize impacts and improve the operations and aesthetics of their facilities.	N/A
LU-2.8	Transitional Areas. We require development in transitional areas to protect the quality of life of current residents.	N/A
LU-2.9	Methane Gas Sites. We require sensitive land uses and new uses on former dairy farms or other methane-producing sites be designed to minimize health risks.	N/A

LU-2.10	Sensitive Uses. We monitor and share information with the community about stationary and non-stationary emission sources. We encourage siting and design of facilities to minimize health and safety risks on existing and proposed sensitive uses, especially in environmental justice areas.	N/A
LU-2.11	Context-Aware Transitions and Connections. We require new development projects and land-planning efforts to provide context-aware and appropriate transitions and connections between existing and planned neighborhoods, blocks, sites, and buildings. (Link to Community Design Element Policies CD-1.1, CD-1.3, CD-3.4)	Consistent: The Specific Plan complements the adjacent properties, including a conference center, airport, and other hotel properties. Therefore, the proposed development is context-aware with appropriate transitions and connections.
GOAL LU-3	**Staff, regulations and processes that support and allow flexible response to conditions and circumstances in order to achieve the Vision.**	
Policies		
LU-3.1	Development Standards. We maintain clear development standards which allow flexibility to achieve our Vision and provide objective standards that ensure predictability and deliver the intended physical outcomes. (Link to Community Design Element Design Quality and Urban, Mixed Use, and Transit-oriented Place Types Sections)	Consistent: The development standards chapter provides mandatory provisions that are intended to achieve the vision of the Specific Plan and provide for objective standards that are measurable. The design guidelines however are not mandatory and provide flexibility.
LU-3.2	Design Incentives. We offer design incentives to help projects achieve the Vision. (Link to Community Design Element)	N/A
LU-3.3	Land Use Flexibility. We consider uses not typically permitted within a land use category if doing so improves livability, reduces vehicular trips, creates community gathering places and activity nodes, and helps create identity.	Consistent: The Specific Plan development standards include bicycle facilities and includes bike rentals as a permitted use that may aid in the reduction of vehicular trips. The Specific Plan is a mixed-use development and provides for local serving retail and restaurants that will also help reduce trips. The Local Serving Retail area has a public plaza and outdoor seating which contributes to community gathering places. The hotel features gathering areas and landscaping both within and around the property, enhancing the overall appeal of the area.
GOAL LU-4	**Development that provides short-term value only when the opportunity to achieve our Vision can be preserved.**	
Policies		
LU-4.1	Commitment to Vision. We are committed to achieving our Vision but realize that it may take time and several interim steps to get there.	Consistent: The plan is consistent with Guasti District's vision within the Ontario Plan.

LU-4.2	Interim Development. We allow development in urban, mixed use, and transit-oriented Place Types that is not immediately reflective of our ultimate Vision for the Place Type, provided it can be modified or replaced when circumstances are right to support development aligned with the Place Type Vision. We will not allow development that impedes, precludes, or compromises our ability to achieve our Vision. (Link to Community Economics Element Policy CE-2.3; Community Design Element Policy CD-1.2; Community Design Element Urban, Mixed Use, and Transit-oriented Place Types section).	Consistent: The Specific Plan is a mixed-use plan with Hotel and Local Serving Retail uses and transit- supportive use.
LU-4.3	Infrastructure Timing. We require that the necessary infrastructure and services be in place prior to or concurrently with development.	Consistent: The necessary infrastructure and services either exist or will be in place to support development within the Specific Plan.
LU-4.4	Shared Infrastructure. We encourage and facilitate the use of shared infrastructure (including shared or managed parking) in urban, mixed use, and transit-oriented Place Types. (Link to Community Design Element Policy CD-3.6)	Consistent: The Specific Plan is a mixed-use plan with Hotel and Local Serving Retail uses and transit- supportive use. The parking areas are shared. The ULI shared parking analysis has provided on-site parking for the entire development. The plaza area at the intersection of Holt Boulevard and Guasti Road is a public plaza.
GOAL LU-5	**Integrated airport systems and facilities that minimize negative impacts to the community and maximize economic benefits.**	
Policies		
LU-5.1	Coordination with Airport Authorities. We collaborate with FAA, Caltrans Division of Aeronautics, airport owners, neighboring jurisdictions, and other shareholders in the preparation, update, and maintenance of airport-related plans.	Consistent The Specific Plan is consistent with the policies and criteria set forth within an Airport Land Use Compatibility Plan. The Specific Plan includes uses compatible with surrounding land uses and adjacent properties.
LU-5.2	Airport Planning Consistency. We coordinate with airport authorities to ensure The Ontario Plan is consistent with state law, federal regulations, and/or adopted master plans, and airport land use compatibility plans for ONT and Chino Airport.	Consistent: The Specific Plan is consistent with the policies and criteria set forth within an Airport Land Use Compatibility Plan. The Specific Plan includes uses compatible with surrounding land uses and adjacent properties.
LU-5.3	Airport Impacts. We work with agencies to maximize resources to mitigate the impacts and hazards related to airport operations – their homes.	Consistent: The Specific Plan is consistent with the policies and criteria set forth within an Airport Land Use Compatibility Plan. The Specific Plan includes uses compatible with surrounding land uses and adjacent properties.
LU-5.4	ONT Growth Forecast. We support and promote an ONT that accommodates 30 million annual passengers and 1.6 million tons of cargo per year, as long as the impacts associated with that level of operations are planned for and mitigated.	N/A
LU-5.5	Airport Compatibility Planning for ONT. We create and maintain the Airport Land Use Compatibility Plan for ONT.	Consistent: The Specific Plan is consistent with the policies and criteria set forth within an Airport Land Use Compatibility Plan.

LU-5.6	Alternative Process. We fulfill our responsibilities and comply with state law with regard to the Alternative Process for proper airport land use compatibility planning.	Consistent: The Specific Plan is consistent with the policies and criteria set forth within an Airport Land Use Compatibility Plan.
LU-5.7	ALUCP Consistency with Land Use Regulations. We comply with state law that requires general plans, specific plans, and all new development to be consistent with the policies and criteria set forth within an Airport Land Use Compatibility Plan for any public-use airport.	Consistent: The Specific Plan is consistent with the policies and criteria set forth within an Airport Land Use Compatibility Plan. The allowable height is within the range (100' to 150') as prescribed by Airport Land Use Compatibility Plan.
LU-5.8	Chino Airport. We will support the creation and implementation of the Airport Land Use Compatibility Plan for Chino Airport.	N/A
Housing Element		
GOAL H-1	**Stable neighborhoods of quality housing, ample community services and public facilities, well-maintained infrastructure, and public safety that foster a positive sense of identity.**	
Policies		
H-1.1	Housing Rehabilitation. We support the rehabilitation, maintenance, and improvement of single-family, multiple-family, and mobile homes through code compliance, removal of blight where necessary, and provision of rehabilitation assistance where feasible.	N/A: The Specific Plan is a mixed-use plan with Hotel and Local Serving Retail uses. It does not include housing.
H-1.2	Neighborhood Conditions. We direct efforts to improve the long-term sustainability of neighborhoods through comprehensive planning, provision of neighborhood amenities, rehabilitation and maintenance of housing, and community building efforts.	Consistent: The Specific Plan has a Local Serving Retail component with a public plaza that will contribute to neighborhood amenities. Development within the Specific Plan will contribute to a substantial number of jobs in the area and lead to jobs-housing balance and community building efforts.
H-1.3	Community Amenities. We shall provide adequate public services, infrastructure, open space, parking and traffic management, pedestrian, bicycle, and equestrian routes and public safety for neighborhoods consistent with City master plans and neighborhood plans.	Consistent: The Specific Plan has a Local Serving Retail component with a public plaza that will contribute to neighborhood amenities. The Specific Plan will create a pedestrian realm with wide, buffered, and landscaped sidewalks that will contribute to pedestrian safety.
H-1.4	Historical Preservation. We support the preservation and enhancement of residential structures, properties, street designs, lot configurations, and other reminders of Ontario's past that are considered to be local historical or cultural resources.	N/A: There are no local historical or cultural resources within the Specific Plan.
H-1.5	Neighborhood Identity. We strengthen neighborhood identity through creating parks and recreational outlets, sponsoring neighborhood events, and encouraging resident participation in the planning and improvement of their neighborhoods.	Consistent: The hotel is envisioned to be a world-class hotel with high aesthetic value creating identity for the neighborhood. Additionally, it will provide paid event space in the form of banquet halls as well as restaurants. Additionally, it includes a public plaza in the Local Serving Retail portion of the Specific Plan.

GOAL H-2	**Diversity of types of quality housing that are affordable to a range of household income levels, accommodate changing demographics, and support and reinforce the economic sustainability of Ontario.**	
Policies		
H-2.1	Corridor Housing. We revitalize transportation corridors by encouraging the production of higher density residential and mixed-uses that are architecturally, functionally, and aesthetically suited to corridors.	N/A: The Specific Plan is a commercial mixed-use plan with Hotel and Local Serving Retail uses. It does not include a residential component. However, development within the Specific Plan will contribute to a substantial number of jobs in the area and lead to jobs-housing balance.
H-2.2	Historic Downtown. We foster a vibrant historic downtown through facilitating a wide range of housing types and affordability levels for households of all ages, housing preferences, and income levels.	N/A: The Specific Plan is a commercial mixed-use plan with Hotel and Local Serving Retail uses. It does not include a residential component.
H-2.3	Ontario Airport Metro Center. We foster a vibrant, urban, intense, and highly amenitized community in the Ontario Airport Metro Center Area through a mix of residential, entertainment, retail, and office-oriented uses.	The Specific Plan is within the Ontario Airport Metro Center and provides for a commercial mixed-use development with Hotel and Local Serving Retail.
H-2.4	Ontario Ranch. We support a premier lifestyle community in the Ontario Ranch, distinguished by diverse housing, highest design quality, and cohesive and highly amenitized neighborhoods.	N/A: The Specific Plan is a commercial mixed-use plan with Hotel and Local Serving Retail uses. It does not include a residential component.
H-2.5	Housing Design. We require architectural excellence through adherence to City design guidelines, thoughtful site planning, environmentally sustainable practices, and other best practices.	N/A: The Specific Plan is a commercial mixed-use plan with Hotel and Local Serving Retail uses It does not include a residential component.
H-2.6	Infill Development. We support the revitalization of neighborhoods through the construction of higher-density residential developments on underutilized residential and commercial sites.	N/A: The Specific Plan is a commercial mixed-use plan with Hotel and Local Serving Retail uses It does not include a residential component.
GOAL H-3	**A City regulatory environment that balances the need for creativity and excellence in residential design, flexibility and predictability in the project approval process, and the provision of an adequate supply and prices of housing.**	
Policies		
H-3.1	Incentives. We maintain incentive programs that can be offered to projects that provide benefits to the community such as exceptional design quality, economic advantages, environmental sustainability, or other benefits that would otherwise be unrealized.	N/A
H-3.2	Flexible Standards. We allow flexibility in the application of residential and mixed-use development standards in order to gain benefits such as exceptional design quality, economic advantages, sustainability, or other benefits that would otherwise be unrealized.	Consistent: The development standards for mixed-use development are flexible and provide for high quality development.
H-3.3	Development Review. We maintain a residential development review process that provides certainty and transparency for project stakeholders and the public, yet allows for the appropriate review to facilitate quality housing development.	N/A

H-3.4	Financial Incentives. We consider financial incentives to facilitate and encourage the production, rehabilitation or improvement of housing, or provision of services where such activity furthers housing and community-wide goals.	N/A
GOAL H-4	**Increased opportunities for low- and moderate-income households and families to afford and maintain quality ownership and rental housing opportunities, including move-up opportunities. Inclusive communities, racial equity, fair housing choice, and access to opportunity.**	
Policies		
H-4.1	Preservation of Affordable Apartments. We strive to facilitate the preservation of the affordability of publicly assisted apartments for lower-income households through financial assistance, technical assistance, rehabilitation, and collaborative partnerships.	N/A
H-4.2	Homeownership Opportunities. We increase and expand homeownership rates for lower- and moderate-income households by offering financial assistance, low-interest loans, and educational resources, and by working in collaboration with partnerships.	N/A
H-4.3	Rental Assistance. We support the provision of rental assistance for individuals and families earning extremely low, very low, and low income with funding from the state and federal government.	N/A
H-4.4	Mixed-income Housing. We encourage the integration of affordable housing in the Ontario Ranch, Ontario Airport Metro Center Area, and existing neighborhoods.	N/A
H-4.5	Collaborative Partnerships. We support collaborative partnerships of nonprofit organizations, affordable housing developers, major employers, and for-profit developers to produce affordable housing.	N/A
H-4.6	Fair Housing. We further fair housing by prohibiting discrimination in the housing market, lifting barriers that restrict access to housing, and providing education, support, and enforcement services to address discriminatory practices.	N/A
GOAL H-5	**A full range of housing types and community services that meet the special housing needs for all individuals and families in Ontario, regardless of income level, age, or other status.**	
Policies		
H-5.1	Senior Housing. We support the development of accessible and affordable senior housing and provide financial assistance for seniors to maintain and improve their homes.	N/A
H-5.2	Family Housing. We support the development of larger rental apartments that are appropriate for families with children, including, as feasible, the provision of services, recreation, and other amenities.	N/A

H-5.3	Disabled People. We increase the supply of permanent, affordable, and accessible housing for people with disabilities, and provide assistance to allow them to maintain and improve their homes.	N/A
H-5.4	Homeless People. We partner with nonprofit partners to provide emergency shelters, transitional housing, permanent supportive housing, and supportive services for people who are homeless.	N/A
H-5.5	Supportive Services. We financially support organizations, as feasible, that provide support services that meet the needs of those with special needs and further the greatest level of independence.	N/A
H-5.6	Partnerships. We collaborate with nonprofit organizations, private developers, employers, government agencies, and other interested parties to develop affordable housing and provide support services.	N/A
Parks and Recreation Element		
GOAL PR-1	**A system of safe and accessible parks that meets the needs of the community.**	
Policies		
PR-1.1	Access to Parks. In all new residential development areas, we strive to provide a park and/or recreational facility within walking distance (¼ mile) of every residence and prioritize the establishment of parks in environmental justice areas that do not have adequate access to parks.	N/A: The Specific Plan is a commercial mixed-use plan with Hotel and Local Serving Retail uses. Although this area is classified as an environmental justice area according to Cal Enviroscreen 4.0, it is not residential and does not include a residential component. However, the plan encourages the improvement of and connection to Cucamonga Creek Trail and improvements of Holt Boulevard and Guasti Road which will contribute to the safe and comfortable mobility between the Specific Plan and surrounding uses.
PR-1.2	Adjacency to Schools. We examine locating parks adjacent to school sites to promote joint-use opportunities.	N/A: The Specific Plan does not include a residential component so there is no impact on the location of schools.
PR-1.3	Funding. We shall seek outside, one-time sources of funding for capital improvements and reserve ongoing City funds primarily for operations and maintenance.	N/A
PR-1.4	Joint-use Opportunities. In areas where there is a need but no City recreational facility, we explore joint-use opportunities. (e.g., school sites).	N/A
PR-1.5	Acreage Standard. We strive to provide 5 acres of parkland (public and private) per 1,000 residents.	Consistent. The Specific Plan contributes to both public and private open space. Please see below for the Public/Private landscape area breakdown: - Level 1: Public landscape (not including driveways):28,621 sq ft; Private - landscape:205,335 sq ft - Level 3: Private landscape: 57,365 sq ft - Level 9: Private landscape: 32,119 sq ft

PR-1.6	Private Parks. We expect development to provide a minimum of 2 acres of developed private park space per 1,000 residents.	Consistent. The Specific Plan contributes to both public and private open space. Please see below for the Public/Private landscape area breakdown: - Level 1: Public landscape (not including driveways):28,621 sq ft; Private - landscape:205,335 sq ft - Level 3: Private landscape: 57,365 sq ft - Level 9: Private landscape: 32,119 sq ft
PR-1.7	Special Needs/Universal Design. We attempt to provide recreational opportunities at parks for people of all ages and abilities.	Consistent. The Specific Plan aims to design all public realm and open space facilities with Universal Design standards.
PR-1.8	Renovation. We examine renovating existing facilities prior to building replacement facilities.	N/A: This is a new development Specific Plan.
PR-1.9	Phased Development. We require parks be built in new communities before a significant proportion of residents move in.	N/A: The Specific Plan does not have a residential component
PR-1.10	Master Plans for Individual Park Facilities. We require an individual park master plan for parks in excess of 10 acres.	N/A
PR-1.11	Environmental Function of Parks. We require new parks to meet environmental management objectives.	N/A: The development is not a parks project.
PR-1.12	Trails. We promote connections between parks and local trails including those managed by other public agencies.	N/A: The development is not a parks project, but the Specific Plan is supportive of connections to the Cucamonga Creek Trail.
PR-1.13	Equestrian Trails. We require the design, construction, and maintenance of equestrian trails in Rural Residential designated areas.	N/A
PR-1.14	Multi-family Residential Developments. We require that new multi-family residential developments of five or more units provide recreational facilities or open space, in addition to paying adopted impact fees.	N/A: The development is not a residential project.
PR-1.15	Trail Connectivity. We strengthen and improve equestrian, bike, and multipurpose trail connections within the City and work to improve trail connections into adjacent jurisdictions.	Consistent: The development is supportive of connections to the Cucamonga Creek Trail.
PR-1.16	Equestrian Master Plan. We use Homer Briggs Park as the primary focal point for the development of a Master Plan of Equestrian Trails in the Rural Residential area.	N/A
GOAL PR-5	**A range of recreational programs provided by public, private, and nonprofit organizations that meet the needs of the community's varied interests, age groups, and abilities.**	
Policies		
PR-2.1	Participation. We program park facilities to maximize utilization and participation, while considering park size, location, and population served.	N/A: The development is not a parks project.

PR-2.2	Needs Assessment. We track the needs and priorities for recreational programming and look for ways to meet demand.	N/A: The development is not a parks project.
PR-2.3	Community Involvement. We involve the local community in planning programs for neighborhood and community park facilities.	N/A: The development is not a parks project.
PR-2.4	Access to Programs. We provide a range of recreational and physical exercise programs that are accessible to residents of all income levels throughout the community and prioritize establishing and maintaining equitable access for residents in environmental justice areas.	N/A: Although this area is classified as an environmental justice area according to Cal Enviroscreen 4.0, it does not include residential and is not a parks project. However, the Specific Plan incorporates sustainable strategies and public open space. The plan also encourages the improvement of and connection to Cucamonga Creek Trail. Additionally, public realm improvements of the sidewalk areas and edge friction elements such as curbs, street trees, lighting, etc. along Holt Boulevard and Guasti Road contribute to walkability and connectivity to surrounding areas.
PR-2.5	Partnerships. We partner with local and regional agencies, nonprofit organizations, and the private sector to provide a comprehensive range of recreational programs.	N/A
PR-2.6	Crime Deterrents. We promote and participate in recreational programming as part of our crime prevention effort.	N/A
Environmental Resources Element		
GOAL ER-1	**A reliable and cost-effective system that permits the City to manage its diverse water resources and needs.**	
Policies		
ER-1.1	Local Water Supply. We increase local water supplies to reduce our dependence on imported water. New and redevelopment projects are aligned with our available water supply and/or to enhance our available water supply.	Consistent: Development within the Specific Plan is consistent with General Plan and will not impose water demand beyond that analyzed in the General Plan.
ER-1.2	Matching Supply to Use. We match water supply and quality to the appropriate use.	N/A
ER-1.3	Conservation and Sustainable Water Supply. We work with regional water providers and users to conserve water and ensure sustainable local water supplies as more frequent droughts reduce long term local and regional water availability	N/A
ER-1.4	Supply-Demand Balance. We require that available water supply and demands be balanced.	Consistent: Development within the Specific Plan is consistent with General Plan and will not impose water demand beyond that analyzed in the General Plan.
ER-1.5	Water Resource Management. Environmental justice areas are prioritized as we coordinate with local agencies to protect water quality, prevent pollution, address existing contamination, and remediate contaminated surface water and groundwater.	N/A

ER-1.6	Urban Run-off Quantity. We encourage the use of low impact development strategies, including green infrastructure, to intercept run-off, slow the discharge rate, increase infiltration, and ultimately reduce discharge volumes to traditional storm drain systems.	Consistent: Development within the Specific Plan will use native or drought-tolerant landscaping techniques and will incorporate LID where feasible.
ER-1.7	Urban Run-off Quality. We require the control and management of urban run-off, consistent with Regional Water Quality Control Board regulations.	Consistent: Development within the Specific Plan will use native or drought-tolerant landscaping techniques and will incorporate LID where feasible.
ER-1.8	Wastewater Management. We require the management of wastewater discharge and collection consistent with waste discharge requirements adopted by the Regional Water Quality Control Board.	Consistent: Development within the Specific Plan will be consistent waste discharge requirements adopted by the Regional Water Quality Control Board.
GOAL ER-2	**A cost effective, integrated waste management system that meets or exceeds state and federal recycling and waste diversion mandates.**	
Policies		
ER-2.1	Waste Diversion. We shall meet or exceed AB 939 requirements.	Consistent: Development within the Specific Plan will comply with state requirements.
ER-2.2	Hazardous and Electronic Wastes. We prohibit the disposal of hazardous and electronic waste into the municipal waste stream pursuant to state law.	Consistent: Development within the Specific Plan will comply with state requirements.
ER-2.3	Purchase Products Made from Recycled Materials. We purchase recycled-content products where it is cost effective.	Consistent: Development within the Specific Plan will purchase products made from recycled materials where feasible ensuring competitiveness in the market or adherence to industry standards.
GOAL ER-3	**Cost-effective and reliable energy system sustained through a combination of low impact buildings, site and neighborhood energy conservation, and diverse sources of energy generation that collectively helps to minimize the region's carbon footprint.**	
Policies		
ER-3.1	Conservation Strategy. We require conservation as the first strategy to be employed to meet applicable energy-saving standards.	Consistent: Development within the Specific Plan will aim to conserve energy to the extent feasible based on market competitiveness and industry standards.
ER-3.2	Green Development– Communities. We encourage the use of the LEED Neighborhood Development rating system, or similar mechanism, to guide the planning and development of all new communities.	Consistent: Development within the Specific Plan will use many sustainable practices such as shared parking, drought-tolerant landscaping, transit-supportive design, mixed-use development, pedestrian support, electric charging stations, bike parking facilities, provision of open spaces, heat island reduction, light pollution reduction, enhanced indoor air quality strategies, low-emitting materials, daylighting, and other techniques that are consistent with the LEED Neighborhood Development rating system.

ER-3.3	Building and Site Design. We require new construction to incorporate energy efficient building and site design strategies, which could include appropriate solar orientation, maximum use of natural daylight, passive solar, and natural ventilation.	Consistent: The building maximizes the site's potential for appropriate solar orientation, maximum use of natural daylight, passive solar, and natural ventilation. The main façade of the building is on the south which receives maximum sunlight. Being a hotel with a double-loaded corridor, the rooms are also oriented toward the north. Vertical architectural fin walls are used for solar control as well as architectural element.
ER-3.4	Green Development– Public Buildings. We require all new and substantially renovated City buildings in excess of 10,000 square feet achieve a LEED Silver Certification standard, as determined by the U.S. Green Building Council.	N/A: The Specific Plan is not a City building.
ER-3.5	Fuel-Efficient and Alternative Energy Vehicles and Equipment. We require purchase and use vehicles and equipment that are fuel efficient and meet or surpass state emissions requirements and/or use renewable sources of energy.	Consistent: Any new vehicles owned for the use of the hotel will meet or surpass state emissions requirements and/or use renewable sources of energy.
ER-3.6	Generation- Renewable Sources. We promote the use of renewable energy sources (e.g., solar, wind, biomass) in public and private sector development.	Consistent: Development within the Specific Plan will consider using renewable energy sources.
GOAL ER-4	**Improved indoor and outdoor air quality and reduced locally generated pollutant emissions.**	
Policies		
ER-4.1	Land Use. We reduce GHG and other local pollutant emissions through compact, mixed use, and transit-oriented development and development that improves the regional jobs-housing balance.	Consistent: The Specific Plan is a mixed-use development with a hotel and retail area and will contribute to a substantial number of jobs in the area and lead to a jobs-housing balance.
ER-4.2	Sensitive Land Uses. We prohibit the future siting of sensitive land uses within the distances defined by the California Air Resources Board for specific source categories, without sufficient mitigation.	N/A
ER-4.3	Greenhouse Gases (GHG) Emissions Reductions. We will reduce GHG emissions in accordance with regional, state, and federal regulations.	Consistent: The Specific Plan is a mixed-use development with a hotel and retail area. It is transit supportive as it is located in the vicinity of Metrolink and Amtrak Stations and BRT route. It encourages active transportation by providing an enhanced public realm and bike facilities. The plan encourages the improvement of and connection to Cucamonga Creek Trail. The land uses allow for bike rental and repair facilities in the Local Serving Retail area. It also has an electric charging station in the parking areas. All of the above contribute to the lowering of GHG.

ER-4.4	Indoor Air Quality. We will comply with State Green Building Codes relative to indoor air quality. We seek funding to improve indoor air quality for households with poor indoor air quality, with priority for lower income households in environmental justice areas.	Consistent: The indoor building materials will comply with State Green Building Codes.
ER-4.5	Transportation. We promote mass transit and non-motorized mobility options (walking, biking) to reduce air pollutant emissions.	Consistent: The Specific Plan is a mixed-use plan with hotel and retail uses. It is transit-supportive as it is located in the vicinity of Metrolink and Amtrak Stations and BRT route. It encourages active transportation by providing an enhanced public realm and bike facilities. The plan encourages the improvement of and connection to Cucamonga Creek Trail. The land uses allow for bike rental in the Local Serving Retail area. It also has an electric charging station in the parking areas. All of the above contribute to reducing air pollutant emissions.
ER-4.6	Particulate Matter. We support efforts to reduce particulate matter to meet State and Federal Clean Air Standards.	Consistent: The development will comply with State and Federal Clean Air Standards.
ER-4.7	Other Agency Collaboration. We collaborate with other agencies within the South Coast Air Basin to improve regional air quality at the emission source, with a particular focus on sources that affect environmental justice areas in Ontario.	N/A
ER-4.8	Tree Planting. We protect healthy trees within the City and plant new trees to increase carbon sequestration and help the regional/local air quality. We expand the tree canopy in environmental justice areas to enhance air quality and reduce the “heat island” effect.	Consistent: The Specific Plan includes a number of new trees (See landscaping concepts) that will contribute to enhancing air quality and reducing the “heat island” effect.

ER-4.9	New Localized Air Pollution Sources Near Existing Sensitive Receptors. We require new developments to conduct a Health Risk Assessment for land uses that generate more than 100 trucks per day or 40 trucks per day by trucks operating transportation refrigeration units (TRU's) within 1,000 feet from sensitive land uses (California Health and Safety Code § 42705.5(a)(5)). If the health risk assessment determines the new development poses health hazards that increase the incremental cancer risk above the threshold established by the South Coast Air Quality Management District (AQMD), we will only approve permits upon the condition that adequate mitigation measures are proposed and implemented for potential impacts on the sensitive uses around the site and along the route within Ontario taken by the trucks to and from freeways. We require new developments that must perform a health risk assessment to conduct additional public outreach by sending notifications in multiple languages to all residents living within 500 feet and encourage hosting a public meeting.	N/A
GOAL ER-5	**Protected high value habitat and farming and mineral resource extraction activities that are compatible with adjacent development.**	
Policies		
ER-5.1	Habitat Conservation Areas. We support the protection of biological resources through the establishment, restoration, and conservation of high-quality habitat areas.	N/A: There are no biological resources within the Specific Plan.
ER-5.2	Entitlement and Permitting Process. We comply with state and federal regulations regarding protected species.	N/A: There are no protected species within the Specific Plan.
ER-5.3	Right to Farm. We support the right of existing farms to continue their operations within the Ontario Ranch.	N/A
ER-5.4	Transition of Farms. We protect both existing farms and sensitive uses around them as agricultural areas transition to urban uses.	N/A
ER-5.5	Mining Operations. We prohibit future mining operations where the resource extraction activities are incompatible with existing or proposed adjacent land uses.	N/A

Community Economics Element		
GOAL CE-1	**A complete community that provides for all incomes and stages of life.**	
Policies		
CE-1.1	Jobs-Housing Balance. We pursue improvement to the Inland Empire's balance between jobs and housing by promoting job growth that reduces the regional economy's reliance on out-commuting.	Consistent: The Specific Plan includes hotel and retail uses that will contribute to a substantial number of jobs in the area and lead to jobs-housing balance.
CE-1.2	Jobs and Workforce Skills. We use our economic development resources to: 1. attract jobs suited for the skills and education of current and future City residents; 2. work with regional partners to provide opportunities for the labor force to improve its skills and education; and 3. attract businesses that increase Ontario's stake and participation in growing sectors of the regional and global economy. (Link to Social Resources Policy SR-2.2)	Consistent: The Specific Plan includes hotel, and retail uses that will contribute to a substantial number of jobs in the area for residents and attract businesses in the Local Serving Retail as well as within the hotel.
CE-1.3	Regional Approach to Workforce Development. We work with our partners to provide workforce training and development services throughout the region, recognizing that Ontario employers rely on workers living outside of the City.	N/A
CE-1.4	Business Retention and Expansion. We continuously improve two-way communication with the Ontario business community and emphasize customer service to existing businesses as part of our competitive advantage.	Consistent: The development owners and operators will be open to two-way communication with the City.
CE-1.5	Business Attraction. We proactively attract new and expanding businesses to Ontario in order to increase the City's share of growing sectors of the regional and global economy.	Consistent: The Specific Plan is a hotel and retail plan that will attract businesses in the Local Serving Retail as well as within the hotel.
CE-1.6	Diversity of Housing. We collaborate with residents, housing providers, and the development community to provide housing opportunities for every stage of life; we plan for a variety of housing types and price points to encourage the development of housing supportive of our efforts to attract business in growing sectors of the community while being respectful of existing viable uses.	N/A: The Specific Plan does not include a residential component.
CE-1.7	Retail Goods and Services. We seek to ensure a mix of retail businesses that provide the full continuum of goods and services for the community.	Consistent: The Specific Plan is a mixed-use development with a hotel and retail component.

CE-1.8	Regional Attraction. We encourage the development and programming of regional, cultural, and entertainment destinations in Ontario.	N/A
CE-1.9	Regional Leadership. We provide leadership for public, quasi-public, and private-sector partners that help Ontario and its residents and businesses realize our goals and achieve our Vision.	N/A
CE-1.10	Life-Long Education. We work with our partners who provide life-long learning to ensure that our residents and workforce have access to education at all stages of life.	N/A
CE-1.11	Socioeconomic Trends. We continuously monitor, plan for, and respond to changing socioeconomic trends.	N/A
CE-1.12	Circulation. We continuously plan and improve public transit and non-vehicular circulation for the mobility of all, including those with limited or no access to private automobiles. (Link to Mobility Element Public Transit Section)	Consistent: The Specific Plan is transit-supportive and located in the vicinity of Metrolink and Amtrack stations as well as along the future BRT route.
CE-1.13	Safety and Security. We invest in public safety and communicate our successes because the perception and reality of safety and security are necessary prerequisites for private investment and economic growth.	Consistent: The Specific Plan will incorporate industry-standard safety and security measures.
GOAL CE-2	**A City of distinctive neighborhoods, districts, corridors, and centers where people choose to be.**	
Policies		
CE-2.1	Development Projects. We require new development and redevelopment to create unique, high-quality places that add value to the community. (Link to Community Design Element)	Consistent: The design guidelines for mixed-use development aim to provide for high-quality development that is aesthetically pleasing and creates a unique identity.
CE-2.2	Development Review. We require those proposing new development and redevelopment to demonstrate how their projects will create appropriately unique, functional, and sustainable places that will compete well with their competition within the region.	Consistent: The design guidelines for mixed-use development aim to provide for high-quality development that is aesthetically pleasing and creates a unique identity. The standards and concept plans also provide sustainable strategies and functional spaces.
CE-2.3	Interim Development. We require interim development that does not reflect the long-term Vision, be limited in scale of development so that the investment can be sufficiently amortized to make Vision-compatible redevelopment financially feasible.	N/A
CE-2.4	Protection of Investment. We require that new development and redevelopment protect existing investment by providing architecture and urban design of equal or greater quality.	Consistent: The design guidelines for mixed-use development aim to provide for high-quality development that is aesthetically pleasing and creates a unique identity.

CE-2.5	Private Maintenance. We require adequate maintenance, upkeep, and investment in private property because proper maintenance on private property protects property values. (Link to Community Design Element Policy CD-5.1)	Consistent: Development of private property within the Specific Plan will be privately maintained.
CE-2.6	Public Maintenance. We require the establishment and operation of maintenance districts or other vehicles to fund the long-term operation and maintenance of the public realm whether on private land, in rights-of-way, or on publicly-owned property. (Link to Community Design Element Policy CD-5.1)	N/A
GOAL CE-3	**Decision-making deliberations that incorporate the full short-term and long-term economic and fiscal implications of proposed City Council actions.**	
Policies		
CE-3.1	Fiscal Impact Disclosure. We require requests for City Council action to disclose the full fiscal impacts, including direct and indirect costs.	N/A
CE-3.2	General Plan Amendments. We require those proposing General Plan amendments to disclose reasonably foreseeable impacts through a fiscal analysis.	Consistent: There are no foreseen fiscal impacts on the City. All on-site improvements will be undertaken and financed by the developer. The costs for related off-site improvements shall be the responsibility of either the Developer or the City as defined further in the conditions of the approval and Development Agreement.
CE-3.3	Long-Term Funding Disclosure. We require those requesting City support or funding for projects or programs to disclose if and how they can be continued without further City support.	Consistent: There are no foreseen fiscal impacts on the City. All on-site improvements will be undertaken and financed by the developer. The costs for related off-site improvements shall be the responsibility of either the Developer or the City as defined further in the conditions of the approval and Development Agreement.
CE-3.4	Improving Fiscal Decision-Making. We periodically assess the accuracy of projections for staff time and City resources and use the assessment results to improve our fiscal decision-making process.	N/A
CE-3.5	Sustainable Development. We recognize impacts to municipal finances as an element of sustainability, and we require claims of sustainability to assess fiscal impacts.	N/A
CE-3.6	Fully Funded Liability. We require long-term liabilities, such as retiree medical benefits, employee accrued leave balances, and self-insured liability claims to be fully funded to ensure sound, long-term fiscal health.	Consistent. All long-term liabilities will be in accordance with industry standard.
CE-3.7	Programmatically Balanced Budget. We require that the annual budget include appropriations allocated in a manner to meet the goal of the programmatically balanced budget.	N/A

CE-3.8	Budget Margins. We require that the adopted budget for revenue and expenditures reflect sufficient budget margins to minimize negative impacts to City services due to economic uncertainties.	N/A
CE-3.9	Complete Comparative Context. We require that our annual budget process provide the complete comparative context for proposed new and increased funding so decision makers can fully understand the trade-offs among budget choices.	N/A
Safety Element		
GOAL S-1	**Minimized risk of injury, loss of life, property damage, and economic and social disruption caused by earthquake-induced and other geologic hazards.**	
Policies		
S-1.1	Implementation of Regulations and Standards. We require that all new habitable structures be designed in accordance with the most recent California Building Code adopted by the City, including provisions regarding lateral forces and grading.	Consistent: Development within the Specific Plan will comply with California Building Code adopted by the City, including provisions regarding lateral forces and grading.
S-1.2	Entitlement and Permitting Process. We follow state guidelines and the California Building Code to determine when development proposals must conduct geotechnical and geological investigations.	Consistent: Development within the Specific Plan will comply with California Building Code adopted by the City, including provisions regarding lateral forces and grading.
S-1.3	Continual Update of Technical Information. We maintain up-to-date California Geological Survey seismic hazard maps.	N/A
S-1.4	Seismically Vulnerable Structures. We conform to state law regarding unreinforced masonry structures and coordinate with not-for-profits to facilitate seismic retrofits in environmental justice areas and for low-income households.	N/A
GOAL S-2	**Minimized risk of injury, loss of life, property damage and economic and social disruption caused by flooding and inundation hazards.**	
Policies		
S-2.1	Entitlement and Permitting Process. We require hydrological studies prepared by a state-certified engineer when new development is located in a 100-year or 500-year floodplain to assess the impact that the new development will have on the flooding potential of existing development down-gradient.	TBD
S-2.2	Floodplain Mapping. We require any new development partially or entirely in 100-year flood zones to provide detailed floodplain mapping for 100- and 200-year storm events as part of the development approval process.	N/A: The Specific Plan is not in the 100-year flood zones.

S-2.3	Facilities that Use Hazardous Materials. We comply with state and federal law and do not permit facilities using, storing, or otherwise involved with substantial quantities of onsite hazardous materials to be located in the 100-year flood zone or 500-year flood zone unless all standards of elevation, floodproofing, and storage have been implemented to the satisfaction of the Building Department.	N/A: There are no hazardous materials stored, produced, or transported to the site.
S-2.4	Prohibited Land Uses. We prohibit the development of new essential and critical facilities in the 100-year floodplain and discourage the development of new essential and critical facilities in the 500-year floodplain unless all standards of elevation and flood proofing demonstrate that a facility can be safe and operational during a flood event, implemented to the satisfaction of the Building Department.	N/A
S-2.5	Stormwater Management. We maintain the storm drain system to convey a 100-year storm, when feasible, and encourage environmental site design practices to minimize flooding and increase groundwater recharge, including natural drainage, green infrastructure, and permeable ground surfaces. (Link to Environmental Resources Element)	N/A: The Specific Plan is not in the 100-year flood zones.
S-2.6	Use of Flood Control Facilities. We encourage joint use of flood control facilities as open space or other types of recreational facilities.	Consistent: The Specific plan is located immediately west of the Cucamonga Creek Channel. This fully improved facility provides regional flood control and storm conveyance to the surrounding area. A portion of the flood control channel could be re-imagined as a multimodal greenway that promotes outdoor activity.
S-2.7	Collaboration Between Agencies. Collaborate with the San Bernardino County Flood Control District and other state and federal agencies to maintain flood-control infrastructure to minimize flood damage.	N/A
GOAL S-3	**Reduced risk of death, injury, property damage and economic loss due to fires, accidents and normal everyday occurrences through prompt and capable emergency response.**	
Policies		
S-3.1	Prevention Services. We proactively mitigate or reduce the negative effects of fire, hazardous materials release, and structural collapse by implementing the regularly adopted California Fire Code and California Building Code.	Consistent: Development within the Specific Plan will comply with California Fire Code and California Building Code adopted by the City.
S-3.2	Community Outreach. We provide education to local schools and community groups to promote personal and public safety.	N/A

S-3.3	Fire and Emergency Medical Services. We maintain sufficient fire stations, equipment and staffing to respond effectively to emergencies and meet the needs of the community and state requirements.	N/A

S-3.4	Special Team Services. We maintain effective special rescue services.	N/A
S-3.5	Emergency Notifications. We maintain a public alert notification system that efficiently conveys information about imminent, developing, ongoing, and concluding emergency events to residents and visitors, working with network providers that translate information into other languages.	N/A
S-3.6	Interagency Cooperation. In order to back up and supplement our capabilities to respond to emergencies, we participate in the California Fire Rescue and Mutual Aid Plan.	N/A
S-3.7	Water Supply and System Redundancy. We monitor our water system to manage and ensure adequate firefighting water supplies.	N/A
S-3.8	Fire Prevention through Environmental Design. We require new development to incorporate fire prevention consideration in the design of streetscapes, sites, open spaces, and buildings. (Link to Community Design Element)	Consistent: Development within the Specific Plan will incorporate fire prevention considerations in the design of streetscapes, sites, open spaces, and buildings. See landscape plan concepts.
S-3.9	Resource Allocation. We analyze fire data to evaluate the effectiveness of our fire prevention and reduction strategies and allocate resources accordingly.	N/A
GOAL S-4	**An environment where noise does not adversely affect the public's health, safety, and welfare.**	
Policies		
S-4.1	Noise Mitigation. We utilize the City's Noise Ordinance, building codes, and subdivision and development codes to mitigate noise impacts.	Consistent: Development within the Specific Plan is allowed equivalent noise levels within 70 dbA per the City's Zoning Code for exterior noise standards for lodging facilities.
S-4.2	Coordination with Transportation Authorities. We collaborate with airport owners, FAA, Caltrans, SBCTA, SCAG, neighboring jurisdictions, and other transportation providers in the preparation and maintenance of, and updates to transportation-related plans to minimize noise impacts and provide appropriate mitigation measures.	N/A
S-4.3	Airport Noise Mitigation. We aggressively pursue funding and utilize programs to reduce effects of aircraft noise in impacted areas of our community.	N/A
S-4.4	Truck Traffic. We manage truck traffic to minimize noise impacts on sensitive land uses.	N/A
S-4.5	Roadway Design. We design streets and highways to minimize noise impacts.	N/A

S-4.6	Airport Noise Compatibility. We utilize information from Airport Land Use Compatibility Plans to prevent the construction of new noise-sensitive land uses within airport noise impact zones.	N/A
S-4.7	Rail Noise Mitigation. We require residential and mixed use development of vibration-sensitive uses in areas within 200 feet of rail to evaluate for indoor vibration levels and mitigate any exceedances of the Federal Transit Administration vibration-annoyance criteria.	N/A
GOAL S-5	**Minimize the risk of injury, property damage, and economic loss resulting from windstorms and wind-related hazards.**	
Policies		
S-5.1	Dust Control Measures. We require the implementation of Best Management Practices for dust control at all excavation and grading projects.	Consistent: Development within the Specific Plan requires little to no grading. However, Best Management Practices will be implemented for dust control.
S-5.2	Grading in High Winds. We prohibit excavation and grading during strong wind conditions, as defined by the Building Code.	Consistent: Development within the Specific Plan requires little to no grading. Grading during strong wind conditions will be prohibited, as defined by the Building Code.
S-5.3	Public Safety Power Shutoffs. We coordinate with utility companies to minimize service interruptions, such as Public Safety Power Shutoffs, before, during, and after windstorms and wind-related hazards.	N/A
GOAL S-6	**Reduced potential for hazardous materials exposure and contamination.**	
Policies		
S-6.1	Disclosure and Notification. We enforce disclosure laws that require all users, producers, and transporters of hazardous materials and wastes to clearly identify the materials that they store, use, or transport.	N/A
S-6.2	Response to Hazardous Materials Releases. We respond to hazardous materials incidents and coordinate these services with other jurisdictions.	N/A
S-6.3	Safer Alternatives. We minimize our use of pesticides and other hazardous materials by choosing non-toxic alternatives that do not pose a threat to the environment, especially when it could affect public park facilities and open spaces.	Consistent: Safer non-toxic alternatives will be used for the maintenance of landscaped areas within the Specific Plan.
S-6.4	Safe Storage and Maintenance Practices. We require that the users of hazardous materials be adequately prepared to prevent and mitigate hazardous materials releases.	N/A

S-6.5	Location of Hazardous Material Facilities. We regulate facilities that will be involved in the production, use, storage, or disposal of hazardous materials, pursuant to federal, state, county, and local regulations, so that impacts to the environment and sensitive land uses are mitigated. We prohibit new hazardous waste facilities in close proximity to sensitive land uses and environmental justice areas.	N/A
S-6.6	Location of Sensitive Land Uses. We prohibit new sensitive land uses from locating within airport safety zones and near existing sites that use, store, or generate large quantities of hazardous materials. (Link to Land Use Element)	N/A
S-6.7	Household Hazardous Waste. We support the proper disposal of household hazardous substances.	N/A
S-6.8	Mitigation and Remediation of Groundwater Contamination. We actively participate in local and regional efforts directed at both mitigating environmental exposure to contaminated groundwater and taking action to clean up contaminated groundwater once exposure occurs.	N/A
S-6.9	Remediation of Methane. We require development to assess and mitigate the presence of methane, per regulatory standards and guidelines.	N/A
GOAL S-7	**Residential neighborhoods, commercial areas, and industrial districts that are kept safe through a multi-faceted approach of prevention, suppression, and community involvement in public safety.**	
Policies		
S-7.1	Police Unit Response. We respond to calls for service in a timely manner.	N/A
S-7.2	Community Oriented Problem Solving (C.O.P.S.). We support and maintain the mission of COPS to identify and resolve community problems.	N/A
S-7.3	Prevention Services. We provide crime prevention programs targeted to youth, parents, seniors, businesses, and neighborhoods.	N/A

S-7.4	Crime Prevention through Environmental Design (CPTED). We require new development to incorporate CPTED in the design of streetscapes, sites, open spaces, and buildings.	Consistent: CPTED techniques are implemented in the Specific Plan. These include but not limited to the following: - Design public spaces, such as lobbies, and entrances, to maximize visibility. - Use landscaping and lighting strategically to eliminate hiding spots and create clear sightlines. - Limit access points to the hotel and use controlled entry systems. - Use fencing, gates, and other barriers to control access to the property. - Use design elements, such as changes in paving materials or landscaping, to delineate different areas. -Provide well-lit pathways and amenities that encourage guests to use outdoor spaces. -Use clear and informative signage to guide guests and staff around the property.
S-7.5	Interdepartmental Coordination. We utilize all City departments to help reduce crime and promote public safety.	N/A
S-7.6	Partnerships. We partner with other local, state, and federal law enforcement agencies and private security providers to enhance public safety services in Ontario.	N/A
S-7.7	Resource Allocation. We analyze crime data to evaluate the effectiveness of crime prevention and reduction strategies and allocate resources accordingly.	N/A
S-7.8	Social Services. We support behavioral health and social services as part of the public safety solution.	N/A
GOAL S-8	**Disaster resilient, prepared community through effective emergency/disaster preparedness, response, mitigation, and recovery.**	
Policies		
S-8.1	State and Federal Mandates. We maintain emergency management programs that meet the requirements of the State of California Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS).	N/A
S-8.2	Emergency Management Plans. We maintain, update, and adopt the Emergency Operations Plan (EOP) and incorporate, by reference the City's Hazard Mitigation Plan (HMP).	N/A
S-8.3	Emergency/Disaster Training Exercises. We conduct training and exercises to prepare for and evaluate emergency/disaster response and recovery procedures.	N/A

S-8.4	Interagency Collaboration. We maintain partnerships, including automatic aid agreements, with fire protection, police and sheriff departments, and emergency management agencies in San Bernardino and Riverside County to strengthen emergency response.	N/A
S-8.5	Interdepartmental Coordination. We utilize all City departments to help support emergency/disaster preparedness, response, mitigation, and recovery.	N/A
S-8.6	Community Outreach. We provide education to the community to promote personal, family, and community emergency preparedness to both natural and human-generated hazards.	N/A
S-8.7	Extreme Heat and Air Quality. We work to ensure that all community members are informed about and have access to community cooling centers and clean air centers during extreme heat events or wildfires, with a focus on serving environmental justice communities. We support the development of extreme heat emergency response policies and practices to address these critical health risks in the community.	N/A
S-8.8	Regional Partnerships for Climate Adaptation. We partner with local governments in San Bernardino County, Riverside County, and Inland Southern California Climate Collaborative to develop regional climate change adaptation strategies and programs.	N/A
S-8.9	Backup Power in Critical Facilities. We require backup power be maintained in critical facilities. We encourage backup power solutions that include renewable energy components.	N/A
GOAL S-9	**Incorporate energy efficient practices and renewable energy systems to improve air quality, comfort, and energy reliability during temporary power outages.**	
Policies		
S-9.1	Solar Energy. We support and may incentivize the installation of residential and commercial solar panels and battery storage systems that can provide electricity during power outages.	N/A
S-9.2	Renewable Energy. Renovate existing city-owned facilities and plan future facilities to include renewable energy generation capacity and battery storage as part of an effort to make public facilities and services greener and more resilient to power outages.	N/A
S-9.3	Energy Efficiency Retrofits. We support and may incentivize retrofits to residential and commercial buildings that improve energy efficiency and insulation from extreme temperatures, giving priority towards low-income applicants.	N/A

Mobility Element		
M-1	**A system of roadways that meets the mobility needs of a dynamic and prosperous Ontario.**	
	Policies	
M-1.1	Roadway Design and Maintenance. We require our roadways to: 1. Comply with federal, state, and local design and safety standards; 2. Meet the needs of multiple transportation modes and users; 3. Handle the capacity envisioned in the City of Ontario Master Plan of Streets and Highways; 4. Be maintained in accordance with best practices; 5. Be compatible with the streetscape and surrounding land uses; and 6. Promote the efficient flow of all modes of traffic through the implementation of intelligent transportation systems and travel demand management strategies. (Link to Community Design Element Policies CD-2.5, CD-2.6, CD-2.16, CD-3.3)	N/A: There are no roadways proposed within the Specific Plan other than the entranceway and access to the basement. These are designed with best practices in mind that promote the efficient flow of traffic.
M-1.2	Mitigation of Impacts. We require development to mitigate its traffic impacts.	Consistent: Traffic impacts will be mitigated based on a development agreement with the City.
M-1.3	Agency Coordination on Roadway Improvements. We work with Caltrans, SBCTA, and others to identify, fund, and implement needed improvements to roadways when necessary. We work with neighboring jurisdictions to promote regional connectivity, access, and meet operational level of service standards at the City limits.	N/A
M-1.4	Complete Streets. We work to provide a complete, balanced, context-aware, multimodal transportation network that meets the needs of all users of streets, roads, and highways, including motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation. We prioritize implementation of complete streets improvements in environmental justice areas to facilitate opportunities for residents to use active transportation systems.	N/A: There are no roadways proposed within the Specific Plan other than the entranceway and access to the basement. These are designed with best practices in mind that promote efficient traffic flow and allow for pedestrian movement. The Specific Plan also improves the pedestrian realm along Holt Boulevard and Guasti Road which will contribute to complete street.

M-1.5	Level of Service. Maintain a peak hour Level of Service (LOS) E or better at all intersections. Maintain Level of Service D or better on arterial streets in the City. Develop and maintain a list of locations where LOS E or LOS F are considered acceptable and would be exempt from this level of service policy. Considerations for LOS exemption include being restricted by environmental constraints, lacking available right-of-way, deterring an increase in VMT, or degrading other modes of travel (such as bicycle or pedestrian infrastructure).	Consistent: Traffic impacts will be mitigated based on a development agreement with the City.
M-1.6	Reduce Vehicle Miles Traveled. We will strive to reduce VMT through a combination of land use, transportation projects, travel demand management strategies, and other trip reduction measures in coordination with development projects and public capital improvement projects.	Consistent: The Specific Plan is a mixed-use development with a hotel and retail area. It is transit supportive as it is located in the vicinity of Metrolink and Amtrak Stations and BRT route. It encourages active transportation by providing an enhanced public realm and bike facilities. The plan encourages the improvement of and connection to Cucamonga Creek Trail. The Local Serving Retail allows for bike rentals . The Specific Plan Development Standards call for electric charging stations in the parking areas. All of the above contribute to the lowering of VMT.
M-2	**A system of trails and corridors that facilitate and encourage active modes of transportation.**	
Policies		
M-2.1	Active Transportation. We maintain our Active Transportation Master Plan to create a comprehensive system of on- and off-street bikeways and pedestrian facilities that are safe, comfortable, and accessible and connect residential areas, businesses, schools, parks, and other key destination points.	Consistent: The plan encourages active transportation by providing an enhanced public realm and bike facilities. The plan encourages the improvement of and connection to Cucamonga Creek Trail.
M-2.2	Bicycle System. We provide off-street multipurpose trails and Class II bikeways as our preferred paths of travel and use the Class III for connectivity in constrained circumstances. When truck routes and bicycle facilities share a right-of-way, we prefer Class I or Class IV bicycle facilities. We require new development to include bicycle facilities, such as bicycle parking and secure storage areas.	Consistent: The plan encourages active transportation by providing an enhanced public realm and bike facilities. The plan encourages the improvement of and connection to Cucamonga Creek Trail.
M-2.3	Pedestrian Walkways. We require streets to include sidewalks and visible crosswalks at major intersections where necessary to promote safe and comfortable mobility between residential areas, businesses, schools, parks, recreation areas, and other key destination points. (Link to Community Design Policy CD-3.3)	Consistent: There are no roadways proposed within the Specific Plan other than the entranceway and access to the basement. These are designed with best practices and features that allow for pedestrian movement. The Specific Plan also improves the pedestrian realm along Holt Boulevard and Guasti Road which will contribute to the safe and comfortable mobility between the Specific Plan and surrounding uses.

M-2.4	Network Opportunities. We use public rights-of-way and easements such as, utility easements, levees, drainage corridors, road rights-of-way, medians, and other potential options to maintain and expand our bicycle and pedestrian network. In urban, mixed- use, and transit-oriented Place Types, we encourage the use of underutilized public and private spaces to expand our public realm and improve pedestrian and bicycle connectivity. (Link to Community Design Element Urban, Mixed Use, and Transit-oriented Place Types Section)	Consistent: The Specific Plan is transit-supportive and located in the vicinity of Metrolink and Amtrack stations as well as along the future BRT route.
M-3	**A public transit system that is a viable alternative to automobile travel and meets basic transportation needs of the transit-dependent.**	
	Policies	
M-3.1	Transit Partners. We maintain a proactive working partnership with transit providers to ensure that adequate public transit service is available, cost-efficient, and convenient, particularly for residents in environmental justice areas.	N/A
M-3.2	Alternative Transit Facilities at New Development. We require new development adjacent to an existing or planned transit stop to contribute to the creation of transit facilities, such as bus shelters, transit bays and turnouts, and bicycle facilities, such as secure storage areas.	N/A: While the Specific Plan is in the vicinity of the Metrolink and Amtrack stations, it is not adjacent to these facilities. The same goes with the BRT route. The plan does provide for bike parking.
M-3.3	Transit-Oriented Development. We may provide additional development-related incentives to those inherent in the Land Use Plan for projects that promote transit use and reduce vehicle miles traveled.	Consistent: The Specific Plan is a mixed-use development with a hotel and retail area. The future multimodal transit station is under consideration within the Mixed-Use Area, which will link rail, regional, local, and airport transit. The Specific Plan is transit-supportive and contributes to the lowering of VMT.
M-3.4	Bus Rapid Transit (BRT) Corridors. We work with regional transit agencies to implement BRT service and reduce vehicle miles traveled by targeting destinations and corridors with the highest number of potential riders.	N/A
M-3.5	Light Rail. We support extension of the Metro Rail Gold Line to Ontario, and will work to secure station locations at the proposed multimodal transit center.	N/A
M-3.6	Metrolink Expansion. We advocate expansion of Metrolink service to include the Downtown and the multimodal transit center.	N/A
M-3.7	High Speed Rail. We encourage the development of high-speed rail systems that would enhance regional mobility in Southern California and serve the City of Ontario.	N/A

M-3.8	Feeder Systems. We work with regional transit agencies to secure convenient feeder service from the Metrolink station and the proposed multimodal transit center to employment centers in Ontario.	N/A
M-3.9	Ontario Airport Metro Center Circulator. We will explore development of a convenient mobility system, including but not limited to shuttle service, people mover, and shared car system, for the Ontario Airport Metro Center.	N/A
M-3.10	Multimodal Transportation Center. We intend to ensure the development of a multimodal transportation center near ONT airport to serve as a transit hub with amenities for transit riders, pedestrians, and bicyclists transitioning to local buses, BRT, the Gold Line, high-speed rail, the proposed Ontario Airport Metro Center Circulator, and other future transit modes. We support locations for the multimodal transportation center that are north of ONT airport, between Vineyard Avenue and Interstate 15.	N/A
M-3.11	Transit and Community Facilities. We require the future development of community-wide serving facilities to be sited in transit-ready areas that can be served and made accessible by public transit. Conversely, we plan (and coordinate with other transit agencies to plan) future transit routes to serve existing community facilities.	N/A
M-4	**An efficient flow of goods through the City that maximizes economic benefits and minimizes negative impacts.**	
	Policies	
M-4.1	Truck Routes. We designate and maintain a network of City truck routes that provide for the safe and efficient transport of goods while minimizing negative impacts on local circulation and noise-sensitive land uses, as shown on Exhibit M-04, Truck Routes. We will minimize conflicts on truck routes through the design and implementation of buffers between travel lanes and pedestrian and bicycle facilities on designated truck routes.	N/A
M-4.2	Regional Participation. We work with regional and subregional transportation agencies and adjacent cities to plan and implement goods movement strategies, including regional truck routes, plans and projects that improve mobility, support the efficient movement of goods, and minimize negative environmental impacts. (Link to Environmental Resources Policy ER-4.3)	N/A
M-4.3	Railroad Grade Separations. We eliminate at-grade rail crossings identified on Exhibit M-01, Roadway Classifications.	N/A

M-4.4	Environmental Considerations. We support both local and regional efforts to reduce/eliminate the negative environmental impacts of goods movement through the planning and implementation of truck routing and the development of a plan to evaluate the future needs of clean fueling/recharging and electrified truck parking.	N/A
M-4.5	Air Cargo. We support and promote a ONT airport that accommodates 1.6 million tons of cargo per year, as long as the impacts associated with that level of operations are planned for and mitigated.	N/A
GOAL M-5	**A proactive leadership role in helping identify and facilitate implementation of strategies that address regional transportation challenges.**	
Policies		
M-5.1	Regional Leadership. We maintain a leadership role to help identify and implement potential solutions to long-term regional transportation problems.	N/A
M-5.2	Land Use Compatibility with Regional Transportation Facilities. We work with ONT, railroads, Caltrans, SBCTA, and other transportation agencies to minimize impacts.	N/A
Community Design Element		
GOAL CD-1	**A dynamic, progressive city containing distinct and complete places that foster a positive sense of identity and belonging among residents, visitors, and businesses.**	
Policies		
CD-1.1	City Identity. We take actions that are consistent with the City being a leading urban center in Southern California while recognizing, enhancing, and preserving the character of our existing viable neighborhoods.	Consistent: The Specific Plan is a mixed-use development with hotel and Local Serving Retail uses. The design standards within the Specific Plan aim to provide for high-quality development that is aesthetically pleasing and contributes to City identity.
CD-1.2	Place Types. We establish Place Types in urban, mixed use, and transit-oriented areas to foster the City's identity as a premier community and require new development within each Place Type to incorporate prescribed urban patterns, forms, and placemaking priorities. (Link to Community Design Element Urban, Mixed Use, and Transit-oriented Place Types Section)	Consistent: The Specific Plan is a mixed-use development with hotel and Local Serving Retail uses. The design standards within the Specific Plan aim to provide for high-quality development that is aesthetically pleasing and contributes to City identity. The concept plans and elevations are contemporary and aesthetically pleasing. The public plaza and public realm along Holt Boulevard and Guasti Road contribute to public placemaking whereas the private open space and recreational areas contribute to placemaking elements within the development. The signage, lighting, landscaping, and paving standards aim to contribute to placemaking.

CD-1.3	Existing Neighborhoods. We require the existing character of viable residential and non-residential neighborhoods be preserved, protected, and enhanced.	N/A
CD-1.4	Transportation Corridors. We will enhance our major transportation corridors within the City through landscape, hardscape, signage and lighting. The extent of enhancement should be appropriate to the use, type, and context of each corridor.	Consistent: The Specific Plan includes a public plaza and public realm along Holt Boulevard and Guasti Road which contribute to public placemaking and enhancement of these corridors.
CD-1.5	View Corridors. We require all major north-south streets be designed and redeveloped to feature views of the San Gabriel Mountains, which are part of the City's visual identity and a key to geographic orientation. Such views should be free of visual clutter, including billboards and may be enhanced by framing with trees.	N/A
GOAL CD-2	**A high level of design quality resulting in neighborhoods, commercial areas, public spaces, parks, and streetscapes that are attractive, safe, functional, human- scale, and distinct.**	
Policies		
CD-2.1	Quality Building Design and Architecture. We encourage all development projects to convey visual interest and character through: 1. Building volume, massing, and height to provide context-appropriate scale and proportion; 2. A true architectural style which is carried out in plan, section, and elevation through all aspects of the building and site design and appropriate for its setting; and 3. Exterior building materials that are articulated, high quality, durable, and appropriate for the architectural style.	Consistent: The development standards and design guidelines chapters in the Specific Plan document discuss massing, architecture, materials, and related topics. The elevation rendering shows a high-quality design with contemporary architecture and high-quality materials (refer to the material palette in the design guidelines). Digital illumination is also used to provide a cutting edge to the architecture of the building. There is a regularity in architecture through the use of architectural fins that create vertical elements, and they are intercepted by horizontal elements forming a grid-like pattern.

CD-2.2	Neighborhood Design. We create distinct residential neighborhoods that promote a sense of community and identity by emphasizing access, connectivity, livability, and social interaction through such elements as: 1. A pattern of smaller, walkable blocks that promote activity, safety, and access to nearby amenities and services; 2. Varied parcel sizes and lot configurations to accommodate a diversity of housing types; 3. Traffic calming measures to slow traffic and promote walkability while maintaining acceptable traffic flows and emergency evacuation access; 4. Floor plans that encourage views onto the street and de-emphasize the visual and physical dominance of garages (introducing the front porch as the "outdoor living room"), as appropriate; and 5. Landscaped parkways, with sidewalks separated from the curb and designed to maximize safety, comfort, and aesthetics for all users.	Consistent: The Specific Plan includes a public plaza and public realm improvements of the sidewalk areas and edge friction elements such as curbs, street trees, lighting, etc. along Holt Boulevard and Guasti Road contributing to walkability and traffic calming. These also maximize safety, comfort, and aesthetics for all users. The hotels have windows looking onto Guasti Road and Holt Boulevard that provide views of the street. Parking is provided underground.
CD-2.3	Commercial Areas. We desire commercial areas and centers to be distinctive, pedestrian friendly, functional, and vibrant with a range of businesses, places to gather, and connectivity to the neighborhoods they serve.	Consistent: The Specific Plan includes a public plaza and public realm improvements of the sidewalk areas and edge friction elements such as curbs, street trees, lighting, etc. along Holt Boulevard and Guasti Road which contribute to walkability and traffic calming. These also maximize safety, comfort, and aesthetics for all users.
CD-2.4	Urban, Mixed Use, and Transit-oriented Areas. We establish Place Types to require mixed use, urban, and transit-oriented areas to be designed and developed as pedestrian oriented areas that are integrated with adjacent neighborhoods and promote a vibrant, comfortable, and functional environment, as defined for each Place Type. (Link to Community Design Element Urban, Mixed Use, and Transit-oriented Place Types Section)	Consistent: The Specific Plan includes a public plaza and public realm improvements of the sidewalk areas and edge friction elements such as curbs, street trees, lighting, etc. along Holt Boulevard and Guasti Road which contribute to walkability and traffic calming. These also maximize safety, comfort, and aesthetics for all users.
CD-2.5	Streetscapes. We design new and, when necessary, retrofit existing streets to improve walkability, bicycling and transit integration, strengthen connectivity, and enhance community identity through improvements to the public right-of-way such as sidewalks, street trees, parkways, curbs, street lighting and street furniture.	Consistent: The Specific Plan includes a public plaza and public realm improvements of the sidewalk areas and edge friction elements such as curbs, street trees, lighting, etc. along Holt Boulevard and Guasti Road which addresses this policy.

CD-2.6	Connectivity. We promote development of local street patterns, multimodal networks, and connected public spaces that create and unify neighborhoods, rather than divide them, and create cohesive and continuous corridors, rather than independent "islands" through the following means: 1. Local street networks that provide access both between subdivisions and within neighborhoods and discourage through traffic; 2. A local street system that is logical and understandable for the user. A grid system is preferred to avoid circuitous and confusing travel paths between internal neighborhood areas and adjacent arterials and to provide adequate emergency and evacuation access; and 3. Pedestrian and bicycle networks that provide convenient access to neighborhoods and nearby destinations, such as schools, parks, other public spaces, commercial areas, and transit stops.	Consistent: The Circulation Plan complements the Land Use Plan by linking the hotel and retail uses to adjacent land uses and is designed to enhance connectivity and facilitate the movement of various transportation modes. Additionally, the development of the Specific Plan Area will include sidewalks around the site and development of a plaza at the intersection of Holt Boulevard and Guasti Road.
CD-2.7	Sustainability. We collaborate with the development community to design and build neighborhoods, streetscapes, sites, outdoor spaces, landscaping, and buildings to reduce energy demand through solar orientation, maximum use of natural daylight, passive solar and natural ventilation, building form, mechanical and structural systems, building materials, and construction techniques.	Consistent: The Development Standards and Design Guidelines within the Specific plan include many sustainable practices such as shared parking, drought-tolerant landscaping, transit-supportive design, mixed-use development, pedestrian support, electric charging stations, bike parking facilities, provision of open spaces, heat island reduction, light pollution reduction, enhanced indoor air quality strategies, low-emitting materials, daylighting, and so on that are consistent with Sustainable design.
CD-2.8	Safe Design. We incorporate defensible space design into new and existing developments to ensure the maximum safe travel and visibility on pathways, corridors, and open space and at building entrances and parking areas by avoiding physically and visually isolated spaces, maintaining visibility and accessibility, and using lighting.	Consistent: All outdoor spaces, including entrances and parking areas, are designed to ensure maximum visibility and adequate lighting. This includes both public and private areas. Review the parking and lighting standards and guidelines within the Specific Plan.
CD-2.9	Landscape Design. We encourage durable, sustainable, and drought-tolerant landscaping materials and designs that enhance the aesthetics of structures, create and define public and private spaces, and provide shade and environmental benefits.	Consistent: The Specific Plan includes many sustainable practices to the extent possible including drought-tolerant landscaping, low-emitting materials, paving materials, reduced heat island effect, daylighting, and other techniques. A variety of paving materials are used as shown in the paving palette in design guidelines to delineate and define spaces both public and private.

CD-2.10	Parking Areas. We require all development, including single-family residential, to minimize the visual impact of surface, structured, and garage parking areas visible from the public realm in an aesthetically pleasing, safe and environmentally sensitive manner. Examples include: 1. Surface parking: Shade trees, pervious surfaces, urban run-off capture and infiltration, and pedestrian paths to guide users through the parking field. 2. Structured parking: facade articulation, screening, appropriate lighting, and landscaping. 3. Garage parking: providing access to single-family residential garages through alley access, recessing garages from the frontage to emphasize front doors or active living spaces.	N/A: The Specific Plan does not include residential. The parking is provided underground.
CD-2.11	Entry Statements. We encourage the inclusion of amenities, signage, and landscaping at the entry to neighborhoods, commercial centers, mixed use areas, industrial developments, and public places that reinforce them as uniquely identifiable places.	Consistent: The Specific Plan entrance is designed with attractive landscaping that features terraced planting, an entry canal water feature, an attractive entranceway, an arrival court with sculpture, and outdoor dining spaces. The local retail area includes a plaza, an attractive landscaping buffer, and outdoor dining spaces.
CD-2.12	Site and Building Signage. We encourage the use of sign programs that utilize complementary materials, colors, and themes. Project signage should be designed to effectively communicate and direct users to various aspects of the development and complement the character of the structures.	Consistent: The Specific Plan sign program is well-defined in in the development standards and provides for the size, location, and themes of the signage. The signage will be made of durable materials and will be complementary to the building design.
CD-2.13	Entitlement Process. We work collaboratively with all stakeholders to ensure a high degree of certainty in the efficient review and timely processing of all development plans and permits.	N/A
CD-2.14	Availability of Information. We provide easy access to information for developers, builders and the public about design quality, construction quality, and sustainable building practices.	N/A
CD-2.15	Leverage Professional and Trade Organizations. We support excellence in design and construction quality through collaboration with trade and professional organizations that provide expertise, resources and programs for developers, builders, and the public.	N/A
CD-2.16	Transit Stops. We require transit stops be conveniently located, well lit, safe, and clearly accessible to pedestrians, bicyclists, and people of all abilities.	N/A

GOAL CD-3	Vibrant urban environments that are organized around intense buildings, pedestrian and transit areas, public plazas, and linkages between and within developments that are conveniently located, visually appealing and safe during all hours.	
	Policies	
CD-3.1	Unique Identity. We promote development that heightens the unique character and identity of each Place Type by requiring compatible land uses and land planning, site design, and building design that promotes an active public realm.	Consistent: The design guidelines for mixed-use development aim to provide for high-quality development that is aesthetically pleasing and contributes to the City's identity. The concept plans and elevations are contemporary and aesthetically pleasing. The public plaza and public realm along Holt Boulevard and Guasti Road contribute to public placemaking whereas the private open space and recreational areas contribute to placemaking elements within the development. The signage, lighting, landscaping, and paving standards aim to contribute to placemaking.
CD-3.2	Comfortable, Human-Scale Public Realm. We require that public spaces, including streets, parks, and plazas on both public and private property be designed to maximize safety, comfort and aesthetics and connect to the citywide pedestrian, vehicular, and bicycle networks.	Consistent: The Specific Plan includes a public plaza and public realm improvements of the sidewalk areas and edge friction elements such as curbs, street trees, lighting, etc. along Holt Boulevard and Guasti Road contribute to walkability and traffic calming. These also maximize safety, comfort, and aesthetics for all users.
CD-3.3	Complete and Connected Network. We require that pedestrian, vehicular, and bicycle circulation on both public and private property be coordinated to provide connections internally and externally to adjacent neighborhoods and properties (existing and planned) through a system of local roads and trails that promote walking and biking to nearby destinations (including existing and planned parks, commercial areas, and transit stops) and are designed to maximize safety, comfort, and aesthetics.	Consistent: The Specific Plan encourages active transportation by providing an enhanced public realm and bike facilities, including bike rentals as an allowable use in the Local Serving Retail area. The plan encourages the improvement of and connection to Cucamonga Creek Trail. The Specific Plan also improves the pedestrian realm along Holt Boulevard and Guasti Road. The public plaza and public realm improvements of the sidewalk areas and edge friction elements such as curbs, street trees, lighting, etc. along Holt Boulevard and Guasti Road contribute to walkability. All of the above encourage physical activity.
CD-3.4	Context-Aware and Appropriate Design. We require appropriate building and site design that complements existing development, respects the intent and identity of the Place Type, and provides appropriate transitions and connections between adjacent uses to ensure compatibility of scale, maintain an appropriate level of privacy for each use, and minimize potential conflicts.	Consistent: The Specific Plan is consistent with General Plan Update- The Ontario Plan's "Guasti District".
CD-3.5	Active Frontages. We create lively pedestrian streetscapes by requiring primary building, business, and residential entrances, outdoor dining, and storefronts be located on ground floors adjacent to sidewalks or public spaces and designed to maximize safety, comfort, aesthetics, and the intended functionality (as defined by the Place Type).	Consistent: The Specific Plan includes a public plaza and public realm improvements of the sidewalk areas encourage active use. There are outdoor dining areas both for the restaurants within the Hotel overlooking Guasti road and for restaurants within the Local Serving Retail areas.

CD-3.6	Managed Infrastructure. We collaborate with developers and property owners to facilitate development that realizes the envisioned character and functionality of the Place Type through the use of green and shared infrastructure within each Place Type.	Consistent: The Specific Plan encourages the improvement of and connection to Cucamonga Creek Trail. The Specific Plan also improves the pedestrian realm along Holt Boulevard and Guasti Road. The public plaza and public realm improvements of the sidewalk areas and edge friction elements such as curbs, street trees, lighting, etc. along Holt Boulevard and Guasti Road contribute to walkability.
GOAL CD-4	**Historic buildings, streets, landscapes, and neighborhoods, as well as the story of Ontario's people, businesses, and social and community organizations, have been preserved and serve as a focal point for civic pride and identity.**	
Policies		
CD-4.1	Cultural Resource Management. We update and maintain an inventory of historic sites and buildings, professional collections, artifacts, manuscripts, photographs, documents, maps, and other archives.	N/A
CD-4.2	Collaboration with Property Owners and Developers. We educate and collaborate with property owners and developers to implement strategies and best practices that preserve the character of our historic buildings, streetscapes, and unique neighborhoods.	N/A
CD-4.3	Collaboration with Outside Agencies. We pursue opportunities to team with other agencies, local organizations, and nonprofits in order to preserve and promote Ontario's heritage.	N/A
CD-4.4	Incentives. We use the Mills Act and other federal, state, regional and local programs to assist property owners with the preservation of select properties and structures.	N/A
CD-4.5	Adaptive Reuse. We actively promote and support the adaptive reuse of historic sites and buildings to preserve and maintain their viability.	N/A
CD-4.6	Promotion of Public Involvement in Preservation. We engage in programs to publicize and promote the City's and the public's involvement in preservation efforts.	N/A
CD-4.7	Public Outreach. We provide opportunities for our residents to research and learn about the history of Ontario through the Planning Department, the Ontario Museum of History and Art, and the Robert E. Ellingwood Model Colony History Room.	N/A
GOAL CD-5	**A sustained level of maintenance and improvement of properties, buildings, and infrastructure that protects the property values and encourages additional public and private investments.**	
Policies		

CD-5.1	Maintenance of Buildings and Property. We require all public and privately-owned buildings and property (including trails and easements) to be properly and consistently maintained.	Consistent: Maintenance of all improvements within the Specific Plan site, including private/quasi-public open space and recreation facilities, private driveways, circulation, and landscape, will be the responsibility of the applicant. Maintenance of the sidewalk areas in the immediate vicinity of the Specific Plan site will also be the responsibility of the applicant.
CD-5.2	Maintenance of Infrastructure. We require the continual maintenance of infrastructure.	Consistent: Maintenance of all improvements within the Specific Plan, including private/quasi-public open space and recreation facilities, private driveways, circulation, and landscape, will be the responsibility of the applicant. Maintenance of the sidewalk areas in the immediate vicinity of the Specific Plan will also be the responsibility of the applicant.
CD-5.3	Improvements to Property & Infrastructure. We provide programs to improve property and infrastructure.	Consistent: Maintenance of all improvements within the Specific Plan, including private/quasi-public open space and recreation facilities, private driveways, circulation, and landscape, will be the responsibility of the applicant. Maintenance of the sidewalk areas in the immediate vicinity of the Specific Plan will also be the responsibility of the applicant.
CD-5.4	Neighborhood Involvement. We encourage active community involvement to implement programs aimed at the beautification and improvement of neighborhoods.	N/A
Social Resources Element		
GOAL SR-1	**Residents have access to information, services and goods that improve their health and wellbeing.**	
Policies		
SR-1.1	Partnering for Healthcare. We work with healthcare providers, and local, regional, state, and federal agencies to attract and retain a diversity of affordable, quality healthcare and facilities for the entire community.	N/A
SR-1.2	Nutrition Choices. We support the promotion of equitable access to affordable healthy food choices in the community, including community gardens, farmers markets, and cooking classes.	N/A
SR-1.3	Health Education. We promote equitable access to health education, including disease prevention, mental health, nutrition, and physical fitness.	N/A

SR-1.4	Physical Activity. We encourage activities and community design that improve the physical fitness of our community members, with an emphasis on the provision of activities and facilities in environmental justice areas.	Consistent: The Specific Plan is a mixed-use development with a hotel and retail area and encourages active transportation by providing an enhanced public realm and bike facilities. The plan encourages the improvement of and connection to Cucamonga Creek Trail. The Local Serving Retail allows for bike rentals The Specific Plan also improves the pedestrian realm along Holt Boulevard and Guasti Road. All of the above encourage physical activity.
GOAL SR-2	**A range of educational and training opportunities for residents and workers of all ages and abilities that improves their life choices and provides a skilled workforce for our businesses.**	
Policies		
SR-2.1	Educational Partners. We partner with educational institutions throughout the region in order to expand the range and quality of educational offerings available to the community.	N/A
SR-2.2	Workforce Training. We will work with industrial organizations, businesses, and educational institutions to create opportunities for workforce training.	N/A
SR-2.3	Joint Use of Facilities. We partner with public and private educational institutions to jointly use facilities for both City and educational purposes.	N/A
SR-2.4	Access to Schools. We work with local and regional partners to improve the safety in and around schools and to improve access for citizens of all ages and abilities to schools and community services, such as after school and other programs.	N/A
SR-2.5	School Facilities. We plan and coordinate with school districts for designing and locating school facilities to meet the City's goals, such as for health, walkability, and safety and to minimize impacts to existing neighborhoods.	N/A
SR-2.6	Language. We promote broad outreach in languages used by the community for proposed projects that could negatively affect environmental justice areas.	N/A
SR-2.7	Community Engagement. We promote targeted outreach and education to historically underrepresented groups to encourage meaningful participation in decision-making process for projects whose outcomes will affect land use in environmental justice areas.	N/A
GOAL SR-3	**A range of community and leisure programs and activities provided by public, private, and nonprofit organizations that meet the needs of the community's varied interests, age groups and abilities.**	
Policies		

SR-3.1	Partnerships. We partner with local and regional agencies, nonprofit organizations, and the private sector to provide a comprehensive range of community activities and events to citizens.	N/A
SR-3.2	Needs Assessment. We track the needs and priorities for community services and look for ways to meet demands and avoid duplication of offerings.	N/A
SR-3.3	Program Outreach. We promote information about leisure activities, classes, special events, and other services and activities to our community.	N/A
SR-3.4	Community Events. We plan and actively participate in regularly scheduled community events and seasonal or yearly citywide events.	N/A
SR-3.5	Community Activities as Crime Deterrents. We promote and participate in community activities as part of our crime prevention efforts. (Link to Safety Element Policy S-7.3)	N/A
GOAL SR-4	**City libraries that connect community members of all ages and abilities to a broad range of programs, communication, and informational resources.**	
Policies		
SR-4.1	Community Needs. We identify and monitor community needs for library services, technology, and facilities, and tailor them to effectively meet those needs.	N/A
SR-4.2	Interagency Coordination. We leverage relationships with outside agencies, educational institutions, and neighboring jurisdictions to share library resources to the benefit of Ontario residents.	N/A
SR-4.3	Library Outreach. We outreach to the community to increase the patronage of the library.	N/A
SR-4.4	Coordination with Other Community Services. We coordinate library programs with other recreational and community programs and facilities.	N/A
SR-4.5	Focal Points of the Community. We design and program Ontario's libraries as focal points of community engagement, including public outreach and community events.	N/A
SR-4.6	Robert E. Ellingwood Model Colony History Room. We work with the Ontario Museum of History and Art in order to collect, preserve, and display artifacts and images from Ontario's heritage and connect the City's past to the present through the History Room.	N/A
GOAL SR-5	**Local heritage, entertainment, and cultural experiences that enrich the lives of Ontario's residents, workers, and visitors and serve to attract residents and businesses to the City.**	
Policies		

SR-5.1	Provision of Entertainment and Culture. We support equitable access to a range of entertainment and cultural experiences such as public art, exhibitions, and performances.	N/A
SR-5.2	Local Heritage Education. We partner with educational providers to promote culture and heritage. (Link to Community Design Element, Historic Preservation Section).	N/A
SR-5.3	Public Art. We encourage public art in buildings, parks, open spaces, and other public and private spaces.	N/A
SR-5.4	Private-Public Sector Events. We partner with private and nonprofit sectors to provide and promote participation in cultural activities including fairs, festivals, and other events geared to neighborhoods, the City as a whole, and the region.	N/A
SR-5.5	Promotion of Ontario Artists and Musicians. We promote awareness of entertainment and culture produced in Ontario.	N/A

RESOLUTION NO. PC25-009

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ONTARIO, CALIFORNIA, RECOMMENDING CITY COUNCIL APPROVE FILE NO. PDEV23-039, A DEVELOPMENT PLAN TO CONSTRUCT A 600,000 SQUARE FOOT HOTEL AND COMMERCIAL BUILDING CONSISTING OF 600 ROOMS ON 10.43-ACRES OF LAND LOCATED ON THE SOUTHEAST CORNER OF GUASTI ROAD AND HOLT BOULEVARD WITHIN THE PROPOSED PA1 (HOSPITALITY MIXED-USE) DISTRICT OF THE EMPIRE GROVES SPECIFIC PLAN, AND MAKING FINDINGS IN SUPPORT THEREOF—APN: 110-322-33

WHEREAS, Diversified Pacific Development Group, LLC (hereinafter referred to as "Applicant") has filed an Application for the approval of a Development Plan, File No. PDEV23-039, as described in the title of this Resolution (hereinafter referred to as "Application" or "Project"); and

WHEREAS, the Application applies to 10.43 acres of land generally located on southeast corner of Guasti Road and Holt Boulevard, within the proposed Empire Groves Specific Plan; and

WHEREAS, the properties to the north of the Project site are within the CCS (Convention Center Support Commercial) zoning district, and are developed with offices and hotel. The property to the east is within the UC (Utilities Corridor) zoning district and is developed with a flood control channel. The property to the south and west is within the CCS (Convention Center Support Commercial) zoning district, and is developed with hotel; and

WHEREAS, the proposed 600,000 square foot luxury hotel and commercial building consists of 600 rooms and will provide destination dining, luxury retail, banquet halls, spa, fitness center, public gathering spaces and additional guest amenities; and

WHEREAS, the proposed project is associated with the proposed Empire Groves Specific Plan (concurrently under review), and approval of the hotel development is contingent upon approval of the Empire Groves Specific Plan; and

WHEREAS, a shared parking analysis was completed by Translutions (Dated: November 2023) to evaluate the shared parking demand of the 600-room/suite full-service hotel with amenities (a pool/spa, fitness areas, meeting/conference rooms) and retail/restaurant areas. The methodology used for the shared parking analyses includes base parking demand ratios derived from the Urban Land Institute’s (ULI) Shared Parking (3rd Edition, 2020). The parking analyses identified the highest parking demand is for 925 spaces on weekdays and 745 parking spaces on weekends. The Project is proposing a total of 932 parking spaces to meet the parking needs of the project; and

WHEREAS, the Ontario Plan 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364) was certified on August 16, 2022 (hereinafter referred to as "Certified EIR"), in which development and use of the Project site was discussed; and

WHEREAS, the Planning Director of the City of Ontario prepared and approved for attachment to the certified Environmental Impact Report, an Addendum to the Certified EIR (hereinafter referred to as "EIR Addendum") in accordance with the requirements of the California Environmental Quality Act of 1970, together with State and local guidelines implementing said Act, all as amended to date (collectively referred to as "CEQA"); and

WHEREAS, the environmental impacts of this Project were thoroughly analyzed in the EIR Addendum, which concluded that implementation of the Project could result in a number of significant effects on the environment that were previously analyzed in the Certified EIR, and that the Certified EIR identified mitigation measures that would reduce each of those significant effects to a less-than-significant level; and

WHEREAS, the City's "Local Guidelines for the Implementation of the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed; and

WHEREAS, the Application is a project pursuant to the California Environmental Quality Act — Public Resources Code Section 21000 et seq. — (hereinafter referred to as "CEQA") and an EIR Addendum has been prepared to determine possible environmental impacts; and

WHEREAS, Ontario Development Code Table 2.02-1 (Review Matrix) grants the Planning Commission the responsibility and authority to review and make recommendation to the City Council on the subject Application; and

WHEREAS, the Project has been reviewed for consistency with the Housing Element of the Policy Plan component of The Ontario Plan 2050, as State Housing Element law (as prescribed in Government Code Sections 65580 through 65589.8) requires that development projects must be consistent with the Housing Element, if upon consideration of all its aspects, it is found to further the purposes, principals, goals, and policies of the Housing Element; and

WHEREAS, the Project is located within the Airport Influence Area of Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and is subject to, and must be consistent with, the policies and criteria set forth in the Ontario International Airport Land Use Compatibility Plan (hereinafter referred to as "ALUCP"), which applies only to jurisdictions within San

Bernardino County, and addresses the noise, safety, airspace protection, and overflight impacts of current and future airport activity; and

WHEREAS, City of Ontario Development Code Division 2.03 (Public Hearings) prescribes the manner in which public notification shall be provided and hearing procedures to be followed, and all such notifications and procedures have been completed; and

WHEREAS, on February 19, 2025, the Development Advisory Board of the City of Ontario conducted a hearing to consider the Addendum and the Project, and concluded said hearing on that date, voting to issue Decision No. DAB25-004, recommending that the Planning Commission approve the Application; and

WHEREAS, as the first action on the Project, on February 25, 2025, the Planning Commission issued a Resolution recommending the City Council adopt the EIR Addendum, finding that the proposed Project introduces no new significant environmental impacts and applying all previously adopted mitigation measures to the Project, which were incorporated by reference; and

WHEREAS, on February 25, 2025, the Planning Commission of the City of Ontario conducted a hearing to consider the Project, and concluded said hearing on that date; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED, AND RESOLVED by the Planning Commission of the City of Ontario, as follows:

SECTION 1: ***Environmental Determination and Findings.*** As the recommending body for the Project, the Planning Commission has reviewed and considered the information contained in the Addendum, the initial study, and the administrative record for the Project, including all written and oral evidence provided during the comment period. Based upon the facts and information contained in the Addendum, the initial study, and the administrative record, including all written and oral evidence presented to the Planning Commission, the Planning Commission finds as follows:

(1) The environmental impacts of this Project were reviewed in conjunction with an Addendum to TOP 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364), certified by the Ontario City Council on August 16, 2022, in conjunction with File No. PGPA20-002; and

(2) The EIR Addendum and administrative record have been completed in compliance with CEQA, the State CEQA Guidelines, and the City of Ontario Local CEQA Guidelines; and

(3) The City's "Guidelines for the Implementation of the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed. This Application introduces no new significant environmental impacts; and

(4) All previously adopted mitigation measures shall be a condition of Project approval, as they are applicable to the Project, and are incorporated herein by this reference; and

(5) The EIR Addendum contains a complete and accurate reporting of the environmental impacts associated with the Project, and reflects the independent judgment of the Planning Commission; and

(6) There is no substantial evidence in the administrative record supporting a fair argument that the Project may result in significant environmental impacts.

SECTION 2: ***Subsequent or Supplemental Environmental Review Not Required.*** Based on the EIR Addendum, all related information presented to the Planning Commission, and the specific findings set forth in Section 1, above, the Planning Commission finds that the preparation of a subsequent or supplemental Certified EIR is not required for the Project, as the Project:

(1) Does not constitute substantial changes to the Certified EIR that will require major revisions to the Certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and

(2) Does not constitute substantial changes with respect to the circumstances under which the Certified EIR was prepared, that will require major revisions to the Certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of the previously identified significant effects; and

(3) Does not contain new information of substantial importance that was not known and could not have been known with the exercise of reasonable diligence at the time the Certified EIR was certified/adopted, that shows any of the following:

(a) The Project will have one or more significant effects not discussed in the Certified EIR; or

(b) Significant effects previously examined will be substantially more severe than shown in the Certified EIR; or

(c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the City declined to adopt such measures; or

(d) Mitigation measures or alternatives considerably different from those analyzed in the Certified EIR would substantially reduce one or more significant effects on the environment, but which the City declined to adopt.

SECTION 3: ***Housing Element Compliance.*** Pursuant to the requirements of California Government Code Chapter 3, Article 10.6, commencing with Section 65580, as the recommending body for the Project, the Planning Commission finds that based upon the facts and information contained in the Application and supporting documentation, at the time of Project implementation, the Project is consistent with the Housing Element of the Policy Plan (General Plan) component of The Ontario Plan 2050, as the Project site is not one of the properties in the Housing Element Sites Inventory contained in Tables B-1 and B-2 of the Housing Element Technical Report.

SECTION 4: ***Airport Land Use Compatibility Plan ("ALUCP") Compliance.*** The California State Aeronautics Act (Public Utilities Code Section 21670 et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

(1) On April 19, 2011, the City Council of the City of Ontario approved and adopted the Ontario International Airport Land use Compatibility Plan, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the recommending body for the Project, the Planning Commission has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the Planning Commission therefore finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the ONT ALUCP; and

SECTION 5: ***Concluding Facts and Reasons.*** Based upon the substantial evidence presented to the Planning Commission during the above-referenced hearing, and upon the specific findings set forth in the Sections above, the Planning Commission hereby concludes as follows:

(1) ***The proposed development at the proposed location is consistent with the goals, policies, plans and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan 2050.*** The proposed Project is located within the Mixed Use - Multimodal (MU-Multimodal land use district of the Policy Plan Land Use Map, and the proposed - PA1 (Hospitality Mixed-Use) of the Empire Groves Specific Plan. The development standards and conditions under which the proposed Project will be constructed and maintained is consistent with the goals, policies, plans, and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan.

(2) ***The proposed development is compatible with those on adjoining sites in relation to location of buildings, with particular attention to privacy, views, any physical constraint identified on the site and the characteristics of the area in which the site is located.*** The Project has been designed consistent with the requirements of the City of Ontario Development Code and the proposed - PA1 (Hospitality Mixed-Use) of the Empire Groves Specific Plan, including standards relative to the particular land use proposed (hotel/commercial), as-well-as building intensity, building and parking setbacks, building height, number of off-street parking and loading spaces, on-site and off-site landscaping, and fences, walls and obstructions.

(3) ***The proposed development will complement and/or improve upon the quality of existing development in the vicinity of the Project and the minimum safeguards necessary to protect the public health, safety and general welfare have been required of the proposed Project.*** The Planning Commission has required certain safeguards, and imposed certain conditions of approval, which have been established to ensure that: [i] the purposes of the proposed Empire Groves Specific Plan are maintained; [ii] the project will not endanger the public health, safety or general welfare; [iii] the project will not result in any significant environmental impacts; [iv] the project will be in harmony with the area in which it is located; and [v] the project will be in full conformity with the Vision, City Council Priorities and Policy Plan components of The Ontario Plan, and the proposed Empire Groves Specific Plan.

(4) ***The proposed development is consistent with the development standards and design guidelines set forth in the Development Code, or applicable specific plan or planned unit development.*** The proposed Project has been reviewed for consistency with the general development standards and guidelines of the proposed Empire Groves Specific Plan that are applicable to the proposed Project, including building intensity, building and parking setbacks, building height, amount of off-street

parking and loading spaces, parking lot dimensions, design and landscaping, bicycle parking, on-site landscaping, and fences and walls, as-well-as those development standards and guidelines specifically related to the particular land use being proposed (hotel/commercial). As a result of this review, the Planning Commission has determined that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the development standards and guidelines described in the proposed Empire Groves Specific Plan.

SECTION 6: ***Planning Commission Action.*** Based upon the findings and conclusions set forth in the Sections above, the Planning Commission hereby RECOMMENDS THE CITY COUNCIL APPROVES the herein described Application, subject to each and every condition set forth in the Department reports attached hereto as "Attachment A," and incorporated herein by this reference.

SECTION 7: ***Indemnification.*** The Applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void, or annul this approval. The City of Ontario shall promptly notify the Applicant of any such claim, action, or proceeding, and the City of Ontario shall cooperate fully in the defense.

SECTION 8: ***Custodian of Records.*** The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East "B" Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario.

SECTION 9: ***Certification to Adoption.*** The Secretary shall certify to the adoption of the Resolution.

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The Secretary Pro Tempore for the Planning Commission of the City of Ontario shall certify as to the adoption of this Resolution.

I hereby certify that the foregoing Resolution was duly and regularly introduced, passed and adopted by the Planning Commission of the City of Ontario at a regular meeting thereof held on the 25th day of February 2025, and the foregoing is a full, true and correct copy of said Resolution, and has not been amended or repealed.

Nicola Ricci
Planning Commission Chairman

ATTEST:

Henry K. Noh
Planning Director and
Secretary to the Planning Commission

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO)
CITY OF ONTARIO)

I, Gwen Berendsen, Secretary Pro Tempore of the Planning Commission of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. PC25-009, was duly passed and adopted by the Planning Commission of the City of Ontario at their regular meeting held on February 25, 2025, by the following roll call vote, to wit:

AYES: DeDiemar, Gage, Lampkin, Ricci

NOES: None

ABSENT: Anderson

ABSTAIN: None

Gwen Berendsen
Secretary Pro Tempore

ATTACHMENT A:

File No. PDEV23-039
Departmental Conditions of Approval

(Departmental conditions of approval to follow this page)

ENGINEERING DEPARTMENT
CONDITIONS OF APPROVAL

(Land Development Division, Environmental Section, Traffic & Transportation Division, Ontario Municipal Utilities Company, Broadband Department, and Financial Services Agency Conditions incorporated)

☒ **DEVELOPMENT PLAN** ☐ OTHER	☐ PARCEL MAP ☐ TRACT MAP ☐ FOR CONDOMINIUM PURPOSES
PROJECT FILE NO. PDEV23-039 **RELATED FILE NO(S). PSP23-001; PDA23-005**	
☒ **ORIGINAL** ☒ REVISED: 2/18/25	

CITY PROJECT ENGINEER & PHONE NO:	**Jeffrey Tang, P.E.**	**(909) 395-2128**
CITY PROJECT PLANNER & PHONE NO:	**Lorena Mejia**	**(909) 395-2276**
DAB MEETING DATE:	**February 19, 2025**	
PROJECT NAME / DESCRIPTION:	**A Development Plan to construct a 9-story hotel consisting of approximately 596,450 square feet to include 600 rooms, ancillary retail and various amenities on 10.43 acres of land, within the SP (Specific Plan) zoning district and the MTC (Multimodal Transit Center overlay. APN: 0110-322-33**	
LOCATION:	**2236 East Holt Boulevard**	
APPLICANT:	**Diversified Pacific**	
REVIEWED BY:	Raymond Lee 2/13/25 **Raymond Lee, P.E.** **Date** **Assistant City Engineer**	
APPROVED BY:	2-13-25 **Khoi Do, P.E.** **Date** **City Engineer**	

THIS PROJECT SHALL COMPLY WITH THE REQUIREMENTS SET FORTH IN THE GENERAL STANDARD CONDITIONS OF APPROVAL ADOPTED BY THE CITY COUNCIL (RESOLUTION NO. 2017-027) AND THE PROJECT SPECIFIC CONDITIONS OF APPROVAL SPECIFIED HEREIN. ONLY APPLICABLE CONDITIONS OF APPROVAL ARE CHECKED. THE APPLICANT SHALL BE RESPONSIBLE FOR THE COMPLETION OF ALL APPLICABLE CONDITIONS OF APPROVAL PRIOR TO FINAL MAP OR PARCEL MAP APPROVAL, ISSUANCE OF PERMITS AND/OR OCCUPANCY CLEARANCE, AS SPECIFIED IN THIS REPORT.

1. PRIOR TO FINAL MAP OR PARCEL MAP APPROVAL, APPLICANT SHALL:

			Check When Complete
☐	1.01	Dedicate to the City of Ontario, the right-of-way, described below to achieve: _____ feet on _____ Property line corner 'cut-back' required at the intersection of _____ and _____.	☐
☐	1.02	Dedicate to the City of Ontario, the following easement(s): _____ _____	☐
☐	1.03	Restrict vehicular access to the site as follows: _____	☐
☐	1.04	Vacate the following street(s) and/or easement(s): A. All interfering on-site easements shall be quitclaimed, vacated, and/or submit non-interference letter from affected owner/utility company.	☐
☐	1.05	Submit a copy of a recorded private reciprocal use agreement or easement. The agreement or easement shall ensure, at a minimum, common ingress and egress and joint maintenance of all common access areas and drive aisles.	☐
☐	1.06	Provide (original document) Covenants, Conditions and Restrictions (CC&Rs) as applicable to the project and as approved by the City Attorney and the Engineering and Planning Departments, ready for recordation with the County of San Bernardino. The CC&Rs shall provide for, but not be limited to, common ingress and egress, joint maintenance responsibility for all common access improvements, common facilities, parking areas, utilities, median and landscaping improvements and drive approaches, in addition to maintenance requirements established in the Water Quality Management Plan (WQMP), as applicable to the project. The CC&Rs shall also address the maintenance and repair responsibility for public improvements/utilities (sewer, water, storm drain, recycled water, etc.) located within open space/easements. In the event of any maintenance or repair of these facilities, the City shall only restore disturbed areas to current City Standards.	☐
☐	1.07	For all development occurring south of the Pomona Freeway (60-Freeway) and within the specified boundary limits (per Boundary Map found at *http://tceplumecleanup.com/*), the property developer/owner is made aware of the South Archibald Trichloroethylene (TCE) Plume "Disclosure Letter". Property owner may wish to provide this Letter as part of the Real Estate Transfer Disclosure requirements under California Civil Code Section 1102 et seq. This may include notifications in the Covenants, Conditions and Restrictions (CC&Rs) or other documents related to property transfer and disclosures. Additional information on the plume is available from the Santa Ana Regional Water Quality Control Board at *http://geotracker.waterboards.ca.gov/profile_report?global_id=T10000004658*.	☐
☐	1.08	File an application for Reapportionment of Assessment, together with payment of a reapportionment processing fee, for each existing assessment district listed below. Contact the Financial Services Department at (909) 395-2124 regarding this requirement. (1) _____ (2) _____	☐
☐	1.09	Prepare a fully executed Subdivision Agreement (on City approved format and forms) with accompanying security as required, or complete all public improvements.	☐

☐ 1.10 Provide a monument bond (i.e. cash deposit) in an amount calculated by the City's approved cost estimate spreadsheet (available for download on the City's website: www.ontarioca.gov) or as specified in writing by the applicant's Registered Engineer or Licensed Land Surveyor of Record and approved by the City Engineer, whichever is greater. ☐

☐ 1.11 Provide a preliminary title report current to within 30 days. ☐

☐ 1.12 File an application, together with an initial deposit (if required), to establish a Community Facilities District (CFD) pursuant to the Mello-Roos Community Facilities District Act of 1982. The application and fee shall be submitted a minimum of four (4) months prior to final subdivision map approval, and the CFD shall be established prior to final subdivision map approval or issuance of building permits, whichever occurs first. The CFD shall be established upon the subject property to provide funding for various City services. An annual special tax shall be levied upon each parcel or lot in an amount to be determined. The special tax will be collected along with annual property taxes. The City shall be the sole lead agency in the formation of any CFD. Contact Financial Services Agency at (909) 395-2015 or email CFD@ontarioca.gov to initiate the CFD application process. ☐

☐ 1.13 Ontario Ranch Developments: ☐

☐ 1) Provide evidence of final cancellation of Williamson Act contracts associated with this tract, prior to approval of any final subdivision map. Cancellation of contracts shall have been approved by the City Council.

☐ 2) Provide evidence of sufficient storm water capacity availability equivalents (Certificate of Storm Water Treatment Equivalents).

☐ 3) Provide evidence of sufficient water availability equivalents (Certificate of Net MDD Availability).

☐ 1.14 Other conditions: _____ ☐

2. PRIOR TO ISSUANCE OF ANY PERMITS, APPLICANT SHALL:

A. GENERAL
(Permits includes Grading, Building, Demolition and Encroachment)

☐ 2.01 Record Parcel Map/Tract Map No. _____ pursuant to the Subdivision Map Act and in accordance with the City of Ontario Municipal Code. ☐

☐ 2.02 Submit a PDF of the recorded map to the City Engineer's office. ☐

☒ **2.03 Note that the subject parcel is a recognized parcel in the City of Ontario per Parcel Map 5660.** ☐

☐ 2.04 Note that the subject parcel is an 'unrecognized' parcel in the City of Ontario and shall require a Certificate of Compliance to be processed unless a deed is provided confirming the existence of the parcel prior to the date of March 4, 1972. ☐

☐ 2.05 Apply for a: ☐

☐ Certificate of Compliance with a Record of Survey;

☐ Lot Line Adjustment (Record a Conforming Deed with the County of San Bernardino within six months of the recordation of the Lot Line Adjustment to conform the new LLA legal description. Submit a copy of the recorded Conforming Deed to the Engineering Department.);

☐ Make a Dedication of Easement.

☐ 2.06 Provide (original document) Covenants, Conditions and Restrictions (CC&R's), as applicable to the project, and as approved by the City Attorney and the Engineering and Planning Departments, ready for recordation with the County of San Bernardino. The CC&R's shall provide for, but not be limited to, common ingress and egress, joint maintenance of all common access improvements, common facilities, parking areas, utilities and drive approaches in addition to maintenance requirements established in the Water Quality Management Plan (WQMP), as applicable to the project. ☐

☐ 2.07 For all development occurring south of the Pomona Freeway (60-Freeway) and within the specified boundary limits (per Boundary Map found at *http://tceplumecleanup.com/*), the property developer/owner is made aware of the South Archibald Trichloroethylene (TCE) Plume "Disclosure Letter". Property owner may wish to provide this Letter as part of the Real Estate Transfer Disclosure requirements under California Civil Code Section 1102 et seq. This may include notifications in the Covenants, Conditions and Restrictions (CC&Rs) or other documents related to property transfer and disclosures. Additional information on the plume is available from the Santa Ana Regional Water Quality Control Board at *http://geotracker.waterboards.ca.gov/profile_report?global_id=T10000004658*. ☐

☒ **2.08 Submit a soils/geology report.** ☐

☒ **2.09 Other Agency Permit/Approval: Submit a copy of the approved permit and/or other form of approval of the project from the following agency or agencies:** ☐

- ☒ **State of California Department of Transportation (Caltrans) for street and utility improvements along Holt Blvd**
- ☐ San Bernardino County Road Department (SBCRD)
- ☒ **San Bernardino County Flood Control District (SBCFCD) for proposed Fire Access Lane through SBCFCD property along Cucamonga Channel**
- ☐ Federal Emergency Management Agency (FEMA)
- ☐ Cucamonga Valley Water District (CVWD) for sewer/water service
- ☐ United States Army Corps of Engineers (USACE)
- ☐ California Department of Fish & Game
- ☐ Inland Empire Utilities Agency (IEUA)
- ☐ Other: _____

☒ **2.10 Dedicate to the City of Ontario the right-of-way described below:** ☐

- **20 feet on Guasti Road along the proposed right turn pocket to Holt Blvd, see Transportation Section Condition 1 and 2 for more detail.**
- **Property line corner 'cut-back' required at the intersection of Guasti Road and Holt Blvd**

☒ **2.11 Dedicate to the City of Ontario the following easement(s):** ☐

- **An easement for emergency vehicle access to the City of Ontario along approved Fire Access Lane from Holt Blvd through hotel courtyard**
- **An easement for emergency vehicle access to the City of Ontario along approved Fire Access Lane from Holt Blvd to Guasti Rd through SBCFCD property along the Cucamonga Channel**
- **An easement for pedestrian public access to the City of Ontario for the onsite sidewalk along Guasti Road, see Condition 2.18.3 for more detail.**

☒ **2.12 Vacate the following street(s) and/or easement(s):** ☐

A. All interfering on-site easements shall be quitclaimed, vacated, and/or submit non-interference letter from affected owner/utility company.

☐ 2.13 Ontario Ranch Developments: ☐

☐ 1) Submit a copy of the permit from the San Bernardino County Health Department to the Engineering Department and the Ontario Municipal Utilities Company (OMUC) for the destruction/abandonment of the on-site water well. The well shall be destroyed/abandoned in accordance with the San Bernardino County Health Department guidelines.

☐ 2) Make a formal request to the City of Ontario Engineering Department for the proposed temporary use of an existing agricultural water well for purposes other than agriculture, such as grading, dust control, etc. Upon approval, the Applicant shall enter into an agreement with the City of Ontario and pay any applicable fees as set forth by said agreement.

☐ 3) Design proposed retaining walls to retain up to a maximum of three (3) feet of earth. In no case shall a wall exceed an overall height of nine (9) feet (i.e. maximum 6-foot high wall on top of a maximum 3-foot high retaining wall.

☒ **2.14** **Submit a security deposit to the Engineering Department to guarantee construction of the public improvements required herein valued at 100% of the approved construction cost estimate. Security deposit shall be in accordance with the City of Ontario Municipal Code. Security deposit will be eligible for release, in accordance with City procedure, upon completion and acceptance of said public improvements.** ☐

☒ **2.15** **The applicant/developer shall submit all necessary survey documents prepared by a Licensed Surveyor registered in the State of California detailing all existing survey monuments in and around the project site. These documents are to be reviewed and approved by the City Survey Office.** ☐

☒ **2.16** **Pay all Development Impact Fees (DIF) to the Building Department. Storm Drain Development Impact Fee shall be paid to the Building Department. Final fee shall be determined based on the approved site plan and the DIF rate at the time of payment.** ☐

☒ **2.17** **Other conditions:** ☐

- **This Development Plan shall comply with the approved Specific Plan (PSP23-001) and the approved Development Agreement (PDA23-005).**
- **The applicant/developer shall establish, on behalf of the City, a maintenance, access, and use agreement with SBCFCD for the proposed Fire Access Lane along the Cucamonga Channel from Holt Blvd. to Guasti Rd. within SBCFCD property.**

B. PUBLIC IMPROVEMENTS
(See attached Exhibit 'A' for plan check submittal requirements.)

☒ 2.18 **Design and construct full public improvements in accordance with the City of Ontario Municipal Code, current City standards and specifications, master plans and the adopted specific plan for the area, if any. These public improvements shall include, but not be limited to, the following (checked boxes):**

Improvement	Guasti Rd	Holt Blvd	-	-
Curb and Gutter	☒ **New; 32 ft. from C/L** ☐ Replace damaged ☐ Remove and replace	☒ **New; 30 ft. from C/L** ☐ Replace damaged ☐ Remove and replace	☐ New; ___ ft. from C/L ☐ Replace damaged ☐ Remove and replace	☐ New; ___ ft. from C/L ☐ Replace damaged ☐ Remove and replace
AC Pavement	☒ **Replacement[1]** ☒ **Widen 13 additional feet along frontage, including pavm't transitions**	☐ Replacement ☐ Widen ____ additional feet along frontage, including pavm't transitions	☐ Replacement ☐ Widen ____ additional feet along frontage, including pavm't transitions	☐ Replacement ☐ Widen ____ additional feet along frontage, including pavm't transitions
PCC Pavement (Truck Route Only)	☐ New ☐ Modify existing	☒ **Widen 10 additional feet along frontage, including pavm't transitions** ☒ **Replace Existing[2]**	☐ New ☐ Modify existing	☐ New ☐ Modify existing
Drive Approach	☒ **New** ☐ Remove and replace	☒ **New** ☐ Remove and replace	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace
Sidewalk	☒ **New[3]** ☐ Remove and replace	☒ **New** ☐ Remove and replace	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace
ADA Access Ramp	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace
Parkway	☒ **Trees** ☒ **Landscaping (w/irrigation)**	☒ **Trees** ☒ **Landscaping (w/irrigation)**	☐ Trees ☐ Landscaping (w/irrigation)	☐ Trees ☐ Landscaping (w/irrigation)
Raised Landscaped Median	☒ **New** ☐ Remove and replace	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace
Fire Hydrant	☒ **New / Upgrade** ☐ Relocation	☐ New / Upgrade ☐ Relocation	☐ New / Upgrade ☐ Relocation	☐ New / Upgrade ☐ Relocation

Sewer (see Sec. 2.C)	☐ Main ☐ Lateral	☐ Main ☒ **Lateral**	☐ Main ☐ Lateral	☐ Main ☐ Lateral
Water (see Sec. 2.D)	☐ Main ☒ **Service**	☐ Main ☐ Service	☐ Main ☐ Service	☐ Main ☐ Service
Recycled Water (see Sec. 2.E)	☒ **Main** ☒ **Service**	☐ Main ☐ Service	☐ Main ☐ Service	☐ Main ☐ Service
Traffic Signal System (see Sec. 2.F)	☒ **New** ☐ Modify existing	☐ New ☒ **Modify existing**	☐ New ☐ Modify existing	☐ New ☐ Modify existing
Traffic Signing and Striping (see Sec. 2.F)	☒ **New** ☐ Modify existing	☒ **New** ☐ Modify existing	☐ New ☐ Modify existing	☐ New ☐ Modify existing
Street Light (see Sec. 2.F)	☒ **New / Upgrade** ☐ Relocation	☒ **New / Upgrade** ☐ Relocation	☐ New / Upgrade ☐ Relocation	☐ New / Upgrade ☐ Relocation
Bus Stop Pad or Turn-out (see Sec. 2.F)	☐ New ☐ Modify existing	☐ New ☐ Modify existing	☐ New ☐ Modify existing	☐ New ☐ Modify existing
Storm Drain (see Sec. 2G)	☐ Main ☒ **Lateral**	☐ Main ☐ Lateral	☐ Main ☐ Lateral	☐ Main ☐ Lateral
Fiber Optics (see Sec. 2K)	☒ **Conduit / Appurtenances**	☒ **Conduit / Appurtenances**	☐ Conduit / Appurtenances	☐ Conduit / Appurtenances
Overhead Utilities	☐ Underground ☐ Relocate	☐ Underground ☐ Relocate	☐ Underground ☐ Relocate	☐ Underground ☐ Relocate
Removal of Improvements	_____ _____ _____	_____ _____ _____	_____ _____ _____	_____ _____ _____
Other Improvements	☒ Bridge Widening, (see 2.24)	_____ _____ _____	_____ _____ _____	_____ _____ _____

Specific notes for improvements listed in item no. 2.18, above:

1. **Replace existing AC pavement along north side of Guasti Road from proposed median to proposed widening along project frontage per City of Ontario Standard Drawing number 1011.**
2. **Southernmost row of existing PCC pavement panels along Holt Blvd shall be removed and replaced in conjunction with the proposed frontage improvements.**
3. **Onsite sidewalk along Guasti Road shall have a continuous ADA accessible path of travel from each connection to public sidewalk.**

☒ **2.19 Construct a 2" asphalt concrete (AC) grind and overlay on the existing section of the following street(s):** ☐

- **South side of Guasti Rd, edge of gutter to proposed median curb, from Holt Blvd to Cucamonga Channel bridge**

☐ 2.20 Reconstruction of the full pavement structural section, per City of Ontario Standard Drawing number 1011, may be required based on the existing pavement condition and final street design. Minimum limits of reconstruction shall be along property frontage, from street centerline to curb/gutter. ☐

☒ **2.21 Depending on site conditions and number of utility service cuts at time of construction, additional pavement restoration may be required.** ☐

☐ 2.22 Make arrangements with the Cucamonga Valley Water District (CVWD) to provide ☐ water service ☐ sewer service to the site. This property is within the area served by the CVWD and Applicant shall provide documentation to the City verifying that all required CVWD fees have been paid. ☐

☐ 2.23 Overhead utilities shall be under-grounded, in accordance with Title 7 of the City's Municipal Code (Ordinance No. 2804 and 2892). Developer may pay in-lieu fee, approximately _____, for undergrounding of utilities in accordance with Section 7-7.302.e of the City's Municipal Code. ☐

☒ **2.24 Other conditions:** ☐

- **The applicant/developer shall design and construct a widening of Guasti Road bridge over the Cucamonga Channel to accommodate 2 lanes of vehicular traffic in each direction and pedestrian travel and transitions. Additional right-of-way to be dedicated as needed per final design. Improvements to be coordinated, reviewed, and approved by City and SBCFCD. The Development Agreement shall determine responsible party for funding and or construction of this improvement. See Transportation Section Condition 3 for more detail.**

C. SEWER

☒ **2.25 A 12 inch sewer main is available for connection by this project in Holt Blvd (Ref: Sewer Drawing Number: S13859)** ☐

☐ 2.26 Design and construct a sewer main extension. A sewer main is not available for direct connection. The closest main is approximately _____ feet away. ☐

☐ 2.27 Submit documentation that shows expected peak loading values for modeling the impact of the subject project to the existing sewer system. The project site is within a deficient public sewer system area. Applicant shall be responsible for all costs associated with the preparation of the model. Based on the results of the analysis, Applicant may be required to mitigate the project impact to the deficient public sewer system, including, but not limited to, upgrading of existing sewer main(s), construction of new sewer main(s) or diversion of sewer discharge to another sewer. ☐

☒ **2.28 Other conditions: See Exhibit B for Utilities Engineering Conditions of Approval** ☐

D. WATER

☒ **2.29 A 12 inch water main is available for connection by this project in Guasti Rd (Ref: Water Drawing Number: W11988)** ☐

☐ 2.30 Design and construct a water main extension. A water main is not available for direct connection. The closest main is approximately _____ feet away. ☐

☒ **2.31 Other conditions: See Exhibit B for Utilities Engineering Conditions of Approval** ☐

E. RECYCLED WATER

☐ 2.32 A _____inch recycled water main is available for connection by this project in _____. (Ref: Recycled Water Drawing Number:_____) ☐

☒ **2.33 Design and construct an on-site recycled water system for this project. A recycled water main does exist in the vicinity of this project.** ☐

☐ 2.34 Design and construct an on-site recycled water ready system for this project. A recycled water main does not currently exist in the vicinity of this project but is planned for the near future. If Applicant would like to connect to this recycled water main when it becomes available, the cost for the connection shall be borne solely by the Applicant. ☐

☒ **2.35 Submit one (1) electronic copy, in PDF format, of the Supplemental Engineering Report (ER), for the use of recycled water to OMUC's Water Quality Programs at OMUCWQPlanCheck@ontarioca.gov for review and subsequent submittal to the California State Water Board (Division of Drinking Water) for final approval.** ☐

Note: The Division of Drinking Water review and approval process may take up to four (4) months. Contact the OMUC's Water Quality Programs at (909) 395-2678 or email OMUCWQPlanCheck@ontarioca.gov regarding this requirement. *Failure to obtain an approval letter from the Division of Drinking Water authorizing the use of recycled water will delay meter installation and if applicable, occupancy release for new developments.*

☒ **2.36 Submit one (1) electronic copy, in PDF format, of the Landscape Plans (on-site & off-site) to OMUC's Water Quality Programs at OMUCWQPlanCheck@ontarioca.gov for review and approval.**

☒ **2.37 Other conditions: See Exhibit B for Utilities Engineering Conditions of Approval** ☐

F. TRAFFIC / TRANSPORTATION

☐ 2.38 Submit a focused traffic impact study, prepared and signed by a Traffic/Civil Engineer registered in the State of California. The study shall address, but not be limited to, the following issues as required by the City Engineer: ☐

1. On-site and off-site circulation
2. Traffic level of service (LOS) at 'build-out' and future years
3. Impact at specific intersections as selected by the City Engineer

☒ **2.39 New traffic signal installations shall be added to Southern California Edison (SCE) customer account number # 2-20-044-3877.** ☐

☒ **2.40 Other conditions: See Exhibit A for Transportation Section Conditions of Approval** ☐

G. DRAINAGE / HYDROLOGY

☒ **2.41 A 108 inch storm drain main is available to accept flows from this project in Guasti Rd. (Ref: Storm Drain Drawing Number: D10795)** ☐

☒ **2.42 Submit a hydrology study and drainage analysis, prepared and signed by a Civil Engineer registered in the State of California. The study shall be prepared in accordance with the San Bernardino County Hydrology Manual and City of Ontario standards and guidelines. Additional drainage facilities, including, but not limited to, improvements beyond the project frontage, may be required to be designed and constructed, by Applicant, as a result of the findings of this study.** ☐

☐ 2.43 An adequate drainage facility to accept additional runoff from the site does not currently exist downstream of the project. Design and construct a storm water detention facility on the project site. 100-year post-development peak flow shall be attenuated such that it does not exceed 80% of pre-development peak flows, in accordance with the approved hydrology study and improvement plans. ☐

☐ 2.44 Submit a copy of a recorded private drainage easement or drainage acceptance agreement to the Engineering Department for the acceptance of any increase to volume and/or concentration of historical drainage flows onto adjacent property, prior to approval of the grading plan for the project. ☐

☐ 2.45 Comply with the City of Ontario Flood Damage Prevention Ordinance (Ordinance No. 2409). The project site or a portion of the project site is within the Special Flood Hazard Area (SFHA) as indicated on the Flood Insurance Rate Map (FIRM) and is subject to flooding during a 100-year frequency storm. The site plan shall be subject to the provisions of the National Flood Insurance Program. ☐

☐ 2.46 Other conditions: _____ ☐

H. STORM WATER QUALITY / NATIONAL POLLUTANT DISCHARGE AND ELIMINATION SYSTEM (NPDES)

☐ 2.47 401 Water Quality Certification/404 Permit – Submit a copy of any applicable 401 Certification or 404 Permit for the subject project to the City project engineer. Development that will affect any body of surface water (i.e. lake, creek, open drainage channel, etc.) may require a 401 Water Quality Certification from the California Regional Water Quality Control Board, Santa Ana Region (RWQCB) and a 404 Permit from the United States Army Corps of Engineers (USACE). The groups of water bodies classified in these requirements are perennial (flow year round) and ephemeral (flow during rain conditions, only) and include, but are not limited to, direct connections into San Bernardino County Flood Control District (SBCFCD) channels. ☐
If a 401 Certification and/or a 404 Permit are not required, a letter confirming this from Applicant's engineer shall be submitted.
Contact information: USACE (Los Angeles District) (213) 452-3414; RWQCB (951) 782-4130.

☒ **2.48 Submit a Water Quality Management Plan (WQMP). This plan shall be approved by the Engineering Department prior to approval of any grading plan. The WQMP shall be submitted, utilizing the current San Bernardino County Stormwater Program template, available at: http://www.sbcounty.gov/dpw/land/npdes.asp.** ☐

☒ **2.49 Design and construct a Connector Pipe Trash Screen or equivalent Trash Treatment Control Device, per catch basin located within or accepting flows tributary of a Priority Land Use (PLU) area that meets the Full Capture System definition and specifications, and is on the Certified List of the State Water Resources Control Board. The device shall be adequately sized per catch basin and include a deflector screen with vector control access for abatement application, vertical support bars, and removable component to facilitate maintenance and cleaning.** ☐

☒ **2.50 Other conditions:** ☐
Activities resulting in one acre or more land disturbance are required to obtain coverage under the Construction General Permit (CGP). The owner is the legally responsible person (LRP) of the site and shall have a Stormwater Pollution Prevention Plan (SWPPP) developed and submitted through the SMARTS website at https://smarts.waterboards.ca.gov/smarts/faces/SwSmartsLogin.xhtml.

J. SPECIAL DISTRICTS

☐ 2.51 File an application, together with an initial deposit (if required), to establish a Community Facilities District (CFD) pursuant to the Mello-Roos Community Facilities District Act of 1982. The application and fee shall be submitted a minimum of four (4) months prior to final subdivision map approval, and the CFD shall be established prior to final subdivision map approval or issuance of building permits, whichever occurs first. The CFD shall be established upon the subject property to provide funding for various City services. An annual special tax shall be levied upon each parcel or lot in an amount to be determined. The special tax will be collected along with annual property taxes. The City shall be the sole lead agency in the formation of any CFD. Contact Financial Services Agency at (909) 395-2015 or email CFD@ontarioca.gov to initiate the CFD application process. ☐

☐ 2.52 Other conditions: _____ ☐

K. FIBER OPTIC

☒ **2.53 A fiber optic line is available for connection by this project in Holt Blvd. (Ref: Fiber Optic Drawing Number: 22936)** ☐

☒ **2.54 Design and construct fiber optic system to provide access to the City's conduit and fiber optic system per the City's Fiber Optic Master Plan. Building entrance conduits shall start from the closest OntarioNet hand hole constructed along the project frontage in the ROW and shall terminate in the main telecommunications room for each building. Conduit infrastructure shall interconnect with the primary and/or secondary backbone fiber optic conduit system at the nearest OntarioNet hand hole. Generally located at the northwest corner of Holt Blvd and Guasti Rd** ☐

☐ 2.55 Refer to the City's Fiber Optic Master Plan for design and layout guidelines. Contact the Broadband Operations Department at (909) 395-2000, regarding this requirement. ☐

☒ **2.56 Other conditions: See Exhibit C for Broadband Operations Section Conditions of Approval** ☐

3. PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY, APPLICANT SHALL:

☒ **3.01 Set new monuments in place of any monuments that have been damaged or destroyed as a result of construction of the subject project. Monuments shall be set in accordance with City of Ontario standards and to the satisfaction of the City Engineer.** ☐

☒ **3.02 Complete all requirements for recycled water usage.** ☐

☒ **1) Procure from OMUC a copy of the letter of confirmation from the California State Water Board (Division of Drinking Water) that the Engineering Report (ER) has been reviewed and the subject site is approved for the use of recycled water.**

☒ **2) Obtain clearance from the OMUC confirming completion of recycled water improvements and passing of shutdown tests and cross connection inspection, upon availability/usage of recycled water.**

☒ **3) Complete Site Supervisor training of on-site personnel in the use of recycled water, in accordance with the ER, upon availability/usage of recycled water.**

☒ **3.03 The applicant/developer shall submit all final survey documents prepared by a Licensed Surveyor registered in the State of California detailing all survey monuments that have been preserved, revised, adjusted or set along with any maps, corner records or Records of Survey needed to comply with these Conditions of Approvals and the latest edition of the California Professional Land Survey Act. These documents are to be reviewed and approved by the City Survey Office.** ☐

☐ 3.04 Ontario Ranch Projects: For developments located at an intersection of any two collector or arterial streets, the applicant/developer shall set a monument if one does not already exist at that intersection. Contact the City Survey office for information on reference benchmarks, acceptable methodology and required submittals. ☐

☒ **3.05 Confirm payment of all Development Impact Fees (DIF) to the Building Department.** ☐

☒ **3.06 Submit electronic copies (PDF and Auto CAD format) of all approved improvement plans, studies and reports (i.e. hydrology, traffic, WQMP, etc.).** ☐

4. PRIOR TO FINAL ACCEPTANCE, APPLICANT SHALL:

☒ **4.01 Complete all Conditions of Approval listed under Sections 1-3 above.** ☐

☒ **4.02 Pay all outstanding fees pursuant to the City of Ontario Municipal Code, including but not limited to, plan check fees, inspection fees and Development Impact Fees.** ☐

☒ **4.03 The applicant/developer shall submit a written request for the City's final acceptance of the project addressed to the City Project Engineer. The request shall include a completed Acceptance and Bond Release Checklist, state that all Conditions of Approval have been completed and shall be signed by the applicant/developer. Upon receipt of the request, review of the request shall be a minimum of 10 business days. Conditions of Approval that are deemed incomplete by the City will cause delays in the acceptance process.** ☐

☒ **4.04 Submit record drawings (PDF) for all public improvements identified within Section 2 of these Conditions of Approval.** ☐

EXHIBIT 'A'

ENGINEERING DEPARTMENT
First Plan Check Submittal Checklist

Project Number: PDEV23-039, PSP23-001, PDA23-005

All plan check submittals are to be done digitally through the City Of Ontario Citizen Portal Access. The following items are to be included with the first plan check submittal:

1. ☒ **A copy of this check list**
2. ☒ **Payment of fee for Plan Checking**
3. ☒ **Engineering Cost Estimate (on City form) with engineer's wet signature and stamp.**
4. ☒ **Project Conditions of Approval**
5. ☒ **Potable and Recycled Water demand calculations (include water demand calculations showing low, average and peak water demand in GPM for the proposed development and proposed water meter size).**
6. ☒ **Public Street improvement plan with street cross-sections**
7. ☒ **Public Water improvement plan (include water demand calculations showing low, average and peak water demand in GPM for the proposed development and proposed water meter size)**
8. ☒ **Recycled Water improvement plan (include recycled water demand calculations showing low, average and peak water demand in GPM for the proposed development and proposed water meter size and an exhibit showing the limits of areas being irrigated by each recycled water meter)**
9. ☒ **Public Sewer improvement plan**
10. ☒ **Public Storm Drain improvement plan**
11. ☒ **Public Street Light improvement plan**
12. ☒ **Signing and Striping improvement plan**
13. ☒ **Fiber Optic plan (include Auto CAD electronic submittal)**
14. ☒ **HOA Landscape improvement plans. Show corner sight line distance per engineering standard drawing 1309.**
15. ☐ CFD Landscape improvement plans. Show corner sight line distance per engineering standard drawing 1309.
16. ☒ **Dry Utility plans within public right-of-way (at a minimum the plans must show existing and ultimate right-of-way, curb and gutter, proposed utility location including centerline dimensions, wall to wall clearances between proposed utility and adjacent public line, street work repaired per Standard Drawing No. 1306. Include Auto CAD electronic submittal)**
17. ☒ **Traffic Signal improvement plan and One (1) copy of Traffic Signal Specifications with modified Special Provisions. Please contact the Traffic Division at (909) 395-2154 to obtain Traffic Signal Specifications.**
18. ☒ **Water Quality Management Plan (WQMP), including one (1) copy of the approved Preliminary WQMP (PWQMP).**
19. ☒ **Hydrology/Drainage study**

20. ☒ **Soils/Geology report**

21. ☐ Payment for Final Map/Parcel Map processing fee

22. ☐ Final Map/Parcel Map

23. ☐ Approved Tentative Map

24. ☒ **Preliminary Title Report (current within 30 days)**

25. ☐ Traverse Closure Calculations

26. ☒ **Set of supporting documents and maps (legible copies): referenced improvement plans (full size), referenced record final maps/parcel maps (full size, 18"x26"), Assessor's Parcel map (full size, 11"x17"), recorded documents such as deeds, lot line adjustments, easements, etc.**

27. ☒ **Supplemental Engineering Report, in electronic format (PDF format), for recycled water use only. Must be reviewed and submitted to the Division of Drinking Water by OMUC Water Quality Programs before clearing plan check workflows (includes grading and landscape plan reviews). *Approval letter issued by the Division of Drinking Water must be obtained before meter installation and if applicable, occupancy release.***

28. ☒ **Other: Precise Grading Plan coordinated with the offsite improvement plans to include, but not be limited to, utility tie-in points of connection between public and private facilities, driveway and sidewalk connections, and perimeter wall/fence heights and locations.**

CITY OF ONTARIO
MEMORANDUM

Development Plan Review
Engineering Department:
Transportation Section

Project: PDEV23-039
(600 Room Hotel)

Date: February 11, 2025

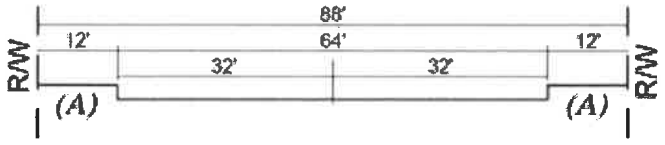
Location: 2236 East Holt Boulevard

By: Jaime Maciel-Carrera
Diego Tapia

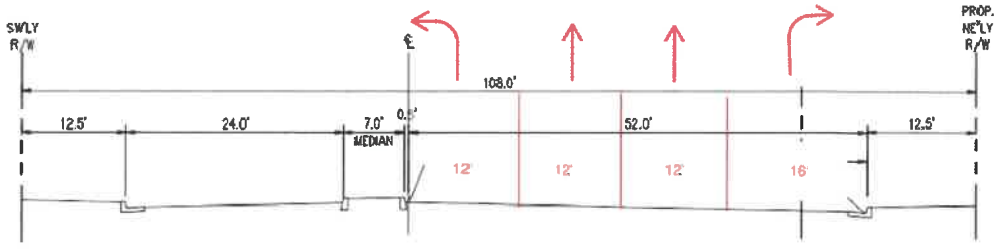
The Transportation Division recommends the following to be incorporated into the Project's Conditions-of-Approval:

Conditions:

1. The required street section for Guasti Road along the project frontage will generally be 64-feet (curb to curb) with an 88-foot ROW section. However, as Guasti Road approaches Holt Blvd/Convention Center Way, additional ROW will be required to accommodate additional left or right turn lanes as determined by the traffic analysis being prepared for the project. See street section below:



2. The Applicant/Developer shall be responsible for installing the required lane configuration, on Guasti Road approaching the signalized intersection at Holt Boulevard. This includes a right turn lane pocket length of 135-feet. See the lane configuration below:



3. The Applicant/Developer shall be responsible to widen the existing bridge on Guasti Road at the easterly property line over the Cucamonga Creek Channel in order to accommodate 4

travel lanes and sidewalk (north and southside) per the City of Ontario General Plan, the Master Plan of Streets and Highways, and to the satisfaction of the City Engineer. The Development Agreement shall determine responsible party for funding and or construction of this improvement.

4. The Applicant/Developer shall be responsible to design and construct raised median along project frontage on Guasti Road from Holt Boulevard to the easterly property line. Raised median shall have a break at the proposed signalized main entrance in order to accommodate full access.

5. The Applicant/Developer shall be responsible to design and construct modifications to the existing traffic signal on Guasti Road and Holt Boulevard as necessary to accommodate the roadway widening of Guasti Road. The traffic signal modification shall address relocation or upgrade of any affected equipment including poles, video detection, interconnect/fiber optic communication equipment, cable and conduit, CCTV cameras, emergency vehicle preemption systems, and bicycle detection to the satisfaction of the City Engineer. All new signal equipment shall be installed at its ultimate location, unless precluded by right-of-way limitations. The Development Agreement shall determine responsible party for funding and or construction of this improvement

6. The Applicant/Developer shall be responsible to design and construct a traffic signal on Guasti Road at the main entrance (approximately 980-feet East of Holt Boulevard and Convention Center Way). The new traffic signal shall include poles, video detection, CCTV, fiber optic communication equipment, cable and conduit, emergency vehicle preemption systems, and bicycle detection to the satisfaction of the City Engineer. All new signal equipment shall be installed at its ultimate location, unless precluded by right-of-way limitations.

7. The Applicant/Developer shall install all-way stop at the intersection of Cardena's driveway and Guasti Road.

8. The Applicant/Developer shall be responsible to design and construct in-fill public street lights and a potential new service as needed along Guasti Road and Holt Boulevard (between Guasti/Convention Center Way and I-10 On-Ramp). Street lighting shall be LED-type and in accordance with City's Approved Material List LED Luminaires. The Applicant/Developer shall also install smart nodes on all new street light fixtures.

9. The Applicant/Developer shall be responsible to design and construct the necessary pavement and striping transitions from existing roadway conditions to the widened roadway portions along Guasti Road. Striping and paving improvements shall include the removal existing interim signing and striping beyond the project frontage limits and the installation of ultimate signing and striping, and additional pavement necessary to accommodate fully widened street improvements and raised median, to east of the Cucamonga Channel bridge to the satisfaction of the City Engineer and in accordance with the Development Agreement.

10. Guasti Road and Holt Boulevard (between Convention Center Way/Guasti Road and I-10 On-Ramp) shall be signed "No Stopping Anytime" along the property frontage.

11. Design and construct proposed driveways in accordance with City of Ontario Standard Drawing No. 1204 for Commercial Driveway.

12. All project driveways onto Guasti Road from Holt Boulevard/Convention Center Way to the easterly property line, except the signalized main entrance, shall be restricted to right-in/right-out access due to the proposed raised median.

13. All landscaping, block walls, and other obstructions shall be compatible with the stopping sight distance requirements per City of Ontario Standard Drawing No. 1309.

14. The Applicant/Developer's engineer-of-record shall meet with City Engineering staff prior to designing and submitting for plan check the signing/striping, street lighting and traffic signal design plans to define limits of improvements.

jmc,dt;

EXHIBIT B

CITY OF ONTARIO
MEMORANDUM

ONTARIO MUNICIPAL UTILITIES COMPANY

DATE: February 05, 2025
TO: Jeff Tang, Engineering Department
CC: Lorena Mejia, Planning Department
FROM: Eric Woosley, Utilities Engineering (QC:CS/DM)
SUBJECT: DPR #3 - Utilties Engineering Condtions of Approval
PROJECT NO.: PDEV23-039

BRIEF DESCRIPTION

A Development Plan to construct one 9-story hotel consisting of approximately 596,450 square feet, including 600 rooms, ancillary retail and various amenities on 10.43 acres of land located at 2236 East Holt Boulevard, within the SP (Specific Plan) zoning district and the MTC (Multimodal Transit Center) overlay. (APNs: 0110-322-33) Related Files: PSP-23-001; PDA-23-005.

UTILITIES ENGINEERING CONDITIONS OF APPROVAL

CONDITIONS OF APPROVAL: *The Ontario Municipal Utilities Company (OMUC) recommends this application for approval subject to the conditions outlined below and compliance with the City's Design Development Guidelines, Specifications Design Criteria, and City Standards.*

1. Standard Conditions of Approval: Project shall comply with the requirements as set forth in the Amendment to the Standard Conditions of Approval for New Development Projects adopted by the City Council (Resolution No. 2017-027) on April 18, 2017; as well as project-specific conditions/requirements as outlined below.

Prior to Issuance of Any Permits (Grading, Building, Demolition and Encroachment), unless other timeline milestones are specified by individual conditions below, the Applicant Shall:

General Conditions (Section 2.A, Other conditions): The Applicant shall comply with the following:

2. Final Utilities Systems Map (USM): Submit a Final Utilities Systems Map (USM) as part of the precise grading plan submittal that meets all the City's USM requirements. These requirements include showing and labeling all existing and proposed utilities (including all appurtenances such as backflow devices, DCDAs, etc.), sizes, points of connection, and any easements. The final utility design shall comply with all Division of Drinking Water (CCR §64572) Separation Requirements. See the *Utility Systems Map (USM) Requirements document* for details.
    a. The proposed utilities, utility alignments, and Public Rights-of-Way (ROW)/Public Utility Easements (PUE) shown on the Conceptual Utilities Systems Map (CUSM) and other Entitlement documents are not considered final and shall be revised during Final Design to meet all City Design Guidelines, Standards, City Requirements, and all the Conditions of Approval contained in this document.
3. Note the following definitions and concepts for Public Utility Improvements and Private Utility Improvements: Public Improvements shall be designed per City Public Design Guidelines and City Standards and constructed through a City Encroachment Permit; and Private Onsite Improvements shall be designed per Building Code and Plumbing Code and constructed through a City Building Permit.
    a. Public Utility Improvements include the following: water main pipelines and sewer main pipelines; sewer laterals connecting to a Public Sewer Main up to the Cleanout (or Manhole) at PL/ROW; water services and connected appurtenances (Meters/Meter Boxes, Fire Hydrants, Airvacs, Blowoffs, etc.) connecting to a Public Water Main per City Standards; and Fire Services connecting to a Public Water Main from the Main up to the DCDA. Public Water Improvements and Public Sewer Improvements are required to be designed and constructed through Public Improvement Plans with Plan View and Profile View per City Standards, Guidelines, and Requirements.
    b. Private Utility Improvements include the following: onsite water plumbing lines after a Public Meter, or after the Fire DCDA and including the DCDA; Backflow Devices and other Cross-Connection Prevention; onsite sewer upstream of the Public Sewer Lateral, including the Cleanout (or Manhole) at PL/ROW/PUE Edge;

Monitoring Manholes and other Wastewater Pretreatment Facilities. Private Onsite Utility Improvements are required to be designed and constructed per Building and Plumbing Plans with: the Backflows, DCDAs, Cleanout (or Manhole) at PL/ROW/PUE Edge, and Monitoring Manholes being designed and constructed through a Precise Grading Plan; and, the other Pretreatment Devices (Grease Interceptor, Sand, Oil Interceptors, etc.) and the connections to the buildings and structures through a building Plumbing Plan.

4. Public Utilities and Public Right-of-Way including Public Utility Easements (PUE): All City of Ontario Public Utilities shall be installed within a Public Right-of-Way (ROW), or within a Public Utility Easements (PUE), or within a combination of ROW and PUE. In this case, Public Utilities is referring to the mains and connected appurtenances of the following City of Ontario/OMUC Utilities: Public Potable Water; Public Recycled Water; and Public Sanitary Sewer. Public Utilities shall be subject to the Minimum ROW/PUE Area Requirements and PUE Restrictions:
    a. Minimum ROW Area Requirements: Public Utilities shall be installed within in existing ROW/PUE in alignments/locations that meet the following minimum ROW/PUE areas surrounding the Public Utilities, and/or additional ROW/PUE shall be dedicated/granted to the City to provide the following minimum ROW/PUE areas surrounding the Public Utilities:
        i. For each main, the ROW/PUE Area shall be a minimum of 20 feet wide, centered on the utility main with a minimum of 10 feet of ROW/PUE on each side of the main and this minimum area shall extend a minimum for 10 feet past the end of a main;
        ii. For each Service/Lateral, the ROW/PUE Area shall be a minimum of 10 feet wide, centered on the service/lateral with a minimum of 5 feet of ROW on each side of each service/lateral;
        iii. For each water meter box, the ROW/PUE Area shall be a minimum of 5 feet behind and 5 feet on each side of a water meter box;
        iv. For each water appurtenances (fire hydrants, blowoffs, airvacs, etc.), the ROW/PUE Area shall be a minimum of 5 feet on each side surrounding the water appurtenances (fire hydrants, blowoffs, airvacs, etc.);
        v. The ROW/PUE minimum areas for separate Public Utilities may overlap, provided that all minimum separations and PUE Restrictions are met.
    b. PUE Restrictions: The Minimum PUE Area required surrounding Public Utilities shall be subject to the following restrictions:
        i. The Minimum PUE Area required surrounding Public Utilities shall not contain:
            A. Any storm water quality improvements (infiltration, detention, retention, bioswale, etc.);
            B. Landscaping with thick or intrusive root structures,
            C. Any trees;
            D. Any private utilities, plumbing lines, private fire system, or irrigation lines; or,
            E. Any permanent structures or overhangs of permanent structures.
        ii. The PUE surface shall be designed to allow vehicle access over and along the full length of the utility main by any City maintenance vehicle.
        iii. Minimum Separations: Within a PUE, all Department of Drinking Water (DDW) Water Main Separations per California Code of Regulations (CCR) §64572 shall be met for all Public Potable Water Mains and Services between: all Public City Utilities; Non-City Utilities; and Private Utilities. Additionally, the following Minimum Separations shall be met:
            A. At minimum there shall be a 4 feet horizontal separation between each utility as measured between the outside walls of the utility pipelines, or in the case of a Joint Utility Trench, between the outside edge of the Joint Utility Trench and the outside wall of the Utility Pipeline.
            B. Public Utility mains shall not be located behind curb or under curb and gutter and shall be located a minimum of 5 feet from curbface.

Sewer Conditions (Section 2.C): The Applicant shall comply with the following:

5. Public Sewer Improvements: Design and construct the following required public sewer mains in accordance with City of Ontario Standards and Design Guidelines and Specifications: N/A
    a. There is an existing sewer main (S13859) available for connection by this project in Holt Boulevard.
6. Sewer Lateral: Per City of Ontario Standard Drawing No. 2003:
    a. Install a sewer lateral connected to the existing 12-inch public sewer main (S13859) in Holt Boulevard.
    b. No storm water quality improvements (infiltration, detention, retention, bioswale, etc.) shall be installed above or within 5 feet of any Public Sewer Lateral.

7. Private Onsite Sewer System and Plumbing: The Onsite Sewer System shall be privately maintained by the property owner and shall be designed as follows:
    a. Design and construct a manhole per city standard upstream of the proposed on-site lateral manhole, to facilitate the transition of the proposed on-site private force sewer system to a gravity sewer system. The transition manhole shall be located a minimum of 10 feet upstream of the on-site lateral manhole.
    b. The Onsite sewer system and building plumbing shall be designed in such a way that the sanitary domestic wastewater flows leave the building separately from non-sanitary wastewater flows (industrial, process, or kitchen, etc.) and the line for non-sanitary wastewater flows can be upgraded in the future to have pretreatment equipment and devices on it, as required by a Wastewater Discharge Permit.
    c. Each private system shall have an onsite monitoring manhole prior to the point of connection with the Public Sewer System.
    d. No storm water quality improvements (infiltration, detention, retention, bioswale, etc.) shall be installed above or within 5 feet of any Private Onsite Sewer pipes.
8. Monitoring Manhole: Per City of Ontario Standard Drawing Nos. 2201 and 2203:
    a. Each sewer system (sanitary and non-sanitary flows) shall have a monitoring manhole on-site as part of the privately owned and maintained sewer system(s), upstream of the sewer lateral.
        i. Each monitoring manhole shall be in a location directly accessible by field staff.
9. Wastewater Discharge Permit: The Occupant/Applicant shall apply for a Wastewater Discharge Permit for their Establishment, and shall comply will all the requirements of the Wastewater Discharge Permit found at: (http://www.ontarioca.gov/municipal-utilities-company/utilities/industrial-wastewater-discharge-permit). Requirements of the Wastewater Discharge Permit may include but not limited to: Installation of wastewater pretreatment equipment, such as clarifiers. For wastewater permit application questions, please contact: omucenvironmental@ontarioca.gov

Potable Water Conditions (Section 2.D): The Applicant shall comply with the following:

10. Public Water Improvements: Design and construct the following required public water mains in accordance with City of Ontario Standards and Design Guidelines and Specifications: N/A
    a. There is an existing 12-inch potable water main (W11988) available for connection by this project in Guasti Road.
    b. There is an existing 12-inch potable water main stub (W11987) in Holt Boulevard. If the Fire Department requires public fire hydrants along the frontage of Holt Boulevard, or if the fire flow along Holt Boulevard is determined to be inadequate through the hydraulic analysis during final design; extension of the 12-inch along the frontage of Holt Boulevard shall be required.
11. Existing Appurtenance: Abandon the existing 2-inch air release and vacuum relief (airvac) (W11987) located at the SEC of Holt Boulevard and Guasti Road and install a new 2-inch airvac per City of Ontario Standard Drawing No. 4102.
12. Existing Fire Hydrants: The existing fire hydrant located in the location of the proposed drive approach shall be abandoned to the main connection.
13. Fire Hydrants: Per City of Ontario Standard Drawing No. 4101:
    a. Install fire hydrants along the project frontages connected to the potable water main per City of Ontario Standards. Fire hydrants connected to potable water mains shall be spaced a maximum of 300 feet apart or per Fire Department Standards/Requirements.
14. Fire Service with Fire System Double Check Detector Assembly (DCDA): Per City of Ontario Standard Drawing No. 4208:
    a. If an onsite private fire system is required, then a separate Fire Service equipped with a DCDA connected to the Public Potable Water System is required, to serve the onsite private fire system. The onsite fire system shall be separate from the onsite domestic water plumbing system and the onsite landscape irrigation system.

15. Water Service with a Meter and Backflow Prevention Assembly Reduced Pressure Device:

    a. Install a water service and meter connected to the existing potable water main in Guasti Road per City of Ontario Standards. The water service shall be equipped with a backflow prevention device. The water meter shall be located within the ROW.

16. Existing Water Services:

    a. All existing unused water services shall be abandoned to the main water connection.

Recycled Water Conditions (Section 2.E): The Applicant shall comply with the following:

17. Public Recycled Water Improvements: Design and construct the following required public recycled water mains in accordance with City of Ontario Standards and Design Guidelines and Specifications:

    a. An 8-inch recycled water main (1299 PZ) in Guasti Road between Holt Boulevard and the Cucamonga Creek Channel.

        i. The point of connection for the recycled water main is located in Convention Center Way north of the intersection of Holt Boulevard and Guasti Road/Convention Center Way (P11059). The connection shall be made with a tee, connecting the recycled water mains in both Convention center Way and Holt Boulevard, and extending south in Guasti Road to the Cucamonga Creek Channel bridge. Any portions of the existing recycled water main, including, but not limited to the diagonal section of the recycled water main and existing bends located in said intersection no longer connected and active, resulting from the modifications required to facilitate the connection, shall be abandoned.

18. City Ordinance 2689: This development shall comply with City Ordinance 2689 and make use of recycled water for all approved uses, including but not limited to landscape irrigation.

19. Irrigation Recycled Water Service with Meter:

    a. Install a water service and meter for irrigation purposes connected to the new recycled water main in Guasti Road per City of Ontario Standards. The irrigation recycled water meter shall be located within the ROW.

20. Recycled Water Program Requirements: In order to receive recycled water service, the applicant shall comply with each of the following:

    a. Prior to Precise Grading Plan Approval and Building Permits Issuance:

        i. Submit one (1) electronic copy, in PDF format, of the Landscape Plans (on-site & off-site) to OMUC's Water Quality Programs at OMUCWQPlanCheck@ontarioca.gov for review and approval.

        ii. Submit one (1) electronic copy, in PDF format, of the Supplemental Engineering Report (ER), for the use of recycled water to OMUC's Water Quality Programs at OMUCWQPlanCheck@ontarioca.gov for review and subsequent submittal to the California State Water Board (Division of Drinking Water) for final approval.

        Note: The Division of Drinking Water review and approval process may take up to four (4) months. Contact the OMUC's Water Quality Programs at (909) 395-2678 or email OMUCWQPlanCheck@ontarioca.gov regarding this requirement. Failure to obtain an approval letter from the Division of Drinking Water authorizing the use of recycled water will delay meter installation and if applicable, occupancy release for new developments.

    b. Prior to Occupancy Release/Finalizing:

        i. Procure from OMUC a copy of the letter of confirmation from the California State Water Board (Division of Drinking Water) that the Engineering Report (ER) has been reviewed and the subject site is approved for the use of recycled water.

        ii. Obtain clearance from the OMUC confirming completion of recycled water improvements and passing of shutdown tests and cross connection inspection, upon availability/usage of recycled water.

        iii. Complete Site Supervisor training of on-site personnel in the use of recycled water, in accordance with the ER, upon availability/usage of recycled water.

UTILITIES SYSTEMS MAP (USM) REQUIREMENTS:

The USM shall meet, at a minimum, the following requirements:

1. USM Content and Format: The Utilities Systems Maps shall show all existing and proposed Utilities (Potable Water, Recycled Water, Sewer, Storm Drain, and other utilities) including each of the City's public utilities' points of connection to the existing systems. This plan should include::

    a. Format: The Utilities Systems plan at a minimum 1:100 scale (or large engineering scale as appropriate to show needed details) that clearly shows each existing and proposed utility and its relative location. This includes property lines, right-of-way, public utility easements, but should not include underlying existing topography, just proposed general grades. Use appropriate colors for each Utility type: blue for Potable Water; purple for Recycled Water; green for Sanitary Sewer; yellow-brown for storm Drain.

    b. Services and Laterals: All Proposed Utility Service laterals for each parcel (potable water domestic, recycled water irrigation, potable/recycled water for process water, and sewer) and any associated appurtenances.

        i. Meter and Backflow Device Locations: Show all proposed meters and required backflow devices located per City Standards (Water Services and Meters; Backflow Devices). Meters should be located in public rights-of-way or PUEs; either at the R/W (or PUE) line for curb adjacent sidewalks or at back of curb for all other cases. All water connections that serve more than one residential unit are required to have a backflow device installed behind the meter.

    c. Cross Sections **(if applicable, for project construction new public mains)**: Scaled cross sections showing the utility layout on the Utility Systems Map (Utility Plan) for each public street, private street and Public Utility Easement (PUE). The cross sections shall show the location and size of each utility and annotate the property/ROW lines, the type of finished surface material, the distance of each utility from centerline, the depth from finished surface to top of pipe, and the distance between utilities (outside wall to outside wall).

    d. Points of Connections: The locations of the points of connections to the existing utility systems, which can include breaks between the map area and the connection points with descriptions of the pipe size, type, use (pressure zone for water), and distance. An inset map can be used in addition to this to help provide clarity.

    e. Water Demand Table **(if applicable, for projects within Ontario Ranch/NMC)**: Add a Water Demand Table to the Utility Systems Map (Utility Plan) that calculates the project's domestic water use based on land use category (residential, commercial, and OS-R/Parks) and the number of units. The table shall state demand in terms of Average Daily Demand (ADD from Table 4-8 of the Water Master Plan) and Water Demand Equivalents (WDE / Net MDD from Exhibit C-2R of the NMC Construction Agreement; WDEs only if NMC). It should also identify the quantity of units in each category and the specific lots that are included in that category. Please Note that master planned lines are designed using gross acreage densities for all projected water use from residential categories.

        i. See Attached Sheet for WDT Example.

    f. Phasing Plan (***if applicable***): As separate exhibits, provide a proposed phasing plan showing the phasing of the infrastructure and the number and type (TOP land use category) of units in each phase.

        i. All phases must have: a connection to public sewer; a two separate looped connections to the potable water system, where no one closing of a main segment results in any part of any of any phase being without potable water.

ii. For public water mains in all phases, dead-end water lines (temporary or permanent) are limited to serving 28 dwelling units or a maximum of 600 linear feet, whichever comes first. Otherwise a looped water system with at least two (2) points of connection to the primary public system is required.

g. Private Onsite Systems versus Public Systems within PUEs for Residential Tract Map Project(***if applicable***): the following requirements apply when to delineating between Private and Public Systems:

i. Current Standard Drawing No. 1304 remains applicable and minimum health separation must be met.

ii. Public water mains will be accepted in longer alleys when it serves more than 6 meters.

iii. Public sewer mains will be accepted in alleys where the water is public.

iv. Public dead-end water mains will require a blow-off at the end and the alley should be designed to accommodate runoff from required water main flushing operations.

v. Public sewer mains in alleys will require a manhole at both ends of the main.

vi. Public meters serving more than one single family residential unit are considered as multifamily service with master meter and require: a backflow device after the meter, private HOA sub-metering for each unit, and a separate Fire Service with DCDA to provide private onsite fire service.

EXHIBIT C

CITY OF ONTARIO
MEMORANDUM

DEVELOPMENT PLAN REVIEW CONDITIONS OF APPROVAL
Broadband Operations Section

DATE: 08-25-24

PROJECT: PDEV23-039

LOCATION: Holt and Guasti

PROJECT ENGINEER: Jeff

BROADBAND PLAN CHECKER: Cameron Chadwick - CChadwick@ontarioca.gov

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The following Conditions of Approval requirements must be incorporated prior to the Development Advisory Board and/or Zoning Administrator Hearing.

1. Project shall be designed and constructed to provide access to the City's conduit and fiber optic system per the City's Fiber Optic Master Plan. Building entrance conduits shall start from the closest OntarioNet hand hole in the Right-of-Way (ROW) and shall terminate in the main telecommunications room for each building. Conduit infrastructure shall interconnect with the primary and/or secondary backbone fiber optic conduit system at the nearest OntarioNet hand hole.
2. Contractor is responsible for locating and connecting conduit to existing OntarioNet hand holes on adjacent properties within a reasonable distance. There should be no "Gaps" in conduit between the contractor's development and the adjacent property. OntarioNet hand holes are typically located in the ROW at the extreme edge of a property.
3. Where a joint telecom or street light street crossing is required, include (2) 2" HDPE SDR-11 conduits or (1) 4" schedule 80 conduit sleeve. Terminate the street crossing conduit(s) in a new HH-3/22 OntarioNet hand hole in the right of way
4. The City requires a public utility easement for fiber optics on all private aisles/alley ways.
5. Hand holes - Design and install OntarioNet fiber optic hand hole HH-FP (10x00x10), HH-1 (13x24x18), HH-2 (17x30x24), HH-2A (24x36x30), HH-3 (30x48x36) and/or HH-4 (36x60x36) as needed. Respectively, Newbasis Part # PLA100010T-00002, PCA132418-00006, PCA-173024-90116, PCA-243630-90064, PCA-304836-90244 and PCA-366036-90146 or equivalent as specified per City Standard 1316. Conduits sweeping into hand holes shall enter in flush with the cut-out mouse holes aligned parallel to the bottom of the box and come in perpendicular to the wall of the box. Conduits shall not enter at any angle other than parallel. Provide 5-foot minimum clearance from existing/proposed utilities. All hand holes will have ¼-inch galvanized wire between the hand holes and the gravel it is placed on.
6. ROW Conduit – Design and install fiber optic conduit at a minimum depth of 36-inch. Trenching shall be per City Standard 1306. Install (1) 2-inch HDPE SDR-11 (Smoothwall) roll pipe (Orange) duct and (1) 2-inch HDPE SDR-11 (Smoothwall) roll pipe (Orange with Black Stripe) duct. Conduit(s) between ROW hand holes and hand holes on private property shall be 2-inch HDPE SDR-11 (Smoothwall) roll pipe (Orange) duct.
7. Building Entrance (Single Family) – Design and install 0.75-inch HDPE SDR-11 (Smoothwall) roll pipe (Orange) duct from hand holes on property or hand holes in the ROW. Consult City's Fiber Team for design assistance.
8. Building Entrance (Multi-family and Commercial) - From the nearest handhole to the building entrance, design and install fiber optic conduit at a minimum depth of 36-inches. Trenching shall be per City Standard for Commercial Buildings. (1) 2-inch HDPE SDR-11 (Smoothwall) roll pipe (Orange) duct. Install

locate/tracer wires minimum 12AWG within conduit bank and fiber warning tape 18-inch above the uppermost duct

9. Multi-family and commercial properties shall terminate conduit in an electrical room adjacent to the wall no less than five inches above the finished floor. A 20" width X length 36" space shall be reserved on the plywood wall for OntarioNet equipment. This space shall be labeled "OntarioNet Only". Ontario Conduit shall be labeled "OntarioNet"
10. A minimum 13/16 millimeter microduct joint use telecommunications conduit with pull-rope from the single-family, multi-family or commercial building communal telecom/electrical room/closet to each multi-family or commercial building unit shall be installed. See Structured Wiring Checklist on City's website for additional details.
11. Warning Tape - Contractor shall supply and install an approved non-detectable warning tape 18-inch above the uppermost conduit when backfilling trenches, pits or excavations greater than 10' in length. Warning Tape shall be non-detectable, Orange in color, 4-inch minimum width, 4 mil, 500% minimum elongation, with bold printed black letters "CAUTION - BURIED FIBER OPTIC CABLE BELOW" printed in bold black lettering no less than 2-inch high.
12. All hand holes, conduits, conduit banks, materials and installations are per the City's Fiber Optic Master Plan and City Fiber Optic Cable and Duct Standards. All hand holes, conduits and ducts shall be placed in the public right of way.
13. All unused conduits/ducts/microducts shall be protected with duct plugs that provide a positive seal. Ducts that are occupied shall be protected with industry accepted duct seal compound.
14. Locate/Tracer Wire - Conduit bank requires (1) 12AWG high strength (minimum break load 452#) copper-clad steel with 30mil HDPE orange insulation for locate/tracer wire. Contact City's Fiber Team for tracer wire specifications and see note 8.
15. Multi-family dwellings are considered commercial property.
16. Refer to the In-tract Fiber Network Design guideline on the City's website for additional in-tract conduit guidelines.

AIRPORT LAND USE COMPATIBILITY PLANNING
CONSISTENCY DETERMINATION REPORT

ONTARIO AIRPORT PLANNING

Project File No.: PSP23-001, PDEV23-039, PDA23-005

Address: southeast corner of Guasti Road and Holt Boulevard

APN: 110-322-33

Existing Land Use: Vacant lot

Proposed Land Use: Specific Plan, Development Plan to construct a 600,000 square foot hotel and commercial building

Site Acreage: 10.43 Proposed Structure Height: 120 FT

ONT-IAC Project Review: n/a

Airport Influence Area: ONT

Reviewed By: Lorena Mejia

Contact Info: 909-395-2276

Project Planner: Lorena Mejia

Date: 2/12/2025

CD No.: 2023-024

PALU No.: 24-002

The project is impacted by the following ONT ALUCP Compatibility Zones:

Safety	Noise Impact	Airspace Protection	Overflight Notification
☐ Zone 1	☐ 75+ dB CNEL	☐ High Terrain Zone	☑ Avigation Easement Dedication
☐ Zone 1A	☐ 70 - 75 dB CNEL	☑ FAA Notification Surfaces	☑ Recorded Overflight Notification
☐ Zone 2	☑ 65 - 70 dB CNEL	☑ Airspace Obstruction Surfaces	☐ Real Estate Transaction Disclosure
☐ Zone 3	☑ 60 - 65 dB CNEL	☐ Airspace Avigation Easement Area	
☐ Zone 4		Allowable Height: 120 -140 FT	
☐ Zone 5			

The project is impacted by the following Chino ALUCP Safety Zones:

☐ Zone 1 ☐ Zone 2 ☐ Zone 3 ☐ Zone 4 ☐ Zone 5 ☐ Zone 6

Allowable Height: _____

CONSISTENCY DETERMINATION

This proposed Project is: ○ Exempt from the ALUCP ○ Consistent ◉ Consistent with Conditions ○ Inconsistent

The proposed project is located within the Airport Influence Area of Ontario International Airport (ONT) and was evaluated and found to be consistent with the policies and criteria of the Airport Land Use Compatibility Plan (ALUCP) for ONT.

See Attached conditions.

Airport Planner Signature: Lorena Mejia

Project Conditions

1. The project site is located within an area where 120-140 foot building heights are allowed. The applicant will be required to file for an FAA Obstruction Evaluation/Airport Airspace Analysis (FAA Form 7460-1) and receive a Determination of No Hazard prior to building permit issuance.

2. The project site is located within an area where 120-140 foot building heights are allowed. The applicant will be required to file for an FAA Obstruction Evaluation/Airport Airspace Analysis (FAA Form 7460-1) for any temporary construction equipment such as cranes and receive a Determination of No Hazard for any temporary structures/objects that are over 100 feet in height.

CITY OF ONTARIO
MEMORANDUM

TO: **Lorena Mejia, Senior Planner**
Planning Department

FROM: **Robert Johnson, Deputy Fire Chief**
Fire Department

DATE: **February 12, 2025**

SUBJECT: **PDEV23-039 - A Development Plan to construct a 9-story hotel consisting of approximately 596.450 square feet to include 600 rooms, ancillary retail and various amenities on 10.43 acres of land located at 2236 East Holt Boulevard, within the SP (Specific Plan) zoning district and the MTC (Multimodal Transit Center) overlay (APN(s): 0110-322-33). Related File(s): PSP-23-001; PDA-23-005.**

☒ The plan **does** adequately address Fire Department requirements at this time

☒ Standard Conditions of Approval apply, as stated below.

See attached access exhibit

SITE AND BUILDING FEATURES:

A. 2022 CBC Type of Construction: Not listed, assumed I-A

B. Type of Roof Materials: N/A

C. Ground Floor Area(s): N/A

D. Number of Stories: 9

E. Total Square Footage: 598,441 Sq. Ft.

F. 2022 CBC Occupancy Classification(s): R-1

CONDITIONS OF APPROVAL:

1.0 GENERAL

☒ 1.1 The following are the Ontario Fire Department ("Fire Department") requirements for this development project, based on the current edition of the California Fire Code (CFC), and the current versions of the Fire Prevention Standards ("Standards.") It is recommended that the applicant or developer transmit a copy of these requirements to the on-site contractor(s) and that all questions or concerns be directed to the Bureau of Fire Prevention, at (909) 395-2029. For copies of Ontario Fire Department Standards please access the City of Ontario web site at www.ontarioca.gov/Fire/Prevention.

☒ 1.2 These Fire Department conditions of approval are to be included on any and all construction drawings.

2.0 FIRE DEPARTMENT ACCESS

☒ 2.1 Fire Department vehicle access roadways shall be provided to within one hundred and fifty feet (150') of all portions of the exterior walls of the first story of any building, unless specifically approved. Roadways shall be paved with an all-weather surface and shall be a minimum of twenty-four (24) ft. wide. See Standard #B-004.

☒ 2.2 In order to allow for adequate turning radius for emergency fire apparatus, all turns shall be designed to meet the minimum twenty-five feet (25') inside and forty-five feet (45') outside turning radius per Standard #B-005.

☒ 2.3 Fire Department access roadways that exceed one hundred and fifty feet (150') in length shall have an approved turn-around per Standard #B-002.

☒ 2.4 Access drive aisles which cross property lines shall be provided with CC&Rs, access easements, or reciprocating agreements, and shall be recorded on the titles of affected properties, and copies of same shall be provided at the time of building plan check.

☒ 2.5 "No Parking-Fire Lane" signs and /or red painted curbs with lettering are required to be installed in interior access roadways, in locations where vehicle parking would obstruct the minimum clear width requirement. Installation shall be per Standard #B-001.

☒ 2.6 Security gates or other barriers on fire access roadways shall be provided with a Knox brand key switch or padlock to allow Fire Department access. See Standards #B-003, B-004 and H-001.

☒ 2.7 Any time PRIOR to on-site combustible construction and/or storage, a minimum twenty-four feet (24') wide circulating all weather access roads shall be provided to within one hundred and fifty feet (150') of all portions of the exterior walls of the first story of any building, unless specifically approved by fire department and other emergency services.

3.0 WATER SUPPLY

☒ 3.1 The required fire flow per Fire Department standards, based on the 2022 California Fire Code, Appendix B, is 3000 gallons per minute (g.p.m.) for 4 hours at a minimum of 20 pounds per square inch (p.s.i.) residual operating pressure.

☒ 3.2 Off-site (public) fire hydrants are required to be installed on all frontage streets, at a maximum spacing of three hundred feet (300') apart, on alternating sides of the street. Streets with a center median shall require public hydrants spaced five hundred feet (500') apart, on the same side of the street.

☒ 3.3 Buildings that exceed 100,000 square feet in floor area shall provide an onsite looped fire protection water line around the building(s.) The loops shall be required to have two or more points of connection from a public circulating water main.

☒ 3.4 The water supply, including water mains and fire hydrants, shall be tested and approved by the Engineering Department and Fire Department prior to combustible construction to assure availability and reliability for firefighting purposes.

4.0 FIRE PROTECTION SYSTEMS

☒ 4.1 On-site private fire hydrants are required per Standard #D-005, and identified in accordance with Standard #D-002. Installation and locations(s) are subject to the approval of the Fire Department. An application with detailed plans shall be submitted, and a construction permit shall be issued by the Fire Department, prior to any work being done.

☒ 4.2 Underground fire mains which cross property lines shall be provided with CC & R, easements, or reciprocating agreements, and shall be recorded on the titles of affected properties, and copies of same shall be provided at the time of fire department plan check. The shared use of private fire mains or fire pumps is allowable only between immediately adjacent properties and shall not cross any public street.

☒ 4.3 An automatic fire sprinkler system is required. The system design shall be in accordance with National Fire Protection Association (NFPA) Standard 13. All new fire sprinkler systems, except those in single family dwellings, which contain twenty (20) sprinkler heads or more shall be monitored by an approved listed supervising station. An application along with detailed plans shall be submitted, and a construction permit shall be issued by the Fire Department, prior to any work being done.

☒ 4.4 Wood frame buildings that are to be sprinkled shall have these systems in service (but not necessarily finaled) before the building is enclosed.

☒ 4.5 Fire Department Connections (FDC) shall be located on the address side of the building within one hundred fifty feet (150') of a public fire hydrant on the same side of the street. Provide identification for all fire sprinkler control valves and fire department connections per Standard #D-007. Raised curbs adjacent to Fire Department connection(s) shall be painted red, five feet either side, per City standards.

☒ 4.6 A fire alarm system is required. The system design shall be in accordance with National Fire Protection Association (NFPA) Standard 72. An application along with detailed plans shall be submitted, and a construction permit shall be issued by the Fire Department, prior to any work being done.

☒ 4.7 Portable fire extinguishers are required to be installed prior to occupancy per Standard #C-001. Please contact the Fire Prevention Bureau to determine the exact number, type and placement required.

☒ 4.8 A fixed fire extinguishing system is required for the protection of hood, duct, plenum and cooking surfaces. This system must comply with National Fire Protection Association (NFPA) Standards 17A and 96. An application with detailed plans shall be submitted, and a construction permit shall be issued by the Fire Department, prior to any work being done.

☒ 4.9 Provide a Fire Command Center in accordance with the Fire Code Section 508.1 in all buildings classified as high-rise buildings by the California Building Code and Group I-2 occupancies having occupied floors located more than 75 feet (23 m) above the lowest level of fire department vehicle access and in all F-1 and S-1 occupancies with a building footprint greater than 500,000 square feet

5.0 BUILDING CONSTRUCTION FEATURES

☒ 5.1 The developer/general contractor is to be responsible for reasonable periodic cleanup of the development during construction to avoid hazardous accumulations of combustible trash and debris both on and off the site.

☒ 5.2 Approved numbers or addresses shall be placed on all new and existing buildings in such a position as to be plainly visible and legible from the street or road fronting the property. Multi-tenant or building projects shall have addresses and/or suite numbers provided on the rear of the building. Address numbers shall contrast with their background. See Section 9-1 6.06 of the Ontario Municipal Code and Standards #H-003 and #H-002.

☒ 5.6 Knox ® brand key-box(es) shall be installed in location(s) acceptable to the Fire Department. All Knox boxes shall be monitored for tamper by the building fire alarm system. See Standard #H-001 for specific requirements.

6.0 OTHER SPECIAL USES

☒ 6.1 The storage, use, dispensing, or handling of any hazardous materials shall be approved by the Fire Department, and adequate fire protection features shall be required. If hazardous materials are proposed, a Fire Department Hazardous Materials Information Packet, including Disclosure Form and Information Worksheet, shall be completed and submitted with Material Safety Data Sheets to the Fire Department along with building construction plans.

☒ 6.3 Underground fuel tanks, their associated piping and dispensers shall be reviewed, approved, and permitted by Ontario Building Department, Ontario Fire Department, and San Bernardino County Fire Department Hazardous Materials Division. In fueling facilities, an exterior emergency pump shut-off switch shall be provided.

GENERAL NOTES

1. "NO PARKING-FIRE LANE" SIGNS AND /OR RED PAINTED CURBS WITH LETTERING ARE REQUIRED TO BE INSTALLED IN INTERIOR ACCESS ROADWAYS. IN LOCATIONS WHERE VEHICLE PARKING WOULD OBSTRUCT THE MINIMUM CLEAR WIDTH REQUIREMENT. INSTALLATION SHALL BE PER STANDARD #B-001.

PROVIDE KNOX BRAND KEY SWITCH OR PADLOCK AT THE SLIDING SECURITY GATE TO ALLOW FIRE DEPARTMENT ACCESS. REFER TO LANDSCAPE DRAWINGS FOR THE GATE INFORMATION.

E HOLT BLVD

Proposed Fire Hydrant Locations

Option B: Modified Hammerhead design within courtyard area. Provide minimum 26 ft wide paved or alternate driveable surface drive aisle parallel to the west wing of the building and is setback 15 ft from building as shown.

Rooftop Stair Access

Proposed Fire Hydrant Locations

Option A: SB County Flood Control Fire Access. Provide a minimum 26 ft wide paved area, setback 30 ft from building between the proposed southern wall to the north rooftop stair access as shown. This Option requires San Bernardino County approval.

Rooftop Stair Access

Rooftop Stair Access

Rooftop Stair Access

Rooftop Stair Access

Rooftop Stair Access

92-100 FT Bldg. Height

30 FT Bldg. Height

30 FT Bldg. Height

92-100 FT Bldg. Height

21 FT Bldg. Height

114-120 FT Bldg. Height

BANQUET STORAGE

PREFUNCTION

BALLROOM

F&B

JR. BALLROOM

PREFUNCTION

FOH/OFFICE

WEST LOBBY

BAR

LOUNGE

EAST LOBBY

FIRE COMMAND CENTER 213 SF

SUNDRY RETAIL

RETAIL

KITCHEN

MEETING

KITCHEN / IRD KITCHEN

3 MEAL RESTAURANT

ROOFTOP ACCESS STAIR

SPA RETAIL

SPA OFFICE

BOUTIQUE RETAIL

LUGGAGE STORAGE

LOBBY

HIGH-END RETAIL

KNOX BOX TO BE MOUNTED TO THE WALL. BOTTOM OF THE BOX TO BE 5' FROM THE FINISH GRADE.

FIRE HYDRANT

FDC

R 150' - 0"

26' - 0"

30' - 0"

STOP SIGN

E GUASTI RD

CUCAMONGA CHANNEL

1 FIRE ACCESS SITE PLAN
SCALE: 1/32" = 1'-0"

THE EMPIRE GROVES HOTEL
Ontario CA 91730

Gensler

500 South Figueroa Street
Los Angeles, California 90071
United States

Tel 213.327.3600
Fax 213.327.3601

△	Date	Description
	9/29/23	ISSUE FOR ENTITLEMENT
1	7/12/24	REISSUE FOR ENTITLEMENT
2	12/2/2024	REISSUE FOR ENTITLEMENT

Seal / Signature

NOT FOR CONSTRUCTION

Project Name
Diversified Pacific Communities

Project Number
05.4382.000

Description
FIRE ACCESS PLAN

Scale
As indicated

Ref North

AS.002

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12/3/2024 10:06:08 AM Autodesk Docs://05.4382.000 - DPV/Sheets - 05.4382.000 - DPV.rvt

CITY OF ONTARIO
LANDSCAPE PLANNING DIVISION
303 East "B" Street, Ontario, CA 91764

CONDITIONS OF APPROVAL	
Sign Off	
	01/28/2025
Jamie Richardson, Sr. Landscape Architect	Date

Reviewer's Name:	Phone:
Jamie Richardson, Sr. Landscape Architect	**(909) 395-2615**

D.A.B. File No.:	Case Planner:
PDEV23-039, PDA-23-005, PSP-23-001	Lorena Mejia

Project Name and Location:

9-Story, 600 Room Hotel
2236 East Holt Blvd

Applicant/Representative:

Diversified Pacific Development Group, LLC Nolan Leggio nleggio@divpac.com
10621 Civic Center Drive
Rancho Cucamonga, CA 91730

☒	**Preliminary Plans (dated 12/12/2024) meet the Standard Conditions for New Development and have been approved considering that the following conditions below be met upon submittal of the landscape construction documents.**
☐	**Preliminary Plans (dated) have not been approved. Corrections noted below are required before Preliminary Landscape Plan approval.**

A RESPONSE SHEET IS REQUIRED WITH RESUBMITTAL OR PLANS WILL BE RETURNED AS INCOMPLETE.
DIGITAL SUBMITTALS MUST BE 10MB OR LESS.

Civil/ Site Plans

1. Mitigation for removed trees shall equal the trunk diameter of heritage trees removed per the Development Code Tree Preservation Policy and Protection Measures, section 6.05.020. A total of 795.5 inches of trunk replacement is required; see below for mitigation options.
2. Show on demo plans and landscape construction plans trees to be preserved, removed or mitigation measures for trees removed, such as:
   a. New 15 gallon trees min 1" diameter trunk, in addition to trees required.
   b. New 24" box trees min 1.5" diameter trunk, in addition to trees required.
   c. Upsizing trees on the plan one size larger such as 15 gallon to 24" box, or 24" to 36" box size.
   d. Monetary value of the trees removed as identified in the "Guide for Plant Appraisal," approved certified arborist plant appraiser, may be equal to the value of the installation cost of planting, fertilizing, staking, and irrigating 15-gallon trees (100$ each) to the City of Ontario Historic Preservation Fund for city tree planting or city approved combination of the above items.
3. Include improvements to the Cucamonga Flood Control Channel.
4. Before permit issuance, stormwater infiltration devices located in landscape areas shall be reviewed and plans approved by the Landscape Planning Division. Any stormwater devices in parkway areas shall not displace street trees.
5. Stormwater chamber systems shall be designed and configured to allow for required tree locations.
6. Show transformers set back 5' from paving all sides. Coordinate with landscape plans. Note that if SCE requires bollards (less than 5' setback from vehicular paving), permanent, decorative bollards will be required; submit cut shets to the Planning Department.

7. Show all backflow devices set back 4’ from paving on all sides. Locate on level grade
8. Locate utilities including light standards, fire hydrants, water, drain, and sewer lines to not conflict with required tree locations—coordinate civil plans with landscape plans.
9. Provide a utility clear space 8’ wide in parkways and 30’ apart for street trees. Move water meters, drain lines, and light standards to the utility minimum spacing and show utility lines at the edges of the parkway, toward the driveway apron, to allow space for street trees.

Landscape Plans

10. Shrub and Ground Cover Palette: Replace Dendromecon and Mimulus are easily overwatered, Isomeris (large and rangy, OK with ample planter areas), Ericameria (invasive), Lavandula (short-lived), Pennisetum/Nassella (invasive) and limit the use of non-invasive ornamental grasses to accent areas (difficult and costly to maintain in masses and poor winter appearance).
11. Show backflow devices with 36” high strappy leaf shrub screening and trash enclosures and transformers, a 4’-5’ high evergreen hedge screening. Do not encircle utility; show as masses and duplicate masses in other locations at regular intervals.
12. Locate light standards, fire hydrants, water, and sewer lines to not conflict with required tree locations. Coordinate civil plans with landscape plans
13. Show all utilities on the landscape plans. Coordinate so utilities are clear of tree locations.
14. Landscape construction plans shall meet the requirements of the Landscape Development Guidelines. See http://www.ontarioca.gov/landscape-planning/standards
15. After a project’s entitlement approval, the applicant shall pay all applicable fees for landscape plan check and inspections at a rate established by resolution of the City Council.

Specific Plan Comments

16. Shrub and Ground Cover Palette: Replace Dendromecon and Mimulus are easily overwatered, Isomeris (large and rangy, OK with ample planter areas), Ericameria (invasive), Lavandula (short-lived), Pennisetum/Nassella (invasive) and limit the use of non-invasive ornamental grasses to accent areas (difficult and costly to maintain in masses and poor winter appearance).

PROJECT REVIEW BOARD COMMENTS
* * * BUILDING DEPARTMENT * * *

Planning Case File No(s): PDEV23-039

Case Planner: Lorena Mejia

Applicant: Ontario Project LLC – Gabriel Guerreo

Location: 2236 Holt

A Development Plan to construct a 9-story hotel consisting of approximately 596.450 square feet to include 600 rooms, ancillary retail and various amenities on 10.43 acres of land located at 2236 East Holt Boulevard, within the SP (Specific Plan) zoning district and the MTC (Multimodal Transit Center) overlay (APN(s): 0110-322-33). Related File(s): PSP-23-001; PDA-23-005.

Project:

APN(s): 0110-322-33

Reviewed By: Klaus De Guzman Date: 1/13/2025

Following Standard Building Department Conditions of Approval
Are Applicable to This Project:

See checked boxes below

Specific Conditions:

A)

Specific Comments (NOTE: THESE COMMENTS ARE NOT CONDITIONS!):

A)

(NOTE: Standard Conditions of Approval are attached.)

BUILDING DEPARTMENT

GENERAL CONDITIONS

☒ 1. Shall comply with the latest adopted edition of the following codes as applicable:

A. California Building Code
B. California Residential Code
C. California Existing Building Code
D. California Electrical Code
E. California Mechanical Code
F. California Plumbing Code
G. California Energy Code.
H. California Fire Code
I. California Green Building Standards Code.

☐ 2. The property owner/business operator shall comply with all applicable City of Ontario Municipal Codes and Ordinances.

☒ 3. The requirements of the Department of Environmental Health Services and the Air Quality Management District shall be satisfied prior to the issuance of any permit if hazardous materials are stored and/or used.

☒ 4. Pursuant to the California Business and Professions Code Section 6737, most projects are required to be designed by a California Licensed Architect or Engineer. The project owner or developer should review the section of the California Codes and comply with the regulation

☐ 5. All perimeter / boundary walls shall be designed and constructed so that the outer/exterior face of the wall is as close as possible to the lot line. In any case, the outer/exterior face of the wall shall be within two (2) inches of the lot line. Distances greater than two (2) inches may be approved prior to construction by the Building Official on a case-by-case basis for extenuating circumstances.

☐ 6. All lot lines, easement lines, etc. shall be located and/or relocated in such a manner as to not cause any existing structure to become non-conforming with the requirements of the latest adopted edition of the Building Code, or any other applicable law, ordinance, or code.

☒ 7. The Developer/Owner is responsible for the coordination of the final occupancy. The Developer/Owner shall obtain clearances from each department and division prior to requesting a final building inspection from the Building Department. Each department shall sign the Building Department Job Card

☒ 8. All signs shall be Underwriters Laboratories, or equal, approved.

☐ 9. Permits are required prior to the removal and/or demolition of structures.

☐ 10. In addition to approval from Building Department, approval is required from the County of San Bernardino, Department of Public Health and the California Regional Water Quality Control Board, Santa Ana Region for the Private Sewage Disposal System.

☐ 11. The existing private sewage system will have to be modified as required to accommodate the new use. Plans and/or supporting data will have to be submitted to, and approved by, the Building Department regarding the new use and necessary modifications. Additionally, approval from the Regional Water Quality Control Board, Santa Ana Region, is required for the new use.

☐ 12. The coach shall bear a State of California, Department of Housing and Community Development (HCD) insignia indicating the occupancy group and design loads that the coach conforms to, and other relevant information regarding exiting, fire safety, electrical, plumbing and mechanical. The foundation system, porch and awning shall comply with plans that bear the HCD "Standard Plan Approval" stamp. The coach, foundation system, porch and awning shall comply with the City of Ontario's design loads and site-specific conditions.

☐ 13. The conversion of the existing single-family dwelling(s) into a commercial use changes the occupancy group classification, and therefore the existing buildings must be made to comply with the requirements of all applicable codes for the new occupancy classification. Complete plans, calculations and other specifications shall be submitted to the Building Department for review, approval and subsequent permit issuance. The plans, calculations and other specifications shall be prepared by an Architect or Registered Civil/Structural Engineer licensed by the State of California who is qualified to perform said work.

☐ 14. The site, or a portion of the site, is in a flood hazard area. Justification that the proposed development does not adversely affect the location or carrying capacity of the floodway, nor does it adversely affect upstream or downstream sites shall be provided to Building Department. Additionally, all provisions must be taken to protect the site from flood damage.

☐ 15. All exterior lighting shall be orientated, directed, and/or shielded as much as possible so that direct illumination does not infringe onto adjoining properties.

☒ 16. Site facilities such as parking open or covered, recreation facilities, and trash dumpster areas, and common use areas shall be accessible per the CBC, Chapter 11.

☒ 17. Trash Enclosure shall be covered, and the interior clearances shall be designed to accommodate the following:

- 4' min. side access entrance

- 3’ min. wide clear pathway along rear of enclosure between trash bins and back wall.
- Trash bins must be oriented sideways to allow access from the narrow dimension.
- Use of curbs or wheel stops shall be provided within the enclosure to maintain access clearances and bin orientations.

☒ 18. The applicant/developer shall include the conditions of approval of this resolution on the construction plans.

☒ 19. Site development and grading shall be designed to provide access to all entrances and exterior ground floors exits and access to normal paths of travel, and where necessary to provide access. Paths of travel shall incorporate (but not limited to) exterior stairs, landings, walks and sidewalks, pedestrian ramps, curb ramps, warning curbs, detectable warning, signage, gates, lifts and walking surface materials. The accessible route(s) of travel shall be the most practical direct route between accessible building entrances, site facilities, accessible parking, public sidewalks, and the accessible entrance(s) to the site, California Building Code, (CBC) Chapter 11, Sec, 11A and 11B.

☐ 20. Commercial/Industrial gated site must have at least one pedestrian emergency gate, 3’-0’ x 6’-8” min. gate size, equipped with panel hardware on the inside, and gate must swing out. Pedestrian emergency gates can be installed integrated with vehicular gates.

☐ 21. New residential single-family dwelling (SFD’s):

- The side yard gate must swing out toward the street.
- The gas meter shall not obstruct side yard access gates.
- Air Conditioning unit located at side yard shall maintain 3’ min. clearance from property line wall to AC unit.
- Provide a continuous concrete walk between garage side door to driveway or sidewalk.

☐ 22. New development projects located in the Ontario Ranch specific plan are required to submit a **methane assessment report**. This report shall be submitted to the Building Department for review and approval at grading plan submittal.

☐ 23. If hazardous substances are used and/or stored, a technical opinion and report, identifying and developing methods of protection from the hazards presented by the hazardous materials may be required. This report shall be prepared by a qualified person, firm, or corporation and submitted to Building Department. This report shall also explain the proposed facility's intended methods of operation and list all of the proposed materials, their quantities, classifications, and the effects of any chemical (material) intermixing in the event of an accident or spill.

☒ 24. The property owner/business operator shall provide a grease interceptor at a location where it shall be easily accessible for inspection, cleaning, and removal of accumulated grease. The sizing and installation shall conform to the current California Plumbing Code. The grease interceptor shall be constructed in accordance with plans approved by the Director of Public

Works and the Building Official. The property owner/business operator shall contract with a maintenance company for maintenance and cleaning of the grease interceptor.

SITE CONSTRUCTION REQUIRMENTS

☒ 25. All construction sites must be protected by a security fence and screening. The fencing and screening shall always maintained to protect pedestrians

☒ 26. Temporary toilet facilities shall be provided for construction workers. The toilet facilities shall be maintained in a sanitary condition. Construction toilet facilities of the non-sewer type shall conform to ANSI ZA.3

☒ 27. Construction projects which require temporary electrical power shall obtain an Electrical Permit from Building Department. No temporary electrical power will be granted to a project unless one of the following items is in place and approved by Building Department and the Planning Department.
(A) Installation of a construction trailer, or
(B) Security fenced area where the electrical power will be located

☒ 28. Installation of construction/sales trailers must be located on private property. No trailers can be in the public street right of way

☒ 29. Any temporary building, trailer, commercial coach, etc. installed and/or used in connection with a construction project shall comply with City Code.

☐ 30. Prior to issuance of a Building Permit all of the following must be in place: portable toilet with hand wash station, all BMP's, fencing and signage on each adjacent street saying "If there is any dust or debris coming from this site please contact (superintendent number here) or the AQMD if the problem is not being resolved" or something similar to this.

PRIOR TO ISSUANCE OF BUILDING/CONSTRUCTION PERMITS

☒ 31. The following grading items shall be completed and/or submitted – as applicable – prior to the issuance of building permits for this project:

A. Precise grading plans shall be approved
B. Rough grading completed
C. Compaction certification completed
D. Pad elevation certification completed
E. Rough grade inspection signed off by a City's Building Inspector

☒ 32. Prior to the issuance of a Building Permit, the applicant shall pay all Development

Improvement Fees to the City. Copies of receipts shall be provided to the Building Department prior to permit issuance.

☒ 33. The Tract or Parcel map shall record prior to the issuance of any permits.

☐ 34. The existing parcels shall be combined into a single parcel, or a lot line adjustment shall be done so that the proposed structure(s) does not cross any lot line and complies with all requirements of the California Building Code, prior to any building permits being issued.

☐ 35. Fire sprinklers, fire alarm systems and fire hydrant plans shall be submitted for plan review concurrently with building plans and shall be approved prior to permit issuance

☒ 36. Prior to issuance of Building Permits, school fees need to be paid to school district where project is located

PROJECT REVIEW BOARD COMMENTS
* * * BUILDING DEPARTMENT * * *

Planning Case File No(s): PDEV23-039

Case Planner: Lorena Mejia

Applicant: Ontario Project LLC – Gabriel Guerreo

Location: 2236 Holt

A Development Plan to construct a 9-story hotel consisting of approximately 596.450 square feet to include 600 rooms, ancillary retail and various amenities on 10.43 acres of land located at 2236 East Holt Boulevard, within the SP (Specific Plan) zoning district and the MTC (Multimodal Transit Center) overlay (APN(s): 0110-322-33). Related File(s): PSP-23-001; PDA-23-005.

Project:

APN(s): 0110-322-33

Reviewed By: Klaus De Guzman Date: 1/13/2025

Following Standard Building Department Conditions of Approval
Are Applicable to This Project:

See checked boxes below

Specific Conditions:

A)

Specific Comments (NOTE: THESE COMMENTS ARE NOT CONDITIONS!):

A)

(NOTE: Standard Conditions of Approval are attached.)

BUILDING DEPARTMENT

GENERAL CONDITIONS

☒ 1. Shall comply with the latest adopted edition of the following codes as applicable:

A. California Building Code
B. California Residential Code
C. California Existing Building Code
D. California Electrical Code
E. California Mechanical Code
F. California Plumbing Code
G. California Energy Code.
H. California Fire Code
I. California Green Building Standards Code.

☐ 2. The property owner/business operator shall comply with all applicable City of Ontario Municipal Codes and Ordinances.

☒ 3. The requirements of the Department of Environmental Health Services and the Air Quality Management District shall be satisfied prior to the issuance of any permit if hazardous materials are stored and/or used.

☒ 4. Pursuant to the California Business and Professions Code Section 6737, most projects are required to be designed by a California Licensed Architect or Engineer. The project owner or developer should review the section of the California Codes and comply with the regulation

☐ 5. All perimeter / boundary walls shall be designed and constructed so that the outer/exterior face of the wall is as close as possible to the lot line. In any case, the outer/exterior face of the wall shall be within two (2) inches of the lot line. Distances greater than two (2) inches may be approved prior to construction by the Building Official on a case-by-case basis for extenuating circumstances.

☐ 6. All lot lines, easement lines, etc. shall be located and/or relocated in such a manner as to not cause any existing structure to become non-conforming with the requirements of the latest adopted edition of the Building Code, or any other applicable law, ordinance, or code.

☒ 7. The Developer/Owner is responsible for the coordination of the final occupancy. The Developer/Owner shall obtain clearances from each department and division prior to requesting a final building inspection from the Building Department. Each department shall sign the Building Department Job Card

☒ 8. All signs shall be Underwriters Laboratories, or equal, approved.

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☒ 36. Prior to issuance of Building Permits, school fees need to be paid to school district where project is located

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING AN ADDENDUM TO THE ONTARIO PLAN 2050 SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT, PURSUANT TO THE REQUIREMENTS OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT, AS AMENDED, FOR FILE NO. PSP23-001.

WHEREAS, DIVERSIFIED PACIFIC DEVELOPMENT GROUP, LLC (hereinafter referred to as "Applicant") has filed an Application for the approval of the Empire Groves Specific Plan, File No. PSP23-001, to establish the land use district, development standards, guidelines, and infrastructure improvements for the development of up to 600,000 square feet of hospitality and commercial land uses on 10.43-acres of land located on the southeast corner of Guasti Road and Holt Boulevard, in the City of Ontario, California (hereinafter referred to as "Application" or "Project"); and

WHEREAS, in conjunction with the Project, the Applicant also filed an application for a Development Agreement (File No. PDA23-005) between the City of Ontario and Diversified Pacific Development Group, LLC to establish the terms and conditions for the associated Development Plan (File No. PDEV23-039), which will be considered by the City Council and contingent upon approval of the Empire Groves Specific Plan; and

WHEREAS, the City of Ontario certified the Environmental Impact Report prepared for The Ontario Plan and associated Statement of Overriding Considerations, and issued Resolution No. 2010-003; and

WHEREAS, the City of Ontario adopted the Policy Plan (General Plan) as part of the component framework for The Ontario Plan on January 27, 2010, and issued Resolution No. 2010-004; and

WHEREAS, the City of Ontario certified the Supplemental Environmental Impact Report (SEIR), for the General Plan Amendment for The Ontario Plan 2050 Technical Update on August 16, 2022; and

WHEREAS, the Planning Director of the City of Ontario has prepared and approved for attachment to the certified Environmental Impact Report, an Addendum to the Certified EIR (hereinafter referred to as "EIR Addendum") in accordance with the requirements of the California Environmental Quality Act of 1970, together with State and local guidelines implementing said Act, all as amended to date (collectively referred to as "CEQA"); and

WHEREAS, the EIR Addendum concluded that implementation of the Project could result in a number of significant effects on the environment that were previously analyzed in the Certified EIR, and that the Certified EIR identified mitigation measures that would reduce each of those significant effects to a less-than-significant level; and

WHEREAS, pursuant to State CEQA Guidelines Section 15164(a), a lead agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary to a project, but the preparation of a subsequent or supplemental EIR is not required; and

WHEREAS, the City determined that none of the conditions requiring preparation of a subsequent or supplemental EIR would occur from the Project, and that preparation of an Addendum to the Certified EIR was appropriate; and

WHEREAS, on February 25, 2025, the Planning Commission of the City of Ontario conducted a hearing to consider the Addendum and concluded said hearing on that date, voting to issue Resolution No. PC25-006, recommending that the City Council concluded that none of the conditions requiring preparation of a subsequent or supplemental EIR have occurred, and further recommending that the City Council take actions on the Project in compliance with CEQA and state and local guidelines implementing CEQA; and

WHEREAS, the City of Ontario is the lead agency on the Project, and the City Council is the decision-making authority for the requested approval to construct and otherwise undertake the Project; and

WHEREAS, the City Council has reviewed and considered the SEIR Addendum for the Project, has concluded that none of the conditions requiring preparation of a subsequent or supplemental EIR have occurred, and intends to take actions on the Project in compliance with CEQA and state and local guidelines implementing CEQA; and

WHEREAS, the EIR Addendum for the Project are on file in the Planning Department, located at 303 East B Street, Ontario, CA 91764, are available for inspection by any interested person at that location and are, by this reference, incorporated into this Resolution as if fully set forth herein; and

WHEREAS, on March 18, 2025, the City Council of the City of Ontario conducted a hearing to consider the SEIR Addendum, and concluded said hearing on that date; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED, AND RESOLVED by the City Council of the City of Ontario, as follows:

SECTION 1: ***Environmental Determination and Findings.*** As the decision-making authority for the Project, The City Council has reviewed and considered the information contained in the administrative record for the Project. Based upon the facts and information contained in the administrative record, including all written and oral evidence presented to the City Council, the City Council finds as follows:

(1) The environmental impacts of this Project were reviewed in conjunction with an Addendum to TOP 2050 Supplemental Environmental Impact Report

(State Clearinghouse No. 2021070364), certified by the Ontario City Council on August 16, 2022, in conjunction with File No. PGPA20-002; and

(2) The EIR Addendum and administrative record have been completed in compliance with CEQA, the State CEQA Guidelines, and the City of Ontario Local CEQA Guidelines; and

(3) The City's "Guidelines for the Implementation of the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed. This Application introduces no new significant environmental impacts; and

(4) All previously adopted mitigation measures shall be a condition of project approval, as they are applicable to the Project, and are incorporated herein by this reference; and

(5) The EIR Addendum contains a complete and accurate reporting of the environmental impacts associated with the Project, and reflects the independent judgment of the City Council; and

(6) There is no substantial evidence in the administrative record supporting a fair argument that the project may result in significant environmental impacts.

SECTION 2: ***Additional Environmental Review Not Required.*** Based on the Addendum, all related information presented to the City Council, and the specific findings set forth in Section 1, above, the City Council finds that the preparation of a subsequent or supplemental Environmental Impact Report is not required for the Project, as the Project:

(1) Does not constitute substantial changes to the Certified EIR that will require major revisions to the Certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and

(2) Does not constitute substantial changes with respect to the circumstances under which the Certified EIR was prepared, that will require major revisions to the Certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of the previously identified significant effects; and

(3) Does not contain new information of substantial importance that was not known and could not have been known with the exercise of reasonable diligence at the time the Certified EIR was certified/adopted, that shows any of the following:

(a) The project will have one or more significant effects not discussed in the Certified EIR; or

(b) Significant effects previously examined will be substantially more severe than shown in the Certified EIR; or

(c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the City declined to adopt such measures; or

(d) Mitigation measures or alternatives considerably different from those analyzed in the Certified EIR would substantially reduce one or more significant effects on the environment, but which the City declined to adopt.

SECTION 3: ***City Council Action.*** Based upon the findings and conclusions set forth in Sections 1 and 2, above, the City Council hereby finds that based upon the entire record of proceedings before it, and all information received, that there is no substantial evidence that the Project will constitute substantial changes to the Certified EIR, and does hereby approve the SEIR Addendum, attached hereto as "Attachment A," and incorporated herein by this reference.

SECTION 4: ***Indemnification.*** The Applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void, or annul this approval. The City of Ontario shall promptly notify the applicant of any such claim, action, or proceeding, and the City of Ontario shall cooperate fully in the defense.

SECTION 5: ***Custodian of Records.*** The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East "B" Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario.

The City Clerk of the City of Ontario shall certify as to the adoption of this Resolution.

PASSED, APPROVED, AND ADOPTED this 18th day of March, 2025.

_____

PAUL S. LEON, MAYOR

ATTEST:

_____
SHEILA MAUTZ, CITY CLERK

APPROVED AS TO FORM:

_____
BEST BEST & KRIEGER LLP
CITY ATTORNEY

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO)
CITY OF ONTARIO)

I, SHEILA MAUTZ, City Clerk of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. 2025- was duly passed and adopted by the City Council of the City of Ontario at their regular meeting held March 18, 2025 by the following roll call vote, to wit:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

The foregoing is the original of Resolution No. 2025- duly passed and adopted by the Ontario City Council at their regular meeting held March 18, 2025.

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

ATTACHMENT A:

Addendum to TOP 2050
Supplemental Environmental Impact Report

(Addendum to follow this page)

ADDENDUM TO THE FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT FOR THE ONTARIO PLAN 2050

Empire Groves Specific Plan
(State Clearinghouse No. 2021070364)

Lead Agency:

CITY OF ONTARIO
Planning Department
303 East B Street
Ontario, CA 91764
Contact: Lorena Mejia, Senior Planner
909.395.2036

Prepared By:

MICHAEL BAKER INTERNATIONAL
5 Hutton Centre Drive, Suite 500
Santa Ana, CA 92707
Contact: Frances Yau, AICP
949.472.3505

February 14, 2025

JN 195033

This document is designed for double-sided printing to conserve natural resources.

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G GHG Analysis
H Hydrology Report/WQMP
I Noise Impact Analysis
J VMT Analysis
K Water Supply Assessment

1.0 INTRODUCTION

In 2009 and 2010, the City of Ontario (City), as Lead Agency, prepared a Draft Environmental Impact Report (EIR), Recirculated Draft EIR, and a Final EIR for *The Ontario Plan* (TOP). These documents are collectively referred to in this document as the 2010 TOP EIR. TOP consisted of a six-part component framework: 1) Vision, 2) Governance Manual, 3) Policy Plan (General Plan), 4) City Council Priorities, 5) Implementation, and 6) Tracking and Feedback, to guide development of Ontario 20 years or more into the future.

In 2022, the City prepared *The Ontario Plan 2050 Final Supplemental Environmental Impact Report* (TOP 2050 SEIR; State Clearinghouse No. 2021070364) for *The Ontario Plan 2050* (TOP 2050), which was an update to TOP to guide the City's development and conservation for the next 30 years through 2050. TOP 2050 is referred to herein as the "approved project."

The Empire Groves Specific Plan (referred to herein as the "modified project" or "Specific Plan") proposes to establish land use regulations, development standards, and design guidelines for a proposed hotel and retail development. This Addendum has been prepared to determine whether the modified project would result in new or substantially more severe significant environmental impacts compared to the impacts of the approved project as disclosed in the TOP 2050 SEIR.

1.1 PROJECT LOCATION

The City of Ontario is in the southwestern portion of San Bernardino County and is surrounded by the cities of Upland and Rancho Cucamonga to the north; the City of Fontana and unincorporated San Bernardino County to the east; the cities of Eastvale and Jurupa Valley to the south; and the cities of Chino and Montclair and unincorporated San Bernardino County to the west; refer to Exhibit 1, *Regional Vicinity*.

As shown on Exhibit 2, *Site Vicinity*, the approximately 10.43-acre triangular modified project site (Assessor's Parcel Number [APN] 0110-322-33) is in the southeastern quadrant of the intersection of East Holt Boulevard and East Guasti Road. The site is bounded by East Holt Boulevard to the north, while East Guasti Road runs along its southern and southwestern edges. The eastern boundary is defined by an existing flood channel and the Cucamonga Creek Trail. To the south of the site lies the Ontario International Airport, which is separated from the site by East Guasti Road, Airport Drive, and a set of railroad tracks. The modified project site (also referred to as "Specific Plan area" herein) has direct access from Interstate 10 (I-10), situated to the north of the site.

Exhibit 1
Regional Vicinity

Exhibit 2
Site Vicinity

1.2 PREVIOUS ENVIRONMENTAL DOCUMENTS

The Ontario Plan Final Environmental Impact Report

In 2009 and 2010, the City prepared a Draft EIR, Recirculated Draft EIR, and Final EIR for *The Ontario Plan* (TOP). These documents are collectively referred to in this document as the 2010 TOP EIR. TOP consisted of a six-part component framework: 1) Vision, 2) Governance Manual, 3) Policy Plan (General Plan), 4) City Council Priorities, 5) Implementation, and 6) Tracking and Feedback, to guide development of Ontario 20 years or more into the future.

The 2009 Draft EIR identified six environmental topical areas (Agricultural Resources, Air Quality, Cultural Resources, Global Climate Change, Noise, and Traffic and Transportation) with significant and unavoidable impacts.

The 2009 Recirculated Draft EIR was released to provide additional analysis related to greenhouse gas (GHG) emissions impacts associated with buildout of TOP.

Pursuant to Section 15088.5(c) of the CEQA Guidelines, which states that if an EIR revision is "limited to a few chapters or portions of the EIR, the lead agency need only recirculate the chapters or portions that have been modified," only the following topic areas were analyzed in the 2009 Recirculated Draft EIR:

- Global Climate Change; and
- Additional Project Alternative: 15 percent GHG Reduction Alternative.

Remaining topics previously analyzed in the 2009 Draft EIR were determined to be adequately addressed. Analysis in the 2009 Recirculated Draft EIR found that significant and unavoidable impacts identified in the 2009 Draft EIR would remain significant and unavoidable. These determinations were reiterated in the 2010 TOP EIR when it was certified on January 27, 2010.

The Ontario Plan 2050 Final Supplemental Environmental Impact Report

In 2022, the City prepared TOP 2050 SEIR for *The Ontario Plan 2050* (TOP 2050), which was an update to TOP to guide the City's development and conservation for the next 30 years through 2050. TOP 2050 is a focused effort, with particular emphasis on technical refinements to the Policy Plan to comply with State housing mandates; conform with new State laws related to community health, environmental justice, climate adaptation, resiliency, and mobility; bring long-term growth and fiscal projections into alignment with current economic conditions; and advance the Implementation Plan and Tracking and Feedback system.

TOP 2050 fulfills the City's mandatory Regional Housing Needs Assessment (RHNA) obligation. TOP 2050 brings long-term growth and fiscal projections into alignment with

current economic conditions as well as property owner and stakeholder requests, to support the vision for Ontario.

TOP 2050 SEIR identified significant and unavailable impacts related to air quality, cultural resources, noise, and transportation.

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2.0 DESCRIPTION OF PROJECT MODIFICATIONS

2.1 ADDENDUM'S PURPOSE AND NEED

When an EIR has been certified or a negative declaration adopted for a project, no subsequent or supplemental environmental review documentation shall be required unless one or more of the following events occurs:

1) Substantial changes are proposed in the project, which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

2) Substantial changes occur with respect to the circumstances under which the project is undertaken, which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:

    A. The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

    B. Significant effects previously examined will be substantially more severe than shown in the previous EIR;

    C. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

    D. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

When none of the above events has occurred, yet minor technical changes or additions to the previously adopted negative declaration are necessary, an addendum may be prepared (CEQA Guidelines Section 15164[b]).

As discussed below, none of the conditions described in CEQA Guidelines Section 15162 calling for preparation of subsequent environmental review have occurred. This Addendum supports the conclusion that the modified project modifications are minor or technical changes that do not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects. In addition, as discussed below, the modified project modifications would not result in any new or substantially increased significant environmental impacts, no new mitigation measures, or no new alternatives that would substantially reduce significant impacts. As a result, an addendum is an appropriate CEQA document for analysis and consideration of the modified project modifications.

Circulation of an addendum for public review is not necessary (CEQA Guidelines Section 15164, subdivision (c)); however, the addendum must be considered in conjunction with the adopted Final EIR by the decision-making body (CEQA Guidelines Section 15164, subdivision (d)). The modified project is an Addendum to TOP 2050 SEIR (i.e., the certified Final EIR).

CEQA requires a comparative evaluation of a modified project and alternatives to the project, including the “No Project” alternative. TOP 2050 SEIR addressed a reasonable range of alternatives for the approved project. There is no new information indicating that an alternative that was previously rejected as infeasible is in fact feasible, or that a considerably different alternative than those previously studied would substantially reduce one or more significant effects on the environment.

2.2 ENVIRONMENTAL SETTING

Located in an urban environment, the modified project site is an undeveloped, vacant, disturbed lot and is relatively flat with no temporary or permanent structures. Ruderal vegetation, including nonnative trees and shrubs, as well as stockpiled dirt mounds and rocks are present on-site. The site was formerly utilized for agriculture production until the early to mid-1980s and has since remained undeveloped. The site has been maintained through disking and mowing. The modified project site is surrounded by development on all four sides, including a channelized portion of Cucamonga Creek to the east.

GENERAL PLAN DESIGNATION

According to TOP 2050 Figures LU-01, *Land Use Plan*, and LU-04, *Mixed Use Areas*, the modified project site has a Mixed Use-Multimodal (MU-Multimodal) land use designation. Per TOP 2050 Figure LU-05, *Overlay Areas*, the site is also within the Ontario Airport Metro Center Overlay.

The City’s future multimodal transit station is under consideration within the MU-Multimodal area, which will link rail, regional, local, and airport transit. Intensive office, retail, and residential uses are envisioned to be integrated with the transit station. The transit center is envisioned as an iconic, convenient, and intuitively designed multimodal transportation center that will serve the City and the region at large.

According to TOP 2050 full buildout summary, the total acreage under the MU-Multimodal designated areas (west of Archibald Avenue and south of I-10) is 72.56 acres, of which 10.43 acres fall in the Specific Plan area. It is estimated that this area will absorb a total of 2,449,727 square feet of nonresidential development and will create 5,993 jobs. Of this, approximately 553,124 square feet is allocated to lodging and the remaining approximately 1,896,603 square feet is allocated to retail and office development. The area has an allowable density of 20.0 to 80.0 dwelling units per acre.

The Ontario Airport Metro Center Overlay is envisioned as the most intensive area in the County with a vertical and horizontal mixture of regional-serving retail, office, restaurant, entertainment, cultural, and residential uses in low- to mid-rise buildings (i.e., 3 to 10 stories in height).

ZONING

According to the City's *Official Zoning Map*, dated January 1, 2016, the site is zoned Specific Plan (SP) within the Multimodal Transit Center (MTC) Overlay District. The SP zoning district is established to accommodate the adoption of specific plans pursuant to TOP 2050 Exhibit LU-05, *Overlay Areas*. All land uses, activities, and facilities within the SP zoning district shall only be allowed pursuant to the applicable Specific Plan document. The MTC Overlay District was established to allow for the interim use of existing buildings located within the overlay district boundary, while preserving the City's vision for development of a multimodal transit center and supporting mixed-use development.

SURROUNDING LAND USES

Surrounding land uses include a mix of commercial, airport, and industrial uses, which are further described as follows:

- *North*: East Holt Boulevard bounds the modified project site to the north. The Frontier Center office building and Holiday Inn are located further north. These land uses are designated Hospitality with a floor area ratio (FAR) of 1.0, and zoned Convention Center Support Commercial (CCS).

- *East*: An existing flood channel and the Cucamonga Creek Trail bound the site to the east. Further east is an industrial warehouse development. Land uses to the east are designated Open Space-Non-Recreation and MU-Multimodal (20.0 to 80.0 dwelling units per acre and 1.0 FAR), and zoned SP with an MTC overlay.

- *South*: East Guasti Road bounds the southern modified project boundary. The Ontario Gateway Hotel is located to the south of East Guasti Road. The Ontario International Airport is located further to the south and is separated from the site by East Guasti Road, Airport Drive, and a set of railroad tracks. Land uses to the

south are designated Hospitality (1.0 FAR), Rail and Airport, and zoned CCS, Railway Corridor (RC), and Ontario International Airport (ONT).

- *West*: East Guasti Road bounds the modified project site to the west. The Ontario Gateway Hotel is located further west and southwest of East Guasti Road. Land uses to the west are designated Hospitality (1.0 FAR) and zoned CCS.

2.3 MODIFIED PROJECT DESCRIPTION

The modified project proposes to implement the Empire Groves Specific Plan which would include construction of a hotel and retail development with ancillary site improvements; refer to Exhibit 3, *Conceptual Site Plan*. The hotel would encompass approximately 553,124 square feet and the local-serving retail component would encompass approximately 46,876 square feet. Buildout of the total development would be approximately 600,000 square feet; refer to Table 1, *Proposed Specific Plan Buildout*. Additionally, as shown, the proposed buildout would be within the TOP 2050 full buildout assumptions for the project site based on the MU-Multimodal designation.

Table 1
Proposed Specific Plan Buildout

Land Use	Proposed Buildout	TOP 2050 Maximum Buildout for Project Site
Hotel	553,124 square feet	553,124 square feet
Local-Serving Retail	46,876 square feet	1,896,603 square feet
TOTAL	**600,000 square feet**	**2,449,727 square feet**
Notes: According to TOP 2050 full buildout summary, the total acreage under the City's MU-Multimodal designated areas is 72.56 acres, of which 10.43 acres fall in the Specific Plan area. It is estimated that the Specific Plan area will absorb a total of 2,449,727 square feet of nonresidential development, consisting of 553,124 square feet of lodging and 1,896,603 square feet of retail and office development.		

In compliance with the City of Ontario's *Community Climate Action Plan* (CCAP), the modified project proposes to implement Screening Table Measures identified in CCAP Table 6, *Screening Table for Implementing GHG Performance Standards for Commercial, Office, Medical, Hotel, Fitness, Industrial, and Retail Development, 2030*, that achieve a minimum of 100 points to ensure modified project-related GHG emission impacts remain less than significant. Potential GHG reduction measures include those related to building electrification, solar energy systems, green roofs, urban cooling, transit oriented communities, and transit ridership. The City would be responsible for verifying that Screening Table Measures achieving the requisite points are incorporated into the modified project plans and are appropriately implemented. At the discretion of the City, measures that provide GHG reductions equivalent to GHG emissions reductions achieved via the CCAP Screening Table Measures may be implemented.

Exhibit 3
Conceptual Site Plan

PROPOSED DEVELOPMENT

Hotel Component

The hotel component consists of a 600-room hotel with a variety of amenities, including banquet halls, conference rooms, restaurants/cafes, spa and pool facilities, and a rooftop deck. The hotel consists of an east and west wing, connected above by a rooftop floor. In total, there would be eight levels with a rooftop deck with a maximum building height of 120 feet. The first floor of the hotel consists of the lobby, lounge, upscale restaurant and bar, spa, retail area, small meeting rooms, and a spacious banquet/conference center. The first-floor mezzanine level is planned to include a game room, fitness area, meeting rooms, and a board room in addition to mechanical and electrical equipment. The second floor would house offices and a fitness center, and the remaining floors would be dedicated to hotel rooms. A rooftop pool and lounge terrace are also proposed with a full-service restaurant and bar.

Local-Serving Retail Component

The local-serving retail and restaurant component would be located on the ground floor and be the focus of the northwest corner of the modified project site as a community plaza. Local-serving retail would consist of business spaces to provide services to the local community. Small businesses may include such uses as coffee shops, food and beverage outlets, retail, print shops, laundry or tailoring services, among others.

Landscaping

Extensive landscaping is proposed on the ground level of the entire site and third and rooftop floors of the hotel building. On the ground level, primary landscaped areas include the entrance area; edge treatments; courtyard, pool, and spa areas; and buffer planting area. Specifically, the primary entranceway to the hotel development from East Guasti Road would be designed with a canal water feature, fountain sculpture, and terraced plantings.

The edge treatments along East Guasti Road and near the intersection of East Guasti Road and East Holt Boulevard would include an array of street trees and decorative flowering trees to provide an aesthetic and safe buffer from vehicular traffic, promoting a pedestrian-friendly environment for the local-serving community plaza. The courtyard, pool, and spa areas would include pools, a water garden, event spaces, a wellness garden, and a food and beverage pavilion landscaped with shade trees, low hedges, and grassy open areas. Lastly, the buffer planting area is located between Cucamonga Creek and the eastern modified project boundary and would include a dense screening hedge to provide a visual privacy barrier that delineates the boundary between the modified project site and trail users along the creek.

On the third floor, a meadow type landscaping is proposed with specimen trees, an herb garden, pathways, and outdoor seating areas with cabanas, a fire pit, and pocket lounges.

The rooftop area would be divided into the Sky Island on the west and High Gardens on the east. The Sky Island would include a central water feature and rock sculpture with a stone landscaping area, an expansive wooden deck, and pocket seating areas. The High Gardens would include a VIP pool with cabanas, chaise chairs, and outdoor living rooms.

Parking

A total of 932 parking spaces would be provided via a 27-space aboveground lot (for the local-serving retail uses) and a two-level, subterranean parking structure with 905 spaces (for the hotel). The subterranean areas would also include back-of-the-hotel facilities, storage, employee areas, and offices as well as mechanical and electrical equipment.

EMPIRE GROVES SPECIFIC PLAN

The proposed Specific Plan establishes land use regulations, development standards, and design guidelines for future development within the Specific Plan area.

Development Plan

The proposed development plan outlines the comprehensive land use framework, encompassing a summary of the modified project, a depiction of land uses specified in the Specific Plan, and various modified project elements, including landscape concepts and parking facilities. It also presents essential infrastructure plans, covering circulation, fire access, water supply, sewage, recycled water, solid waste, and community facilities.

The Specific Plan consists of one planning area (PA1), Hospitality Mixed-Use. The Hospitality Mixed-Use land use refers to a development that combines hotel uses, ancillary services, and amenities with local-serving commercial uses within a single property.

- *Hotel Use*: Hotel use is the primary component of Hospitality Mixed-Use and should occupy the majority of the FAR of the development. This includes guest rooms, office space for hotel administration, and may also include restaurant, bars, lounges, day spas, gyms, ballrooms, meeting rooms, and more.
- Local-Serving Retail Uses: Local-serving retail uses cater to the daily needs of the local community as well as the hotel use. These businesses may include coffee shops, restaurants, retail, print shops, laundry or tailoring services and similar types of uses. These types of uses can benefit shoppers visiting the surrounding area as well as nearby residents who can access these services by foot.

As detailed in Table 1, total anticipated Specific Plan buildout would be approximately 553,124 square feet of hotel use and 46,876 square feet of local-serving use, totaling 600,000 square feet.

As previously described, the City's MU-Multimodal designated areas (west of Archibald Avenue and south of I-10) encompass 72.56 acres, of which 10.43 acres fall in the

Specific Plan area. Based on TOP 2050 full buildout summary, the MU-Multimodal designated areas have an anticipated buildout of 2,449,727 square feet of nonresidential uses (approximately 553,124 square feet for lodging and approximately 1,896,603 square feet for retail and office development). As shown in Table 1, the proposed Specific Plan buildout for both hotel and local-serving retail use would be within the TOP 2050 maximum buildout assumptions for the project site based on the MU-Multimodal designation. Overall, the site's total anticipated buildout of 2,449,727 square feet under the MU-Multimodal designation would not be exceeded.

Circulation and Access

Potential roadway improvements in the modified project vicinity along East Holt Boulevard, East Guasti Road, and Airport Drive are identified in the Specific Plan that would complement future development of the area as well as improve connectivity.

The pedestrian circulation around the Specific Plan area is provided by existing sidewalks that have gaps at certain locations. The development of the Specific Plan would include sidewalks around the site and development of the community plaza at the intersection of East Holt Boulevard and East Guasti Road.

Infrastructure Plan

- *Domestic/Potable Water*: Water service to the Specific Plan area would be provided by the City. Currently, there is an existing 12-inch water main in East Guasti Road along the modified project frontage, and an existing 8-inch water main in East Holt Boulevard along the modified project frontage, both available for connection. The modified project proposes water line connections from the site to the existing water mains in East Guasti Road and East Holt Boulevard.

- *Sewer*: Sewer mains are maintained by the City of Ontario and wastewater is treated at the Inland Empire Utilities Agency (IEUA) Treatment Plant. Several regional trunk sewers collect sewage generated in the City and transport it to IEUA's Regional Plant No. 1 and Regional Plant No. 5 for treatment. The modified project proposes to install a sewer line on-site to connect to an existing 12-inch sewer main in East Holt Boulevard.

- *Recycled Water*: Recycled water is provided to the City by the IEUA from its four wastewater reclamation plants. Currently, there are recycled water mains in the vicinity of the Specific Plan Area, with a point of connection located at the intersection of East Guasti Road and East Holt Boulevard. The modified project proposes to install an 8-inch recycled water main in East Guasti Road that connects to an existing 8-inch recycled water main in Convention Center Way (north of East Holt Boulevard) to extend south in East Guasti Road to end east of the Cucamonga Creek Channel.

- *Stormwater*: The Specific Plan area would connect to existing storm drain infrastructure systems within adjacent roadways. Specifically, the modified project proposes an underground detention system and stormwater pump in the southeast of the site to convey treated stormwater flows on-site to an existing 108-inch storm drain line in Guasti Road.

- *Dry Utilities*: Electrical lines would be installed underground to connect to existing Southern California Edison (SCE) infrastructure. Similarly, the modified project would connect to existing gas lines provided by Southern California Gas Company (SoCalGas). Infrastructure supporting telephone services by AT&T and Verizon and cable television services provided by Time Warner Cable would be installed along with other utilities.

Development Standards

The development standards associated with the proposed Specific Plan serve as the authoritative document that delineates the specific land use designations and regulatory guidelines for the Specific Plan. The Specific Plan establishes standards, including those related to setbacks, maximum building height, floor area ratio, and lot coverage. Specific standards associated with utilities, public and private open space, bicycle parking, and loading areas are also detailed. Additionally, Specific Plan Table 3, *Allowable Land Uses*, details the allowable uses within the Specific Plan area.

Design Guidelines

The design guidelines establish a clear set of qualitative guiding principles that form a basis for the City to review development within the Specific Plan. The guidelines serve to establish high-quality design for new development and facilitate the design review and planning approval process relative to building configuration and architecture.

The guidelines are not intended as a literal requirement; instead, they serve as a framework for the design review process and cover key elements including building mass, elevation treatment and materials, entrances, façade design and composition, roof forms, materials, colors, landscaping, lighting, and signage. The intent is for the City to use the guidelines as part of the formal design review process, and for the City's decision-making body to make qualitative findings demonstrating such compliance.

CONSTRUCTION

The modified project is anticipated to be constructed in a single phase for a duration of approximately 15 months.

DISCRETIONARY ACTIONS

The modified project is anticipated to require the following City discretionary permits and approvals:

- CEQA Clearance;
- Development Plan;
- Specific Plan; and
- Development Agreement.

Additionally, the modified project may be required to obtain permits/approvals from the following agencies:

- ONT Inter-Agency Notification Process;
- FAR Part 77 Notification – Federal Aviation Administration; and
- NPDES Construction General Permit – Santa Ana Regional Water Quality Control Board.

2.4 ADDENDUM SCOPE OF ENVIRONMENTAL REVIEW

As discussed in the TOP 2050 SEIR, the approved project was determined to have less than significant impacts or no impact with regard to the following environmental issue areas:

- Aesthetics;
- Agriculture and Forestry Resources;
- Biological Resources;
- Energy;
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Population and Housing;
- Public Services;
- Recreation;
- Utilities; and
- Wildfire.

The TOP 2050 SEIR established that, with mitigation, the approved project would result in less than significant impacts related to the following environmental issue areas:

- Geology and Soils; and
- Tribal Cultural Resources.

The TOP 2050 SEIR determined that the approved project would result in the following significant and unavoidable impacts:

- Air Quality;
- Cultural Resources;
- Noise; and
- Transportation.

This Addendum addresses changes resulting from implementation of the modified project to each of the environmental resource areas noted above.

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3.0 ENVIRONMENTAL ASSESSMENT

This comparative analysis has been undertaken to analyze whether the modified project would result in any new or substantially more severe significant environmental impacts as compared to the approved project that has been subject to the TOP 2050 SEIR. The comparative analysis discusses whether impacts are greater than, less than, or similar to the conclusions discussed in the TOP 2050 SEIR.

3.1 IMPACTS HAVING NO POTENTIAL TO RESULT IN NEW OR SUBSTANTIALLY MORE SEVERE SIGNIFICANT IMPACTS

- Agriculture and Forestry Resources: According to the California Department of Conservation, the modified project site is designated as Urban and Built-Up Land.[1] As such, no agricultural or forestry resources occur on-site. No new or substantially more severe significant impacts to agricultural and forestry resources would result from implementation of the modified project.

- Hazards and Hazardous Materials: The *Phase I Environmental Site Assessment: Proposed Empire Resort and Spa, Southeast Corner of E. Holt Boulevard and E. Guasti Road, APN 0110-322-33-0-000, City of Ontario, San Bernardino County, California 91761,* (Phase I ESA), prepared by Petra Geosciences, Inc., and dated December 5, 2023, was prepared for the modified project; refer to Appendix A, *Phase I ESA*. According to the Phase I ESA, the modified project site is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Additionally, the Phase I ESA determined that no recognized environmental conditions, controlled recognized environmental conditions, or historical recognized environmental conditions were identified within or affecting the modified project site. Further, the modified project site is not located within 0.25-mile of a school. While modified project construction could involve the use of limited amounts of hazardous materials, such as paints and solvents, gasoline, diesel fuels, and other hazardous materials routinely utilized with construction equipment, activities would be short-term, and the materials used would not be in such quantities, or stored in such a manner, as to pose a significant safety hazard. Given that the modified project site was historically used for agriculture, it is possible that discolored soils, noxious odors, buried pipelines or irrigation channels, and/or other buried objects/debris may be encountered during clearing and grubbing, or future grading. However, similar to the approved project, all modified project-related construction activities would be subject to applicable laws and regulations governing the use, storage, and transportation of hazardous materials, specifically those established by the U.S. Department of Transportation,

[1] California Department of Conservation, *California Important Farmland Finder*, https://maps.conservation.ca.gov/DLRP/CIFF/, accessed August 14, 2024.

California Department of Transportation, and California Highway Patrol, as well as the Hazardous Materials Transportation Uniform Safety Act.

Operation of the proposed uses would involve the use of small amounts of hazardous materials, such as cleansers, paints, fertilizers, and pesticides for cleaning and maintenance purposes. However, uses of such hazardous materials would be regulated by the California Fire Code, as well as other federal, State, and local regulations related to the protection of the public's health and safety. Following compliance with existing local, State, and federal regulations, impacts would be less than significant in this regard. Thus, no new or substantially more severe significant impacts regarding hazards and hazardous materials would result from implementation of the modified project.

- Mineral Resources: According to Figure 5.12-1, *Areas of Mineral Resources Significance*, of TOP 2050 SEIR, the modified project site is identified as Mineral Resource Zone 3 (MRZ-3), which are areas where the significance of mineral deposits cannot be determined from the available data. Development in an MRZ-3 area would not result in significant impacts because mineral resources of Statewide or local importance are not identified in those areas on the California Geological Survey's maps. As such, no new or substantially more severe significant impacts related to mineral resources would result from implementation of the modified project.

- Population and Housing: The modified project site is currently vacant; therefore, the modified project would not displace any existing housing or residents. The proposed hotel and retail uses are considered employment-generating uses. Employment opportunities resulting from the modified project could directly increase the City's population, as employees (and their families) may choose to relocate to the City. However, estimating the number of future employees who may choose to relocate to the City would be highly speculative, since many factors influence personal housing location decisions (e.g., family income levels and the cost and availability of suitable housing in the local area). Further, many modified project employees could already live within Ontario or neighboring jurisdictions. Nonetheless, buildout of the modified project site and other areas designated MU-Multimodal was projected by TOP 2050 to create 5,993 jobs associated with lodging and retail/office uses and was analyzed in TOP 2050 SEIR. The modified project is consistent with the MU-Multimodal designation and thus, would not substantially increase employment growth beyond what was previously analyzed in TOP 2050 SEIR. Additionally, the modified project would support this potential increase in population by providing for the infrastructure to accommodate the projected growth (e.g., utility and roadway improvements). Further, the modified project would support the goals of TOP 2050 by providing employment in proximity to multimodal transit. As such, no new or substantially more severe significant impacts related to population and housing would result from implementation of the modified project.

- Public Services: As discussed above under *Population and Housing*, while the proposed hotel and retail uses may be growth inducing, such growth has been projected by TOP 2050 for MU-Multimodal designated areas within Ontario. As such, while new development may increase demand for public services, including police protection, fire protection, school, and library services, TOP 2050 SEIR determined that buildout of the approved project would be adequately served by existing and planned public services. No new or substantially more severe significant impacts related to public services would result from implementation of the modified project.

- Recreation: As discussed above under *Population and Housing*, while the proposed hotel and retail uses may be growth inducing, such growth has been projected by TOP 2050 for MU-Multimodal Designated areas within Ontario. Additionally, no housing is proposed under the modified project, and the modified project would include extensive public and private open space areas to accommodate the proposed development. As such, demand for parks and other recreational facilities would not substantially increase. No new or substantially more severe significant impacts related to recreation would result from implementation of the modified project.

- Wildfire: According to the California Department of Forestry and Fire, the modified project site is not located in or near a State Responsibility Area Fire Hazard Severity Zone.[2] According to Figure 5.20-2, *Fire Hazard Severity Zones*, of TOP 2050 SEIR, the modified project site is not located in or near a fire hazard zone. Thus, no new or substantially more severe significant impacts related to wildfire would result from implementation of the modified project.

3.2 IMPACTS POTENTIALLY RESULTING IN NEW OR SUBSTANTIALLY MORE SEVERE SIGNIFICANT IMPACTS

3.2.1 Aesthetics/Light And Glare

Approved Project Findings

TOP 2050 SEIR determined that the approved project would have no impact on State-designated scenic highways as there are none in the City. TOP 2050 SEIR concluded that the approved project would not propose any development of a design and/or scale that would impact views of the San Gabriel Mountains, that implementation of the approved project would not conflict with existing zoning and regulations governing scenic quality, and that the approved project would be subject to the *City of Ontario Municipal Code* (Municipal Code) regarding potential light and glare impacts. Overall, aesthetic

[2] California Department of Forestry and Fire, *Fire Hazard Severity Zones in State Responsibility Area*, effective April 1, 2024, https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=988d431a42b242b29d89597ab693d008, accessed August 14, 2024.

impacts were determined to be less than significant. No mitigation measures were required for the approved project.

Modified Project Analysis

The modified project proposes a hotel and retail development in accordance with the proposed Empire Groves Specific Plan that establishes a development plan, development standards, and design guidelines to guide development within the Specific Plan area. As detailed in Section 2.2, *Environmental Setting*, the MU-Multimodal land use designation permits lodging and retail on-site, which is consistent with the modified project's uses. While the MU-Multimodal land use designation permits low- to mid-rise buildings ranging from three to 10 stories (approximately 30 to 100 feet) in height, the proposed Specific Plan would permit a maximum height of 10 to 15 stories (approximately 100 to 140 feet). This would be consistent with the allowable building height for the modified project site based on the *Ontario International Airport Land Use Compatibility Plan* (ONT ALUCP; refer to Section 3.2.9, *Land Use and Planning*). The Specific Plan would include development standards and design guidelines to ensure high-quality design and facilitate the design review and planning approval process within the Specific Plan area. Development standards would require site setbacks ranging from five to 50 feet, a floor area ratio of 1.0, and a maximum 40 percent lot coverage. The Specific Plan would require that public open space be accessible at the pedestrian level from public sidewalks and would set minimum dimensions for private open spaces that are visible to the public. Design guidelines would provide direction regarding building massing and elevation treatments, as well as site landscaping, lighting, and sign design. Specifically, lighting would need to be shielded in order to minimize light trespass, glare, and sky glow. Further, lighting provision for modified project construction are detailed in Municipal Code, Title 4, Chapter 11, Section 4-11.11, *Construction site security provisions*. Collectively, the proposed Specific Plan development standards and design guidelines and existing Municipal Code requirements would ensure the proposed development is consistent with regulations governing scenic quality.

Scenic views of the San Gabriel Mountains, the dominant scenic resource within the City, would not be obstructed with buildout of the proposed Specific Plan. Proposed design guidelines and development standards related to building mass, elevation, and height would ensure the proposed development does not have the potential to alter scenic views provided by the backdrop of the San Gabriel Mountains as the peaks rise to 7,000 feet above mean sea level.

Further, the proposed development would be adjacent to similar uses, including existing hotels to the north and west. Overall, the modified project would be of similar scale and character to surrounding uses and would be compatible with the buildout envisioned for the MU-Multimodal land use designated site by TOP 2050. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Certified TOP 2050 SEIR Mitigation Measures: Not Applicable.

Addendum Project Conditions: None.

3.2.2 Air Quality

Approved Project Findings

According to TOP 2050 SEIR, TOP 2050 would be inconsistent with the South Coast Air Quality Management District's (SCAQMD's) Air Quality Management Plan (AQMP) because buildout under TOP 2050 would generate short- and long-term emissions that exceed SCAQMD's regional significance thresholds and cumulatively contribute to the nonattainment designations of the South Coast Air Basin (Basin). Additionally, operation of industrial and warehousing land uses accommodated under TOP 2050 could expose sensitive receptors to substantial toxic air contaminant concentrations.

Incorporation of mitigation measures that would apply to a development project's construction phase (2010 TOP EIR Mitigation Measure 3-1) and operational phase (2010 TOP EIR Mitigation Measure 3-2 and TOP 2050 SEIR Mitigation Measure AQ-1) would reduce short- and long-term emissions and subsequently, impacts associated with consistency with the SCAQMD. Additionally, TOP 2050 goals and policies would promote increased capacity for alternative transportation modes.

However, due to the magnitude of residential units that would be planned under TOP 2050 to accommodate the City's Regional Housing Needs Assessment requirements, no additional mitigation measures are available that would reduce impacts below SCAQMD thresholds. Impact pertaining to consistency with an adopted AQMP, short-term and long-term air pollutants emissions, and health impacts to nearby sensitive receptors would remain significant and unavoidable.

According to TOP 2050 SEIR, TOP 2050 would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Impacts would be less than significant in this regard.

Modified Project Analysis

The *Empire Groves Hotel Air Quality Impact Analysis, City of Ontario* (Air Quality Impact Analysis), prepared by Urban Crossroads and dated April 19, 2024, was prepared to evaluate potential air quality impacts associated with the modified project; refer to Appendix B, *Air Quality Impact Analysis*.

Project Consistency with AQMP

In December 2022, SCAQMD released the *Final 2022 AQMP* (2022 AQMP). The 2022 AQMP continues to evaluate current integrated strategies and control measures to meet the California Ambient Air Quality Standards (CAAQS), as well as explore new and

innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a strategy with fair-share reductions at the federal, State, and local levels. Similar to the 2016 AQMP, the 2022 AQMP incorporates scientific and technological information and planning assumptions, including the Southern California Association of Governments (SCAG) *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy* (2020-2045 RTP/SCS), a planning document that supports the integration of land use and transportation to help the region meet the Federal Clean Air Act requirements. The modified project's consistency with the AQMP will be determined using the 2022 AQMP as discussed below.

- *Consistency Criterion No. 1*: The proposed project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

As demonstrated below, the modified project's localized and regional construction-source emissions would not exceed applicable regional significance threshold and LST thresholds. As such, a less than significant impact is expected. Further, the modified project's localized and regional operation-source emissions would not exceed applicable regional significance threshold and localized significance thresholds. As such, a less than significant impact is expected. On the basis of the preceding discussion, the modified project is determined to be consistent with the first criterion.

- *Consistency Criterion No. 2*: The project will not exceed the assumptions in the AQMP based on the years of project buildout phase.

Peak day emissions generated by construction activities are largely independent on land use assignments, but rather are a function of development scope and maximum area of disturbance. Irrespective of the site's land use designation, development of the site to its maximum potential would likely occur, with disturbance of the entire site occurring during construction activities. As such, when considering that no emissions thresholds will be exceeded, a less than significant impact would result.

TOP 2050 designates the modified project site as MU-Multimodal. The MU designation allows for a maximum FAR of 1.0 for office and retail uses. Intensive office, retail, and residential uses are envisioned to be integrated with the future multimodal transit station that is under consideration, which links rail, regional, local and airport transit. The modified project includes the development of a hotel with 600 rooms and suites, ballrooms, a spa & fitness center, meeting and conference rooms as well as an outdoor pool and event lawn and locally serving retail uses. Since the modified project's proposed land uses are consistent with TOP 2050 and as the modified project's construction and operational-source air pollutant emissions would not exceed the regional or localized significance thresholds, the modified project is determined to be consistent with the second criterion.

In conclusion, the modified project would not have the potential to result in or cause federal and/or State ambient air quality standards (i.e., National Ambient Air Quality Standards [NAAQS] and/or CAAQS) violations. The modified project's proposed uses are consistent with the site's land use designation and the modified project would not exceed the regional or localized construction and operational thresholds. As such, the modified project is considered to be consistent with the 2022 AQMP and impacts in this regard would be less than significant. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Construction Emissions

As part of the Air Quality Impact Analysis, modified project-related construction-source and operational-source air quality emissions from criteria pollutants (volatile organic compounds [VOCs], nitrous oxides [NO_x], carbon monoxides [CO], sulfur oxides [SO_x], coarse particulate matter [PM_{10}], and fine particulate matter [$PM_{2.5}$]) were calculated using the California Emissions Estimator Model (CalEEMod) version 2022.1.1.22. Output from the model runs for both construction and operational activity are provided in Appendix B.

The estimated maximum daily construction emissions without mitigation are summarized in Table 2, *Overall Construction Emissions Summary*. Under the assumed scenarios, emissions resulting from modified project construction would not exceed criteria pollutant thresholds established by the SCAQMD. Therefore, construction impacts in this regard would be less than significant. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Table 2
Overall Construction Emissions Summary

Year	Emissions (pounds/day)					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Summer						
2024	4.86	85.10	59.57	0.32	15.68	5.96
2025	39.43	27.80	72.35	0.08	9.62	2.95
Winter						
2024	3.67	20.66	46.45	0.06	7.91	2.33
2025	3.30	19.14	43.84	0.06	7.84	2.27
Maximum Daily Emissions	**39.43**	**85.10**	**72.35**	**0.32**	**15.68**	**5.96**
SCAQMD Thresholds	75	100	550	150	150	55
Threshold Exceeded?	***No***	***No***	***No***	***No***	***No***	***No***

Notes: VOC = volatile organic chemical; NO_x = nitrous oxide; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter

Source: Urban Crossroads, *Empire Groves Hotel Air Quality Impact Analysis, City of Ontario*, April 19, 2024; refer to Appendix B, *Air Quality Impact Analysis*.

Operational Emissions

Operational activities associated with the modified project would result in emissions of VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$. Operational emissions are expected from the following primary sources:

- *Area Source Emissions*: Area sources include architectural coatings, consumer products, and landscape maintenance equipment.
- *Energy Source Emissions*: Energy source emissions include combustion emissions associated with generation of natural gas and electricity. However, because electrical generating facilities for the modified project area are located either outside the region (State) or offset through the use of pollution credits (RECLAIM) for generation within the Basin, criteria pollutant emissions from off-site generation of electricity are excluded from the evaluation of significance.
- *Mobile Source Emissions*: Modified project-related air quality emissions derive primarily from vehicle trips associated with the modified project, including employee trips and commercial trips to and from the site associated with the proposed uses. Moreover, vehicles traveling on paved roads would be a source of fugitive emissions due to the generation of road dust inclusive of brake and tire wear particulates. Trip characteristics available from the modified project-specific traffic impact analysis.

The estimated operational-source emissions are summarized in Table 3, *Summary of Peak Operational Emissions*. Modified project operational activities would not exceed the numerical thresholds of significance established by the SCAQMD for emissions of any criteria pollutant. As such, operational impacts would be considered less than significant. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Table 3
Summary of Peak Operational Emissions

Source	Emissions (pounds/day)					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Summer						
Mobile Source	19.66	18.24	172.16	0.41	35.25	9.14
Area Source	23.33	0.40	47.22	0.00	0.08	0.06
Energy Source	0.29	5.21	4.38	0.03	0.40	0.40
Maximum Daily Emissions	**43.28**	**23.84**	**223.76**	**0.44**	**35.73**	**9.60**
SCAQMD Thresholds	75	100	550	150	150	55
Threshold Exceeded?	***No***	***No***	***No***	***No***	***No***	***No***
Winter						
Mobile Source	18.22	19.60	144.10	0.38	35.25	9.14
Area Source	15.58	0.00	0.00	0.00	0.00	0.00

Source	Emissions (pounds/day)					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Energy Source	0.29	5.21	4.38	0.03	0.40	0.40
Maximum Daily Emissions	**34.09**	**24.81**	**148.47**	**0.42**	**35.64**	**9.54**
SCAQMD Thresholds	55	55	550	150	150	55
Threshold Exceeded?	***No***	***No***	***No***	***No***	***No***	***No***

Notes: VOC = volatile organic chemical; NO_x = nitrous oxide; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter

Source: Urban Crossroads, *Empire Groves Hotel Air Quality Impact Analysis, City of Ontario*, April 19, 2024; refer to Appendix B, *Air Quality Impact Analysis*.

Localized Significance to Sensitive Receptors

The Air Quality Impact Analysis makes use of methodology included in the SCAQMD *Final Localized Significance Threshold Methodology* (LST Methodology). The SCAQMD has established that impacts to air quality are significant if there is a potential to contribute or cause localized exceedances of the federal and/or State ambient air quality standards (NAAQS/CAAQS). Collectively, these are referred to as Localized Significance Thresholds (LSTs). Based on SCAQMD's LST Methodology, emissions of concern during construction activities are those associated with on-site NO_X, CO, $PM_{2.5}$, and PM_{10} emissions. The LST Methodology clearly states that "off-site mobile emissions from the project should not be included in the emissions compared to LSTs." As such, for purposes of the construction LST analysis, only emissions included in the CalEEMod "on-site" emissions outputs were considered.

The SCAQMD recommends that the nearest sensitive receptor be considered when determining a project's localized air quality impacts. The nearest land use where an individual could remain for 24 hours to the project site has been used to determine localized construction and operational air quality impacts for emissions of PM_{10} and $PM_{2.5}$ (since PM_{10} and $PM_{2.5}$ thresholds are based on a 24-hour averaging time). Receptors in the modified project area are described and shown in Air Quality Impact Analysis Exhibit 3-B, *Receptor Locations*.

- *R1*: Location R1 represents the Ontario Gateway Hotel at 2200 E Holt Blvd, approximately 176 feet west of the modified project site.
- *R2*: Location R2 represents the existing residence at 304 N Placer Privado, approximately 2,802 feet north of the modified project site.
- *R3*: Location R3 represents the existing building of Holiday Inn Ontario Airport at 2155 E Convention Center Way, approximately 237 feet north of the modified project site.
- *R4*: Location R4 represents the existing residence at 2505 E Date Palm Paseo, approximately 1,968 feet north of the modified project site.
- *R5*: Location R5 represents the existing residence at 710 Via Dolcetto, approximately 3,593 feet northeast of the modified project site.
- *R6*: Location R6 represents the Frontier Center at 2151 E Convention Center Way, approximately 232 feet north of the modified project site.

In order to estimate localized pollutant concentrations resulting from modified project construction, the SCAQMD-approved American Meteorological Society/EPA Regulatory Model (AERMOD) dispersion model was utilized. AERMOD model outputs are provided in Appendix B. As illustrated in Table 4, *Localized Significance Summary Peak Construction*, emissions during the peak construction activity would not exceed the SCAQMD's localized significance thresholds at the maximally exposed receptor location, All other modeled locations in the study area would experience a lesser concentration and consequently a lesser impact.

Table 4
Localized Significance Summary Peak Construction

Peak Construction	CO		NO_2	PM_{10}	$PM_{2.5}$
	Averaging Time				
	1-Hour	8-Hour	1-Hour	24-Hour	24-Hour
Peak Day Localized Emissions	0.05	0.03	0.0366	2.72	1.57
Background Concentration	1.30	1.00	0.085	--	
Total Concentration	**1.35**	**1.03**	**0.12**	**2.72**	**1.57**
SCAQMD LST	*20*	*9*	*0.18*	*10.4*	*10.4*
Threshold Exceeded?	***NO***	***NO***	***NO***	***NO***	***NO***

Notes: NO_2 = nitrogen dioxide; CO = carbon monoxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter

Source: Urban Crossroads, *Empire Groves Hotel Air Quality Impact Analysis, City of Ontario*, April 19, 2024; refer to Appendix B, *Air Quality Impact Analysis*.

According to SCAQMD LST methodology, LSTs would apply to the operational phase of a proposed project, if the project includes stationary sources, or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., transfer facilities and warehouse buildings). The modified project does not include such uses, and thus, due to the lack of significant stationary source emissions, no long-term localized significance threshold analysis is warranted.

Based on the Air Quality Impact Analysis, the modified project would not result in potentially adverse CO concentrations or "hot spots". Further, detailed modeling of project-specific CO "hot spots" is not needed to reach this conclusion. It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). To establish a more accurate record of baseline CO concentrations affecting the Basin, a CO "hot spot" analysis was conducted in 2003 for four busy intersections in Los Angeles at the peak morning and afternoon time periods. This 2003 "hot spot" analysis did not predict any violation of CO standards at any of these busy intersections.

An adverse CO concentration, known as a "hot spot," would occur if an exceedance of the State one-hour standard of 20 ppm or the eight-hour standard of 9 ppm were to occur.

The ambient 1-hour and 8-hour CO concentration within the modified project study area is estimated to be 1.3 ppm and 1.0 ppm, respectively (2022 data from I-10 Near Road monitoring station). Therefore, even if the traffic volumes for the modified project were double or even triple the traffic volumes generated at the Long Beach Boulevard and Imperial Highway intersection (the nearest intersection out of the four busy intersections studied in 2003 “hot spot” analysis), coupled with the on-going improvements in ambient air quality, the modified project would not be capable of resulting in a CO “hot spot” at any study area intersections.

In December 2018, in the case of Sierra Club v. County of Fresno (2018) 6 Cal.5th 502, the California Supreme Court held that an EIR’s air quality analysis must meaningfully connect the identified air quality impacts to the human health consequences of those impacts, or meaningfully explain why that analysis cannot be provided. As the modified project’s emissions would comply with federal, State, and local air quality standards, the modified project’s emissions are not sufficiently high enough to use a regional modeling program to correlate health effects on a Basin-wide level and would not provide a reliable indicator of health effects if modeled.

In conclusion, results of the LST analysis indicate that the modified project would not exceed the SCAQMD localized significance thresholds during construction. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations during modified project construction. Additionally, the modified project would not have the potential to exceed the SCAQMD localized significance thresholds during operation as the modified project lack significant stationary source emissions. Further, modified project-related traffic would not create or result in a CO “hotspot.” Lastly, as the modified project’s emissions would comply with federal, State, and local air quality standards, they are not sufficiently high enough to use a regional modeling program to correlate health effects on a basin-wide level and would not provide a reliable indicator of health effects if modeled. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations as the result of modified project and localized impacts would be less than significant. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Odor

The modified project does not contain land uses typically associated with emitting objectionable odors. Potential odor sources associated with the modified project may result from construction equipment exhaust and the application of asphalt and architectural coatings during construction activities and the temporary storage of typical solid waste (refuse) associated with the modified project’s (long-term operational) uses. Standard construction requirements would minimize odor impacts from construction. The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction and is thus considered less than significant. It is expected that modified project-generated refuse would be stored in covered containers and removed at regular intervals in compliance

with current solid waste regulations. The modified project would also be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Therefore, odors and other emissions (such as those leading to odors) associated with construction and operations activities of the modified project would be less than significant. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Certified TOP 2050 SEIR Mitigation Measures: Not Applicable.

Addendum Project Conditions: None.

3.2.3 Biological Resources

Approved Project Findings

According to TOP 2050 SEIR, there are no sensitive plant species or wildlife movement corridors within the City. However, TOP 2050 SEIR requires all future development located within special-status wildlife critical habitat in the City, including within jurisdictional waters and wetlands, and conservation plans and areas, to conduct focused species surveys where applicable. Additionally, future projects would be required to consult and coordinate with applicable regulating agencies, including, but not limited to, U.S. Fish and Wildlife Service (USFWS), United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW), and implement necessary mitigation measures pursuant to the Federal Endangered Species Act (FESA), Migratory Bird Treaty Act of 1918 (MBTA), Clean Water Act (CWA), and California Endangered Species Act (CESA). Following the focused surveys and agency consultation, any resulting mitigation measures should be implemented. Overall, TOP 2050 SEIR determined that less than significant impacts to biological resources would result as the approved project would not grant specific entitlements for development and would not result in development of new, previously undeveloped areas of the City. No mitigation measures were required for the approved project.

Modified Project Analysis

The *Biological Technical Report for the Ontario Hotel Project, San Bernardino County, California* (Biological Technical Report), prepared by ECORP Consulting, Inc., and dated December 2024, was prepared for the modified project; refer to Appendix C, *Biological Technical Report*. The Biological Technical Report involved a literature review using the CDFW's California Natural Diversity Database (CNDDB), the California Native Plant Society's (CNPS) Electronic Inventory, the Natural Resources Conservation Service (NRCS) Web Soil Survey, NRCS Hydric Soils List, USFWS National Wetlands Inventory, and corresponding U.S. Geological Survey (USGS) topographic maps, a biological reconnaissance survey of the modified project site and 500-foot buffer conducted on June 28, 2023, and a tree inventory by a certified arborist.

Riparian Habitat and Sensitive Natural Communities

The Biological Technical Report determined that the modified project site does not contain any riparian habitat or other sensitive natural communities that would need to be preserved, is not located within a designated wildlife corridor or linkage, does not contain any State or federally protected wetlands, and is not located in a habitat conservation plan or natural community conservation plan. As such, no impacts would occur in this regard.

Special-Status Species

No special-status plant or wildlife species were observed during the site survey; however, 12 special-status plant species and 50 special-status wildlife species appeared in the literature review as occurring within five miles of the modified project site. Of the 12 special-status plant species identified, Parry's spineflower (*Chorizanthe parryi* var. *parryi*) and Brand's star phacelia (*Phacelia stellaris*) have a moderate potential to occur on-site. It is acknowledged that neither species was identified on the modified project site during the field survey and the site provides only marginally or limited amounts of suitable habitat (including soils and elevation factors). Further, Parry's spineflower and Brand's star phacelia are not federally or State-listed species. Therefore, it is not likely that the modified project would require a mechanism for "take" of federally or State-listed plant species. If present on-site, these two species are only expected to occur in very low density and modified project-related impacts would not be expected to contribute to an overall decline of populations for these species. Therefore, less than significant impacts would occur to special-status plant species.

Of the 50 special-status wildlife species identified, Crotch bumble bee (*Bombus crotchii*), southern California legless lizard (*Anniella stebbinsi*), burrowing owl (*Athene cunicularia*), northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*), and Los Angeles pocket mouse (*Perognathus longimembris brevinasus*), have a moderate potential to occur on-site. The southern California legless lizard, northwestern San Diego pocket mouse, Los Angeles pocket mouse are all CDFW species of special concern and, if present on the modified project site, these species could be subject to direct impacts through ground disturbance and indirect impacts from construction noise, vibrations, and increased human activity related to modified project development. However, due to the lack of high-quality habitat within the modified project area, the site's long history of anthropogenic disturbances, and the presence of urban development immediately adjacent to the modified site, if present on the modified project site, these species are only expected to occur in very low density and modified project-related impacts would not be expected to contribute to the overall decline of populations for these species. Therefore, impacts to southern California legless lizard, northwestern San Diego pocket mouse, Los Angeles pocket mouse would not be considered significant under CEQA,

Crotch bumble bee and burrowing owl, both candidate species for listing under CESA, were not present on the modified project site during the field survey; however, these species were determined to have moderate potential to occur based on the presence of

marginally suitable habitat and/or recent (less than 20 years old) species records within five miles of the modified project site. To ensure good faith effort and best practices are implemented during ground disturbing activities, Standard Condition of Approval (SCA) BIO-1 through SCA BIO-3 would require implementation of best management practices, including pre-construction surveys, monitoring, and other avoidance measures to reduce potential impacts to special-status wildlife species. Specifically, SCA BIO-1 requires pre-construction surveys be conducted based on established protocols provided by the CDFW and/or USFWS, SCA BIO-2 requires construction monitoring to ensure compliance with environmental regulations including the MBTA, and SCA BIO-3 requires consultation with CDFW and/or USFWS if special-status wildlife species are observed during monitoring. Thus, impacts in this regard would be less than significant.

Nesting Birds and Roosting Bats

During the tree inventory, potential nesting habitat for migratory birds and raptors protected by the MBTA and California Fish and Game Code was present in the river red gum (*Eucalyptus camaldulensis*) and Peruvian pepper trees (*Schinus mole*) scattered throughout the modified project site. Suitable nesting habitat for ground-nesting bird species, such as mourning doves, as well as suitable roosting habitat for foliage roosting bat species could occur on-site. The project would be subject to compliance with the MBTA and California Fish and Game Code regarding nesting birds. Therefore, SCA BIO-2 would require construction monitoring to ensure best practices to minimize impacts to biological resources are implemented.

The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Certified TOP 2050 SEIR Mitigation Measures: Not Applicable.

Addendum Project Conditions:

SCA BIO-1 Pre-construction Surveys. A biologist should conduct surveys for plants species covered by the San Bernardino County Development Code – Plant Protection and Management (Chapter 88.01) and special-status wildlife species (e.g., desert tortoise, Crotch bumble bee, and burrowing owl), as well as for nesting birds. Surveys should follow established protocols provided by the California Department of Fish and Wildlife (CDFW) and/or U.S. Fish and Wildlife Service (USFWS), if applicable. If special-status species or nesting birds are identified, the biologist should coordinate with CDFW and/or USFWS to develop and implement appropriate measures. These may include establishing protective buffer zones, rescheduling activities to avoid sensitive periods, or other measures.

SCA BIO-2 Construction Monitoring. During initial ground-disturbing and vegetation-clearing activities, a biologist should conduct daily clearance surveys

("sweeps") to ensure compliance with environmental regulations, including the Migratory Bird Treaty Act (MBTA). If an active bird nest, protected by the MTBA or other special-status resource is located, the biologist should establish a visible disturbance-free buffer zone around the nest or resource. Construction activities within these buffer zones should only proceed once the biologist determines the nest is no longer active.

SCA BIO-3 Response to Wildlife Observations. If special-status wildlife species are observed during monitoring, consultation with the California Department of Fish and Wildlife (CDFW) and/or U.S. Fish and Wildlife Service (USFWS) is advised to establish and implement additional protective measures. These may include further monitoring or specific work restrictions to ensure compliance with environmental regulations, including the Migratory Bird Treaty Act (MBTA) and the San Bernardino County Development Code – Plant Protection and Management (Chapter 88.01).

3.2.4 Cultural Resources

Approved Project Findings

According to TOP 2050 SEIR, implementation of TOP 2050 could impact historic resources. TOP 2050 would result in an increase in land use intensity but would not result in development in areas of the City that were not planned for development under TOP 2010. Nonetheless, historical resources categorized under the City's Development Code as Tier III could still be potentially impacted with implementation of new land uses under TOP 2050. 2010 TOP EIR Mitigation Measure 5-1 would require historic or potentially historic resources to be evaluated for historic significance through the City's Development Code tier system. Major modification or demolition of Tier III resources may be appropriate under certain circumstances. If demolition occurs, the City requires historic resources to be documented and historic features to be salvaged and requires a demolition mitigation fee. Provided that major modification or demolition of Tier III resources may still occur upon implementation of 2010 TOP EIR Mitigation Measure 5-1, the measure would not provide a high level of protection for Tier III historic resources under CEQA. Therefore, impacts to historic resources were determined to remain significant and unavoidable.

Implementation of TOP 2050 could impact archaeological resources as future development that would be accommodated by TOP 2050 could potentially unearth previously unrecorded resources. 2010 TOP EIR Mitigation Measure 5-2 would require preservation and curation of archeological resources if uncovered during development. Implementation of 2010 TOP EIR Mitigation Measure 5-2 would reduce potential impacts to archeological resources to a less than significant level.

According to TOP 2050 SEIR, grading activities would not adversely impact human remains, if accidently uncovered, because procedures are required under the Public Resources Code and California Health and Safety code. Although soil-disturbing activities

associated with development in accordance with TOP 2050 could result in the discovery of human remains, compliance with existing regulations would ensure that significant impacts to human remains would not occur.

Modified Project Analysis

The *Archaeological Resources Inventory and Evaluation Report for the Ontario Hotel Project on the East Corner of Holt Boulevard and Guasti Road, San Bernardino County, California* (Archaeological Resources Report), prepared by ECORP Consulting, Inc. and dated August 2023, was prepared to evaluate potential cultural resources impacts associated with the modified project; refer to Appendix D, *Archaeological Resources Report*. The Archaeological Resources Report included a records search for the modified project site using the California Historical Resources Information System (CHRIS) at the South-Central Coastal Information Center (SCCIC) at California State University, Fullerton; literature review, and a field survey. In addition to the official records and maps for archaeological sites and surveys in San Bernardino County, the following historic references were also reviewed during the literature review: Built Environment Resource Directory; the National Register Information System; Office of Historic Preservation, California Historical Landmarks; California Points of Historical Interest Caltrans State Bridge Inventory; and Historic Spots in California. Additionally, a search for a local historical registry was conducted at Ontario Heritage, the nearest historical society in the City of Ontario.

The records search results indicated that 22 previous cultural resources studies have been conducted within one mile of the modified project area. As a result of those studies, no archaeological resources have been previously recorded within the modified project site. Consultation with Ontario Heritage indicated the possible presence of a historic building in the modified project site; however, no structure was identified through the literature review, historic aerial and topographic map review, or field survey.

As a result of the field survey, a single historic-period isolated artifact, OH-1 (a small shard of sun-colored amethyst glass), was recorded within the modified project site. OH-1 was evaluated using the National Register of Historic Places and California Register of Historical Resources eligibility criteria and found not eligible for listing under any criteria. OH-1 does not contribute to any known or suspected historic districts; and is neither considered to be a Historic Property for the purpose of Section 106 National Historic Preservation Act (NHPA), nor a Historical Resource under CEQA. OH-1 is not listed in the local register of historical resources, as defined in PRC 5020.1(k), has not been identified as significant in a historical resources survey, as defined in PRC 5024.1(g), and has not been determined to be historically significant by the CEQA lead agency. Therefore, it is not a historical resource under CEQA and is not a historic property under Section 106 of the NHPA.

In conclusion, the records search did not yield any historic-period or pre-contact cultural resources within the modified project site. The field survey identified a single historic-period isolated find. Isolated finds are not considered Historic Properties under Section

106, nor are they considered historic properties under CEQA. Therefore, no Historic Properties under Section 106 of the NHPA or Historical Resources under CEQA would be affected by the modified project.

Due to the modified project area being covered by Holocene alluvium deposit during the period of human occupation in the Americas and the proximity to Cucamonga Creek, which was channelized during the historic period, there exists a potential for buried pre-contact and historic archaeological sites within the modified project area. However, due to a history of agricultural use, and evidence of earthmoving activities related to the Cucamonga Creek, the Interstate 10 freeway and on-ramp, the Archaeological Resources Report concluded that potential for intact historic subsurface cultural deposits is low.

Nonetheless, there is a potential for disturbing previously unknown archaeological resources during excavation into native soil materials. 2010 TOP EIR Mitigation Measure 5-2 is applicable to the modified project and would require preservation and curation of archeological resources if uncovered during development. As such, upon implementation of 2010 TOP EIR Mitigation Measure 5-2, modified project-related impacts to archeological resources would be reduced to less than significant levels.

Similar to TOP 2050, although soil-disturbing activities associated with development of the modified project could result in the discovery of human remains, compliance with existing law, including procedures are required under the Public Resources Code and California Health and Safety code, would ensure that significant impacts to human remains would not occur. No impacts would occur in this regard.

Overall, cultural impacts would be less than significant with implementation of 2010 TOP EIR Mitigation Measure 5-2. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Certified 2010 TOP EIR Mitigation Measures:

5-2 In areas of documented or inferred from evident archaeological and/or paleontological resource presence, City staff shall require applicants for development permits to provide studies to document the presence/absence of such resources. On properties where resources are identified, such studies shall provide a detailed mitigation plan, including a monitoring program and recovery and/or in situ preservation plan, based on the recommendations of a qualified cultural preservation expert. The mitigation plan shall include the following requirements:

a) Archaeologists and/or paleontologist shall be retained for the modified project and will be on call during grading and other significant ground-disturbing activities.
b) Should any cultural resources be discovered, no further grading shall occur in the area of the discovery until the Planning Director or designee

is satisfied that adequate provisions are in place to protect these resources.

c) Unanticipated discoveries shall be evaluated for significance by a San Bernardino County Certified Professional Archaeologist/Paleontologist. If significance criteria are met, then the modified project shall be required to perform data recovery, professional identification, radiocarbon dates, and other special studies; submit materials to a museum for permanent curation; and provide a comprehensive final report including a catalog with museum numbers.

Certified TOP 2050 SEIR Mitigation Measures: Not Applicable.

Addendum Project Conditions: None.

3.2.5 Energy

Approved Project Findings

According to TOP 2050 SEIR, regulatory compliance (e.g., Building Energy Efficiency Standards [commonly known as Title 24], CALGreen [California's green building code], California Renewables Portfolio Standard [RPS], and Corporate Average Fuel Economy [CAFÉ] standards) would increase building energy efficiency and vehicle fuel efficiency and reduce building energy demand and transportation-related fuel usage. Additionally, TOP 2050 includes policies related to land use and transportation planning and design, energy efficiency, public and active transit, and renewable energy generation that will contribute to minimizing building and transportation-related energy demands overall and demands on nonrenewable sources of energy. Implementation of proposed policies under TOP 2050 and City's Community Climate Action Plan (CCAP), in conjunction with regulatory requirements would ensure that energy demand associated with growth under TOP 2050 would not be inefficient, wasteful, or unnecessary. Therefore, TOP 2050 would not result in new or a substantial increase in magnitude of impacts. Furthermore, TOP 2050 includes Environmental Resources Element and Safety Element policies that would support the Statewide goal of transitioning the electricity grid to renewable sources and employ best practices regarding energy-saving standards. Therefore, implementation of TOP 2050 would not conflict with or obstruct implementation of California's RPS program. TOP 2050 SEIR determined that energy-related impacts would be less than significant.

Modified Project Analysis

The analysis of impacts related to energy use considers construction and operations of the modified project. The analysis of operational electricity and natural gas usage is based on the CalEEMod modeling results for the modified project from the Air Quality Impact Analysis. The modified project's estimated electricity and natural gas consumption is based primarily on CalEEMod's default settings for San Bernardino County and consumption factors provided by SCE and SoCalGas, the electricity and natural gas providers for the City and the modified project site, respectively. The results of the

CalEEMod modeling are included in Appendix B; results of energy use are included in Appendix E, *Energy Analysis*. The amount of operational fuel consumption was estimated using the modified project's annual vehicle miles traveled (VMT) as modeled in CalEEMod, and California Air Resources Board (CARB) Emissions Factor 2021 (EMFAC2021) website platform, which provides typical fuel efficiency for the County.

Construction

This analysis focuses on the on-road (automotive) fuel consumption associated with construction vehicle trips and off-road fuel consumption associated with construction equipment usage. The modified project's construction equipment fuel consumption is estimated from the modified project's construction equipment, timing/phasing, and hours of duration for construction equipment as modeled in CalEEMod.

The modified project's estimated construction-related energy consumption is summarized in Table 5, *Energy Consumption*.

Table 5
Energy Consumption

Energy Type	Modified Project Annual Energy Consumption[1]	San Bernadino County Annual Energy Consumption[2]	Percentage Increase Countywide
Electricity Consumption (MWh)	11,975	16,629,614	0.0720%
Natural Gas Consumption (therms)	194,008	562,123,065	0.0345%
Construction Off-Road Fuel Consumption (Gallon)	37,165	18,336,278	0.2027%
Construction On-Road Fuel Consumption (Gallon)	205,723	205,723,206	0.1000%
Operational Automotive Fuel Consumption (Gallon)	938,341	1,110,012,646	0.0845%

Notes:
1. Modified project electricity and natural gas consumptions as modeled in California Emissions Estimator Model (CalEEMod) computer model provided in Urban Crossroads, *Empire Groves Hotel Air Quality Impact Analysis, City of Ontario*, April 19, 2024; refer to Appendix B, *Air Quality Impact Analysis*. Fuel consumption calculated based on CalEEMod results.
2. The percentage increases in construction off-road and on-road fuel consumption are compared with the projected Countywide off-road fuel consumption and Countywide on-road fuel consumption in 2024 (assumed first year of construction based on CalEEMod). Countywide off-road construction equipment diesel fuel consumption and on-road fuel consumption are from CARB EMFAC2021.

Refer to Appendix E, *Energy Analysis*, for modeling outputs.

Construction would consume energy in two general forms: (1) the fuel energy consumed by construction vehicles and equipment; and (2) bound energy in construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass.

Fossil fuels used for construction vehicles and other energy-consuming equipment would be used during construction of the modified project. Fuel energy consumed during construction would be temporary and would not represent a significant demand on energy resources. In addition, some incidental energy conservation would occur during construction through compliance with State requirements that equipment not in use for more than five minutes be turned off. Construction equipment would also be required to comply with the latest U.S. Environmental Protection Agency (EPA) and CARB engine emissions standards. These emissions standards require highly efficient combustion systems that maximize fuel efficiency and reduce unnecessary fuel consumption. Due to increasing transportation costs and fuel prices, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction. There is growing recognition among developers and retailers that sustainable construction is not prohibitively expensive, and that there is a significant cost-savings potential in green building practices and materials.

The modified project-related incremental increase in the use of energy bound in construction materials, such as asphalt, steel, concrete, pipes and manufactured or processed materials (e.g., lumber and gas), would not substantially increase demand for energy compared to overall local and regional demand for construction materials. As indicated in Table 5, the modified project's off-road fuel consumption and on-road fuel consumption from construction in total would be approximately 37,165 gallons and 205,723 gallons, respectively. Consequently, the modified project's off-road construction equipment diesel fuel consumption and on-road construction fuel consumption would increase San Bernadino County's consumption by approximately 0.2027 percent and 0.1000 percent, respectively. It should be noted that the Countywide annual diesel consumption is based solely on diesel consumption for the mining and construction sector. As such, construction would have a nominal effect on the local and regional energy supplies.

Construction fuel use is temporary and would cease upon completion of construction activities. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in the region or State. Additionally, construction contractors would be required to comply with the provisions of California Code of Regulations Title 13, Sections 2449 and 2485, which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than five minutes and would minimize unnecessary fuel consumption. Construction equipment would be subject to the EPA Construction Equipment Fuel Efficiency Standard, which would also minimize inefficient, wasteful, or unnecessary fuel consumption. Furthermore, per applicable regulatory requirements, such as the current CALGreen, the modified project would comply with construction waste management practices to divert a minimum of 65 percent of construction debris. Therefore, construction fuel consumption would not be any more inefficient, wasteful, or unnecessary than other similar development projects. As such, a less than significant impact would occur.

Operations

As indicated in Table 5, the modified project's operational automotive transportation is estimated to consume approximately 938,341 gallons of fuel per year. This increase would account for 0.0845 percent of the County's forecasted annual consumption of fuel for the buildout year of 2025. As such, the modified project would account for a nominal percentage of the forecasted annual operational automotive fuel consumption for the County and, thus, would have a nominal effect on the local and regional energy supplies. The modified project does not propose any unusual features that would result in excessive long-term operational fuel consumption.

The modified project would be required to comply with the most current and applicable version of the Title 24 standards pertaining to electric vehicle (EV) capable spaces and parking stalls with EV chargers. The modified project would also include features such as bicycle parking, electric vehicle charging station, and vanpool/carpool parking, which would promote near-zero and zero-emissions technologies and encourage alternative modes of transportation. Thus, the modified project would encourage and support the use of EVs and alternative modes of transportation, thus reducing petroleum fuel consumption. Therefore, fuel consumption associated with vehicle trips generated by the modified project would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region.

The CEC developed 2024 to 2040 forecasts for energy consumption and peak demand in support of the 2023 IEPR for each of the major electricity and natural gas planning areas and the State based on the economic and demographic growth projections. CEC forecasted baseline electricity consumption grows at a rate of about 1.7 percent annually through 2040.[3] The natural gas consumption grows at a rate of about 0.2 percent annually through 2035.[4] As shown in Table 5, the modified project's operational energy consumption at full buildout would result in an annual electricity and natural gas consumption of 11,975 MWh and 194,008 therms, respectively. Table 5 also shows the increase of operational energy consumption would result in approximately 0.0720 percent increase in electricity consumption and approximately 0.0345 percent increase in natural gas consumption over the current Countywide usage. As such, energy consumption would be significantly below CEC's forecasts and the current Countywide usage. Therefore, the modified project would be consistent with the CEC's energy consumption forecasts and would not require additional energy capacity or supplies. The modified project would also consume energy during the same time periods as other surrounding residential and commercial developments. As a result, the modified project would not result in unique or more intensive peak or base period electricity demand.

The modified project would be required to comply with the most current and applicable version of the Building Energy Efficiency Standards (commonly known as Title 24), which

[3] California Energy Commission, *2023 Integrated Energy Policy Report, page 130*, July 14, 2024.

[4] Based on the *2023 Integrated Energy Policy Report*, the gas forecast is updated every two years, in odd years. As such, the natural gas consumption shown here is based on the California Energy Commission, *Final 2022 Integrated Energy Policy Report Update, page 140*, May 10, 2023.

provide minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting. The modified project would also comply with CALGreen pertaining to the installation of EV charging stations. Compliance with the most current and applicable Title 24 standards significantly reduces energy usage. Furthermore, the electricity provider, SCE, is subject to California's RPS. The RPS requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 60 percent of total procurement by 2030 and 100 percent of total procurement by 2045. Renewable energy is generally defined as energy that comes from resources which are naturally replenished within a human timescale such as sunlight, wind, tides, waves, and geothermal heat. The increase in reliance of such energy resources further ensures that new development projects will not result in the waste of the finite energy resources. In compliance with Title 24, including the CALGreen, the modified project would install high efficiency lighting and energy efficient appliances. The modified project would also include solar ready roofs. As a result, the modified project would ensure energy consumption to be kept to a minimum through these components.

Based on the analysis above, the modified project would not cause wasteful, inefficient, and unnecessary consumption of building energy during modified project operation or preempt future energy development or future energy conservation. As such, impacts resulting from the modified project would be less than significant.

Conclusion

As discussed above, impacts regarding energy consumption during construction and operation would be less than significant. Modified project implementation would not result in increased operational electricity, natural gas, or fuel consumption compared to existing conditions. Further, the modified project would be required to adhere to all applicable federal, State, and local requirements pertaining to energy efficiency during construction and operation. As such, energy impacts would be less than significant. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Certified TOP 2050 SEIR Mitigation Measures: Not Applicable.

Addendum Project Conditions: None.

3.2.6 Geology And Soils

Approved Project Findings

TOP 2050 SEIR concluded that buildout of TOP 2050 would not result in significant geology and soils impacts. Development in accordance with TOP 2050 would be subject to potential impacts from ground shaking, liquefaction, seismically induced settlement,

ground subsidence, compressible soils, expansive soils, and erosion. TOP 2050 would be subject to its Safety Element and the Municipal Code, which would ensure that geology and soils impacts are reduced to less than significant levels.

With regard to paleontological resources, future development in accordance with TOP 2050 would be required to implement 2010 TOP EIR Mitigation Measure 5-2, which requires that, in the event of an unanticipated discovery of archaeological resources during grading and excavation of a site, a qualified archaeologist is required to assess the find and develop a course of action to preserve the find. Accordingly, 2010 TOP EIR Mitigation Measure 5-2 would reduce potential impacts to paleontological resources to a level that is less than significant.

Modified Project Analysis

The *Preliminary Geotechnical Evaluation, Proposed Empire Resort And Spa Project, Approximately 10.4 Acres Of Vacant Land At Southeast Corner Of E. Holt Boulevard And E. Guasti Road, APN 011 032 233, City Of Ontario, San Bernardino, California* (Geotechnical Evaluation), prepared by Petra Geosciences, Inc. and dated February 10, 2023, was prepared to evaluate potential geology and soils impacts associated with the modified project; refer to Appendix F, *Geotechnical Evaluation*.

Faulting

According to the Geotechnical Evaluation, no active or potentially active faults are known to underly the modified project site and the site does not lie within the bounds of an "Earthquake Fault Zone" as defined by the State of California in the Alquist-Priolo (AP) Earthquake Fault Hazard Zoning Act nor within a San Bernardino County fault zone. In addition, no features in the field were observed that would indicate active faulting. The closest known Quaternary fault is the Red Hill – Etiwanda fault which lies approximately 1,500 feet to the north. As such, the Geotechnical Evaluation concluded that the potential for active fault rupture at the site is considered to be very low; no impacts would occur in this regard.

Seismic Ground Shaking

As discussed above, no active or potentially active faults are known to underly the modified project site and the site does not lie within the bounds of an "Earthquake Fault Zone" nor within a San Bernardino County fault zone. The closest known Quaternary fault is the Red Hill – Etiwanda fault which lies approximately 1,500 feet to the north. Nonetheless, Southern California has numerous active seismic faults subjecting residents to potential earthquake and seismic-related hazards. Therefore, the modified project is anticipated to experience moderate to occasionally high levels of ground motion from nearby faults as well as ground motions from other active seismic areas of the Southern California region.

According to TOP 2050 SEIR, projects considered for approval under TOP 2050 (e.g.,

the modified project) would be required to comply with seismic safety provisions of the California Building Code (CBC) (Title 24, Part 2 of the California Code of Regulations). Such compliance would minimize potential hazards arising from ground shaking. As such, less than significant impacts would occur in this regard.

Liquefaction

According to the Geotechnical Evaluation, the County has identified the general modified project area within a low liquefaction zone. Further, groundwater level is reported at depths of greater than 300 feet below ground surface (bgs). Considering the very dense underlying older alluvial fans deposits that underlay the modified project site, the Geotechnical Evaluation concluded that risks pertaining to liquefaction-induced settlement is considered negligible. As such, no impacts would occur in this regard.

Landslides

According to the Geotechnical Evaluation, the modified project site exhibits nearly level topography that is not subject to landslides. As such, no impacts would occur in this regard.

Soil Erosion

Construction of the modified project would require compliance with the CBC and review of grading plans for individual projects by the City Engineer to ensure no significant impacts regarding soil erosion would occur. In addition, the modified project is required to comply with the requirements of the State's Construction General Permit (CGP), including preparation of a notice of intent and stormwater pollution prevention Plan (SWPPP). Additionally, the modified project would be required to control pollutants in stormwater discharges per the *Water Quality Management Plan for: Empire Hotel, APN: 001032233* (WQMP), prepared by Kimley-Horn and Associates, Inc.; refer to Appendix H, *Hydrology Report/WQMP*. This would include implementation of non-structural and structural source Best Management Practices (BMPs). Following compliance with the existing regulations and implementation of the WQMP, impacts pertaining soil erosion would be minimized, and a less than significant impact would occur in this regard.

Lateral Spreading, Subsidence, or Collapse Associated With Unstable Soil

Lateral spreading is seismically-induced slope instability phenomenon wherein slope failure can occur as a result of liquefaction. According to the Geotechnical Evaluation, risks pertaining to liquefaction-induced settlement is considered negligible. Subsequently, risks pertaining to lateral spreading would also be considered negligible; as such, no impacts would occur in this regard.

Land subsidence may be induced from withdrawal of oil, gas, or water from wells. Based on a search of the California Department of Conservation, Geologic Energy Management Division's (CalGEM) online mapping application Well Finder, there are no active oil or gas

wells within a mile of the site. According to the Phase I ESA prepared for the modified project, the closest mapped well to the modified project site (Chino-1002337) is mapped on the north side of I-10, approximately 3,300 feet to the northeast. Further, groundwater level is reported at depths of greater than 300 feet bgs. Considering the very dense underlying older alluvial fans deposits that underlay the modified project site and the distance to the nearest water well, the likelihood of land subsidence is low. As such, impacts in this regard would be less than significant.

According to the Geotechnical Evaluation, a notable geotechnical factor affecting the modified project site is the presence of existing artificial fills and low density and dry, younger alluvial soils. For relatively light-weight structures, these upper materials, ranging in depth from approximately six to ten feet bgs across the majority site, in their current state are not considered suitable for support of anticipated loads. Therefore, the Geotechnical Evaluation recommended that these materials be removed to an approximate depth of 10 feet and replaced with engineered fill. Any such building may be supported on a shallow spread footing system embedded in compacted fill soils. The lower approximately 10 feet of the younger alluvial soils are not expected to be suitable for the support of the main, moderate- to high-rise structure. However, a portion of the proposed structure is expected to be supported on footings that are within the two-story subterranean parking. As such, no remedial grading (i.e., over-excavation and replacement) is deemed necessary in this area. Conversely, depending on the anticipated loads, considerations may be given to removing the upper approximately 15 to 20 feet of soils consisting of younger alluvial fan deposits to support the other parts of the proposed main structure. Accordingly, the Geotechnical Evaluation recommends that these materials be removed (over-excavation) to expose the underlying competent older alluvial fan deposits, which shall be verified in the field by the geotechnical consultant. Upon implementation of recommendations as provided in the Geotechnical Evaluation, impacts pertaining to collapsible soils would be less than significant.

As such, impacts pertaining to unstable soils would be less than significant upon implementation of recommendations as provided in the Geotechnical Evaluation.

Expansive Soil

According to the Geotechnical Evaluation, on-site soils are sandy and silty with generally a very low to low expansive potential. As such, no impacts would occur in this regard.

Septic Tanks or Alternative Wastewater Disposal System

The modified project does not propose any septic tanks or alternative wastewater disposal systems. The modified project proposes to install a sewer line on-site to connect to an existing 12-inch sewer main in East Holt Boulevard. As such, no impacts would occur in this regard.

Paleontological Resources

Based on the Archaeological Resources Report, the modified project area is comprised of late Pleistocene and early Holocene alluvium, which is characterized by slightly to moderately consolidated deposits consisting mostly of fine to coarse-grained sand, but with thin beds of pebbles, gravels, or silt. Most of the vicinity is alluvial fans and stream valleys removed from mountains. According to the Archaeological Resources Report, there exists the potential for buried pre-contact archaeological sites within the modified project area due to the presence of deep soils deposited during the Holocene period and the likelihood of pre-contact archaeological sites located along perennial waterways such as Cucamonga Creek, which is currently restrained in a constructed channel that forms the eastern boundary of the modified project site. In accordance with TOP 2050 SEIR, the modified project would be required to implement 2010 TOP EIR Mitigation Measure 5-2, which requires that in the event of an unanticipated discovery of paleontological resources during grading and excavation of the site, a qualified paleontologist would assess the find and develop a course of action to preserve the find. Accordingly, 2010 TOP EIR Mitigation Measure 5-2 would reduce potential impacts to paleontological resources to a level that is less than significant.

Conclusion

As detailed above, the modified project would result in less than significant or no geology and soils impacts including those associated with fault rupture; seismic ground shaking; liquefaction; landslides; soil erosion; unstable soils and associated lateral spreading, subsidence, or collapse; expansive soil; and unsupported septic systems. With regard to paleontological resources, the modified project would be required to implement 2010 TOP EIR Mitigation Measure 5-2, which requires that, in the event of an unanticipated discovery of archaeological resources during grading and excavation of a site, a qualified archaeologist is required to assess the find and develop a course of action to preserve the find. Accordingly, 2010 TOP EIR Mitigation Measure 5-2 would reduce potential impacts to paleontological resources to a level that is less than significant. Overall, impacts pertaining to geology and soils would be less than significant. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Certified 2010 TOP EIR Mitigation Measures:

5-2 In areas of documented or inferred from evident archaeological and/or paleontological resource presence, City staff shall require applicants for development permits to provide studies to document the presence/absence of such resources. On properties where resources are identified, such studies shall provide a detailed mitigation plan, including a monitoring program and recovery and/or in situ preservation plan, based on the

recommendations of a qualified cultural preservation expert. The mitigation plan shall include the following requirements:

a) Archaeologists and/or paleontologist shall be retained for the modified project and will be on call during grading and other significant ground-disturbing activities.
b) Should any cultural resources be discovered, no further grading shall occur in the area of the discovery until the Planning Director or designee is satisfied that adequate provisions are in place to protect these resources.
c) Unanticipated discoveries shall be evaluated for significance by a San Bernardino County Certified Professional Archaeologist/Paleontologist. If significance criteria are met, then the modified project shall be required to perform data recovery, professional identification, radiocarbon dates, and other special studies; submit materials to a museum for permanent curation; and provide a comprehensive final report including a catalog with museum numbers.

Certified TOP 2050 SEIR Mitigation Measures: Not Applicable.

Addendum Project Conditions: None.

3.2.7 Greenhouse Gas Emissions

Approved Project Findings

According to TOP 2050 SEIR, with implementation of the City's Community Climate Action Plan (CCAP), TOP 2050 would achieve the State's GHG emissions efficiency target without implementation of additional local GHG reduction measures. Goals and policies in TOP 2050 and actions in the CCAP would minimize GHG emissions generated by the residential and nonresidential land uses in the City. Implementation of TOP 2050 would not obstruct implementation of the CARB Scoping Plan or interfere with SCAG's ability to implement the regional strategies in the 2020-2045 RTP/SCS. Overall, TOP 2050 would not result in significant unavoidable adverse impacts related to GHG emissions with implementation of regulatory requirements and standard conditions of approval, as well as the City's CCAP. Less than significant impacts would occur in this regard.

Modified Project Analysis

The *Empire Groves Hotel Greenhouse Gas Analysis, City of Ontario* (GHG Analysis), prepared by Urban Crossroads and dated September 9, 2024, was prepared to evaluate potential greenhouse gas impacts associated with the modified project; refer to Appendix G, *GHG Analysis*.

Threshold of Significance

The City of Ontario adopted the CCAP on December 16, 2014. The CCAP contains further guidance on the City's GHG Inventory reduction goals, policies, guidelines, and implementation programs. The purpose of the CCAP is to provide guidance on how to analyze GHG emissions and determine significance during the CEQA review of proposed development projects within the City of Ontario. The CCAP builds upon the Reduction Plan to address City-specific information and City-specific GHG reduction measures. To address the State's requirement to reduce GHG emissions, the City prepared the CCAP with the goal of reducing GHG emissions within the City by 15 percent below 2008 levels by the year 2020. The City's target is consistent with the AB 32 target and ensures that the City o achieves GHG reductions locally that complement and are consistent with State efforts to reduce GHG emissions.

As part of the CCAP, the City published a guidance document titled *Greenhouse Gas Emissions, CEQA Thresholds and Screening Tables* in December 2014. As part of this guidance, the City determined that if GHG emissions of a given project exceeds 3,000 metric tons of carbon dioxide equivalents ($MTCO_2e$) per year, then project emissions would need to be reduced by 25 percent when compared to year 2008 emissions levels. Alternatively, the project would need to achieve a minimum of 100 points pursuant to measures identified in the Screening Tables.

TOP 2050 includes an update to the City's CCAP (CCAP Update) originally adopted in 2014. The CCAP Update is a plan to reduce GHG emissions and improve community resilience to hazardous conditions associated with climate change. The CCAP Update includes updated emissions inventories; updated emissions forecasts; identifies GHG emissions reduction targets to achieve the GHG reduction goals of the City consistent with Senate Bill 32, Executive Order S-03-05, and substantial progress toward the State's carbon neutrality goals of Executive Order B-55-18; and measures, that when quantified, achieve the GHG reduction targets for the City. As noted in TOP 2050 SEIR, the measures included in the CCAP Update are not substantially different than that of the previous CCAP and therefore, there is no change in the environmental impacts associated with the CCAP Update. Because the CCAP Update addresses GHG emissions reductions and is consistent with the requirements of AB 32, SB 32, and international efforts to reduce GHG emissions, projects that comply with the CCAP Update would have a less than significant GHG impact.

GHG Emissions

CalEEMod version 2022.1.1.22 was used to calculate modified project-related GHG emissions. Output from the model runs for construction and operational activity are provided in Appendix G. CalEEMod includes GHG emissions from the following source categories: construction, area, energy, mobile, waste, water, and refrigerants.

The modified project's construction activities would generate CO_2 and CH_4 emissions. For construction phase emissions, GHGs are quantified and amortized over the life of the

modified project. To amortize the emissions over the life of a project, the SCAQMD recommends calculating the total GHG emissions for the construction activities, dividing it by a 30-year project life then adding that number to the annual operational phase GHG emissions. As such, construction emissions were amortized over a 30-year period and added to the annual operational phase GHG emissions. Operational activities associated with the modified project would result in emissions of CO_2, CH_4, N_2O, and refrigerants from the following direct and indirect primary sources:

- *Area Source Emissions*: Direct GHG emissions from area sources are mostly associated with landscape maintenance equipment. Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shedders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of a project.
- *Energy Source Emissions*: Direct GHG emissions from energy sources are mostly associated with combustion emissions associated with natural gas and electricity.
- *Mobile Source Emissions*: Direct GHG emissions from mobile sources are mostly associated with vehicle trips, including employee trips to and from the site associated with the proposed uses. Trip characteristics available from the modified project-specific traffic impact analysis.
- *Water Supply, Treatment, and Distribution*: Indirect GHG emissions result from the production of electricity used to convey, treat, and distribute water and wastewater. The amount of electricity required to convey, treat, and distribute water depends on the volume of water as well as the sources of the water.
- *Solid Waste*: The proposed land uses would result in the generation and disposal of solid waste. A percentage of this waste would be diverted from landfills by a variety of means, such as reducing the amount of waste generated, recycling, and/or composting. The remainder of the waste not diverted would be disposed of at a landfill. GHG emissions from landfills are associated with the anaerobic breakdown of material. GHG emissions associated with the disposal of solid waste associated with the modified project were calculated by CalEEMod using default parameters.
- *Refrigerants*: Air conditioning (A/C) and refrigeration equipment associated with the buildings are anticipated to generate GHG emissions. CalEEMod automatically generates a default A/C and refrigeration equipment inventory for each project land use subtype based on industry data from the U.S. Environmental Protection Agency. CalEEMod quantifies refrigerant emissions from leaks during regular operation and routine servicing over the equipment lifetime and then derives average annual emissions from the lifetime estimate. Note that CalEEMod does not quantify emissions from the disposal of refrigeration and A/C equipment at the end of its lifetime. GHG emissions associated with refrigerants were calculated by CalEEMod using default parameters.

The modified project's anticipated GHG emissions are identified in Table 6, *Estimated Greenhouse Gas Emissions*. As shown, construction and operation of the modified project would generate approximately 9,661.88 $MTCO_2e$ per year.

Table 6
Estimated Greenhouse Gas Emissions

Emission Source	CO_2	CH_4	N_2O	Refrigerants	CO_2e
	Metric Tons/year[1]				
Annual construction-related emissions amortized over 30 years	85.04	0.00565	0.00736	0.0940	87.47
Mobile Source	6,302.52	0.32	0.32	10.69	6,415.24
Area Source	22.02	0.00	0.00	0.00	22.10
Energy Source	2,923.18	0.27	0.02	0.00	2,936.99
Water Source	21.21	0.50	0.01	0.00	37.19
Waste	29.31	2.93	0.00	0.00	102.55
Refrigerants	0.00	0.00	0.00	60.33	60.33
Total CO_2e (All Sources)	***9,661.88 $MTCO_2e$ per year***				

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent

Source: Urban Crossroads, *Empire Groves Hotel Greenhouse Gas Analysis, City of Ontario*, April 19, 2024; refer to Appendix G, *GHG Analysis*.

The purpose of the CCAP Update is to provide guidance on how to analyze GHG emissions and determine significance during the CEQA review of proposed development projects within the City. Because the CCAP Update addresses GHG emissions reductions and is consistent with the requirements of AB 32, SB 32, and international efforts to reduce GHG emissions, compliance with the CCAP Update fulfills the description of mitigation found in the State CEQA Guidelines.

The modified project would implement Screening Table Measures that achieve the requisite points as a project design feature as detailed above in Section 2.3, *Modified Project Description*. The City would verify that the Screening Table Measures achieving the requisite points are incorporated in the modified project plans prior to issuance of building permits and are appropriately implemented prior to issuance of certificates of occupancy. Appendix 3.2, *CCAP Screening Tables*, of Appendix G identifies potential CCAP Screening Table Measures to be implemented by the modified project. As such, the modified project would be consistent with CCAP Update and is considered to have a less than significant individual and cumulatively considerable impact regarding GHG emissions.

Certified TOP 2050 SEIR Mitigation Measures: Not Applicable.

Addendum Project Conditions: None.

3.2.8 Hydrology And Water Quality

Approved Project Findings

According to TOP 2050 SEIR, the approved project would not exacerbate risk of flood hazards, tsunamis, or seiches or risk release of pollutants due to inundation. However, future development in the City would increase impervious areas, thus increasing runoff and flows into storm drainage systems. As such, TOP 2050 SEIR requires all future

development to prepare hydrology and hydraulic studies in accordance with the County Hydrology Manual and analyze stormwater flows that result from the 100-year storm event to ensure that the capacities of existing and planned storm drain systems are not exceeded. Additionally, future projects would be required to comply with the Santa Ana Regional Water Quality Control Board (RWQCB) multiple separate storm sewer system (MS4) permit and the San Bernardino County Stormwater Program. Upon implementation of regulatory requirements, including low impact design strategies and construction and post-construction best management practices, and TOP 2050 policies and programs, the approved project would result in less than significant impacts to hydrology and water quality, and no mitigation measures were required for the approved project.

Modified Project Analysis

The *Preliminary Hydrology Report for Diversified Empire Hotel, APN: 0010-322-33, Southeast of Holt Blvd and Guasti Road* (Hydrology Report), prepared by Kimley-Horn and Associates, Inc., and dated October 2023, and the *Water Quality Management Plan for: Empire Hotel, APN: 001032233* (WQMP), prepared by Kimley-Horn and Associates, Inc., were prepared for the modified project; refer to Appendix H, *Hydrology Report/WQMP*.

The modified project site consists of vacant, undeveloped land. According to the Hydrology Report, the modified project site is located within Zone X per the Federal Emergency Management Administration (FEMA) Flood Insurance Rate Map (FIRM), indicating that the site has a 0.2 percent annual chance of flood hazard; as such, potential flooding hazards would be less than significant in this regard.

Currently, the modified project site generally drains in the southeast direction with two main drainage areas (DAs). Runoff from DA 1 flows southeast towards Guasti Road, where there is a curb and gutter on the other side of the road with an existing catch basin, as well as a 108-inch storm drain line that collects stormwater for nearby properties. Runoff from DA 2 flows to the east towards the Cucamonga Channel. Current pre-development flows are detailed in Hydrology Report Table 1, *Pre-Development Flows*, for the 10- and 100-year storm events.

Following implementation of the modified project, the modified project site would consist of one main drainage area comprised of five sub-areas. Runoff from the drainage sub-areas would be intercepted by a combination of trench drains, area drains, and curb inlets, which would then be conveyed into a proposed underground detention system located southeast of the site. A stormwater pump is also proposed in the southeast side to pump runoff into the proposed underground detention system to be treated and conveyed into the existing 108-inch storm drain line in Guasti Road. Unmitigated post-development flows are detailed in Hydrology Report Table 2, *Post-Development Flows (Un-Mitigated)*. With the proposed underground detention system and stormwater pump, the Hydrology Report concluded that the modified project would not cause a significant impact to downstream systems and discharges would be less than existing conditions. Therefore, the modified project would not increase the severity or permanence of impacts related to

the City's storm drain system, and no new impacts would occur. No new mitigation measures are required.

Similar to the approved project, in order to minimize impacts to erosion on-site, the modified project would be required to comply with the requirements of the State's CGP, including preparation of a notice of intent and SWPPP. Additionally, the modified project would be required to control pollutants in stormwater discharges per the WQMP prepared for the modified project. This would include implementation of non-structural and structural source BMPs, including LID requirements consistent with the Santa Ana RWQCB MS4 and National Pollutant Discharge Elimination System (NPDES) program. Following compliance with the existing regulations and implementation of the WQMP, water quality standards and waste discharge requirements would not be exceeded, and surface water and groundwater quality would not be degraded. The modified project would not result in a new significant environmental effect or substantial increase the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Certified TOP 2050 SEIR Mitigation Measures: Not Applicable.

Addendum Project Conditions: None.

3.2.9 Land Use and Planning

Approved Project Findings

TOP 2050 SEIR concluded that the approved project's impacts related to land use and planning would be less than significant. Although the approved project would change existing land use designations, implementation of TOP 2050 would ensure compatibility among adjacent land uses to establish a sense of community and enhance the City's character; overall, it was determined that the approved project would not divide an established community. Additionally, the approved project was found to be consistent with the SCAG 2020-2045 RTP/SCS, the ONT ALUCP, and the *Chino Airport Master Plan*.

Modified Project Analysis

The modified project proposes a Specific Plan that establishes a development plan, development standards, and design guidelines to guide development within the Specific Plan area. The modified project site is bound on all sides by existing roadways to the north, south, and west, and by the Cucamonga Channel to the east. Therefore, the modified project would not physically divide an established community.

The modified project would be consistent with the envisioned buildout of the site's MU-Multimodal designation and Ontario Airport Metro Center Overlay by TOP 2050. As detailed in Section 2.2, TOP 2050 anticipates full buildout of the project site's MU-Multimodal designation to be approximately 2,449,727 square feet of nonresidential uses (553,124 square feet for lodging and 1,896,603 square feet for retail and office

development). As shown in Table 1, the proposed Specific Plan buildout would result in 553,124 square feet of hotel use and 46,876 square feet of local-serving retail use. Thus, the project would be within TOP 2050 buildout assumptions for the project site. Additionally, the modified project would contribute towards the Ontario Airport Metro Center Overlay vision providing an intensive development with vertical and horizontal mixtures of regional-serving uses. Further, the proposed Specific Plan would be consistent with the site's SP zoning. The proposed development would also be adjacent to similar uses, including hotels to the north and west.

Development within the City is also subject to applicable ONT ALUCP land use compatibility standards. The modified project is required to undergo the ONT Inter-Agency Notification Process with the ONT Airport Authority to ensure consistency with policies set forth in the ONT ALUCP. As described in Section 3.2.1, *Aesthetics/Light and Glare*, and Section 3.2.10, *Noise*, the modified project would be consistent with building height and noise-related hazards policies detailed in the ONT ALUCP. In addition to the ONT-IAC approval, the modified project would also require Federal Aviation Administration approval of the proposed building height per Federal Aviation Regulation Part 77, Subpart B, and by the California Public Utilities Code, Sections 21658 and 21659. Thus, the modified project would not conflict with applicable land use plans, policies, or regulations, and impacts would be less than significant.

Overall, the modified project would not result in a new significant environmental effect or substantial increase the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Certified TOP 2050 SEIR Mitigation Measures: Not Applicable.

Addendum Project Conditions: None.

3.2.10 Noise

Approved Project Findings

According to TOP 2050 SEIR, construction activities associated with buildout of TOP 2050 would result in temporary noise increases at sensitive receptors during construction activities and could create groundborne vibration during construction activities in excess of established standards. 2010 TOP EIR Mitigation Measure 12-4 would reduce potential impacts associated with construction from individual development projects to the extent feasible, and 2010 TOP EIR Mitigation Measure 12-2 would reduce potential impacts associated with construction vibration from individual development projects to the extent feasible. However, due to the potential for proximity of construction activities to sensitive uses, the number of construction projects occurring simultaneously, and the potential duration of construction activities, TOP 2050 could still result in a temporary substantial increase in noise levels above ambient conditions and exceedance of the 80 dBA L_{eq} threshold and generate excessive vibration levels at sensitive receptor locations.

Therefore, TOP 2050 SEIR concluded that construction noise and vibration impacts in accordance with TOP 2050 would remain significant and unavoidable.

Buildout associated with TOP 2050 would not result in new types of stationary noise sources. Furthermore, TOP 2050 includes Safety Element Policy S-4.1, *Noise Mitigation*, which utilizes the City's Noise Ordinance, building codes, and subdivision and development code regulations to reduce noise from future development projects. As such, stationary noise impacts would be less than significant. In regard to transportation noise, TOP 2050 traffic noise level increase along studied roadway segments in the City would not result in the exceedance of the significance threshold when other noise sources such as rail have been taken into considerations. Additionally, TOP 2050 includes Safety Element Policies S-4.2, *Coordination with Transportation Authorities*, S-4.4, *Truck Traffic*, and S-4.5, *Roadway Design*, that would minimize traffic noise impacts. As such, transportation noise impacts would be less than significant. Moreover, according to TOP 2050 SEIR, TOP 2050's commercial and industrial operations would not generate significant vibration impacts, and vibration from industrial and commercial operations would be less than significant.

According to TOP 2050 SEIR, implementation of TOP 2050 could expose noise sensitive uses to excessive noise levels from the Ontario International Airport. With the implementation of 2010 TOP EIR Mitigation Measure 12-1, impacts to future sensitive receptors from excessive airport-related noise would be reduced to interior noise levels of 45 dBA Community Noise Equivalent Level (CNEL) or less. While interior noise levels are required to achieve the interior noise limits of Title 24 and Title 25, exterior noise levels may continue to exceed the noise compatibility criteria for the City. Consequently, TOP 2050 SEIR concluded that airport noise compatibility impacts would remain significant and unavoidable.

Modified Project Analysis

The *Empire Groves Hotel Noise Impact Analysis, City of Ontario* (Noise Impact Analysis), prepared by Urban Crossroads and dated May 13, 2024, was prepared to evaluate potential noise impacts associated with the modified project; refer to Appendix I, *Noise Impact Analysis*.

Significance Criteria

Noise impacts shall be considered significant if any of the following occur as a direct result of the proposed development. Table 7, *Significance Criteria Summary*, shows the significance criteria summary matrix that includes the allowable criteria used to identify potentially significant incremental noise level increases.

Table 7
Significance Criteria Summary

	Land Use	Condition(s)	Significance Criteria	
			Daytime	Nighttime
On-Site Traffic Noise	All	Exterior Noise Level Criteria From *TOP 2050 LU-07 Noise Level Exposure and Land Use Compatibility Guidelines*	See Noise Impact Analysis Exhibit 3-A	
	Residential	Interior Noise Level Standard From *TOP 2050 LU-07 Noise Level Exposure and Land Use Compatibility Guidelines*	45 dBA CNEL	
	Non-Residential	Interior Noise Level Standard From *TOP 2050 LU-07 Noise Level Exposure and Land Use Compatibility Guidelines*	50 dBA CNEL	
Off-Site	Noise Sensitive	if ambient is < 60 dBA CNEL	≥ 5 dBA CNEL increase	
		if ambient is 60-65 dBA CNEL	≥ 3 dBA CNEL increase	
		if ambient is > 65 dBA CNEL	≥ 1.5 dBA CNEL increase	
	Non-Noise Sensitive	if ambient is > 75 dBA CNEL	≥ 3 dBA CNEL increase	
Operational	Residential	Exterior Noise Level Limit From City of Ontario Municipal Code Section 5-29.09(a)	55 dBA L_{eq}	45 dBA L_{eq}
	Commercial		65 dBA L_{eq}	60 dBA L_{eq}
	Noise Sensitive	if ambient is < 60 dBA L_{eq}	≥ 5 dBA L_{eq} increase	
		if ambient is 60-65 dBA L_{eq}	≥ 3 dBA L_{eq} increase	
		if ambient is > 65 dBA L_{eq}	≥ 1.5 dBA L_{eq} increase	
Construction	Residential	Noise Level Thresholds From FTA's *Transit Noise and Vibration Impact Assessment Manual*.	80 dBA L_{eq}	70 dBA L_{eq}
	Commercial		85 dBA L_{eq}	80 dBA L_{eq}
	Commercial	Vibration Level Thresholds From Caltrans' *Transportation and Construction Vibration Manual*.	0.5 PPV (in/sec)	n/a
Airport Noise	Long- and Short-Term Lodging	Exterior Noise Level Criteria From *TOP 2050 LU-07 Noise Level Exposure and Land Use Compatibility Guidelines*	70 dBA CNEL	
		Interior Noise Level Standard From *TOP 2050 LU-07 Noise Level Exposure and Land Use Compatibility Guidelines*	45 dBA CNEL	

Source: Urban Crossroads, *Empire Groves Hotel Noise Impact Analysis, City of Ontario*, May 13, 2024; refer to Appendix I, *Noise Impact Analysis*.

Construction Noise

This section analyzes potential impacts resulting from the short-term construction activities associated with the development of the modified project. According to Section 5-29.09, *Construction activity noise regulations*, of the Municipal Code states: No person, while engaged in construction, remodeling, digging, grading, demolition or any other related building activity, shall operate any tool, equipment or machine in a manner that produces loud noise that disturbs a person of normal sensitivity who works or resides in the vicinity, or a Police or Code Enforcement Officer, on any weekday except between the hours of 7:00 a.m. and 6:00 p.m. or on Saturday or Sunday between the hours of 9:00 a.m. and 6:00 p.m. In addition, neither TOP 2050 or the Municipal Code establish numeric maximum acceptable construction source noise levels at potentially affected receivers for CEQA analysis purposes. Therefore, a numerical construction threshold based on the

Federal Transit Administration (FTA) *Transit Noise and Vibration Impact Assessment Manual* is used for analysis of daytime construction impacts. The FTA considers a daytime exterior construction noise level of 80 dBA L_{eq} as a reasonable threshold for noise sensitive residential land use.

Noise generated by the modified project construction equipment would include a combination of trucks, power tools, concrete mixers, and portable generators that when combined can reach high levels. The number and mix of construction equipment are expected to occur in the following stages:

- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

To describe construction noise activities, this construction noise analysis was prepared using reference construction equipment noise levels from the Federal Highway Administration (FHWA) published the Roadway Construction Noise Model (RCNM), which includes a national database of construction equipment reference noise emission levels. The RCNM equipment database, provides a comprehensive list of the noise generating characteristics for specific types of construction equipment. In addition, the database provides an acoustical usage factor to estimate the fraction of time each piece of construction equipment is operating at full power (i.e., its loudest condition) during a construction operation.

Using the reference construction equipment noise levels from RCNM and the CadnaA noise prediction model, calculations of the modified project construction noise level impacts at the nearby sensitive receiver locations were completed; refer to Appendix I for detailed CadnaA construction noise model inputs. For construction noise assessment, construction equipment can be considered to operate in two modes: stationary and mobile. As defined, stationary equipment operates in a single location for one or more days at a time, with either fixed-power operation (e.g., pumps, generators, and compressors) or variable-power operation (e.g., pile drivers, rock drills, and pavement breakers). Mobile equipment moves around the construction site with power applied in cyclic fashion, such as bulldozers, graders, and loaders. The FTA and FHWA recommend noise impacts from stationary equipment be assessed from the center of the equipment location, while noise impacts from mobile construction equipment should be assessed from the center of the equipment activity area (e.g., construction site). Thus, to assess a more realistic and reasonable worst-case construction scenario while accounting for the dynamic nature of construction activities, this construction noise analysis models the equipment combination with the highest reference combined level as a moving point within the construction area (modified project site boundary). Construction impacts are based on the highest noise level calculated at each receiver location. To evaluate whether the modified project would generate potentially significant short-term noise levels at nearest receiver locations, a construction-related daytime noise level threshold of 80 dBA

L_{eq} is used as a reasonable threshold to assess the daytime construction noise level impacts at residential locations.

As shown in Table 8, *Construction Equipment Noise Level Summary*, the construction noise levels are expected to range from 34.4 to 60.0 dBA L_{eq}, and the highest construction levels are expected to range from 40.4 to 60.0 dBA L_{eq} at the nearest receiver locations.

Table 8
Construction Equipment Noise Level Summary

Receiver[1]	Construction Noise Levels (dBA L_{eq})						Threshold	Threshold Exceeded ?
	Site Preparation	Grading	Building Construction	Paving	Architectural Coating	Highest Levels		
R1	57.0	60.0	58.0	60.0	54.0	60	80	No
R2	39.5	42.5	40.5	42.5	36.5	42.5	80	No
R3	56.3	59.3	57.3	59.3	53.3	59.3	80	No
R4	42.5	45.5	43.5	45.5	39.5	45.5	80	No
R5	37.4	40.4	38.4	40.4	34.4	40.4	80	No

Notes:
1. Noise receiver locations are shown on Noise Impact Analysis Exhibit 9-A, *Construction Noise Source And Receiver Locations*; refer to Appendix I, *Noise Impact Analysis*.

Source: Urban Crossroads, *Empire Groves Hotel Noise Impact Analysis, City of Ontario*, May 13, 2024; refer to Appendix I, *Noise Impact Analysis*.

As shown in Table 8, the construction noise levels at the nearest receiver locations would not exceed the daytime significance thresholds. Therefore, construction noise impacts would be less than significant at all receiver locations. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Construction Vibration

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods used, distance to the affected structures and soil type. It is expected that ground-borne vibration from modified project construction activities would cause only intermittent, localized intrusion. Ground-borne vibration levels resulting from typical construction activities occurring within the modified project site were estimated by data published by the FTA and California Department of Transportation (Caltrans). However, while vehicular traffic is rarely perceptible, construction has the potential to result in varying degrees of temporary ground vibration, depending on the specific construction activities and equipment used. Based on the representative vibration levels presented for various construction equipment types, it is possible to estimate the potential construction vibration levels using vibration assessment methods defined by Caltrans.

Vibration-generating activities are appropriately evaluated using the Caltrans vibration damage thresholds to assess potential temporary construction-related impacts at

adjacent building locations. The nearest noise sensitive buildings adjacent to the modified project site can best be described as “modern industrial/commercial buildings” with a maximum acceptable continuous vibration threshold of 0.5 PPV (in/sec).

Ground vibration levels associated with various types of construction equipment at each nearby receiver locations are summarized in Table 9, *Construction Vibration Levels*.

Table 9
Construction Vibration Levels

Receiver[1]	Distance (Feet)[1]	Construction Noise Levels (dBA L_{eq})					Threshold PPV (in/sec)[4]	Threshold Exceeded ?
		Site Preparation	Grading	Building Construction	Paving	Highest Levels		
R1	176	<0.01	<0.01	<0.01	<0.01	<0.01	0.50	No
R2	2,802	<0.01	<0.01	<0.01	<0.01	<0.01	0.50	No
R3	237	<0.01	<0.01	<0.01	<0.01	<0.01	0.50	No
R4	1,968	<0.01	<0.01	<0.01	<0.01	<0.01	0.50	No
R5	3,593	<0.01	<0.01	<0.01	<0.01	<0.01	0.50	No

Notes:
1. Noise receiver locations are shown on Noise Impact Analysis Exhibit 9-A, *Construction Noise Source And Receiver Locations*; refer to Appendix I, *Noise Impact Analysis*. Distances are measured from receiver locations to the nearest construction boundary (modified project site boundary).

Source: Urban Crossroads, *Empire Groves Hotel Noise Impact Analysis, City of Ontario*, May 13, 2024; refer to Appendix I, *Noise Impact Analysis*.

At distances ranging from 176 feet to 3,593 feet from modified project construction area (at the modified project site boundary), construction vibration levels are estimated to be less than 0.01 PPV (inch per second [in/sec]) at the nearest vibration sensitive receiver. Based on maximum acceptable continuous vibration threshold of 0.50 PPV (in/sec), the typical modified project construction vibration levels would fall below the building damage thresholds at all the receiver locations. Further, vibration levels at the site of the closest sensitive receiver are unlikely to be sustained during the entire construction period but will occur rather only during the times that heavy construction equipment is operating simultaneously adjacent to the modified project site perimeter. Therefore, the modified project-related vibration impacts during typical construction activities are considered less than significant. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Operational Noise

This section analyzes the potential operational noise impacts resulting from stationary noise sources, including the operation of events with amplified sound, outdoor activities, swimming pool/spa activities, roof-mounted air conditioning units, loading dock activities, and parking lot vehicle movement, as well as potential operational traffic noise impacts.

Stationary Noise

This operational noise analysis is intended to describe noise level impacts associated with the expected typical of daytime and nighttime activities at the modified project site. To analyze noise impacts originating from the modified project, the operational noise levels are evaluated against standards established in the City of Ontario Municipal Code, 5-29.04, *Exterior noise standards.* Section 5-29.04(a) of the Municipal Code sets a stationary-source average Leq exterior noise limit for not to be exceeded 65 dBA L_{eq} during daytime hours and 45 dBA L_{eq} during nighttime hours at residential properties and 65 dBA Leq during daytime hours and 60 dBA L_{eq} during nighttime hours at commercial properties, such as those nearest the modified project site.

To estimate the modified project operational noise impacts, reference noise levels were collected from sample manufacturers specifications for similar equipment, published research, and/or measurements of similar activities that represent the noise levels expected with the development of the modified project. It is important to note that the predicted noise levels assume the worst-case noise environment with the events with amplified sound, outdoor activities, swimming pool/spa activities, roof-mounted air conditioning units, loading dock activities, and parking lot vehicle movement all operating continuously. These sources of noise activity will likely vary throughout the day.

A detailed description of the reference noise levels are shown in Table 10, *Reference Noise Levels*, which are used to estimate the modified project's operational noise impacts.

Table 10
Reference Noise Levels

Noise Source	Noise Source Height (Feet)	Minutes within the Hour		Reference Noise Level (dBA L_{eq}) @ 50 Feet	Sound Power Level Day Night (dBA)[3]
		Day	Night		
Event/Announcement Speaker	5'	60	60	75.6	107.2
Outdoor Gatherings	5'	60	60	59.9	91.5
Swimming Pool Activities	5'	60	60	63.0	94.6
Roof-Top Air Conditioning Units	5'	45	30	77.4	109.0
Loading Dock Activities	8'	60	60	71.8	103.4
Parking Lot Vehicle Movements	0'	60	60	31.4	63.0

Source: Urban Crossroads, *Empire Groves Hotel Noise Impact Analysis, City of Ontario*, May 13, 2024; refer to Appendix I, *Noise Impact Analysis*.

Using the reference noise levels to represent the proposed modified project operations that include events with amplified sound, outdoor activities, swimming pool/spa activities, roof-mounted air conditioning units, loading dock activities, and parking lot vehicle movement, the Noise Impact Analysis calculated the operational source noise levels that are expected to be generated at the modified project site and the modified project-related noise level increases that would be experienced at each of the sensitive receiver

locations. Table 11, *Operational Noise Levels*, shows the modified project operational noise levels during the daytime hours of 7:00 a.m. to 10:00 p.m., as well as the nighttime hours of 10:00 p.m. to 7:00 a.m.

Table 11
Operational Noise Levels

Noise Source	Operational Noise Levels by Receiver Location[1] (dBA L_{eq})				
	R1	R2	R3	R4	R5
Daytime Operational Noise					
Event/Announcement Speaker	22.1	31.0	51.8	34.8	29.1
Outdoor Gatherings	49.4	31.3	49.6	34.0	27.7
Swimming Pool Activities	18.5	28.2	48.1	32.3	27.0
Roof-Top Air Conditioning Units	52.8	38.6	50.8	40.3	35.5
Loading Dock Activities	20.8	5.0	22.0	33.1	28.5
Parking Lot Vehicle Movements	30.2	5.2	0.0	0.0	0.0
Total (All Noise Sources)	**54.4**	**40.2**	**56.3**	**43.0**	**37.9**
Daytime Threshold	*65.0*	*65.0*	*65.0*	*65.0*	*65.0*
Threshold Exceeded?	***No***	***No***	***No***	***No***	***No***
Nighttime Operational Noise					
Event/Announcement Speaker	21.1	30.1	50.8	33.9	28.2
Outdoor Gatherings	48.4	30.4	48.8	33.1	26.8
Swimming Pool Activities	17.6	27.2	47.2	31.3	26.0
Roof-Top Air Conditioning Units	50.1	35.9	48.1	37.6	32.7
Loading Dock Activities	20.8	5.0	22.0	33.1	28.5
Parking Lot Vehicle Movements	30.2	5.2	0.0	0.0	0.0
Total (All Noise Sources)	**52.4**	**38.2**	**55.0**	**41.3**	**36.1**
Nighttime Threshold	*60.0*	*45.0*	*60.0*	*45.0*	*45.0*
Threshold Exceeded?	***No***	***No***	***No***	***No***	***No***

Notes:
1. Noise receiver locations are shown on Noise Impact Analysis Exhibit 9-A, *Construction Noise Source And Receiver Locations*; refer to Appendix I, *Noise Impact Analysis*. Distances are measured from receiver locations to the nearest construction boundary (modified project site boundary).

Source: Urban Crossroads, *Empire Groves Hotel Noise Impact Analysis, City of Ontario*, May 13, 2024; refer to Appendix I, *Noise Impact Analysis*.

The daytime hourly noise levels at the off-site receiver locations are expected to range from 37.9 to 56.3 dBA L_{eq}; the nighttime hourly noise levels at the off-site receiver locations are expected to range from 36.1 to 55.0 dBA L_{eq}. As shown in Table 11, operational noise levels associated with the modified project would satisfy the City's daytime and nighttime exterior noise level standards at all nearby receiver locations.

To describe the operational noise level increases, the operational noise levels are combined with the existing ambient noise levels measurements for the nearest receiver locations potentially impacted by operational noise sources. The difference between the combined modified project's noise levels and ambient noise levels describes the noise level increases to the existing ambient noise environment. As indicated in Table 12, *Operational Noise Level Increases*, the modified project-related daytime and nighttime operational noise level increases are expected to range up to 1.7 dBA L_{eq} at the nearest receiver locations. As such, the modified project-related operational noise level increases would satisfy the operational noise level increase significance criteria presented on Noise Impact Analysis Table 4-1, *Significance Criteria Summary*. Therefore, the incremental operational noise level increase is considered less than significant at all receiver locations.

Table 12
Operational Noise Level Increases

Receiver Location[1]	Modified Project Operational Noise Level (dBA L_{eq})[2]	Measurement Location[3]	Reference Ambient Noise Levels (dBA L_{eq})[4]	Combined Modified Project and Ambient (dBA L_{eq})[5]	Increase (dBA L_{eq})	Increase Criteria (dBA L_{eq})[6]	Increase Criteria Exceeded?
Daytime Operational Noise							
R1	54.4	L1	64.2	64.6	0.4	3.0	No
R2	40.2	L2	59.1	59.2	0.1	5.0	No
R3	56.3	L3	62.0	63.0	1.0	3.0	No
R4	43.0	L4	71.7	71.7	0.0	1.5	No
R5	37.9	L5	66.5	66.5	0.0	1.5	No
Nighttime Operational Noise							
R1	52.4	L1	61.2	61.7	0.5	3.0	No
R2	38.2	L2	58.3	58.3	0.0	5.0	No
R3	55.0	L3	58.3	60.0	1.7	3.0	No
R4	41.3	L4	67.7	67.7	0.0	1.5	No
R5	36.1	L5	61.7	61.7	0.0	1.5	No

Notes:
1. Noise receiver locations are shown on Noise Impact Analysis Exhibit 9-A, *Construction Noise Source And Receiver Locations*; refer to Appendix I, *Noise Impact Analysis*.
2. Refer to Table 10 above.
3. Reference noise level measurement locations as shown on Noise Impact Analysis Exhibit 5-A, *Noise Measurement Locations*.
4. Observed ambient noise levels measured by Urban Crossroads are shown on Noise Impact Analysis Table 5-1, *24-Hour Ambient Noise Level Measurements*.
5. Represents the combined ambient conditions plus the modified project operational activities.
6. Refer to Table 7, *Significance Criteria Summary*.

Source: Urban Crossroads, *Empire Groves Hotel Noise Impact Analysis, City of Ontario*, May 13, 2024; refer to Appendix I, *Noise Impact Analysis*.

Overall, the operational noise levels associated with the modified project would not exceed the City's daytime and nighttime exterior noise level standards at all nearby receiver locations and would not result in significant increases. As such, operational noise impacts resulting from stationary noise sources would be less than significant. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Traffic Noise

To assess the off-site traffic CNEL noise level impacts associated with development of the proposed modified project, noise level contours were developed based on modified project-specific traffic impact analysis; refer to Noise Impact Analysis Appendix 7.1, Off-Site Traffic Noise Calculations, which includes a summary of the dBA CNEL traffic noise level contours. Noise level contour boundaries represent the equal levels of noise exposure and are measured in CNEL from the center of the roadway. Noise contours were used to assess the modified project's incremental 24-hour dBA CNEL traffic-related noise impacts at land uses adjacent to roadways conveying modified project-related traffic. The noise contours represent the distance to noise levels of a constant value and are measured from the center of the roadway for the 70, 65, and 60 dBA CNEL noise levels. The noise contours do not consider the effect of any existing noise barriers or topography that may attenuate ambient noise levels. In addition, because the noise contours reflect modeling of vehicular noise on area roadways, they appropriately do not reflect noise contributions from the surrounding stationary noise sources within the study area.

Roadway segments are analyzed in each of the following timeframes: Existing With and Without Modified Project Conditions, Opening Year 2026 With And Without modified Project Conditions, and Cumulative 2050 With And Without modified Project Conditions. The analyses for each timeframe are as followed:

- *Existing With And Without Modified Project Conditions*: Noise Impact Analysis Table 7-1, *Existing Without Project Conditions Noise Level Contours*, presents the "Existing Without Project Conditions" CNEL noise levels, which are expected to range from 57.5 to 67.6 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Noise Impact Analysis Table 7-2, *Existing With Project Conditions Noise Level Contours*, shows that roadway noise levels from "Existing With Project Conditions" would range from 58.7 to 67.7 dBA CNEL. As shown in Table 7-7, *Existing Off-Site Project-Related Traffic Noise Impacts*, the "Existing With Project Conditions" would generate a noise level increase of up to 2.5 dBA CNEL on the study area roadway segments.

  Based on the significance criteria for off-site traffic noise impacts as presented in Table 7, the modified project-related traffic noise level increases are considered less than significant under "Existing With Modified Project" conditions at the land uses adjacent to roadways conveying modified project-related traffic.

- *Opening Year (2026) With And Without Project Conditions*: Noise Impact Analysis Table 7-3, *OY 2026 Without Project Conditions Noise Level Contours,* presents the "Opening Year (2026) Without Modified Project Conditions" CNEL noise levels, which are expected to range from 60.3 to 69.0 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Noise Impact Analysis Table 7-4, *OY 2026 With Project Conditions Noise Level Contours*, shows that roadway noise levels from "Opening Year (2026) With Modified Project Conditions" would range from 61.0 to 69.0 dBA CNEL. As shown on Noise Impact Analysis Table 7-8, *OY 2026 Off-Site Project-Related Traffic Noise Impacts*, "Opening Year (2026) Without Modified Project Conditions" would generate a noise level increase of up to 1.6 dBA CNEL.

  Based on the significance criteria for off-site traffic noise impacts as presented in Table 7, land uses adjacent to the study area roadway segments would experience less than significant noise level increases due to unmitigated opening year modified project-related traffic noise levels.

- *Cumulative 2050 With And Without Modified Project Conditions*: Noise Impact Analysis Table 7-5, *Cumulative 2050 Without Project Conditions Noise Level Contours*, presents the "Cumulative 2050 Without Modified Project Conditions" CNEL noise levels, which are expected to range from 63.1 to 69.6 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Noise Impact Analysis Table 7-6, *Cumulative 2050 With Project Conditions Noise Level Contours*, shows that roadway noise levels from "Cumulative 2050 Without Modified Project Condition" would range from 66.3 to 69.7 CNEL. Noise Impact Analysis Table 7-9, *Cumulative 2050 Off-Site Project-Related Traffic Noise Impacts*, shows that the modified project off-site contribution to cumulative traffic noise level increases up to 0.5 dBA CNEL.

  Based on the significance criteria for off-site traffic noise impacts as presented in Table 7, land uses adjacent to the study area roadway segments would not experience substantial noise level increases due to modified project-related traffic noise level increases and impacts in this regard would be considered less than significant.

Overall, the modified project would result in less than significant traffic noise impacts during operation. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Operational Vibration

The modified project would not generate additional long-term operational traffic, and no new stationary noise sources are anticipated. Operational noise impacts resulting from the modified project would be less than significant. Further, the modified project would not involve railroads operations or substantial heavy truck trips and would not result in

significant vibration impacts at surrounding uses during operation. As such, less than significant impacts would occur in this regard. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Airport Noise

The modified project site is located approximately 350 feet north of the Ontario International Airport (ONT). This places the modified project site within the ONT Airport Influence Area according to Policy Map 2-1 of the ONT ALUCP. The ONT ALUCP was amended July 2018 to promote compatibility between airport and the surrounding land uses. Since the modified project site is located within the ONT Airport Influence Area, the modified project is subject to the Noise Criteria established in the ONT ALUCP. As shown on Noise Impact Analysis Exhibit 3-B, the modified project site is located within the 60 to 70 dBA CNEL airport noise level contours. Specifically, as shown on Noise Impact Analysis Exhibit 8-A, the 65 dBA CNEL noise level contours cross the southern portion of the modified project site, while the remainder of the modified project site would be located between the 60 and 65 CNEL noise level contours of Ontario Airport.

According to Table 2-3 of the ONT ALUCP, the short-term lodging land use (i.e., hotel) within the 60 to 70 dBA CNEL is considered a conditionally compatible land use which must demonstrate compliance with the interior noise standard of 45 CNEL.

As shown in Noise Impact Analysis Tables 8-4, *First Floor Interior Noise Levels (CNEL)*, through 8-12, *Ninth Floor Interior Noise Levels (CNEL)*, on-site interior traffic noise levels would not exceed the 45 dBA CNEL interior noise level standard for hotel rooms and additional noise abatement measures are not needed. As such, airport noise impacts would be less than significant. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Certified TOP 2050 SEIR Mitigation Measures: Not Applicable.

Addendum Project Conditions: None.

3.2.11 Transportation

Approved Project Findings

TOP 2050 SEIR determined that the approved project would result in less than significant impacts related to the circulation system, hazardous traffic conditions due to geometric design, and adequate emergency access. However, TOP 2050 SEIR found that due to the approved project's anticipated population increase, an increase in Vehicle Miles Traveled (VMT) would occur, which would result in potentially significant impacts. As such, TOP 2050 SEIR included Mitigation Measure T-1, which would require that prior to

approval of discretionary projects under TOP 2050 and subject to VMT reduction analysis, applicants shall demonstrate compliance with the City's VMT Guidelines for CEQA assessment of VMT impacts. For projects with VMT per Service Population exceeding the County's significance threshold, a mitigation plan shall be developed and implemented. Mitigation should consist of Transportation Demand Management (TDM) measures analyzed under a VMT-reduction methodology consistent with the California Air Pollution Control Officers Association's (CAPCOA) *Final Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity*, and approved by the City (if applicable). However, given the uncertainty of the effectiveness of implementing TDM measures at a Citywide level and of their effectiveness at reducing Citywide VMT, VMT impacts were determined to be significant and unavoidable.

Modified Project Analysis

The *Empire Groves Hotel – VMT Analysis,* (VMT Analysis), prepared by Translutions, Inc., and dated October 12, 2023, was prepared for the modified project; refer to Appendix J, *VMT Analysis*.

Based on the City's VMT guidelines, a project would result in a significant VMT impact if either of the following conditions are satisfied:

1. Project Generated VMT: A significant impact would occur if the project VMT per Service Population (VMT/SP) exceeds the Citywide average for Service Population under General Plan Buildout Conditions; or
2. Project Effect on VMT: A significant impact would occur if the project causes total daily VMT within the City to be higher than the no project alternative under cumulative conditions.

Based on the results of the VMT Analysis modeling, modified project-generated VMT would be 32.13 VMT/SP and the Citywide average at General Plan buildout would be 32.55 VMT/SP; therefore, the modified project would result in less than significant VMT impacts. Additionally, based on the modeling, for future year 2045, Citywide average at General Plan buildout with the modified project would be 22.64 VMT/SP, and Citywide average at General Plan buildout without the modified project would be 22.73 VMT/SP. Therefore, implementation of the modified project would lower Citywide VMT/SP at buildout year 2045 and would result in a less than significant impact.

While the modified project does not propose new bicycle facilities or new transit infrastructure, the modified project would continue to provide access to existing facilities, including multipurpose trails, as well as stops and connections for Metrolink, Amtrak, West Valley Connector BRT, Ontario Airport Loop, and Metro. As described in Section 2.3, *Modified Project Description*, the modified project would provide sidewalk improvements along the site perimeter, including visible crosswalks at major intersections and the Specific Plan identifies potential future roadway improvements along East Holt Boulevard, East Guasti Road, and Airport Drive that would further expand the multimodal

transportation network in the modified project area. All transportation improvements would be designed to City standards and would enhance connectivity through and around the modified project site as well as between neighboring districts and the airport. Further, no roadway improvements are proposed that would create geometric design hazards or impact emergency access in the modified project area.

Overall, the modified project would not result in a new significant environmental effect or substantial increase the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Certified TOP 2050 SEIR Mitigation Measures: Not Applicable.

Addendum Project Conditions: None.

3.2.12 Tribal Cultural Resources

Approved Project Findings

According to TOP 2050 SEIR, future development as a result of TOP 2050 implementation could occur in portions of the City with sensitivity to tribal cultural resources. Grading and construction activities in undeveloped areas or redevelopment that requires deeper soil excavation than in the past could potentially disturb tribal cultural resources. However, TOP 2050 SEIR determined that 2010 TOP EIR Mitigation Measures 5-3 (tribal consultation and preparation of a cultural resources assessment) and 5-4 (construction-related tribal resources mitigation) as well as TOP 2050 SEIR Mitigation Measures TCR-1 (tribal cultural resources monitoring plan) and TCR-2 (treatment and disposition of cultural resources) would reduce potential impacts associated with tribal cultural resources to less than significant levels. Therefore, TOP 2050 SEIR concluded that impacts would be less than significant with mitigation incorporated.

Modified Project Analysis

As of July 1, 2015, California Assembly Bill 52 (AB 52) was enacted and expanded CEQA by establishing a formal consultation process for California tribes within the CEQA process. AB 52 states that prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project, a lead agency shall begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project, if the tribe requested to the lead agency, in writing, to be informed by the lead agency of proposed projects in that geographic area and the tribe requests consultation. As this environmental document (i.e., an Addendum) is not a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report, AB 52 consultation would not apply to the modified project. Nevertheless, tribal consultation under AB 52 and California Senate Bill (SB) 18 was conducted as part of TOP 2050 SEIR, which resulted in the inclusion of 2010 TOP EIR Mitigation Measures 5-3 (tribal consultation and preparation of a cultural resources

assessment) and 5-4 (construction-related tribal resources mitigation) as well as TOP 2050 SEIR Mitigation Measures TCR-1 (tribal cultural resources monitoring plan) and TCR-2 (treatment and disposition of cultural resources) to reduce potential impacts associated with tribal cultural resources to less than significant levels.

SB 18 states that prior to a local (city or county) government's adoption of any general plan or specific plan, or amendment to general and specific plans, or a designation of open space land proposed on or after March 1, 2005, the city or county shall conduct consultations with California Native American tribes for the purpose of preserving or mitigating impacts to Cultural Places. The modified project proposes to construct a hotel and retail development with associated site improvements in accordance with the proposed Empire Groves Specific Plan. As such, tribal consultation under SB 18 is required and was conducted for the modified project. As required, the City distributed letters by e-mail to applicable tribes identified by the Native American Heritage Commission (NAHC). The City initiated tribal consultation on October 29, 2024, by emailing letters that provided a description of the modified project and notified each tribe of the opportunity to consult with the City regarding the modified project.

The City initiated consultation on November 12, 2024, with the Gabrieleno Band of Mission Indians – Kizh Nation (Kizh Nation) and concluded consultation on December 3, 2025. The Kizh Nation did not identify any cultural resources on the project site, however, the tribe requested project conditions to be included regarding tribal monitoring and notification that are included below. The Yuhaaviatam of San Manuel Nation e-mailed the City on November 5, 2025, and did not identify any cultural resources on the project site however requested project conditions to be included consistent with TOP 2050 SEIR Mitigation Measures TCR-1 and TCR-2 that are included below. The modified project would not result in any new or substantially increased impacts that were not identified as part of the Certified TOP 2050 SEIR.

Certified TOP 2050 SEIR Mitigation Measures:

TCR-1 Tribal Cultural Resources Monitoring. The project archaeologist, in consultation with interested tribes, the developer, and the City of Ontario, shall develop an archaeological monitoring plan (AMP) to address the details, timing, and responsibility of archaeological and cultural activities that will occur on the project site. Details in the AMP shall include:

1. Project-related ground disturbance (including, but not limited to, brush clearing, grading, trenching, etc.) and development scheduling;
2. The development of a rotating or simultaneous schedule in coordination with the developer and the project archeologist for designated Native American Tribal Monitors from the consulting tribes during grading, excavation and ground disturbing activities on the site: including the scheduling, safety requirements, duties, scope of work, and Native American Tribal Monitors' authority to stop and redirect grading activities in coordination with all project archaeologists (if the tribes cannot come

to an agreement on the rotating or simultaneous schedule of tribal monitoring, the Native American Heritage Commission shall designate the schedule for the onsite Native American Tribal Monitor for the proposed project);

3. The protocols and stipulations that the developer, City, Tribes, and project archaeologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits that shall be subject to a cultural resources evaluation.

At least 30 days prior to application for a grading permit and before any brush clearance, grading, excavation, and/or ground disturbing activities on the site, the developer shall retain a tribal cultural monitor to monitor all ground-disturbing activities in an effort to identify any unknown archaeological resources.

Pursuant to the AMP, a tribal monitor from the consulting tribe shall be present during the initial grading activities. If tribal resources are found during grubbing activities, the tribal monitoring shall be present during site grading activities.

TCR-2 Treatment and Disposition of Cultural Resources. In the event that Native American cultural resources are inadvertently discovered during the course of any ground-disturbing activities, including but not limited to brush clearance, grading, trenching, etc., for the proposed project, the following procedures will be carried out for treatment and disposition of the discoveries:

1. Temporary Curation and Storage: During the course of construction, all discovered resources shall be temporarily curated in a secure location on-site or at the offices of the project archaeologist. The removal of any artifacts from the project site will need to be thoroughly inventoried with tribal monitor oversight of the process;

2. Treatment and Final Disposition: The landowner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and nonhuman remains as part of the required mitigation for impacts to cultural resources. The applicant shall relinquish the artifacts through one or more of the following methods and provide the City of Ontario with evidence of same:

    a. Accommodate the process for on-site reburial of the discovered items with the consulting Native American tribes or bands. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloging, basic analysis, other analyses as recommended by the project archaeologist and approved by consulting tribes, and basic

recordation have been completed; all documentation should be at a level of standard professional practice to allow the writing of a report of professional quality;

b. A curation agreement with an appropriate qualified repository in San Bernardino County that meets federal standards per 36 CFR Part 79, and therefore the resource would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility in San Bernardino County, to be accompanied by payment of the fees necessary for permanent curation;
c. For purposes of conflict resolution, if more than one Native American tribe or band is involved with the project and cannot come to an agreement as to the disposition of cultural materials, materials shall be curated at the San Bernardino County Museum by default;
d. At the completion of grading, excavation, and ground-disturbing activities on the site, a Phase IV Monitoring Report shall be submitted to the City documenting monitoring activities conducted by the project archaeologist and Native Tribal Monitors within 60 days of completion of grading. This report shall document the impacts to the known resources on the property; describe how each mitigation measure was fulfilled; document the type of cultural resources recovered and the disposition of such resources; provide evidence of the required cultural sensitivity training for the construction staff held during the required pregrade meeting; and, in a confidential appendix, include the daily/weekly monitoring notes from the archaeologist. All reports produced will be submitted to the City, County Museum, and consulting tribes.

Addendum Project Conditions: Below are tribal project conditions for the Yuhaaviatam of San Manuel Nation and Gabrieleno Band of Mission Indians – Kizh Nation.

A. Yuhaaviatam of San Manuel Nation:

1. In the event that cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted, as detailed within TOP 2050 SEIR Mitigation Measures TCR-1, regarding any pre-contact finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment.

2. If significant pre-contact cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to YSMN for review and comment, as detailed within TOP 2050 SEIR Mitigation Measures TCR-1. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.

3. If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.

4. The Yuhaaviatam of San Manuel Nation Cultural Resources Management Department (YSMN) shall be contacted, as detailed in TOP 2050 SEIR Mitigation Measure TCR-1, of any pre-contact cultural resources discovered during project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a Cultural Resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with YSMN, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents YSMN for the remainder of the project, should YSMN elect to place a monitor on-site.

5. Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to YSMN. The Lead Agency and/or applicant shall, in good faith, consult with YSMN throughout the life of the project

B. Gabrieleno Band of Mission Indians – Kizh Nation:

1. The project applicant or lead agency shall retain a Native American Tribal Monitor from the Gabrieleno Band of Mission Indians – Kizh Nation to ensure proper oversight of Tribal Cultural Resources (TCR). The Tribal Cultural Resources monitoring plan shall address the details, timing, and responsibilities for cultural resource activities occurring on the project site. The plan shall include:

    a. Project-related ground disturbance (including, but not limited to, brush clearing, grading, trenching, etc.) and development scheduling.

b. Full-time presence of a designated Native American Tribal Monitor from the Gabrieleno Band of Mission Indians – Kizh Nation during all grading, excavation, and ground-disturbing activities on the site. The monitor shall coordinate with the developer to ensure safety requirements, duties, and scope of work are adhered to. The Tribal Monitor shall also have the authority to stop and redirect grading activities if tribal cultural resources are identified.

c. Protocols and stipulations to address inadvertent discoveries of Tribal Cultural Resources, including immediate evaluation by the Kizh Nation. At least 30 days prior to application for a grading permit and before any brush clearance, grading, excavation, and/or ground disturbing activities on the site, the developer shall retain a Tribal Cultural Monitor from the Gabrieleno Band of Mission Indians – Kizh Nation to monitor all such activities. A Tribal Monitor shall be present during all initial grading activities. If tribal resources are identified during grubbing activities, the Tribal Monitor shall continue to be present during subsequent grading activities.

2. Treatment and Disposition of Cultural Resources. In the event that Tribal Cultural Resources are inadvertently discovered during the course of any ground-disturbing activities, including but not limited to brush clearance, grading, trenching, etc., the following procedures shall be followed to ensure proper and disposition of the discoveries:

   a. Temporary Curation and Storage: During construction, all discovered resources shall be temporarily curated in a secure on-site location under the oversight of the Tribal Monitor from the Gabrieleno Band of Mission Indians – Kizh Nation.

   b. Treatment and Final Disposition All discovered cultural resources, including sacred items, burial goods, and archaeological artifacts, shall remain under the custodianship of the Gabrieleno Band of Mission Indians – Kizh Nation. Final disposition shall occur through the following process of On-site Reburial. Discovered items shall be reburied on-site in coordination with the Gabrieleno Band of Mission Indians – Kizh Nation. Measures shall be taken to ensure the future reburial area is protected from any potential future impacts. Reburial shall only occur after cataloging, basic analysis, recordation, and any other necessary documentation have been completed in consultation with the Kizh Nation.

3. Phase IV Monitoring Report: Upon completion of grading, excavation, and ground-disturbing activities, a Phase IV Monitoring Report shall be submitted to the City of Ontario within 60 days. This report shall document:

    a. All monitoring activities conducted by the Tribal Monitors from the Gabrieleno Band of Mission Indians – Kizh Nation.

    b. The impacts to known resources on the property.

    c. A summary of how each mitigation measure was fulfilled.

    d. The type and disposition of cultural resources recovered.

    e. Evidence of cultural sensitivity training provided to construction staff prior to project commencement.

    f. A confidential appendix including daily/weekly monitoring notes prepared by the monitors. All reports produced shall be submitted to the City of Ontario, the Gabrieleno Band of Mission Indians – Kizh Nation, and any other relevant agencies.

3.2.13 Utilities and Service Systems

Approved Project Findings

TOP 2050 SEIR determined that, following compliance with all applicable regulations and ordinances issued by the Inland Empire Utilities Agency (IEUA), wastewater generated by the approved project could be adequately treated by the wastewater service provider and would not require the construction of new wastewater treatment facilities or the expansion of existing facilities or exceed wastewater treatment requirements of the Regional Water Quality Control Board. Additionally, TOP 2050 SEIR concluded that water demand in the City is projected through 2045 in the *City of Ontario 2020 Urban Water Management Plan* (2020 UWMP), and therefore the City's water supply and delivery systems are adequate to meet the requirements of the approved project. Further, as discussed in Section 3.2.8, *Hydrology and Water Quality*, in order to ensure existing and proposed drainage systems under the approved project are adequate to serve buildout of TOP 2050, TOP 2050 SEIR requires all future development to prepare hydrology and hydraulic studies in accordance with the County Hydrology Manual and analyze stormwater flows that result from the 100-year storm event to ensure that the capacities of the storm drain systems are not exceeded. Additionally, future projects would be required to comply with the Santa Ana RWQCB MS4 permit and the San Bernardino County Stormwater Program. Lastly, TOP 2050 determined that existing and/or proposed facilities would be able to accommodate solid waste generated by the approved project, and that the approved project would comply with related solid waste regulations. Overall,

it was determined that impacts to utilities and service systems would be less than significant following compliance with existing regulations and policies.

Modified Project Analysis

The modified project proposes to install a sewer line on-site to connect to an existing 12-inch sewer main in East Holt Boulevard. As the modified project site is currently vacant, development of the modified project would generate additional wastewater compared to existing conditions, which could increase sewer flows and increase demand on the wastewater treatment provider. However, the modified project has a similar footprint compared to the site buildout envisioned by the approved project. As such, the City's Sewer Master Plan and Capital Improvement Program accounted for buildout of the modified project site, and the modified project would be adequately served by the existing conveyance system. Additionally, as stated in TOP 2050 SEIR, IEUA has experienced a decrease in the volume of sewage flow of approximately 10 percent over the last 20 years, due to a decrease in indoor water consumption with new development compliance with California Green Building Standards Code and water conservation efforts. The IEUA anticipates a significant increase in the growth of its service area in the next ten years, with 40 percent of the growth resulting from new development in the City. The IEUA develops 10-year forecasts and specifies capital improvements that will be implemented to meet the increase in demand; further, future projects have been assumed in the IEUA's Sewer System Management Plans. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

The modified project proposes water line connections from the site to an existing 12-inch water main in East Guasti Road along the modified project frontage and an existing 6-inch water main in East Holt Boulevard along the modified project frontage. Additionally, the modified project proposes to install an 8-inch recycled water main in East Guasti Road that connects to an existing 8-inch recycled water main in Convention Center Way (north of East Holt Boulevard) to extend south in East Guasti Road to end east of the Cucamonga Creek Channel. Given that the modified project site is currently vacant, development of the modified project would increase water demand. As stated in TOP 2050 SEIR, the City has the discretion to require water capacity studies associated with new development and redevelopment and currently requires site-specific studies to determine a project's impact throughout the water system. As such, *Water Supply Assessment and Written Verification of Sufficient Water Supply for the Empire Groves Hotel Specific Plan* (Water Supply Assessment), prepared by PlaceWorks and dated August 2024, was prepared for the modified project; refer to Appendix K, *Water Supply Assessment*. Based on the Water Supply Assessment, the modified project would result in total potable water demand of approximately 80.60 acre-feet per year (AFY) and total recycled water demand of approximately 13.35 AFY. Development of the project site consistent with the site's MU-Multimodal land use designation was previously included in the 2020 UWMP. Therefore, water demand associated with the modified project was compared to water demand associated with buildout of the site as a mixed-use

development consistent with the 2020 UWMP. The results showed that the modified project would result in a net increase in potable water demand by 43.55 AFY compared to the approved project and a net decrease in recycled water demand by 1.71 AFY compared to the approved project. Nonetheless, the net increase in potable water demand is within the 2020 UWMP projected water demand increases for the years 2025 to 2030, which is within the timeframe in which the modified project is anticipated to be completed. Furthermore, the City has the ability to increase groundwater production from the Chino Basin as well as increase imported water. As such, the City would have sufficient water supplies available during normal, single dry, and multiple dry years through the year 2045 to meet all projected water demands associated with its existing and future customers, including the modified project. The modified project would also be required to pay connection fees, which would offset the costs of system maintenance and capital upgrades to support the new development in the City's service area. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

The modified project proposes stormwater improvements consisting of an underground detention system and stormwater pump in the southeast corner of the site. According to the Hydrology Report prepared for the modified project, modified project implementation would increase impervious areas on-site, thereby increasing flows discharging from site. As such, the proposed stormwater pump would be installed to convey flows to the proposed underground detention system for treatment and restricted flow into an existing 108-inch stormwater line in Guasti Road. The proposed stormwater improvements would ensure the modified project do not cause a significant impact to downstream systems and discharge flows are reduced compared to existing conditions. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Given that the modified project site is currently vacant, development of the modified project would increase solid waste generation and increase demand for solid waste services. The approved project was estimated to occupy approximately two percent of the Badlands Sanitary Landfill and the El Sobrante Landfill remaining capacities. Given that the modified project has a similar development potential to the buildout envisioned for the City's MU-Multimodal designated areas by the approved project, it is not anticipated that development of the modified project would substantially increase solid waste generation. Additionally, the modified project would be required to comply with CALGreen, AB 341, AB 1826, and TOP 2050 policies regarding waste diversion. The modified project would not result in a new significant environmental effect or substantial increase in the severity of a previously identified significant environmental effect as compared to the conclusions of TOP 2050 SEIR.

Certified TOP 2050 SEIR Mitigation Measures: Not Applicable.

Addendum Project Conditions: None.

4.0 DETERMINATION/ADDENDUM CONCLUSION

As detailed in the analysis presented above, this Addendum supports the conclusion that the modified project constitutes minor or technical changes and do not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects as compared to the conclusions of TOP 2050 SEIR. No new information has become available and no substantial changes to the circumstances under which the approved project was being undertaken since the certification of TOP 2050 SEIR have occurred. As identified in TOP 2050 SEIR, the approved project would result in significant environmental impacts with regard to air quality, cultural resources, noise, and transportation. However, the modified project would not substantially increase the severity of these effects. In addition, there are no new or different mitigation measures or alternatives that would substantially reduce these significant impacts.

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5.0 REFERENCES

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California Department of Forestry and Fire, *Fire Hazard Severity Zones in State Responsibility Area*, effective April 1, 2024, https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=988d431a42b242b29d89597ab693d008, accessed August 14, 2024.

ECORP Consulting, Inc., *Archaeological Resources Inventory and Evaluation Report for the Ontario Hotel Project on the East Corner of Holt Boulevard and Guasti Road, San Bernardino County, California*, August 2023.

ECORP Consulting, Inc., *Biological Technical Report for the Ontario Hotel Project, San Bernardino County, California*, December 2024.

Kimley-Horn and Associates, Inc., *Preliminary Hydrology Report for Diversified Empire Hotel, APN: 0010-322-33, Southeast of Holt Blvd and Guasti Road*, October 2023.

Kimley-Horn and Associates, Inc., *Water Quality Management Plan for: Empire Hotel, APN: 001032233*.

Petra Geosciences, Inc., *Phase I Environmental Site Assessment: Proposed Empire Resort and Spa, Southeast Corner of E. Holt Boulevard and E. Guasti Road, APN 0110-322-33-0-000, City of Ontario, San Bernardino County, California 91761*, December 5, 2023.

Petra Geosciences, Inc., *Preliminary Geotechnical Evaluation, Proposed Empire Resort And Spa Project, Approximately 10.4 Acres Of Vacant Land At Southeast Corner Of E. Holt Boulevard And E. Guasti Road, APN 011 032 233, City Of Ontario, San Bernardino, California*, February 10, 2023.

PlaceWorks, *Water Supply Assessment and Written Verification of Sufficient Water Supply for the Empire Groves Hotel Specific Plan*, August 2024.

Translutions, Inc., *Empire Groves Hotel – VMT Analysis*, October 12, 2023.

Urban Crossroads, *Empire Groves Hotel Air Quality Impact Analysis, City of Ontario*, April 19, 2024.

Urban Crossroads, *Empire Groves Hotel Greenhouse Gas Analysis, City of Ontario*, September 9, 2024.

Urban Crossroads, *Empire Groves Hotel Noise Impact Analysis, City of Ontario*, May 13, 2024.

APPENDICES

Appendix A
Phase I ESA

PETRA GEOSCIENCES INC.

SOLID AS A ROCK

ENGINEERS + GEOLOGISTS + ENVIRONMENTAL SCIENTISTS

PHASE I ENVIRONMENTAL SITE ASSESSMENT

PROPOSED EMPIRE RESORT AND SPA
SOUTHEAST CORNER OF E. HOLT BOULEVARD AND E. GUASTI ROAD
ASSESSOR PARCEL NUMBER (APN) 0110-322-33-0-000
CITY OF ONTARIO, SAN BERNARDINO COUNTY, CALIFORNIA 91761

DIVERSIFIED PACIFIC COMMUNITIES

December 5, 2023
J.N. 22-398

4646

December 5, 2023
J.N. 22-398

DIVERSIFIED PACIFIC COMMUNITIES
10621 Civic Center Drive
Rancho Cucamonga, California 91730

Attention: Mr. Nolan Leggio

Subject: **Phase I Environmental Site Assessment: *Proposed Empire Resort and Spa,* Southeast Corner of E. Holt Boulevard and E. Guasti Road, APN 0110-322-33-0-000, City of Ontario, San Bernardino County, California 91761**

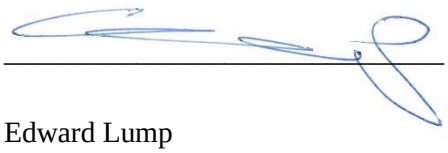
Dear Mr. Leggio:

Petra Geosciences, Inc. (Petra) presents this Phase I Environmental Site Assessment for the above-referenced site. This assessment has been conducted in accordance with our Supplemental Proposal No. 22-398P, dated October 20, 2023, and in conformance with the scope and limitations of the standards set forth in the American Society for Testing and Materials (ASTM) Practice E 1527-21, the EPA's All Appropriate Inquiry (AAI) regulations 40 CFR Part 312.

This opportunity to be of service to you is sincerely appreciated. Please do not hesitate to call this office if you have questions pertaining to this report.

Respectfully submitted,

PETRA GEOSCIENCES, INC.



Edward Lump
Associate Geologist



Siamak Jafroudi, PhD
Senior Principal Engineer

EXECUTIVE SUMMARY

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Proposed Empire Resort and Spa
Southeast Corner of E. Holt Boulevard and E. Guasti Road
Assessor Parcel Number (APN) 0110-322-33-0-000
City of Ontario, San Bernardino County, California 91761

INTRODUCTION

The information presented in this report includes the results of our recent site reconnaissance, a review of pertinent literature, and recent federal, state, and local government agency records. Our field reconnaissance, data gathering, and compilation was performed by Mr. Edward Lump, Associate Geologist, with oversight by Dr. Siamak Jafroudi President and Principal Engineer.

SITE DESCRIPTION AND GENERAL INFORMATION

1. The subject property is a vacant site located at the southeasterly corner of E. Holt Boulevard and E. Guasti Road in the city of Ontario, San Bernardino County, California. The site is bounded by hotel properties to the north and west; improved Cucamonga Creek to the east and a distribution center and vacant land beyond; and a railroad line to the south with Ontario International Airport beyond. Sidewalks are not present along any street edges bounding the subject property. Chain link fencing delineates the subject site boundary perimeter. A site location map is included as Figure 1.

2. The subject site is comprised of one parcel of approximately 10.4-acres with Assessor Parcel Number (APN) 0110-322-33-0-000. A plan showing recent conditions on the site is included as Figure 2.

3. Access to the subject property is via an open gate off E. Guasti Road near E. Holt Boulevard. A second locked gate is situated further south. At the time of our field reconnaissance, the site was vacant land. A majority of the subject site is covered with moderately thick to thick, dry native vegetation with somewhat scattered trees; however, an irregularly shaped strip of cleared vegetation exists along the westerly side of the subject site, exposing native soil. Some of this cleared area is covered with gravel. Some of the trees have been uprooted and partially ground up to mulch. A thinner strip of partially cleared vegetation exists along the east property boundary with Cucamonga Creek. Windblow trash and debris is common along the northern boundary with E. Holt Boulevard and to a lesser extent along the west and south boundary with E. Guasti Road. Windblown trash and debris are occasionally observed along the east edge of the dirt area and the brush area of the northwesterly area onsite. The site slopes gently to the southeast with existing elevations on the order of 965 feet above mean sea level (msl) to 950 feet above msl (USGS, 1981).

4. Within the subject property trash and debris is minimal. The largest area of debris is in the northeastern portion of the subject site, where what appears to be remnants of a homeless encampment was observed. Three dumped piles of soil noted in the south-central area of the subject property appear to be relatively recent. It appears these soil piles were placed on top of a relatively thin layer of leveled fill soil. Except for roots/rootlets, the surface of these piles was clean of trash and debris. Except for occasional concrete fragments, trash and debris was limited within the subject property. A few small areas of waste concrete and asphalt were noted among the brush in the interior of the subject site.

5. No water wells were observed on site during our reconnaissance.

6. Overhead power lines were observed adjacent to the subject property during our site reconnaissance. Overhead lines with one pole mounted transformer were noted outside the fence along the east side of E. Guasti Road near a fire hydrant. The transformer appeared to be in good condition at the time of our reconnaissance. No ground surface staining or distressed vegetation was noted below the transformer. No pad mounted transformers were observed; however, yellow bollards were observed near two high voltage SCE risers and a vault within the southwesterly portion of the subject site. Closer to the open gate, a buried concrete water valve box was observed inside the fence line.

7. Information obtained during this assessment indicated that the subject property and vicinity appeared to have been utilized for agricultural purposes in the form of grape orchards from at least 1938 to sometime after/during 1975 and before/during 1985. No structures were observed within the subject site boundary from at least 1938 to the present day. From 1985 to 2023, the subject property was vacant and undeveloped land with relatively uniform native vegetation and scattered trees. Holt Boulevard was constructed along the north side of the subject property from at least 1938. Guasti Road was constructed along the south and western site boundary sometime after/during 1985 and before/during 1989. Historical information reviewed during this assessment includes aerial photographs (dating back to 1938), USGS topographical maps (dating back to 1897), and interviews.

8. No sites were identified in our search of various government agency database records, which appear to have impacted the soils or groundwater beneath the subject site.

9. There was no evidence of drums, above ground storage tanks, underground storage tanks, sumps, pits, pools, or lagoons identified within the subject property boundary during our site assessment.

RECOGNIZED ENVIRONMENTAL CONDITIONS

Recognized environmental conditions are defined by the American Society of Testing and Materials (ASTM) as any hazardous substance or petroleum product under conditions that indicate an existing, past, or material threat of release into the structures, ground, groundwater, or surface water at the subject site. If the presences of recognized environmental conditions are identified on a subject site, it may warrant additional research, site assessment, and/or action.

- No REC's have been identified within or affecting the subject property.

Controlled recognized environmental conditions (CREC'S) are defined by the American Society of Testing and Materials (ASTM) Practice E 1527-21 as a recognized environmental condition resulting from the past *release* of *hazardous substances* or *petroleum products* that has been addressed to the satisfaction of the applicable regulatory authority (i.e., as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with *hazardous substances* or *petroleum products* allowed to remain in place subject to the implementation of required controls. For example, if a leaking underground storage tank has been cleaned up to a commercial use standard but does not meet unrestricted residential cleanup criteria; this would be considered a controlled recognized environmental condition. The "control" is represented by the (inferred) restriction that the property remains commercial.

- No CREC's have been identified within or affecting the subject property.

Historical recognized environmental conditions (HREC'S) are defined by the American Society of Testing and Materials (ASTM) Practice E 1527-21 as a past release of any *hazardous substances or petroleum products* that has occurred in connection with the *property* and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory agency, without subjecting the *property* to any required controls (i.e., *property* use restrictions, *activity and use limitations*, *institutional controls* or *engineering controls*).

- No HREC's have been identified within or affecting the subject property.

We have performed a Phase I Environmental Site Assessment in general conformance with the scope and limitations of ASTM Practice E 1527-21 for the subject property, APN 0110-322-33-0-000, located at the southeast corner of E. Holt Boulevard and E. Guasti Road, in the City of Ontario, San Bernardino County, California. Any exceptions to, or deletions from, this practice are described in the section titled data gaps of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the subject property at this time.

SITE CONSIDERATIONS

The items presented below are not considered recognized environmental conditions in accordance with ASTM E 1527-21. Although these items may warrant consideration in conjunction with any planned development activities, they are not recognized environmental conditions. The information regarding possible actions relative to these items has been provided as guidance.

1. With re-development of any former agricultural property, a certain amount of unknown subsurface conditions may be anticipated. Any discolored soils, noxious odors, buried pipelines or irrigation channels, and/or other buried objects/debris encountered during clearing and grubbing, or future grading and development should be left in place until an experienced environmental professional (such as Petra) has had the opportunity to evaluate the conditions and provide recommendations if needed.

2. It is possible that abandoned irrigation lines will be encountered during demolition, clearing, and grubbing, or rough grading. If these irrigation lines are concrete, they should be left in place until an experienced environmental professional (such as Petra) has had the opportunity to evaluate the conditions and provide recommendations if needed. In the event concrete irrigation lines are encountered, caution should be taken to not crush the lines until it can be ascertained that they do not contain asbestos.

3. It is recommended that all debris and trash observed on the subject site be removed and disposed of in accordance with current local, state and federal disposal regulations.

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PHASE I ENVIRONMENTAL SITE ASSESSMENT

Proposed Empire Resort and Spa
Southeast Corner of E. Holt Boulevard and E. Guasti Road
Assessor Parcel Number (APN) 0110-322-33-0-000
City of Ontario, San Bernardino County, California 91761

INTRODUCTION

The information presented in this report includes the results of our recent field reconnaissance, a review of various federal, state, and local government agency records, and a review of historic aerial photographs and topographic maps for the site and vicinity. This report includes a summary of our findings, our opinion as to the current environmental condition of the site, and recommendations for additional work, if needed.

Purpose

This assessment was conducted to determine if any recognized environmental conditions exist on the subject site. Recognized environmental conditions are defined by the American Society for Testing and Materials (ASTM) as any hazardous substance or petroleum product under conditions that indicate an existing, past, or material threat of release into the structures, ground, groundwater, or surface water at the subject site.

This assessment is also intended to satisfy the requirement for conducting all appropriate inquiries into the previous ownership and uses of a property for the purposes of meeting the all appropriate inquiries provisions necessary to qualify for certain landowner liability protections under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

We have performed this assessment in general conformance with the scope and limitations of the standards set forth in the ASTM Practice E 1527-21, the EPA's All Appropriate Inquiry (AAI) regulations 40 CFR Part 312.

Involved Parties

This report was prepared by Petra Geosciences, Inc. (Petra), at the request of Diversified Pacific Communities, for their exclusive use. Use of this report or reliance thereon by other parties or projects is not authorized. The report may not be suitable for other parties or other purposes.

SCOPE OF ASSESSMENT

The scope of this assessment included the following:

1. Performing a site reconnaissance to identify the current conditions and land use of the subject site and adjoining properties, during which visual evidence of prior uses of the subject site and adjoining properties were noted. The site reconnaissance included an observation of the site surface and the site perimeter. Representative photographs of our site walk are provided in Appendix A.

2. Researching historical land use of the subject site and vicinity by reviewing available historical aerial photographs, United States Geologic Survey (USGS) topographic maps, fire insurance maps, city directories, and other reasonably ascertainable maps and data (Appendix C).

3. Review Preliminary Title Search document by Ticor Title, dated May 6, 2022, provided by the client (Appendix E).

4. Conducting a search for Environmental Liens and Activities and Use Limitations (AULs) back to 1980 for the subject property parcel (Appendix C).

5. Performing a cursory review of local and regional geological conditions as they pertain solely to commenting of recognized environmental conditions for the site.

6. Obtaining and reviewing a search of pertinent federal, state, and local regulatory agency databases concerning environmental conditions on and in the vicinity of the site. As specified in the ASTM and AAI standards, the following databases were searched using, at a minimum, the recommended search radius:

    - Federal National Priority List (NPL) site list,
    - Federal Delisted NPL site list,
    - Federal Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) site list,
    - Federal CERCLIS- No Further Remedial Action Planned (CERC-NFRAP) site list,
    - Federal Resource Conservation and Recovery Act Information (RCRA) Corrective Action Report (CORRACTS) facilities list,
    - Federal RCRA non-CORRACTS Treat, Store and Dispose (RCRA-TSD) facilities list,
    - Federal RCRA generators list,
    - Federal institutional control/engineering control registries,
    - Federal Emergency Response Notification System (ERNS) list,
    - State and tribal lists of hazardous waste sites identified for investigation or remediation including: State- and tribal-equivalent NPL, State, and tribal-equivalent CERCLIS lists,
    - State and tribal landfill and/or solid waste disposal site lists,
    - State and tribal leaking storage tank lists,
    - State and tribal registered storage tank lists,
    - State and tribal institutional control/engineering control registries,
    - State and tribal voluntary cleanup sites, and
    - State and tribal Brownfield sites.

    In the interest of thoroughness, numerous non-ASTM and non-AAI required databases were also searched. These databases are listed and discussed in the database search included within this report (Appendix B).

7. Contacting and interviewing knowledgeable persons, such as property owners, managers, and representatives of local government agencies regarding historical site use and current site conditions, if possible.

8. Evaluating the presence of recognized environmental conditions at the subject site through visual observation and research of reasonably ascertainable records. Recognized environmental conditions may include the presence of hazardous materials, petroleum products, underground storage tanks, above ground storage tanks, drums, chemical containers, polychlorinated biphenyls

(PCB's), liquid or solid wastes, oil wells, and areas indicative of potential contamination including stained soils and/or pavement, stressed vegetation, drains, sumps, pits, ponds, lagoons, odors, and septic systems.

9. Preparing this report presenting the results of our assessment.

10. Non-Scope Items. In addition to those items discussed above, several items outside the scope of ASTM Standard E 1527-21 and AAI will be addressed in this assessment. The non-scope items include:

    a. Cursory visual examination of the site for the potential presence of asbestos containing materials. Please note this is not a survey for these materials.

    b. Cursory visual examination of the site for the potential presence of lead-based paint. Please note this is not a survey for these materials.

Unless listed above, this assessment does not include any testing or sampling of materials (such as an assessment for the potential presence of methane or radon, asbestos or lead-based paints, or the sampling and testing of soil, soil vapor, air, surface water, or groundwater). This assessment does not include evaluating the site for the presence of wetlands, regulatory compliance, or other items beyond the scope of ASTM E 1527-21 or 40 CFR Part 312, nor is it an assessment for vapor intrusion as defined by ASTM E 2600-15.

SITE OVERVIEW

According to the California Department of Conservation, Geologic Energy Management Division (CalGEM) Online Mapping System (2023), the site is located within Township 01 South, Range 07 West, Section 22, San Bernardino Base and Meridian. Site elevations range from approximately 965± feet above mean sea level (msl) in the northern portion of the site, to 950± feet above msl in the southeast (USGS, 2018). A site location map is included as Figure 1.

The subject site is comprised of one parcel of approximately 10.4-acres with Assessor Parcel Number (APN) 011-032-233. The site is bounded by hotel properties to the north and west; improved Cucamonga Creek to the east and a distribution center and vacant land beyond; and a railroad line to the south with Ontario International Airport beyond. Sidewalks are not present along any street edges bounding the subject property. Chain link fencing delineates the subject site boundary perimeter. An aerial photograph showing the configuration of the subject property is attached as Figure 2.

PREVIOUS LAND USE

Information obtained during this assessment indicated that the subject property and vicinity appeared to have been utilized for agricultural purposes in the form of grapes from at least 1938 to sometime after/during 1975 and before/during 1985. No structures were observed within the subject site boundary from at least 1938 to the present day. From 1985 to 2023, the subject property was vacant and undeveloped land with relatively uniform native vegetation and scattered trees. Holt Boulevard was constructed along the north side of the subject property from at least 1938. Guasti Road was constructed along the south and western site boundary sometime after/during 1985 and before/during 1989. Historical information reviewed during this assessment includes aerial photographs (dating back to 1938), USGS topographical maps (dating back to 1897), and interviews.

PREVIOUS REPORTS

No previous environmental report for the subject site was provided to Petra for review during this assessment.

As a part of this assessment, Petra also reviewed potential environmental concerns associated with facilities in proximity to the subject property via electronic reports, maps, and/or databases. Information from our review is incorporated into this report.

ENVIRONMENTAL SETTING

The following section provides a cursory overview of the regional and local geologic setting and includes information pertaining to groundwater conditions in the vicinity of the subject site. Geotechnical hazard information (faults, landslides, etc.) is not part of this assessment. This section does not constitute a geotechnical evaluation of the subject property and should not be taken as such.

Geology

Geologically, the site lies within the northern portion of the Peninsular Ranges Geomorphic Province (CGS, 2002). The Peninsular Range Province extends from the tip of Baja California north to the Transverse Ranges Geomorphic Province and is characterized by northwest trending mountain ranges separated by subparallel fault zones. The San Bernardino Mountains, located north of the site, provides the boundary between the Peninsula Range Province and the Transverse Ranges Province. In general, the province is underlain primarily of plutonic rock of the Southern California Batholith. The Peninsular Range Geomorphic Province is generally characterized by alluviated basins and elevated erosion surfaces.

More specifically, published geologic maps of the area indicate that the site and surrounding alluvial areas are underlain by Holocene- and Late Pleistocene-age Young alluvial-fan deposits (Bedrossian, Hayhurst, and Roffers, 2010). This soil is described as unconsolidated to slightly consolidated boulder, cobble, sand, and silt deposits issued from a confined valley or canyon.

Surface Water

No indication of surface water was observed on the property or in close proximity at the time of our site reconnaissance.

The subject property is situated within Flood Insurance Rate Map (FIRMette) 06071C8628J. Most of the subject property is mapped within Zone X, defined as an area defined as areas of 0.2 percent annual chance flood; and areas of 1 percent annual chance flood with average depths of less than 1 foot or within drainage areas less than 1 square mile. A small portion of the north central portion of the subject property is also mapped within Zone X, defined, however, as an area of minimal flood hazard. Cucamonga Creek is within Zone A, defined as a 1 percent annual chance flood discharge contained within structure. The FIRMette map (effective February 10, 2015) is provided in Appendix B.

Groundwater

The site is located within the Upper Santa Ana Valley - Chino (8-002.01) Groundwater Basin. No historic groundwater wells are listed within the subject site on the CDWR water data library (CDWR, 2023). Based on our review, the closest mapped well to the subject property (Chino-1002337) is mapped on the north side of the I-10 Freeway, approximately 3,300 feet to the northeast. In April 1929, this well reported a depth to groundwater of approximately 219 feet below the ground surface (bgs). In 1944 depth was recorded as 242 feet bgs; in 2000 355 feet bgs; in 2018 343 feet bgs; and, in March 2023 344 feet bgs. In general, groundwater depth varies within the area and though flow direction specifically beneath the subject property is unknown, it is reasonable to estimate flow to follow regional topography to the south/southeast.

RESULTS OF ASSESSMENT

The results of our site reconnaissance and assessment of adjacent sites, agency database review, and historical land use study are presented in the following sections.

Site Observation

Petra conducted a reconnaissance of the subject site on November 4, 2023. Representative site photographs are included in Appendix A. Our site observations are summarized below.

1. The subject property is a vacant site located at the southeasterly corner of E. Holt Boulevard and E. Guasti Road in the city of Ontario, San Bernardino County, California. The site is bounded by hotel properties to the north and west; improved Cucamonga Creek to the east and a distribution center and vacant land beyond; and a railroad line to the south with Ontario International Airport beyond. Sidewalks are not present along any street edges bounding the subject property. Chain link fencing delineates the subject site boundary perimeter. A site location map is included as Figure 1.

2. The subject site is comprised of one parcel of approximately 10.4-acres with Assessor Parcel Number (APN) 0110-322-33-0-000. A plan showing recent conditions on the site is included as Figure 2.

3. Access to the subject property is via an open gate off E. Guasti Road near E. Holt Boulevard. A second locked gate is situated further south. At the time of our field reconnaissance, the site was vacant land. A majority of the subject site is covered with moderately thick to thick, dry native vegetation with somewhat scattered trees; however, an irregularly shaped strip of cleared vegetation exists along the westerly side of the subject site, exposing native soil. Some of this cleared area is covered with gravel. Some of the trees have been uprooted and partially ground up to mulch. A thinner strip of partially cleared vegetation exists along the east property boundary with Cucamonga Creek. Windblow trash and debris is common along the northern boundary with E. Holt Boulevard and to a lesser extent along the west and south boundary with E. Guasti Road. Windblown trash and debris are occasionally observed along the east edge of the dirt area and the brush area of the northwesterly area onsite. The site slopes gently to the southeast with existing elevations on the order of 965 feet above mean sea level (msl) to 950 feet above msl (USGS, 1981).

4. Within the subject property trash and debris is minimal. The largest area of debris is in the northeastern portion of the subject site, where what appears to be remnants of a homeless encampment was observed. Three dumped piles of soil noted in the south-central area of the subject property appear to be relatively recent. It appears these soil piles were placed on top of a relatively thin layer of leveled fill soil. Except for roots/rootlets, the surface of these piles was clean of trash and debris. Except for occasional concrete fragments, trash and debris was limited within the subject property. A few small areas of waste concrete and asphalt were noted among the brush in the interior of the subject site.

5. No water wells were observed on site during our reconnaissance.

6. Overhead power lines were observed adjacent to the subject property during our site reconnaissance. Overhead lines with one pole mounted transformer were noted outside the fence along the east side of E. Guasti Road near a fire hydrant. The transformer appeared to be in good condition at the time of our reconnaissance. No ground surface staining or distressed vegetation was noted below the transformer. No pad mounted transformers were observed; however, yellow bollards were observed near two high voltage SCE risers and a vault within the southwesterly portion of the subject site. Closer to the open gate, a buried concrete water valve box was observed inside the fence line.

7. There was no evidence of drums, above ground storage tanks, underground storage tanks, sumps, pits, pools, or lagoons identified within the subject property boundary during our site assessment.

Adjacent Site and Vicinity Observations

The property is situated in an area of commercial land use. Our observations are noted below:

South To the south of the property is E. Guasti Road, a railroad line and Ontario Airport beyond.

East To the east of the site is Cucamonga Creek, with a distribution center to the northeast and a vacant lot to the southeast beyond.

West To the west of the property is E. Guasti Road, with a hotel beyond.

North To the north of the site is E. Holt Boulevard and the east bound onramp to I-10, with hotel development beyond.

Government Agency Database Research

A search of federal, state, and local government listings was performed by Environmental Data Resources, Inc. (EDR) for the purposes of this report. The search radius used for all government databases meets or exceeds the standard search distance adopted by ASTM and AAI.

Results of Agency Records Search

A data search of the various government agency records listed in Appendix C revealed two listings mapped for the subject site under the Facility Index System/Facility Registry System (FINDS), Enforcement & Compliance History Information (ECHO), and Aerometric Information Retrieval System-Minor (US AIRS) databases. The Site Name is listed as Marriott Airport Hotel, 2200 E. Holt Street, Ontario, CA 91761. Based upon our site reconnaissance and Bing Maps, 2200 E. Holt Boulevard is located on the west side of E. Guasti Road (the subject property is located on the east). These database listings pertain solely to air quality monitoring of stationary sources of air pollution.

The EDR report shows 57 other listings at approximately 25 addresses within the requested search radii. Eighteen of the listings refer to businesses reported only under the Resource Conservation Recovery Act (RCRA) NonGenerator (RCRA NonGen/NLR) or San Bernardino County Permit (CA San Bern. Co. Permit) databases. Thirty-six of the listings are mapped within 1,760 feet (1/3 mile) of the center of the subject property; however, 13 are mapped at a down- or cross-groundwater gradient. Thirty-one orphan sites (sites with inadequate address information to be mapped by EDR) were identified during the agency database search. Refer to the EDR Radius Map Report in Appendix C for the search radii completed for this assessment.

The linear distance and groundwater gradient guidelines provided in ASTM E2600-15 (Tier 1 Areas of Concern) are used as a reasonable screening tool for groundwater and vapor migration to identify a

recognized environmental condition (REC) associated with the subject site (ASTM, 2015; Buonicore, 2014). For contaminated sources (such as a dry cleaner with a PCE release or a gas station with a leaking underground storage tank releasing BTEX) located up-gradient of the Target Property (TP), the focus would be on those contaminated sites within the AOC distance of 1,760 feet. The AOC search distance in the cross-gradient quadrant is reduced from 1,760 feet to 365 feet and the AOC for contaminated sites down-gradient from the TP is reduced from 1,760 feet to 100 feet.

A brief description of the sites listed in the EDR report, which are of potential concern due to the nature of the listing or their proximity to the site (i.e., within the AOC), is provided below. EDR's VEC Map application depicting the AOC pertaining to the subject property is provided in Appendix B.

Sites A1 & A2 Target Site: Marriott Airport Hotel, 2200 E. Holt St., Ontario, CA 91761: This listing is mapped as the Target Property; however, as noted above, Bing Maps located this address and hotel across E. Guasti Road from the subject property. This address is reported under the Facility Index System/Facility Registry System (FINDS), Enforcement & Compliance History Information (ECHO), and Aerometric Information Retrieval System-Minor (US AIRS) databases. Under FINDS, the Air Facility System (AFS) contains compliance and permit data for stationary sources of air pollution regulated by the US EPA, state, and local air pollution agencies. No additional pertinent data is provided. No additional pertinent data is provided under ECHO. Under US AIRS MINOR, the default air classification code is reported as MIN. The air program is reported as "Stratospheric Ozone Protection." The activity group is listed as "Compliance Monitoring." No additional pertinent data is provided. Based upon the absence of a dual listing pertaining to an unauthorized release, spill, or leak of hazardous materials this adjacent property these listings do not appear to represent a recognized environmental condition (REC) with regards to the subject property currently.

Site 3: Well 29, Ontario, CA: This site is listed less than 1/8-mile east-northeast of and at a higher elevation than the subject site. This site is reported on the State Water Resources Control Board's (CA PFAS) database. EDR maps the well directly east of the Cucamonga Channel, which bounds the east edge of the subject property. The site use is reported as "Drinking Water Wells". Potential Contaminants of Concern are "not reported". Potential media affected is listed as "not reported". Site history is "not reported." The matrix is listed as "liquid." PFOA is listed as < 2 nanograms per liter (NG/L) in December 2019. An additional 10 PFAS analytes are reported at a concentration < 2 NG/L. No additional pertinent data is provided.

Based upon our experience with laboratory detection levels of PFAS in groundwater, a concentration reported as <2 NG/L represent a non-detect designation, or below the laboratory detection limit. Based upon the 2019 PFAS groundwater results, this listing does not appear to represent a recognized environmental condition (REC) with regards to the subject property currently.

Site B4: Frontier California: Airport RSC3/9, 2152 E. D St., Ontario, CA 91764: This site is listed less than 1/8-mile west-northwest of and at a higher elevation than the subject site. This site is reported on the San Bernardino County Permit (CA San Bern. Co. Permit) database. The permit category is listed as "hazardous materials 1-3 chemicals special." The facility status is listed as "active." The expiration date is reported as 5-31-2023. No additional pertinent data is provided. Based upon the absence of a dual listing pertaining to an unauthorized release, spill, or leak of hazardous materials this property listing does not appear to represent a recognized environmental condition (REC) with regards to the subject property currently.

Site 5: Holiday Inn, 2155 E. Convention Center Way, Ontario, CA 91764: This site is listed less than 1/8-mile north of and at a higher elevation than the subject site. This site is reported on the Resource Conservation Recovery Act (RCRA) Non-Generator/No Longer Regulated (RCRA NonGen/NLR) database. The Federal Waste Generation Description is reported as "not regulated, verified." The NAICS Code, 72111, is described as "hotels (except casino hotels) and motels." This facility has received no notices of violations and no evaluation actions. Based upon the absence of a dual listing pertaining to an unauthorized release, spill, or leak of hazardous materials this property listing does not appear to represent a recognized environmental condition (REC) with regards to the subject property currently.

Site B11: L.D. King, Inc., 2151 E. Convention Center Way, Suite 100, Ontario, CA 91764: This site is listed less than 1/8-mile northwest of and at a higher elevation than the subject site. This site is reported on the CA San Bern. Co. Permit database. The permit category is listed as "conditionally exempt small quantity generator." The facility status is reported as "inactive" as of 8-3-2005. No additional pertinent information is provided. Based upon the absence of a dual listing pertaining to an unauthorized release, spill, or leak of hazardous materials this property listing does not appear to represent a recognized environmental condition (REC) with regards to the subject property currently.

Site 14: Radisson Ontario Airport, 2200 E. Holt Blvd., Ontario, CA 91761: This site is listed less than 1/8-mile west of and at a higher elevation than the subject site. This site is reported on the CA San Bern. Co. Permit database. The permit category is listed as "hazardous materials 1-3 chemicals special." The facility status is listed as "inactive." The expiration date is reported as 9-30-2017. No additional pertinent data is provided. Based upon the absence of a dual listing pertaining to an unauthorized release, spill, or leak of hazardous materials this property listing does not appear to represent a recognized environmental condition (REC) with regards to the subject property currently.

Site D15: Mark Christopher Auto Center, 2131 Convention Center Way, Ontario, CA 91764: This site is listed between 1/8-mile and 1/4-mile northwest of and at a higher elevation than the subject site. This address is reported on CA EPA's California Underground Storage Tank (CA UST) database. The UST is permitted through San Bernardino County Fire Department. The installation date was listed as 1-7-1991. The double-walled steel UST is reported to have two compartments with a capacity of 4,000 gallons. The UST content is listed as regular unleaded. Tank piping was reported as fiberglass. Tank alarms are present. A permit for a second UST was listed for A 2,000-gallon used oil UST. The same general tank construction was reported. No additional pertinent information is provided. Based upon the absence of a dual listing pertaining to an unauthorized release, spill, or leak of hazardous materials this property listing does not appear to represent a recognized environmental condition (REC) with regards to the subject property currently.

Site D16: Mark Christopher Chevrolet, 2131 E. D St, Ontario, CA 91764: This site is listed between 1/8-mile and 1/4-mile northwest of and at a higher elevation than the subject site. This facility is reported on multiple regulatory agency databases including Small Quantity Hazardous Waste Generator (RCRA SQG) and multiple UST databases, which can be reviewed in EDR's *Radius Report* in Appendix C; however, this site was not reported on a leaking underground storage tank (LUST) database. This address is considered located up groundwater gradient from the subject property.

Under the CA San Bern. Co. Permit database, the permit category was listed as "1,320- to 10,000-gallon facility capacity." The facility status is listed as "active" with an expiration date of 10-31-2023. The second permit category was reported for "hazardous materials 11 – 30 chemicals" with the same status and expiration date. The permit also reported this facility as a "large quantity (hazardous waste) generator." These permits noted regular UST annual inspections per tank for the facility. Under the CA EPA's Environmental Reporting System (CERS) database, administrative violations were listed. Notes indicate

the facility returned to compliance, in some cases corrected during the agency inspection. No additional pertinent information is provided.

Based upon the absence of a dual listing pertaining to an unauthorized release, spill, or leak of hazardous materials this property the listing does not appear to represent a recognized environmental condition (REC) with regards to the subject property currently. Additional information is provided below under GeoTracker in the *Local Agencies* section.

Site D17: Metropolitan Transit District, 2131 D, Ontario, CA 91764: This site is listed between 1/8-mile and 1/4-mile northwest of and at a higher elevation than the subject site. This facility is reported on CA EPA's Historic Hazardous Waste & Substance Site (CA HIST CORTESE) database. No additional pertinent information is provided. Based upon the absence of a dual listing pertaining to an unauthorized release, spill, or leak of hazardous materials this property listing does not appear to represent a recognized environmental condition (REC) with regards to the subject property currently.

Site F30: Ontario Convention Center, 2000 Convention Center Way, Ontario, CA 91764: This site is listed between 1/8-mile and 1/4-mile northwest of and at a higher elevation than the subject site. This facility is reported on CA San Bern. Co. Permit and CA CERS databases. Under CA San Bern. Co. Permit, the owner of this facility is reported as the City of Ontario Utilities Department. The permit category is reported as "Hazardous Materials 4-10 Chemicals." The status is reported as "active" with an expiration date of 5-31-2023. Administrative violations and compliance evaluation inspections were listed. Notes indicate the facility returned to compliance, in some cases corrected during the agency inspection. No additional pertinent information is provided.

A second permit was listed for *Version Wireless: Turner* at the same address. The permit category is reported as "Hazardous Materials 1-3 Chemicals." The status is reported as "active" with an expiration date of 11-30-2021. This site was also listed under CERS, with a description of "Chemical Storage Facilities." Administrative violations and compliance evaluation inspections were listed.

Based upon the absence of a dual listing pertaining to an unauthorized release, spill, or leak of hazardous materials this property listing does not appear to represent a recognized environmental condition (REC) with regards to the subject property currently.

Site F31: AT&T Mobility-(USID26378), 2000 Convention Center Way, Ontario, CA 91764: This site is listed between 1/8-mile and 1/4-mile northwest of and at a higher elevation than the subject site. This facility is reported on the CA San Bern. Co. Permit database. Under CA San Bern. Co. Permit, the owner of this facility is reported as New Cingular Wireless PCS, LLC dba AT&T Mobility. The permit category is reported as "Hazardous Materials 1-3 Chemicals." The status is reported as "inactive" with an expiration date of 8-31-2022. No administrative violations or compliance evaluation inspections were listed. No additional pertinent information is provided. Based upon the absence of a dual listing pertaining to an unauthorized release, spill, or leak of hazardous materials this property listing does not appear to represent a recognized environmental condition (REC) with regards to the subject property currently.

All other site listings in the EDR report do not currently appear to represent a recognized environmental condition with regards to the subject site, due to the nature of the listings (school site assessments, non-generators, etc.), the oversight agency having granted No Further Action, the site being outside the AOC from the subject site, and/or their distance from the subject site and/or depth to contamination.

Orphan Sites

Orphan sites are those that the database search was not able to locate due to lack of complete address information. Thirty-one orphan sites are listed in the EDR report. Nine LUST listings for the City of Ontario and the Ontario Postal Service, four drycleaners, one EDR Manufactured Gas Plant (MGP), two EDR Historic Auto Stations, and five SLIC database listings were checked for location relative to the subject property. The drycleaners at 9359 Foothill Boulevard, Rancho Cucamonga, were over 1 mile north-northeast from the subject property. The MGP site appeared to be over a mile west of the subject site. The LUST listings were the most difficult to locate based upon the readably available data presented by EDR. The Post office LUST site was mapped by Bings Maps over a half mile to the west of the subject site and at a cross gradient. The remaining 8 City LUST listings were not located. The EDR Historic Auto database sites at 4265 E. Holt Boulevard appeared to be over 1 mile to the west. The 4 SLIC database sites listed Northrop, Lockheed, Douglass Aircraft Company, California Air National Guard, and GE Engine Service at the Ontario International Airport, which is south and down gradient from the subject property.

Based upon our cursory review of the most relevant orphan sites, the orphan sites do not appear to represent a recognized environmental condition (REC) with regards to the subject property at this time.

Local Agencies

Petra reviewed information held by the agencies listed below during the course of this assessment.

San Bernardino County Fire Department

The San Bernardino County Fire Department Hazardous Materials Division maintains records related to hazardous materials business and management plans, hazardous waste generation and onsite treatment, aboveground petroleum storage, underground storage tanks, and California Accidental Release Program facilities in San Bernardino County. Records held by this agency were accessed by EDR during the government database search. No listings for the subject site were reported by EDR.

California Regional Water Quality Control Board

The California Regional Water Quality Control Board-Santa Ana Region 8 (RWQCB) maintains records of leaking underground storage tank sites and groundwater cleanups for sites in the Santa Ana Region. Records held by the RWQCB were accessed by EDR during the government database search. No listings for the subject site were reported by EDR.

GeoTracker

The GeoTracker website maintains a record of environmental data for regulated facilities in California. No database listings for the subject site were reported on GeoTracker. The memorandum documenting this inquiry is included in Appendix B.

Based upon the number of database listings for Mark Christopher Auto Center (2131 Convention Center Way, Ontario, CA 91764) above in the *Results of Agency Records* database search, Petra reviewed information on GeoTracker. The facility was mapped with permitted underground storage tanks only. The permitting agency was reported as San Bernardino County Fire Department. A LUST listing was not reported. Based upon the absence of a dual listing pertaining to an unauthorized release, spill, or leak of hazardous materials, this confirms that this offsite property listing does not appear to represent a recognized environmental condition (REC) with regards to the subject property currently.

- GeoTracker PFAS Map

Per- and polyfluoroalkyl substances (PHAS) is a large family of emerging contaminants with over 2,000 fluorinated chemicals. The persistence and mobility of some PFAS, combined with decades of widespread use in industrial processes, certain types of firefighting foams, and consumer products, have resulted in their being present in environmental media at trace levels across the globe. Toxicological studies have raised concerns regarding the bioaccumulative nature and potential health concerns of some PFAS. As a result, our understanding of PFAS and the risks they may pose is rapidly evolving (ITRC, 2022).

Since the 1950s, many products commonly used by consumers and industry have been manufactured with or from PFAS, as the unique physical and chemical properties of PFAS impart oil, water, stain, and soil repellency, chemical and thermal stability, and/or friction reduction to a range of products. These products have applications in many industries, including the aerospace, semiconductor, medical, automotive, construction, electronics, and aviation industries, as well as in consumer products (such as carpets, clothing, furniture, outdoor equipment, food packaging), and firefighting applications (ITRC, 2022).

Effective February 25, 2022, for purposes of Proposition 65, the Office of Environmental Health Hazard Assessment (OEHHA) added perfluorooctanoic acid (PFOA) to the list of chemicals known to the State of California to cause cancer. On September 6, 2022, the US EPA issued a notice of proposed rulemaking to designate perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) as hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund).

Petra reviewed the interactive map of sites where water wells have analytical test data for the suite identified as per- and polyfluoroalkyl (PFAS), which include PHOA and PFOS (currently listed on CERCLA). One well was mapped in proximity to the subject property, just east of Cucamonga Creek (Public Drinking Water Well 29). Results for 12 different PFAS, including PFOA and PFOS, were reported as less than 2 nanograms per liter (ng/L) or non-detect on January 9, 2020. May 2023 US EPA Regional Screening Levels (RSLs) for tap water list PFOA at 0.06 micrograms per liter (µg/L) and PFOS at 0.04 µg/L (or 60 ng/L and 40 ng/L, respectively). No Maximum Contaminant Level (MCL) is provided. As such, non-detect concentrations, or the detection limit of PFOA and PFOS in groundwater, over 200 feet below the ground surface in the subject site area, are well below the RSLs for tap water.

<u>California Department of Conservation, Geologic Energy Management Division (CalGEM)</u>

According to the California Department of Conservation, Geologic Energy Management Division (CalGEM), there are no active or abandoned oil, or gas wells located on the subject site. Further, there were no indications of any such wells found during our reconnaissance of the subject site. A copy of this map is included in Appendix B.

California Department of Conservation

The California Department of Conservation, Division of Mine Reclamation's "Mines Online" interactive map was queried regarding mines in proximity to the subject property. The map depicted no mines within the subject property or within one mile of the subject property. The memorandum documenting this inquiry is included in Appendix B.

Department of Toxic Substances Control

The online database EnviroStor (DTSC, 2023), which provides records on LUSTs, SLICs, Priority cleanup sites and states sites, is maintained by the Department of Toxic Substances Control (DTSC). No database listings for the subject site were reported on EnviroStor. The memorandum documenting this inquiry is included in Appendix B.

Department of Toxic Substances Control – Land Use Covenants

Petra reviewed the DTSC's Permitting Land Use Covenants Web App for land use covenants (LUCs) affecting the subject property. None were found for the subject property. The memorandum documenting this inquiry is included in Appendix B.

National Pipeline Mapping System

Petra reviewed the National Pipeline Mapping System (NPMS, 2023) public viewer website for gas transmission pipelines and hazardous liquid trunklines on or close to the subject property. Due to security purposes, close-up map views are not available. According to the information reviewed, a hazardous liquid pipeline or petroleum pipelines are mapped south of Guasti Road, apparently along the railroad line. One of the pipelines is reported as permanently abandoned. The commodity of the second pipeline is reported as "non HVL product." The pipeline owner is listed as Kinder Morgan. A copy of this map is included in Appendix B.

Vapor Migration

Standards presented in ASTM E1527-21 considers the assessment of vapor migration similar to that of groundwater contamination. As a result, Petra reviewed documentation regarding surrounding sites near the subject property with known soil and groundwater contamination to preliminarily evaluate potential areas of concern for vapor migration/encroachment onto the subject property. An area of concern typically includes active or abandoned gas stations and dry cleaners, industrial facilities, and hazardous waste disposal and landfill facilities with known or suspected soil and/or groundwater contamination.

For vapor encroachment to represent a potential for vapor intrusion to structures within the subject property, vapors must have a pathway to create an indoor air quality condition (i.e., Recognized Environmental Condition). As a result, vapor encroachment from an offsite release onto the subject property does not immediately equate to vapor intrusion into existing or proposed structures within the subject property, and cannot be ascertained without additional field work.

In the absence of specific criteria within ASTM Standard E1527-21, Petra considered the linear distance and groundwater gradient guidelines provided in ASTM E2600-15 (Tier 1 Areas of Concern) as a reasonable screening tool for vapor migration to identify a recognized environmental condition (REC) associated with the subject site (ASTM, 2015; Buonicore, 2014). As a result of our review of readily available information, no surrounding sites have been identified during this assessment which would represent a concern in regard to vapor encroachment on to the subject site at this time.

Petra also reviewed the USEPA's default residential Vapor Intrusion Screening Levels (VISLs) for PFOA and PFOS. We found that these chemicals "are not considered sufficiently volatile and hazardous to pose inhalation risk via vapor from a soil or groundwater source". Currently, non-detect levels of PFOA and PFOS are reported in a public well adjacent to the subject property; however, groundwater is over 200 feet below the ground surface in proximity to the subject property and not anticipated to represent a potential environmental concern to the subject property unless groundwater rises to less than 100 feet below the ground surface. PHOA and PFOS vapor encroachment is not considered a likely risk to the subject property.

Evaluation of Records Search Results

In summary, no sites were identified in our search of various government agency database records, which may have significantly adversely impacted soil, soil vapor, or groundwater beneath the subject site at this time.

Results of Aerial Photo Analysis

Although aerial photographs can often be a valuable source of information in the assessment of historical land usage, it should be understood that information extrapolated from photographic images is strictly interpretation and not necessarily fact. For this reason, it may not be appropriate to draw conclusions regarding previous site activities based solely upon aerial photograph analysis.

In order to provide a complete assessment of historical land usage on and in the vicinity of the subject site, aerial photographs with coverage of the subject site and vicinity were obtained from EDR and viewed by a representative of this firm. Photographs from the years 1938, 1949, 1953, 1966, 1975, 1985, 1989, 1994, 2002, 2006, 2009, 2012, 2016, and 2020 were provided by EDR. Also, aerial photographs (i.e., Google Earth®) from 2020 through 2023 have been reviewed for this assessment and noted no significant changes to the subject property. A summary of the information obtained during the aerial photograph review follows. Copies of the aerial photographs obtained from EDR are included in Appendix C.

1938, 1949 and 1953 Photographs

In photographs from 1938, 1949, and 1953, the subject property and surrounding land is developed for agricultural purposes, which may consist of grapes. A roadway exists along the north and south boundaries of the site. An unimproved drainage is visible along the east boundary. Multiple rows of young and mature trees are observed mostly south of the dirt road along the south property boundary. What appears to be a railroad line is south of the dirt road. No buildings are readily visible within the subject property.

No readily detectable changes to the subject property were observed in the 1949 black and white aerial photograph. The roadway along the north site boundary is improved. The drainage channel east of the site appears to be channelized. Only one row of trees is visible on the north side of the dirt road south of the subject property. No significant changes are noted to land surrounding the subject site; however, the photograph has been blocked south of the railroad. Rows of cultivated vegetation remains visible within the subject property in the 1953 photograph. An airfield is visible south of the subject site. I-10 bridge construction is noted across the drainage north of the site.

1966, 1975, and 1985 Photographs

In the 1966 black and white aerial photograph, surface conditions within the subject property remain very similar to the previous photograph. Vegetation in the eastern two-thirds of the site appears less dense compared to the western one-third. A thin, north-south trending dirt road separates the two areas. No structures are visible within the subject property. What appears to be a farm compound is visible on the east side of the channel across from the southeast corner of the site. The drainage channel along the east edge of the site may be concrete lined. The I-10 Freeway north of the subject property appears active. An expanded airfield with at least two runways is visible south of the subject property.

The 1975 infrared aerial photograph depicts minimal changes to the subject property, except for checkered vegetation patterns. Additionally, vegetation onsite presents a light red or pink tone, suggesting lower plant vigor. An improved road (Guasti Road), which intersects Holt Boulevard, is visible along the south and western edges of the subject property. The farm compound east of the southeast portion of the subject property has expanded to the north and includes multiple buildings.

Cultivated vegetation rows are no longer visible onsite or in the site vicinity in the 1985 photograph. Areas of this vegetation are noted along the eastern property boundary with the drainage channel. Uniform grasses are observed within the remaining area of the subject property. Hotels are observed to the north, between I-10 and Holt Boulevard, including the northeast corner of Guasti Road and Holt Boulevard. What appear to be graded pads are observed to the west (across Guasti Road), to the northwest (across Holt Boulevard),

and to the northeast (across Holt Boulevard). A large building (commercial?) with parking and truck docks is east of the drainage channel, opposite the northeastern portion of the subject property. The farm compound remains east of the southeast portion of the site.

1989, 1994, 2002, 2006, 2009, and 2012 Photographs

In the 1989 photograph, the subject property is undeveloped with buildings visible. What appears to be native vegetation covers a majority of the subject site, except for the eastern edge and three thin areas crossing the site. Trees are noted in the northern portion of the site. Surrounding land appears to be built out to conditions similar to what is current in the vicinity, except for vacant lots across Holt Boulevard and the northeastern portion of the site. Except for the absence of vegetation clearings crossing the site, the subject property conditions in 1994 remain similar to the previous photograph. In addition, a small, half circle shaped clearing is observed on the southwest edge of the subject property. The farm compound east of the southeast portion of the site is no longer visible and the area consists of unform grasses. Except for local variations in onsite vegetation, no significant changes were noted on the undeveloped subject property in 2002, 2006, 2009, and 2012. In the 2009 aerial photograph, what appears to be a hotel has been constructed offsite, across Holt Boulevard from the northeastern portion of the subject site.

2016 and 2020 Photographs

In the 2016 color photograph, a relatively large area of vegetation clearing was observed in the west-northwesterly portion of the subject property. Vegetation clearing was also noted along the south, southeast, and east areas of the site. A small clearing was observed at the northeasterly area of the property. No significant changes were noted in the 2020 aerial photograph. Surrounding land remained hotel use to the west and north, Ontario Airport to the south, vacant land to the southeast and a commercial warehouse to the northeast.

Google Earth Imagery 2020 to 2023

Petra also reviewed historic aerial photographs on Goggle Earth™ from October 2020, September 2022, and May 2023. These photographs depicted similar site conditions to the property to that described above and observed within the subject site during our site walk.

Historical USGS Topographic Maps

Petra reviewed the historical USGS topographic maps of the site and vicinity provided by EDR which included Target Quad's: dated 1897, 1900, 1903, 1941, 1944, 1953, 1954, 1966, 1973, 1976, 1981, 2012, 2015, and 2018. No structures were shown on the subject property in any of the maps. The 1897, 1900, and 1903 maps depicted the subject property and immediate vicinity as undeveloped. A small, northwest-

southeast trending drainage intersected the western edge of the site. A railroad line was visible south of the property. No buildings were depicted in the site area. The 1941 and 1944 maps showed an improved road along the north edge of the site (Holt Boulevard). An unimproved road (1941) and later improved (1944) trending east-west was noted along the south property boundary. Railroad tracks were further south. A thin, unimproved drainage was visible to the east.

Maps from 1953, 1954, 1966, 1973, 1976, and 1981 depicted agricultural development on the subject property and vicinity. I-10 to the north and Ontario International Airport to the south were visible in the 1953 map. In the 1966 map, the road along the south edge of the subject property was labeled A Street. The 1976 map showed three small buildings offsite across the channel from the southeastern portion of the subject site. The 2012 map depicted Guasti Road improved along the south and western edge of the subject site. Maps from 2015 and 2018 showed no changes to the subject property or streets in the vicinity. These maps generally support observations made from the aerial photographs reviewed. Copies of the maps reviewed are provided in Appendix C.

Environmental Lien and Activity and Use Limitations Search 1980

Environmental Liens and Activity and Use Limitations (AULs) indicate restrictions on a property, which may represent a recognized environmental condition for the property. The subject properties San Bernardino County Assessor Parcel Number (APN) 011-032-233-0000 was utilized in this search.

An Environmental Liens and AUL Search dating back to 1980 was conducted by EDR as part of this assessment using the above APN. The EDR Environmental Lien and AUL Search 1980 Report provides results from a search of available current land title records for environmental cleanup liens and other activity and use limitations, such as engineering controls and institutional controls.

A network of professional, trained researchers, following established procedures, uses client supplied address information to:

- search for parcel information and/or legal description;
- search for ownership information filed between January 1, 1980 and October 30, 2023;
- research official land title documents recorded at jurisdictional agencies such as recorders' offices, registries of deeds, county clerks' offices, etc.;
- search for environmental encumbering instrument(s) filed between 1980 and the date of this report;
- provide a copy of any environmental encumbrance(s); and
- provide a copy of the current deed when available.

Public records of San Bernardino County, California were searched from January 1, 1980 to October 30, 2023, and no other deeds vesting title in the subject property were found or recorded during the period searched. Research sources included the San Bernardino County Recorder's Office, the San Bernardino County Assessor's Office, and the California Department of Toxic Substances Control (DTSC). Judicial records were not searched. Based upon available information evaluated by the title search professional, the jurisdiction does not require a search of judicial records in order to identify environmental liens.

The results from this search indicated that there were no recorded Environmental Liens or AULs listed for the subject property APN. A complete Environmental Liens and AUL Search 1980 report is provided in Appendix C. A summary is provided in the table below.

Historic Chain of Title From 1980

Assessor Parcel Number	Grantor	Grantee	Recorded Date
011--032-233	Qualco, Inc. fka Agriswiss, Inc.	JC Horizon, Ltd.	08/24/2018
	Co-Invest Ontario, Inc	Agriswiss, Inc.	11/22/1985
	James M. & Eloise B. Kline	Co-Invest Ontario, Inc.	07/01/1983

A copy of the lien and AUL search report are provided in Appendix C.

Preliminary Title Report

A Preliminary Title report by Ticor Title was provided by the client, dated November 15, 2023. The land referred to in this report in the County of San Bernardino, State of California is described as APN: 0110-322-33-0-000. The title to said estate or interest at the date hereof is vested in *JC Horizon. Ltd*., a California Corporation.

Exceptions presented in the report date back to April 17, 1946 and include easements to San Bernardino County Flood Control District (September 12, 1951) and the City of Ontario Public Utilities (April 7, 1966).

Fire Insurance Maps and City Directories

Fire Insurance Maps provide information on structure locations and operations, which were present at the time of the survey. These maps were completed for most major cities and metropolitan areas, dating from 1867, and provide information into past usage of buildings and how commercial and industrial zoning has changed over time. Sanborn™ Fire Insurance maps were requested for this study. EDR reports that the

subject site is "unmapped property" on fire insurance maps. The memorandum documenting this inquiry is included in Appendix C.

City Directory

City Directories provide information for a specific address at a specific time. A search of city directories from 1922 to 2020 was conducted by EDR for this assessment. The search was conducted for the target streets (E. Guasti Rd. and E. Holt Blvd.) and adjoining streets (A St., Airport Dr., Convention Center Way).

McCutcheon Construction was reported on A Street in 1980 and 1985. Historically A Street was located south of the subject property, but no longer exists. The US Department of Agriculture Animal and Plant Inspection facility is reported on Airport Drive, south of the railroad easement, in 2000, 2003, and 2008.

Mark Christopher Auto Center at 2131 Convention Center Way, north of the subject property, was listed in 2003 and 2008. Mark Christopher was also listed on D Street in 1990 and 1995. Additional discussion regarding Mark Christopher Chevrolet and Auto Center is provided above in the *Results of Agency Records Search* section. Additional commercial businesses, offices, and hotels are reported on Convention Center Way in 2003 and 2008, including the California State Health Vector Borne Disease facility and the California State Health Food and Drug Branch at 2151 Convention Center Way in 2003. The California Department of Health Services was also listed at the same address in 1995, 2000 and 2010. Kaiser Cement Corporation was listed at 2151 D Street, north of the site, in 1985.

In 2000 through 2010, Great Quality and E.L. Yeager Construction companies were listed at 2445 E. Guasti Rd., east of the subject property. HUB Distributing Corporation was listed at the same address in 1980, 1985, 1992, 1995, 2000, and 2008.

The only address listed on E. Holt Boulevard was 2200 E. Holt Boulevard, Ontario, California. Google Earth maps this address across E. Guasti Road from the subject property. In 1991 and 1995 the occupants were reported as Clarion Hotel Ontario Airport and Swank Audio Visuals, Inc. In 2003 and 2008 the occupants were reported as Kustom Gifts, KVL Audio Visual Corp., Marriott Hotel, and On Command Corp.

No listings were found for the subject property. Adjoining properties were first listed in 1975. No surrounding listings, which would indicate a potential concern for the subject site based on the name of the listing, was included in the EDR city directory image report. A copy of this search is presented in Appendix C.

EDR Property Tax Map Report

EDR's Property Tax Map report indicated there was no coverage for the subject parcel number. A copy of the EDR report is provided in Appendix C.

Building Permits

Building Permit data provides information to identify current and/or former operations and structures/features which may represent a recognized environmental condition for the subject site. The complete collection of building permit available to EDR was searched, and as of October 2, 2023, EDR does not have access to building permits in the city where the target property is located (Ontario, California). A copy of this search is presented in Appendix C.

Interviews

Petra provided an Owner Questionnaire to Mr. Jake Sowder, Assistant Project Manager with Diversified Pacific Communities. Mr. Sowder forwarded the Questionnaire to Ms. Judy Lee, owner of subject site. The completed Property Owner Interview Questionnaire was returned to Petra on October 30, 2023 by Mr. Sowder. Ms. Lee's response to the questionnaire is summarized below.

1. According to Ms. Lee, she does have a good knowledge regarding the uses and physical characteristics of the property and does have good knowledge regarding the activities/processes conducted at the property.

2. Ms. Lee stated that the subject property was, "vacant land since we purchased it in 2018". No additional information was provided regarding past use of the site.

3. Ms. Lee indicated that, to the best of her knowledge, there are no hazardous substances or petroleum products present on the site. He indicated that there is no potential recognized environmental conditions within or adjacent to the site. Additionally, Ms. Lee noted that she is not aware of any current or previous uses of the property, or nearby properties that would suggest the presence of potential recognized environmental conditions, hazardous substances, or materials.

4. Ms. Lee indicated that there are no water wells, clarifiers, disposal wells or underground irrigation system on the subject property. She also noted that, to the best of her knowledge, there are no utility corridors on the site.

5. Ms. Lee started that she does not have good knowledge regarding the identity of any existing documents relating to the property and responded that there is one environmental assessment report by BBG Assessment, dated February 11, 2019. Ms. Lee noted that she is not aware of environmental permits, storage tank registrations, reports regarding hydrogeologic condition on site or in the vicinity, there are no hazardous waste generator notices or reports, and no geotechnical studies.

6. According to Ms. Lee , based on her knowledge and experience related to the property, there are no notices or other correspondence from any government agency relating to past or current violations of environmental laws.

7. According to Ms. Lee, there are no notices or other correspondence from any governmental agency relating to environmental liens encumbering the property.

8. According to Ms. Lee, there are no pending, threatened, or past litigation or administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the property.

9. According to Ms. Lee, there are no notices from any governmental entity regarding any possible violations of environmental laws, or possible liability relating to hazardous substances or petroleum products.

A copy of the complete Owner Questionnaire is provided in Appendix D.

User / Client Knowledge

In compliance with AAI, Petra provided a User / Client Questionnaire to Mr. Jake Sowder, Assistant Project Manager with Diversified Pacific Communities. Mr. Sowder forwarded the Questionnaire to Mr. Nolan Leggio, Director of Forward Planning with Diversified Pacific Communities to complete. Mr. Leggio noted that the Phase I ESA was required due to development of the site as a hotel. A summary of the questions and response is provided below.

1. Mr. Leggio indicated he does have reports for this project.

2. Mr. Leggio indicated that there are no current restrictions regarding Petra contacting local agencies regarding the subject property.

3. According to Mr. Leggio, he is not aware of any environmental clean-up liens against the property that are filed or recorded under federal, tribal, state of local law. He did not respond to the question whether he will be conducting a search of environmental cleanup liens against the property that are filed or recorded in a registry. Mr. Leggio indicated that Petra is to complete this task. Mr. Leggio noted that a preliminary title report was conducted by Ticor Title Company of California. (*Petra: a copy was provided by Mr. Leggio.*)

According to Mr. Leggio, he is not aware of any activity and land use limitations (AULs), such as engineering controls, land use restrictions, or institutional controls that are in place on or for the site, and/or have been filed or that environmental cleanup liens against the property that are filed or recorded under federal, tribal, state of local law. He responded that he will be conducting a search of AULs against the property that are filed or recorded in a registry. Mr. Leggio requested Petra to complete this task.

4. According to Mr. Leggio, he does not have specialized knowledge or experience related to the property or nearby properties.

5. Mr. Leggio indicated that the purchase price for the land is fair market value.

6. Mr. Leggio indicated that he is not aware of past uses of the subject property.

7. Mr. Leggio indicated that he is not aware of chemical spills that have occurred on the subject property or environmental cleanups that have taken place on the property or on adjacent properties.

8. According to Mr. Leggio, he is not aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of hazardous materials/chemical releases or threatened releases.

9. According to Mr. Leggio, he is not aware of any specific chemicals present currently or previously on the site.

10. According to Mr. Leggio, he does not know of any obvious indicators that point to the presence or likely presence of contamination at the property.

A copy of the complete user-client questionnaire is provided in Appendix D.

Data Failures and Data Gaps

In the event that data gaps are identified, the Environmental Professional (EP) will endeavor to comment on the significance of those data gaps. However, the EP cannot, and does not warrant or guarantee that no significant events, releases, or conditions arose, during periods such as data gaps.

Petra reviewed several sources for historical information regarding the subject site. These sources included a government agency database search, a city directory search, a review of historical aerial photographs and historical USGS topographic maps, and interviews. Some of the gaps between the aerial photographs (1938 to 1949: 1953 to 1966) and the USGS topographic maps exceeded 10 years and fire insurance maps covering the target property were not found.

Data gaps exist in the historic information reviewed. These gaps are due to the limited records and resources available, which are reasonably ascertainable and practically reviewable in the local area. However, it is our opinion that if additional historical information were to become available, it is not likely to change the conclusions or recommendations of this assessment.

DISCUSSION OF POTENTIAL ENVIRONMENTAL CONCERNS

The following discussions of potential environmental concerns are presented to inform the client as to the existence, or lack thereof, of recognized environmental conditions present on the subject site.

Regulatory Actions

Based upon a thorough search of available federal, state, and local records, no known current regulatory action is pending with respect to the subject property.

Adjacent and Nearby Properties

No information has been obtained during this assessment which would indicate the presence of recognized environmental conditions adjacent to the subject site that are considered likely to pose a significant impact to soils or groundwater beneath the subject site at this time.

Polychlorinated Biphenyls (PCB's)

Polychlorinated biphenyls (PCB's) are historically linked to electrical equipment, such as capacitors and transformers, due to their physical and chemical characteristics. PCB's, persistent in the environment, are known to accumulate in organisms and the food chain.

Any electrical equipment (i.e., transformers, capacitors, and fluorescent light fittings) containing dielectric insulating fluids or coolants, manufactured prior to 1976, should be considered to potentially contain PCB's. PCB's may also be found in older lubricating oils, cutting oils, hydraulic fluids, paints, sealants, and flame retardants (UNEP, 2002).

At this time, buildings which were known to have occupied the southern portion of the subject property, are no longer present. One pole-mounted transformer was observed outside the chain link fencing along E. Guasti Road. The transformer appeared to be in good condition and there were no readily detectable signs of surface staining around the base of the wooden pole. No information has been obtained during this assessment which would indicate the existing or past presence of Polychlorinated Biphenyls (PCB's) at the site. A PCB survey, however, was not conducted at the subject property as part of this assessment.

Underground Storage Tanks

No information has been obtained during this assessment, which would indicate fuel underground storage tanks (UST's) to be located on the subject site currently nor are UST's reported to have been located on site in the past. Further, no surface indications of UST's were observed on the subject site during the site reconnaissance.

Above Ground Storage Tanks

No information has been obtained during this assessment, which would indicate above ground fuel storage tanks (AST's) are located on the subject site currently, nor are ASTs reported to have been located on the site in the past.

Stormwater/Wastewater Discharge

At this time, stormwater/wastewater discharge from the site appears to be limited to surface water runoff. It is anticipated that precipitation falling on the site would infiltrate site soils. Water which does not infiltrate site soils would be expected to flow off of the site following the surface topography. Cucamonga Creek, a concrete lines drainage channel flows south along the eastern edge of the subject property.

Pesticide and Herbicide Residue

Based on information obtained during this assessment, the site was used for agricultural (grape vineyards) purposes from at least 1938 to sometime during/between 1975 and 1985; however, the infrared photograph from 1975 presents light red or pink tones suggesting lower plant vigor. Sometime during/between 1975 and 1985 agricultural usage ceased, and the land has remained vacant from that time to the present. There is a potential that copper based fungicides (common vineyard contaminants) may have been applied to the former grape plants to prevent vine downy mildew and, therefore, may have impacted the near surface soils. However, it is our understanding that the potential for vine downy mildew is relatively low for the area due to the temperate climate in the region.

Copper sulfate is partly washed down to lower soil levels by water percolating through the ground; partly bound to soil components; and partly changed into different metabolites, or breakdown products. Copper is considered to be among the more mobile of the heavy metals in surface environments. Due to the passage of time (at least 38 years), soil characteristics (alluvial fan deposits of sands, gravel, and cobbles) and the environment of the region, the potential that copper residues remaining in onsite soils exceeding regulatory screening levels is considered very low to nil.

Asbestos-Containing Materials

Buildings were not known to have occupied the subject property from at least 1938 to the present day. No potential asbestos-containing materials (ACMs) were observed on the site during our recent site reconnaissance and no information was found which indicated the use, storage, or disposal of asbestos-containing materials on the site. An ACM survey, however, was not conducted at the subject property as part of this assessment.

Lead-Based Paints

Buildings were not known to have occupied the subject property from at least 1938 to the present day. No potential lead-based paint (LBP) materials were observed on the site during our recent site reconnaissance and no information was found which indicated the use, storage, or disposal of lead-based paint materials on the site. A LBP survey, however, was not conducted at the subject property as part of this assessment.

Landfills

The EDR Radius Report does not list any known landfills within the search radius conducted for this assessment. Therefore, landfills do not appear to represent a recognized environmental condition with regards to the subject site.

Water Supplies

No water wells were observed on the subject site. There were no signs observed by Petra during our recent site reconnaissance indicating water is supplied to the subject property.

Waste Generation and Storage

Waste generation and storage was not observed onsite during our site reconnaissance. Windblown trash was most common along the perimeter fencing and small localized areas of trash/debris were noted within the subject property, including remnants of a homeless encampment in the northeasterly portion of the subject property. A few areas of tree stump grinding have created relatively large isolated areas of wood mulch. It is recommended that the debris be removed and disposed of, in accordance with current regulations.

CONCLUSIONS

Recognized Environmental Conditions

Recognized environmental conditions are defined by the American Society of Testing and Materials (ASTM) as any hazardous substance or petroleum product under conditions that indicate an existing, past, or material threat of release into the structures, ground, groundwater, or surface water at the subject site. If the presences of recognized environmental conditions are identified on a subject site, it may warrant additional research, site assessment, and/or action.

- No REC’s have been identified within or affecting the subject property.

Controlled recognized environmental conditions (CREC'S) are defined by the American Society of Testing and Materials (ASTM) Practice E 1527-21 as a recognized environmental condition resulting from the past *release* of *hazardous substances* or *petroleum products* that has been addressed to the satisfaction of the applicable regulatory authority (i.e., as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with *hazardous substances* or *petroleum products* allowed to remain in place subject to the implementation of required controls. For example, if a leaking underground storage tank has been cleaned up to a commercial use standard but does not meet unrestricted residential cleanup criteria; this would be considered a controlled recognized environmental condition. The "control" is represented by the (inferred) restriction that the property remains commercial.

- No CREC's have been identified within or affecting the subject property.

Historical recognized environmental conditions (HREC'S) are defined by the American Society of Testing and Materials (ASTM) Practice E 1527-21 as a past release of any *hazardous substances or petroleum products* that has occurred in connection with the *property* and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory agency, without subjecting the *property* to any required controls (i.e., *property* use restrictions, *activity and use limitations*, *institutional controls* or *engineering controls*).

- No HREC's have been identified within or affecting the subject property.

We have performed a Phase I Environmental Site Assessment in general conformance with the scope and limitations of ASTM Practice E 1527-21 for the subject property, APN 011-032-233, located at the southeast corner of E. Holt Boulevard and E. Guasti Road, in the city of Ontario, San Bernardino County, California. Any exceptions to, or deletions from, this practice are described in the section titled data gaps of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the subject property at this time.

SITE CONSIDERATIONS

The items presented below are not considered recognized environmental conditions in accordance with ASTM E 1527-21. Although these items may warrant consideration in conjunction with any planned development activities, they are not recognized environmental conditions. The information regarding possible actions relative to these items has been provided as guidance.

1. With re-development of any former agricultural property, a certain amount of unknown subsurface conditions may be anticipated. Any discolored soils, noxious odors, buried pipelines or irrigation channels, and/or other buried objects/debris encountered during clearing and grubbing, or future grading and development should be left in place until an experienced environmental professional (such as Petra) has had the opportunity to evaluate the conditions and provide recommendations if needed.

2. It is possible that abandoned irrigation lines will be encountered during demolition, clearing, and grubbing, or rough grading. If these irrigation lines are concrete, they should be left in place until an experienced environmental professional (such as Petra) has had the opportunity to evaluate the conditions and provide recommendations if needed. In the event concrete irrigation lines are encountered, caution should be taken to not crush the lines until it can be ascertained that they do not contain asbestos.

3. It is recommended that all debris and trash observed on the subject site be removed and disposed of in accordance with current local, state and federal disposal regulations.

LIMITATIONS

This assessment is based upon the project as described and the environmental data obtained from the field reconnaissance and research performed as outlined in this report. This report has not been prepared for use by parties or projects other than those named or described in this report, additional studies may be required.

Since our assessment is based upon a review of available data and visual assessment of the site, without any invasive study, the conclusions presented herein are professional opinions. These opinions have been derived in accordance with current standards of practice, and no warranty is expressed or implied.

This firm's evaluation of previous reports and/or subconsultant reports focuses on the completeness of the information presented in the document, in accordance with applicable rules and regulations, and does not include the establishment of data sufficiency or accuracy.

QUALIFICATIONS

Resumes for the staff who contributed to this report are presented in Appendix F.

“We the undersigned declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in § 312.10 of 40 CFR 312. We have the specific qualification based on education, training, and experience to assess a property of the nature, history, and setting of the subject site. We have developed and performed the all appropriate inquiries in general conformance with the standards and practices set forth in 40 CFR Part 312.”

Respectfully submitted,

PETRA GEOSCIENCES, INC.

Edward Lump
Associate Geologist
PG 5975

Siamak Jafroudi, PhD
Senior Principal Engineer
GE 2024

12/5/23

EL/JC/SJ/lv

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FIGURES



- Reproduced from: USGS, 2023, The National Map Viewer

LEGEND

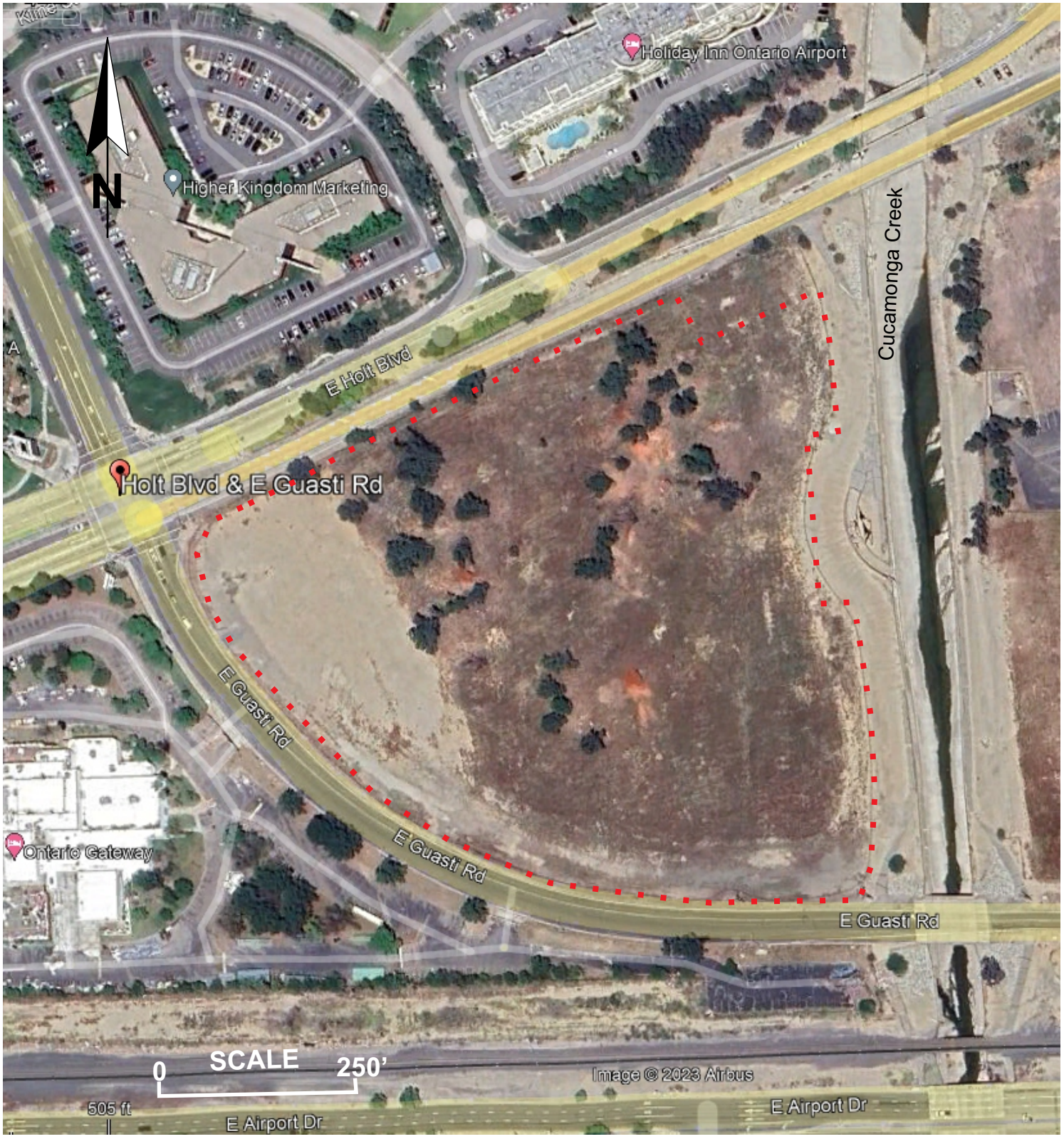
- Approximate Site Location

PETRA GEOSCIENCES, INC.
40880 COUNTY CENTER DRIVE, SUITE M
TEMECULA, CALIFORNIA 92591
PHONE: (951) 600-9271
COSTA MESA MURRIETA PALM DESERT SANTA CLARITA

Site Location Map

Proposed Empire Resort and Spa
Ontario, San Bernardino County, California

DATE: DECEMBER 2023	J.N.: 22-398	Figure 1
DWG BY: epl	SCALE: see map	4684



- Reproduced from: Google Earth, 2023, Photograph dated May 16

LEGEND

- - - - - - - Approximate Limits of Site

PETRA GEOSCIENCES, INC.
40880 COUNTY CENTER DRIVE, SUITE M
TEMECULA, CALIFORNIA 92591
PHONE: (951) 600-9271
COSTA MESA MURRIETA PALM DESERT SANTA CLARITA

Site Aerial Photograph

Proposed Empire Report and Spa
Ontario, San Bernardino County, California

DATE: December 2023	J.N.: 22-398	Figure 2
DWG BY: epl	SCALE: see map	4685

APPENDIX A

SITE PHOTOGRAPHS



Photo #1 – northerly view across the west-central portion of the property.



Photo #2 – east view of import soils stockpiled in the southwesterly portion of the property.



Photo # 3 – northeasterly view of tree stump and lumber in the west central area of the site. Note ground mulch in foreground.



Photo #4 – northeasterly view of rubber tire in northwesterly portion of the property.



Photo # 5 – cardboard and lumber debris in north-central portion of the property.



Photo #6 – West view of surface conditions along northwest edge of the site. Holt Blvd. is visible to the right.



Photo # 7 – southeast view of site conditions in west-southwest portion of the property.



Photo #8 – southerly view of site conditions along southwesterly boundary with E. Guasti Rd. Note above ground yellow SCE bollards and risers in background.



Photo # 9 – electric meter box onsite near second southern gate along E. Guasti Rd.



Photo #10 – southeasterly view of high voltage SCE risers and manhole near electric meter box shown in Photo 9.



Photo # 11 – small level pile of asphalt in west-central portion of the property.



Photo #12 – northwest view of pole-mounted transformer outside fence in the southwest portion of the site.



Photo #13 – southerly view of surface utilities and Cucamonga Creek access road in southeast corner of site.



Photo #14 – north view of large concrete fragments noted near Cucamonga Creek in east-central edge of site.



Photo #15 – northeast view of site conditions in northeast portion of the site. Homeless camp is near base of tree.



Photo #16 – debris related to abandoned homeless camp in northeastern portion of the property. Holt Blvd. and Cucamonga Creek are visible in the background.



Photo #17 – additional debris related to abandoned homeless camp in northeast portion of the property.



Photo #18 – northeast view of dumped concrete and asphalt fragments north of homeless camp in northeast portion of the subject property.



Photo #19 – west view of surface conditions in northeasterly portion of the site. Holt Blvd. is visible in right photo.



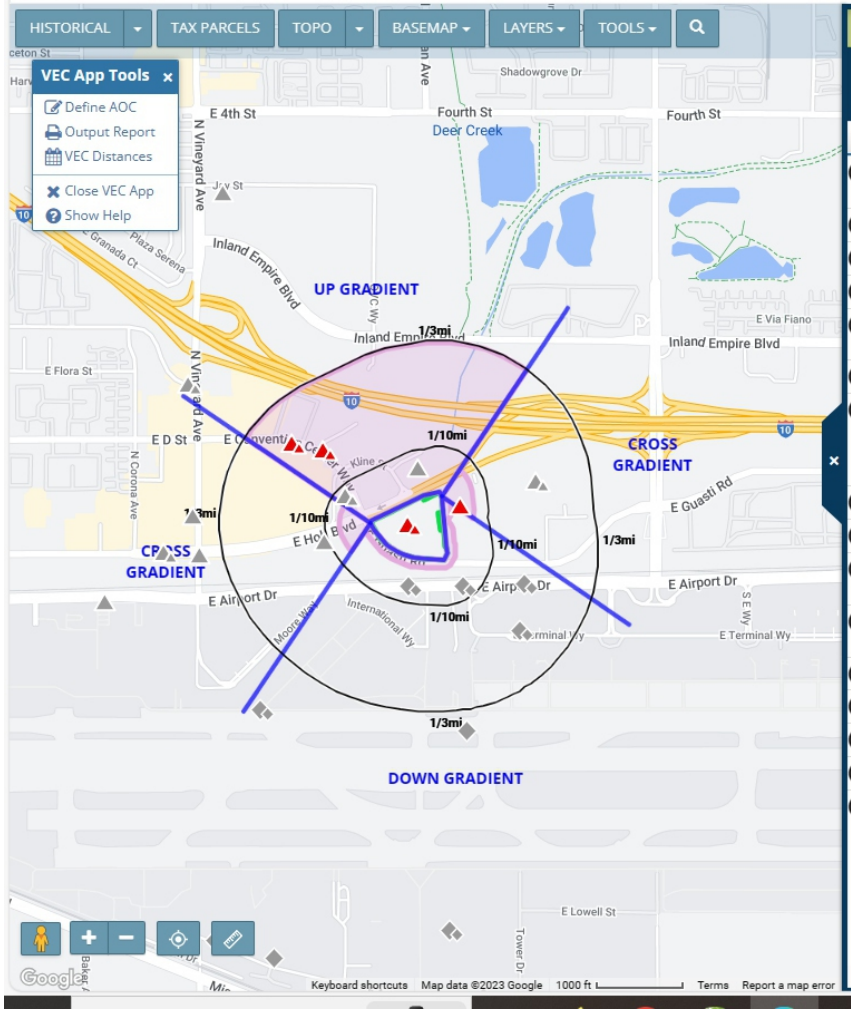
Photo #20 – southwest view across the subject property from near the northeast corner of the site.

APPENDIX B

AGENCY SEARCH RESULTS

EDR LIGHTBOX

ONTARIO HOTEL, SE CORNER E. HOLT BLVD. AND E. GUASTI RD., ONTARIO, CA 9... DRAW REPORTS ABOUT



FINDINGS PHYSICAL SETTINGS

MAP FINDINGS

59 of 59 Records

EXPORT COLUMNS

ID	VEC	RPT	SITE NAME	ADDRESS	DATABASES	GW FLOW	ELEV	DIST(mi)
1		Y	MARRIOTT AIRPORT HOTEL	2200 E HOLT ST	FINDS ECHO	Up	TP	TP
2		Y	MARRIOTT AIRPORT HOTEL	2200 E HOLT ST	US AIRS	Up	TP	TP
3		Y	WELL 29		PFAS	Cross	Higher	0.040
4		N	FRONTIER CALIFORNIA: AIRPORT RSC3/9	2152 E D ST	SAN BERN. CO. PERMIT	Up	Higher	0.061
5		N	HOLIDAY INN	2155 EAST CONVENTION CENTER WAY	RCRA NONGEN / NLR	Up	Higher	0.061
6		N	PRIME FLIGHT CARGO	2300 E AIRPORT RD	SAN BERN. CO. PERMIT	Down	Lower	0.069
7		N	MAJESTIC TERMINAL SERVICES	2300 E AIRPORT DR	CERS HAZ WASTE HWTS HAZNET CERS	Down	Lower	0.069
8		N	PRIME FLIGHT CARGO	2300 EAST AIRPORT DR	RCRA NONGEN / NLR	Down	Lower	0.069
9		N	MAJESTIC TERMINAL SERVICES	2300 E AIRPORT DR	RCRA NONGEN / NLR	Down	Lower	0.069
10		N	PF CARGO-ONT		RCRA-SQG PFAS ECHO	Down	Lower	0.069
11		N	L D KING INC	2151 E CONVENTION CENTER WAY STE. 100	SAN BERN. CO. PERMIT	Up	Higher	0.071
12		N	ONTARIO WELL #29	2400 E AIRPORT DR	SAN BERN. CO. PERMIT	Down	Lower	0.087
13		N	CITY ONTARIO WELL GUASTI	2400 E GUASTI ROAD	RCRA NONGEN / NLR	Down	Lower	0.105
14		N	RADISSON, ONTARIO AIRPORT	2200 E HOLT BLVD	SAN BERN. CO. PERMIT	Cross	Higher	0.109
15		N	MARK CHRISTOPHER AUTO CENTER	2131 CONVENTION CENTER WAY	UST	Up	Higher	0.171
16		Y	MARK CHRISTOPHER CHEVROLET	2131 E D ST	RCRA-SQG UST AST CERS HAZ WASTE SWEEPS UST HIST UST CA FID UST CERS TANKS	Up	Higher	0.171

National Flood Hazard Layer FIRMette

FEMA

117°36'29"W 34°4'7"N



0 250 500 1,000 1,500 2,000 Feet

1:6,000

117°35'52"W 34°3'37"N

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

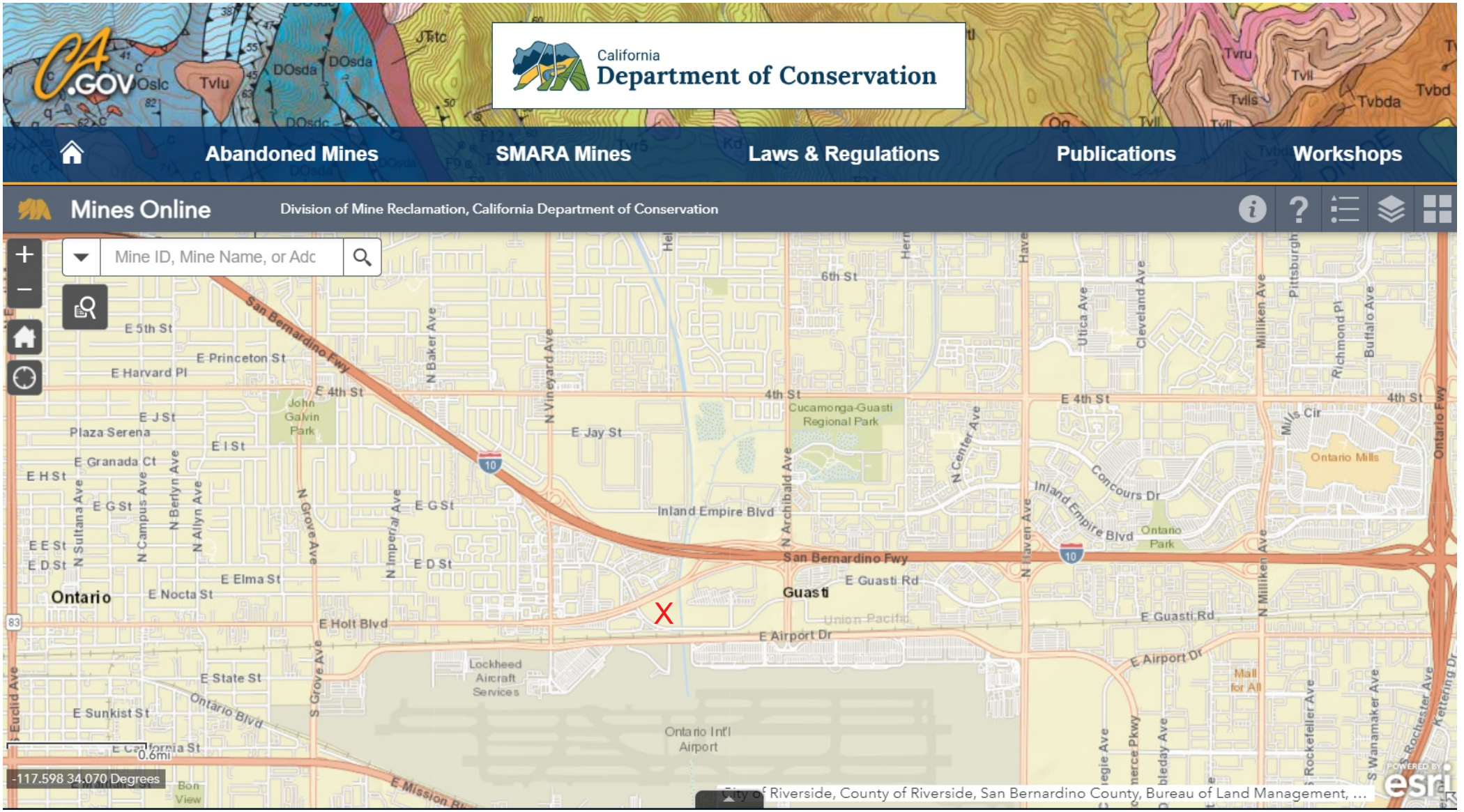
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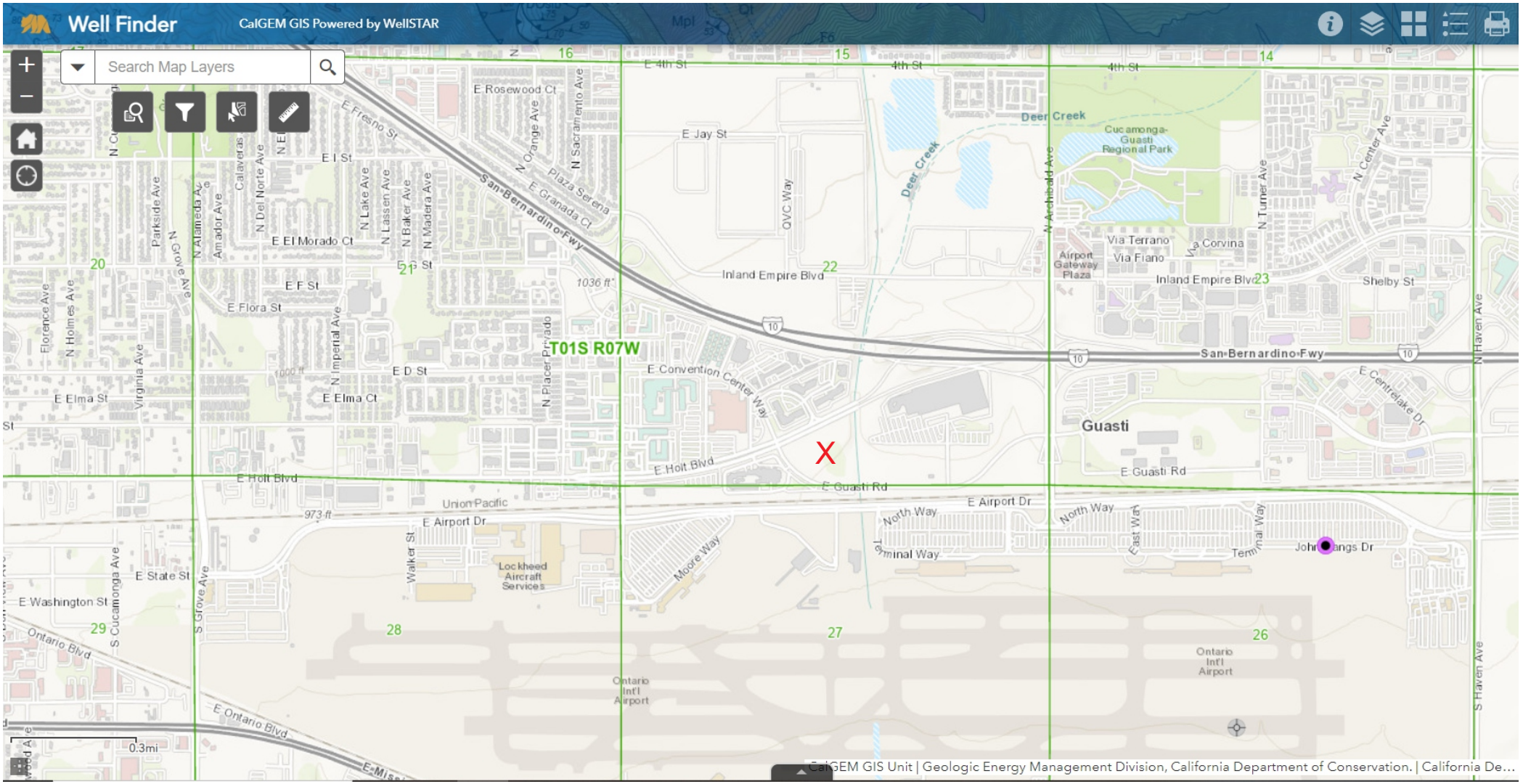
The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

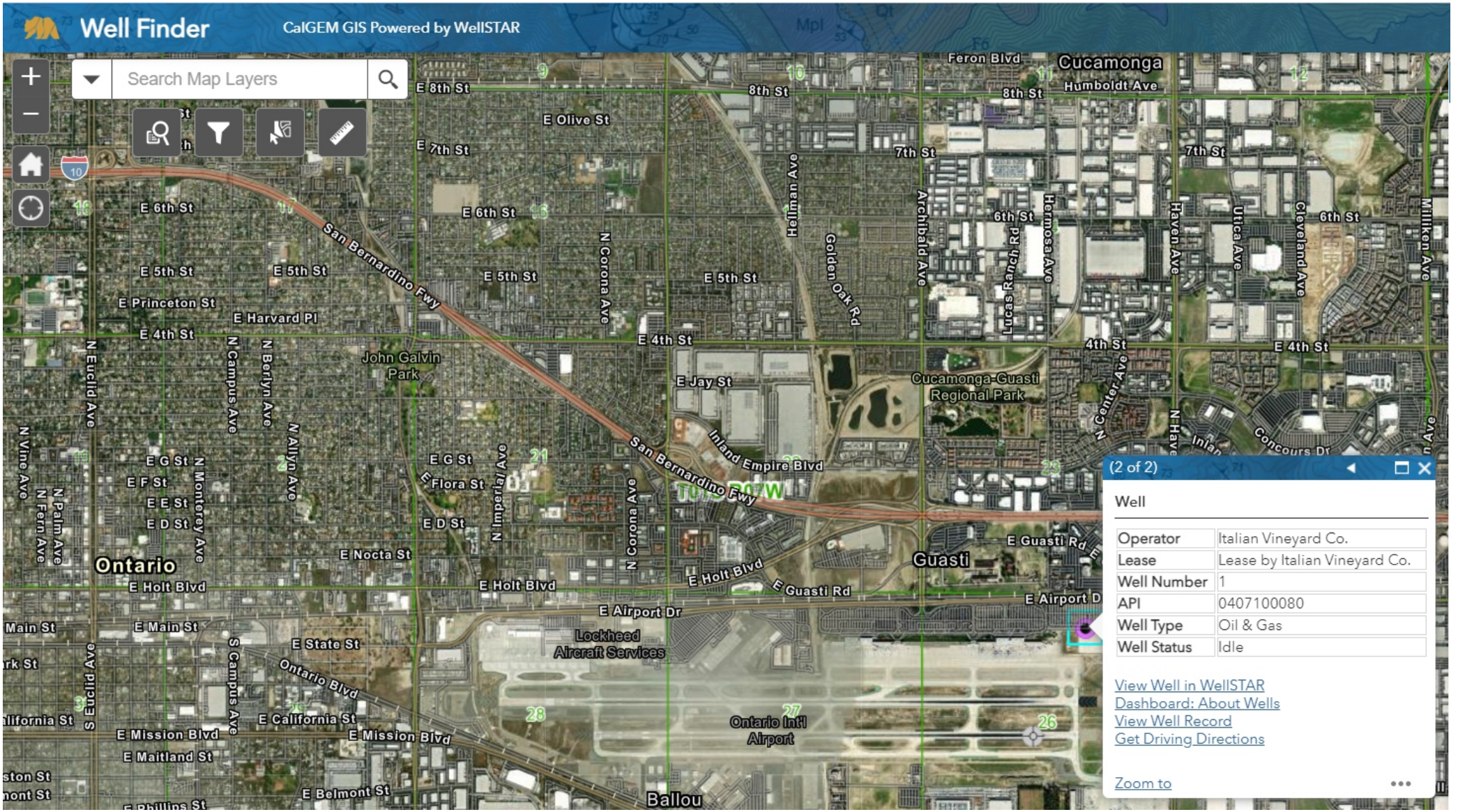
This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

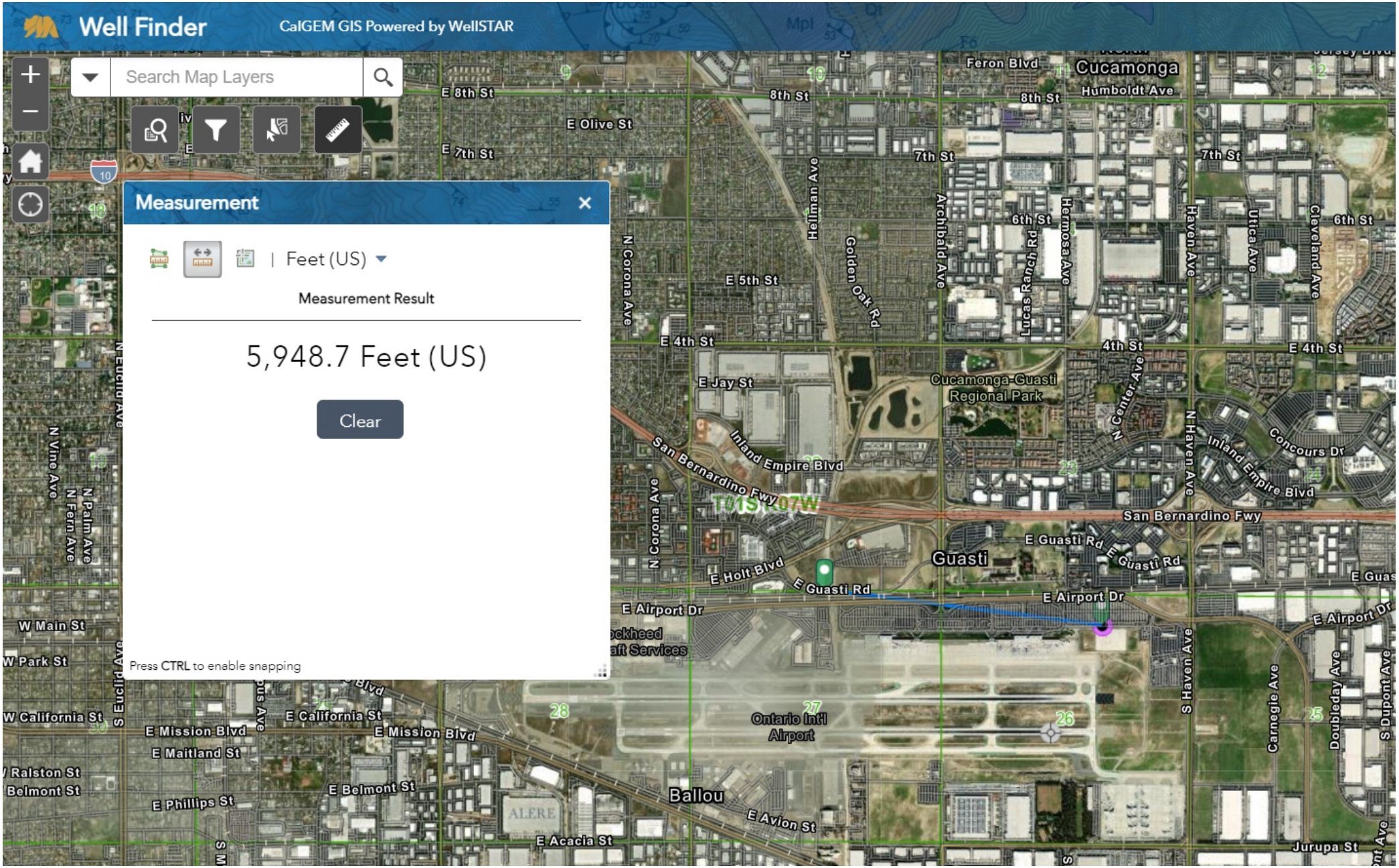
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 10/28/2023 at 7:31 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

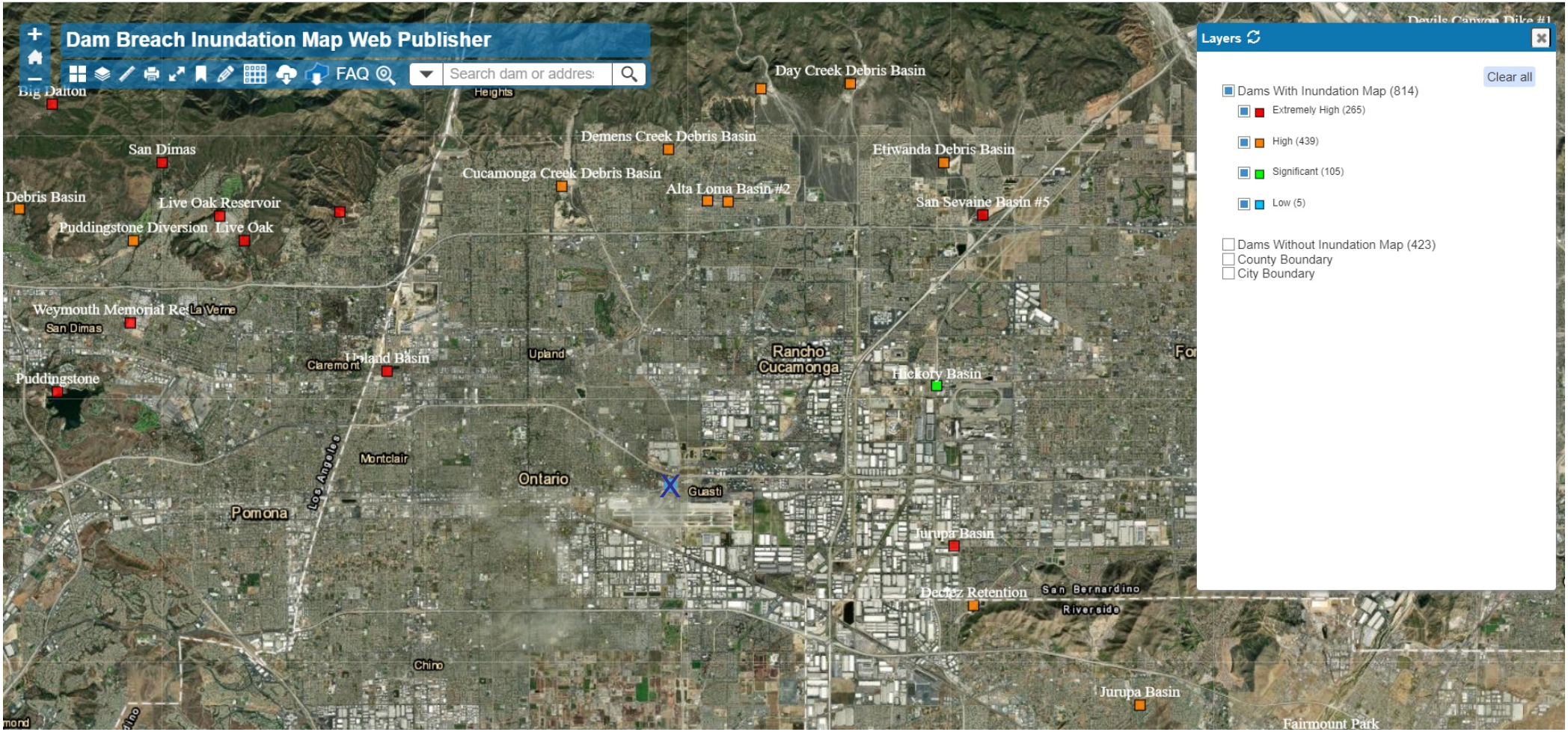
This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used f regulatory purposes.

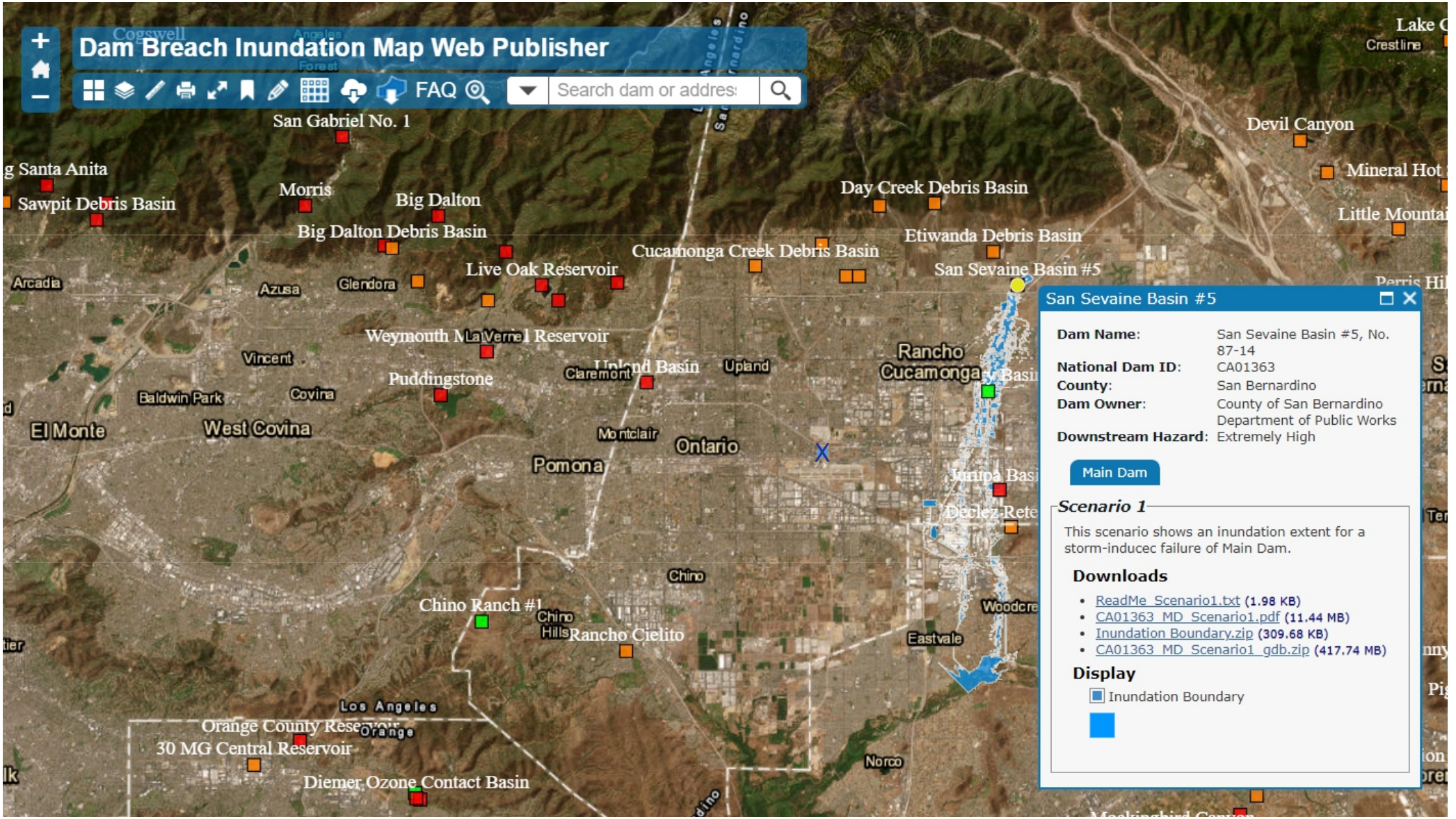

CA.GOV
California
Department of Conservation
Abandoned Mines
SMARA Mines
Laws & Regulations
Publications
Workshops
Mines Online
Division of Mine Reclamation, California Department of Conservation
Mine ID, Mine Name, or Adc
San Bernardino Fwy
E 5th St
E Princeton St
E Harvard Pl
E 4th St
John Galvin Park
E J St
Plaza Serena
E I St
E Granada Ct
E H St
E G St
E E St
E D St
N Sultana Ave
N Campus Ave
N Berlyn Ave
N Allyn Ave
N Grove Ave
N Imperial Ave
E Elma St
Ontario
E Nocta St
E Holt Blvd
E State St
E Sunkist St
Ontario Blvd
S Grove Ave
Euclid Ave
Lockheed Aircraft Services
Ontario Int'l Airport
E Airport Dr
Union Pacific
Guasti
E Guasti Rd
Inland Empire Blvd
N Archibald Ave
N Vineyard Ave
N Baker Ave
E Jay St
4th St
Cucamonga-Guasti Regional Park
N Center Ave
N Haven Ave
Concours Dr
Ontario Park
Ontario Mills
Mills Cir
Milliken Ave
N Milliken Ave
Pittsburgh
Richmond Pl
Buffalo Ave
Cleveland Ave
Utica Ave
6th St
Ontario Fwy
Mall for All
S Rockefeller Ave
S Wanamaker Ave
S Rochester Ave
Kettering Dr
X
0.6mi
-117.598 34.070 Degrees
City of Riverside, County of Riverside, San Bernardino County, Bureau of Land Management, ...
esri

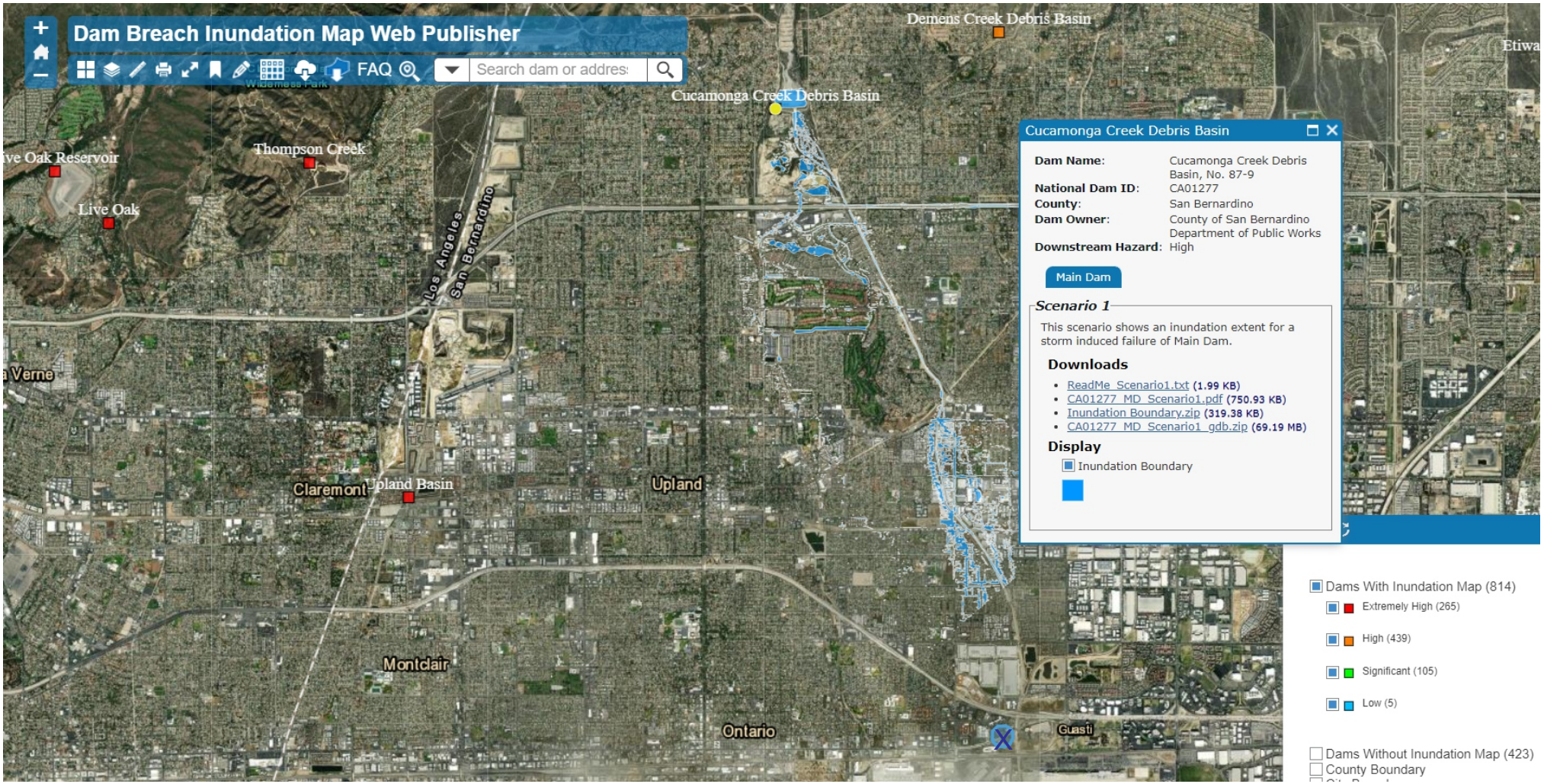

Well Finder
CalGEM GIS Powered by WellSTAR
Search Map Layers
T01S R07W
X
Guasti
Deer Creek
Cucamonga-Guasti Regional Park
Inland Empire Blvd
San Bernardino Fwy
E Holt Blvd
E Guasti Rd
E Airport Dr
Union Pacific
Lockheed Aircraft Services
Ontario Int'l Airport
E Ontario Blvd
E Washington St
E State St
E Fresno St
E 4th St
E Jay St
E Rosewood Ct
E Granada Ct
E El Morado Ct
E F St
E Flora St
E D St
E Elma St
E Elma Ct
Via Terrano
Via Fiano
Via Corvina
Airport Gateway Plaza
Shelby St
E Centrelake Dr
North Way
Terminal Way
Moore Way
Walker St
S Grove Ave
S Cucamonga Ave
N Haven Ave
N Center Ave
N Turner Ave
N Archibald Ave
QVC Way
N Placer Privado
N Imperial Ave
N Orange Ave
N Sacramento Ave
Plaza Serena
N Lake Ave
N Lassen Ave
N Baker Ave
N Madera Ave
N Del Norte Ave
Calaveras
Amador Ave
N Alameda Ave
Parkside Ave
N Holmes Ave
Florence Ave
Virginia Ave
1036 ft
973 ft
0.3mi
CalGEM GIS Unit | Geologic Energy Management Division, California Department of Conservation. | California De...

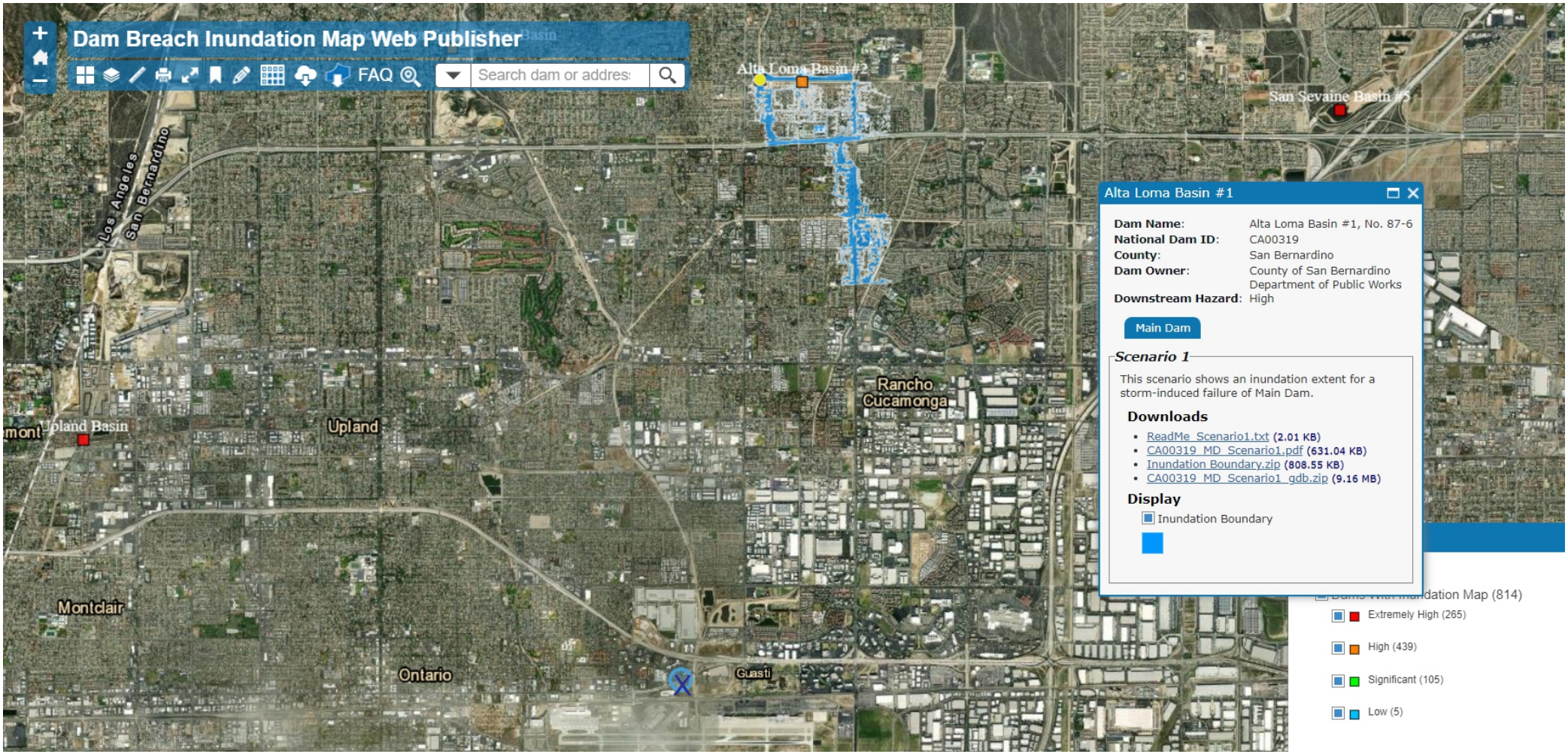

Well Finder
CalGEM GIS Powered by WellSTAR
Search Map Layers
Cucamonga
Humboldt Ave
E 8th St
8th St
E Olive St
E 7th St
7th St
E 6th St
6th St
San Bernardino Fwy
E 5th St
E Princeton St
E Harvard Pl
E 4th St
4th St
John Galvin Park
E Jay St
Cucamonga-Guasti Regional Park
Inland Empire Blvd
E G St
E Flora St
E F St
E E St
E D St
Ontario
E Nocta St
E Holt Blvd
Guasti
E Guasti Rd
E Airport Dr
Lockheed Aircraft Services
E Main St
E State St
Ontario Blvd
E California St
E Mission Blvd
E Maitland St
Ontario Int'l Airport
E Belmont St
Ballou
Hellman Ave
Golden Oak Rd
Archibald Ave
Hermosa Ave
Lucas Ranch Rd
Haven Ave
Utica Ave
Cleveland Ave
Milliken Ave
N Corona Ave
N Euclid Ave
N Campus Ave
N Berlyn Ave
N Allyn Ave
N Monterey Ave
N Palm Ave
N Fern Ave
N Vine Ave
N Imperial Ave
S Euclid Ave
S Campus Ave
(2 of 2)
Well
Operator | Italian Vineyard Co.
Lease | Lease by Italian Vineyard Co.
Well Number | 1
API | 0407100080
Well Type | Oil & Gas
Well Status | Idle
View Well in WellSTAR Dashboard: About Wells
View Well Record
Get Driving Directions
Zoom to

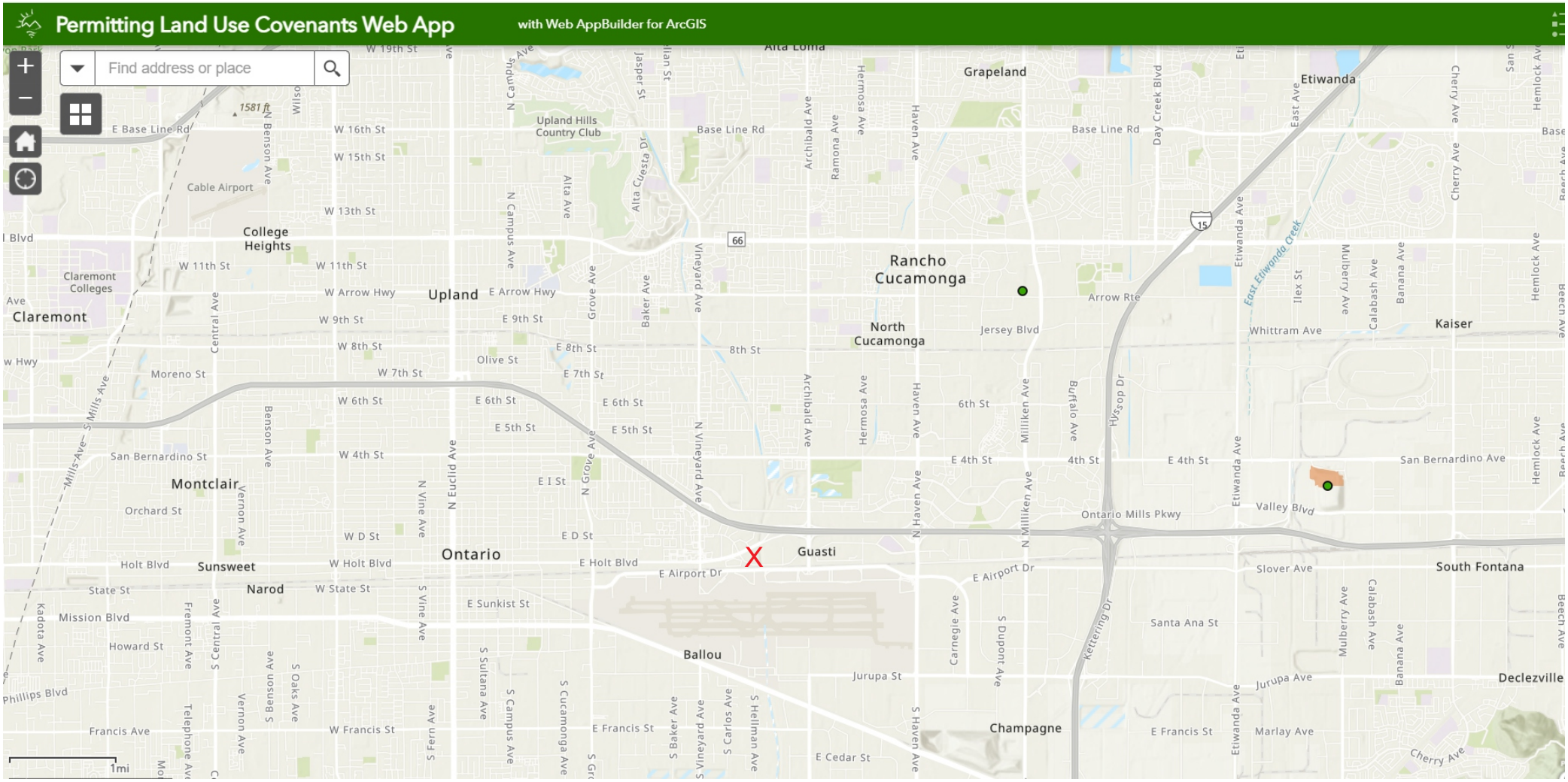

Well Finder
CalGEM GIS Powered by WellSTAR
Search Map Layers
Measurement
Feet (US)
Measurement Result
5,948.7 Feet (US)
Clear
Press CTRL to enable snapping
Cucamonga
Feron Blvd
Humboldt Ave
8th St
E 8th St
E Olive St
E 7th St
7th St
6th St
E 5th St
E 4th St
4th St
Hellman Ave
Golden Oak Rd
Archibald Ave
Lucas Ranch Rd
Hermosa Ave
Haven Ave
Utica Ave
Cleveland Ave
N Corona Ave
Cucamonga-Guasti Regional Park
N Center Ave
E Jay St
Inland Empire Blvd
San Bernardino Fwy
Concours Dr
N Haven Ave
T01S R07W
Guasti
E Guasti Rd
E Holt Blvd
E Airport Dr
Ontario Int'l Airport
W Main St
W Park St
W California St
E California St
E Mission Blvd
E Maitland St
E Belmont St
E Phillips St
Ralston St
Belmont St
Ballou
E Avion St
E Acacia St
Jurupa St
S Haven Ave
Carnegie Ave
Doubleday Ave
S Dupont Ave
N Vine Ave
N Fern Ave
N Palm Ave
S Euclid Ave
N Euclid Ave


Dam Breach Inundation Map Web Publisher
FAQ
Search dam or address
Layers
Clear all
Dams With Inundation Map (814)
Extremely High (265)
High (439)
Significant (105)
Low (5)
Dams Without Inundation Map (423)
County Boundary
City Boundary
Day Creek Debris Basin
Demens Creek Debris Basin
Cucamonga Creek Debris Basin
Alta Loma Basin #2
Etiwanda Debris Basin
San Sevaine Basin #5
San Dimas
Live Oak Reservoir
Puddingstone Diversion
Live Oak
Weymouth Memorial Re
La Verne
San Dimas
Puddingstone
Claremont
Upland Basin
Upland
Rancho Cucamonga
Hickory Basin
Montclair
Ontario
Guasti
Pomona
Los Angeles
Jurupa Basin
Declez Retention
San Bernardino
Riverside
Chino
Jurupa Basin
Fairmount Park

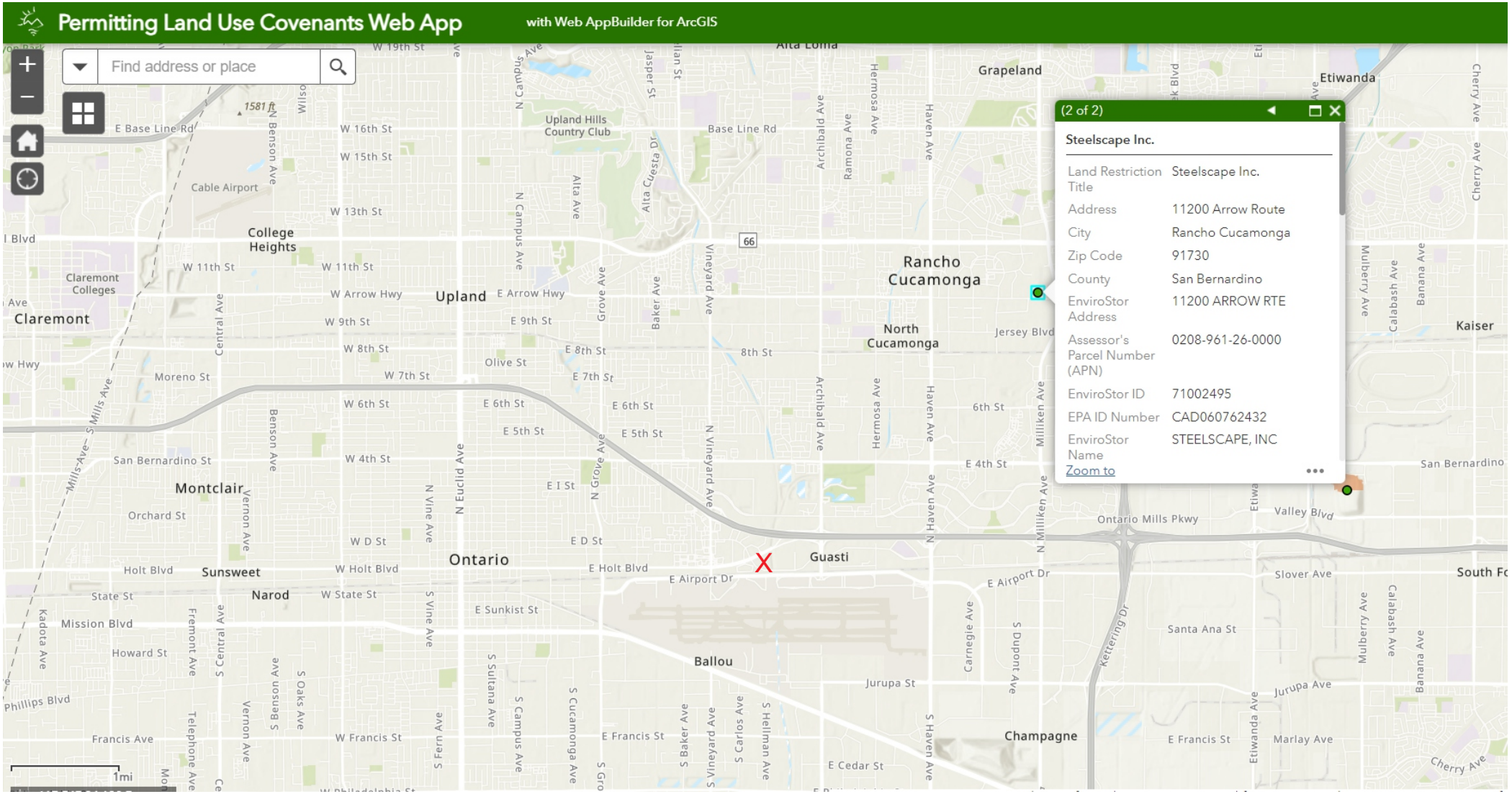

Dam Breach Inundation Map Web Publisher
FAQ
Search dam or addres
San Gabriel No. 1
Santa Anita
Sawpit Debris Basin
Morris
Big Dalton
Big Dalton Debris Basin
Live Oak Reservoir
Cucamonga Creek Debris Basin
Day Creek Debris Basin
Etiwanda Debris Basin
San Sevaine Basin #5
Devil Canyon
Mineral Hot
Little Mountai
Crestline
Arcadia
Azusa
Glendora
Weymouth
La Verne
Reservoir
Vincent
Puddingstone
Claremont
Upland Basin
Upland
Rancho Cucamonga
Baldwin Park
Covina
El Monte
West Covina
Montclair
Ontario
Pomona
Chino
Chino Ranch #1
Chino Hills
Rancho Cielito
Eastvale
Los Angeles
Orange County Reservoir
Orange
30 MG Central Reservoir
Diemer Ozone Contact Basin
Norco
San Sevaine Basin #5
Dam Name: San Sevaine Basin #5, No. 87-14
National Dam ID: CA01363
County: San Bernardino
Dam Owner: County of San Bernardino Department of Public Works
Downstream Hazard: Extremely High
Main Dam
Scenario 1
This scenario shows an inundation extent for a storm-inducec failure of Main Dam.
Downloads
ReadMe_Scenario1.txt (1.98 KB)
CA01363_MD_Scenario1.pdf (11.44 MB)
Inundation Boundary.zip (309.68 KB)
CA01363_MD_Scenario1_gdb.zip (417.74 MB)
Display
Inundation Boundary


Dam Breach Inundation Map Web Publisher
FAQ
Search dam or address
Demens Creek Debris Basin
Cucamonga Creek Debris Basin
Thompson Creek
Live Oak
Los Angeles
San Bernardino
Claremont
Upland Basin
Upland
Montclair
Ontario
Guasti
Cucamonga Creek Debris Basin
Dam Name: Cucamonga Creek Debris Basin, No. 87-9
National Dam ID: CA01277
County: San Bernardino
Dam Owner: County of San Bernardino Department of Public Works
Downstream Hazard: High
Main Dam
Scenario 1
This scenario shows an inundation extent for a storm induced failure of Main Dam.
Downloads
ReadMe_Scenario1.txt (1.99 KB)
CA01277_MD_Scenario1.pdf (750.93 KB)
Inundation Boundary.zip (319.38 KB)
CA01277_MD_Scenario1_gdb.zip (69.19 MB)
Display
Inundation Boundary
Dams With Inundation Map (814)
Extremely High (265)
High (439)
Significant (105)
Low (5)
Dams Without Inundation Map (423)
County Boundary


Dam Breach Inundation Map Web Publisher
FAQ
Search dam or addres
Alta Loma Basin #2
San Sevaine Basin #5
Los Angeles
San Bernardino
Alta Loma Basin #1
Dam Name: Alta Loma Basin #1, No. 87-6
National Dam ID: CA00319
County: San Bernardino
Dam Owner: County of San Bernardino Department of Public Works
Downstream Hazard: High
Main Dam
Scenario 1
This scenario shows an inundation extent for a storm-induced failure of Main Dam.
Downloads
ReadMe_Scenario1.txt (2.01 KB)
CA00319_MD_Scenario1.pdf (631.04 KB)
Inundation Boundary.zip (808.55 KB)
CA00319_MD_Scenario1_gdb.zip (9.16 MB)
Display
Inundation Boundary
Rancho Cucamonga
Upland Basin
Upland
Montclair
Ontario
Guasti
Extremely High (265)
High (439)
Significant (105)
Low (5)


Permitting Land Use Covenants Web App
with Web AppBuilder for ArcGIS
Find address or place
Grapeland
Etiwanda
Upland Hills Country Club
Base Line Rd
College Heights
Cable Airport
Claremont Colleges
Claremont
Upland
Rancho Cucamonga
North Cucamonga
Kaiser
Whittram Ave
Jersey Blvd
Arrow Rte
East Etiwanda Creek
Montclair
Ontario
Guasti
Sunsweet
Narod
Ballou
Champagne
South Fontana
Declezville
Ontario Mills Pkwy
Valley Blvd
Slover Ave
Santa Ana St
Jurupa St
Jurupa Ave
E Airport Dr
E Holt Blvd
W Holt Blvd
San Bernardino Ave
Holt Blvd
Mission Blvd
Howard St
State St
Francis Ave
Phillips Blvd
Orchard St
Moreno St
Olive St
8th St
6th St
4th St
Archibald Ave
Hermosa Ave
Haven Ave
Milliken Ave
Buffalo Ave
Hyssop Dr
Etiwanda Ave
Day Creek Blvd
Cherry Ave
Hemlock Ave
Banana Ave
Calabash Ave
Mulberry Ave
Ilex St
Marlay Ave
Carnegie Ave
S Dupont Ave
Kettering Dr
Vineyard Ave
Grove Ave
Baker Ave
Alta Cuesta Dr
Alta Ave
Jasper St
Campus Ave
Benson Ave
Mills Ave
Central Ave
Euclid Ave
Vine Ave
Vernon Ave
Fremont Ave
Kadota Ave
Oaks Ave
Sultana Ave
Cucamonga Ave
Ferry Ave
Telephone Ave
Hellman Ave
Carlos Ave
Francis St
E Cedar St
Cherry Ave
1581 ft
1mi
66
15

4708

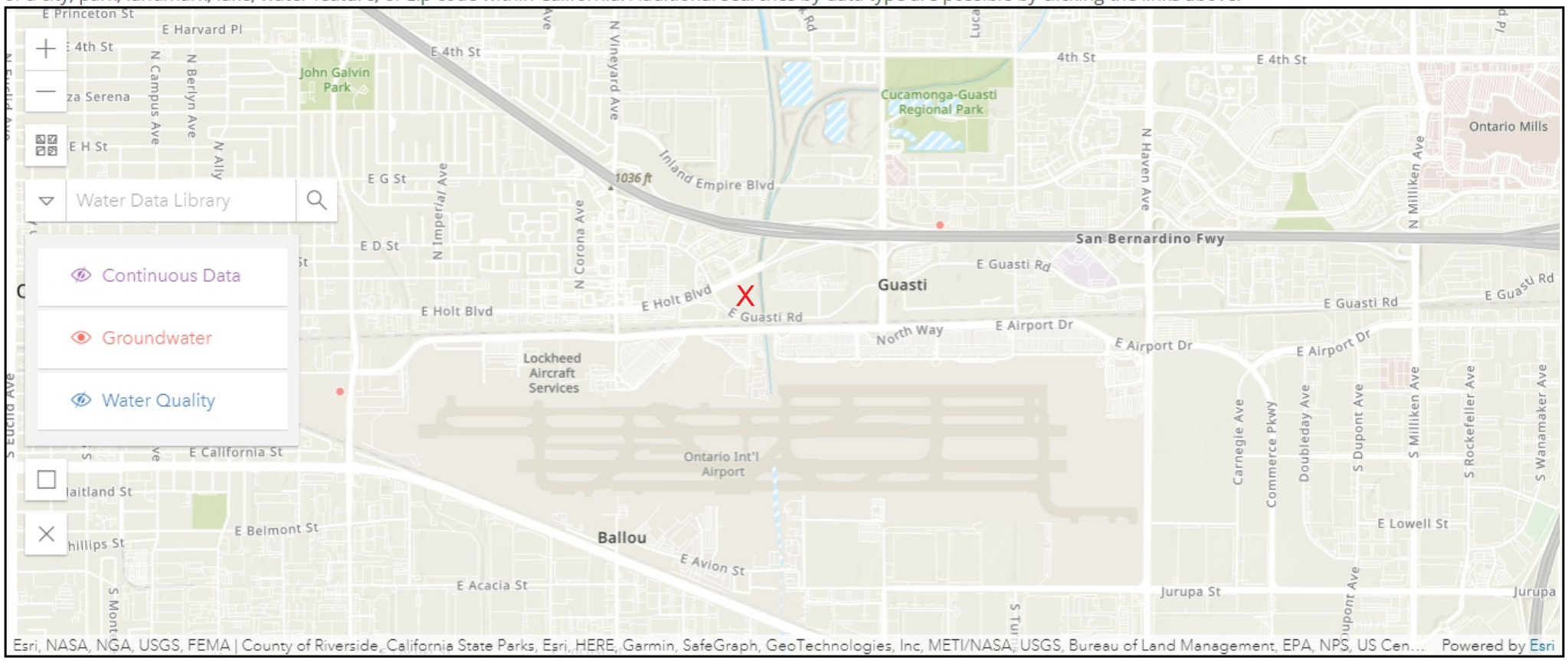

Permitting Land Use Covenants Web App
with Web AppBuilder for ArcGIS
Find address or place
(2 of 2)
Steelscape Inc.
Land Restriction Title Steelscape Inc.
Address 11200 Arrow Route
City Rancho Cucamonga
Zip Code 91730
County San Bernardino
EnviroStor Address 11200 ARROW RTE
Assessor's Parcel Number (APN) 0208-961-26-0000
EnviroStor ID 71002495
EPA ID Number CAD060762432
EnviroStor Name STEELSCAPE, INC
Zoom to
Rancho Cucamonga
Upland
Claremont
College Heights
Ontario
Montclair
Guasti
North Cucamonga
Grapeland
Etiwanda
Kaiser
Ballou
Champagne
Sunsweet
Narod
Upland Hills Country Club
Cable Airport
Claremont Colleges
E Base Line Rd
Base Line Rd
W Arrow Hwy
E Arrow Hwy
Jersey Blvd
Ontario Mills Pkwy
Valley Blvd
E Airport Dr
Holt Blvd
W Holt Blvd
E Holt Blvd
San Bernardino St
Moreno St
Olive St
Orchard St
Mission Blvd
Howard St
State St
Phillips Blvd
Francis Ave
Jurupa St
Jurupa Ave
Santa Ana St
Slover Ave
Marlay Ave
1mi

CALIFORNIA DEPARTMENT OF
WATER RESOURCES

WDL Station Map | Water Quality | Groundwater | Continuous Data | About | Login

Water Data Library (WDL) Station Map

Use the map below to locate monitoring stations. You can find an area of interest if you zoom and pan the map. Use the search box below to find features on the map such as the name of a city, park, landmark, lake, water feature, or zip code within California. Additional searches by data type are possible by clicking the links above.



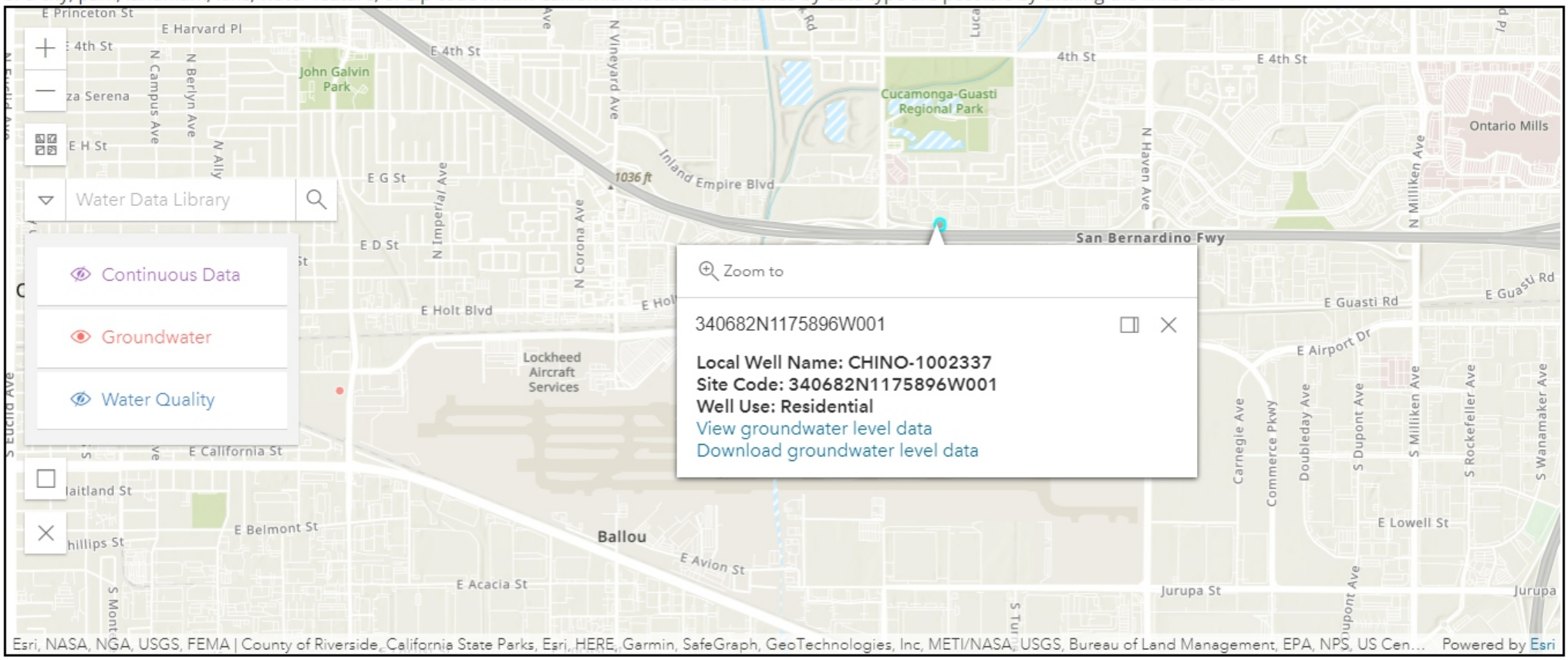
CALIFORNIA DEPARTMENT OF
WATER RESOURCES

WDL Station Map | Water Quality | Groundwater | Continuous Data | About

Login

Water Data Library (WDL) Station Map

Use the map below to locate monitoring stations. You can find an area of interest if you zoom and pan the map. Use the search box below to find features on the map such as the name of a city, park, landmark, lake, water feature, or zip code within California. Additional searches by data type are possible by clicking the links above.



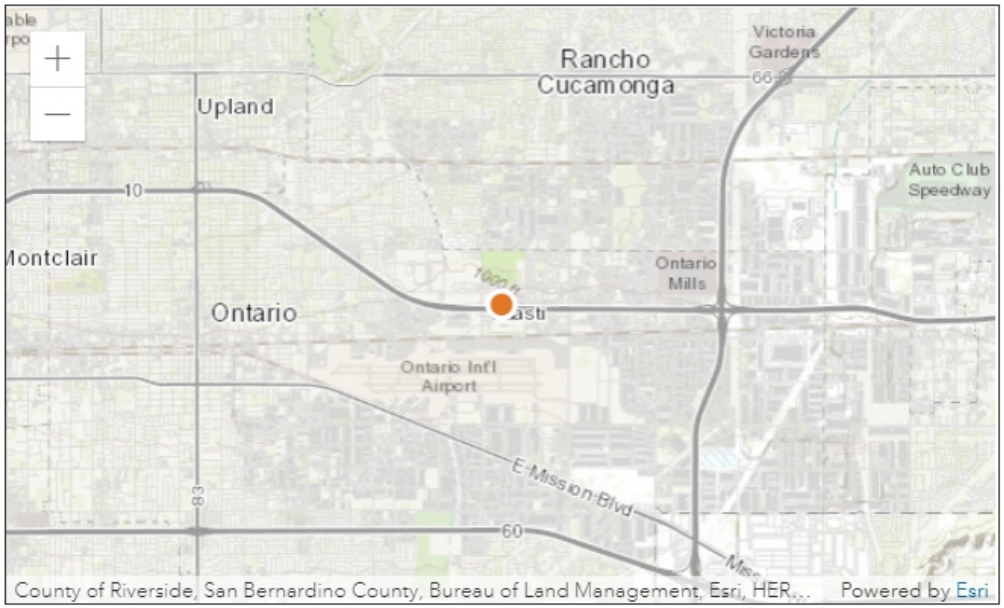
Back to Search

Groundwater Level Report

Station 340682N1175896W001

Station Data | Groundwater Level Data

State Well Number:	01S07W23M001S
Local Well Name:	CHINO-1002337
Site Code:	340682N1175896W001
Latitude (NAD83):	34.068166
Longitude (NAD83):	-117.589579
Basin Subbasin Name (Code):	Chino (8-002.01)
Well Use Type:	Residential
Well Status:	Active
WCR Number:	
Reference Point Elevation (NAVD88 ft):	981.000
Ground Surface Elevation (NAVD88 ft):	981.000
Well Depth (feet bgs):	903
Perforated Interval Depths (feet bgs):	370.000 903.000



CALIFORNIA DEPARTMENT OF
WATER RESOURCES

WDL Station Map | Water Quality | Groundwater | Continuous Data | About | Login

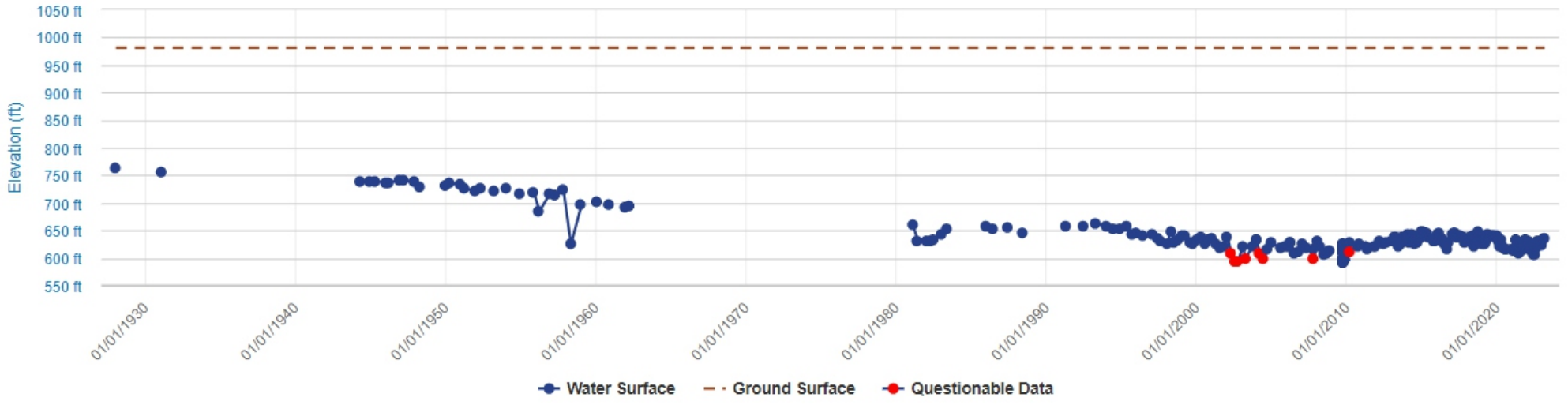
Back to Search

Groundwater Level Report

Station 340682N1175896W001

Station Data | Groundwater Level Data

Groundwater Levels for Well 340682N1175896W001



Measurement Date (PST)	Reference Point Elevation	Ground Surface Elevation	Distance from RP to WS	Groundwater Elevation	Ground Surface to Water Surface	Measurement Issue	Submitting Organization	Collecting Organization	Water Level Measurement Comments
10/01/2022 00:00:00	981.000	981.000	350	631	350		Chino Basin Watermaster...	Chino Basin Watermaster	
11/01/2022 00:00:00	981.000	981.000	352	629	352		Chino Basin Watermaster...	Chino Basin Watermaster	
12/01/2022 00:00:00	981.000	981.000	351	630	351		Chino Basin Watermaster...	Chino Basin Watermaster	
01/01/2023 00:00:00	981.000	981.000	358	623	358		Chino Basin Watermaster...	Chino Basin Watermaster	
02/01/2023 00:00:00	981.000	981.000	348	633	348		Chino Basin Watermaster...	Chino Basin Watermaster	
03/01/2023 00:00:00	981.000	981.000	344	637	344		Chino Basin Watermaster...	Chino Basin Watermaster	

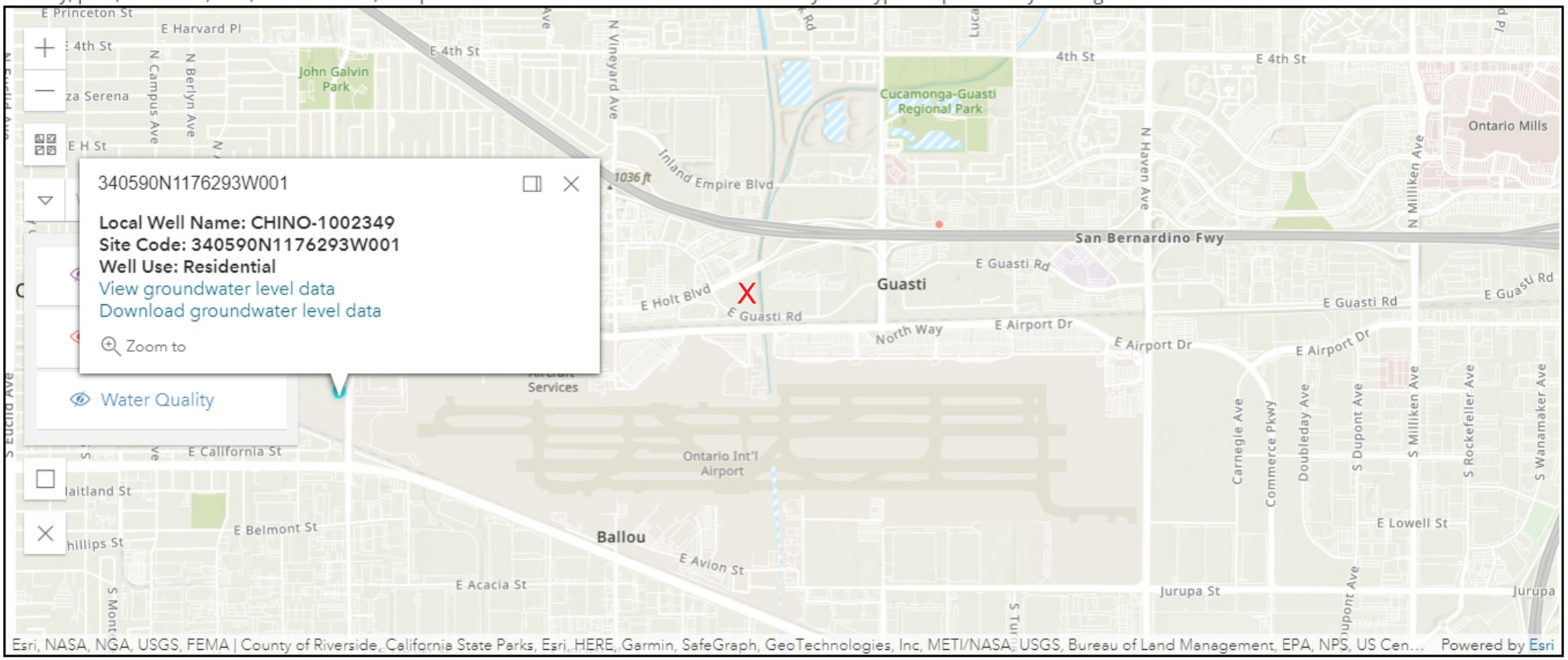
426 to 431 of 431 records

CALIFORNIA DEPARTMENT OF
WATER RESOURCES

WDL Station Map | Water Quality | Groundwater | Continuous Data | About | Login

Water Data Library (WDL) Station Map

Use the map below to locate monitoring stations. You can find an area of interest if you zoom and pan the map. Use the search box below to find features on the map such as the name of a city, park, landmark, lake, water feature, or zip code within California. Additional searches by data type are possible by clicking the links above.



Back to Search

Groundwater Level Report

Station 340590N1176293W001

Station Data | Groundwater Level Data

State Well Number:	01S07W29A001S
Local Well Name:	CHINO-1002349
Site Code:	340590N1176293W001
Latitude (NAD83):	34.059042
Longitude (NAD83):	-117.629251
Basin Subbasin Name (Code):	Chino (8-002.01)
Well Use Type:	Residential
Well Status:	Active
WCR Number:	90430
Reference Point Elevation (NAVD88 ft):	958.000
Ground Surface Elevation (NAVD88 ft):	958.000
Well Depth (feet bgs):	1028
Perforated Interval Depths (feet bgs):	415.000 430.000 510.000 695.000 770.000 885.000 925.000 1007.000



CALIFORNIA DEPARTMENT OF
WATER RESOURCES

WDL Station Map | Water Quality | Groundwater | Continuous Data | About | Login

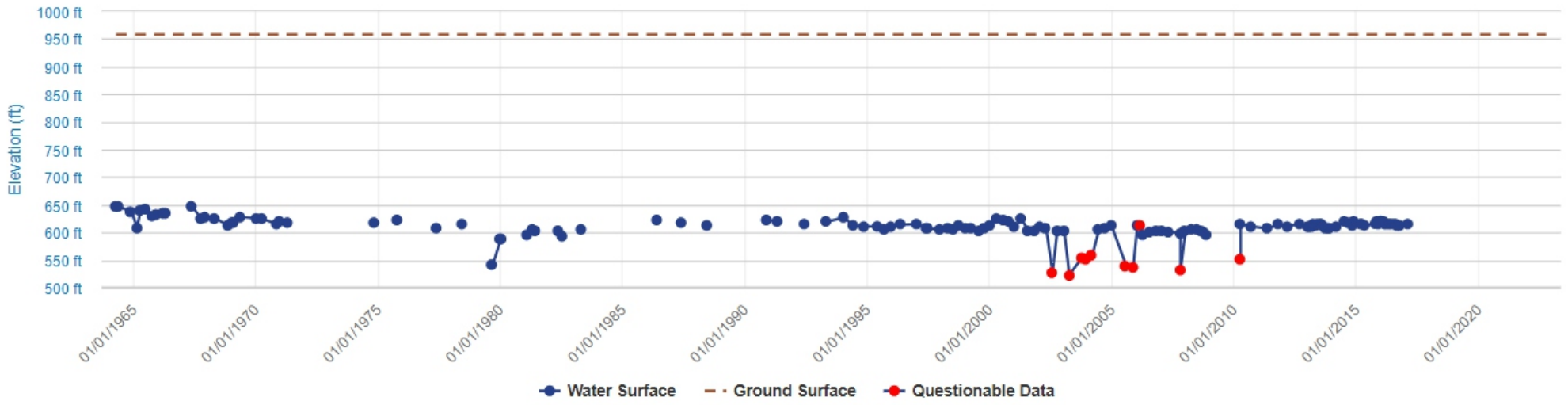
Back to Search

Groundwater Level Report

Station 340590N1176293W001

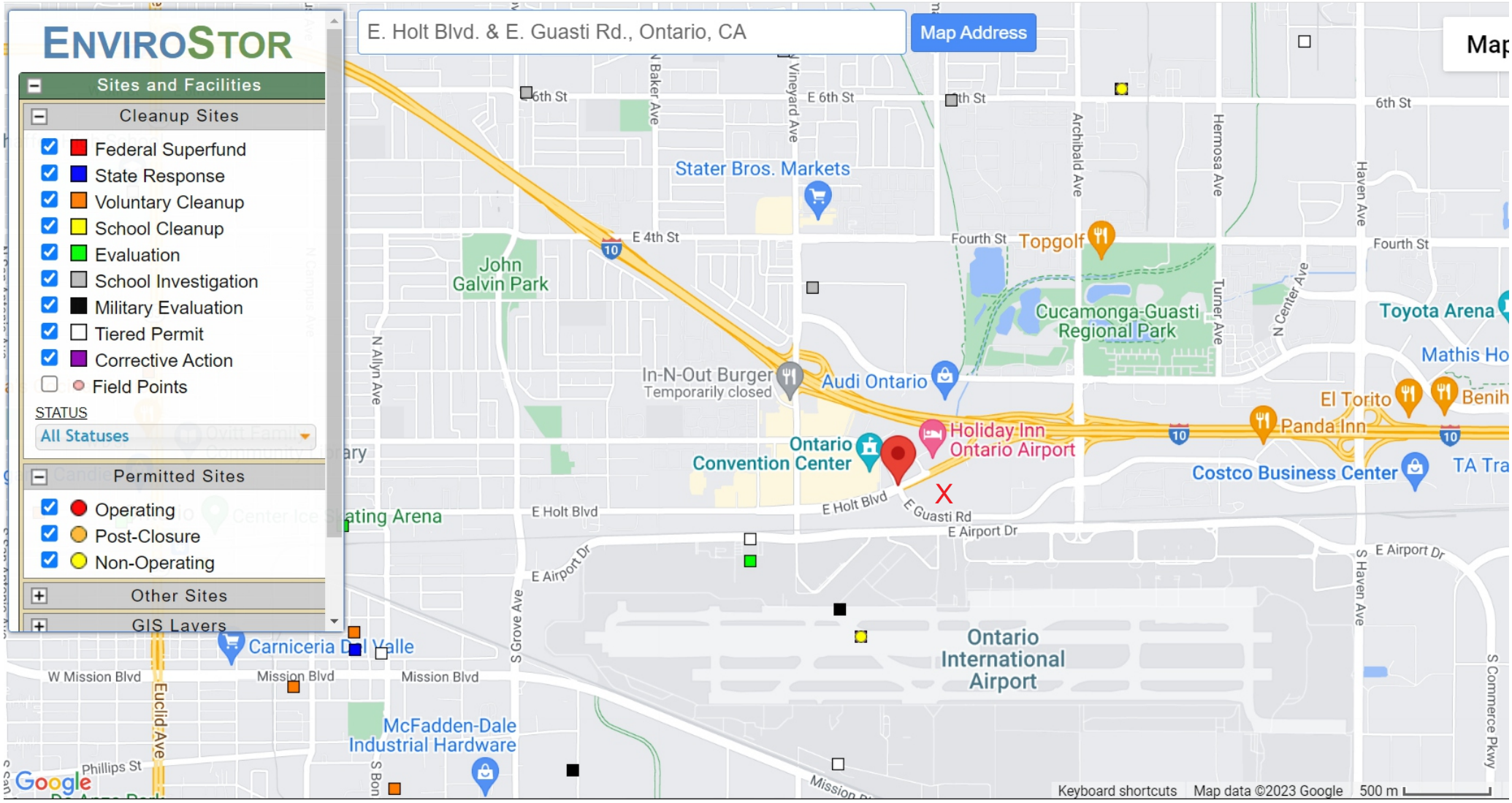
Station Data | Groundwater Level Data

Groundwater Levels for Well 340590N1176293W001

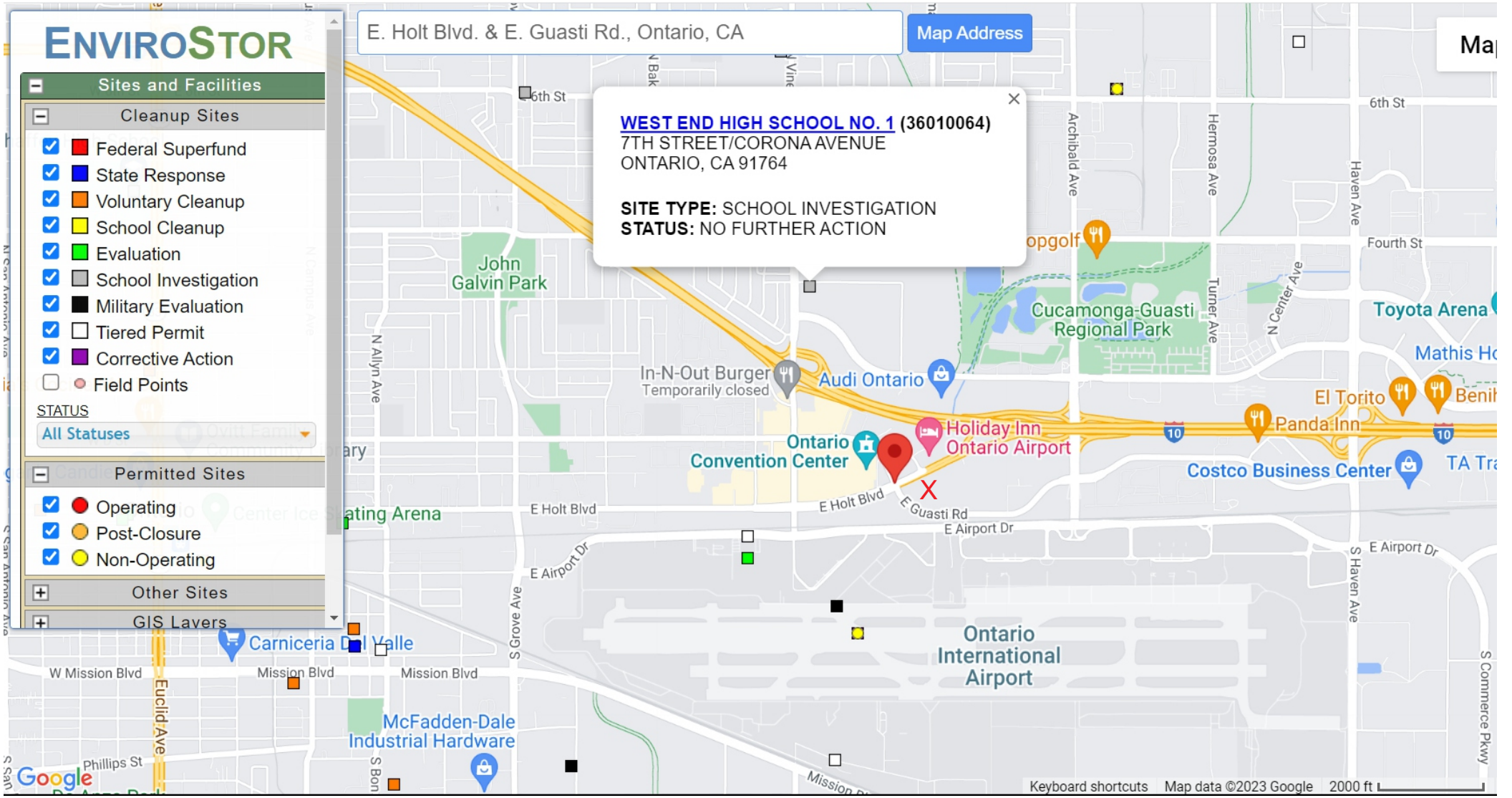


Measurement Date (PST)	Reference Point Elevation	Ground Surface Elevation	Distance from RP to WS	Groundwater Elevation	Ground Surface to Water Surface	Measurement Issue	Submitting Organization	Collecting Organization	Water Level Measurement Comments
04/06/1964 00:00:00	958.000	958.000	312	646	312		Chino Basin Watermaster...	Chino Basin Watermaster	
05/09/1964 00:00:00	958.000	958.000	312	646	312		Chino Basin Watermaster...	Chino Basin Watermaster	
11/23/1964 00:00:00	958.000	958.000	320	638	320		Chino Basin Watermaster...	Chino Basin Watermaster	
02/15/1965 00:00:00	958.000	958.000	349	609	349		Chino Basin Watermaster...	Chino Basin Watermaster	
04/07/1965 00:00:00	958.000	958.000	318	640	318		Chino Basin Watermaster...	Chino Basin Watermaster	
06/21/1965 00:00:00	958.000	958.000	316	642	316		Chino Basin Watermaster...	Chino Basin Watermaster	
10/11/1965 00:00:00	958.000	958.000	327	631	327		Chino Basin Watermaster...	Chino Basin Watermaster	
11/23/1965 00:00:00	958.000	958.000	325	633	325		Chino Basin Watermaster...	Chino Basin Watermaster	
03/15/1966 00:00:00	958.000	958.000	324	634	324		Chino Basin Watermaster...	Chino Basin Watermaster	
04/13/1966 00:00:00	958.000	958.000	323	635	323		Chino Basin Watermaster...	Chino Basin Watermaster	

03/01/2016 00:00:00	958.000	958.000	342	616	342		Chino Basin Watermaster...	Chino Basin Watermaster	ONT 17
04/01/2016 00:00:00	958.000	958.000	344	614	344		Chino Basin Watermaster...	Chino Basin Watermaster	ONT 17
05/01/2016 00:00:00	958.000	958.000	342	616	342		Chino Basin Watermaster...	Chino Basin Watermaster	ONT 17
06/01/2016 00:00:00	958.000	958.000	342	616	342		Chino Basin Watermaster...	Chino Basin Watermaster	
07/01/2016 00:00:00	958.000	958.000	342	616	342		Chino Basin Watermaster...	Chino Basin Watermaster	
08/01/2016 00:00:00	958.000	958.000	343	615	343		Chino Basin Watermaster...	Chino Basin Watermaster	
09/01/2016 00:00:00	958.000	958.000	345	613	345		Chino Basin Watermaster...	Chino Basin Watermaster	
10/01/2016 00:00:00	958.000	958.000	345	613	345		Chino Basin Watermaster...	Chino Basin Watermaster	
02/01/2017 00:00:00	958.000	958.000	343	615	343		Chino Basin Watermaster...	Chino Basin Watermaster	
04/01/2017 00:00:00	958.000	958.000				NM:Measurement Discontinued	Chino Basin Watermaster...	Chino Basin Watermaster	Agency abandoned well.
11/01/2017 00:00:00	958.000	958.000				NM:Measurement Discontinued	Chino Basin Watermaster...	Chino Basin Watermaster	Agency abandoned well.


ENVIROSTOR
Sites and Facilities
Cleanup Sites
Federal Superfund
State Response
Voluntary Cleanup
School Cleanup
Evaluation
School Investigation
Military Evaluation
Tiered Permit
Corrective Action
Field Points
STATUS
All Statuses
Permitted Sites
Operating
Post-Closure
Non-Operating
Other Sites
GIS Layers
E. Holt Blvd. & E. Guasti Rd., Ontario, CA
Map Address
Stater Bros. Markets
John Galvin Park
Topgolf
Cucamonga-Guasti Regional Park
Toyota Arena
In-N-Out Burger
Temporarily closed
Audi Ontario
Holiday Inn Ontario Airport
Ontario Convention Center
Panda Inn
El Torito
Costco Business Center
Ontario International Airport
Carniceria Del Valle
McFadden-Dale Industrial Hardware
E 6th St
E 4th St
Fourth St
E Holt Blvd
E Guasti Rd
E Airport Dr
W Mission Blvd
Mission Blvd
Euclid Ave
S Grove Ave
N Baker Ave
N Vineyard Ave
Archibald Ave
Hermosa Ave
Haven Ave
Turner Ave
N Center Ave
S Haven Ave
S Commerce Pkwy
Phillips St
Google
Keyboard shortcuts
Map data ©2023 Google
500 m

4720


ENVIROSTOR
Sites and Facilities
Cleanup Sites
Federal Superfund
State Response
Voluntary Cleanup
School Cleanup
Evaluation
School Investigation
Military Evaluation
Tiered Permit
Corrective Action
Field Points
STATUS
All Statuses
Permitted Sites
Operating
Post-Closure
Non-Operating
Other Sites
GIS Layers
E. Holt Blvd. & E. Guasti Rd., Ontario, CA
Map Address
WEST END HIGH SCHOOL NO. 1 (36010064)
7TH STREET/CORONA AVENUE
ONTARIO, CA 91764
SITE TYPE: SCHOOL INVESTIGATION
STATUS: NO FURTHER ACTION
John Galvin Park
Cucamonga-Guasti Regional Park
In-N-Out Burger
Temporarily closed
Audi Ontario
Holiday Inn Ontario Airport
Ontario Convention Center
Panda Inn
El Torito
Toyota Arena
Costco Business Center
Ontario International Airport
Carniceria Del Valle
McFadden-Dale Industrial Hardware
6th St
Fourth St
E Holt Blvd
E Guasti Rd
E Airport Dr
Mission Blvd
W Mission Blvd
Phillips St
Euclid Ave
S Grove Ave
S Haven Ave
Archibald Ave
Hermosa Ave
Haven Ave
Turner Ave
N Center Ave
N Allyn Ave
S Commerce Pkwy
Google
Keyboard shortcuts
Map data ©2023 Google
2000 ft

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

ENVIROSTOR

Tools | Reports | Community Involvement | How to Use EnviroStor | ESI | DTSC Web

WEST END HIGH SCHOOL NO. 1 (36010064)

SIGN UP FOR EMAIL ALERTS

7TH STREET/CORONA AVENUE
ONTARIO, CA 91764
SAN BERNARDINO COUNTY
SITE TYPE: SCHOOL

SUPERVISOR:	JAVIER HINOJOSA
OFFICE:	SOUTHERN CALIFORNIA SCHOOLS & BROWNFIELDS OUTREACH
SCHOOL DISTRICT:	SAN BERNARDINO COUNTY OFF OF EDUCATION SCHOOL DISTRICT
CENSUS TRACT:	6071001312
CALENVIROSCREEN PERCENTILE SCORE:	75-80%

Site Information

CLEANUP STATUS
NO FURTHER ACTION AS OF 12/28/2001

SITE TYPE: SCHOOL	**SCHOOL DISTRICT:**	SAN BERNARDINO COUNTY OFF OF EDUCATION SCHOOL DISTRICT	
NATIONAL PRIORITIES LIST: NO	**ENVIROSTOR ID:**		36010064
ACRES: 5 ACRES	**SITE CODE:**		404080
APN: NONE SPECIFIED	**SPECIAL PROGRAM:**		
CLEANUP OVERSIGHT AGENCIES:	**FUNDING:**		SCHOOL DISTRICT
DTSC - LEAD AGENCY	**ASSEMBLY DISTRICT:**		50
	SENATE DISTRICT:		22

Regulatory Profile

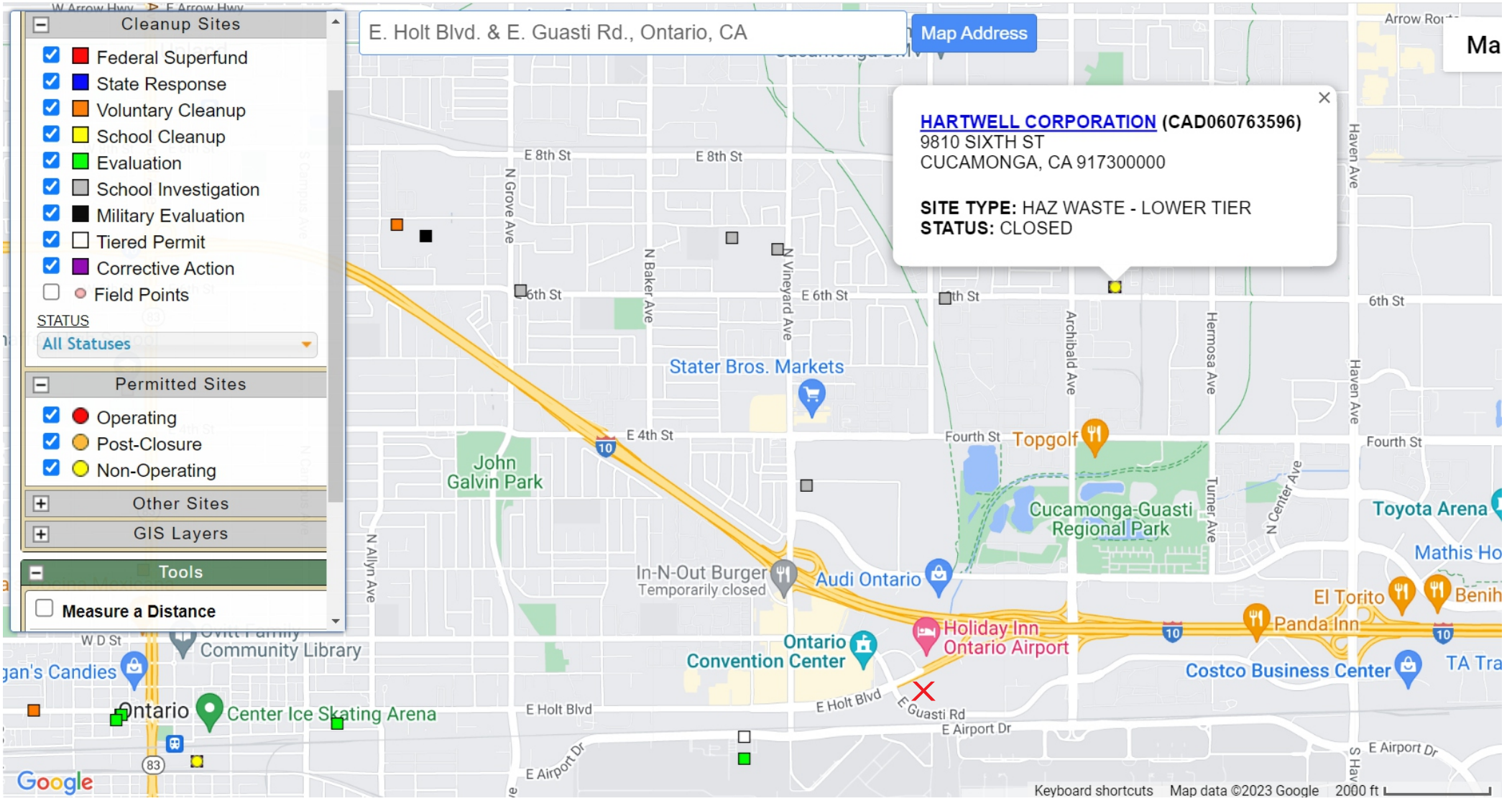
PAST USE(S) THAT CAUSED CONTAMINATION
AGRICULTURAL - ROW CROPS

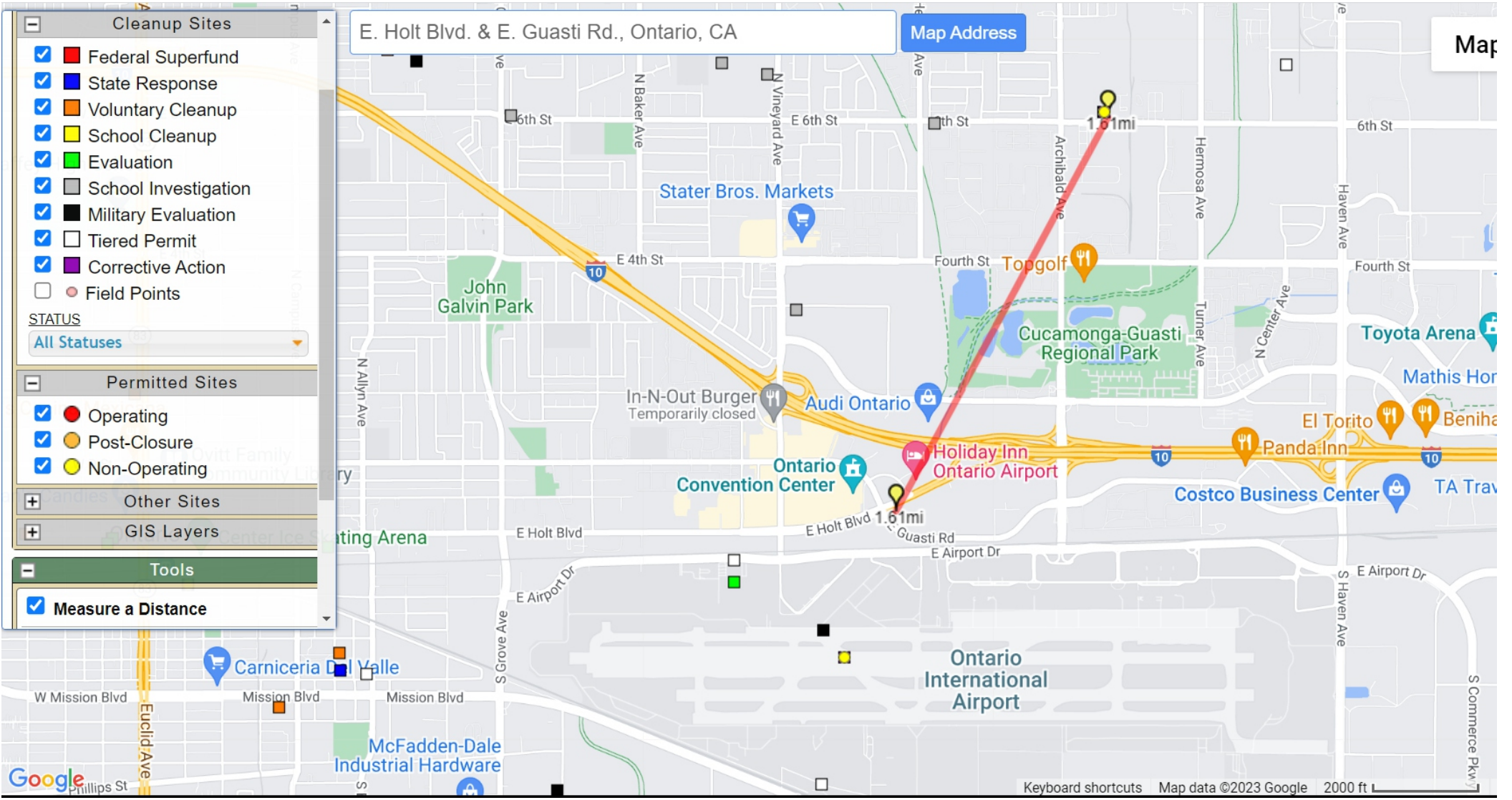
POTENTIAL CONTAMINANTS OF CONCERN
DDE
DDT
DIELDRIN
SELENIUM

POTENTIAL MEDIA AFFECTED
SOIL

Site History

The proposed school site is currently vacant and was historically agricultural.


Cleanup Sites
Federal Superfund
State Response
Voluntary Cleanup
School Cleanup
Evaluation
School Investigation
Military Evaluation
Tiered Permit
Corrective Action
Field Points
STATUS
All Statuses
Permitted Sites
Operating
Post-Closure
Non-Operating
Other Sites
GIS Layers
Tools
Measure a Distance
E. Holt Blvd. & E. Guasti Rd., Ontario, CA
Map Address
HARTWELL CORPORATION (CAD060763596)
9810 SIXTH ST
CUCAMONGA, CA 917300000
SITE TYPE: HAZ WASTE - LOWER TIER
STATUS: CLOSED
E 8th St
N Grove Ave
N Baker Ave
N Vineyard Ave
E 6th St
Archibald Ave
Hermosa Ave
Haven Ave
6th St
Stater Bros. Markets
E 4th St
Fourth St
Topgolf
John Galvin Park
Cucamonga-Guasti Regional Park
Turner Ave
N Center Ave
Toyota Arena
N Allyn Ave
In-N-Out Burger
Temporarily closed
Audi Ontario
Holiday Inn Ontario Airport
Ontario Convention Center
El Torito
Panda Inn
Costco Business Center
W D St
Community Library
Ontario
Center Ice Skating Arena
E Holt Blvd
E Guasti Rd
E Airport Dr
Google
Keyboard shortcuts
Map data ©2023 Google
2000 ft


Cleanup Sites
Federal Superfund
State Response
Voluntary Cleanup
School Cleanup
Evaluation
School Investigation
Military Evaluation
Tiered Permit
Corrective Action
Field Points
STATUS
All Statuses
Permitted Sites
Operating
Post-Closure
Non-Operating
Other Sites
GIS Layers
Tools
Measure a Distance
E. Holt Blvd. & E. Guasti Rd., Ontario, CA
Map Address
1.61mi
Stater Bros. Markets
John Galvin Park
Topgolf
Cucamonga-Guasti Regional Park
Toyota Arena
In-N-Out Burger
Temporarily closed
Audi Ontario
Holiday Inn Ontario Airport
Ontario Convention Center
Panda Inn
El Torito
Costco Business Center
E Holt Blvd
E Guasti Rd
E Airport Dr
Ontario International Airport
Carniceria Del Valle
McFadden-Dale Industrial Hardware
W Mission Blvd
Mission Blvd
Euclid Ave
S Grove Ave
N Baker Ave
N Vineyard Ave
Archibald Ave
Hermosa Ave
Haven Ave
Turner Ave
N Center Ave
S Haven Ave
S Commerce Pkwy
E 6th St
6th St
E 4th St
Fourth St
N Allyn Ave
Google
Keyboard shortcuts
Map data ©2023 Google
2000 ft

HARTWELL CORPORATION (CAD060763596)

SIGN UP FOR EMAIL ALERTS

9810 SIXTH ST
CUCAMONGA, CA 917300000
SAN BERNARDINO COUNTY

FACILITY TYPE: CLOSED
PROGRAM TYPE: HAZARDOUS WASTE FACILITY

CENSUS TRACT: 6071002110
CALENVIROSCREEN PERCENTILE SCORE: 70-75%

Permitting | Activities | Site/Facility Docs | Map | Related Sites | CalEnviroScreen | Enforcement / Inspections | Corrective Action

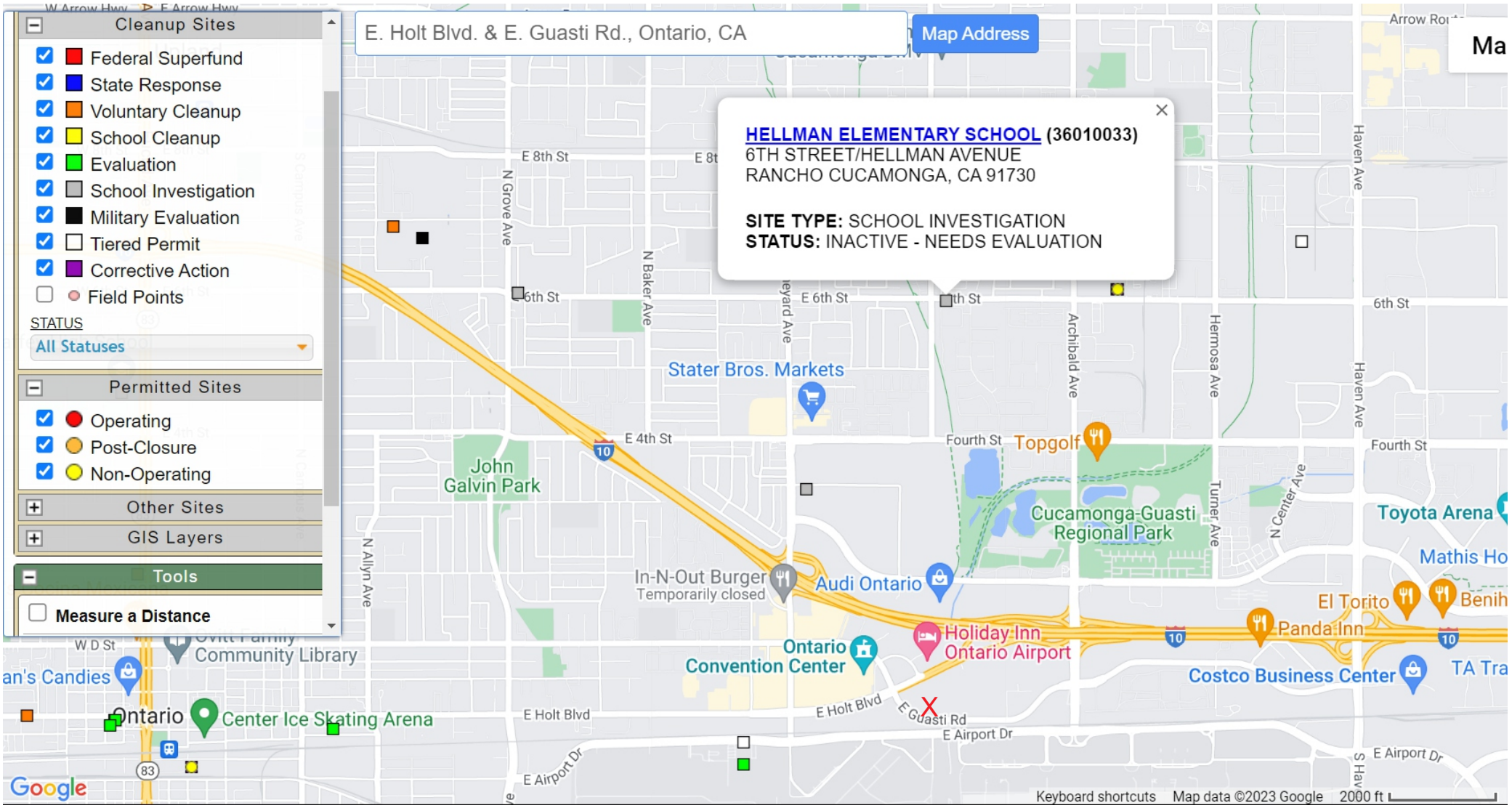
Site Information

SITE/FACILITY TYPE
CLOSED

SITE CODE	ASSEMBLY DISTRICT	SENATE DISTRICT
	50	29

Facility History

5/3/17- The Hartwell corporation received an ISD on 12/12/81. In February of 1983 the facility then applied for a variance and exemption for ISD as they determined the facility should not have been permitted under an ISD in 1981. In January 1991, they withdrew from variance and applied for PBR. However due to violations and contaminations at the site, this facility was referred to clean up (see project information in clean up Envirostor for details). A no further action determination for the Hartwell Corp was made on 9/25/14 by the clean up program. This facility is being administratively closed in the Permitting Evirostor database due to never being a TSDF and was regulated by the tiered permitting program.


Cleanup Sites
Federal Superfund
State Response
Voluntary Cleanup
School Cleanup
Evaluation
School Investigation
Military Evaluation
Tiered Permit
Corrective Action
Field Points
STATUS
All Statuses
Permitted Sites
Operating
Post-Closure
Non-Operating
Other Sites
GIS Layers
Tools
Measure a Distance
E. Holt Blvd. & E. Guasti Rd., Ontario, CA
Map Address
HELLMAN ELEMENTARY SCHOOL (36010033)
6TH STREET/HELLMAN AVENUE
RANCHO CUCAMONGA, CA 91730
SITE TYPE: SCHOOL INVESTIGATION
STATUS: INACTIVE - NEEDS EVALUATION
Stater Bros. Markets
John Galvin Park
Topgolf
Cucamonga-Guasti Regional Park
In-N-Out Burger
Temporarily closed
Audi Ontario
Holiday Inn Ontario Airport
Ontario Convention Center
Panda Inn
El Torito
Toyota Arena
Costco Business Center
Community Library
Center Ice Skating Arena
E 8th St
E 6th St
6th St
Fourth St
E 4th St
E Holt Blvd
E Airport Dr
E Guasti Rd
N Grove Ave
N Baker Ave
N Allyn Ave
Archibald Ave
Hermosa Ave
Haven Ave
Turner Ave
N Center Ave
Google
Keyboard shortcuts
Map data ©2023 Google
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DEPARTMENT OF TOXIC SUBSTANCES CONTROL

ENVIROSTOR

Tools | Reports | Community Involvement | How to Use EnviroStor | ESI | DTSC Web

HELLMAN ELEMENTARY SCHOOL (36010033)

SIGN UP FOR EMAIL ALERTS

6TH STREET/HELLMAN AVENUE
RANCHO CUCAMONGA, CA 91730
SAN BERNARDINO COUNTY
SITE TYPE: SCHOOL

SUPERVISOR: SHAHIR HADDAD
OFFICE: SOUTHERN CALIFORNIA SCHOOLS & BROWNFIELDS OUTREACH
SCHOOL DISTRICT: CUCAMONGA ELEMENTARY SCHOOL DISTRICT
CENSUS TRACT: 6071001311
CALENVIROSCREEN PERCENTILE SCORE: 55-60%

Summary | Activities | Site/Facility Docs | Map | Related Sites | CalEnviroScreen

Site Information

CLEANUP STATUS

INACTIVE - NEEDS EVALUATION AS OF 6/29/2000

SITE TYPE: SCHOOL
NATIONAL PRIORITIES LIST: NO
ACRES: 9.54 ACRES
APN: NONE SPECIFIED
CLEANUP OVERSIGHT AGENCIES:
DTSC - SITE CLEANUP PROGRAM - LEAD AGENCY

SCHOOL DISTRICT: CUCAMONGA ELEMENTARY SCHOOL DISTRICT
ENVIROSTOR ID: 36010033
SITE CODE: 404035, 404092
SPECIAL PROGRAM:
FUNDING: SCHOOL DISTRICT
ASSEMBLY DISTRICT: 50
SENATE DISTRICT: 29

Regulatory Profile

PAST USE(S) THAT CAUSED CONTAMINATION
AGRICULTURAL - ROW CROPS

POTENTIAL CONTAMINANTS OF CONCERN
NONE SPECIFIED

POTENTIAL MEDIA AFFECTED
NONE SPECIFIED

Site History

The site currently has two residential structures on a portion of the site with the remainder being used as a vineyard since 1945. The vineyard replaced peach orchards and tomatoes that were grown as an agricultural crop. Reported onsite environmental conditions include current and historic application of agricultural chemicals, an abandoned 200-gallon underground storage tanks and stained soils.

Summary | Activities | Site/Facility Docs | Map | Related Sites | CalEnviroScreen

DOCUMENT DATE RANGE: TO Filter

Completed Activities

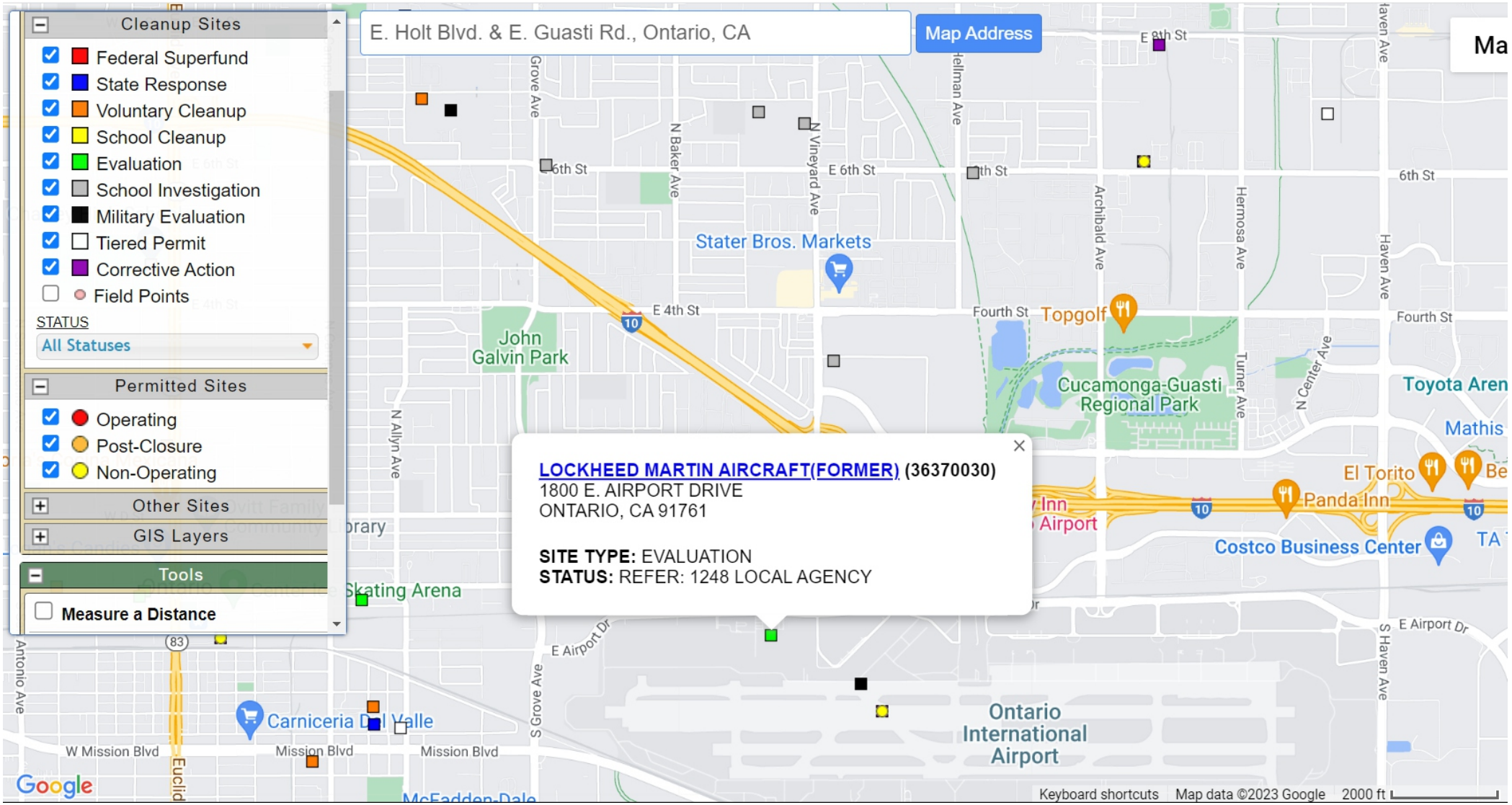
HIDE DOCUMENTS > 1 YEAR OLD

TITLE/DESCRIPTION	DOCUMENT TYPE	DATE COMPLETED

Community Involvement Documents

HIDE DOCUMENTS > 1 YEAR OLD

NO COMMUNITY INVOLVEMENT DOCUMENTS HAVE BEEN UPLOADED TO THIS PROJECT


Cleanup Sites
Federal Superfund
State Response
Voluntary Cleanup
School Cleanup
Evaluation
School Investigation
Military Evaluation
Tiered Permit
Corrective Action
Field Points
STATUS
All Statuses
Permitted Sites
Operating
Post-Closure
Non-Operating
Other Sites
GIS Layers
Tools
Measure a Distance
E. Holt Blvd. & E. Guasti Rd., Ontario, CA
Map Address
LOCKHEED MARTIN AIRCRAFT(FORMER) (36370030)
1800 E. AIRPORT DRIVE
ONTARIO, CA 91761
SITE TYPE: EVALUATION
STATUS: REFER: 1248 LOCAL AGENCY
Stater Bros. Markets
John Galvin Park
Cucamonga-Guasti Regional Park
Topgolf
Panda Inn
El Torito
Costco Business Center
Toyota Aren
Mathis
Ontario International Airport
Carniceria Del Valle
Skating Arena
E 4th St
Fourth St
E 6th St
6th St
E Airport Dr
Mission Blvd
W Mission Blvd
Grove Ave
N Baker Ave
N Vineyard Ave
Hellman Ave
Archibald Ave
Hermosa Ave
Haven Ave
Turner Ave
N Center Ave
N Allyn Ave
S Grove Ave
Antonio Ave
Euclid
Google
Keyboard shortcuts
Map data ©2023 Google
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DEPARTMENT OF TOXIC SUBSTANCES CONTROL

ENVIROSTOR

Tools | Reports | Community Involvement | How to Use EnviroStor | ESI | DTSC Web

LOCKHEED MARTIN AIRCRAFT(FORMER) (36370030)

SIGN UP FOR EMAIL ALERTS

1800 E. AIRPORT DRIVE
ONTARIO, CA 91761
SAN BERNARDINO COUNTY
SITE TYPE: EVALUATION

OFFICE: CLEANUP CYPRESS
CENSUS TRACT: 6071001600
CALENVIROSCREEN PERCENTILE SCORE: 95-100% (highest scores)

Summary | Map | Related Sites | CalEnviroScreen

Site Information

CLEANUP STATUS
REFER: 1248 LOCAL AGENCY AS OF 3/8/2001

SITE TYPE: EVALUATION
NATIONAL PRIORITIES LIST: NO
ACRES: NONE SPECIFIED
APN: NONE SPECIFIED
CLEANUP OVERSIGHT AGENCIES:
NONE SPECIFIED

ENVIROSTOR ID: 36370030
SITE CODE:
SPECIAL PROGRAM:
FUNDING: NOT APPLICABLE
ASSEMBLY DISTRICT: 53
SENATE DISTRICT: 22

Site Information

CLEANUP STATUS
REFER: 1248 LOCAL AGENCY AS OF 3/8/2001

SITE TYPE: EVALUATION
NATIONAL PRIORITIES LIST: NO
ACRES: NONE SPECIFIED
APN: NONE SPECIFIED
CLEANUP OVERSIGHT AGENCIES:
NONE SPECIFIED

ENVIROSTOR ID: 36370030
SITE CODE:
SPECIAL PROGRAM:
FUNDING: NOT APPLICABLE
ASSEMBLY DISTRICT: 53
SENATE DISTRICT: 22

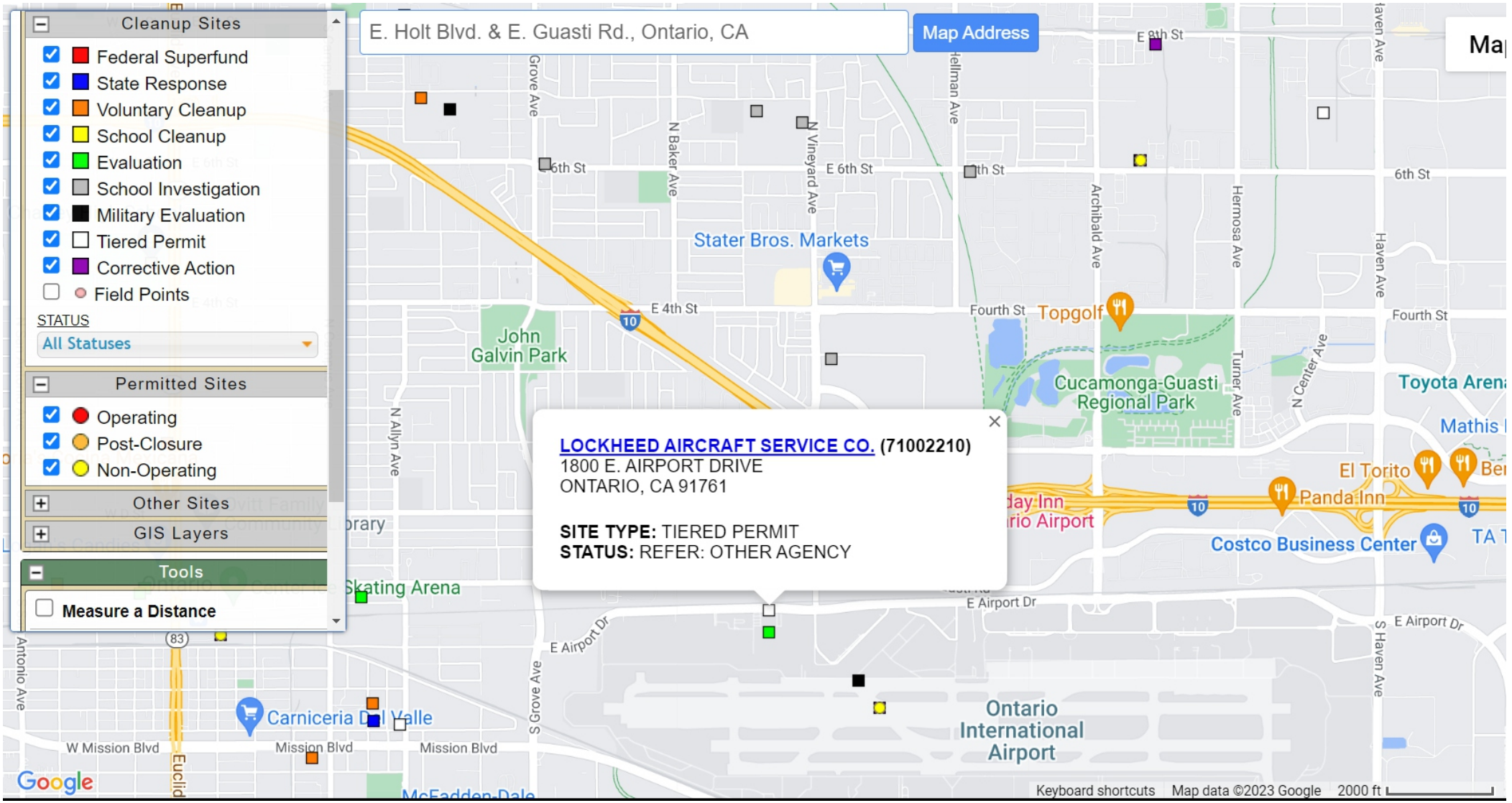
Regulatory Profile

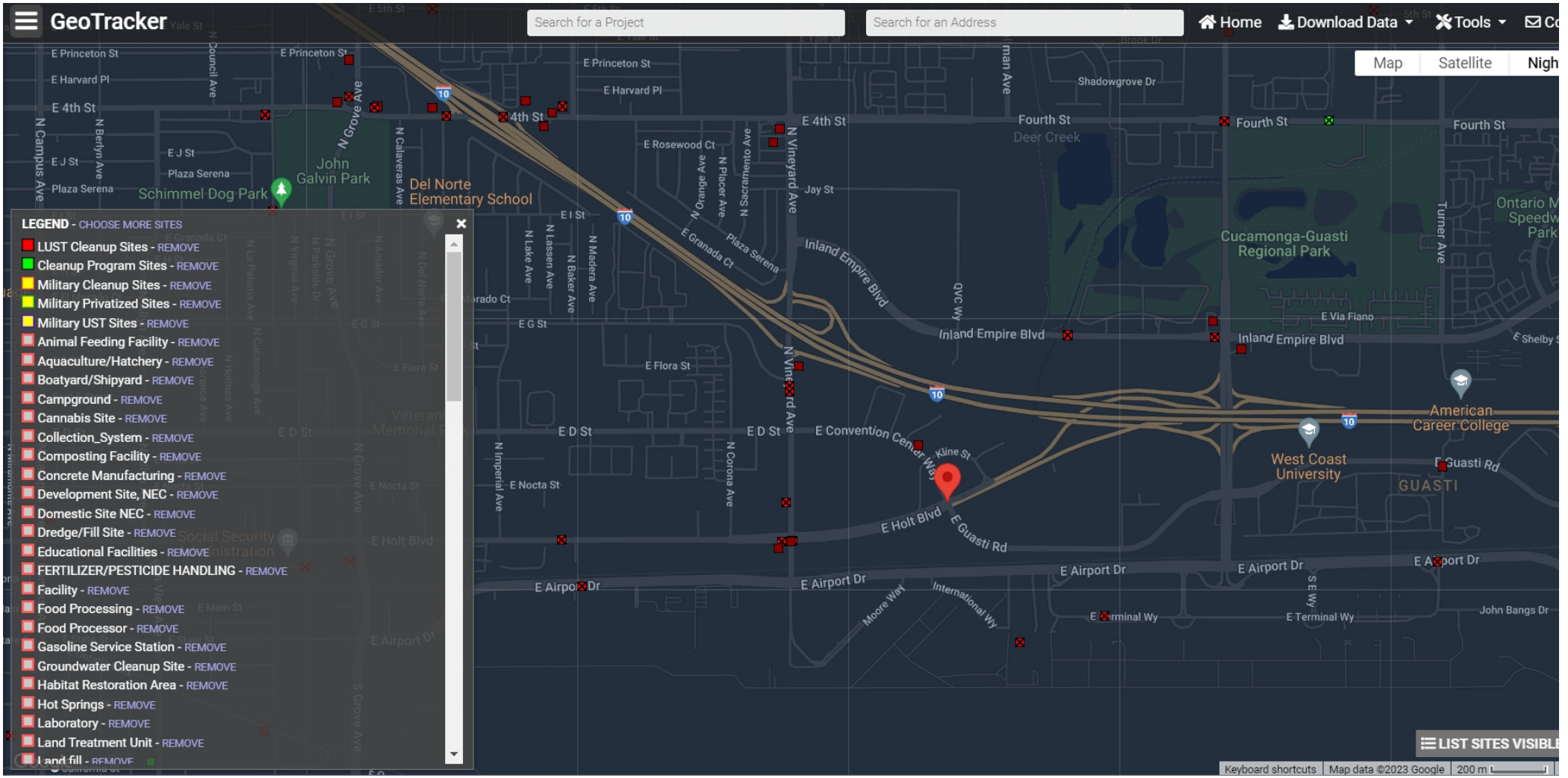
PAST USE(S) THAT CAUSED CONTAMINATION
NONE SPECIFIED

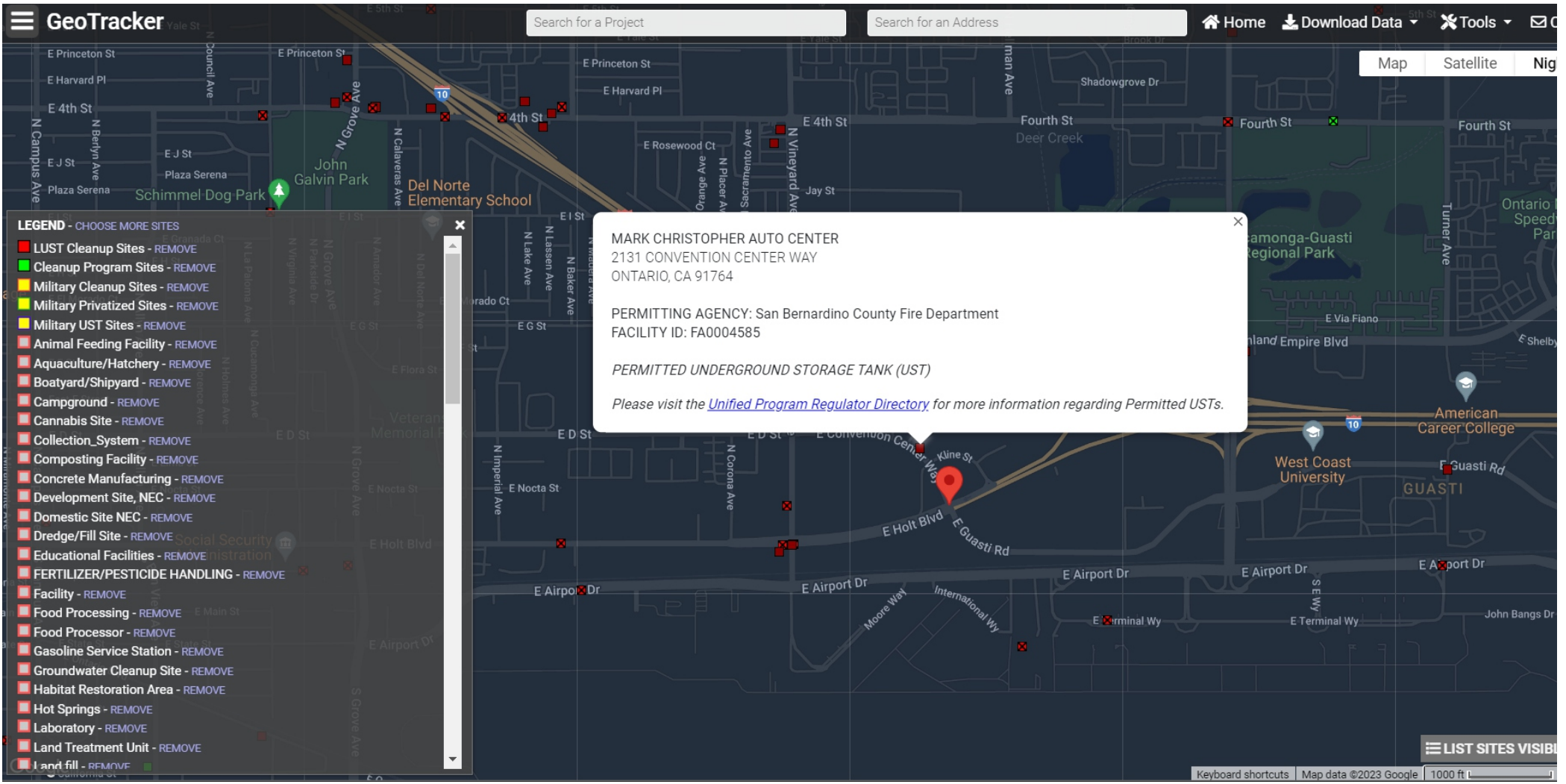
POTENTIAL CONTAMINANTS OF CONCERN
NONE SPECIFIED

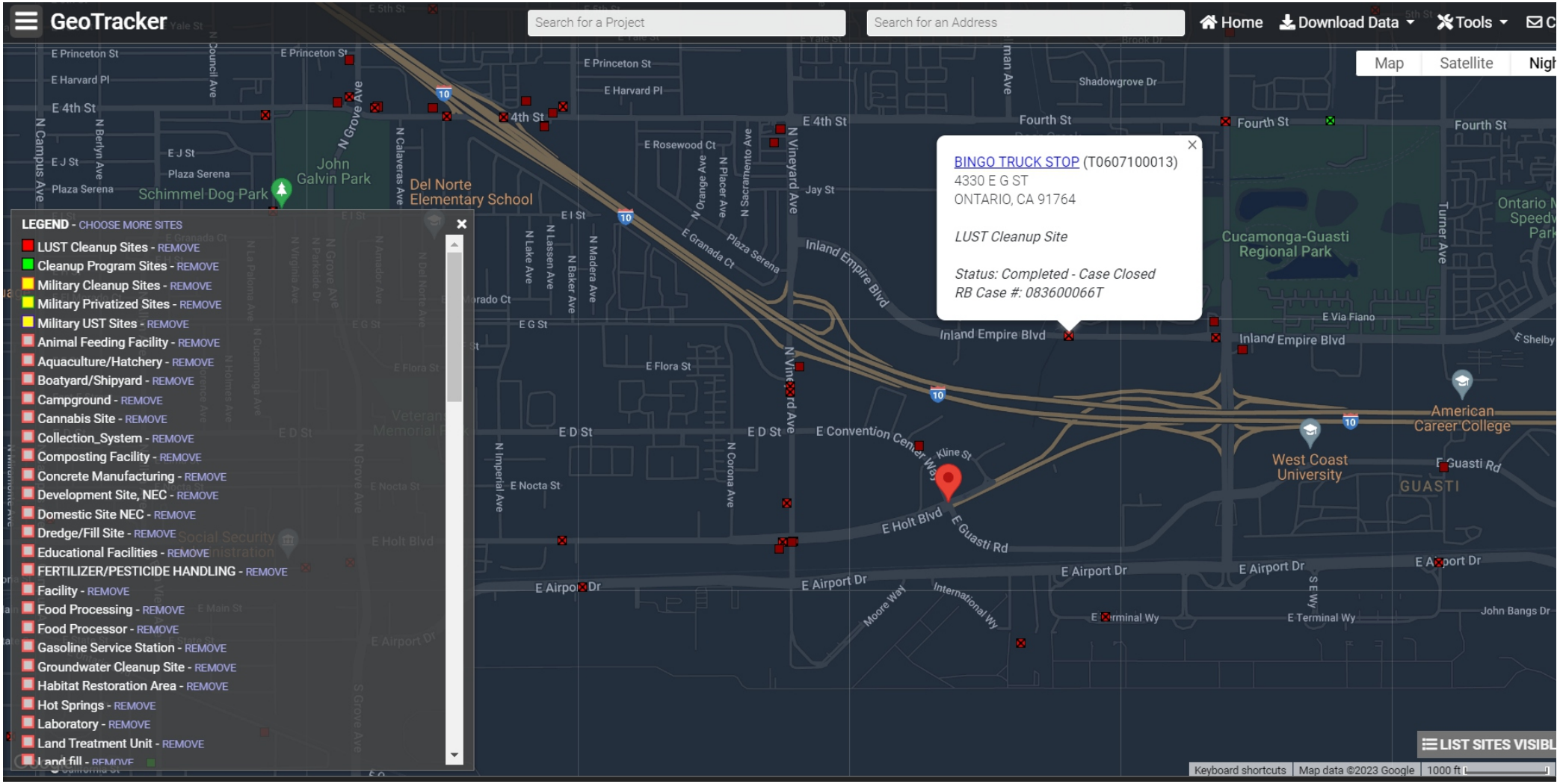
POTENTIAL MEDIA AFFECTED
NONE SPECIFIED

Site History


Cleanup Sites
Federal Superfund
State Response
Voluntary Cleanup
School Cleanup
Evaluation
School Investigation
Military Evaluation
Tiered Permit
Corrective Action
Field Points
STATUS
All Statuses
Permitted Sites
Operating
Post-Closure
Non-Operating
Other Sites
GIS Layers
Tools
Measure a Distance
E. Holt Blvd. & E. Guasti Rd., Ontario, CA
Map Address
LOCKHEED AIRCRAFT SERVICE CO. (71002210)
1800 E. AIRPORT DRIVE
ONTARIO, CA 91761
SITE TYPE: TIERED PERMIT
STATUS: REFER: OTHER AGENCY
Stater Bros. Markets
John Galvin Park
Cucamonga-Guasti Regional Park
Topgolf
Panda Inn
El Torito
Costco Business Center
Ontario International Airport
Carniceria Del Valle
Skating Arena
E 6th St
E 4th St
Fourth St
E Airport Dr
Mission Blvd
W Mission Blvd
Grove Ave
N Baker Ave
N Vineyard Ave
Archibald Ave
Hermosa Ave
Haven Ave
Turner Ave
N Center Ave
S Grove Ave
S Haven Ave
N Allyn Ave
Antonio Ave
Euclid
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GeoTracker
Search for a Project
Search for an Address
Home
Download Data
Tools
Map
Satellite
LEGEND - CHOOSE MORE SITES
LUST Cleanup Sites - REMOVE
Cleanup Program Sites - REMOVE
Military Cleanup Sites - REMOVE
Military Privatized Sites - REMOVE
Military UST Sites - REMOVE
Animal Feeding Facility - REMOVE
Aquaculture/Hatchery - REMOVE
Boatyard/Shipyard - REMOVE
Campground - REMOVE
Cannabis Site - REMOVE
Collection_System - REMOVE
Composting Facility - REMOVE
Concrete Manufacturing - REMOVE
Development Site, NEC - REMOVE
Domestic Site NEC - REMOVE
Dredge/Fill Site - REMOVE
Educational Facilities - REMOVE
FERTILIZER/PESTICIDE HANDLING - REMOVE
Facility - REMOVE
Food Processing - REMOVE
Food Processor - REMOVE
Gasoline Service Station - REMOVE
Groundwater Cleanup Site - REMOVE
Habitat Restoration Area - REMOVE
Hot Springs - REMOVE
Laboratory - REMOVE
Land Treatment Unit - REMOVE
Land fill - REMOVE
LIST SITES VISIBLE
Keyboard shortcuts
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Tools
Map
Satellite
LEGEND - CHOOSE MORE SITES
LUST Cleanup Sites - REMOVE
Cleanup Program Sites - REMOVE
Military Cleanup Sites - REMOVE
Military Privatized Sites - REMOVE
Military UST Sites - REMOVE
Animal Feeding Facility - REMOVE
Aquaculture/Hatchery - REMOVE
Boatyard/Shipyard - REMOVE
Campground - REMOVE
Cannabis Site - REMOVE
Collection_System - REMOVE
Composting Facility - REMOVE
Concrete Manufacturing - REMOVE
Development Site, NEC - REMOVE
Domestic Site NEC - REMOVE
Dredge/Fill Site - REMOVE
Educational Facilities - REMOVE
FERTILIZER/PESTICIDE HANDLING - REMOVE
Facility - REMOVE
Food Processing - REMOVE
Food Processor - REMOVE
Gasoline Service Station - REMOVE
Groundwater Cleanup Site - REMOVE
Habitat Restoration Area - REMOVE
Hot Springs - REMOVE
Laboratory - REMOVE
Land Treatment Unit - REMOVE
Land fill - REMOVE
MARK CHRISTOPHER AUTO CENTER
2131 CONVENTION CENTER WAY
ONTARIO, CA 91764
PERMITTING AGENCY: San Bernardino County Fire Department
FACILITY ID: FA0004585
PERMITTED UNDERGROUND STORAGE TANK (UST)
Please visit the Unified Program Regulator Directory for more information regarding Permitted USTs.
E Princeton St
E Harvard Pl
E 4th St
E J St
Plaza Serena
Schimmel Dog Park
John Galvin Park
Del Norte Elementary School
N Grove Ave
N Campus Ave
N Berlyn Ave
N Calaveras Ave
E I St
E G St
E D St
E Nocta St
E Holt Blvd
E Guasti Rd
E Airport Dr
Moore Way
International Wy
E Terminal Wy
Shadowgrove Dr
Fourth St
Deer Creek
E Rosewood Ct
Orange Ave
N Placer Ave
Sacramento Ave
N Vineyard Ave
Jay St
N Lake Ave
N Lassen Ave
N Baker Ave
N Imperial Ave
N Corona Ave
Convention Center Way
Kline St
Turner Ave
E Via Fiano
Inland Empire Blvd
West Coast University
American Career College
GUASTI
John Bangs Dr
LIST SITES VISIBL
Keyboard shortcuts
Map data ©2023 Google
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GeoTracker
Search for a Project
Search for an Address
Home
Download Data
Tools
Map
Satellite
BINGO TRUCK STOP (T0607100013)
4330 E G ST
ONTARIO, CA 91764
LUST Cleanup Site
Status: Completed - Case Closed
RB Case #: 083600066T
LEGEND - CHOOSE MORE SITES
LUST Cleanup Sites - REMOVE
Cleanup Program Sites - REMOVE
Military Cleanup Sites - REMOVE
Military Privatized Sites - REMOVE
Military UST Sites - REMOVE
Animal Feeding Facility - REMOVE
Aquaculture/Hatchery - REMOVE
Boatyard/Shipyard - REMOVE
Campground - REMOVE
Cannabis Site - REMOVE
Collection_System - REMOVE
Composting Facility - REMOVE
Concrete Manufacturing - REMOVE
Development Site, NEC - REMOVE
Domestic Site NEC - REMOVE
Dredge/Fill Site - REMOVE
Educational Facilities - REMOVE
FERTILIZER/PESTICIDE HANDLING - REMOVE
Facility - REMOVE
Food Processing - REMOVE
Food Processor - REMOVE
Gasoline Service Station - REMOVE
Groundwater Cleanup Site - REMOVE
Habitat Restoration Area - REMOVE
Hot Springs - REMOVE
Laboratory - REMOVE
Land Treatment Unit - REMOVE
Land fill - REMOVE
Inland Empire Blvd
E Holt Blvd
E Guasti Rd
E Airport Dr
E 4th St
Fourth St
E Princeton St
E Harvard Pl
E J St
Plaza Serena
E I St
E G St
E Flora St
E D St
E Nocta St
E Via Fiano
Shadowgrove Dr
Jay St
E Rosewood Ct
E Granada Ct
Kline St
Moore Way
International Wy
E Terminal Wy
John Bangs Dr
Schimmel Dog Park
John Galvin Park
Del Norte Elementary School
Cucamonga-Guasti Regional Park
West Coast University
American Career College
GUASTI
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Keyboard shortcuts
Map data ©2023 Google
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STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER

Tools | Reports | UST Case Closures | How to Use GeoTracker | ESI | Information

BINGO TRUCK STOP (T0607100013) - (MAP)

SIGN UP FOR EMAIL ALERTS

4330 E G ST
ONTARIO, CA 91764
SAN BERNARDINO COUNTY
LUST CLEANUP SITE (INFO)
COMPLETED - CASE CLOSED AS OF 12/5/1984 - DEFINITION
PRINTABLE CASE SUMMARY / CSM REPORT

CLEANUP OVERSIGHT AGENCIES
SANTA ANA RWQCB (REGION 8) *(LEAD)* - *CASE #: 083600066T*
SAN BERNARDINO COUNTY
CASE MANAGER: CATHERINE RICHARDS

Summary | Cleanup Action Report | Regulatory Activities | *Environmental Data (ESI)* | Site Maps / Documents | Community Involvement | *Related Cases*

Regulatory Profile

PRINTABLE CASE SUMMARY

CLEANUP STATUS - DEFINITIONS

COMPLETED - CASE CLOSED AS OF 12/5/1984 - CLEANUP STATUS HISTORY

POTENTIAL CONTAMINANTS OF CONCERN
DIESEL

POTENTIAL MEDIA OF CONCERN
AQUIFER USED FOR DRINKING WATER SUPPLY

FILE LOCATION

DESIGNATED GROUNDWATER BENEFICIAL USE(S) - DEFINITIONS
MUN, AGR, IND, PROC - Note: Also incl parts of 481.21 and 481.23 (R4).

DWR GROUNDWATER SUB-BASIN NAME
Upper Santa Ana Valley - Chino (8-002.01)

CALWATER WATERSHED NAME
Santa Ana River - Middle Santa Ana River - Chino (Split) (801.21)

Site History

No site history available

STATE WATER RESOURCES CONTROL BOARD

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Tools | Reports | UST Case Closures | How to Use GeoTracker | ESI | Information

BINGO TRUCK STOP (T0607100013) - (MAP)

SIGN UP FOR EMAIL ALERTS

4330 E G ST
ONTARIO, CA 91764
SAN BERNARDINO COUNTY
LUST CLEANUP SITE (INFO)
COMPLETED - CASE CLOSED AS OF 12/5/1984 - DEFINITION
PRINTABLE CASE SUMMARY / CSM REPORT

CLEANUP OVERSIGHT AGENCIES
SANTA ANA RWQCB (REGION 8) *(LEAD)* - *CASE #: 083600066T*
SAN BERNARDINO COUNTY
CASE MANAGER: CATHERINE RICHARDS

Summary | Cleanup Action Report | Regulatory Activities | *Environmental Data (ESI)* | Site Maps / Documents | Community Involvement | *Related Cases*

CLICK HERE TO MARK MULTIPLE DOCUMENTS TO DOWNLOAD

* DENOTES A SUBMITTAL WAS AUTO-RECEIVED

Site Maps (GEO_MAP), Boring Logs (GEO_BORE) and KML / KMZ Files

NO SITE MAP SUBMITTALS FOUND FOR THIS FACILITY.

Site Documents

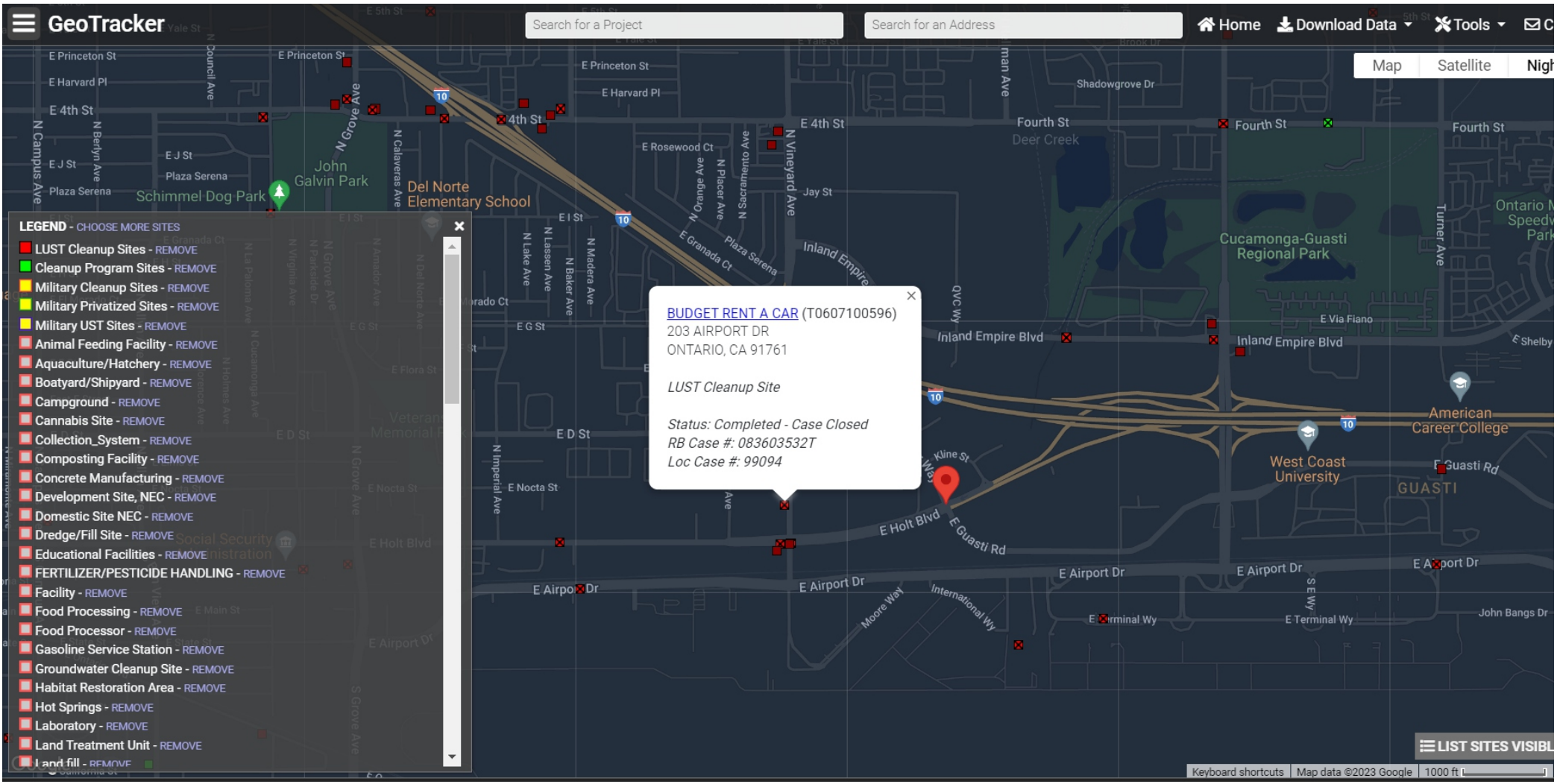
TITLE	TYPE	SUBMITTED BY	DOCUMENT DATE	SIZE
CLOSURE/NO FURTHER ACTION LETTER	CLOSURE/NO FURTHER ACTION LETTER	(REGULATOR)	12/22/1999	

Petition Documents

NO PETITION DOCUMENT SUBMITTALS FOUND FOR THIS FACILITY.

Monitoring Reports

NO MONITORING REPORT SUBMITTALS FOUND FOR THIS FACILITY.


GeoTracker
Search for a Project
Search for an Address
Home
Download Data
Tools
Map
Satellite
BUDGET RENT A CAR (T0607100596)
203 AIRPORT DR
ONTARIO, CA 91761
LUST Cleanup Site
Status: Completed - Case Closed
RB Case #: 083603532T
Loc Case #: 99094
LEGEND - CHOOSE MORE SITES
LUST Cleanup Sites - REMOVE
Cleanup Program Sites - REMOVE
Military Cleanup Sites - REMOVE
Military Privatized Sites - REMOVE
Military UST Sites - REMOVE
Animal Feeding Facility - REMOVE
Aquaculture/Hatchery - REMOVE
Boatyard/Shipyard - REMOVE
Campground - REMOVE
Cannabis Site - REMOVE
Collection_System - REMOVE
Composting Facility - REMOVE
Concrete Manufacturing - REMOVE
Development Site, NEC - REMOVE
Domestic Site NEC - REMOVE
Dredge/Fill Site - REMOVE
Educational Facilities - REMOVE
FERTILIZER/PESTICIDE HANDLING - REMOVE
Facility - REMOVE
Food Processing - REMOVE
Food Processor - REMOVE
Gasoline Service Station - REMOVE
Groundwater Cleanup Site - REMOVE
Habitat Restoration Area - REMOVE
Hot Springs - REMOVE
Laboratory - REMOVE
Land Treatment Unit - REMOVE
Land fill - REMOVE
LIST SITES VISIBL
Keyboard shortcuts
Map data ©2023 Google
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STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER

Tools | Reports | UST Case Closures | How to Use GeoTracker | ESI | Information

BUDGET RENT A CAR (T0607100596) - (MAP)

SIGN UP FOR EMAIL ALERTS

203 AIRPORT DR
ONTARIO, CA 91761
SAN BERNARDINO COUNTY
LUST CLEANUP SITE (INFO)
COMPLETED - CASE CLOSED AS OF 2/28/2002 - DEFINITION
PRINTABLE CASE SUMMARY / CSM REPORT

CLEANUP OVERSIGHT AGENCIES
SAN BERNARDINO COUNTY *(LEAD)* - *CASE #: 99094*
SANTA ANA RWQCB (REGION 8) - *CASE #: 083603532T*
CASE MANAGER: MAILE SEEGER GEE

Summary | Cleanup Action Report | Regulatory Activities | Environmental Data (ESI) | Site Maps / Documents | Community Involvement | Related Cases

Regulatory Profile

PRINTABLE CASE SUMMARY

CLEANUP STATUS - DEFINITIONS
COMPLETED - CASE CLOSED AS OF 2/28/2002 - CLEANUP STATUS HISTORY

POTENTIAL CONTAMINANTS OF CONCERN
GASOLINE

POTENTIAL MEDIA OF CONCERN
SOIL

FILE LOCATION
LOCAL AGENCY

DESIGNATED GROUNDWATER BENEFICIAL USE(S) - DEFINITIONS
MUN, AGR, IND, PROC - Note: Also incl parts of 481.21 and 481.23 (R4).

DWR GROUNDWATER SUB-BASIN NAME
Upper Santa Ana Valley - Chino (8-002.01)

CALWATER WATERSHED NAME
Santa Ana River - Middle Santa Ana River - Chino (Split) (801.21)

Site History

No site history available

STATE WATER RESOURCES CONTROL BOARD

GeoTracker

Tools | Reports | UST Case Closures | How to Use GeoTracker | ESI | Information

BUDGET RENT A CAR (T0607100596) - (MAP)

SIGN UP FOR EMAIL ALERTS

203 AIRPORT DR
ONTARIO, CA 91761
SAN BERNARDINO COUNTY
LUST CLEANUP SITE (INFO)
COMPLETED - CASE CLOSED AS OF 2/28/2002 - DEFINITION
PRINTABLE CASE SUMMARY / CSM REPORT

CLEANUP OVERSIGHT AGENCIES
SAN BERNARDINO COUNTY *(LEAD) - CASE #: 99094*
SANTA ANA RWQCB (REGION 8) - *CASE #: 083603532T*
CASE MANAGER: MAILE SEEGER GEE

Summary | Cleanup Action Report | Regulatory Activities | Environmental Data (ESI) | Site Maps / Documents | Community Involvement | Related Cases

Cleanup Action Report

NO CLEANUP ACTIONS EXIST

STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER

Tools | Reports | UST Case Closures | How to Use GeoTracker | ESI | Information

BUDGET RENT A CAR (T0607100596) - (MAP)

SIGN UP FOR EMAIL ALERTS

203 AIRPORT DR
ONTARIO, CA 91761
SAN BERNARDINO COUNTY
LUST CLEANUP SITE (INFO)
COMPLETED - CASE CLOSED AS OF 2/28/2002 - DEFINITION
PRINTABLE CASE SUMMARY / CSM REPORT

CLEANUP OVERSIGHT AGENCIES
SAN BERNARDINO COUNTY *(LEAD)* - *CASE #: 99094*
SANTA ANA RWQCB (REGION 8) - *CASE #: 083603532T*
CASE MANAGER: MAILE SEEGER GEE

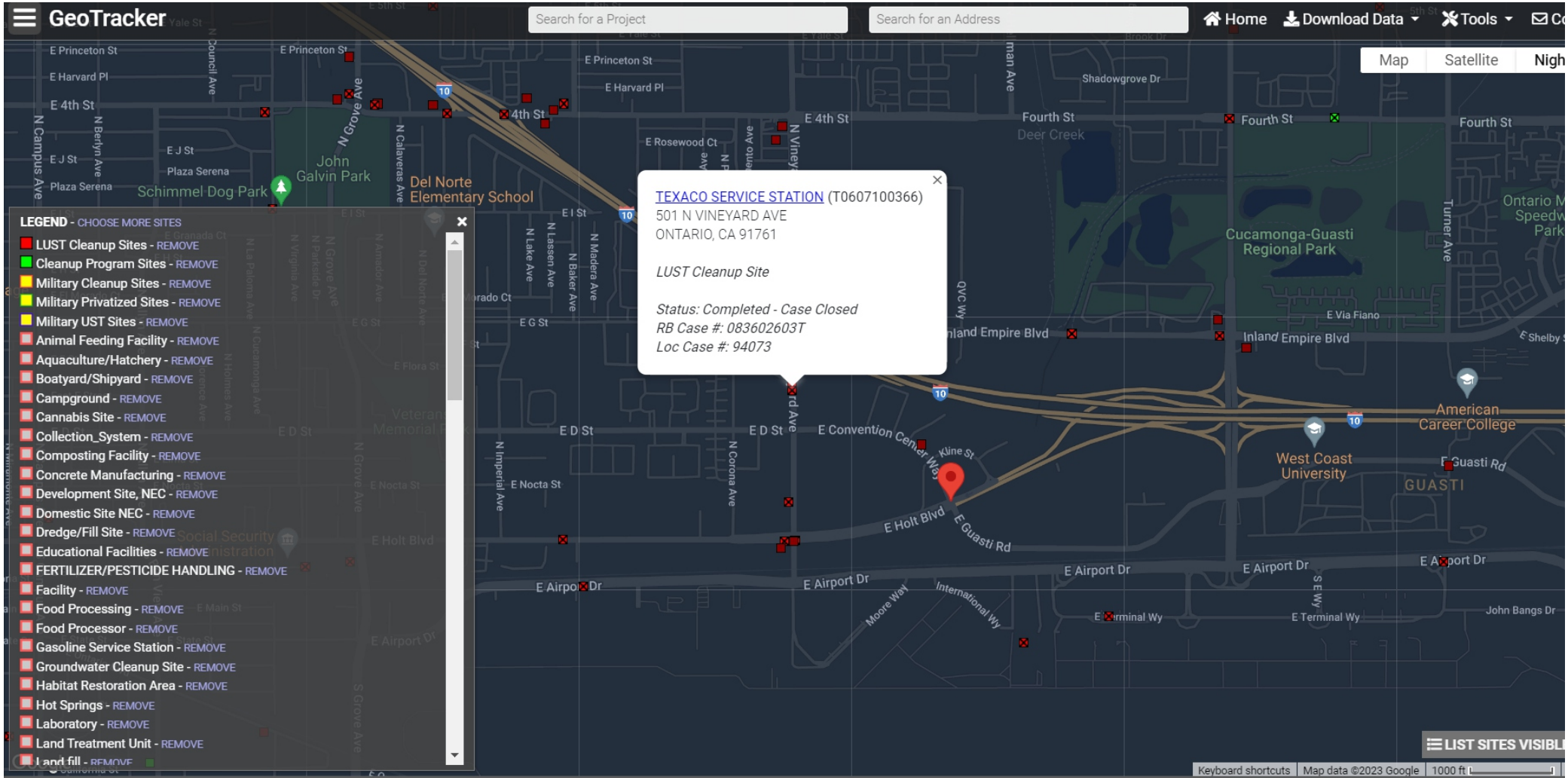
Summary | Cleanup Action Report | Regulatory Activities | Environmental Data (ESI) | Site Maps / Documents | Community Involvement | Related Cases

Regulatory Activities

Action Type Filter: Show All Activities Go

* Indicates a revised due date

ACTION TYPE	ACTION	ACTION DATE	RECEIVED / ISSUE DATE	TITLE / DESCRIPTION / COMMENTS
Leak Action	Leak Reported	6/23/1999		
Leak Action	Leak Discovery	6/22/1999		


GeoTracker
Search for a Project
Search for an Address
Home
Download Data
Tools
Map
Satellite
TEXACO SERVICE STATION (T0607100366)
501 N VINEYARD AVE
ONTARIO, CA 91761
LUST Cleanup Site
Status: Completed - Case Closed
RB Case #: 083602603T
Loc Case #: 94073
LEGEND - CHOOSE MORE SITES
LUST Cleanup Sites - REMOVE
Cleanup Program Sites - REMOVE
Military Cleanup Sites - REMOVE
Military Privatized Sites - REMOVE
Military UST Sites - REMOVE
Animal Feeding Facility - REMOVE
Aquaculture/Hatchery - REMOVE
Boatyard/Shipyard - REMOVE
Campground - REMOVE
Cannabis Site - REMOVE
Collection_System - REMOVE
Composting Facility - REMOVE
Concrete Manufacturing - REMOVE
Development Site, NEC - REMOVE
Domestic Site NEC - REMOVE
Dredge/Fill Site - REMOVE
Educational Facilities - REMOVE
FERTILIZER/PESTICIDE HANDLING - REMOVE
Facility - REMOVE
Food Processing - REMOVE
Food Processor - REMOVE
Gasoline Service Station - REMOVE
Groundwater Cleanup Site - REMOVE
Habitat Restoration Area - REMOVE
Hot Springs - REMOVE
Laboratory - REMOVE
Land Treatment Unit - REMOVE
Land fill - REMOVE
LIST SITES VISIBL
Keyboard shortcuts
Map data ©2023 Google
1000 ft

STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER

Tools | Reports | UST Case Closures | How to Use GeoTracker | ESI | Information

TEXACO SERVICE STATION (T0607100366) - (MAP)

SIGN UP FOR EMAIL ALERTS

501 N VINEYARD AVE
ONTARIO, CA 91761
SAN BERNARDINO COUNTY
LUST CLEANUP SITE (INFO)
COMPLETED - CASE CLOSED AS OF 9/10/1999 - DEFINITION
PRINTABLE CASE SUMMARY / CSM REPORT

CUF Claim #: 16236
CUF Priority Assigned: D
CUF Amount Paid: $61,460

CLEANUP OVERSIGHT AGENCIES
SAN BERNARDINO COUNTY *(LEAD)* - *CASE #: 94073*
SANTA ANA RWQCB (REGION 8) - *CASE #: 083602603T*
CASE MANAGER: MIGUEL OVIEDO

Summary | Cleanup Action Report | Regulatory Activities | *Environmental Data (ESI)* | Site Maps / Documents | Community Involvement | *Related Cases* | LUST CUF Data

Regulatory Profile

PRINTABLE CASE SUMMARY

CLEANUP STATUS - DEFINITIONS

COMPLETED - CASE CLOSED AS OF 9/10/1999 - CLEANUP STATUS HISTORY

POTENTIAL CONTAMINANTS OF CONCERN
GASOLINE

POTENTIAL MEDIA OF CONCERN
SOIL

FILE LOCATION
LOCAL AGENCY

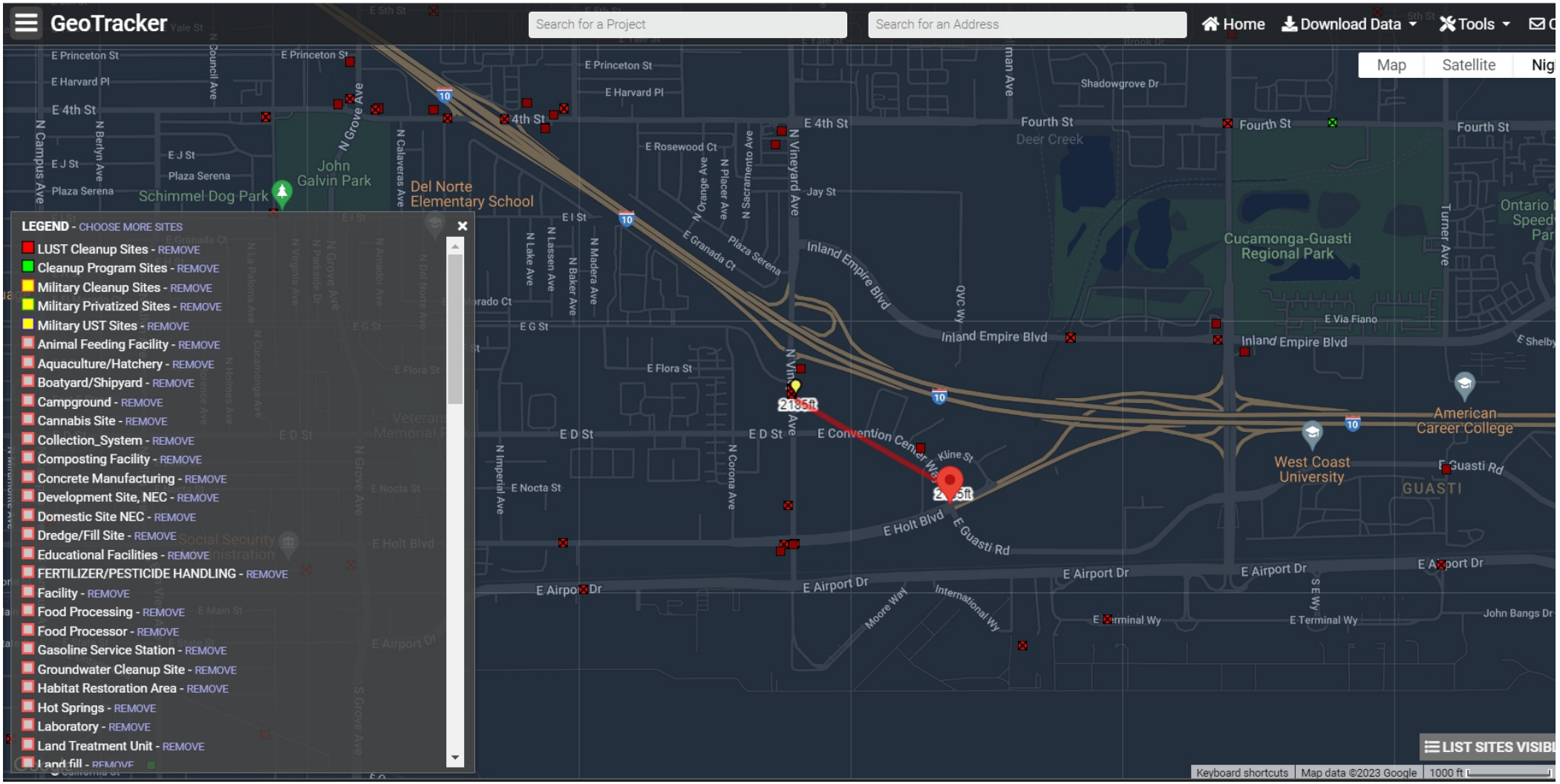
DESIGNATED GROUNDWATER BENEFICIAL USE(S) - DEFINITIONS
MUN, AGR, IND, PROC - Note: Also incl parts of 481.21 and 481.23 (R4).

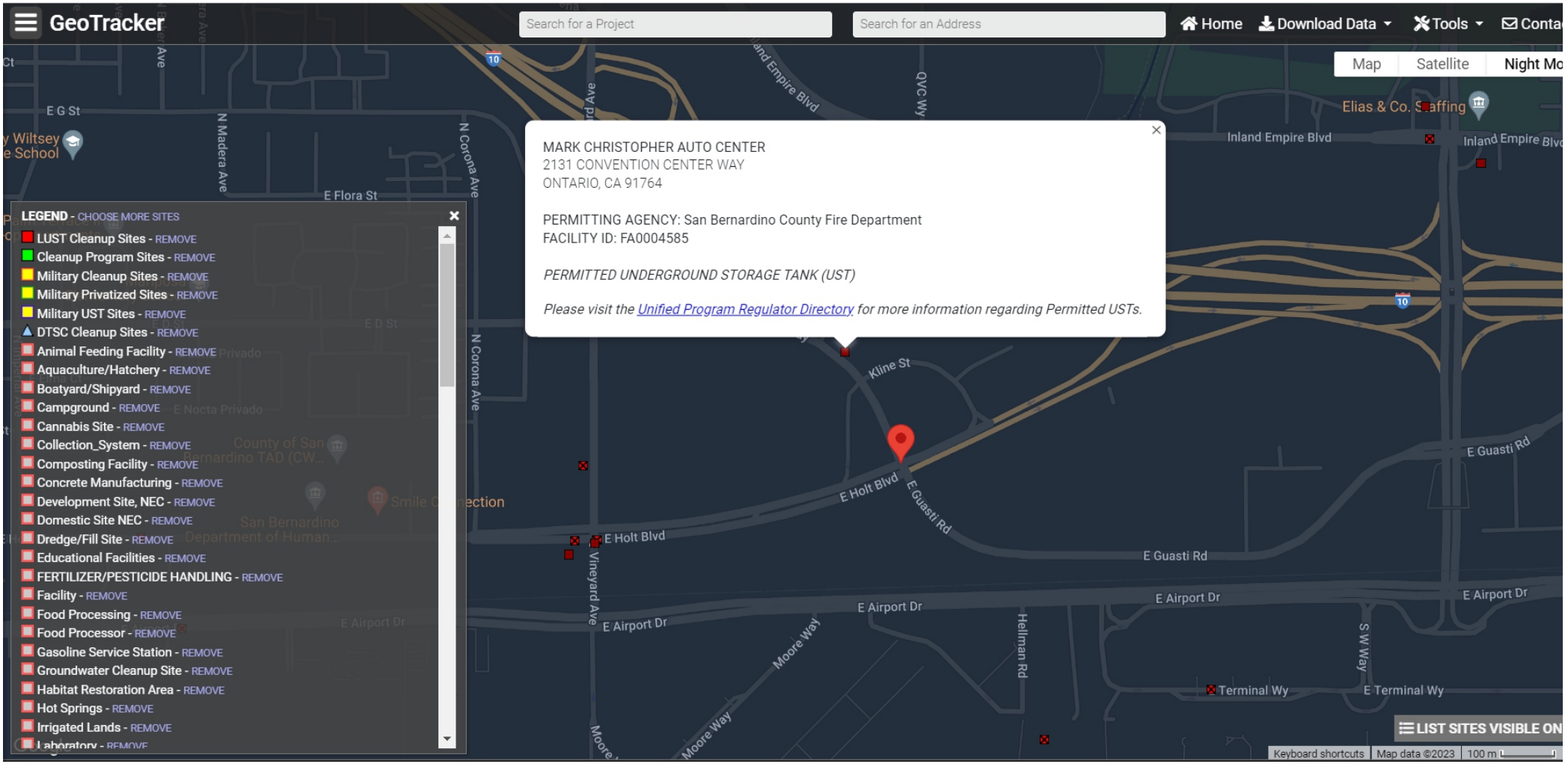
DWR GROUNDWATER SUB-BASIN NAME
Upper Santa Ana Valley - Chino (8-002.01)

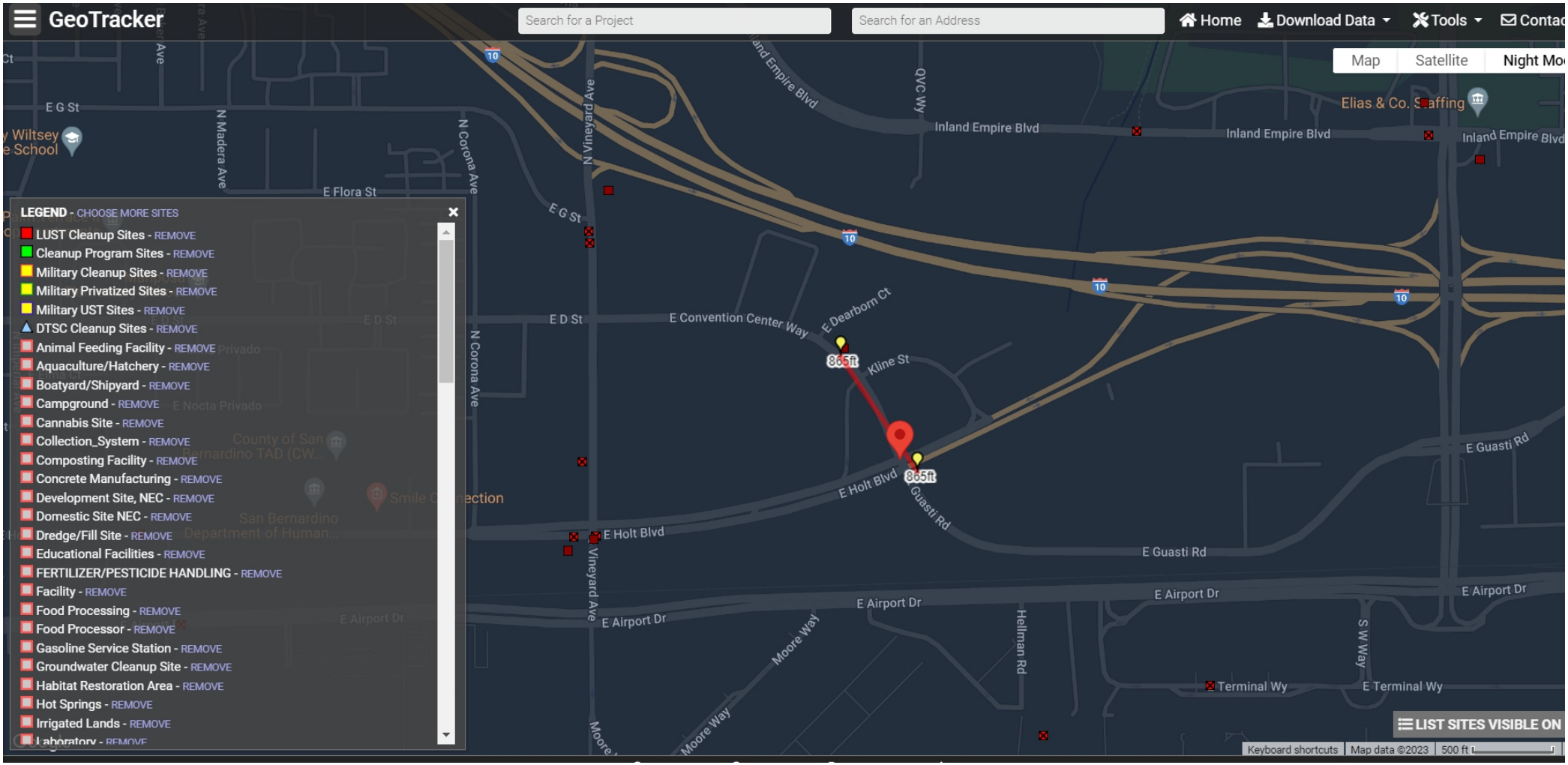
CALWATER WATERSHED NAME
Santa Ana River - Middle Santa Ana River - Chino (Split) (801.21)

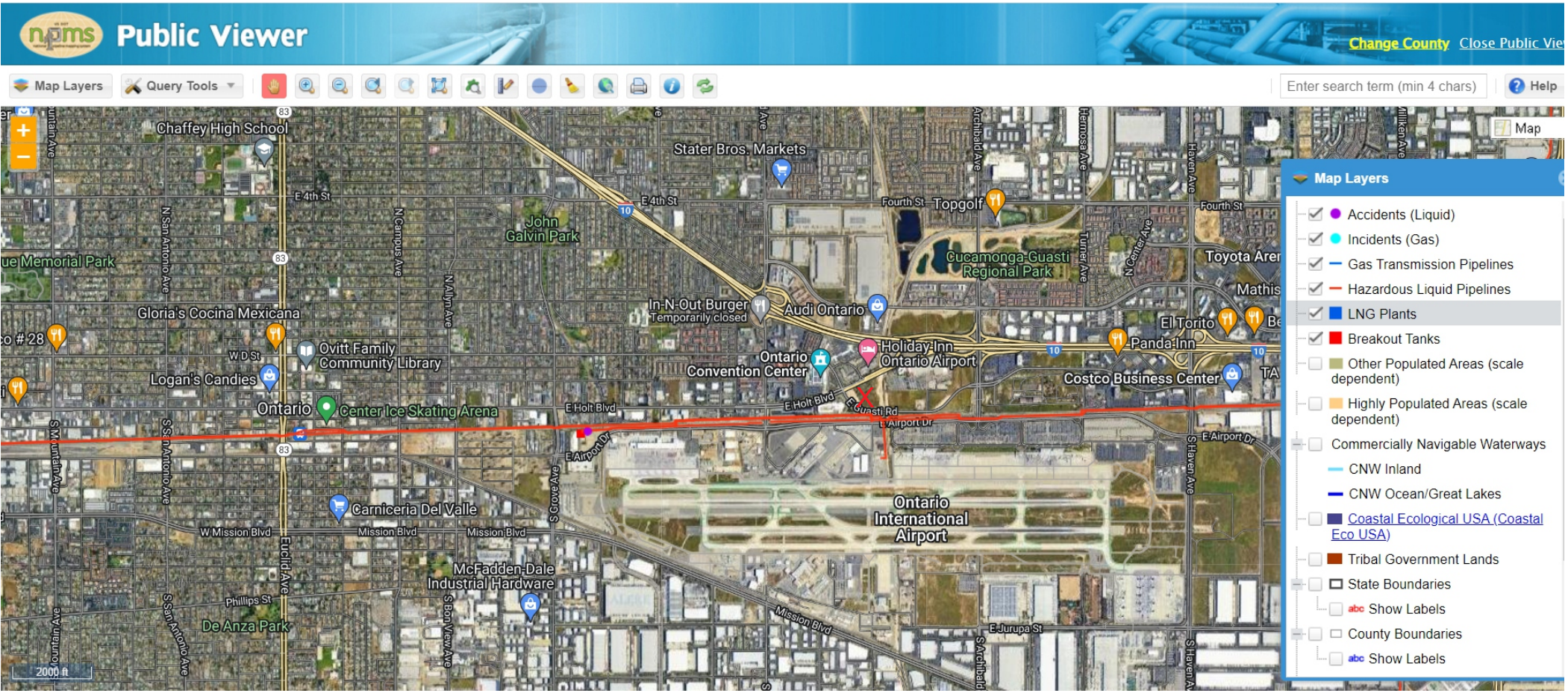
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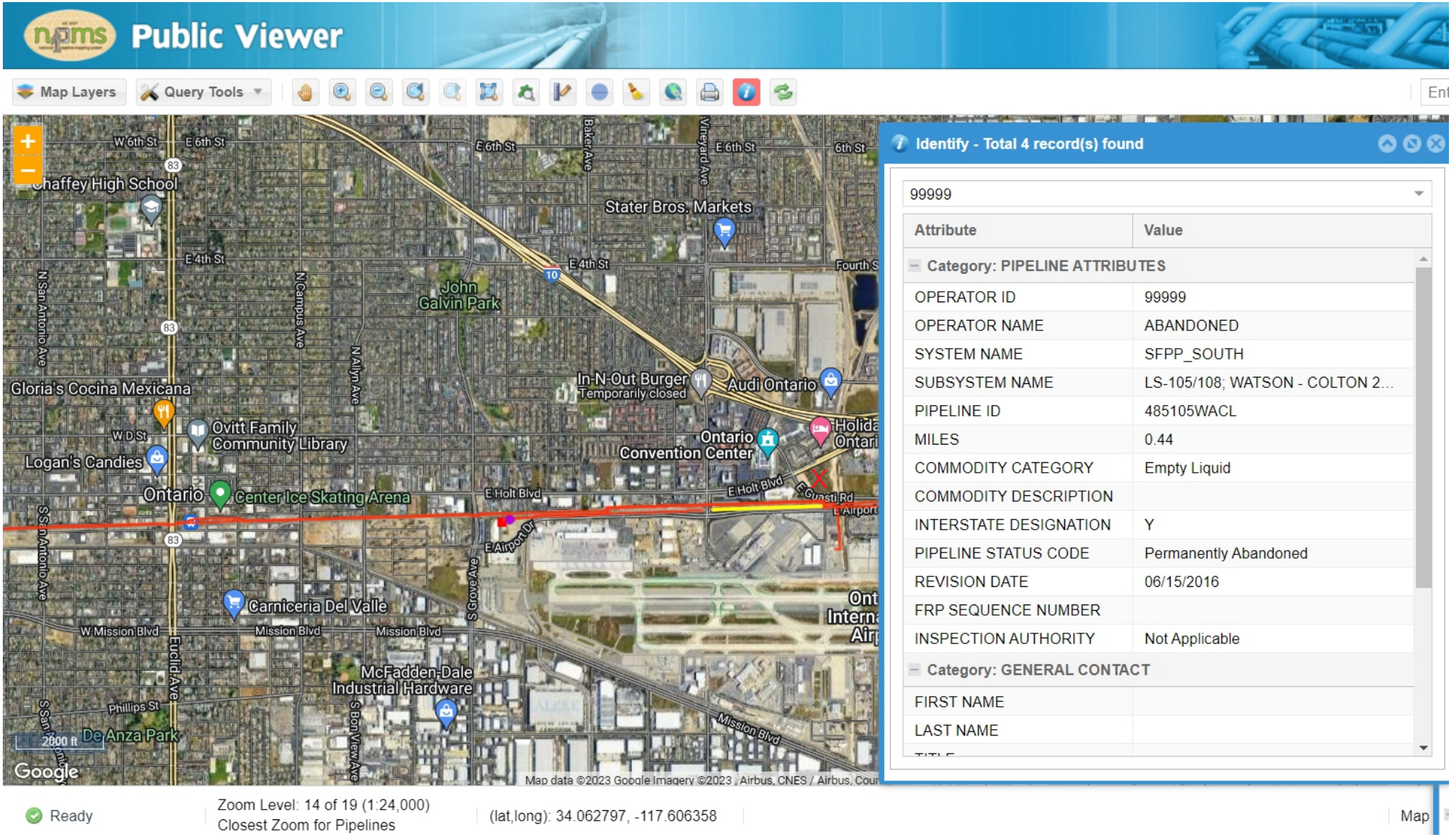
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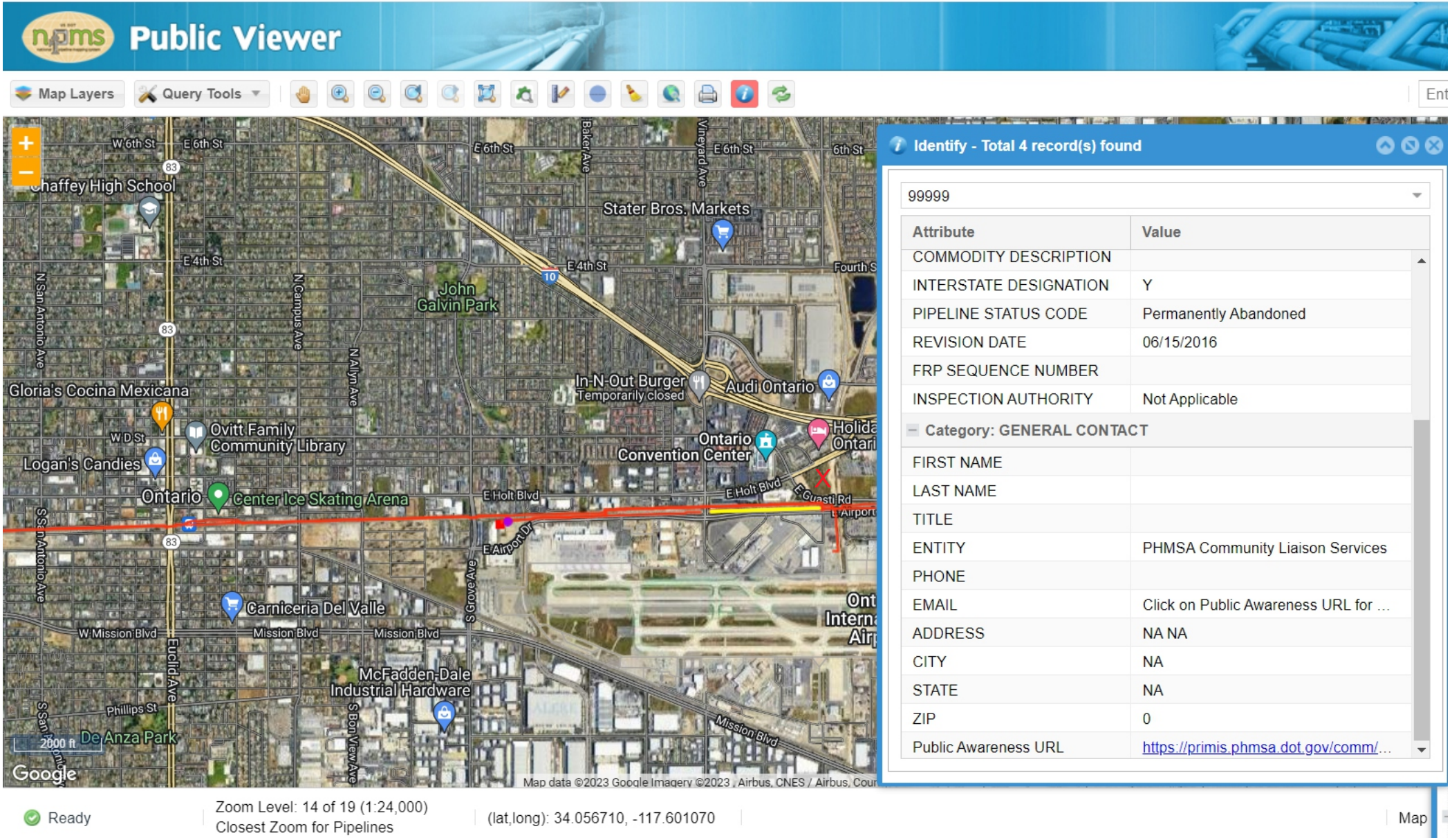

GeoTracker
Search for a Project
Search for an Address
Home
Download Data
Tools
Map
Satellite
LEGEND - CHOOSE MORE SITES
LUST Cleanup Sites - REMOVE
Cleanup Program Sites - REMOVE
Military Cleanup Sites - REMOVE
Military Privatized Sites - REMOVE
Military UST Sites - REMOVE
Animal Feeding Facility - REMOVE
Aquaculture/Hatchery - REMOVE
Boatyard/Shipyard - REMOVE
Campground - REMOVE
Cannabis Site - REMOVE
Collection_System - REMOVE
Composting Facility - REMOVE
Concrete Manufacturing - REMOVE
Development Site, NEC - REMOVE
Domestic Site NEC - REMOVE
Dredge/Fill Site - REMOVE
Educational Facilities - REMOVE
FERTILIZER/PESTICIDE HANDLING - REMOVE
Facility - REMOVE
Food Processing - REMOVE
Food Processor - REMOVE
Gasoline Service Station - REMOVE
Groundwater Cleanup Site - REMOVE
Habitat Restoration Area - REMOVE
Hot Springs - REMOVE
Laboratory - REMOVE
Land Treatment Unit - REMOVE
Land fill - REMOVE
2135ft
E Princeton St
E Harvard Pl
E 4th St
E J St
Plaza Serena
Schimmel Dog Park
John Galvin Park
Del Norte Elementary School
N Grove Ave
N Campus Ave
N Berlyn Ave
N Calaveras Ave
E I St
E Granada Ct
Plaza Serena
E Rosewood Ct
N Orange Ave
N Placer Ave
N Sacramento Ave
N Vineyard Ave
Jay St
Inland Empire Blvd
OVC Wy
Shadowgrove Dr
Fourth St
Deer Creek
Cucamonga-Guasti Regional Park
Turner Ave
E Via Fiano
N Lake Ave
N Lassen Ave
N Baker Ave
N Madera Ave
E G St
E Flora St
E D St
E Convention Center Way
Kline St
N Imperial Ave
N Corona Ave
E Nocta St
E Holt Blvd
E Guasti Rd
West Coast University
American Career College
GUASTI
E Airport Dr
Moore Way
International Wy
E Terminal Wy
John Bangs Dr
Keyboard shortcuts
Map data ©2023 Google
1000 ft

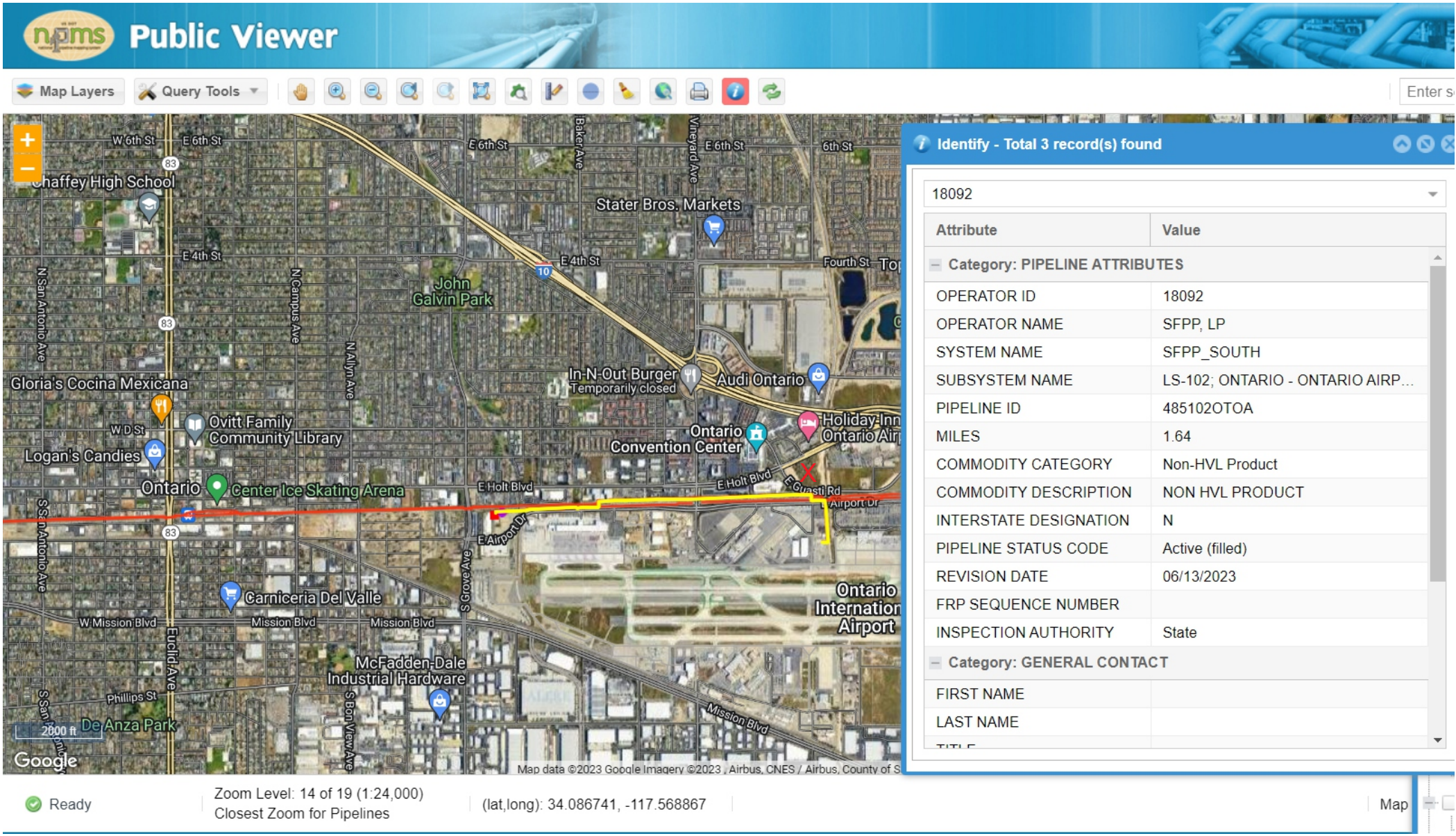

GeoTracker
Search for a Project
Search for an Address
Home
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Tools
Map
Satellite
MARK CHRISTOPHER AUTO CENTER
2131 CONVENTION CENTER WAY
ONTARIO, CA 91764
PERMITTING AGENCY: San Bernardino County Fire Department
FACILITY ID: FA0004585
PERMITTED UNDERGROUND STORAGE TANK (UST)
Please visit the Unified Program Regulator Directory for more information regarding Permitted USTs.
LEGEND - CHOOSE MORE SITES
LUST Cleanup Sites - REMOVE
Cleanup Program Sites - REMOVE
Military Cleanup Sites - REMOVE
Military Privatized Sites - REMOVE
Military UST Sites - REMOVE
DTSC Cleanup Sites - REMOVE
Animal Feeding Facility - REMOVE
Aquaculture/Hatchery - REMOVE
Boatyard/Shipyard - REMOVE
Campground - REMOVE
Cannabis Site - REMOVE
Collection_System - REMOVE
Composting Facility - REMOVE
Concrete Manufacturing - REMOVE
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Domestic Site NEC - REMOVE
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Educational Facilities - REMOVE
FERTILIZER/PESTICIDE HANDLING - REMOVE
Facility - REMOVE
Food Processing - REMOVE
Food Processor - REMOVE
Gasoline Service Station - REMOVE
Groundwater Cleanup Site - REMOVE
Habitat Restoration Area - REMOVE
Hot Springs - REMOVE
Irrigated Lands - REMOVE
Laboratory - REMOVE
Kline St
E Holt Blvd
E Guasti Rd
E Airport Dr
Vineyard Ave
Moore Way
Hellman Rd
Terminal Wy
E Terminal Wy
Inland Empire Blvd
N Corona Ave
N Madera Ave
E Flora St
LIST SITES VISIBLE ON
Keyboard shortcuts
Map data ©2023
100 m

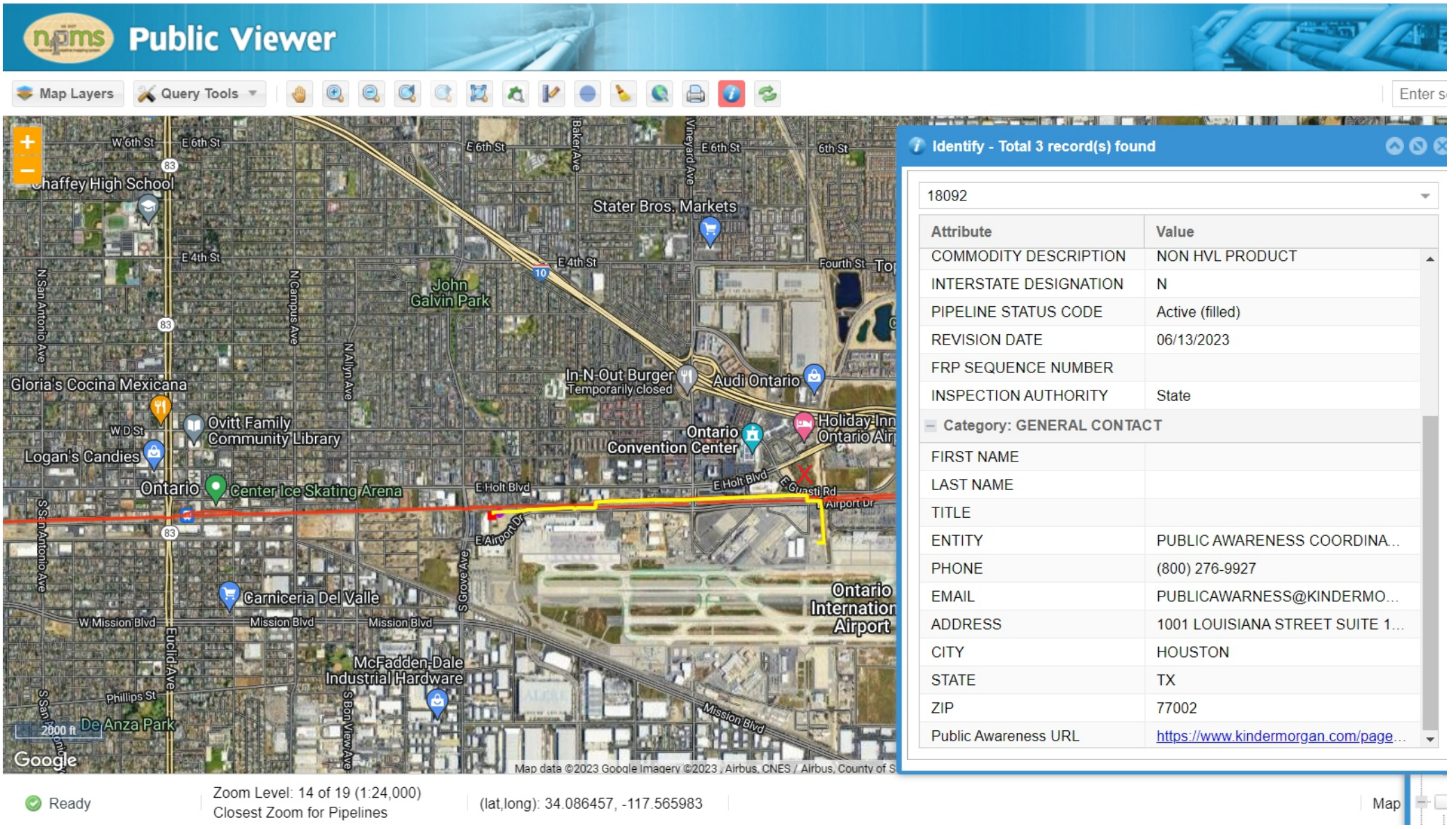

GeoTracker
Search for a Project
Search for an Address
Home
Download Data
Tools
Map
Satellite
LEGEND - CHOOSE MORE SITES
LUST Cleanup Sites - REMOVE
Cleanup Program Sites - REMOVE
Military Cleanup Sites - REMOVE
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Military UST Sites - REMOVE
DTSC Cleanup Sites - REMOVE
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FERTILIZER/PESTICIDE HANDLING - REMOVE
Facility - REMOVE
Food Processing - REMOVE
Food Processor - REMOVE
Gasoline Service Station - REMOVE
Groundwater Cleanup Site - REMOVE
Habitat Restoration Area - REMOVE
Hot Springs - REMOVE
Irrigated Lands - REMOVE
Laboratory - REMOVE
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E Dearborn Ct
Kline St
865ft
865ft
E Holt Blvd
E Guasti Rd
Inland Empire Blvd
E Airport Dr
Terminal Wy
E Terminal Wy
LIST SITES VISIBLE ON
Keyboard shortcuts
Map data ©2023
500 ft

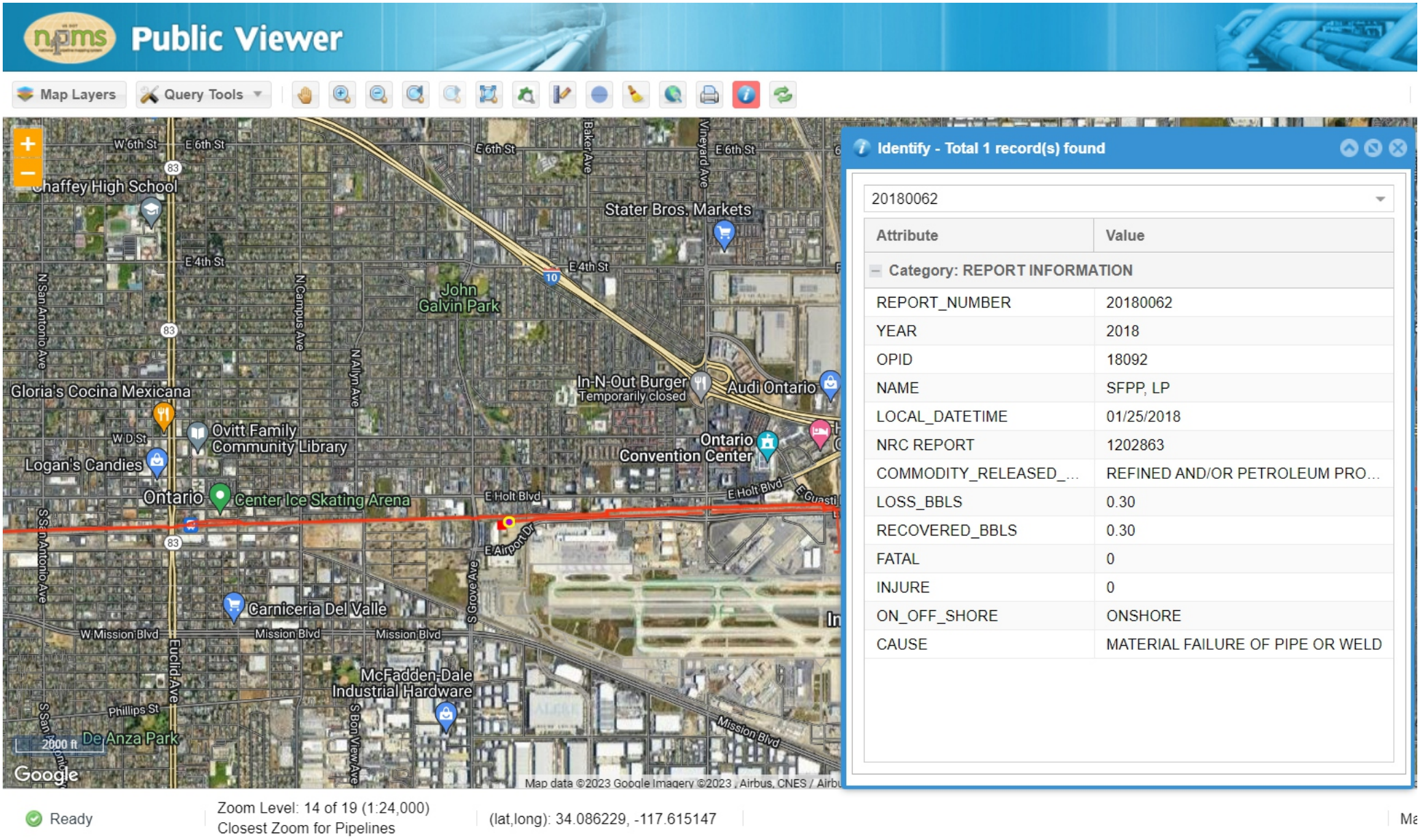

Public Viewer
Change County
Close Public Vie
Map Layers
Query Tools
Enter search term (min 4 chars)
Help
Map
Chaffey High School
Stater Bros. Markets
Topgolf
John Galvin Park
Cucamonga-Guasti Regional Park
Toyota Aren
Mathis
Gloria's Cocina Mexicana
In-N-Out Burger
Temporarily closed
Audi Ontario
El Torito
Panda Inn
Ovitt Family Community Library
Holiday Inn Ontario Airport
Ontario Convention Center
Costco Business Center
Logan's Candies
Ontario
Center Ice Skating Arena
Carniceria Del Valle
Ontario International Airport
McFadden-Dale Industrial Hardware
De Anza Park
E 4th St
W D St
E Holt Blvd
E Guasti Rd
E Airport Dr
W Mission Blvd
Mission Blvd
E Jurupa St
Phillips St
2000 ft
Map Layers
Accidents (Liquid)
Incidents (Gas)
Gas Transmission Pipelines
Hazardous Liquid Pipelines
LNG Plants
Breakout Tanks
Other Populated Areas (scale dependent)
Highly Populated Areas (scale dependent)
Commercially Navigable Waterways
CNW Inland
CNW Ocean/Great Lakes
Coastal Ecological USA (Coastal Eco USA)
Tribal Government Lands
State Boundaries
Show Labels
County Boundaries
Show Labels

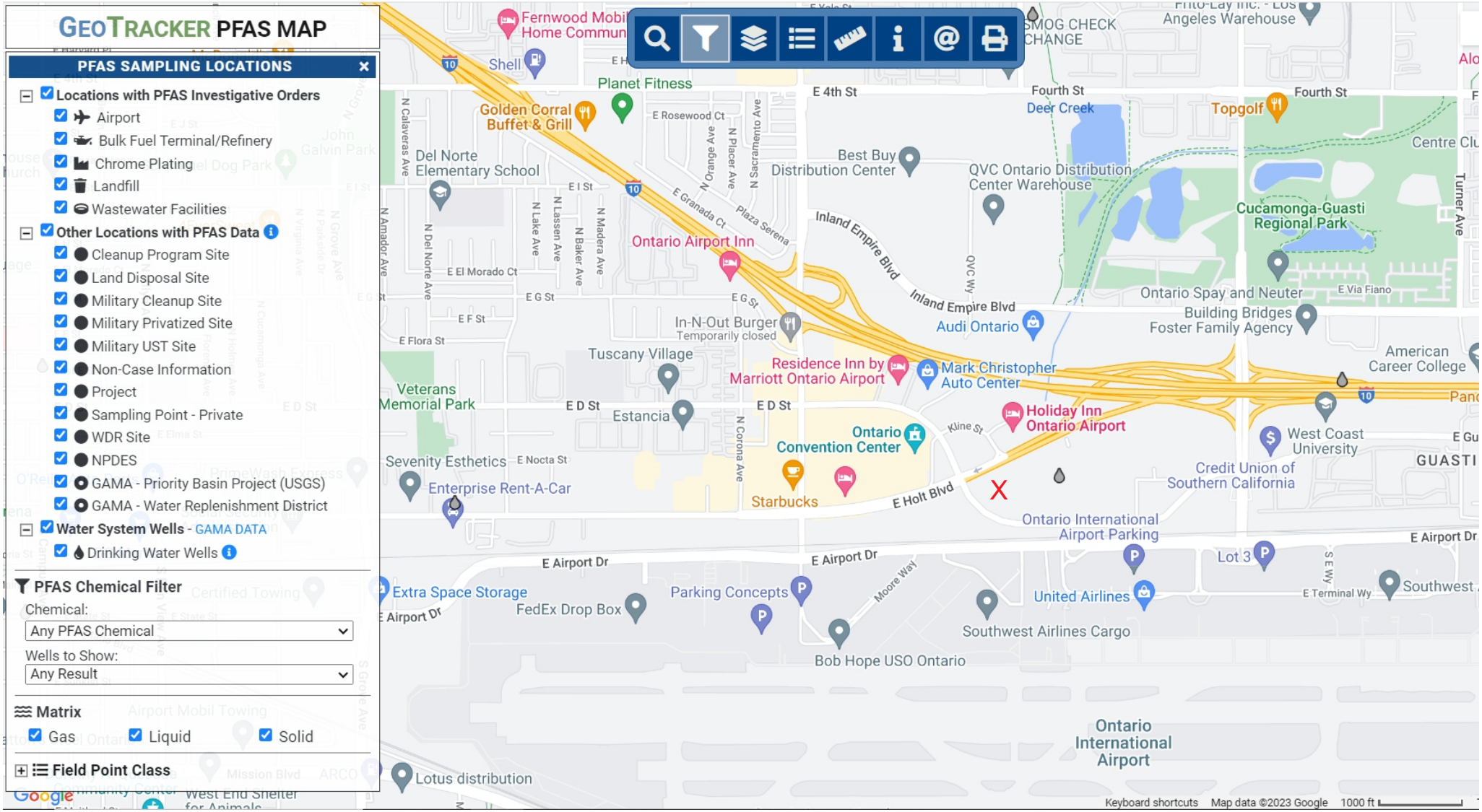

Public Viewer
Map Layers
Query Tools
Identify - Total 4 record(s) found
99999
Attribute
Value
Category: PIPELINE ATTRIBUTES
OPERATOR ID
99999
OPERATOR NAME
ABANDONED
SYSTEM NAME
SFPP_SOUTH
SUBSYSTEM NAME
LS-105/108; WATSON - COLTON 2...
PIPELINE ID
485105WACL
MILES
0.44
COMMODITY CATEGORY
Empty Liquid
COMMODITY DESCRIPTION
INTERSTATE DESIGNATION
Y
PIPELINE STATUS CODE
Permanently Abandoned
REVISION DATE
06/15/2016
FRP SEQUENCE NUMBER
INSPECTION AUTHORITY
Not Applicable
Category: GENERAL CONTACT
FIRST NAME
LAST NAME
Chaffey High School
Stater Bros. Markets
John Galvin Park
In-N-Out Burger
Temporarily closed
Audi Ontario
Gloria's Cocina Mexicana
Ovitt Family Community Library
Logan's Candies
Ontario Convention Center
Ontario Center Ice Skating Arena
Carniceria Del Valle
McFadden-Dale Industrial Hardware
De Anza Park
E 6th St
E 4th St
E Holt Blvd
E Airport Dr
Mission Blvd
W Mission Blvd
Phillips St
Google
Ready
Zoom Level: 14 of 19 (1:24,000)
Closest Zoom for Pipelines
(lat,long): 34.062797, -117.606358
Map

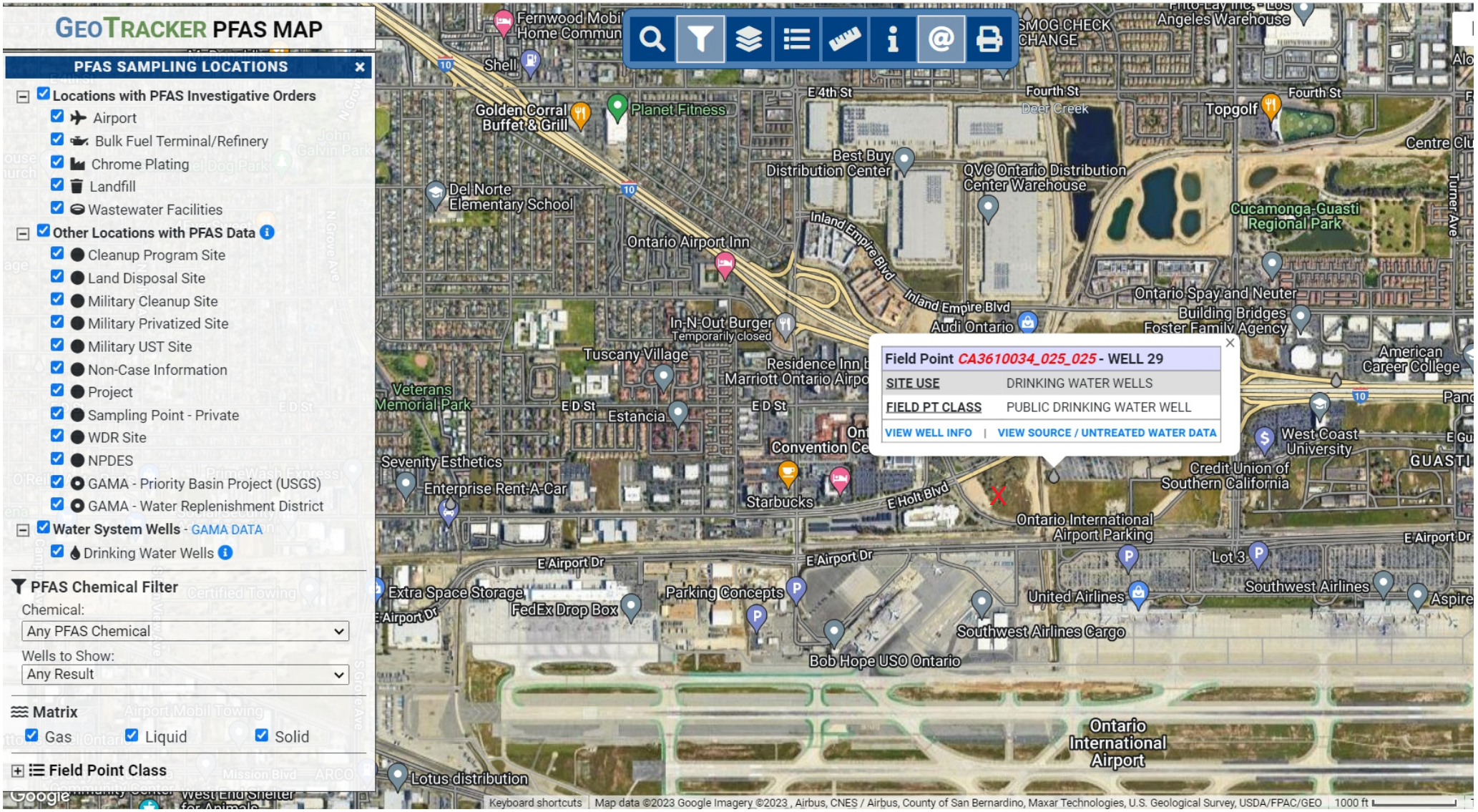

Public Viewer
Map Layers
Query Tools
Identify - Total 4 record(s) found
99999
Attribute
Value
COMMODITY DESCRIPTION
INTERSTATE DESIGNATION
Y
PIPELINE STATUS CODE
Permanently Abandoned
REVISION DATE
06/15/2016
FRP SEQUENCE NUMBER
INSPECTION AUTHORITY
Not Applicable
Category: GENERAL CONTACT
FIRST NAME
LAST NAME
TITLE
ENTITY
PHMSA Community Liaison Services
PHONE
EMAIL
Click on Public Awareness URL for ...
ADDRESS
NA NA
CITY
NA
STATE
NA
ZIP
0
Public Awareness URL
https://primis.phmsa.dot.gov/comm/...
Chaffey High School
Stater Bros. Markets
John Galvin Park
In-N-Out Burger
Temporarily closed
Audi Ontario
Gloria's Cocina Mexicana
Ovitt Family Community Library
Logan's Candies
Ontario Convention Center
Ontario Center Ice Skating Arena
Carniceria Del Valle
McFadden-Dale Industrial Hardware
De Anza Park
E 6th St
E 4th St
E Holt Blvd
E Airport Dr
Mission Blvd
W Mission Blvd
Phillips St
Google
Map data ©2023 Google Imagery ©2023 , Airbus, CNES / Airbus, Cour
Ready
Zoom Level: 14 of 19 (1:24,000)
Closest Zoom for Pipelines
(lat,long): 34.056710, -117.601070
Map


Public Viewer
Map Layers
Query Tools
Identify - Total 3 record(s) found
18092
Attribute
Value
Category: PIPELINE ATTRIBUTES
OPERATOR ID 18092
OPERATOR NAME SFPP, LP
SYSTEM NAME SFPP_SOUTH
SUBSYSTEM NAME LS-102; ONTARIO - ONTARIO AIRP...
PIPELINE ID 485102OTOA
MILES 1.64
COMMODITY CATEGORY Non-HVL Product
COMMODITY DESCRIPTION NON HVL PRODUCT
INTERSTATE DESIGNATION N
PIPELINE STATUS CODE Active (filled)
REVISION DATE 06/13/2023
FRP SEQUENCE NUMBER
INSPECTION AUTHORITY State
Category: GENERAL CONTACT
FIRST NAME
LAST NAME
Chaffey High School
Stater Bros. Markets
John Galvin Park
In-N-Out Burger
Temporarily closed
Audi Ontario
Gloria's Cocina Mexicana
Ovitt Family Community Library
Logan's Candies
Ontario Convention Center
Holiday Inn Ontario Airp
Ontario
Center Ice Skating Arena
Carniceria Del Valle
McFadden-Dale Industrial Hardware
De Anza Park
Ontario International Airport
E Holt Blvd
E Airport Dr
Mission Blvd
W 6th St
E 6th St
E 4th St
Fourth St
W D St
Phillips St
Baker Ave
Vineyard Ave
N Campus Ave
N Alyn Ave
N San Antonio Ave
S San Antonio Ave
S Grove Ave
Euclid Ave
S Bon View Ave
2000 ft
Google
Map data ©2023 Google Imagery ©2023 , Airbus, CNES / Airbus, County of S
Ready
Zoom Level: 14 of 19 (1:24,000)
Closest Zoom for Pipelines
(lat,long): 34.086741, -117.568867
Map


Public Viewer
Map Layers
Query Tools
Identify - Total 3 record(s) found
18092
Attribute
Value
COMMODITY DESCRIPTION
NON HVL PRODUCT
INTERSTATE DESIGNATION
N
PIPELINE STATUS CODE
Active (filled)
REVISION DATE
06/13/2023
FRP SEQUENCE NUMBER
INSPECTION AUTHORITY
State
Category: GENERAL CONTACT
FIRST NAME
LAST NAME
TITLE
ENTITY
PUBLIC AWARENESS COORDINA...
PHONE
(800) 276-9927
EMAIL
PUBLICAWARNESS@KINDERMO...
ADDRESS
1001 LOUISIANA STREET SUITE 1...
CITY
HOUSTON
STATE
TX
ZIP
77002
Public Awareness URL
https://www.kindermorgan.com/page...
Chaffey High School
Stater Bros. Markets
John Galvin Park
In-N-Out Burger
Temporarily closed
Audi Ontario
Gloria's Cocina Mexicana
Ovitt Family Community Library
Logan's Candies
Ontario Convention Center
Holiday Inn Ontario Air
Ontario Center Ice Skating Arena
Carniceria Del Valle
McFadden-Dale Industrial Hardware
Ontario International Airport
De Anza Park
E 6th St
E 4th St
Fourth St
E Holt Blvd
E Airport Dr
S Grasti Rd
W Mission Blvd
Mission Blvd
Phillips St
Baker Ave
Vineyard Ave
N San Antonio Ave
N Campus Ave
N Allyn Ave
S Grove Ave
Euclid Ave
S Bon View Ave
2000 ft
Google
Map data ©2023 Google Imagery ©2023 , Airbus, CNES / Airbus, County of S
Ready
Zoom Level: 14 of 19 (1:24,000)
Closest Zoom for Pipelines
(lat,long): 34.086457, -117.565983
Map


Public Viewer
Map Layers
Query Tools
Identify - Total 1 record(s) found
20180062
Attribute
Value
Category: REPORT INFORMATION
REPORT_NUMBER 20180062
YEAR 2018
OPID 18092
NAME SFPP, LP
LOCAL_DATETIME 01/25/2018
NRC REPORT 1202863
COMMODITY_RELEASED_... REFINED AND/OR PETROLEUM PRO...
LOSS_BBLS 0.30
RECOVERED_BBLS 0.30
FATAL 0
INJURE 0
ON_OFF_SHORE ONSHORE
CAUSE MATERIAL FAILURE OF PIPE OR WELD
Chaffey High School
Stater Bros. Markets
John Galvin Park
In-N-Out Burger
Temporarily closed
Audi Ontario
Gloria's Cocina Mexicana
Ovitt Family Community Library
Logan's Candies
Ontario Convention Center
Ontario Center Ice Skating Arena
Carniceria Del Valle
McFadden-Dale Industrial Hardware
De Anza Park
W 6th St
E 6th St
E 4th St
W D St
E Holt Blvd
E Airport Dr
W Mission Blvd
Mission Blvd
Euclid Ave
Phillips St
2000 ft
Google
Map data ©2023 Google Imagery ©2023 , Airbus, CNES / Airbu
Ready
Zoom Level: 14 of 19 (1:24,000)
Closest Zoom for Pipelines
(lat,long): 34.086229, -117.615147


GeoTracker PFAS MAP
PFAS SAMPLING LOCATIONS
Locations with PFAS Investigative Orders
Airport
Bulk Fuel Terminal/Refinery
Chrome Plating
Landfill
Wastewater Facilities
Other Locations with PFAS Data
Cleanup Program Site
Land Disposal Site
Military Cleanup Site
Military Privatized Site
Military UST Site
Non-Case Information
Project
Sampling Point - Private
WDR Site
NPDES
GAMA - Priority Basin Project (USGS)
GAMA - Water Replenishment District
Water System Wells - GAMA DATA
Drinking Water Wells
PFAS Chemical Filter
Chemical:
Any PFAS Chemical
Wells to Show:
Any Result
Matrix
Gas
Liquid
Solid
Field Point Class
Fernwood Mobil Home Commun
Shell
Planet Fitness
Golden Corral Buffet & Grill
Del Norte Elementary School
Ontario Airport Inn
In-N-Out Burger
Temporarily closed
Tuscany Village
Veterans Memorial Park
Estancia
Sevenity Esthetics
Enterprise Rent-A-Car
Starbucks
Ontario Convention Center
Residence Inn by Marriott Ontario Airport
Mark Christopher Auto Center
Holiday Inn Ontario Airport
Audi Ontario
Best Buy Distribution Center
QVC Ontario Distribution Center Warehouse
Deer Creek
Topgolf
Cucamonga-Guasti Regional Park
Ontario Spay and Neuter
Building Bridges Foster Family Agency
American Career College
West Coast University
Credit Union of Southern California
Ontario International Airport Parking
Lot 3
United Airlines
Southwest
Southwest Airlines Cargo
Bob Hope USO Ontario
Parking Concepts
FedEx Drop Box
Extra Space Storage
Lotus distribution
Ontario International Airport
SMOG CHECK CHANGE
Frito-Lay Inc. - Los Angeles Warehouse
E 4th St
Fourth St
E Rosewood Ct
E I St
E Granada Ct
Plaza Serena
Inland Empire Blvd
E El Morado Ct
E G St
E F St
E Flora St
E D St
E Nocta St
Kline St
E Holt Blvd
E Airport Dr
Moore Way
E Terminal Wy
E Via Fiano
Turner Ave
X
Keyboard shortcuts
Map data ©2023 Google
1000 ft


GeoTracker PFAS MAP
PFAS SAMPLING LOCATIONS
Locations with PFAS Investigative Orders
Airport
Bulk Fuel Terminal/Refinery
Chrome Plating
Landfill
Wastewater Facilities
Other Locations with PFAS Data
Cleanup Program Site
Land Disposal Site
Military Cleanup Site
Military Privatized Site
Military UST Site
Non-Case Information
Project
Sampling Point - Private
WDR Site
NPDES
GAMA - Priority Basin Project (USGS)
GAMA - Water Replenishment District
Water System Wells - GAMA DATA
Drinking Water Wells
PFAS Chemical Filter
Chemical:
Any PFAS Chemical
Wells to Show:
Any Result
Matrix
Gas
Liquid
Solid
Field Point Class
Field Point CA3610034_025_025 - WELL 29
SITE USE
DRINKING WATER WELLS
FIELD PT CLASS
PUBLIC DRINKING WATER WELL
VIEW WELL INFO | VIEW SOURCE / UNTREATED WATER DATA
Fernwood Mobil Home Commun
Shell
Golden Corral Buffet & Grill
Planet Fitness
E 4th St
Fourth St
Deer Creek
Topgolf
Best Buy Distribution Center
QVC Ontario Distribution Center Warehouse
Del Norte Elementary School
Ontario Airport Inn
Inland Empire Blvd
Cucamonga-Guasti Regional Park
Ontario Spay and Neuter
Building Bridges Foster Family Agency
In-N-Out Burger
Temporarily closed
Audi Ontario
Tuscany Village
Residence Inn Marriott Ontario Airpo
American Career College
Veterans Memorial Park
E D St
Estancia
Convention Ce
West Coast University
Sevenity Esthetics
Enterprise Rent-A-Car
Starbucks
Credit Union of Southern California
E Holt Blvd
Ontario International Airport Parking
E Airport Dr
Lot 3
Extra Space Storage
FedEx Drop Box
Parking Concepts
United Airlines
Southwest Airlines
Southwest Airlines Cargo
Bob Hope USO Ontario
Ontario International Airport
Lotus distribution
Keyboard shortcuts
Map data ©2023 Google Imagery ©2023 , Airbus, CNES / Airbus, County of San Bernardino, Maxar Technologies, U.S. Geological Survey, USDA/FPAC/GEO
1000 ft

Well Report

ONTARIO MUNICIPAL UTILITIES COMPANY (ONTARIO)
WELL 29
303 East B Street
ONTARIO , CA 91761761

State Well #: CA3610034_025_025
Well Source: Groundwater
Well Status: Active Raw

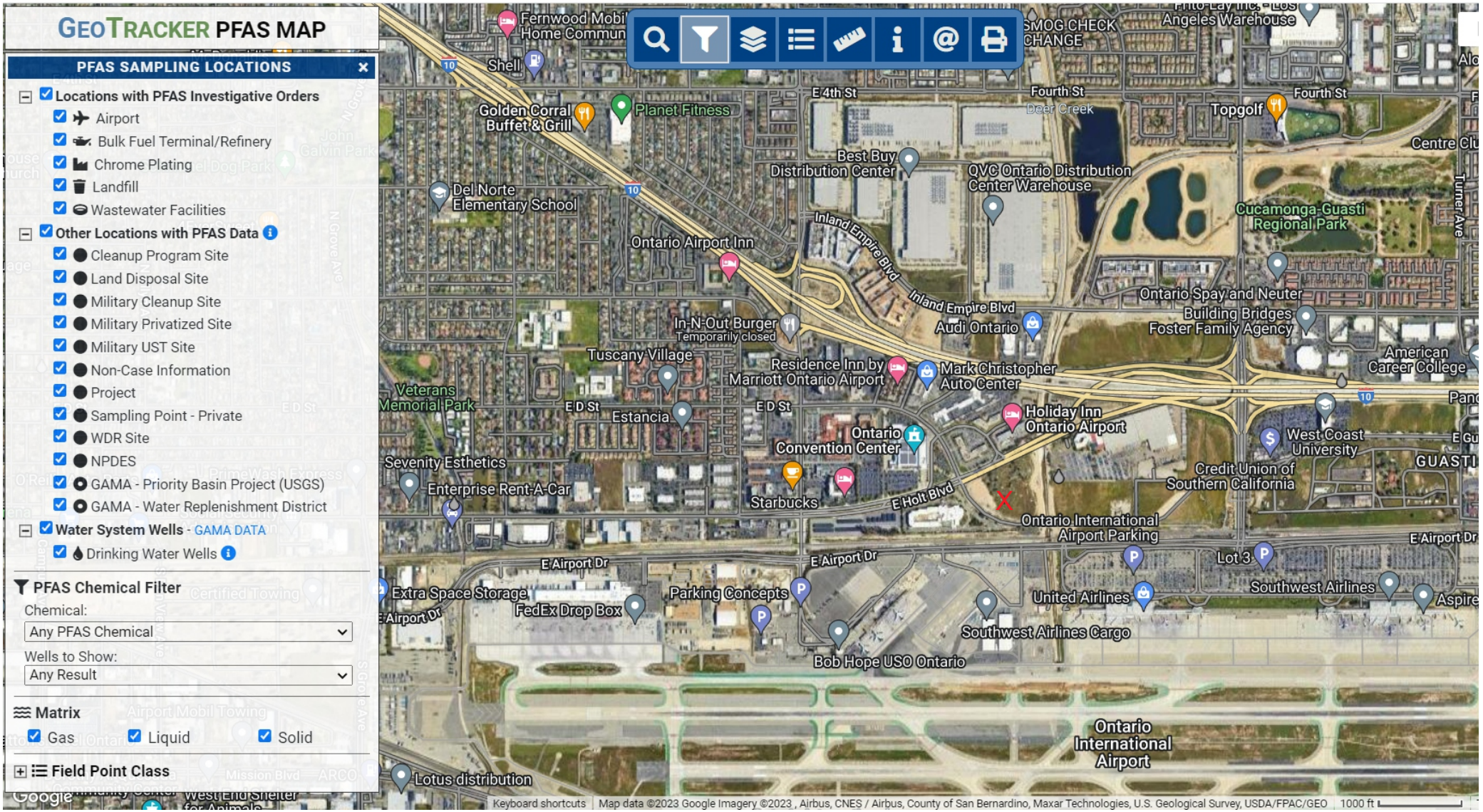
Detailed Well Information | Water Quality Data

Plot Selected Chemicals | Reset Boxes | **Note: You may select up to 6 chemicals.**

(ALL DATA) | (MOST RECENT) | (MAXIMUM CONCENTRATIONS)

DATE	PARAMETER	SOURCE QUALIFIER	SOURCE RESULT	UNITS	MCL	Plot
7/15/2020	1,1,1,2-TETRACHLOROETHANE	<	0.5	UG/L	NA	☐

7/27/2022	PERCHLORATE	<	2	UG/L	6	☐
1/9/2020	PERFLUOROBUTANESULFONIC ACID (PFBS)	<	2	NG/L	NA	☐
1/9/2020	PERFLUORODECANOIC ACID (PFDA)	<	2	NG/L	NA	☐
1/9/2020	PERFLUORODODECANOIC ACID (PFDoA)	<	2	NG/L	NA	☐
1/9/2020	PERFLUOROHEPTANOIC ACID (PFHpA)	<	2	NG/L	NA	☐
1/9/2020	PERFLUOROHEXANE SULFONIC ACID (PFHxS)	<	2	NG/L	NA	☐
1/9/2020	PERFLUOROHEXANOIC ACID (PFHxA)	<	2	NG/L	NA	☐
1/9/2020	PERFLUORONONANOIC ACID (PFNA)	<	2	NG/L	NA	☐
1/9/2020	PERFLUOROOCTANE SULFONIC ACID (PFOS)	<	2	NG/L	NA	☐
1/9/2020	PERFLUOROOCTANOIC ACID (PFOA)	<	2	NG/L	NA	☐
1/9/2020	PERFLUOROTETRADECANOIC ACID (PFTA)	<	2	NG/L	NA	☐
1/9/2020	PERFLUOROTRIDECANOIC ACID (PFTrDA)	<	2	NG/L	NA	☐
1/9/2020	PERFLUOROUNDECANOIC ACID (PFUnA)	<	2	NG/L	NA	☐
7/15/2020	PH, LABORATORY		8.1		NA	☐


GeoTracker PFAS MAP
PFAS SAMPLING LOCATIONS
Locations with PFAS Investigative Orders
Airport
Bulk Fuel Terminal/Refinery
Chrome Plating
Landfill
Wastewater Facilities
Other Locations with PFAS Data
Cleanup Program Site
Land Disposal Site
Military Cleanup Site
Military Privatized Site
Military UST Site
Non-Case Information
Project
Sampling Point - Private
WDR Site
NPDES
GAMA - Priority Basin Project (USGS)
GAMA - Water Replenishment District
Water System Wells - GAMA DATA
Drinking Water Wells
PFAS Chemical Filter
Chemical:
Any PFAS Chemical
Wells to Show:
Any Result
Matrix
Gas
Liquid
Solid
Field Point Class
Fernwood Mobil Home Commun
Shell
Golden Corral Buffet & Grill
Planet Fitness
E 4th St
Fourth St
Deer Creek
Topgolf
Best Buy Distribution Center
QVC Ontario Distribution Center Warehouse
Del Norte Elementary School
Ontario Airport Inn
Inland Empire Blvd
Cucamonga-Guasti Regional Park
Ontario Spay and Neuter
Building Bridges Foster Family Agency
In-N-Out Burger
Temporarily closed
Audi Ontario
Tuscany Village
Residence Inn by Marriott Ontario Airport
Mark Christopher Auto Center
American Career College
Veterans Memorial Park
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Estancia
Holiday Inn Ontario Airport
Ontario Convention Center
West Coast University
Sevenity Esthetics
Enterprise Rent-A-Car
Starbucks
Credit Union of Southern California
E Holt Blvd
Ontario International Airport Parking
E Airport Dr
Lot 3
Extra Space Storage
Parking Concepts
FedEx Drop Box
United Airlines
Southwest Airlines
Southwest Airlines Cargo
Bob Hope USO Ontario
Ontario International Airport
Lotus distribution
Google
Keyboard shortcuts
Map data ©2023 Google Imagery ©2023 , Airbus, CNES / Airbus, County of San Bernardino, Maxar Technologies, U.S. Geological Survey, USDA/FPAC/GEO
1000 ft

Well Report

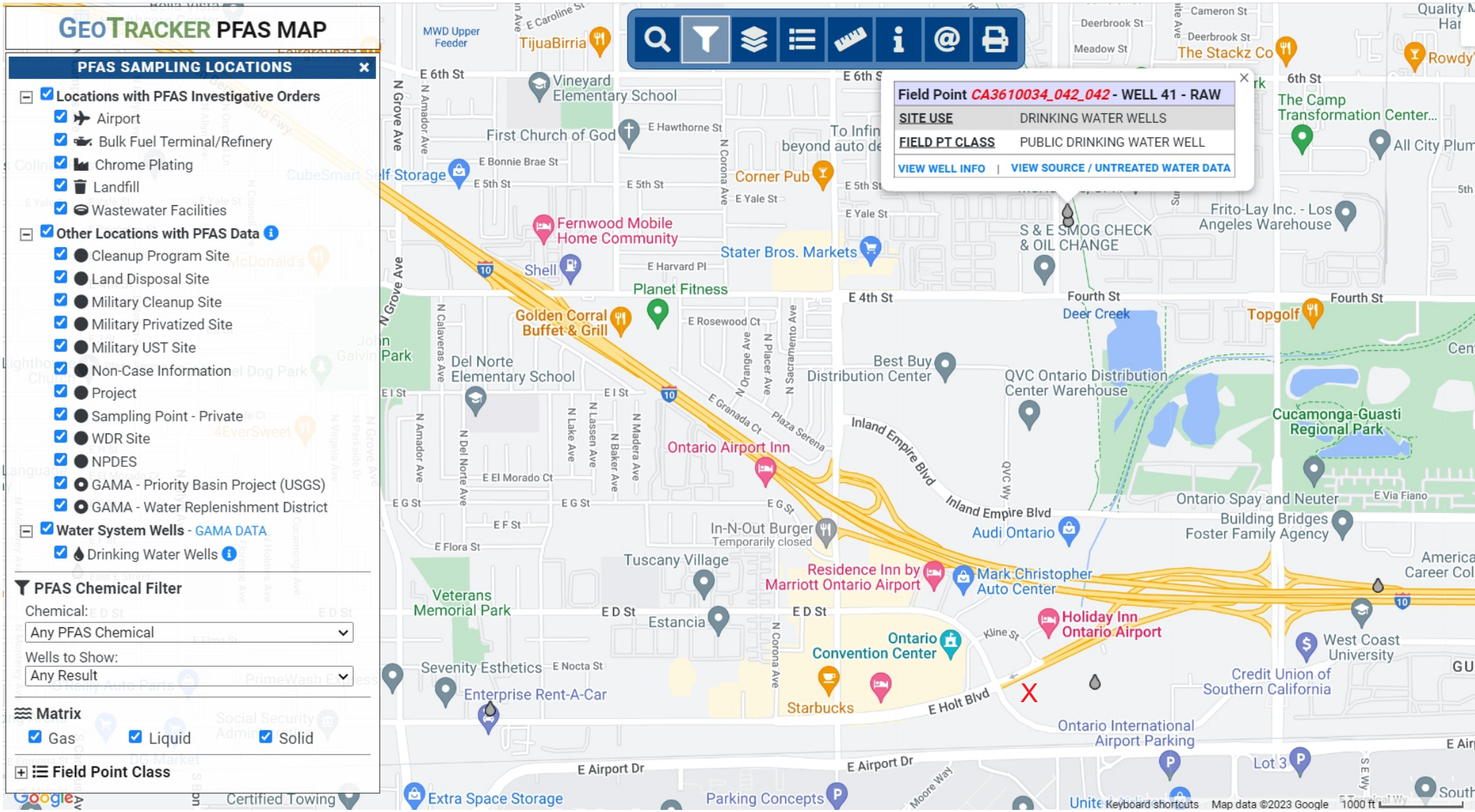
ONTARIO MUNICIPAL UTILITIES COMPANY (ONTARIO)
WELL 29
303 East B Street
ONTARIO , CA 91761761

State Well #: CA3610034_025_025
Well Source: Groundwater
Well Status: Active Raw

Detailed Well Information | Water Quality Data



Chemical	Color	Visible?
PERFLUOROOCTANE SULFONIC ACID (PFOS)	Red	Visible?: ☑
PERFLUOROOCTANOIC ACID (PFOA)	Blue	Visible?: ☑


GeoTracker PFAS MAP
PFAS SAMPLING LOCATIONS
Locations with PFAS Investigative Orders
Airport
Bulk Fuel Terminal/Refinery
Chrome Plating
Landfill
Wastewater Facilities
Other Locations with PFAS Data
Cleanup Program Site
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Project
Sampling Point - Private
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GAMA - Priority Basin Project (USGS)
GAMA - Water Replenishment District
Water System Wells - GAMA DATA
Drinking Water Wells
PFAS Chemical Filter
Chemical:
Any PFAS Chemical
Wells to Show:
Any Result
Matrix
Gas
Liquid
Solid
Field Point Class
Field Point CA3610034_042_042 - WELL 41 - RAW
SITE USE
DRINKING WATER WELLS
FIELD PT CLASS
PUBLIC DRINKING WATER WELL
VIEW WELL INFO | VIEW SOURCE / UNTREATED WATER DATA
Ontario Airport Inn
Residence Inn by Marriott Ontario Airport
Holiday Inn Ontario Airport
Ontario Convention Center
Ontario International Airport Parking
Lot 3
Starbucks
Enterprise Rent-A-Car
Sevenity Esthetics
Extra Space Storage
Parking Concepts
Certified Towing
Veterans Memorial Park
Tuscany Village
Estancia
In-N-Out Burger
Temporarily closed
Golden Corral Buffet & Grill
Planet Fitness
Shell
Fernwood Mobile Home Community
Stater Bros. Markets
Corner Pub
First Church of God
Vineyard Elementary School
Del Norte Elementary School
TijuaBirria
S & E SMOG CHECK & OIL CHANGE
Frito-Lay Inc. - Los Angeles Warehouse
Best Buy Distribution Center
QVC Ontario Distribution Center Warehouse
Deer Creek
Topgolf
Cucamonga-Guasti Regional Park
Ontario Spay and Neuter
Building Bridges Foster Family Agency
Audi Ontario
Mark Christopher Auto Center
West Coast University
Credit Union of Southern California
The Stackz Co
The Camp Transformation Center...
All City Plum
Inland Empire Blvd
E Holt Blvd
E Airport Dr
E 6th St
E 4th St
Fourth St
E Harvard Pl
E Yale St
E 5th St
E Hawthorne St
E Bonnie Brae St
E Rosewood Ct
E Granada Ct
Plaza Serena
E El Morado Ct
E F St
E G St
E I St
E D St
E Flora St
E Nocta St
E Via Fiano
Kline St
Moore Way
N Grove Ave
N Amador Ave
N Del Norte Ave
N Lake Ave
N Lassen Ave
N Baker Ave
N Madera Ave
N Calaveras Ave
N Orange Ave
N Placer Ave
N Sacramento Ave
N Corona Ave
QVC Way
MWD Upper Feeder
Deerbrook St
Meadow St
Cameron St
6th St
Keyboard shortcuts
Map data ©2023 Google
1000 ft

Well Report

ONTARIO MUNICIPAL UTILITIES COMPANY (ONTARIO)
WELL 41 - RAW
303 East B Street
ONTARIO , CA 91761761

State Well #: CA3610034_042_042
Well Source: Groundwater
Well Status: Active Raw

Detailed Well Information | Water Quality Data

Plot Selected Chemicals | Reset Boxes **Note: You may select up to 6 chemicals.**

(ALL DATA) | (MOST RECENT) | (MAXIMUM CONCENTRATIONS)

DATE	PARAMETER	SOURCE QUALIFIER	SOURCE RESULT	UNITS	MCL	Plot
7/1/2020	1,1,1,2-TETRACHLOROETHANE	<	0.5	UG/L	NA	☐

8/30/2023	PERCHLORATE	<	2	UG/L	6	☐
1/23/2020	PERFLUOROBUTANESULFONIC ACID (PFBS)	<	2	NG/L	NA	☐
1/23/2020	PERFLUORODECANOIC ACID (PFDA)	<	2	NG/L	NA	☐
1/23/2020	PERFLUORODODECANOIC ACID (PFDoA)	<	2	NG/L	NA	☐
1/23/2020	PERFLUOROHEPTANOIC ACID (PFHpA)	<	2	NG/L	NA	☐
1/23/2020	PERFLUOROHEXANE SULFONIC ACID (PFHxS)	<	2	NG/L	NA	☐
1/23/2020	PERFLUOROHEXANOIC ACID (PFHxA)	<	2	NG/L	NA	☐
1/23/2020	PERFLUORONONANOIC ACID (PFNA)	<	2	NG/L	NA	☐
1/23/2020	PERFLUOROOCTANE SULFONIC ACID (PFOS)	<	2	NG/L	NA	☐
1/23/2020	PERFLUOROOCTANOIC ACID (PFOA)	<	2	NG/L	NA	☐
1/23/2020	PERFLUOROTETRADECANOIC ACID (PFTA)	<	2	NG/L	NA	☐
1/23/2020	PERFLUOROTRIDECANOIC ACID (PFTrDA)	<	2	NG/L	NA	☐
1/23/2020	PERFLUOROUNDECANOIC ACID (PFUnA)	<	2	NG/L	NA	☐
7/1/2020	PH, LABORATORY		8.1		NA	☐

Well Report

ONTARIO MUNICIPAL UTILITIES COMPANY (ONTARIO)
WELL 41 - RAW
303 East B Street
ONTARIO , CA 91761761

State Well #: CA3610034_042_042
Well Source: Groundwater
Well Status: Active Raw

Detailed Well Information | Water Quality Data



Chemical	Color	Visible?
PERFLUOROOCTANE SULFONIC ACID (PFOS)	Red	Visible?: ☑
PERFLUOROOCTANOIC ACID (PFOA)	Blue	Visible?: ☑

APPENDIX C

EDR HISTORICAL REPORTS

Ontario Hotel
SE Corner E. Holt Blvd. and E. Guasti Rd.
Ontario, CA 91761

Inquiry Number: 07482419.2r
October 27, 2023

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

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Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	9
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Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
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Physical Setting Source Map Findings	A-9
Physical Setting Source Records Searched	PSGR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527 - 21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E2247 - 16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E1528 - 22) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

SE CORNER E. HOLT BLVD. AND E. GUASTI RD.
ONTARIO, CA 91761

COORDINATES

Latitude (North):	34.0642390 - 34° 3' 51.26''
Longitude (West):	117.6026560 - 117° 36' 9.56''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	444386.3
UTM Y (Meters):	3769248.0
Elevation:	962 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	12015973 GUASTI, CA
Version Date:	2018

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20200423
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
SE CORNER E. HOLT BLVD. AND E. GUASTI RD.
ONTARIO, CA 91761

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	MARRIOTT AIRPORT HOT	2200 E HOLT ST	FINDS, ECHO		TP
A2	MARRIOTT AIRPORT HOT	2200 E HOLT ST	US AIRS		TP
3	WELL 29		CA PFAS	Higher	209, 0.040, ENE
B4	FRONTIER CALIFORNIA:	2152 E D ST	CA San Bern. Co. Permit	Higher	321, 0.061, WNW
5	HOLIDAY INN	2155 EAST CONVENTION	RCRA NonGen / NLR	Higher	324, 0.061, North
C6	PRIME FLIGHT CARGO	2300 E AIRPORT RD	CA San Bern. Co. Permit	Lower	362, 0.069, South
C7	MAJESTIC TERMINAL SE	2300 E AIRPORT DR	CA CERS HAZ WASTE, CA HWTS, CA HAZNET, CA CERS	Lower	362, 0.069, South
C8	PRIME FLIGHT CARGO	2300 EAST AIRPORT DR	RCRA NonGen / NLR	Lower	362, 0.069, South
C9	MAJESTIC TERMINAL SE	2300 E AIRPORT DR	RCRA NonGen / NLR	Lower	362, 0.069, South
C10	PF CARGO-ONT		RCRA-SQG, PFAS ECHO	Lower	362, 0.069, South
B11	L D KING INC	2151 E CONVENTION CE	CA San Bern. Co. Permit	Higher	374, 0.071, NW
12	ONTARIO WELL #29	2400 E AIRPORT DR	CA San Bern. Co. Permit	Lower	461, 0.087, SE
13	CITY ONTARIO WELL GU	2400 E GUASTI ROAD	RCRA NonGen / NLR	Lower	555, 0.105, ESE
14	RADISSON, ONTARIO AI	2200 E HOLT BLVD	CA San Bern. Co. Permit	Higher	573, 0.109, West
D15	MARK CHRISTOPHER AUT	2131 CONVENTION CENT	CA UST	Higher	901, 0.171, NW
D16	MARK CHRISTOPHER CHE	2131 E D ST	RCRA-SQG, CA UST, CA AST, CA CERS HAZ WASTE, CA...	Higher	901, 0.171, NW
D17	METROPOLITAN TRANSIT	2131 D	CA HIST CORTESE	Higher	901, 0.171, NW
E18	UNITED GROUND EXPRES	2500 E AIRPORT DR ST	RCRA NonGen / NLR	Lower	1063, 0.201, ESE
E19	UNIFI AVIATION, LLC.	2500 E AIRPORT DR	RCRA-SQG	Lower	1063, 0.201, ESE
E20	DELTA AIRLINES ONTAR	2500 AIRPORT DR STE	RCRA NonGen / NLR	Lower	1063, 0.201, ESE
E21	MICHAEL WESTER	2500 E. AIRPORT DRIV	RCRA NonGen / NLR	Lower	1063, 0.201, ESE
E22	UNIFI AVIATION, LLC.	2500 E AIRPORT DR	FINDS, ECHO, PFAS ECHO	Lower	1063, 0.201, ESE
E23	UNITED AIRLINES INC	2500 E AIRPORT DR ST	CA San Bern. Co. Permit	Lower	1063, 0.201, ESE
E24	AIRCRAFT SERVICE INT	2500 E. AIRPORT DRIV	CA LUST, CA CERS HAZ WASTE, CA Cortese, CA NPDES,...	Lower	1063, 0.201, ESE
E25	SKYWEST AIRLINES INC	2500 E AIRPORT DR ST	RCRA NonGen / NLR	Lower	1063, 0.201, ESE
E26	TRANSPORTATION SECUR	2500 E AIRPORT DR	RCRA-VSQG	Lower	1063, 0.201, ESE
E27	ONTARIO INTERNATIONA	2500 E AIRPORT DR	CA HAULERS, CA CERS HAZ WASTE, CA AQUEOUS FOAM, CA...	Lower	1063, 0.201, ESE
E28	NORTHWEST AIRLINES I	2500 E AIRPORT DR 12	CA San Bern. Co. Permit	Lower	1063, 0.201, ESE
E29	UNITED AIRLINES INC	2500 E AIRPORT DR ST	RCRA NonGen / NLR	Lower	1063, 0.201, ESE
F30	ONTARIO CONVENTION C	2000 CONVENTION CENT	CA San Bern. Co. Permit, CA CERS	Higher	1187, 0.225, NW
F31	AT&T MOBILITY - (USI	2000 E CONVENTION CE	CA San Bern. Co. Permit	Higher	1187, 0.225, NW
G32	CARDENAS MARKETS DIS	2501 E GUASTI RD	RCRA NonGen / NLR	Higher	1191, 0.226, ENE
G33	CARDENAS MARKETS DIS	2501 E GUASTI RD	CA CERS HAZ WASTE, CA HWTS, CA HAZNET, CA NPDES,...	Higher	1191, 0.226, ENE
G34	CARDENAS MARKETS DIS	2501 E GUASTI RD	RCRA NonGen / NLR	Higher	1191, 0.226, ENE
H35	AVIS RENT A CAR	ONTARIO AIRPORT	CA LUST, CA CHMIRS, CA Cortese	Lower	1313, 0.249, SE
H36	AVIS RENT A CAR	ONTARIO AIRPORT	CA LUST	Lower	1313, 0.249, SE
H37	AEROJET	N/A ONT. INTL. AIRPO	CA CPS-SLIC	Lower	1369, 0.259, SE
H38	AEROJET GENERAL CORP	ONTARIO INTERNATIONA	CA CPS-SLIC	Lower	1392, 0.264, SE
39	GE ONTARIO AIRCRAFT	2264	CA LUST, CA HIST CORTESE	Lower	1996, 0.378, SSE

MAPPED SITES SUMMARY

Target Property Address:
SE CORNER E. HOLT BLVD. AND E. GUASTI RD.
ONTARIO, CA 91761

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
40	ARCO #5222	101 VINEYARD AVE	CA LUST, CA Cortese, CA CERS	Higher	2016, 0.382, West
41	BUDGET RENT A CAR	203 AIRPORT DR	CA LUST, CA Cortese, CA HIST CORTESE, CA CERS	Higher	2067, 0.391, West
I42	SHELL STN. #088	1862 E HOLT	CA LUST, CA SWEEPS UST, CA FID UST, CA Cortese, CA...	Higher	2350, 0.445, West
I43	BERTINO-LAWTON PROPE	1862 HOLT	CA LUST, CA HIST CORTESE	Higher	2350, 0.445, West
J44	SBD ONTARIO ARMY AIR		CA ENVIROSTOR, CA AQUEOUS FOAM	Lower	2403, 0.455, SW
J45	OBSERV. SQUADRON OAA		CA ENVIROSTOR	Lower	2403, 0.455, SW
J46	SMALL ARMS RANGES		UXO	Lower	2408, 0.456, SW
J47	ONTARIO ARMY AIRFIEL		FUDS	Lower	2408, 0.456, SW
K48	TEXACO SERVICE STATI	501 VINEYARD AVE	CA LUST, CA CERS	Higher	2555, 0.484, WNW
K49	TEXACO SERVICE STATI	501 N VINEYARD AVE	CA LUST, CA SWEEPS UST, CA FID UST, CA Cortese, CA...	Higher	2555, 0.484, WNW
K50	TEXACO SERVICE STATI	501 VINEYARD AVENUE	CA LUST, CA Cortese	Higher	2555, 0.484, WNW
51	LOCKHEED MARTIN AIRC	1800 E. AIRPORT DRIV	CA ENVIROSTOR, CA San Bern. Co. Permit	Higher	3221, 0.610, WSW
52	WEST END HIGH SCHOOL	7TH STREET/CORONA AV	CA ENVIROSTOR, CA SCH	Higher	4183, 0.792, NNW
L53	ONTARIO ANG TNG SITE		UXO	Lower	4354, 0.825, South
L54	ONTARIO A.N.G. TRAIN		FUDS	Lower	4354, 0.825, South
55	GE ENGINE SERVICES,	2264 E. AVION PLACE	CA RESPONSE, CA ENVIROSTOR, CA LUST, CA CPS-SLIC,...	Lower	4906, 0.929, SSW
M56	GENERAL ELECTRIC CO-	1923 EAST AVION	CA ENVIROSTOR, CA CERS HAZ WASTE, CA HIST UST, CA..	Lower	4987, 0.945, SSW
M57	GE ENGINE SERVICES I	1923 E AVION ST	SEMS-ARCHIVE, CORRACTS, RCRA-TSDF, RCRA NonGen /..	Lower	4987, 0.945, SSW
M58	GENERAL ELECTRIC ENG	1923 EAST AVION STRE	CA BOND EXP. PLAN	Lower	4987, 0.945, SSW
59	GE ENGINE SERVICES	2264 AVION DR	CA HIST Cal-Sites, CA EMI	Lower	5089, 0.964, South

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 9 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
MARRIOTT AIRPORT HOT 2200 E HOLT ST ONTARIO, CA 91761	FINDS Registry ID:: 110001179064 ECHO Registry ID: 110001179064	N/A
MARRIOTT AIRPORT HOT 2200 E HOLT ST ONTARIO, CA 91761	US AIRS Database: US AIRS MINOR, Date of Government Version: 10/12/2016 EPA plant ID:: 110000479401	N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Lists of Federal Delisted NPL sites

Delisted NPL ---------- National Priority List Deletions

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

Lists of Federal RCRA generators

RCRA-LQG ---------- RCRA - Large Quantity Generators

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List

US INST CONTROLS Institutional Controls Sites List

Federal ERNS list

ERNS Emergency Response Notification System

Lists of state and tribal landfills and solid waste disposal facilities

CA SWF/LF Solid Waste Information System

Lists of state and tribal leaking storage tanks

INDIAN LUST Leaking Underground Storage Tanks on Indian Land

Lists of state and tribal registered storage tanks

FEMA UST Underground Storage Tank Listing
INDIAN UST Underground Storage Tanks on Indian Land

Lists of state and tribal voluntary cleanup sites

CA VCP Voluntary Cleanup Program Properties
INDIAN VCP Voluntary Cleanup Priority Listing

Lists of state and tribal brownfield sites

CA BROWNFIELDS Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

CA WMUDS/SWAT Waste Management Unit Database
CA SWRCY Recycler Database
INDIAN ODI Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9 Torres Martinez Reservation Illegal Dump Site Locations
ODI Open Dump Inventory
IHS OPEN DUMPS Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL Delisted National Clandestine Laboratory Register
CA CDL Clandestine Drug Labs
CA Toxic Pits Toxic Pits Cleanup Act Sites
US CDL National Clandestine Laboratory Register

Local Land Records

CA LIENS Environmental Liens Listing
LIENS 2 CERCLA Lien Information

CA DEED	Deed Restriction Listing

Records of Emergency Release Reports

HMIRS	Hazardous Materials Information Reporting System
CA LDS	Land Disposal Sites Listing
CA MCS	Military Cleanup Sites Listing
CA SPILLS 90	SPILLS 90 data from FirstSearch

Other Ascertainable Records

DOD	Department of Defense Sites
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US MINES	Mines Master Index File
MINES MRDS	Mineral Resources Data System
ABANDONED MINES	Abandoned Mines
DOCKET HWC	Hazardous Waste Compliance Docket Listing
FUELS PROGRAM	EPA Fuels Program Registered Listing
PFAS NPL	Superfund Sites with PFAS Detections Information
PFAS FEDERAL SITES	Federal Sites PFAS Information
PFAS TRIS	List of PFAS Added to the TRI
PFAS TSCA	PFAS Manufacture and Imports Information
PFAS RCRA MANIFEST	PFAS Transfers Identified In the RCRA Database Listing
PFAS ATSDR	PFAS Contamination Site Location Listing
PFAS WQP	Ambient Environmental Sampling for PFAS
PFAS NPDES	Clean Water Act Discharge Monitoring Information
PFAS ECHO FIRE TRAINING	Facilities in Industries that May Be Handling PFAS Listing
PFAS PART 139 AIRPORT	All Certified Part 139 Airports PFAS Information Listing
AQUEOUS FOAM NRC	Aqueous Foam Related Incidents Listing

BIOSOLIDS ICIS-NPDES Biosolids Facility Data
CA CHROME PLATING Chrome Plating Facilities Listing
CA CUPA Listings CUPA Resources List
CA DRYCLEANERS Cleaner Facilities
CA ENF Enforcement Action Listing
CA Financial Assurance Financial Assurance Information Listing
CA ICE Inspection, Compliance and Enforcement
CA HWT Registered Hazardous Waste Transporter Database
CA MINES Mines Site Location Listing
CA MWMP Medical Waste Management Program Listing
CA PEST LIC Pesticide Regulation Licenses Listing
CA PROC Certified Processors Database
CA Notify 65 Proposition 65 Records
CA HAZMAT Hazardous Material Facilities
CA UIC UIC Listing
CA UIC GEO UIC GEO (GEOTRACKER)
CA WASTEWATER PITS Oil Wastewater Pits Listing
CA WDS Waste Discharge System
CA WIP Well Investigation Program Case List
CA MILITARY PRIV SITES MILITARY PRIV SITES (GEOTRACKER)
CA PROJECT PROJECT (GEOTRACKER)
CA WDR Waste Discharge Requirements Listing
CA NON-CASE INFO NON-CASE INFO (GEOTRACKER)
CA OTHER OIL GAS OTHER OIL & GAS (GEOTRACKER)
CA PROD WATER PONDS PROD WATER PONDS (GEOTRACKER)
CA SAMPLING POINT SAMPLING POINT (GEOTRACKER)
CA WELL STIM PROJ Well Stimulation Project (GEOTRACKER)

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP EDR Proprietary Manufactured Gas Plants
EDR Hist Auto EDR Exclusive Historical Auto Stations
EDR Hist Cleaner EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

CA RGA LF Recovered Government Archive Solid Waste Facilities List
CA RGA LUST Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 07/24/2023 has revealed that there is 1 CORRACTS site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
GE ENGINE SERVICES I EPA ID:: CAD009542721	***1923 E AVION ST***	***SSW 1/2 - 1 (0.945 mi.)***	***M57***	***264***

Lists of Federal RCRA generators

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 07/24/2023 has revealed that there are 3 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MARK CHRISTOPHER CHE EPA ID:: CAD044336741	***2131 E D ST***	***NW 1/8 - 1/4 (0.171 mi.)***	***D16***	***45***

Lower Elevation	Address	Direction / Distance	Map ID	Page
PF CARGO-ONT EPA ID:: CAR000352476		***S 0 - 1/8 (0.069 mi.)***	***C10***	***37***
UNIFI AVIATION, LLC. EPA ID:: CAR000273326	2500 E AIRPORT DR	ESE 1/8 - 1/4 (0.201 mi.)	E19	75

RCRA-VSQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-VSQG list, as provided by EDR, and dated 07/24/2023 has revealed that there is 1 RCRA-VSQG site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
TRANSPORTATION SECUR	2500 E AIRPORT DR	ESE 1/8 - 1/4 (0.201 mi.)	E26	98

EPA ID:: CAR000192575

Lists of state- and tribal (Superfund) equivalent sites

CA RESPONSE: Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

A review of the CA RESPONSE list, as provided by EDR, has revealed that there is 1 CA RESPONSE site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
GE ENGINE SERVICES,	***2264 E. AVION PLACE***	***SSW 1/2 - 1 (0.929 mi.)***	***55***	***213***
Database: RESPONSE, Date of Government Version: 07/24/2023 Status: Refer: RWQCB Facility Id: 36370024				

Lists of state- and tribal hazardous waste facilities

CA ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the CA ENVIROSTOR list, as provided by EDR, and dated 07/24/2023 has revealed that there are 6 CA ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LOCKHEED MARTIN AIRC	***1800 E. AIRPORT DRIV***	***WSW 1/2 - 1 (0.610 mi.)***	***51***	***203***
Facility Id: 71002210 Facility Id: 36370030 Status: Refer: Other Agency Status: Refer: 1248 Local Agency				
WEST END HIGH SCHOOL	***7TH STREET/CORONA AV***	***NNW 1/2 - 1 (0.792 mi.)***	***52***	***206***
Facility Id: 36010064 Facility Id: 36010010 Status: No Further Action				

Lower Elevation	Address	Direction / Distance	Map ID	Page
SBD ONTARIO ARMY AIR		***SW 1/4 - 1/2 (0.455 mi.)***	***J44***	***189***
Facility Id: 80000880 Status: Inactive - Needs Evaluation				
OBSERV. SQUADRON OAA		SW 1/4 - 1/2 (0.455 mi.)	J45	191

Facility Id: 80000874
Status: Inactive - Needs Evaluation

GE ENGINE SERVICES,	***2264 E. AVION PLACE***	***SSW 1/2 - 1 (0.929 mi.)***	***55***	***213***

Facility Id: 36370024
Facility Id: 71002752
Status: Refer: RWQCB
Status: Inactive - Needs Evaluation

GENERAL ELECTRIC CO-	***1923 EAST AVION***	***SSW 1/2 - 1 (0.945 mi.)***	***M56***	***229***

Facility Id: 71002298
Facility Id: 80001638
Facility Id: 80000416
Status: Inactive - Needs Evaluation
Status: No Further Action

Lists of state and tribal leaking storage tanks

CA LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the CA LUST list, as provided by EDR, has revealed that there are 11 CA LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ARCO #5222	***101 VINEYARD AVE***	***W 1/4 - 1/2 (0.382 mi.)***	***40***	***176***

Database: LUST REG 8, Date of Government Version: 02/14/2005
Database: LUST, Date of Government Version: 06/05/2023
Status: Completed - Case Closed
Facility Status: Preliminary site assessment workplan submitted
Global Id: T0607100539
Global ID: T0607100539

BUDGET RENT A CAR	***203 AIRPORT DR***	***W 1/4 - 1/2 (0.391 mi.)***	***41***	***180***

Database: LUST REG 8, Date of Government Version: 02/14/2005
Database: LUST, Date of Government Version: 06/05/2023
Status: Completed - Case Closed
Facility Status: Case Closed
Global Id: T0607100596
Global ID: T0607100596

SHELL STN. #088	***1862 E HOLT***	***W 1/4 - 1/2 (0.445 mi.)***	***I42***	***184***

Database: LUST, Date of Government Version: 06/05/2023
Status: Completed - Case Closed
Global Id: T0607100410

BERTINO-LAWTON PROPE	***1862 HOLT***	***W 1/4 - 1/2 (0.445 mi.)***	***I43***	***188***

Database: LUST REG 8, Date of Government Version: 02/14/2005
Facility Status: Case Closed
Global ID: T0607100410

TEXACO SERVICE STATI	***501 VINEYARD AVE***	***WNW 1/4 - 1/2 (0.484 mi.)***	***K48***	***194***

Database: LUST REG 8, Date of Government Version: 02/14/2005
Database: LUST, Date of Government Version: 06/05/2023
Status: Completed - Case Closed

Facility Status: Pollution Characterization
Global Id: T0607102075
Global ID: T0607100366

TEXACO SERVICE STATI	***501 N VINEYARD AVE***	***WNW 1/4 - 1/2 (0.484 mi.)***	***K49***	***198***

Database: LUST, Date of Government Version: 06/05/2023
Status: Completed - Case Closed
Global Id: T0607100366

TEXACO SERVICE STATI	***501 VINEYARD AVENUE***	***WNW 1/4 - 1/2 (0.484 mi.)***	***K50***	***202***

Database: LUST REG 8, Date of Government Version: 02/14/2005
Facility Status: Leak being confirmed
Global ID: T0607102075

Lower Elevation	Address	Direction / Distance	Map ID	Page
AIRCRAFT SERVICE INT	***2500 E. AIRPORT DRIV***	***ESE 1/8 - 1/4 (0.201 mi.)***	***E24***	***86***

Database: LUST, Date of Government Version: 06/05/2023
Status: Completed - Case Closed
Global Id: T0607181149

AVIS RENT A CAR	***ONTARIO AIRPORT***	***SE 1/8 - 1/4 (0.249 mi.)***	***H35***	***169***

Database: LUST REG 8, Date of Government Version: 02/14/2005
Facility Status: Case Closed
Global ID: T0607100472

AVIS RENT A CAR	ONTARIO AIRPORT	SE 1/8 - 1/4 (0.249 mi.)	H36	172

Database: LUST, Date of Government Version: 06/05/2023
Status: Completed - Case Closed
Global Id: T0607100472

GE ONTARIO AIRCRAFT	***2264***	***SSE 1/4 - 1/2 (0.378 mi.)***	***39***	***175***

Database: LUST REG 8, Date of Government Version: 02/14/2005
Facility Status: Pollution Characterization
Global ID: T0607100233

CA CPS-SLIC: Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the CA CPS-SLIC list, as provided by EDR, has revealed that there are 2 CA CPS-SLIC sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
AEROJET	N/A ONT. INTL. AIRPO	SE 1/4 - 1/2 (0.259 mi.)	H37	173

Database: SLIC REG 8, Date of Government Version: 04/03/2008
Facility Status: Closed

AEROJET GENERAL CORP	ONTARIO INTERNATIONA	SE 1/4 - 1/2 (0.264 mi.)	H38	174

Database: CPS-SLIC, Date of Government Version: 06/05/2023
Facility Status: Completed - Case Closed
Global Id: SLT8R0503934

Lists of state and tribal registered storage tanks

CA UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the CA UST list, as provided by EDR, has revealed that there are 2 CA UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MARK CHRISTOPHER AUT Database: UST, Date of Government Version: 06/05/2023 Facility Id: FA0004585	2131 CONVENTION CENT	NW 1/8 - 1/4 (0.171 mi.)	D15	44
MARK CHRISTOPHER CHE Database: UST, Date of Government Version: 06/05/2023 Facility Id: 86008986	***2131 E D ST***	***NW 1/8 - 1/4 (0.171 mi.)***	***D16***	***45***

CA AST: A listing of aboveground storage tank petroleum storage tank locations.

A review of the CA AST list, as provided by EDR, has revealed that there is 1 CA AST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MARK CHRISTOPHER CHE Database: AST, Date of Government Version: 07/06/2016	***2131 E D ST***	***NW 1/8 - 1/4 (0.171 mi.)***	***D16***	***45***

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Hazardous waste / Contaminated Sites

CA HIST Cal-Sites: Formerly known as ASPIS, this database contains both known and potential hazardous substance sites. The source is the California Department of Toxic Substance Control. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

A review of the CA HIST Cal-Sites list, as provided by EDR, and dated 08/08/2005 has revealed that there is 1 CA HIST Cal-Sites site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
GE ENGINE SERVICES	***2264 AVION DR***	***S 1/2 - 1 (0.964 mi.)***	***59***	***286***

CA CERS HAZ WASTE: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

A review of the CA CERS HAZ WASTE list, as provided by EDR, and dated 07/17/2023 has revealed that there are 5 CA CERS HAZ WASTE sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MARK CHRISTOPHER CHE	*2131 E D ST*	*NW 1/8 - 1/4 (0.171 mi.)*	*D16*	*45*
CARDENAS MARKETS DIS	*2501 E GUASTI RD*	*ENE 1/8 - 1/4 (0.226 mi.)*	*G33*	*142*

Lower Elevation	Address	Direction / Distance	Map ID	Page
MAJESTIC TERMINAL SE	*2300 E AIRPORT DR*	*S 0 - 1/8 (0.069 mi.)*	*C7*	*21*
AIRCRAFT SERVICE INT	*2500 E. AIRPORT DRIV*	*ESE 1/8 - 1/4 (0.201 mi.)*	*E24*	*86*
ONTARIO INTERNATIONA	*2500 E AIRPORT DR*	*ESE 1/8 - 1/4 (0.201 mi.)*	*E27*	*105*

Local Lists of Registered Storage Tanks

CA SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the CA SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there is 1 CA SWEEPS UST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MARK CHRISTOPHER CHE	*2131 E D ST*	*NW 1/8 - 1/4 (0.171 mi.)*	*D16*	*45*
Status: A				
Tank Status: A				
Comp Number: 1210				

CA HIST UST: Historical UST Registered Database.

A review of the CA HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there is 1 CA HIST UST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MARK CHRISTOPHER CHE	*2131 E D ST*	*NW 1/8 - 1/4 (0.171 mi.)*	*D16*	*45*
Facility Id: 00000001210				

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there is 1 CA FID UST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MARK CHRISTOPHER CHE	*2131 E D ST*	*NW 1/8 - 1/4 (0.171 mi.)*	*D16*	*45*
Facility Id: 36002031				
Status: A				

CA CERS TANKS: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

A review of the CA CERS TANKS list, as provided by EDR, and dated 07/17/2023 has revealed that there is 1 CA CERS TANKS site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MARK CHRISTOPHER CHE	***2131 E D ST***	***NW 1/8 - 1/4 (0.171 mi.)***	***D16***	***45***

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 07/24/2023 has revealed that there are 11 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HOLIDAY INN EPA ID:: CAC003235247	2155 EAST CONVENTION	N 0 - 1/8 (0.061 mi.)	5	18
CARDENAS MARKETS DIS EPA ID:: CAL000451589	2501 E GUASTI RD	ENE 1/8 - 1/4 (0.226 mi.)	G32	140
CARDENAS MARKETS DIS EPA ID:: CAL000378320	2501 E GUASTI RD	ENE 1/8 - 1/4 (0.226 mi.)	G34	167

Lower Elevation	Address	Direction / Distance	Map ID	Page
PRIME FLIGHT CARGO EPA ID:: CAL000457984	2300 EAST AIRPORT DR	S 0 - 1/8 (0.069 mi.)	C8	32
MAJESTIC TERMINAL SE EPA ID:: CAL000432907	2300 E AIRPORT DR	S 0 - 1/8 (0.069 mi.)	C9	34
CITY ONTARIO WELL GU EPA ID:: CAC003135817	2400 E GUASTI ROAD	ESE 0 - 1/8 (0.105 mi.)	13	41
UNITED GROUND EXPRES EPA ID:: CAL000468632	2500 E AIRPORT DR ST	ESE 1/8 - 1/4 (0.201 mi.)	E18	73
DELTA AIRLINES ONTAR EPA ID:: CAL000277336	2500 AIRPORT DR STE	ESE 1/8 - 1/4 (0.201 mi.)	E20	79
MICHAEL WESTER EPA ID:: CAC003132588	2500 E. AIRPORT DRIV	ESE 1/8 - 1/4 (0.201 mi.)	E21	81
SKYWEST AIRLINES INC EPA ID:: CAL000412202	2500 E AIRPORT DR ST	ESE 1/8 - 1/4 (0.201 mi.)	E25	96
UNITED AIRLINES INC EPA ID:: CAL000385095	2500 E AIRPORT DR ST	ESE 1/8 - 1/4 (0.201 mi.)	E29	130

FUDS: The Listing includes locations of Formerly Used Defense Sites Properties where the US Army Corps Of Engineers is actively working or will take necessary cleanup actions.

A review of the FUDS list, as provided by EDR, and dated 08/07/2023 has revealed that there are 2 FUDS sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ONTARIO ARMY AIRFIEL		SW 1/4 - 1/2 (0.456 mi.)	J47	192
ONTARIO A.N.G. TRAIN		S 1/2 - 1 (0.825 mi.)	L54	211

UXO: A listing of unexploded ordnance site locations

A review of the UXO list, as provided by EDR, and dated 11/09/2021 has revealed that there are 2 UXO sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SMALL ARMS RANGES		SW 1/4 - 1/2 (0.456 mi.)	J46	192
ONTARIO ANG TNG SITE		S 1/2 - 1 (0.825 mi.)	L53	211

PFAS ECHO: Regulators and the public have expressed interest in knowing which regulated entities may be using PFAS. EPA has developed a dataset from various sources that show which industries may be handling PFAS. Approximately 120,000 facilities subject to federal environmental programs have operated or currently operate in industry sectors with processes that may involve handling and/or release of PFAS.

A review of the PFAS ECHO list, as provided by EDR, and dated 07/05/2023 has revealed that there are 2 PFAS ECHO sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PF CARGO-ONT		***S 0 - 1/8 (0.069 mi.)***	***C10***	***37***
UNIFI AVIATION, LLC.	***2500 E AIRPORT DR***	***ESE 1/8 - 1/4 (0.201 mi.)***	***E22***	***83***

CA PFAS: A listing of PFAS contaminated sites included in the GeoTracker database.

A review of the CA PFAS list, as provided by EDR, and dated 06/02/2023 has revealed that there is 1 CA PFAS site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WELL 29		ENE 0 - 1/8 (0.040 mi.)	3	10

CA AQUEOUS FOAM: Airports shown on this list are those believed to use Aqueous Film Forming Foam (AFFF), and certified by the Federal Aviation Administration (FAA) under Title 14, Code of Federal Regulations (CFR), Part 139 (14 CFR Part 139). This list was created by SWRCB using information available from the FAA. Location points shown are from the latitude and longitude listed on the FAA airport master record.

A review of the CA AQUEOUS FOAM list, as provided by EDR, and dated 06/02/2023 has revealed that there is 1 CA AQUEOUS FOAM site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ONTARIO INTERNATIONA	***2500 E AIRPORT DR***	***ESE 1/8 - 1/4 (0.201 mi.)***	***E27***	***105***

CA BOND EXP. PLAN: Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

A review of the CA BOND EXP. PLAN list, as provided by EDR, and dated 01/01/1989 has revealed that there is 1 CA BOND EXP. PLAN site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
GENERAL ELECTRIC ENG	1923 EAST AVION STRE	SSW 1/2 - 1 (0.945 mi.)	M58	285

CA Cortese: The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

A review of the CA Cortese list, as provided by EDR, and dated 06/14/2023 has revealed that there are 7 CA Cortese sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ARCO #5222	***101 VINEYARD AVE***	***W 1/4 - 1/2 (0.382 mi.)***	***40***	***176***
Cleanup Status: COMPLETED - CASE CLOSED				
BUDGET RENT A CAR	***203 AIRPORT DR***	***W 1/4 - 1/2 (0.391 mi.)***	***41***	***180***
Cleanup Status: COMPLETED - CASE CLOSED				
SHELL STN. #088	***1862 E HOLT***	***W 1/4 - 1/2 (0.445 mi.)***	***I42***	***184***
Cleanup Status: COMPLETED - CASE CLOSED				
TEXACO SERVICE STATI	***501 N VINEYARD AVE***	***WNW 1/4 - 1/2 (0.484 mi.)***	***K49***	***198***
Cleanup Status: COMPLETED - CASE CLOSED				
TEXACO SERVICE STATI	***501 VINEYARD AVENUE***	***WNW 1/4 - 1/2 (0.484 mi.)***	***K50***	***202***
Cleanup Status: COMPLETED - CASE CLOSED				

Lower Elevation	Address	Direction / Distance	Map ID	Page
AIRCRAFT SERVICE INT	***2500 E. AIRPORT DRIV***	***ESE 1/8 - 1/4 (0.201 mi.)***	***E24***	***86***
Cleanup Status: COMPLETED - CASE CLOSED				
AVIS RENT A CAR	***ONTARIO AIRPORT***	***SE 1/8 - 1/4 (0.249 mi.)***	***H35***	***169***
Cleanup Status: COMPLETED - CASE CLOSED				

CA HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the CA HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 4 CA HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
METROPOLITAN TRANSIT	2131 D	NW 1/8 - 1/4 (0.171 mi.)	D17	72
Reg Id: 3112				
BUDGET RENT A CAR	***203 AIRPORT DR***	***W 1/4 - 1/2 (0.391 mi.)***	***41***	***180***
Reg Id: 083603532T				
BERTINO-LAWTON PROPE	***1862 HOLT***	***W 1/4 - 1/2 (0.445 mi.)***	***I43***	***188***
Reg Id: 083602824T				

Lower Elevation	Address	Direction / Distance	Map ID	Page
GE ONTARIO AIRCRAFT	***2264***	***SSE 1/4 - 1/2 (0.378 mi.)***	***39***	***175***

Reg Id: 083601881T

CA HWP: Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

A review of the CA HWP list, as provided by EDR, and dated 05/15/2023 has revealed that there is 1 CA HWP site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
GE ENGINE SERVICES I	***1923 E AVION ST***	***SSW 1/2 - 1 (0.945 mi.)***	***M57***	***264***
EPA ID: CAD009542721				
Cleanup Status: CLOSED				

San Bernardino County Fire Department Hazardous Materials Division.

A review of the CA San Bern. Co. Permit list, as provided by EDR, and dated 05/09/2023 has revealed that there are 13 CA San Bern. Co. Permit sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FRONTIER CALIFORNIA:	2152 E D ST	WNW 0 - 1/8 (0.061 mi.)	B4	18
Facility Status: ACTIVE				
Facility Id: FA0003619				
L D KING INC	2151 E CONVENTION CE	NW 0 - 1/8 (0.071 mi.)	B11	40
Facility Status: INACTIVE				
Facility Id: FA0004325				
RADISSON, ONTARIO AI	2200 E HOLT BLVD	W 0 - 1/8 (0.109 mi.)	14	43
Facility Status: INACTIVE				
Facility Id: FA0008294				
MARK CHRISTOPHER CHE	***2131 E D ST***	***NW 1/8 - 1/4 (0.171 mi.)***	***D16***	***45***
Facility Status: ACTIVE				
Facility Status: INACTIVE				
Facility Id: FA0004585				
ONTARIO CONVENTION C	***2000 CONVENTION CENT***	***NW 1/8 - 1/4 (0.225 mi.)***	***F30***	***132***
Facility Status: ACTIVE				
Facility Id: FA0008300				
Facility Id: FA0017086				
AT&T MOBILITY - (USI	2000 E CONVENTION CE	NW 1/8 - 1/4 (0.225 mi.)	F31	139
Facility Status: INACTIVE				
Facility Id: FA0009012				
CARDENAS MARKETS DIS	***2501 E GUASTI RD***	***ENE 1/8 - 1/4 (0.226 mi.)***	***G33***	***142***
Facility Status: ACTIVE				
Facility Status: INACTIVE				
Facility Id: FA0015061				
Facility Id: FA0003876				

Lower Elevation	Address	Direction / Distance	Map ID	Page
PRIME FLIGHT CARGO	2300 E AIRPORT RD	S 0 - 1/8 (0.069 mi.)	C6	21

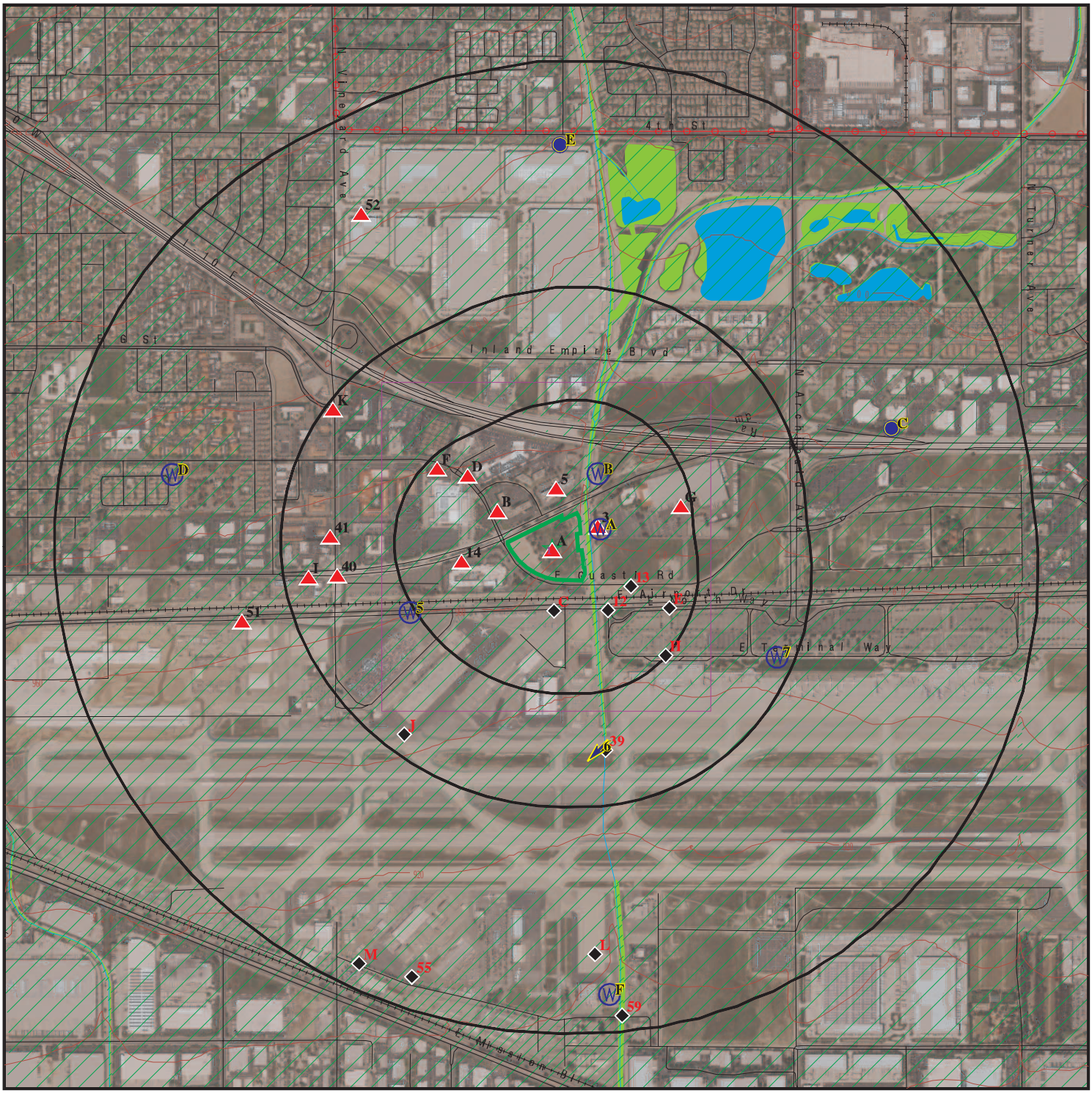
Facility Status: ACTIVE Facility Id: FA0019127				
ONTARIO WELL #29 Facility Status: INACTIVE Facility Id: FA0002048	2400 E AIRPORT DR	SE 0 - 1/8 (0.087 mi.)	12	41
UNITED AIRLINES INC Facility Status: INACTIVE Facility Id: FA0006904	2500 E AIRPORT DR ST	ESE 1/8 - 1/4 (0.201 mi.)	E23	85
AIRCRAFT SERVICE INT Facility Status: ACTIVE Facility Status: INACTIVE Facility Id: FA0011617 Facility Id: FA0000800	***2500 E. AIRPORT DRIV***	***ESE 1/8 - 1/4 (0.201 mi.)***	***E24***	***86***
ONTARIO INTERNATIONA Facility Status: ACTIVE Facility Status: INACTIVE Facility Id: FA0017002 Facility Id: FA0002679 Facility Id: FA0018764 Facility Id: FA0016229	***2500 E AIRPORT DR***	***ESE 1/8 - 1/4 (0.201 mi.)***	***E27***	***105***
NORTHWEST AIRLINES I Facility Status: INACTIVE Facility Id: FA0005004	2500 E AIRPORT DR 12	ESE 1/8 - 1/4 (0.201 mi.)	E28	130

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 31 records.

Site Name	Database(s)
GENUINE PARTS COMPANY DBA NAPA AUT	CA CERS HAZ WASTE
HBIZCTR ONTARIO	CA NPDES, CA CIWQS
LOT 1 OF ONTARIO AVE BUSINESS PARK	CA CIWQS
ONTARIO AIRPORT TOWERS - WCU PARKI	CA CIWQS
ONTARIO, CITY OF	CA RGA LUST
ONTARIO, CITY OF	CA RGA LUST
ONTARIO, CITY OF	CA RGA LUST
ONTARIO, CITY OF	CA RGA LUST
ONTARIO, CITY OF	CA RGA LUST
ONTARIO, CITY OF	CA RGA LUST
U. S. POSTAL SERVICE ONTARIO	CA RGA LUST
GTE ONTARIO	CA RGA LUST
GTE ONTARIO	CA RGA LUST
ONTARIO AIRPORT TOWERS WCU PARKING	CA NPDES
	CA CDL
RRR & H INC	CA DRYCLEANERS
BONDED CLEANERS, JOSEPH MONTES	CA DRYCLEANERS
BONDED CLEANERS	CA DRYCLEANERS
BONDED CLEANERS, HOURT SENG DBA	CA DRYCLEANERS
ONTARIO PACIFIC BUSINESS CENTRE	RCRA-SQG
CITY ONTARIO WELL GUASTI	FINDS
ONTARIO PACIFIC BUSINESS CENTRE	FINDS
NORTHROP (O)	CA CPS-SLIC
LOCKHEED (O)	CA CPS-SLIC
DOUGLAS AIRCRAFT CO	CA CPS-SLIC
CALIF. AIR NATIONAL GUARD	CA CPS-SLIC
G E ENGINE SERVICE	CA CPS-SLIC
MOUNTAIN VIEW SD PROPOSED ELEMENTA	CA ENVIROSTOR, CA SCH
SO CAL GAS/ONTARIO MGP	EDR MGP
ONTARIO AUTO TRUCK PLAZA INC	EDR Hist Auto
ONTARIO AUTO TRUCK PLAZA INC	EDR Hist Auto

OVERVIEW MAP - 07482419.2R

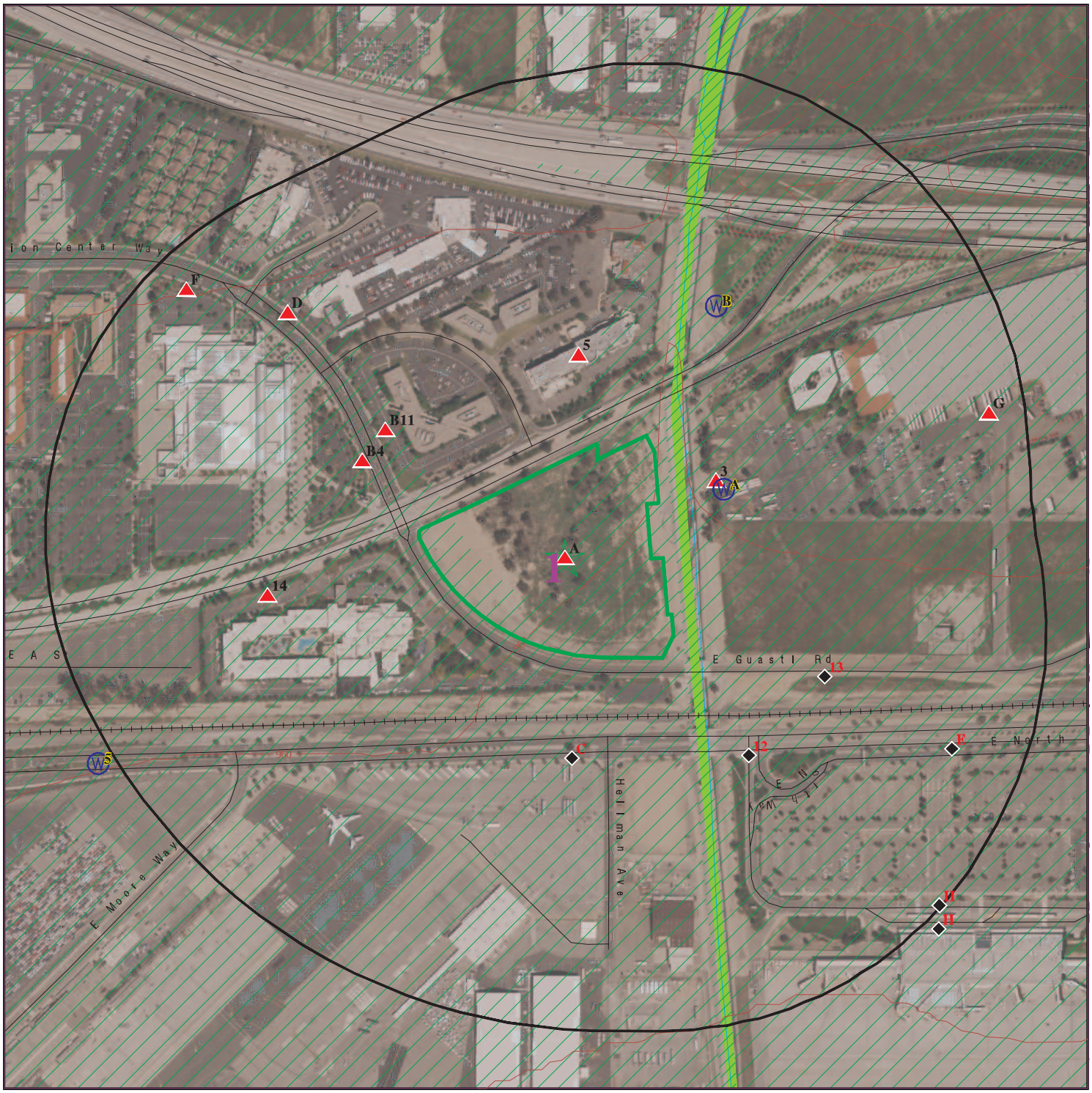


This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Ontario Hotel	CLIENT:	Petra Geotechnical Inc
ADDRESS:	SE Corner E. Holt Blvd. and E. Guasti Rd. Ontario CA 91761	CONTACT:	Ed Lump
		INQUIRY #:	07482419.2r
LAT/LONG:	34.064239 / 117.602656	DATE:	October 27, 2023 6:18 pm

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DETAIL MAP - 07482419.2R



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

0 1/16 1/8 1/4 Miles

Indian Reservations BIA

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

Areas of Concern

N

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Ontario Hotel	CLIENT:	Petra Geotechnical Inc
ADDRESS:	SE Corner E. Holt Blvd. and E. Guasti Rd. Ontario CA 91761	CONTACT:	Ed Lump
		INQUIRY #:	07482419.2r
LAT/LONG:	34.064239 / 117.602656	DATE:	October 27, 2023 6:19 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Lists of Federal NPL (Superfund) sites								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Lists of Federal Delisted NPL sites								
Delisted NPL	1.000		0	0	0	0	NR	0
Lists of Federal sites subject to CERCLA removals and CERCLA orders								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Lists of Federal CERCLA sites with NFRAP								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA facilities undergoing Corrective Action								
CORRACTS	1.000		0	0	0	1	NR	1
Lists of Federal RCRA TSD facilities								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA generators								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		1	2	NR	NR	NR	3
RCRA-VSQG	0.250		0	1	NR	NR	NR	1
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
Lists of state- and tribal (Superfund) equivalent sites								
CA RESPONSE	1.000		0	0	0	1	NR	1
Lists of state- and tribal hazardous waste facilities								
CA ENVIROSTOR	1.000		0	0	2	4	NR	6
Lists of state and tribal landfills and solid waste disposal facilities								
CA SWF/LF	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Lists of state and tribal leaking storage tanks								
CA LUST	0.500		0	3	8	NR	NR	11
INDIAN LUST	0.500		0	0	0	NR	NR	0
CA CPS-SLIC	0.500		0	0	2	NR	NR	2
Lists of state and tribal registered storage tanks								
FEMA UST	0.250		0	0	NR	NR	NR	0
CA UST	0.250		0	2	NR	NR	NR	2
CA AST	0.250		0	1	NR	NR	NR	1
INDIAN UST	0.250		0	0	NR	NR	NR	0
Lists of state and tribal voluntary cleanup sites								
CA VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
Lists of state and tribal brownfield sites								
CA BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
CA WMUDS/SWAT	0.500		0	0	0	NR	NR	0
CA SWRCY	0.500		0	0	0	NR	NR	0
CA HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
CA HIST Cal-Sites	1.000		0	0	0	1	NR	1
CA SCH	0.250		0	0	NR	NR	NR	0
CA CDL	0.001		0	NR	NR	NR	NR	0
CA CERS HAZ WASTE	0.250		1	4	NR	NR	NR	5
CA Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
CA SWEEPS UST	0.250		0	1	NR	NR	NR	1
CA HIST UST	0.250		0	1	NR	NR	NR	1
CA FID UST	0.250		0	1	NR	NR	NR	1
CA CERS TANKS	0.250		0	1	NR	NR	NR	1
Local Land Records								
CA LIENS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	0.001		0	NR	NR	NR	NR	0
CA DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CA CHMIRS	0.001		0	NR	NR	NR	NR	0
CA LDS	0.001		0	NR	NR	NR	NR	0
CA MCS	0.001		0	NR	NR	NR	NR	0
CA SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		4	7	NR	NR	NR	11
FUDS	1.000		0	0	1	1	NR	2
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001	1	0	NR	NR	NR	NR	1
US MINES	0.250		0	0	NR	NR	NR	0
MINES MRDS	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001	1	0	NR	NR	NR	NR	1
UXO	1.000		0	0	1	1	NR	2
ECHO	0.001	1	0	NR	NR	NR	NR	1
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
PFAS NPL	0.250		0	0	NR	NR	NR	0
PFAS FEDERAL SITES	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
PFAS TRIS	0.250		0	0	NR	NR	NR	0
PFAS TSCA	0.250		0	0	NR	NR	NR	0
PFAS RCRA MANIFEST	0.250		0	0	NR	NR	NR	0
PFAS ATSDR	0.250		0	0	NR	NR	NR	0
PFAS WQP	0.250		0	0	NR	NR	NR	0
PFAS NPDES	0.250		0	0	NR	NR	NR	0
PFAS ECHO	0.250		1	1	NR	NR	NR	2
PFAS ECHO FIRE TRAINING	0.250		0	0	NR	NR	NR	0
PFAS PART 139 AIRPORT	0.250		0	0	NR	NR	NR	0
AQUEOUS FOAM NRC	0.250		0	0	NR	NR	NR	0
BIOSOLIDS	0.001		0	NR	NR	NR	NR	0
CA PFAS	0.250		1	0	NR	NR	NR	1
CA AQUEOUS FOAM	0.250		0	1	NR	NR	NR	1
CA BOND EXP. PLAN	1.000		0	0	0	1	NR	1
CA CHROME PLATING	0.500		0	0	0	NR	NR	0
CA Cortese	0.500		0	2	5	NR	NR	7
CA CUPA Listings	0.250		0	0	NR	NR	NR	0
CA DRYCLEANERS	0.250		0	0	NR	NR	NR	0
CA EMI	0.001		0	NR	NR	NR	NR	0
CA ENF	0.001		0	NR	NR	NR	NR	0
CA Financial Assurance	0.001		0	NR	NR	NR	NR	0
CA ICE	0.001		0	NR	NR	NR	NR	0
CA HIST CORTESE	0.500		0	1	3	NR	NR	4
CA HWP	1.000		0	0	0	1	NR	1
CA HWT	0.250		0	0	NR	NR	NR	0
CA HWTS	0.001		0	NR	NR	NR	NR	0
CA HAZNET	0.001		0	NR	NR	NR	NR	0
NY MANIFEST	0.250		0	0	NR	NR	NR	0
CA MINES	0.250		0	0	NR	NR	NR	0
CA MWMP	0.250		0	0	NR	NR	NR	0
CA NPDES	0.001		0	NR	NR	NR	NR	0
CA San Bern. Co. Permit	0.250		5	8	NR	NR	NR	13
CA PEST LIC	0.001		0	NR	NR	NR	NR	0
CA PROC	0.500		0	0	0	NR	NR	0
CA Notify 65	1.000		0	0	0	0	NR	0
CA HAZMAT	0.250		0	0	NR	NR	NR	0
CA UIC	0.001		0	NR	NR	NR	NR	0
CA UIC GEO	0.001		0	NR	NR	NR	NR	0
CA WASTEWATER PITS	0.500		0	0	0	NR	NR	0
CA WDS	0.001		0	NR	NR	NR	NR	0
CA WIP	0.250		0	0	NR	NR	NR	0
CA MILITARY PRIV SITES	0.001		0	NR	NR	NR	NR	0
CA PROJECT	0.001		0	NR	NR	NR	NR	0
CA WDR	0.001		0	NR	NR	NR	NR	0
CA CIWQS	0.001		0	NR	NR	NR	NR	0
CA CERS	0.001		0	NR	NR	NR	NR	0
CA NON-CASE INFO	0.001		0	NR	NR	NR	NR	0
CA OTHER OIL GAS	0.001		0	NR	NR	NR	NR	0
CA PROD WATER PONDS	0.001		0	NR	NR	NR	NR	0
CA SAMPLING POINT	0.001		0	NR	NR	NR	NR	0
CA WELL STIM PROJ	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
CA RGA LF	0.001		0	NR	NR	NR	NR	0
CA RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		3	13	37	22	11	0	86

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1
Target
Property

MARRIOTT AIRPORT HOTEL
2200 E HOLT ST
ONTARIO, CA 91761

FINDS **1016063768**
ECHO **N/A**

Site 1 of 2 in cluster A

Actual:
962 ft.

FINDS:
Registry ID: 110001179064

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:
The Air Facility System (AFS) contains compliance and permit data for stationary sources of air pollution regulated by the EPA, state, and local air pollution agencies.
ICIS-Air (AIR) AIR is the modernization of the Air Facility System (AFS) into the Integrated Compliance Information System (ICIS). AIR contains enforcement, compliance, and permit data for stationary sources of air pollution regulated by the EPA, State, and Local air pollution agencies.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1016063768
Registry ID:	110001179064
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110001179064
Name:	MARRIOTT AIRPORT HOTEL
Address:	2200 E HOLT ST
City,State,Zip:	ONTARIO, CA 91761

A2
Target
Property

MARRIOTT AIRPORT HOTEL
2200 E HOLT ST
ONTARIO, CA 91761

US AIRS **1005654742**
N/A

Site 2 of 2 in cluster A

Actual:
962 ft.

US AIRS MINOR:

Envid:	1005654742
Region Code:	09
Programmatic ID:	AIR 0900000006071R9732
Facility Registry ID:	110001179064
D and B Number:	Not reported
Primary SIC Code:	7011
NAICS Code:	335911
Default Air Classification Code:	MIN
Facility Type of Ownership Code:	POF
Air CMS Category Code:	Not reported
HPV Status:	Not reported

US AIRS MINOR:

Region Code:	09
Programmatic ID:	AIR 0900000006071R9732
Facility Registry ID:	110001179064
Air Operating Status Code:	OPR
Default Air Classification Code:	MIN
Air Program:	Stratospheric Ozone Protection
Activity Date:	2000-11-28 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring

MARRIOTT AIRPORT HOTEL (Continued) **1005654742**

Activity Type:	Information Request
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR 0900000006071R9732
Facility Registry ID:	110001179064
Air Operating Status Code:	OPR
Default Air Classification Code:	MIN
Air Program:	Stratospheric Ozone Protection
Activity Date:	2000-09-15 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

---

3 **WELL 29** **CA PFAS** **S127520305**
ENE **N/A**
< 1/8 **ONTARIO, CA**
0.040 mi.
209 ft.

Relative:
Higher

Actual:
964 ft.

PFAS:

Name:	WELL 29
Address:	Not reported
City,State,Zip:	ONTARIO, CA
Envirostor ID:	Not reported
Program Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Enviroscreen Score:	Not reported
Site Code:	Not reported
Global ID:	W0603610034
Facility Region:	Not reported
Lead Agency:	Not reported
Case worker:	Not reported
Local Agency:	Not reported
Location Case Number:	Not reported
File Location:	Not reported
Potential Contaminants of Concern:	Not reported
Potential Media Affected:	Not reported
Site History:	Not reported
Begin Date:	Not reported
RB Case Number:	Not reported
source_type:	All PFAS Chemicals
Location ID:	CA3610034_025_025
Matrix:	Liquid
Chemical:	PFOA
Qualifier:	<
Value:	2
Reporting Limit:	Not reported
Detection Limit:	Not reported
Lab Notes:	Not reported
Quarterly Running Annual Average:	Not reported
Units:	NG/L
Date:	12/26/2019
Field Pt Class:	PUBW

WELL 29 (Continued) **S127520305**

Site Use: Drinking Water Wells
Site Type: DDW Well
Latitude: 34.064989
Longitude: -117.600889
Geo Tracker URL: Not reported

Name: WELL 29
Address: Not reported
City,State,Zip: ONTARIO, CA
Envirostor ID: Not reported
Program Type: Not reported
Status: Not reported
Status Date: Not reported
Enviroscreen Score: Not reported
Site Code: Not reported
Global ID: W0603610034
Facility Region: Not reported
Lead Agency: Not reported
Case worker: Not reported
Local Agency: Not reported
Location Case Number: Not reported
File Location: Not reported
Potential Contaminants of Concern: Not reported
Potential Media Affected: Not reported
Site History: Not reported

Begin Date: Not reported
RB Case Number: Not reported
source_type: All PFAS Chemicals
Location ID: CA3610034_025_025
Matrix: Liquid
Chemical: PFTEDA
Qualifier: <
Value: 2
Reporting Limit: Not reported
Detection Limit: Not reported
Lab Notes: Not reported
Quarterly Running Annual Average: Not reported
Units: NG/L
Date: 1/9/2020
Field Pt Class: PUBW
Site Use: Drinking Water Wells
Site Type: DDW Well
Latitude: 34.064989
Longitude: -117.600889
Geo Tracker URL: Not reported

Name: WELL 29
Address: Not reported
City,State,Zip: ONTARIO, CA
Envirostor ID: Not reported
Program Type: Not reported
Status: Not reported
Status Date: Not reported
Enviroscreen Score: Not reported
Site Code: Not reported
Global ID: W0603610034

WELL 29 (Continued) **S127520305**

Facility Region:	Not reported
Lead Agency:	Not reported
Case worker:	Not reported
Local Agency:	Not reported
Location Case Number:	Not reported
File Location:	Not reported
Potential Contaminants of Concern:	Not reported
Potential Media Affected:	Not reported
Site History:	Not reported
Begin Date:	Not reported
RB Case Number:	Not reported
source_type:	All PFAS Chemicals
Location ID:	CA3610034_025_025
Matrix:	Liquid
Chemical:	PFHXSA
Qualifier:	<
Value:	2
Reporting Limit:	Not reported
Detection Limit:	Not reported
Lab Notes:	Not reported
Quarterly Running Annual Average:	Not reported
Units:	NG/L
Date:	1/9/2020
Field Pt Class:	PUBW
Site Use:	Drinking Water Wells
Site Type:	DDW Well
Latitude:	34.064989
Longitude:	-117.600889
Geo Tracker URL: Not reported	
Name:	WELL 29
Address:	Not reported
City,State,Zip:	ONTARIO, CA
Envirostor ID:	Not reported
Program Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Enviroscreen Score:	Not reported
Site Code:	Not reported
Global ID:	W0603610034
Facility Region:	Not reported
Lead Agency:	Not reported
Case worker:	Not reported
Local Agency:	Not reported
Location Case Number:	Not reported
File Location:	Not reported
Potential Contaminants of Concern:	Not reported
Potential Media Affected:	Not reported
Site History:	Not reported
Begin Date:	Not reported
RB Case Number:	Not reported
source_type:	All PFAS Chemicals
Location ID:	CA3610034_025_025
Matrix:	Liquid
Chemical:	PFDOA

WELL 29 (Continued) **S127520305**

Qualifier: <
Value: 2
Reporting Limit: Not reported
Detection Limit: Not reported
Lab Notes: Not reported
Quarterly Running Annual Average: Not reported
Units: NG/L
Date: 1/9/2020
Field Pt Class: PUBW
Site Use: Drinking Water Wells
Site Type: DDW Well
Latitude: 34.064989
Longitude: -117.600889
Geo Tracker URL: Not reported

Name: WELL 29
Address: Not reported
City,State,Zip: ONTARIO, CA
Envirostor ID: Not reported
Program Type: Not reported
Status: Not reported
Status Date: Not reported
Enviroscreen Score: Not reported
Site Code: Not reported
Global ID: W0603610034
Facility Region: Not reported
Lead Agency: Not reported
Case worker: Not reported
Local Agency: Not reported
Location Case Number: Not reported
File Location: Not reported
Potential Contaminants of Concern: Not reported
Potential Media Affected: Not reported
Site History: Not reported

Begin Date: Not reported
RB Case Number: Not reported
source_type: All PFAS Chemicals
Location ID: CA3610034_025_025
Matrix: Liquid
Chemical: PFBSA
Qualifier: <
Value: 2
Reporting Limit: Not reported
Detection Limit: Not reported
Lab Notes: Not reported
Quarterly Running Annual Average: Not reported
Units: NG/L
Date: 6/27/2019
Field Pt Class: PUBW
Site Use: Drinking Water Wells
Site Type: DDW Well
Latitude: 34.064989
Longitude: -117.600889
Geo Tracker URL: Not reported

Name: WELL 29

WELL 29 (Continued) **S127520305**

Address:	Not reported
City,State,Zip:	ONTARIO, CA
Envirostor ID:	Not reported
Program Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Enviroscreen Score:	Not reported
Site Code:	Not reported
Global ID:	W0603610034
Facility Region:	Not reported
Lead Agency:	Not reported
Case worker:	Not reported
Local Agency:	Not reported
Location Case Number:	Not reported
File Location:	Not reported
Potential Contaminants of Concern:	Not reported
Potential Media Affected:	Not reported
Site History:	Not reported

Begin Date:	Not reported
RB Case Number:	Not reported
source_type:	All PFAS Chemicals
Location ID:	CA3610034_025_025
Matrix:	Liquid
Chemical:	NMEFOSAA
Qualifier:	<
Value:	2
Reporting Limit:	Not reported
Detection Limit:	Not reported
Lab Notes:	Not reported
Quarterly Running Annual Average:	Not reported
Units:	NG/L
Date:	12/26/2019
Field Pt Class:	PUBW
Site Use:	Drinking Water Wells
Site Type:	DDW Well
Latitude:	34.064989
Longitude:	-117.600889

Geo Tracker URL: Not reported

Name:	WELL 29
Address:	Not reported
City,State,Zip:	ONTARIO, CA
Envirostor ID:	Not reported
Program Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Enviroscreen Score:	Not reported
Site Code:	Not reported
Global ID:	W0603610034
Facility Region:	Not reported
Lead Agency:	Not reported
Case worker:	Not reported
Local Agency:	Not reported
Location Case Number:	Not reported
File Location:	Not reported
Potential Contaminants of Concern:	Not reported

WELL 29 (Continued) **S127520305**

Potential Media Affected:	Not reported
Site History:	Not reported
Begin Date:	Not reported
RB Case Number:	Not reported
source_type:	All PFAS Chemicals
Location ID:	CA3610034_025_025
Matrix:	Liquid
Chemical:	PFNA
Qualifier:	<
Value:	2
Reporting Limit:	Not reported
Detection Limit:	Not reported
Lab Notes:	Not reported
Quarterly Running Annual Average:	Not reported
Units:	NG/L
Date:	12/26/2019
Field Pt Class:	PUBW
Site Use:	Drinking Water Wells
Site Type:	DDW Well
Latitude:	34.064989
Longitude:	-117.600889
Geo Tracker URL:	Not reported
Name:	WELL 29
Address:	Not reported
City,State,Zip:	ONTARIO, CA
Envirostor ID:	Not reported
Program Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Enviroscreen Score:	Not reported
Site Code:	Not reported
Global ID:	W0603610034
Facility Region:	Not reported
Lead Agency:	Not reported
Case worker:	Not reported
Local Agency:	Not reported
Location Case Number:	Not reported
File Location:	Not reported
Potential Contaminants of Concern:	Not reported
Potential Media Affected:	Not reported
Site History:	Not reported
Begin Date:	Not reported
RB Case Number:	Not reported
source_type:	All PFAS Chemicals
Location ID:	CA3610034_025_025
Matrix:	Liquid
Chemical:	PFTRIDA
Qualifier:	<
Value:	2
Reporting Limit:	Not reported
Detection Limit:	Not reported
Lab Notes:	Not reported
Quarterly Running Annual Average:	Not reported
Units:	NG/L

WELL 29 (Continued) **S127520305**

Date: 6/27/2019
Field Pt Class: PUBW
Site Use: Drinking Water Wells
Site Type: DDW Well
Latitude: 34.064989
Longitude: -117.600889
Geo Tracker URL: Not reported

Name: WELL 29
Address: Not reported
City,State,Zip: ONTARIO, CA
Envirostor ID: Not reported
Program Type: Not reported
Status: Not reported
Status Date: Not reported
Enviroscreen Score: Not reported
Site Code: Not reported
Global ID: W0603610034
Facility Region: Not reported
Lead Agency: Not reported
Case worker: Not reported
Local Agency: Not reported
Location Case Number: Not reported
File Location: Not reported
Potential Contaminants of Concern: Not reported
Potential Media Affected: Not reported
Site History: Not reported

Begin Date: Not reported
RB Case Number: Not reported
source_type: All PFAS Chemicals
Location ID: CA3610034_025_025
Matrix: Liquid
Chemical: PFHPA
Qualifier: <
Value: 2
Reporting Limit: Not reported
Detection Limit: Not reported
Lab Notes: Not reported
Quarterly Running Annual Average: Not reported
Units: NG/L
Date: 7/10/2019
Field Pt Class: PUBW
Site Use: Drinking Water Wells
Site Type: DDW Well
Latitude: 34.064989
Longitude: -117.600889
Geo Tracker URL: Not reported

Name: WELL 29
Address: Not reported
City,State,Zip: ONTARIO, CA
Envirostor ID: Not reported
Program Type: Not reported
Status: Not reported
Status Date: Not reported
Enviroscreen Score: Not reported

WELL 29 (Continued) **S127520305**

Site Code:	Not reported
Global ID:	W0603610034
Facility Region:	Not reported
Lead Agency:	Not reported
Case worker:	Not reported
Local Agency:	Not reported
Location Case Number:	Not reported
File Location:	Not reported
Potential Contaminants of Concern:	Not reported
Potential Media Affected:	Not reported
Site History:	Not reported
Begin Date:	Not reported
RB Case Number:	Not reported
source_type:	All PFAS Chemicals
Location ID:	CA3610034_025_025
Matrix:	Liquid
Chemical:	PFTRIDA
Qualifier:	<
Value:	2
Reporting Limit:	Not reported
Detection Limit:	Not reported
Lab Notes:	Not reported
Quarterly Running Annual Average:	Not reported
Units:	NG/L
Date:	7/10/2019
Field Pt Class:	PUBW
Site Use:	Drinking Water Wells
Site Type:	DDW Well
Latitude:	34.064989
Longitude:	-117.600889
Geo Tracker URL: Not reported	
Name:	WELL 29
Address:	Not reported
City,State,Zip:	ONTARIO, CA
Envirostor ID:	Not reported
Program Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Enviroscreen Score:	Not reported
Site Code:	Not reported
Global ID:	W0603610034
Facility Region:	Not reported
Lead Agency:	Not reported
Case worker:	Not reported
Local Agency:	Not reported
Location Case Number:	Not reported
File Location:	Not reported
Potential Contaminants of Concern:	Not reported
Potential Media Affected:	Not reported
Site History:	Not reported
Begin Date:	Not reported
RB Case Number:	Not reported
source_type:	All PFAS Chemicals
Location ID:	CA3610034_025_025

WELL 29 (Continued) **S127520305**

Matrix:	Liquid
Chemical:	PFNA
Qualifier:	<
Value:	2
Reporting Limit:	Not reported
Detection Limit:	Not reported
Lab Notes:	Not reported
Quarterly Running Annual Average:	Not reported
Units:	NG/L
Date:	6/27/2019
Field Pt Class:	PUBW
Site Use:	Drinking Water Wells
Site Type:	DDW Well
Latitude:	34.064989
Longitude:	-117.600889
Geo Tracker URL:	Not reported

Click this hyperlink while viewing on your computer to access
46 additional CA PFAS: record(s) in the EDR Site Report.

B4 **FRONTIER CALIFORNIA: AIRPORT RSC3/9** **CA San Bern. Co. Permit** **S104905650**
WNW **2152 E D ST** **N/A**
< 1/8 **ONTARIO, CA 91764**
0.061 mi.
321 ft. **Site 1 of 2 in cluster B**

Relative:
Higher

Actual:
970 ft.

San Bern. Co. Permit:

Name:	FRONTIER CALIFORNIA: AIRPORT RSC3/9
Address:	2152 E D ST
City,State,Zip:	ONTARIO, CA 91764
Region:	SAN BERNARDINO
Facility ID:	FA0003619
Owner:	FRONTIER CALIFORNIA, INC
Permit Number:	PT0009512
Permit Category:	HAZARDOUS MATERIALS 1-3 CHEMICALS SPECIAL
Facility Status:	ACTIVE
Expiration Date:	05/31/2023

---

5 **HOLIDAY INN** **RCRA NonGen / NLR** **1027692628**
North **2155 EAST CONVENTION CENTER WAY** **CAC003235247**
< 1/8 **ONTARIO, CA 91764**
0.061 mi.
324 ft.

Relative:
Higher

Actual:
970 ft.

RCRA Listings:

Date Form Received by Agency:	20230601
Handler Name:	Holiday Inn
Handler Address:	2155 EAST CONVENTION CENTER WAY
Handler City,State,Zip:	ONTARIO, CA 91764
EPA ID:	CAC003235247
Contact Name:	JEFF WILLIAMS
Contact Address:	2155 EAST CONVENTION CENTER WAY
Contact City,State,Zip:	ONTARIO, CA 91764
Contact Telephone:	909-212-8000
Contact Fax:	Not reported
Contact Email:	JUSTIN.EASTMAN@HAZARDOUSWASTEEXPERTS.COM

HOLIDAY INN (Continued) **1027692628**

Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	2155 EAST CONVENTION CENTER WAY
Mailing City,State,Zip:	ONTARIO, CA 91764
Owner Name:	Jeff Williams
Owner Type:	Other
Operator Name:	Jeff Williams
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20230601
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

HOLIDAY INN (Continued) **1027692628**

Handler - Owner Operator:
Owner/Operator Indicator: Operator
Owner/Operator Name: JEFF WILLIAMS
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 2155 EAST CONVENTION CENTER WAY
Owner/Operator City,State,Zip: ONTARIO, CA 91764
Owner/Operator Telephone: 909-212-8000
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: JEFF WILLIAMS
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 2155 EAST CONVENTION CENTER WAY
Owner/Operator City,State,Zip: ONTARIO, CA 91764
Owner/Operator Telephone: 909-212-8000
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20230601
Handler Name: HOLIDAY INN
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Code: 72111
NAICS Description: HOTELS (EXCEPT CASINO HOTELS) AND MOTELS

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

C6 **PRIME FLIGHT CARGO** **CA San Bern. Co. Permit** **S128547100**
South **2300 E AIRPORT RD** **N/A**
< 1/8 **ONTARIO, CA 91761**
0.069 mi.
362 ft. **Site 1 of 5 in cluster C**

Relative: **Lower**

Actual: **954 ft.**

San Bern. Co. Permit:

Name:	PRIME FLIGHT CARGO
Address:	2300 E AIRPORT RD
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO
Facility ID:	FA0019127
Owner:	PRIME FLIGHT CARGO
Permit Number:	PT0041176
Permit Category:	CONDITIONALLY EXEMPT SM QTY GENERATOR
Facility Status:	ACTIVE
Expiration Date:	05/31/2023

Name:	PRIME FLIGHT CARGO
Address:	2300 E AIRPORT RD
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO
Facility ID:	FA0019127
Owner:	PRIME FLIGHT CARGO
Permit Number:	PT0041175
Permit Category:	HAZARDOUS MATERIALS 1-3 CHEMICALS
Facility Status:	ACTIVE
Expiration Date:	05/31/2023

C7 **MAJESTIC TERMINAL SERVICES** **CA CERS HAZ WASTE** **S124920069**
South **2300 E AIRPORT DR** **CA HWTS** **N/A**
< 1/8 **ONTARIO, CA 98390** **CA HAZNET**
0.069 mi. **CA CERS**
362 ft. **Site 2 of 5 in cluster C**

Relative: **Lower**

Actual: **954 ft.**

CERS HAZ WASTE:

Name:	PRIMEFLIGHT CARGO
Address:	2300 E AIRPORT DR
City,State,Zip:	ONTARIO, CA 91761
Site ID:	611765
CERS ID:	10896028
CERS Description:	Hazardous Waste Generator

Name:	PRIMEFLIGHT CARGO
Address:	2300 E AIRPORT DR
City,State,Zip:	ONTARIO, CA 91761
Site ID:	611765
CERS ID:	10896028
CERS Description:	RCRA LQ HW Generator

HWTS:

Name:	MAJESTIC TERMINAL SERVICES
Address:	2300 E AIRPORT DR
Address 2:	Not reported
City,State,Zip:	ONTARIO, CA 92860
EPA ID:	CAL000432907
Inactive Date:	06/30/2021
Create Date:	01/03/2018
Last Act Date:	Not reported

MAJESTIC TERMINAL SERVICES (Continued) **S124920069**

Mailing Name:	Not reported
Mailing Address:	9568 ARCHIBALD AVE, SUITE 100
Mailing Address 2:	Not reported
Mailing City,State,Zip:	RANCHO CUCAMONGA, CA 91730
Owner Name:	BRIAN CELLA
Owner Address:	15127 MAIN ST E STE 104 PMB 217
Owner Address 2:	Not reported
Owner City,State,Zip:	SUMNER, WA 98390
Owner Phone:	Not reported
Owner Fax:	Not reported
Contact Name:	FRANK AUDELO
Contact Address:	2300 E AIRPORT DR
Contact Address 2:	Not reported
City,State,Zip:	ONTARIO, CA 917610000
Contact Phone:	Not reported
Contact Fax:	Not reported
Facility Status:	Inactive
Facility Type:	PERMANENT
Category:	STATE
Latitude:	34.06222718
Longitude:	-117.6037299

NAICS:

EPA ID:	CAL000432907
Create Date:	2018-01-03 11:08:39.853
NAICS Code:	711410
NAICS Description:	Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures
Issued EPA ID Date:	2018-01-03 11:08:39.48000
Inactive Date:	2020-06-30 00:00:00
Facility Name:	MAJESTIC TERMINAL SERVICES
Facility Address:	2300 E AIRPORT DR
Facility Address 2:	Not reported
Facility City:	ONTARIO
Facility County:	Not reported
Facility State:	CA
Facility Zip:	92860

HAZNET:

Name:	MAJESTIC TERMINAL SERVICES
Address:	2300 E AIRPORT DR
Address 2:	Not reported
City,State,Zip:	ONTARIO, CA 92860
Contact:	FRANK AUDELO
Telephone:	9097869894
Mailing Name:	Not reported
Mailing Address:	9568 ARCHIBALD AVE SUITE 100
Year:	2020
Gepaid:	CAL000432907
TSD EPA ID:	AZR000520478
CA Waste Code:	352 - Other organic solids
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.65

MAJESTIC TERMINAL SERVICES (Continued) **S124920069**

Year:	2018
Gepaid:	CAL000432907
TSD EPA ID:	CAD097030993
CA Waste Code:	352 - Other organic solids
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.30000

Additional Info:

Year:	2020
Gen EPA ID:	CAL000432907
Shipment Date:	9/9/2020
Creation Date:	10/30/2020
Receipt Date:	9/16/2020
Manifest ID:	006384693GBF
Trans EPA ID:	CAR000129254
Trans Name:	BENNYS MAINT AND OIL FILTER RECYCLING
Trans 2 EPA ID:	CAR000183574
Trans 2 Name:	ENVIRONMENTAL MNGMT TECHNOLOGIES INC
TSDF EPA ID:	AZR000520478
Trans Name:	ENVIRONMENTAL WASTE SOLUTIONS, INC.
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.1
Waste Quantity:	200
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	7/22/2020
Creation Date:	11/4/2020
Receipt Date:	8/3/2020
Manifest ID:	006384614GBF
Trans EPA ID:	CAR000129254
Trans Name:	BENNYS MAINT AND OIL FILTER RECYCLING
Trans 2 EPA ID:	CAR000183574
Trans 2 Name:	ENVIRONMENTAL MNGMT TECHNOLOGIES INC
TSDF EPA ID:	AZR000520478
Trans Name:	ENVIRONMENTAL WASTE SOLUTIONS, INC.
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.2
Waste Quantity:	400
Quantity Unit:	P

MAJESTIC TERMINAL SERVICES (Continued) **S124920069**

Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	7/1/2020
Creation Date:	8/26/2020
Receipt Date:	7/10/2020
Manifest ID:	006101814GBF
Trans EPA ID:	CAR000129254
Trans Name:	BENNYS MAINT AND OIL FILTER RECYCLING
Trans 2 EPA ID:	CAR000183574
Trans 2 Name:	ENVIRONMENTAL MNGMT TECHNOLOGIES INC
TSDF EPA ID:	AZR000520478
Trans Name:	ENVIRONMENTAL WASTE SOLUTIONS, INC.
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.1
Waste Quantity:	200
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	3/25/2020
Creation Date:	6/17/2020
Receipt Date:	4/1/2020
Manifest ID:	006244372GBF
Trans EPA ID:	CAR000129254
Trans Name:	BENNYS MAINT AND OIL FILTER RECYCLING
Trans 2 EPA ID:	CAR000183574
Trans 2 Name:	ENVIRONMENTAL MNGMT TECHNOLOGIES INC
TSDF EPA ID:	AZR000520478
Trans Name:	ENVIRONMENTAL WASTE SOLUTIONS, INC.
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.1
Waste Quantity:	200
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	1/15/2020

MAJESTIC TERMINAL SERVICES (Continued) **S124920069**

Creation Date:	12/4/2020
Receipt Date:	1/27/2020
Manifest ID:	006201713GBF
Trans EPA ID:	CAR000129254
Trans Name:	BENNYS MAINT AND OIL FILTER RECYCLING
Trans 2 EPA ID:	CAR000183574
Trans 2 Name:	ENVIRONMENTAL MNGMT TECHNOLOGIES INC
TSDF EPA ID:	AZR000520478
Trans Name:	ENVIRONMENTAL WASTE SOLUTIONS, INC.
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.15
Waste Quantity:	300
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Detail Two:

Year:	2020
EM Manifest ID:	49ae78eb-51a7-4131-9a18-a787a6a44419
Shipment Date:	9/9/2020
Receipt Date:	9/16/2020
Manifest Number:	006384693GBF
Generator EPA ID:	CAL000432907
Name:	MAJESTIC TERMINAL SERVICES
Address:	2300 E AIRPORT DR
Address 2:	Not reported
City:	ONTARIO
Zip:	92860
Telephone:	800-535-5053
Contact:	AIMEE BRIDGES
Contact Telephone:	909-314-9758
Transporter 1 EPA ID:	CAR000129254
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	CAR000183574
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	AZR000520478
TSDF Name:	ENVIRONMENTAL WASTE SOLUTIONS, INC.
TSDF Address 1:	31915 INDUSTRIAL LANE
TSDF Address 2:	Not reported
TSDF City:	PAKER
TSDF Zip:	85344
TSDF Telephone:	Not reported

State:

Year:	2020
EM Manifest ID:	49ae78eb-51a7-4131-9a18-a787a6a44419
Generator EPA ID:	CAL000432907
Shipment Date:	2020-09-09
Manifest Number:	006384693GBF

MAJESTIC TERMINAL SERVICES (Continued) **S124920069**

Line Number: 1
Method Code: H141
Quantity Tons: 0.10000
Quantity Waste: 200.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: Metal drums, barrels, kegs
Quantity Type: Pounds
State Code: 352

Year: 2020
EM Manifest ID: e3c57d7d-5301-4a5e-861b-fafd39a909e4
Shipment Date: 7/22/2020
Receipt Date: 8/3/2020
Manifest Number: 006384614GBF
Generator EPA ID: CAL000432907
Name: MAJESTIC TERMINAL SERVICES
Address: 2300 E AIRPORT DR
Address 2: Not reported
City: ONTARIO
Zip: 92860
Telephone: 800-535-5053
Contact: AIMEE BRIDGES
Contact Telephone: 909-314-9758
Transporter 1 EPA ID: CAR000129254
Transporter 1 Emergency Number: Not reported
Transporter 2 EPA ID: CAR000183574
Transporter 2 Emergency Number: Not reported
TSDF EPA ID: AZR000520478
TSDF Name: ENVIRONMENTAL WASTE SOLUTIONS, INC.
TSDF Address 1: 31915 INDUSTRIAL LANE
TSDF Address 2: Not reported
TSDF City: PAKER
TSDF Zip: 85344
TSDF Telephone: Not reported

State:
Year: 2020
EM Manifest ID: e3c57d7d-5301-4a5e-861b-fafd39a909e4
Generator EPA ID: CAL000432907
Shipment Date: 2020-07-22
Manifest Number: 006384614GBF
Line Number: 1
Method Code: H141
Quantity Tons: 0.20000
Quantity Waste: 400.000000
Quantity Unit: P
Number of Containers: 2
Type of Container: Metal drums, barrels, kegs
Quantity Type: Pounds
State Code: 352

Year: 2020
EM Manifest ID: 0c2ffc91-5af5-44be-9a87-a08b281a96ac
Shipment Date: 7/1/2020
Receipt Date: 7/10/2020

MAJESTIC TERMINAL SERVICES (Continued) **S124920069**

Manifest Number:	006101814GBF
Generator EPA ID:	CAL000432907
Name:	MAJESTIC TERMINAL SERVICES
Address:	2300 E AIRPORT DR
Address 2:	Not reported
City:	ONTARIO
Zip:	92860
Telephone:	800-535-5053
Contact:	AIMEE BRIDGES
Contact Telephone:	909-314-9758
Transporter 1 EPA ID:	CAR000129254
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	CAR000183574
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	AZR000520478
TSDF Name:	ENVIRONMENTAL WASTE SOLUTIONS, INC.
TSDF Address 1:	31915 INDUSTRIAL LANE
TSDF Address 2:	Not reported
TSDF City:	PAKER
TSDF Zip:	85344
TSDF Telephone:	Not reported

State:

Year:	2020
EM Manifest ID:	0c2ffc91-5af5-44be-9a87-a08b281a96ac
Generator EPA ID:	CAL000432907
Shipment Date:	2020-07-01
Manifest Number:	006101814GBF
Line Number:	1
Method Code:	H141
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Metal drums, barrels, kegs
Quantity Type:	Pounds
State Code:	352

Year:	2020
EM Manifest ID:	98d0691b-acfa-46e4-aa53-0bbd529db7cb
Shipment Date:	3/25/2020
Receipt Date:	4/1/2020
Manifest Number:	006244372GBF
Generator EPA ID:	CAL000432907
Name:	MAJESTIC TERMINAL SERVICES
Address:	2300 E AIRPORT DR
Address 2:	Not reported
City:	ONTARIO
Zip:	92860
Telephone:	800-535-5053
Contact:	AIMEE BRIDGES
Contact Telephone:	909-314-9758
Transporter 1 EPA ID:	CAR000129254
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	CAR000183574
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	AZR000520478

MAJESTIC TERMINAL SERVICES (Continued) **S124920069**

TSDF Name: ENVIRONMENTAL WASTE SOLUTIONS, INC.
TSDF Address 1: 31915 INDUSTRIAL LANE
TSDF Address 2: Not reported
TSDF City: PAKER
TSDF Zip: 85344
TSDF Telephone: Not reported

State:
Year: 2020
EM Manifest ID: 98d0691b-acfa-46e4-aa53-0bbd529db7cb
Generator EPA ID: CAL000432907
Shipment Date: 2020-03-25
Manifest Number: 006244372GBF
Line Number: 1
Method Code: H141
Quantity Tons: 0.10000
Quantity Waste: 200.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: Metal drums, barrels, kegs
Quantity Type: Pounds
State Code: 352

Year: 2020
EM Manifest ID: a5ebc832-7a98-4831-a02d-dcb1fd12cdad
Shipment Date: 1/15/2020
Receipt Date: 1/27/2020
Manifest Number: 006201713GBF
Generator EPA ID: CAL000432907
Name: MAJESTIC TERMINAL SERVICES
Address: 2300 E AIRPORT DR
Address 2: Not reported
City: ONTARIO
Zip: 92860
Telephone: 800-535-5053
Contact: Not reported
Contact Telephone: 909-314-9758
Transporter 1 EPA ID: CAR000129254
Transporter 1 Emergency Number: Not reported
Transporter 2 EPA ID: CAR000183574
Transporter 2 Emergency Number: Not reported
TSDF EPA ID: AZR000520478
TSDF Name: ENVIRONMENTAL WASTE SOLUTIONS, INC.
TSDF Address 1: 31915 INDUSTRIAL LANE
TSDF Address 2: Not reported
TSDF City: PAKER
TSDF Zip: 85344
TSDF Telephone: Not reported

State:
Year: 2020
EM Manifest ID: a5ebc832-7a98-4831-a02d-dcb1fd12cdad
Generator EPA ID: CAL000432907
Shipment Date: 2020-01-15
Manifest Number: 006201713GBF
Line Number: 1
Method Code: H141

MAJESTIC TERMINAL SERVICES (Continued) **S124920069**

Quantity Tons:	0.15000
Quantity Waste:	300.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Metal drums, barrels, kegs
Quantity Type:	Pounds
State Code:	352

CERS:

Name:	PRIMEFLIGHT CARGO
Address:	2300 E AIRPORT DR
City,State,Zip:	ONTARIO, CA 91761
Site ID:	611765
CERS ID:	10896028
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	611765
Site Name:	PrimeFlight Cargo
Violation Date:	03-17-2022
Citation:	Un-Specified
Violation Description:	Hazardous Waste Generator Program - Administration/Documentation - General Local Ordinance
Violation Notes:	OBSERVATION: The facility generates hazardous waste from maintenance activities and did not obtain a hazardous waste permit. CORRECTIVE ACTION: Submit payment upon receipt of invoice.
Violation Division:	San Bernardino County Fire Department
Violation Program:	HW
Violation Source:	CERS,

Site ID:	611765
Site Name:	PrimeFlight Cargo
Violation Date:	03-17-2022
Citation:	HSC 6.95 25507 - California Health and Safety Code, Chapter 6.95, Section(s) 25507
Violation Description:	Failure to adequately establish and implement a business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes:	Returned to compliance on 04/11/2022. OBSERVATION: The facility has not established and implemented a hazardous materials business plan in CERS. CORRECTIVE ACTION: Establish and implement a complete business plan in CERS.
Violation Division:	San Bernardino County Fire Department
Violation Program:	HMRRP
Violation Source:	CERS,

Site ID:	611765
Site Name:	PrimeFlight Cargo
Violation Date:	03-17-2022
Citation:	Un-Specified
Violation Description:	Business Plan Program - Administration/Documentation - General Local Ordinance
Violation Notes:	OBSERVATION: The facility stores hazardous materials above the reportable quantities and did not obtain a hazardous materials permit. CORRECTIVE ACTION: Submit payment upon receipt of the invoice.
Violation Division:	San Bernardino County Fire Department

MAJESTIC TERMINAL SERVICES (Continued) **S124920069**

Violation Program: HMRRP
Violation Source: CERS,

Site ID: 611765
Site Name: PrimeFlight Cargo
Violation Date: 03-17-2022
Citation: 40 CFR 1 265.174 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.174
Violation Description: Failure to inspect hazardous waste storage areas at least weekly and look for leaking and deteriorating containers.
Violation Notes: Returned to compliance on 04/11/2022. OBSERVATION: A weekly inspection of the hazardous waste collection area has not been conducted. A template was provided. CORRECTIVE ACTION: Submit a signed certificate of compliance indicating that the hazardous waste storage area is being inspected weekly.
Violation Division: San Bernardino County Fire Department
Violation Program: HW
Violation Source: CERS,

Site ID: 611765
Site Name: PrimeFlight Cargo
Violation Date: 03-17-2022
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description: Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes: Returned to compliance on 03/17/2022. OBSERVATION: The drum of waste coolant was observed missing a hazardous waste label and the drum of waste oil was missing the accumulation start date. CORRECTIVE ACTION: Properly label all hazardous waste containers. This was corrected during the inspection.
Violation Division: San Bernardino County Fire Department
Violation Program: HW
Violation Source: CERS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-17-2022
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-17-2022
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

MAJESTIC TERMINAL SERVICES (Continued) **S124920069**

Affiliation:

Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	9568 Archibald Ave, Suite 100
Affiliation City:	Rancho Cucamonga
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	91730
Affiliation Phone:	,

Affiliation Type Desc:	Operator
Entity Name:	PrimeFlight Cargo
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(909) 390-1210,

Affiliation Type Desc:	Parent Corporation
Entity Name:	PrimeFlight Cargo
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Document Preparer
Entity Name:	Fransico Audelo
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Environmental Contact
Entity Name:	Fransico Xavier Audelo
Entity Title:	Not reported
Affiliation Address:	9568 Archibald Ave, Suite 100
Affiliation City:	Rancho Cucamonga
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	91730
Affiliation Phone:	,

Affiliation Type Desc:	Legal Owner
Entity Name:	Wayne Ingle
Entity Title:	Not reported
Affiliation Address:	Three Sugar Creek Cr
Affiliation City:	Sugar Land
Affiliation State:	TX

MAJESTIC TERMINAL SERVICES (Continued) **S124920069**

Affiliation Country:	United States
Affiliation Zip:	77478
Affiliation Phone:	(734) 626-5175,
Affiliation Type Desc:	CUPA District
Entity Name:	San Bernardino County Fire
Entity Title:	Not reported
Affiliation Address:	620 South E Street
Affiliation City:	San Bernardino
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92415-0153
Affiliation Phone:	(909) 386-8401,
Affiliation Type Desc:	Identification Signer
Entity Name:	Fransico Audelo
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

C8 **PRIME FLIGHT CARGO** **RCRA NonGen / NLR** **1026493177**
South **2300 EAST AIRPORT DR** **CAL000457984**
< 1/8 **ONTARIO, CA 91761**
0.069 mi.
362 ft. **Site 3 of 5 in cluster C**

Relative: **Lower**
Actual: **954 ft.**

RCRA Listings:

Date Form Received by Agency:	20201103
Handler Name:	Prime Flight Cargo
Handler Address:	2300 EAST AIRPORT DR
Handler City,State,Zip:	ONTARIO, CA 91761
EPA ID:	CAL000457984
Contact Name:	FRANK AUDELO
Contact Address:	9568 ARCHIBALD AVE STE 100
Contact City,State,Zip:	RANCHO CUCAMONGA, CA 91730
Contact Telephone:	734-626-5175
Contact Fax:	Not reported
Contact Email:	FAUDELO@PRIMEFLIGHT.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	9568 ARCHIBALD AVE STE 100
Mailing City,State,Zip:	RANCHO CUCAMONGA, CA 91730
Owner Name:	Wayne Ingle
Owner Type:	Other
Operator Name:	Frank Audelo

PRIME FLIGHT CARGO (Continued) **1026493177**

Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20201106
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name: FRANK AUDELO	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	9568 ARCHIBALD AVE STE 100
Owner/Operator City,State,Zip:	RANCHO CUCAMONGA, CA 91730
Owner/Operator Telephone:	734-626-5175
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner

PRIME FLIGHT CARGO (Continued) **1026493177**

Owner/Operator Name: WAYNE INGLE
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 3 SUGAR CREEK CENTER BLVD STE 450
Owner/Operator City,State,Zip: SUGAR LAND, TX 77478
Owner/Operator Telephone: 734-626-5175
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20201103
Handler Name: PRIME FLIGHT CARGO
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 811420
NAICS Description: REUPHOLSTERY AND FURNITURE REPAIR

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

C9 **MAJESTIC TERMINAL SERVICES** **RCRA NonGen / NLR** **1024864346**
South **2300 E AIRPORT DR** **CAL000432907**
< 1/8 **ONTARIO, CA 92860**
0.069 mi.
362 ft. **Site 4 of 5 in cluster C**

Relative: RCRA Listings:
Lower
Date Form Received by Agency: 20180103
Actual: Handler Name: Majestic Terminal Services
954 ft. Handler Address: 2300 E AIRPORT DR
Handler City,State,Zip: ONTARIO, CA 92860
EPA ID: CAL000432907
Contact Name: AIMEE BRIDGES
Contact Address: 2300 E AIRPORT DR
Contact City,State,Zip: ONTARIO, CA 92860
Contact Telephone: 909-314-9758
Contact Fax: 909-390-4780
Contact Email: AIMEE.BRIDGES@MAJESTICTERMINALSERVICES.COM
Contact Title: Not reported
EPA Region: 09

MAJESTIC TERMINAL SERVICES (Continued) **1024864346**

Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	15127 MAIN ST E STE 104 PMB 217
Mailing City,State,Zip:	SUMNER, WA 98390
Owner Name:	Brian Cella
Owner Type:	Other
Operator Name:	Aimee Bridges
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20180907
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

MAJESTIC TERMINAL SERVICES (Continued) **1024864346**

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name: BRIAN CELLA	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	15127 MAIN ST E STE 104 PMB 217
Owner/Operator City,State,Zip:	SUMNER, WA 98390
Owner/Operator Telephone:	253-862-1269
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name: AIMEE BRIDGES	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	2300 E AIRPORT DR
Owner/Operator City,State,Zip:	ONTARIO, CA 92860
Owner/Operator Telephone:	909-314-9758
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20180103
Handler Name: MAJESTIC TERMINAL SERVICES	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	711410
NAICS Description:	AGENTS AND MANAGERS FOR ARTISTS, ATHLETES, ENTERTAINERS, AND OTHER PUBLIC FIGURES

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

C10
South
< 1/8
0.069 mi.
362 ft.

PF CARGO-ONT
ONTARIO, CA

Site 5 of 5 in cluster C

RCRA-SQG **1027702938**
PFAS ECHO **CAR000352476**

Relative:
Lower

Actual:
954 ft.

RCRA Listings:

Date Form Received by Agency:	20230325
Handler Name:	Pf Cargo-Ont
Handler Address:	EAST AIRPORT DRIVE
Handler City,State,Zip:	ONTARIO, CA 91761
EPA ID:	CAR000352476
Contact Name:	ROBB HINRICHS
Contact Address:	EAST AIRPORT DRIVE
Contact City,State,Zip:	ONTARIO, CA 91761
Contact Telephone:	951-241-9204
Contact Fax:	Not reported
Contact Email:	RHINRICHS@PRIMEFLIGHT.COM
Contact Title:	GENERAL MANAGER
EPA Region:	09
Land Type:	Municipal
Federal Waste Generator Description:	Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	ARCHIBALD AVE
Mailing City,State,Zip:	RANCHO CUCAMONGA, CA 91730
Owner Name:	Ontario International Airport
Owner Type:	Municipal
Operator Name:	Primeflight Aviation Services
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No

PF CARGO-ONT (Continued) **1027702938**

Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20230328
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Hazardous Waste Summary:

Waste Code:	D001
Waste Description:	Ignitable Waste
Waste Code:	D002
Waste Description:	Corrosive Waste

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	ONTARIO INTERNATIONAL AIRPORT
Legal Status:	Municipal
Date Became Current:	20230316
Date Ended Current:	Not reported
Owner/Operator Address:	2900 EAST AIRPORT DRIVE
Owner/Operator City,State,Zip:	ONTARIO, CA 91761
Owner/Operator Telephone:	909-544-5300
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	ATLF.ELKADI'S@FLYONTARIO.COM
Owner/Operator Indicator:	Operator
Owner/Operator Name:	PRIMEFLIGHT AVIATION SERVICES
Legal Status:	Private
Date Became Current:	20190628
Date Ended Current:	Not reported
Owner/Operator Address:	3 SUGAR CREEK CENTER BLVD
Owner/Operator City,State,Zip:	SUGAR LAND, TX 77478
Owner/Operator Telephone:	281-942-6800
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	SAFETY@PRIMEFLIGHT.COM

Historic Generators:

Receive Date:	20230325
Handler Name: PF CARGO-ONT	
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No

PF CARGO-ONT (Continued) **1027702938**

Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	No
Electronic Manifest Broker:	No

List of NAICS Codes and Descriptions:

NAICS Code:	488119
NAICS Description:	OTHER AIRPORT OPERATIONS

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

PFAS ECHO:

Name:	PF CARGO-ONT
Address:	Not reported
City,State,Zip:	ONTARIO, CA
Latitude:	34.062238
Longitude:	-117.60373
Count:	1
County:	SAN BERNARDINO
Status:	Active
Region:	09
Industry:	Airports
ECHO Facility Report:	https://echo.epa.gov/detailed-facility-report?fid=110071414134
Facility Percent Minority:	81.657
Facility Derived Tribes:	San Manuel Band of Mission Indians, California - 22.2 mile(s), San Manuel Band of Mission Indians, California - 22.3 mile(s)
Facility Population:	4200.57
EPA Programs:	RCRA
Federal Facility:	No
Federal Agency:	-
Facility FIPS Code:	06071
Facility Indian Country Flag:	N
Facility Collection Method:	GDT-ADDRESS MATCHING (GEOCODING)
Facility Derived HUC:	18070203
Facility Derived WBD:	180702030704
Facility Derived CD113:	35
Facility Derived CB2010:	060710016002026
Facility Major Flag:	-
Facility Active Flag:	Y
Facility Inspection Count:	0
Facility Date Last Inspection:	-
Facility Days Last Inspection:	-
Facility Informal Count:	0
Facility Date Last Informal Action:	-
Facility Formal Action Count:	0
Facility Date Last Formal Action:	-
Facility Total Penalties:	0
Facility Penalty Count:	-

PF CARGO-ONT (Continued) **1027702938**

Facility Date Last Penalty:	-
Facility Last Penalty AMT:	-
Facility QTRS With NC:	0
Facility Programs With SNC:	0
Facility Compliance Status:	No Violation Identified
Facility SNC Flag:	N
AIR Flag:	N
NPDES Flag:	N
SDWIS Flag:	N
RCRA Flag:	Y
TRI Flag:	N
GHG Flag:	N
AIR IDS:	-
CAA Permit Types:	-
CAA NAICS:	-
CAA SICS:	-
NPDES IDS:	-
CWA Permit Types:	-
CWA NAICS:	-
CWA SICS:	-
RCRA IDS:	CAR000352476
RCRA Permit Types:	SQG
RCRA NAICS:	488119
SDWA IDS:	-
SDWA System Types:	-
SDWA Compliance Status:	-
SDWA SNC Flag:	N
TRI IDS:	-
TRI Releases Transfers:	-
TRI On Site Releases:	-
TRI Off Site Transfers:	-
TRI Reporter:	-
Facility IMP Water Flag:	-
EJSCREEN Flag US:	Y
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-117.60373,%22y%22:34.062238,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1

B11 **L D KING INC** **CA San Bern. Co. Permit** **S102682127**
NW **2151 E CONVENTION CENTER WAY STE. 100** **N/A**
< 1/8 **ONTARIO, CA 91764**
0.071 mi.
374 ft. **Site 2 of 2 in cluster B**

Relative: **Higher**

Actual: **971 ft.**

San Bern. Co. Permit:

Name:	L D KING INC
Address:	2151 E CONVENTION CENTER WAY STE. 100
City,State,Zip:	ONTARIO, CA 91764
Region:	SAN BERNARDINO
Facility ID:	FA0004325
Owner:	L D KING INC
Permit Number:	PT0008641
Permit Category:	CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR
Facility Status:	INACTIVE
Expiration Date:	08/31/2005

12
SE
< 1/8
0.087 mi.
461 ft.

ONTARIO WELL #29
2400 E AIRPORT DR
ONTARIO, CA 91761

CA San Bern. Co. Permit

S103367692
N/A

Relative:
Lower

Actual:
951 ft.

San Bern. Co. Permit:

Name:	ONTARIO WELL #29
Address:	2400 E AIRPORT DR
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO
Facility ID:	FA0002048
Owner:	CITY OF ONTARIO
Permit Number:	PT0009317
Permit Category:	HAZMAT HANDLER 0-10 EMPLOYEES
Facility Status:	INACTIVE
Expiration Date:	09/30/2012

Name:	ONTARIO WELL #29
Address:	2400 E AIRPORT DR
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO
Facility ID:	FA0002048
Owner:	CITY OF ONTARIO
Permit Number:	PT0009316
Permit Category:	CALARP FACILITY PERMIT
Facility Status:	INACTIVE
Expiration Date:	09/30/2006

13
ESE
< 1/8
0.105 mi.
555 ft.

CITY ONTARIO WELL GUASTI
2400 E GUASTI ROAD
ONTARIO, CA 91761

RCRA NonGen / NLR

1026822841
CAC003135817

Relative:
Lower

Actual:
955 ft.

RCRA Listings:

Date Form Received by Agency:	20210824
Handler Name:	City Ontario Well Guasti
Handler Address:	2400 E GUASTI ROAD
Handler City,State,Zip:	ONTARIO, CA 91761
EPA ID:	CAC003135817
Contact Name:	MAN SANDOVAL
Contact Address:	340 S LEMON AVE SUITE 5210
Contact City,State,Zip:	WALNUT, CA 91789
Contact Telephone:	844-252-2677
Contact Fax:	Not reported
Contact Email:	ZHERNANDEZ@SIGNALRESTORATION.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	303 EAST B STREET
Mailing City,State,Zip:	ONTARIO, CA 91764
Owner Name:	City Of Ontartio

CITY ONTARIO WELL GUASTI (Continued) **1026822841**

Owner Type:	Other
Operator Name:	Man Sandoval
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20210824
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name: MAN SANDOVAL	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	340 S LEMON AVE SUITE 5210
Owner/Operator City,State,Zip:	WALNUT, CA 91789
Owner/Operator Telephone:	844-252-2677
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

CITY ONTARIO WELL GUASTI (Continued) **1026822841**

Owner/Operator Indicator: Owner
Owner/Operator Name: CITY OF ONTARTIO
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 303 EAST B STREET
Owner/Operator City,State,Zip: ONTARIO, CA 91764
Owner/Operator Telephone: 909-395-2000
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20210824
Handler Name: CITY ONTARIO WELL GUASTI
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

14
West
< 1/8
0.109 mi.
573 ft.

Relative:
Higher

Actual:
966 ft.

RADISSON, ONTARIO AIRPORT **CA San Bern. Co. Permit** **S106230113**
2200 E HOLT BLVD **N/A**
ONTARIO, CA 91761

San Bern. Co. Permit:
Name: RADISSON, ONTARIO AIRPORT
Address: 2200 E HOLT BLVD
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0008294
Owner: PRIME HOSPITALITY LLC
Permit Number: PT0014501
Permit Category: HAZARDOUS MATERIALS 1-3 CHEMICALS SPECIAL
Facility Status: INACTIVE
Expiration Date: 09/30/2017

D15
NW
1/8-1/4
0.171 mi.
901 ft.

MARK CHRISTOPHER AUTO CENTER
2131 CONVENTION CENTER WAY
ONTARIO, CA 91764

Site 1 of 3 in cluster D

CA UST **U004263830**
N/A

Relative:
Higher

Actual:
978 ft.

UST:

Name:	MARK CHRISTOPHER AUTO CENTER
Address:	2131 CONVENTION CENTER WAY
City,State,Zip:	ONTARIO, CA 91764
Facility ID:	FA0004585
Permitting Agency:	San Bernardino County Fire Department
CERSID:	10041748
Latitude:	34.0665940
Longitude:	-117.605809
Owner type:	Non-Government
Facility type:	Other
Num of inuse ust:	Not reported
Num of closed ust:	0
Num of oos ust:	0
Epa region:	9
Tribal lands:	No
Tank owner name:	Mark Christopher Auto Center
Tank owner mailing address:	2131 E. Convention Center Way
Tank owner mailing city:	Ontario
Tank owner mailing zip:	91764
Tank owner mailing state:	CA
Tank operator name:	MARK CHRISTOPHER AUTO CENTER
Tank operator mailing address:	2131 CONVENTION CENTER WAY
Tank operator mailing city:	ONTARIO
Tank operator mailing zip:	91764
Tank operator mailing state:	CA
Tankidnumber:	T1/87
Tank status:	Renewal Permit
Tank configuration:	One in a Compartmented Unit
Tank closure date:	Not reported
Tank installation date:	10/7/1991 12:00:00 AM
Tank num of compartments:	2
Tank contents:	Regular Unleaded
Tank capacity gallons:	4000
Tank type:	Double Wall
Tank pc construction:	Steel
Tank pwpiping construction:	Fiberglass
Tank piping type:	23 CCR S2636(a)(3) Suction
Tank piping construction:	Double Walled
Tank sacrificial anode:	No
Tank cp impressed current:	No
Tank cp shutoff:	No
Tank alarms:	Yes
Tank ball float:	Yes
Tank spill bucket:	Yes

Name:	MARK CHRISTOPHER AUTO CENTER
Address:	2131 CONVENTION CENTER WAY
City,State,Zip:	ONTARIO, CA 91764
Facility ID:	FA0004585
Permitting Agency:	San Bernardino County Fire Department
CERSID:	10041748
Latitude:	34.0665940

MARK CHRISTOPHER AUTO CENTER (Continued) **U004263830**

Longitude:	-117.605809
Owner type:	Non-Government
Facility type:	Other
Num of inuse ust:	Not reported
Num of closed ust:	0
Num of oos ust:	0
Epa region:	9
Tribal lands:	No
Tank owner name:	Mark Christopher Auto Center
Tank owner mailing address:	2131 E. Convention Center Way
Tank owner mailing city:	Ontario
Tank owner mailing zip:	91764
Tank owner mailing state:	CA
Tank operator name:	MARK CHRISTOPHER AUTO CENTER
Tank operator mailing address:	2131 CONVENTION CENTER WAY
Tank operator mailing city:	ONTARIO
Tank operator mailing zip:	91764
Tank operator mailing state:	CA
Tankidnumber:	T2 waste oil
Tank status:	Confirmed/Updated Information
Tank configuration:	One in a Compartmented Unit
Tank closure date:	Not reported
Tank installation date:	10/7/1991 12:00:00 AM
Tank num of compartments:	2
Tank contents:	Used Oil
Tank capacity gallons:	2000
Tank type:	Double Wall
Tank pc construction:	Steel
Tank pwpiping construction:	Fiberglass
Tank piping type:	Gravity
Tank piping construction:	Double Walled
Tank sacrificial anode:	No
Tank cp impressed current:	No
Tank cp shutoff:	No
Tank alarms:	Yes
Tank ball float:	Yes
Tank spill bucket:	Yes

D16
NW
1/8-1/4
0.171 mi.
901 ft.

Relative:
Higher

Actual:
978 ft.

MARK CHRISTOPHER CHEVROLET
2131 E D ST
ONTARIO, CA 91764

Site 2 of 3 in cluster D

RCRA-SQG **1000266136**
CA UST **CAD044336741**
CA AST
CA CERS HAZ WASTE
CA SWEEPS UST
CA HIST UST
CA CERS TANKS
CA FID UST
FINDS
ECHO
CA EMI
CA San Bern. Co. Permit
CA CERS

RCRA Listings:

Date Form Received by Agency:	19960901
Handler Name:	Mark Christopher Chevrolet
Handler Address:	2131 E D ST
Handler City,State,Zip:	ONTARIO, CA 91764
EPA ID:	CAD044336741

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Contact Name:	Not reported
Contact Address:	Not reported
Contact City,State,Zip:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Ca
State District:	4
Mailing Address:	2131 E D ST
Mailing City,State,Zip:	ONTARIO, CA 91764
Owner Name:	Not reported
Owner Type:	Not reported
Operator Name:	Not Required
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20060905
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name: NOT REQUIRED	
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name: NOT REQUIRED	
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name: CHUCK LEGGIO	
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	19960901
Handler Name: MARK CHRISTOPHER CHEVROLET	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Ca
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Electronic Manifest Broker: Not reported

Receive Date: 19960901
Handler Name: MARK CHRISTOPHER CHEVROLET
Federal Waste Generator Description: Small Quantity Generator
State District Owner: Ca
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19851021
Handler Name: MARK CHRISTOPHER CHEVROLET
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Ca
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19900313
Handler Name: MARK CHRISTOPHER CHEVROLET
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19920217
Handler Name: MARK CHRISTOPHER CHEVROLET
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 44111
NAICS Description: NEW CAR DEALERS

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

UST:

Name:	MARK CHRISTOPHER CHEV INC
Address:	2131 E CONVENTION CENTER WAY
City,State,Zip:	ONTARIO, CA 91764
Facility ID:	86008986
Permitting Agency:	SAN BERNARDINO COUNTY
CERSID:	Not reported
Latitude:	34.0689606
Longitude:	-117.6027028
Owner type:	Not reported
Facility type:	Not reported
Num of inuse ust:	Not reported
Num of closed ust:	Not reported
Num of oos ust:	Not reported
Epa region:	Not reported
Tribal lands:	Not reported
Tank owner name:	Not reported
Tank owner mailing address:	Not reported
Tank owner mailing city:	Not reported
Tank owner mailing zip:	Not reported
Tank owner mailing state:	Not reported
Tank operator name:	Not reported
Tank operator mailing address:	Not reported
Tank operator mailing city:	Not reported
Tank operator mailing zip:	Not reported
Tank operator mailing state:	Not reported
Tankidnumber:	Not reported
Tank status:	Not reported
Tank configuration:	Not reported
Tank closure date:	Not reported
Tank installation date:	Not reported
Tank num of compartments:	Not reported
Tank contents:	Not reported
Tank capacity gallons:	Not reported
Tank type:	Not reported
Tank pc construction:	Not reported
Tank pwpiping construction:	Not reported
Tank piping type:	Not reported
Tank piping construction:	Not reported
Tank sacrificial anode:	Not reported
Tank cp impressed current:	Not reported
Tank cp shutoff:	Not reported
Tank alarms:	Not reported
Tank ball float:	Not reported
Tank spill bucket:	Not reported

AST:
Name: MARK CHRISTOPHER AUTO CENTER

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Address:	2131 CONVENTION CENTER WAY
City/Zip:	ONTARIO,
Certified Unified Program Agencies:	San Bernardino
Owner:	MARK & CHRIS LEGGIO
Total Gallons:	2,300
CERSID:	Not reported
Facility ID:	Not reported
Business Name:	Not reported
Phone:	Not reported
Fax:	Not reported
Mailing Address:	Not reported
Mailing Address City:	Not reported
Mailing Address State:	Not reported
Mailing Address Zip Code:	Not reported
Operator Name:	Not reported
Operator Phone:	Not reported
Owner Phone:	Not reported
Owner Mail Address:	Not reported
Owner State:	Not reported
Owner Zip Code:	Not reported
Owner Country:	Not reported
Property Owner Name:	Not reported
Property Owner Phone:	Not reported
Property Owner Mailing Address:	Not reported
Property Owner City:	Not reported
Property Owner Stat :	Not reported
Property Owner Zip Code:	Not reported
Property Owner Country:	Not reported
EPAID:	Not reported

Name:	MARK CHRISTOPHER AUTO CENTER
Address:	2131 CONVENTION CENTER WAY
City/Zip:	ONTARIO,91764
Certified Unified Program Agencies:	Not reported
Owner:	MARK CHRISTOPHER AUTO CENTER
Total Gallons:	Not reported
CERSID:	10041748
Facility ID:	FA0004585
Business Name:	MARK CHRISTOPHER AUTO CENTER
Phone:	(909) 390-2900
Fax:	(909) 390-2956
Mailing Address:	2131 CONVENTION CENTER WAY
Mailing Address City:	ONTARIO
Mailing Address State:	CA
Mailing Address Zip Code:	91764
Operator Name:	Mark & Chris Leggio
Operator Phone:	(909) 390-2900
Owner Phone:	(909) 390-2900
Owner Mail Address:	2131 CONVENTION CENTER WAY
Owner State:	CA
Owner Zip Code:	Not reported
Owner Country:	United States
Property Owner Name:	MARK CHRISTOPHER AUTO CENTER
Property Owner Phone:	(909) 390-2900
Property Owner Mailing Address:	2131 CONVENTION CENTER WAY
Property Owner City:	ONTARIO
Property Owner Stat :	CA

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Property Owner Zip Code: 91764
Property Owner Country: United States
EPAID: CAD044336741

CERS HAZ WASTE:
Name: MARK CHRISTOPHER AUTO CENTER
Address: 2131 CONVENTION CENTER WAY
City,State,Zip: ONTARIO, CA 91764
Site ID: 46662
CERS ID: 10041748
CERS Description: Hazardous Waste Generator

SWEEPS UST:
Name: MARK CHRISTOPHER CHEVROLET INC
Address: 2131 E D ST
City: ONTARIO
Status: Active
Comp Number: 1210
Number: 9
Board Of Equalization: 44-019794
Referral Date: 09-04-91
Action Date: 09-04-91
Created Date: 02-29-88
Owner Tank Id: 1
SWRCB Tank Id: 36-000-001210-000001
Tank Status: A
Capacity: 6000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: 3

Name: MARK CHRISTOPHER CHEVROLET INC
Address: 2131 E D ST
City: ONTARIO
Status: Active
Comp Number: 1210
Number: 9
Board Of Equalization: 44-019794
Referral Date: 09-04-91
Action Date: 09-04-91
Created Date: 02-29-88
Owner Tank Id: 3
SWRCB Tank Id: 36-000-001210-000002
Tank Status: A
Capacity: 250
Active Date: 07-01-85
Tank Use: OIL
STG: W
Content: WASTE OIL
Number Of Tanks: Not reported

Name: MARK CHRISTOPHER CHEVROLET INC
Address: 2131 E D ST
City: ONTARIO

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Status:	Active
Comp Number:	1210
Number:	9
Board Of Equalization:	44-019794
Referral Date:	09-04-91
Action Date:	09-04-91
Created Date:	02-29-88
Owner Tank Id:	2
SWRCB Tank Id:	36-000-001210-000003
Tank Status:	A
Capacity:	2000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not reported

HIST UST:

Name:	MARK CHRISTOPHER CHEVROLET INC
Address:	2131 EAST D STREET
City,State,Zip:	ONTARIO, CA 91764
File Number:	0002a218
URL:	https://documents.geotracker.waterboards.ca.gov/ustpdfs/pdf/0002a218.pdf
Region:	STATE
Facility ID:	00000001210
Facility Type:	Other
Other Type:	CAR DEALER
Contact Name:	RENE JONES
Telephone:	7149830017
Owner Name:	MARK CHRISTOPHER CHEVROLET INC
Owner Address:	2131 EAST D STREET
Owner City,St,Zip:	ONTARIO, CA 91764
Total Tanks:	0003
Tank Num:	001
Container Num:	1
Year Installed:	1981
Tank Capacity:	00006000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	Not reported
Leak Detection:	Visual
Tank Num:	002
Container Num:	3
Year Installed:	Not reported
Tank Capacity:	00000250
Tank Used for:	WASTE
Type of Fuel:	WASTE OIL
Container Construction Thickness:	Not reported
Leak Detection:	Visual
Tank Num:	003
Container Num:	2
Year Installed:	1981
Tank Capacity:	00002000
Tank Used for:	PRODUCT

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Type of Fuel: DIESEL
Container Construction Thickness: Not reported
Leak Detection: Visual

Click here for Geo Tracker PDF:

CERS TANKS:
Name: MARK CHRISTOPHER AUTO CENTER
Address: 2131 CONVENTION CENTER WAY
City,State,Zip: ONTARIO, CA 91764
Site ID: 46662
CERS ID: 10041748
CERS Description: Aboveground Petroleum Storage

Name: MARK CHRISTOPHER AUTO CENTER
Address: 2131 CONVENTION CENTER WAY
City,State,Zip: ONTARIO, CA 91764
Site ID: 46662
CERS ID: 10041748
CERS Description: Underground Storage Tank

CA FID UST:
Facility ID: 36002031
Regulated By: UTNKA
Regulated ID: 00001210
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 7149830017
Mail To: Not reported
Mailing Address: 2131 E D ST
Mailing Address 2: Not reported
Mailing City,St,Zip: ONTARIO 91764
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

FINDS:
Registry ID: 110002645638

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:
The Resource Conservation and Recovery Act Information System (RCRAInfo) is EPA's comprehensive information system in support of the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. It tracks many types of information about generators, transporters, treaters, storers, and disposers of hazardous waste.
California's Hazardous Waste Tracking System Data Mart (HWTS-DATAMART) provides information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000266136
Registry ID:	110002645638
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110002645638
Name:	MARK CHRISTOPHER CHEVROLET
Address:	2131 E D ST
City,State,Zip:	ONTARIO, CA 91764

EMI:

Name:	MARK CHRISTOPHER CHEVROLET
Address:	2131 E D ST
City,State,Zip:	ONTARIO, CA 91764
Year:	1995
County Code:	36
Air Basin:	SC
Facility ID:	3112
Air District Name:	SC
SIC Code:	5511
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	8
Reactive Organic Gases Tons/Yr:	7
Carbon Monoxide Emissions Tons/Yr:	2
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	MARK CHRISTOPHER CHEVROLET
Address:	2131 E D ST
City,State,Zip:	ONTARIO, CA 91764
Year:	1996
County Code:	36
Air Basin:	SC
Facility ID:	3112
Air District Name:	SC
SIC Code:	5511
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	7
Reactive Organic Gases Tons/Yr:	5
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

San Bern. Co. Permit:

Name:	MARK CHRISTOPHER AUTO CENTER
Address:	2131 CONVENTION CENTER WAY
City,State,Zip:	ONTARIO, CA 91764

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Region: SAN BERNARDINO
Facility ID: FA0004585
Owner: MARK CHRISTOPHER AUTO CENTER
Permit Number: PT0012832
Permit Category: APSA 1,320-10,000 GAL FAC CAPACITY
Facility Status: ACTIVE
Expiration Date: 10/31/2023

Name: MARK CHRISTOPHER AUTO CENTER
Address: 2131 CONVENTION CENTER WAY
City,State,Zip: ONTARIO, CA 91764
Region: SAN BERNARDINO
Facility ID: FA0004585
Owner: MARK CHRISTOPHER AUTO CENTER
Permit Number: PT0002303
Permit Category: HAZARDOUS MATERIALS 11-30 CHEMICALS
Facility Status: ACTIVE
Expiration Date: 10/31/2023

Name: MARK CHRISTOPHER AUTO CENTER
Address: 2131 CONVENTION CENTER WAY
City,State,Zip: ONTARIO, CA 91764
Region: SAN BERNARDINO
Facility ID: FA0004585
Owner: MARK CHRISTOPHER AUTO CENTER
Permit Number: PT0002304
Permit Category: LARGE QUANTITY GENERATOR
Facility Status: ACTIVE
Expiration Date: 10/31/2023

Name: MARK CHRISTOPHER AUTO CENTER
Address: 2131 CONVENTION CENTER WAY
City,State,Zip: ONTARIO, CA 91764
Region: SAN BERNARDINO
Facility ID: FA0004585
Owner: MARK CHRISTOPHER AUTO CENTER
Permit Number: PT0011852
Permit Category: REGULAR UST ANNUAL INSPECTION (PER TANK)
Facility Status: ACTIVE
Expiration Date: 10/31/2023

Name: MARK CHRISTOPHER AUTO CENTER
Address: 2131 CONVENTION CENTER WAY
City,State,Zip: ONTARIO, CA 91764
Region: SAN BERNARDINO
Facility ID: FA0004585
Owner: MARK CHRISTOPHER AUTO CENTER
Permit Number: PT0011853
Permit Category: REGULAR UST ANNUAL INSPECTION (PER TANK)
Facility Status: ACTIVE
Expiration Date: 10/31/2023

Name: MARK CHRISTOPHER AUTO CENTER
Address: 2131 CONVENTION CENTER WAY
City,State,Zip: ONTARIO, CA 91764
Region: SAN BERNARDINO
Facility ID: FA0004585

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Owner: MARK CHRISTOPHER AUTO CENTER
Permit Number: PT0020324
Permit Category: EPCRA FACILITY
Facility Status: INACTIVE
Expiration Date: 10/31/2013

CERS:
Name: MARK CHRISTOPHER AUTO CENTER
Address: 2131 CONVENTION CENTER WAY
City,State,Zip: ONTARIO, CA 91764
Site ID: 46662
CERS ID: 10041748
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 46662
Site Name: MARK CHRISTOPHER AUTO CENTER
Violation Date: 03-09-2022
Citation: 23 CCR 16 2715(c)(4) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(c)(4)
Violation Description: Failure to maintain a list of employees trained by the designated operator on-site or off-site at a readily available location, if approved by the UPA. For training that occurs on or after October 1, 2018, failure to maintain a copy of the "Facility Employee Training Certificate" on-site or off-site at a readily available location, if approved by the UPA.
Violation Notes: Returned to compliance on 03/30/2022. OBSERVATION: At the time of document review, UST employee training documentation records were not in the UST Compliance binder. CORRECTIVE ACTION: Provide UST employee training documentation within 30 days.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 46662
Site Name: MARK CHRISTOPHER AUTO CENTER
Violation Date: 03-09-2022
Citation: 23 CCR 16 2716(f) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2716(f)
Violation Description: Failure to maintain on-site, or off-site at a readily available location if approved by the UPA, copies of Designated Operator inspection records as follows: Designated operator monthly inspection records for inspections performed before October 1, 2018 must be kept for 12 months from the month of inspection. For inspections performed on or after October 1, 2018, copies of the "Designated Underground Storage Tank Operator Visual Inspection Report" must be kept for 36 months from the month of inspection.
Violation Notes: Returned to compliance on 04/05/2022. OBSERVATION: At the time of document review, observed that the Designated Operator Monthly Inspection Report for January 2022 was missing from the UST Compliance Binder. CORRECTIVE ACTION: Provide the Designated Operator Monthly Inspection Report for January 2022 within 30 days and place the copy in the UST Compliance Binder.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Site ID: 46662
Site Name: MARK CHRISTOPHER AUTO CENTER
Violation Date: 10-24-2018
Citation: HSC 6.67 25270.4.5 (a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5 (a)
Violation Description: Failure to complete a review and evaluation of the SPCC Plan at least once every five years, document the completion of the review, and sign a statement as to whether the SPCC Plan will be amended.
Violation Notes: Returned to compliance on 11/16/2018. OBSERVATION: The most recent SPCC plan was dated 9/30/2010 by a professional engineer. A revision certification was not found. CORRECTIVE ACTION: Submit a signed statement indicating that the 5-year review has been performed, documented and SPCC plan amended if necessary.
Violation Division: San Bernardino County Fire Department
Violation Program: APSA
Violation Source: CERS,

Site ID: 46662
Site Name: MARK CHRISTOPHER AUTO CENTER
Violation Date: 03-23-2015
Citation: 23 CCR 16 2665 - California Code of Regulations, Title 23, Chapter 16, Section(s) 2665
Violation Description: Failure of the overfill prevention system to meet one of the following requirements: 1. Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or 2. Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or 3. Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or 4. Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling.
Violation Notes: Returned to compliance on 03/23/2015. VISUAL ALARM (LIGHT) AT EXTERNAL ENUNCIATOR FAILED TO PROPERLY OPERATE WHEN TESTED. COMPLIANCE REQUIREMENT: LIGHT WAS REPAIRED AND DEVICE WAS RETESTED. VIOLATION CORRECTED.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 46662
Site Name: MARK CHRISTOPHER AUTO CENTER
Violation Date: 03-31-2023
Citation: 23 CCR 16 2635(e)(8) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2635(e)(8)
Violation Description: Failure to submit as-built plans for the location and orientation of the tanks and appurtenant piping systems for new installations and/or with the permit application.
Violation Notes: OBSERVATION: At the time of inspection, the fill sump for T1 (Regular) was hydrostatically tested. CORRECTIVE ACTION: Submit as built plans for the SB989 repairs that were done to the fill sump for T1 (Regular) within 30 days.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Site ID:	46662
Site Name:	MARK CHRISTOPHER AUTO CENTER
Violation Date:	10-24-2018
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes:	Returned to compliance on 10/25/2018. OBSERVATION: The hazardous materials inventory was found to be incomplete. Waste filters, parts washer waste, air bags and metal turning wastes were found that were not listed on the plan inventory. CORRECTIVE ACTION: Submit an accurate and complete hazardous materials inventory via CERS to include all routinely generated hazardous waste.
Violation Division:	San Bernardino County Fire Department
Violation Program:	HMRRP
Violation Source:	CERS,

Site ID:	46662
Site Name:	MARK CHRISTOPHER AUTO CENTER
Violation Date:	03-23-2015
Citation:	HSC 6.7 25291 - California Health and Safety Code, Chapter 6.7, Section(s) 25291
Violation Description:	Failure to maintain under-dispenser containment, sumps, and/or other secondary containment in good condition and/or free of debris/liquid.
Violation Notes:	Returned to compliance on 03/23/2015. LIQUID WAS OBSERVED IN 87 AND IN WASTE OIL SUMPS DURING INSPECTION. COMPLIANCE REQUIREMENT: LIQUID WAS REMOVED. VIOLATION WAS CORRECTED DURING INSPECTION
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,

Site ID:	46662
Site Name:	MARK CHRISTOPHER AUTO CENTER
Violation Date:	03-23-2015
Citation:	HSC 6.75 25299.30-25299.34 - California Health and Safety Code, Chapter 6.75, Section(s) 25299.30-25299.34
Violation Description:	Failure to submit and maintain complete and current Certification of Financial Responsibility or other mechanism of financial assurance.
Violation Notes:	Returned to compliance on 04/20/2015. CERTIFICATE OF FINANCIAL RESPONSIBILITY (CFR) WAS NOT AVAILABLE ON CERS DURING INSPECTION. VIOLATION REMAINS OUTSTANDING AND IS RECALCITRANT AND WAS CITED ON 3/25/14 INSPECTION REPORT. COMPLIANCE REQUIREMENT: UPDATE CERS TO REFLECT CURRENT CFR WITHIN 30 DAYS. SUBMIT A SIGNED CERTIFICATE OF COMPLIANCE WITHIN 30 DAYS. 4/7/15 CERS REVIEWED WRONG CFR DOCUMENTATION UPLOADED VIOLATION STILL OUTSTANDING PS CERS UPDATED TO REFLECT CURRENT CFR 4/20 PS
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,

Site ID:	46662
Site Name:	MARK CHRISTOPHER AUTO CENTER
Violation Date:	11-23-2021
Citation:	HSC 6.67 25270.4.5 (a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5 (a)
Violation Description:	Failure to complete a review and evaluation of the SPCC Plan at least

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

	once every five years, document the completion of the review, and sign a statement as to whether the SPCC Plan will be amended.
Violation Notes:	Returned to compliance on 12/07/2021. OBSERVATION: The SPCC plan reviewed on site was stamped on 09/30/2010 by a professional engineer and is expired. CORRECTIVE ACTION: Provide a current SPCC plan using the Tier 1 or Tier2 templates (for sites that have under 10,000 gal of hazardous material) within 30 days.
Violation Division:	San Bernardino County Fire Department
Violation Program:	APSA
Violation Source:	CERS,
Site ID:	46662
Site Name:	MARK CHRISTOPHER AUTO CENTER
Violation Date:	03-25-2014
Citation:	HSC 6.7 25286(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25286(a)
Violation Description:	Failure to prepare, maintain, and submit accurate CUPA UST Operating Permit Application for Facility information and/or Tank information.
Violation Notes:	Returned to compliance on 05/14/2014. THE DUE DATE TO SUBMIT ALL REQUIRED DOCUMENTATION TO THE CALIFORNIA ENVIRONMENTAL REPORTING SYSTEM (CERS) WAS DECEMBER 31, 2013. REQUIREMENT: UPDATE AND SUBMIT THE COMPLETE UST APPLICATION PACKAGE (FACILITY AND TANK INFORMATION) TO CERS WITHIN 30 DAYS. PROVIDE NOTIFICATION TO JKOOYMAN@SBCFIRE.ORG UPON COMPLETION.
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,
Site ID:	46662
Site Name:	MARK CHRISTOPHER AUTO CENTER
Violation Date:	03-25-2014
Citation:	HSC 6.7 Multiple Sections - California Health and Safety Code, Chapter 6.7, Section(s) Multiple Sections
Violation Description:	UST Program - Administration/Documentation - General
Violation Notes:	Returned to compliance on 05/14/2014. Failure to have a written monitoring program with monitoring procedures and response plan. (CCR 2632(d)) REQUIREMENT: UPDATE THE MONITORING PLAN AND UPLOAD THE INFORMATION INTO CERS WITHIN 30 DAYS.
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,
Site ID:	46662
Site Name:	MARK CHRISTOPHER AUTO CENTER
Violation Date:	03-09-2022
Citation:	HSC 6.7 25292.2(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25292.2(a)
Violation Description:	Failure to submit and maintain complete and current Certification of Financial Responsibility or other mechanism of financial assurance.
Violation Notes:	Returned to compliance on 03/14/2022. OBSERVATION: At the time of CERS review, observed that the Certificate of Financial Responsibility dated 02/01/2021 is expired. CORRECTIVE ACTION: Provide a current Certificate of Financial Responsibility on CERS within 30 days.
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Site ID:	46662
Site Name:	MARK CHRISTOPHER AUTO CENTER
Violation Date:	03-25-2014
Citation:	23 CCR 16 2665 - California Code of Regulations, Title 23, Chapter 16, Section(s) 2665
Violation Description:	Failure to comply with one or more of the following: failure to install a spill bucket, have a functional drain valve or other method for the removal of liquid from the spill bucket/spill container, and/or be resistant to galvanic corrosion.
Violation Notes:	Returned to compliance on 04/02/2014. THE OVERSPILL BUCKET FOR THE 87 TANK FAILED TO HOLD LIQUID WHEN TESTED. REQUIREMENT: WITHIN 7 DAYS, REPAIR OR REPLACE THE BUCKET USING LIKE-FOR-LIKE EQUIPMENT. PROVIDE THE A COPY OF THE WORK ORDER DOCUMENTING THE REPAIR AND RETEST TO THIS DEPARTMENT UPON COMPLETION. (attn: JAKE KOOYMAN).
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,

Site ID:	46662
Site Name:	MARK CHRISTOPHER AUTO CENTER
Violation Date:	03-23-2015
Citation:	23 CCR 16 2715 - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715
Violation Description:	Failure to comply with one or more of the designated operator monthly inspection requirements: failed to inspect the monthly alarm history report; attach a copy of the alarm history; failed to inspect for the presence of liquid or debris in the spill container/spill bucket and under dispenser containment; failed to inspect the under dispenser containment to ensure that monitoring equipment is placed in the proper position; failure to inspect for liquid or debris in the containment sump where an alarm occurred or for which there is no record of a service visit; or failure to check that all testing and maintenance has been completed and documented.
Violation Notes:	Returned to compliance on 04/07/2015. MONTHLY DO INSPECTION REPORTS FOR 10/14, 12/14 AND 2015 WERE NOT AVAILABLE FOR REVIEW. SENSOR ALARMS REPORTS WERE NOT AVAILABLE FOR 11/14 AND 12/14. COMPLIANCE REQUIREMENT: SUBMIT COPIES OF MISSING DO REPORTS FOR THE MONTHS NOT AVAILABLE. SUBMIT COPIES OF REPAIRS PERFORMED AND OR ALARM CAUSE AND CORRECTIVE ACTION. SUBMIT A SIGNED CERTIFICATE OF COMPLIANCE WITHIN 30 DAYS WITH REQUIRED DOCUMENTATION WITHIN 30 DAYS. 4/7/15 COMPLIANCE DOCS RECEIVED. PS
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,

Site ID:	46662
Site Name:	MARK CHRISTOPHER AUTO CENTER
Violation Date:	06-15-2022
Citation:	23 CCR 16 2637(f) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2637(f)
Violation Description:	Failure to submit a copy of the secondary containment test results on the Secondary Containment Testing report Form to the UPA within 30 days after the test.
Violation Notes:	Returned to compliance on 06/15/2022. OBSERVATION: The Secondary Containment (SB989) test results were not submitted within 30 days of testing. CORRECTIVE ACTION: The Secondary Containment (SB989) was conducted on 03/09/2022 and test results were received on 04/19/2022.

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,
Site ID:	46662
Site Name:	MARK CHRISTOPHER AUTO CENTER
Violation Date:	03-23-2016
Citation:	HSC 6.7 25286(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25286(a)
Violation Description:	Failure to submit an complete and accurate application for a permit to operate an underground storage tank, or for renewal of the permit.
Violation Notes:	Returned to compliance on 07/11/2016. COMPLIANCE ACTIVITY: 07/11/2016- FACILITY COMPLIED- CERS DOCUMENTATION UPDATED COMPLIANCE ACTIVITY: 06/21/2016- MAILED OUTSTANDING VIOLATIONS LETTER. OBSERVATION: UST Monitoring Site plan must be updated. COMPLIANCE REQUIREMENT: Updated the monitoring site plan. Include the sensor model types and routes of UST piping ON THE UST Monitoring site plan.
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,
Site ID:	46662
Site Name:	MARK CHRISTOPHER AUTO CENTER
Violation Date:	03-23-2015
Citation:	HSC 6.7 25286(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25286(a)
Violation Description:	Failure to submit an complete and accurate application for a permit to operate an underground storage tank, or for renewal of the permit.
Violation Notes:	Returned to compliance on 04/07/2015. CERTIFICATE OF FINANCIAL RESPONSIBILITY AND DESIGNATED OPERATOR STATEMENT WAS NOT UPLOADED TO CERS WEBSITE. VIOLATION WAS ALSO CITED 3/25/14 AND IS RECALCITRANT. COMPLIANCE REQUIREMENT: SUBMIT REQUIRED UST DOCUMENTS TO CERS WITHIN 30 DAYS. SUBMIT A SGNED CERTIFICATE OF COMPLIANCE WITHIN 30 DAYS. 4/7/15 RECEIVED COMPLIANCE DOCUMENTATION FROM OPERATOR. CHECKED CERS ALL IS UPDATED EXCEPT CFR, WRONG DOCUMENT. PS
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,
Site ID:	46662
Site Name:	MARK CHRISTOPHER AUTO CENTER
Violation Date:	06-15-2022
Citation:	23 CCR 16 2638(d) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2638(d)
Violation Description:	Failure to submit the Monitoring System Certification Form to the UPA within 30 days of completion of the test.
Violation Notes:	Returned to compliance on 06/15/2022. OBSERVATION: The Annual Monitoring Certification test results were not submitted within 30 days after testing was conducted. CORRECTIVE ACTION: The Annual Monitoring Certification test results was conducted on 3/9/22 and test results were received on 4/22/22.
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,
Site ID:	46662
Site Name:	MARK CHRISTOPHER AUTO CENTER

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Violation Date: 03-22-2017
Citation: HSC 6.7 Multiple - California Health and Safety Code, Chapter 6.7, Section(s) Multiple
Violation Description: UST Program - Administration/Documentation - General - Must include violation description, proper statute and regulation citation in the "comment" section.
Violation Notes: Returned to compliance on 04/14/2017. Failure to obtain a UST construction permit and plan approval (CHSC 25270.4.5(a)) Failure to obtain a UST construction permit and plan approval (SBCC 23.0603(a)) OBSERVED COLD START PERFORMED TODAY DUE TO MALFUNCTION IN VEEDER ROOT MONITORING PANEL. DISCUSSED COLD START WITH TECHNICIAN AND IT WAS PERFORMED PRIOR TO ANNUAL INSPECTION. COMPLIANCE REQUREMENT; SUBMIT FEES AND REQUIRED PERMIT FOR COLD START WITHIN 30 DAYS. IF SUBMITTED WITHIN 30 DAYS, THEN THIS INSPECTION WILL SERVE AS COLD START FINAL INSPECTION. IF FEES SUBMITTED AFTER 30 DAYS, THEN ANOTHER COLD START INSPECTION WILL BE REQUIRED.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 46662
Site Name: MARK CHRISTOPHER AUTO CENTER
Violation Date: 03-09-2022
Citation: 23 CCR 16 2712(b)(1)(F) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(b)(1)(F)
Violation Description: "Failure to conduct secondary containment testing, or one or more of the following requirements: Perform the test of the secondary containment system upon installation, within six months of installation and every 36 months thereafter. Perform the test of a secondary containment component within 30 days of a repair or discontinuing vacuum, pressure or hydrostatic monitoring. Use a procedure that demonstrates the system works as well as at installation. Use applicable manufacturer guidelines, industry codes, engineering standard, or professional engineer approval. Performed by a certified service technician. Maintain records of secondary containment testing for 36 months."
Violation Notes: OBSERVATION: The fill sump for T1 (Regular) failed the hydrostatic test (SB989 testing). CORRECTIVE ACTION: Submit plans and apply for a permit for repairs to the fill sump for T1 (Regular) within 30 days for SB989 failures.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 46662
Site Name: MARK CHRISTOPHER AUTO CENTER
Violation Date: 03-22-2017
Citation: HSC 6.7 Multiple - California Health and Safety Code, Chapter 6.7, Section(s) Multiple
Violation Description: UST Program - Administration/Documentation - General - Must include violation description, proper statute and regulation citation in the "comment" section.
Violation Notes: Returned to compliance on 02/28/2018. Failure to submit a signed Designated UST Operator Statement (23 CCR 2715(a)) OBSERVED DO STATEMENT ON CERS WITH EXPIRED CERTIFICATION NUMBERS. COMPLIANCE REQUIREMENT: UPDATE CERS DO STATEMENT WITH CURRENT ICC CERTIFICATIONS. SUBMIT A SIGNED CERTIFICATE OF COMPLIANCE WITH 30 DAYS.

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,
Site ID:	46662
Site Name:	MARK CHRISTOPHER AUTO CENTER
Violation Date:	10-24-2018
Citation:	HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Description:	Failure to implement the SPCC Plan.
Violation Notes:	Returned to compliance on 11/16/2018. OBSERVATION: Inspection logs for the SPCC plan were not available for review. CORRECTIVE ACTION: Implement the SPCC Plan. Submit a signed statement indicating that the SPCC plan has been properly implemented.
Violation Division:	San Bernardino County Fire Department
Violation Program:	APSA
Violation Source:	CERS,
Site ID:	46662
Site Name:	MARK CHRISTOPHER AUTO CENTER
Violation Date:	06-15-2022
Citation:	HSC 6.7 25291(a)(2) - California Health and Safety Code, Chapter 6.7, Section(s) 25291(a)(2)
Violation Description:	Failure to maintain secondary containment (e.g., failure of secondary containment testing).
Violation Notes:	OBSERVATION: At the time of test results review, observed that there were secondary containment failures on the report dated 03/09/2022. CORRECTIVE ACTION: Submit plans and apply for a permit for SB989 repairs within 30 days.
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,
Site ID:	46662
Site Name:	MARK CHRISTOPHER AUTO CENTER
Violation Date:	10-01-2014
Citation:	HSC 6.5 Multiple Sections - California Health and Safety Code, Chapter 6.5, Section(s) Multiple Sections
Violation Description:	Haz Waste Generator Program - Operations/Maintenance - General
Violation Notes:	Returned to compliance on 12/17/2014. Failure to keep hazardous waste containers closed when not in active use (CCR 66265.173(a)) There were several drums of used oil filters stored in a bay on the east end of the shop. Most of the drums were overfilled with used oil filters and could not have a lid on the drums. All hazardous waste containers must have a locking lid installed.
Violation Division:	San Bernardino County Fire Department
Violation Program:	HW
Violation Source:	CERS,
Site ID:	46662
Site Name:	MARK CHRISTOPHER AUTO CENTER
Violation Date:	03-25-2014
Citation:	HSC 6.75 25299.30-25299.34 - California Health and Safety Code, Chapter 6.75, Section(s) 25299.30-25299.34
Violation Description:	Failure to submit and maintain complete and current Certification of Financial Responsibility or other mechanism of financial assurance.
Violation Notes:	Returned to compliance on 05/14/2014. REQUIREMENT: UPDATE THE

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

CERTIFICATE OF FINANCIAL RESPONSIBILITY AND UPLOAD INTO CERS WITHIN 30 DAYS.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 46662
Site Name: MARK CHRISTOPHER AUTO CENTER
Violation Date: 03-22-2017
Citation: HSC 6.7 Multiple - California Health and Safety Code, Chapter 6.7, Section(s) Multiple
Violation Description: UST Program - Administration/Documentation - General - Must include violation description, proper statute and regulation citation in the "comment" section.
Violation Notes: Returned to compliance on 02/28/2018. Failure to have a written monitoring program with monitoring procedures and response plan (CHSC 25286(a)) OBSERVED UST INFORMATION PAGE ON CERS MISSING UST INSTALLATION DATE. IF DATE IS UNKNOWN, LIST 1/1/1900 AS INSTALLATION DATE. COMPLIANCE REQUIREMENT: UPDATE CERS TO REFLECT CORRECT AND COMPLETE INFORMATION.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 46662
Site Name: MARK CHRISTOPHER AUTO CENTER
Violation Date: 03-25-2014
Citation: HSC 6.7 Multiple Sections - California Health and Safety Code, Chapter 6.7, Section(s) Multiple Sections
Violation Description: UST Program - Administration/Documentation - General
Violation Notes: Returned to compliance on 05/14/2014. Failure to submit a signed Designated UST Operator Statement (23 CCR 2715(a)) REQUIREMENT: UPDATE THE DESIGNATED OPERATOR STATEMENT AND UPLOAD INTO CERS WITHIN 30 DAYS.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 46662
Site Name: MARK CHRISTOPHER AUTO CENTER
Violation Date: 03-11-2019
Citation: HSC 6.7 25292.2(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25292.2(a)
Violation Description: Failure to submit and maintain complete and current Certification of Financial Responsibility or other mechanism of financial assurance.
Violation Notes: Returned to compliance on 03/09/2020. OBSERVATION: The Certificate of Financial Responsibility on CERS was dated 02/21/2018 and therefore not current. CORRECTIVE ACTION: Provide a current Certificate of Financial Responsibility.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-09-2022
Violations Found: Yes
Eval Type: Routine done by local agency

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Eval Notes: An inspection was conducted to determine compliance with underground storage tank (UST) laws and regulations.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-22-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Mark Christopher UST Inspection
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 03-23-2016
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: MARK CHRISTOPHER- UST SB989 INSPECTION- SB989 NOT FULLY WITNESSED
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-24-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-23-2021
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: On site to conduct a Hazardous Material and Hazardous Waste inspection.
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-09-2020
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: On-site to conduct an Annual Underground Storage Tank (UST) inspection. Inspection was conducted during the annual monitoring certification testing.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 03-11-2019
Violations Found: No

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Eval Type: Other, not routine, done by local agency
Eval Notes: Witnessed the SB989 test.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-24-2021
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: On-site to conduct an Annual Underground Storage Tank (UST) inspection.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 06-15-2022
Violations Found: Yes
Eval Type: Other, not routine, done by local agency
Eval Notes: NON INSPECTION RELATED VIOLATION
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-01-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Routine inspection
Eval Division: San Bernardino County Fire Department
Eval Program: APSA
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-24-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: APSA
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-23-2015
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: ANNUAL MONITORING CERTIFICATION
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-23-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: MARK CHRISTOPHER AUTO CENTER- UST INSPECTION & UST MONITORING

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

CERTIFICATION
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 03-24-2021
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: OPE INSPECTION WAS CONDUCTED. RESULTS PENDING.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-31-2023
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: An inspection was conducted to determine compliance with underground storage tank (UST) laws and regulations.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 09-25-2014
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Attempted inspection but due to excessive work load it was requested that I return the following week.
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-01-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Routine inspection
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-01-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Routine inspection
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 03-09-2022
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: WITNESSED THE SB989 TESTING.

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 03-11-2019
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Witnessed the OPE inspection.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-11-2019
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: On-site to conduct an Annual Underground Storage Tank (UST) inspection. Inspection was conducted during the annual monitoring certification testing.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-22-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: ANNUAL UST INSPECTION AND CERS REVIEW
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-25-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: UST FIELD INSPECTION-ANNUAL MONITORING SYSTEM CERTIFICATION (2 TANKS) W/JIM HORNE. TIME ONSITE INCLUDED CERS DISCUSSION WITH RODNEY REID (SERVICE MANAGER)
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-24-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-23-2021
Violations Found: No
Eval Type: Routine done by local agency

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Eval Notes: CONDUCTED A FULL CUPA INSPECTION.
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-23-2021
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: CONDUCTED A FULL CUPA INSPECTION.
Eval Division: San Bernardino County Fire Department
Eval Program: APSA
Eval Source: CERS,

Enforcement Action:
Site ID: 46662
Site Name: MARK CHRISTOPHER AUTO CENTER
Site Address: 2131 CONVENTION CENTER WAY
Site City: ONTARIO
Site Zip: 91764
Enf Action Date: 03-22-2017
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: San Bernardino County Fire Department
Enf Action Program: UST
Enf Action Source: CERS,

Site ID: 46662
Site Name: MARK CHRISTOPHER AUTO CENTER
Site Address: 2131 CONVENTION CENTER WAY
Site City: ONTARIO
Site Zip: 91764
Enf Action Date: 03-23-2015
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: San Bernardino County Fire Department
Enf Action Program: UST
Enf Action Source: CERS,

Site ID: 46662
Site Name: MARK CHRISTOPHER AUTO CENTER
Site Address: 2131 CONVENTION CENTER WAY
Site City: ONTARIO
Site Zip: 91764
Enf Action Date: 03-23-2016
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: San Bernardino County Fire Department
Enf Action Program: UST
Enf Action Source: CERS,

Site ID: 46662
Site Name: MARK CHRISTOPHER AUTO CENTER
Site Address: 2131 CONVENTION CENTER WAY

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Site City: ONTARIO
Site Zip: 91764
Enf Action Date: 03-25-2014
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: San Bernardino County Fire Department
Enf Action Program: UST
Enf Action Source: CERS,

Site ID: 46662
Site Name: MARK CHRISTOPHER AUTO CENTER
Site Address: 2131 CONVENTION CENTER WAY
Site City: ONTARIO
Site Zip: 91764
Enf Action Date: 10-01-2014
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: San Bernardino County Fire Department
Enf Action Program: HW
Enf Action Source: CERS,

Affiliation:
Affiliation Type Desc: CUPA District
Entity Name: San Bernardino County Fire
Entity Title: Not reported
Affiliation Address: 620 South E Street
Affiliation City: San Bernardino
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92415-0153
Affiliation Phone: (909) 386-8401,

Affiliation Type Desc: UST Tank Owner
Entity Name: MARK CHRISTOPHER AUTO CENTER
Entity Title: Not reported
Affiliation Address: 2131 E. Convention Center Way
Affiliation City: Ontario
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 91764
Affiliation Phone: (909) 390-2900,

Affiliation Type Desc: Document Preparer
Entity Name: KPA, LLC
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Environmental Contact
Entity Name: Jeff Rizzi
Entity Title: Not reported

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Affiliation Address:	2131 CONVENTION CENTER WAY
Affiliation City:	ONTARIO
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	91764
Affiliation Phone:	,
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	2131 CONVENTION CENTER WAY
Affiliation City:	ONTARIO
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	91764
Affiliation Phone:	,
Affiliation Type Desc:	Legal Owner
Entity Name:	MARK CHRISTOPHER AUTO CENTER
Entity Title:	Not reported
Affiliation Address:	2131 CONVENTION CENTER WAY
Affiliation City:	ONTARIO
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	91764-9176
Affiliation Phone:	(909) 390-2900,
Affiliation Type Desc:	Property Owner
Entity Name:	MARK CHRISTOPHER AUTO CENTER
Entity Title:	Not reported
Affiliation Address:	2131 CONVENTION CENTER WAY
Affiliation City:	ONTARIO
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	91764
Affiliation Phone:	(909) 390-2900,
Affiliation Type Desc:	Identification Signer
Entity Name:	Jeff Rizzi
Entity Title:	Service Director
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Operator
Entity Name:	Christopher Leggio
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(909) 390-2900,

MARK CHRISTOPHER CHEVROLET (Continued) **1000266136**

Affiliation Type Desc:	Parent Corporation
Entity Name:	MARK CHRISTOPHER AUTO CENTER
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	UST Permit Applicant
Entity Name:	RODNEY REID
Entity Title:	SERVICE MANAGER
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(909) 975-3933,

Affiliation Type Desc:	UST Property Owner Name
Entity Name:	Roberta Caswell
Entity Title:	Not reported
Affiliation Address:	2875 Calle Heraldo
Affiliation City:	San Clemente
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92673-6817
Affiliation Phone:	(949) 276-5260,

Affiliation Type Desc:	UST Tank Operator
Entity Name:	MARK CHRISTOPHER AUTO CENTER
Entity Title:	Not reported
Affiliation Address:	2131 CONVENTION CENTER WAY
Affiliation City:	ONTARIO
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	91764
Affiliation Phone:	(909) 390-2900,

D17 **METROPOLITAN TRANSIT DIST** **CA HIST CORTESE** **S105025358**
NW **2131 D** **N/A**
1/8-1/4 **ONTARIO, CA 91764**
0.171 mi.
901 ft. **Site 3 of 3 in cluster D**

Relative: HIST CORTESE:
Higher

Actual: edr_fname:	Metropolitan Transit Dist
978 ft. edr_fadd1:	2131 D
City,State,Zip:	ONTARIO, CA 91764
Region:	CORTESE
Facility County Code:	36
Reg By:	LTNKA
Reg Id:	3112

E18
ESE
1/8-1/4
0.201 mi.
1063 ft.

UNITED GROUND EXPRESS
2500 E AIRPORT DR STE 1211-A
ONTARIO, CA 91761

Site 1 of 12 in cluster E

RCRA NonGen / NLR

1027095029
CAL000468632

Relative:
Lower

Actual:
952 ft.

RCRA Listings:

Date Form Received by Agency:	20220216
Handler Name:	United Ground Express
Handler Address:	2500 E AIRPORT DR STE 1211-A
Handler City,State,Zip:	ONTARIO, CA 91761
EPA ID:	CAL000468632
Contact Name:	UGE SAFETY
Contact Address:	11555 W TOUHY AVE
Contact City,State,Zip:	CHICAGO, IL 60666
Contact Telephone:	479-236-1916
Contact Fax:	Not reported
Contact Email:	SAFETY@UNITEDGROUNDEXPRESS.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	2500 E AIRPORT DR STE 1211-A
Mailing City,State,Zip:	MONTEREY, CA 91761
Owner Name:	United Ground Express Inc
Owner Type:	Other
Operator Name:	Uge Safety
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No

UNITED GROUND EXPRESS (Continued) **1027095029**

Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20220223
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name: UGE SAFETY	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	11555 W TOUHY AVE
Owner/Operator City,State,Zip:	CHICAGO, IL 60666
Owner/Operator Telephone:	479-236-1916
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name: UNITED GROUND EXPRESS INC	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	233 S WACKER DR 14TH FL WHQCT
Owner/Operator City,State,Zip:	CHICAGO, IL 60606
Owner/Operator Telephone:	479-236-1916
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20220216
Handler Name: UNITED GROUND EXPRESS	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	No
Electronic Manifest Broker:	No

UNITED GROUND EXPRESS (Continued) **1027095029**

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

E19 **UNIFI AVIATION, LLC.- ONTARIO** **RCRA-SQG** **1023675299**
ESE **2500 E AIRPORT DR** **CAR000273326**
1/8-1/4 **ONTARIO, CA 91761**
0.201 mi.
1063 ft. **Site 2 of 12 in cluster E**

Relative: **Lower**
Actual: **952 ft.**

RCRA Listings:

Date Form Received by Agency:	20230314
Handler Name:	Unifi Aviation, Llc.- Ontario
Handler Address:	E AIRPORT DR
Handler City,State,Zip:	ONTARIO, CA 91761
EPA ID:	CAR000273326
Contact Name:	ART SLAYTON
Contact Address:	VIRGINIA AVE
Contact City,State,Zip:	ATLANTA, GA 30354
Contact Telephone:	470-630-2448
Contact Fax:	Not reported
Contact Email:	ART.SLAYTON@UNIFISERVICE.COM
Contact Title:	ENVIRONMENTAL PROGRAM & COMPLIANCE MGR.
EPA Region:	09
Land Type:	Municipal
Federal Waste Generator Description:	Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	E AIRPORT DR
Mailing City,State,Zip:	ONTARIO, CA 91761
Owner Name:	Ontario International Airport Authority
Owner Type:	Municipal
Operator Name:	Unifi Aviation, Llc.
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No

UNIFI AVIATION, LLC.- ONTARIO (Continued) **1023675299**

Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20230321
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Hazardous Waste Summary:

Waste Code:	D001
Waste Description:	Ignitable Waste
Waste Code:	D018
Waste Description:	Benzene

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	ONTARIO INTERNATIONAL AIRPORT AUTHORITY
Legal Status:	Municipal
Date Became Current:	20120801
Date Ended Current:	Not reported
Owner/Operator Address:	1923 EAST AVION ST
Owner/Operator City,State,Zip:	ONTARIO, CA 91761
Owner/Operator Telephone:	918-688-6184
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	UNIFI AVIATION, LLC.
Legal Status:	Private
Date Became Current:	20170301
Date Ended Current:	Not reported

UNIFI AVIATION, LLC.- ONTARIO (Continued) **1023675299**

Owner/Operator Address: 1007 VIRGINIA AVE, SUITE 150, ENVIRONMENTAL
Owner/Operator City,State,Zip: ATLANTA, GA 30354
Owner/Operator Telephone: 470-630-2448
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: ART.SLAYTON@UNIFISERVICES.COM

Owner/Operator Indicator: Operator
Owner/Operator Name: UNIFI AVIATION, LLC.
Legal Status: Private
Date Became Current: 20170301
Date Ended Current: Not reported
Owner/Operator Address: 1007 VIRGINIA AVE, SUITE 150, ENVIRONMENTAL
Owner/Operator City,State,Zip: ATLANTA, GA 30354
Owner/Operator Telephone: 470-630-2448
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: ART.SLAYTON@UNIFISERVICES.COM

Owner/Operator Indicator: Owner
Owner/Operator Name: ONTARIO INTERNATIONAL AIRPORT AUTHORITY
Legal Status: Municipal
Date Became Current: 20120801
Date Ended Current: Not reported
Owner/Operator Address: 1923 EAST AVION ST
Owner/Operator City,State,Zip: ONTARIO, CA 91761
Owner/Operator Telephone: 918-688-6184
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: ONTPAWSQUAD@FLYONTARIO.COM

Owner/Operator Indicator: Owner
Owner/Operator Name: ONTARIO INTERNATIONAL AIRPORT AUTHORITY
Legal Status: Municipal
Date Became Current: 20120801
Date Ended Current: Not reported
Owner/Operator Address: 1923 EAST AVION ST
Owner/Operator City,State,Zip: ONTARIO, CA 91761
Owner/Operator Telephone: 918-688-6184
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: ONTPAWSQUAD@FLYONTARIO.COM

Owner/Operator Indicator: Operator
Owner/Operator Name: DELTA GLOBAL SERVICES
Legal Status: Private
Date Became Current: 20170301
Date Ended Current: Not reported
Owner/Operator Address: Not reported
Owner/Operator City,State,Zip: Not reported
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20170612

UNIFI AVIATION, LLC.- ONTARIO (Continued) **1023675299**

Handler Name: DELTA GLOBAL SERVICES - ONTARIO CA
Federal Waste Generator Description: Small Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20220406
Handler Name: UNIFI AVIATION, LLC.- ONTARIO
Federal Waste Generator Description: Small Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

Receive Date: 20230314
Handler Name: UNIFI AVIATION, LLC.- ONTARIO
Federal Waste Generator Description: Small Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Code: 481111
NAICS Description: SCHEDULED PASSENGER AIR TRANSPORTATION

NAICS Code: 488119
NAICS Description: OTHER AIRPORT OPERATIONS

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

E20
ESE
1/8-1/4
0.201 mi.
1063 ft.

DELTA AIRLINES ONTARIO
2500 AIRPORT DR STE 1259
ONTARIO, CA 91761

Site 3 of 12 in cluster E

RCRA NonGen / NLR | **1024807941** | **CAL000277336**

Relative:
Lower

Actual:
952 ft.

RCRA Listings:

Date Form Received by Agency:	20031216
Handler Name:	Delta Airlines Ontario
Handler Address:	2500 AIRPORT DR STE 1259
Handler City,State,Zip:	ONTARIO, CA 91761-2132
EPA ID:	CAL000277336
Contact Name:	ALFONSO CARDENAS
Contact Address:	2500 E AIRPORT DR STE 1259
Contact City,State,Zip:	ONTARIO, CA 91761
Contact Telephone:	909-605-7370
Contact Fax:	909-605-7372
Contact Email:	ALFONSO.L.CARDENAS@DELTA.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	2500 E AIRPORT DR STE 1259
Mailing City,State,Zip:	ONTARIO, CA 91761-2132
Owner Name:	Delta Air Lines, Inc
Owner Type:	Other
Operator Name:	Alfonso Cardenas
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No

DELTA AIRLINES ONTARIO (Continued) **1024807941**

Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20180905
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name: ALFONSO CARDENAS	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	2500 E AIRPORT DR STE 1259
Owner/Operator City,State,Zip:	ONTARIO, CA 91761
Owner/Operator Telephone:	909-605-7370
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name: DELTA AIR LINES, INC	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1020 DELTA BLVD DEPT 885
Owner/Operator City,State,Zip:	ATLANTA, GA 30354-0000
Owner/Operator Telephone:	404-714-6061
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20031216
Handler Name: DELTA AIRLINES ONTARIO	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

DELTA AIRLINES ONTARIO (Continued) **1024807941**

List of NAICS Codes and Descriptions:
NAICS Code: 481112
NAICS Description: SCHEDULED FREIGHT AIR TRANSPORTATION

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

E21 **MICHAEL WESTER** **RCRA NonGen / NLR** **1026819738**
ESE **2500 E. AIRPORT DRIVE** **CAC003132588**
1/8-1/4 **ONTARIO, CA 91761**
0.201 mi.
1063 ft. **Site 4 of 12 in cluster E**

Relative: **Lower**
Actual: **952 ft.**

RCRA Listings:

Date Form Received by Agency:	20210803
Handler Name:	Michael Wester
Handler Address:	2500 E. AIRPORT DRIVE
Handler City,State,Zip:	ONTARIO, CA 91761
EPA ID:	CAC003132588
Contact Name:	MICHAEL WESTER
Contact Address:	1130 S. ARCHIBALD AVE
Contact City,State,Zip:	ONTARIO, CA 91761
Contact Telephone:	909-418-2601
Contact Fax:	Not reported
Contact Email:	GABRIELLEPGJ@GMAIL.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	1130 S. ARCHIBALD AVE
Mailing City,State,Zip:	ONTARIO, CA 91761
Owner Name:	Michael Wester
Owner Type:	Other
Operator Name:	Michael Wester
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No

MICHAEL WESTER (Continued) **1026819738**

Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20210804
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name: MICHAEL WESTER	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1130 S. ARCHIBALD AVE
Owner/Operator City,State,Zip:	ONTARIO, CA 91761
Owner/Operator Telephone:	909-418-2601
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name: MICHAEL WESTER	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1130 S. ARCHIBALD AVE
Owner/Operator City,State,Zip:	ONTARIO, CA 91761
Owner/Operator Telephone:	909-418-2601
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

MICHAEL WESTER (Continued) **1026819738**

Historic Generators:
Receive Date: 20210803
Handler Name: MICHAEL WESTER
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

E22 **UNIFI AVIATION, LLC.- ONTARIO** **FINDS** **1023708589**
ESE **2500 E AIRPORT DR** **ECHO** **N/A**
1/8-1/4 **ONTARIO, CA 91761** **PFAS ECHO**
0.201 mi.
1063 ft. **Site 5 of 12 in cluster E**

Relative:
Lower

Actual:
952 ft.

FINDS:
Registry ID: 110070119309

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:
The Resource Conservation and Recovery Act Information System (RCRAInfo) is EPA's comprehensive information system in support of the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. It tracks many types of information about generators, transporters, treaters, storers, and disposers of hazardous waste.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1023708589
Registry ID: 110070119309
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110070119309
Name: UNIFI AVIATION, LLC.- ONTARIO
Address: 2500 E AIRPORT DR
City,State,Zip: ONTARIO, CA 91761

PFAS ECHO:

UNIFI AVIATION, LLC.- ONTARIO (Continued) **1023708589**

Name:	UNIFI AVIATION, LLC.- ONTARIO
Address:	Not reported
City,State,Zip:	ONTARIO, CA
Latitude:	34.061921
Longitude:	-117.612034
Count:	1
County:	SAN BERNARDINO
Status:	Active
Region:	09
Industry:	Airports
ECHO Facility Report:	https://echo.epa.gov/detailed-facility-report?fid=110070119309
Facility Percent Minority:	82.311
Facility Derived Tribes:	San Manuel Band of Mission Indians, California - 22.6 mile(s), San Manuel Band of Mission Indians, California - 22.8 mile(s)
Facility Population:	4766.5
EPA Programs:	RCRA
Federal Facility:	No
Federal Agency:	-
Facility FIPS Code:	06071
Facility Indian Country Flag:	N
Facility Collection Method:	GDT-ADDRESS MATCHING (GEOCODING)
Facility Derived HUC:	18070203
Facility Derived WBD:	180702030704
Facility Derived CD113:	35
Facility Derived CB2010:	060710016002026
Facility Major Flag:	-
Facility Active Flag:	Y
Facility Inspection Count:	0
Facility Date Last Inspection:	-
Facility Days Last Inspection:	-
Facility Informal Count:	0
Facility Date Last Informal Action:	-
Facility Formal Action Count:	0
Facility Date Last Formal Action:	-
Facility Total Penalties:	0
Facility Penalty Count:	-
Facility Date Last Penalty:	-
Facility Last Penalty AMT:	-
Facility QTRS With NC:	0
Facility Programs With SNC:	0
Facility Compliance Status:	No Violation Identified
Facility SNC Flag:	N
AIR Flag:	N
NPDES Flag:	N
SDWIS Flag:	N
RCRA Flag:	Y
TRI Flag:	N
GHG Flag:	N
AIR IDS:	-
CAA Permit Types:	-
CAA NAICS:	-
CAA SICS:	-
NPDES IDS:	-
CWA Permit Types:	-
CWA NAICS:	-
CWA SICS:	-
RCRA IDS:	CAR000273326

UNIFI AVIATION, LLC.- ONTARIO (Continued) **1023708589**

RCRA Permit Types:	SQG
RCRA NAICS:	488119
SDWA IDS:	-
SDWA System Types:	-
SDWA Compliance Status:	-
SDWA SNC Flag:	N
TRI IDS:	-
TRI Releases Transfers:	-
TRI On Site Releases:	-
TRI Off Site Transfers:	-
TRI Reporter:	-
Facility IMP Water Flag:	-
EJSCREEN Flag US:	Y
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-117.612034,%22y%22:34.061921,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1

E23 **UNITED AIRLINES INC** **CA San Bern. Co. Permit** **S105048147**
ESE **2500 E AIRPORT DR STE 1211A** **N/A**
1/8-1/4 **ONTARIO, CA 91761**
0.201 mi.
1063 ft. **Site 6 of 12 in cluster E**

Relative: **Lower**

Actual: **952 ft.**

San Bern. Co. Permit:

Name:	UNITED AIRLINES INC
Address:	2500 E AIRPORT DR STE 1211A
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO
Facility ID:	FA0006904
Owner:	UNITED AIRLINES INC
Permit Number:	PT0007799
Permit Category:	SMALL QUANTITY GENERATOR
Facility Status:	INACTIVE
Expiration Date:	09/30/2016

Name:	UNITED AIRLINES INC
Address:	2500 E AIRPORT DR STE 1211A
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO
Facility ID:	FA0006904
Owner:	UNITED AIRLINES INC
Permit Number:	PT0007798
Permit Category:	HAZARDOUS MATERIALS 4-10 CHEMICALS
Facility Status:	INACTIVE
Expiration Date:	09/30/2016

E24
ESE
1/8-1/4
0.201 mi.
1063 ft.

Relative:
Lower

Actual:
952 ft.

AIRCRAFT SERVICE INTERNATIONAL GROUP (ASIG), ONT
2500 E. AIRPORT DRIVE
ONTARIO, CA 91761

Site 7 of 12 in cluster E

CA LUST **S108223679**
CA CERS HAZ WASTE **N/A**
CA Cortese
CA NPDES
CA San Bern. Co. Permit
CA CIWQS
CA CERS

LUST:

Name:	AIRCRAFT SERVICE INTERNATIONAL GROUP (ASIG), ONT
Address:	2500 E. AIRPORT DRIVE
City,State,Zip:	ONTARIO, CA 91761
Lead Agency:	SANTA ANA RWQCB (REGION 8)
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607181149
Global Id:	T0607181149
Latitude:	34.0600014921062
Longitude:	-117.601711750031
Status:	Completed - Case Closed
Status Date:	10/11/2016
Case Worker:	MAO
RB Case Number:	T0607181149
Local Agency:	SAN BERNARDINO COUNTY
File Location:	Regional Board
Local Case Number:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Aviation
EPA Region:	9
Coordinate Source:	Manual Entry on Screens
Cuf Case:	NO
Quantity Released Gallons:	5500
Begin Date:	06/19/2006
Leak Reported Date:	06/19/2006
How Discovered:	Other Means
How Discovered Description:	SURFACE SPILL
Discharge Source:	Other
Discharge Cause:	Overfill
Stop Method:	Other Means
Stop Description:	EMERGENCY SHUTOFF
No Further Action Date:	10/11/2016
CA Water Watershed Name:	Santa Ana River - Middle Santa Ana River - Chino (Split) (801.21)
Dwr Groundwater Subbasin Name:	Upper Santa Ana Valley - Chino (8-002.01)
Disadvantaged Community:	Severely Disadvantaged Community
CA Enviroscreen 3 Score:	96-100% (highest scores)
CA Enviroscreen 4 Score:	95-100% (highest scores)
Military DOD Site:	No
Facility Project Subtype:	Not reported
RWQCB Region:	SANTA ANA RWQCB (REGION 8)
Site History:	,

LUST:

Global Id:	T0607181149
Contact Type:	Local Agency Caseworker
Contact Name:	JACKSON CRUTSINGER
Organization Name:	SAN BERNARDINO COUNTY
Address:	620 SOUTH E STREET
City:	SAN BERNARDINO
Email:	jcrutsinger@sbcfire.org
Phone Number:	Not reported

AIRCRAFT SERVICE INTERNATIONAL GROUP (ASIG), ONT (Continued) **S108223679**

Global Id:	T0607181149
Contact Type:	Regional Board Caseworker - Primary Caseworker
Contact Name:	MIGUEL OVIEDO
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 Main Street, Suite 500
City:	RIVERSIDE
Email:	miguel.oviedo@waterboards.ca.gov
Phone Number:	9517823238

LUST:

Global Id:	T0607181149
Action Type:	ENFORCEMENT
Date:	10/11/2016
Action:	Closure/No Further Action Letter
Global Id:	T0607181149
Action Type:	Other
Date:	06/19/2006
Action:	Leak Reported
Global Id:	T0607181149
Action Type:	ENFORCEMENT
Date:	03/22/2011
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0607181149
Action Type:	ENFORCEMENT
Date:	05/09/2012
Action:	File review
Global Id:	T0607181149
Action Type:	ENFORCEMENT
Date:	12/17/2012
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0607181149
Action Type:	ENFORCEMENT
Date:	04/09/2010
Action:	Referral to Regional Board
Global Id:	T0607181149
Action Type:	ENFORCEMENT
Date:	10/13/2013
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0607181149
Action Type:	RESPONSE
Date:	08/24/2014
Action:	Request for Closure - Regulator Responded
Global Id:	T0607181149
Action Type:	RESPONSE
Date:	04/20/2014
Action:	Site Investigation Workplan - Regulator Responded
Global Id:	T0607181149
Action Type:	RESPONSE

AIRCRAFT SERVICE INTERNATIONAL GROUP (ASIG), ONT (Continued) **S108223679**

Date: 08/24/2014
Action: Other Workplan - Regulator Responded

Global Id: T0607181149
Action Type: RESPONSE
Date: 09/28/2014
Action: Respond to Petition - Regulator Responded

Global Id: T0607181149
Action Type: RESPONSE
Date: 08/20/2014
Action: Preliminary Site Assessment Workplan - Addendum - Regulator Responded

Global Id: T0607181149
Action Type: RESPONSE
Date: 11/03/2016
Action: Other Workplan - Regulator Responded

Global Id: T0607181149
Action Type: RESPONSE
Date: 07/20/2016
Action: Request for Closure - Regulator Responded

Global Id: T0607181149
Action Type: RESPONSE
Date: 06/20/2016
Action: Request for Closure - Regulator Responded

Global Id: T0607181149
Action Type: RESPONSE
Date: 08/02/2016
Action: Request for Closure - Regulator Responded

Global Id: T0607181149
Action Type: RESPONSE
Date: 08/30/2016
Action: Other Report / Document - Regulator Responded

Global Id: T0607181149
Action Type: REMEDIATION
Date: 06/19/2010
Action: Excavation

Global Id: T0607181149
Action Type: ENFORCEMENT
Date: 01/12/2010
Action: Staff Letter

Global Id: T0607181149
Action Type: ENFORCEMENT
Date: 02/05/2015
Action: Email Correspondence

Global Id: T0607181149
Action Type: ENFORCEMENT
Date: 03/16/2016
Action: Technical Correspondence / Assistance / Other

AIRCRAFT SERVICE INTERNATIONAL GROUP (ASIG), ONT (Continued) **S108223679**

Global Id: T0607181149
Action Type: Other
Date: 06/19/2006
Action: Leak Discovery

Global Id: T0607181149
Action Type: RESPONSE
Date: 07/28/2016
Action: Other Report / Document

LUST:
Global Id: T0607181149
Status: Open - Assessment & Interim Remedial Action
Status Date: 06/19/2006

Global Id: T0607181149
Status: Open - Case Begin Date
Status Date: 06/19/2006

Global Id: T0607181149
Status: Open - Site Assessment
Status Date: 06/19/2006

Global Id: T0607181149
Status: Open - Eligible for Closure
Status Date: 08/01/2016

Global Id: T0607181149
Status: Completed - Case Closed
Status Date: 10/11/2016

CERS HAZ WASTE:
Name: TRANSPORTATION SECURITY ADMINISTRATION (ONT)
Address: 2500 E AIRPORT DR
City,State,Zip: ONTARIO, CA 91761
Site ID: 77539
CERS ID: 10487590
CERS Description: Hazardous Waste Generator

CORTESE:
Name: AIRCRAFT SERVICE INTERNATIONAL GROUP (ASIG), ONT
Address: 2500 E. AIRPORT DRIVE
City,State,Zip: ONTARIO, CA 91761
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0607181149
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported

AIRCRAFT SERVICE INTERNATIONAL GROUP (ASIG), ONT (Continued) **S108223679**

Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

NPDES:

Name:	ONTARIO AIRPORT PARKING LOT 6
Address:	2500 E AIRPORT DR
City,State,Zip:	ONTARIO, CA 91761
Facility Status:	Active
NPDES Number:	CAS000002
Region:	8
Agency Number:	0
Regulatory Measure ID:	553510
Place ID:	Not reported
Order Number:	2009-0009-DWQ
WDID:	8 36C398642
Regulatory Measure Type:	Enrollee
Program Type:	Construction
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	09/15/2022
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	303 E B Street
Discharge Name:	Ontario International Airport Authority
Discharge City:	Ontario
Discharge State:	California
Discharge Zip:	91764
Status:	Not reported
Status Date:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported

Name:	ONTARIO AIRPORT PARKING LOT 6
Address:	2500 E AIRPORT DR
City,State,Zip:	ONTARIO, CA 91761
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	8 36C398642
Regulatory Measure Type:	Construction
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported

AIRCRAFT SERVICE INTERNATIONAL GROUP (ASIG), ONT (Continued) **S108223679**

Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Active
Status Date:	09/15/2022
Operator Name:	Ontario International Airport Authority
Operator Address:	303 E B Street
Operator City:	Ontario
Operator State:	California
Operator Zip:	91764

San Bern. Co. Permit:

Name:	TRANSPORTATION SECURITY ADMINISTRATION (ONT)
Address:	2500 E AIRPORT DR
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO
Facility ID:	FA0011617
Owner:	Transportation Security Administration
Permit Number:	PT0020061
Permit Category:	SMALL QUANTITY GENERATOR
Facility Status:	ACTIVE
Expiration Date:	05/31/2023

Name:	TRANSPORTATION SECURITY ADMINISTRATION (ONT)
Address:	2500 E AIRPORT DR
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO
Facility ID:	FA0011617
Owner:	Transportation Security Administration
Permit Number:	PT0020060
Permit Category:	HAZARDOUS MATERIALS 4-10 CHEMICALS
Facility Status:	ACTIVE
Expiration Date:	05/31/2023

Name:	ALASKA AIRLINES INC
Address:	2500 E AIRPORT DR
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO
Facility ID:	FA0000800
Owner:	ALASKA AIRLINES INC
Permit Number:	PT0040092
Permit Category:	SMALL QUANTITY GENERATOR
Facility Status:	INACTIVE
Expiration Date:	05/31/2022

Name:	ALASKA AIRLINES INC
Address:	2500 E AIRPORT DR
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO
Facility ID:	FA0000800
Owner:	ALASKA AIRLINES INC
Permit Number:	PT0008646
Permit Category:	HAZARDOUS MATERIALS 4-10 CHEMICALS
Facility Status:	INACTIVE

AIRCRAFT SERVICE INTERNATIONAL GROUP (ASIG), ONT (Continued) **S108223679**

Expiration Date: 05/31/2022

CIWQS:

Name:	ONTARIO AIRPORT PARKING LOT 6
Address:	2500 E AIRPORT DR
City,State,Zip:	ONTARIO, CA 91761
Agency:	Ontario International Airport Authority
Agency Address:	303 E B Street, Ontario, CA 91764
Place/Project Type:	Construction - Other: Parking Lot
SIC/NAICS:	Not reported
Region:	8
Program:	CONSTW
Regulatory Measure Status:	Active
Regulatory Measure Type:	Storm water construction
Order Number:	2009-0009-DWQ
WDID:	8 36C398642
NPDES Number:	CAS000002
Adoption Date:	Not reported
Effective Date:	09/15/2022
Termination Date:	Not reported
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	34.06028
Longitude:	-117.59727

CERS:

Name:	TRANSPORTATION SECURITY ADMINISTRATION (ONT)
Address:	2500 E AIRPORT DR
City,State,Zip:	ONTARIO, CA 91761
Site ID:	77539
CERS ID:	10487590
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	77539
Site Name:	Transportation Security Administration (ONT)
Violation Date:	07-31-2013
Citation:	HSC 6.95 25505(a) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)
Violation Description:	Owner/Operator failed to complete and/or submit a Hazardous Materials Business Plan when storing hazardous materials at or above the thresholds quantities of 55 gallons/500 lbs/200 cubic feet.
Violation Notes:	Returned to compliance on 08/28/2013.
Violation Division:	San Bernardino County Fire Department
Violation Program:	HMRRP
Violation Source:	CERS,

Evaluation:

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	03-05-2020
Violations Found:	No

AIRCRAFT SERVICE INTERNATIONAL GROUP (ASIG), ONT (Continued) **S108223679**

Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-09-2023
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-17-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: ROUTINE GENERATOR INSPECTION-ONTARIO AIRPORT TSA
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-09-2023
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-31-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: ROUTINE GENERATOR INSPECTION-TSA
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-31-2013
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: ROUTINE HANDLER INSPECTION-TSA
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-05-2020
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department

AIRCRAFT SERVICE INTERNATIONAL GROUP (ASIG), ONT (Continued) **S108223679**

Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-17-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: ROUTINE HANDLER INSPECTION-ONTARIO AIRPORT TSA
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Enforcement Action:
Site ID: 77539
Site Name: Transportation Security Administration (ONT)
Site Address: 2500 E AIRPORT DR
Site City: ONTARIO
Site Zip: 91761
Enf Action Date: 07-31-2013
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: San Bernardino County Fire Department
Enf Action Program: HMRRP
Enf Action Source: CERS,

Affiliation:
Affiliation Type Desc: Parent Corporation
Entity Name: Transportation Security Administration (ONT)
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: CUPA District
Entity Name: San Bernardino County Fire
Entity Title: Not reported
Affiliation Address: 620 South E Street
Affiliation City: San Bernardino
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92415-0153
Affiliation Phone: (909) 386-8401,

Affiliation Type Desc: Identification Signer
Entity Name: Leslie Husted
Entity Title: EMC
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

AIRCRAFT SERVICE INTERNATIONAL GROUP (ASIG), ONT (Continued) **S108223679**

Affiliation Type Desc:	Legal Owner
Entity Name:	TRANSPORTATION SECURITY ADMINISTRATION
Entity Title:	Not reported
Affiliation Address:	3200 E Guasti Rd, Suite 250
Affiliation City:	Ontario
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	91761
Affiliation Phone:	(949) 573-7780,

Affiliation Type Desc:	Document Preparer
Entity Name:	Amber Kennedy, Leidos
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Environmental Contact
Entity Name:	Jonathan Michaels
Entity Title:	Not reported
Affiliation Address:	3200 E Guasti Rd, Suite 250
Affiliation City:	Ontario
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	91761
Affiliation Phone:	,

Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	3200 E Guasti Rd, Suite 250
Affiliation City:	Ontario
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	91761
Affiliation Phone:	,

Affiliation Type Desc:	Operator
Entity Name:	TSA
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(909) 472-0108,

Name:	AIRCRAFT SERVICE INTERNATIONAL GROUP (ASIG), ONT
Address:	2500 E. AIRPORT DRIVE
City,State,Zip:	ONTARIO, CA 91761
Site ID:	632642
CERS ID:	T0607181149
CERS Description:	Leaking Underground Storage Tank Cleanup Site

AIRCRAFT SERVICE INTERNATIONAL GROUP (ASIG), ONT (Continued) **S108223679**

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	JACKSON CRUTSINGER - SAN BERNARDINO COUNTY
Entity Title:	Not reported
Affiliation Address:	620 SOUTH E STREET
Affiliation City:	SAN BERNARDINO
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Regional Board Caseworker
Entity Name:	MIGUEL OVIEDO - SANTA ANA RWQCB (REGION 8)
Entity Title:	Not reported
Affiliation Address:	3737 Main Street, Suite 500
Affiliation City:	RIVERSIDE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	9517823238,

Name:	ONTARIO AIRPORT PARKING LOT 6
Address:	2500 E AIRPORT DR
City,State,Zip:	ONTARIO, CA 91761
Site ID:	622369
CERS ID:	907203
CERS Description:	Construction Storm Water

E25 **SKYWEST AIRLINES INC** **RCRA NonGen / NLR** **1024852899**
ESE **2500 E AIRPORT DR STE 1211A** **CAL000412202**
1/8-1/4 **ONTARIO, CA 91761**
0.201 mi.
1063 ft. **Site 8 of 12 in cluster E**

Relative: **Lower**

Actual: **952 ft.**

RCRA Listings:

Date Form Received by Agency:	20151106
Handler Name:	Skywest Airlines Inc
Handler Address:	2500 E AIRPORT DR STE 1211A
Handler City,State,Zip:	ONTARIO, CA 91761-2132
EPA ID:	CAL000412202
Contact Name:	TUFI NAEA
Contact Address:	2500 E AIRPORT DR STE 1211A
Contact City,State,Zip:	ONTARIO, CA 91761-2132
Contact Telephone:	909-605-2220
Contact Fax:	909-605-2830
Contact Email:	TNAEA@SKYWEST.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported

SKYWEST AIRLINES INC (Continued) **1024852899**

Mailing Address:	1202 PACIFIC CT
Mailing City,State,Zip:	FORT LUPTON, CO 80621
Owner Name:	Skywest Airlines Inc
Owner Type:	Other
Operator Name:	Tufi Naea
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20181120
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name: SKYWEST AIRLINES INC	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	444 S RIVER RD
Owner/Operator City,State,Zip:	ST GEORGE, UT 84790
Owner/Operator Telephone:	435-634-3000

SKYWEST AIRLINES INC (Continued) **1024852899**

Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: TUFI NAEA
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 2500 E AIRPORT DR STE 1211A
Owner/Operator City,State,Zip: ONTARIO, CA 91761-2132
Owner/Operator Telephone: 909-605-2220
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20151106
Handler Name: SKYWEST AIRLINES INC
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: Not reported
Recognized Trader Exporter: Not reported
Spent Lead Acid Battery Importer: Not reported
Spent Lead Acid Battery Exporter: Not reported
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 481112
NAICS Description: SCHEDULED FREIGHT AIR TRANSPORTATION

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

E26 **TRANSPORTATION SECURITY ADMINISTRATION AT ONTARIO** **RCRA-VSQG** **1011488120**
ESE **2500 E AIRPORT DR** **CAR000192575**
1/8-1/4 **ONTARIO, CA 91761**
0.201 mi.
1063 ft. **Site 9 of 12 in cluster E**

Relative: RCRA Listings:
Lower
Date Form Received by Agency: 20220201
Actual: Handler Name: Transportation Security Administration At Ontario Intl Airport
952 ft. Handler Address: 2500 E AIRPORT DR
Handler City,State,Zip: ONTARIO, CA 91761
EPA ID: CAR000192575
Contact Name: TERRELL BOWIE
Contact Address: E GUASTI RD
Contact City,State,Zip: ONTARIO, CA 91761

TRANSPORTATION SECURITY ADMINISTRATION AT ONTARIO INTL AIRPO (Continued) **1011488120**

Contact Telephone:	909-418-6607
Contact Fax:	Not reported
Contact Email:	TERRELL.BOWIE@TSA.DHS.GOV
Contact Title:	EMC
EPA Region:	09
Land Type:	Other
Federal Waste Generator Description:	Conditionally Exempt Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	2021
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	E GUASTI RD
Mailing City,State,Zip:	ONTARIO, CA 91761
Owner Name:	Ontario Int'L Airport Authority
Owner Type:	Other
Operator Name:	Transportation Security Administration
Operator Type:	Federal
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	The site is federally-operated
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20220603
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No

TRANSPORTATION SECURITY ADMINISTRATION AT ONTARIO INTL AIRPO (Continued) **1011488120**

Manifest Broker: No
Sub-Part P Indicator: No

Biennial: List of Years
Year: 2021

Click Here for Biennial Reporting System Data:
Year: 2019

Click Here for Biennial Reporting System Data:

Hazardous Waste Summary:
Waste Code: D001
Waste Description: Ignitable Waste

Waste Code: D002
Waste Description: Corrosive Waste

Waste Code: D003
Waste Description: Reactive Waste

Waste Code: D006
Waste Description: Cadmium

Waste Code: D008
Waste Description: Lead

Waste Code: D009
Waste Description: Mercury

Waste Code: D035
Waste Description: Methyl Ethyl Ketone

Waste Code: U002
Waste Description: 2-Propanone (I) (Or) Acetone (I)

Waste Code: U080
Waste Description: Methane, Dichloro- (Or) Methylene Chloride

Handler - Owner Operator:
Owner/Operator Indicator: Operator
Owner/Operator Name: TSA
Legal Status: Federal
Date Became Current: 20000101
Date Ended Current: Not reported
Owner/Operator Address: Not reported
Owner/Operator City,State,Zip: Not reported
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: TSA
Legal Status: Federal
Date Became Current: 20000101

TRANSPORTATION SECURITY ADMINISTRATION AT ONTARIO INTL AIRPO (Continued) **1011488120**

Date Ended Current: Not reported
Owner/Operator Address: Not reported
Owner/Operator City,State,Zip: Not reported
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: ONTARIO INT'L AIRPORT AUTHORITY
Legal Status: Other
Date Became Current: 19460501
Date Ended Current: Not reported
Owner/Operator Address: 1923 E AVION ST
Owner/Operator City,State,Zip: ONTARIO, CA 91761
Owner/Operator Telephone: 909-544-5300
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: UNKNOWN@UNKNOWN.COM

Owner/Operator Indicator: Owner
Owner/Operator Name: CITY OF LOS ANGELES
Legal Status: Other
Date Became Current: 19300101
Date Ended Current: Not reported
Owner/Operator Address: NO 1 WORLD WAY
Owner/Operator City,State,Zip: LOS ANGELES, CA 90009
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: TSA
Legal Status: Federal
Date Became Current: 20000101
Date Ended Current: Not reported
Owner/Operator Address: Not reported
Owner/Operator City,State,Zip: Not reported
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: ONTARIO INT'L AIRPORT AUTHORITY
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 1923 E AVION ST
Owner/Operator City,State,Zip: ONTARIO, CA 91761
Owner/Operator Telephone: 909-544-5300
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner

TRANSPORTATION SECURITY ADMINISTRATION AT ONTARIO INTL AIRPO (Continued) **1011488120**

Owner/Operator Name: CITY OF LOS ANGELES
Legal Status: Other
Date Became Current: 19300101
Date Ended Current: Not reported
Owner/Operator Address: NO 1 WORLD WAY
Owner/Operator City,State,Zip: LOS ANGELES, CA 90009
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: ONTARIO INT'L AIRPORT AUTHORITY
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 1923 E AVION ST
Owner/Operator City,State,Zip: ONTARIO, CA 91761
Owner/Operator Telephone: 909-544-5300
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: TRANSPORTATION SECURITY ADMINISTRATION
Legal Status: Federal
Date Became Current: 20000101
Date Ended Current: Not reported
Owner/Operator Address: 3200 E GUASTI RD
Owner/Operator City,State,Zip: ONTARIO, CA 91761
Owner/Operator Telephone: 909-418-6607
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: TERRELL.BOWIE@TSA.DHS.GOV

Owner/Operator Indicator: Operator
Owner/Operator Name: TRANSPORTATION SECURITY ADMINISTRATION
Legal Status: Federal
Date Became Current: 20000101
Date Ended Current: Not reported
Owner/Operator Address: 3200 E GUASTI RD
Owner/Operator City,State,Zip: ONTARIO, CA 91761
Owner/Operator Telephone: 909-418-6607
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: TERRELL.BOWIE@TSA.DHS.GOV

Owner/Operator Indicator: Owner
Owner/Operator Name: CITY OF LOS ANGELES
Legal Status: Other
Date Became Current: 19300101
Date Ended Current: Not reported
Owner/Operator Address: NO 1 WORLD WAY
Owner/Operator City,State,Zip: LOS ANGELES, CA 90009
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported

TRANSPORTATION SECURITY ADMINISTRATION AT ONTARIO INTL AIRPO (Continued) **1011488120**

Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: CITY OF LOS ANGELES
Legal Status: Other
Date Became Current: 19300101
Date Ended Current: Not reported
Owner/Operator Address: NO 1 WORLD WAY
Owner/Operator City,State,Zip: LOS ANGELES, CA 90009
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: TRANSPORTATION SECURITY ADMINISTRATION
Legal Status: Federal
Date Became Current: 20000101
Date Ended Current: Not reported
Owner/Operator Address: 3200 E GUASTI RD
Owner/Operator City,State,Zip: ONTARIO, CA 91761
Owner/Operator Telephone: 909-418-6607
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: TERRELL.BOWIE@TSA.DHS.GOV

Historic Generators:
Receive Date: 20200413
Handler Name: TRANSPORTATION SECURITY ADMINISTRATION AT ONTARIO INTL AIRPORT
Federal Waste Generator Description: Conditionally Exempt Small Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: Yes
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

Receive Date: 20220201
Handler Name: TRANSPORTATION SECURITY ADMINISTRATION AT ONTARIO INTL AIRPORT
Federal Waste Generator Description: Conditionally Exempt Small Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

Receive Date: 20100714
Handler Name: TSA AT ONTARIO INTL AIRPORT
Federal Waste Generator Description: Small Quantity Generator
State District Owner: Not reported

TRANSPORTATION SECURITY ADMINISTRATION AT ONTARIO INTL AIRPO (Continued) **1011488120**

Large Quantity Handler of Universal Waste: Yes
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20080523
Handler Name: TSA AT ONTARIO INTL AIRPORT
Federal Waste Generator Description: Small Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20171106
Handler Name: TRANSPORTATION SECURITY ADMINISTRATION AT ONTARIO INTL AIRPORT
Federal Waste Generator Description: Conditionally Exempt Small Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: Yes
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Code: 488119
NAICS Description: OTHER AIRPORT OPERATIONS

NAICS Code: 926120
NAICS Description: REGULATION AND ADMINISTRATION OF TRANSPORTATION PROGRAMS

NAICS Code: 92811
NAICS Description: NATIONAL SECURITY

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

E27
ESE
1/8-1/4
0.201 mi.
1063 ft.

Relative:
Lower

Actual:
952 ft.

ONTARIO INTERNATIONAL AIRPORT
2500 E AIRPORT DR
ONTARIO, CA 91761

Site 10 of 12 in cluster E

CA HAULERS
CA CERS HAZ WASTE
CA AQUEOUS FOAM
CA NPDES
CA San Bern. Co. Permit
CA CIWQS
CA CERS

S119086494
N/A

HAULERS:

Name:	UNIFI
Address:	2500 EAST AIRPORT DRIVE - SUITE 1259
City,State,Zip:	ONTARIO, CA 91761
Facility ID:	1950424
Facility Phone:	(909) 605-7390
Business Email Address:	Not reported
Contact Person:	Art Slayton
Mailing Address:	980 Virginia Avenue - Department 937, Environmental
Mailing City:	Atlanta
Mailing State:	GA
Mailing Zip:	30354
Mailing County:	Not reported
Mailing Phone:	(470) 630-2448
Current Status:	Active
Current Hauler Status:	Not reported
Accepting Tires From Public:	Not reported
Regulatory Status Last Changed:	2021-09-07 13:17:31
Business Types:	Not reported

CERS HAZ WASTE:

Name:	UNIFI AVIATION, LLC - ONT
Address:	2500 E AIRPORT DR STE 1259
City,State,Zip:	ONTARIO, CA 91761
Site ID:	364979
CERS ID:	10411489
CERS Description:	Hazardous Waste Generator

AQUEOUS FOAM:

Object ID:	26
Name:	ONTARIO INTERNATIONAL AIRPORT
Address:	2500 E AIRPORT DR
City,State,Zip:	ONTARIO, CA
Airport ID:	ONT
Airport Class:	Medium Hub
Lead Agency:	Santa Ana Regional Water quality Control Board (8)
Lead Agency Name:	Mehrnoosh Behrooz
Contact URL:	https://www.waterboards.ca.gov/pfas/regional_board_contacts.html
Global ID:	T10000012784
Geotracker:	http://geotracker.waterboards.ca.gov/profile_report?global_id=T10000012861
Latitude:	34.06033000
Longitude:	-117.59716000
Envirostor ID:	Not reported
Program Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Calenviroscreen Score:	Not reported
Site Code:	Not reported

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

NPDES:

Name:	ONTARIO INTERNATIONAL AIRPORT
Address:	2500 E AIRPORT DR
City,State,Zip:	ONTARIO, CA 91761
Facility Status:	Active
NPDES Number:	CAS000001
Region:	8
Agency Number:	0
Regulatory Measure ID:	479771
Place ID:	Not reported
Order Number:	97-03-DWQ
WDID:	8 36I026885
Regulatory Measure Type:	Enrollee
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	10/25/2016
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	303 E B Street
Discharge Name:	Ontario International Airport Authority
Discharge City:	Ontario
Discharge State:	California
Discharge Zip:	91764
Status:	Not reported
Status Date:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported

NPDES as of 03/2018:

NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	8
Regulatory Measure ID:	479771
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	8 36I026885
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	10/18/2016
Processed Date:	10/25/2016
Status:	Active
Status Date:	10/25/2016
Place Size:	1463
Place Size Unit:	Acres

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Contact:	Kelly Fredericks
Contact Title:	CEO
Contact Phone:	909-395-2400
Contact Phone Ext:	Not reported
Contact Email:	kfredericks@ontariooiaa.com
Operator Name:	Ontario International Airport Authority
Operator Address:	303 E B Street
Operator City:	Ontario
Operator State:	California
Operator Zip:	91764
Operator Contact:	Kelly Fredericks
Operator Contact Title:	CEO
Operator Contact Phone:	909-395-2400
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	kfredericks@ontariooiaa.com
Operator Type:	Private Business
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	California
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	N
Receiving Water Name:	Santa Ana River
Certifier:	Kelly Fredericks
Certifier Title:	CEO
Certification Date:	18-OCT-16
Primary Sic:	4581-Airports, Flying Fields, and Airport Terminal Services
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	CAS000001
Status:	Active
Agency Number:	0
Region:	8
Regulatory Measure ID:	479771
Order Number:	97-03-DWQ

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	8 36I026885
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	10/25/2016
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Ontario International Airport Authority
Discharge Address:	303 E B Street
Discharge City:	Ontario
Discharge State:	California
Discharge Zip:	91764
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

Name:	OIAA TAXIWAY S
Address:	2500 E AIRPORT DRIVE
City,State,Zip:	ONTARIO, CA 91761
Facility Status:	Terminated
NPDES Number:	CAS000002
Region:	8
Agency Number:	0
Regulatory Measure ID:	532919
Place ID:	Not reported
Order Number:	2009-0009-DWQ
WDID:	8 36C393246
Regulatory Measure Type:	Enrollee
Program Type:	Construction
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	03/23/2021
Termination Date Of Regulatory Measure:	12/02/2021
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	303 E B Street
Discharge Name:	Ontario International Airport Authority
Discharge City:	Ontario
Discharge State:	California
Discharge Zip:	91764
Status:	Not reported
Status Date:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported

Name:	ONTARIO INTERNATIONAL AIRPORT
Address:	2500 E AIRPORT DR
City,State,Zip:	ONTARIO, CA 91761
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	8 36I026885
Regulatory Measure Type:	Industrial
Program Type:	Not reported

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Active
Status Date:	10/25/2016
Operator Name:	Ontario International Airport Authority
Operator Address:	303 E B Street
Operator City:	Ontario
Operator State:	California
Operator Zip:	91764

NPDES as of 03/2018:

NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	8
Regulatory Measure ID:	479771
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	8 36I026885
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	10/18/2016
Processed Date:	10/25/2016
Status:	Active
Status Date:	10/25/2016
Place Size:	1463
Place Size Unit:	Acres
Contact:	Kelly Fredericks
Contact Title:	CEO
Contact Phone:	909-395-2400
Contact Phone Ext:	Not reported
Contact Email:	kfredericks@ontariooiaa.com
Operator Name:	Ontario International Airport Authority
Operator Address:	303 E B Street
Operator City:	Ontario
Operator State:	California
Operator Zip:	91764
Operator Contact:	Kelly Fredericks
Operator Contact Title:	CEO
Operator Contact Phone:	909-395-2400
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	kfredericks@ontariooiaa.com

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Operator Type:	Private Business
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	California
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	N
Receiving Water Name:	Santa Ana River
Certifier:	Kelly Fredericks
Certifier Title:	CEO
Certification Date:	18-OCT-16
Primary Sic:	4581-Airports, Flying Fields, and Airport Terminal Services
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	CAS000001
Status:	Active
Agency Number:	0
Region:	8
Regulatory Measure ID:	479771
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	8 36I026885
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	10/25/2016
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Ontario International Airport Authority
Discharge Address:	303 E B Street
Discharge City:	Ontario
Discharge State:	California
Discharge Zip:	91764
Received Date:	Not reported
Processed Date:	Not reported

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

Name: OIAA TAXIWAY S

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Address:	2500 E AIRPORT DRIVE
City,State,Zip:	ONTARIO, CA 91761
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	8 36C393246
Regulatory Measure Type:	Construction
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Terminated
Status Date:	12/16/2021
Operator Name:	Ontario International Airport Authority
Operator Address:	303 E B Street
Operator City:	Ontario
Operator State:	California
Operator Zip:	91764

Name:	OIAA TAXIWAY S
Address:	2500 E AIRPORT DRIVE
City,State,Zip:	ONTARIO, CA 91761
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	8 36C393246
Regulatory Measure Type:	Construction
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Terminated
Status Date:	12/16/2021
Operator Name:	Ontario International Airport Authority
Operator Address:	303 E B Street
Operator City:	Ontario
Operator State:	California

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Operator Zip:	91764
Name:	OIAA TAXIWAY S
Address:	2500 E AIRPORT DRIVE
City,State,Zip:	ONTARIO, CA 91761
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	8 36C393246
Regulatory Measure Type:	Construction
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Terminated
Status Date:	12/16/2021
Operator Name:	Ontario International Airport Authority
Operator Address:	303 E B Street
Operator City:	Ontario
Operator State:	California
Operator Zip:	91764
Name:	OIAA TAXIWAY S
Address:	2500 E AIRPORT DRIVE
City,State,Zip:	ONTARIO, CA 91761
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	8 36C393246
Regulatory Measure Type:	Construction
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Terminated
Status Date:	12/16/2021
Operator Name:	Ontario International Airport Authority

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Operator Address:	303 E B Street
Operator City:	Ontario
Operator State:	California
Operator Zip:	91764
Name:	TAXIWAY S AND W
Address:	2500 E AIRPORT DRIVE
City,State,Zip:	ONTARIO, CA 91761
Facility Status:	Terminated
NPDES Number:	CAS000002
Region:	8
Agency Number:	0
Regulatory Measure ID:	495269
Place ID:	Not reported
Order Number:	2009-0009-DWQ
WDID:	8 36C382579
Regulatory Measure Type:	Enrollee
Program Type:	Construction
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	02/26/2018
Termination Date Of Regulatory Measure:	12/02/2021
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	303 E B Street
Discharge Name:	Ontario International Airport Authority
Discharge City:	Ontario
Discharge State:	California
Discharge Zip:	91764
Status:	Not reported
Status Date:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported

NPDES as of 03/2018:

NPDES Number:	CAS000002
Status:	Active
Agency Number:	0
Region:	8
Regulatory Measure ID:	495269
Order Number:	2009-0009-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	8 36C382579
Program Type:	Construction
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	02/26/2018
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Ontario International Airport Authority
Discharge Address:	303 E B Street
Discharge City:	Ontario
Discharge State:	California
Discharge Zip:	91764
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

San Bern. Co. Permit:
Name: UNIFI AVIATION, LLC - ONT

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Address: 2500 E AIRPORT DR STE 1259
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0017002
Owner: UNIFI AVIATION, LLC
Permit Number: PT0036345
Permit Category: SMALL QUANTITY GENERATOR
Facility Status: ACTIVE
Expiration Date: 10/31/2023

Name: UNIFI AVIATION, LLC - ONT
Address: 2500 E AIRPORT DR STE 1259
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0017002
Owner: UNIFI AVIATION, LLC
Permit Number: PT0036344
Permit Category: HAZARDOUS MATERIALS 1-3 CHEMICALS
Facility Status: ACTIVE
Expiration Date: 10/31/2023

Name: DELTA AIR LINES, INC.
Address: 2500 E AIRPORT DR STE 1259
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0002679
Owner: Delta Air Lines, Inc.
Permit Number: PT0005688
Permit Category: HAZARDOUS MATERIALS 1-3 CHEMICALS SPECIAL
Facility Status: ACTIVE
Expiration Date: 10/31/2023

Name: UNITED GROUND EXPRESS
Address: 2500 E AIRPORT DR
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0018764
Owner: UNITED AIRLINES INC
Permit Number: PT0040542
Permit Category: HAZARDOUS MATERIALS 1-3 CHEMICALS SPECIAL
Facility Status: ACTIVE
Expiration Date: 04/30/2023

Name: SKYWEST AIRLINES, INC
Address: 2500 E AIRPORT DR STE 1211A
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0016229
Owner: SkyWest Airlines
Permit Number: PT0034998
Permit Category: CONDITIONALLY EXEMPT SM QTY GENERATOR
Facility Status: INACTIVE
Expiration Date: 10/31/2019

Name: SKYWEST AIRLINES, INC
Address: 2500 E AIRPORT DR STE 1211A
City,State,Zip: ONTARIO, CA 91761

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Region: SAN BERNARDINO
Facility ID: FA0016229
Owner: SkyWest Airlines
Permit Number: PT0034997
Permit Category: HAZARDOUS MATERIALS 1-3 CHEMICALS
Facility Status: INACTIVE
Expiration Date: 10/31/2019

CIWQS:

Name:	OIAA TAXIWAY S
Address:	2500 E AIRPORT DRIVE
City,State,Zip:	ONTARIO, CA 91761
Agency:	Ontario International Airport Authority
Agency Address:	303 E B Street, Ontario, CA 91764
Place/Project Type:	Construction - Transportation
SIC/NAICS:	Not reported
Region:	8
Program:	CONSTW
Regulatory Measure Status:	Terminated
Regulatory Measure Type:	Storm water construction
Order Number:	2009-0009-DWQ
WDID:	8 36C393246
NPDES Number:	CAS000002
Adoption Date:	Not reported
Effective Date:	03/23/2021
Termination Date:	12/02/2021
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	34.053842
Longitude:	-117.607341

Name:	TAXIWAY S AND W
Address:	2500 E AIRPORT DRIVE
City,State,Zip:	ONTARIO, CA 91761
Agency:	Ontario International Airport Authority
Agency Address:	303 E B Street, Ontario, CA 91764
Place/Project Type:	Construction - Industrial, Transportation
SIC/NAICS:	Not reported
Region:	8
Program:	CONSTW
Regulatory Measure Status:	Terminated
Regulatory Measure Type:	Storm water construction
Order Number:	2009-0009-DWQ
WDID:	8 36C382579
NPDES Number:	CAS000002
Adoption Date:	Not reported
Effective Date:	02/26/2018
Termination Date:	12/02/2021
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	34.053189
Longitude:	-117.583611
Name:	ONTARIO INTERNATIONAL AIRPORT
Address:	2500 E AIRPORT DR
City,State,Zip:	ONTARIO, CA 91761
Agency:	Ontario International Airport Authority
Agency Address:	303 E B Street, Ontario, CA 91764
Place/Project Type:	Industrial - Airports, Flying Fields, and Airport Terminal Services
SIC/NAICS:	4581
Region:	8
Program:	INDSTW
Regulatory Measure Status:	Active
Regulatory Measure Type:	Storm water industrial
Order Number:	2014-0057-DWQ
WDID:	8 36I026885
NPDES Number:	CAS000001
Adoption Date:	Not reported
Effective Date:	10/25/2016
Termination Date:	Not reported
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	1
Violations within 5 years:	3
Latitude:	34.06033
Longitude:	-117.59716

CERS:

Name:	DELTA AIR LINES, INC.
Address:	2500 E AIRPORT DR STE 1259
City,State,Zip:	ONTARIO, CA 91761
Site ID:	24611
CERS ID:	10407691
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	24611
Site Name:	Delta Air Lines, Inc.
Violation Date:	02-16-2023
Citation:	HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)
Violation Description:	Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes:	Returned to compliance on 02/28/2023. OBSERVATION: 1. At the time of the inspection observed (1) 120-gallon aboveground diesel tank not reported on the hazardous materials inventory. 2. At the time of the inspection, observed ~17,000 Kg of lead acid batteries inaccurately reported on the hazardous materials inventory. CORRECTIVE ACTION: Ensure all hazardous materials stored above the thresholds of 55-gallons of liquids, 500-pounds of solids, 200-cubic feet of

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

compressed flammable gases, 1,000-cubic feet of compressed non-flammable gas, and any amount of hazardous waste are completely and accurately reported on the hazardous materials inventory. Update the hazardous materials inventory reported to CERS. Sign and return the Certificate of Compliance to the inspector within 30 days indicating the Hazardous materials inventory has been completely and accurately updated.

Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Evaluation:

Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-12-2020
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-16-2023
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 01-11-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Routine Inspection
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Affiliation:

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 2500 E Airport Dr Ste 1259
Affiliation City: Ontario
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 91761
Affiliation Phone: ,

Affiliation Type Desc: Identification Signer
Entity Name: Alfonso Cardenas
Entity Title: Station Manager
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Environmental Contact
Entity Name: Bernardo Melendez
Entity Title: Not reported
Affiliation Address: 2500 E Airport Dr Ste 1259
Affiliation City: Ontario
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 91761
Affiliation Phone: ,

Affiliation Type Desc: CUPA District
Entity Name: San Bernardino County Fire
Entity Title: Not reported
Affiliation Address: 620 South E Street
Affiliation City: San Bernardino
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92415-0153
Affiliation Phone: (909) 386-8401,

Affiliation Type Desc: Document Preparer
Entity Name: Ben Huron
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Operator
Entity Name: Delta Air Lines, Inc.-ONT
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (909) 605-7373,

Affiliation Type Desc: Parent Corporation
Entity Name: Delta Air Lines, Inc.
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Legal Owner
Entity Name: Delta Air Lines, Inc.
Entity Title: Not reported

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Affiliation Address: 1020 Delta Blvd., Dept. 885
Affiliation City: Atlanta
Affiliation State: GA
Affiliation Country: United States
Affiliation Zip: 30354
Affiliation Phone: (404) 773-5673,

Affiliation Type Desc: Property Owner
Entity Name: Delta Air Lines, Inc.
Entity Title: Not reported
Affiliation Address: 1020 Delta Blvd., Dept. 885
Affiliation City: Atlanta
Affiliation State: GA
Affiliation Country: United States
Affiliation Zip: 30354
Affiliation Phone: (404) 773-5673,

Name: UNIFI AVIATION, LLC - ONT
Address: 2500 E AIRPORT DR STE 1259
City,State,Zip: ONTARIO, CA 91761
Site ID: 364979
CERS ID: 10411489
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 364979
Site Name: Unifi Aviation, LLC - ONT
Violation Date: 03-05-2021
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes: Returned to compliance on 09/28/2021. OBSERVATION: The facility is no longer operating the shop on the North side of the airport and has moved into a building on the South side of the airport. The mailing address and operations are still based out of Terminal 2 on the North side. As the shop itself has moved, the site map submitted in CERS is no longer valid and a new map shall be prepared and submitted into CERS. The emergency response plan document shall also be revised accordingly to account for any changes with the move. Also, hazardous materials were observed on site during the inspection that are not listed in the most current CERS inventory or are listed in lesser quantities. CORRECTIVE ACTION: Submit a signed statement that the Business Plan elements have been updated and resubmitted into CERS.
Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 364979
Site Name: Unifi Aviation, LLC - ONT
Violation Date: 03-05-2021
Citation: HSC 6.5 25123.3(h)(1) - California Health and Safety Code, Chapter 6.5, Section(s) 25123.3(h)(1)
Violation Description: Failure to send hazardous waste offsite for treatment, storage, or disposal within 180 days (or 270 days if waste is transported over 200 miles) for a generator who generates less than 1000 kilogram per month

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

	if all of the following conditions are met: (1) The quantity of hazardous waste accumulated onsite never exceeds 6,000 kilograms. (2) The generator complies with the requirements of 40 Code of Federal Regulations section 262.34(d), (e) and (f). (3) The generator does not hold acutely hazardous waste or extremely hazardous waste in an amount greater than one kilogram for more than 90 days.
Violation Notes:	Returned to compliance on 04/05/2021. OBSERVATION: Observed a 55-gallon drum of used oil and a ~20-gallon container of waste coolant stored on site for longer than one year. CORRECTIVE ACTION: Submit a copy of a hazardous waste manifest showing that the used oil and waste coolant have been removed.
Violation Division:	San Bernardino County Fire Department
Violation Program:	HW
Violation Source:	CERS,
Site ID:	364979
Site Name:	Unifi Aviation, LLC - ONT
Violation Date:	12-13-2017
Citation:	HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Description:	Hazardous Waste Generator Program - Administration/Documentation - General
Violation Notes:	Returned to compliance on 01/11/2018. Failure to obtain a CUPA Hazardous Waste Generator Permit (SBCC 23.0602(b)(1))
Violation Division:	San Bernardino County Fire Department
Violation Program:	HW
Violation Source:	CERS,
Site ID:	364979
Site Name:	Unifi Aviation, LLC - ONT
Violation Date:	12-13-2017
Citation:	HSC 6.95 25508.1(a)-(f) - California Health and Safety Code, Chapter 6.95, Section(s) 25508.1(a)-(f)
Violation Description:	Failure to electronically update business plan within 30 days of any one of the following events: A 100 percent or more increase in the quantity of a previously disclosed material. Any handling of a previously undisclosed hazardous materials at or above reportable quantities. A change of business address, business ownership, or business name. A substantial change in the handler's operations that requires modification to any portion of the business plan.
Violation Notes:	Returned to compliance on 01/11/2018.
Violation Division:	San Bernardino County Fire Department
Violation Program:	HMRRP
Violation Source:	CERS,

Evaluation:

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	03-05-2021
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	San Bernardino County Fire Department
Eval Program:	HMRRP
Eval Source:	CERS,
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	03-05-2021

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-13-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-13-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Affiliation:
Affiliation Type Desc: CUPA District
Entity Name: San Bernardino County Fire
Entity Title: Not reported
Affiliation Address: 620 South E Street
Affiliation City: San Bernardino
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92415-0153
Affiliation Phone: (909) 386-8401,

Affiliation Type Desc: Legal Owner
Entity Name: Unifi Aviation, LLC
Entity Title: Not reported
Affiliation Address: 1007 Virginia Ave, STE 150, Environmental
Affiliation City: Atlanta
Affiliation State: GA
Affiliation Country: United States
Affiliation Zip: 30354
Affiliation Phone: (470) 630-2448,

Affiliation Type Desc: Environmental Contact
Entity Name: Art Slayton
Entity Title: Not reported
Affiliation Address: 1007 Virginia Ave, STE 150, Environmental
Affiliation City: Atlanta
Affiliation State: GA
Affiliation Country: Not reported
Affiliation Zip: 30354
Affiliation Phone: ,

Affiliation Type Desc: Facility Mailing Address

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	2500 E. Airport Drive, Ste 1259
Affiliation City:	Ontario
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	91761
Affiliation Phone:	,
Affiliation Type Desc:	Document Preparer
Entity Name:	Art Slayton
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Operator
Entity Name:	Unifi Aviation, LLC - ONT
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(760) 422-8793,
Affiliation Type Desc:	Parent Corporation
Entity Name:	Unifi Aviation, LLC
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Property Owner
Entity Name:	Unifi Aviation, LLC
Entity Title:	Not reported
Affiliation Address:	1007 Virginia Ave, STE 150, Environmental
Affiliation City:	ATLANTA
Affiliation State:	GA
Affiliation Country:	United States
Affiliation Zip:	30354
Affiliation Phone:	(470) 630-2448,
Affiliation Type Desc:	Identification Signer
Entity Name:	Alice Parra
Entity Title:	Station Manager
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Affiliation Phone: ,

Name: ONTARIO INTERNATIONAL AIRPORT
Address: 2500 E AIRPORT DR
City,State,Zip: ONTARIO, CA 91761
Site ID: 538456
CERS ID: 850683
CERS Description: Industrial Facility Storm Water

Violations:

Site ID: 538456
Site Name: Ontario International Airport
Violation Date: 12-16-2021
Citation: 2014-0057-DWQ - Industrial General Permit
Violation Description: SWPPP
Violation Notes: Sampling violation: Section XI.B.4 requires samples shall be collected from each drainage area at all discharge locations unless a Representative Sampling Reduction report has been submitted. As no report has been submitted, this is a violation of section XI.B.4.
Violation Division: Water Boards
Violation Program: INDSTW
Violation Source: SMARTS,

Site ID: 538456
Site Name: Ontario International Airport
Violation Date: 06-15-2022
Citation: 2014-0057-DWQ - Industrial General Permit
Violation Description: SWPPP
Violation Notes: The resolution of site map Figures 2, 3, 4, 5, 7, and 8 makes some text illegible. The illegibility of the maps is in violation of section X.E.1 of the IGP.
Violation Division: Water Boards
Violation Program: INDSTW
Violation Source: SMARTS,

Site ID: 538456
Site Name: Ontario International Airport
Violation Date: 12-16-2021
Citation: 2014-0057-DWQ - Industrial General Permit
Violation Description: SWPPP
Violation Notes: Sampling violation: Per December 16, 2021 inspection, wattles were installed around the CC-terminals sampling point inlet and no other terminal inlets. Any samples collected from CC-terminals under these conditions were not representative of storm water associated with industrial activities as is required under section XI.B.4 of the IGP.
Violation Division: Water Boards
Violation Program: INDSTW
Violation Source: SMARTS,

Site ID: 538456
Site Name: Ontario International Airport
Violation Date: 06-15-2022
Citation: 2014-0057-DWQ - Industrial General Permit
Violation Description: SW - Deficient BMP Implementation
Violation Notes: I observed accumulated sediment and broken concrete near the CC-sheetflow sampling point (pages 5-7). The broken concrete is in violation of XXI.F since concrete serves as a pollution control device

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

that prevents sediment from being mobilized. The accumulated sediment may be in violation of section X.H.1 if it is feasible to clean it up.
I observed five open dumpsters in the Menzies Maintenance area, at least three of which contained industrial waste (page 10), and one uncovered waste bin in the MY area (page 20). This is in violation of section X.H.1.d.iii. I observed eroded banks causing deterioration of the asphalt paving in the MY channel (pages 13-16). This is also in violation of section XXI.F mentioned previously. I observed open absorbent bags, spilled absorbent, and a deteriorated sandbag in the MY area. This may be in violation of section X.H.1.c.ii if it is feasible to clean up the spilled material.

Violation Division: Water Boards
Violation Program: INDSTW
Violation Source: SMARTS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-16-2021
Violations Found: No
Eval Type: Industrial Storm Water Compliance Evaluation
Eval Notes: Walkthrough of site with Matthew Renaud. Photos and details in inspection report. Note that Deer Creek is no longer being sampled, and CC Sheetflow and CC terminal sampling sites have been added. SWPPP and inspection reports were accessible on site. Some concerns with erosion and displacement of BMPS were noted, and Mr. Renaud commented that they would be repaired. Envirosocks used at sampling locations. Site is in level 1 for Zinc, TSS, and Copper
Eval Division: Water Boards
Eval Program: INDSTW
Eval Source: SMARTS,

Enforcement Action:
Site ID: 538456
Site Name: Ontario International Airport
Site Address: 2500 E AIRPORT DR
Site City: ONTARIO
Site Zip: 91761
Enf Action Date: 06-23-2022
Enf Action Type: Industrial Storm Water Enforcement
Enf Action Description: Industrial Storm Water Enforcement
Enf Action Notes: Follow up email alleging violations
Enf Action Division: Water Boards
Enf Action Program: INDSTW
Enf Action Source: SMARTS,

Affiliation:
Affiliation Type Desc: Owner/Operator
Entity Name: Ontario International Airport Authority
Entity Title: Operator
Affiliation Address: 303 E B Street
Affiliation City: Ontario
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 91764
Affiliation Phone: ,

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Name: UNITED GROUND EXPRESS
Address: 2500 E AIRPORT DR
City,State,Zip: ONTARIO, CA 91761
Site ID: 572401
CERS ID: 10864402
CERS Description: Chemical Storage Facilities

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-08-2021
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Coordinates:
Site ID: 572401
Facility Name: United Ground Express
Env Int Type Code: HMBP
Program ID: 10864402
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.,
Latitude: 34.060300
Longitude: -117.597170

Affiliation:
Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 2500 E Airport Dr
Affiliation City: Ontario
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 91761
Affiliation Phone: ,

Affiliation Type Desc: Legal Owner
Entity Name: United Ground Express
Entity Title: Not reported
Affiliation Address: 11555 W Touhy Ave
Affiliation City: Chicago
Affiliation State: IL
Affiliation Country: United States
Affiliation Zip: 60606
Affiliation Phone: (872) 825-7431,

Affiliation Type Desc: CUPA District
Entity Name: San Bernardino County Fire
Entity Title: Not reported
Affiliation Address: 620 South E Street
Affiliation City: San Bernardino
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92415-0153
Affiliation Phone: (909) 386-8401,

ONTARIO INTERNATIONAL AIRPORT (Continued) **S119086494**

Affiliation Type Desc:	Document Preparer
Entity Name:	Amanda Thomas
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Environmental Contact
Entity Name:	Amanda Thomas
Entity Title:	Not reported
Affiliation Address:	11555 W Touhy Ave
Affiliation City:	Chicago
Affiliation State:	IL
Affiliation Country:	Not reported
Affiliation Zip:	60606
Affiliation Phone:	,

Affiliation Type Desc:	Operator
Entity Name:	United Ground Express
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(909) 418-2820,

Affiliation Type Desc:	Identification Signer
Entity Name:	Amanda Thomas
Entity Title:	GSE Regional Manager
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Parent Corporation
Entity Name:	United Ground Express
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

E28
ESE
1/8-1/4
0.201 mi.
1063 ft.

NORTHWEST AIRLINES INC
2500 E AIRPORT DR 1243
ONTARIO, CA 91761

Site 11 of 12 in cluster E

CA San Bern. Co. Permit

S106112205
N/A

Relative:
Lower

Actual:
952 ft.

San Bern. Co. Permit:

Name:	NORTHWEST AIRLINES INC
Address:	2500 E AIRPORT DR 1243
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO
Facility ID:	FA0005004
Owner:	NORTHWEST AIRLINES INC
Permit Number:	PT0008648
Permit Category:	SPECIAL GENERATOR
Facility Status:	INACTIVE
Expiration Date:	08/31/2006

Name:	NORTHWEST AIRLINES INC
Address:	2500 E AIRPORT DR 1243
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO
Facility ID:	FA0005004
Owner:	NORTHWEST AIRLINES INC
Permit Number:	PT0008647
Permit Category:	SPECIAL HANDLER
Facility Status:	INACTIVE
Expiration Date:	08/31/2006

E29
ESE
1/8-1/4
0.201 mi.
1063 ft.

UNITED AIRLINES INC
2500 E AIRPORT DR STE 1211A
ONTARIO, CA 91761

Site 12 of 12 in cluster E

RCRA NonGen / NLR

1024838364
CAL000385095

Relative:
Lower

Actual:
952 ft.

RCRA Listings:

Date Form Received by Agency:	20130502
Handler Name:	United Airlines Inc
Handler Address:	2500 E AIRPORT DR STE 1211A
Handler City,State,Zip:	ONTARIO, CA 91761-0000
EPA ID:	CAL000385095
Contact Name:	MONICA LU
Contact Address:	PO BOX 92245
Contact City,State,Zip:	LOS ANGELES, CA 90009
Contact Telephone:	310-431-3623
Contact Fax:	310-431-3696
Contact Email:	MONICA.LU@UNITED.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	PO BOX 92245
Mailing City,State,Zip:	LOS ANGELES, CA 90009-0000
Owner Name:	United Air Lines

UNITED AIRLINES INC (Continued) **1024838364**

Owner Type:	Other
Operator Name:	Monica Lu
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20180906
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name: UNITED AIR LINES	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	6020 AVION DR
Owner/Operator City,State,Zip:	LOS ANGELES, CA 90045-5679
Owner/Operator Telephone:	310-431-3623
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

UNITED AIRLINES INC (Continued) **1024838364**

Owner/Operator Indicator:	Operator
Owner/Operator Name: MONICA LU	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	PO BOX 92245
Owner/Operator City,State,Zip:	LOS ANGELES, CA 90009
Owner/Operator Telephone:	310-431-3623
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20130502
Handler Name: UNITED AIRLINES INC	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	481112
NAICS Description:	SCHEDULED FREIGHT AIR TRANSPORTATION

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

F30 **ONTARIO CONVENTION CENTER** **CA San Bern. Co. Permit** **S106230076**
NW **2000 CONVENTION CENTER WAY** **CA CERS** **N/A**
1/8-1/4 **ONTARIO, CA 91764**
0.225 mi.
1187 ft. **Site 1 of 2 in cluster F**

Relative: Higher

Actual: 980 ft.

San Bern. Co. Permit:

Name:	ONTARIO CONVENTION CENTER
Address:	2000 CONVENTION CENTER WAY
City,State,Zip:	ONTARIO, CA 91764
Region:	SAN BERNARDINO
Facility ID:	FA0008300
Owner:	CITY OF ONTARIO UTILITIES DEPT
Permit Number:	PT0014514
Permit Category:	HAZARDOUS MATERIALS 4-10 CHEMICALS
Facility Status:	ACTIVE
Expiration Date:	05/31/2023

Name: VERIZON WIRELESS: TURNER

ONTARIO CONVENTION CENTER (Continued) **S106230076**

Address: 2000 CONVENTION CENTER WAY
City,State,Zip: ONTARIO, CA 91764
Region: SAN BERNARDINO
Facility ID: FA0017086
Owner: Verizon Wireless
Permit Number: PT0036442
Permit Category: HAZARDOUS MATERIALS 1-3 CHEMICALS SPECIAL
Facility Status: ACTIVE
Expiration Date: 11/30/2021

CERS:
Name: VERIZON WIRELESS: TURNER
Address: 2000 CONVENTION CENTER WAY
City,State,Zip: ONTARIO, CA 91764
Site ID: 168784
CERS ID: 10165151
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 168784
Site Name: Verizon Wireless: Turner
Violation Date: 07-20-2022
Citation: Un-Specified
Violation Description: Business Plan Program - Administration/Documentation - General Local Ordinance
Violation Notes: OBSERVATION: At the time of inspection, the Hazardous Materials Handler permit had expired on 11/30/2021. CORRECTIVE ACTION: Contact fiscal and pay permit fees within 30 days.
Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-20-2022
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-05-2019
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Affiliation:
Affiliation Type Desc: Identification Signer
Entity Name: Wilson Rodriguez
Entity Title: Engr III Spec-RE/Regulatory
Affiliation Address: Not reported

ONTARIO CONVENTION CENTER (Continued) **S106230076**

Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Operator
Entity Name:	Verizon Wireless
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(949) 286-7000,
Affiliation Type Desc:	Environmental Contact
Entity Name:	Environmental Compliance
Entity Title:	Not reported
Affiliation Address:	15505 Sand Canyon Avenue
Affiliation City:	Irvine
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92618
Affiliation Phone:	,
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	15505 Sand Canyon Avenue
Affiliation City:	Irvine
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92618
Affiliation Phone:	,
Affiliation Type Desc:	Parent Corporation
Entity Name:	Verizon Wireless [Southern California]
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Document Preparer
Entity Name:	Steve Skanderson, Stantec
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Legal Owner

ONTARIO CONVENTION CENTER (Continued) **S106230076**

Entity Name: Verizon Wireless
Entity Title: Not reported
Affiliation Address: 15505 Sand Canyon Avenue
Affiliation City: Irvine
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 92618
Affiliation Phone: (949) 286-7000,

Affiliation Type Desc: CUPA District
Entity Name: San Bernardino County Fire
Entity Title: Not reported
Affiliation Address: 620 South E Street
Affiliation City: San Bernardino
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92415-0153
Affiliation Phone: (909) 386-8401,

Name: ONTARIO CONVENTION CENTER
Address: 2000 CONVENTION CENTER WAY
City,State,Zip: ONTARIO, CA 91764
Site ID: 53940
CERS ID: 10048348
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 53940
Site Name: ONTARIO CONVENTION CENTER
Violation Date: 04-25-2019
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.
Violation Notes: Returned to compliance on 05/07/2019. OBSERVATION: The CERS business plan inventory was last submitted on 10/2/2017 and the emergency response plan section was last submitted in 2013. The plan is required to be updated and submitted annually by March 1st. CORRECTIVE ACTION: Review and certify the business plan via CERS within 30 days and yearly before March 1st.
Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 53940
Site Name: ONTARIO CONVENTION CENTER
Violation Date: 04-25-2019
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes: Returned to compliance on 05/07/2019. OBSERVATION: The hazardous materials inventory was found to be incomplete. Water treatment chemicals were observed that are above the 55 gallon threshold reporting quantities. CORRECTIVE ACTION: Submit an accurate and

ONTARIO CONVENTION CENTER (Continued) **S106230076**

complete hazardous materials inventory via CERS.
Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 53940
Site Name: ONTARIO CONVENTION CENTER
Violation Date: 04-07-2016
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2
Violation Description: Failure to annually review and electronically certify that the business plan is complete, accurate, and up-to-date.
Violation Notes: Returned to compliance on 10/11/2017. The last update submitted by this facility is dated 6/7/2013.
Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 53940
Site Name: ONTARIO CONVENTION CENTER
Violation Date: 04-25-2019
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit a site map with all required content.
Violation Notes: Returned to compliance on 05/07/2019. OBSERVATION: The site map as submitted is incomplete. The following items must be indicated on the site map: north orientation, loading areas, internal roads, adjacent streets, storm and sewer drains, access and exit points, utility emergency shutoff, evacuation staging areas, hazardous material handling and storage areas, and emergency response equipment. CORRECTIVE ACTION: Submit an accurate and complete site map into CERS.
Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 53940
Site Name: ONTARIO CONVENTION CENTER
Violation Date: 04-07-2016
Citation: HSC 6.95 25508.1(a)-(e) - California Health and Safety Code, Chapter 6.95, Section(s) 25508.1(a)-(e)
Violation Description: Failure to electronically update business plan within 30 days of any one of the following events: A 100 percent or more increase in the quantity of a previously disclosed material. Any handling of a previously undisclosed hazardous materials at or above reportable quantities. A change of business address, business ownership, or business name.
Violation Notes: Returned to compliance on 05/07/2019. Hazardous materials were observed on site during the inspection that are not listed in the most current Business Plan inventory or are listed in lesser quantities. The contacts listed in CERS have changed and require revision. Also, some of the elements required on the site map were not present.
Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 53940

ONTARIO CONVENTION CENTER (Continued) **S106230076**

Site Name: ONTARIO CONVENTION CENTER
Violation Date: 04-25-2019
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to establish and electronically submit an adequate emergency response plan and procedures for a release or threatened release of a hazardous material.
Violation Notes: Returned to compliance on 05/07/2019. OBSERVATION: The emergency response phone number for this agency (CUPA) was not listed within the emergency response plan. Regulated facilities in this jurisdiction are required to include one of the following phone numbers in the Emergency Response Plans & Procedures: (800) 33-TOXIC or (909) 386-8425. CORRECTIVE ACTION: Submit an updated emergency response plan into the California Environmental Reporting System (CERS).
Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-07-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: ROUTINE HANDLER INSPECTION-ONTARIO CONVENTION CENTER
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-25-2019
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-23-2022
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Enforcement Action:
Site ID: 53940
Site Name: ONTARIO CONVENTION CENTER
Site Address: 2000 CONVENTION CENTER WAY
Site City: ONTARIO
Site Zip: 91764
Enf Action Date: 04-07-2016
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported

ONTARIO CONVENTION CENTER (Continued) **S106230076**

Enf Action Division: San Bernardino County Fire Department
Enf Action Program: HMRRP
Enf Action Source: CERS,

Affiliation:
Affiliation Type Desc: Document Preparer
Entity Name: Operations Coordinator
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Legal Owner
Entity Name: CITY OF ONTARIO UTILITIES DEPT
Entity Title: Not reported
Affiliation Address: 303 EAST 'B' STREET
Affiliation City: ONTARIO
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 91764-9176
Affiliation Phone: (909) 395-2000,

Affiliation Type Desc: Operator
Entity Name: Operations Coordinator
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (909) 937-3025,

Affiliation Type Desc: Parent Corporation
Entity Name: SMG
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: CUPA District
Entity Name: San Bernardino County Fire
Entity Title: Not reported
Affiliation Address: 620 South E Street
Affiliation City: San Bernardino
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92415-0153
Affiliation Phone: (909) 386-8401,

Affiliation Type Desc: Identification Signer
Entity Name: Daniel J. Villegas

ONTARIO CONVENTION CENTER (Continued) **S106230076**

Entity Title:	DIRECTOR OF FACILITIES
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Property Owner
Entity Name:	CITY OF ONTARIO UTILITIES DEPT
Entity Title:	Not reported
Affiliation Address:	2000 CONVENTION CENTER WAY
Affiliation City:	ONTARIO
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	91764
Affiliation Phone:	(909) 395-2000,
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	2000 E. CONVENTION CENTER WAY
Affiliation City:	ONTARIO
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	91764
Affiliation Phone:	,
Affiliation Type Desc:	Environmental Contact
Entity Name:	Daniel J. Villegas
Entity Title:	Not reported
Affiliation Address:	2000 E. CONVENTION CENTER WAY
Affiliation City:	ONTARIO
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	91764
Affiliation Phone:	,

F31 **AT&T MOBILITY - (USID26378)** **CA San Bern. Co. Permit** **S124442837**
NW **2000 E CONVENTION CENTER WAY** **N/A**
1/8-1/4 **ONTARIO, CA 91762**
0.225 mi.
1187 ft. **Site 2 of 2 in cluster F**

Relative:
Higher

Actual:
980 ft.

San Bern. Co. Permit:

Name:	AT&T MOBILITY - (USID26378)
Address:	2000 E CONVENTION CENTER WAY
City,State,Zip:	ONTARIO, CA 91762
Region:	SAN BERNARDINO
Facility ID:	FA0009012
Owner:	New Cingular Wireless PCS, LLC dba AT&T Mobility
Permit Number:	PT0015880
Permit Category:	HAZARDOUS MATERIALS 1-3 CHEMICALS SPECIAL
Facility Status:	INACTIVE
Expiration Date:	08/31/2022

G32 **CARDENAS MARKETS DISTRIBUTION CENTER** **RCRA NonGen / NLR** **1026055407**
ENE **2501 E GUASTI RD** **CAL000451589**
1/8-1/4 **ONTARIO, CA 91761**
0.226 mi.
1191 ft. **Site 1 of 3 in cluster G**

Relative:
Higher

Actual:
966 ft.

RCRA Listings:

Date Form Received by Agency:	20191224
Handler Name:	Cardenas Markets Distribution Center
Handler Address:	2501 E GUASTI RD
Handler City,State,Zip:	ONTARIO, CA 91761-7657
EPA ID:	CAL000451589
Contact Name:	MIRNA RUACHO
Contact Address:	2501 E. GUASTI RD.
Contact City,State,Zip:	ONTARIO, CA 91761
Contact Telephone:	909-470-7135
Contact Fax:	Not reported
Contact Email:	MRUACHO@CMKTS.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	2501 E GUASTI RD
Mailing City,State,Zip:	ONTARIO, CA 91761-3631
Owner Name:	Cardenas Markets Llc
Owner Type:	Other
Operator Name:	Mirna Ruacho
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **1026055407**

Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20200210
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name: CARDENAS MARKETS LLC	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	2501 E GUASTI RD
Owner/Operator City,State,Zip:	ONTARIO, CA 91761-3631
Owner/Operator Telephone:	909-923-7426
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name: MIRNA RUACHO	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	2501 E. GUASTI RD.
Owner/Operator City,State,Zip:	ONTARIO, CA 91761
Owner/Operator Telephone:	909-470-7135
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20191224
Handler Name:	CARDENAS MARKETS DISTRIBUTION CENTER
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **1026055407**

List of NAICS Codes and Descriptions:
NAICS Code: 454390
NAICS Description: OTHER DIRECT SELLING ESTABLISHMENTS

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

G33 **CARDENAS MARKETS DISTRIBUTION CENTER** **CA CERS HAZ WASTE** **S102040171**
ENE **2501 E GUASTI RD** **CA HWTS** **N/A**
1/8-1/4 **ONTARIO, CA 91761** **CA HAZNET**
0.226 mi. **CA NPDES**
1191 ft. **Site 2 of 3 in cluster G** **CA San Bern. Co. Permit**
CA CIWQS
Relative: Higher **CA CERS**

Actual: 966 ft.

CERS HAZ WASTE:
Name: CARDENAS MARKETS DISTRIBUTION CENTER
Address: 2501 E GUASTI RD
City,State,Zip: ONTARIO, CA 91761
Site ID: 102986
CERS ID: 10459684
CERS Description: Hazardous Waste Generator

HWTS:
Name: CARDENAS MARKETS DISTRIBUTION CENTER
Address: 2501 E GUASTI RD
Address 2: Not reported
City,State,Zip: ONTARIO, CA 91761
EPA ID: CAL000451589
Inactive Date: Not reported
Create Date: 12/24/2019
Last Act Date: Not reported
Mailing Name: Not reported
Mailing Address: 2501 E GUASTI RD
Mailing Address 2: Not reported
Mailing City,State,Zip: ONTARIO, CA 91761
Owner Name: CARDENAS MARKET LLC
Owner Address: 2501 E GUASTI RD
Owner Address 2: Not reported
Owner City,State,Zip: ONTARIO, CA 917610000
Owner Phone: Not reported
Owner Fax: Not reported
Contact Name: MIRNA RUACHO
Contact Address: 2501 E. GUASTI RD.
Contact Address 2: Not reported
City,State,Zip: ONTARIO, CA 917610000
Contact Phone: Not reported
Contact Fax: Not reported
Facility Status: Active
Facility Type: PERMANENT
Category: STATE
Latitude: 34.063179

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Longitude: -117.600129

NAICS:

EPA ID: CAL000451589
Create Date: 2019-12-24 10:04:02.227
NAICS Code: 454390
NAICS Description: Other Direct Selling Establishments
Issued EPA ID Date: 2019-12-24 10:04:02.19700
Inactive Date: Not reported
Facility Name: CARDENAS MARKETS DISTRIBUTION CENTER
Facility Address: 2501 E GUASTI RD
Facility Address 2: Not reported
Facility City: ONTARIO
Facility County: Not reported
Facility State: CA
Facility Zip: 917617657

Name: CARDENAS MARKETS DISTRIBUTION CENTER
Address: 2501 E GUASTI RD
Address 2: Not reported
City,State,Zip: ONTARIO, CA 91761
EPA ID: CAL000378320
Inactive Date: 06/30/2019
Create Date: 09/19/2012
Last Act Date: Not reported
Mailing Name: Not reported
Mailing Address: 2501 E GUASTI RD
Mailing Address 2: Not reported
Mailing City,State,Zip: ONTARIO, CA 917613631
Owner Name: CARDENAS MARKETS INC
Owner Address: 2501 E GUASTI RD
Owner Address 2: Not reported
Owner City,State,Zip: ONTARIO, CA 917613631
Owner Phone: Not reported
Owner Fax: Not reported
Contact Name: MIRNA RUACHO
Contact Address: 2501 E. GUASTI RD.
Contact Address 2: Not reported
City,State,Zip: ONTARIO, CA 91761
Contact Phone: Not reported
Contact Fax: Not reported
Facility Status: Inactive
Facility Type: PERMANENT
Category: STATE
Latitude: 34.063179
Longitude: -117.600129

NAICS:

EPA ID: CAL000378320
Create Date: 2012-09-19 12:55:11.343
NAICS Code: 56121
NAICS Description: Facilities Support Services
Issued EPA ID Date: 2012-09-19 12:55:11.32700
Inactive Date: 2019-06-30 00:00:00
Facility Name: CARDENAS MARKETS DISTRIBUTION CENTER
Facility Address: 2501 E GUASTI RD
Facility Address 2: Not reported

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Facility City: ONTARIO
Facility County: Not reported
Facility State: CA
Facility Zip: 917617657

HAZNET:
Name: CARDENAS MARKETS DISTRIBUTION CENTER
Address: 2501 E GUASTI RD
Address 2: Not reported
City,State,Zip: ONTARIO, CA 917617657
Contact: MIRNA RUACHO
Telephone: 9094707135
Mailing Name: Not reported
Mailing Address: 2501 E GUASTI RD

Year: 2021
Gepaid: CAL000451589
TSD EPA ID: CAD008364432
CA Waste Code: 331 - Off-specification, aged or surplus organics
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.0135

Year: 2021
Gepaid: CAL000451589
TSD EPA ID: CAD008364432
CA Waste Code: 214 - Unspecified solvent mixture
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.0135

Year: 2021
Gepaid: CAL000451589
TSD EPA ID: CAD008364432
CA Waste Code: 791 - Liquids with pH <= 2
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.037

Year: 2020
Gepaid: CAL000451589
TSD EPA ID: CAD008364432
CA Waste Code: 331 - Off-specification, aged or surplus organics
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.0395

Year: 2019
Gepaid: CAL000378320
TSD EPA ID: CAD008364432
CA Waste Code: 791 - Liquids with pH <= 2
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.00600

Year: 2019

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Gepaid:	CAL000378320
TSD EPA ID:	CAD008364432
CA Waste Code:	214 - Unspecified solvent mixture
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.00500
Year:	2019
Gepaid:	CAL000378320
TSD EPA ID:	AZR000515924
CA Waste Code:	352 - Other organic solids
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.05000
Year:	2018
Gepaid:	CAL000378320
TSD EPA ID:	CAD008364432
CA Waste Code:	331 - Off-specification, aged or surplus organics
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.02050
Year:	2017
Gepaid:	CAL000378320
TSD EPA ID:	AZR000515924
CA Waste Code:	352 - Other organic solids
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.075
Year:	2015
Gepaid:	CAL000378320
TSD EPA ID:	AZR000515924
CA Waste Code:	352 - Other organic solids
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.1

Click this hyperlink while viewing on your computer to access additional CA HAZNET: detail in the EDR Site Report.

Additional Info:

Year:	2021
Gen EPA ID:	CAL000451589
Shipment Date:	7/13/2020
Creation Date:	7/23/2020
Receipt Date:	7/21/2020
Manifest ID:	014930515FLE
Trans EPA ID:	MNS000110924
Trans Name:	Stericycle Specialty Waste Solutions Inc
Trans 2 EPA ID:	MNS000110924
Trans 2 Name:	Stericycle Specialty Waste Solutions Inc
TSDF EPA ID:	CAD008364432
Trans Name:	Rho Chem LLC

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0155
Waste Quantity:	31
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	1/16/2020
Creation Date:	2/13/2020
Receipt Date:	1/24/2020
Manifest ID:	014047563FLE
Trans EPA ID:	MNS000110924
Trans Name:	Stericycle Specialty Waste Solutions Inc
Trans 2 EPA ID:	MNS000110924
Trans 2 Name:	Stericycle Specialty Waste Solutions Inc
TSDF EPA ID:	CAD008364432
Trans Name:	Rho Chem LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.024
Waste Quantity:	48
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2020
Gen EPA ID:	CAL000451589
Shipment Date:	7/13/2020
Creation Date:	7/23/2020
Receipt Date:	7/21/2020
Manifest ID:	014930515FLE
Trans EPA ID:	MNS000110924
Trans Name:	Stericycle Specialty Waste Solutions Inc
Trans 2 EPA ID:	MNS000110924
Trans 2 Name:	Stericycle Specialty Waste Solutions Inc
TSDF EPA ID:	CAD008364432
Trans Name:	Rho Chem LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0155
Waste Quantity:	31
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	1/16/2020
Creation Date:	2/13/2020
Receipt Date:	1/24/2020
Manifest ID:	014047563FLE
Trans EPA ID:	MNS000110924
Trans Name:	Stericycle Specialty Waste Solutions Inc
Trans 2 EPA ID:	MNS000110924
Trans 2 Name:	Stericycle Specialty Waste Solutions Inc
TSDF EPA ID:	CAD008364432
Trans Name:	Rho Chem LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.024
Waste Quantity:	48
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Detail Two:

Year:	2020
EM Manifest ID:	c09f4372-f268-48cb-83fd-bc5e73e9e911
Shipment Date:	7/13/2020
Receipt Date:	7/21/2020
Manifest Number:	014930515FLE
Generator EPA ID:	CAL000451589
Name:	CARDENAS MARKETS
Address:	2501 E. GUASTI ROAD
Address 2:	Not reported
City:	ONTARIO
Zip:	91761
Telephone:	877-577-2669
Contact:	Not reported
Contact Telephone:	323-776-6233
Transporter 1 EPA ID:	MNS000110924
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MNS000110924
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD008364432

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

TSDF Name:	Rho Chem LLC
TSDF Address 1:	425 Isis Ave.
TSDF Address 2:	Not reported
TSDF City:	Inglewood
TSDF Zip:	90301
TSDF Telephone:	Not reported

State:

Year:	2020
EM Manifest ID:	c09f4372-f268-48cb-83fd-bc5e73e9e911
Generator EPA ID:	CAL000451589
Shipment Date:	2020-07-13
Manifest Number:	014930515FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.01550
Quantity Waste:	31.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
State Code:	331

Year:	2020
EM Manifest ID:	1006101
Shipment Date:	1/16/2020
Receipt Date:	1/24/2020
Manifest Number:	014047563FLE
Generator EPA ID:	CAL000451589
Name:	CARDENAS MARKETS
Address:	2501 E. GUASTI ROAD
Address 2:	Not reported
City:	ONTARIO
Zip:	91761
Telephone:	877-577-2669
Contact:	Not reported
Contact Telephone:	323-776-6233
Transporter 1 EPA ID:	MNS000110924
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MNS000110924
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD008364432
TSDF Name:	Rho Chem LLC
TSDF Address 1:	425 Isis Ave.
TSDF Address 2:	Not reported
TSDF City:	Inglewood
TSDF Zip:	90301
TSDF Telephone:	Not reported

State:

Year:	2020
EM Manifest ID:	1006101
Generator EPA ID:	CAL000451589
Shipment Date:	2020-01-16
Manifest Number:	014047563FLE
Line Number:	1
Method Code:	H141

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Quantity Tons:	0.02400
Quantity Waste:	48.000000
Quantity Unit:	P
Number of Containers:	2
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
State Code:	331

Detail Two:

Year:	2019
EM Manifest ID:	286862
Shipment Date:	1/2/2019
Receipt Date:	1/10/2019
Manifest Number:	018146617JJK
Generator EPA ID:	CAL000378320
Name:	CARDENAS MARKETS DISTRIBUTION CENTER
Address:	2501 E GUASTI RD
Address 2:	Not reported
City:	ONTARIO
Zip:	91761-7657
Telephone:	949-310-2747
Contact:	Not reported
Contact Telephone:	909-923-7426
Transporter 1 EPA ID:	CAR000267260
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	CAR000175422
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	AZR000515924
TSDF Name:	YUMA YES WASTE TRANSFER FACILITY
TSDF Address 1:	2730 E 13TH ST
TSDF Address 2:	Not reported
TSDF City:	YUMA
TSDF Zip:	85365-1901
TSDF Telephone:	Not reported

State:

Year:	2019
EM Manifest ID:	286862
Generator EPA ID:	CAL000378320
Shipment Date:	2019-01-02
Manifest Number:	018146617JJK
Line Number:	1
Method Code:	H141
Quantity Tons:	0.05000
Quantity Waste:	100.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Metal drums, barrels, kegs
Quantity Type:	Pounds
State Code:	352

Detail Two:

Year:	2018
EM Manifest ID:	016089401JJK20170606_D_1
Shipment Date:	6/6/2017

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Receipt Date:	6/17/2017
Manifest Number:	016089401JJK
Generator EPA ID:	CAL000378320
Name:	CARDENAS MARKET CORPORATION
Address:	Not reported
Address 2:	Not reported
City:	Not reported
Zip:	Not reported
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	Not reported
Transporter 1 EPA ID:	CAR000287260
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	CAR000175422
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	AZR000515924
TSDF Name:	YUMA ENVIRONMENTAL SERVICES
TSDF Address 1:	Not reported
TSDF Address 2:	Not reported
TSDF City:	Not reported
TSDF Zip:	Not reported
TSDF Telephone:	Not reported

State:

Year:	2018
EM Manifest ID:	016089401JJK20170606_D_1
Generator EPA ID:	CAL000378320
Shipment Date:	2017-06-06
Manifest Number:	016089401JJK
Line Number:	1
Method Code:	H141
Quantity Tons:	0.07500
Quantity Waste:	150.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	352

Additional Info:

Year:	2017
Gen EPA ID:	CAL000378320
Shipment Date:	20170606
Creation Date:	7/6/2018 18:30:59
Receipt Date:	20170617
Manifest ID:	016089401JJK
Trans EPA ID:	CAR000287260
Trans Name:	ALPHA PETROLEUM TRANSPORT INC II DBA AEEC
Trans 2 EPA ID:	CAR000175422
Trans 2 Name:	WORLDWIDE RECOVERY SYS INC
TSDF EPA ID:	AZR000515924
Trans Name:	YUMA ENVIRONMENTAL SERVICES
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.075
Waste Quantity:	150
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2015
Gen EPA ID:	CAL000378320
Shipment Date:	20150825
Creation Date:	2/9/2016 22:16:04
Receipt Date:	20150901
Manifest ID:	014918538JJK
Trans EPA ID:	CAT080012800
Trans Name:	HAZ MAT TRANS INC
Trans 2 EPA ID:	CAR000175422
Trans 2 Name:	WORLDWIDE RECOVERY SYSTEMS
TSDF EPA ID:	AZR000515924
Trans Name:	YUMA ENVIRONMENTAL SERVICES
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.1
Waste Quantity:	200
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

NPDES:

Name:	CARDENAS MARKETS LLC
Address:	2501 EAST GUASTI ROAD
City,State,Zip:	ONTARIO, CA 91761
Facility Status:	Active
NPDES Number:	CAS000001
Region:	8
Agency Number:	0
Regulatory Measure ID:	491074
Place ID:	Not reported
Order Number:	97-03-DWQ
WDID:	8 36I027360
Regulatory Measure Type:	Enrollee
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Effective Date Of Regulatory Measure:	09/22/2017
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	2501 East Guasti Road
Discharge Name:	Cardenas Markets LLC
Discharge City:	Ontario
Discharge State:	California
Discharge Zip:	91761
Status:	Not reported
Status Date:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported

NPDES as of 03/2018:

NPDES Number:	CAS000001
Status:	Active
Agency Number:	0
Region:	8
Regulatory Measure ID:	491074
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	8 36I027360
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	09/22/2017
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Cardenas Markets LLC
Discharge Address:	2501 East Guasti Road
Discharge City:	Ontario
Discharge State:	California
Discharge Zip:	91761
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

Name:	CARDENAS MARKETS LLC
Address:	2501 EAST GUASTI ROAD
City,State,Zip:	ONTARIO, CA 91761
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	8 36I027360
Regulatory Measure Type:	Industrial
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Discharge Zip:	Not reported
Status:	Active
Status Date:	07/17/2018
Operator Name:	Cardenas Markets LLC
Operator Address:	2501 East Guasti Road
Operator City:	Ontario
Operator State:	California
Operator Zip:	91761

NPDES as of 03/2018:

NPDES Number:	CAS000001
Status:	Active
Agency Number:	0
Region:	8
Regulatory Measure ID:	491074
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	8 36I027360
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	09/22/2017
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Cardenas Markets LLC
Discharge Address:	2501 East Guasti Road
Discharge City:	Ontario
Discharge State:	California
Discharge Zip:	91761
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

Name:	CARDENAS MARKETS LLC
Address:	2501 EAST GUASTI RD
City,State,Zip:	ONTARIO, CA 91761
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	8 36I024173
Regulatory Measure Type:	Industrial
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Terminated
Status Date:	07/18/2018
Operator Name:	Cardenas Markets LLC
Operator Address:	2501 East Guasti Road
Operator City:	Ontario
Operator State:	California

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Operator Zip:	91761
NPDES as of 03/2018:	
NPDES Number:	CAS000001
Status:	Active
Agency Number:	0
Region:	8
Regulatory Measure ID:	436251
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	8 36I024173
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	03/27/2013
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Cardenas Markets LLC
Discharge Address:	2501 East Guasti Road
Discharge City:	Ontario
Discharge State:	California
Discharge Zip:	91761
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	8
Regulatory Measure ID:	436251
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	8 36I024173
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	03/27/2013
Processed Date:	03/27/2013
Status:	Active
Status Date:	03/20/2017
Place Size:	263842
Place Size Unit:	SqFt
Contact:	Adrian Castaneda
Contact Title:	Supply Chain Director
Contact Phone:	909-923-7426
Contact Phone Ext:	Not reported
Contact Email:	ancastaneda@cmkts.com
Operator Name:	Cardenas Markets LLC
Operator Address:	2501 East Guasti Road
Operator City:	Ontario
Operator State:	California
Operator Zip:	91761
Operator Contact:	Maria Bermudez

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Operator Contact Title:	Director of risk management
Operator Contact Phone:	909-923-7426
Operator Contact Phone Ext:	1601
Operator Contact Email:	mbermudez@cmkts.com
Operator Type:	Private Business
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	California
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	909-243-4212
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	N
Receiving Water Name:	Rancho Cucamonga Channel
Certifier:	Robert Lopez
Certifier Title:	Director of Risk Management
Certification Date:	25-JUL-17
Primary Sic:	4226-Special Warehousing and Storage, NEC
Secondary Sic:	4225-General Warehousing and Storage
Tertiary Sic:	Not reported

San Bern. Co. Permit:

Name:	CARDENAS MARKETS DISTRIBUTION CENTER
Address:	2501 E GUASTI RD
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO
Facility ID:	FA0015061
Owner:	CARDENAS MARKETS LLC
Permit Number:	PT0026222
Permit Category:	SMALL QUANTITY GENERATOR
Facility Status:	ACTIVE
Expiration Date:	02/28/2024

Name:	CARDENAS MARKETS DISTRIBUTION CENTER
Address:	2501 E GUASTI RD
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Facility ID: FA0015061
Owner: CARDENAS MARKETS LLC
Permit Number: PT0026221
Permit Category: HAZARDOUS MATERIALS 4-10 CHEMICALS
Facility Status: ACTIVE
Expiration Date: 02/28/2024

Name: HUB DISTRIBUTING INC
Address: 2501 E GUASTI RD
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0003876
Owner: HUB DISTRIBUTING INC
Permit Number: PT0006357
Permit Category: CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR
Facility Status: INACTIVE
Expiration Date: 11/30/2009

CIWQS:

Name:	CARDENAS MARKETS LLC
Address:	2501 EAST GUASTI RD
City,State,Zip:	ONTARIO, CA 91761
Agency:	Cardenas Markets LLC
Agency Address:	2501 East Guasti Road, Ontario , CA 91761
Place/Project Type:	Industrial - Special Warehousing and Storage, NEC
SIC/NAICS:	4226(+)
Region:	8
Program:	INDSTW
Regulatory Measure Status:	Terminated
Regulatory Measure Type:	Storm water industrial
Order Number:	2014-0057-DWQ
WDID:	8 36I024173
NPDES Number:	CAS000001
Adoption Date:	Not reported
Effective Date:	03/27/2013
Termination Date:	07/18/2018
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	34.06564
Longitude:	-117.59772

Name:	CARDENAS MARKETS LLC
Address:	2501 EAST GUASTI ROAD
City,State,Zip:	ONTARIO, CA 91761
Agency:	Cardenas Markets LLC
Agency Address:	2501 East Guasti Road, Ontario , CA 91761
Place/Project Type:	Industrial - Special Warehousing and Storage, NEC
SIC/NAICS:	4226
Region:	8
Program:	INDSTW
Regulatory Measure Status:	Active
Regulatory Measure Type:	Storm water industrial

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Order Number:	2014-0057-DWQ
WDID:	8 36I027360
NPDES Number:	CAS000001
Adoption Date:	Not reported
Effective Date:	09/22/2017
Termination Date:	Not reported
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	1
Violations within 5 years:	1
Latitude:	34.06636
Longitude:	-117.59769

CERS:

Name:	CARDENAS MARKETS LLC
Address:	2501 EAST GUASTI ROAD
City,State,Zip:	ONTARIO, CA 91761
Site ID:	528622
CERS ID:	858871
CERS Description:	Industrial Facility Storm Water

Violations:

Site ID:	528622
Site Name:	Cardenas Markets LLC
Violation Date:	07-15-2019
Citation:	2014-0057-DWQ - Industrial General Permit
Violation Description:	SW - Late Report
Violation Notes:	Failure to submit the 2018-2019 Annual Report by July 15, 2019.
Violation Division:	Water Boards
Violation Program:	INDSTW
Violation Source:	SMARTS,

Enforcement Action:

Site ID:	528622
Site Name:	Cardenas Markets LLC
Site Address:	2501 EAST GUASTI ROAD
Site City:	ONTARIO
Site Zip:	91761
Enf Action Date:	08-08-2019
Enf Action Type:	Industrial Storm Water Enforcement
Enf Action Description:	Industrial Storm Water Enforcement
Enf Action Notes:	Failure to submit the 2018-2019 Annual Report by July 15, 2019.
Enf Action Division:	Water Boards
Enf Action Program:	INDSTW
Enf Action Source:	SMARTS,

Affiliation:

Affiliation Type Desc:	Owner/Operator
Entity Name:	Cardenas Markets LLC
Entity Title:	Operator
Affiliation Address:	2501 East Guasti Road
Affiliation City:	Ontario
Affiliation State:	CA

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Affiliation Country: Not reported
Affiliation Zip: 91761
Affiliation Phone: ,

Name: CARDENAS MARKETS DISTRIBUTION CENTER
Address: 2501 E GUASTI RD
City,State,Zip: ONTARIO, CA 91761
Site ID: 102986
CERS ID: 10459684
CERS Description: Chemical Storage Facilities

Violations:

Site ID: 102986
Site Name: Cardenas Markets Distribution Center
Violation Date: 05-28-2020
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes: Returned to compliance on 06/15/2020. OBSERVATION: The hazardous materials inventory needs to be updated to include used oil filter and the sulfuric acid content of the equipment batteries. The quantity of propane also needs to be updated to show approximately 255 gallons instead of the 50 gallons currently listed. CORRECTIVE ACTION: Submit an accurate and complete hazardous materials inventory.
Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 102986
Site Name: Cardenas Markets Distribution Center
Violation Date: 05-30-2023
Citation: HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)
Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes: OBSERVATION: Refrigerant underreported and approximately 85 electric forklift/pallet jack batteries observed missing from inventory submitted via CERS on 6/24/2022. CORRECTIVE ACTION: Update refrigerant amounts and include total electric forklift lead acid amounts in the hazardous materials inventory and resubmit via CERS.
Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 102986
Site Name: Cardenas Markets Distribution Center
Violation Date: 04-14-2014
Citation: HSC 6.67 Multiple - California Health and Safety Code, Chapter 6.67, Section(s) Multiple
Violation Description: Haz Waste Generator Program - Operations/Maintenance - General
Violation Notes: Returned to compliance on 03/28/2017. Failure to note accumulation start date on labels (CCR 66262.34(f)(2))
Violation Division: San Bernardino County Fire Department
Violation Program: HW

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Violation Source: CERS,

Site ID: 102986
Site Name: Cardenas Markets Distribution Center
Violation Date: 05-28-2020
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.
Violation Notes: Returned to compliance on 06/15/2020. OBSERVATION: The CERS web page was last update for this site on June 19, 2018. The plan is required to be updated yearly. CORRECTIVE ACTION: Submit an annual update and ensure that it is updated yearly.
Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 102986
Site Name: Cardenas Markets Distribution Center
Violation Date: 05-28-2020
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description: Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes: Returned to compliance on 06/22/2020. OBSERVATION: The waste oil containers in the outdoor maintenance area was found missing an accumulation start date. A container of universal waste inside the warehouse was also found missing an accumulation start date. CORRECTIVE ACTION: Submit photos demonstrating that the containers listed above has been properly labeled.
Violation Division: San Bernardino County Fire Department
Violation Program: HW
Violation Source: CERS,

Site ID: 102986
Site Name: Cardenas Markets Distribution Center
Violation Date: 03-28-2017
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes: Returned to compliance on 06/15/2020. Incomplete Business Plan submittal to CERS on 11/8/16.
Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 102986
Site Name: Cardenas Markets Distribution Center
Violation Date: 04-14-2014
Citation: HSC 6.95 25505(a) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Violation Description: Owner/Operator failed to complete and/or submit a Hazardous Materials Business Plan when storing hazardous materials at or above the thresholds quantities of 55 gallons/500 lbs/200 cubic feet.
Violation Notes: Returned to compliance on 06/15/2020.
Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-28-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: ROUTINE GENERATOR INSPECTION
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-14-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Follow up routine inspection to initial inspection when facility was moving in.
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-28-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: ROUTINE HANDLER INSPECTION
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-14-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Follow up routine inspection to previous inspection when facility was still moving to this location.
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-28-2020
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Eval Date: 05-30-2023
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-28-2020
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-30-2023
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Enforcement Action:
Site ID: 102986
Site Name: Cardenas Markets Distribution Center
Site Address: 2501 E GUASTI RD
Site City: ONTARIO
Site Zip: 91761
Enf Action Date: 03-28-2017
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: San Bernardino County Fire Department
Enf Action Program: HMRRP
Enf Action Source: CERS,

Site ID: 102986
Site Name: Cardenas Markets Distribution Center
Site Address: 2501 E GUASTI RD
Site City: ONTARIO
Site Zip: 91761
Enf Action Date: 04-14-2014
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: San Bernardino County Fire Department
Enf Action Program: HMRRP
Enf Action Source: CERS,

Site ID: 102986
Site Name: Cardenas Markets Distribution Center
Site Address: 2501 E GUASTI RD
Site City: ONTARIO

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Site Zip:	91761
Enf Action Date:	04-14-2014
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	San Bernardino County Fire Department
Enf Action Program:	HW
Enf Action Source:	CERS,

Coordinates:

Site ID:	102986
Facility Name:	Cardenas Markets Distribution Center
Env Int Type Code:	HWG
Program ID:	10459684
Coord Name:	Not reported
Ref Point Type Desc:	Center of a facility or station.,
Latitude:	34.065760
Longitude:	-117.597720

Affiliation:

Affiliation Type Desc:	Identification Signer
Entity Name:	Jorge Morfin
Entity Title:	Regulatory Compliance Specialist
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Parent Corporation
Entity Name:	Cardenas Markets, LLC.
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	2501 E. Guasti Rd.
Affiliation City:	Ontario
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	91761
Affiliation Phone:	,

Affiliation Type Desc:	Legal Owner
Entity Name:	Cardenas Markets LLC
Entity Title:	Not reported
Affiliation Address:	2501 E Guasti Rd
Affiliation City:	Ontario
Affiliation State:	CA

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **S102040171**

Affiliation Country:	United States
Affiliation Zip:	91761
Affiliation Phone:	(909) 923-7426,
Affiliation Type Desc:	CUPA District
Entity Name:	San Bernardino County Fire
Entity Title:	Not reported
Affiliation Address:	620 South E Street
Affiliation City:	San Bernardino
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92415-0153
Affiliation Phone:	(909) 386-8401,
Affiliation Type Desc:	Environmental Contact
Entity Name:	Mirna Ruacho
Entity Title:	Not reported
Affiliation Address:	2501 E Guasti Rd
Affiliation City:	Ontario
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	91761
Affiliation Phone:	,
Affiliation Type Desc:	Operator
Entity Name:	Cardenas Markets Distribution Center
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(909) 243-4212,
Affiliation Type Desc:	Property Owner
Entity Name:	M-K Associates, Ltd.
Entity Title:	Not reported
Affiliation Address:	3625 Del Amo Boulevard Ste 130
Affiliation City:	Torrance
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	90503
Affiliation Phone:	(310) 371-4095,
Affiliation Type Desc:	Document Preparer
Entity Name:	Jorge Morfin
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

G34 **CARDENAS MARKETS DISTRIBUTION CENTER** **RCRA NonGen / NLR** **1024835793**
ENE **2501 E GUASTI RD** **CAL000378320**
1/8-1/4 **ONTARIO, CA 91761**
0.226 mi.
1191 ft. **Site 3 of 3 in cluster G**

Relative:
Higher

Actual:
966 ft.

RCRA Listings:

Date Form Received by Agency:	20120919
Handler Name:	Cardenas Markets Distribution Center
Handler Address:	2501 E GUASTI RD
Handler City,State,Zip:	ONTARIO, CA 91761-7657
EPA ID:	CAL000378320
Contact Name:	ROBERT LOPEZ
Contact Address:	2501 E. GUASTI RD.
Contact City,State,Zip:	ONTARIO, CA 91761
Contact Telephone:	951-775-4783
Contact Fax:	Not reported
Contact Email:	RLOPEZ@CMKTS.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	2501 E GUASTI RD
Mailing City,State,Zip:	ONTARIO, CA 91761-3631
Owner Name:	Cardenas Markets Inc
Owner Type:	Other
Operator Name:	Robert Lopez
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **1024835793**

Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20180906
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name: ROBERT LOPEZ	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	2501 E. GUASTI RD.
Owner/Operator City,State,Zip:	ONTARIO, CA 91761
Owner/Operator Telephone:	951-775-4783
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name: CARDENAS MARKETS INC	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	2501 E GUASTI RD
Owner/Operator City,State,Zip:	ONTARIO, CA 91761-3631
Owner/Operator Telephone:	909-923-7426
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20120919
Handler Name:	CARDENAS MARKETS DISTRIBUTION CENTER
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

CARDENAS MARKETS DISTRIBUTION CENTER (Continued) **1024835793**

List of NAICS Codes and Descriptions:
NAICS Code: 56121
NAICS Description: FACILITIES SUPPORT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

H35 **AVIS RENT A CAR** **CA LUST** **S103249206**
SE **ONTARIO AIRPORT** **CA CHMIRS** **N/A**
1/8-1/4 **ONTARIO, CA 91762** **CA Cortese**
0.249 mi.
1313 ft. **Site 1 of 4 in cluster H**

Relative: **Lower**
Actual: **943 ft.**

LUST REG 8:

Name:	AVIS RENT A CAR
Address:	ONTARIO AIRPORT
City:	ONTARIO
Region:	8
County:	San Bernardino
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083603159T
Local Case Num:	98023
Case Type:	Soil only
Substance:	Gasoline
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	AIRPORT DR
Enf Type:	CLOS
Funding:	Not reported
How Discovered:	Not reported
How Stopped:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Global ID:	T0607100472
How Stopped Date:	Not reported
Enter Date:	5/6/1998
Date Confirmation of Leak Began:	3/27/1997
Date Preliminary Assessment Began:	Not reported
Discover Date:	3/27/1997
Enforcement Date:	Not reported
Close Date:	10/22/1999
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	5/6/1998
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported

AVIS RENT A CAR (Continued) **S103249206**

Interim:	Not reported
Oversite Program:	LUST
Latitude:	34.0597921
Longitude:	-117.66595
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	TME
Staff Initials:	JC3
Lead Agency:	Local Agency
Local Agency:	36000L
Hydr Basin #:	UPPER SANTA ANA VALL
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported

Summary: Not reported

CHMIRS:

Name:	Not reported
Address:	ONTARIO AIRPORT
City,State,Zip:	ONTARIO, CA
OES Incident Number:	5-1232
OES notification:	02/23/2005
OES Date:	Not reported
OES Time:	Not reported
Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	Not reported
Waterway:	East Cucamonga Channel

AVIS RENT A CAR (Continued) **S103249206**

Spill Site:	Not reported
Cleanup By:	Unknown
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Date/Time:	Not reported
Year:	2005
Agency:	Ontario Airport
Incident Date:	2/23/200512:00:00 AM
Admin Agency:	San Bernardino County Health Department
Amount:	Not reported
Contained:	Unknown
Site Type:	Waterways
E Date:	Not reported
Substance:	Jet Fuel
Gallons:	0.000000
Unknown:	5
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	0
Number of Injuries:	0
Number of Fatalities:	0
#1 Pipeline:	Not reported
#2 Pipeline:	Not reported
#3 Pipeline:	Not reported
#1 Vessel >= 300 Tons:	Not reported
#2 Vessel >= 300 Tons:	Not reported
#3 Vessel >= 300 Tons:	Not reported
Evacs:	Not reported
Injuries:	Not reported
Fatals:	Not reported
Comments:	Not reported
Description:	The jet fuel spilled into channel for unknown reason.

CORTESE:

Name:	AVIS RENT A CAR
Address:	ONTARIO AIRPORT
City,State,Zip:	ONTARIO, CA 91762
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0607100472
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported

AVIS RENT A CAR (Continued) **S103249206**

Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

H36 **AVIS RENT A CAR** **CA LUST** **S110655013**
SE **ONTARIO AIRPORT** **N/A**
1/8-1/4 **ONTARIO, CA 91762**
0.249 mi.
1313 ft. **Site 2 of 4 in cluster H**

Relative: **Lower**

Actual: **943 ft.**

LUST:

Name:	AVIS RENT A CAR
Address:	ONTARIO AIRPORT
City,State,Zip:	ONTARIO, CA 91762
Lead Agency:	SAN BERNARDINO COUNTY
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607100472
Global Id:	T0607100472
Latitude:	34.060855
Longitude:	-117.598279
Status:	Completed - Case Closed
Status Date:	10/22/1999
Case Worker:	JC
RB Case Number:	083603159T
Local Agency:	SAN BERNARDINO COUNTY
File Location:	Local Agency
Local Case Number:	98023
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
EPA Region:	9
Coordinate Source:	Google Geocode
Cuf Case:	YES
Quantity Released Gallons:	Not reported
Begin Date:	03/27/1997
Leak Reported Date:	04/13/1998
How Discovered:	Not reported
How Discovered Description:	Not reported
Discharge Source:	Not reported
Discharge Cause:	Not reported
Stop Method:	Not reported
Stop Description:	Not reported
No Further Action Date:	10/22/1999
CA Water Watershed Name:	Santa Ana River - Middle Santa Ana River - Chino (Split) (801.21)
Dwr Groundwater Subbasin Name:	Upper Santa Ana Valley - Chino (8-002.01)
Disadvantaged Community:	Not reported
CA Enviroscreen 3 Score:	96-100% (highest scores)
CA Enviroscreen 4 Score:	95-100% (highest scores)
Military DOD Site:	No
Facility Project Subtype:	Not reported
RWQCB Region:	SANTA ANA RWQCB (REGION 8)
Site History:	Not reported

LUST:

Global Id:	T0607100472
Contact Type:	Local Agency Caseworker - Primary Caseworker
Contact Name:	JACKSON CRUTSINGER

AVIS RENT A CAR (Continued) **S110655013**

Organization Name: SAN BERNARDINO COUNTY
Address: 620 SOUTH E STREET
City: SAN BERNARDINO
Email: jcrutsinger@sbcfire.org
Phone Number: Not reported

Global Id: T0607100472
Contact Type: Regional Board Caseworker
Contact Name: MIGUEL OVIEDO
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 Main Street, Suite 500
City: RIVERSIDE
Email: miguel.oviedo@waterboards.ca.gov
Phone Number: 9517823238

LUST:
Global Id: T0607100472
Action Type: Other
Date: 04/13/1998
Action: Leak Reported

Global Id: T0607100472
Action Type: ENFORCEMENT
Date: 10/22/1999
Action: Closure/No Further Action Letter

Global Id: T0607100472
Action Type: Other
Date: 03/27/1997
Action: Leak Discovery

LUST:
Global Id: T0607100472
Status: Open - Case Begin Date
Status Date: 03/27/1997

Global Id: T0607100472
Status: Open - Site Assessment
Status Date: 03/27/1997

Global Id: T0607100472
Status: Completed - Case Closed
Status Date: 10/22/1999

H37 **AEROJET** **CA CPS-SLIC** **S108542868**
SE **N/A ONT. INTL. AIRPORT** **N/A**
1/4-1/2 **ONTARIO, CA**
0.259 mi.
1369 ft. **Site 3 of 4 in cluster H**

Relative: **Lower**
Actual: **942 ft.**

SLIC REG 8:
Name: AEROJET
Address: N/A ONT. INTL. AIRPORT
City: ONTARIO
Type: Undefined
Facility Status: Closed

AEROJET (Continued) **S108542868**

Staff: Kamron Saremi, Tel 909-782-4303, SLIC
Substance: TCE
Lead Agency: Regional Board
Location Code: Not reported
Thomas Bros Code: Not reported

H38 **AEROJET GENERAL CORPORATION** **CA CPS-SLIC** **S106717771**
SE **ONTARIO INTERNATIONAL AIRPORT** **N/A**
1/4-1/2 **ONTARIO, CA**
0.264 mi.
1392 ft. **Site 4 of 4 in cluster H**

Relative: **Lower**
Actual: **942 ft.**

CPS-SLIC:

Name:	AEROJET GENERAL CORPORATION
Address:	ONTARIO INTERNATIONAL AIRPORT
City,State,Zip:	ONTARIO, CA
Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	02/01/2000
Global Id:	SLT8R0503934
Lead Agency:	SANTA ANA RWQCB (REGION 8)
Lead Agency Case Number:	Not reported
Latitude:	34.0539525420464
Longitude:	-117.626323513672
Case Type:	Cleanup Program Site
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	SLT8R050
File Location:	Not reported
Potential Media Affected:	Under Investigation
Potential Contaminants of Concern:	Tetrachloroethylene (PCE), Trichloroethylene (TCE)
EPA Region:	9
Coordinate Source:	Manual Entry on Screens
Cuf Case:	NO
Quantity Released Gallons:	Not reported
Begin Date:	02/01/2000
Leak Reported Date:	Not reported
How Discovered:	* RBD
How Discovered Description:	Not reported
Discharge Source:	Not reported
Discharge Cause:	Not reported
Stop Method:	Not reported
Stop Description:	Not reported
No Further Action Date:	02/01/2000
CA Water Watershed Name:	Santa Ana River - Middle Santa Ana River - Chino (Split) (801.21)
Dwr Groundwater Subbasin Name:	Upper Santa Ana Valley - Chino (8-002.01)
Disadvantaged Community:	Not reported
CA Enviroscreen 3 Score:	96-100% (highest scores)
CA Enviroscreen 4 Score:	95-100% (highest scores)
Military DOD Site:	No
Facility Project Subtype:	Not reported
RWQCB Region:	SANTA ANA RWQCB (REGION 8)
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

39
SSE
1/4-1/2
0.378 mi.
1996 ft.

GE ONTARIO AIRCRAFT ENGIN
2264
ONTARIO, CA 91761

CA LUST **S102430671**
CA HIST CORTESE **N/A**

Relative:
Lower

Actual:
932 ft.

LUST REG 8:

Name:	GE ONTARIO AIRCRAFT ENGINES
Address:	2264 AVION ST
City:	ONTARIO
Region:	8
County:	San Bernardino
Regional Board:	Santa Ana Region
Facility Status:	Pollution Characterization
Case Number:	083601881T
Local Case Num:	95031
Case Type:	Aquifer affected
Substance:	Diesel
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Not reported
How Stopped:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Global ID:	T0607100233
How Stopped Date:	Not reported
Enter Date:	7/20/1991
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	Not reported
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	5/30/1991
Date Pollution Characterization Began:	1/1/1965
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	7/20/1991
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	34.0342211
Longitude:	-117.6066882
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*
Staff:	CAB
Staff Initials:	CB5
Lead Agency:	Local Agency

GE ONTARIO AIRCRAFT ENGIN (Continued) **S102430671**

Local Agency: 36000L
Hydr Basin #: UPPER SANTA ANA VALL
Beneficial: Not reported
Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Summary: GASOLINE & JET FUEL DETECTED TO 120 FT. ON GOING CHLORINATED VOC INVESTIGATION. GROUNDWATER IMPACTED UP TO 5.5 PPB BENZENE (9/95, CAB)

HIST CORTESE:
edr_fname: GE ONTARIO AIRCRAFT ENGIN
edr_fadd1: 2264
City,State,Zip: ONTARIO, CA 91761
Region: CORTESE
Facility County Code: 36
Reg By: LTNKA
Reg Id: 083601881T

40
West
1/4-1/2
0.382 mi.
2016 ft.

ARCO #5222
101 VINEYARD AVE
ONTARIO, CA 91761

CA LUST **S103891726**
CA Cortese **N/A**
CA CERS

Relative:
Higher

Actual:
968 ft.

LUST:
Name: ARCO #5222
Address: 101 VINEYARD AVE
City,State,Zip: ONTARIO, CA 91761
Lead Agency: SAN BERNARDINO COUNTY
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607100539
Global Id: T0607100539
Latitude: 34.0634042
Longitude: -117.6109234
Status: Completed - Case Closed
Status Date: 06/07/2011
Case Worker: CR2
RB Case Number: 083603367T
Local Agency: SAN BERNARDINO COUNTY
File Location: Local Agency
Local Case Number: 99027
Potential Media Affect: Soil, Soil Vapor
Potential Contaminants of Concern: Gasoline, MTBE / TBA / Other Fuel Oxygenates
EPA Region: 9
Coordinate Source: * Historical Geocode - Exact Address Match
Cuf Case: YES
Quantity Released Gallons: Not reported
Begin Date: 01/04/1999
Leak Reported Date: 02/16/1999
How Discovered: Tank Closure
How Discovered Description: Not reported
Discharge Source: Piping
Discharge Cause: Unknown
Stop Method: Repair Product Piping
Stop Description: Not reported
No Further Action Date: 06/07/2011
CA Water Watershed Name: Santa Ana River - Middle Santa Ana River - Chino (Split) (801.21)

ARCO #5222 (Continued) **S103891726**

Dwr Groundwater Subbasin Name: Upper Santa Ana Valley - Chino (8-002.01)
Disadvantaged Community: Severely Disadvantaged Community
CA Enviroscreen 3 Score: 96-100% (highest scores)
CA Enviroscreen 4 Score: 95-100% (highest scores)
Military DOD Site: No
Facility Project Subtype: Not reported
RWQCB Region: SANTA ANA RWQCB (REGION 8)
Site History: CONFIRMATION SOIL BORINGS WERE INSTALLED AND SAMPLED IN JULY 2010.

LUST:
Global Id: T0607100539
Contact Type: Local Agency Caseworker - Primary Caseworker
Contact Name: CATHERINE RICHARDS
Organization Name: SAN BERNARDINO COUNTY
Address: 620 SOUTH E STREET
City: SAN BERNARDINO
Email: crichards@sbcfire.org
Phone Number: 9093868419

Global Id: T0607100539
Contact Type: Regional Board Caseworker
Contact Name: MAILE SEEGER GEE
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: maile.gee@waterboards.ca.gov
Phone Number: 9517824379

LUST:
Global Id: T0607100539
Action Type: ENFORCEMENT
Date: 08/10/2010
Action: Letter - Notice

Global Id: T0607100539
Action Type: Other
Date: 02/16/1999
Action: Leak Reported

Global Id: T0607100539
Action Type: ENFORCEMENT
Date: 05/12/2010
Action: Staff Letter

Global Id: T0607100539
Action Type: ENFORCEMENT
Date: 08/10/2010
Action: Letter - Notice

Global Id: T0607100539
Action Type: ENFORCEMENT
Date: 06/07/2011
Action: Closure/No Further Action Letter

Global Id: T0607100539
Action Type: Other
Date: 01/04/1999

ARCO #5222 (Continued) **S103891726**

Action: Leak Stopped

Global Id: T0607100539
Action Type: REMEDIATION
Date: 10/15/2008
Action: Soil Vapor Extraction (SVE)

Global Id: T0607100539
Action Type: ENFORCEMENT
Date: 01/16/2008
Action: Notification - Public Notice of ROD/RAP/CAP

Global Id: T0607100539
Action Type: Other
Date: 01/04/1999
Action: Leak Discovery

Global Id: T0607100539
Action Type: RESPONSE
Date: 02/01/2011
Action: Other Report / Document

LUST:
Global Id: T0607100539
Status: Open - Case Begin Date
Status Date: 01/04/1999

Global Id: T0607100539
Status: Open - Site Assessment
Status Date: 01/26/1999

Global Id: T0607100539
Status: Open - Remediation
Status Date: 09/21/2009

Global Id: T0607100539
Status: Completed - Case Closed
Status Date: 06/07/2011

LUST REG 8:
Name: ARCO #5222
Address: 101 VINEYARD AVE
City: ONTARIO
Region: 8
County: San Bernardino
Regional Board: Santa Ana Region
Facility Status: Preliminary site assessment workplan submitted
Case Number: 083603367T
Local Case Num: 99027
Case Type: Soil only
Substance: 8006619, MTB
Qty Leaked: Not reported
Abate Method: Not reported
Cross Street: HOLT
Enf Type: Not reported

ARCO #5222 (Continued) **S103891726**

Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Not reported
Leak Cause:	UNK
Leak Source:	Piping
Global ID:	T0607100539
How Stopped Date:	1/4/1999
Enter Date:	3/19/1999
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	1/4/1999
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	1/26/1999
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	3/19/1999
GW Qualifies:	Not reported
Soil Qualifies:	ND
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	34.0634042
Longitude:	-117.6109234
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	0
MTBE Fuel:	0
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	*
Staff:	VJJ
Staff Initials:	LH6
Lead Agency:	Local Agency
Local Agency:	36000L
Hydr Basin #:	UPPER SANTA ANA VALL
Beneficial:	MUN
Priority:	A2
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported

Summary: DISPENSER AND PIPING UPGRADE

CORTESE:

Name:	ARCO #5222
Address:	101 VINEYARD AVE
City,State,Zip:	ONTARIO, CA 91761
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0607100539
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported

ARCO #5222 (Continued) **S103891726**

Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

CERS:

Name:	ARCO #5222
Address:	101 VINEYARD AVE
City,State,Zip:	ONTARIO, CA 91761
Site ID:	635111
CERS ID:	T0607100539
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	CATHERINE RICHARDS - SAN BERNARDINO COUNTY
Entity Title:	Not reported
Affiliation Address:	620 SOUTH E STREET
Affiliation City:	SAN BERNARDINO
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	9093868419,

41
West
1/4-1/2
0.391 mi.
2067 ft.

BUDGET RENT A CAR
203 AIRPORT DR
ONTARIO, CA 91761

CA LUST **S104744910**
CA Cortese **N/A**
CA HIST CORTESE
CA CERS

Relative:
Higher

Actual:
974 ft.

LUST:

Name:	BUDGET RENT A CAR
Address:	203 AIRPORT DR
City,State,Zip:	ONTARIO, CA 91761
Lead Agency:	SAN BERNARDINO COUNTY
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607100596
Global Id:	T0607100596
Latitude:	34.0646651
Longitude:	-117.6111915
Status:	Completed - Case Closed
Status Date:	02/28/2002
Case Worker:	Not reported
RB Case Number:	083603532T
Local Agency:	Not reported
File Location:	Local Agency
Local Case Number:	99094
Potential Media Affect:	Soil

BUDGET RENT A CAR (Continued) **S104744910**

Potential Contaminants of Concern:	Gasoline
EPA Region:	9
Coordinate Source:	* Historical Geocode - Exact Address Match
Cuf Case:	NO
Quantity Released Gallons:	Not reported
Begin Date:	06/22/1999
Leak Reported Date:	06/23/1999
How Discovered:	Tank Closure
How Discovered Description:	Not reported
Discharge Source:	Other
Discharge Cause:	Unknown
Stop Method:	Not reported
Stop Description:	Not reported
No Further Action Date:	02/28/2002
CA Water Watershed Name:	Santa Ana River - Middle Santa Ana River - Chino (Split) (801.21)
Dwr Groundwater Subbasin Name:	Upper Santa Ana Valley - Chino (8-002.01)
Disadvantaged Community:	Not reported
CA Enviroscreen 3 Score:	96-100% (highest scores)
CA Enviroscreen 4 Score:	80-85%
Military DOD Site:	No
Facility Project Subtype:	Not reported
RWQCB Region:	SANTA ANA RWQCB (REGION 8)
Site History:	Not reported

LUST:

Global Id:	T0607100596
Contact Type:	Regional Board Caseworker
Contact Name:	MAILE SEEGER GEE
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	maile.gee@waterboards.ca.gov
Phone Number:	9517824379

LUST:

Global Id:	T0607100596
Action Type:	Other
Date:	06/23/1999
Action:	Leak Reported
Global Id:	T0607100596
Action Type:	Other
Date:	06/22/1999
Action:	Leak Discovery

LUST:

Global Id:	T0607100596
Status:	Open - Case Begin Date
Status Date:	06/22/1999
Global Id:	T0607100596
Status:	Open - Site Assessment
Status Date:	06/23/1999
Global Id:	T0607100596
Status:	Completed - Case Closed
Status Date:	02/28/2002

BUDGET RENT A CAR (Continued) **S104744910**

LUST REG 8:

Name:	BUDGET RENT A CAR
Address:	203 AIRPORT DR
City:	ONTARIO
Region:	8
County:	San Bernardino
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083603532T
Local Case Num:	99094
Case Type:	Soil only
Substance:	Gasoline
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	VINEYARD
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Not reported
Leak Cause:	UNK
Leak Source:	UNK
Global ID:	T0607100596
How Stopped Date:	Not reported
Enter Date:	9/2/1999
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	6/22/1999
Enforcement Date:	Not reported
Close Date:	2/28/2002
Date Prelim Assessment Workplan Submitted:	6/23/1999
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	9/2/1999
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	34.0646651
Longitude:	-117.6111915
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	CAB
Staff Initials:	LH6
Lead Agency:	Local Agency
Local Agency:	36000L
Hydr Basin #:	UPPER SANTA ANA VALL
Beneficial:	Not reported
Priority:	Not reported

BUDGET RENT A CAR (Continued) **S104744910**

Cleanup Fund Id: Not reported
Work Suspended: No
Summary: Not reported

CORTESE:
Name: BUDGET RENT A CAR
Address: 203 AIRPORT DR
City,State,Zip: ONTARIO, CA 91761
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0607100596
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported
Flag: active
Order No: Not reported
Waste Discharge System No: Not reported
Effective Date: Not reported
Region 2: Not reported
WID Id: Not reported
Solid Waste Id No: Not reported
Waste Management Uit Name: Not reported
File Name: Active Open

HIST CORTESE:
edr_fname: BUDGET RENT A CAR
edr_fadd1: 203
City,State,Zip: ONTARIO, CA 91761
Region: CORTESE
Facility County Code: 36
Reg By: LTNKA
Reg Id: 083603532T

CERS:
Name: BUDGET RENT A CAR
Address: 203 AIRPORT DR
City,State,Zip: ONTARIO, CA 91761
Site ID: 639686
CERS ID: T0607100596
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Regional Board Caseworker
Entity Name: MAILE SEEGER GEE - SANTA ANA RWQCB (REGION 8)
Entity Title: Not reported
Affiliation Address: 3737 MAIN STREET, SUITE 500
Affiliation City: RIVERSIDE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported

BUDGET RENT A CAR (Continued) **S104744910**

Affiliation Phone: 9517824379,

I42
West
1/4-1/2
0.445 mi.
2350 ft.

SHELL STN. #088
1862 E HOLT
ONTARIO, CA 91761

Site 1 of 2 in cluster I

CA LUST **S101618982**
CA SWEEPS UST **N/A**
CA FID UST
CA Cortese
CA CERS

Relative:
Higher

Actual:
969 ft.

LUST:

Name:	BERTINO-LAWTON PROPERTIES
Address:	1862 E HOLT BLVD
City,State,Zip:	ONTARIO, CA 91761
Lead Agency:	SAN BERNARDINO COUNTY
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607100410
Global Id:	T0607100410
Latitude:	34.0633733
Longitude:	-117.6113645
Status:	Completed - Case Closed
Status Date:	11/19/1996
Case Worker:	JC
RB Case Number:	083602824T
Local Agency:	SAN BERNARDINO COUNTY
File Location:	Local Agency
Local Case Number:	96028
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
EPA Region:	9
Coordinate Source:	Google Geocode
Cuf Case:	YES
Quantity Released Gallons:	Not reported
Begin Date:	05/07/1996
Leak Reported Date:	06/05/1996
How Discovered:	Tank Closure
How Discovered Description:	Not reported
Discharge Source:	Other
Discharge Cause:	Unknown
Stop Method:	Not reported
Stop Description:	Not reported
No Further Action Date:	11/19/1996
CA Water Watershed Name:	Santa Ana River - Middle Santa Ana River - Chino (Split) (801.21)
Dwr Groundwater Subbasin Name:	Upper Santa Ana Valley - Chino (8-002.01)
Disadvantaged Community:	Not reported
CA Enviroscreen 3 Score:	96-100% (highest scores)
CA Enviroscreen 4 Score:	95-100% (highest scores)
Military DOD Site:	No
Facility Project Subtype:	Not reported
RWQCB Region:	SANTA ANA RWQCB (REGION 8)
Site History:	Not reported

LUST:

Global Id:	T0607100410
Contact Type:	Local Agency Caseworker - Primary Caseworker
Contact Name:	JACKSON CRUTSINGER
Organization Name:	SAN BERNARDINO COUNTY
Address:	620 SOUTH E STREET
City:	SAN BERNARDINO

SHELL STN. #088 (Continued) **S101618982**

Email: jcrutsinger@sbcfire.org
Phone Number: Not reported

Global Id: T0607100410
Contact Type: Regional Board Caseworker
Contact Name: MAILE SEEGER GEE
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: maile.gee@waterboards.ca.gov
Phone Number: 9517824379

LUST:
Global Id: T0607100410
Action Type: Other
Date: 06/05/1996
Action: Leak Reported

Global Id: T0607100410
Action Type: ENFORCEMENT
Date: 11/19/1996
Action: Closure/No Further Action Letter

Global Id: T0607100410
Action Type: Other
Date: 05/07/1996
Action: Leak Stopped

Global Id: T0607100410
Action Type: Other
Date: 05/07/1996
Action: Leak Discovery

LUST:
Global Id: T0607100410
Status: Open - Case Begin Date
Status Date: 05/07/1996

Global Id: T0607100410
Status: Open - Site Assessment
Status Date: 05/07/1996

Global Id: T0607100410
Status: Open - Site Assessment
Status Date: 06/05/1996

Global Id: T0607100410
Status: Completed - Case Closed
Status Date: 11/19/1996

SWEEPS UST:
Name: SHELL STN. #088
Address: 1862 E HOLT
City: ONTARIO
Status: Active

SHELL STN. #088 (Continued) **S101618982**

Comp Number:	4694
Number:	9
Board Of Equalization:	44-000074
Referral Date:	07-28-92
Action Date:	07-28-92
Created Date:	02-29-88
Owner Tank Id:	88-1
SWRCB Tank Id:	36-000-004694-000001
Tank Status:	A
Capacity:	10000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	LEADED
Number Of Tanks:	3

Name:	SHELL STN. #088
Address:	1862 E HOLT
City:	ONTARIO
Status:	Active
Comp Number:	4694
Number:	9
Board Of Equalization:	44-000074
Referral Date:	07-28-92
Action Date:	07-28-92
Created Date:	02-29-88
Owner Tank Id:	88-2
SWRCB Tank Id:	36-000-004694-000002
Tank Status:	A
Capacity:	10000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

Name:	SHELL STN. #088
Address:	1862 E HOLT
City:	ONTARIO
Status:	Active
Comp Number:	4694
Number:	9
Board Of Equalization:	44-000074
Referral Date:	07-28-92
Action Date:	07-28-92
Created Date:	02-29-88
Owner Tank Id:	88-5
SWRCB Tank Id:	36-000-004694-000003
Tank Status:	A
Capacity:	10000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

SHELL STN. #088 (Continued) **S101618982**

CA FID UST:

Facility ID:	36003384
Regulated By:	UTNKA
Regulated ID:	00004694
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	2139239876
Mail To:	Not reported
Mailing Address:	10000 LAKEWOOD BLVD
Mailing Address 2:	Not reported
Mailing City,St,Zip:	ONTARIO 91761
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

CORTESE:

Name:	BERTINO-LAWTON PROPERTIES
Address:	1862 E HOLT BLVD
City,State,Zip:	ONTARIO, CA 91761
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0607100410
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

CERS:

Name:	BERTINO-LAWTON PROPERTIES
Address:	1862 E HOLT BLVD
City,State,Zip:	ONTARIO, CA 91761
Site ID:	638050
CERS ID:	T0607100410
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	JACKSON CRUTSINGER - SAN BERNARDINO COUNTY

SHELL STN. #088 (Continued) **S101618982**

Entity Title:	Not reported
Affiliation Address:	620 SOUTH E STREET
Affiliation City:	SAN BERNARDINO
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

I43 **BERTINO-LAWTON PROPERTIES** **CA LUST S103637900**
West **1862 HOLT** **CA HIST CORTESE N/A**
1/4-1/2 **ONTARIO, CA 91761**
0.445 mi.
2350 ft. **Site 2 of 2 in cluster I**

Relative:
Higher

Actual:
969 ft.

LUST REG 8:

Name:	BERTINO-LAWTON PROPERTIES
Address:	1862 HOLT BLVD
City:	ONTARIO
Region:	8
County:	San Bernardino
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083602824T
Local Case Num:	96028
Case Type:	Soil only
Substance:	Gasoline
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	CORONA
Enf Type:	CLOS
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Not reported
Leak Cause:	UNK
Leak Source:	UNK
Global ID:	T0607100410
How Stopped Date:	5/7/1996
Enter Date:	6/18/1996
Date Confirmation of Leak Began:	5/7/1996
Date Preliminary Assessment Began:	5/7/1996
Discover Date:	5/7/1996
Enforcement Date:	Not reported
Close Date:	11/19/1996
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	6/5/1996
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	6/18/1996
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	34.0633122
Longitude:	-117.6120725

BERTINO-LAWTON PROPERTIES (Continued) **S103637900**

MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	2
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	*
Staff:	VJJ
Staff Initials:	JC3
Lead Agency:	Local Agency
Local Agency:	36000L
Hydr Basin #:	UPPER SANTA ANA VALL
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported

Summary: Not reported

HIST CORTESE:

edr_fname:	BERTINO-LAWTON PROPERTIES
edr_fadd1:	1862 HOLT
City,State,Zip:	ONTARIO, CA 91761
Region:	CORTESE
Facility County Code:	36
Reg By:	LTNKA
Reg Id:	083602824T

J44 **SBD ONTARIO ARMY AIRFIELD** **CA ENVIROSTOR** **S107736960**
SW **CA AQUEOUS FOAM** **N/A**
1/4-1/2 **ONTARIO, CA 91761**
0.455 mi.
2403 ft. **Site 1 of 4 in cluster J**

Relative:
Lower

Actual:
943 ft.

ENVIROSTOR:

Name:	SBD ONTARIO ARMY AIRFIELD
Address:	Not reported
City,State,Zip:	ONTARIO, CA 91761
Facility ID:	80000880
Status:	Inactive - Needs Evaluation
Status Date:	08/15/2018
Site Code:	Not reported
Site Type:	Military Evaluation
Site Type Detailed:	FUDS
Acres:	875
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Not reported
Supervisor:	Patrick Hsieh
Division Branch:	Cleanup Cypress
Assembly:	53
Senate:	22
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	DERA
Latitude:	34.05833

SBD ONTARIO ARMY AIRFIELD (Continued) **S107736960**

Longitude: -117.6083
APN: NONE SPECIFIED
Past Use: AIRFIELD OPERATIONS, HAZARDOUS WASTE STORAGE - TANKS/CONTAINERS
Potential COC: Explosives (UXO, MEC
Confirmed COC: NONE SPECIFIED
Potential Description: UE
Alias Name: CA99799FA00100
Alias Type: Federal Facility ID
Alias Name: J09CA7178
Alias Type: INPR
Alias Name: 80000880
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Inventory Project Report (INPR)
Completed Date: 04/29/1999
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 05/02/2016
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

AQUEOUS FOAM:
Object ID: Not reported
Name: SBD ONTARIO ARMY AIRFIELD
Address: Not reported
City,State,Zip: ONTARIO, CA
Airport ID: Not reported
Airport Class: Not reported
Lead Agency: Not reported
Lead Agency Name: Not reported
Contact URL: Not reported
Global ID: Not reported
Geotracker: Not reported
Latitude: 34.058333333
Longitude: -117.60833333
Envirostor ID: 80000880
Program Type: MILITARY EVALUATION
Status: INACTIVE - NEEDS EVALUATION
Status Date: 8/15/2018
Calenviroscreen Score: 95-100%
Site Code: Not reported

J45 **OBSERV. SQUADRON OAA** **CA ENVIROSTOR** **S107736949**
SW **N/A**
1/4-1/2 **ONTARIO army AIRPT, CA**
0.455 mi.
2403 ft. **Site 2 of 4 in cluster J**

Relative:
Lower

Actual:
943 ft.

ENVIROSTOR:

Name:	OBSERV. SQUADRON OAA
Address:	Not reported
City,State,Zip:	ONTARIO ARMY AIRPT, CA
Facility ID:	80000874
Status:	Inactive - Needs Evaluation
Status Date:	07/01/2005
Site Code:	Not reported
Site Type:	Military Evaluation
Site Type Detailed:	FUDS
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Not reported
Supervisor:	Douglas Bautista
Division Branch:	Cleanup Cypress
Assembly:	53
Senate:	22
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	DERA
Latitude:	34.05833
Longitude:	-117.6083
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	CA99799F999500
Alias Type:	Federal Facility ID
Alias Name:	J09CA7172
Alias Type:	INPR
Alias Name:	80000874
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Inventory Project Report (INPR)
Completed Date:	04/29/1999
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

J46 **SMALL ARMS RANGES** **UXO** **1024714813**
SW **N/A**
1/4-1/2 **ONTARIO, CA**
0.456 mi.
2408 ft. **Site 3 of 4 in cluster J**

Relative: UXO:
Lower

DoD Component:	FUDS
Installation Name:	ONTARIO ARMY AIRFIELD
Name:	SMALL ARMS RANGES
Address:	Not reported
Address 2:	Not reported
City,State,Zip:	ONTARIO, CA
Site ID:	02OEW
Site Type:	Small Arms Range
Latitude:	34.058333
Longitude:	-117.608333

Actual:
943 ft.

J47 **ONTARIO ARMY AIRFIELD** **FUDS** **1007212224**
SW **N/A**
1/4-1/2 **ONTARIO, CA**
0.456 mi.
2408 ft. **Site 4 of 4 in cluster J**

Relative: FUDS:
Lower

EPA Region:	09
Installation ID:	CA99799F686800
Congressional District Number:	35
Name:	ONTARIO ARMY AIRFIELD
FUDS Number:	J09CA0531
City:	ONTARIO
State:	CA
County:	SAN BERNARDINO
Object ID:	7806
USACE Division:	SPD
USACE District:	Los Angeles District (SPL)
Status:	Properties with all projects at site closeout
Current Owner:	LOCAL: CITY The City of Los Angeles, Department of Airports, currently owns the site and uses it for the Ontario International Airport.
EMS Map Link:	https://fudsportal.usace.army.mil/ems/inventory/map?id=61967
Eligibility:	Eligible
Has Projects:	Yes
NPL Status:	Not reported
Project Required:	Yes
Feature Description:	The site consisted of a total of 875.49 acres; 375.11 acres fee, 518.12 acres lease, and 0.26 acres easement acquired between 1942 and 1944. A portion of the site (Ontario Air National Guard) is adressed under J09CA0522. Civilian airport operations at this site began in the early 1930s and was located in the southwest corner of the field. The airport was then expanded between 1940 and 1942 by the City of Ontario. The AAF began operation in 1942, when the U.S. Army obtained control of Ontario Municipal Airport and expanded it by development of the agricultural land adjacent to the airport. The U.S. Army utilized the site for training P-38 fighter pilots. The site was surplused on 15 November 1945 and then transferred on 29 October 1946 to the War Assets Administration for control. In 1949, the U.S. terminated allleases and easements at the site and quitclaimed the fee title tot he City of Ontario, with the exception of 7.93 acres, which was withdrawn from surplus on 7 April 1949 by the U.S. Air Force for the establishment of the National Guard Training Site.

ONTARIO ARMY AIRFIELD (Continued) **1007212224**

Latitude: 34.05833333
Longitude: -117.60833333

FUDS Detail as of Jan 2015:
Fiscal Year: 2013
Federal Facility ID: CA9799F6868
RAB: Not reported
NPL Status: Not Listed
Description: The site comprised of 875.49 acres in Ontario, California. The site encompasses all of the present airport property west of Archibald Avenue and sections south of Mission Blvd. between Grove and Turner Streets. The City of Ontario subsequently expanded the airport to the east to lengthen the runways and taxiways and named the airport Ontario International Airport. Over the years, the City of Ontario leased portions of the airport to numerous companies for commercial and industrial purposes. Aerospace companies built, tested, overhauled, and refurbished aircraft within and adjacent to the airport. In 1985, the City of Ontario deeded title of the airport property to the City of Los Angeles, Department of Airports (LADA). From 1967 to 1985, the LADA operated and maintained the airport for the City of Ontario under an agreement. AAF improvements included maintenance and fueling facilities for aircraft and motor vehicles, taxiways and hardstands, subsistence, recreation, storage and operations buildings, utilities, and an ammo dump.
History: The site consisted of a total of 875.49 acres; 375.11 acres fee, 518.12 acres lease, and 0.26 acres easement acquired between 1942 and 1944. A portion of the site (Ontario Air National Guard) is adressed under J09CA0522. Civilian airport operations at this site began in the early 1930s and was located in the southwest corner of the field. The airport was then expanded between 1940 and 1942 by the City of Ontario. The AAF began operation in 1942, when the U.S. Army obtained control of Ontario Municipal Airport and expanded it by development of the agricultural land adjacent to the airport. The U.S. Army utilized the site for training P-38 fighter pilots. The site was surplused on 15 November 1945 and then transferred on 29 October 1946 to the War Assets Administration for control. In 1949, the U.S. terminated allleases and easements at the site and quitclaimed the fee title tot he City of Ontario, with the exception of 7.93 acres, which was withdrawn from surplus on 7 April 1949 by the U.S. Air Force for the establishment of the National Guard Training Site.
CTC: 868.20000000000005
Current Program: Not reported
Future Program: Not reported
Institutional ID: 61967

MRA:
Inst ID: 61967
FUDS Number: J09CA0531
Facility Name: ONTARIO ARMY AIRFIELD
PHASE: 4
ARC: Y
DIST: SPL
MMRP: Y
MRA ID: J09CA053102R01

Inst ID: 61967
FUDS Number: J09CA0531

ONTARIO ARMY AIRFIELD (Continued) **1007212224**

Facility Name:	ONTARIO ARMY AIRFIELD
PHASE:	4
ARC:	Y
DIST:	SPL
MMRP:	Y
MRA ID:	J09CA053102R01

MRS:

Inst ID:	61967
FUDS Number:	J09CA0531
Facility Name:	ONTARIO ARMY AIRFIELD
PHASE:	4
Site ID:	02
DIST:	SPL
MMRP:	Y
MRA ID:	J09CA053102R01
PROJ NO:	J09CA053102

Inst ID:	61967
FUDS Number:	J09CA0531
Facility Name:	ONTARIO ARMY AIRFIELD
PHASE:	4
Site ID:	02
DIST:	SPL
MMRP:	Y
MRA ID:	J09CA053102R01
PROJ NO:	J09CA053102

K48 **TEXACO SERVICE STATION** **CA LUST S103066110**
WNW **501 VINEYARD AVE** **CA CERS N/A**
1/4-1/2 **ONTARIO, CA 91761**
0.484 mi.
2555 ft. **Site 1 of 3 in cluster K**

Relative:
Higher

Actual:
1002 ft.

LUST:

Name:	TEXACO SERVICE STATION
Address:	501 VINEYARD AVENUE NORTH
City,State,Zip:	ONTARIO, CA 91764
Lead Agency:	SAN BERNARDINO COUNTY
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607102075
Global Id:	T0607102075
Latitude:	34.0685896
Longitude:	-117.6110655
Status:	Completed - Case Closed
Status Date:	05/06/2005
Case Worker:	JC
RB Case Number:	Not reported
Local Agency:	SAN BERNARDINO COUNTY
File Location:	Local Agency
Local Case Number:	2002011
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
EPA Region:	9
Coordinate Source:	Google Geocode
Cuf Case:	YES

TEXACO SERVICE STATION (Continued) **S103066110**

Quantity Released Gallons:	Not reported
Begin Date:	02/26/2002
Leak Reported Date:	03/26/2002
How Discovered:	Tank Closure
How Discovered Description:	Not reported
Discharge Source:	Other
Discharge Cause:	Unknown
Stop Method:	Close and Remove Tank
Stop Description:	Not reported
No Further Action Date:	05/06/2005
CA Water Watershed Name:	Santa Ana River - Middle Santa Ana River - Chino (Split) (801.21)
Dwr Groundwater Subbasin Name:	Upper Santa Ana Valley - Chino (8-002.01)
Disadvantaged Community:	Disadvantaged Community
CA Enviroscreen 3 Score:	96-100% (highest scores)
CA Enviroscreen 4 Score:	80-85%
Military DOD Site:	No
Facility Project Subtype:	Not reported
RWQCB Region:	SANTA ANA RWQCB (REGION 8)
Site History:	Not reported

LUST:

Global Id:	T0607102075
Contact Type:	Local Agency Caseworker
Contact Name:	JACKSON CRUTSINGER
Organization Name:	SAN BERNARDINO COUNTY
Address:	620 SOUTH E STREET
City:	SAN BERNARDINO
Email:	jcrutsinger@sbcfire.org
Phone Number:	Not reported

LUST:

Global Id:	T0607102075
Action Type:	Other
Date:	03/26/2002
Action:	Leak Reported
Global Id:	T0607102075
Action Type:	ENFORCEMENT
Date:	05/06/2005
Action:	Closure/No Further Action Letter
Global Id:	T0607102075
Action Type:	REMEDIATION
Date:	04/10/2002
Action:	Excavation
Global Id:	T0607102075
Action Type:	REMEDIATION
Date:	07/22/2004
Action:	Soil Vapor Extraction (SVE)
Global Id:	T0607102075
Action Type:	Other
Date:	03/19/2002
Action:	Leak Discovery

TEXACO SERVICE STATION (Continued) **S103066110**

LUST:

Global Id:	T0607102075
Status:	Open - Case Begin Date
Status Date:	02/26/2002
Global Id:	T0607102075
Status:	Open - Site Assessment
Status Date:	02/26/2002
Global Id:	T0607102075
Status:	Open - Remediation
Status Date:	04/10/2002
Global Id:	T0607102075
Status:	Open - Site Assessment
Status Date:	06/01/2003
Global Id:	T0607102075
Status:	Completed - Case Closed
Status Date:	05/06/2005

LUST REG 8:

Name:	TEXACO SERVICE STATION
Address:	501 VINEYARD AVE
City:	ONTARIO
Region:	8
County:	San Bernardino
Regional Board:	Santa Ana Region
Facility Status:	Pollution Characterization
Case Number:	083602603T
Local Case Num:	94073
Case Type:	Soil only
Substance:	Gasoline
Qty Leaked:	Not reported
Abate Method:	Excavate and Dispose - remove contaminated soil and dispose in approved site
Cross Street:	G
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Not reported
Leak Cause:	Not reported
Leak Source:	Piping
Global ID:	T0607100366
How Stopped Date:	12/1/1994
Enter Date:	2/3/1995
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	12/7/1994
Discover Date:	12/1/1994
Enforcement Date:	Not reported
Close Date:	9/10/1999
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	1/1/1965
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported

TEXACO SERVICE STATION (Continued) **S103066110**

Date Post Remedial Action Monitoring:	Not reported
Enter Date:	2/3/1995
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	34.068441
Longitude:	-117.6112025
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	TME
Staff Initials:	LH6
Lead Agency:	Local Agency
Local Agency:	36000L
Hydr Basin #:	UPPER SANTA ANA VALL
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported

Summary: SANDY GRAVEL SOIL

CERS:

Name:	TEXACO SERVICE STATION
Address:	501 VINEYARD AVENUE NORTH
City,State,Zip:	ONTARIO, CA 91764
Site ID:	689800
CERS ID:	T0607102075
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	JACKSON CRUTSINGER - SAN BERNARDINO COUNTY
Entity Title:	Not reported
Affiliation Address:	620 SOUTH E STREET
Affiliation City:	SAN BERNARDINO
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

K49 **TEXACO SERVICE STATION** **CA LUST** **U001566648**
WNW **501 N VINEYARD AVE** **CA SWEEPS UST** **N/A**
1/4-1/2 **ONTARIO, CA 91761** **CA FID UST**
0.484 mi. **CA Cortese**
2555 ft. **Site 2 of 3 in cluster K** **CA CERS**

Relative:
Higher

Actual:
1002 ft.

LUST:

Name:	TEXACO SERVICE STATION
Address:	501 N VINEYARD AVE
City,State,Zip:	ONTARIO, CA 91761
Lead Agency:	SAN BERNARDINO COUNTY
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607100366
Global Id:	T0607100366
Latitude:	34.0683922
Longitude:	-117.611058
Status:	Completed - Case Closed
Status Date:	09/10/1999
Case Worker:	Not reported
RB Case Number:	083602603T
Local Agency:	Not reported
File Location:	Local Agency
Local Case Number:	94073
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
EPA Region:	9
Coordinate Source:	Google Geocode
Cuf Case:	YES
Quantity Released Gallons:	Not reported
Begin Date:	12/01/1994
Leak Reported Date:	12/07/1994
How Discovered:	Tank Closure
How Discovered Description:	Not reported
Discharge Source:	Piping
Discharge Cause:	Not reported
Stop Method:	Not reported
Stop Description:	Not reported
No Further Action Date:	09/10/1999
CA Water Watershed Name:	Santa Ana River - Middle Santa Ana River - Chino (Split) (801.21)
Dwr Groundwater Subbasin Name:	Upper Santa Ana Valley - Chino (8-002.01)
Disadvantaged Community:	Disadvantaged Community
CA Enviroscreen 3 Score:	96-100% (highest scores)
CA Enviroscreen 4 Score:	80-85%
Military DOD Site:	No
Facility Project Subtype:	Not reported
RWQCB Region:	SANTA ANA RWQCB (REGION 8)
Site History:	Not reported

LUST:

Global Id:	T0607100366
Contact Type:	Regional Board Caseworker
Contact Name:	MIGUEL OVIEDO
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 Main Street, Suite 500
City:	RIVERSIDE
Email:	miguel.oviedo@waterboards.ca.gov
Phone Number:	9517823238

LUST:

TEXACO SERVICE STATION (Continued) **U001566648**

Global Id: T0607100366
Action Type: ENFORCEMENT
Date: 12/22/1998
Action: Closure/No Further Action Letter

Global Id: T0607100366
Action Type: Other
Date: 12/07/1994
Action: Leak Reported

Global Id: T0607100366
Action Type: Other
Date: 12/01/1994
Action: Leak Stopped

Global Id: T0607100366
Action Type: Other
Date: 12/01/1994
Action: Leak Discovery

LUST:
Global Id: T0607100366
Status: Open - Case Begin Date
Status Date: 12/01/1994

Global Id: T0607100366
Status: Open - Site Assessment
Status Date: 12/07/1994

Global Id: T0607100366
Status: Completed - Case Closed
Status Date: 09/10/1999

SWEEPS UST:
Name: EXXON SERVICE STATION #7-2886
Address: 501 N VINEYARD
City: ONTARIO
Status: Active
Comp Number: 23936
Number: 1
Board Of Equalization: 44-000285
Referral Date: 07-28-92
Action Date: 07-28-92
Created Date: 02-29-88
Owner Tank Id: 1
SWRCB Tank Id: 36-000-023936-000001
Tank Status: A
Capacity: 6000
Active Date: 08-23-88
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: 4

Name: EXXON SERVICE STATION #7-2886

TEXACO SERVICE STATION (Continued) **U001566648**

Address:	501 N VINEYARD
City:	ONTARIO
Status:	Active
Comp Number:	23936
Number:	1
Board Of Equalization:	44-000285
Referral Date:	07-28-92
Action Date:	07-28-92
Created Date:	02-29-88
Owner Tank Id:	2
SWRCB Tank Id:	36-000-023936-000002
Tank Status:	A
Capacity:	8000
Active Date:	08-23-88
Tank Use:	M.V. FUEL
STG:	P
Content:	LEADED
Number Of Tanks:	Not reported

Name:	EXXON SERVICE STATION #7-2886
Address:	501 N VINEYARD
City:	ONTARIO
Status:	Active
Comp Number:	23936
Number:	1
Board Of Equalization:	44-000285
Referral Date:	07-28-92
Action Date:	07-28-92
Created Date:	02-29-88
Owner Tank Id:	4
SWRCB Tank Id:	36-000-023936-000003
Tank Status:	A
Capacity:	1000
Active Date:	08-23-88
Tank Use:	OIL
STG:	W
Content:	WASTE OIL
Number Of Tanks:	Not reported

Name:	EXXON SERVICE STATION #7-2886
Address:	501 N VINEYARD
City:	ONTARIO
Status:	Active
Comp Number:	23936
Number:	1
Board Of Equalization:	44-000285
Referral Date:	07-28-92
Action Date:	07-28-92
Created Date:	02-29-88
Owner Tank Id:	3
SWRCB Tank Id:	36-000-023936-000004
Tank Status:	A
Capacity:	10000
Active Date:	08-23-88
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED

TEXACO SERVICE STATION (Continued) **U001566648**

Number Of Tanks: Not reported

CA FID UST:
Facility ID: 36004687
Regulated By: UTNKA
Regulated ID: 00023936
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: Not reported
Mail To: Not reported
Mailing Address: 501 N VINEYARD
Mailing Address 2: Not reported
Mailing City,St,Zip: ONTARIO 91061
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

CORTESE:
Name: TEXACO SERVICE STATION
Address: 501 N VINEYARD AVE
City,State,Zip: ONTARIO, CA 91761
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0607100366
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported
Flag: active
Order No: Not reported
Waste Discharge System No: Not reported
Effective Date: Not reported
Region 2: Not reported
WID Id: Not reported
Solid Waste Id No: Not reported
Waste Management Uit Name: Not reported
File Name: Active Open

CERS:
Name: TEXACO SERVICE STATION
Address: 501 N VINEYARD AVE
City,State,Zip: ONTARIO, CA 91761
Site ID: 689795
CERS ID: T0607100366
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:

TEXACO SERVICE STATION (Continued) **U001566648**

Affiliation Type Desc:	Regional Board Caseworker
Entity Name:	MIGUEL OVIEDO - SANTA ANA RWQCB (REGION 8)
Entity Title:	Not reported
Affiliation Address:	3737 Main Street, Suite 500
Affiliation City:	RIVERSIDE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	9517823238,

K50 **TEXACO SERVICE STATION** **CA LUST S106784777**
WNW **501 VINEYARD AVENUE NORTH** **CA Cortese N/A**
1/4-1/2 **ONTARIO, CA 91764**
0.484 mi.
2555 ft. **Site 3 of 3 in cluster K**

Relative: **Higher**
Actual: **1002 ft.**

LUST REG 8:

Name:	TEXACO SERVICE STATION
Address:	501 VINEYARD AVENUE NORTH
City:	ONTARIO
Region:	8
County:	San Bernardino
Regional Board:	Santa Ana Region
Facility Status:	Leak being confirmed
Case Number:	Not reported
Local Case Num:	2002011
Case Type:	Soil only
Substance:	Gasoline
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	"G" STREET
Enf Type:	Not reported
Funding:	REDEV
How Discovered:	Tank Closure
How Stopped:	Close Tank
Leak Cause:	UNK
Leak Source:	UNK
Global ID:	T0607102075
How Stopped Date:	Not reported
Enter Date:	Not reported
Date Confirmation of Leak Began:	1/28/2005
Date Preliminary Assessment Began:	Not reported
Discover Date:	3/19/2002
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST

TEXACO SERVICE STATION (Continued) **S106784777**

Latitude:	0
Longitude:	0
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	Not reported
Staff Initials:	JC3
Lead Agency:	Local Agency
Local Agency:	36000L
Hydr Basin #:	Not reported
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported

Summary: Not reported

CORTESE:

Name:	TEXACO SERVICE STATION
Address:	501 VINEYARD AVENUE NORTH
City,State,Zip:	ONTARIO, CA 91764
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0607102075
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

51
WSW
1/2-1
0.610 mi.
3221 ft.

LOCKHEED MARTIN AIRCRAFT(FORMER) **CA ENVIROSTOR** **S108221154**
1800 E. AIRPORT DRIVE **CA San Bern. Co. Permit** **N/A**
ONTARIO, CA 91761

Relative:
Higher

Actual:
966 ft.

ENVIROSTOR:

Name:	LOCKHEED AIRCRAFT SERVICE CO.
Address:	1800 E. AIRPORT DRIVE
City,State,Zip:	ONTARIO, CA 91761
Facility ID:	71002210

LOCKHEED MARTIN AIRCRAFT(FORMER) (Continued) **S108221154**

Status: Refer: Other Agency
Status Date: Not reported
Site Code: Not reported
Site Type: Tiered Permit
Site Type Detailed: Tiered Permit
Acres: Not reported
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Not reported
Division Branch: Cleanup Cypress
Assembly: 53
Senate: 22
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 34.06199
Longitude: -117.6138
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CAD008368896
Alias Type: EPA Identification Number
Alias Name: 71002210
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

Name: LOCKHEED MARTIN AIRCRAFT(FORMER)
Address: 1800 E. AIRPORT DRIVE
City,State,Zip: ONTARIO, CA 91761
Facility ID: 36370030
Status: Refer: 1248 Local Agency
Status Date: 03/08/2001
Site Code: Not reported
Site Type: Evaluation
Site Type Detailed: Evaluation
Acres: Not reported
NPL: NO

LOCKHEED MARTIN AIRCRAFT(FORMER) (Continued) **S108221154**

Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Referred - Not Assigned
Division Branch: Cleanup Cypress
Assembly: 53
Senate: 22
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not Applicable
Latitude: 34.06083
Longitude: -117.6139
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: 36370030
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

San Bern. Co. Permit:
Name: SOUTHWEST AIRLINES CO - GSE
Address: 1800 E AIRPORT DR
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0009746
Owner: SOUTHWEST AIRLINES CO
Permit Number: PT0016610
Permit Category: SMALL QUANTITY GENERATOR
Facility Status: INACTIVE
Expiration Date: 05/31/2020

Name: SOUTHWEST AIRLINES CO - GSE
Address: 1800 E AIRPORT DR
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0009746
Owner: SOUTHWEST AIRLINES CO
Permit Number: PT0016609

LOCKHEED MARTIN AIRCRAFT(FORMER) (Continued) **S108221154**

Permit Category: HAZARDOUS MATERIALS 4-10 CHEMICALS
Facility Status: INACTIVE
Expiration Date: 05/31/2020

Name: SOUTHWEST AIRLINES CO ONT CARGO
Address: 1800 E AIRPORT DR
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0007762
Owner: SOUTHWEST AIRLINES CO
Permit Number: PT0013384
Permit Category: HAZMAT HANDLER 0-10 EMPLOYEES
Facility Status: INACTIVE
Expiration Date: 04/30/2014

52
NNW
1/2-1
0.792 mi.
4183 ft.

WEST END HIGH SCHOOL NO. 1 **CA ENVIROSTOR** **S105628827**
7TH STREET/CORONA AVENUE **CA SCH** **N/A**
ONTARIO, CA 91764

Relative:
Higher

Actual:
1023 ft.

ENVIROSTOR:
Name: WEST END HIGH SCHOOL NO. 1
Address: 7TH STREET/CORONA AVENUE
City,State,Zip: ONTARIO, CA 91764
Facility ID: 36010064
Status: No Further Action
Status Date: 12/28/2001
Site Code: 404080
Site Type: School Investigation
Site Type Detailed: School
Acres: 5
NPL: NO
Regulatory Agencies: DTSC
Lead Agency: DTSC
Program Manager: Not reported
Supervisor: Javier Hinojosa
Division Branch: Southern California Schools & Brownfields Outreach
Assembly: 50
Senate: 22
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: School District
Latitude: 34.075
Longitude: -117.61
APN: NONE SPECIFIED
Past Use: AGRICULTURAL - ROW CROPS
Potential COC: DDE DDT Dieldrin Selenium
Confirmed COC: 30515-NO 30207-NO 30007-NO 30008-NO
Potential Description: SOIL
Alias Name: 404080
Alias Type: Project Code (Site Code)
Alias Name: 36010064
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE

WEST END HIGH SCHOOL NO. 1 (Continued) **S105628827**

Completed Sub Area Name: Not reported
Completed Document Type: Phase 1
Completed Date: 12/28/2001
Comments: DTSC reviewed a Phase I Environmental Assessment and has made a

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

Name: WEST END HIGH SCHOOL NO. 1
Address: 7TH STREET/CORONA AVENUE
City,State,Zip: ONTARIO, CA 91764
Facility ID: 36010010
Status: No Further Action
Status Date: 12/28/2000
Site Code: 404144
Site Type: School Investigation
Site Type Detailed: School
Acres: 5
NPL: NO
Regulatory Agencies: DTSC
Lead Agency: DTSC
Program Manager: Not reported
Supervisor: Javier Hinojosa
Division Branch: Southern California Schools & Brownfields Outreach
Assembly: 50
Senate: 22
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: School District
Latitude: 34.075
Longitude: -117.61
APN: NONE SPECIFIED
Past Use: AGRICULTURAL - ROW CROPS
Potential COC: Selenium Dieldrin DDT DDE
Confirmed COC: NONE SPECIFIED
Potential Description: SOIL
Alias Name: SAN BERNARDINO CO SCHS/WEST END HS #1
Alias Type: Alternate Name
Alias Name: SAN BERNARDINO CO. SUPERINTENDENT SCHOOL
Alias Type: Alternate Name
Alias Name: SAN BERNARDINO COE-W. END SCH NO.1/VCA
Alias Type: Alternate Name
Alias Name: SAN BERNARDINO COE-WEST END HI NO. 1/CDE
Alias Type: Alternate Name
Alias Name: WEST END HIGH SCHOOL #1
Alias Type: Alternate Name
Alias Name: 404033
Alias Type: Project Code (Site Code)
Alias Name: 404080

WEST END HIGH SCHOOL NO. 1 (Continued) **S105628827**

Alias Type: Project Code (Site Code)
Alias Name: 404144
Alias Type: Project Code (Site Code)
Alias Name: 36010010
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 06/29/2000
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 01/11/2001
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 10/26/2000
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 12/28/2000
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 07/05/2001
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

SCH:

Name: WEST END HIGH SCHOOL NO. 1
Address: 7TH STREET/CORONA AVENUE
City,State,Zip: ONTARIO, CA 91764
Facility ID: 36010010
Site Type: School Investigation
Site Type Detail: School
Site Mgmt. Req.: NONE SPECIFIED
Acres: 5

WEST END HIGH SCHOOL NO. 1 (Continued) **S105628827**

National Priorities List:	NO
Cleanup Oversight Agencies:	DTSC
Lead Agency:	DTSC
Lead Agency Description:	* DTSC
Project Manager:	Not reported
Supervisor:	Javier Hinojosa
Division Branch:	Southern California Schools & Brownfields Outreach
Site Code:	404144
Assembly:	50
Senate:	22
Special Program Status:	Not reported
Status:	No Further Action
Status Date:	12/28/2000
Restricted Use:	NO
Funding:	School District
Latitude:	34.075
Longitude:	-117.61
APN:	NONE SPECIFIED
Past Use:	AGRICULTURAL - ROW CROPS
Potential COC:	Selenium, Selenium, Dieldrin, DDT, DDE
Confirmed COC:	NONE SPECIFIED
Potential Description:	SOIL
Alias Name:	SAN BERNARDINO CO SCHS/WEST END HS #1
Alias Type:	Alternate Name
Alias Name:	SAN BERNARDINO CO. SUPERINTENDENT SCHOOL
Alias Type:	Alternate Name
Alias Name:	SAN BERNARDINO COE-W. END SCH NO.1/VCA
Alias Type:	Alternate Name
Alias Name:	SAN BERNARDINO COE-WEST END HI NO. 1/CDE
Alias Type:	Alternate Name
Alias Name:	WEST END HIGH SCHOOL #1
Alias Type:	Alternate Name
Alias Name:	404033
Alias Type:	Project Code (Site Code)
Alias Name:	404080
Alias Type:	Project Code (Site Code)
Alias Name:	404144
Alias Type:	Project Code (Site Code)
Alias Name:	36010010
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Cost Recovery Closeout Memo
Completed Date:	06/29/2000
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Cost Recovery Closeout Memo
Completed Date:	01/11/2001
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Environmental Oversight Agreement
Completed Date:	10/26/2000

WEST END HIGH SCHOOL NO. 1 (Continued) **S105628827**

Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	12/28/2000
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Cost Recovery Closeout Memo
Completed Date:	07/05/2001
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported
Name:	WEST END HIGH SCHOOL NO. 1
Address:	7TH STREET/CORONA AVENUE
City,State,Zip:	ONTARIO, CA 91764
Facility ID:	36010064
Site Type:	School Investigation
Site Type Detail:	School
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	5
National Priorities List:	NO
Cleanup Oversight Agencies:	DTSC
Lead Agency:	DTSC
Lead Agency Description:	* DTSC
Project Manager:	Not reported
Supervisor:	Javier Hinojosa
Division Branch:	Southern California Schools & Brownfields Outreach
Site Code:	404080
Assembly:	50
Senate:	22
Special Program Status:	Not reported
Status:	No Further Action
Status Date:	12/28/2001
Restricted Use:	NO
Funding:	School District
Latitude:	34.075
Longitude:	-117.61
APN:	NONE SPECIFIED
Past Use:	AGRICULTURAL - ROW CROPS
Potential COC:	DDE, DDT, Dieldrin, Selenium
Confirmed COC:	30515-NO, 30207-NO, 30007-NO, 30008-NO
Potential Description:	SOIL
Alias Name:	404080
Alias Type:	Project Code (Site Code)

WEST END HIGH SCHOOL NO. 1 (Continued) **S105628827**

Alias Name: 36010064
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1
Completed Date: 12/28/2001
Comments: DTSC reviewed a Phase I Environmental Assessment and has made a

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

L53 **ONTARIO ANG TNG SITE** **UXO** **1024713491**
South **N/A**
1/2-1 **ONTARIO, CA**
0.825 mi.
4354 ft. **Site 1 of 2 in cluster L**

Relative: UXO:
Lower
DoD Component: FUDS
Actual: Installation Name: ONTARIO A.N.G. TRAINING SITE
904 ft. Name: ONTARIO ANG TNG SITE
Address: Not reported
Address 2: Not reported
City,State,Zip: ONTARIO, CA
Site ID: 00OEW
Site Type: Unexploded Munitions and Ordnance Area
Latitude: 34.051300
Longitude: -117.600998

L54 **ONTARIO A.N.G. TRAINING SITE** **FUDS** **1009484399**
South **N/A**
1/2-1 **ONTARIO, CA**
0.825 mi.
4354 ft. **Site 2 of 2 in cluster L**

Relative: FUDS:
Lower
EPA Region: 09
Actual: Installation ID: CA99799F554300
904 ft. Congressional District Number: 35
Name: ONTARIO A.N.G. TRAINING SITE
FUDS Number: J09CA0522
City: ONTARIO
State: CA
County: SAN BERNARDINO
Object ID: 9921
USACE Division: SPD
USACE District: Los Angeles District (SPL)
Status: Properties with all projects at site closeout

ONTARIO A.N.G. TRAINING SITE (Continued) **1009484399**

Current Owner:	LOCAL: CITY The City of Los Angeles, the current owner and operator of the Ontario International Airport, uses the site for aviation purposes.
EMS Map Link:	https://fudsportal.usace.army.mil/ems/inventory/map?id=61125
Eligibility:	Eligible
Has Projects:	Yes
NPL Status:	Not reported
Project Required:	Yes
Feature Description:	The site has been used as an airport and for Air National Guard training. The former Ontario Air National Guard Training Site is located on a small portion of the former Ontario Army Airfield (DERP Site No. J09CA053100). The U.S. Air Force acquired the site for the use of the CANG. The CANG used the site from 1949 to about 1980 for ANG flight training. The former ANG site was disposed of to the LADA in 1988. LADA has leased this area to various tenants whom have used the hangar located on this site.
Latitude:	34.0513
Longitude:	-117.600998

FUDS Detail as of Jan 2015:

Fiscal Year:	2013
Federal Facility ID:	CA9799F5543
RAB:	Not reported
NPL Status:	Not Listed
Description:	The former Ontario Air National Guard Training Site consisted of 30.62 acres leased to the U.S. Air Force by the City of Ontario and 7.93 acres fee owned by the U.S. Air Force and leased to the California Air National Guard (CANG). It is on 1280 S. Tower Drive, Ontario, California. The site is located along the south-central border of Ontario International Airport. In 1985, the city of Ontario conveyed the entire airport to the City of Los Angeles, Department of Airports (LADA). The site was included in that conveyance. By supplemental agreement dated 11 May 1988, 27.41 acres were deleted from the lease between the Air Force and the City of Los Angeles, reducing the size of the site. The Air Force still leases 3.21 acres from LADA and still owns 7.93 acres fee. This area is currently used by the California Air National Guard (CANG), 148th Combat Communications Squadron. This portion contains supply and administrative facilities and a motor pool, and is ineligible for consideration under DERP-FUDS. Since 1988, the eligible portion of the site has been leased to various tenants whom have used the hangar.
History:	The site has been used as an airport and for Air National Guard training. The former Ontario Air National Guard Training Site is located on a small portion of the former Ontario Army Airfield (DERP Site No. J09CA053100). The U.S. Air Force acquired the site for the use of the CANG. The CANG used the site from 1949 to about 1980 for ANG flight training. The former ANG site was disposed of to the LADA in 1988. LADA has leased this area to various tenants whom have used the hangar located on this site.
CTC:	86.5
Current Program:	Not reported
Future Program:	Not reported
Institutional ID:	61125

55
SSW
1/2-1
0.929 mi.
4906 ft.

Relative:
Lower

Actual:
906 ft.

GE ENGINE SERVICES, INC.
2264 E. AVION PLACE
ONTARIO, CA 91761

CA RESPONSE
CA ENVIROSTOR
CA LUST
CA CPS-SLIC
CA Cortese
CA San Bern. Co. Permit
CA CERS

S109517004
N/A

RESPONSE:

Name:	GE ENGINE SERVICES TEST CELL FACILITY (AKA GE AIRCRAFT)
Address:	2264 E. AVION PLACE
City,State,Zip:	ONTARIO, CA 91761
Facility ID:	36370024
Site Type:	State Response
Site Type Detail:	State Response or NPL
Acres:	4
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP, RWQCB 8 - Santa Ana
Lead Agency Description:	Not reported
Project Manager:	Not reported
Supervisor:	Yolanda Garza
Division Branch:	Southern California Schools & Brownfields Outreach
Site Code:	400070
Site Mgmt. Req.:	NONE SPECIFIED
Assembly:	53
Senate:	22
Special Program Status:	Not reported
Status:	Refer: RWQCB
Status Date:	05/07/2019
Restricted Use:	YES
Funding:	Responsible Party
Latitude:	34.04773
Longitude:	-117.6009
APN:	011327136
Past Use:	AIRCRAFT MAINTENANCE, JET FUEL STORAGE/REFUELING
Potential COC :	* HYDROCARBON SOLVENTS * Laboratory Waste Chemicals * ORGANIC LIQUIDS WITH METALS * OXYGENATED SOLVENTS * Sludge - Paint * UNSPECIFIED ACID SOLUTION * WASTE OIL & MIXED OIL * BAGHOUSE WASTE Tetrachloroethylene (PCE Trichloroethylene (TCE Chromium VI
Confirmed COC:	10179-NO 10193-NO 10199-NO 20003-NO 10009-NO 10012-NO 10061-NO 10067-NO Tetrachloroethylene (PCE 30153-NO Trichloroethylene (TCE
Potential Description:	OTH, SOIL, SV
Alias Name:	GE Aircraft
Alias Type:	Alternate Name
Alias Name:	GENERAL ELECTRIC CO AVIATION SERVICE
Alias Type:	Alternate Name
Alias Name:	GENERAL ELECTRIC ENGINE MAINTENANCE CTR.
Alias Type:	Alternate Name
Alias Name:	GENERAL ELECTRIC JET ENGINE TEST CELL
Alias Type:	Alternate Name
Alias Name:	011327136
Alias Type:	APN
Alias Name:	CAD009542721
Alias Type:	EPA Identification Number
Alias Name:	110033619742
Alias Type:	EPA (FRS #)
Alias Name:	SL208133868
Alias Type:	GeoTracker Global ID
Alias Name:	P41017

GE ENGINE SERVICES, INC. (Continued) **S109517004**

Alias Type: PCode
Alias Name: 400070
Alias Type: Project Code (Site Code)
Alias Name: 36370024
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/01/2016
Comments: Groundwater monitoring at the site is conducted under the Santa Ana RWQCB's oversight.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/29/2013
Comments: report submitted by the facility but not reviewed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/21/2014
Comments: No comments from DTSC.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/21/2014
Comments: No comments from DTSC

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/21/2014
Comments: No comments from DTSC

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operation & Maintenance Order/Agreement
Completed Date: 08/28/1998
Comments: Enforceable Agreement for Operation and Maintenance was signed by DTSC and GE.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * CEQA
Completed Date: 09/16/1994
Comments: The Department approved the final Remedial Action Plan for the General Electric Jet Engine Test Cell Facility. The CEQA (Negative Declaration) documents have also been approved. The remedial alternative recommended for the site consists of in situ soil vapor extraction to reduce VOC levels at the known source areas of the site. Groundwater investigation and cleanup will be under the oversight of the RWQCB.

Completed Area Name: PROJECT WIDE

GE ENGINE SERVICES, INC. (Continued) **S109517004**

Completed Sub Area Name: Not reported
Completed Document Type: Consent Order
Completed Date: 09/28/1988
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 03/15/1983
Comments: Facility Identified: RWQCB files - aircraft parts mfg.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 05/06/2019
Comments: The project was transferred to SARWQCB.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/31/2018
Comments: DTSC is not the oversight agency for GW monitoring.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 11/21/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Reports
Completed Date: 01/16/2009
Comments: DTSC sent approval with Engineering and HERD's comments.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Reports
Completed Date: 05/04/2007
Comments: 2nd 5 Yr. Review Report was approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/27/2006
Comments: Final letter sent to RP.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Reports
Completed Date: 01/27/2006
Comments: Shallow soil remedy only.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 05/26/1989

GE ENGINE SERVICES, INC. (Continued) **S109517004**

Comments: Reassessment was reviewed by Region 4 staff recommended AWP.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment Report
Completed Date: 01/01/1985
Comments: Preliminary Assessment Done: Facility is located in the Ontario International Airport. Test Area is 1/3-mile east along Avion. Operations consist of cleaning, overhauling, and testing of aircraft engines. In operation since 1956 (dry wells 1974-1980). Discharge to sewer. Preliminary Assessment submitted to U.S. EPA.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 10/09/1996
Comments: RMDL: Installation, operation and maintenance of three (3) separate soil vapor extraction and treatment systems (VET's) was completed on 10/09/1996.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 01/10/1996
Comments: Military and commercial jet engine testing facility. Contaminants include petroleum hydrocarbons, TCA, PCE, volatile and semi-volatile organic compounds, chloroform, naphthalene, 2-methylnaphthalene, and volatile aromatics (xylene, toluene, ethyl benzene).

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Plan
Completed Date: 09/16/1994
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 06/30/1993
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan
Completed Date: 02/29/1992
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan
Completed Date: 12/31/1991
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/27/2014

GE ENGINE SERVICES, INC. (Continued) **S109517004**

Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	02/08/2018
Comments:	DTSC is not the oversight agency for GW monitoring.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	07/31/2014
Comments:	No comments for the GW monitoring Report. DTSC is waiting for RWQCB's determination for the soil gas and GW investigation.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	03/12/2015
Comments:	Increasing TCE observed in Well OW-15.
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

ENVIROSTOR:

Name:	GE ENGINE SERVICES TEST CELL FACILITY (AKA GE AIRCRAFT)
Address:	2264 E. AVION PLACE
City,State,Zip:	ONTARIO, CA 91761
Facility ID:	36370024
Status:	Refer: RWQCB
Status Date:	05/07/2019
Site Code:	400070
Site Type:	State Response
Site Type Detailed:	State Response or NPL
Acres:	4
NPL:	NO
Regulatory Agencies:	SMBRP, RWQCB 8 - Santa Ana
Lead Agency:	RWQCB 8 - Santa Ana,SMBRP
Program Manager:	Not reported
Supervisor:	Yolanda Garza
Division Branch:	Southern California Schools & Brownfields Outreach
Assembly:	53
Senate:	22
Special Program:	Not reported
Restricted Use:	YES
Site Mgmt Req:	NONE SPECIFIED
Funding:	Responsible Party
Latitude:	34.04773
Longitude:	-117.6009
APN:	011327136

GE ENGINE SERVICES, INC. (Continued) **S109517004**

Past Use: AIRCRAFT MAINTENANCE, JET FUEL STORAGE/REFUELING
Potential COC: * HYDROCARBON SOLVENTS * Laboratory Waste Chemicals * ORGANIC LIQUIDS WITH METALS * OXYGENATED SOLVENTS * Sludge - Paint * UNSPECIFIED ACID SOLUTION * WASTE OIL & MIXED OIL * BAGHOUSE WASTE Tetrachloroethylene (PCE Trichloroethylene (TCE Chromium VI
Confirmed COC: 10179-NO 10193-NO 10199-NO 20003-NO 10009-NO 10012-NO 10061-NO 10067-NO Tetrachloroethylene (PCE 30153-NO Trichloroethylene (TCE
Potential Description: OTH, SOIL, SV
Alias Name: GE Aircraft
Alias Type: Alternate Name
Alias Name: GENERAL ELECTRIC CO AVIATION SERVICE
Alias Type: Alternate Name
Alias Name: GENERAL ELECTRIC ENGINE MAINTENANCE CTR.
Alias Type: Alternate Name
Alias Name: GENERAL ELECTRIC JET ENGINE TEST CELL
Alias Type: Alternate Name
Alias Name: 011327136
Alias Type: APN
Alias Name: CAD009542721
Alias Type: EPA Identification Number
Alias Name: 110033619742
Alias Type: EPA (FRS #)
Alias Name: SL208133868
Alias Type: GeoTracker Global ID
Alias Name: P41017
Alias Type: PCode
Alias Name: 400070
Alias Type: Project Code (Site Code)
Alias Name: 36370024
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/01/2016
Comments: Groundwater monitoring at the site is conducted under the Santa Ana RWQCB's oversight.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/29/2013
Comments: report submitted by the facility but not reviewed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/21/2014
Comments: No comments from DTSC.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/21/2014
Comments: No comments from DTSC

Completed Area Name: PROJECT WIDE

GE ENGINE SERVICES, INC. (Continued) **S109517004**

Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/21/2014
Comments: No comments from DTSC

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operation & Maintenance Order/Agreement
Completed Date: 08/28/1998
Comments: Enforceable Agreement for Operation and Maintenance was signed by DTSC and GE.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * CEQA
Completed Date: 09/16/1994
Comments: The Department approved the final Remedial Action Plan for the General Electric Jet Engine Test Cell Facility. The CEQA (Negative Declaration) documents have also been approved. The remedial alternative recommended for the site consists of in situ soil vapor extraction to reduce VOC levels at the known source areas of the site. Groundwater investigation and cleanup will be under the oversight of the RWQCB.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Consent Order
Completed Date: 09/28/1988
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 03/15/1983
Comments: Facility Identified: RWQCB files - aircraft parts mfg.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 05/06/2019
Comments: The project was transferred to SARWQCB.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/31/2018
Comments: DTSC is not the oversight agency for GW monitoring.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 11/21/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Reports

GE ENGINE SERVICES, INC. (Continued) **S109517004**

Completed Date: 01/16/2009
Comments: DTSC sent approval with Engineering and HERD's comments.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Reports
Completed Date: 05/04/2007
Comments: 2nd 5 Yr. Review Report was approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/27/2006
Comments: Final letter sent to RP.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Reports
Completed Date: 01/27/2006
Comments: Shallow soil remedy only.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 05/26/1989
Comments: Reassessment was reviewed by Region 4 staff recommended AWP.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment Report
Completed Date: 01/01/1985
Comments: Preliminary Assessment Done: Facility is located in the Ontario International Airport. Test Area is 1/3-mile east along Avion. Operations consist of cleaning, overhauling, and testing of aircraft engines. In operation since 1956 (dry wells 1974-1980). Discharge to sewer. Preliminary Assessment submitted to U.S. EPA.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 10/09/1996
Comments: RMDL: Installation, operation and maintenance of three (3) separate soil vapor extraction and treatment systems (VET's) was completed on 10/09/1996.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 01/10/1996
Comments: Military and commercial jet engine testing facility. Contaminants include petroleum hydrocarbons, TCA, PCE, volatile and semi-volatile organic compounds, chloroform, naphthalene, 2-methylnaphthalene, and volatile aromatics (xylene, toluene, ethyl benzene).

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Plan

GE ENGINE SERVICES, INC. (Continued) **S109517004**

Completed Date: 09/16/1994
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 06/30/1993
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan
Completed Date: 02/29/1992
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan
Completed Date: 12/31/1991
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/27/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/08/2018
Comments: DTSC is not the oversight agency for GW monitoring.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/31/2014
Comments: No comments for the GW monitoring Report. DTSC is waiting for RWQCB's determination for the soil gas and GW investigation.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/12/2015
Comments: Increasing TCE observed in Well OW-15.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

Name: GE ENGINE SERVICES, INC.

GE ENGINE SERVICES, INC. (Continued) **S109517004**

Address: 2264 E. AVION PLACE
City,State,Zip: ONTARIO, CA 91761
Facility ID: 71002752
Status: Inactive - Needs Evaluation
Status Date: Not reported
Site Code: Not reported
Site Type: Tiered Permit
Site Type Detailed: Tiered Permit
Acres: Not reported
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Not reported
Division Branch: Cleanup Cypress
Assembly: 53
Senate: 22
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 34.04773
Longitude: -117.6009
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CAD981375124
Alias Type: EPA Identification Number
Alias Name: 71002752
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

LUST:
Name: GE TEST CELL FACILITY
Address: 2264 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Lead Agency: SAN BERNARDINO COUNTY
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607100233

GE ENGINE SERVICES, INC. (Continued) **S109517004**

Global Id:	T0607100233
Latitude:	34.050565678
Longitude:	-117.6080382
Status:	Completed - Case Closed
Status Date:	03/01/2010
Case Worker:	JC
RB Case Number:	083601881T
Local Agency:	SAN BERNARDINO COUNTY
File Location:	Local Agency
Local Case Number:	95031
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Diesel
EPA Region:	9
Coordinate Source:	* GeoTracker web moving tool
Cuf Case:	NO
Quantity Released Gallons:	Not reported
Begin Date:	01/20/1987
Leak Reported Date:	07/20/1995
How Discovered:	Site Assessment/Site Investigation
How Discovered Description:	Not reported
Discharge Source:	Not reported
Discharge Cause:	Not reported
Stop Method:	Change Operating Procedures
Stop Description:	Not reported
No Further Action Date:	03/01/2010
CA Water Watershed Name:	Santa Ana River - Middle Santa Ana River - Chino (Split) (801.21)
Dwr Groundwater Subbasin Name:	Upper Santa Ana Valley - Chino (8-002.01)
Disadvantaged Community:	Severely Disadvantaged Community
CA Enviroscreen 3 Score:	96-100% (highest scores)
CA Enviroscreen 4 Score:	95-100% (highest scores)
Military DOD Site:	No
Facility Project Subtype:	Not reported
RWQCB Region:	SANTA ANA RWQCB (REGION 8)
Site History:	Not reported

LUST:

Global Id:	T0607100233
Contact Type:	Local Agency Caseworker - Primary Caseworker
Contact Name:	JACKSON CRUTSINGER
Organization Name:	SAN BERNARDINO COUNTY
Address:	620 SOUTH E STREET
City:	SAN BERNARDINO
Email:	jcrutsinger@sbcfire.org
Phone Number:	Not reported

Global Id:	T0607100233
Contact Type:	Regional Board Caseworker
Contact Name:	MAILE SEEGER GEE
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	maile.gee@waterboards.ca.gov
Phone Number:	9517824379

LUST:

Global Id:	T0607100233
Action Type:	ENFORCEMENT

GE ENGINE SERVICES, INC. (Continued) **S109517004**

Date: 07/06/1995
Action: Notice of Responsibility

Global Id: T0607100233
Action Type: ENFORCEMENT
Date: 09/19/1995
Action: File review

Global Id: T0607100233
Action Type: Other
Date: 03/28/1988
Action: Leak Discovery

Global Id: T0607100233
Action Type: Other
Date: 07/20/1995
Action: Leak Reported

Global Id: T0607100233
Action Type: RESPONSE
Date: 10/16/2009
Action: Other Report / Document

Global Id: T0607100233
Action Type: ENFORCEMENT
Date: 03/01/2010
Action: Closure/No Further Action Letter

Global Id: T0607100233
Action Type: ENFORCEMENT
Date: 03/01/2010
Action: Closure/No Further Action Letter

Global Id: T0607100233
Action Type: Other
Date: 07/12/1990
Action: Leak Stopped

Global Id: T0607100233
Action Type: REMEDIATION
Date: 05/01/1996
Action: Soil Vapor Extraction (SVE)

Global Id: T0607100233
Action Type: ENFORCEMENT
Date: 02/02/2008
Action: Notification - Fee Title Owners Notice

LUST:
Global Id: T0607100233
Status: Open - Case Begin Date
Status Date: 01/20/1987

Global Id: T0607100233
Status: Open - Site Assessment
Status Date: 01/20/1987

GE ENGINE SERVICES, INC. (Continued) **S109517004**

Global Id:	T0607100233
Status:	Open - Site Assessment
Status Date:	07/06/1995
Global Id:	T0607100233
Status:	Open - Remediation
Status Date:	10/26/1996
Global Id:	T0607100233
Status:	Completed - Case Closed
Status Date:	03/01/2010

CPS-SLIC:

Name:	GENERAL ELECTRIC CO - JET ENGINE TEST CELL FACILITY
Address:	2264 E. AVION STREET
City,State,Zip:	ONTARIO, CA 91761
Region:	STATE
Facility Status:	**Open - Verification Monitoring**
Status Date:	02/05/2010
Global Id:	SL208133868
Lead Agency:	SANTA ANA RWQCB (REGION 8)
Lead Agency Case Number:	36370024
Latitude:	34.047717
Longitude:	-117.601186
Case Type:	Cleanup Program Site
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	2081300
File Location:	Regional Board
Potential Media Affected:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Tetrachloroethylene (PCE), Trichloroethylene (TCE)
EPA Region:	9
Coordinate Source:	Manual Entry on Screens
Cuf Case:	NO
Quantity Released Gallons:	Not reported
Begin Date:	05/18/1990
Leak Reported Date:	01/02/1965
How Discovered:	* GOV
How Discovered Description:	Not reported
Discharge Source:	Not reported
Discharge Cause:	Not reported
Stop Method:	Not reported
Stop Description:	Not reported
No Further Action Date:	Not reported
CA Water Watershed Name:	Santa Ana River - Middle Santa Ana River - Chino (Split) (801.21)
Dwr Groundwater Subbasin Name:	Upper Santa Ana Valley - Chino (8-002.01)
Disadvantaged Community:	Severely Disadvantaged Community
CA Enviroscreen 3 Score:	96-100% (highest scores)
CA Enviroscreen 4 Score:	95-100% (highest scores)
Military DOD Site:	No
Facility Project Subtype:	Not reported
RWQCB Region:	SANTA ANA RWQCB (REGION 8)
Site History:	The Site has been operated by GE Engine Services as an aircraft engine facility since 1956. Chlorintaed solvents were used in the 1950s and 1960s. In early 1970s, 1,1,1-TCE replaced TCE. From 1981 to 1996, isopropyl alcohol was the only solvent used at the facility.

GE ENGINE SERVICES, INC. (Continued) **S109517004**

Prior to 1974, some waste water flowed to the wash area along the north side of the facility. In 1974, two dry wells were constructed (Area A & B). Some waste water were discharged to dry wells. From 1980 until 2006, waste water were treated at the Site. Site investigations were completed between 1985 and 1998. On-ste and off-Site ground investigations were performed between 1994 and 1998. Another phase of off-Site GW investigation occured in 2001 and 2002. Another phase is scheduled for 2009. GW plume extend approximately in southwesterly direction to Grove Ave. On-Site soil remediation have been completed and GE is working with DTSC to complete the closure process in 2009.

Click here to access the California GeoTracker records for this facility:

CORTESE:

Name:	GE TEST CELL FACILITY
Address:	2264 E AVION ST
City,State,Zip:	ONTARIO, CA 91761
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0607100233
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

San Bern. Co. Permit:

Name:	GE ENGINE SERVICES LLC
Address:	2264 E AVION ST
City,State,Zip:	ONTARIO, CA 91710
Region:	SAN BERNARDINO
Facility ID:	FA0003387
Owner:	GE AVIATION SERVICES
Permit Number:	PT0020069
Permit Category:	UW HANDLER WITH ANOTHER CUPA PERMIT
Facility Status:	INACTIVE
Expiration Date:	07/31/2011

Name:	GE ENGINE SERVICES LLC
Address:	2264 E AVION ST
City,State,Zip:	ONTARIO, CA 91710
Region:	SAN BERNARDINO

GE ENGINE SERVICES, INC. (Continued) **S109517004**

Facility ID: FA0003387
Owner: GE AVIATION SERVICES
Permit Number: PT0006086
Permit Category: HAZMAT HANDLER 11-25 EMPLOYEES (W/GEN PRMT)
Facility Status: INACTIVE
Expiration Date: 07/31/2011

Name: GE ENGINE SERVICES LLC
Address: 2264 E AVION ST
City,State,Zip: ONTARIO, CA 91710
Region: SAN BERNARDINO
Facility ID: FA0003387
Owner: GE AVIATION SERVICES
Permit Number: PT0017389
Permit Category: EPCRA FACILITY
Facility Status: INACTIVE
Expiration Date: 07/31/2011

Name: GE ENGINE SERVICES LLC
Address: 2264 E AVION ST
City,State,Zip: ONTARIO, CA 91710
Region: SAN BERNARDINO
Facility ID: FA0003387
Owner: GE AVIATION SERVICES
Permit Number: PT0006085
Permit Category: HAZARDOUS WASTE GENERATOR - 11-25 EMPLOYEES
Facility Status: INACTIVE
Expiration Date: 07/31/2011

Name: GE ENGINE SERVICES LLC
Address: 2264 E AVION ST
City,State,Zip: ONTARIO, CA 91710
Region: SAN BERNARDINO
Facility ID: FA0003387
Owner: GE AVIATION SERVICES
Permit Number: PT0006084
Permit Category: CA ANNUAL FEE
Facility Status: INACTIVE
Expiration Date: 07/31/2010

Name: GE ENGINE SERVICES LLC
Address: 2264 E AVION ST
City,State,Zip: ONTARIO, CA 91710
Region: SAN BERNARDINO
Facility ID: FA0003387
Owner: GE AVIATION SERVICES
Permit Number: PT0006087
Permit Category: APSA 10,001-100,000 GAL FAC CAPACITY
Facility Status: INACTIVE
Expiration Date: 07/31/2010

CERS:
Name: GE TEST CELL FACILITY
Address: 2264 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Site ID: 657207
CERS ID: T0607100233

GE ENGINE SERVICES, INC. (Continued) **S109517004**

CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Local Agency Caseworker
Entity Name: JACKSON CRUTSINGER - SAN BERNARDINO COUNTY
Entity Title: Not reported
Affiliation Address: 620 SOUTH E STREET
Affiliation City: SAN BERNARDINO
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Regional Board Caseworker
Entity Name: MAILE SEEGER GEE - SANTA ANA RWQCB (REGION 8)
Entity Title: Not reported
Affiliation Address: 3737 MAIN STREET, SUITE 500
Affiliation City: RIVERSIDE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 9517824379,

Name: GE ENGINE SERVICES T
Address: 2264 E. AVION PLACE
City,State,Zip: ONTARIO, CA 91761
Site ID: 607548
CERS ID: 36370024
CERS Description: State Response

Affiliation:
Affiliation Type Desc: Lead Project Manager
Entity Name: Chia Rin Yen
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Supervisor
Entity Name: Yolanda Garza
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

M56
SSW
1/2-1
0.945 mi.
4987 ft.

Relative:
Lower

Actual:
909 ft.

GENERAL ELECTRIC CO-AVIATION
1923 EAST AVION
ONTARIO, CA 91761

Site 1 of 3 in cluster M

CA ENVIROSTOR **U001569990**
CA CERS HAZ WASTE **N/A**
CA HIST UST
CA CERS TANKS
CA NPDES
CA San Bern. Co. Permit
CA CIWQS
CA CERS

ENVIROSTOR:

Name:	GENERAL ELECTRIC, MAIN FACILITY
Address:	1923 E. AVION STREET
City,State,Zip:	ONTARIO, CA 91761
Facility ID:	71002298
Status:	Inactive - Needs Evaluation
Status Date:	Not reported
Site Code:	Not reported
Site Type:	Tiered Permit
Site Type Detailed:	Tiered Permit
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	Not reported
Division Branch:	Cleanup Cypress
Assembly:	53
Senate:	22
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Not reported
Latitude:	34.05034
Longitude:	-117.6084
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	CAD009542721
Alias Type:	EPA Identification Number
Alias Name:	71002298
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	Not reported
Completed Sub Area Name:	Not reported
Completed Document Type:	Not reported
Completed Date:	Not reported
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Name: GE ENGINE SERVICES INC
Address: 1923 E. AVION PLACE
City,State,Zip: ONTARIO, CA 917610000
Facility ID: 80001638
Status: Inactive - Needs Evaluation
Status Date: 03/20/2013
Site Code: 400359
Site Type: Corrective Action
Site Type Detailed: Corrective Action
Acres: 3
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: MBR
Program Manager: Katherine Gould
Supervisor: John Scandura
Division Branch: Cleanup Cypress
Assembly: 53
Senate: 22
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 34.05695
Longitude: -117.6069
APN: NONE SPECIFIED
Past Use: AEROSPACE ROCKET TESTING/LAUNCH, JET FUEL STORAGE/REFUELING
Potential COC: Tetrachloroethylene (PCE 1,1,1-Trichloroethane (TCA Chloroform Ethylbenzene Toluene Xylenes
Confirmed COC: Tetrachloroethylene (PCE 1,1,1-Trichloroethane (TCA Ethylbenzene Toluene Xylenes Chloroform
Potential Description: OTH, SOIL
Alias Name: CAD009542721
Alias Type: EPA Identification Number
Alias Name: 400359
Alias Type: Project Code (Site Code)
Alias Name: 80001638
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Interim Measures Questionnaire
Completed Date: 12/03/1997
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Consent Order
Completed Date: 01/01/1990
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: SOILS
Completed Document Type: Consent Order
Completed Date: 09/28/1988
Comments: Not reported

Completed Area Name: Sites With No Operable Unit

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Completed Sub Area Name: SOILS
Completed Document Type: Design/Implementation Workplan
Completed Date: 01/10/1996
Comments: Remedial Design approved. Groundwater investigation and remediation will be conducted by the RWQCB.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: RCRA Facility Assessment Report
Completed Date: 09/13/1988
Comments: Reassessment of GE PA

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: SOILS
Completed Document Type: Remedy Selection and Statement of Basis
Completed Date: 09/16/1994
Comments: Final Remedial Action plan approval. Per file chronology.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: RCRA Facility Assessment Report
Completed Date: 09/13/1988
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Groundwater Migration Controlled
Completed Date: 12/03/1997
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedy Construction Complete
Completed Date: 10/09/1996
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Remedy Selected
Completed Date: 09/16/1994
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Human Exposure Controlled
Completed Date: 12/03/1997
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment Report
Completed Date: 07/01/1985
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: SOILS
Completed Document Type: Corrective Measures Study Report

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Completed Date: 06/30/1993
Comments: Remedial Investigation and Feasibility Study Approved per file chronology.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Interim Measures Workplan
Completed Date: 08/01/1994
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment Report
Completed Date: 11/14/1988
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: SOILS
Completed Document Type: Remedy Constructed: Operating Properly & Successfully
Completed Date: 10/09/1996
Comments: Remedial Action Completion per Site Mit database. O&M of 3 SVE and treatment system.

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: SOILS
Completed Document Type: RFI Report
Completed Date: 06/01/1990
Comments: Approval of Phase I Remedial Investigation

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: SOILS
Completed Document Type: RFI Workplan
Completed Date: 12/27/1991
Comments: Phase IIb Remedial Investigation Workplan Approved per file chronology.

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: SOILS
Completed Document Type: RFI Report
Completed Date: 06/30/1993
Comments: Remedial Investigation and Feasibility Study Approved per file chronology.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

Name: ONTARIO ARMY AIRFIELD
Address: 1923 E AVION DR
City,State,Zip: ONTARIO, CA 91761
Facility ID: 80000416

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Status: No Further Action
Status Date: 03/05/2012
Site Code: 401330
Site Type: Military Evaluation
Site Type Detailed: FUDS
Acres: 875
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Daniel Cordero
Supervisor: Manny Alonzo
Division Branch: Cleanup Cypress
Assembly: 53
Senate: 22
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: DERA
Latitude: 34.05833
Longitude: -117.6083
APN: NONE SPECIFIED
Past Use: FIRING RANGE - SMALL ARMS ETC...
Potential COC: Explosives (UXO, MEC Munitions Debris (MD
Confirmed COC: 30011-NO 32000-NO
Potential Description: SOIL
Alias Name: ONTARIO AAF
Alias Type: Alternate Name
Alias Name: CA99799F686800
Alias Type: Federal Facility ID
Alias Name: 401330
Alias Type: Project Code (Site Code)
Alias Name: 80000416
Alias Type: Envirostor ID Number
Alias Name: J09CA0531
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 01/03/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Inventory Project Report (INPR)
Completed Date: 02/10/1992
Comments: INPR concluded that site is eligible the Formerly Used Defense Sites program.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment/Site Inspection Report (PA/SI)
Completed Date: 10/12/2011
Comments: DTSC comments incorporated into final document.

Future Area Name: Not reported
Future Sub Area Name: Not reported

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

CERS HAZ WASTE:
Name: ONTARIO INTERNATIONAL AIRPORT
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Site ID: 398642
CERS ID: 10037323
CERS Description: Hazardous Waste Generator

HIST UST:
Name: GENERAL ELECTRIC CO-AVIATION
Address: 1923 EAST AVION
City,State,Zip: ONTARIO, CA 91761
File Number: 00029f0e
URL: https://documents.geotracker.waterboards.ca.gov/ustpdfs/pdf/00029f0e.pdf
Region: STATE
Facility ID: 00000000186
Facility Type: Other
Other Type: JET ENGINE OVERHAUL
Contact Name: Not reported
Telephone: 7149866731
Owner Name: GENERAL ELECTRIC CO.
Owner Address: 3135 EASTON TURNPIKE
Owner City,St,Zip: FAIRFIELD, CT 06431
Total Tanks: 0017

Tank Num: 001
Container Num: ASO/06
Year Installed: 1981
Tank Capacity: 00006000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Container Construction Thickness: Not reported
Leak Detection: Visual

Tank Num: 002
Container Num: ASO/07
Year Installed: 1981
Tank Capacity: 00006000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Container Construction Thickness: Not reported
Leak Detection: Visual

Tank Num: 003
Container Num: ASO/05
Year Installed: 1981
Tank Capacity: 00006000
Tank Used for: PRODUCT

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Visual

Tank Num: 004
Container Num: ASO/04
Year Installed: 1980
Tank Capacity: 00008000
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Container Construction Thickness: Not reported
Leak Detection: Visual

Tank Num: 005
Container Num: ASO/03
Year Installed: 1980
Tank Capacity: 00008000
Tank Used for: PRODUCT
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Visual

Tank Num: 006
Container Num: ASO/02
Year Installed: 1960
Tank Capacity: 00004000
Tank Used for: PRODUCT
Type of Fuel: 06
Container Construction Thickness: Not reported
Leak Detection: Visual

Tank Num: 007
Container Num: ASO/01
Year Installed: 1970
Tank Capacity: 00002000
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Container Construction Thickness: 8
Leak Detection: Visual

Tank Num: 008
Container Num: SPO/01
Year Installed: 1984
Tank Capacity: 00008000
Tank Used for: WASTE
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Visual, Vapor Sniff Well

Tank Num: 009
Container Num: ASO/14
Year Installed: 1970
Tank Capacity: 00000500
Tank Used for: Not reported
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Visual

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Tank Num: 010
Container Num: ASO/13
Year Installed: 1964
Tank Capacity: 00002000
Tank Used for: PRODUCT
Type of Fuel: 06
Container Construction Thickness: Not reported
Leak Detection: Visual

Tank Num: 011
Container Num: ASO/12
Year Installed: 1964
Tank Capacity: 00002000
Tank Used for: PRODUCT
Type of Fuel: 06
Container Construction Thickness: Not reported
Leak Detection: Visual

Tank Num: 012
Container Num: ASO/11
Year Installed: 1963
Tank Capacity: 00002000
Tank Used for: PRODUCT
Type of Fuel: 06
Container Construction Thickness: Not reported
Leak Detection: Visual

Tank Num: 013
Container Num: ASO/10
Year Installed: Not reported
Tank Capacity: 00002000
Tank Used for: WASTE
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Visual

Tank Num: 014
Container Num: ASO/09
Year Installed: Not reported
Tank Capacity: 00007000
Tank Used for: PRODUCT
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Visual

Tank Num: 015
Container Num: ASO/08
Year Installed: 1968
Tank Capacity: 00000250
Tank Used for: WASTE
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Visual

Tank Num: 016
Container Num: SPO02
Year Installed: 1984

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Tank Capacity: 00004000
Tank Used for: PRODUCT
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Visual, Vapor Sniff Well

Tank Num: 017
Container Num: SPO03
Year Installed: 1984
Tank Capacity: 00004000
Tank Used for: PRODUCT
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Visual, Vapor Sniff Well

Click here for Geo Tracker PDF:

CERS TANKS:
Name: ONTARIO INTERNATIONAL AIRPORT
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Site ID: 398642
CERS ID: 10037323
CERS Description: Aboveground Petroleum Storage

Name: ONTARIO INTERNATIONAL AIRPORT
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Site ID: 398642
CERS ID: 10037323
CERS Description: Underground Storage Tank

NPDES:
Name: ONTARIO INTERNATIONAL AIRPORT
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Facility Status: Not reported
NPDES Number: Not reported
Region: Not reported
Agency Number: Not reported
Regulatory Measure ID: Not reported
Place ID: Not reported
Order Number: Not reported
WDID: 8 36I004993
Regulatory Measure Type: Industrial
Program Type: Not reported
Adoption Date Of Regulatory Measure: Not reported
Effective Date Of Regulatory Measure: Not reported
Termination Date Of Regulatory Measure: Not reported
Expiration Date Of Regulatory Measure: Not reported
Discharge Address: Not reported
Discharge Name: Not reported
Discharge City: Not reported
Discharge State: Not reported
Discharge Zip: Not reported
Status: Terminated

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Status Date:	11/03/2016
Operator Name:	Los Angeles World Airports
Operator Address:	7301 World Way West
Operator City:	Los Angeles
Operator State:	California
Operator Zip:	90045

NPDES as of 03/2018:

NPDES Number:	CAS000001
Status:	Terminated
Agency Number:	0
Region:	8
Regulatory Measure ID:	213197
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	8 36I004993
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	04/08/1992
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	11/01/2016
Discharge Name:	Los Angeles World Airports
Discharge Address:	7301 World Way West
Discharge City:	Los Angeles
Discharge State:	California
Discharge Zip:	90045
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	8
Regulatory Measure ID:	213197
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	8 36I004993
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	11/01/2016
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	05/09/2008
Processed Date:	04/08/1992
Status:	Terminated
Status Date:	11/03/2016
Place Size:	1463
Place Size Unit:	Acres
Contact:	Robert Freeman
Contact Title:	Airport Environmental Manager
Contact Phone:	646-424-6474
Contact Phone Ext:	Not reported
Contact Email:	rfreeman@lawa.org
Operator Name:	Los Angeles World Airports

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Operator Address:	7301 World Way West
Operator City:	Los Angeles
Operator State:	California
Operator Zip:	90045
Operator Contact:	Robert Freeman
Operator Contact Title:	Airport Environmental Manager
Operator Contact Phone:	424-646-6474
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	rfreeman@lawa.org
Operator Type:	City/Town Agency
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	California
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	310-908-1495
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	N
Receiving Water Name:	Santa Ana River
Certifier:	Robert Freeman
Certifier Title:	Airport Environmental Manager
Certification Date:	22-JUN-15
Primary Sic:	4581-Airports, Flying Fields, and Airport Terminal Services
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

Name:	SOUTH CARGO RAMP REHABILITATION
Address:	1923 EAST AVION STREET
City,State,Zip:	ONTARIO, CA 91761
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	8 36C384883

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Regulatory Measure Type:	Construction
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Terminated
Status Date:	03/11/2020
Operator Name:	Ontario International Airport Authority
Operator Address:	303 E B Street
Operator City:	Ontario
Operator State:	California
Operator Zip:	91764

San Bern. Co. Permit:

Name:	ONTARIO INTERNATIONAL AIRPORT
Address:	1923 E AVION ST
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO
Facility ID:	FA0002014
Owner:	Ontario International Airport Authority
Permit Number:	PT0016534
Permit Category:	UW HANDLER WITH ANOTHER CUPA PERMIT
Facility Status:	ACTIVE
Expiration Date:	10/31/2023

Name:	ONTARIO INTERNATIONAL AIRPORT
Address:	1923 E AVION ST
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO
Facility ID:	FA0002014
Owner:	Ontario International Airport Authority
Permit Number:	PT0016535
Permit Category:	APSA 10,001-100,000 GAL FAC CAPACITY
Facility Status:	ACTIVE
Expiration Date:	10/31/2023

Name:	ONTARIO INTERNATIONAL AIRPORT
Address:	1923 E AVION ST
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO
Facility ID:	FA0002014
Owner:	Ontario International Airport Authority
Permit Number:	PT0011564
Permit Category:	REGULAR UST ANNUAL INSPECTION (PER TANK)
Facility Status:	ACTIVE
Expiration Date:	10/31/2023

Name:	ONTARIO INTERNATIONAL AIRPORT
Address:	1923 E AVION ST
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Facility ID: FA0002014
Owner: Ontario International Airport Authority
Permit Number: PT0011565
Permit Category: REGULAR UST ANNUAL INSPECTION (PER TANK)
Facility Status: ACTIVE
Expiration Date: 10/31/2023

Name: ONTARIO INTERNATIONAL AIRPORT
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0002014
Owner: Ontario International Airport Authority
Permit Number: PT0002689
Permit Category: LARGE QUANTITY GENERATOR
Facility Status: ACTIVE
Expiration Date: 10/31/2023

Name: ONTARIO INTERNATIONAL AIRPORT
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0002014
Owner: Ontario International Airport Authority
Permit Number: PT0016537
Permit Category: REGULAR UST ANNUAL INSPECTION (PER TANK)
Facility Status: ACTIVE
Expiration Date: 10/31/2023

Name: ONTARIO INTERNATIONAL AIRPORT
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0002014
Owner: Ontario International Airport Authority
Permit Number: PT0002690
Permit Category: HAZARDOUS MATERIALS 31-50 CHEMICALS
Facility Status: ACTIVE
Expiration Date: 10/31/2023

Name: ONTARIO INTERNATIONAL AIRPORT
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0002014
Owner: Ontario International Airport Authority
Permit Number: PT0021720
Permit Category: REGULAR UST ANNUAL INSPECTION (PER TANK)
Facility Status: INACTIVE
Expiration Date: 10/31/2013

Name: ONTARIO INTERNATIONAL AIRPORT
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0002014
Owner: Ontario International Airport Authority

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Permit Number: PT0016536
Permit Category: EPCRA FACILITY
Facility Status: INACTIVE
Expiration Date: 10/31/2013

Name: ONTARIO INTERNATIONAL AIRPORT
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0002014
Owner: Ontario International Airport Authority
Permit Number: PT0010664
Permit Category: REGULAR UST ANNUAL INSPECTION (PER TANK)
Facility Status: INACTIVE
Expiration Date: 10/31/2010

Name: ONTARIO INTERNATIONAL AIRPORT
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0002014
Owner: Ontario International Airport Authority
Permit Number: PT0010665
Permit Category: REGULAR UST ANNUAL INSPECTION (PER TANK)
Facility Status: INACTIVE
Expiration Date: 10/31/2010

Name: G E ENGINE SERVICES INC
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0003388
Owner: GE AVIATION SERVICES
Permit Number: PT0002121
Permit Category: PBR ANNUAL FEE
Facility Status: INACTIVE
Expiration Date: 07/31/2007

Name: G E ENGINE SERVICES INC
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0003388
Owner: GE AVIATION SERVICES
Permit Number: PT0002119
Permit Category: HAZMAT HANDLER 101-250 EMPLOYEES (W/GEN PRMT)
Facility Status: INACTIVE
Expiration Date: 07/31/2007

Name: G E ENGINE SERVICES INC
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0003388
Owner: GE AVIATION SERVICES
Permit Number: PT0002120
Permit Category: HAZARDOUS WASTE GENERATOR - 101-250 EMPLOYEES

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Facility Status: INACTIVE
Expiration Date: 07/31/2007

Name: G E ENGINE SERVICES INC
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0003388
Owner: GE AVIATION SERVICES
Permit Number: PT0017053
Permit Category: HAZARDOUS WASTE GENERATOR RCRA LQG
Facility Status: INACTIVE
Expiration Date: 07/31/2007

Name: ONTARIO INTERNATIONAL AIRPORT
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0002014
Owner: Ontario International Airport Authority
Permit Number: PT0011566
Permit Category: REGULAR UST ANNUAL INSPECTION (PER TANK)
Facility Status: INACTIVE
Expiration Date: 10/31/2005

Name: ONTARIO INTERNATIONAL AIRPORT
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Region: SAN BERNARDINO
Facility ID: FA0002014
Owner: Ontario International Airport Authority
Permit Number: PT0011567
Permit Category: REGULAR UST ANNUAL INSPECTION (PER TANK)
Facility Status: INACTIVE
Expiration Date: 10/31/2005

CIWQS:
Name: ONTARIO INTERNATIONAL AIRPORT
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Agency: Los Angeles World Airports
Agency Address: 7301 World Way West Rm 312, Los Angeles, CA 90045
Place/Project Type: Industrial - Airports, Flying Fields, and Airport Terminal Services
SIC/NAICS: 4581
Region: 8
Program: INDSTW
Regulatory Measure Status: Terminated
Regulatory Measure Type: Storm water industrial
Order Number: 2014-0057-DWQ
WDID: 8 36I004993
NPDES Number: CAS000001
Adoption Date: Not reported
Effective Date: 04/08/1992
Termination Date: 11/01/2016
Expiration/Review Date: Not reported
Design Flow: Not reported
Major/Minor: Not reported

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	34.05169
Longitude:	-117.60845
Name:	ONTARIO INTL AIRPORT
Address:	1923 EAST AVION STREET
City,State,Zip:	ONTARIO, CA 91761
Agency:	Ontario International Airport Authority
Agency Address:	1923 East Avion Street, Ontario, CA 91761
Place/Project Type:	Other
SIC/NAICS:	Not reported
Region:	SB
Program:	SLIC
Regulatory Measure Status:	Active
Regulatory Measure Type:	Co-Permitee
Order Number:	2019-0005-DWQ
WDID:	Not reported
NPDES Number:	Not reported
Adoption Date:	Not reported
Effective Date:	03/20/2019
Termination Date:	Not reported
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	Not reported
Longitude:	Not reported

CERS:

Name:	GE ENGINE SERVICES I
Address:	1923 E. AVION PLACE
City,State,Zip:	ONTARIO, CA 917610000
Site ID:	607546
CERS ID:	80001638
CERS Description:	Corrective Action

Affiliation:

Affiliation Type Desc:	Supervisor
Entity Name:	John Scandura
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Lead Project Manager
Entity Name:	Katherine Gould
Entity Title:	Not reported
Affiliation Address:	Not reported

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Name: ONTARIO INTERNATIONAL AIRPORT
Address: 1923 E AVION ST
City,State,Zip: ONTARIO, CA 91761
Site ID: 398642
CERS ID: 10037323
CERS Description: Chemical Storage Facilities

Violations:

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Violation Date: 08-18-2017
Citation: 23 CCR 16 2715(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(i)
Violation Description: Failure to have a properly qualified service technician test leak detection equipment as required every 12 months (vapor, pressure, hydrostatic (VPH) system, sensors, line-leak detectors (LLD), automatic tank gauge (ATG), etc.).
Violation Notes: Returned to compliance on 08/29/2017. 09/25/17 : WITNESSED INSPECTION TOOK PLACE ON 08/29/17 BY SHANE BARBAO OBSERVATION: THE DIESEL SIPHON SYSTEM--- FLEET MAINTENANCE AREA--- STOP OPERATING DURING THE MONITORING CERTIFICATION. ESO & THE FAIL SAFE SYSTEMS WERE NOT TESTED. COMPLIANCE REQUIREMENT: TROUBLESHOOT SIPHON OPERATION PROBLEMS. WITHIN 30-DAYS, CALL FOR A WITNESSED TEST OF THE DIESEL'S ESO & FAILSAFE SYSTEM.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Violation Date: 04-12-2016
Citation: HSC 6.7 25292.1(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25292.1(a)
Violation Description: Failure to operate the UST system to prevent spills and/or overfills.
Violation Notes: Returned to compliance on 04/19/2016. THE TRIENNIAL SECONDARY CONTAINMENT (SB989) TESTING PERFORMED ON 3/22/16 REVEALED A FAILURE WITHIN THE DIESEL UDC (MAINTENANCE YARD). THE EXACT POINT OF FAILURE HAS YET TO BE IDENTIFIED AS ALL PENETRATIONS (PIPING AND CONDUIT) ARE LOCATED AT APPROXIMATELY THE SAME HEIGHT WITHIN THE CONTAINMENT. PER THE ON-SITE CONTRACTOR, PLANS FOR REPAIR HAVE BEEN DRAWN UP, BUT HAVE YET TO BE SUBMITTED TO THIS DEPARTMENT FOR REVIEW. REQUIREMENT: WITHIN 10 DAYS, COMPLETE AND SUBMIT THE REPAIR PLAN FOR THE DIESEL UDC. NOTE: A PERMIT WILL BE REQUIRED FOR PENETRATION REPAIRS.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Violation Date: 04-29-2020
Citation: HSC 6.7 25284.2 - California Health and Safety Code, Chapter 6.7,

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Section(s) 25284.2

Violation Description: "Failure to meet one or more of the following requirements: Install or maintain a liquid-tight spill container. Have a minimum capacity of five gallons. Have a functional drain valve or other method for the removal of liquid from the spill container. Be resistant to galvanic corrosion. Perform a tightness test at installation, every 12 months thereafter, or within 30 days after a repair to the spill container. Tested using applicable manufacturer guidelines, industry codes, engineering standards, or a method approved by a professional engineer. Tested by a certified UST service technician. Maintain records of spill containment testing for 36 months. "

Violation Notes: Returned to compliance on 05/21/2021. OBSERVATION: At the time of inspection, the spill buckets did not meet the 5-gallon capacity requirement. CORRECTIVE ACTION: Submit plans and apply for a permit for replacement of the spill buckets for both tanks (unleaded and diesel) within 30 days.

Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Violation Date: 04-23-2021
Citation: HSC 6.7 25284.2 - California Health and Safety Code, Chapter 6.7, Section(s) 25284.2

Violation Description: "Failure to meet one or more of the following requirements: Install or maintain a liquid-tight spill container. Have a minimum capacity of five gallons. Have a functional drain valve or other method for the removal of liquid from the spill container. Be resistant to galvanic corrosion. Perform a tightness test at installation, every 12 months thereafter, or within 30 days after a repair to the spill container. Tested using applicable manufacturer guidelines, industry codes, engineering standards, or a method approved by a professional engineer. Tested by a certified UST service technician. Maintain records of spill containment testing for 36 months. "

Violation Notes: Returned to compliance on 05/21/2021. OBSERVATION: At the time of inspection, the spill buckets did not meet the 5-gallon capacity requirement. (REPEAT VIOLATION-CLASS 1). CORRECTIVE ACTION: Submit plans and apply for a permit for replacement of the spill buckets for both tanks within 30 days. (REPEAT VIOLATION-CLASS 1)

Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Violation Date: 07-13-2022
Citation: HSC 6.7 25284, 25286 - California Health and Safety Code, Chapter 6.7, Section(s) 25284, 25286

Violation Description: Failure to submit a complete and accurate application for a permit to operate a UST, or for renewal of the permit.

Violation Notes: Returned to compliance on 07/19/2022. OBSERVATION: At the time of document review, observed that the UST Overfill Protection section on CERS was not updated to reflect the installation of the Overfill Prevention Valve in the Diesel UST. CORRECTIVE ACTION: Update the Overfill Protection section on CERS and say YES to Fill tube shut off valve for the Diesel UST.

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Violation Date: 04-17-2015
Citation: 23 CCR 16 2665 - California Code of Regulations, Title 23, Chapter 16, Section(s) 2665
Violation Description: Failure of the overfill prevention system to meet one of the following requirements: 1. Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or 2. Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or 3. Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or 4. Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling.
Violation Notes: Returned to compliance on 04/17/2015. OBSERVATION: THE LIGHT IN THE EXTERNAL OVERFILL ALARM FAILED WHEN TESTED. COMPLIANCE MET ON SITE: TECHNICIAN REPLACED LIGHT BULB IN THE EXTERNAL OVERFILL ALARM AND RE-TESTED- PASSED
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Violation Date: 08-18-2017
Citation: HSC 6.7 29291(b) - California Health and Safety Code, Chapter 6.7, Section(s) 29291(b)
Violation Description: Failure of the UST system to be designed and constructed with a monitoring system capable of detecting the entry of the hazardous substance into the secondary containment.
Violation Notes: Returned to compliance on 08/18/2017. OBSERVATION: DURING THE INSPECTION, TERMINAL 4 TANK'S ANNULAR SENSOR FAILED DURING THE MONITORING CERTIFICATION. COMPLIANCE MET ON SITE: TECHNICIAN REPLACED AND RE-TESTED ANNULAR SENSOR (VR 409)-PASSED
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Violation Date: 09-27-2018
Citation: HSC 6.7 25290.1(d) - California Health and Safety Code, Chapter 6.7, Section(s) 25290.1(d)
Violation Description: Failure of a UST system installed on or after July 1, 2004 to be designed and constructed with a monitoring system capable of detecting the entry of the liquid or vapor-phase of the hazardous substance stored in the primary containment into the secondary containment and capable of detecting water intrusion into the secondary containment.
Violation Notes: Returned to compliance on 04/04/2019. Testing of the annular space of the tank at Terminal 4 indicates that the annular space will not hold

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

a vacuum of -10.0 in Hg for 60 minutes. After 17 minutes of testing the vacuum level dropped from -10.0 to -9.4 inHg and continued to drop. Submit plans for repair of the annular space to this office within 30 days.

Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Violation Date: 04-28-2023
Citation: 23 CCR 16 2712(b)(1)(G) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(b)(1)(G)
Violation Description: Failure to comply with one or more of the following overfill prevention equipment requirements: Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling. Install/retrofit overfill prevention equipment that does not use flow restrictors on vent piping to meet overfill prevention equipment requirements when the overfill prevention equipment is installed, repaired, or replaced on and after October 1, 2018. For USTs installed before October 1, 2018, perform an inspection by October 13, 2018 and every 36 months thereafter. For USTs installed on and after October 1, 2018, perform an inspection at installation and every 36 months thereafter. Inspected within 30 days after a repair to the overfill prevention equipment. Inspected using an applicable manufacturer guidelines, industry codes, engineering standards, or a method approved by a professional engineer. Inspected by a certified UST service technician. Maintain records of overfill prevention equipment inspection for 36 months.
Violation Notes: OBSERVATION: At the time of inspection, observed that the ext. A/V system did not activate when the ATG was tested. CORRECTIVE ACTION: The Service Technician troubleshooted the ext. A/V system and determined that the acknowledgement box would have to be replaced. Submit plans and permit application to ustplancheck@sbcfire.org within 30 days for the replacement of the ext. A/V acknowledgement box.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Violation Date: 04-23-2021
Citation: 23 CCR 16 2715(a)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(a)(2)
Violation Description: Failure to submit the Underground Storage Tank Statement of Understanding and Compliance Form.
Violation Notes: Returned to compliance on 05/07/2021. OBSERVATION: The following changes/updates are needed on CERS. See corrective action. CORRECTIVE ACTION: Provide a UST Statement of Understanding and Compliance form

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

	on CERS.
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,
Site ID:	398642
Site Name:	ONTARIO INTERNATIONAL AIRPORT
Violation Date:	04-29-2022
Citation:	23 CCR 16 2636(f)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(2)
Violation Description:	Failure of the functional line leak detector (LLD) monitoring pressurized piping to meet one or more of the following requirements: Monitored at least hourly with the capability of detecting a release of 3.0 gallons per hour leak at 10 pounds per square inch and restrict or shut off the flow of product through the piping when a leak is detected.
Violation Notes:	Returned to compliance on 04/29/2022. OBSERVATION: At the time of inspection, the mechanical line leak detector for T1 (Regular) failed initial testing. CORRECTIVE ACTION: The Service Technician replaced the mechanical line leak detector with like for like components, re-tested and passed. Violation abated.
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,
Site ID:	398642
Site Name:	ONTARIO INTERNATIONAL AIRPORT
Violation Date:	04-23-2021
Citation:	HSC 6.7 25290.1(c)(3),25290.2(c)(3) - California Health and Safety Code, Chapter 6.7, Section(s) 25290.1(c)(3),25290.2(c)(3)
Violation Description:	Failure to keep water out of the secondary containment of UST systems installed on or after July 1, 2003.
Violation Notes:	Returned to compliance on 04/30/2021. OBSERVATION: At the time of inspection the following was observed that there was moisture in the annular space. CORRECTIVE ACTION: Remove moisture from the annular space within 7 days. Provide a work order.
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,
Site ID:	398642
Site Name:	ONTARIO INTERNATIONAL AIRPORT
Violation Date:	04-23-2021
Citation:	HSC 6.7 25292.2(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25292.2(a)
Violation Description:	Failure to submit and maintain complete and current Certification of Financial Responsibility or other mechanism of financial assurance.
Violation Notes:	Returned to compliance on 05/07/2021. OBSERVATION: The following changes/updates are needed on CERS. See corrective action. CORRECTIVE ACTION: The Certificate of Financial Responsibility is dated 02/24/2020 and is expired. Provide a current Certificate of Financial Responsibility on CERS.
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,
Site ID:	398642

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Site Name:	ONTARIO INTERNATIONAL AIRPORT
Violation Date:	04-29-2022
Citation:	HSC 6.7 25290.1(c)(3),25290.2(c)(3) - California Health and Safety Code, Chapter 6.7, Section(s) 25290.1(c)(3),25290.2(c)(3)
Violation Description:	Failure to keep water out of the secondary containment of UST systems installed on or after July 1, 2003.
Violation Notes:	Returned to compliance on 04/29/2022. OBSERVATION: At the time of inspection, there was an annular alarm for Tank 3 (generator tank). CORRECTIVE ACTION: The Service Technician removed the water/moisture from the annular space and the alarm cleared. Violation abated.
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,
Site ID:	398642
Site Name:	ONTARIO INTERNATIONAL AIRPORT
Violation Date:	08-17-2018
Citation:	23 CCR 16 2715(a) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(a)
Violation Description:	Failure to submit the UPA. of the designated operator (DO) identification and/or change of the DO within 30 days.
Violation Notes:	Returned to compliance on 09/12/2018. The Designated Operator Statement has an expired operator certification. Update the statement to show the current operator certification and submit a copy to this department. Upload the current statement to the CERS website.
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,
Site ID:	398642
Site Name:	ONTARIO INTERNATIONAL AIRPORT
Violation Date:	08-17-2018
Citation:	HSC 6.7 25290.1(c)(3),25290.2(c)(3) - California Health and Safety Code, Chapter 6.7, Section(s) 25290.1(c)(3),25290.2(c)(3)
Violation Description:	Failure to keep water out of the secondary containment of UST systems installed on or after July 1, 2003.
Violation Notes:	Returned to compliance on 09/27/2018. As indicated in previous months, water is entering the interstitial space of the Terminal 4 tank. The technician indicated water was also in the annular space today. Conduct the necessary inspection and/or testing to verify the source of water to verify if a leak exists.
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,
Site ID:	398642
Site Name:	ONTARIO INTERNATIONAL AIRPORT
Violation Date:	08-18-2017
Citation:	23 CCR 6.7 25284, 25286 - California Code of Regulations, Title 23, Chapter 6.7, Section(s) 25284, 25286
Violation Description:	Failure to submit a complete and accurate application for a permit to operate a UST, or for renewal of the permit.
Violation Notes:	Returned to compliance on 09/17/2017. OBSERVATION: THE FOLLOWING UST ITEMS LISTED IN CERS MUST BE UPDATED. 1) THE CURRENT BOE NUMBER IS NOT VALID-- OBTAIN A VAILD NUMBER-contact BOE at 800-400-7115 IF YOU NEED HELP. 2) LIQUID SENSORS WERE NOTED TO BE VR 208-- DURING THE INSPECTION, VR 323 WERE OBSERVED. COMPLIANCE REQUIREMENT: UPDATE CERS

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

	WITH CURRENT INFORMATION.
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,
Site ID:	398642
Site Name:	ONTARIO INTERNATIONAL AIRPORT
Violation Date:	11-01-2017
Citation:	HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Description:	Hazardous Waste Generator Program - Operations/Maintenance - General
Violation Notes:	Returned to compliance on 11/14/2017. Failure to inspect Hazardous Waste tank (CCR 66265.195)
Violation Division:	San Bernardino County Fire Department
Violation Program:	HW
Violation Source:	CERS,
Site ID:	398642
Site Name:	ONTARIO INTERNATIONAL AIRPORT
Violation Date:	04-17-2014
Citation:	HSC 6.7 29291(b) - California Health and Safety Code, Chapter 6.7, Section(s) 29291(b)
Violation Description:	Failure of the UST system to be designed and constructed with a monitoring system capable of detecting the entry of the hazardous substance stored in the primary containment into the secondary containment.
Violation Notes:	Returned to compliance on 04/30/2014. IMMEDIATELY REPAIR/REPLACE FAILED SPILL BUCKET AND RETEST. PROVIDE DOCUMENTATION OF REPAIR/REPLACEMENT OF SPILL BUCKET WITH PASSING TEST RESULTS TO THIS DEPARTMENT WITHIN 30 DAYS.
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,
Site ID:	398642
Site Name:	ONTARIO INTERNATIONAL AIRPORT
Violation Date:	04-29-2020
Citation:	HSC 6.7 25291(a)(2) - California Health and Safety Code, Chapter 6.7, Section(s) 25291(a)(2)
Violation Description:	Failure to maintain secondary containment (e.g., failure of secondary containment testing).
Violation Notes:	Returned to compliance on 05/06/2020. OBSERVATION: Penetrations were replaced inside the turbine sump for the unleaded tank without permits. CORRECTIVE ACTION: Submit plans and apply for a permit for SB989 repairs to the turbine sump for the unleaded tank within 30 days. The SB989 failure was noted on report dated 03/19/2019. Penalty fees will apply.
Violation Division:	San Bernardino County Fire Department
Violation Program:	UST
Violation Source:	CERS,
Site ID:	398642
Site Name:	ONTARIO INTERNATIONAL AIRPORT
Violation Date:	04-17-2014
Citation:	HSC 6.7 25292(e) - California Health and Safety Code, Chapter 6.7, Section(s) 25292(e)
Violation Description:	Failure to install line leak detector on pressurized piping system.

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Violation Notes: Returned to compliance on 04/30/2014. LD2000 VMI MECHANICAL LINE LEAK DETECTOR FAILED WHEN TESTED. IMMEDIATELY REPAIR/REPLACE FAILED DETECTOR AND SCHEDULE RETEST WITH THIS DEPARTMENT WITHIN 15 DAYS.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Violation Date: 04-29-2015
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2
Violation Description: Failure to annually review and electronically certify that the business plan is complete, accurate, and up-to-date.
Violation Notes: Returned to compliance on 06/29/2015.
Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Violation Date: 04-29-2020
Citation: 23 CCR 16 2641(j) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2641(j)
Violation Description: Failure of the leak detection equipment to be installed, calibrated, operated, and/or maintained properly.
Violation Notes: Returned to compliance on 04/29/2020. OBSERVATION: At the time of inspection, the annular sensor for the generator tank was not working properly. CORRECTIVE ACTION: The Service Technician replaced the annular sensor (VR 409) for the generator tank with like for like components, re-tested and passed. Violation abated.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Violation Date: 08-18-2017
Citation: 23 CCR 16 2665 - California Code of Regulations, Title 23, Chapter 16, Section(s) 2665
Violation Description: Failure of the overfill prevention system to meet one of the following requirements: Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling.
Violation Notes: Returned to compliance on 08/18/2017. OBSERVATION: THE VISUAL (LIGHT BULB) IN THE EXTERNAL OVERFILL ALARM FAILED WHEN TESTED. COMPLIANCE MET ON SITE: TECHNICIAN REPLACED AND RE-TESTED ALARM- PASSED
Violation Division: San Bernardino County Fire Department
Violation Program: UST

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Violation Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Violation Date: 08-17-2018
Citation: HSC 6.75 25299.30-25299.34 - California Health and Safety Code, Chapter 6.75, Section(s) 25299.30-25299.34
Violation Description: Failure to submit and maintain complete and current Certification of Financial Responsibility or other mechanism of financial assurance.
Violation Notes: Returned to compliance on 09/12/2018. Certificate of Financial Responsibility expired on 11/04/17. Update the certificate within 30 days and submit a signed Certificate of Financial Responsibility to this office.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Violation Date: 04-29-2015
Citation: HSC 6.5 Multiple Sections - California Health and Safety Code, Chapter 6.5, Section(s) Multiple Sections
Violation Description: Haz Waste Generator Program - Operations/Maintenance - General
Violation Notes: Returned to compliance on 07/02/2015. Failure to manage contaminated containers lawfully (CCR 66261.7)
Violation Division: San Bernardino County Fire Department
Violation Program: HW
Violation Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Violation Date: 04-23-2021
Citation: 23 CCR 16 2641(j) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2641(j)
Violation Description: Failure of the leak detection equipment to be installed, calibrated, operated, and/or maintained properly.
Violation Notes: Returned to compliance on 04/23/2021. OBSERVATION: At the time of inspection, the annular sensor for the diesel generator tank was not working properly. CORRECTIVE ACTION: The Service Technician replaced the annular sensor (VR 409) with like for like components for the diesel generator tank, re-tested and passed. Violation abated.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Violation Date: 04-29-2022
Citation: 23 CCR 16 2712(b)(1)(G) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(b)(1)(G)
Violation Description: Failure to comply with one or more of the following overfill prevention equipment requirements: Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

minutes before the tank overfills; or Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling. Install/retrofit overfill prevention equipment that does not use flow restrictors on vent piping to meet overfill prevention equipment requirements when the overfill prevention equipment is installed, repaired, or replaced on and after October 1, 2018. For USTs installed before October 1, 2018, perform an inspection by October 13, 2018 and every 36 months thereafter. For USTs installed on and after October 1, 2018, perform an inspection at installation and every 36 months thereafter. Inspected within 30 days after a repair to the overfill prevention equipment. Inspected using an applicable manufacturer guidelines, industry codes, engineering standards, or a method approved by a professional engineer. Inspected by a certified UST service technician. Maintain records of overfill prevention equipment inspection for 36 months.

Violation Notes: Returned to compliance on 07/13/2022. OBERVATION: 1) All UST s at the Maintenance Yard have external Audible/Visual (A/V) alarms only. When an overfill alarm is activated for one UST, additional overfill alarms for other tanks will not activate if the alarm for the first tank has not yet cleared. This effectively eliminates overfill protection for all but one tank if multiple tanks are filled at the same time. 2) The initial Overfill Prevention Equipment test was conducted on 04/09/2019. The next Overfill Prevention Equipment test was due by 10/31/2021. The Overfill Prevention Equipment test must be conducted once every three years starting 10/01/2018. CORRECTIVE ACTION: 1) UST systems that can only activate external alarms when the first UST overfill condition occurs, additional actions must be taken to ensure that each UST has a functional overfill prevention independent of the other UST s at the facility (i.e., installing a separate alarm unit or other appropriate overfill equipment for each tank). [Truncated]

Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Violation Date: 04-29-2020
Citation: 23 CCR 16 2636(f)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(2)

Violation Description: Failure of the functional line leak detector (LLD) monitoring pressurized piping to meet one or more of the following requirements: Monitored at least hourly with the capability of detecting a release of 3.0 gallons per hour leak at 10 pounds per square inch and restrict or shut off the flow of product through the piping when a leak is detected.

Violation Notes: Returned to compliance on 04/29/2020. OBSERVATION: At the time of the inspection, the line leak detector for the unleaded tank failed testing. CORRECTIVE ACTION: The service technician replaced the line leak detector for the unleaded tank with like for like components, re-tested and passed. Violation abated.

Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Evaluation:

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-12-2016
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	UST FIELD INSPECTION-ANNUAL MONITORING SYSTEM CERTIFICATION (3 TANKS/2 PANELS)W/ STEVEN GRAHAM
Eval Division:	San Bernardino County Fire Department
Eval Program:	UST
Eval Source:	CERS,

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-17-2015
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	ONTARIO WORLD AIRPORTS- UST MONITORING CERTIFICATION
Eval Division:	San Bernardino County Fire Department
Eval Program:	UST
Eval Source:	CERS,

Eval General Type:	Other/Unknown
Eval Date:	04-23-2021
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	On-site to conduct a plan check inspection for a dispenser upgrade permit at the UST Maintenance Yard located at 2132 E. Avion St.
Eval Division:	San Bernardino County Fire Department
Eval Program:	UST
Eval Source:	CERS,

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-29-2015
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	ROUTINE INSPECTION.
Eval Division:	San Bernardino County Fire Department
Eval Program:	APSA
Eval Source:	CERS,

Eval General Type:	Other/Unknown
Eval Date:	04-28-2014
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	UST REINSPECTION
Eval Division:	San Bernardino County Fire Department
Eval Program:	UST
Eval Source:	CERS,

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-29-2020
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	On-site to conduct an Annual Underground Storage Tank (UST) inspection. Inspection was conducted during the annual monitoring certification testing.
Eval Division:	San Bernardino County Fire Department
Eval Program:	UST

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 06-15-2020
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: ON SITE TO CONDUCT A FINAL PLAN CHECK INSPECTION FOR SB989 REPAIRS.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 07-09-2021
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: ON SITE FOR A FINAL PLAN CHECK INSPECTION
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 07-26-2013
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: PRESENT FOR STATE WATER RESOURCES CONTROL BOARD AND LOS ANGELES WORLD AIRPORTS REPRESENTATIVES.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 07-13-2022
Violations Found: Yes
Eval Type: Other, not routine, done by local agency
Eval Notes: On-site to conduct a final plan check inspection for permit SR0202540 for installation of an Overfill Prevention Valve in the Diesel UST.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-01-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-12-2020
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-09-2019
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Routine inspection with monitoring certification
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-17-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: UST ANNUAL INSPECTION WITH MONITORING SYSTEM CERTIFICATION
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-17-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Routine inspection with monitoring certification
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-18-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: ONTARIO AIRPORT- UST INSPECTION & UST MONITORING CERTIFICATION--TRAINING W/ K.A & J.H.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 08-29-2017
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: ONTARIO AIR PORT- UST- RE---INSPECTION
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-01-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: APSA
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-12-2020

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: APSA
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 11-18-2020
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: On-site to conduct a final plan check inspection for repairs made to the Diesel generator at Terminal 4.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 12-17-2020
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: On-site to witness the SB989 6-month post repairs test for the Unleaded STP sump.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-23-2021
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: On-site to conduct an Annual Underground Storage Tank (UST) inspection.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-28-2023
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: An inspection was conducted to determine compliance with underground storage tank (UST) laws.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-29-2015
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Routine inspection
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Other/Unknown

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Eval Date: 04-29-2022
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: WITNESSED THE OPE INSPECTION.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-29-2022
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: An inspection was conducted to determine compliance with underground storage tank (UST) laws.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 09-27-2018
Violations Found: Yes
Eval Type: Other, not routine, done by local agency
Eval Notes: Special inspection of the annular space
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-01-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-12-2020
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-29-2015
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Routine inspection
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 11-19-2013
Violations Found: No

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Eval Type: Other, not routine, done by local agency
Eval Notes: Pre-UST removal site meeting with contractor.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Enforcement Action:
Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Site Address: 1923 E AVION ST
Site City: ONTARIO
Site Zip: 91761
Enf Action Date: 04-12-2016
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: San Bernardino County Fire Department
Enf Action Program: UST
Enf Action Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Site Address: 1923 E AVION ST
Site City: ONTARIO
Site Zip: 91761
Enf Action Date: 04-17-2014
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: San Bernardino County Fire Department
Enf Action Program: UST
Enf Action Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Site Address: 1923 E AVION ST
Site City: ONTARIO
Site Zip: 91761
Enf Action Date: 04-17-2015
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: San Bernardino County Fire Department
Enf Action Program: UST
Enf Action Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Site Address: 1923 E AVION ST
Site City: ONTARIO
Site Zip: 91761
Enf Action Date: 04-29-2015
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: San Bernardino County Fire Department
Enf Action Program: HMRRP

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Enf Action Source: CERS,

Site ID: 398642
Site Name: ONTARIO INTERNATIONAL AIRPORT
Site Address: 1923 E AVION ST
Site City: ONTARIO
Site Zip: 91761
Enf Action Date: 04-29-2015
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: San Bernardino County Fire Department
Enf Action Program: HW
Enf Action Source: CERS,

Coordinates:
Site ID: 398642
Facility Name: ONTARIO INTERNATIONAL AIRPORT
Env Int Type Code: APSA
Program ID: 10037323
Coord Name: Not reported
Ref Point Type Desc: Unknown,
Latitude: 34.050979
Longitude: -117.610160

Affiliation:
Affiliation Type Desc: Environmental Contact
Entity Name: Kristy Monji-Chung
Entity Title: Not reported
Affiliation Address: 2132 E Avion Street
Affiliation City: Ontario
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 91761
Affiliation Phone: ,

Affiliation Type Desc: Property Owner
Entity Name: Ontario International Airport Authorities
Entity Title: Not reported
Affiliation Address: 1923 E Avion Street
Affiliation City: Ontario
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 90761
Affiliation Phone: (909) 395-2400,

Affiliation Type Desc: UST Tank Operator
Entity Name: Atif Elkadi
Entity Title: Not reported
Affiliation Address: 1923 E Avion Street
Affiliation City: Ontario
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 91761
Affiliation Phone: (909) 544-5432,

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	1923 E Avion Street
Affiliation City:	Ontario
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	91761
Affiliation Phone:	,

Affiliation Type Desc:	Operator
Entity Name:	Atif Elkadi
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(858) 361-9319,

Affiliation Type Desc:	UST Permit Applicant
Entity Name:	Anh Nguyen
Entity Title:	Executive Services Administrator
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(909) 544-5372,

Affiliation Type Desc:	UST Property Owner Name
Entity Name:	Ontario Airport Authority
Entity Title:	Not reported
Affiliation Address:	1923 E Avion Street
Affiliation City:	Ontario
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	91764
Affiliation Phone:	(909) 395-2400,

Affiliation Type Desc:	UST Tank Owner
Entity Name:	Ontario International Airport Authority
Entity Title:	Not reported
Affiliation Address:	1923 E Avion Street
Affiliation City:	Ontario
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	91764
Affiliation Phone:	(909) 395-2400,

Affiliation Type Desc:	CUPA District
Entity Name:	San Bernardino County Fire
Entity Title:	Not reported
Affiliation Address:	620 South E Street
Affiliation City:	San Bernardino
Affiliation State:	CA
Affiliation Country:	Not reported

GENERAL ELECTRIC CO-AVIATION (Continued) **U001569990**

Affiliation Zip:	92415-0153
Affiliation Phone:	(909) 386-8401,
Affiliation Type Desc:	Document Preparer
Entity Name:	Ramsha Salim
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Identification Signer
Entity Name:	Kristy Monji -Chung
Entity Title:	Environmental Consultant
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Legal Owner
Entity Name:	Ontario International Airport Authority
Entity Title:	Not reported
Affiliation Address:	1923 E Avion Street
Affiliation City:	Ontario
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	91761
Affiliation Phone:	(909) 395-2400,
Affiliation Type Desc:	Parent Corporation
Entity Name:	Ontario International Airport Authority
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

M57 **GE ENGINE SERVICES INC.** **SEMS-ARCHIVE** **1000213808**
SSW **1923 E AVION ST** **CORRACTS** **CAD009542721**
1/2-1 **ONTARIO, CA 91761** **RCRA-TSDF**
0.945 mi. **RCRA NonGen / NLR**
4987 ft. **Site 2 of 3 in cluster M** **CA HWP**
NY MANIFEST

Relative:
Lower

Actual:
909 ft.

SEMS Archive:

Site ID:	0901222
EPA ID:	CAD009542721
Name:	GENERAL ELECTRIC AVIATION SERVS OPS
Address:	1923 E AVION ST
Address 2:	Not reported
City,State,Zip:	ONTARIO, CA 91761

GE ENGINE SERVICES INC. (Continued) **1000213808**

Cong District: 35
FIPS Code: 06071
FF: N
NPL: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

SEMS Archive Detail:

Region: 09
Site ID: 0901222
EPA ID: CAD009542721
Site Name: GENERAL ELECTRIC AVIATION SERVS OPS
NPL: N
FF: N
OU: 00
Action Code: VS
Action Name: ARCH SITE
SEQ: 1
Start Date: Not reported
Finish Date: 1988-11-14 05:00:00
Qual: Not reported
Current Action Lead: EPA Perf In-Hse

Region: 09
Site ID: 0901222
EPA ID: CAD009542721
Site Name: GENERAL ELECTRIC AVIATION SERVS OPS
NPL: N
FF: N
OU: 00
Action Code: PA
Action Name: PA
SEQ: 1
Start Date: Not reported
Finish Date: 1988-11-14 05:00:00
Qual: N
Current Action Lead: EPA Perf

Region: 09
Site ID: 0901222
EPA ID: CAD009542721
Site Name: GENERAL ELECTRIC AVIATION SERVS OPS
NPL: N
FF: N
OU: 00
Action Code: DS
Action Name: DISCVRY
SEQ: 1
Start Date: 1980-07-01 04:00:00
Finish Date: 1980-07-01 04:00:00
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0901222
EPA ID: CAD009542721
Site Name: GENERAL ELECTRIC AVIATION SERVS OPS
NPL: N
FF: N

GE ENGINE SERVICES INC. (Continued) **1000213808**

OU: 00
Action Code: PA
Action Name: PA
SEQ: 2
Start Date: 1985-03-01 06:00:00
Finish Date: 1985-07-01 05:00:00
Qual: L
Current Action Lead: St Perf

CORRACTS:
Name: GE ENGINE SERVICES INC.
Address: 1923 E AVION ST
Address 2: Not reported
EPA ID: CAD009542721
Area Name: SOILS
Corrective Action: INVESTIGATION COMPLETE
Actual Date: 19930630
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: GE ENGINE SERVICES INC.
Address: 1923 E AVION ST
Address 2: Not reported
EPA ID: CAD009542721
Area Name: SOILS
Corrective Action: CMS COMPLETE
Actual Date: 19930630
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: GE ENGINE SERVICES INC.
Address: 1923 E AVION ST
Address 2: Not reported
EPA ID: CAD009542721
Area Name: SOILS
Corrective Action: INVESTIGATION COMPLETE
Actual Date: 19900601
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: GE ENGINE SERVICES INC.
Address: 1923 E AVION ST
Address 2: Not reported
EPA ID: CAD009542721
Area Name: SOILS
Corrective Action: INVESTIGATION WORKPLAN APPROVED
Actual Date: 19911227
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported

GE ENGINE SERVICES INC. (Continued) **1000213808**

Surface Water Release Indicator: Not reported

Name: GE ENGINE SERVICES INC.
Address: 1923 E AVION ST
Address 2: Not reported
EPA ID: CAD009542721
Area Name: ENTIRE FACILITY
Corrective Action: RFA COMPLETED
Actual Date: 19880913
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: GE ENGINE SERVICES INC.
Address: 1923 E AVION ST
Address 2: Not reported
EPA ID: CAD009542721
Area Name: ENTIRE FACILITY
Corrective Action: HUMAN EXPOSURES CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE
Actual Date: 19971203
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: GE ENGINE SERVICES INC.
Address: 1923 E AVION ST
Address 2: Not reported
EPA ID: CAD009542721
Area Name: ENTIRE FACILITY
Corrective Action: RELEASE TO GW CONTROLLED DETERMINATION-FACILITY DOES NOT MEET DEFINITION
Actual Date: 19971203
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: GE ENGINE SERVICES INC.
Address: 1923 E AVION ST
Address 2: Not reported
EPA ID: CAD009542721
Area Name: ENTIRE FACILITY
Corrective Action: REMEDY DECISION
Actual Date: 19940916
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: GE ENGINE SERVICES INC.
Address: 1923 E AVION ST
Address 2: Not reported
EPA ID: CAD009542721
Area Name: ENTIRE FACILITY

GE ENGINE SERVICES INC. (Continued) **1000213808**

Corrective Action: REMEDY CONSTRUCTION-REMEDY CONSTRUCTED
Actual Date: 19961009
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

RCRA TSDF:
Treatment Storage and Disposal Type: Storage, Treatment
Full Enforcement Universe: Not reported
Corrective Action Workload Universe: Yes
Permit Renewals Workload Universe: Not reported
Permit Workload Universe: Not reported
Permit Progress Universe: Storage, Treatment
Post-Closure Workload Universe: Not reported
Closure Workload Universe: Not reported
Operating TSDF Universe: Not reported
Commercial TSD Indicator: No
Active Site Fed-Reg Treatment Storage and Disposal Facility: Not reported
Active Site Converter Treatment storage and Disposal Facility: Not reported
Active Site State-Reg Treatment Storage and Disposal Facility: Not reported
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe: No
TSDFs Only Subject to CA under Discretionary Auth Universe: Yes

Biennial: List of Years
Year: 2005

Click Here for Biennial Reporting System Data:
Year: 2003

Click Here for Biennial Reporting System Data:
Year: 2001

Click Here for Biennial Reporting System Data:

RCRA Listings:
Date Form Received by Agency: 20071116
Handler Name: Ge Engine Services Inc.
Handler Address: 1923 E AVION ST
Handler City,State,Zip: ONTARIO, CA 91761
EPA ID: CAD009542721
Contact Name: TAMI NORWOOD
Contact Address: PO BOX 797
Contact City,State,Zip: ARKANSAS CITY, KS 67005
Contact Telephone: 620-442-3600 4331
Contact Fax: Not reported
Contact Email: Not reported
Contact Title: Not reported
EPA Region: 09
Land Type: Municipal
Federal Waste Generator Description: Not a generator, verified
Non-Notifier: Not reported
Biennial Report Cycle: Not reported
Accessibility: Not reported
Active Site Indicator: Corrective Action Activities
State District Owner: Not reported

GE ENGINE SERVICES INC. (Continued) **1000213808**

State District:	Not reported
Mailing Address:	PO BOX 797
Mailing City,State,Zip:	ARKANSAS CITY, KS 67005
Owner Name:	City Of Los Angeles
Owner Type:	Municipal
Operator Name:	Ge Company
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	Yes
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	Yes
Groundwater Controls Indicator:	No
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20071120
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Biennial: List of Years
Year: 2005

Click Here for Biennial Reporting System Data:
Year: 2003

Click Here for Biennial Reporting System Data:
Year: 2001

GE ENGINE SERVICES INC. (Continued) **1000213808**

Click Here for Biennial Reporting System Data:

Hazardous Waste Summary:

Waste Code:	D001
Waste Description:	Ignitable Waste
Waste Code:	D002
Waste Description:	Corrosive Waste
Waste Code:	D003
Waste Description:	Reactive Waste
Waste Code:	D005
Waste Description:	Barium
Waste Code:	D007
Waste Description:	Chromium
Waste Code:	D008
Waste Description:	Lead
Waste Code:	D035
Waste Description:	Methyl Ethyl Ketone
Waste Code:	F003
Waste Description:	The Following Spent Nonhalogenated Solvents: Xylene, Acetone, Ethyl Acetate, Ethyl Benzene, Ethyl Ether, Methyl Isobutyl Ketone, N-Butyl Alcohol, Cyclohexanone, And Methanol; All Spent Solvent Mixtures/Blends Containing, Before Use, Only The Above Spent Nonhalogenated Solvents; And All Spent Solvent Mixtures/Blends Containing, Before Use, One Or More Of The Above Nonhalogenated Solvents, And A Total Of Ten Percent Or More (By Volume) Of One Or More Of Those Solvents Listed In F001, F002, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures.
Waste Code:	F005
Waste Description:	The Following Spent Nonhalogenated Solvents: Toluene, Methyl Ethyl Ketone, Carbon Disulfide, Isobutanol, Pyridine, Benzene, 2-Ethoxyethanol, And 2-Nitropropane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Nonhalogenated Solvents Or Those Solvents Listed In F001, F002, Or F004; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures.
Waste Code:	F006
Waste Description:	Wastewater Treatment Sludges From Electroplating Operations, Except From The Following Processes: (1) Sulfuric Acid Anodizing Of Aluminum; (2) Tin Plating On Carbon Steel; (3) Zinc Plating (Segregated Basis) On Carbon Steel; (4) Aluminum Or Zinc-Aluminum Plating On Carbon Steel; (5) Cleaning/Stripping Associated With Tin, Zinc, And Aluminum Plating On Carbon Steel; And (6) Chemical Etching And Milling Of Aluminum.

Handler - Owner Operator:

GE ENGINE SERVICES INC. (Continued) **1000213808**

Owner/Operator Indicator:	Operator
Owner/Operator Name: GE COMPANY	
Legal Status:	Private
Date Became Current:	19550101
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name: CITY OF LOS ANGELES	
Legal Status:	Municipal
Date Became Current:	19530101
Date Ended Current:	Not reported
Owner/Operator Address:	1 NEUMANN WAY
Owner/Operator City,State,Zip:	CINCINNATI, OH 45215
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name: GENERAL ELECTRIC COMPANY	
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	I-75 & NEUMANN WAY
Owner/Operator City,State,Zip:	CITY NOT REPORTED, OH 99999
Owner/Operator Telephone:	513-243-5194
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name: GE COMPANY	
Legal Status:	Private
Date Became Current:	19550101
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name: CITY OF LOS ANGELES	
Legal Status:	Municipal
Date Became Current:	19530101
Date Ended Current:	Not reported
Owner/Operator Address:	1 NEUMANN WAY
Owner/Operator City,State,Zip:	CINCINNATI, OH 45215
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported

GE ENGINE SERVICES INC. (Continued) **1000213808**

Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: CITY OF LOS ANGELES
Legal Status: Municipal
Date Became Current: 19530101
Date Ended Current: Not reported
Owner/Operator Address: 1 NEUMANN WAY
Owner/Operator City,State,Zip: CINCINNATI, OH 45215
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: GE COMPANY
Legal Status: Private
Date Became Current: 19550101
Date Ended Current: Not reported
Owner/Operator Address: Not reported
Owner/Operator City,State,Zip: Not reported
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: GE ENGINE SERVICES INC
Legal Status: Private
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 1923 E AVION ST
Owner/Operator City,State,Zip: ONTARIO, CA 91761
Owner/Operator Telephone: 909-986-6731
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 19940304
Handler Name: GE ENGINE SERVICES INC
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Ca
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19970123
Handler Name: GE ENGINE SERVICES INC
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Ca

GE ENGINE SERVICES INC. (Continued) **1000213808**

Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20071116
Handler Name: GE ENGINE SERVICES INC.
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19900412
Handler Name: GENERAL ELECTRIC ONTARIO AIRPORT
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19920227
Handler Name: GE AIRCRAFT ENGINES ENGINE MAINTENANCE C
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19940331
Handler Name: GE ENGINE SERVICES/ W COAST OPERATIONS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No

GE ENGINE SERVICES INC. (Continued) **1000213808**

Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19960229
Handler Name: GE ENGINE SERVICES - WEST COAST OPERATIO
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19990304
Handler Name: GE ENGINE SERVICES, INC.
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20001012
Handler Name: GE ENGINEE SERVICES, INC.
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20020227
Handler Name: GE ENGINE SERVICES INC
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20040218

GE ENGINE SERVICES INC. (Continued) **1000213808**

Handler Name: GE ENGINE SERVICES, INC.
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20060228
Handler Name: GE ENGINE SERVICES INC.
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 332813
NAICS Description: ELECTROPLATING, PLATING, POLISHING, ANODIZING, AND COLORING

NAICS Code: 336411
NAICS Description: AIRCRAFT MANUFACTURING

NAICS Code: 336412
NAICS Description: AIRCRAFT ENGINE AND ENGINE PARTS MANUFACTURING

NAICS Code: 81149
NAICS Description: OTHER PERSONAL AND HOUSEHOLD GOODS REPAIR AND MAINTENANCE

Has the Facility Received Notices of Violations:
Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported

GE ENGINE SERVICES INC. (Continued) **1000213808**

Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported

GE ENGINE SERVICES INC. (Continued) **1000213808**

Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	19880510
Actual Return to Compliance Date:	19880628
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	19880615
Enforcement Identifier:	001
Date of Enforcement Action:	19880523
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	TSD - Financial Requirements
Date Violation was Determined:	19921201
Actual Return to Compliance Date:	19921215
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	EPA
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported

GE ENGINE SERVICES INC. (Continued) **1000213808**

Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - General
Date Violation was Determined: 19900427
Actual Return to Compliance Date: 19900909
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 002
Date of Enforcement Action: 19900605
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: FINAL 3008(A) COMPLIANCE ORDER
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: 5500
Paid Amount: 5500
Final Count: 1

GE ENGINE SERVICES INC. (Continued) **1000213808**

Final Amount: 5500

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - General
Date Violation was Determined: 20051006
Actual Return to Compliance Date: 20051209
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 501
Date of Enforcement Action: 20051006
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number:Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Evaluation Action Summary:
Evaluation Date: 20060928
Evaluation Responsible Agency: Local
Found Violation: No
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier: Not reported
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: Not reported
Scheduled Compliance Date: Not reported
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

Evaluation Date: 19880519
Evaluation Responsible Agency: State
Found Violation: No

GE ENGINE SERVICES INC. (Continued) **1000213808**

Evaluation Type Description:	FINANCIAL RECORD REVIEW
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19880510
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19880628
Scheduled Compliance Date:	19880615
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19920514
Evaluation Responsible Agency:	EPA Contractor/Grantee
Found Violation:	Yes
Evaluation Type Description:	FINANCIAL RECORD REVIEW
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19921215
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19900427
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19900909
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	20051006
Evaluation Responsible Agency:	State Contractor/Grantee
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20051209
Scheduled Compliance Date:	Not reported

GE ENGINE SERVICES INC. (Continued) **1000213808**

Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

GE ENGINE SERVICES INC. (Continued) **1000213808**

HWP:

EPA ID:	CAD009542721
Name:	GE ENGINE SERVICES INC
Address:	ONTARIO INT'L AIRPORT
Cleanup Status:	CLOSED
Latitude:	34.05695
Longitude:	-117.6069
Facility Type:	Historical - Non-Operating
Facility Size:	Not reported
Supervisor:	Not reported
Site Code:	400359
Senate District:	22
Assembly District:	53
Public Information Officer:	Not reported
Commercial Offsite Facility Types:	Not reported
Quarterly Update:	The site is a test facility for commercial and military jet engines that has operated from 1956 to the present. About 6,000 gallons of hazardous waste were disposed of in dry wells. There is an estimated 600 cubic yards of waste and contaminated soil on the site. Results of a preliminary investigation in 1987 indicated the presence of 1,1,1-trichloroethane (TCA), tetrachloroethene (PCE), chloroform, naphthalene, 2-methylnaph- thalene, and volatile aromatic (xylene, toluene, ethylbenzene) in soils near the dry wells. Hazardous substances disposed of in dry wells may potentially enter groundwater and contaminate drinking water supplies. The workers on the facility may be exposed to volatile organic compounds if contaminated subsurface soils are excavated or disturbed. General Electric performed preliminary assessment soil sampling in 1984 and 1987 to identify contaminated areas on the facility. A Consent Order between General Electric and DHS was signed September 28, 1988, for both groundwater and soil remediation. A Remedial Investigation / Feasibility Study was done in 1993 to fully characterize the site. DTSC approved the final Remedial Action Plan on September 16, 1994. System operation of the vapor extraction treatment systems in areas A, B and C began on May 17, 1996. An Enforceable Agreement for Operation and Maintenance was signed by DTSC and GE on August 28, 1998. Quarterly reports on the status of operation have been submitted to DTSC since commencing remediation. Concentrations of VOCs in shallow soils in areas A, B, and C at the site have reached acceptable closure levels. The shallow extraction wells in areas A, B, and C will be maintained in operational condition until sufficient data can be obtained to evaluate rebound data.
Project Manager Lead:	Not reported
Project Manager:	Not reported
Permit Type:	RCRA Interim Status Permit
Permit Effective Date:	Not reported
Permit Expiration Date:	Not reported
Calenviroscreen Score:	96-100% (highest scores)
Total Planned Hours:	Not reported
Total Planned Amount:	Not reported
Total Actual Hours:	Not reported

Activities:

EPA ID:	CAD009542721
Facility Type:	Historical - Non-Operating
Facility Name:	GE ENGINE SERVICES INC
Project Manager:	Not reported

GE ENGINE SERVICES INC. (Continued) **1000213808**

Project Manager Lead: Not reported
Supervisor: Not reported
Facility Status: CLOSED
Activity Type: New Operating Permit
Permit Being Renewed: Not reported
Permit Being Modified: Not reported
Final Date: Not reported
Type: Not reported
Title Description: Imported 12/2011:PERMIT1
Due Date: Not reported
Comments: Not reported
Unit Names: Not reported
Event Description: New Operating Permit - CALL-IN LETTER ISSUED
Actual Date: 03/23/1983

EPA ID: CAD009542721
Facility Type: Historical - Non-Operating
Facility Name: GE ENGINE SERVICES INC
Project Manager: Not reported
Project Manager Lead: Not reported
Supervisor: Not reported
Facility Status: CLOSED
Activity Type: New Operating Permit
Permit Being Renewed: Not reported
Permit Being Modified: Not reported
Final Date: Not reported
Type: Not reported
Title Description: Imported 12/2011:PERMIT1
Due Date: Not reported
Comments: Not reported
Unit Names: Not reported
Event Description: New Operating Permit - APPLICATION PART A RECEIVED
Actual Date: 11/18/1980

Closure:
EPA ID: CAD009542721
Facility Type: Historical - Non-Operating
Facility Name: GE ENGINE SERVICES INC
Project Manager: Not reported
Project Manager Lead: Not reported
Supervisor: Not reported
Facility Size: Not reported
Facility Status: CLOSED
Activity Type: Closure
Final Date: Not reported
Type: Not reported
Title Description: Imported 12/2011:CLOSURE1
Due Date: Not reported
Comments: Not reported
Unit Names: TANKSTR1, TANKSTR2, TANKTRT1
Event Description: Closure - CLOSURE PLAN RECEIVED
Actual Date: 11/20/1990

EPA ID: CAD009542721
Facility Type: Historical - Non-Operating
Facility Name: GE ENGINE SERVICES INC
Project Manager: Not reported

GE ENGINE SERVICES INC. (Continued) **1000213808**

Project Manager Lead:	Not reported
Supervisor:	Not reported
Facility Size:	Not reported
Facility Status:	CLOSED
Activity Type:	Closure
Final Date:	Not reported
Type:	Not reported
Title Description:	Imported 12/2011:CLOSURE1
Due Date:	Not reported
Comments:	Not reported
Unit Names:	TANKSTR1, TANKSTR2, TANKTRT1
Event Description:	Closure - ISSUE CLOSURE VERIFICATION
Actual Date:	10/17/1994

EPA ID:	CAD009542721
Facility Type:	Historical - Non-Operating
Facility Name:	GE ENGINE SERVICES INC
Project Manager:	Not reported
Project Manager Lead:	Not reported
Supervisor:	Not reported
Facility Size:	Not reported
Facility Status:	CLOSED
Activity Type:	Closure
Final Date:	Not reported
Type:	Not reported
Title Description:	Imported 12/2011:CLOSURE1
Due Date:	Not reported
Comments:	Not reported
Unit Names:	TANKSTR1, TANKSTR2, TANKTRT1
Event Description:	Closure - 1ST NOTICE OF DEFICIENCY ISSUED
Actual Date:	02/06/1992

Alias:

EPA ID:	CAD009542721
Facility Type:	Historical - Non-Operating
Facility Name:	GE ENGINE SERVICES INC
Facility Status:	CLOSED
Project Manager:	Not reported
Project Manager Lead:	Not reported
Supervisor:	Not reported
Alias Type:	Project Code (Site Code)
Alias:	400359

NY MANIFEST:

Name:	GENERAL ELECTRIC
Address:	1923 E. AVION STREET
City,State,Zip:	ONTARIO, CA 91761-0000
Country:	USA
EPA ID:	CAD009542721
Facility Status:	Not reported
Location Address 1:	1923 EAST AVION STREET
Code:	BP
Location Address 2:	Not reported
Total Tanks:	Not reported
Location City:	ONTARIO

GE ENGINE SERVICES INC. (Continued) **1000213808**

Location State: CA
Location Zip: 91761
Location Zip 4: Not reported

NY MANIFEST:
EPAID: CAD009542721
Mailing Name: GENERAL ELECTRIC
Mailing Contact: ROBERT
Mailing Address 1: 1923 EAST AVION STREET
Mailing Address 2: Not reported
Mailing City: ONTARIO
Mailing State: VA
Mailing Zip: 91761
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 7143915424

M58 **GENERAL ELECTRIC ENGINE MAINTENANCE CENTER** **CA BOND EXP. PLAN** **S100833313**
SSW **1923 EAST AVION STREET** **N/A**
1/2-1 **ONTARIO, CA 91761**
0.945 mi.
4987 ft. **Site 3 of 3 in cluster M**

Relative:
Lower

Actual:
909 ft.

CA BOND EXP. PLAN:
Reponsible Party: RESPONSIBLE PARTY LEAD SITE CLEANUP WORKPLAN
Project Revenue Source Company: Not reported
Project Revenue Source Addr: Not reported
Project Revenue Source City,St,Zip: Not reported
Project Revenue Source Desc: The potentially responsible parties (PRPs) include General Electric and the City of Los Angeles Department of Airports. DHS entered into a consent order with the PRPs on September 28, 1988. DHS has budgeted $50,000 for oversight/monitoring of cleanup activities. DHS will recover its direct costs, plus staff costs and overhead related to the project. The PRPs will pay for the cost of investigation and remedial action.
Site Description: This facility maintains and overhauls aircraft engines. Hazardous wastes disposed of onsite have contaminated soils.
Hazardous Waste Desc: About 6,000 gallons of hazardous waste were disposed of in dry wells. There is an estimated 600 cubic yards of waste and contaminated soil on the site. Results of a 1987 investigation indicated the presence of 1,1,1-trichloroethane (TCA), tetrachloroethene (PCE), chloroform, naphthalene, 2- methylnaphthalene, and volatile aromatics (xylene, toluene, ethylbenzene) in soils near the dry wells.
Threat To Public Health & Env: Hazardous substances disposed of in dry wells may potentially enter ground water and contaminate drinking water supplies. The workers on the facility may be exposed to volatile organic compounds if contaminated soils, currently beneath an asphalt orcement cover, are excavated or disturbed.
Site Activity Status: General Electric performed soil sampling in 1984 and 1987 to identify contaminated areas on the facility. General Electric is proceeding with site investigation in order to fully characterize the site.

59
South
1/2-1
0.964 mi.
5089 ft.

GE ENGINE SERVICES
2264 AVION DR
ONTARIO, CA 91761

CA HIST Cal-Sites **S103643503**
CA EMI **N/A**

Relative:
Lower

Actual:
892 ft.

Calsite:

Name:	GE AIRCRAFT, ENGINE MAINTENANCE CTR
Address:	2264 AVION PLACE
City:	ONTARIO
Region:	CYPRESS
Facility ID:	36370024
Facility Type:	RP
Type:	RESPONSIBLE PARTY
Branch:	SB
Branch Name:	SO CAL - CYPRESS
File Name:	Not reported
State Senate District:	04231996
Status:	ANNUAL WORKPLAN (AWP) - ACTIVE SITE
Status Name:	ANNUAL WORKPLAN - ACTIVE SITE
Lead Agency:	DEPT OF TOXIC SUBSTANCES CONTROL
NPL:	Not Listed
SIC Code:	37
SIC Name:	MANU - TRANSPORTATION EQUIPMENT
Access:	Not reported
Cortese:	Not reported
Hazardous Ranking Score:	Not reported
Date Site Hazard Ranked:	Not reported
Groundwater Contamination:	Suspected
Staff Member Responsible for Site:	THOM
Supervisor Responsible for Site:	Not reported
Region Water Control Board:	Not reported
Region Water Control Board Name:	Not reported
Lat/Long Direction:	Not reported
Lat/Long (dms):	0 0 0 / 0 0 0
Lat/long Method:	Not reported
Lat/Long Description:	Not reported
State Assembly District Code:	61
State Senate District Code:	32
Facility ID:	36370024
Activity:	DISC
Activity Name:	DISCOVERY
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	03151983
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported

GE ENGINE SERVICES (Continued) **S103643503**

For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	36370024
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	CNSNT
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	09281988
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	36370024
Activity:	SS
Activity Name:	SITE SCREENING
AWP Code:	EPAPA
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	05261989
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	36370024
Activity:	FRIFS
Activity Name:	FOCUSED REMEDIAL INVESTIGATION/FEASIBILITY STUDY
AWP Code:	Not reported
Proposed Budget:	0

GE ENGINE SERVICES (Continued) **S103643503**

AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	12311991
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	36370024
Activity:	FRIFS
Activity Name:	FOCUSED REMEDIAL INVESTIGATION/FEASIBILITY STUDY
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	02291992
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	36370024
Activity:	RIFS
Activity Name:	REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	06301993
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0

GE ENGINE SERVICES (Continued) **S103643503**

Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	36370024
Activity:	CEQA
Activity Name:	CEQA INCLUDING NEGATIVE DECS
AWP Code:	NEGDK
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	09161994
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	36370024
Activity:	RAP
Activity Name:	REMEDIAL ACTION PLAN / RECORD OF DECISION
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	09161994
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0

GE ENGINE SERVICES (Continued) **S103643503**

Unknown Type:	0
Facility ID:	36370024
Activity:	DES
Activity Name:	DESIGN
AWP Code:	GW
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	01101996
Est Person-Yrs to complete:	0.32000
Estimated Size:	L
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	36370024
Activity:	RMDL
Activity Name:	REMEDIAL ACTION (RAP REQUIRED)
AWP Code:	SOIL
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	10091996
Est Person-Yrs to complete:	0.20000
Estimated Size:	L
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	36370024
Activity:	OM
Activity Name:	OPERATION & MAINTENANCE
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	06302010
Revised Due Date:	Not reported
Comments Date:	Not reported

GE ENGINE SERVICES (Continued) **S103643503**

Est Person-Yrs to complete:	0
Estimated Size:	L
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	36370024
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	SOIL
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	08281998
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	36370024
Activity:	COST
Activity Name:	COST RECOVERY
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	09151998
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported

GE ENGINE SERVICES (Continued) **S103643503**

Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	36370024
Activity:	5YEAR
Activity Name:	FIVE-YEAR REVIEW REQUIRED BY CERCLA
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	03312005
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Alternate Address:	1923 AVION STREET (ONTARIO AIRPORT)
Alternate City,St,Zip:	ONTARIO, CA 91761
Alternate Address:	2264 AVION PLACE
Alternate City,St,Zip:	ONTARIO, CA 91761

Background Info:

General Electric has operated a jet engine test facility at this site from 1956 to the present. Both commercial and military engines are tested at the facility.

About 6,000 gallons of hazardous waste were disposed of in dry wells. There is an estimated 600 cubic yards of waste and contaminated soil on the site. Results of a preliminary investigation in 1987, indicated the presence of 1,1,1-trichloroethane (TCA), tetrachloroethene (PCE), chloroform, naphthalene, 2-methylnaphthalene, and volatile aromatic (xylene, toluene, ethylbenzene) in soils near the dry wells.

Hazardous substances disposed of in dry wells may potentially enter groundwater and contaminate drinking water supplies. The workers on the facility may be exposed to volatile organic compounds if contaminated subsurface soils, are excavated or disturbed.

General Electric performed soil sampling in 1984, and 1987, to identify contaminated areas on the facility. General Electric has performed a site investigation to fully characterizethe site. A Consent Order between General Electric and DHS was signed September 28, 1988, for both groundwater and soil remediation.

System operation of the vapor extraction treatment systems in

GE ENGINE SERVICES (Continued) **S103643503**

areas A, B and C began on May 17, 1996. Quarterly reports on the status of operation have been submitted to DTSC since commencing remediation. Concentrations of VOCs in shallow soils in areas A, B, and C at the site have reached acceptable closure levels. The shallow extraction wells in areas A, B, and C will be maintained in operational condition until sufficient data can be obtained to evaluate rebound data.

Comments Date: 10091996
Comments: separate soil vapor extraction and treatment systems (VET's)
Comments Date: 10091996
Comments: was completed on 10/09/1996.
Comments Date: 12062001
Comments: In January 2001, DTSC issued conditional closure of the
Comments Date: 01011985
Comments: Preliminary Assessment Done: Facility is located in the Ontario
Comments Date: 01011985
Comments: International Airport. Test Area is 1/3-mile east along Avion.
Comments Date: 01011985
Comments: Operations consist of cleaning, overhauling, and testing of
Comments Date: 01011985
Comments: aircraft engines. In operation since 1956 (dry wells 1974-1980).
Comments Date: 01011985
Comments: Discharge to sewer. Preliminary Assessment submitted to
Comments Date: 01011985
Comments: U.S. EPA.
Comments Date: 01101996
Comments: DTSC approved the remedial design for the GE Company site.
Comments Date: 01111999
Comments: As part of a Cost Recovery Settlement between GE (the
Comments Date: 01111999
Comments: Responsible Party) and DTSC, for the period July 1, 1998 to
Comments Date: 01111999
Comments: June 30, 1997 for Invoice No. 13637, GE settled the disputed
Comments Date: 01111999
Comments: amount. DTSC received settlement payment pursuant to the
Comments Date: 01111999
Comments: settlement signed on 09/15/98 by GE and DTSC.
Comments Date: 01301984
Comments: DHS/TSCD Inspection: No violations found.
Comments Date: 02071997
Comments: O&M agreement being reviewed by OLC .
Comments Date: 02071997
Comments: Quarterly progrss reports, weekly operation logs and O&M Manual
Comments Date: 02071997
Comments: have been submitted by GE.
Comments Date: 02152000
Comments: GE conducted soil gas sampling of deep and shallow soils in
Comments Date: 02152000
Comments: October 1999. There were some operational soil vapor
Comments Date: 02152000
Comments: extraction for rebound and closure data in areas A, B and C for
Comments Date: 02152000
Comments: shallow soils. The final closure decision will be based on an
Comments Date: 02152000
Comments: evaluation of rebound concentrations in shallow soil extraction
Comments Date: 02152000
Comments: wells over time. The remediation for deeper wells in each area

GE ENGINE SERVICES (Continued) **S103643503**

Comments Date:	02152000
Comments:	will continue.
Comments Date:	02171995
Comments:	The Pilot Test and deep soil monitoring protocol RAP
Comments Date:	02171995
Comments:	implementation document was submitted to DTSC.
Comments Date:	03151983
Comments:	Facility Identified: RWQCB files - aircraft parts mfg.
Comments Date:	04231996
Comments:	SVE System was installed this month.
Comments Date:	05201983
Comments:	Facility Drive-By: Active firm. Large, secured, paved
Comments Date:	05201983
Comments:	complex.
Comments Date:	05261989
Comments:	Reassessment was reviewed by Region 4 staff recommended AWP.
Comments Date:	05281997
Comments:	Draft O&M Agreement sent to GE.
Comments Date:	05281997
Comments:	Not reported
Comments Date:	06161983
Comments:	DHS/HMMS Inspection: No violations found.
Comments Date:	07251991
Comments:	Military and commercial jet engine testing facility.
Comments Date:	07251991
Comments:	Contaminants include petroleum hydrocarbons, TCA, PCE, volatile
Comments Date:	07251991
Comments:	and semi-volatile organic compounds, chloroform, naphthalene,
Comments Date:	07251991
Comments:	2-methylnaphthalene, and volatile aromatics (xylene, toluene,
Comments Date:	07251991
Comments:	ethyl benzene).
Comments Date:	08011984
Comments:	Core samples from two dry wells show 1,1,1-trichloroethane,
Comments Date:	08011984
Comments:	TCE, PCE, and bibromochloroethane.
Comments Date:	08281998
Comments:	Enforceable Agreement for Operation and Maintenance was signed
Comments Date:	08281998
Comments:	by DTSC and GE.
Comments Date:	09131988
Comments:	EPA submitted a reassessment recommending NFA.
Comments Date:	09161994
Comments:	The Department approved the final Remedial Action Plan for the
Comments Date:	09161994
Comments:	General Electric Jet Engine Test Cell Facility. The CEQA
Comments Date:	09161994
Comments:	(Negative Declaration) documents have also been approved. The
Comments Date:	09161994
Comments:	remedial alternative recommended for the site consists of
Comments Date:	09161994
Comments:	in situ soil vapor extraction to reduce VOC levels at the known
Comments Date:	09161994
Comments:	source areas of the site. Groundwater investigation and cleanup
Comments Date:	09161994
Comments:	will be under the oversight of the RWQCB.
Comments Date:	10091996

GE ENGINE SERVICES (Continued) **S103643503**

Comments:	RMDL: Installation, operation and maintenance of three (3)
Comments Date:	12062001
Comments:	shallow soils in Areas A, B, and C. In October 4, 2001,
Comments Date:	12062001
Comments:	DTSC supported closure of shallow soils at Areas A,B, and C
Comments Date:	12062001
Comments:	and recommended cessation of deep soil vapor extraction
Comments Date:	12062001
Comments:	operations in Area A. The VETS effluent concentration at
Comments Date:	12062001
Comments:	Area A is being closely monitored. The VETS is being
Comments Date:	12062001
Comments:	operated in accordance with the requirements of the Regional
Comments Date:	12062001
Comments:	Water Quality Control Board (RWQCB).
Comments Date:	12062001
Comments:	Not reported
Comments Date:	12062001
Comments:	The individual VETS are being operated with the intent to
Comments Date:	12062001
Comments:	operate deep soil VETS at each of the areas, A,B, and C
Comments Date:	12062001
Comments:	until asymptotic conditions are achieved.
Comments Date:	12062001
Comments:	Not reported
Comments Date:	12062001
Comments:	It is recommended that there is resolution of two issues
Comments Date:	12062001
Comments:	relating to the extent of deep soil VETS operation required
Comments Date:	12062001
Comments:	at this site, which are: 1) A determination of the
Comments Date:	12062001
Comments:	contamination specific clean up objectives for each of the
Comments Date:	12062001
Comments:	five extraction wells in each VETS based on the distance
Comments Date:	12062001
Comments:	from the screened interval of each individual well to
Comments Date:	12062001
Comments:	groundwater; 2) An analysis of the relationship of
Comments Date:	12062001
Comments:	contaminant levels in deep extraction wells to the level
Comments Date:	12062001
Comments:	of contamination in groundwater and the proximity of the
Comments Date:	12062001
Comments:	screened interval to groundwater.
ID Name:	CALSTARS CODE
ID Value:	400070
ID Name:	BEP DATABASE PCODE
ID Value:	P41017
ID Name:	EPA IDENTIFICATION NUMBER
ID Value:	CAD009542721
Alternate Name:	GENERAL ELECTRIC ENGINE MAINTENANCE CTR.
Alternate Name:	GENERAL ELECTRIC CO AVIATION SERVICE
Alternate Name:	GE AIRCRAFT, ENGINE MAINTENANCE CTR
Alternate Name:	GENERAL ELECTRIC JET ENGINE TEST CELL
Alternate Name:	Not reported
Special Programs Code:	R3012

GE ENGINE SERVICES (Continued) **S103643503**

Special Programs Name: RCRA 3012

EMI:

Name:	GENERAL ELECTRIC COMPANY
Address:	2264 AVION PLACE
City,State,Zip:	ONTARIO, CA 917610000
Year:	1990
County Code:	36
Air Basin:	SC
Facility ID:	61160
Air District Name:	SC
SIC Code:	5171
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	GENERAL ELECTRIC COMPANY
Address:	2264 AVION DR
City,State,Zip:	ONTARIO, CA 917610000
Year:	1993
County Code:	36
Air Basin:	SC
Facility ID:	61160
Air District Name:	SC
SIC Code:	5171
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	13
Reactive Organic Gases Tons/Yr:	13
Carbon Monoxide Emissions Tons/Yr:	7
NOX - Oxides of Nitrogen Tons/Yr:	29
SOX - Oxides of Sulphur Tons/Yr:	13
Particulate Matter Tons/Yr:	2
Part. Matter 10 Micrometers and Smllr Tons/Yr:	2

Name:	GENERAL ELECTRIC COMPANY
Address:	2264 AVION DR
City,State,Zip:	ONTARIO, CA 917610000
Year:	1995
County Code:	36
Air Basin:	SC
Facility ID:	61160
Air District Name:	SC
SIC Code:	5171
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	13
Reactive Organic Gases Tons/Yr:	13

GE ENGINE SERVICES (Continued) **S103643503**

Carbon Monoxide Emissions Tons/Yr:	7
NOX - Oxides of Nitrogen Tons/Yr:	29
SOX - Oxides of Sulphur Tons/Yr:	13
Particulate Matter Tons/Yr:	2
Part. Matter 10 Micrometers and Smllr Tons/Yr:	2

Name:	GE ENGINE SERVICES
Address:	2264 AVION DR
City,State,Zip:	ONTARIO, CA 917610000
Year:	1996
County Code:	36
Air Basin:	SC
Facility ID:	61160
Air District Name:	SC
SIC Code:	5171
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	11
Reactive Organic Gases Tons/Yr:	11
Carbon Monoxide Emissions Tons/Yr:	5
NOX - Oxides of Nitrogen Tons/Yr:	23
SOX - Oxides of Sulphur Tons/Yr:	11
Particulate Matter Tons/Yr:	2
Part. Matter 10 Micrometers and Smllr Tons/Yr:	2

Name:	GE ENGINE SERVICES
Address:	2264 AVION DR
City,State,Zip:	ONTARIO, CA 917610000
Year:	1997
County Code:	36
Air Basin:	SC
Facility ID:	61160
Air District Name:	SC
SIC Code:	5171
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	15
Reactive Organic Gases Tons/Yr:	13
Carbon Monoxide Emissions Tons/Yr:	16
NOX - Oxides of Nitrogen Tons/Yr:	80
SOX - Oxides of Sulphur Tons/Yr:	2
Particulate Matter Tons/Yr:	1
Part. Matter 10 Micrometers and Smllr Tons/Yr:	1

Name:	GE ENGINE SERVICES
Address:	2264 AVION DR
City,State,Zip:	ONTARIO, CA 917610000
Year:	1998
County Code:	36
Air Basin:	SC
Facility ID:	61160
Air District Name:	SC
SIC Code:	5171
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported

GE ENGINE SERVICES (Continued) **S103643503**

Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	15
Reactive Organic Gases Tons/Yr:	13
Carbon Monoxide Emissions Tons/Yr:	16
NOX - Oxides of Nitrogen Tons/Yr:	80
SOX - Oxides of Sulphur Tons/Yr:	2
Particulate Matter Tons/Yr:	1
Part. Matter 10 Micrometers and Smllr Tons/Yr:	1

Name:	GE ENGINE SERVICES
Address:	2264 AVION DR
City,State,Zip:	ONTARIO, CA 917610000
Year:	1999
County Code:	36
Air Basin:	SC
Facility ID:	61160
Air District Name:	SC
SIC Code:	5171
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	15
Reactive Organic Gases Tons/Yr:	13
Carbon Monoxide Emissions Tons/Yr:	16
NOX - Oxides of Nitrogen Tons/Yr:	80
SOX - Oxides of Sulphur Tons/Yr:	2
Particulate Matter Tons/Yr:	1
Part. Matter 10 Micrometers and Smllr Tons/Yr:	1

Name:	GE ENGINE SERVICES
Address:	2264 AVION DR
City,State,Zip:	ONTARIO, CA 917610000
Year:	2000
County Code:	36
Air Basin:	SC
Facility ID:	61160
Air District Name:	SC
SIC Code:	5171
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	15
Reactive Organic Gases Tons/Yr:	13
Carbon Monoxide Emissions Tons/Yr:	16
NOX - Oxides of Nitrogen Tons/Yr:	80
SOX - Oxides of Sulphur Tons/Yr:	2
Particulate Matter Tons/Yr:	1
Part. Matter 10 Micrometers and Smllr Tons/Yr:	1

Name:	GE ENGINE SERVICES
Address:	2264 AVION DR
City,State,Zip:	ONTARIO, CA 91761
Year:	2009
County Code:	36
Air Basin:	SC
Facility ID:	61160
Air District Name:	SC

GE ENGINE SERVICES (Continued) **S103643503**

SIC Code:	7538
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.34695481795966199
Reactive Organic Gases Tons/Yr:	0.29103200000000001
Carbon Monoxide Emissions Tons/Yr:	0.94186999999999999
NOX - Oxides of Nitrogen Tons/Yr:	2.2469600000000001
SOX - Oxides of Sulphur Tons/Yr:	0.0100321
Particulate Matter Tons/Yr:	2.0400999999999999E-2
Part. Matter 10 Micrometers and Smllr Tons/Yr:	1.9900950000000001E-2

Name:	GE ENGINE SERVICES
Address:	2264 AVION DR
City,State,Zip:	ONTARIO, CA 91761
Year:	2010
County Code:	36
Air Basin:	SC
Facility ID:	61160
Air District Name:	SC
SIC Code:	7538
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	8.2598359947286606E-2
Reactive Organic Gases Tons/Yr:	6.3538750000000005E-2
Carbon Monoxide Emissions Tons/Yr:	0.24610000000000001
NOX - Oxides of Nitrogen Tons/Yr:	1.18371
SOX - Oxides of Sulphur Tons/Yr:	0.00679
Particulate Matter Tons/Yr:	0.01106
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0.01078

Count: 31 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
ONTARIO	S117701653	HBIZCTR ONTARIO	SE CORNER OF THE INT OF FRANCI	91761	CA NPDES, CA CIWQS
ONTARIO	S121652155	LOT 1 OF ONTARIO AVE BUSINESS PARK	NE CORNER OF GROVE AVE & LUCUS	91761	CA CIWQS
ONTARIO	1009508586	SO CAL GAS/ONTARIO MGP	CORNER OF CAMPUS, MARTLAND, MO	91761	EDR MGP
ONTARIO	S129213612	MOUNTAIN VIEW SD PROPOSED ELEMENTA	NORTHWEST CORNER OF THE INTERS	91761	CA ENVIROSTOR, CA SCH
ONTARIO	1027048732	CITY ONTARIO WELL GUASTI	2400 E GUASTI ROAD	91761	FINDS
ONTARIO	1025878940	ONTARIO PACIFIC BUSINESS CENTRE	3979 B GUASTI	91764	RCRA-SQG
ONTARIO	1026440623	ONTARIO PACIFIC BUSINESS CENTRE	3979 B GUASTI	91764	FINDS
ONTARIO	S114663927	ONTARIO, CITY OF	W HOLT BLVD		CA RGA LUST
ONTARIO	S114663925	ONTARIO, CITY OF	HOLT BOULEVARD, WEST		CA RGA LUST
ONTARIO	S114663923	ONTARIO, CITY OF	HOLT BLVD		CA RGA LUST
ONTARIO	S114663922	ONTARIO, CITY OF	HOLT AVENUE		CA RGA LUST
ONTARIO	S114663921	ONTARIO, CITY OF	W HOLT BLVD		CA RGA LUST
ONTARIO	S114663920	ONTARIO, CITY OF	HOLT BLVD		CA RGA LUST
ONTARIO	S114708156	U. S. POSTAL SERVICE ONTARIO	1555 HOLT BLVD		CA RGA LUST
ONTARIO	1021787704	ONTARIO AUTO TRUCK PLAZA INC	4265 E HOLT RD	91761	EDR Hist Auto
ONTARIO	1022258803	ONTARIO AUTO TRUCK PLAZA INC	4265 E HOLT BLVD	91761	EDR Hist Auto
ONTARIO	S126215803	ONTARIO AIRPORT TOWERS WCU PARKING	NEC OF GUASTI RD & ARCHIBALD A	91761	CA NPDES
ONTARIO	S110735027	ONTARIO AIRPORT TOWERS - WCU PARKI	NEC OF GUASTI RD. AND ARCHIBAL	91761	CA CIWQS
ONTARIO	S108543038	NORTHROP (O)	N/A ONT. INTL. AIRPORT		CA CPS-SLIC
ONTARIO	S108543020	LOCKHEED (O)	N/A ONT. INTL. AIRPORT		CA CPS-SLIC
ONTARIO	S108542946	DOUGLAS AIRCRAFT CO	N/A ONT. INTL. AIRPORT		CA CPS-SLIC
ONTARIO	S108985930	CALIF. AIR NATIONAL GUARD	N/A ONT. INTL. AIRPORT		CA CPS-SLIC
ONTARIO	S108985929	G E ENGINE SERVICE	N/A ONT. INTL. AIRPORT		CA CPS-SLIC
ONTARIO	S114629501	GTE ONTARIO	207 D ST		CA RGA LUST
ONTARIO	S114629502	GTE ONTARIO	207 D STREET, WEST		CA RGA LUST
RANCHO CUCAMONGA	S126976690	GENUINE PARTS COMPANY DBA NAPA AUT	9359 FOOTHILL BLVD, SUITE A	91730	CA CERS HAZ WASTE
RANCHO CUCAMONGA	S126286583	RRR & H INC	9359 FOOTHILL BLVD A-1	91730	CA DRYCLEANERS
RANCHO CUCAMONGA	S121694037	BONDED CLEANERS, JOSEPH MONTES	9359 FOOTHILL A BLVD	91730	CA DRYCLEANERS
RANCHO CUCAMONGA	S121696509	BONDED CLEANERS	9359 FOOTHILL BLVD A-1	91730	CA DRYCLEANERS
RANCHO CUCAMONGA	S121695007	BONDED CLEANERS, HOURT SENG DBA	9359 FOOTHILL BLVD A-1	91730	CA DRYCLEANERS
SAN BERNARDINO COUNT	S107538165		CORNER OF HWY 247 & 18 AND 76		CA CDL

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 09/19/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 16

Source: EPA
Telephone: N/A
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 09/19/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 16

Source: EPA
Telephone: N/A
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Lists of Federal Delisted NPL sites

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 09/19/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 16

Source: EPA
Telephone: N/A
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: Quarterly

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 06/23/2023
Date Data Arrived at EDR: 06/23/2023
Date Made Active in Reports: 09/20/2023
Number of Days to Update: 89

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 09/26/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 09/19/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 16

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/22/2024
Data Release Frequency: Quarterly

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 09/19/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 16

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/22/2024
Data Release Frequency: Quarterly

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 07/24/2023
Date Data Arrived at EDR: 07/31/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 14

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

Lists of Federal RCRA TSD facilities

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 07/24/2023
Date Data Arrived at EDR: 07/31/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 14

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

Lists of Federal RCRA generators

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 07/24/2023
Date Data Arrived at EDR: 07/31/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 14

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 07/24/2023
Date Data Arrived at EDR: 07/31/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 14

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 07/24/2023
Date Data Arrived at EDR: 07/31/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 14

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 08/03/2023
Date Data Arrived at EDR: 08/07/2023
Date Made Active in Reports: 10/10/2023
Number of Days to Update: 64

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 08/02/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 05/22/2023
Date Data Arrived at EDR: 05/23/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 62

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/21/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 05/22/2023
Date Data Arrived at EDR: 05/23/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 62

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/21/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 06/12/2023
Date Data Arrived at EDR: 06/20/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 55

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

Lists of state- and tribal (Superfund) equivalent sites

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 07/24/2023
Date Data Arrived at EDR: 07/25/2023
Date Made Active in Reports: 10/11/2023
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/24/2023
Next Scheduled EDR Contact: 02/05/2024
Data Release Frequency: Quarterly

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 07/24/2023
Date Data Arrived at EDR: 07/25/2023
Date Made Active in Reports: 10/11/2023
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/24/2023
Next Scheduled EDR Contact: 02/05/2024
Data Release Frequency: Quarterly

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 08/07/2023
Date Data Arrived at EDR: 08/08/2023
Date Made Active in Reports: 10/26/2023
Number of Days to Update: 79

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 08/08/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: Quarterly

Lists of state and tribal leaking storage tanks

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks
California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)
Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Quarterly

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 1: Active Toxic Site Investigation
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 10/11/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/14/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 10/11/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/11/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/19/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 10/11/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 10/11/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 10/11/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/11/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/19/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 10/11/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)

Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

Lists of state and tribal registered storage tanks

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 03/08/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 05/30/2023
Number of Days to Update: 82

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 10/10/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Semi-Annually

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases
UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 05/31/2023
Date Data Arrived at EDR: 06/02/2023
Date Made Active in Reports: 08/23/2023
Number of Days to Update: 82

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)
Military ust sites

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 09/07/2023
Next Scheduled EDR Contact: 12/25/2023
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 10/11/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/11/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 10/11/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/19/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 10/11/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 10/11/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/14/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 10/11/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/11/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 10/11/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

Lists of state and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 07/08/2021
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 09/12/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 07/24/2023
Date Data Arrived at EDR: 07/25/2023
Date Made Active in Reports: 10/11/2023
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/24/2023
Next Scheduled EDR Contact: 02/05/2024
Data Release Frequency: Quarterly

Lists of state and tribal brownfield sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 06/14/2023
Date Data Arrived at EDR: 06/14/2023
Date Made Active in Reports: 09/06/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 04/06/2023
Date Data Arrived at EDR: 04/13/2023
Date Made Active in Reports: 04/19/2023
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 08/30/2023
Next Scheduled EDR Contact: 12/25/2023
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 10/20/2023
Next Scheduled EDR Contact: 02/05/2024
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 06/02/2023
Date Data Arrived at EDR: 06/02/2023
Date Made Active in Reports: 08/23/2023
Number of Days to Update: 82

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 11/16/2022
Date Data Arrived at EDR: 11/22/2022
Date Made Active in Reports: 02/13/2023
Number of Days to Update: 83

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 08/29/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 10/23/2023
Next Scheduled EDR Contact: 02/05/2024
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 10/10/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176
Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 07/27/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 05/22/2023
Date Data Arrived at EDR: 05/23/2023
Date Made Active in Reports: 07/10/2023
Number of Days to Update: 48
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/21/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21
Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program
This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 07/24/2023
Date Data Arrived at EDR: 07/25/2023
Date Made Active in Reports: 10/11/2023
Number of Days to Update: 78
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/24/2023
Next Scheduled EDR Contact: 02/05/2024
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs
A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2022
Date Made Active in Reports: 02/09/2023
Number of Days to Update: 71
Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 10/25/2023
Next Scheduled EDR Contact: 02/12/2024
Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites
Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27
Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

CERS HAZ WASTE: California Environmental Reporting System Hazardous Waste
List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 07/17/2023
Date Data Arrived at EDR: 07/18/2023
Date Made Active in Reports: 10/06/2023
Number of Days to Update: 80
Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 10/17/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 05/22/2023
Date Data Arrived at EDR: 05/23/2023
Date Made Active in Reports: 07/10/2023
Number of Days to Update: 48
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/21/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing
Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35
Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HIST UST: Hazardous Substance Storage Container Database
The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18
Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing
Aboveground storage tank sites

Date of Government Version: 08/04/2023
Date Data Arrived at EDR: 08/08/2023
Date Made Active in Reports: 10/25/2023
Number of Days to Update: 78
Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 10/25/2023
Next Scheduled EDR Contact: 02/12/2024
Data Release Frequency: Varies

CERS TANKS: California Environmental Reporting System (CERS) Tanks
List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 07/17/2023
Date Data Arrived at EDR: 07/18/2023
Date Made Active in Reports: 10/06/2023
Number of Days to Update: 80

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 10/17/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Quarterly

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 06/06/2023
Date Data Arrived at EDR: 06/07/2023
Date Made Active in Reports: 08/25/2023
Number of Days to Update: 79

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/22/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 09/19/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 16

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 05/25/2023
Date Data Arrived at EDR: 05/25/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 81

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 08/29/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/19/2023
Date Data Arrived at EDR: 06/23/2023
Date Made Active in Reports: 09/20/2023
Number of Days to Update: 89

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System
California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 06/01/2023
Date Data Arrived at EDR: 07/18/2023
Date Made Active in Reports: 10/05/2023
Number of Days to Update: 79

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 10/20/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)
Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/25/2023
Number of Days to Update: 81

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)
Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/25/2023
Number of Days to Update: 81

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch
Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 07/24/2023
Date Data Arrived at EDR: 07/31/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 14

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 08/07/2023
Date Data Arrived at EDR: 08/15/2023
Date Made Active in Reports: 10/10/2023
Number of Days to Update: 56

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 06/07/2021
Date Data Arrived at EDR: 07/13/2021
Date Made Active in Reports: 03/09/2022
Number of Days to Update: 239

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 10/09/2023
Next Scheduled EDR Contact: 01/22/2024
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 10/04/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 07/30/2021
Date Data Arrived at EDR: 02/03/2023
Date Made Active in Reports: 02/10/2023
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 08/01/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 06/19/2023
Date Data Arrived at EDR: 06/20/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 55

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 07/31/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 08/03/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 06/14/2022
Date Made Active in Reports: 03/24/2023
Number of Days to Update: 283

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/15/2023
Next Scheduled EDR Contact: 12/25/2023
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 02/16/2023
Date Made Active in Reports: 05/02/2023
Number of Days to Update: 75

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 08/18/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 07/17/2023
Date Data Arrived at EDR: 07/18/2023
Date Made Active in Reports: 10/10/2023
Number of Days to Update: 84

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 10/20/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 09/19/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 16

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 05/09/2023
Date Data Arrived at EDR: 06/29/2023
Date Made Active in Reports: 09/25/2023
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 09/26/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 09/19/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 16

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 03/20/2023
Date Data Arrived at EDR: 04/04/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 66

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 10/06/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 09/27/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 07/20/2023
Date Data Arrived at EDR: 09/01/2023
Date Made Active in Reports: 09/20/2023
Number of Days to Update: 19

Source: Nuclear Regulatory Commission
Telephone: 301-415-0717
Last EDR Contact: 10/10/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 04/14/2023
Date Made Active in Reports: 07/10/2023
Number of Days to Update: 87

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 09/01/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 08/28/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 08/03/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 09/22/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data
Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80
Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 10/04/2023
Next Scheduled EDR Contact: 02/05/2024
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2023
Date Data Arrived at EDR: 07/19/2023
Date Made Active in Reports: 10/10/2023
Number of Days to Update: 83
Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11
Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546
Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 10/02/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 03/03/2023
Date Data Arrived at EDR: 03/03/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 98
Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 10/25/2023
Next Scheduled EDR Contact: 02/12/2024
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74
Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 08/10/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 09/19/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 16
Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 07/05/2023
Date Data Arrived at EDR: 07/05/2023
Date Made Active in Reports: 09/25/2023
Number of Days to Update: 82

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 10/04/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: Quarterly

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 05/01/2023
Date Data Arrived at EDR: 05/24/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 61

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 08/22/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 01/07/2022
Date Data Arrived at EDR: 02/24/2023
Date Made Active in Reports: 05/17/2023
Number of Days to Update: 82

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 08/24/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 08/24/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System

Mineral Resources Data System

Date of Government Version: 08/23/2022
Date Data Arrived at EDR: 11/22/2022
Date Made Active in Reports: 02/28/2023
Number of Days to Update: 98

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 08/24/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 06/13/2023
Date Data Arrived at EDR: 06/14/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 61

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 09/12/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 05/04/2023
Date Data Arrived at EDR: 05/25/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 60

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 09/28/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 06/24/2023
Date Data Arrived at EDR: 06/29/2023
Date Made Active in Reports: 09/25/2023
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/06/2021
Date Data Arrived at EDR: 05/21/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Varies

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 11/09/2021
Date Data Arrived at EDR: 10/20/2022
Date Made Active in Reports: 01/10/2023
Number of Days to Update: 82

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 09/13/2023
Next Scheduled EDR Contact: 01/22/2024
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 08/14/2023
Date Data Arrived at EDR: 08/15/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 65

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Quarterly

PFAS NPL: Superfund Sites with PFAS Detections Information

EPA's Office of Land and Emergency Management and EPA Regional Offices maintain data describing what is known about site investigations, contamination, and remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) where PFAS is present in the environment.

Date of Government Version: 07/05/2023
Date Data Arrived at EDR: 07/05/2023
Date Made Active in Reports: 10/02/2023
Number of Days to Update: 89

Source: Environmental Protection Agency
Telephone: 703-603-8895
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Varies

PFAS FEDERAL SITES: Federal Sites PFAS Information

Several federal entities, such as the federal Superfund program, Department of Defense, National Aeronautics and Space Administration, Department of Transportation, and Department of Energy provided information for sites with known or suspected detections at federal facilities.

Date of Government Version: 07/05/2023
Date Data Arrived at EDR: 07/05/2023
Date Made Active in Reports: 10/02/2023
Number of Days to Update: 89

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Varies

PFAS TRIS: List of PFAS Added to the TRI

Section 7321 of the National Defense Authorization Act for Fiscal Year 2020 (NDAA) immediately added certain per- and polyfluoroalkyl substances (PFAS) to the list of chemicals covered by the Toxics Release Inventory (TRI) under Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) and provided a framework for additional PFAS to be added to TRI on an annual basis.

Date of Government Version: 07/05/2023
Date Data Arrived at EDR: 07/05/2023
Date Made Active in Reports: 10/02/2023
Number of Days to Update: 89

Source: Environmental Protection Agency
Telephone: 202-566-0250
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Varies

PFAS TSCA: PFAS Manufacture and Imports Information

EPA issued the Chemical Data Reporting (CDR) Rule under the Toxic Substances Control Act (TSCA) and requires chemical manufacturers and facilities that manufacture or import chemical substances to report data to EPA. EPA publishes non-confidential business information (non-CBI) and includes descriptive information about each site, corporate parent, production volume, other manufacturing information, and processing and use information.

Date of Government Version: 07/05/2023
Date Data Arrived at EDR: 07/05/2023
Date Made Active in Reports: 10/02/2023
Number of Days to Update: 89

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Varies

PFAS RCRA MANIFEST: PFAS Transfers Identified In the RCRA Database Listing

To work around the lack of PFAS waste codes in the RCRA database, EPA developed the PFAS Transfers dataset by mining e-Manifest records containing at least one of these common PFAS keywords: PFAS, PFOA, PFOS, PERFL, AFFF, GENX, GEN-X (plus the VT waste codes). These keywords were searched for in the following text fields: Manifest handling instructions (MANIFEST_HANDLING_INSTR), Non-hazardous waste description (NON_HAZ_WASTE_DESCRIPTION), DOT printed information (DOT_PRINTED_INFORMATION), Waste line handling instructions (WASTE_LINE_HANDLING_INSTR), Waste residue comments (WASTE_RESIDUE_COMMENTS).

Date of Government Version: 07/05/2023
Date Data Arrived at EDR: 07/05/2023
Date Made Active in Reports: 10/02/2023
Number of Days to Update: 89

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Varies

PFAS ATSDR: PFAS Contamination Site Location Listing

PFAS contamination site locations from the Department of Health & Human Services, Center for Disease Control & Prevention. ATSDR is involved at a number of PFAS-related sites, either directly or through assisting state and federal partners. As of now, most sites are related to drinking water contamination connected with PFAS production facilities or fire training areas where aqueous film-forming firefighting foam (AFFF) was regularly used.

Date of Government Version: 06/24/2020
Date Data Arrived at EDR: 03/17/2021
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 601

Source: Department of Health & Human Services
Telephone: 202-741-5770
Last EDR Contact: 10/23/2023
Next Scheduled EDR Contact: 02/05/2024
Data Release Frequency: Varies

PFAS WQP: Ambient Environmental Sampling for PFAS

The Water Quality Portal (WQP) is a part of a modernized repository storing ambient sampling data for all environmental media and tissue samples. A wide range of federal, state, tribal and local governments, academic and non-governmental organizations and individuals submit project details and sampling results to this public repository. The information is commonly used for research and assessments of environmental quality.

Date of Government Version: 09/23/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 10/10/2023
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Varies

PFAS NPDES: Clean Water Act Discharge Monitoring Information

Any discharger of pollutants to waters of the United States from a point source must have a National Pollutant Discharge Elimination System (NPDES) permit. The process for obtaining limits involves the regulated entity (permittee) disclosing releases in a NPDES permit application and the permitting authority (typically the state but sometimes EPA) deciding whether to require monitoring or monitoring with limits. Caveats and Limitations: Less than half of states have required PFAS monitoring for at least one of their permittees and fewer states have established PFAS effluent limits for permittees. New rulemakings have been initiated that may increase the number of facilities monitoring for PFAS in the future.

Date of Government Version: 07/05/2023
Date Data Arrived at EDR: 07/05/2023
Date Made Active in Reports: 10/02/2023
Number of Days to Update: 89
Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Varies

PFAS ECHO: Facilities in Industries that May Be Handling PFAS Listing

Regulators and the public have expressed interest in knowing which regulated entities may be using PFAS. EPA has developed a dataset from various sources that show which industries may be handling PFAS. Approximately 120,000 facilities subject to federal environmental programs have operated or currently operate in industry sectors with processes that may involve handling and/or release of PFAS.

Date of Government Version: 07/05/2023
Date Data Arrived at EDR: 07/05/2023
Date Made Active in Reports: 09/25/2023
Number of Days to Update: 82
Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Varies

PFAS ECHO FIRE TRAINING: Facilities in Industries that May Be Handling PFAS Listing

A list of fire training sites was added to the Industry Sectors dataset using a keyword search on the permitted facilitys name to identify sites where fire-fighting foam may have been used in training exercises. Additionally, you may view an example spreadsheet of the subset of fire training facility data, as well as the keywords used in selecting or deselecting a facility for the subset. as well as the keywords used in selecting or deselecting a facility for the subset. These keywords were tested to maximize accuracy in selecting facilities that may use fire-fighting foam in training exercises, however, due to the lack of a required reporting field in the data systems for designating fire training sites, this methodology may not identify all fire training sites or may potentially misidentify them.

Date of Government Version: 07/05/2023
Date Data Arrived at EDR: 07/05/2023
Date Made Active in Reports: 09/25/2023
Number of Days to Update: 82
Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Varies

PFAS PART 139 AIRPORT: All Certified Part 139 Airports PFAS Information Listing

Since July 1, 2006, all certified part 139 airports are required to have fire-fighting foam onsite that meet military specifications (MIL-F-24385) (14 CFR 139.317). To date, these military specification fire-fighting foams are fluorinated and have been historically used for training and extinguishing. The 2018 FAA Reauthorization Act has a provision stating that no later than October 2021, FAA shall not require the use of fluorinated AFFF. This provision does not prohibit the use of fluorinated AFFF at Part 139 civilian airports; it only prohibits FAA from mandating its use. The Federal Aviation Administration?s document AC 150/5210-6D - Aircraft Fire Extinguishing Agents provides guidance on Aircraft Fire Extinguishing Agents, which includes Aqueous Film Forming Foam (AFFF).

Date of Government Version: 07/05/2023
Date Data Arrived at EDR: 07/05/2023
Date Made Active in Reports: 09/25/2023
Number of Days to Update: 82
Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Varies

AQUEOUS FOAM NRC: Aqueous Foam Related Incidents Listing

The National Response Center (NRC) serves as an emergency call center that fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. The spreadsheets posted to the NRC website contain initial incident data that has not been validated or investigated by a federal/state response agency. Response center calls from 1990 to the most recent complete calendar year where there was indication of Aqueous Film Forming Foam (AFFF) usage are included in this dataset. NRC calls may reference AFFF usage in the ?Material Involved? or ?Incident Description? fields.

Date of Government Version: 07/05/2023
Date Data Arrived at EDR: 07/06/2023
Date Made Active in Reports: 09/25/2023
Number of Days to Update: 81
Source: Environmental Protection Agency
Telephone: 202-267-2675
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Varies

PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 55

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 09/28/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: No Update Planned

PCS ENF: Enforcement data

No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 09/28/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Varies

BIOSOLIDS: ICIS-NPDES Biosolids Facility Data

The data reflects compliance information about facilities in the biosolids program.

Date of Government Version: 07/16/2023
Date Data Arrived at EDR: 07/18/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 41

Source: Environmental Protection Agency
Telephone: 202-564-4700
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 06/02/2023
Date Data Arrived at EDR: 06/02/2023
Date Made Active in Reports: 08/23/2023
Number of Days to Update: 82

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

AQUEOUS FOAM: Former Fire Training Facility Assessments Listing

Airports shown on this list are those believed to use Aqueous Film Forming Foam (AFFF), and certified by the Federal Aviation Administration (FAA) under Title 14, Code of Federal Regulations (CFR), Part 139 (14 CFR Part 139). This list was created by SWRCB using information available from the FAA. Location points shown are from the latitude and longitude listed on the FAA airport master record.

Date of Government Version: 06/02/2023
Date Data Arrived at EDR: 06/02/2023
Date Made Active in Reports: 08/23/2023
Number of Days to Update: 82

Source: State Water Resources Control Board
Telephone: 916-341-5455
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CHROME PLATING: Chrome Plating Facilities Listing

This listing represents chrome plating facilities the California State Water Resources Control Board staff identified as possibly being a source of Per- and polyfluoroalkyl substance (PFAS) contamination. Sites and locations were identified by staff with the Division of Water Quality in the California State Water Board. Data was collected from the CA Air Resources Board 2013 and 2018 - Cr VI emission survey, CA Emission Inventory, CA HAZ Waste discharge database and by reviewing storm water permits. Former chrome plating sites are also included that are open site investigation or remediation cases with the Regional Water Quality Control Boards and the Department of Toxic Substances Control.

Date of Government Version: 06/08/2023
Date Data Arrived at EDR: 06/08/2023
Date Made Active in Reports: 09/26/2023
Number of Days to Update: 110

Source: State Water Resources Control Board
Telephone: 916-341-5455
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 06/14/2023
Date Data Arrived at EDR: 06/14/2023
Date Made Active in Reports: 09/06/2023
Number of Days to Update: 84

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing

list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 03/31/2023
Date Data Arrived at EDR: 05/08/2023
Date Made Active in Reports: 07/31/2023
Number of Days to Update: 84

Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 08/10/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: Varies

DRYCLEAN SAN LUIS OB CO DIST: San Luis Obispo County Air Pollution Control District Drycleaner Facility Listing

A listing of drycleaner facility locations, for the San Luis Obispo County Air Pollution Control District.

Date of Government Version: 07/26/2023
Date Data Arrived at EDR: 07/27/2023
Date Made Active in Reports: 10/13/2023
Number of Days to Update: 78

Source: San Luis Obispo County Air Pollution Control District
Telephone: 805-781-5756
Last EDR Contact: 07/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SAN DIEGO CO DIST: San Diego County Air Pollution Control District Drycleaner Facility Listing

A listing of drycleaner facility locations, for the San Diego County Air Pollution Control District.

Date of Government Version: 08/08/2023
Date Data Arrived at EDR: 08/09/2023
Date Made Active in Reports: 10/26/2023
Number of Days to Update: 78

Source: San Diego County Air Pollution Control District
Telephone: 858-586-2616
Last EDR Contact: 08/08/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN FEATHER RIVER DIST: Feather River Air Quality Management District Drycleaner Facility Listing

A listing of drycleaner facility locations, for the Feather River Air Quality Management District.

Date of Government Version: 03/08/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 06/05/2023
Number of Days to Update: 88

Source: Feather River Air Quality Management District
Telephone: 530-634-7659
Last EDR Contact: 06/08/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SACRAMENTO METO DIST: Sacramento Metropolitan Air Quality Management DistrictDrycleaner Facility Listing
A listing of drycleaner facility locations, for the Sacramento Metropolitan Air Quality Management District.

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 04/28/2023
Date Made Active in Reports: 07/19/2023
Number of Days to Update: 82
Source: Sacramento Metropolitan Air Quality Management District
Telephone: 916-874-3958
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SAN JOAQ VAL DIST: San Joaquin Valley Air Pollution Control District District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the San Joaquin Valley Air Pollution Control District.

Date of Government Version: 05/24/2023
Date Data Arrived at EDR: 05/30/2023
Date Made Active in Reports: 08/21/2023
Number of Days to Update: 83
Source: San Joaquin Valley Air Pollution Control District
Telephone: 559-230-6001
Last EDR Contact: 05/11/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 08/27/2021
Date Data Arrived at EDR: 09/01/2021
Date Made Active in Reports: 11/19/2021
Number of Days to Update: 79
Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 08/22/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Annually

DRYCLEAN GLENN CO DIST: Glenn County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Glenn County Air Pollution Control District.

Date of Government Version: 05/02/2023
Date Data Arrived at EDR: 05/03/2023
Date Made Active in Reports: 07/25/2023
Number of Days to Update: 83
Source: Glenn County Air Pollution Control District
Telephone: 530-934-6500
Last EDR Contact: 05/03/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN EAST KERN DIST: Eastern Kern Air Pollution Control District District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Eastern Kern Air Pollution Control District.

Date of Government Version: 01/12/2023
Date Data Arrived at EDR: 04/26/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 79
Source: Eastern Kern Air Pollution Control District
Telephone: 661-862-9684
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN IMPERIAL CO DIST: Imperial County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Imperial County Air Pollution Control District

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 04/26/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 79
Source: Imperial County Air Pollution Control District
Telephone: 442-265-1800
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN MENDO CO DIST: Mendocino County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Mendocino County Air Quality Management District.

Date of Government Version: 04/27/2023
Date Data Arrived at EDR: 04/28/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 77

Source: Mendocino County Air Quality Management District
Telephone: 707-463-4354
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN MOJAVE DESERT DIST: Mojave Desert Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Mojave Desert Air Quality Management District.

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 78

Source: Mojave Desert Air Quality Management District
Telephone: 760-245-1661
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN MONTEREY BAY DIST: Monterey Bay Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Monterey Bay Air Quality Management District.

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 04/26/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 79

Source: Monterey Bay Air Quality Management District
Telephone: 831-647-9411
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SHASTA CO DIST: Shasta County Air Quality Management District District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Shasta County Air Quality Management District.

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 78

Source: Shasta County Air Quality Management District
Telephone: 530-225-5674
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN YOLO-SOLANO DIST: Yolo-Solano Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Yolo-Solano Air Quality Management District.

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 78

Source: Yolo-Solano Air Quality Management District
Telephone: 530-757-3650
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 05/22/2023
Date Data Arrived at EDR: 05/24/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 82

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 08/22/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Varies

DRYCLEAN PLACER CO DIST: Placer County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Placer County Air Quality Management District.

Date of Government Version: 05/15/2023
Date Data Arrived at EDR: 05/17/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 89

Source: Placer County Air Quality Management District
Telephone: 530-745-2335
Last EDR Contact: 05/11/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN BAY AREA DIST: Bay Area Air Quality Management District Drycleaner Facility Listing
Bay Area Air Quality Management District Drycleaner Facility Listing.

Date of Government Version: 02/20/2019
Date Data Arrived at EDR: 05/30/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1432
Source: Bay Area Air Quality Management District
Telephone: 415-516-1916
Last EDR Contact: 07/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN BUTTE CO DIST: Butte County Air Quality Management DistrictDrycleaner Facility Listing
Butte County Air Quality Management DistrictDrycleaner Facility Listing.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1469
Source: Butte County Air Quality Management District
Telephone: 530-332-9400
Last EDR Contact: 10/03/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN CALAVERAS CO DIST: Calaveras County Environmental Management Agency Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Calaveras County Environmental Management Agency.

Date of Government Version: 06/17/2019
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1412
Source: Calaveras County Environmental Management Agency
Telephone: 209-754-6399
Last EDR Contact: 04/24/2023
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Varies

DRYCLEAN GRANT: Grant Recipients List
Assembly Bill 998 (AB 998) established the Non-Toxic Dry Cleaning Incentive Program to provide financial assistance to the dry cleaning industry to switch from systems using perchloroethylene (Perc), an identified toxic air contaminant and potential human carcinogen, to non-toxic and non-smog forming alternatives.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 02/04/2021
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 816
Source: California Air Resources Board
Telephone: 916-323-0006
Last EDR Contact: 07/24/2023
Next Scheduled EDR Contact: 11/06/2023
Data Release Frequency: Varies

DRYCLEAN LAKE CO DIST: Lake County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Lake County Air Quality Management District,

Date of Government Version: 04/29/2019
Date Data Arrived at EDR: 05/07/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1455
Source: Lake County Air Quality Management District
Telephone: 707-263-7000
Last EDR Contact: 05/11/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN NO COAST UNIFIED DIST: North Coast Unified Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the North Coast Unified Air Quality Management District.

Date of Government Version: 11/30/2016
Date Data Arrived at EDR: 04/19/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1473
Source: North Coast Unified Air Quality Management District
Telephone: 707-443-3093
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN NO SIERRA DIST: Northern Sierra Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Northern Sierra Air Quality Management District,

Date of Government Version: 05/07/2019
Date Data Arrived at EDR: 05/07/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1455
Source: Northern Sierra Air Quality Management District
Telephone: 530-274-9350
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN NO SONOMA CO DIST: Norther Sonoma County County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Northern Sonoma County Air Pollution Control District.,

Date of Government Version: 04/17/2019
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1475
Source: Santa Barbara County Air Pollution Control District
Telephone: 707-433-5911
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SANTA BARB CO DIST: Santa Barbara County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Santa Barbara County Air Pollution Control District.

Date of Government Version: 02/19/2019
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1475
Source: Santa Barbara County Air Pollution Control District
Telephone: 805-961-8867
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN TEHAMA CO DIST: Tehama County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Tehama County Air Pollution Control District.

Date of Government Version: 04/24/2019
Date Data Arrived at EDR: 04/24/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1468
Source: Tehama County Air Pollution Control District
Telephone: 530-527-3717
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN VENTURA CO DIST: Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Ventura County Air Pollution Control District.

Date of Government Version: 04/16/2019
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1475
Source: Ventura County Air Pollution Control District
Telephone: 805-645-1421
Last EDR Contact: 10/11/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 05/17/2023
Date Data Arrived at EDR: 05/18/2023
Date Made Active in Reports: 08/09/2023
Number of Days to Update: 83
Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Varies

DRYCLEAN AMADOR: Amador Air District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Amador Air Quality Management District

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 77
Source: Amador Air Quality Management District
Telephone: 209-257-0112
Last EDR Contact: 04/24/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 06/09/2023
Date Made Active in Reports: 08/30/2023
Number of Days to Update: 82
Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 09/15/2023
Next Scheduled EDR Contact: 12/25/2023
Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 07/17/2023
Date Data Arrived at EDR: 07/18/2023
Date Made Active in Reports: 10/05/2023
Number of Days to Update: 79

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 10/17/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 09/13/2023
Date Data Arrived at EDR: 09/14/2023
Date Made Active in Reports: 09/21/2023
Number of Days to Update: 7

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 09/13/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 05/04/2023
Date Data Arrived at EDR: 05/25/2023
Date Made Active in Reports: 08/16/2023
Number of Days to Update: 83

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: Varies

ICE: Inspection, Compliance and Enforcement

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 05/15/2023
Date Data Arrived at EDR: 05/16/2023
Date Made Active in Reports: 08/09/2023
Number of Days to Update: 85

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 08/14/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 05/15/2023
Date Data Arrived at EDR: 05/16/2023
Date Made Active in Reports: 08/09/2023
Number of Days to Update: 85

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/14/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 06/29/2023
Date Data Arrived at EDR: 06/29/2023
Date Made Active in Reports: 09/19/2023
Number of Days to Update: 82

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 10/04/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Quarterly

HWTS: Hazardous Waste Tracking System

DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 08/04/2023
Date Data Arrived at EDR: 08/09/2023
Date Made Active in Reports: 10/26/2023
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-324-2444
Last EDR Contact: 09/27/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 07/05/2022
Date Made Active in Reports: 09/19/2022
Number of Days to Update: 76

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 07/05/2022
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Annually

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 06/02/2023
Date Data Arrived at EDR: 06/02/2023
Date Made Active in Reports: 08/23/2023
Number of Days to Update: 82

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 05/08/2023
Date Data Arrived at EDR: 05/25/2023
Date Made Active in Reports: 08/16/2023
Number of Days to Update: 83

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 08/29/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 08/07/2023
Date Data Arrived at EDR: 08/08/2023
Date Made Active in Reports: 10/26/2023
Number of Days to Update: 79

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 08/08/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 05/25/2023
Date Data Arrived at EDR: 05/25/2023
Date Made Active in Reports: 08/16/2023
Number of Days to Update: 83

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 08/29/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Quarterly

PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 06/02/2023
Date Data Arrived at EDR: 06/02/2023
Date Made Active in Reports: 08/23/2023
Number of Days to Update: 82

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 06/06/2023
Date Data Arrived at EDR: 06/07/2023
Date Made Active in Reports: 08/25/2023
Number of Days to Update: 79

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 09/07/2023
Next Scheduled EDR Contact: 12/25/2023
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/03/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 01/26/2021
Number of Days to Update: 82

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 10/25/2023
Next Scheduled EDR Contact: 02/12/2024
Data Release Frequency: Annually

SANTA CRUZ CO SITE MITI: Site Mitigation Listing

Sites may become contaminated with toxic chemicals through illegal dumping or disposal, from leaking underground storage tanks, or through industrial or commercial activities.The goal of the site mitigation program is to protect the public health and the environment while facilitating completion of contaminated site clean-up projects in a timely manner.

Date of Government Version: 12/03/2018
Date Data Arrived at EDR: 06/23/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 20

Source: Santa Cruz Environmental Health Services
Telephone: 831-454-2761
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 06/02/2023
Date Data Arrived at EDR: 06/02/2023
Date Made Active in Reports: 08/23/2023
Number of Days to Update: 82

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84
Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 07/01/2021
Date Made Active in Reports: 09/29/2021
Number of Days to Update: 90
Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 10/06/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9
Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13
Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 09/12/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)
Projects sites

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing
In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 06/02/2023
Date Data Arrived at EDR: 06/02/2023
Date Made Active in Reports: 08/23/2023
Number of Days to Update: 82

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 05/25/2023
Date Data Arrived at EDR: 05/25/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 81

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 08/29/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 07/17/2023
Date Data Arrived at EDR: 07/18/2023
Date Made Active in Reports: 10/06/2023
Number of Days to Update: 80

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 10/17/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)

Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 09/27/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 06/27/2023
Date Data Arrived at EDR: 06/28/2023
Date Made Active in Reports: 09/14/2023
Number of Days to Update: 78

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 09/27/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List
Cupa Facility List

Date of Government Version: 04/27/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 77

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 10/25/2023
Next Scheduled EDR Contact: 02/12/2024
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing
Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 09/27/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 06/27/2023
Date Data Arrived at EDR: 06/28/2023
Date Made Active in Reports: 09/14/2023
Number of Days to Update: 78

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 09/12/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/06/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 78

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 10/25/2023
Next Scheduled EDR Contact: 02/12/2024
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 07/05/2023
Date Data Arrived at EDR: 07/20/2023
Date Made Active in Reports: 10/05/2023
Number of Days to Update: 77

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 10/20/2023
Next Scheduled EDR Contact: 02/05/2024
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 08/02/2023
Date Data Arrived at EDR: 08/03/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 77

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 10/20/2023
Next Scheduled EDR Contact: 02/05/2024
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/08/2022
Date Data Arrived at EDR: 08/09/2022
Date Made Active in Reports: 09/01/2022
Number of Days to Update: 23

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 10/20/2023
Next Scheduled EDR Contact: 02/05/2024
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 06/28/2021
Date Data Arrived at EDR: 12/21/2021
Date Made Active in Reports: 03/03/2022
Number of Days to Update: 72

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 09/28/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 10/10/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/12/2021
Date Data Arrived at EDR: 08/12/2021
Date Made Active in Reports: 11/08/2021
Number of Days to Update: 88

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 07/11/2023
Date Data Arrived at EDR: 07/12/2023
Date Made Active in Reports: 09/26/2023
Number of Days to Update: 76

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 10/10/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

KERN COUNTY:

CUPA KERN: CUPA Facility List
A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 07/26/2023
Date Data Arrived at EDR: 07/27/2023
Date Made Active in Reports: 08/09/2023
Number of Days to Update: 13

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 10/25/2023
Next Scheduled EDR Contact: 02/12/2024
Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 07/26/2023
Date Data Arrived at EDR: 07/27/2023
Date Made Active in Reports: 08/03/2023
Number of Days to Update: 7

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 10/25/2023
Next Scheduled EDR Contact: 02/12/2024
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 12/03/2020
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/14/2021
Number of Days to Update: 78

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 05/31/2023
Number of Days to Update: 34

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 10/04/2023
Next Scheduled EDR Contact: 01/22/2024
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List
Cupa facility list

Date of Government Version: 07/31/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 80

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 10/10/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 09/07/2023
Next Scheduled EDR Contact: 12/25/2023
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 06/21/2023
Date Data Arrived at EDR: 06/28/2023
Date Made Active in Reports: 09/14/2023
Number of Days to Update: 78

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 09/27/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 07/10/2023
Date Data Arrived at EDR: 07/10/2023
Date Made Active in Reports: 09/27/2023
Number of Days to Update: 79

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 10/09/2023
Next Scheduled EDR Contact: 01/22/2024
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 12/31/2022
Date Data Arrived at EDR: 01/12/2023
Date Made Active in Reports: 03/29/2023
Number of Days to Update: 76

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 10/04/2023
Next Scheduled EDR Contact: 01/22/2024
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LOS ANGELES AST: Active & Inactive AST Inventory
A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/19/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills
This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 04/13/2023
Date Data Arrived at EDR: 07/13/2023
Date Made Active in Reports: 09/27/2023
Number of Days to Update: 76

Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 10/04/2023
Next Scheduled EDR Contact: 01/22/2024
Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory
A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 06/20/2023
Date Data Arrived at EDR: 06/22/2023
Date Made Active in Reports: 08/09/2023
Number of Days to Update: 48

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory
A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 06/20/2023
Date Data Arrived at EDR: 06/22/2023
Date Made Active in Reports: 09/12/2023
Number of Days to Update: 82

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 03/02/2023
Date Data Arrived at EDR: 04/18/2023
Date Made Active in Reports: 07/07/2023
Number of Days to Update: 80

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 10/17/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 10/04/2023
Next Scheduled EDR Contact: 01/22/2024
Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 65

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 10/10/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 04/12/2023
Date Data Arrived at EDR: 05/02/2023
Date Made Active in Reports: 06/13/2023
Number of Days to Update: 42

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 10/10/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/10/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 72

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 09/21/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: Semi-Annually

MENDOCINO COUNTY:

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/22/2021
Date Data Arrived at EDR: 11/18/2021
Date Made Active in Reports: 11/22/2021
Number of Days to Update: 4

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 07/25/2023
Date Data Arrived at EDR: 08/03/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 77

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 07/25/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 10/04/2021
Date Data Arrived at EDR: 10/06/2021
Date Made Active in Reports: 12/29/2021
Number of Days to Update: 84

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 10/20/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 07/21/2023
Date Data Arrived at EDR: 07/25/2023
Date Made Active in Reports: 10/11/2023
Number of Days to Update: 78

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 10/20/2023
Next Scheduled EDR Contact: 02/05/2024
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 05/15/2023
Date Data Arrived at EDR: 07/31/2023
Date Made Active in Reports: 08/09/2023
Number of Days to Update: 9

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 07/31/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 05/15/2023
Date Data Arrived at EDR: 07/31/2023
Date Made Active in Reports: 08/09/2023
Number of Days to Update: 9

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 07/31/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 04/01/2023
Date Data Arrived at EDR: 05/18/2023
Date Made Active in Reports: 06/14/2023
Number of Days to Update: 27

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/03/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 08/26/2022
Date Data Arrived at EDR: 08/29/2022
Date Made Active in Reports: 11/15/2022
Number of Days to Update: 78

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 07/31/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 10/10/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 07/10/2023
Date Data Arrived at EDR: 07/11/2023
Date Made Active in Reports: 09/26/2023
Number of Days to Update: 77

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/07/2023
Next Scheduled EDR Contact: 12/25/2023
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 07/10/2023
Date Data Arrived at EDR: 07/11/2023
Date Made Active in Reports: 09/26/2023
Number of Days to Update: 77

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/07/2023
Next Scheduled EDR Contact: 12/25/2023
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 11/07/2022
Date Data Arrived at EDR: 12/21/2022
Date Made Active in Reports: 03/16/2023
Number of Days to Update: 85

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 09/25/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 11/07/2022
Date Data Arrived at EDR: 12/09/2022
Date Made Active in Reports: 03/01/2023
Number of Days to Update: 82

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 09/25/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List
Cupa facility list

Date of Government Version: 05/02/2023
Date Data Arrived at EDR: 05/04/2023
Date Made Active in Reports: 07/25/2023
Number of Days to Update: 82

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 10/18/2023
Next Scheduled EDR Contact: 02/12/2024
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 05/09/2023
Date Data Arrived at EDR: 05/10/2023
Date Made Active in Reports: 08/01/2023
Number of Days to Update: 83

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 10/26/2023
Next Scheduled EDR Contact: 02/12/2024
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 05/25/2023
Date Data Arrived at EDR: 05/25/2023
Date Made Active in Reports: 08/16/2023
Number of Days to Update: 83

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 08/29/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 04/04/2023
Date Data Arrived at EDR: 04/05/2023
Date Made Active in Reports: 06/27/2023
Number of Days to Update: 83

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 10/10/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 07/22/2021
Date Data Arrived at EDR: 10/19/2021
Date Made Active in Reports: 01/13/2022
Number of Days to Update: 86

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 10/10/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 08/22/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 08/04/2023
Date Data Arrived at EDR: 08/08/2023
Date Made Active in Reports: 10/26/2023
Number of Days to Update: 79

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 10/25/2023
Next Scheduled EDR Contact: 02/12/2024
Data Release Frequency: Varies

LUST SAN FRANCISCO: Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 10/25/2023
Next Scheduled EDR Contact: 02/12/2024
Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 08/04/2023
Date Data Arrived at EDR: 08/08/2023
Date Made Active in Reports: 10/25/2023
Number of Days to Update: 78

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 10/25/2023
Next Scheduled EDR Contact: 02/12/2024
Data Release Frequency: Quarterly

SAN FRANCISO COUNTY:

SAN FRANCISCO MAHER: Maher Ordinance Property Listing
a listing of properties that fall within a Maher Ordinance, for all of San Francisco

Date of Government Version: 07/17/2023
Date Data Arrived at EDR: 07/18/2023
Date Made Active in Reports: 10/05/2023
Number of Days to Update: 79

Source: San Francisco Planning
Telephone: 628-652-7483
Last EDR Contact: 10/17/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 09/07/2023
Next Scheduled EDR Contact: 12/25/2023
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 05/10/2023
Date Data Arrived at EDR: 05/11/2023
Date Made Active in Reports: 07/31/2023
Number of Days to Update: 81

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 09/08/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 08/29/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28
Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 05/10/2023
Date Data Arrived at EDR: 05/11/2023
Date Made Active in Reports: 07/31/2023
Number of Days to Update: 81
Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22
Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13
Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: No Update Planned

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 08/22/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 09/15/2021
Date Data Arrived at EDR: 09/16/2021
Date Made Active in Reports: 12/09/2021
Number of Days to Update: 84

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 08/22/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

Date of Government Version: 07/02/2021
Date Data Arrived at EDR: 07/06/2021
Date Made Active in Reports: 07/14/2021
Number of Days to Update: 8

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 09/12/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 06/30/2021
Date Data Arrived at EDR: 06/30/2021
Date Made Active in Reports: 09/24/2021
Number of Days to Update: 86

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 09/12/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List
Cupa facility list

Date of Government Version: 02/08/2022
Date Data Arrived at EDR: 02/10/2022
Date Made Active in Reports: 05/04/2022
Number of Days to Update: 83

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 10/04/2023
Next Scheduled EDR Contact: 01/22/2024
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 08/03/2023
Date Data Arrived at EDR: 08/24/2023
Date Made Active in Reports: 09/12/2023
Number of Days to Update: 19

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 08/22/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 08/01/2023
Date Data Arrived at EDR: 08/02/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 78

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 10/25/2023
Next Scheduled EDR Contact: 02/12/2024
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 07/11/2023
Date Data Arrived at EDR: 07/12/2023
Date Made Active in Reports: 09/26/2023
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 10/10/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 10/07/2022
Date Data Arrived at EDR: 10/07/2022
Date Made Active in Reports: 12/21/2022
Number of Days to Update: 75

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 10/25/2023
Next Scheduled EDR Contact: 02/12/2024
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 10/10/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 06/26/2023
Date Data Arrived at EDR: 07/20/2023
Date Made Active in Reports: 10/03/2023
Number of Days to Update: 75

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 10/16/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/21/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 08/02/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 06/26/2023
Date Data Arrived at EDR: 07/25/2023
Date Made Active in Reports: 10/13/2023
Number of Days to Update: 80

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 10/16/2023
Next Scheduled EDR Contact: 01/29/2024
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 05/26/2023
Date Data Arrived at EDR: 06/02/2023
Date Made Active in Reports: 06/14/2023
Number of Days to Update: 12

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 04/03/2023
Date Data Arrived at EDR: 04/18/2023
Date Made Active in Reports: 06/13/2023
Number of Days to Update: 56

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 09/21/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 07/24/2023
Date Data Arrived at EDR: 07/26/2023
Date Made Active in Reports: 10/11/2023
Number of Days to Update: 77

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 10/20/2023
Next Scheduled EDR Contact: 02/05/2024
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 08/07/2023
Date Data Arrived at EDR: 08/08/2023
Date Made Active in Reports: 10/24/2023
Number of Days to Update: 77

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 08/08/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 09/28/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 10/29/2021
Date Made Active in Reports: 01/19/2022
Number of Days to Update: 82

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 07/27/2023
Next Scheduled EDR Contact: 11/06/2023
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 10/05/2023
Next Scheduled EDR Contact: 01/22/2024
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/18/2022
Number of Days to Update: 80

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 08/10/2022
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 08/30/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.
Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

ONTARIO HOTEL
SE CORNER E. HOLT BLVD. AND E. GUASTI RD.
ONTARIO, CA 91761

TARGET PROPERTY COORDINATES

Latitude (North):	34.064239 - 34° 3' 51.26''
Longitude (West):	117.602656 - 117° 36' 9.56''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	444386.3
UTM Y (Meters):	3769248.0
Elevation:	962 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	12015973 GUASTI, CA
Version Date:	2018

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

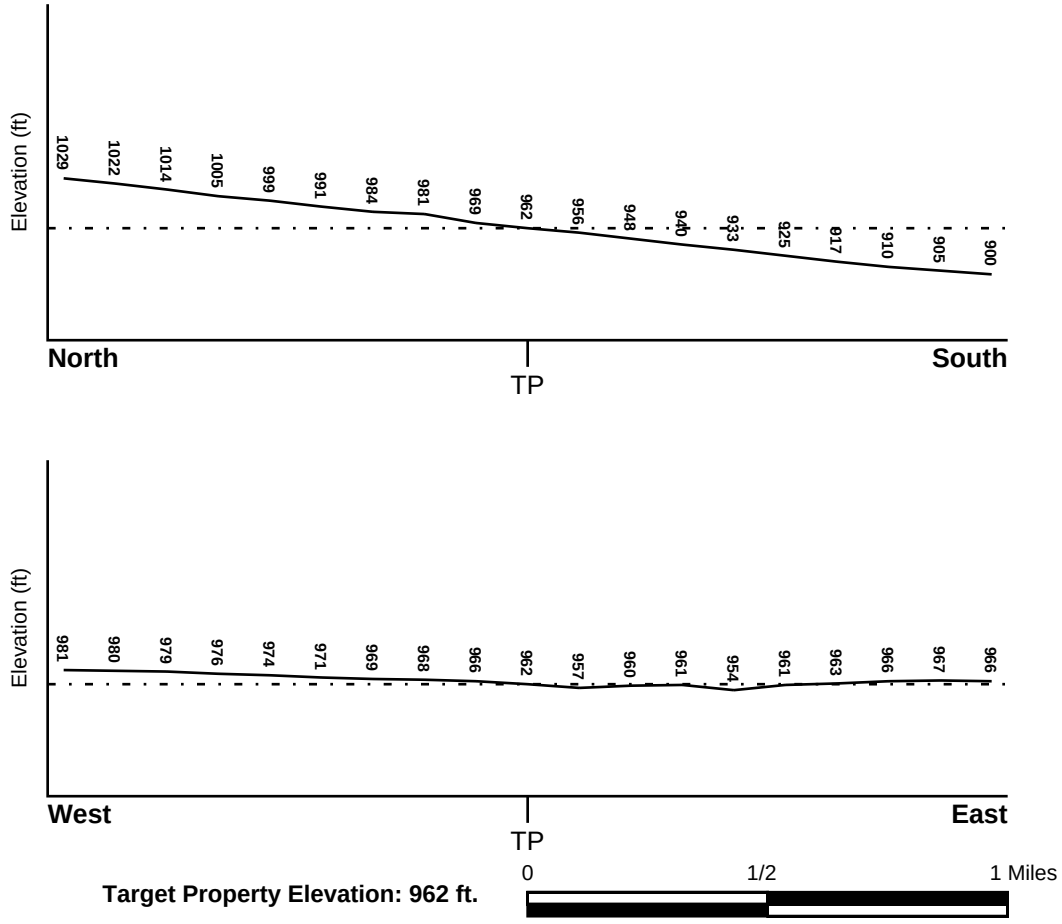
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SSE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Target Property Elevation: 962 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06071C8628J	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06071C8629H	FEMA FIRM Flood data
06071C8636J	FEMA FIRM Flood data
06071C8637H	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
GUASTI	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
6	1/4 - 1/2 Mile SSE	SW
1G	1/4 - 1/2 Mile SSE	SW

For additional site information, refer to Physical Setting Source Map Findings.

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

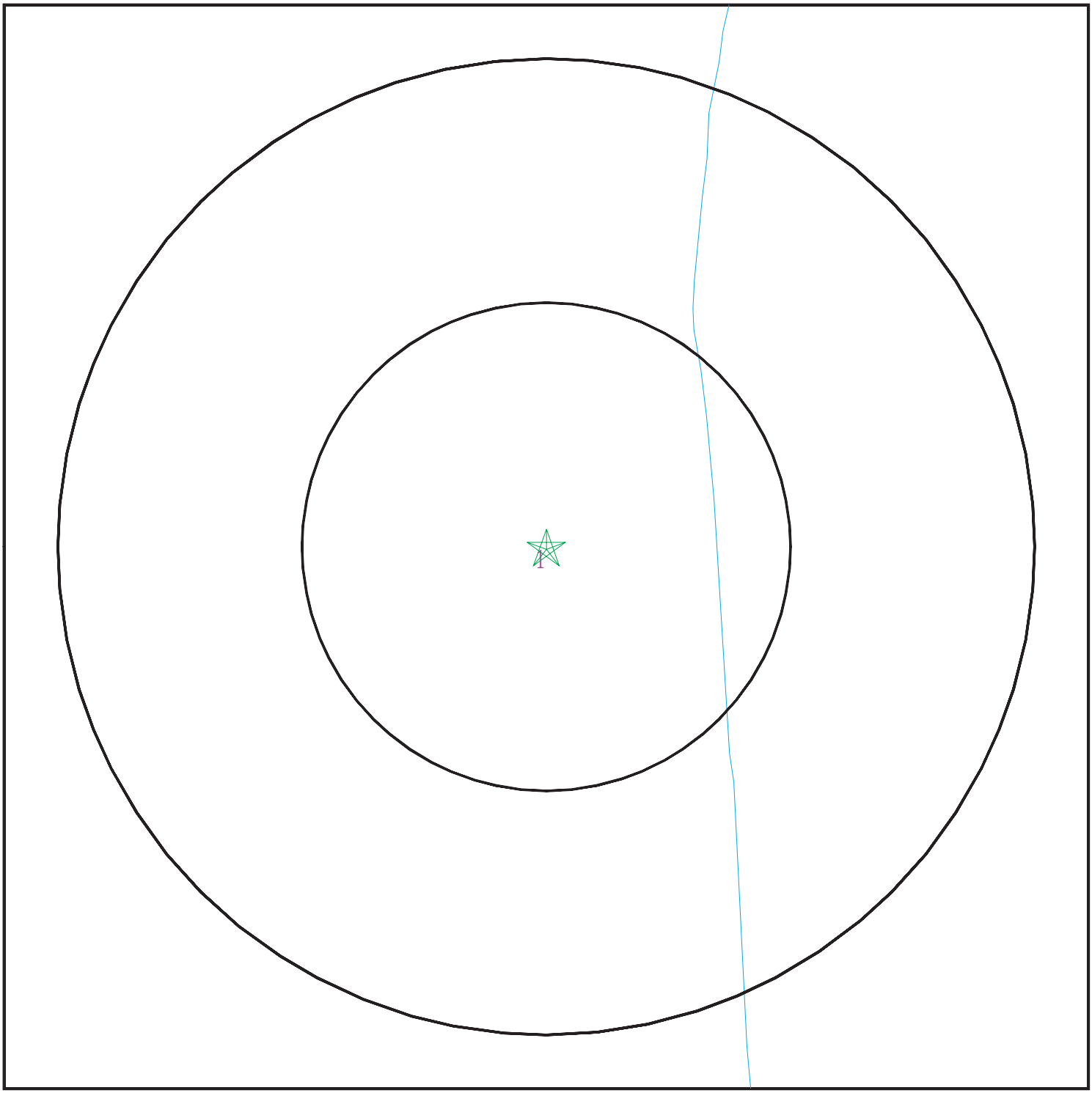
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 07482419.2r



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Ontario Hotel	CLIENT:	Petra Geotechnical Inc
ADDRESS:	SE Corner E. Holt Blvd. and E. Guasti Rd. Ontario CA 91761	CONTACT:	Ed Lump
LAT/LONG:	34.064239 / 117.602656	INQUIRY #:	07482419.2r
		DATE:	October 27, 2023 6:20 pm

5150

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: TUJUNGA

Soil Surface Texture: gravelly loamy sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	18 inches	gravelly loamy sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.8 Min: 6.1
2	18 inches	59 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.8 Min: 6.1

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
5	USGS40000140377	1/4 - 1/2 Mile WSW
C9	USGS40000140479	1/2 - 1 Mile ENE
E18	USGS40000140670	1/2 - 1 Mile North

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

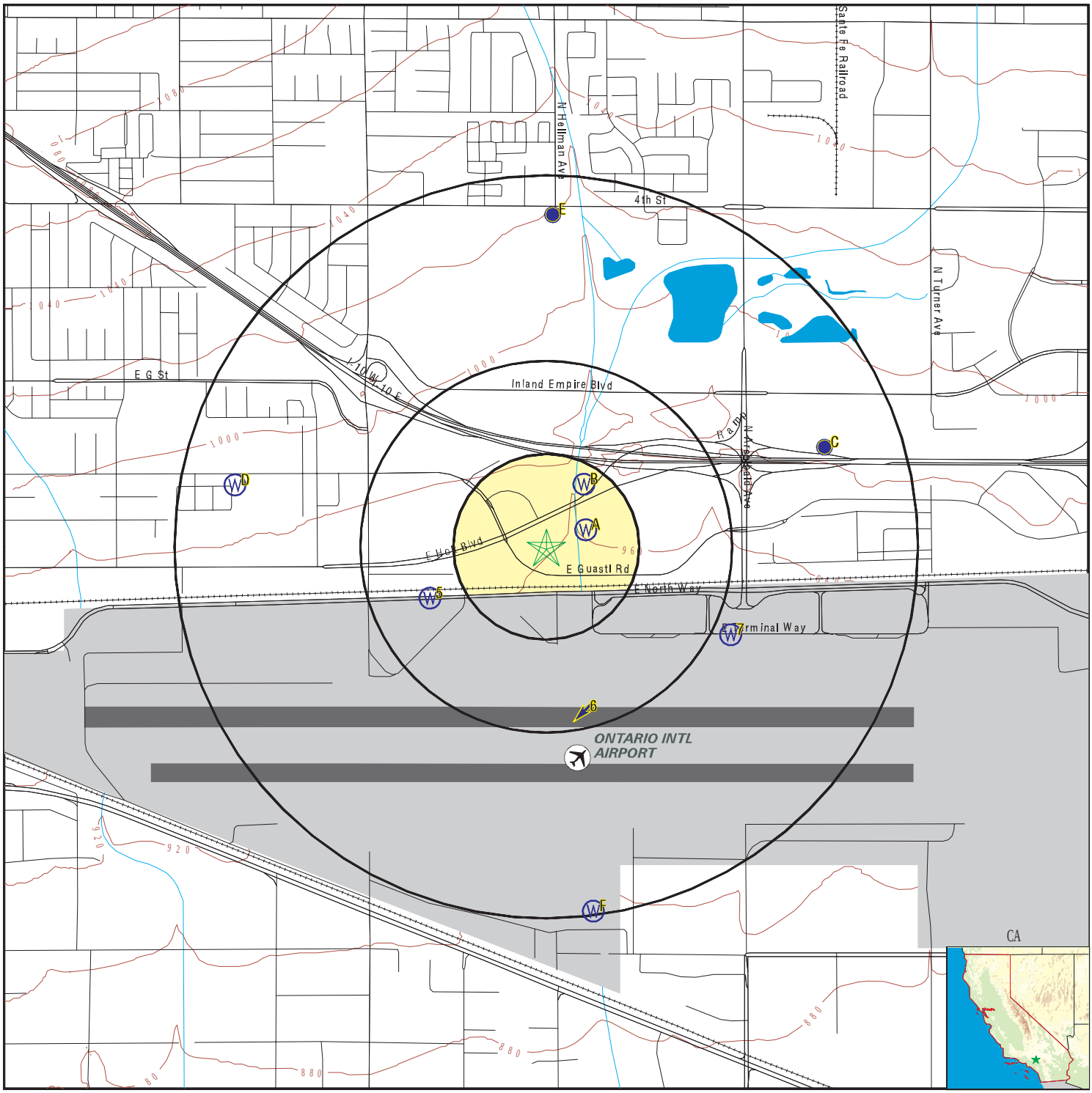
MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	CADDW0000012724	0 - 1/8 Mile ENE
A2	CAPFAS000001596	0 - 1/8 Mile ENE
B3	1082	1/8 - 1/4 Mile NNE
B4	1083	1/8 - 1/4 Mile NNE
7	CADWR0000031399	1/2 - 1 Mile ESE
C8	CADWR9000006602	1/2 - 1 Mile ENE
C10	CAPFAS000001247	1/2 - 1 Mile ENE
C11	CADDW0000009565	1/2 - 1 Mile ENE
C12	CAUSGS000002128	1/2 - 1 Mile ENE
C13	CAUSGSN00000130	1/2 - 1 Mile ENE
D14	CADDW0000015707	1/2 - 1 Mile WNW
D15	1081	1/2 - 1 Mile West
D16	1080	1/2 - 1 Mile West
E17	CADDW0000019623	1/2 - 1 Mile North
F19	1089	1/2 - 1 Mile South
F20	CADDW0000012553	1/2 - 1 Mile South

PHYSICAL SETTING SOURCE MAP - 07482419.2r



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	Ontario Hotel	CLIENT:	Petra Geotechnical Inc
ADDRESS:	SE Corner E. Holt Blvd. and E. Guasti Rd. Ontario CA 91761	CONTACT:	Ed Lump
		INQUIRY #:	07482419.2r
LAT/LONG:	34.064239 / 117.602656	DATE:	October 27, 2023 6:20 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A1
ENE
0 - 1/8 Mile
Higher

CA WELLS **CADDW0000012724**

Well ID:	3610034-025	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 29	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=3610034-025&store_num=		
GeoTracker Data:	Not Reported		

A2
ENE
0 - 1/8 Mile
Higher

CA WELLS **CAPFAS000001596**

Well ID:	3610034-025	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 29	GAMA PFAS Testing:	Yes
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=3610034-025&store_num=		
GeoTracker Data:	Not Reported		

B3
NNE
1/8 - 1/4 Mile
Higher

CA WELLS **1082**

Seq:	1082	Prim sta c:	01S/07W-22B01 S
Frds no:	3610034015	County:	36
District:	13	User id:	TAN
System no:	3610034	Water type:	G
Source nam:	WELL 18	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	340400.0	Longitude:	1173600.0
Precision:	8	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	3610034	System nam:	Ontario, City Of
Hqname:	Not Reported	Address:	303 EAST B STREET
City:	ONTARIO	State:	CA
Zip:	91764	Zip ext:	Not Reported
Pop serv:	140000	Connection:	30927
Area serve:	ONTARIO CITY		

B4
NNE
1/8 - 1/4 Mile
Higher

CA WELLS **1083**

Seq:	1083	Prim sta c:	01S/07W-22Q02 S
Frds no:	3610034025	County:	36

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

District:	13	User id:	TAN
System no:	3610034	Water type:	G
Source nam:	WELL 29	Station ty:	WELL/AMBNT
Latitude:	340400.0	Longitude:	1173600.0
Precision:	3	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	3610034	System nam:	Ontario, City Of
Hqname:	Not Reported	Address:	303 EAST B STREET
City:	ONTARIO	State:	CA
Zip:	91764	Zip ext:	Not Reported
Pop serv:	140000	Connection:	30927
Area serve:	ONTARIO CITY		

Sample date:	12-JUL-17	Finding:	2.4
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		

Sample date:	06-JUL-17	Finding:	140.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		

Sample date:	06-JUL-17	Finding:	140.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		

Sample date:	06-JUL-17	Finding:	140.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		

Sample date:	06-JUL-17	Finding:	42.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		

Sample date:	06-JUL-17	Finding:	8.6
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		

Sample date:	06-JUL-17	Finding:	23.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		

Sample date:	06-JUL-17	Finding:	2.
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		

Sample date:	06-JUL-17	Finding:	13.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		

Sample date:	06-JUL-17	Finding:	16.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		

Sample date:	06-JUL-17	Finding:	0.2
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		

Sample date:	06-JUL-17	Finding:	81.

Chemical:	BARIUM	Report units:	UG/L
Dlr:	100.		
Sample date:	06-JUL-17	Finding:	4.2
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	06-JUL-17	Finding:	4.5
Chemical:	CHROMIUM (TOTAL)	Report units:	UG/L
Dlr:	10.		
Sample date:	06-JUL-17	Finding:	230.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	06-JUL-17	Finding:	0.21
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	06-JUL-17	Finding:	380.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	06-JUL-17	Finding:	8.3
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	28-JUL-16	Finding:	1.2
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	06-JUL-15	Finding:	4.9
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	06-JUL-15	Finding:	0.2
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	06-JUL-15	Finding:	11.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	06-JUL-15	Finding:	5.2
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	06-JUL-15	Finding:	1.7
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	06-JUL-15	Finding:	21.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	06-JUL-15	Finding:	8.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	06-JUL-15	Finding:	39.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		

Sample date:	06-JUL-15	Finding:	130.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	06-JUL-15	Finding:	180.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	06-JUL-15	Finding:	140.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	06-JUL-15	Finding:	8.3
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	06-JUL-15	Finding:	320.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	06-JUL-15	Finding:	210.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	09-FEB-15	Finding:	280.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	09-FEB-15	Finding:	3.4
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	09-FEB-15	Finding:	12.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	09-FEB-15	Finding:	4.9
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	09-FEB-15	Finding:	1.8
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	09-FEB-15	Finding:	22.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	09-FEB-15	Finding:	7.7
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	09-FEB-15	Finding:	38.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	09-FEB-15	Finding:	130.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	09-FEB-15	Finding:	180.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L

Dlr:	0.		
Sample date:	09-FEB-15	Finding:	140.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	09-FEB-15	Finding:	340.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	09-FEB-15	Finding:	7.8
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	15-OCT-14	Finding:	8.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	15-OCT-14	Finding:	20.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	15-OCT-14	Finding:	1.7
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	15-OCT-14	Finding:	5.1
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	15-OCT-14	Finding:	10.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	15-OCT-14	Finding:	0.2
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	15-OCT-14	Finding:	3.4
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	15-OCT-14	Finding:	3.7
Chemical:	CHROMIUM (TOTAL)	Report units:	UG/L
Dlr:	10.		
Sample date:	15-OCT-14	Finding:	180.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	15-OCT-14	Finding:	4.9
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	15-OCT-14	Finding:	0.4
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	15-OCT-14	Finding:	310.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		

Sample date:	15-OCT-14	Finding:	8.
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	15-OCT-14	Finding:	140.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	15-OCT-14	Finding:	170.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	15-OCT-14	Finding:	1.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	15-OCT-14	Finding:	130.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	15-OCT-14	Finding:	37.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	29-JUL-14	Finding:	140.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	29-JUL-14	Finding:	340.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	29-JUL-14	Finding:	1.1
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	29-JUL-14	Finding:	0.416
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	29-JUL-14	Finding:	1.28
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	29-JUL-14	Finding:	180.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	29-JUL-14	Finding:	130.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	29-JUL-14	Finding:	38.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	29-JUL-14	Finding:	7.8
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	29-JUL-14	Finding:	0.2
Chemical:	RADIUM 228 MDA95	Report units:	PCI/L

Dlr:	0.		
Sample date:	29-JUL-14	Finding:	20.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	29-JUL-14	Finding:	1.7
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	29-JUL-14	Finding:	5.4
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	29-JUL-14	Finding:	11.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	29-JUL-14	Finding:	2.8
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	29-JUL-14	Finding:	190.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	29-JUL-14	Finding:	4.4
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	29-JUL-14	Finding:	7.8
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	17-APR-14	Finding:	0.253
Chemical:	RADIUM 228 MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	17-APR-14	Finding:	1.64
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	17-APR-14	Finding:	0.412
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	17-APR-14	Finding:	1.3
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	17-APR-14	Finding:	0.25
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	17-APR-14	Finding:	4.9
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	17-APR-14	Finding:	4.
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		

Sample date:	17-APR-14	Finding:	11.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	17-APR-14	Finding:	5.4
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	17-APR-14	Finding:	1.7
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	17-APR-14	Finding:	21.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	17-APR-14	Finding:	7.6
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	17-APR-14	Finding:	37.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	17-APR-14	Finding:	120.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	17-APR-14	Finding:	180.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	17-APR-14	Finding:	140.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	17-APR-14	Finding:	7.8
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	17-APR-14	Finding:	360.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	17-APR-14	Finding:	210.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	27-JAN-14	Finding:	5.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	27-JAN-14	Finding:	640.
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		
Sample date:	27-JAN-14	Finding:	3.
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	27-JAN-14	Finding:	11.
Chemical:	SULFATE	Report units:	MG/L

Dlr:	0.5		
Sample date:	27-JAN-14	Finding:	4.8
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	27-JAN-14	Finding:	1.6
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	27-JAN-14	Finding:	20.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	27-JAN-14	Finding:	7.8
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	27-JAN-14	Finding:	38.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	27-JAN-14	Finding:	130.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	27-JAN-14	Finding:	180.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	27-JAN-14	Finding:	150.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	27-JAN-14	Finding:	7.7
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	27-JAN-14	Finding:	340.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	27-JAN-14	Finding:	160.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	19-NOV-13	Finding:	330.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	19-NOV-13	Finding:	150.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	19-NOV-13	Finding:	180.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	19-NOV-13	Finding:	130.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		

Sample date:	19-NOV-13	Finding:	38.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	19-NOV-13	Finding:	7.8
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	19-NOV-13	Finding:	20.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	19-NOV-13	Finding:	1.8
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	19-NOV-13	Finding:	5.9
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	19-NOV-13	Finding:	11.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	19-NOV-13	Finding:	0.2
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	19-NOV-13	Finding:	3.6
Chemical:	CHROMIUM (TOTAL)	Report units:	UG/L
Dlr:	10.		
Sample date:	19-NOV-13	Finding:	170.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	19-NOV-13	Finding:	5.1
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	19-NOV-13	Finding:	0.34
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	19-NOV-13	Finding:	7.9
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	29-JUL-13	Finding:	360.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	29-JUL-13	Finding:	7.8
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	29-JUL-13	Finding:	130.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	29-JUL-13	Finding:	160.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L

Dlr:	0.		
Sample date:	29-JUL-13	Finding:	130.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	29-JUL-13	Finding:	38.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	29-JUL-13	Finding:	8.3
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	29-JUL-13	Finding:	21.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	29-JUL-13	Finding:	1.7
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	29-JUL-13	Finding:	6.8
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	29-JUL-13	Finding:	11.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	29-JUL-13	Finding:	240.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	29-JUL-13	Finding:	6.2
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	16-MAY-13	Finding:	6.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	15-MAY-13	Finding:	5.8
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	17-APR-13	Finding:	140.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	17-APR-13	Finding:	6.1
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	17-APR-13	Finding:	210.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	17-APR-13	Finding:	12.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		

Sample date:	17-APR-13	Finding:	7.1
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	17-APR-13	Finding:	1.7
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	17-APR-13	Finding:	21.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	17-APR-13	Finding:	8.4
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	17-APR-13	Finding:	40.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	17-APR-13	Finding:	130.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	17-APR-13	Finding:	180.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	17-APR-13	Finding:	7.9
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	17-APR-13	Finding:	340.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	16-JAN-13	Finding:	7.7
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	16-JAN-13	Finding:	170.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JAN-13	Finding:	140.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JAN-13	Finding:	360.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	16-JAN-13	Finding:	220.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JAN-13	Finding:	150.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JAN-13	Finding:	12.
Chemical:	CHLORIDE	Report units:	MG/L

Dlr:	0.		
Sample date:	16-JAN-13	Finding:	1.8
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JAN-13	Finding:	21.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JAN-13	Finding:	9.5
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JAN-13	Finding:	43.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JAN-13	Finding:	16.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	19-DEC-12	Finding:	0.2
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	19-DEC-12	Finding:	4.8
Chemical:	CHROMIUM (TOTAL)	Report units:	UG/L
Dlr:	10.		
Sample date:	04-OCT-12	Finding:	8.3
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	04-OCT-12	Finding:	140.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	04-OCT-12	Finding:	230.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	04-OCT-12	Finding:	140.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	04-OCT-12	Finding:	41.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	04-OCT-12	Finding:	8.5
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	04-OCT-12	Finding:	20.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	04-OCT-12	Finding:	1.6
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		

Sample date:	04-OCT-12	Finding:	12.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	04-OCT-12	Finding:	14.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	04-OCT-12	Finding:	380.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	04-OCT-12	Finding:	170.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	12-SEP-12	Finding:	0.68
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	12-SEP-12	Finding:	0.252
Chemical:	RADIUM 228 MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	12-SEP-12	Finding:	0.25
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	12-SEP-12	Finding:	0.578
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	12-SEP-12	Finding:	240.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	12-SEP-12	Finding:	4.6
Chemical:	CHROMIUM (TOTAL)	Report units:	UG/L
Dlr:	10.		
Sample date:	12-SEP-12	Finding:	0.3
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	12-SEP-12	Finding:	13.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	12-SEP-12	Finding:	7.8
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	12-SEP-12	Finding:	360.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	12-SEP-12	Finding:	7.8
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	12-SEP-12	Finding:	140.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L

Dlr:	0.		
Sample date:	12-SEP-12	Finding:	170.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	12-SEP-12	Finding:	140.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	12-SEP-12	Finding:	40.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	12-SEP-12	Finding:	8.5
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	12-SEP-12	Finding:	20.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	12-SEP-12	Finding:	1.9
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		

5
WSW
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000140377**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	001S007W27D001S	Type:	Well
Description:	Not Reported	HUC:	18070203
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	496
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

6
SSE
1/4 - 1/2 Mile
Lower

AQUIFLOW **50214**

Site ID:	083601881T
Groundwater Flow:	SW
Shallow Water Depth:	250
Deep Water Depth:	300
Average Water Depth:	Not Reported
Date:	04/14/1987

7
ESE
1/2 - 1 Mile
Lower

CA WELLS **CADWR0000031399**

Well ID:	01S07W27D001S	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	01S07W27D001S	GAMA PFAS Testing:	Not Reported

Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=01S07W27D001S&store_num=
GeoTracker Data: Not Reported

C8
ENE
1/2 - 1 Mile
Higher

CA WELLS **CADWR9000006602**

State Well #:	01S07W23M001S	Station ID:	48061
Well Name:	CHINO-1002337	Basin Name:	Chino
Well Use:	Residential	Well Type:	Single Well
Well Depth:	903	Well Completion Rpt #:	Not Reported

C9
ENE
1/2 - 1 Mile
Higher

FED USGS **USGS40000140479**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	001S007W23M001S	Type:	Well
Description:	Not Reported	HUC:	18070203
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Cenozoic Erathem	Aquifer Type:	Unconfined single aquifer
Construction Date:	19650205	Well Depth:	900
Well Depth Units:	ft	Well Hole Depth:	903
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	3	Level reading date:	2004-06-17
Feet below surface:	360	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	2003-03-25	Feet below surface:	359
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-01	Feet below surface:	348
Feet to sea level:	Not Reported	Note:	Not Reported

C10
ENE
1/2 - 1 Mile
Higher

CA WELLS **CAPFAS000001247**

Well ID:	3610034-021	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 25 - INACTIVE	GAMA PFAS Testing:	Yes

Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=3610034-021&store_num=
GeoTracker Data: Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

C11
ENE
1/2 - 1 Mile
Higher

CA WELLS **CADDW0000009565**

Well ID:	3610034-021	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 25 - INACTIVE	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=3610034-021&store_num=		
GeoTracker Data:	Not Reported		

C12
ENE
1/2 - 1 Mile
Higher

CA WELLS **CAUSGS000002128**

C13
ENE
1/2 - 1 Mile
Higher

CA WELLS **CAUSGSN00000130**

Well ID:	USGS-340406117351701	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-340406117351701	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-340406117351701&store_num=		
GeoTracker Data:	Not Reported		

D14
WNW
1/2 - 1 Mile
Higher

CA WELLS **CADDW0000015707**

Well ID:	3610034-003	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 04 - DESTROYED 3/8/10		
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=3610034-003&store_num=		
GeoTracker Data:	Not Reported		

D15
West
1/2 - 1 Mile
Higher

CA WELLS **1081**

Seq:	1081	Prim sta c:	01S/07W-21D01 S
Frds no:	3610034003	County:	36
District:	13	User id:	TAN
System no:	3610034	Water type:	G
Source nam:	WELL 04	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	340400.0	Longitude:	1173700.0

Precision:	8	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	3610034	System nam:	Ontario, City Of
Hqname:	Not Reported	Address:	303 EAST B STREET
City:	ONTARIO	State:	CA
Zip:	91764	Zip ext:	Not Reported
Pop serv:	140000	Connection:	30927
Area serve:	ONTARIO CITY		

D16
West
1/2 - 1 Mile
Higher

CA WELLS **1080**

Seq:	1080	Prim sta c:	01S/07W-21C01 S
Frds no:	3610034002	County:	36
District:	13	User id:	TAN
System no:	3610034	Water type:	G
Source nam:	WELL 03A	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	340400.0	Longitude:	1173700.0
Precision:	8	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	3610034	System nam:	Ontario, City Of
Hqname:	Not Reported	Address:	303 EAST B STREET
City:	ONTARIO	State:	CA
Zip:	91764	Zip ext:	Not Reported
Pop serv:	140000	Connection:	30927
Area serve:	ONTARIO CITY		

E17
North
1/2 - 1 Mile
Higher

CA WELLS **CADDW0000019623**

Well ID:	3610034-015	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 18 - DESTROYED 8/3/08		
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=3610034-015&store_num=		
GeoTracker Data:	Not Reported		

E18
North
1/2 - 1 Mile
Higher

FED USGS **USGS40000140670**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	001S007W22B001S	Type:	Well

Description:	Not Reported	HUC:	18070203
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	1035
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

F19
South
1/2 - 1 Mile
Lower

CA WELLS **1089**

Seq:	1089	Prim sta c:	01S/07W-27D01 S
Frds no:	3610034006	County:	36
District:	13	User id:	TAN
System no:	3610034	Water type:	G
Source nam:	WELL 07 - ABANDONED	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	340300.0	Longitude:	1173600.0
Precision:	8	Status:	AB
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	3610034	System nam:	Ontario, City Of
Hqname:	Not Reported	Address:	303 EAST B STREET
City:	ONTARIO	State:	CA
Zip:	91764	Zip ext:	Not Reported
Pop serv:	140000	Connection:	30927
Area serve:	ONTARIO CITY		

F20
South
1/2 - 1 Mile
Lower

CA WELLS **CADDW0000012553**

Well ID:	3610034-006	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 07 - ABANDONED	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=3610034-006&store_num=		
GeoTracker Data:	Not Reported		

1G
SSE
1/4 - 1/2 Mile
Lower

AQUIFLOW **50214**

Site ID:	083601881T
Groundwater Flow:	SW
Shallow Water Depth:	250
Deep Water Depth:	300
Average Water Depth:	Not Reported
Date:	04/14/1987

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
91761	7	0

Federal EPA Radon Zone for SAN BERNARDINO County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for SAN BERNARDINO COUNTY, CA

Number of sites tested: 18

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.678 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

Groundwater Ambient Monitoring & Assessment Program
State Water Resources Control Board
Telephone: 916-341-5577
The GAMA Program is Californias comprehensive groundwater quality monitoring program. GAMA collects data by testing the untreated, raw water in different types of wells for naturally-occurring and man-made chemicals. The GAMA data includes Domestic, Monitoring and Municipal well types from the following sources, Department of Water Resources, Department of Heath Services, EDF, Agricultural Lands, Lawrence Livermore National Laboratory, Department of Pesticide Regulation, United States Geological Survey, Groundwater Ambient Monitoring and Assessment Program and Local Groundwater Projects.

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

California Oil and Gas Well Locations
Source: Dept of Conservation, Geologic Energy Management Division
Telephone: 916-323-1779
Oil and Gas well locations in the state.

California Earthquake Fault Lines
Source: California Division of Mines and Geology
The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon
Source: Department of Public Health
Telephone: 916-210-8558
Radon Database for California

PHYSICAL SETTING SOURCE RECORDS SEARCHED

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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Ontario Hotel

SE Corner E. Holt Blvd. and E. Guasti Rd.

Ontario, CA 91761

Inquiry Number: 7482419.3

October 27, 2023

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

10/27/23

Site Name:

Ontario Hotel
SE Corner E. Holt Blvd. and E.
Ontario, CA 91761
EDR Inquiry # 7482419.3

Client Name:

Petra Geotechnical Inc
40880 County Center Drive, Suite M
Temecula, CA 92591
Contact: Ed Lump

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Petra Geotechnical Inc were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 332F-4B91-8A1F

PO # J.N. 22-398

Project Ontario Hotel

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: 332F-4B91-8A1F

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

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Ontario Hotel

SE Corner E. Holt Blvd. and E. Guasti Rd.

Ontario, CA 91761

Inquiry Number: 7482419.4

October 27, 2023

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

10/27/23

Site Name:

Ontario Hotel
SE Corner E. Holt Blvd. and E.
Ontario, CA 91761
EDR Inquiry # 7482419.4

Client Name:

Petra Geotechnical Inc
40880 County Center Drive, Suite M
Temecula, CA 92591
Contact: Ed Lump

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Petra Geotechnical Inc were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:

P.O.# J.N. 22-398

Project: Ontario Hotel

Coordinates:

Latitude:	34.064239 34° 3' 51" North
Longitude:	-117.602656 -117° 36' 10" West
UTM Zone:	Zone 11 North
UTM X Meters:	444387.57
UTM Y Meters:	3769442.53
Elevation:	962.22' above sea level

Maps Provided:

2018	1953
2015	1944
2012	1941
1981	1903
1976	1900
1973	1897
1966	
1954	

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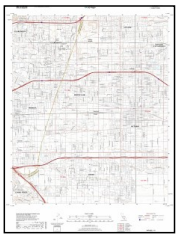
Topo Sheet Key

□□□□ □DR □□□□□ M□□ Re□□r□□□ □□□□ed u□□□ □□e □□□□□□ □□□ □ □□ □ □□□□□□r□□□□□ □ □□ □□ee□□□

2018 Source Sheets

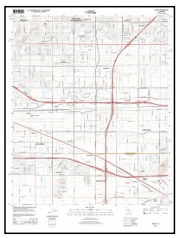


Guasti
2018
7.5-minute, 24000



Ontario
2018
7.5-minute, 24000

2015 Source Sheets



Guasti
2015
7.5-minute, 24000

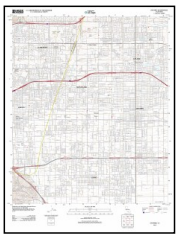


Ontario
2015
7.5-minute, 24000

2012 Source Sheets



Guasti
2012
7.5-minute, 24000

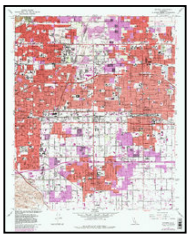


Ontario
2012
7.5-minute, 24000

1981 Source Sheets



Guasti
1981
7.5-minute, 24000
Aerial Photo Revised 1978

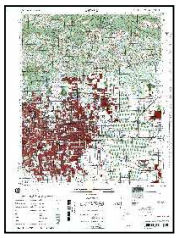


Ontario
1981
7.5-minute, 24000
Aerial Photo Revised 1978

Topo Sheet Key

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1976 Source Sheets

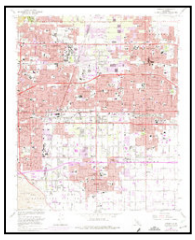


ONTARIO
1976
15-minute, 50000

1973 Source Sheets



Guasti
1973
7.5-minute, 24000
Aerial Photo Revised 1973



Ontario
1973
7.5-minute, 24000
Aerial Photo Revised 1973

1966 Source Sheets



Guasti
1966
7.5-minute, 24000
Aerial Photo Revised 1966

1954 Source Sheets



Ontario
1954
15-minute, 62500
Aerial Photo Revised 1952

Topo Sheet Key

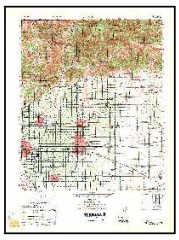
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1953 Source Sheets



Guasti
1953
7.5-minute, 24000
Aerial Photo Revised 1952

1944 Source Sheets



CUCAMONGA
1944
15-minute, 50000

1941 Source Sheets



GUASTI VICINITY
1941
7.5-minute, 31680

1903 Source Sheets



Cucamonga
1903
15-minute, 62500

Topo Sheet Key

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1900 Source Sheets



Cucamonga
1900
15-minute, 62500

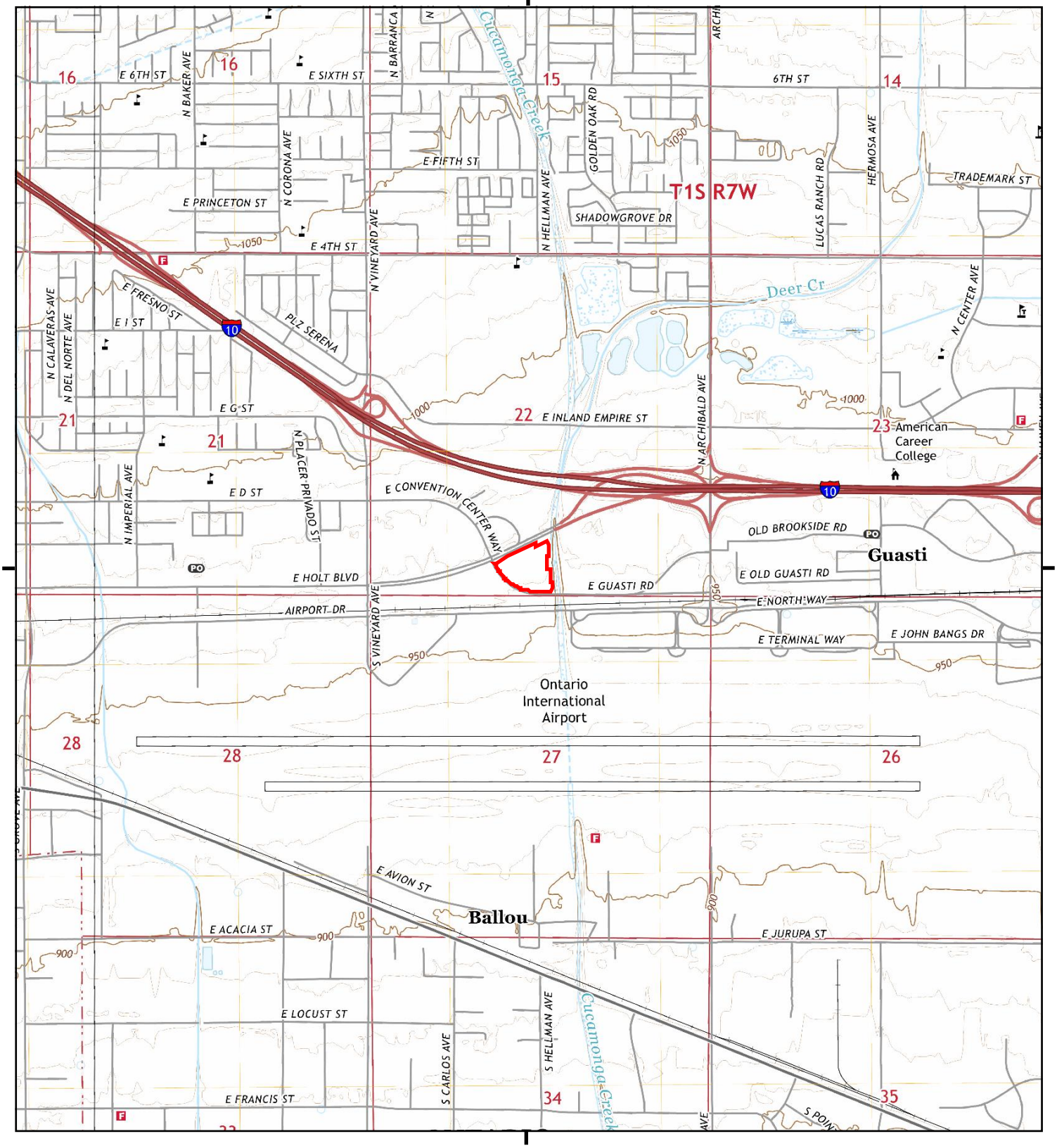
1897 Source Sheets



Cucamonga
1897
15-minute, 62500

Historical Topo Map

2018



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0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Guasti, 2018, 7.5-minute
W, Ontario, 2018, 7.5-minute

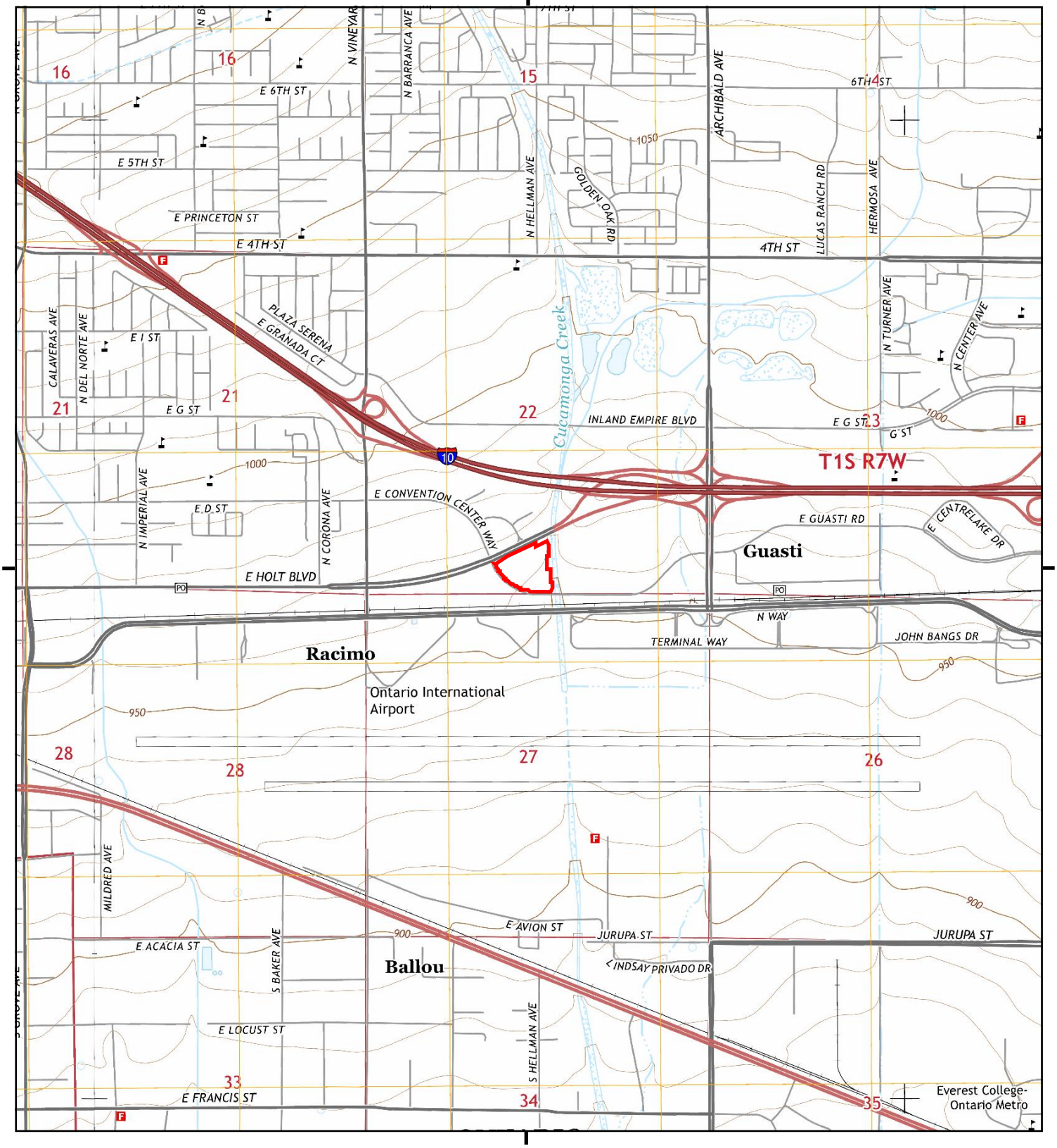
□□□□ □□M□□ Ontario Hotel
□DDR□□□□ SE Corner E. Holt Blvd. and E. Guasti Rd
Ontario, CA 91761
□L□□□□ Petra Geotechnical Inc

N

7482419 - 4

Historical Topo Map

2015



0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Guasti, 2015, 7.5-minute
W, Ontario, 2015, 7.5-minute

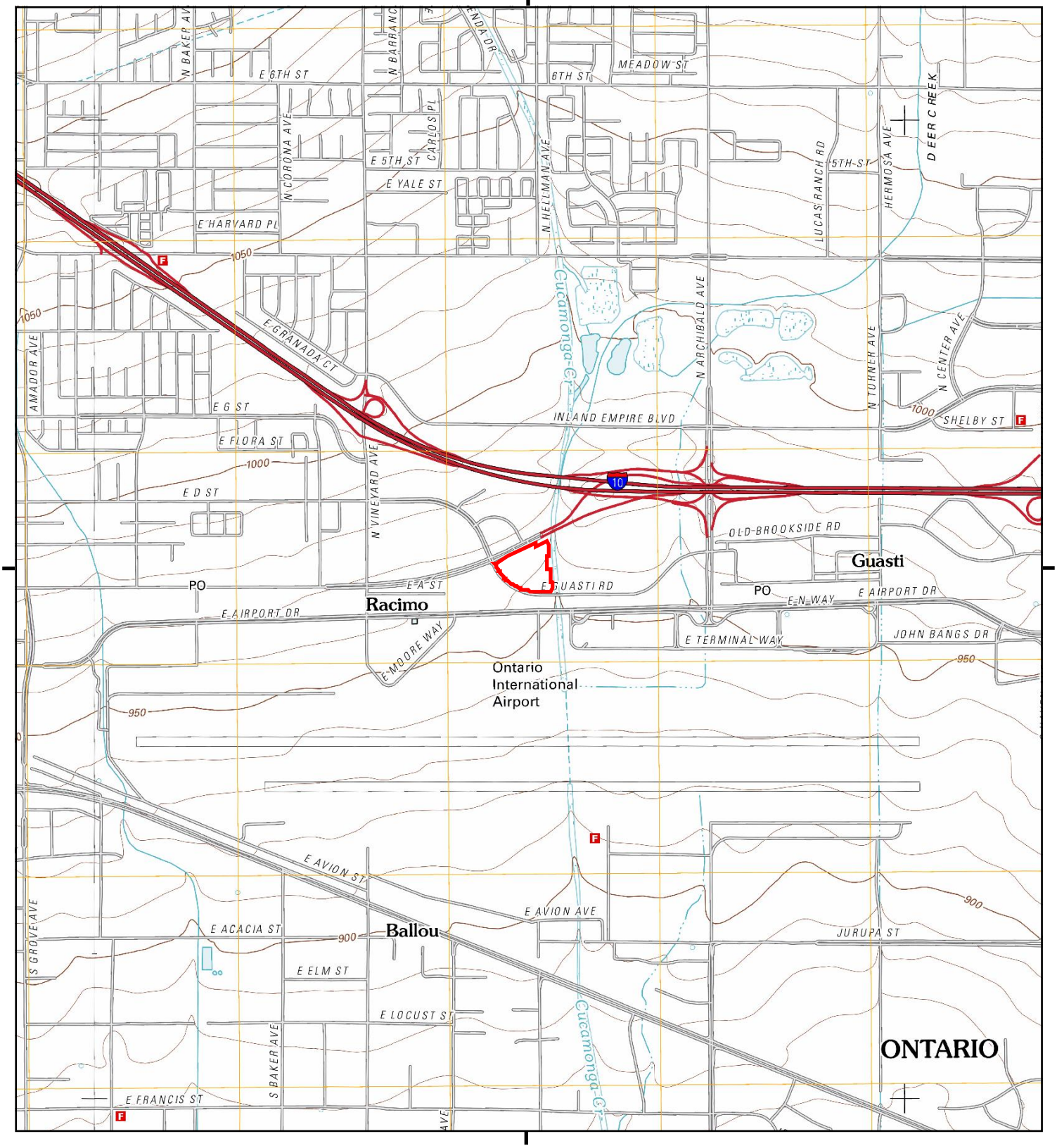
Ontario Hotel
SE Corner E. Holt Blvd. and E. Guasti Rd
Ontario, CA 91761
Petra Geotechnical Inc

N

7482419 - 4

Historical Topo Map

2012



□□□□re□□r□□□□□ude□ □□□□r□ □□□□□ r□□□ □□e □□□□□□□ □□□□ □ □□□ □□ee□□□□□

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Guasti, 2012, 7.5-minute
W, Ontario, 2012, 7.5-minute

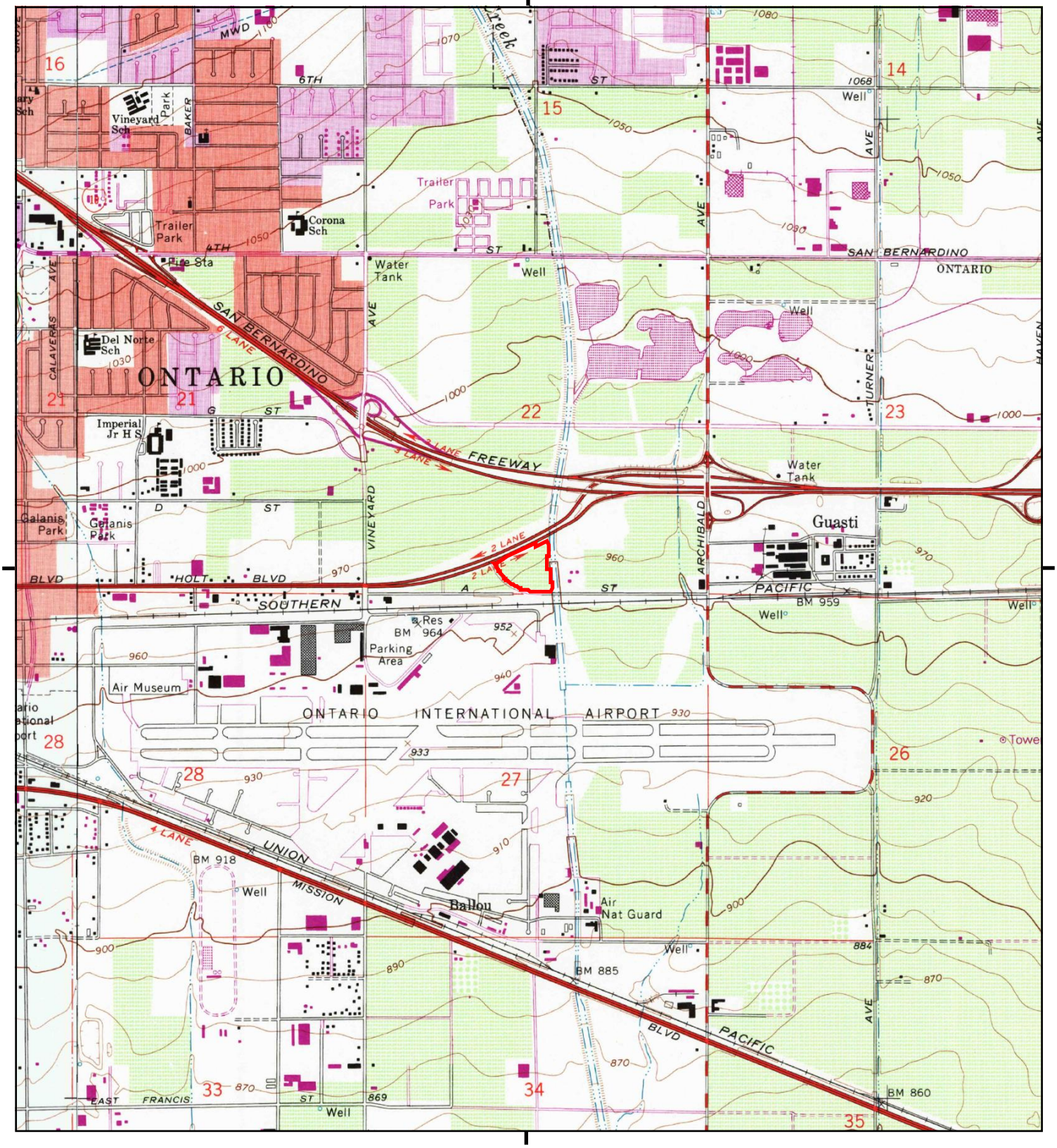
□□□□ □□M□□ Ontario Hotel
□DDR□□□□ SE Corner E. Holt Blvd. and E. Guasti Rd
Ontario, CA 91761
□L□□□□ Petra Geotechnical Inc

N

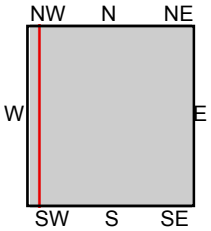
7482419 - 4

Historical Topo Map

1981



0 Miles 0.25 0.5 1 1.5



TP, Guasti, 1981, 7.5-minute
W, Ontario, 1981, 7.5-minute

Ontario Hotel
SE Corner E. Holt Blvd. and E. Guasti Rd
Ontario, CA 91761
Petra Geotechnical Inc

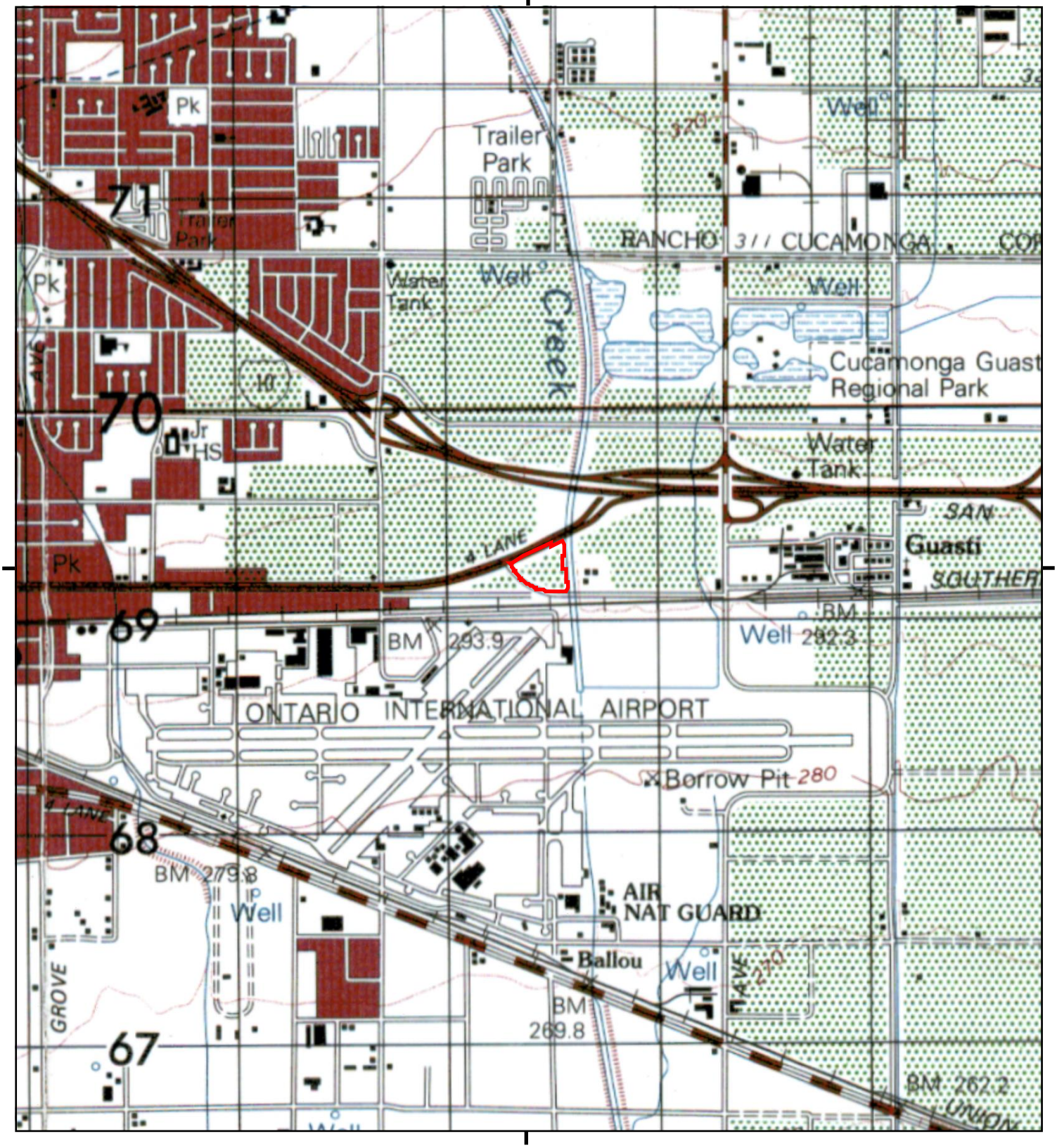
N

7482419 - 4

5188

Historical Topo Map

1976



0 Miles 0.25 0.5 1 1.5

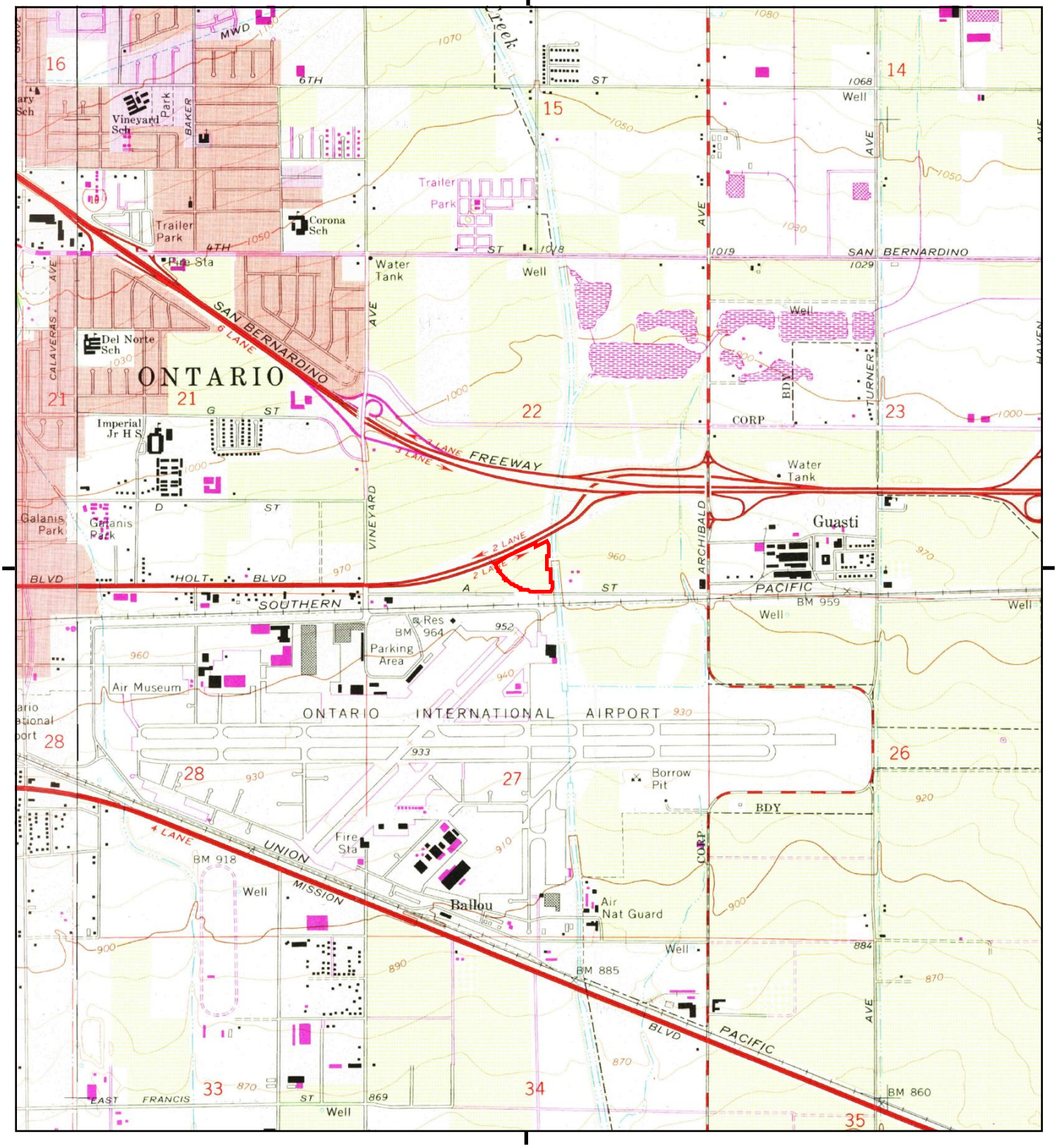
NW N NE
W E
SW S SE

TP, ONTARIO, 1976, 15-minute

Ontario Hotel
SE Corner E. Holt Blvd. and E. Guasti Rd
Ontario, CA 91761
Petra Geotechnical Inc

N

7482419 - 4



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NW N NE
W E
SW S SE

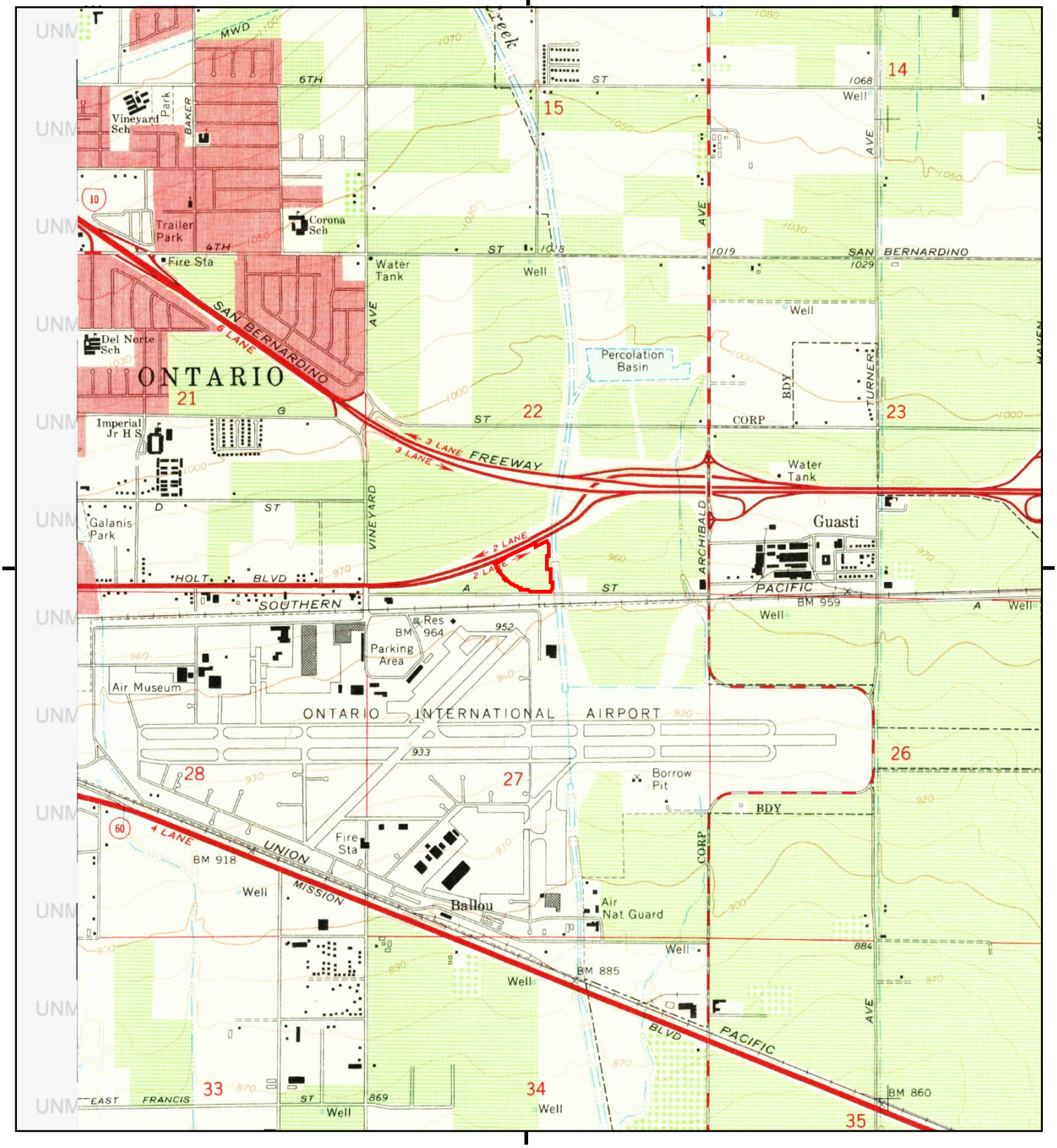
TP, Guasti, 1973, 7.5-minute
W, Ontario, 1973, 7.5-minute

□□□□ □□M□□ Ontario Hotel
□DDR□□□□ SE Corner E. Holt Blvd. and E. Guasti Rd
Ontario, CA 91761
□L□□□□ Petra Geotechnical Inc

N

Historical Topo Map

1966



0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Guasti, 1966, 7.5-minute

Ontario Hotel
SE Corner E. Holt Blvd. and E. Guasti Rd
Ontario, CA 91761
Petra Geotechnical Inc

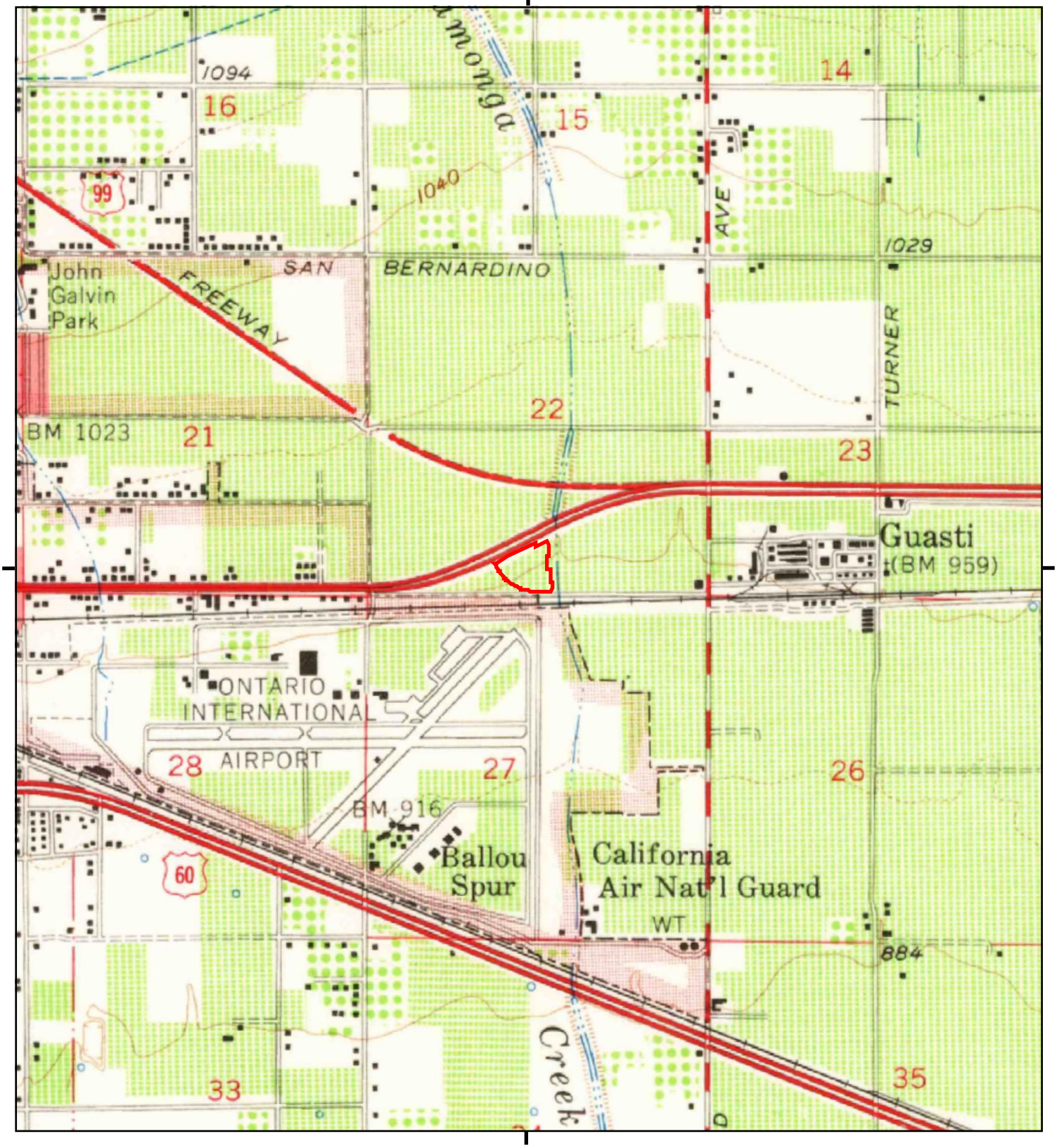
N

7482419 - 4

5191

Historical Topo Map

1954



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0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Ontario, 1954, 15-minute

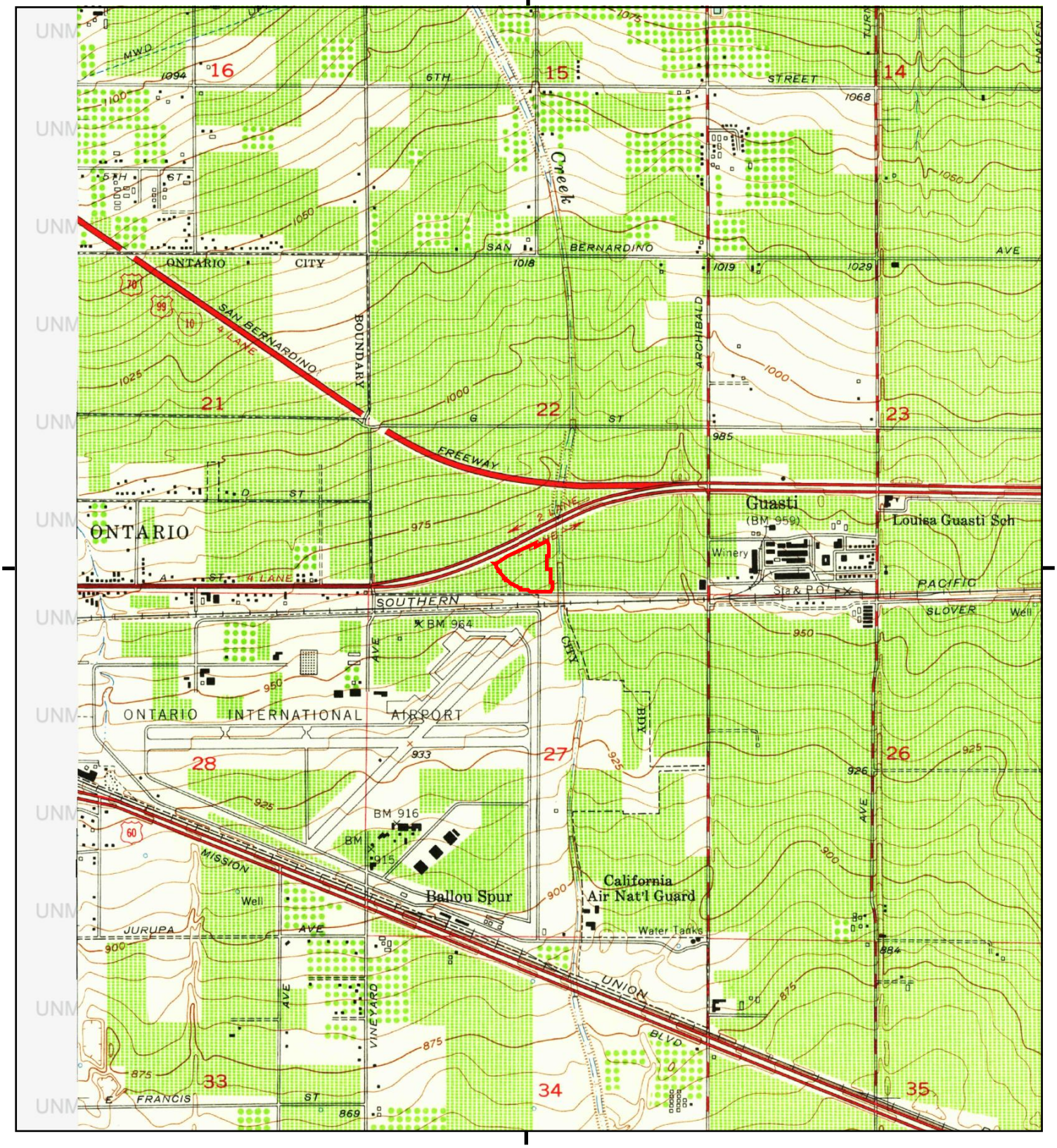
□□□□ □□M□□ Ontario Hotel
□DDR□□□□ SE Corner E. Holt Blvd. and E. Guasti Rd
Ontario, CA 91761
□L□□□□ Petra Geotechnical Inc

N

7482419 - 4

Historical Topo Map

1953



□□□□ re□□r□□□□□ude□ □□□□r□ □□□□□ r□□□ □□e
□□□□□□ □□□ □ □□ □□ee□□□□□

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Guasti, 1953, 7.5-minute

□□□□ □□M□□ Ontario Hotel
□DDR□□□□ SE Corner E. Holt Blvd. and E. Guasti Rd
Ontario, CA 91761
□L□□□□ Petra Geotechnical Inc

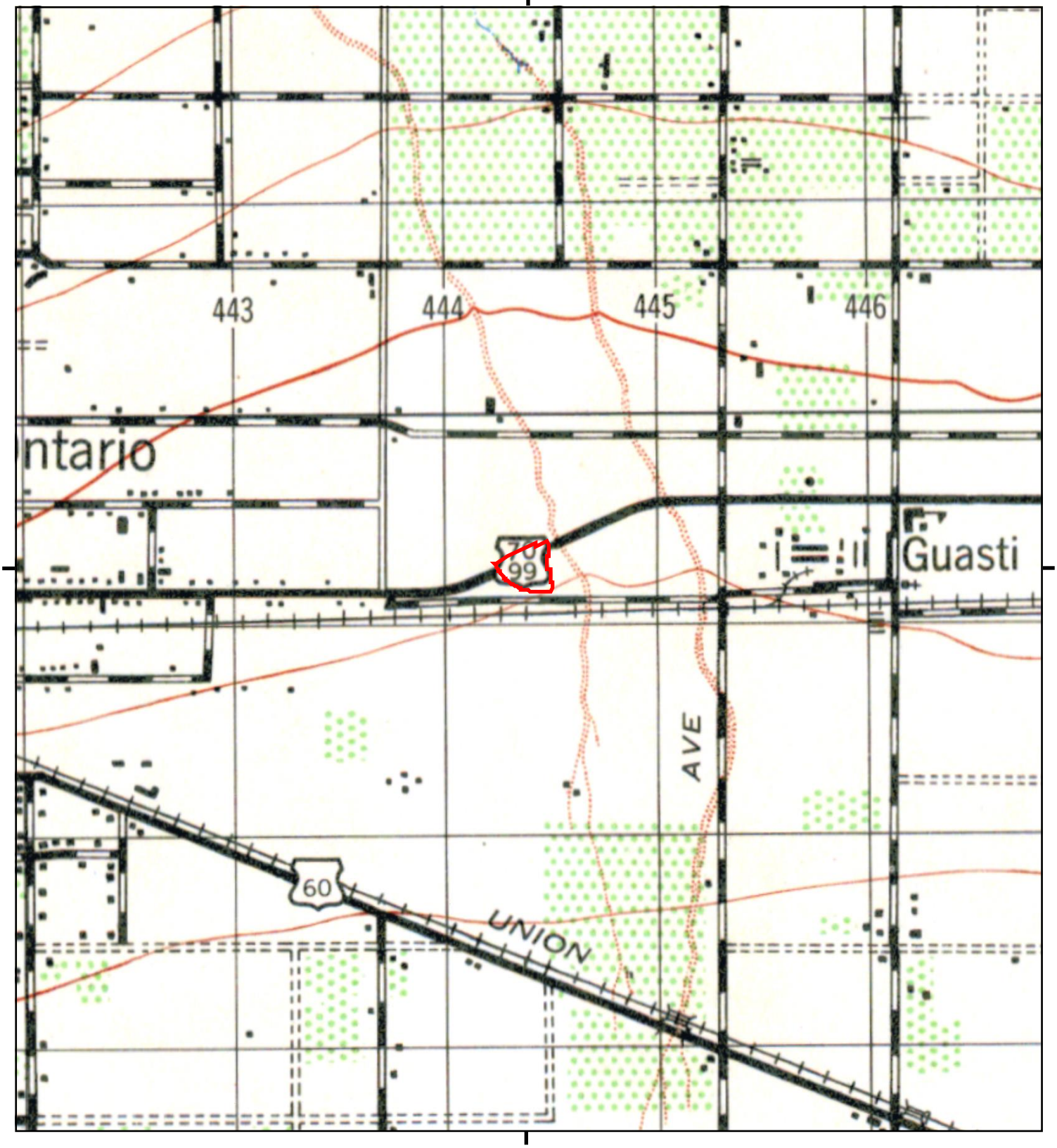
N

7482419 - 4

5193

Historical Topo Map

1944



□□□□ re□□r□□□□□ude□ □□□□r□ □□□□□ □r□□ □□e
□□□□□□ □□□ □ □□ □□ee□□□□□

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, CUCAMONGA, 1944, 15-minute

□□□□ □□M□□ Ontario Hotel
□DDR□□□□ SE Corner E. Holt Blvd. and E. Guasti Rd
Ontario, CA 91761
□L□□□□ Petra Geotechnical Inc

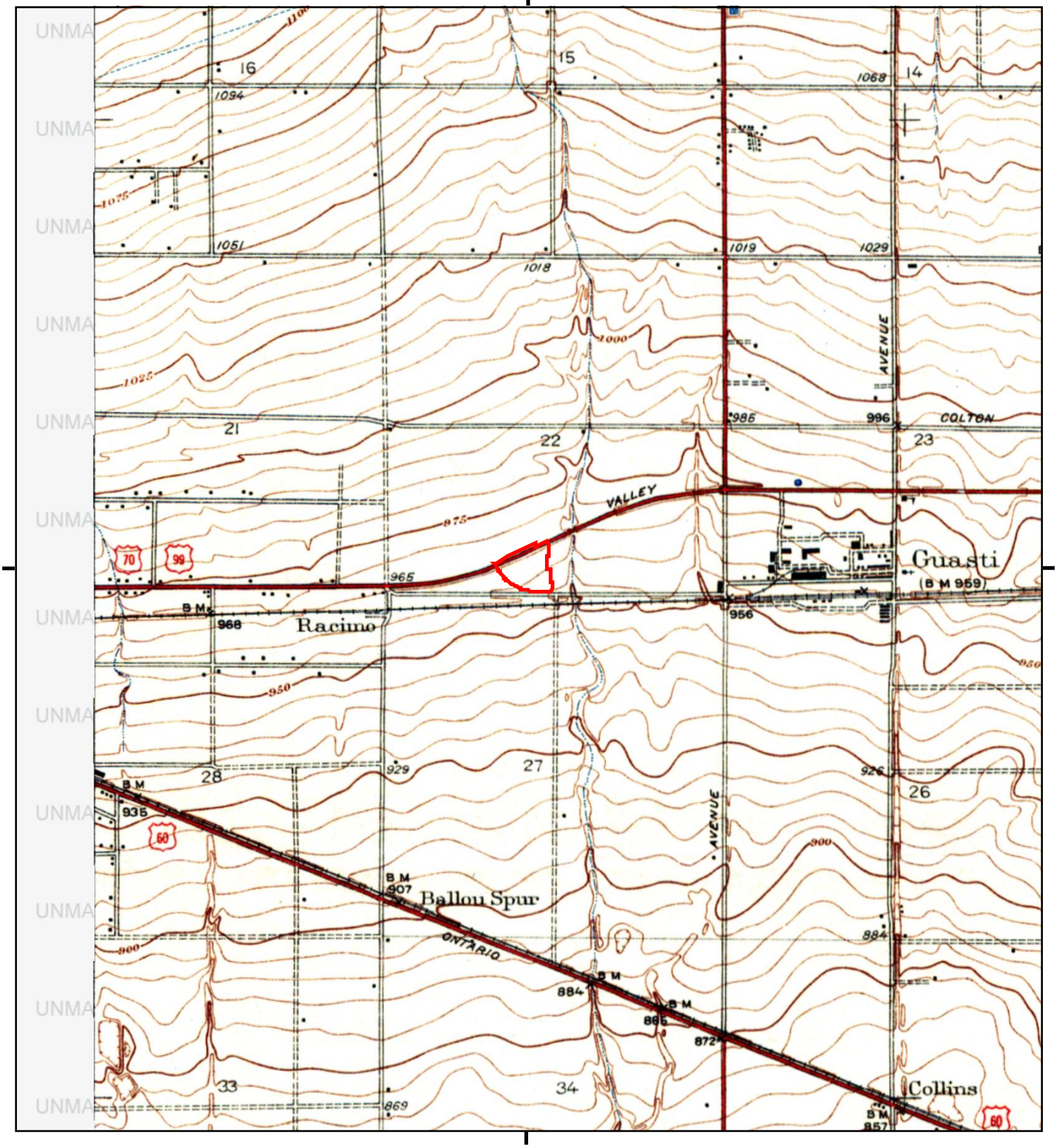
N

7482419 - 4

5194

Historical Topo Map

1941



0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

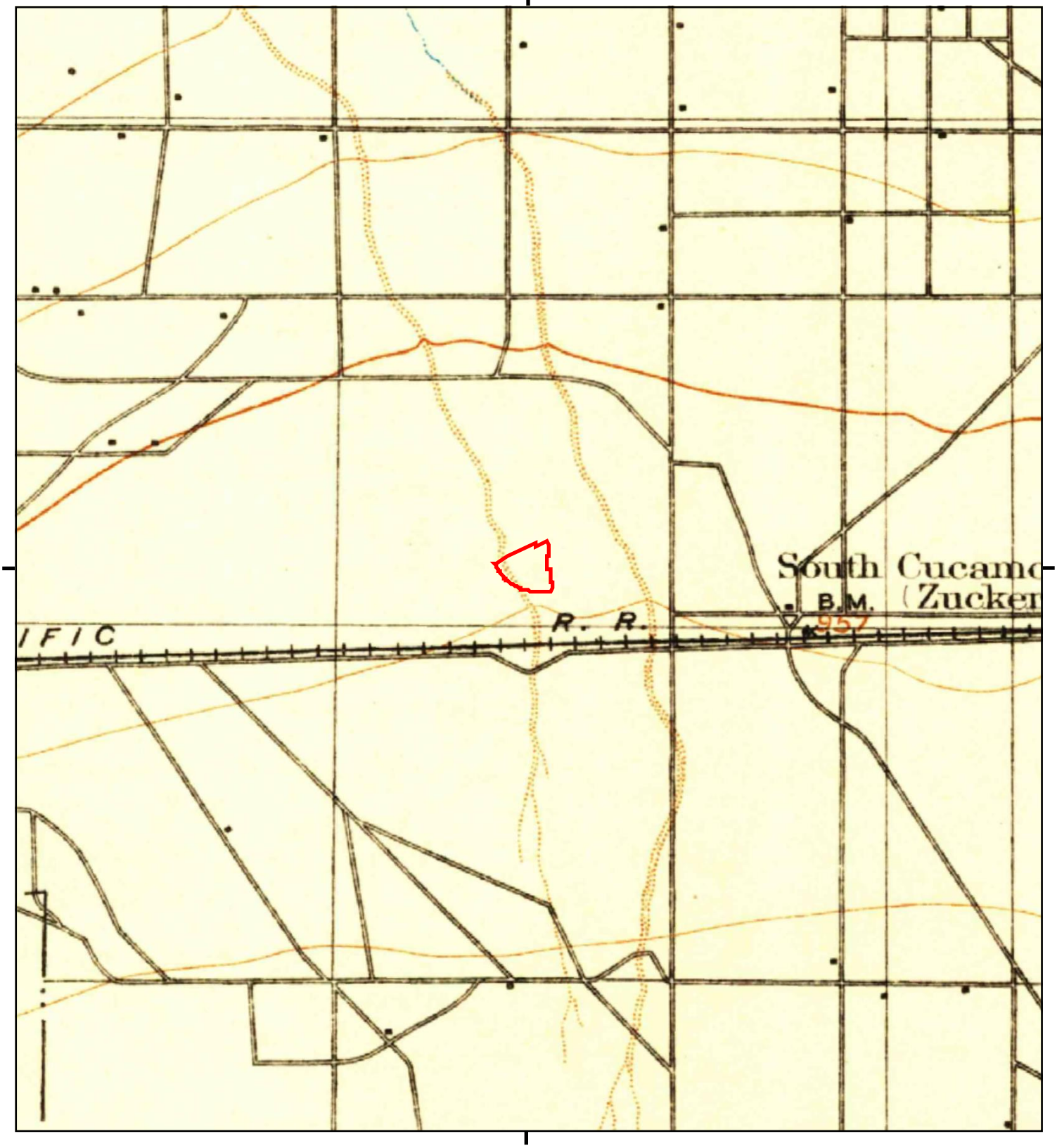
TP, GUASTI VICINITY, 1941, 7.5-minute

Ontario Hotel
SE Corner E. Holt Blvd. and E. Guasti Rd
Ontario, CA 91761
Petra Geotechnical Inc

N

7482419 - 4

5195



□□□ re□□r□□□□ude□ □□□r□ □□□□ r□□ □e
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0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

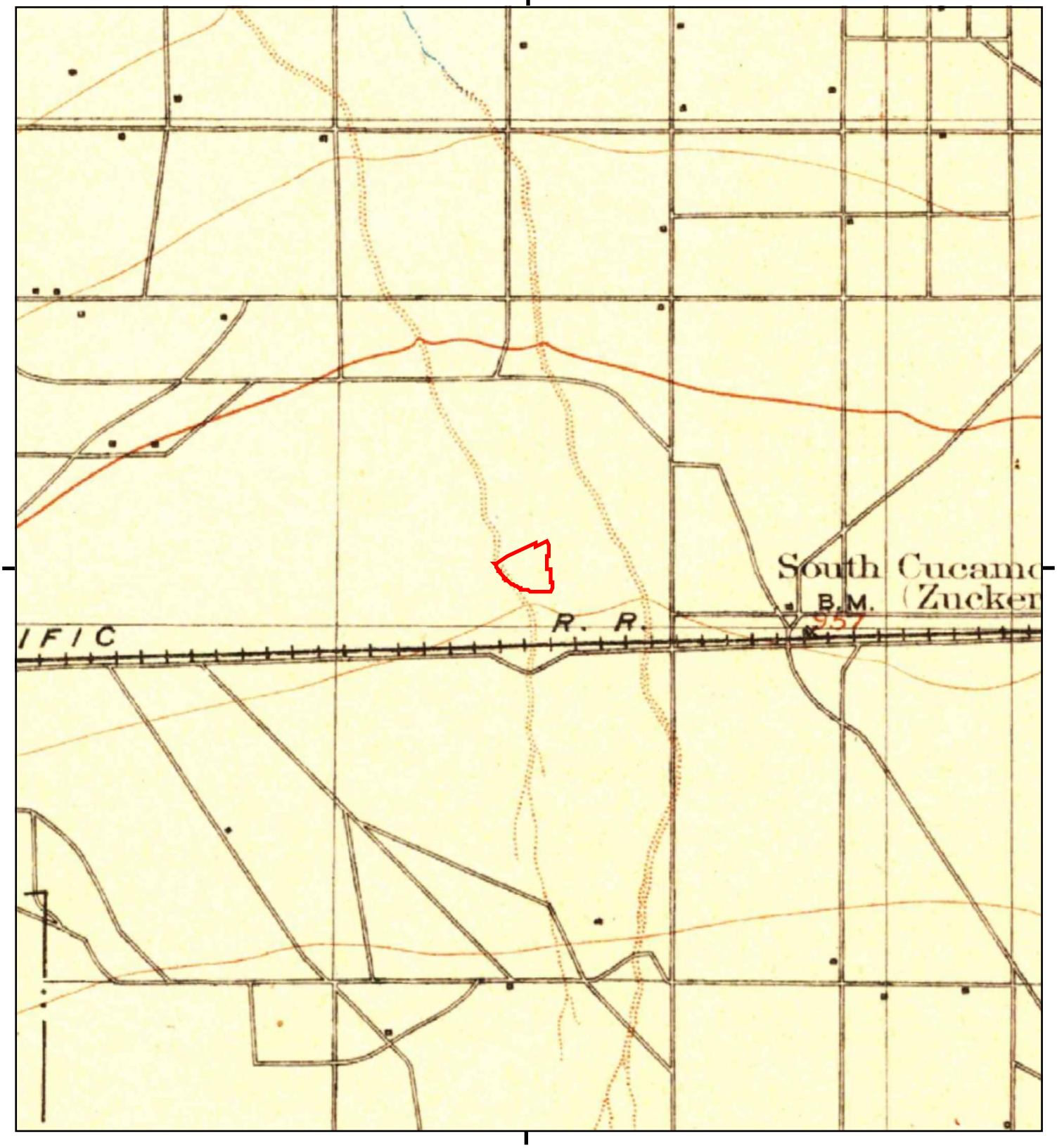
TP, Cucamonga, 1903, 15-minute

□□□ □□M□□ Ontario Hotel
□DDR□□□□ SE Corner E. Holt Blvd. and E. Guasti Rd
Ontario, CA 91761
□L□□□□ Petra Geotechnical Inc

N

Historical Topo Map

1900



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□□□□□□ □□□ □ □□ □□ee□□□□□

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

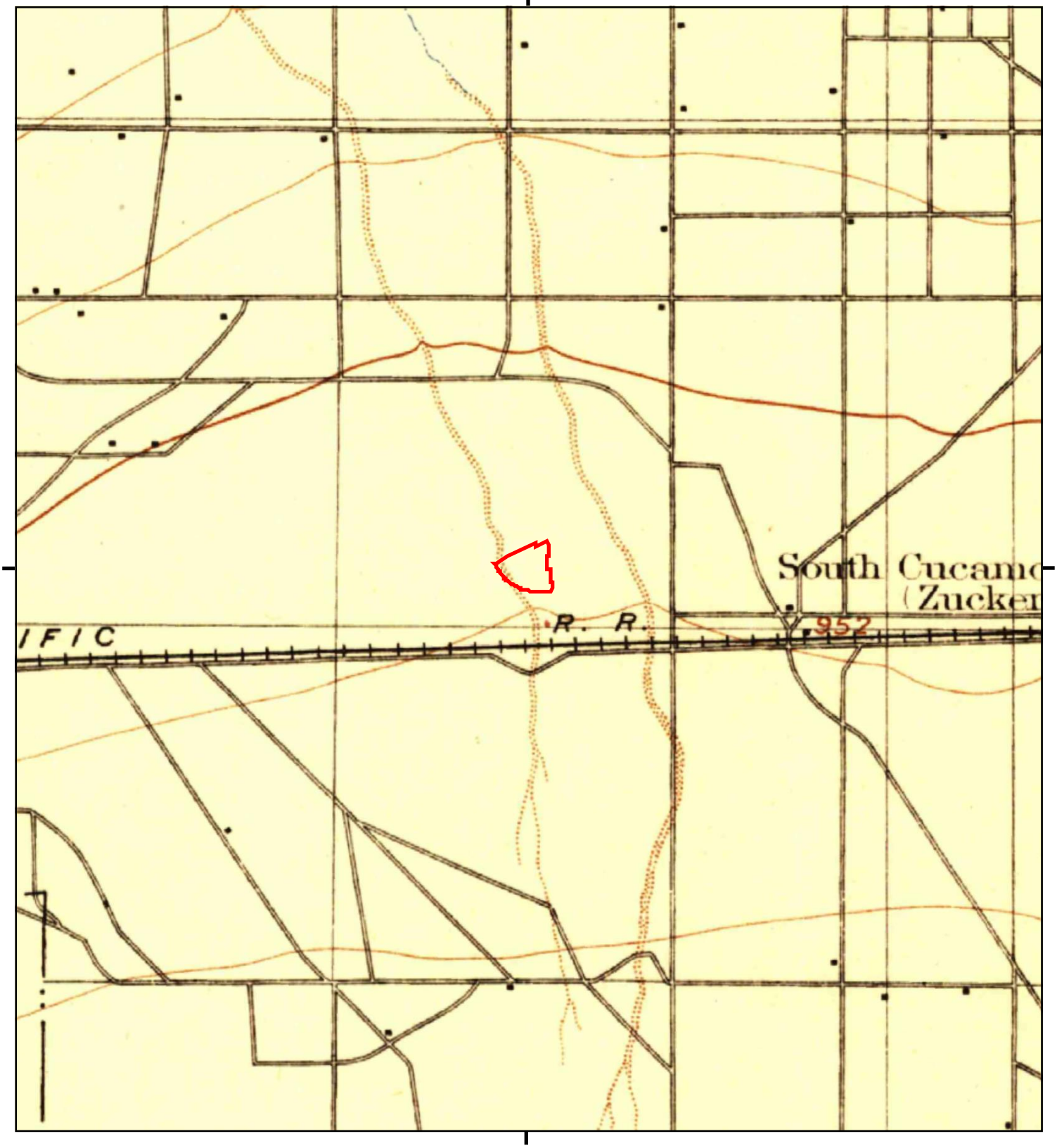
TP, Cucamonga, 1900, 15-minute

□□□□ □□M□□ Ontario Hotel
□DDR□□□□ SE Corner E. Holt Blvd. and E. Guasti Rd
Ontario, CA 91761
□L□□□□ Petra Geotechnical Inc

N

Historical Topo Map

1897



□□□ re□□r□□□□ude□ □□□r□ □□□□ r□□ □e
□□□□ □□ □ □□ □□ee□□□□

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Cucamonga, 1897, 15-minute

□□□ □□M□□ Ontario Hotel
□DDR□□□□ SE Corner E. Holt Blvd. and E. Guasti Rd
Ontario, CA 91761
□L□□□□ Petra Geotechnical Inc

N

7482419 - 4

Ontario Hotel
SE Corner E. Holt Blvd. and E. Guasti Rd.
Ontario, CA 91761

Inquiry Number: 7482419.5
October 27, 2023

The EDR-City Directory Abstract

EDR® Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at approximately five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1922 through current. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 1320 feet of the target property.

Summary information obtained is provided in the text of this report.

RECORD SOURCES

The EDR City Directory Report accesses a variety of business directory sources, including Haines, InfoUSA, Polk, Cole, Bresser, and Stewart. Listings marked as EDR Digital Archive access Cole and InfoUSA records. The various directory sources enhance and complement each other to provide a more thorough and accurate report.

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

Year	Source	TP	Adjoining	Text Abstract	Source Image
2020	EDR Digital Archive	-	X	X	-
2017	Cole Information	-	X	X	-
2014	Cole Information	-	X	X	-
2010	Cole Information	-	X	X	-
2008	Haines Company, Inc.	-	X	X	-
2005	Cole Information	-	X	X	-
2003	Haines & Co Publishers	-	X	X	-
2002	Cole Information Services	-	-	-	-
2000	Cole Information	-	X	X	-
1996	GTE	-	-	-	-
1995	Cole Information	-	X	X	-
	GTE Directories	-	X	X	-
1992	Cole Information	-	X	X	-
1991	GTE California Incorporated	-	-	-	-
1990	GTE	-	X	X	-
1985	GTE	-	X	X	-

EXECUTIVE SUMMARY

Year	Source	TP	Adjoining	Text Abstract	Source Image
1981	General Telephone Company of California	-	-	-	-
1980	GTE General Telephone Company of California	-	X	X	-
1975	GTE Directories	-	X	X	-
1970	General Telephone Company of California	-	-	-	-
1965	GTE	-	-	-	-
1964	Luskey Brothers & Co	-	-	-	-
1961	Luskey Brothers& Co Publishers	-	-	-	-
1960	Luskey Brothers & Co Publishers	-	-	-	-
1956	General Telephone Company Publishers	-	-	-	-
1955	Luskey Brothers Co Publishers	-	-	-	-
1951	Los Angeles Directory Co Publishers	-	-	-	-
1950	The Pacific Telephone and Telegraph Co	-	-	-	-
1949	San Bernardino Directory Co. Publishers	-	-	-	-
1946	Los Angeles Directory Company Publishers	-	-	-	-
1945	Southern Califronia Telephone Company	-	-	-	-
1942	San Bernardino Directory Co Publisher	-	-	-	-
1941	Associated Telephone Company Limited	-	-	-	-
1940	Los Angeles Directory Co.	-	-	-	-
1938	Los Angeles Directory Co.	-	-	-	-
1936	San Bernardino Directory Co Publisher	-	-	-	-
1934	Los Angeles Directory Co.	-	-	-	-
1931	Los Angeles Directory Co.	-	-	-	-
1930	San Bernardino Directory Co Publisher	-	-	-	-
1926	Los Angeles Directory Co.	-	-	-	-
1923	Los Angeles Directory Company	-	-	-	-
1922	R.L. Polk & Co Publishers	-	-	-	-

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

SE Corner E. Holt Blvd. and E. Guasti Rd.
Ontario, CA 91761

FINDINGS DETAIL

Target Property research detail.

FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

A ST

2345 A ST

Year	Uses	Source
1985	MC CUTCHEON CONSTR	GTE
1980	MC CUTCHEON CONSTR	GTE General Telephone Company of California

AIRPORT DR

2222 AIRPORT DR

Year	Uses	Source
2008	US AGRI ANML & PLNT INSPCTN	Haines Company, Inc.
2003	US AGRI ANML & PLNT INSPCTN	Haines & Co Publishers

AIRPRT DR

2222 AIRPRT DR

Year	Uses	Source
2000	UNITED STATES GOVERNMENT AGRICULTURE DEPARTMENT OF	Cole Information

CONVENTION CENTER WAY

2131 CONVENTION CENTER WAY

Year	Uses	Source
2008	CADILLAC MRK CHRSTPHR ATO CNTR	Haines Company, Inc.
	CHEVROLET MARK CHRSTPHR CNTR	Haines Company, Inc.
	ENTERPRISE RNT A CR ONTROMRK	Haines Company, Inc.
	HUMMER MARK C	Haines Company, Inc.
	MARK CHRISTOPHER AUTO CENTER	Haines Company, Inc.

FINDINGS

2143 CONVENTION CENTER WAY

Year	*Uses*	*Source*
2008	CARE ALTERNATIVE	Haines Company, Inc.
	HEE ENVRNMNTL ENGRG LLC	Haines Company, Inc.
	HERFF JONES INC	Haines Company, Inc.
	JT2 INTERGRATED RESOURCES	Haines Company, Inc.
	MISSION HILLS MORTGAGE	Haines Company, Inc.
	SUPREME LENDING	Haines Company, Inc.
	TAIT & ASSOCIATES INC	Haines Company, Inc.

2149 CONVENTION CENTER WAY

Year	*Uses*	*Source*
2008	MARIECLLNDRS RSTRNTS & BKRS	Haines Company, Inc.

2151 CONVENTION CENTER WAY

Year	*Uses*	*Source*
2008	BUILDING	Haines Company, Inc.
	A & L FINANCE	Haines Company, Inc.
	ALLCOM	Haines Company, Inc.
	ANTHONY TRAVEL INC	Haines Company, Inc.
	APPLIED PLANNING	Haines Company, Inc.
	BARNES LAW FIRM THE	Haines Company, Inc.
	BEVERLY HILLS REALTY & LOANS	Haines Company, Inc.
	BRAUNWALDER INSURANCE AGENCY	Haines Company, Inc.
	CA CONTRACTORS NETWORK SIG	Haines Company, Inc.
	CA ST HLTH VECTR BORNE DISEASE	Haines Company, Inc.
	COMBINE INS CO OF AMER	Haines Company, Inc.
	FARMERS INS	Haines Company, Inc.
	FARMERS INS	Haines Company, Inc.
	FONT CAPITAL LLC	Haines Company, Inc.
	FPSGOLD	Haines Company, Inc.
	GARZON INSURANCE AGENCY	Haines Company, Inc.
	HAVEN MANAGEMENT INC	Haines Company, Inc.
	KING L	Haines Company, Inc.
	MANPOWER TEMPORARY STAFFING	Haines Company, Inc.

Year	Uses	Source
2008	QUADRANT DISTRIBUTION	Haines Company, Inc.
	SELF INSURED SOLUTIONS LLC	Haines Company, Inc.
	TRADE EXCHANGE NETWORK INC	Haines Company, Inc.
	VALPAK OF GREATER LA	Haines Company, Inc.
	WHITEBOARD PARTNERS LLC	Haines Company, Inc.

2155 CONVENTION CENTER WAY

Year	Uses	Source
2008	HOLIDAY INN	Haines Company, Inc.
	HOLIDAY INN	Haines Company, Inc.

CONVENTION CNTR WAY

2131 CONVENTION CNTR WAY

Year	Uses	Source
2003	CASWELL George	Haines & Co Publishers
	HUMMER MARK C	Haines & Co Publishers
	MARK CHRISTOPHER AUTO CENTER	Haines & Co Publishers

2143 CONVENTION CNTR WAY

Year	Uses	Source
2003	ALPLAN CHIROPRACTIC	Haines & Co Publishers
	MISSION HILLS MORTGAGE	Haines & Co Publishers
	SOUTHLND ECONOMIC	Haines & Co Publishers

2147 CONVENTION CNTR WAY

Year	Uses	Source
2003	CALLENDER Donald	Haines & Co Publishers

2149 CONVENTION CNTR WAY

Year	Uses	Source
2003	MARIE CALLENDERS REST & BKRY	Haines & Co Publishers

2151 CONVENTION CNTR WAY

Year	Uses	Source
2003	BUILDING	Haines & Co Publishers
	ALLCOM	Haines & Co Publishers

FINDINGS

Year	Uses	Source
2003	BEATTY & ASSOCIATES	Haines & Co Publishers
	BROADBAND OFFICE	Haines & Co Publishers
	CA MANUFACTURING TECHNOLOGY CT	Haines & Co Publishers
	CASTHLTH FOOD & DRUGBRANCH	Haines & Co Publishers
	CA ST HLTH VECTH BORNE DISEASE	Haines & Co Publishers
	EDAMAME RESTAURANT	Haines & Co Publishers
	FARMERS INS	Haines & Co Publishers
	FARMERS INS	Haines & Co Publishers
	FARMERS INS	Haines & Co Publishers
	FARMERS INS	Haines & Co Publishers
	FARMERS INS ANDRES PERNETT	Haines & Co Publishers
	FPSGOLD	Haines & Co Publishers
	GENE BURTON & ASSOCIATES	Haines & Co Publishers
	HAVEN MANAGEMENT INC	Haines & Co Publishers
	HORACE MANN	Haines & Co Publishers
	INSURANCE CO	Haines & Co Publishers
	J M FUNDING CORPORATION	Haines & Co Publishers
	JENKINS S LESLIE ATTY AT LAW	Haines & Co Publishers
	JENKINS & ASSOCIATES	Haines & Co Publishers
	L D KING ENGINEERING CO INC	Haines & Co Publishers
	MANPOWER STAFFING SERVICES	Haines & Co Publishers
	MCIG CAPITAL CORP	Haines & Co Publishers
	RICHARDS & ASSOCIATES	Haines & Co Publishers
	TRADE EXCHANGE	Haines & Co Publishers
	NETWORK INC	Haines & Co Publishers
	U S LONG DISTANCE	Haines & Co Publishers
	SALES BRANCH	Haines & Co Publishers
	URBINA INSURANCE AGENCY	Haines & Co Publishers
	VOCAID INC	Haines & Co Publishers
	WEST COAST AD FEX	Haines & Co Publishers

FINDINGS

D

2131 D

Year	Uses	Source
1995	MARK CHRISTOPHER	GTE Directories

2143 D

Year	Uses	Source
1995	Building	GTE Directories
	DONNELLY INFORMATION	GTE Directories

2149 D

Year	Uses	Source
1995	MARIE CALLENDERS	GTE Directories

2151 D

Year	Uses	Source
1995	Building	GTE Directories

D ST

2129 D ST

Year	Uses	Source
1990	MARK CHRIS SUBARU	GTE

2131 D ST

Year	Uses	Source
1990	CHRISTOPHER MARK CHEVROLET INC	GTE
	MARK CHRISTOPHER CHEVROLET INC	GTE
	MARK CHRISTOPHER LEASING	GTE
1985	MARK CHRISTOPHER	GTE

2139 D ST

Year	Uses	Source
1985	MARK CHRIS SUBARU	GTE

FINDINGS

2143 D ST

Year	*Uses*	*Source*
1990	Ardmore Brow n & Broedow	GTE
	From Azusa Glendora Telephones Call	GTE
	Donnelly Information Publishing	GTE
	DUNAWAY ASSOCIATES INC	GTE
	FABRICARE CENTER	GTE
	Facemate Corp	GTE
	Health Dynamics	GTE
	Holiday Corp Loss Prevention	GTE
	Household Finance Western Division Executive Headquarters	GTE
	Kline Center	GTE
	Kline Center Executive Suite	GTE
	Kline Center Office Services	GTE
	Larrob Enterprises	GTE
	LONG BEACH SAVINGS & LOAN ASSOCIATION Equity Loans	GTE
	NAIOP	GTE
	Neff Don	GTE
	Rafco Hotel Supply	GTE
	RAFFELSINC	GTE
	SUMITOMO MACHINERY CORP	GTE
	Sunteau Sales Internatl Inc	GTE
	Technical Systems Concepts Inc	GTE
	Trammell Crow Co	GTE
	V & V Services	GTE
	William David & Associates	GTE

2149 D ST

Year	*Uses*	*Source*
1990	Ontario	GTE
	Marie Callenders Restaurants & Bakeries	GTE

FINDINGS

2151 D ST

Year	Uses	Source
1990	American Creditors Bureau Of Los Angeles	GTE
	Ayerst Laboratories A Div Of American Home Products	GTE
	Gottfried Phillip MAI	GTE
	Grubb & Ellis Commercial Real Estate Services	GTE
	Hays Al & Associates	GTE
	Healthdent	GTE
	Micro Frame Technologies Inc	GTE
	Mitsubishi Corp	GTE
	PRIVATE LEDGER FINANCIAL SERVICES INC	GTE
	Pro Staff Personnel Services	GTE
1985	BUILDING	GTE
	CLARION HOTL ONTARIO	GTE
	XCORONA PACIFIC CORP	GTE
	DOLE CITRUS CASTLE	GTE
	EQUIDON CONTRACTORS	GTE
	KAISER CEMENT CORP	GTE

E AIRPORT DR

2222 E AIRPORT DR

Year	Uses	Source
2020	CONCERT TECHNOLOGIES	EDR Digital Archive
	US CUSTOMS SVC	EDR Digital Archive
2017	CONCERT TECHNOLOGIES	Cole Information
2014	CONCERT TECHNOLOGIES	Cole Information
2010	US CUSTOMS SVC	Cole Information

E CONVENTION CENTER WAY

2131 E CONVENTION CENTER WAY

Year	Uses	Source
2020	MARK CHRISTOPHER CHEV BUICK	EDR Digital Archive

FINDINGS

Year	Uses	Source
2020	J-LEGG AVIATION LLC	EDR Digital Archive
	NATIONWIDE INSURANCE-PL KINAN	EDR Digital Archive
	ELECTRIC CHARGING STATION	EDR Digital Archive
	NATIONWIDE INSURANCE	EDR Digital Archive
2017	ENTERPRISE	Cole Information
	MARK CHRISTOPHER AUTO CENTER	Cole Information
2014	MARK CHRISTOPHER AUTO CENTER	Cole Information
	ENTERPRISE	Cole Information
2010	MARK CHRISTOPHER AUTO CTR	Cole Information
	ENTERPRISE RENTACAR	Cole Information
2005	STRIPE MAN INC	Cole Information
	MARK CHRISTOPHER AUTO CENTER	Cole Information
2000	HERTZ LOCAL EDITION	Cole Information
	MARK CHRISTOPHER CHEVY OLDSMOBILE INCORPORATED SALES LEASE S	Cole Information

2143 E CONVENTION CENTER WAY

Year	Uses	Source
2020	PRIME HEALTHCARE	EDR Digital Archive
2017	JT2 INTERGRATED RESOURCES	Cole Information
	SUPREME LENDING	Cole Information
	PRIME HEALTHCARE	Cole Information
	AMERICAN PUBLISHING	Cole Information
	GOLDEN STATE WATER COMPANY REGION II	Cole Information
	MISSION HILLS MORTGAGE	Cole Information
2014	JT2 INTERGRATED RESOURCES	Cole Information
	GOLDEN STATE WATER COMPANY REGION II	Cole Information
	MISSION HILLS MORTGAGE	Cole Information
2010	GOLDEN STATE WATER CO	Cole Information
	MISSION HILLS MORTGAGE BANKERS	Cole Information
	HEE ENVIRONMENTAL ENGRG LLC	Cole Information
	HYGIENE TECHNOLOGIES	Cole Information

FINDINGS

Year	Uses	Source
2005	FIRST NLC FINANCIAL SERVICE LLC	Cole Information
	MISSION HILLS MORTGAGE	Cole Information
	KENNEDY / JENKS CONSULTANTS	Cole Information
	GLOBAL BANCORP INC	Cole Information
	AMERICAN STATES WATER CO	Cole Information
	WFS FINANCIAL	Cole Information
2000	KENNEDY JENKS CONSULTANTS	Cole Information
	MICHAEL BRANDMAN ASSOCIATES	Cole Information
	INFINITY INSURANCE	Cole Information
	PATHTRACE SYSTEMS INCORPORATED	Cole Information
	NORRELL SERVICES	Cole Information
	INFINITY INSURANCE COMPANY	Cole Information
	NMC HOMECARE	Cole Information
	WESTERN FINANCIAL	Cole Information
	NORRELL SERVICES CLIENT LINE	Cole Information
	REICHERT STANFORD E LAW OFFICES OF	Cole Information

2149 E CONVENTION CENTER WAY

Year	Uses	Source
2010	MARIE CALLENDERS	Cole Information
2005	MARIE CALLENDERS RESTAURANTS & BAKE	Cole Information
	CASTLE HARLAN PARTNERS III LP	Cole Information
2000	MARIE CALLENDERS RESTAURANTS & BAKERIES	Cole Information

2151 E CONVENTION CENTER WAY

Year	Uses	Source
2020	FRONTIER BROKERS INC	EDR Digital Archive
	FRONTIER COMMUNITIES	EDR Digital Archive
	FARMERS INSURANCE-GERMAIN GRC	EDR Digital Archive
	FARMERS INSURANCE-GARCIA AGCY	EDR Digital Archive
	GSG PROTECTIVE SVC	EDR Digital Archive
	APPLIED PLANNING	EDR Digital Archive
	YANG FRANCES C DO	EDR Digital Archive

FINDINGS

Year	Uses	Source
2020	TAM HELEN B MD	EDR Digital Archive
	DAUWALDER TIMOTHY J DO	EDR Digital Archive
	RIM OF THE WORLD HM HEALTH INC	EDR Digital Archive
	MONTGOMERY STEELE LAW	EDR Digital Archive
	LALA FOODS INC	EDR Digital Archive
	GARZON INSURANCE AGENCY	EDR Digital Archive
	GRAND CAPITAL	EDR Digital Archive
	ALCID CHRIS ALAN	EDR Digital Archive
	MARSHALL ELIZABETH L PT	EDR Digital Archive
	INTEGRITY REIMBURSEMENT INC	EDR Digital Archive
	HEALTH SERVICES DEPT	EDR Digital Archive
2017	BEVERLY HILLS REALTY & LOANS	Cole Information
	TRADE EXCHANGE NETWORK INC	Cole Information
	VALPAK	Cole Information
	ALLCOM	Cole Information
	BARNES LAW FIRM	Cole Information
	FPSGOLD INC	Cole Information
	ITERIS INC	Cole Information
	LA LA FOODS INC	Cole Information
	ROYAL PRESTIGE HEALTHQUEST	Cole Information
	FARMERS INSURANCE	Cole Information
	INTEGRITY REIMBURSEMENT INC	Cole Information
	APPLIED PLANNING	Cole Information
	FONT CAPITAL LLC	Cole Information
	KING L D INC	Cole Information
2014	BARNES LAW FIRM THE	Cole Information
	MANPOWER	Cole Information
	VALPAK OF GREATER LA	Cole Information
	CALIFORNIA CONTRACTORS NETWORK SIG	Cole Information
	FARMERS INSURANCE GROUP	Cole Information
	VALPAK	Cole Information
	APPLIED PLANNING INC	Cole Information

FINDINGS

Year	Uses	Source
2014	STATE OF CALIFORNIA	Cole Information
	FPSGOLD INC	Cole Information
	ITERIS INC	Cole Information
	INTEGRITY REIMBURSEMENT INC	Cole Information
	KING L D INC	Cole Information
2010	HEALTH SERVICES DEPT	Cole Information
	INLAND SOUTHERN INSURANCE	Cole Information
	HAVEN MANAGEMENT INC	Cole Information
	MANPOWER	Cole Information
	SELF INSURED SOLUTIONS LLC	Cole Information
	U S LONG DISTANCE SALES BRANCH	Cole Information
	BARNES LAW FIRM	Cole Information
	FPSGOLD INC	Cole Information
	ANTHONY TRAVEL INC	Cole Information
	L D KING INC	Cole Information
	FARMERS INSURANCE	Cole Information
	COMBINED INSURANCE COAMERICA	Cole Information
	CALIFORNIA CONTRACTORS NTWRK	Cole Information
	QUADRANT DISTRIBUTION	Cole Information
	VALPAK	Cole Information
2005	L D KING ENGINEERING CO INC	Cole Information
	TRADE EXCHANGE NETWORK INC	Cole Information
	BAB DEVELOPMENT CORP	Cole Information
	APPLIED PLANNING INC	Cole Information
	VAN MOORE INC	Cole Information
	SASHCO INC	Cole Information
	JM FUNDING CORP	Cole Information
	MJM INVESTIGATIONS INC	Cole Information
	HAVEN MANAGEMENT INC	Cole Information
	THE BARNES LAW FIRM APC	Cole Information
	WORLWIDE SECURITY INC	Cole Information
	ONTARIO WARRIORS LLC	Cole Information

FINDINGS

Year	Uses	Source
2005	11066 HOLE AVENUE PRTNR LLC	Cole Information
	GENE BURTON & ASSOCIATES	Cole Information
	VOCAID INC	Cole Information
	FPSGOLD	Cole Information
	T MOBILE	Cole Information
	GRAND CAPITAL	Cole Information
	WMG & ASSOCIATES	Cole Information
	ACCU FAB SYSTEMS INC	Cole Information
	MCIG CAPITAL CORP	Cole Information
	RICHARDS & ASSOCIATES	Cole Information
	HORACE MANN INSURANCE	Cole Information
	BRAUNWALDER INSURANCE AGENCY	Cole Information
	VALPAK OF GREATER LA	Cole Information
	JAMES LANI	Cole Information
	FARMERS INSURANCE	Cole Information
	BEATTY & ASSOCIATES	Cole Information
	CALIFORNIA MFG TECHNOLOGY	Cole Information
	FARMERS INSURANCE ANDRES PERNETT	Cole Information
	JENKINS & ASSOCIATES	Cole Information
	LEM PARTNERS LLC	Cole Information
	THE BARNES LAW FIRM A PROFESSI	Cole Information
	FERRARI CORP	Cole Information
2000	ONE STOCK FINANCIAL SERVICES	Cole Information
	TRADE EXCHANGE NETWORK INCORPORATED	Cole Information
	L D KING ENGINEERING COMPANY INCORPORATED	Cole Information
	CALIFORNIA MANUFACTURING TECHNOLOGY CENTER	Cole Information
	TEACHERS INSURANCE CLAIMS	Cole Information
	WMA SECURITIES	Cole Information
	LOVE MED TRANSPORTATION	Cole Information
	MANPOWER STAFFING SERVICES	Cole Information

Year	Uses	Source
2000	CALIFORNIA MANUFACTURING TECHNOLOGY CENTER	Cole Information
	ALLCOM	Cole Information
	MORTGAGENET WORK	Cole Information
	HAVEN MANAGEMENT INCORPORATED	Cole Information
	OFFICE OF PUBLIC SCHOOL CONSTRUCTION	Cole Information
	APPLIED PLANNING	Cole Information
	U S LONG DISTANCE SALES BRANCH	Cole Information
	ENVIROSPECT INCORPORATED	Cole Information
	SEARCH WEST	Cole Information
	ALLEGIANCE INS SERVICE	Cole Information
	RICHARDS & ASSOCIATES	Cole Information
	SPIEKER PROPERTIES	Cole Information
	BEATTY & ASSOCIATES	Cole Information
	FPS GOLD	Cole Information
	U S LONG DISTANCE	Cole Information
	CALIFORNIA STATE OF HEALTH SERVICIES	Cole Information
	MARIA JACINTO	Cole Information
	TODD WALKER	Cole Information

2155 E CONVENTION CENTER WAY

Year	Uses	Source
2020	ATM	EDR Digital Archive
	HOLIDAY INN-ONTARIO AIRPORT	EDR Digital Archive
2017	HOLIDAY INN	Cole Information
	HOLIDAY INN ONTARIO AIRPORT	Cole Information
2014	HOLIDAY INN	Cole Information
2010	HOLIDAY INNONTARIO	Cole Information

E CONVENTION CENTER WAY STE 222

2151 E CONVENTION CENTER WAY STE 222

Year	Uses	Source
2020	JAMES PREVITI	EDR Digital Archive

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E D ONTARIO

2143 E D ONTARIO

Year	Uses	Source
2000	65 PLUS CAREAMERICA BRANCH OFFICES	Cole Information

E D ST

2131 E D ST

Year	Uses	Source
1995	MARK CHRISTOPHER CHEVROLET	Cole Information
	ACURA, MARC	Cole Information
1992	MARK C CHEVROLET	Cole Information

2143 E D ST

Year	Uses	Source
2000	65 PLUS CAREAMERICA BRANCH OFFICES	Cole Information
	SEARS ROEBUCK AND CO ONTARIO	Cole Information
1995	LARROB ENTERPRISES	Cole Information
	COFFEE CONCEPTS	Cole Information
	KLINE CENTER OFFICE SVC	Cole Information
	LOMAS MANAGEMENT INC	Cole Information
	BISHOP HAWK INC	Cole Information
	LONG BEACH BANK	Cole Information
	PRESTIGE INTERIORS	Cole Information
	BROWN & BROEDOW	Cole Information
	DONNELLEY INFORMATION PUB	Cole Information
	METRO BROKERS	Cole Information
	DRUG & CRIME FREE YOUTH FNDTN	Cole Information
	CALIFORNIA HOMEOWNERS	Cole Information
	MITSUBISHI FUSO TRUCK	Cole Information
	SUN MICROSYSTEMS INC	Cole Information
	ALOHA FINANCIAL & INVESTMENT	Cole Information
	HARRISON GLENN & ASSOC	Cole Information
	SUN STAR MORTGAGE CORP	Cole Information

FINDINGS

Year	Uses	Source
1995	ITT FINANCIAL CORP	Cole Information
	COMPS	Cole Information
	L D KING ENGINEERING CO	Cole Information
	TECHNICAL SYSTEMS CONCEPTS INC	Cole Information
	TRANSPORT INSURANCE CO	Cole Information
1992	SUNSTAR MORTAGE	Cole Information
	LARROB ENTERPRISES	Cole Information
	CA METER SERVICE	Cole Information
	UPLAND INDS CORP	Cole Information
	BROWN&WILLIAMSON	Cole Information
	FACEMATE CORP	Cole Information
	SUN MICROSYSTEM INC	Cole Information
	LONG BEACH BANK SSB	Cole Information
	INTL TROPICAL FRUIT	Cole Information
	PINNACLE FLOORING	Cole Information
	METRO BROKERS	Cole Information
	ARDMORE BROEDOW	Cole Information
	B&B ASSOCIATES	Cole Information
	ALCAN AEROSPACE	Cole Information
	HOLIDAY CORP PRVNTN	Cole Information
	TECHNICAL SYS CNCPT	Cole Information
	PREMIER CREDIT SERV	Cole Information
	SUNTEAU SALES INTL	Cole Information
	SCARBROUGH&SISSON	Cole Information
	PROGRSV INS	Cole Information
	C M O CAREER CNTRS	Cole Information
	TOKAI CREDIT CORP	Cole Information
	DUNAWAY ASSOCIATES	Cole Information
	KLINE CENTER	Cole Information
	NATL ASN IND&OFC PK	Cole Information
	DONNELLY INFO PBLSH	Cole Information
	DENTAL HEALTH SERVS	Cole Information

FINDINGS

Year	Uses	Source
1992	PHOTO&SOUND CO	Cole Information
	HAINES WM D	Cole Information
	ARDMORE, BROWN	Cole Information
	HAINES, WILLIAM D	Cole Information

2149 E D ST

Year	Uses	Source
1995	MARIE CALLENDERS RESTAURANT	Cole Information
1992	MARIE CALLNDRS REST	Cole Information

2151 E D ST

Year	Uses	Source
2000	EXIDE CORPORATION	Cole Information
	BIG THREE LIQUID AIR	Cole Information
1995	EMERGENCY SERVICES OFFICE	Cole Information
	BILL PARSONS SVC	Cole Information
	GOTTFRIED GAMBLE & ASSOCS INC	Cole Information
	VOC AID INC	Cole Information
	DOLE CITRUS WESTERN REGIONAL	Cole Information
	OPTIMA ASSET MANAGEMENT SVC	Cole Information
	HEALTH SERVICE DEPT	Cole Information
	GRUBB & ELLIS REAL ESTATE INC	Cole Information
	BIG THREE LIQUID AIR	Cole Information
	GALAHER SETTLEMENTS & INS SVC	Cole Information
	GOTTFRIED, PHILLIP	Cole Information
1992	BILL PARSONS SERV	Cole Information
	GOTTFRIED GAMBLE	Cole Information
	C I T GROUP	Cole Information
	VOC AID INC	Cole Information
	GRUBB&ELLIS BRKRGE	Cole Information
	BOMBARDIER CAPITAL	Cole Information
	MITSUBISHI CEMENT	Cole Information
	TRANSPORT INSURANCE	Cole Information
	CA ST EMER SERV OFC	Cole Information

Year	Uses	Source
1992	KING L D ENGRG CO	Cole Information
	CARDOX DIVISION	Cole Information
	MICRO FRAME TECH	Cole Information
	PRO STAFF PRSNNL SV	Cole Information
	DOLE CITRUS C&C ADM	Cole Information
	GOTTFRIED, PHILLIP	Cole Information

E GUASTI RD

2381 E GUASTI RD

Year	Uses	Source
2000	COMSYS INFORMATION TECHNOLOGY SERVICES	Cole Information

2445 E GUASTI RD

Year	Uses	Source
2017	VETERANS COMMUNICATION SERVICES INC	Cole Information
2014	VETERANS COMMUNICATION SERVICES INC	Cole Information
2010	VETERANS COMMUNICATION SVC INC	Cole Information
	GREAT QUALITY CONSTRUCTION	Cole Information
2005	VETERANS COMM SERVICES INC	Cole Information
	JLB PROTECTIVE SERVICES INC	Cole Information
2000	YEAGER E L CONSTRUCTION	Cole Information
	SVERDRUP CIVIL	Cole Information

2501 E GUASTI RD

Year	Uses	Source
2017	TANTARA WEST	Cole Information
	SALES MAX INC	Cole Information
2014	SALES MAX INC	Cole Information
2010	CERTEGY	Cole Information
	TANTARA WEST	Cole Information
	ANCHOR BLUE RETAIL GROUP	Cole Information
2005	HUB HOLDING CORP	Cole Information

Year	Uses	Source
2000	HUB DISTRIBUTING INCORPORATED	Cole Information
1995	HUB DISTRIBUTING INC	Cole Information
1992	HUB DISTRIBUTING	Cole Information

E HOLT BLVD

2200 E HOLT BLVD

Year	Uses	Source
2020	ONTARIO GATEWAY HOTEL	EDR Digital Archive
	AUTO GLASS SVC	EDR Digital Archive
2017	RADISSON HOTEL ONTARIO AIRPORT	Cole Information
	MARRIOTT HOTELS & RESORTS	Cole Information
	MARRIOTT ONTARIO AIRPORT	Cole Information
	AUTO GLASS SERVICES	Cole Information
2014	RADISSON ONTARIO AIRPORT	Cole Information
	MARRIOTT ONTARIO AIRPORT	Cole Information
	RADISSON HOTELS & RESORTS	Cole Information
2010	KVL AUDIO VISUAL INC	Cole Information
	MARRIOTTONTARIO AIRPORT	Cole Information
2005	CSDR REUNION	Cole Information
	ONTARIO AIRPORT MARRIOTT	Cole Information
	CUSTOM GIFTS	Cole Information
	MARRIOTT HOTELS & RESORTS	Cole Information
	THERAPEUTIC TOUCH	Cole Information
	KVL AUDIO VISUAL CORP	Cole Information
	PADILLAS BARBER & BEAUTY SHOP	Cole Information
2000	KUSTOM GIFTS	Cole Information
	MPS MARKETING & PUBLISHING GROUP	Cole Information
	MARRIOTT HOTEL ONTARIO AIRPORT	Cole Information
	ONTARIO AIRPORT MARRIOTT	Cole Information
	KVL AUDIO VISUAL CORPORATION	Cole Information
	ON COMMAND CORP	Cole Information
	MARRIOTT HOTELS RESORTS SUITES	Cole Information

Year	Uses	Source
1995	SWANK AUDIO VISUALS INC	Cole Information
	MARRIOTT HOTELS & RESORTS	Cole Information
	JACKSON, CLAUDIA	Cole Information
1992	SWANK AUDIO VISUALS	Cole Information
	CLARION HOTEL	Cole Information

GAREY AVE

1807 GAREY AVE

Year	Uses	Source
1975	Rowetts Portable X Ray Service Inc	GTE Directories

GUASTI RD

2345 GUASTI RD

Year	Uses	Source
1985	MCCUTCHEON SUPERIOR	GTE

2445 GUASTI RD

Year	Uses	Source
2008	VETERANS COMMUNICATION SRV INC	Haines Company, Inc.
2003	VETERANS COMMUNICATION SRV INC	Haines & Co Publishers

2501 GUASTI RD

Year	Uses	Source
2008	CERTEGY	Haines Company, Inc.
	HUB DISTRIBUTING INC	Haines Company, Inc.
	HUB DISTRIBUTING INC	Haines Company, Inc.
	KUEHNE NAGEL	Haines Company, Inc.
	TANTARA WEST	Haines Company, Inc.
2003	HUB DISTRIBUTING INC	Haines & Co Publishers
1995	HUB DISTRIBUTING INC	GTE Directories
1985	HUB DISTRIBUTING INC	GTE
1980	MHUB DISTRIBUTING INC	GTE General Telephone Company of California

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HOLT BLVD

2200 HOLT BLVD

Year	*Uses*	*Source*
2008	KUSTOM GIFTS	Haines Company, Inc.
	KVL AUDIO VISUAL CORP	Haines Company, Inc.
	KVL AUDIO VISUAL INC	Haines Company, Inc.
	MARRIOTT HOTELS & RESORTS	Haines Company, Inc.
	ON COMMAND CORP	Haines Company, Inc.
2003	KUSTOM GIFTS	Haines & Co Publishers
	KVL AUDIO VISUAL CORP	Haines & Co Publishers
	MARRIOTT HOTEL	Haines & Co Publishers
	ON COMMAND CORP	Haines & Co Publishers
1995	SWANK AUDIO VISUALS	GTE Directories
	MARRIOTT HOTEL ONTARIO	GTE Directories
1990	CLARION HOTEL ONTARIO AIRPORT	GTE
	Swank Audio Visuals Inc	GTE

FINDINGS

ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

Address Researched	Address Not Identified in Research Source
1807 GAREY AVE	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2129 D ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2131 CONVENTION CENTER WAY	2020, 2017, 2014, 2010, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2131 CONVENTION CNTR WAY	2020, 2017, 2014, 2010, 2008, 2005, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2131 D	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2131 D ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2131 D ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2131 E CONVENTION CENTER WAY	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2131 E CONVENTION CENTER WAY	2020, 2017, 2014, 2010, 2008, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2131 E CONVENTION CENTER WAY	2020, 2017, 2014, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2131 E CONVENTION CENTER WAY	2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
2131 E CONVENTION CENTER WAY	2020, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2131 E CONVENTION CENTER WAY	2020, 2017, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2131 E D ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2131 E D ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2139 D ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2143 CONVENTION CENTER WAY	2020, 2017, 2014, 2010, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2143 CONVENTION CNTR WAY	2020, 2017, 2014, 2010, 2008, 2005, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2143 D	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2143 D ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2143 E CONVENTION CENTER WAY	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2143 E CONVENTION CENTER WAY	2020, 2017, 2014, 2010, 2008, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2143 E CONVENTION CENTER WAY	2020, 2017, 2014, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2143 E CONVENTION CENTER WAY	2020, 2017, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

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Address Researched	Address Not Identified in Research Source
2143 E CONVENTION CENTER WAY	2020, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2143 E CONVENTION CENTER WAY	2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2143 E D ONTARIO	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2143 E D ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2143 E D ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2143 E D ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2147 CONVENTION CNTR WAY	2020, 2017, 2014, 2010, 2008, 2005, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2149 CONVENTION CENTER WAY	2020, 2017, 2014, 2010, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2149 CONVENTION CNTR WAY	2020, 2017, 2014, 2010, 2008, 2005, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2149 D	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2149 D ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2149 E CONVENTION CENTER WAY	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2149 E CONVENTION CENTER WAY	2020, 2017, 2014, 2010, 2008, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

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Address Researched	Address Not Identified in Research Source
2149 E CONVENTION CENTER WAY	2020, 2017, 2014, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2149 E D ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2149 E D ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2151 CONVENTION CENTER WAY	2020, 2017, 2014, 2010, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2151 CONVENTION CNTR WAY	2020, 2017, 2014, 2010, 2008, 2005, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2151 D	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2151 D ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2151 D ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2151 E CONVENTION CENTER WAY	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2151 E CONVENTION CENTER WAY	2020, 2017, 2014, 2010, 2008, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2151 E CONVENTION CENTER WAY	2020, 2017, 2014, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2151 E CONVENTION CENTER WAY	2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2151 E CONVENTION CENTER WAY	2020, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
2151 E CONVENTION CENTER WAY	2020, 2017, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2151 E CONVENTION CENTER WAY STE 222	2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2151 E D ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2151 E D ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2151 E D ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2155 CONVENTION CENTER WAY	2020, 2017, 2014, 2010, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2155 E CONVENTION CENTER WAY	2020, 2017, 2014, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2155 E CONVENTION CENTER WAY	2020, 2017, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2155 E CONVENTION CENTER WAY	2020, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2155 E CONVENTION CENTER WAY	2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2200 E HOLT BLVD	2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2200 E HOLT BLVD	2020, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2200 E HOLT BLVD	2020, 2017, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
2200 E HOLT BLVD	2020, 2017, 2014, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2200 E HOLT BLVD	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2200 E HOLT BLVD	2020, 2017, 2014, 2010, 2008, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2200 E HOLT BLVD	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2200 E HOLT BLVD	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2200 HOLT BLVD	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2200 HOLT BLVD	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2200 HOLT BLVD	2020, 2017, 2014, 2010, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2200 HOLT BLVD	2020, 2017, 2014, 2010, 2008, 2005, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2222 AIRPORT DR	2020, 2017, 2014, 2010, 2008, 2005, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2222 AIRPORT DR	2020, 2017, 2014, 2010, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2222 AIRPRT DR	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2222 E AIRPORT DR	2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
2222 E AIRPORT DR	2020, 2017, 2014, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2222 E AIRPORT DR	2020, 2017, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2222 E AIRPORT DR	2020, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2345 A ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2345 A ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2345 GUASTI RD	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2381 E GUASTI RD	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2445 E GUASTI RD	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2445 E GUASTI RD	2020, 2017, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2445 E GUASTI RD	2020, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2445 E GUASTI RD	2020, 2017, 2014, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2445 E GUASTI RD	2020, 2017, 2014, 2010, 2008, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2445 GUASTI RD	2020, 2017, 2014, 2010, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
2445 GUASTI RD	2020, 2017, 2014, 2010, 2008, 2005, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2501 E GUASTI RD	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2501 E GUASTI RD	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2501 E GUASTI RD	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2501 E GUASTI RD	2020, 2017, 2014, 2010, 2008, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2501 E GUASTI RD	2020, 2017, 2014, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2501 E GUASTI RD	2020, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2501 E GUASTI RD	2020, 2017, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2501 GUASTI RD	2020, 2017, 2014, 2010, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2501 GUASTI RD	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2501 GUASTI RD	2020, 2017, 2014, 2010, 2008, 2005, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2501 GUASTI RD	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
2501 GUASTI RD	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

Address Researched	Address Not Identified in Research Source
SE Corner E. Holt Blvd. and E. Guasti Rd.	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

Ontario Hotel
SE Corner E. Holt Blvd. and E. Guasti Rd.
Ontario, CA 91761

Inquiry Number: 7482419.6
October 27, 2023

The EDR Property Tax Map Report

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

EDR Property Tax Map Report

Environmental Data Resources, Inc.'s EDR Property Tax Map Report is designed to assist environmental professionals in evaluating potential environmental conditions on a target property by understanding property boundaries and other characteristics. The report includes a search of available property tax maps, which include information on boundaries for the target property and neighboring properties, addresses, parcel identification numbers, as well as other data typically used in property location and identification.

NO COVERAGE

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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Ontario Hotel
SE Corner E. Holt Blvd. and E. Guasti Rd.
Ontario, CA 91761

Inquiry Number: 7482419.7
October 27, 2023

EDR Building Permit Report

Target Property and Adjoining Properties

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

EDR Building Permit Report: Search Documentation

10/27/23

Site Name:
Ontario Hotel
SE Corner E. Holt
Ontario, CA 91761

EDR Inquiry # 7482419.7

Client Name:
Petra Geotechnical Inc
40880 County Center Drive,
Temecula, CA 92591

Contact: Ed Lump

Search Documentation

DATA GAP

The complete collection of Building Permit data available to EDR has been searched, and as of 10/27/23, EDR does not have access to building permits in the city where your target property is located (Ontario, CA).

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EDR BUILDING PERMIT REPORT

About This Report

The EDR Building Permit Report provides a practical and efficient method to search building department records for indications of environmental conditions. Generated via a search of municipal building permit records gathered from more than 1,600 cities nationwide, this report will assist you in meeting the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527 - 21), or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

Building permit data can be used to identify current and/or former operations and structures/features of environmental concern. The data can provide information on a target property and adjoining properties such as the presence of underground storage tanks, pump islands, sumps, drywells, etc., as well as information regarding water, sewer, natural gas, electrical connection dates, and current/former septic tanks.

Methodology

EDR has developed the EDR Building Permit Report through our partnership with BuildFax, the nation's largest repository of building department records. BuildFax collects, updates, and manages building department records from local municipal governments. The database now includes 30 million permits, on more than 10 million properties across 1,600 cities in the United States.

The EDR Building Permit Report comprises local municipal building permit records, gathered directly from local jurisdictions, including both target property and adjoining properties. Years of coverage vary by municipality. Data reported includes (where available): date of permit, permit type, permit number, status, valuation, contractor company, contractor name, and description.

Incoming permit data is checked at seven stages in a regimented quality control process, from initial data source interview, to data preparation, through final auditing. To ensure the building department is accurate, each of the seven quality control stages contains, on average, 15 additional quality checks, resulting in a process of approximately 105 quality control "touch points."

For more information about the EDR Building Permit Report, please contact your EDR Account Executive at (800) 352-0050.

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Ontario Hotel

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TARGET PROPERTY INFORMATION

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RESEARCH SOURCE(S)

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EDR Environmental Lien and AUL Search 1980

CURRENT DEED EXHIBIT

RECORDING REQUESTED BY

AND WHEN RECORDED MAIL DOCUMENT TO:

NAME Judy Lee
STREET ADDRESS JC Horizon, LTD.
CITY, STATE & ZIP CODE 625 E. State St.
Ontario, CA. 91761

Electronically Recorded in Official Records, County of San Bernardino

8/24/2018
02:15 PM
CG

BOB DUTTON
ASSESSOR - RECORDER - CLERK
867 SPL Title Services

Doc# 2018-0311349

Titles 1 Pages 6

Fees	29.00
Taxes	8,800.00
CA SB2 Fee	.00
Others	.00
Paid	8,829.00

SPACE ABOVE FOR RECORDER'S USE ONLY

Corporation Grant Deed
Title of Document

THIS COVER SHEET ADDED TO PROVIDE ADEQUATE SPACE FOR RECORDING INFORMATION
($3.00 Additional Recording Fee Applies)

Recording Requested By
Fidelity National Title

RECORDING REQUESTED BY
AND WHEN RECORDED RETURN TO:

Judy Lee
JC Horizon, Ltd.
825 E. State Street
Ontario, California 91761

The undersigned declares that
the Documentary Transfer Tax
is $8,800 and is computed on
the full value of the property conveyed.

SPACE ABOVE THIS LINE FOR RECORDER'S USE

2306l143-MB **CORPORATION GRANT DEED**

THE UNDERSIGNED GRANTOR DECLARES:

Documentary Transfer Tax is $8,800.
( ) Unincorporated area (x) City of Ontario, California

Parcel No. 0110-322-33-0-000

(x) computed on full value of the property conveyed, or
( ) computed on full value less value of liens or encumbrances remaining at time of sale.

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, **Qualco, Inc.**, a California corporation, successor by name change to Agriswiss, Inc., a California corporation ("Grantor"), having an address of 1503 South Coast Dr., Suite 206, Costa Mesa, California 92626, hereby GRANTS to **JC Horizon, Ltd.**, a California corporation ("Grantee"), having an address of 825 E. State Street, Ontario, California 91761, the following described real property situated in the County of San Bernardino, State of California (the "Property").

SEE EXHIBIT "A" ATTACHED HERETO AND
INCORPORATED HEREIN BY THIS REFERENCE.

This Deed is made, and is accepted by Grantee, subject to the restrictions, easements, covenants, encumbrances, and liens described on Exhibit "B" attached hereto and incorporated herein by reference for all purposes (the "Permitted Exceptions").

Dated as of this 23rd day of August, 2018.

GRANTOR:

QUALCO, INC., successor by name change to
AGRISWISS, INC., a California corporation

By: _____
Victor Kawana, Secretary

EXHIBIT A

LEGAL DESCRIPTION

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

PARCEL 2 OF PARCEL MAP NO. 5660, IN THE CITY OF ONTARIO, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS PER PLAT RECORDED IN BOOK 69 OF PARCEL MAPS, PAGES 76 THROUGH 78, INCLUSIVE, RECORDS OF SAID COUNTY AS AMENDED BY MAP RECORDED IN BOOK 80 OF PARCEL MAPS, PAGES 56 THROUGH 58, INCLUSIVE, RECORDS OF SAID COUNTY.

APN: 0110-322-33-0-000

EXHIBIT B
PERMITTED EXCEPTIONS

A. Property taxes, which are a lien not yet due and payable, including any assessments collected with taxes to be levied for the fiscal year 2018-2019.

B. Property taxes, including any personal property taxes and any assessments collected with taxes, are as follows:

Tax Identification No.:	0110-322-33-0-000
Fiscal Year:	2014-2015
1st Installment:	$21,676.95, Paid
2nd Installment:	$21,676.91, Paid
Homeowners Exemption:	$0.00
Code Area:	004-080

C. The lien of supplemental or escaped assessments of property taxes, if any, made pursuant to the provisions of Chapter 3.5 (commencing with Section 75) or Part 2, Chapter 3, Articles 3 and 4, respectively, of the Revenue and Taxation Code of the State of California as a result of the transfer of title to the vestee named in Schedule A or as a result of changes in ownership or new construction occurring prior to Date of Policy.

1. Water rights, claims or title to water, whether or not disclosed by the public records.

2. The ownership of said Land does not include rights of access to or from the street, highway, or freeway abutting said Land, such rights having been relinquished by the document,

Recording Date:	April 17, 1946
Recording No:	in Book 1881, Page 477, Official Records
Affects:	Said land

Said deed further contains a waiver in favor of the State of California of any claims for damages to said land by reason of the location, construction, landscaping or maintenance of a highway or freeway contiguous thereto.

3. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to:	San Bernardino County Flood Control District
Purpose:	Flood control and water conservation
Recording Date:	September 12, 1951
Recording No:	in Book 2822, Page 335, Official Records
Affects:	That portion of Parcel 2 shown on the recorded Map of said Parcel Map and more particularly described by recital therein.

4. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to:	The City of Ontario
Purpose:	Public utilities
Recording Date:	April 7, 1966
Recording No:	in Book 6604, Page 153, Official Records
Affects:	That portion of Hellman Avenue, vacated.

5. Requirements contained in the Improvement Certificate as shown by recital in the Owners Certificate of the recorded map of said Parcel Map thereon.

EXHIBIT B
PERMITTED EXCEPTIONS
(Continued)

6. Covenants, conditions, restrictions and easements but omitting any covenants or restrictions, if any, including but not limited to those based upon race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, source of income, gender, gender identity, gender expression, medical condition or genetic information, as set forth in applicable state or federal laws, except to the extent that said covenant or restriction is permitted by applicable law, as set forth in the document

   Recording Date: July 26, 1984
   Recording No: 84-176925, Official Records

   Said covenants, conditions and restrictions provide that a violation thereof shall not defeat the lien of any mortgage or deed of trust made in good faith and for value.

7. The Land described herein is included within a project area of the Redevelopment Agency shown below, and that proceedings for the redevelopment of said project have been instituted under the Redevelopment Law (such redevelopment to proceed only after the adoption of the Redevelopment Plan) as disclosed by a document.

   Redevelopment Agency: Guasti Redevelopment Project Area
   Recording Date: November 5, 2007
   Recording No: 2007-0615960, Official Records

8. Please be advised that our search did not disclose any open Deeds of Trust of record. If you should have knowledge of any outstanding obligation, please contact the Title Department immediately for further review prior to closing.

9. Any easements not disclosed by the public records as to matters affecting title to real property, whether or not said easements are visible and apparent.

10. Matters which may be disclosed by an inspection and/or by a correct ALTA/ACSM Land Title Survey of said Land that is satisfactory to the Company, and/or by inquiry of the parties in possession thereof.

11. Any rights of the parties in possession of a portion of, or all of, said Land, which rights are not disclosed by the public records.

    The Company will require, for review, a full and complete copy of any unrecorded agreement, contract, license and/or lease, together with all supplements, assignments and amendments thereto, before issuing any policy of title insurance without excepting this item from coverage.

    The Company reserves the right to except additional items and/or make additional requirements after reviewing said documents.

END OF EXCEPTIONS

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy or validity of that document

STATE OF CALIFORNIA)
)
COUNTY OF ORANGE)

On 08/23/2018 before me, LORRAINE E. PETERSON, Notary Public, personally appeared VICTOR KAWANA, who provided to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/~~are~~ subscribed to the within instrument and acknowledged to me that he/she/~~the~~y executed the same in his/~~her/their~~ authorized capacity(i~~es~~), and that by his/~~her/the~~ir signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY, under the laws of the State of California that the forgoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Lorraine E Peterson (Seal)

LORRAINE E. PETERSON
COMM. #2101793
Notary Public · California
Orange County
My Comm. Expires Mar. 28, 2019

Ontario Hotel

SE Corner E. Holt Blvd. and E. Guasti Rd.

Ontario, CA 91761

Inquiry Number: 7482419.11

October 27, 2023

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

10/27/23

Site Name:

Ontario Hotel
SE Corner E. Holt Blvd. and E.
Ontario, CA 91761
EDR Inquiry # 7482419.11

Client Name:

Petra Geotechnical Inc
40880 County Center Drive, Suite M
Temecula, CA 92591
Contact: Ed Lump

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	Scale	Details	Source
2020	1"=500'	Flight Year: 2020	USDA/NAIP
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
2002	1"=500'	Acquisition Date: January 01, 2002	USGS/DOQQ
1994	1"=500'	Acquisition Date: June 01, 1994	USGS/DOQQ
1989	1"=500'	Flight Date: August 03, 1989	USDA
1985	1"=500'	Flight Date: July 28, 1985	USDA
1975	1"=500'	Flight Date: August 01, 1975	USGS
1966	1"=500'	Flight Date: April 16, 1966	USGS
1953	1"=500'	Flight Date: February 02, 1953	USDA
1949	1"=500'	Flight Date: May 21, 1949	USDA
1938	1"=500'	Flight Date: May 27, 1938	USDA

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INQUIRY #: 7482419.11

YEAR: 2020

= 500'

N

EDR

5251



INQUIRY #: 7482419.11

YEAR: 2016

= 500'

N

EDR

5252



INQUIRY #: 7482419.11

YEAR: 2012

= 500'

N

EDR

5253



INQUIRY #: 7482419.11

YEAR: 2009

= 500'

N

EDR

5254



INQUIRY #: 7482419.11

YEAR: 2006

= 500'

N

EDR

5255



INQUIRY #: 7482419.11

YEAR: 2002

= 500'

N

EDR

5256



INQUIRY #: 7482419.11

YEAR: 1994

= 500'

N

EDR

5257



INQUIRY #: 7482419.11

YEAR: 1989

= 500'

N

EDR

5258



INQUIRY #: 7482419.11

YEAR: 1985

= 500'

N

EDR

5259



INQUIRY #: 7482419.11

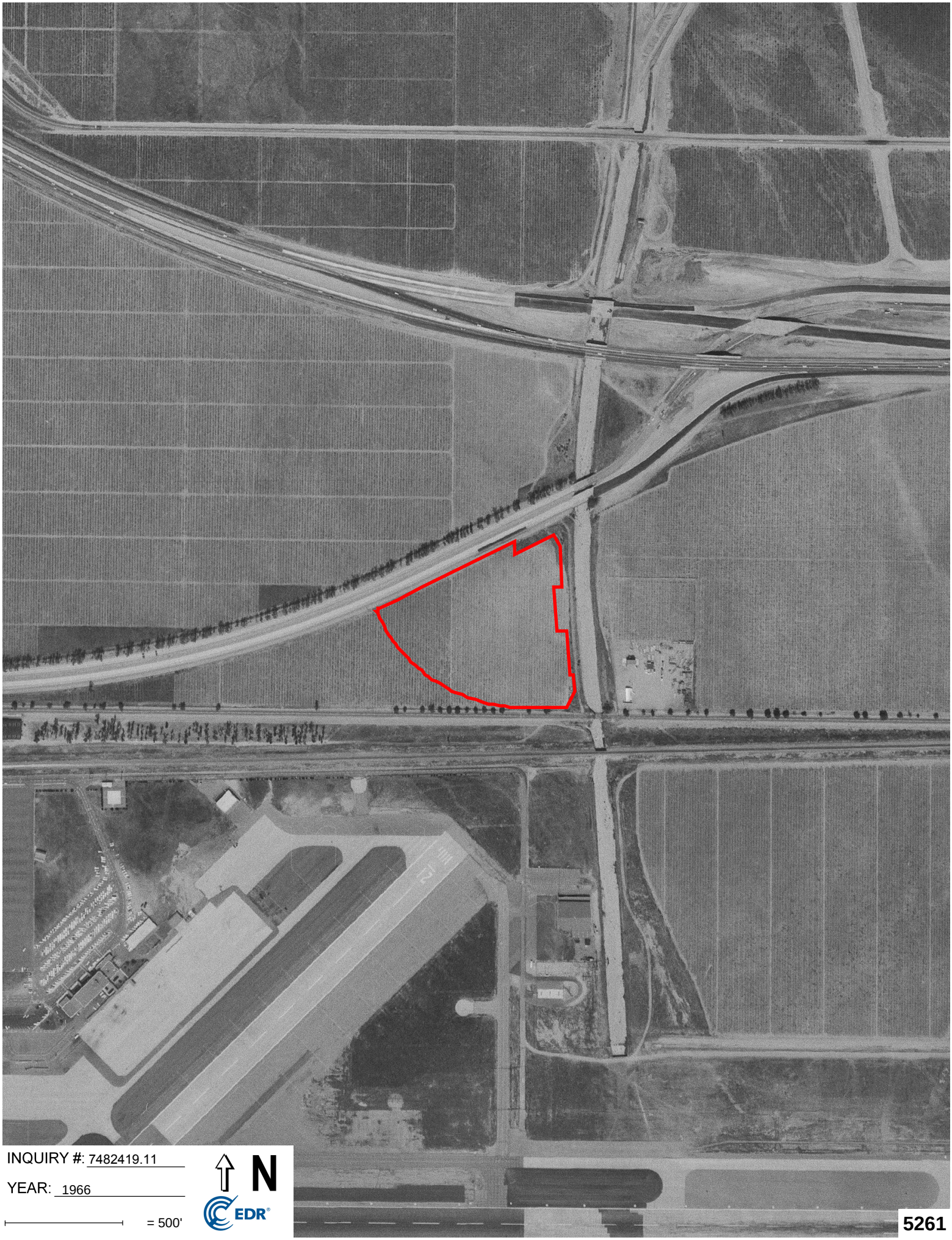
YEAR: 1975

= 500'

N

EDR

5260



INQUIRY #: 7482419.11

YEAR: 1966

= 500'

N

EDR

5261



INQUIRY #: 7482419.11

YEAR: 1953

= 500'

N

EDR

5262



INQUIRY #: 7482419.11

YEAR: 1949

= 500'

N

EDR

5263



INQUIRY #: 7482419.11

YEAR: 1938

= 500'

N

EDR

5264

APPENDIX D

INTERVIEWS

PETRA GEOSCIENCES, INC.
40880 County Center Dr., Suite M, Temecula, CA 92591 * (951) 600-9271 * (714) 549-8921

PHASE I USER/CLIENT QUESTIONNAIRE

The purpose of this questionnaire is to obtain information from the user / client regarding the Subject Property.

Date Sent to Client **October 27, 2023** Date Received from Client _____

A. SITE INFORMATION

1. Property Name/APN: **Ontario Hotel / APN 011-032-233**
2. Location (If a map is available, please include it): **10.5 Acres of undeveloped land at SE corner of E. Holt Blvd. & E. Guasti Rd., Ontario, CA**
3. Why is the Phase I required? (Development as a residential parcel, protection from CERCLA liability, etc?): Development as hotel
4. Please list all parties who will rely on the Phase I report: Diversified Pacific
5. Is there an Interview Contact for this job? (A current owner, operator, or someone with knowledge of the history and/or processes occurring at the site). ☑ Yes ☐ No

   If yes, please provide the following information:
   Person to be interviewed: Judy Lee
   Title/Company: President/JC Horizons LTD
   Phone number and/or email address: (626) 695-790
   judy-jchorizon@jchorizonsltd.com
6. Do you have any reports for this job (such as previous Phase I's, biology reports, cultural resource reports, geotechnical reports, etc.) ☑ Yes ☐ No

   If yes, please provide them for Petra to review. *Date Received from Client*_____
7. As part of our assessment, Petra contacts local agencies to obtain miscellaneous information about the project site such as previous investigations, zoning, and flood zone. Do you have any current restrictions regarding Petra contacting these agencies?

   ☐ Yes ☑ No

   If yes, please contact us to discuss further.

B. SITE ACESS

1. Does Petra have access to the property at this time? ☑ Yes ☐ No
2. Are there any access restrictions such as a locked gate or required insurance forms? Certificate of Insurance needed.
   There is a gate surrounding the property. Enter from the southeast corner adacent to the flood control channel on Guasti Road.
3. Is there a site manager that Petra needs to contact prior to visiting the site? No, just give Diversified (Nolan Leggio) 48 hr notice.

PETRA GEOSCIENCES, INC.
40880 County Center Dr., Suite M, Temecula, CA 92591 * (951) 600-9271 * (714) 549-8921

C. LANDOWNER LIABILITY PROTECTIONS

In order to qualify for one of the Landowner Liability Protections offered by the Small Business liability Relief and Brownfields Revitalization of 2001 (the "Brownfields Amendments"), the client must provide the following information (if available) to the environmental professional. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete.

1. Did a search of the land title records identify any environmental liens filed or recorded against the subject property under federal, tribal, state, or local law? (40 CFR 312.25) ☐ Yes ☑ No

   If no, have you or will you conduct a search for any environmental cleanup liens against the property that are filed or recorded in a registry? ☑ Yes ☐ No

   If yes, please provide Petra with this information. A title report has been provided

   If no, do you require Petra to complete this task, which requires an additional fee? ☑ Yes ☐ No

2. Did a search of the land title records identify land use limitations (AULs), such as engineering controls, land use restrictions, or institutional controls that are in place at the subject site and/or have been recorded against the subject property under federal, tribal, state, or local law? (40 CFR 312.25) ☐ Yes ☑ No

   If no, have you or will you conduct a search for any AULs against the property that are filed or recorded in a registry? ☑ Yes ☐ No

   If yes, please provide Petra with this information. _____

   If no, do you require Petra to complete this task, which requires an additional fee? ☑ Yes ☐No

3. As the User of this Environmental Site Assessment, do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the potential chemicals and processes used by this type of business? (40 CFR 312.28) ☐ Yes ☑ No

   If yes, please provide Petra with this information. _____

4. Does the purchase price being paid for the subject property reasonably reflect the fair market value of the property? (40 CFR 312.29) ☑ Yes ☐ No

   If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination or any environmental concerns are known or believed to be present at the property?

   ☐ Yes ☐ No

   If yes, please provide Petra with that information. _____

5. Are you aware of commonly known or reasonably ascertainable information about the subject property that would help the environmental professional to identify conditions indicative of hazardous materials/chemical releases or threatened releases? (40 CFR 312.30) For example,

   A. Do you know the past uses of the property? ☐ Yes ☑ No

   If yes, please provide Petra with the information. _____

   B. Do you know of specific chemicals that are present or once were present at the subject property? ☐ Yes ☑ No

   If yes, please provide Petra with the information. _____

   C. Do you know of spills or other chemical releases that have taken place at the subject property? ☐ Yes ☑ No

   If yes, please provide Petra with the information. _____

   D. Do you know of any environmental cleanups that have taken place at the subject property or adjacent properties? ☐ Yes ☑ No

   If yes, please provide Petra with the information. _____

6. As the user of this ESA, based on your knowledge and experience related to the property, are there any obvious indicators that point to the presence or likely presence of contamination at the subject property? (40 CFR 312.31) ☐ Yes ☑ No

   If yes, please provide Petra with the information. _____

User/Client Representative: Nick Foggia Date: 10/27/23
(Please sign and print name)

PETRA GEOSCIENCES, INC.
40880 County Center Dr., Suite M, Temecula, CA * (951) 600-9271 * (951) 719-1499

PHASE I PROPERTY OWNER INTERVIEW QUESTIONNAIRE

The purpose of this questionnaire is to obtain information from knowledgeable individuals regarding the Subject Site. This questionnaire will become part of the assessment report.

A. SITE INFORMATION

Project Number: **22-398** Property Location: **10.5 acres of vacant land at the SE corner of E. Holt Blvd. & E. Guasti Rd., Ontario, CA**

INTERVIEW INFORMATION

Date/Time: N/A ☐ In Person
Interviewer: N/A ☐ By Telephone, Number: _____
Person Interviewed: _____ ☐ By Facsimile, Number: _____
Title/Company: _____ ☐ Email: _____

1. What is your relationship to the property? Property owner

2. Do you have good knowledge regarding the uses and physical characteristics of the property?
☑Yes
☐No If not, who does? _____ Phone Number: _____

3. Do you have good knowledge regarding the activities/processes conducted at the property?
☑Yes
☐No If not, who does? _____ Phone Number: _____

B. PROPERTY INFORMATION

1. To the best of your knowledge, what are the current and past uses of the property? Please describe with approximate dates.

Vacant land since we purchased it in 2018.

2. To your knowledge, are there:

Hazardous substances present on the site? ☐Yes ☑No
Petroleum products present on the site? ☐Yes ☑No

If the preceding items are present, are there indications of any of the following:

An existing release? ☐Yes ☐No
A past release? ☐Yes ☐No
A threat of their release? ☐Yes ☐No

If yes to any of the above, please describe: _____

_____

_____

3. Are you aware of the presence of any of the following either currently or previously on the property or any nearby properties:

Potential Recognized Environmental Conditions	Site		Adjacent	
Hazardous substances?	☐ Yes	☑ No	☐ Yes	☑ No
Petroleum products?	☐ Yes	☒ No	☐ Yes	☑ No
Chemicals?	☐ Yes	☑ No	☐ Yes	☑ No
Asbestos or asbestos-containing materials?	☐ Yes	☑ No	☐ Yes	☑ No
Lead-based paints?	☐ Yes	☑ No	☐ Yes	☑ No
Underground storage tanks?	☐Yes	☑ No	☐ Yes	☑ No
Above-ground storage tanks?	☐ Yes	☑ No	☐ Yes	☑ No
Oil Wells?	☐Yes	☑No	☐ Yes	☑ No
Sumps?	☐Yes	☑ No	☐ Yes	☑ No
Industrial land use?	☐Yes	☑No	☐Yes	☑No
Landfill?	☐Yes	☑No	☐Yes	☑ No
Biosolids?	☐Yes	☑No	☐Yes	☑ No
Wastewater treatment?	☐Yes	☑No	☐Yes	☑No
Structure fire?	☐Yes	☑No	☐Yes	☑No

If yes to any of the above, please describe: _____

_____

_____

4. Are you aware of any current or previous uses of the property or nearby properties that would suggest the presence of the foregoing items, substances, or materials? ☐Yes ☑No

If yes to any of the above, please describe: _____

_____

5. To your knowledge, are there any utility corridors on the property? ☐Yes ☑No

If yes to any of the above, please describe: _____

_____

6. To your knowledge, are you aware of any of the following on the property:

Water Wells?	☐Yes ☑No	Disposal Wells?	☐Yes ☑No
Clarifiers?	☐Yes ☑No	Underground Irrigation Systems?	☐Yes ☑No

If yes to any of the above, please describe: _____

_____

7. Are there any occupants on the property? ☐Yes ☑No

If yes to any of the above, please describe: _____

_____

8. Do you have good knowledge regarding the identity of any existing documents relating to the property?
☐Yes
☑No If not, who does? _____ Phone Number: _____

9. To your knowledge, do any of the following documents exist with respect to the subject property? If yes, please name the document and comment upon whether it is available for review.

Document	Yes	No	Name/Availability
Environmental site assessment reports?	X		BBG Assessment / Feb 11, 2019
Environmental audit reports?		x	
Environmental permits?		x	
Storage tank registration?		x	
Material safety data sheets (MSDS)?		x	
Community right-to-know plans?		x	
Safety plans?		x	
Spill Prevention, Countermeasure, & Control Plans?		x	
Illness and Injury Prevention Plans?		x	
Reports regarding hydrogeologic conditions on the property or surrounding area?		X	
Hazardous waste generator notices or reports?		x	
Geotechnical studies?		x	

10. To your knowledge, do any of the following exist with respect to the subject property?

a. Notices or other correspondence from any government agency relating to past or current violations of environmental laws? ☐Yes ☑No

If yes to any of the above, please describe: _____
_____
_____

b. Notices or other correspondence from any government agency relating to environmental liens encumbering the property? ☐Yes ☑No

If yes to any of the above, please describe: _____
_____
_____

c. Pending, threatened, or past litigation or administrative proceedings relevant to hazardous substances, or petroleum products in, on, or from the property? ☐Yes ☑No

If yes to any of the above, please describe: _____
_____
_____

d. Notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products? ☐Yes ☑No

If yes to any of the above, please describe: _____
_____
_____

11. Please provide any additional information associated to this property.

None
_____
_____
_____
_____
_____
_____
_____
_____

Owner/Representative:  Date: 10/27/23
(please, sign and print name) Judy Lee

APPENDIX E

PRELIMINARY TITLE REPORT

Ticor Title - IE
4210 Riverwalk Pkwy, Suite 200

Title Report

4210 Riverwalk Pkwy, Suite 200
Riverside, CA 92505

Title Officer:
Email: TicorIE1@ticortitle.com
Phone No.:
File No.: TT4002374-SA

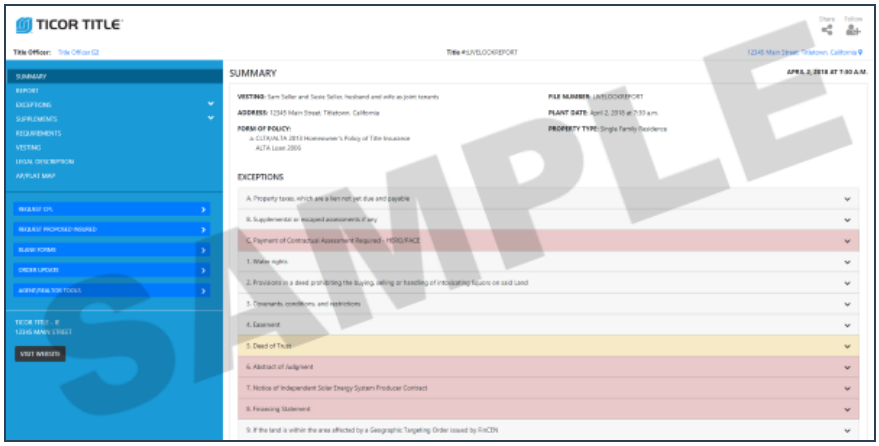
Property Address: Vacant Land, Ontario, CA

Introducing Ticor Title LiveLOOK

LiveLOOK title document delivery system is designed to provide 24/7 real-time access to all information related to a title insurance transaction.

Access title reports, exception documents, an easy-to-use summary page, and more, at your fingertips and your convenience.

To view your new Ticor Title LiveLOOK report, Click Here



Effortless, Efficient, Compliant, and Accessible

PRELIMINARY REPORT

TICOR TITLE COMPANY

4210 Riverwalk Pkwy, Suite 200
Riverside, CA 92505

Prelim Number:

TT4002374

Issuing Policies of **Chicago Title Insurance Company**

Order No.: TT4002374-SA

Escrow/Customer Phone:

Diversified Pacific
10621 Civic Center Drive
Rancho Cucamonga, CA 91730
Attn: Jake Sowder
Email: JSowder@divpac.com

Title Officer.: Salvador Alvarez
Phone No.: (951)343-3805
Fax No.: (951)848-9799
Email: TicorIE1@ticortitle.com

Ref No.:

Property: Vacant Land, Ontario, CA

In response to the application for a policy of title insurance referenced herein, **Ticor Title Company of California** hereby reports that it is prepared to issue, or cause to be issued, as of the date hereof, a policy or policies of title insurance describing the land and the estate or interest therein hereinafter set forth, insuring against loss which may be sustained by reason of a defect, lien or encumbrance not shown or referred to as an exception herein or not excluded from coverage pursuant to the printed Schedules, Exclusions from Coverage, and Conditions of said policy forms.

With respect to any contemplated owner's policy, the printed Exceptions and Exclusions from the coverage and Limitations on Covered Risks of said policy or policies are set forth in Attachment One. The policy to be issued may contain an arbitration clause. When the Amount of Insurance is less than that set forth in the arbitration clause, all arbitrable matters shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties. Limitations on Covered Risks applicable to the CLTA/ALTA Homeowner's Policy of Title Insurance, which establish a Deductible Amount and a Maximum Dollar Limit of Liability for certain coverages are also set forth in Attachment One. Copies of the policy forms should be read. They are available from the office which issued this report.

Please read the exceptions shown or referred to herein and the exceptions and exclusions set forth in Attachment One of this report carefully. The exceptions and exclusions are meant to provide you with notice of matters which are not covered under the terms of the title insurance policy and should be carefully considered.

It is important to note that this preliminary report is not a written representation as to the condition of title and may not list all liens, defects, and encumbrances affecting title to the land.

This report (and any supplements or amendments hereto) is issued solely for the purpose of facilitating the issuance of a policy of title insurance and no liability is assumed hereby. If it is desired that liability be assumed prior to the issuance of a policy of title insurance, a binder or commitment should be requested.

Countersigned By:

Authorized Officer or Agent
Kenji Kikuchi

Effective date: November 15, 2023 at 07:30 AM

The form of Policy or Policies of Title Insurance contemplated by this Report is:

ALTA Homeowner's Policy of Title Insurance 2021

1. The estate or interest in the Land hereinafter described or referred to covered by this Report is:

   A Fee

2. Title to said estate or interest at the date hereof is vested in:

   JC Horizon, Ltd., a California Corporation

3. The Land referred to in this Report is described as follows:

   SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

EXHIBIT A

Legal Description

For APN/Parcel ID(s): 0110-322-33-0-000

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA AND IS DESCRIBED AS FOLLOWS:

PARCEL 2 OF PARCEL MAP NO. 5660, IN THE CITY OF ONTARIO, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS PER PLAT RECORDED IN BOOK 69 OF PARCEL MAPS, PAGES 76 THROUGH 78, INCLUSIVE, RECORDS OF SAID COUNTY AS AMENDED BY MAP RECORDED IN BOOK 80 OF PARCEL MAPS, PAGES 56 THROUGH 58, INCLUSIVE, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

EXCEPTIONS

At the date hereof, items to be considered and exceptions to coverage in addition to the printed exceptions and exclusions in said policy form would be as follows:

1. Property taxes, including any personal property taxes and any assessments collected with taxes, are as follows:

   Tax Id No.: 0110-322-33-0-000
   Fiscal Year: 2023-2024
   1st Installment: $44,865.94, Open (Delinquent after December 10)
   Penalty: $4,486.60
   2nd Installment: $44,865.92, Open (Delinquent after April 10)
   Penalty and Cost: $4,496.60
   Homeowners Exempt: None
   Code Area: 004-080

2. Any liens or other assessments, bonds, or special district liens including without limitation, Community Facility Districts, that arise by reason of any local, City, Municipal or County Project or Special District.

3. The lien of supplemental or escaped assessments of property taxes, if any, made pursuant to the provisions of Chapter 3.5 (commencing with Section 75) or Part 2, Chapter 3, Articles 3 and 4, respectively, of the Revenue and Taxation Code of the State of California as a result of the transfer of title to the vestee named in Schedule A or as a result of changes in ownership or new construction occurring prior to Date of Policy.

4. Water rights, claims or title to water, whether or not disclosed by the public records.

5. Easement(s) in favor of the public over any existing roads lying within said Land.

6. The fact that the ownership of said land does not include rights of access to or from the street, highway, or freeway abutting said land, such rights having been relinquished by the document,

   Recording Date: April 17, 1946
   Recording No.: Book 1881, Page 477, Official Records
   Affects: said land more particularly described therein

   Said deed further contains a waiver in favor of the State of California of any claims for damages to said land by reason of the location, construction, landscaping or maintenance of a highway or freeway contiguous thereto.

7. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

   Granted to: San Bernardino County Flood Control District
   Purpose: flood control and water conservation
   Recording Date: September 12, 1951
   Recording No.: Book 2822, Page 335, Official Records
   Affects: said land more particularly described therein

8. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

   Granted to: The City of Ontario
   Purpose: public utilities
   Recording Date: April 7, 1966
   Recording No.: Book 6604, Page 153, Official Records
   Affects: said land more particularly described therein

9. All easements, offers and dedications as shown on the official map

   Parcel Map No.: 5660

10. Covenants, conditions and restrictions but omitting any covenants or restrictions, if any, including but not limited to those based upon age, race, color, religion, sex, gender, gender identity, gender expression, sexual orientation, marital status, national origin, ancestry, familial status, source of income, disability, veteran or military status, genetic information, medical condition, citizenship, primary language, and immigration status, as set forth in applicable state or federal laws, except to the extent that said covenant or restriction is permitted by applicable law, as set forth in the document

    Recording Date: July 26, 1984
    Recording No: 84-176925, Official Records

    Said covenants, conditions and restrictions provide that a violation thereof shall not defeat the lien of any mortgage or trust deed made in good faith and for value.

    Matters contained in that certain document

    Entitled: Assignment and Assumption of Declarant Rights and Obligations
    Recording Date: June 15, 1998
    Recording No.: 1998-0228785, Official Records

    Reference is hereby made to said document for full particulars.

11. The Land described herein is included within a project area of the Redevelopment Agency shown below, and that proceedings for the redevelopment of said project have been instituted under the Redevelopment Law (such redevelopment to proceed only after the adoption of the Redevelopment Plan) as disclosed by a document.

    Redevelopment Agency: City of Ontario Redevelopment Agency
    Recording Date: July 26, 2001
    Recording No.: 2001-301860, Official Records

    and Recording Date: November 5, 2007
    and Recording No: 2007-0615960, Official Records

12. A deed of trust to secure an indebtedness in the amount shown below,

    Amount: $4,000,000.00
    Dated: March 29, 2019
    Trustor/Grantor: JC Horizon Ltd., a California Corporation
    Trustee: Stewart Title of California, Inc
    Beneficiary: Golden Bank, National Association, a National Bank Association
    Loan No: 2008099
    Recording Date: April 5, 2019
    Recording No.: 2019-0105954, Official Records

    An agreement to modify the terms and provisions of said deed of trust as therein provided

    Executed by: JC Horizon Ltd., a California Corporation and Golden Bank, NA
    Recording Date: May 19, 2021
    Recording No.: 2021-0230979, Official Records

    An agreement to modify the terms and provisions of said deed of trust as therein provided

    Executed by: JC Horizon Ltd and Golden Bank, NA
    Recording Date: June 9, 2023
    Recording No.: 2023-0142795, Official Records

13. An assignment of all moneys due, or to become due as rental or otherwise from said Land, to secure payment of an indebtedness, shown below and upon the terms and conditions therein

    Amount: $4,000,000.00
    Assigned to: Golden Bank, National Association, a National Bank Association
    Assigned By: JC Horizon Ltd., a California Corporation
    Recording Date: April 5, 2019
    Recording No: 2019-0105955, Official Records

14. Matters which may be disclosed by an inspection and/or by a correct ALTA/ACSM Land Title Survey of said Land that is satisfactory to the Company, and/or by inquiry of the parties in possession thereof.

15. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other matters which a correct survey would disclose and which are not shown by the public records.

16. Any easements not disclosed by the Public Records as to matters affecting title to real property, whether or not said easements are visible and apparent.

17. Any rights of the parties in possession of a portion of, or all of, said Land, which rights are not disclosed by the Public Records.

    The Company will require, for review, a full and complete copy of any unrecorded agreement, contract, license and/or lease, together with all supplements, assignments and amendments thereto, before issuing any policy of title insurance without excepting this item from coverage.

    The Company reserves the right to except additional items and/or make additional requirements after reviewing said documents.

END OF EXCEPTIONS

PLEASE REFER TO THE "INFORMATIONAL NOTES" AND "REQUIREMENTS" SECTIONS WHICH FOLLOW FOR INFORMATION NECESSARY TO COMPLETE THIS TRANSACTION.

REQUIREMENTS

1. In order to complete this report, the Company requires a Statement of Information to be completed by the following party(s),

   Party(s): All Parties

   The Company reserves the right to add additional items or make further requirements after review of the requested Statement of Information.

   NOTE: The Statement of Information is necessary to complete the search and examination of title under this order. Any title search includes matters that are indexed by name only, and having a completed Statement of Information assists the Company in the elimination of certain matters which appear to involve the parties but in fact affect another party with the same or similar name. Be assured that the Statement of Information is essential and will be kept strictly confidential to this file.

2. The Company will require the following documents for review prior to the issuance of any title insurance predicated upon a conveyance or encumbrance from the limited partnership named below.

   Name: JC Horizon, Ltd., a California Corporation

   a. A complete copy of the limited partnership agreement and all amendments thereto.

   b. Satisfactory evidence that the partnership was validly formed and is in good standing

   The Company reserves the right to add additional items or make further requirements after review of the requested documentation.

3. Furnish for review a full and complete copy of any unrecorded agreement, contract, license and/or lease together with all supplements, assignments and amendments thereto, prior to the close of this transaction.

   The Company reserves the right to add additional items or make further requirements after review of the requested documentation.

4. The Company will require an affidavit signed by the seller/mortgagor certifying that there are no matters that could give rise to any defects, liens, encumbrances, adverse claims or other matters that would attach to the Land between the effective date of the report and the recording of the instruments creating the estate to be insured.

END OF REQUIREMENTS

INFORMATIONAL NOTES

1. Note: There are NO conveyances affecting said Land recorded within 24 months of the date of this report.

2. NOTE: Please contact your Title Officer to obtain the current recording fees.

3. NOTE: The policy of title insurance will include an arbitration provision. The Company or the insured may demand arbitration. Arbitrable matters may include, but are not limited to, any controversy or claim between the Company and the insured arising out of or relating to this policy, any service of the Company in connection with its issuance or the breach of a policy provision or other obligation. Please ask your escrow or title officer for a sample copy of the policy to be issued if you wish to review the arbitration provisions and any other provisions pertaining to your Title Insurance coverage.

4. Notice: Please be aware that due to the conflict between federal and state laws concerning the cultivation, distribution, manufacture or sale of marijuana, the Company is not able to close or insure any transaction involving Land that is associated with these activities.

5. Pursuant to Government Code Section 27388.1, as amended and effective as of 1-1-2018, a Documentary Transfer Tax (DTT) Affidavit may be required to be completed and submitted with each document when DTT is being paid or when an exemption is being claimed from paying the tax. If a governmental agency is a party to the document, the form will not be required. DTT Affidavits may be available at a Tax Assessor-County Clerk-Recorder.

END OF INFORMATIONAL NOTES

FIDELITY NATIONAL FINANCIAL
PRIVACY NOTICE

Effective January 1, 2023

Fidelity National Financial, Inc. and its majority-owned subsidiary companies (collectively, "FNF," "our," or "we") respect and are committed to protecting your privacy. This Privacy Notice explains how we collect, use, and protect personal information, when and to whom we disclose such information, and the choices you have about the use and disclosure of that information.

A limited number of FNF subsidiaries have their own privacy notices. If a subsidiary has its own privacy notice, the privacy notice will be available on the subsidiary's website and this Privacy Notice does not apply.

Collection of Personal Information

FNF may collect the following categories of Personal Information:

- contact information (*e.g.*, name, address, phone number, email address);
- demographic information (*e.g.*, date of birth, gender, marital status);
- identity information (*e.g.* Social Security Number, driver's license, passport, or other government ID number);
- financial account information (*e.g.* loan or bank account information); and
- other personal information necessary to provide products or services to you.

We may collect Personal Information about you from:

- information we receive from you or your agent;
- information about your transactions with FNF, our affiliates, or others; and
- information we receive from consumer reporting agencies and/or governmental entities, either directly from these entities or through others.

Collection of Browsing Information

FNF automatically collects the following types of Browsing Information when you access an FNF website, online service, or application (each an "FNF Website") from your Internet browser, computer, and/or device:

- Internet Protocol (IP) address and operating system;
- browser version, language, and type;
- domain name system requests; and
- browsing history on the FNF Website, such as date and time of your visit to the FNF Website and visits to the pages within the FNF Website.

Like most websites, our servers automatically log each visitor to the FNF Website and may collect the Browsing Information described above. We use Browsing Information for system administration, troubleshooting, fraud investigation, and to improve our websites. Browsing Information generally does not reveal anything personal about you, though if you have created a user account for an FNF Website and are logged into that account, the FNF Website may be able to link certain browsing activity to your user account.

Other Online Specifics

Cookies. When you visit an FNF Website, a "cookie" may be sent to your computer. A cookie is a small piece of data that is sent to your Internet browser from a web server and stored on your computer's hard drive. Information gathered using cookies helps us improve your user experience. For example, a cookie can help the website load properly or can customize the display page based on your browser type and user preferences. You can choose whether or not to accept cookies by changing your Internet browser settings. Be aware that doing so may impair or limit some functionality of the FNF Website.

Web Beacons. We use web beacons to determine when and how many times a page has been viewed. This information is used to improve our websites.

Do Not Track. Currently our FNF Websites do not respond to "Do Not Track" features enabled through your browser.

Links to Other Sites. FNF Websites may contain links to unaffiliated third-party websites. FNF is not responsible for the privacy practices or content of those websites. We recommend that you read the privacy policy of every website you visit.

Use of Personal Information

FNF uses Personal Information for three main purposes:

- To provide products and services to you or in connection with a transaction involving you.
- To improve our products and services.
- To communicate with you about our, our affiliates', and others' products and services, jointly or independently.

When Information Is Disclosed

We may disclose your Personal Information and Browsing Information in the following circumstances:

- to enable us to detect or prevent criminal activity, fraud, material misrepresentation, or nondisclosure;
- to affiliated or nonaffiliated service providers who provide or perform services or functions on our behalf and who agree to use the information only to provide such services or functions;
- to affiliated or nonaffiliated third parties with whom we perform joint marketing, pursuant to an agreement with them to jointly market financial products or services to you;
- to law enforcement or authorities in connection with an investigation, or in response to a subpoena or court order; or
- in the good-faith belief that such disclosure is necessary to comply with legal process or applicable laws, or to protect the rights, property, or safety of FNF, its customers, or the public.

The law does not require your prior authorization and does not allow you to restrict the disclosures described above. Additionally, we may disclose your information to third parties for whom you have given us authorization or consent to make such disclosure. We do not otherwise share your Personal Information or Browsing Information with nonaffiliated third parties, except as required or permitted by law.

We reserve the right to transfer your Personal Information, Browsing Information, and any other information, in connection with the sale or other disposition of all or part of the FNF business and/or assets, or in the event of bankruptcy, reorganization, insolvency, receivership, or an assignment for the benefit of creditors. By submitting Personal Information and/or Browsing Information to FNF, you expressly agree and consent to the use and/or transfer of the foregoing information in connection with any of the above described proceedings.

Security of Your Information

We maintain physical, electronic, and procedural safeguards to protect your Personal Information.

Choices With Your Information

Whether you submit Personal Information or Browsing Information to FNF is entirely up to you. If you decide not to submit Personal Information or Browsing Information, FNF may not be able to provide certain services or products to you.

For California Residents: We will not share your Personal Information or Browsing Information with nonaffiliated third parties, except as permitted by California law. For additional information about your California privacy rights, please visit the "California Privacy" link on our website (https://fnf.com/pages/californiaprivacy.aspx) or call (888) 413-1748.

For Nevada Residents: We are providing this notice pursuant to state law. You may be placed on our internal Do Not Call List by calling FNF Privacy at (888) 714-2710 or by contacting us via the information set forth at the end of this Privacy Notice. For further information concerning Nevada's telephone solicitation law, you may contact: Bureau of Consumer Protection, Office of the Nevada Attorney General, 555 E. Washington St., Suite 3900, Las Vegas, NV 89101; Phone number: (702) 486-3132; email: aginquiries@ag.state.nv.us.

For Oregon Residents: We will not share your Personal Information or Browsing Information with nonaffiliated third parties for marketing purposes, except after you have been informed by us of such sharing and had an opportunity to indicate that you do not want a disclosure made for marketing purposes.

For Vermont Residents: We will not disclose information about your creditworthiness to our affiliates and will not disclose your personal information, financial information, credit report, or health information to nonaffiliated third parties to market to you, other than as permitted by Vermont law, unless you authorize us to make those disclosures.

For Virginia Residents: For additional information about your Virginia privacy rights, please email privacy@fnf.com or call (888) 714-2710.

Information From Children

The FNF Websites are not intended or designed to attract persons under the age of eighteen (18). We do not collect Personal Information from any person that we know to be under the age of thirteen (13) without permission from a parent or guardian.

International Users

FNF's headquarters is located within the United States. If you reside outside the United States and choose to provide Personal Information or Browsing Information to us, please note that we may transfer that information outside of your country of residence. By providing FNF with your Personal Information and/or Browsing Information, you consent to our collection, transfer, and use of such information in accordance with this Privacy Notice.

FNF Website Services for Mortgage Loans

Certain FNF companies provide services to mortgage loan servicers, including hosting websites that collect customer information on behalf of mortgage loan servicers (the "Service Websites"). The Service Websites may contain links to both this Privacy Notice and the mortgage loan servicer or lender's privacy notice. The sections of this Privacy Notice titled When Information is Disclosed, Choices with Your Information, and Accessing and Correcting Information do not apply to the Service Websites. The mortgage loan servicer or lender's privacy notice governs use, disclosure, and access to your Personal Information. FNF does not share Personal Information collected through the Service Websites, except as required or authorized by contract with the mortgage loan servicer or lender, or as required by law or in the good-faith belief that such disclosure is necessary: to comply with a legal process or applicable law, to enforce this Privacy Notice, or to protect the rights, property, or safety of FNF or the public.

Your Consent To This Privacy Notice; Notice Changes

By submitting Personal Information and/or Browsing Information to FNF, you consent to the collection and use of the information in accordance with this Privacy Notice. We may change this Privacy Notice at any time. The Privacy Notice's effective date will show the last date changes were made. If you provide information to us following any change of the Privacy Notice, that signifies your assent to and acceptance of the changes to the Privacy Notice.

Accessing and Correcting Information; Contact Us

If you have questions or would like to correct your Personal Information, visit FNF's Privacy Inquiry Website or contact us by phone at (888) 714-2710, by email at privacy@fnf.com, or by mail to:

Fidelity National Financial, Inc.
601 Riverside Avenue,
Jacksonville, Florida 32204
Attn: Chief Privacy Officer

FIDELITY NATIONAL FINANCIAL
CALIFORNIA PRIVACY NOTICE

Fidelity National Financial, Inc. and its majority-owned subsidiary companies (collectively, "FNF," "our," or "we") respect and are committed to protecting your privacy. This California Privacy Notice explains how we collect, use, and disclose Personal Information, when and to whom we disclose such information, and the rights you, as a California resident ("Consumer"), have regarding your Personal Information ("California Privacy Rights"). "Personal Information" means information that identifies, relates to, describes, and is reasonably capable of being associated with, or could reasonably be linked, directly or indirectly, with a particular consumer or household. If FNF has collected, used, or disclosed your Personal Information in relation to a job application or employment, independent contractor, officer, owner, or director relationship with FNF, FNF's practices are discussed in our Notice at Collection for Prospective Employees, available at ***Prospective California Employees***.

Some subsidiaries maintain separate California Privacy Notices or privacy statements. If a subsidiary has a separate California Privacy Notice, it will be available on the subsidiary's website, and this California Privacy Notice does not apply.

Collection of categories of Personal Information:

In the preceding twelve (12) months FNF has collected, and will continue to collect, the following categories of Personal Information from you:

- Identifiers such as name, address, telephone number, IP address, email address, account name, social security number, driver's license number, state identification card, passport number, financial information, date of birth, or other similar identifiers;
- Characteristics of protected classifications under California or Federal law;
- Commercial information, including records of personal property, products or services purchased, or other purchasing or consuming histories;
- Internet or other electronic network activity information including, but not limited to browsing history on FNF websites, and information regarding a Consumer's interaction with an FNF website;
- Geolocation data;
- Professional or employment information;
- Education Information.

This Personal Information is collected from the following sources:

- Information we receive from you on applications or other forms;
- Information about your transactions with FNF, our affiliates, or others;
- Information we receive from consumer reporting agencies and/or governmental entities, either directly from these entities, or from internet service providers, data analytics providers, and social networks;
- Information from the use of our websites and mobile applications;
- Information we receive directly from you related to doing business with us.

This Personal Information is collected for the following business purposes:

- To provide products and services to you or in connection with a transaction involving you;
- To perform a contract between FNF and the Consumer;
- To improve our products and services;
- To comply with legal obligations;
- To protect against fraudulent or illegal activity;

- To communicate with you about FNF or our affiliates;
- To maintain an account with FNF or our affiliates;
- To provide, support, personalize, and develop our websites, products, and services;
- To directly market our products to consumers;
- As described to you when collecting your Personal Information or as otherwise set forth in the California Consumer Privacy Act.

Disclosures of Personal Information for a business purpose:

In the preceding twelve (12) months FNF has disclosed, and will continue to disclose, the categories of Personal Information listed above for a business purpose. We may disclose Personal Information for a business purpose to the following categories of third parties:

- FNF affiliates and subsidiaries;
- Non-affiliated third parties, with your prior consent;
- Businesses in connection with the sale or other disposition of all or part of the FNF business and/or assets;
- Service Providers and non-affiliated third parties such as internet service providers, data analytics providers, and social networks;
- Law enforcement or authorities in connection with an investigation, or in response to a subpoena or court order.

Sale of Personal Information:

In the preceding twelve (12) months, FNF has not sold or shared Personal Information. FNF does not sell or share Personal Information.

Retention Periods:

Due to the breadth and variety of data collected by FNF, it is not possible for us to provide you with a comprehensive list of timeframes during which we retain each category of Personal Information. FNF retains categories of information as reasonably necessary to satisfy the purpose for which we collect the information. This time period varies depending on the purpose for which we collected the information, the nature and frequency of our interactions and relationship with you, whether we have a legal basis to continue retaining the information, industry practices, the value and sensitivity of the information, and state and federal recordkeeping requirements.

Personal Information of minors:

FNF does not knowingly collect the Personal Information of minors. FNF does not sell or share the information of consumers under sixteen (16) years of age.

Sensitive Personal Information:

FNF does not use or disclose sensitive Personal Information for any purposes other than those specified in the California Consumer Privacy Act.

Right to know:

Consumers have a right to know about Personal Information collected, used, disclosed, shared, or sold, including the categories of such Personal Information, as well as the purpose for such collection, use, disclosure, sharing, or selling, categories of third parties to whom Personal Information is disclosed, shared or sold, and the specific pieces of Personal Information collected about the Consumer. Consumers have the right to request FNF disclose what Personal Information it collected, used, and disclosed in the past twelve (12) months, or since January 1, 2022.

Right to request deletion:

Consumers have a right to request the deletion of their Personal Information, subject to certain exceptions.

Right to Correct:

Consumers have the right to correct inaccurate Personal Information.

Right to non-discrimination:

Consumers have a right not to be discriminated against because of exercising their consumer privacy rights. We will not discriminate against Consumers for exercising any of their California Privacy Rights.

Privacy Requests:

To exercise any of your California Privacy Rights, or if acting as an authorized agent on behalf of another individual, please visit *California Privacy Request*, call us Toll Free at 888-413-1748, or write to the address at the end of this notice.

Upon making a California Privacy Request, FNF will verify the Consumer's identity by requiring an account, loan, escrow number, or other identifying information from the Consumer.

The above-rights are subject to any applicable rights and obligations including both Federal and California exemptions rendering FNF, or Personal Information collected by FNF, exempt from certain CCPA requirements.

A Consumer may use an Authorized Agent to submit any CCPA request. Authorized agents' requests will be processed like any other CCPA request, but FNF will also require the Consumer provide the agent written permission to make the request and verify his or her identity with FNF.

FNF website services for mortgage loans:

Certain FNF companies provide services to mortgage loan servicers, including hosting websites that collect customer information on behalf of mortgage loan servicers (the "Service Websites"). The Service Websites may contain links to both this Privacy Notice and the mortgage loan servicer or lender's privacy notice. The sections of this Privacy Notice describing the categories, sources, and uses of your Personal Information do not apply to the Service Websites. The mortgage loan servicer or lender's privacy notice governs use, disclosure, and access to your Information. FNF does not share Information collected through the Service Websites, except (1) as required or authorized by contract with the mortgage loan servicer or lender, or (2) as required by law or in the good-faith belief that such disclosure is necessary to comply with a legal process or applicable law, to enforce this Privacy Notice, or to protect the rights, property, or safety of FNF or the public.

California Privacy Notice - Effective Date:

This California Privacy Notice was last updated on January 1, 2023.

Contact for more information:

For questions or concerns about FNF's California Privacy Notice and privacy practices, or to exercise any of your California Privacy Rights, please visit ***California Privacy***, call Toll Free 888-413-1748, or contact us by mail at the below address.

Fidelity National Financial, Inc.
601 Riverside Avenue
Jacksonville, Florida 32204
Attn: Chief Privacy Officer

Notice of Available Discounts

Pursuant to Section 2355.3 in Title 10 of the California Code of Regulations Fidelity National Financial, Inc. and its subsidiaries ("FNF") must deliver a notice of each discount available under our current rate filing along with the delivery of escrow instructions, a preliminary report or commitment. Please be aware that the provision of this notice does not constitute a waiver of the consumer's right to be charged the filed rate. As such, your transaction may not qualify for the below discounts.

You are encouraged to discuss the applicability of one or more of the below discounts with a Company representative. These discounts are generally described below; consult the rate manual for a full description of the terms, conditions and requirements for such discount. These discounts only apply to transactions involving services rendered by the FNF Family of Companies. This notice only applies to transactions involving property improved with a one-to-four family residential dwelling.

Not all discounts are offered by every FNF Company. The discount will only be applicable to the FNF Company as indicated by the named discount.

FNF Underwritten Title Companies	**Underwritten by FNF Underwriters**
CTC - Chicago Title Company	CTIC - Chicago Title Insurance Company
CLTC - Commonwealth Land Title Company	CLTIC - Commonwealth Land Title Insurance Company
FNTC - Fidelity National Title Company of California	FNTIC - Fidelity National Title Insurance Company
FNTCCA - Fidelity National Title Company of California	FNTIC - Fidelity National Title Insurance Company
TICOR - Ticor Title Company of California	CTIC - Chicago Title Insurance Company
LTC - Lawyer's Title Company	CLTIC - Commonwealth Land Title Insurance Company
SLTC - ServiceLink Title Company	CTIC - Chicago Title Insurance Company

Available Discounts

DISASTER LOANS (CTIC, CLTIC, FNTIC)
The charge for a Lender's Policy (Standard or Extended coverage) covering the financing or refinancing by an owner of record, within twenty-four (24) months of the date of a declaration of a disaster area by the government of the United States or the State of California on any land located in said area, which was partially or totally destroyed in the disaster, will be fifty percent (50%) of the appropriate title insurance rate.

CHURCHES OR CHARITABLE NON-PROFIT ORGANIZATIONS (CTIC, FNTIC)
On properties used as a church or for charitable purposes within the scope of the normal activities of such entities, provided said charge is normally the church's obligation the charge for an owner's policy shall be fifty percent (50%) to seventy percent (70%) of the appropriate title insurance rate, depending on the type of coverage selected. The charge for a lender's policy shall be forty percent (40%) to fifty percent (50%) of the appropriate title insurance rate, depending on the type of coverage selected.

WIRE SAFE™ | Inquire before you wire!

WIRE FRAUD ALERT

This Notice is not intended to provide legal or professional advice.
If you have any questions, please consult with a lawyer.

All parties to a real estate transaction are targets for wire fraud and many have lost hundreds of thousands of dollars because they simply relied on the wire instructions received via email, without further verification. **If funds are to be wired in conjunction with this real estate transaction, we strongly recommend verbal verification of wire instructions through a known, trusted phone number prior to sending funds.**

In addition, the following non-exclusive self-protection strategies are recommended to minimize exposure to possible wire fraud.

- **NEVER RELY** on emails purporting to change wire instructions. Parties to a transaction rarely change wire instructions in the course of a transaction.
- **ALWAYS VERIFY** wire instructions, specifically the ABA routing number and account number, by calling the party who sent the instructions to you. DO NOT use the phone number provided in the email containing the instructions, use phone numbers you have called before or can otherwise verify. **Obtain the number of relevant parties to the transaction as soon as an escrow account is opened.** DO NOT send an email to verify as the email address may be incorrect or the email may be intercepted by the fraudster.
- **USE COMPLEX EMAIL PASSWORDS** that employ a combination of mixed case, numbers, and symbols. Make your passwords greater than eight (8) characters. Also, change your password often and do NOT reuse the same password for other online accounts.
- **USE MULTI-FACTOR AUTHENTICATION** for email accounts. Your email provider or IT staff may have specific instructions on how to implement this feature.

For more information on wire-fraud scams or to report an incident, please refer to the following links:

Federal Bureau of Investigation:
http://www.fbi.gov

Internet Crime Complaint Center:
http://www.ic3.gov

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ATTACHMENT ONE

CALIFORNIA LAND TITLE ASSOCIATION
STANDARD COVERAGE POLICY - 1990 (11-09-18)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building or zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating (i) the occupancy, use, or enjoyment of the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien, or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.

   (b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.
3. Defects, liens, encumbrances, adverse claims or other matters:
   (a) whether or not recorded in the public records at Date of Policy, but created, suffered, assumed or agreed to by the insured claimant;
   (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;
   (c) resulting in no loss or damage to the insured claimant;
   (d) attaching or created subsequent to Date of Policy; or
   (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the insured mortgage or for the estate or interest insured by this policy.
4. Unenforceability of the lien of the insured mortgage because of the inability or failure of the insured at Date of Policy, or the inability or failure of any subsequent owner of the indebtedness, to comply with the applicable doing business laws of the state in which the land is situated.
5. Invalidity or unenforceability of the lien of the insured mortgage, or claim thereof, which arises out of the transaction evidenced by the insured mortgage and is based upon usury or any consumer credit protection or truth in lending law.
6. Any claim, which arises out of the transaction vesting in the insured the estate or interest insured by this policy or the transaction creating the interest of the insured lender, by reason of the operation of federal bankruptcy, state insolvency or similar creditors' rights laws.

EXCEPTIONS FROM COVERAGE - SCHEDULE B, PART I

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records.

   Proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.
2. Any facts, rights, interests, or claims which are not shown by the public records but which could be ascertained by an inspection of the land or which may be asserted by persons in possession thereof.
3. Easements, liens or encumbrances, or claims thereof, not shown by the public records.
4. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the public records.
6. Any lien or right to a lien for services, labor or material unless such lien is shown by the public records at Date of Policy.

EXCEPTIONS FROM COVERAGE - SCHEDULE B, PART II

(*Variable exceptions such as taxes, easements, CC&R's, etc., are inserted here*)

ATTACHMENT ONE
(CONTINUED)

CALIFORNIA LAND TITLE ASSOCIATION
STANDARD COVERAGE OWNER'S POLICY (02-04-22)
EXCLUSIONS FROM COVERAGE

The following matters are excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. a. any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) that restricts, regulates, prohibits, or relates to:
   i. the occupancy, use, or enjoyment of the Land;
   ii. the character, dimensions, or location of any improvement on the Land;
   iii. the subdivision of land; or
   iv. environmental remediation or protection.
   b. any governmental forfeiture, police, regulatory, or national security power.
   c. the effect of a violation or enforcement of any matter excluded under Exclusion 1.a. or 1.b.

   Exclusion 1 does not modify or limit the coverage provided under Covered Risk 5 or 6.
2. Any power of eminent domain. Exclusion 2 does not modify or limit the coverage provided under Covered Risk 7.
3. Any defect, lien, encumbrance, adverse claim, or other matter:
   a. created, suffered, assumed, or agreed to by the Insured Claimant;
   b. not Known to the Company, not recorded in the Public Records at the Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
   c. resulting in no loss or damage to the Insured Claimant;
   d. attaching or created subsequent to the Date of Policy (Exclusion 3.d. does not modify or limit the coverage provided under Covered Risk 9 or 10); or
   e. resulting in loss or damage that would not have been sustained if consideration sufficient to qualify the Insured named in Schedule A as a bona fide purchaser had been given for the Title at the Date of Policy.
4. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights law, that the transaction vesting the Title as shown in Schedule A is a:
   a. fraudulent conveyance or fraudulent transfer;
   b. voidable transfer under the Uniform Voidable Transactions Act; or
   c. preferential transfer:
      i. to the extent the instrument of transfer vesting the Title as shown in Schedule A is not a transfer made as a contemporaneous exchange for new value; or
      ii. for any other reason not stated in Covered Risk 9.b.
5. Any claim of a PACA-PSA Trust. Exclusion 5 does not modify or limit the coverage provided under Covered Risk 8.
6. Any lien on the Title for real estate taxes or assessments imposed or collected by a governmental authority that becomes due and payable after the Date of Policy.

   Exclusion 6 does not modify or limit the coverage provided under Covered Risk 2.b.
7 Any discrepancy in the quantity of the area, square footage, or acreage of the Land or of any improvement to the Land.

EXCEPTIONS FROM COVERAGE

Some historical land records contain Discriminatory Covenants that are illegal and unenforceable by law. This policy treats any Discriminatory Covenant in a document referenced in Schedule B as if each Discriminatory Covenant is redacted, repudiated, removed, and not republished or recirculated. Only the remaining provisions of the document are excepted from coverage.

This policy does not insure against loss or damage and the Company will not pay costs, attorneys' fees, or expenses resulting from the terms and conditions of any lease or easement identified in Schedule A, and the following matters:

PART I

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records at Date of Policy but that could be (a) ascertained by an inspection of the Land, or (b) asserted by persons or parties in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records at Date of Policy.
4. Any encroachment, encumbrance, violation, variation, easement, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records at Date of Policy.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor, material or equipment unless such lien is shown by the Public Records at Date of Policy.
7. Any claim to (a) ownership of or rights to minerals and similar substances, including but not limited to ores, metals, coal, lignite, oil, gas, uranium, clay, rock, sand, and gravel located in, on, or under the Land or produced from the Land, whether such ownership or rights arise by lease, grant, exception, conveyance, reservation, or otherwise; and (b) any rights, privileges, immunities, rights of way, and easements associated therewith or appurtenant thereto, whether or not the interests or rights excepted in (a) or (b) appear in the Public Records or are shown in Schedule B.

PART II

(*Variable exceptions such as taxes, easements, CC&R's, etc., are inserted here*)

ATTACHMENT ONE
(CONTINUED)

CLTA/ALTA HOMEOWNER'S POLICY OF TITLE INSURANCE (7-01-21)
EXCLUSIONS FROM COVERAGE

The following matters are excluded from the coverage of this policy and We will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. a. any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) that restricts, regulates, prohibits, or relates to:
   i. the occupancy, use, or enjoyment of the Land;
   ii. the character, dimensions, or location of any improvement on the Land;
   iii. the subdivision of land; or
   iv. environmental remediation or protection.
   b. any governmental forfeiture, police, or regulatory, or national security power.
   c. the effect of a violation or enforcement of any matter excluded under Exclusion 1.a. or 1.b.

   Exclusion 1 does not modify or limit the coverage provided under Covered Risk 8.a., 14, 15, 16, 18, 19, 20, 23, or 27.
2. Any power to take the Land by condemnation. Exclusion 2 does not modify or limit the coverage provided under Covered Risk 17.
3. Any defect, lien, encumbrance, adverse claim, or other matter:
   a. created, suffered, assumed, or agreed to by You;
   b. not Known to Us, not recorded in the Public Records at the Date of Policy, but Known to You and not disclosed in writing to Us by You prior to the date You became an Insured under this policy;
   c. resulting in no loss or damage to You;
   d. attaching or created subsequent to the Date of Policy (Exclusion 3.d. does not modify or limit the coverage provided under Covered Risk 5, 8.f., 25, 26, 27, 28, or 32); or
   e. resulting in loss or damage that would not have been sustained if You paid consideration sufficient to qualify You as a bona fide purchaser of the Title at the Date of Policy.
4. Lack of a right:
   a. to any land outside the area specifically described and referred to in Item 3 of Schedule A; and
   b. in any street, road, avenue, alley, lane, right-of-way, body of water, or waterway that abut the Land.

   Exclusion 4 does not modify or limit the coverage provided under Covered Risk 11 or 21.
5. The failure of Your existing structures, or any portion of Your existing structures, to have been constructed before, on, or after the Date of Policy in accordance with applicable building codes. Exclusion 5 does not modify or limit the coverage provided under Covered Risk 14 or 15.
6. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights law, that the transfer of the Title to You is a:
   a. fraudulent conveyance or fraudulent transfer;
   b. voidable transfer under the Uniform Voidable Transactions Act; or
   c. preferential transfer:
      i. to the extent the instrument of transfer vesting the Title as shown in Schedule A is not a transfer made as a contemporaneous exchange for new value; or
      ii. for any other reason not stated in Covered Risk 30.
7. Contamination, explosion, fire, flooding, vibration, fracturing, earthquake, or subsidence.
8. Negligence by a person or an entity exercising a right to extract or develop oil, gas, minerals, groundwater, or any other subsurface substance.
9. Any lien on Your Title for real estate taxes or assessments, imposed or collected by a governmental authority that becomes due and payable after the Date of Policy. Exclusion 9 does not modify or limit the coverage provided under Covered Risk 8.a or 27.
10. Any discrepancy in the quantity of the area, square footage, or acreage of the Land or of any improvement to the Land.

LIMITATIONS ON COVERED RISKS

Your insurance for the following Covered Risks is limited on the Owner's Coverage Statement as follows:

- For Covered Risk 16, 18, 19 and 21 Your Deductible Amount and Our Maximum Dollar Limit of Liability shown in Schedule A.

The deductible amounts and maximum dollar limits shown on Schedule A are as follows:

	Your Deductible Amount	Our Maximum Dollar Limit of Liability
Covered Risk 16:	1.00% of Policy Amount Shown in Schedule A or $2,500.00 (whichever is less)	$ 10,000.00
Covered Risk 18:	1.00% of Policy Amount Shown in Schedule A or $5,000.00 (whichever is less)	$ 25,000.00
Covered Risk 19:	1.00% of Policy Amount Shown in Schedule A or $5,000.00 (whichever is less)	$ 25,000.00
Covered Risk 21:	1.00% of Policy Amount Shown in Schedule A or $2,500.00 (whichever is less)	$ 5,000.00

ATTACHMENT ONE
(CONTINUED)

CLTA/ALTA HOMEOWNER'S POLICY OF TITLE INSURANCE (12-02-13)
EXCLUSIONS

In addition to the Exceptions in Schedule B, You are not insured against loss, costs, attorneys' fees, and expenses resulting from:

1. Governmental police power, and the existence or violation of those portions of any law or government regulation concerning:
   a. building;
   b. zoning;
   c. land use;
   d. improvements on the Land;
   e. land division; and
   f. environmental protection.

   This Exclusion does not limit the coverage described in Covered Risk 8.a., 14, 15, 16, 18, 19, 20, 23 or 27.
2. The failure of Your existing structures, or any part of them, to be constructed in accordance with applicable building codes. This Exclusion does not limit the coverage described in Covered Risk 14 or 15.
3. The right to take the Land by condemning it. This Exclusion does not limit the coverage described in Covered Risk 17.
4. Risks:
   a. that are created, allowed, or agreed to by You, whether or not they are recorded in the Public Records;
   b. that are Known to You at the Policy Date, but not to Us, unless they are recorded in the Public Records at the Policy Date;
   c. that result in no loss to You; or
   d. that first occur after the Policy Date - this does not limit the coverage described in Covered Risk 7, 8.e., 25, 26, 27 or 28.
5. Failure to pay value for Your Title.
6. Lack of a right:
   a. to any land outside the area specifically described and referred to in paragraph 3 of Schedule A; and
   b. in streets, alleys, or waterways that touch the Land.

   This Exclusion does not limit the coverage described in Covered Risk 11 or 21.
7. The transfer of the Title to You is invalid as a preferential transfer or as a fraudulent transfer or conveyance under federal bankruptcy, state insolvency, or similar creditors' rights laws.
8. Contamination, explosion, fire, flooding, vibration, fracturing, earthquake or subsidence.
9. Negligence by a person or an Entity exercising a right to extract or develop minerals, water, or any other substances.

LIMITATIONS ON COVERED RISKS

Your insurance for the following Covered Risks is limited on the Owner's Coverage Statement as follows:

- For Covered Risk 16, 18, 19 and 21, Your Deductible Amount and Our Maximum Dollar Limit of Liability shown in Schedule A.

The deductible amounts and maximum dollar limits shown on Schedule A are as follows:

	Your Deductible Amount	Our Maximum Dollar Limit of Liability
Covered Risk 16:	1.00% of Policy Amount Shown in Schedule A or $2,500.00 (whichever is less)	$ 10,000.00
Covered Risk 18:	1.00% of Policy Amount Shown in Schedule A or $5,000.00 (whichever is less)	$ 25,000.00
Covered Risk 19:	1.00% of Policy Amount Shown in Schedule A or $5,000.00 (whichever is less)	$ 25,000.00
Covered Risk 21:	1.00% of Policy Amount Shown in Schedule A or $2,500.00 (whichever is less)	$ 5,000.00

ATTACHMENT ONE
(CONTINUED)

ALTA OWNER'S POLICY (07-01-2021)

EXCLUSIONS FROM COVERAGE

The following matters are excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. a. any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) that restricts, regulates, prohibits, or relates to:
   i. the occupancy, use, or enjoyment of the Land;
   ii. the character, dimensions, or location of any improvement on the Land;
   iii. the subdivision of land; or
   iv. environmental remediation or protection.
   b. any governmental forfeiture, police, regulatory, or national security power.
   c. the effect of a violation or enforcement of any matter excluded under Exclusion 1.a. or 1.b.

   Exclusion 1 does not modify or limit the coverage provided under Covered Risk 5 or 6.
2. Any power of eminent domain. Exclusion 2 does not modify or limit the coverage provided under Covered Risk 7.
3. Any defect, lien, encumbrance, adverse claim, or other matter:
   a. created, suffered, assumed, or agreed to by the Insured Claimant;
   b. not Known to the Company, not recorded in the Public Records at the Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
   c. resulting in no loss or damage to the Insured Claimant;
   d. attaching or created subsequent to the Date of Policy (Exclusion 3.d. does not modify or limit the coverage provided under Covered Risk 9 or 10); or
   e. resulting in loss or damage that would not have been sustained if consideration sufficient to qualify the Insured named in Schedule A as a bona fide purchaser had been given for the Title at the Date of Policy.
4. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights law, that the transaction vesting the Title as shown in Schedule A is a:
   a. fraudulent conveyance or fraudulent transfer;
   b. voidable transfer under the Uniform Voidable Transactions Act; or
   c. preferential transfer:
      i. to the extent the instrument of transfer vesting the Title as shown in Schedule A is not a transfer made as a contemporaneous exchange for new value; or
      ii. for any other reason not stated in Covered Risk 9.b.
5. Any claim of a PACA-PSA Trust. Exclusion 5 does not modify or limit the coverage provided under Covered Risk 8.
6. Any lien on the Title for real estate taxes or assessments, imposed or collected by a governmental authority that becomes due and payable after the Date of Policy. Exclusion 6 does not modify or limit the coverage provided under Covered Risk 2.b.
7. Any discrepancy in the quantity of the area, square footage, or acreage of the Land or of any improvement to the Land.

EXCEPTIONS FROM COVERAGE

Some historical land records contain Discriminatory Covenants that are illegal and unenforceable by law. This policy treats any Discriminatory Covenant in a document referenced in Schedule B as if each Discriminatory Covenant is redacted, repudiated, removed, and not republished or recirculated. Only the remaining provisions of the document are excepted from coverage.

This policy does not insure against loss or damage and the Company will not pay costs, attorneys' fees, or expenses resulting from the terms and conditions of any lease or easement identified in Schedule A, and the following matters:

NOTE: The 2021 ALTA Owner's Policy may be issued to afford either Standard Coverage or Extended Coverage. In addition to variable exceptions such as taxes, easements, CC&R's, etc., the Exceptions from Coverage in a Standard Coverage policy will also include the Western Regional Standard Coverage Exceptions listed as 1 through 7 below:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records at Date of Policy but that could be (a) ascertained by an inspection of the Land or (b) asserted by persons or parties in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records at Date of Policy.
4. Any encroachment, encumbrance, violation, variation, easement, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records at Date of Policy.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor, material or equipment unless such lien is shown by the Public Records at Date of Policy.
7. Any claim to (a) ownership of or rights to minerals and similar substances, including but not limited to ores, metals, coal, lignite, oil, gas, uranium, clay, rock, sand, and gravel located in, on, or under the Land or produced from the Land, whether such ownership or rights arise by lease, grant, exception, conveyance, reservation, or otherwise; and (b) any rights, privileges, immunities, rights of way, and easements associated therewith or appurtenant thereto, whether or not the interests or rights excepted in (a) or (b) appear in the Public Records or are shown in Schedule B.

ATTACHMENT ONE
(CONTINUED)

2006 ALTA OWNER'S POLICY (06-17-06)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
   (i) the occupancy, use, or enjoyment of the Land;
   (ii) the character, dimensions, or location of any improvement erected on the Land;
   (iii) the subdivision of land; or
   (iv) environmental protection;
   or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
   (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
   (a) created, suffered, assumed, or agreed to by the Insured Claimant;
   (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
   (c) resulting in no loss or damage to the Insured Claimant;
   (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 9 and 10); or
   (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Title.
4. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction vesting the Title as shown in Schedule A, is
   (a) a fraudulent conveyance or fraudulent transfer; or
   (b) a preferential transfer for any reason not stated in Covered Risk 9 of this policy.
5. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the deed or other instrument of transfer in the Public Records that vests Title as shown in Schedule A.

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage, and the Company will not pay costs, attorneys' fees, or expenses that arise by reason of:

NOTE: The 2006 ALTA Owner's Policy may be issued to afford either Standard Coverage or Extended Coverage. In addition to variable exceptions such as taxes, easements, CC&R's, etc., the Exceptions from Coverage in a Standard Coverage policy will also include the Western Regional Standard Coverage Exceptions listed below as 1 through 7 below:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records at Date of Policy but that could be (a) ascertained by an inspection of the Land, or (b) asserted by persons or parties in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records at Date of Policy.
4. Any encroachment, encumbrance, violation, variation, easement, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records at Date of Policy.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor, material or equipment unless such lien is shown by the Public Records at Date of Policy.]
7. Any claim to (a) ownership of or rights to minerals and similar substances, including but not limited to ores, metals, coal, lignite, oil, gas, uranium, clay, rock, sand, and gravel located in, on, or under the Land or produced from the Land, whether such ownership or rights arise by lease, grant, exception, conveyance, reservation, or otherwise; and (b) any rights, privileges, immunities, rights of way, and easements associated therewith or appurtenant thereto, whether or not the interests or rights excepted in (a) or (b) appear in the Public Records or are shown in Schedule B.

TICOR TITLE COMPANY

OWNER'S DECLARATION

Escrow No.: TT4002374
Property: Vacant Land, Ontario, CA

The undersigned hereby declares as follows:

1. (Fill in the applicable paragraph and strike the other)

   A. Declarant ("Owner") is the owner or lessee, as the case may be, of certain premises located at Vacant Land, Ontario, CA, further described as follows: See Preliminary Report/Commitment No. TT4002374 for full legal description (the "Land").

   B. Declarant is the _____ of _____ ("Owner"), which is the owner or lessee, as the case may be, of certain premises located at Vacant Land, Ontario, CA, further described as follows: See Preliminary Report/Commitment No. TT4002374 for full legal description (the "Land").

2. (Fill in the applicable paragraph and strike the other)

   A. During the period of six (6) months immediately preceding the date of this declaration no work has been done, no surveys or architectural or engineering plans have been prepared, and no materials have been furnished in connection with the erection, equipment, repair, protection or removal of any building or other structure on the Land or in connection with the improvement of the Land in any manner whatsoever.

   B. During the period of six (6) months immediately preceding the date of this declaration certain work has been done and materials furnished in connection with _____ upon the Land in the approximate total sum of $_____, but no work whatsoever remains to be done and no materials remain to be furnished to complete the construction in full compliance with the plans and specifications, nor are there any unpaid bills incurred for labor and materials used in making such improvements or repairs upon the Land, or for the services of architects, surveyors or engineers, except as follows: _____. Owner, by the undersigned Declarant, agrees to and does hereby indemnify and hold harmless Chicago Title Insurance Company against any and all claims arising therefrom.

3. Owner has not previously conveyed the Land; is not a debtor in bankruptcy (and if a partnership, the general partner thereof is not a debtor in bankruptcy); and has not received notice of any pending court action affecting the title to the Land.

4. Except as shown in the above referenced Preliminary Report/Commitment, there are no unpaid or unsatisfied mortgages, deeds of trust, Uniform Commercial Code financing statements, regular assessments, special assessments, periodic assessments or any assessment from any source, claims of lien, special assessments, or taxes that constitute a lien against the Land or that affect the Land but have not been recorded in the public records. There are no violations of the covenants, conditions and restrictions as shown in the above referenced Preliminary Report/Commitment.

5. The Land is currently in use as _____; _____ occupy/occupies the Land; and the following are all of the leases or other occupancy rights affecting the Land:

   _____

6. There are no other persons or entities that assert an ownership interest in the Land, nor are there unrecorded easements, claims of easement, or boundary disputes that affect the Land.

7. There are no outstanding options to purchase or rights of first refusal affecting the Land.

OWNER'S DECLARATION

(continued)

8. Between the most recent Effective Date of the above referenced Preliminary Report/Commitment and the date of recording of the Insured Instrument(s), Owner has not taken or allowed, and will not take or allow, any action or inaction to encumber or otherwise affect title to the Land.

This declaration is made with the intention that Chicago Title Insurance Company (the "Company") and its policy issuing agents will rely upon it in issuing their title insurance policies and endorsements. Owner, by the undersigned Declarant, agrees to indemnify the Company against loss or damage (including attorneys' fees, expenses, and costs) incurred by the Company as a result of any untrue statement made herein.

I declare under penalty of perjury that the foregoing is true and correct and that this declaration was executed on December 5, 2023at 12:00 AM.

_____

AFFIDAVIT

Title No.: TT4002374-SA

This Affidavit, when fully completed, is to be signed **and notarized**, then returned to Ticor Title Company of California to enable Ticor Title Company of California to insure the presently pending transaction.

The undersigned owner hereby states that there are no unrecorded leases or agreements affecting the property described in the Preliminary Report for Title Order Number TT4002374-SA and that there is no one in possession or entitled to possession of said property other than the vestee shown in said Preliminary Report, **except**:

_____

_____

_____

_____

The undersigned owner states that to his/her knowledge, there are no liens or rights to liens upon said property for labor, services and materials for work contracted for, and completed by, an owner, lessee, sub-lessee or tenant within the last year or which is now in progress, **except**:

_____

_____

_____

_____

This statement is made in connection with the request to Ticor Title Company of California to issue its policy(ies) of title insurance with respect to Title Order Number TT4002374-SA.

IN WITNESS WHEREOF, the undersigned have executed this document on the date(s) set forth below.

_____
Signature

_____
Print Name

_____
Signature

_____
Print Name

Address: _____

_____

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

AFFIDAVIT
(continued)

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of _____

County of _____

Subscribed and sworn to (or affirmed) before me on this _____ day of _____, 20___, by

_____,
proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me.

_____
Signature

TICOR TITLE COMPANY

STATEMENT OF INFORMATION
CONFIDENTIAL INFORMATION
FOR YOUR PROTECTION

Escrow No.: TT4002374

Completion of this statement expedites your application for title insurance, as it assists in establishing identity, eliminating matters affecting persons with similar names and avoiding the use of fraudulent or forged documents. Complete all blanks (please print) or indicate "none" or "N/A." If more space is needed for any item(s), use the reverse side of the form. Each party (and spouse/domestic partner, if applicable) to the transaction should personally sign this form.

NAME AND PERSONAL INFORMATION

_____ Date of Birth _____
First Name Middle Name Last Name Maiden Name
(If none, indicate)

Home Phone _____ Business Phone _____ Birthplace _____

Cell Phone _____ Fax _____ Email _____

Social Security No. _____ Driver's License No. _____

List any other name you have used or been known by _____

State of residence _____ I have lived continuously in the U.S.A. since _____

Are you currently married? ☐ Yes ☐ No Are you currently a registered domestic partner? ☐ Yes ☐ No

If yes, complete the following information:

Date and place of marriage _____

Spouse/Domestic Partner _____ Date of Birth _____
First Name Middle Name Last Name Maiden Name
(If none, indicate)

Home Phone _____ Business Phone _____ Birthplace _____

Cell Phone _____ Fax _____ Email _____

Social Security No. _____ Driver's License No. _____

List any other name you have used or been known by _____

State of residence _____ I have lived continuously in the U.S.A. since _____

****
****

CHILDREN

Child Name: _____ Date of Birth: _____ Child Name: _____ Date of Birth: _____

Child Name: _____ Date of Birth: _____ Child Name: _____ Date of Birth: _____

(if more space is required, use reverse side of form)

****
****

RESIDENCES (LAST 10 YEARS)

_____
Number & Street City From (date) to (date)

_____
Number & Street City From (date) to (date)

(if more space is required, use reverse side of form)

****
****

OCCUPATIONS/BUSINESSES (LAST 10 YEARS)

_____
Firm or Business Name Address From (date) to (date)

_____
Firm or Business Name Address From (date) to (date)

(if more space is required, use reverse side of form)

****
****

SPOUSE'S/DOMESTIC PARTNER'S OCCUPATIONS/BUSINESSES (LAST 10 YEARS)

_____
Firm or Business Name Address From (date) to (date)

_____
Firm or Business Name Address From (date) to (date)

(if more space is required, use reverse side of form)

****
****

STATEMENT OF INFORMATION
CONFIDENTIAL INFORMATION FOR YOUR PROTECTION
(continued)

PRIOR MARRIAGE(S) and PRIOR DOMESTIC PARTNERSHIP(S)

Any prior marriages or domestic partnerships for either person? _____ If yes, complete the following:

Prior spouse's (Party A) name: _____ Prior Spouse of Party A: _____

Marriage ended by: ☐ Death ☐ Divorce/Dissolution ☐ Nullification Date of Death/Divorce: _____

Prior spouse's (Party B) name: _____ Prior Spouse of Party B: _____ Spouse

Marriage ended by: ☐ Death ☐ Divorce/Dissolution ☐ Nullification Date of Death/Divorce: _____

(if more space is required, use reverse side of form)

****

INFORMATION ABOUT THE PROPERTY

Buyer intends to reside on the property in this transaction: ☐ Yes ☐ No

Owner to complete the following items

Street Address of Property in this transaction: _____

The land is ☐ unimproved; or improved with a structure of the following type: ☐ A Single or 1-4 Family ☐ Condo Unit ☐ Other _____

Improvements, remodeling or repairs to this property have been made within the past six (6) months: ☐ Yes ☐ No

If yes, have all costs for labor and materials arising in connection therewith been paid in full? ☐ Yes ☐ No

Any current loans on property? _____ If yes, complete the following:

Lender_____ Loan Amount_____ Loan Account No._____

Lender_____ Loan Amount_____ Loan Account No. _____

****

The undersigned declare, under penalty of perjury, that the foregoing is true and correct.

IN WITNESS WHEREOF, the undersigned have executed this document on the date(s) set forth below.

_____ _____
Signature Date

_____
Print Name

_____ _____
Signature Date

_____
Print Name

(Note: If applicable, both spouses/domestic partners must sign.)

THANK YOU.

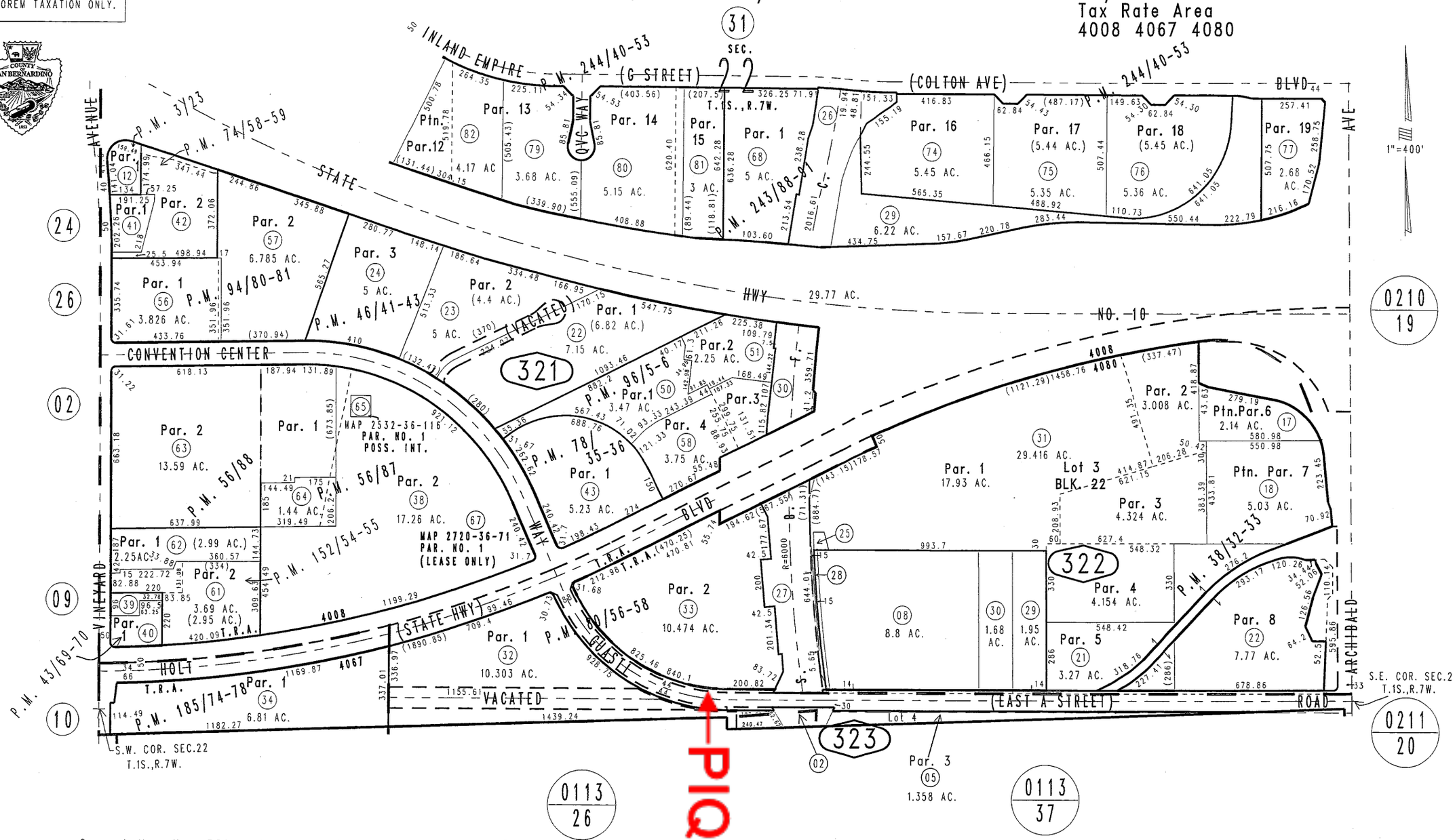
This map/plat is being furnished as an aid in locating the herein described Land in relation to adjoining streets, natural boundaries and other land, and is not a survey of the land depicted. Except to the extent a policy of title insurance is expressly modified by endorsement, if any, the Company does not insure dimensions, distances, location of eas 5303 's, acreage or other matters shown thereon.

MAP IS FOR THE PURPOSE OF AD VALOREM TAXATION ONLY.

Ptn. Tract No. 2244, M.B. 35/50-56

City of Ontario
Tax Rate Area
4008 4067 4080

0110 - 32



Parcel Map No. 7357, P.M. 74/58-59
Ptn. Parcel Map No. 5936, P.M. 56/88
Parcel Map No. 5661, P.M. 56/87
Ptn. Parcel Map No. 4966, P.M. 46/41-43
Ptn. Parcel Map No. 4677, P.M. 43/69-70
Ptn. Parcel Map No. 4088, P.M. 38/32-33
Ptn. Parcel Map No. 247, P.M. 3/23

Parcel Map No. 19579, P.M. 243/88-91
Parcel Map No. 15124, P.M. 185/74-78
Parcel Map No. 12664, P.M. 152/54-55
Parcel Map No. 8690, P.M. 94/80-81
Parcel Map No. 8490, P.M. 88/83-84, Amending Map, P.M. 96/5-6
Parcel Map No. 5660, P.M. 80/56-58
Ptn. Parcel Map No. 7653, P.M. 78/35-36
Ptn. Parcel Map No. 19612, P.M. 244/40-53

Assessor's Map
Book 0110 Page 32
San Bernardino County

REVISED
07/03/18 KA
06/12/19 KC
08/27/19 KA
03/20/20 GW
04/20/20 KC

er 2004

APPENDIX F

RESUMES

ED LUMP

MR. ED LUMP
Associate Geologist

EDUCATION
B.Sc Geology, San Diego State University, San Diego, California

PROFESSIONAL SUMMARY
Mr. Lump has been in the field of Engineering Geology since 1984 and in the field of Environmental Assessment since 1990. Serving as a field technician, soils laboratory technician, and geologist he has gained field experience on numerous hillside and flatland residential and commercial developments throughout southern California. As an engineering geologist he supervised field personnel and conducted numerous geologic and geotechnical evaluations on residential, commercial and industrial developments in California, Arizona and Nevada. His projects have included landslide and fault evaluations, single and multi-tract residential properties, shopping centers/national chain retail developments, and forensic evaluations, as well as grading and construction oversight. Mr. Lump has also conducted and managed numerous Phase I Environmental Site Assessments and Phase II soil, groundwater and soil vapor assessments for vacant, agricultural, residential, commercial and industrial properties in California, Arizona and Nevada.

SELECTED PROJECT EXPERIENCE

Environmental Site Assessments
- Limited Phase II and Soil Vapor Survey, 2013, County of Riverside, future Eastvale fire station, Riverside County, CA
- Phase I ESA, 2013, Wakeland Housing Development, 10 apartment complex portfolio, San Diego County, CA
- Phase I ESA and Limited Phase II, 2013, William Lyon Homes, Upland Residential Development, San Bernardino County, CA
- Limited Phase II Assessment, 2013, KB Homes, Spring Mountain Ranch, Riverside County, CA
- Environmental demolition and grading oversight, 2011/2012, Standard Pacific Homes, Harmony Grove residential development, San Diego County, CA
- Groundwater Mounding Evaluation, 2008, Lowe's HIW, Lowe's of Pacoima, Los Angeles County, CA
- Phase I ESA, Pesticide Residue Survey, Remedial Earthwork Guidelines, and Final As-Built Assessment, 2003/2004, Lennar Homes, Bressi Ranch, San Diego County, CA

Geologic and Geotechnical Evaluations
- Lake Elsinore Marketplace, Diamond Development, Riverside County, CA
- Salton Sea Solar Plant, Chevron Solar, Inc., Imperial County, CA
- Lowe's of Sparks, Nevada, Lowe's HIW, Washoe County, NV
- Walmart Murrieta, Walmart, Inc., Riverside County, CA
- Santa Fe Hills/Paloma Residential Development, KB Homes, San Diego County, CA
- Carmel Mountain Ranch Residential Development, Presley of San Diego, San Diego County, CA
- Lowe's of Bullhead City, Arizona, Lowe's HIW, Mohave County, AZ

ED LUMP

Grading and Construction

- Discovery Hills Residential Development, Presley of San Diego, San Diego County, CA
- Lowe's of Prescott, Arizona, Lowe's HIW, Yavapai County, AZ
- Salt Creek Residential Development, KB Homes, San Diego County, CA
- Lowe's of Pacoima, Lowe's HIW, Los Angeles County, CA
- Lake Elsinore Marketplace, Diamond Development, Riverside County, CA
- Carmel Mountain Ranch Residential Development, Presley of San Diego, San Diego County, CA
- Santa Fe Hills/Paloma Residential Development, KB Homes, San Diego County, CA
- Cobra Golf Facility-Carlsbad, Cobra Golf, San Diego County, CA

SIAMAK JAFROUDI

DR. SIAMAK JAFROUDI
President
Principal-in-Charge

EDUCATION
PhD, Geotechnical Engineering, 1983,
UC Davis
MS, Civil Engineering, 1978, UC Davis

REGISTRATIONS
Civil Engineering, California, PE 36641
Geotechnical Engineer, California, GE 2024
Environmental Assessor, REA 01655

PROFESSIONAL SUMMARY
Dr. Jafroudi has over 34 years of professional experience in geotechnical engineering. His area of specialization is “material characterization” in relation to slope stability evaluation, liquefaction analysis, pavement design, collapse potential, earth retaining structures and earthquake engineering. Dr. Jafroudi’s experience encompasses the design and supervision of a multitude of soil mechanics laboratory tests and drilling programs. With a broad range of project experience, he has served as a Principal Engineer on several key projects for such clients as school, university and college districts, public agencies; transportation agencies; residential and commercial developers, as well as private sector clients.

Acquiring a doctorate degree in Geotechnical Engineering as well as a Master of Science degree in Civil Engineering, Dr. Jafroudi maintains extensive working knowledge and experience with respect to these challenging fields. Dr. Jafroudi is a Registered Geotechnical Engineer (GE), a Registered Environmental Assessor (REA), and is registered in Civil Engineering (PE), all in the state of California. Additionally, he is an active member of the American Society of Civil Engineers, the Earthquake Engineering Research Institute and California Geotechnical Engineering Association.

SELECTED PROJECT EXPERIENCE

Environmental Site Assessments
- KB Homes, Hollywood Beverly Christian Church, Hollywood
- Castle & Cooke, Lake Elsinore Outlet Mall, Lake Elsinore
- Covina Transit Plaza, Foothill Transit, Covina
- First Street Bridge Widening, Los Angeles County
- Overland Street Bridge Improvements, Los Angeles County
- 801 Office Tower, Mani Brothers, Los Angeles
- Harmony Grove Site Acquisition, New Urban West, San Diego County
- Site Acquisitions, County of Los Angeles Office of Education, Los Angeles
- Eleven Projects, City of Mission Viejo, Mission Viejo
- Site Acquisitions, Paramount USD, Paramount
- Site Acquisitions, Santa Ana USD, Santa Ana
- Site Acquisition, Nevis Construction, Chino Hills
- Site Acquisitions, Moreno Valley USD, Moreno Valley
- Corona Farms, Confidential Client, Corona
- Amusement Park, Confidential Client, Orange County
- Nursery Site, Confidential Client, Sylmar

Appendix B
Air Quality Impact Analysis

Empire Groves Hotel

AIR QUALITY IMPACT ANALYSIS

CITY OF ONTARIO

PREPARED BY:

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APRIL 19, 2024

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LIST OF ABBREVIATED TERMS

%	Percent
°F	Degrees Fahrenheit
(1)	Reference
µg/m^3	Microgram per Cubic Meter
1992 CO Plan	*1992 Federal Attainment Plan for Carbon Monoxide*
1993 CEQA Handbook	*SCAQMD's CEQA Air Quality Handbook (1993)*
2020-2045 RTP/SCS	*2020-2045 Regional Transportation Plan/Sustainable Communities Strategy*
AB 2595	California Clean Air Act
AQIA	Air Quality Impact Analysis
AQMP	Air Quality Management Plan
BACT	Best Available Control Technology
C_2H_3Cl	Vinyl Chloride
CAA	Federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards Code
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CEQA Guidelines	*CEQA Statute and Guidelines*
City	City of Ontario
CO	Carbon Monoxide
COHb	Carboxyhemoglobin
EC	Elemental Carbon
EIR	Environmental Impact Report
EMFAC	Emissions FACtor Model
EPA	Environmental Protection Agency
EV	Electric Vehicle
GHG	Greenhouse Gas
H_2S	Hydrogen Sulfide
HDT	Heavy-Duty Trucks
HHDT	Heavy-Heavy-Duty Trucks

HI	Hazard Index
hp	Horsepower
lbs	Pounds
lbs/day	Pounds Per Day
LDA	Light Duty Auto
LDT1/LDT2	Light-Duty Trucks
LHDT1/LHDT2	Light-Heavy-Duty Trucks
LST	Localized Significance Threshold
LST Methodology	*Final Localized Significance Threshold Methodology*
MICR	Maximum Individual Cancer Risk
MM	Mitigation Measures
mph	Miles Per Hour
MWELO	California Department of Water Resources' Model Water Efficient
N_2	Nitrogen
N_2O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards
NO	Nitric Oxide
NO_2	Nitrogen Dioxide
NO_X	Nitrogen Oxides
O_2	Oxygen
O_3	Ozone
O_2 Deficiency	Chronic Hypoxemia
ODC	Ozone Depleting Compounds
Pb	Lead
PM	Particulate Matter
PM_{10}	Particulate Matter 10 microns in diameter or less
$PM_{2.5}$	Particulate Matter 2.5 microns in diameter or less
ppm	Parts Per Million
Project	Empire Groves Hotel
RECLAIM	Regional Clean Air Incentives Market
ROG	Reactive Organic Gases
SB	Senate Bill
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
sf	Square Feet
SIPs	State Implementation Plans

SO_2	Sulfur Dioxide
SO_4	Sulfates
SO_X	Sulfur Oxides
SRA	Source Receptor Area
TAC	Toxic Air Contaminant
Title 24	California Building Code
TITLE I	Non-Attainment Provisions
TITLE II	Mobile Sources Provisions
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compounds
vph	Vehicles Per Hour

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EXECUTIVE SUMMARY

ES.1 SUMMARY OF FINDINGS

The results of this *Empire Groves Hotel Air Quality Impact Analysis* (AQIA) are summarized below based on the significance criteria in Section 3 of this report consistent with Appendix G of the *Guidelines for Implementation of the California Environmental Quality Act* (*CEQA Guidelines*) (1). Table ES-1 shows the findings of significance for each potential air quality impact under the California Environmental Quality Act (CEQA).

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS

Analysis	Report Section	Significance Findings	
		Unmitigated	Mitigated
Regional Construction Emissions	3.4	*Less Than Significant*	*n/a*
Localized Construction Emissions	3.7	*Less Than Significant*	*n/a*
Regional Operational Emissions	3.5	*Less Than Significant*	*n/a*
Localized Operational Emissions	3.8	*Less Than Significant*	*n/a*
CO "Hot Spot" Analysis	3.9	*Less Than Significant*	*n/a*
Air Quality Management Plan	3.10	*Less Than Significant*	*n/a*
Sensitive Receptors	3.11	*Less Than Significant*	*n/a*
Odors	3.12	*Less Than Significant*	*n/a*
Cumulative Impacts	3.13	*Less Than Significant*	*n/a*

ES.2 REGULATORY REQUIREMENTS

There are numerous requirements that development projects must comply with by law, and that were put in place by federal, State, and local regulatory agencies for the improvement of air quality.

Any operation or activity that might cause the emission of any smoke, fly ash, dust, fumes, vapors, gases, or other forms of air pollution, which can cause damage to human health, vegetation, or

other forms of property, or can cause excessive soiling on any other parcel shall conform to the requirements of the South Coast Air Quality Management District (SCAQMD).

SCAQMD RULES

SCAQMD Rules that are currently applicable during construction activity for this Project are described below.

SCAQMD RULE 402

A person shall not discharge from any source whatsoever such quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any such persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule do not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

Odor Emissions. All uses shall be operated in a manner such that no offensive odor is perceptible at or beyond the property line of that use.

SCAQMD RULE 403

This rule is intended to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (human-made) fugitive dust sources by requiring actions to prevent and reduce fugitive dust emissions. Rule 403 applies to any activity or human-made condition capable of generating fugitive dust and requires best available control measures to be applied to earth moving and grading activities.

Dust Control, Operations. Any operation or activity that might cause the emission of any smoke, fly ash, dust, fumes, vapors, gases, or other forms of air pollution, which can cause damage to human health, vegetation, or other forms of property, or can cause excessive soiling on any other parcel, shall conform to the requirements of the SCAQMD.

SCAQMD RULE 1113

This rule serves to limit the VOC content of architectural coatings used on projects in the South Coast Air Basin. This rule applies to any person who supplies, sells, offers for sale, or manufactures any architectural coating for use on projects.

SCAQMD RULE 1301

This rule is intended to provide that pre-construction review requirements to ensure that new or relocated facilities do not interfere with progress in attainment of the National Ambient Air Quality Standards (NAAQS), while future economic growth within the South Coast Air Basin is not unnecessarily restricted. The specific air quality goal is to achieve no net increases from new or modified permitted sources of nonattainment air contaminants or their precursors. Rule 1301 also limits emission increases of ammonia, and Ozone Depleting Compounds (ODCs) from new, modified or relocated facilities by requiring the use of Best Available Control Technology (BACT).

SCAQMD RULE 1401

A person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any 1 hour that is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the United States (U.S.) Bureau of Mines.

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1 INTRODUCTION

This report presents the results of the AQIA prepared by Urban Crossroads, Inc., for the proposed Empire Groves Hotel Project (Project). The purpose of this AQIA is to evaluate the potential impacts to air quality associated with construction and operation of the Project and recommend measures to mitigate impacts considered potentially significant in comparison to thresholds established by the SCAQMD.

1.1 SITE LOCATION

The proposed Project site is located at the northeast corner of Holt Boulevard and Guasti Road in the City of Ontario, as shown in Exhibit 1-A.

1.2 PROJECT DESCRIPTION

The Project consists of a hotel that includes 600 rooms and suites, 2 ballrooms, a spa & fitness center, meeting and conference rooms as well as an outdoor pool and event lawn on 10.43 acres. A preliminary site plan for the proposed hotel development is shown on Exhibit 1-B. The Project will be developed within a single phase with an anticipated opening year of 2025.

EXHIBIT 1-A: LOCATION MAP

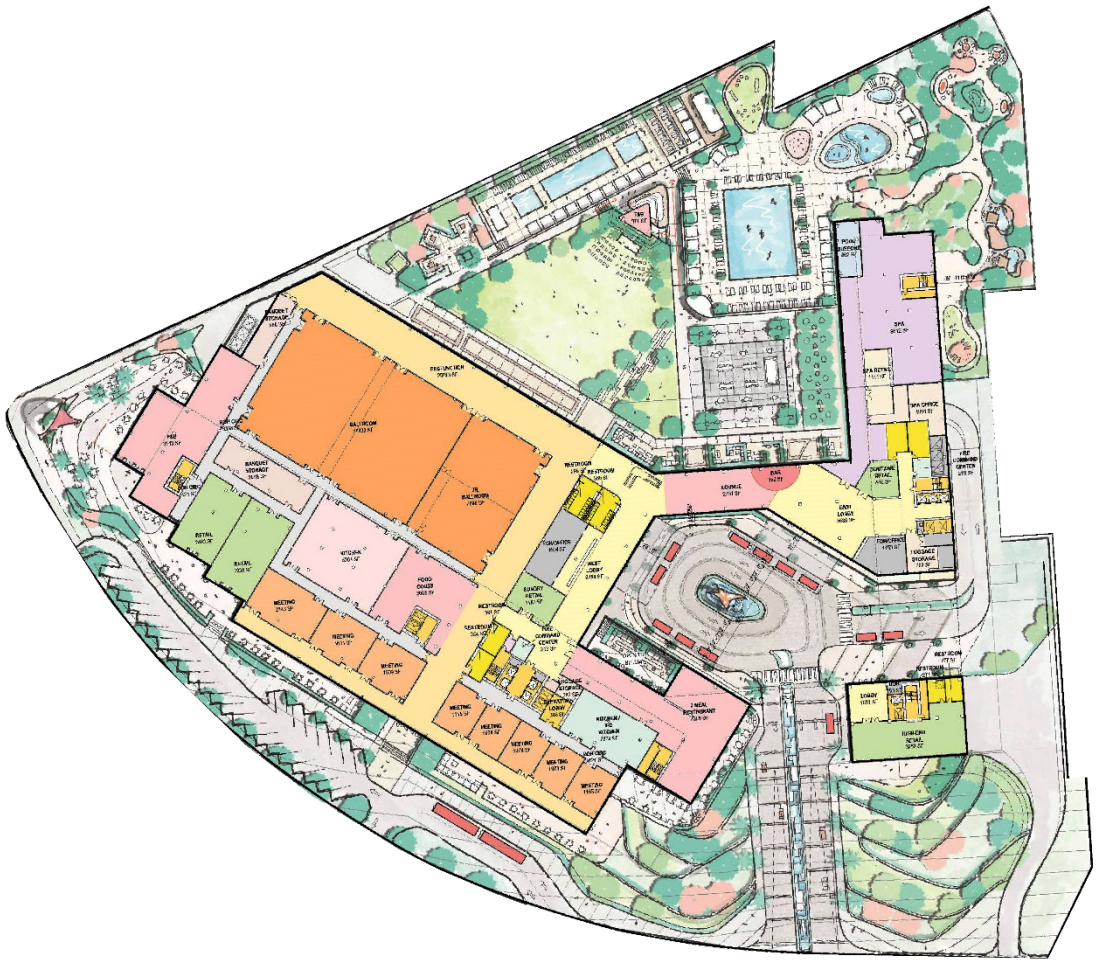


LEGEND:

N

Site Boundary

EXHIBIT 1-B: SITE PLAN





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2 AIR QUALITY SETTING

This section provides an overview of the existing air quality conditions in the Project area and region.

2.1 SOUTH COAST AIR BASIN

The Project site is located in the South Coast Air Basin (SCAB) within the jurisdiction of SCAQMD (2). The SCAQMD was created by the 1977 Lewis-Presley Air Quality Management Act, which merged four county air pollution control bodies into one regional district. Under the Act, the SCAQMD is responsible for bringing air quality in areas under its jurisdiction into conformity with federal and state air quality standards. As stated, the Project site is located within the SCAB, a 6,745-square-mile subregion of the SCAQMD, which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County.

The SCAB is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east, and the San Diego Air Basin to the south.

2.2 REGIONAL CLIMATE

The regional climate has a substantial influence on air quality in the SCAB. In addition, the temperature, wind, humidity, precipitation, and amount of sunshine influence the air quality.

The annual average temperatures throughout the SCAB vary from the low to mid 60s (degrees Fahrenheit [°F]). Due to a decreased marine influence, the eastern portion of the SCAB shows greater variability in average annual minimum and maximum temperatures. January is the coldest month throughout the SCAB, with average minimum temperatures of 47°F in downtown Los Angeles and 36°F in San Bernardino. All portions of the SCAB have recorded maximum temperatures above 100°F.

Although the climate of the SCAB can be characterized as semi-arid, the air near the land surface is quite moist on most days because of the presence of a marine layer. This shallow layer of sea air is an important modifier of SCAB climate. Humidity restricts visibility in the SCAB, and the conversion of sulfur dioxide (SO_2) to sulfates (SO_4) is heightened in air with high relative humidity. The marine layer provides an environment for that conversion process, especially during the spring and summer months. The annual average relative humidity within the SCAB is 71% along the coast and 59% inland. Since the ocean effect is dominant, periods of heavy early morning fog are frequent and low stratus clouds are a characteristic feature. These effects decrease with distance from the coast.

More than 90% of the SCAB's rainfall occurs from November through April. The annual average rainfall varies from approximately nine inches in Riverside to fourteen inches in downtown Los Angeles. Monthly and yearly rainfall totals are extremely variable. Summer rainfall usually consists of widely scattered thunderstorms near the coast and slightly heavier shower activity in the eastern portion of the SCAB with frequency being higher near the coast.

Due to its generally clear weather, about three-quarters of available sunshine is received in the SCAB. The remaining one-quarter is absorbed by clouds. The ultraviolet portion of this abundant radiation is a key factor in photochemical reactions. On the shortest day of the year, there are approximately 10 hours of possible sunshine, and on the longest day of the year, there are approximately 14½ hours of possible sunshine.

The importance of wind to air pollution is considerable. The direction and speed of the wind determines the horizontal dispersion and transport of the air pollutants. During the late autumn to early spring rainy season, the SCAB is subjected to wind flows associated with the traveling storms moving through the region from the northwest. This period also brings five to ten periods of strong, dry offshore winds, locally termed "Santa Anas" each year. During the dry season, which coincides with the months of maximum photochemical smog concentrations, the wind flow is bimodal, typified by a daytime onshore sea breeze and a nighttime offshore drainage wind. Summer wind flows are created by the pressure differences between the relatively cold ocean and the unevenly heated and cooled land surfaces that modify the general northwesterly wind circulation over southern California. Nighttime drainage begins with the radiational cooling of the mountain slopes. Heavy, cool air descends the slopes and flows through the mountain passes and canyons as it follows the lowering terrain toward the ocean. Another characteristic wind regime in the SCAB is the "Catalina Eddy," a low level cyclonic (counterclockwise) flow centered over Santa Catalina Island which results in an offshore flow to the southwest. On most spring and summer days, some indication of an eddy is apparent in coastal sections.

In the SCAB, there are two distinct temperature inversion structures that control vertical mixing of air pollution. During the summer, warm high-pressure descending (subsiding) air is undercut by a shallow layer of cool marine air. The boundary between these two layers of air is a persistent marine subsidence/inversion. This boundary prevents vertical mixing which effectively acts as an impervious lid to pollutants over the entire SCAB. The mixing height for the inversion structure is normally situated 1,000 to 1,500 feet above mean sea level.

A second inversion-type forms in conjunction with the drainage of cool air off the surrounding mountains at night followed by the seaward drift of this pool of cool air. The top of this layer forms a sharp boundary with the warmer air aloft and creates nocturnal radiation inversions. These inversions occur primarily in the winter, when nights are longer and onshore flow is weakest. They are typically only a few hundred feet above mean sea level. These inversions effectively trap pollutants, such as nitrogen oxides (NO_X) and carbon monoxide (CO) from vehicles, as the pool of cool air drifts seaward. Winter is therefore a period of high levels of primary pollutants along the coastline.

2.3 WIND PATTERNS AND PROJECT LOCATION

The distinctive climate of the Project area and the SCAB is determined by its terrain and geographical location. The SCAB is located in a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean in the southwest quadrant with high mountains forming the remainder of the perimeter.

Wind patterns across the south coastal region are characterized by westerly and southwesterly onshore winds during the day and easterly or northeasterly breezes at night. Winds are characteristically light although the speed is somewhat greater during the dry summer months than during the rainy winter season.

2.4 CRITERIA POLLUTANTS

Criteria pollutants are pollutants that are regulated through the development of human health based and/or environmentally based criteria for setting permissible levels. Criteria pollutants, their typical sources, and health effects are identified below (3):

TABLE 2-1: CRITERIA POLLUTANTS

Criteria Pollutant	Description	Sources	Health Effects
CO	CO is a colorless, odorless gas produced by the incomplete combustion of carbon-containing fuels, such as gasoline or wood. CO concentrations tend to be the highest during the winter morning, when little to no wind and surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike ozone (O_3), motor vehicles operating at slow speeds are the primary source of CO in the SCAB. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections.	Any source that burns fuel such as automobiles, trucks, heavy construction equipment, farming equipment, and residential heating.	Individuals with a deficient blood supply to the heart are the most susceptible to the adverse effects of CO exposure. The effects observed include earlier onset of chest pain with exercise, and electrocardiograph changes indicative of decreased oxygen (O_2) supply to the heart. Inhaled CO has no direct toxic effect on the lungs but exerts its effect on tissues by interfering with O_2 transport and competing with O_2 to combine with hemoglobin present in the blood to form carboxyhemoglobin (COHb). Hence, conditions with an increased demand for O_2 supply can be adversely affected by exposure to CO. Individuals most at risk include fetuses, patients with diseases involving heart and blood vessels, and patients with chronic hypoxemia (O_2 deficiency) as seen at high altitudes.
SO_2	SO_2 is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant	Coal or oil burning power plants and industries,	A few minutes of exposure to low levels of SO_2 can result in airway constriction in some

Criteria Pollutant	Description	Sources	Health Effects
	mainly as a result of burning high sulfur-content fuel oils and coal and from chemical processes occurring at chemical plants and refineries. When SO_2 oxidizes in the atmosphere, it forms SO_4. Collectively, these pollutants are referred to as sulfur oxides (SO_X).	refineries, diesel engines.	asthmatics, all of whom are sensitive to its effects. In asthmatics, increase in resistance to air flow, as well as reduction in breathing capacity leading to severe breathing difficulties, are observed after acute exposure to SO_2. In contrast, healthy individuals do not exhibit similar acute responses even after exposure to higher concentrations of SO_2. Animal studies suggest that despite SO_2 being a respiratory irritant, it does not cause substantial lung injury at ambient concentrations. However, very high levels of exposure can cause lung edema (fluid accumulation), lung tissue damage, and sloughing off of cells lining the respiratory tract. Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient SO_2 levels. In these studies, efforts to separate the effects of SO_2 from those of fine particles have not been successful. It is not clear whether the two pollutants act synergistically, or one pollutant alone is the predominant factor.
NO_X	NO_X consist of nitric oxide (NO), nitrogen dioxide (NO_2) and nitrous oxide (N_2O) and are formed when nitrogen (N_2) combines with O_2. Their lifespan in the atmosphere ranges from	Any source that burns fuel such as automobiles, trucks, heavy construction equipment, farming	Population-based studies suggest that an increase in acute respiratory illness, including infections and respiratory symptoms in children (not infants), is

Criteria Pollutant	Description	Sources	Health Effects
	one to seven days for nitric oxide and nitrogen dioxide, to 170 years for nitrous oxide. NO_X is typically created during combustion processes and are major contributors to smog formation and acid deposition. NO_2 is a criteria air pollutant and may result in numerous adverse health effects; it absorbs blue light, resulting in a brownish-red cast to the atmosphere and reduced visibility. Of the seven types of nitrogen oxide compounds, NO_2 is the most abundant in the atmosphere. As ambient concentrations of NO_2 are related to traffic density, commuters in heavy traffic may be exposed to higher concentrations of NO_2 than those indicated by a regional monitoring station.	equipment, and residential heating.	associated with long-term exposure to NO_2 at levels found in homes with gas stoves, which are higher than ambient levels found in Southern California. Increase in resistance to air flow and airway contraction is observed after short-term exposure to NO_2 in healthy subjects. Larger decreases in lung functions are observed in individuals with asthma or chronic obstructive pulmonary disease (e.g., chronic bronchitis, emphysema) than in healthy individuals, indicating a greater susceptibility of these sub-groups. In animals, exposure to levels of NO_2 considerably higher than ambient concentrations result in increased susceptibility to infections, possibly due to the observed changes in cells involved in maintaining immune functions. The severity of lung tissue damage associated with high levels of O_3 exposure increases when animals are exposed to a combination of O_3 and NO_2.
O_3	O_3 is a highly reactive and unstable gas that is formed when VOCs and NO_X, both byproducts of internal combustion engine exhaust, undergo slow photochemical reactions in the presence of sunlight. O_3 concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of this pollutant.	Formed when reactive organic gases (ROG) and NO_X react in the presence of sunlight. ROG sources include any source that burns fuels, (e.g., gasoline, natural gas, wood, oil) solvents, petroleum processing and	Individuals exercising outdoors, children, and people with pre-existing lung disease, such as asthma and chronic pulmonary lung disease, are considered to be the most susceptible sub-groups for O_3 effects. Short-term exposure (lasting for a few hours) to O_3 at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased

Criteria Pollutant	Description	Sources	Health Effects
		storage, and pesticides.	susceptibility to infections, inflammation of the lung tissue, and some immunological changes. Elevated O_3 levels are associated with increased school absences. In recent years, a correlation between elevated ambient O_3 levels and increases in daily hospital admission rates, as well as mortality, has also been reported. An increased risk for asthma has been found in children who participate in multiple outdoor sports and live in communities with high O_3 levels. O_3 exposure under exercising conditions is known to increase the severity of the responses described above. Animal studies suggest that exposure to a combination of pollutants that includes O_3 may be more toxic than exposure to O_3 alone. Although lung volume and resistance changes observed after a single exposure diminish with repeated exposures, biochemical and cellular changes appear to persist, which can lead to subsequent lung structural changes.
Particulate Matter	PM_{10}: A major air pollutant consisting of tiny solid or liquid particles of soot, dust, smoke, fumes, and aerosols. Particulate matter pollution is a major cause of reduced visibility (haze) which is caused by the scattering of light and consequently the significant reduction in air clarity. The size of the particles (10 microns or smaller, about 0.0004 inches or less) allows them to easily enter the lungs where they	Sources of PM_{10} include road dust, windblown dust, and construction. Also formed from other pollutants (acid rain, NO_X, SO_X, organics). Incomplete combustion of any fuel.	A consistent correlation between elevated ambient fine particulate matter (PM_{10} and $PM_{2.5}$) levels and an increase in mortality rates, respiratory infections, number and severity of asthma attacks and the number of hospital admissions has been observed in different parts of the United States and various areas around the world. In

Criteria Pollutant	Description	Sources	Health Effects
	may be deposited, resulting in adverse health effects. Additionally, it should be noted that PM_{10} is considered a criteria air pollutant. $PM_{2.5}$: A similar air pollutant to PM_{10} consisting of tiny solid or liquid particles which are 2.5 microns or smaller (which is often referred to as fine particles). These particles are formed in the atmosphere from primary gaseous emissions that include SO_4 formed from SO_2 release from power plants and industrial facilities and nitrates that are formed from NO_X release from power plants, automobiles, and other types of combustion sources. The chemical composition of fine particles highly depends on location, time of year, and weather conditions. $PM_{2.5}$ is a criteria air pollutant.	$PM_{2.5}$ comes from fuel combustion in motor vehicles, equipment, and industrial sources, residential and agricultural burning. Also formed from reaction of other pollutants (acid rain, NO_X, SO_X, organics).	recent years, some studies have reported an association between long-term exposure to air pollution dominated by fine particles and increased mortality, reduction in lifespan, and an increased mortality from lung cancer. Daily fluctuations in $PM_{2.5}$ concentration levels have also been related to hospital admissions for acute respiratory conditions in children, to school and kindergarten absences, to a decrease in respiratory lung volumes in children without asthma, and to increased medication use in children and adults with asthma. Recent studies show lung function growth in children is reduced with long term exposure to particulate matter. The elderly, people with pre-existing respiratory or cardiovascular disease, and children appear to be more susceptible to the effects of high levels of PM_{10} and $PM_{2.5}$.
VOC	VOCs are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms) that exist in the ambient air. VOCs contribute to the formation of smog through atmospheric photochemical reactions and/or may be toxic. Compounds of carbon (also known as organic compounds) have different levels of reactivity; that is, they do not react at the same speed or do not form O_3 to the same extent when exposed to photochemical processes. VOCs often have an odor, and some examples include	Organic chemicals are widely used as ingredients in household products. Paints, varnishes, and wax all contain organic solvents, as do many cleaning, disinfecting, cosmetic, degreasing, and hobby products. Fuels are made up of organic chemicals. All of these products can	Breathing VOCs can irritate the eyes, nose, and throat, can cause difficulty breathing and nausea, and can damage the central nervous system as well as other organs. Some VOCs can cause cancer. Not all VOCs have all these health effects, though many have several.

Criteria Pollutant	Description	Sources	Health Effects
	gasoline, alcohol, and the solvents used in paints. Exceptions to the VOC designation include CO, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate. VOCs are a criteria pollutant since they are a precursor to O_3, which is a criteria pollutant. The terms VOC and ROG (see below) are used interchangeably.	release organic compounds while you are using them, and, to some degree, when they are stored.	
ROG	Similar to VOC, ROGs are also precursors in forming O_3 and consist of compounds containing methane, ethane, propane, butane, and longer chain hydrocarbons, which are typically the result of some type of combustion/decomposition process. Smog is formed when ROG and NO_X react in the presence of sunlight. ROGs are a criteria pollutant since they are a precursor to O_3, which is a criteria pollutant. The terms ROG and VOC (see previous) are used interchangeably.	Sources similar to VOCs.	Health effects similar to VOCs.
Lead (Pb)	Pb is a heavy metal that is highly persistent in the environment and considered a criteria pollutant. In the past, the primary source of Pb in the air was emissions from vehicles burning leaded gasoline. The major sources of Pb emissions are ore and metals processing, particularly Pb smelters, and piston-engine aircraft operating on leaded aviation gasoline. Other stationary sources include waste incinerators, utilities, and lead-acid battery manufacturers. It should be noted that the Project does not include operational activities such as metal processing or Pb acid battery manufacturing. As such,	Metal smelters, resource recovery, leaded gasoline, deterioration of Pb paint.	Fetuses, infants, and children are more sensitive than others to the adverse effects of Pb exposure. Exposure to low levels of Pb can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotient. In adults, increased Pb levels are associated with increased blood pressure. Pb poisoning can cause anemia, lethargy, seizures, and death; although it appears that there are no direct effects of Pb on the

Criteria Pollutant	Description	Sources	Health Effects
	the Project is not anticipated to generate a quantifiable amount of Pb emissions.		respiratory system. Pb can be stored in the bone from early age environmental exposure, and elevated blood Pb levels can occur due to breakdown of bone tissue during pregnancy, hyperthyroidism (increased secretion of hormones from the thyroid gland) and osteoporosis (breakdown of bony tissue). Fetuses and breast-fed babies can be exposed to higher levels of Pb because of previous environmental Pb exposure of their mothers.
Odor	Odor means the perception experienced by a person when one or more chemical substances in the air come into contact with the human olfactory nerves (4).	Odors can come from many sources including animals, human activities, industry, nature, and vehicles.	Offensive odors can potentially affect human health in several ways. First, odorant compounds can irritate the eye, nose, and throat, which can reduce respiratory volume. Second, studies have shown that the VOCs that cause odors can stimulate sensory nerves to cause neurochemical changes that might influence health, for instance, by compromising the immune system. Finally, unpleasant odors can trigger memories or attitudes linked to unpleasant odors, causing cognitive and emotional effects such as stress.

2.5 EXISTING AIR QUALITY

Existing air quality is measured at established SCAQMD air quality monitoring stations. Monitored air quality is evaluated in the context of ambient air quality standards. These standards are the levels of air quality that are considered safe, with an adequate margin of safety, to protect the public health and welfare. National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) currently in effect are shown in Table 2-2 (5).

The determination of whether a region's air quality is healthful or unhealthful is determined by comparing contaminant levels in ambient air samples to the state and federal standards. At the time of this AQIA, the most recent state and federal standards were updated by CARB on May 4, 2016, and are presented in Table 2-2. The air quality in a region is considered to be in attainment by the state if the measured ambient air pollutant levels for O_3, CO (except 8-hour Lake Tahoe), SO_2 (1 and 24 hour), NO_2, PM_{10}, and $PM_{2.5}$ are not to be exceeded. All others are not to be equaled or exceeded. It should be noted that the three-year period is presented for informational purposes and is not the basis for how the state assigns attainment status. Attainment status for a pollutant means that the SCAQMD meets the standards set by the EPA or the California EPA (CalEPA). Conversely, nonattainment means that an area has monitored air quality that does not meet the NAAQS or CAAQS standards. In order to improve air quality in nonattainment areas, a State Implementation Plan (SIP) is drafted by CARB. The SIP outlines the measures that the state will take to improve air quality. Once nonattainment areas meet the standards and additional redesignation requirements, the EPA will designate the area as a maintenance area (6).

TABLE 2-2: AMBIENT AIR QUALITY STANDARDS (1 OF 2)

Ambient Air Quality Standards						
Pollutant	**Averaging Time**	**California Standards** [1]		**National Standards** [2]		
		Concentration [3]	**Method** [4]	**Primary** [3,5]	**Secondary** [3,6]	**Method** [7]
Ozone (O_3)[8]	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		—		
Fine Particulate Matter (PM2.5)[9]	24 Hour	—	—	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12.0 µg/m^3	15 µg/m^3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		—	—	
Nitrogen Dioxide (NO_2)[10]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemiluminescence	100 ppb (188 µg/m^3)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		0.053 ppm (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	—	Ultraviolet Flourescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[11]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[11]	—	
Lead[12,13]	30 Day Average	1.5 µg/m^3	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m^3 (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m^3		
Visibility Reducing Particles[14]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	**No National Standards**		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

See footnotes on next page …

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TABLE 2-2: AMBIENT AIR QUALITY STANDARDS (2 OF 2)

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15 $\mu g/m^3$. The existing 24-hour PM10 standards (primary and secondary) of 150 $\mu g/m^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
11. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

    Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 $\mu g/m^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

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2.6 REGIONAL AIR QUALITY

Air pollution contributes to a wide variety of adverse health effects. The EPA has established NAAQS for seven of the most common air pollutants: CO, Pb, O_3, PM_{10}, $PM_{2.5}$, NO_2, and SO_2 which are known as criteria pollutants. The SCAQMD monitors levels of various criteria pollutants at 35 permanent monitoring stations and 2 single-pollutant source Pb air monitoring sites throughout the air district (7). On January 25, 2024, CARB adopted the proposed 2023 amendments to the state and national area designations. See Table 2-3 for attainment designations for the SCAB (8). Appendix 2.1 provides geographic representation of the state and federal attainment status for applicable criteria pollutants within the SCAB.

TABLE 2-3: ATTAINMENT STATUS OF CRITERIA POLLUTANTS IN THE SCAB

Criteria Pollutant	State Designation	Federal Designation
O_3 – 1-hour standard	Nonattainment	--
O_3 – 8-hour standard	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Attainment
$PM_{2.5}$	Nonattainment	Nonattainment
CO	Attainment	Unclassifiable/Attainment
NO_2	Attainment	Unclassifiable/Attainment
SO_2	Attainment	Unclassifiable/Attainment
Pb[1]	Attainment	Unclassifiable/Attainment

Note: See Appendix 2.1 for a detailed map of State/National Area Designations within the SCAB
"-" = The national 1-hour O_3 standard was revoked effective June 15, 2005.

2.7 LOCAL AIR QUALITY

The SCAQMD has designated general forecast areas and air monitoring areas (referred to as Source Receptor Areas [SRA]) throughout the district in order to provide Southern California residents about the air quality conditions. The Project site is located within SRA 33. Within SRA 33, the SCAQMD CA-60 Near Road monitoring station, located approximately 2.32 miles south of the Project site, is the nearest long-term air quality monitoring station and reports air quality statistics for NO_2 and $PM_{2.5}$. As the CA-60 Near Road monitoring station does not provide data for O_3, CO, or PM_{10}, the next nearest monitoring stations will be utilized. It should be noted that the following stations will be used to report air quality data for O_3, CO, NO_2, PM_{10}, and $PM_{2.5}$.

- SRA 33 (CA-60 Near Road) – NO_2 and $PM_{2.5}$
- SRA 33 (I-10 Near Road) – CO
- SRA 34 (Central San Bernardino Valley 2) – O_3 and PM_{10}

[1] The Federal nonattainment designation for lead is only applicable towards the Los Angeles County portion of the SCAB.

It should be noted that data from I-10 Near Road and Central San Bernardino Valley 2 monitoring stations were utilized in lieu of the CA-60 Near Road monitoring station only in instances where data was not available.

The most recent three (3) years of data available is shown in Table 2-4 and identifies the number of days ambient air quality standards were exceeded for the study area, which is considered to be representative of the local air quality at the Project site. Data for O_3, CO, NO_2, PM_{10}, and $PM_{2.5}$ for 2020 through 2022 was obtained from the SCAQMD Air Quality Data Tables (9). Additionally, data for SO_2 has been omitted as attainment is regularly met in the SCAB and few monitoring stations measure SO_2 concentrations.

TABLE 2-4: PROJECT AREA AIR QUALITY MONITORING SUMMARY 2020-2022

Pollutant	Standard	Year		
		2020	2021	2022
O_3				
Maximum Federal 1-Hour Concentration (ppm)		0.162	0.142	0.128
Maximum Federal 8-Hour Concentration (ppm)		0.128	0.112	0.105
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	89	66	60
Number of Days Exceeding State/Federal 8-Hour Standard	> 0.070 ppm	128	101	103
CO				
Maximum Federal 1-Hour Concentration	> 35 ppm	1.5	2.8	1.3
Maximum Federal 8-Hour Concentration	> 20 ppm	1.2	1.4	1.0
NO_2				
Maximum Federal 1-Hour Concentration	> 0.100 ppm	0.102	0.080	0.085
Annual Federal Standard Design Value		0.029	0.030	0.029
PM_{10}				
Maximum Federal 24-Hour Concentration (µg/m^3)	> 150 µg/m^3	80	111	177
Annual Federal Arithmetic Mean (µg/m^3)		38.7	39.3	38.0
Number of Days Exceeding Federal 24-Hour Standard	> 150 µg/m^3	0	0	1
Number of Days Exceeding State 24-Hour Standard	> 50 µg/m^3	81	79	65
$PM_{2.5}$				
Maximum Federal 24-Hour Concentration (µg/m^3)	> 35 µg/m^3	53.1	65.4	41.8
Annual Federal Arithmetic Mean (µg/m^3)	> 12 µg/m^3	14.36	14.48	12.20
Number of Days Exceeding Federal 24-Hour Standard	> 35 µg/m^3	4	13	1

ppm = Parts Per Million
µg/m^3 = Microgram per Cubic Meter
Source: Data for O_3, CO, NO_2, PM_{10}, and $PM_{2.5}$ was obtained from SCAQMD Air Quality Data Tables.

2.8 REGULATORY BACKGROUND

2.8.1 FEDERAL REGULATIONS

The EPA is responsible for setting and enforcing the NAAQS for O_3, CO, NO_X, SO_2, PM_{10}, and Pb (10). The EPA has jurisdiction over emissions sources that are under the authority of the federal government including aircraft, locomotives, and emissions sources outside state waters (Outer Continental Shelf). The EPA also establishes emission standards for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission requirements of CARB.

The Federal Clean Air Act (CAA) was first enacted in 1955 and has been amended numerous times in subsequent years (1963, 1965, 1967, 1970, 1977, and 1990). The CAA establishes the federal air quality standards, the NAAQS, and specifies future dates for achieving compliance (11). The CAA also mandates that states submit and implement SIPs for local areas not meeting these standards. These plans must include pollution control measures that demonstrate how the standards will be met.

The 1990 amendments to the CAA that identify specific emission reduction goals for areas not meeting the NAAQS require a demonstration of reasonable further progress toward attainment and incorporate additional sanctions for failure to attain or to meet interim milestones. The sections of the CAA most directly applicable to the development of the Project site include Title I (Non-Attainment Provisions) and Title II (Mobile Source Provisions) (12) (13). Title I provisions were established with the goal of attaining the NAAQS for the following criteria pollutants O_3, NO_2, SO_2, PM_{10}, CO, $PM_{2.5}$, and Pb. The NAAQS were amended in July 1997 to include an additional standard for O_3 and to adopt a NAAQS for $PM_{2.5}$. Table 2-3 (previously presented) provides the NAAQS within the SCAB.

Mobile source emissions are regulated in accordance with Title II provisions. These provisions require the use of cleaner burning gasoline and other cleaner burning fuels such as methanol and natural gas. Automobile manufacturers are also required to reduce tailpipe emissions of hydrocarbons and NO_X. NO_X is a collective term that includes all forms of NO_X which are emitted as byproducts of the combustion process.

2.8.2 CALIFORNIA REGULATIONS

CARB

CARB, which became part of CalEPA in 1991, is responsible for ensuring implementation of the California Clean Air Act (AB 2595), responding to the federal CAA, and for regulating emissions from consumer products and motor vehicles. AB 2595 mandates achievement of the maximum degree of emissions reductions possible from vehicular and other mobile sources in order to attain the state ambient air quality standards by the earliest practical date. CARB established the CAAQS for all pollutants for which the federal government has NAAQS and, in addition, establishes standards for SO_4, visibility, hydrogen sulfide (H_2S), and vinyl chloride (C_2H_3Cl). However, at this time, H_2S and C_2H_3Cl are not measured at any monitoring stations in the SCAB

because they are not considered to be a regional air quality problem. Generally, the CAAQS are more stringent than the NAAQS (14) (10).

Local air quality management districts, such as the SCAQMD, regulate air emissions from stationary sources such as commercial and industrial facilities. All air pollution control districts have been formally designated as attainment or non-attainment for each CAAQS.

Serious non-attainment areas are required to prepare Air Quality Management Plans (AQMP) that include specified emission reduction strategies in an effort to meet clean air goals. These plans are required to include:

- Application of Best Available Retrofit Control Technology to existing sources;
- Developing control programs for area sources (e.g., architectural coatings and solvents) and indirect sources (e.g. motor vehicle use generated by residential and commercial development);
- A District permitting system designed to allow no net increase in emissions from any new or modified permitted sources of emissions;
- Implementing reasonably available transportation control measures and assuring a substantial reduction in growth rate of vehicle trips and miles traveled;
- Significant use of low emissions vehicles by fleet operators;
- Sufficient control strategies to achieve a 5% or more annual reduction in emissions or 15% or more in a period of three years for ROGs, NO_X, CO and PM_{10}. However, air basins may use an alternative emission reduction strategy that achieves a reduction of less than 5% per year under certain circumstances.

TITLE 24 ENERGY EFFICIENCY STANDARDS AND CALIFORNIA GREEN BUILDING STANDARDS

California Code of Regulations (CCR) Title 24 Part 6: The California Energy Code was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption.

The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. CCR, Title 24, Part 11: California Green Building Standards Code (CALGreen) is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on August 1, 2009, and is administered by the California Building Standards Commission.

CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2022 California Green Building Code Standards that became effective on January 1, 2023. The CEC anticipates that the 2022 energy code will provide $1.5 billion in consumer benefits and reduce GHG emissions by 10 million metric tons (15). The Project would be required to comply with the applicable standards in place at the time plan check submittals are made. These require, among other items (16):

RESIDENTIAL MANDATORY MEASURES

- Electric vehicle (EV) charging stations. New construction shall comply with Section 4.106.4.1, 4.106.4.2, 4.106.4.3, to facilitate future installation and use of EV chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the *California Electrical Code*, Article 625. (4.106.4).

  - New one- and two-family dwellings and town-houses with attached private garages. For each dwelling unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces. The service panel and/or subpanel shall provide capacity to install a 40-ampere 208/240-volt minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.
  - New hotels and motels. All newly constructed hotels and motels shall provide EV spaces capable of supporting future installation of EVSE. The construction documents shall identify the location of the EV spaces. The number of required EV spaces shall be based on the total number of parking spaces provided for all types of parking facilities in accordance with Table 4.106.4.3.1.
- Water conserving plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with Sections 4.303.1.1, 4.303.1.2, 4.303.1.3, and 4.303.1.4.
- Outdoor potable water use in landscape areas. Residential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent.
- Operation and maintenance manual. At the time of final inspection, a manual, compact disc, web-based reference or other media acceptable to the enforcing agency which includes all of the following shall be placed in the building:
  - Directions to the owner or occupant that the manual shall remain with the building throughout the life cycle of the structure.
  - Operations and maintenance instructions for the following:
    - Equipment and appliances, including water-saving devices and systems, HVAC systems, photovoltaic systems, EV chargers, water-heating systems and other major appliances and equipment.
    - Roof and yard drainage, including gutter and downspouts.
    - Space conditioning systems, including condensers and air filters.
    - Landscape irrigation systems.
    - Water reuse systems.
  - Information from local utility, water and waste recovery providers on methods to further reduce future resource consumption, including recycling programs and locations.
  - Public transportation and/or carpool options available in the area.
  - Educational material on the positive impacts of an interior relative humidity between 30-60% and what methods occupants may use to maintain the relative humidity level in that range.
  - Information about water-conserving landscape and irrigation design and controllers which conserve water.
  - Instructions for maintaining gutters and downspouts and the importance of diverting water at least 5 feet away from the foundation.

  - Information about state solar energy and incentive programs available.
  - A copy of all special inspection verifications required by the enforcing agency of this code.
  - Information from CALFIRE on maintenance of defensible space around residential structures.
- Any installed gas fireplace shall be direct-vent sealed-combustion type. Any installed woodstove or pellet stove shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as applicable, and shall have a permanent label indicating they are certified to meet the emission limits. Woodstoves, pellet stoves and fireplaces shall also comply with applicable local ordinances.
- Paints and coatings. Architectural paints and coatings shall comply with VOC limits in Table 1 of the CARB Architectural Suggested Control Measure, as shown in Table 4.504.3, unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 4.504.3 shall be determined by classifying the coating as a Flat, Nonflat, or Nonflat-high Gloss coating, based on its glass, as defined in subsections 4.21, 4.36, and 4.37 of the 2007 CARB, Suggested Control Measure, and the corresponding Flat, Nonflat, Nonflat-high Gloss VOC limit in Table 4.504.3 shall apply.

2.8.3 AQMP

Currently, the NAAQS and CAAQS are exceeded in most parts of the SCAB. In response, the SCAQMD has adopted a series of AQMP to meet the state and federal ambient air quality standards (17). AQMPs are updated regularly to ensure an effective reduction in emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy. A detailed discussion on the AQMP and Project consistency with the AQMP is provided in Section 3.10.

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3 PROJECT AIR QUALITY IMPACT

3.1 INTRODUCTION

This study quantifies air quality emissions generated by construction and operation of the Project and addresses whether the Project conflicts with implementation of the SCAQMD's AQMP. The analysis of Project-generated air emissions determines whether the Project would result in a cumulatively considerable net increase of any criteria pollutant for which the SCAB is in non-attainment under an applicable NAAQS and CAAQS. Additionally, the Project has been evaluated to determine whether it would expose sensitive receptors to substantial pollutant concentrations and the impacts of odors. The significance of these potential impacts is described in the following sections.

3.2 STANDARDS OF SIGNIFICANCE

The criteria used to determine the significance of potential Project-related air quality impacts are taken from the *CEQA Guidelines* (14 CCR §§15000, et seq.). Based on these thresholds, a project would result in a significant impact related to air quality if it would (1):

- Conflict with or obstruct implementation of the applicable air quality plan.
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard.
- Expose sensitive receptors to substantial pollutant concentrations.
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

The SCAQMD has also developed regional significance thresholds for other regulated pollutants, as summarized at Table 3-1 (18). The SCAQMD's *CEQA Air Quality Significance Thresholds* (March 2023) indicate that any projects in the SCAB with daily emissions that exceed any of the indicated thresholds should be considered as having an individually and cumulatively significant air quality impact.

TABLE 3-1: MAXIMUM DAILY REGIONAL EMISSIONS THRESHOLDS

Pollutant	Regional Construction Threshold	Regional Operational Thresholds
NO_X	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM_{10}	150 lbs/day	150 lbs/day
$PM_{2.5}$	55 lbs/day	55 lbs/day
SO_X	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Pb	3 lbs/day	3 lbs/day

lbs/day = Pounds Per Day

3.3 MODELS EMPLOYED TO ANALYZE AIR QUALITY

3.3.1 CALEEMOD

Land uses such as the Project affect air quality through construction-source and operational-source emissions.

In August 2023, the California Air Pollution Control Officers Association (CAPCOA) in conjunction with other California air districts including the SCAQMD, released the latest version of the California Emissions Estimator Model (CalEEMod) version 2022.1.1.22. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$) and greenhouse gas (GHG) emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures (19). Accordingly, the latest version of CalEEMod has been used for this Project to determine construction and operational air quality emissions. Output from the model runs for both construction and operational activity are provided in Appendix 3.1.

3.4 CONSTRUCTION EMISSIONS

3.4.1 CONSTRUCTION ACTIVITIES

Construction activities associated with the Project would result in emissions of VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$. Construction-related emissions are expected from the following construction activities:

- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

GRADING ACTIVITIES

Dust is typically a major concern during grading activities. Because such emissions are not amenable to collection and discharge through a controlled source, they are called “fugitive emissions.” Fugitive dust emissions rates vary as a function of many parameters (soil silt, soil moisture, wind speed, area disturbed, number of vehicles, depth of disturbance or excavation, etc.). CalEEMod was utilized to calculate fugitive dust emissions resulting from this phase of activity. Per client-provided data, the Project would require 130,000 cubic yards of export for earthwork activities.

ON-ROAD TRIPS

Construction generates on-road vehicle emissions from vehicle usage for workers, vendors, and haul trucks commuting to and from the site. The number of worker, vendor, and hauling trips are presented below in Table 3-2. Worker trips are based on CalEEMod defaults. It should be noted that for vendor trips, specifically, CalEEMod only assigns vendor trips to the Building Construction

phase. Vendor trips would likely occur during all phases of construction. As such, the CalEEMod defaults for vendor trips have been adjusted based on a ratio of the total vendor trips to the number of days of each subphase of activity.

TABLE 3-2: CONSTRUCTION TRIP ASSUMPTIONS

Construction Activity	Worker Trips Per Day	Vendor Trips Per Day	Hauling Trips Per Day
Site Preparation	18	5	0
Grading	20	16	542
Building Construction	456	157	0
Paving	15	0	0
Architectural Coating	91	0	0

3.4.2 CONSTRUCTION DURATION

For purposes of analysis, construction of Project is expected to commence June 2026 and would last through September 2025. The construction schedule utilized in the analysis, shown in Table 3-3, represents a "conservative" analysis scenario should construction occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent.[2] The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per *CEQA Guidelines* (1).

TABLE 3-3: CONSTRUCTION DURATION

Construction Activity	Start Date	End Date	Working Days
Site Preparation	6/3/2024	6/14/2024	10
Grading	6/17/2024	7/26/2024	30
Building Construction	7/29/2024	9/19/2025	300
Paving	8/25/2025	9/19/2025	20
Architectural Coating	5/19/2025	9/19/2025	90

3.4.3 CONSTRUCTION EQUIPMENT

Consistent with industry standards and typical construction practices, each piece of equipment listed in Table 3-4 is assumed to operate up to a total of eight (8) hours per day, or more than two-thirds of the period during which construction activities are allowed pursuant to the City code.

[2] As shown in the CalEEMod User's Guide Version 2022, Appendix G "Table G-11. Statewide Average Annual Offoad Equipment Emission Factors" as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

TABLE 3-4: CONSTRUCTION EQUIPMENT ASSUMPTIONS

Construction Activity	Equipment[1]	Amount	Hours Per Day
Site Preparation	Rubber Tired Dozers	3	8
	Crawler Tractors	4	8
Grading	Graders	1	8
	Excavators	2	8
	Scrapers	2	8
	Rubber Tired Dozers	1	8
	Crawler Tractors	1	8
Building Construction	Forklifts	2	8
	Generator Sets	3	8
	Cranes	1	8
	Welders	1	8
	Tractors/Loaders/Backhoes	1	8
Paving	Pavers	2	8
	Paving Equipment	2	8
	Rollers	2	8
Architectural Coating	Air Compressors	1	8

[1] In order to account for fugitive dust emissions, Crawler Tractors were used in lieu of Tractors/Loaders/Backhoes during the site preparation and grading phases of Project construction.

3.4.4 CONSTRUCTION EMISSIONS SUMMARY

IMPACTS WITHOUT MITIGATION

The estimated maximum daily construction emissions without mitigation are summarized in Table 3-5. Detailed construction model outputs are presented in Appendix 3.1. Under the assumed scenarios, emissions resulting from the Project construction would not exceed criteria pollutant thresholds established by the SCAQMD.

TABLE 3-5: OVERALL CONSTRUCTION EMISSIONS SUMMARY – WITHOUT MITIGATION

Year	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer						
2024	4.86	85.10	59.57	0.32	15.68	5.96
2025	39.43	27.80	72.35	0.08	9.62	2.95

Year	Emissions (lbs/day)					
	VOC	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Winter						
2024	3.67	20.66	46.45	0.06	7.91	2.33
2025	3.30	19.14	43.84	0.06	7.84	2.27
Maximum Daily Emissions	**39.43**	**85.10**	**72.35**	**0.32**	**15.68**	**5.96**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Source: CalEEMod construction-source (unmitigated) emissions are presented in Appendix 3.1

3.5 OPERATIONAL EMISSIONS

Operational activities associated with the Project would result in emissions of VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$. Operational emissions are expected from the following primary sources:

- Area Source Emissions
- Energy Source Emissions
- Mobile Source Emissions

3.5.1 AREA SOURCE EMISSIONS

ARCHITECTURAL COATINGS

Over a period of time, the Project buildings would require maintenance and would therefore produce emissions resulting from the evaporation of solvents contained in paints, varnishes, primers, and other surface coatings. The emissions associated with architectural coatings were calculated using CalEEMod.

CONSUMER PRODUCTS

Consumer products include, but are not limited to, detergents, cleaning compounds, polishes, personal care products, and lawn and garden products. Many of these products contain organic compounds which when released in the atmosphere can react to form ozone and other photochemically reactive pollutants. The emissions associated with use of consumer products were calculated based on defaults provided within CalEEMod.

LANDSCAPE MAINTENANCE EQUIPMENT

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shedders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the Project. It should be noted that on October 9, 2021, Governor Gavin Newsom signed AB 1346. The bill aims to ban the sale of new gasoline-powered equipment under 25 gross horsepower (known as small off-road engines [SOREs]) by January 1, 2024, which is now in effect. However, for purposes of analysis, the emissions associated with landscape maintenance

equipment were calculated based on assumptions provided in CalEEMod, and do not incorporate the emissions reductions that would be realized from implementation of AB 1346.

3.5.2 Energy Source Emissions

Combustion Emissions Associated with Natural Gas and Electricity

Electricity and natural gas are used by almost every project. Criteria pollutant emissions are emitted through the generation of electricity and consumption of natural gas. However, because electrical generating facilities for the Project area are located either outside the region (state) or offset through the use of pollution credits (RECLAIM) for generation within the SCAB, criteria pollutant emissions from offsite generation of electricity are excluded from the evaluation of significance. Electricity and natural gas usage associated with the Project was calculated by CalEEMod using default parameters.

3.5.3 Mobile Source Emissions

The Project related air quality emissions derive primarily from vehicle trips associated with the Project, including employee trips and commercial trips to and from the site associated with the proposed uses. Trip characteristics available from the *Empire Groves Hotel Traffic Impact Analysis* were utilized in this analysis (20).

Fugitive Dust Related to Vehicular Travel

Vehicles traveling on paved roads would be a source of fugitive emissions due to the generation of road dust inclusive of brake and tire wear particulates. The emissions estimate for travel on paved roads was calculated using CalEEMod.

3.5.4 Operational Emissions Summary

Operational activities for summer and winter scenarios are presented in Table 3-6. The estimated operational-source emissions are summarized in Table 3-6. Detailed operation model outputs for the Project are presented in Appendix 3.1. Project operational activities would not exceed the numerical thresholds of significance established by the SCAQMD for emissions of any criteria pollutant. As such, operational impacts would be considered less-than-significant.

TABLE 3-6: SUMMARY OF PEAK OPERATIONAL EMISSIONS

Source	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer						
Mobile Source	19.66	18.24	172.16	0.41	35.25	9.14
Area Source	23.33	0.40	47.22	0.00	0.08	0.06
Energy Source	0.29	5.21	4.38	0.03	0.40	0.40
Project Maximum Daily Emissions	**43.28**	**23.84**	**223.76**	**0.44**	**35.73**	**9.60**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**
Winter						
Mobile Source	18.22	19.60	144.10	0.38	35.25	9.14
Area Source	15.58	0.00	0.00	0.00	0.00	0.00
Energy Source	0.29	5.21	4.38	0.03	0.40	0.40
Project Maximum Daily Emissions	**34.09**	**24.81**	**148.47**	**0.42**	**35.64**	**9.54**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Source: CalEEMod operational-source emissions are presented in Appendix 3.1.

3.6 LOCALIZED SIGNIFICANCE

BACKGROUND ON LST DEVELOPMENT

The analysis makes use of methodology included in the SCAQMD *Final Localized Significance Threshold Methodology* (LST Methodology). The SCAQMD has established that impacts to air quality are significant if there is a potential to contribute or cause localized exceedances of the federal and/or state ambient air quality standards (NAAQS/CAAQS). Collectively, these are referred to as Localized Significance Thresholds (LSTs).

The SCAQMD established LSTs in response to the SCAQMD Governing Board's Environmental Justice Initiative I-4.[3] LSTs represent the maximum emissions from a project that would not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest residence or sensitive receptor. The SCAQMD states that lead agencies can use the LSTs as another indicator of significance in its air quality impact analyses.

[3] The purpose of SCAQMD's Environmental Justice program is to ensure that everyone has the right to equal protection from air pollution and fair access to the decision-making process that works to improve the quality of air within their communities. Further, the SCAQMD defines Environmental Justice as "…equitable environmental policymaking and enforcement to protect the health of all residents, regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location, from the health effects of air pollution."

LSTs were developed in response to environmental justice and health concerns raised by the public regarding exposure of individuals to criteria pollutants in local communities. To address the issue of localized significance, the SCAQMD adopted LSTs that show whether a project would cause or contribute to localized air quality impacts and thereby cause or contribute to potential localized adverse health effects. The analysis makes use of methodology included in the *LST Methodology* (21).

EMISSIONS CONSIDERED

Based on SCAQMD's *LST Methodology*, emissions for concern during construction activities are on-site NO_X, CO, $PM_{2.5}$, and PM_{10}. The *LST Methodology* clearly states that "off-site mobile emissions from the Project should not be included in the emissions compared to LSTs (22)." As such, for purposes of the construction LST analysis, only emissions included in the CalEEMod "on-site" emissions outputs were considered.

DISPERSION MODELING

In order to estimate localized pollutant concentrations resulting from Project construction, the SCAQMD-approved American Meteorological Society/EPA Regulatory Model (AERMOD) dispersion model was utilized. The modeling approach utilized is discussed as follows:

SOURCES

It should be noted that in order to model worst-case conditions, the highest daily peak on-site emissions resulting from overlapping construction activity were modeled.

A ground level release height and a 1 meter (approximately 3.28 feet) initial vertical dimension (sigma z) were utilized for fugitive dust emissions of PM_{10} and $PM_{2.5}$ consistent with SCAQMD's LST guidance.

In order to account for equipment exhaust emissions from NO_2, CO, PM_{10}, and $PM_{2.5}$ a release height of 5.0 meters was utilized consistent with SCAQMD's LST guidance.

METEOROLOGICAL DATA AND MODEL OPTIONS

In order to account for meteorological conditions at the Project site, meteorological data from the SCAQMD's Ontario Airport monitoring station was utilized, as this is the nearest station to the Project site for which meteorological data is available. Additionally, a receptor height of 2 meters and regulatory default options were utilized consistent with SCAQMD's LST guidance.

RECEPTORS

As previously stated, LSTs represent the maximum emissions from a project that would not cause or contribute to an exceedance of the most stringent applicable NAAQS and CAAQS at the nearest residence or sensitive receptor. Receptor locations are off-site locations where individuals may be exposed to emissions from Project activities.

Some people are especially sensitive to air pollution and are given special consideration when evaluating air quality impacts from projects. These groups of people include children, the elderly,

and individuals with pre-existing respiratory or cardiovascular illness. Structures that house these persons or places where they gather are defined as "sensitive receptors." These structures typically include uses such as residences, hotels, and hospitals where an individual can remain for 24 hours. Consistent with the LST Methodology, the nearest land use where an individual could remain for 24 hours to the Project site has been used to determine construction and operational air quality impacts for emissions of PM_{10} and $PM_{2.5}$, since PM_{10} and $PM_{2.5}$ thresholds are based on a 24-hour averaging time.

LSTs apply, even for non-sensitive land uses, consistent with *LST Methodology* and SCAQMD guidance. Per the *LST Methodology*, commercial and industrial facilities are not included in the definition of sensitive receptor because employees and patrons do not typically remain on-site for a full 24 hours but are typically on-site for 8 hours or less. However, *LST Methodology* explicitly states that "*LSTs based on shorter averaging periods, such as the NO_2 and CO LSTs, could also be applied to receptors such as industrial or commercial facilities since it is reasonable to assume that a worker at these sites could be present for periods of one to eight hours* (22)." Therefore, any adjacent land use where an individual could remain for 1 or 8 hours, that is located at a closer distance to the Project site than the receptor used for PM_{10} and $PM_{2.5}$ analysis, must be considered to determine construction and operational LST air impacts for emissions of NO_2 and CO since these pollutants have an averaging time of 1 and 8 hours.

PROJECT-RELATED RECEPTORS

Receptors in the Project study area are described below and shown in Exhibit 3-B. Localized air quality impacts were evaluated at sensitive receptor land uses nearest the Project site. All distances are measured from the Project site boundary to the outdoor living areas (e.g., backyards) or at the building façade, whichever is closer to the Project site.

- R1: Location R1 represents the Ontario Gateway Hotel at 2200 E Holt Blvd, approximately 176 feet west of the Project site.
- R2: Location R2 represents the existing residence at 304 N Placer Privado, approximately 2,802 feet north of the Project site.
- R3: Location R3 represents the existing building of Holiday Inn Ontario Airport at 2155 E Convention Center Way, approximately 237 feet north of the Project site.
- R4: Location R4 represents the existing residence at 2505 E Date Palm Paseo, approximately 1,968 feet north of the Project site.
- R5: Location R5 represents the existing residence at 710 Via Dolcetto, approximately 3,593 feet northeast of the Project site.
- R6: Location R6 represents the Frontier Center at 2151 E Convention Center Way, approximately 232 feet north of the Project site.

The SCAQMD recommends that the nearest sensitive receptor be considered when determining a Project's impact. The nearest land use where an individual could remain for 24 hours to the Project site has been used to determine localized construction and operational air quality impacts for emissions of PM_{10} and $PM_{2.5}$ (since PM_{10} and $PM_{2.5}$ thresholds are based on a 24-hour averaging time).

EXHIBIT 3-B: RECEPTOR LOCATIONS



3.7 CONSTRUCTION-SOURCE EMISSIONS LST ANALYSIS

Emissions during the peak construction activity will not exceed the SCAQMD's localized significance thresholds at the maximally exposed receptor location, as illustrated in Table 3-7 (without mitigation). All other modeled locations in the study area would experience a lesser concentration and consequently a lesser impact. As such, the Project's localized impacts during construction activity would be less than significant. AERMOD model outputs are provided in Appendix 3.5 (without mitigation).

TABLE 3-7: LOCALIZED SIGNIFICANCE SUMMARY PEAK CONSTRUCTION – WITHOUT MITIGATION

Peak Construction	CO		NO_2	PM_{10}	$PM_{2.5}$
	Averaging Time				
	1-Hour	8-Hour	1-Hour	24-Hours	24-Hours
Peak Day Localized Emissions	0.05	0.03	3.66E-02	2.72	1.57
Background Concentration [A]	1.30	1.00	0.085		
Total Concentration	**1.35**	**1.03**	**0.12**	**2.72**	**1.57**
SCAQMD Localized Significance Threshold	20	9	0.18	10.4	10.4
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**

[A] Highest concentration from the last three years of available data.
Notes: PM_{10} and $PM_{2.5}$ concentrations are expressed in $\mu g/m^3$. All others are expressed in ppm.
Based on SCAQMD's LST Methodology, background concentrations are considered only for CO and NO_2.

3.8 OPERATIONAL-SOURCE EMISSIONS LST ANALYSIS

The Project consists of a hotel that includes 600 rooms and suites, 2 ballrooms, a spa & fitness center, meeting and conference rooms as well as an outdoor pool and event lawn on 10.43 acres.

According to SCAQMD LST methodology, LSTs would apply to the operational phase of a proposed project, if the project includes stationary sources, or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., transfer facilities and warehouse buildings). The proposed Project does not include such uses, and thus, due to the lack of significant stationary source emissions, no long-term localized significance threshold analysis is needed.

3.9 CO "HOT SPOT" ANALYSIS

As discussed below, the Project would not result in potentially adverse CO concentrations or "hot spots." Further, detailed modeling of Project-specific CO "hot spots" is not needed to reach this conclusion. An adverse CO concentration, known as a "hot spot," would occur if an exceedance of the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm were to occur.

It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. In response, vehicle emissions standards have become increasingly stringent in the last twenty years. Currently, the allowable CO emissions standard in

California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration in the SCAB is now designated as attainment. To establish a more accurate record of baseline CO concentrations affecting the SCAB, a CO "hot spot" analysis was conducted in 2003 for four busy intersections in Los Angeles at the peak morning and afternoon time periods. This "hot spot" analysis did not predict any violation of CO standards, as shown in Table 3-8.

TABLE 3-8: CO MODEL RESULTS

Intersection Location	CO Concentrations (ppm)		
	Morning 1-hour	Afternoon 1-hour	8-hour
Wilshire Boulevard/Veteran Avenue	4.6	3.5	3.7
Sunset Boulevard/Highland Avenue	4	4.5	3.5
La Cienega Boulevard/Century Boulevard	3.7	3.1	5.2
Long Beach Boulevard/Imperial Highway	3	3.1	8.4

Source: 2003 AQMP, Appendix V: Modeling and Attainment Demonstrations
Notes: Federal 1-hour standard is 35 ppm and the deferral 8-hour standard is 9.0 ppm.

Based on the SCAQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (*1992 CO Plan*), peak carbon monoxide concentrations in the SCAB were a result of unusual meteorological and topographical conditions and not a result of traffic volumes and congestion at a particular intersection. As evidence of this, for example, 8.4 ppm 8-hour CO concentration measured at the Long Beach Blvd. and Imperial Hwy. intersection (highest CO generating intersection within the "hot spot" analysis), only 0.7 ppm was attributable to the traffic volumes and congestion at this intersection; the remaining 7.7 ppm were due to the ambient air measurements at the time the 2003 AQMP was prepared (23). In contrast, an adverse CO concentration, known as a "hot spot", would occur if an exceedance of the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9 ppm were to occur.

The ambient 1-hour and 8-hour CO concentration within the Project study area is estimated to be 1.3 ppm and 1.0 ppm, respectively (data from CA-60 Near Road monitoring station for 2022). Therefore, even if the traffic volumes for the proposed Project were double or even triple the traffic volumes generated at the Long Beach Blvd. and Imperial Hwy. intersection, coupled with the on-going improvements in ambient air quality, the Project would not be capable of resulting in a CO "hot spot" at any study area intersections.

Similar considerations are also employed by other Air Districts when evaluating potential CO concentration impacts. More specifically, the Bay Area Air Quality Management District (BAAQMD) concludes that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour (vph)—or 24,000 vph where vertical and/or horizontal air does not mix—in order to generate a significant CO impact (24). Traffic volumes generating the CO concentrations for the "hot spot"

analysis is shown in Table 3-9. The busiest intersection evaluated was at Wilshire Boulevard and Veteran Avenue, which has a daily traffic volume of approximately 100,000 vph and AM/PM traffic volumes of 8,062 vph and 7,719 vph respectively (23). The *2003 AQMP* estimated that the 1-hour concentration for this intersection was 4.6 ppm; this indicates that, should the daily traffic volume increase four times to 400,000 vehicles per day, CO concentrations (4.6 ppm x 4= 18.4 ppm) would still not likely exceed the most stringent 1-hour CO standard (20.0 ppm).[4]

TABLE 3-9: TRAFFIC VOLUMES

Intersection Location	Peak Traffic Volumes (vph)				
	Eastbound (AM/PM)	Westbound (AM/PM)	Southbound (AM/PM)	Northbound (AM/PM)	Total (AM/PM)
Wilshire Boulevard/Veteran Avenue	4,954/2,069	1,830/3,317	721/1,400	560/933	8,062/7,719
Sunset Boulevard/Highland Avenue	1,417/1,764	1,342/1,540	2,304/1,832	1,551/2,238	6,614/5,374
La Cienega Boulevard/Century Boulevard	2,540/2,243	1,890/2,728	1,384/2,029	821/1,674	6,634/8,674
Long Beach Boulevard/Imperial Highway	1,217/2,020	1,760/1,400	479/944	756/1,150	4,212/5,514

Source: 2003 AQMP

3.10 AQMP

The Project site is located within the SCAB, which is characterized by relatively poor air quality. The SCAQMD has jurisdiction over an approximately 10,743-square-mile area consisting of the four-county Basin and the Los Angeles County and Riverside County portions of was previoulsy referred to as the Southeast Desert Air Basin. In these areas, the SCAQMD is principally responsible for air pollution control, and works directly with the SCAG, county transportation commissions, local governments, as well as state and federal agencies to reduce emissions from stationary, mobile, and indirect sources to meet state and federal ambient air quality standards.

Currently, these state and federal air quality standards are exceeded in most parts of the SCAB. In response, the SCAQMD has adopted a series of AQMPs to meet the state and federal ambient air quality standards. AQMPs are updated regularly in order to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy.

In December 2022, the SCAQMD released the *Final 2022 AQMP* (*2022 AQMP*). The *2022 AQMP* continues to evaluate current integrated strategies and control measures to meet the CAAQS, as well as explore new and innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a strategy with fair-share reductions at the federal, state, and local levels (25). Similar to the 2016 AQMP, the *2022 AQMP* incorporates scientific and technological information and planning assumptions, including the *2020-2045 RTP/SCS*, a planning document that supports the integration of land use and transportation to help the region meet the federal CAA requirements

[4] Based on the ratio of the CO standard (20.0 ppm) and the modeled value (4.6 ppm)

(26). The Project's consistency with the AQMP will be determined using the *2022 AQMP* as discussed below.

Criteria for determining consistency with the AQMP are defined in Chapter 12, Section 12.2 and Section 12.3 of the *1993 CEQA Handbook* (27). These indicators are discussed below:

3.10.1 CONSISTENCY CRITERION NO. 1

The proposed Project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

The violations that Consistency Criterion No. 1 refer to are the CAAQS and NAAQS. CAAQS and NAAQS violations would occur if regional or localized significance thresholds were exceeded.

Construction Impacts – Consistency Criterion 1

As evaluated, the Project's localized and regional construction-source emissions would not exceed applicable regional significance threshold and LST thresholds. As such, a less than significant impact is expected.

Operational Impacts – Consistency Criterion 1

As evaluated, the Project's localized and regional operation-source emissions would not exceed applicable regional significance threshold and LST thresholds. As such, a less than significant impact is expected.

On the basis of the preceding discussion, the Project is determined to be consistent with the first criterion.

3.10.2 CONSISTENCY CRITERION NO. 2

The Project will not exceed the assumptions in the AQMP based on the years of Project build-out phase.

The *2022 AQMP* demonstrates that the applicable ambient air quality standards can be achieved within the timeframes required under federal law. Growth projections from local general plans adopted by cities in the district are provided to the SCAG, which develops regional growth forecasts, which are then used to develop future air quality forecasts for the AQMP. Development consistent with the growth projections in City of Ontario General Plan is considered to be consistent with the AQMP***.***

Construction Impacts – Consistency Criterion 2

Peak day emissions generated by construction activities are largely independent of land use assignments, but rather are a function of development scope and maximum area of disturbance. Irrespective of the site's land use designation, development of the site to its maximum potential would likely occur, with disturbance of the entire site occurring during construction activities. As such, when considering that no emissions thresholds will be exceeded, a less than significant impact would result.

Operational Impacts – Consistency Criterion 2

The TOP 2050 adopted by the City in August 2022, designates the Project site as "Mixed Use – Multimodal" land uses. The "Mixed-Use" designation allows for a maximum FAR of 1.0 for office and retail uses. Intensive office, retail, and residential uses are envisioned to be integrated with the future multimodal transit station that is under consideration, which links rail, regional, local and Airport transit (28).

The proposed Project includes the development of a hotel with 600 rooms and suites, 2 ballrooms, a spa & fitness center, meeting and conference rooms as well as an outdoor pool and event lawn on 10.43 acres. Since the Project's proposed land use is consistent with the General Plan and as the Project's construction and operational-source air pollutant emissions would not exceed the regional or localized significance thresholds, the Project is determined to be consistent with the second criterion.

On the basis of the preceding discussion, the Project is determined to be consistent with the AQMP and a less than significant impact is expected.

AQMP CONSISTENCY CONCLUSION

The Project would not have the potential to result in or cause NAAQS or CAAQS violations. The Project's proposed uses are consistent with the General Plan land use designation and the Project would not exceed the regional or localized construction and operational thresholds. As such, the Project is considered to be consistent with the AQMP.

3.11 POTENTIAL IMPACTS TO SENSITIVE RECEPTORS

The potential impact of Project-generated air pollutant emissions at sensitive receptors has also been considered. Results of the LST analysis indicate that the Project will not exceed the SCAQMD localized significance thresholds during construction. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations during Project construction.

Additionally, the Project will not exceed the SCAQMD localized significance thresholds during operational activity. Further Project traffic would not create or result in a CO "hotspot." Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations as the result of Project operations.

3.11.1 FRIANT RANCH CASE

In December 2018, in the case of *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, the California Supreme Court held that an Environmental Impact Report's (EIR) air quality analysis must meaningfully connect the identified air quality impacts to the human health consequences of those impacts, or meaningfully explain why that analysis cannot be provided.

Most local agencies, including the City of Perris, lack the data to do their own assessment of potential health impacts from criteria air pollutant emissions, as would be required to establish customized, locally-specific thresholds of significance based on potential health impacts from an individual development project. The use of national or "generic" data to fill the gap of missing local data would not yield accurate results because such data does not capture local air patterns,

local background conditions, or local population characteristics, all of which play a role in how a population experiences air pollution. Because it is impracticable to accurately isolate the exact cause of a human disease (for example, the role a particular air pollutant plays compared to the role of other allergens and genetics in causing asthma), existing scientific tools cannot accurately estimate health impacts of the Project's air emissions without undue speculation. Instead, readers are directed to the Project's air quality impact analysis above, which provides extensive information concerning the quantifiable and non-quantifiable health risks related to the Project's construction and long-term operation.

Notwithstanding, this AQIA does evaluate the proposed Project's localized impact to air quality for emissions of CO, NO_X, PM_{10}, and $PM_{2.5}$ by comparing the proposed project's on-site emissions to the SCAQMD's applicable LST thresholds. The LST analysis above determined that the Project would not result in emissions exceeding SCAQMD's LSTs. Therefore, the proposed Project would not be expected to exceed the most stringent applicable federal or state ambient air quality standards for emissions of CO, NO_X, PM_{10}, and $PM_{2.5}$.

As the Project's emissions would comply with federal, state, and local air quality standards, the proposed Project's emissions are not sufficiently high enough to use a regional modeling program to correlate health effects on a basin-wide level and would not provide a reliable indicator of health effects if modeled.

3.12 ODORS

The potential for the Project to generate objectionable odors has also been considered. Land uses generally associated with odor complaints include:

- Agricultural uses (livestock and farming);
- Wastewater treatment plants;
- Food processing plants;
- Chemical plants;
- Composting operations;
- Refineries;
- Landfills;
- Dairies; and
- Fiberglass molding facilities.

The Project does not contain land uses typically associated with emitting objectionable odors. Potential odor sources associated with the proposed Project may result from construction equipment exhaust and the application of asphalt and architectural coatings during construction activities and the temporary storage of typical solid waste (refuse) associated with the proposed Project's (long-term operational) uses. Standard construction requirements would minimize odor impacts from construction. The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction and is thus considered less than significant. It is expected that Project-generated

refuse would be stored in covered containers and removed at regular intervals in compliance with current solid waste regulations. The proposed Project would also be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Therefore, odors and other emissions (such as those leading to odors) associated with construction and operations activities of the proposed Project would be less than significant and no mitigation is required (29).

3.13 CUMULATIVE IMPACTS

As previously shown in Table 2-3, the CAAQS designate the Project site as nonattainment for O_3 PM_{10}, and $PM_{2.5}$ while the NAAQS designates the Project site as nonattainment for O_3 and $PM_{2.5}$.

The SCAQMD has published a report on how to address cumulative impacts from air pollution: *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution* (30). In this report the SCAQMD clearly states (Page D-3):

> *"…the SCAQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR. The only case where the significance thresholds for project specific and cumulative impacts differ is the Hazard Index (HI) significance threshold for TAC emissions. The project specific (project increment) significance threshold is HI > 1.0 while the cumulative (facility-wide) is HI > 3.0. It should be noted that the HI is only one of three TAC emission significance thresholds considered (when applicable) in a CEQA analysis. The other two are the maximum individual cancer risk (MICR) and the cancer burden, both of which use the same significance thresholds (MICR of 10 in 1 million and cancer burden of 0.5) for project specific and cumulative impacts.*
>
> *Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant."*

Therefore, this analysis assumes that individual projects that do not generate operational or construction emissions exceeding the SCAQMD's thresholds would also not cause a cumulatively considerable increase in emissions for those pollutants for which SCAB is in nonattainment, and, therefore, would not be considered to have a significant, adverse air quality impact. Alternatively, individual project-related construction and operational emissions that exceed SCAQMD thresholds would be considered cumulatively considerable.

CONSTRUCTION IMPACTS

The Project-specific evaluation of emissions presented in the preceding analysis demonstrates that proposed Project construction-source air pollutant emissions would not result in exceedances of regional thresholds. Therefore, proposed Project construction-source emissions would be considered less than significant on a Project-specific and cumulative basis.

OPERATIONAL IMPACTS

The Project-specific evaluation of emissions presented in the preceding analysis demonstrates that proposed Project operation-source air pollutant emissions would not result in exceedances of regional thresholds. Therefore, proposed Project operation-source emissions would be considered less than significant on a project-specific and cumulative basis.

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5 CERTIFICATIONS

The contents of this air study report represent an accurate depiction of the environmental impacts associated with the proposed Empire Groves Hotel. The information contained in this air quality impact assessment report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at hqureshi@urbanxroads.com.

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EDUCATION

Master of Science in Environmental Studies
California State University, Fullerton • May 2010

Bachelor of Arts in Environmental Analysis and Design
University of California, Irvine • June, 2006

PROFESSIONAL AFFILIATIONS

AEP – Association of Environmental Professionals
AWMA – Air and Waste Management Association
ASTM – American Society for Testing and Materials

PROFESSIONAL CERTIFICATIONS

Planned Communities and Urban Infill – Urban Land Institute • June 2011
Indoor Air Quality and Industrial Hygiene – EMSL Analytical • April 2008
Principles of Ambient Air Monitoring – CARB • August 2007
AB2588 Regulatory Standards – Trinity Consultants • November 2006
Air Dispersion Modeling – Lakes Environmental • June 2006

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APPENDIX 2.1:

STATE/FEDERAL ATTAINMENT STATUS OF CRITERIA POLLUTANTS

Appendix C
Maps and Tables of Area Designations for State and National Ambient Air Quality Standards

Appendix C
Maps and Tables of Area Designations for State and National Ambient Air Quality Standards

This attachment fulfills the requirement of Health and Safety Code section 40718 for CARB to publish maps that identify areas where one or more violations of any State ambient air quality standard (State standard) or national ambient air quality standard (national standard) have been measured. The national standards are those promulgated under section 109 of the federal Clean Air Act (42 U.S.C. 7409).

This attachment is divided into three parts. The first part comprises a table showing the levels, averaging times, and measurement methods for each of the State and national standards. This is followed by a section containing maps and tables showing the area designations for each pollutant for which there is a State standard in the California Code of Regulations, title 17, section 70200. The last section contains maps and tables showing the most current area designations for the national standards.

(Updated 5/4/16)

Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards [1]		National Standards [2]		
		Concentration [3]	Method [4]	Primary [3,5]	Secondary [3,6]	Method [7]
Ozone (O_3)[8]	1 Hour	0.09 ppm (180 µg/m³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m³)		0.070 ppm (137 µg/m³)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 µg/m³	Gravimetric or Beta Attenuation	150 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m³		—		
Fine Particulate Matter (PM2.5)[9]	24 Hour	—	—	35 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m³	Gravimetric or Beta Attenuation	12.0 µg/m³	15 µg/m³	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m³)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m³)		9 ppm (10 mg/m³)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m³)		—	—	
Nitrogen Dioxide (NO_2)[10]	1 Hour	0.18 ppm (339 µg/m³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m³)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m³)		0.053 ppm (100 µg/m³)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 µg/m³)	Ultraviolet Fluorescence	75 ppb (196 µg/m³)	—	Ultraviolet Flourescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m³)	
	24 Hour	0.04 ppm (105 µg/m³)		0.14 ppm (for certain areas)[11]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[11]	—	
Lead[12,13]	30 Day Average	1.5 µg/m³	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m³ (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m³		
Visibility Reducing Particles[14]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	**No National Standards**		
Sulfates	24 Hour	25 µg/m³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m³)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m³)	Gas Chromatography			

See footnotes on next page ...

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1- and 24-hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For PM2.5, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4. Any equivalent measurement method which can be shown to the satisfaction of the CARB to give equivalent results at or near the level of the air quality standard may be used.

5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

7. Reference method as described by the U.S. EPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the U.S. EPA.

8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15 $\mu g/m^3$. The existing 24-hour PM10 standards (primary and secondary) of 150 $\mu g/m^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

11. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

    Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

12. The CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 $\mu g/m^3$)as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

14. In 1989, the CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Area Designations for the State Ambient Air Quality Standards

The following maps and tables show the area designations for each pollutant with a State standard set forth in the California Code of Regulations, title 17, section 60200. Each area is identified as attainment, nonattainment, nonattainment-transitional, or unclassified for each pollutant, as shown below:

Designation	Abbreviation
Attainment	A
Nonattainment	N
Nonattainment-Transitional	NA-T
Unclassified	U

In general, CARB designates areas by air basin for pollutants with a regional impact and by county for pollutants with a more local impact. However, when there are areas within an air basin or county with distinctly different air quality deriving from sources and conditions not affecting the entire air basin or county, CARB may designate a smaller area. Generally, when boundaries of the designated area differ from the air basin or county boundaries, the description of the specific area is referenced at the bottom of the summary table.

Figure 1

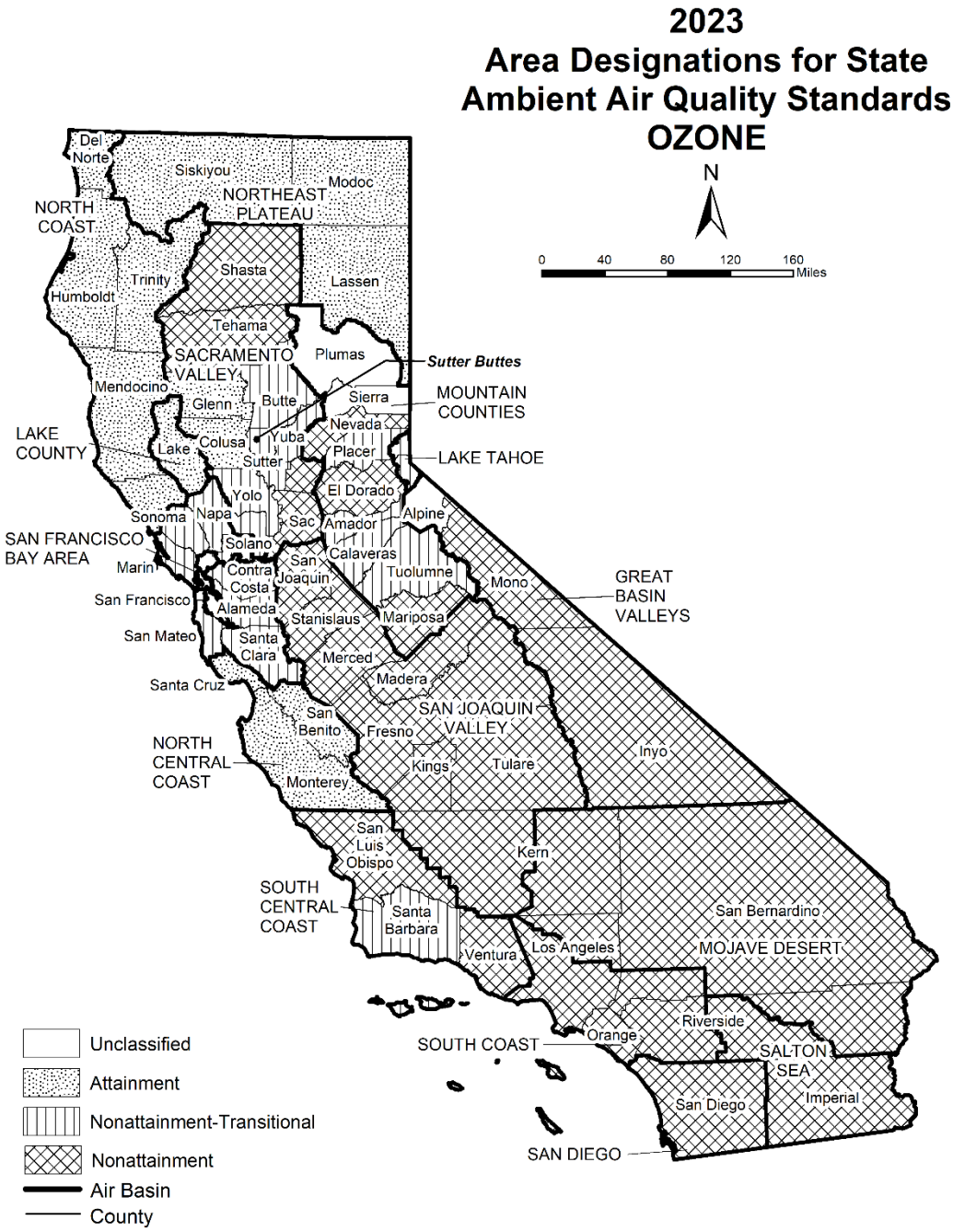

2023
Area Designations for State
Ambient Air Quality Standards
OZONE
N
0 40 80 120 160
Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
SACRAMENTO VALLEY
Plumas
Sutter Buttes
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
LAKE COUNTY
Lake
Colusa
Yuba
Placer
LAKE TAHOE
Sutter
Yolo
El Dorado
Sonoma
Napa
Sac
Amador
Alpine
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
SAN JOAQUIN VALLEY
San Benito
Fresno
NORTH CENTRAL COAST
Kings
Tulare
Inyo
Monterey
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
San Bernardino
Ventura
Los Angeles
MOJAVE DESERT
Riverside
Orange
SOUTH COAST
SALTON SEA
Imperial
San Diego
SAN DIEGO
Unclassified
Attainment
Nonattainment-Transitional
Nonattainment
Air Basin
County
Last Updated: November 2023
Air Quality Planning and Science Division, CARB

Table 1
California Ambient Air Quality Standards Area Designations for Ozone[1]

Area	N	NA-T	U	A
GREAT BASIN VALLEYS AIR BASIN				
Alpine County			U	
Inyo County	N			
Mono County	N			
LAKE COUNTY AIR BASIN				A
LAKE TAHOE AIR BASIN		NA-T		
MOJAVE DESERT AIR BASIN	N			
MOUNTAIN COUNTIES AIR BASIN				
Amador County		NA-T		
Calaveras County		NA-T		
El Dorado County (portion)	N			
Mariposa County	N			
Nevada County	N			
Placer County (portion)		NA-T		
Plumas County			U	
Sierra County			U	
Tuolumne County		NA-T		
NORTH CENTRAL COAST AIR BASIN				A
NORTH COAST AIR BASIN				A
NORTHEAST PLATEAU AIR BASIN				A

Area	N	NA-T	U	A
SACRAMENTO VALLEY AIR BASIN				
Butte County		NA-T		
Colusa and Glenn Counties				A
Shasta County	N			
Sutter/Yuba Counties				
Sutter Buttes		NA-T		
Remainder of Sutter County		NA-T		
Yuba County		NA-T		
Yolo/Solano Counties		NA-T		
Remainder of Air Basin	N			
SALTON SEA AIR BASIN	N			
SAN DIEGO AIR BASIN	N			
SAN FRANCISCO BAY AREA AIR BASIN		NA-T		
SAN JOAQUIN VALLEY AIR BASIN	N			
SOUTH CENTRAL COAST AIR BASIN				
San Luis Obispo County	N			
Santa Barbara County		NA-T		
Ventura County	N			
SOUTH COAST AIR BASIN	N			

[1] AB 3048 (Olberg) and AB 2525 (Miller) signed into law in 1996, made changes to Health and Safety Code, section 40925.5. One of the changes allows nonattainment districts to become nonattainment-transitional for ozone by operation of law.

Figure 2

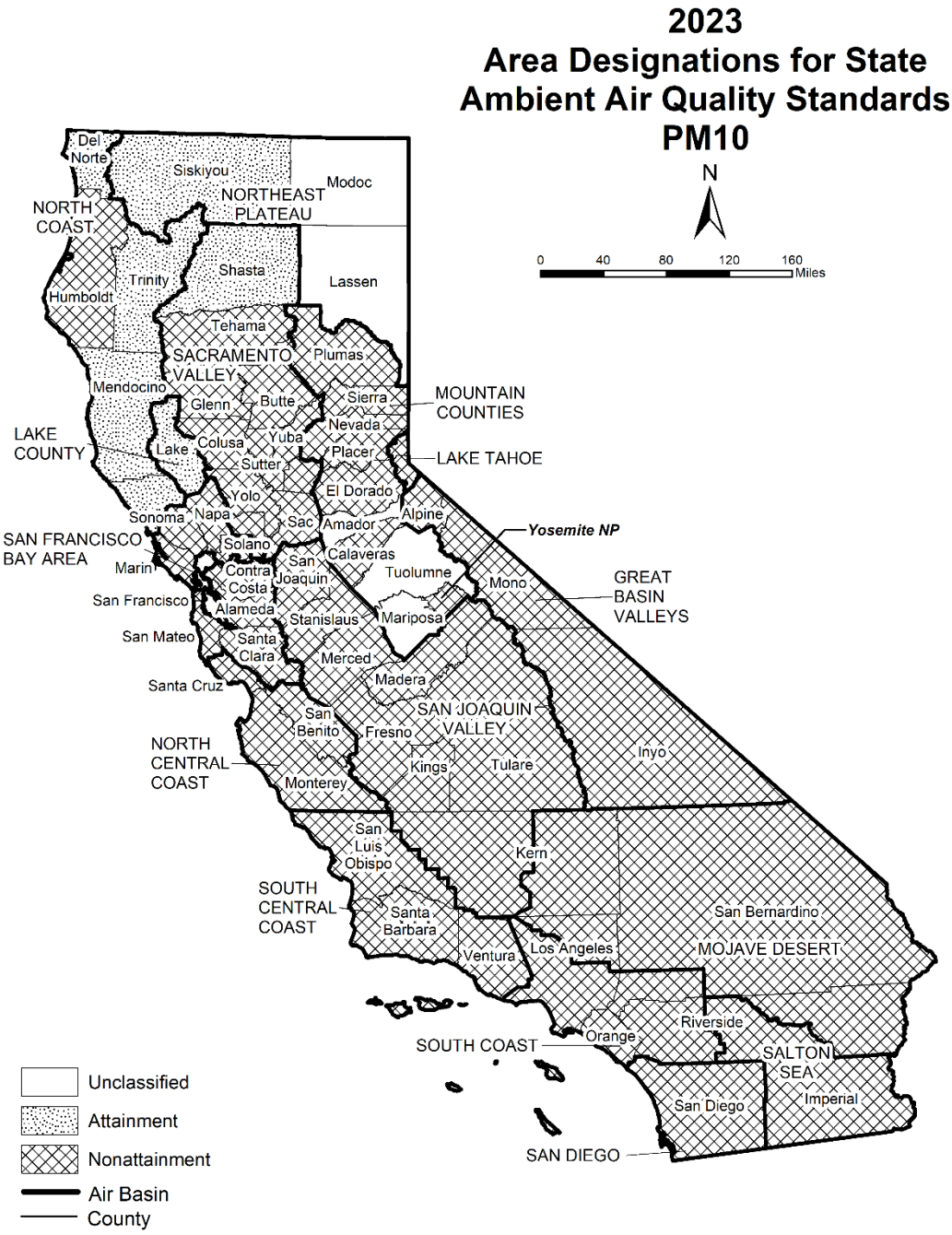
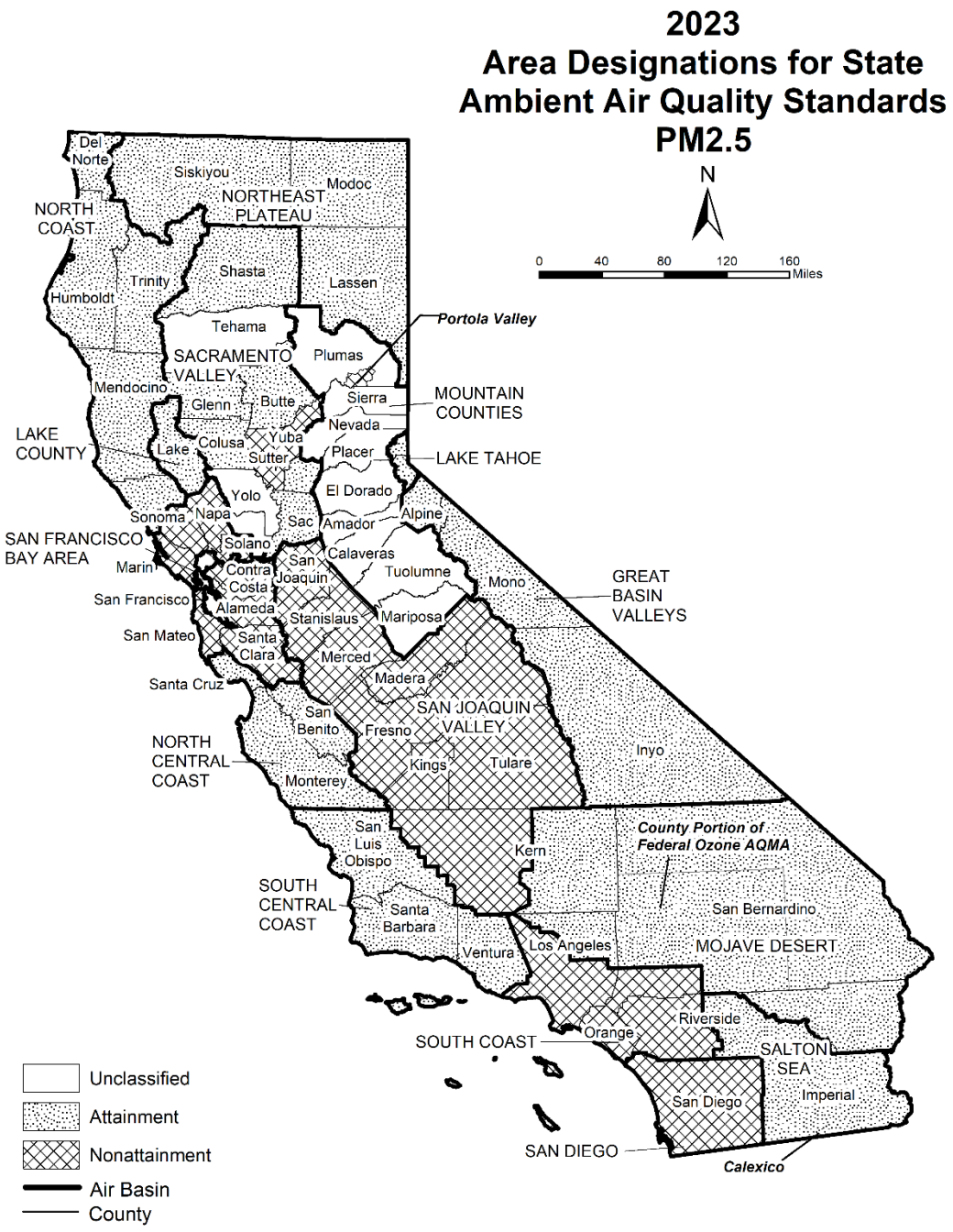

2023
Area Designations for State
Ambient Air Quality Standards
PM10
N
0 40 80 120 160
Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
LAKE COUNTY
Lake
Colusa
Yuba
Placer
LAKE TAHOE
Sutter
El Dorado
Yolo
Sonoma
Napa
Sac
Amador
Alpine
Yosemite NP
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
San Benito
Fresno
SAN JOAQUIN VALLEY
NORTH CENTRAL COAST
Kings
Tulare
Inyo
Monterey
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
San Bernardino
Ventura
Los Angeles
MOJAVE DESERT
Riverside
Orange
SOUTH COAST
SALTON SEA
Imperial
San Diego
SAN DIEGO
Unclassified
Attainment
Nonattainment
Air Basin
County
Last Updated: November 2023
Air Quality Planning and Science Division, CARB

Table 2
California Ambient Air Quality Standards Area Designations for Suspended Particulate Matter (PM_{10})

Area	N	U	A
GREAT BASIN VALLEYS AIR BASIN	N		
LAKE COUNTY AIR BASIN			A
LAKE TAHOE AIR BASIN	N		
MOJAVE DESERT AIR BASIN	N		
MOUNTAIN COUNTIES AIR BASIN			
Amador County		U	
Calaveras County	N		
El Dorado County (portion)	N		
Mariposa County			
- Yosemite National Park	N		
- Remainder of County		U	
Nevada County	N		
Placer County (portion)	N		
Plumas County	N		
Sierra County	N		
Tuolumne County		U	

Area	N	U	A
NORTH CENTRAL COAST AIR BASIN	N		
NORTH COAST AIR BASIN			
Del Norte, Mendocino, Sonoma (portion) and Trinity Counties			A
Remainder of Air Basin	N		
NORTHEAST PLATEAU AIR BASIN			
Siskiyou County			A
Remainder of Air Basin		U	
SACRAMENTO VALLEY AIR BASIN			
Shasta County			A
Remainder of Air Basin	N		
SALTON SEA AIR BASIN	N		
SAN DIEGO AIR BASIN	N		
SAN FRANCISCO BAY AREA AIR BASIN	N		
SAN JOAQUIN VALLEY AIR BASIN	N		
SOUTH CENTRAL COAST AIR BASIN	N		
SOUTH COAST AIR BASIN	N		

Figure 3



Last Updated: November 2023
Air Quality Planning and Science Division, CARB

Table 3
California Ambient Air Quality Standards Area Designations for Fine Particulate Matter ($PM_{2.5}$)

Area	N	U	A
GREAT BASIN VALLEYS AIR BASIN			A
LAKE COUNTY AIR BASIN			A
LAKE TAHOE AIR BASIN			A
MOJAVE DESERT AIR BASIN			A
MOUNTAIN COUNTIES AIR BASIN			
Plumas County			
- Portola Valley[1]	N		
- Remainder Plumas County		U	
Remainder of Air Basin		U	
NORTH CENTRAL COAST AIR BASIN			A
NORTH COAST AIR BASIN			A
NORTHEAST PLATEAU AIR BASIN			A
SACRAMENTO VALLEY AIR BASIN			
Butte County			A
Colusa County			A
Glenn County			A
Placer County (portion)			A
Sacramento County			A
Shasta County			A
Sutter and Yuba Counties	N		
Remainder of Air Basin		U	

Area	N	U	A
SALTON SEA AIR BASIN			
Imperial County			
- City of Calexico[2]	N		
Remainder of Air Basin			A
SAN DIEGO AIR BASIN	N		
SAN FRANCISCO BAY AREA AIR BASIN	N		
SAN JOAQUIN VALLEY AIR BASIN	N		
SOUTH CENTRAL COAST AIR BASIN			A
SOUTH COAST AIR BASIN	N		

[1] California Code of Regulations, title 17, section 60200(c)

[2] California Code of Regulations, title 17, section 60200(a)

Figure 4


2023
Area Designations for State
Ambient Air Quality Standards
CARBON MONOXIDE
N
0 40 80 120 160
Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
LAKE COUNTY
Colusa
Yuba
Lake
Placer
LAKE TAHOE
Sutter
El Dorado
Yolo
Sonoma
Napa
Sac
Amador
Alpine
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
San Benito
Fresno
SAN JOAQUIN VALLEY
NORTH CENTRAL COAST
Kings
Tulare
Inyo
Monterey
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
San Bernardino
Ventura
Los Angeles
MOJAVE DESERT
Riverside
Orange
SOUTH COAST
SALTON SEA
San Diego
Imperial
SAN DIEGO
Unclassified
Attainment
Air Basin
County
Last Updated: November 2023
Air Quality Planning and Science Division, CARB

Table 4
California Ambient Air Quality Standards Area Designations for Carbon Monoxide*

Area	N	NA-T	U	A
GREAT BASIN VALLEYS AIR BASIN				
Alpine County			U	
Inyo County				A
Mono County				A
LAKE COUNTY AIR BASIN				A
LAKE TAHOE AIR BASIN				A
MOJAVE DESERT AIR BASIN				
Kern County (portion)			U	
Los Angeles County (portion)				A
Riverside County (portion)			U	
San Bernardino County (portion)				A
MOUNTAIN COUNTIES AIR BASIN				
Amador County			U	
Calaveras County			U	
El Dorado County (portion)			U	
Mariposa County			U	
Nevada County			U	
Placer County (portion)			U	
Plumas County				A
Sierra County			U	
Tuolumne County				A
NORTH CENTRAL COAST AIR BASIN				
Monterey County				A
San Benito County			U	
Santa Cruz County			U	
NORTH COAST AIR BASIN				
Del Norte County			U	
Humboldt County				A
Mendocino County				A
Sonoma County (portion)			U	
Trinity County			U	
NORTHEAST PLATEAU AIR BASIN			U	

Area	N	NA-T	U	A
SACRAMENTO VALLEY AIR BASIN				
Butte County				A
Colusa County			U	
Glenn County			U	
Placer County (portion)				A
Sacramento County				A
Shasta County			U	
Solano County (portion)				A
Sutter County				A
Tehama County			U	
Yolo County				A
Yuba County			U	
SALTON SEA AIR BASIN				A
SAN DIEGO AIR BASIN				A
SAN FRANCISCO BAY AREA AIR BASIN				A
SAN JOAQUIN VALLEY AIR BASIN				
Fresno County				A
Kern County (portion)				A
Kings County			U	
Madera County			U	
Merced County			U	
San Joaquin County				A
Stanislaus County				A
Tulare County				A
SOUTH CENTRAL COAST AIR BASIN				A
SOUTH COAST AIR BASIN				A

* The area designated for carbon monoxide is a county or portion of a county

Figure 5



Last Updated: November 2023
Air Quality Planning and Science Division, CARB

Table 5
California Ambient Air Quality Standards Area Designations for Nitrogen Dioxide

Area	N	U	A
GREAT BASIN VALLEYS AIR BASIN			A
LAKE COUNTY AIR BASIN			A
LAKE TAHOE AIR BASIN			A
MOJAVE DESERT AIR BASIN			A
MOUNTAIN COUNTIES AIR BASIN			A
NORTH CENTRAL COAST AIR BASIN			A
NORTH COAST AIR BASIN			A
NORTHEAST PLATEAU AIR BASIN			A
SACRAMENTO VALLEY AIR BASIN			A
SALTON SEA AIR BASIN			A
SAN DIEGO AIR BASIN			A
SAN FRANCISCO BAY AREA AIR BASIN			A
SAN JOAQUIN VALLEY AIR BASIN			A
SOUTH CENTRAL COAST AIR BASIN			A
SOUTH COAST AIR BASIN			
CA 60 Near-road Portion of San Bernardino, Riverside, and Los Angeles Counties			A
Remainder of Air Basin			A

Figure 6


2023
Area Designations for State
Ambient Air Quality Standards
SULFUR DIOXIDE
N
0 40 80 120 160
Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
LAKE COUNTY
Colusa
Yuba
Lake
Placer
LAKE TAHOE
Sutter
Yolo
El Dorado
Sonoma
Napa
Sac
Amador
Alpine
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
SAN JOAQUIN VALLEY
San Benito
Fresno
Inyo
NORTH CENTRAL COAST
Kings
Tulare
Monterey
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
San Bernardino
Ventura
Los Angeles
MOJAVE DESERT
Riverside
Orange
SOUTH COAST
SALTON SEA
San Diego
Imperial
SAN DIEGO
Attainment
Air Basin
County
Last Updated: November 2023
Air Quality Planning and Science Division, CARB

Table 6
California Ambient Air Quality Standards Area Designations for Sulfur Dioxide*

Area	N	A
GREAT BASIN VALLEYS AIR BASIN		A
LAKE COUNTY AIR BASIN		A
LAKE TAHOE AIR BASIN		A
MOJAVE DESERT AIR BASIN		A
MOUNTAIN COUNTIES AIR BASIN		A
NORTH CENTRAL COAST AIR BASIN		A
NORTH COAST AIR BASIN		A
NORTHEAST PLATEAU AIR BASIN		A

Area	N	A
SACRAMENTO VALLEY AIR BASIN		A
SALTON SEA AIR BASIN		A
SAN DIEGO AIR BASIN		A
SAN FRANCISCO BAY AREA AIR BASIN		A
SAN JOAQUIN VALLEY AIR BASIN		A
SOUTH CENTRAL COAST AIR BASIN		A
SOUTH COAST AIR BASIN		A

* The area designated for sulfur dioxide is a county or portion of a county. Since all areas in the State are in attainment for this standard, air basins are indicated here for simplicity.

Figure 7

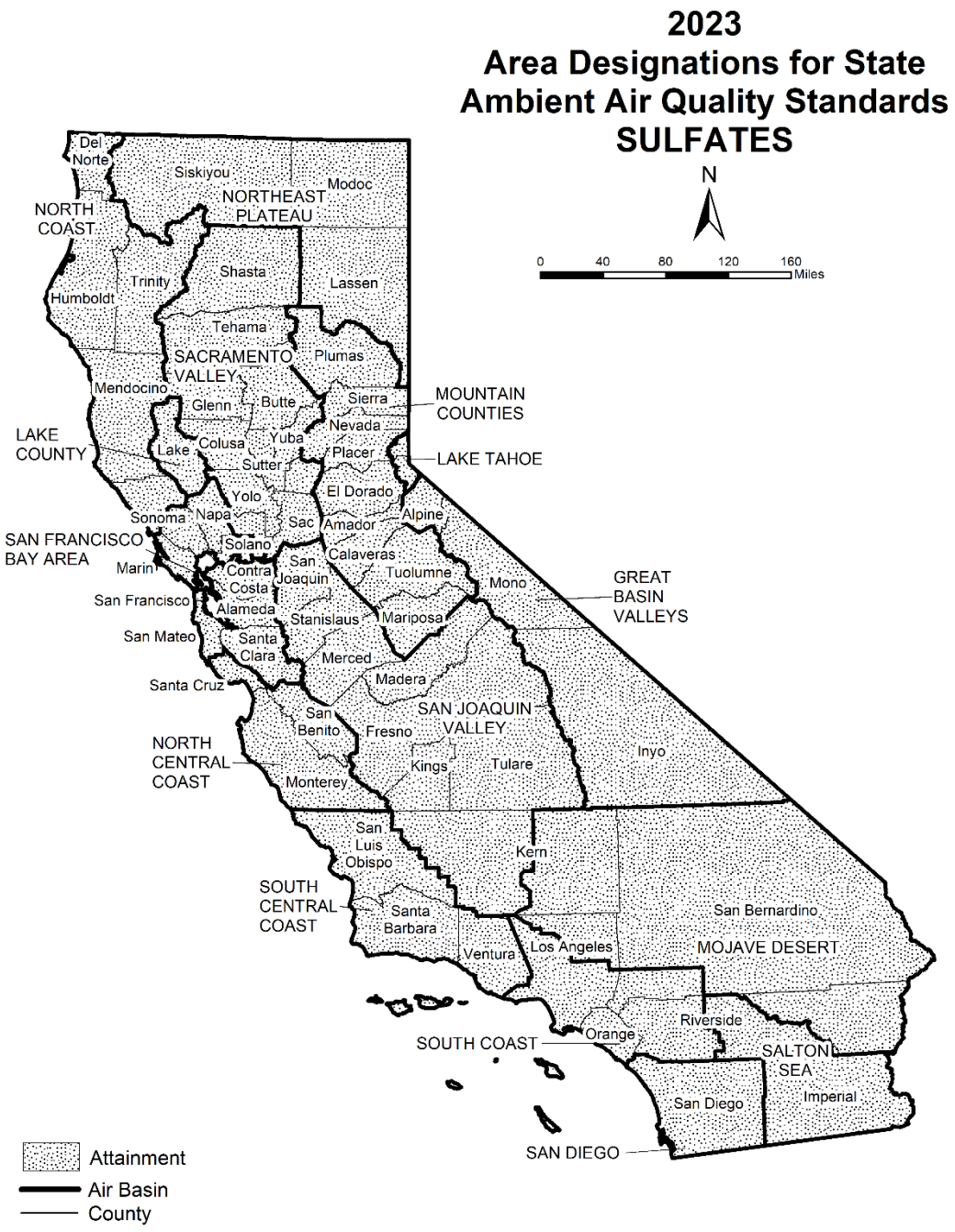

2023
Area Designations for State
Ambient Air Quality Standards
SULFATES
N
0 40 80 120 160
Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
LAKE COUNTY
Colusa
Yuba
Lake
Placer
LAKE TAHOE
Sutter
Yolo
El Dorado
Sonoma
Napa
Sac
Amador
Alpine
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
SAN JOAQUIN VALLEY
San Benito
Fresno
Inyo
NORTH CENTRAL COAST
Kings
Tulare
Monterey
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
San Bernardino
Ventura
Los Angeles
MOJAVE DESERT
Riverside
Orange
SOUTH COAST
SALTON SEA
San Diego
Imperial
SAN DIEGO
Attainment
Air Basin
County
Last Updated: November 2023
Air Quality Planning and Science Division, CARB

Table 7
California Ambient Air Quality Standards Area Designations for Sulfates

Area	N	U	A
GREAT BASIN VALLEYS AIR BASIN			A
LAKE COUNTY AIR BASIN			A
LAKE TAHOE AIR BASIN			A
MOJAVE DESERT AIR BASIN			A
MOUNTAIN COUNTIES AIR BASIN			A
NORTH CENTRAL COAST AIR BASIN			A
NORTH COAST AIR BASIN			A
NORTHEAST PLATEAU AIR BASIN			A

Area	N	U	A
SACRAMENTO VALLEY AIR BASIN			A
SALTON SEA AIR BASIN			A
SAN DIEGO AIR BASIN			A
SAN FRANCISCO BAY AREA AIR BASIN			A
SAN JOAQUIN VALLEY AIR BASIN			A
SOUTH CENTRAL COAST AIR BASIN			A
SOUTH COAST AIR BASIN			A

Figure 8

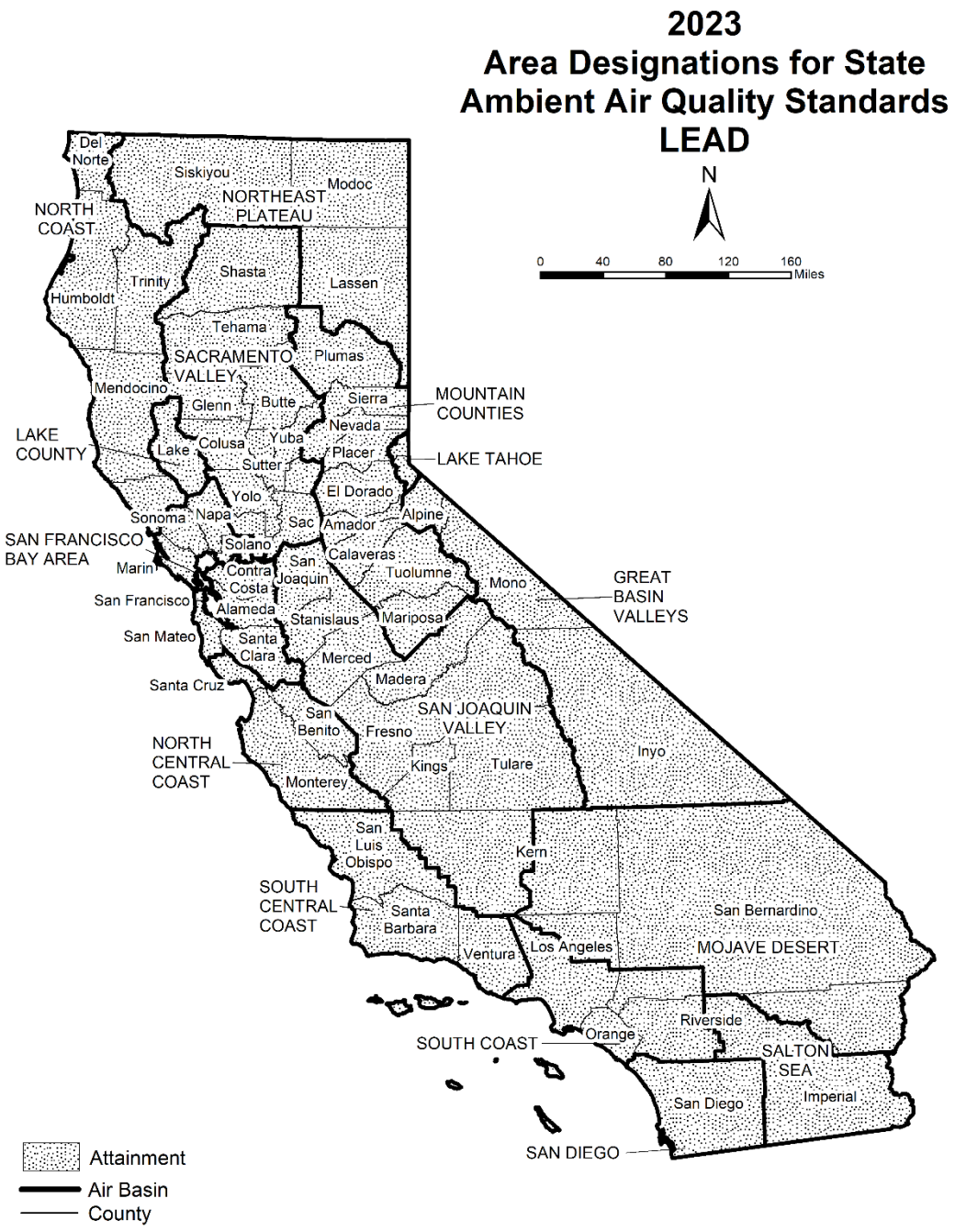

2023
Area Designations for State
Ambient Air Quality Standards
LEAD
N
0 40 80 120 160
Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
LAKE COUNTY
Colusa
Yuba
Lake
Placer
LAKE TAHOE
Sutter
Yolo
El Dorado
Sonoma
Napa
Sac
Amador
Alpine
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
San Benito
Fresno
SAN JOAQUIN VALLEY
NORTH CENTRAL COAST
Kings
Tulare
Inyo
Monterey
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
San Bernardino
Ventura
Los Angeles
MOJAVE DESERT
Riverside
Orange
SOUTH COAST
SALTON SEA
San Diego
Imperial
SAN DIEGO
Attainment
Air Basin
County
Last Updated: November 2023
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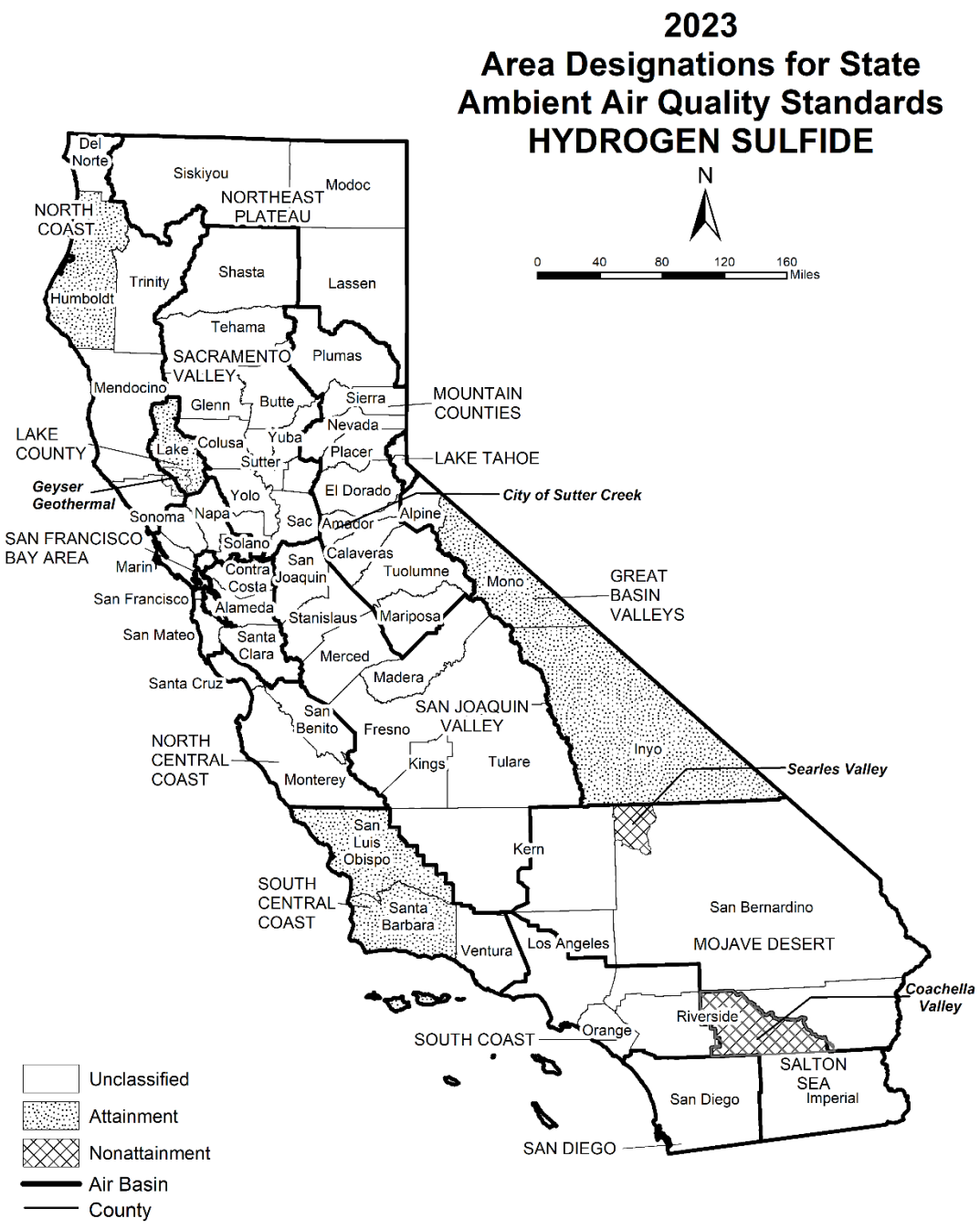
Table 8
California Ambient Air Quality Standards Area Designations for Lead (particulate)*

Area	N	U	A
GREAT BASIN VALLEYS AIR BASIN			A
LAKE COUNTY AIR BASIN			A
LAKE TAHOE AIR BASIN			A
MOJAVE DESERT AIR BASIN			A
MOUNTAIN COUNTIES AIR BASIN			A
NORTH CENTRAL COAST AIR BASIN			A
NORTH COAST AIR BASIN			A
NORTHEAST PLATEAU AIR BASIN			A
SACRAMENTO VALLEY AIR BASIN			A

Area	N	U	A
SALTON SEA AIR BASIN			A
SAN DIEGO AIR BASIN			A
SAN FRANCISCO BAY AREA AIR BASIN			A
SAN JOAQUIN VALLEY AIR BASIN			A
SOUTH CENTRAL COAST AIR BASIN			A
SOUTH COAST AIR BASIN			A

* The area designated for lead is a county or portion of a county. Since all areas in the State are in attainment for this standard, air basins are indicated here for simplicity.

Figure 9



Last Updated: November 2023
Air Quality Planning and Science Division, CARB

Table 9
California Ambient Air Quality Standards Area Designations for Hydrogen Sulfide*

Area	N	NA-T	U	A
GREAT BASIN VALLEYS AIR BASIN				
Alpine County			U	
Inyo County				A
Mono County				A
LAKE COUNTY AIR BASIN				A
LAKE TAHOE AIR BASIN			U	
MOJAVE DESERT AIR BASIN				
Kern County (portion)			U	
Los Angeles County (portion)			U	
Riverside County (portion)			U	
San Bernardino County (portion)				
- Searles Valley Planning Area[1]	N			
- Remainder of County			U	
MOUNTAIN COUNTIES AIR BASIN				
Amador County				
- City of Sutter Creek	N			
- Remainder of County			U	
Calaveras County			U	
El Dorado County (portion)			U	
Mariposa County			U	
Nevada County			U	
Placer County (portion)			U	
Plumas County			U	
Sierra County			U	
Tuolumne County			U	

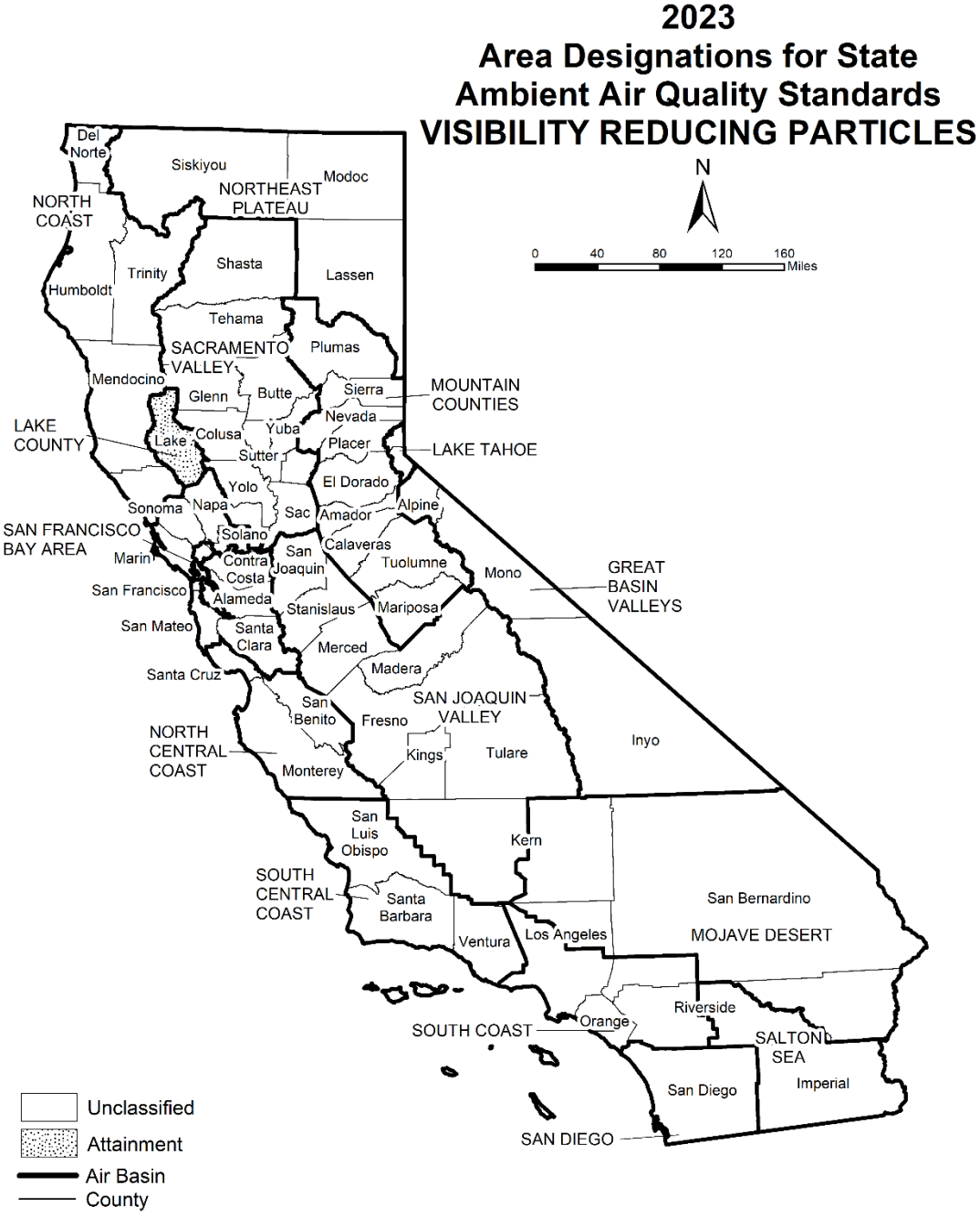
Area	N	NA-T	U	A
NORTH CENTRAL COAST AIR BASIN			U	
NORTH COAST AIR BASIN				
Del Norte County			U	
Humboldt County				A
Mendocino County			U	
Sonoma County (portion)				
- Geyser Geothermal Area[2]				A
- Remainder of County			U	
Trinity County			U	
NORTHEAST PLATEAU AIR BASIN			U	
SACRAMENTO VALLEY AIR BASIN			U	
SALTON SEA AIR BASIN				
Riverside County (portion)	N			
Imperial County			U	
SAN DIEGO AIR BASIN			U	
SAN FRANCISCO BAY AREA AIR BASIN			U	
SAN JOAQUIN VALLEY AIR BASIN			U	
SOUTH CENTRAL COAST AIR BASIN				
San Luis Obispo County				A
Santa Barbara County				A
Ventura County			U	
SOUTH COAST AIR BASIN			U	

* The area designated for hydrogen sulfide is a county or portion of a county

[1] 52 Federal Register 29384 (August 7, 1987)

[2] California Code of Regulations, title 17, section 60200(d)

Figure 10



Last Updated: November 2023
Air Quality Planning and Science Division, CARB

Table 10
California Ambient Air Quality Standards Area Designations for Visibility Reducing Particles

Area	N	NA-T	U	A
GREAT BASIN VALLEYS AIR BASIN			U	
LAKE COUNTY AIR BASIN				A
LAKE TAHOE AIR BASIN			U	
MOJAVE DESERT AIR BASIN			U	
MOUNTAIN COUNTIES AIR BASIN			U	
NORTH CENTRAL COAST AIR BASIN			U	
NORTH COAST AIR BASIN			U	
NORTHEAST PLATEAU AIR BASIN			U	

Area	N	NA-T	U	A
SACRAMENTO VALLEY AIR BASIN			U	
SALTON SEA AIR BASIN			U	
SAN DIEGO AIR BASIN			U	
SAN FRANCISCO BAY AREA AIR BASIN			U	
SAN JOAQUIN VALLEY AIR BASIN			U	
SOUTH CENTRAL COAST AIR BASIN			U	
SOUTH COAST AIR BASIN			U	

Area Designations for the National Ambient Air Quality Standards

The following maps and tables show the area designations for each pollutant with a national ambient air quality standard. Additional information about the federal area designations is available on the U.S. EPA website:

https://www.epa.gov/green-book

Over the last several years, U.S. EPA has been reviewing the levels of the various national standards. The agency has already promulgated new standard levels for some pollutants and is considering revising the levels for others. Information about the status of these reviews is available on the U.S. EPA website:

https://www.epa.gov/criteria-air-pollutants

Designation Categories

Suspended Particulate Matter (PM_{10}). The U.S. EPA uses three categories to designate areas with respect to PM_{10}:

- Attainment (A)
- Nonattainment (N)
- Unclassifiable (U)

Ozone, Fine Suspended Particulate Matter ($PM_{2.5}$), Carbon Monoxide (CO), and Nitrogen Dioxide (NO_2). The U.S. EPA uses two categories to designate areas with respect to these standards:

- Nonattainment (N)
- Unclassifiable/Attainment (U/A)

The national 1-hour ozone standard was revoked effective June 15, 2005, and the area designations map reflects the 2015 national 8-hour ozone standard of 0.070 ppm. Area designations were finalized on August 3, 2018.

On December 14, 2012, the U.S. EPA established a new national annual primary $PM_{2.5}$ standard of 12.0 µg/m^3. Area designations were finalized in December 2014. The current designation map reflects the most recently revised (2012) annual average standard of 12.0 µg/m^3 as well as the 24-hour standard of 35 µg/m^3, revised in 2006.

On January 22, 2010, the U.S. EPA established a new national 1-hour NO_2 standard of 100 parts per billion (ppb) and retained the annual average standard of 53 ppb. Designations for the primary NO_2 standard became effective on February 29, 2012. All areas of California meet this standard.

Sulfur Dioxide (SO_2). The U.S. EPA uses three categories to designate areas with respect to the 24-hour and annual average sulfur dioxide standards. These designation categories are:

- Nonattainment (N),
- Unclassifiable (U), and
- Unclassifiable/Attainment (U/A).

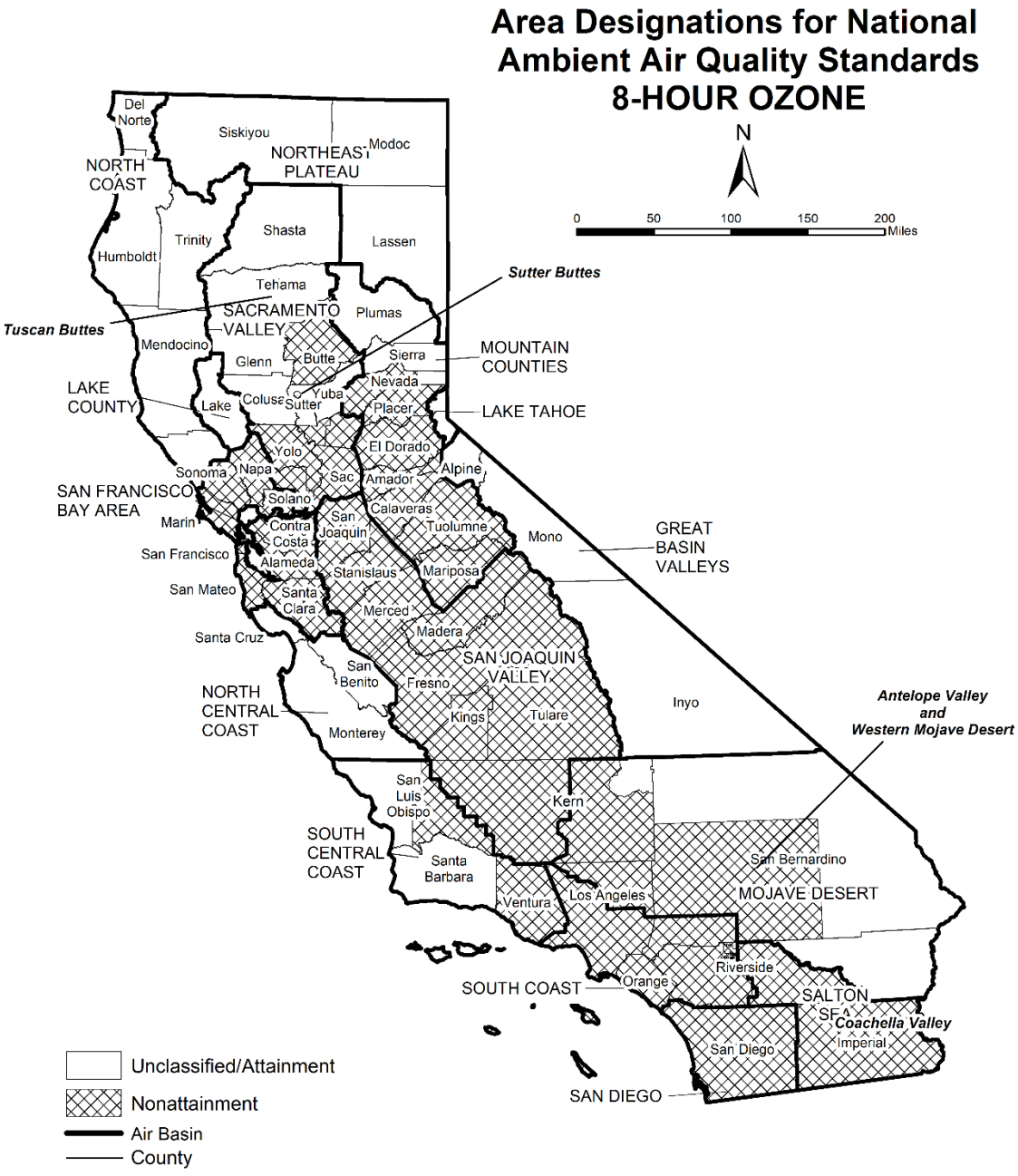
On June 2, 2010, the U.S. EPA established a new primary 1-hour SO_2 standard of 75 parts per billion (ppb). At the same time, U.S. EPA revoked the 24-hour and annual average standards. Area designations for the 1-hour SO_2 standard were finalized on December 21, 2017 and are reflected in the area designations map.

Lead (particulate). The U.S. EPA promulgated a new rolling 3-month average lead standard in October 2008 of 0.15 $\mu g/m^3$. Designations were made for this standard in November 2010.

Designation Areas

From time to time, the boundaries of the California air basins have been changed to facilitate the planning process. CARB generally initiates these changes, and they are not always reflected in the U.S. EPA's area designations. For purposes of consistency, the maps in this attachment reflect area designation boundaries and nomenclature as promulgated by the U.S. EPA. In some cases, these may not be the same as those adopted by CARB. For example, the national area designations reflect the former Southeast Desert Air Basin. In accordance with Health and Safety Code section 39606.1, CARB redefined this area in 1996 to be the Mojave Desert Air Basin and Salton Sea Air Basin. The definitions and boundaries for all areas designated for the national standards can be found in Title 40, Code of Federal Regulations (CFR), Chapter I, Subchapter C, Part 81.305. They are available on the web at: *https://ecfr.io/Title-40/se40.20.81_1305*

Figure 11



Last Updated: November 2023
Map reflects the 2015 8-hour ozone standard of 0.070 ppm
Air Quality Planning and Science Division, CARB

Table 11
National Ambient Air Quality Standards Area Designations for 8-Hour Ozone*

Area	N	U/A
GREAT BASIN VALLEYS AIR BASIN		U/A
LAKE COUNTY AIR BASIN		U/A
LAKE TAHOE AIR BASIN		U/A
MOUNTAIN COUNTIES AIR BASIN		
Amador County	N	
Calaveras County	N	
El Dorado County (portion)[1]	N	
Mariposa County	N	
Nevada County		
- Western Nevada County	N	
- Remainder of County		U/A
Placer County (portion)[1]	N	
Plumas County		U/A
Sierra County		U/A
Tuolumne County	N	
NORTH CENTRAL COAST AIR BASIN		U/A
NORTH COAST AIR BASIN		U/A
NORTHEAST PLATEAU AIR BASIN		U/A
SACRAMENTO VALLEY AIR BASIN		
Butte County	N	
Colusa County		U/A
Glenn County		U/A
Sacramento Metro Area[1]	N	
Shasta County		U/A
Sutter County		
- Sutter Buttes	N	
- Southern portion of Sutter County[1]	N	
- Remainder of Sutter County		U/A
Tehama County		
- Tuscan Buttes	N	
- Remainder of Tehama County		U/A

Area	N	U/A
SACRAMENTO VALLEY AIR BASIN (cont.)		
Yolo County[1]	N	
Yuba County		U/A
SAN DIEGO COUNTY	N	
SAN FRANCISCO BAY AREA AIR BASIN	N	
SAN JOAQUIN VALLEY AIR BASIN	N	
SOUTH CENTRAL COAST AIR BASIN[2]		
San Luis Obispo County		
- Eastern San Luis Obispo County	N	
- Remainder of County		U/A
Santa Barbara County		U/A
Ventura County		
- Area excluding Anacapa and San Nicolas Islands	N	
- Channel Islands[2]		U/A
SOUTH COAST AIR BASIN[2]	N	
SOUTHEAST DESERT AIR BASIN		
Kern County (portion)	N	
- Indian Wells Valley		U/A
Imperial County	N	
Los Angeles County (portion)	N	
Riverside County (portion)		
- Coachella Valley	N	
- Non-AQMA portion		U/A
San Bernardino County		
- Western portion (AQMA)	N	
- Eastern portion (non-AQMA)		U/A

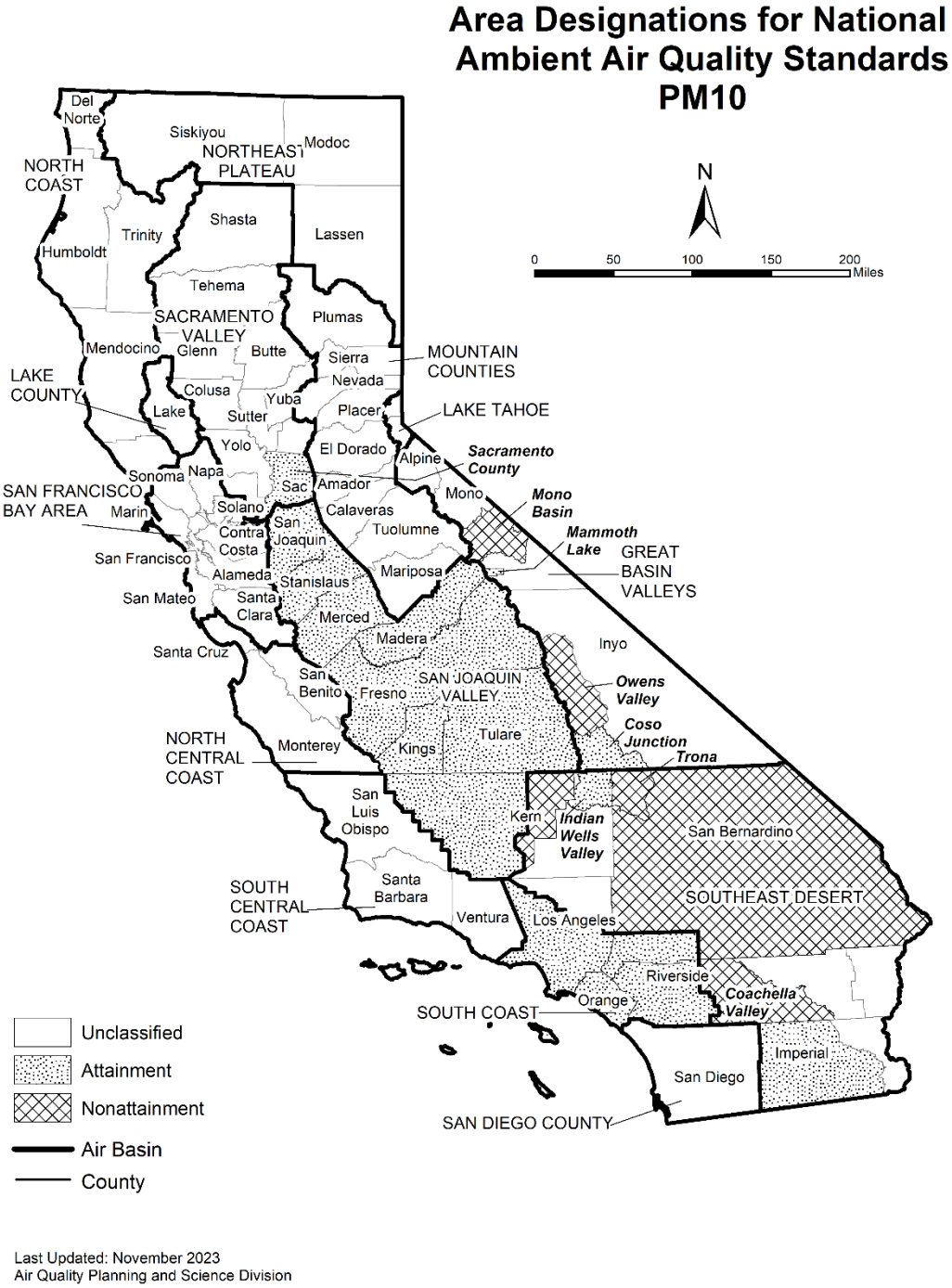
* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.
NOTE: This map and Table reflect the 2015 8-hour ozone standard of 0.070 ppm.

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[1] For this purpose, the Sacramento Metro Area comprises all of Sacramento and Yolo Counties, the Sacramento Valley Air Basin portion of Solano County, the southern portion of Sutter County, and the Sacramento Valley and Mountain Counties Air Basins portions of Placer and El Dorado counties.

[2] South Central Coast Air Basin Channel Islands:
Santa Barbara County includes Santa Cruz, San Miguel, Santa Rosa, and Santa Barbara Islands.
Ventura County includes Anacapa and San Nicolas Islands.
South Coast Air Basin:
Los Angeles County includes San Clemente and Santa Catalina Islands.

Figure 12



Last Updated: November 2023
Air Quality Planning and Science Division

Table 12
National Ambient Air Quality Standards Area Designations for Suspended Particulate Matter (PM_{10})*

Area	N	U	A
GREAT BASIN VALLEYS AIR BASIN			
Alpine County		U	
Inyo County			
- Owens Valley Planning Area	N		
- Coso Junction			A
- Remainder of County		U	
Mono County			
- Mammoth Lake Planning Area			A
- Mono Lake Basin	N		
- Remainder of County		U	
LAKE COUNTY AIR BASIN		U	
LAKE TAHOE AIR BASIN		U	
MOUNTAIN COUNTIES AIR BASIN		U	
NORTH CENTRAL COAST AIR BASIN		U	
NORTH COAST AIR BASIN		U	
NORTHEAST PLATEAU AIR BASIN		U	
SACRAMENTO VALLEY AIR BASIN			
Sacramento County[1]			A
Remainder of Air Basin		U	
SAN DIEGO COUNTY		U	

Area	N	U	A
SAN FRANCISCO BAY AREA AIR BASIN		U	
SAN JOAQUIN VALLEY AIR BASIN			A
SOUTH CENTRAL COAST AIR BASIN		U	
SOUTH COAST AIR BASIN			A
SOUTHEAST DESERT AIR BASIN			
Eastern Kern County			
- Indian Wells Valley			A
- Portion within San Joaquin Valley Planning Area	N		
- Remainder of County		U	
Imperial County			
- Imperial Valley Planning Area[2]			A
- Remainder of County		U	
Los Angeles County (portion)		U	
Riverside County (portion)			
- Coachella Valley	N		
- Non-AQMA portion		U	
San Bernardino County			
- Trona	N		
- Remainder of County	N		

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.

[1] Air quality in Sacramento County meets the national PM_{10} standards. The request for redesignation to attainment was approved by U.S. EPA in September 2013.

[2] The request for redesignation to attainment for the Imperial Valley Planning Area was approved by U.S. EPA in September 2020, effective October 2020.

Figure 13

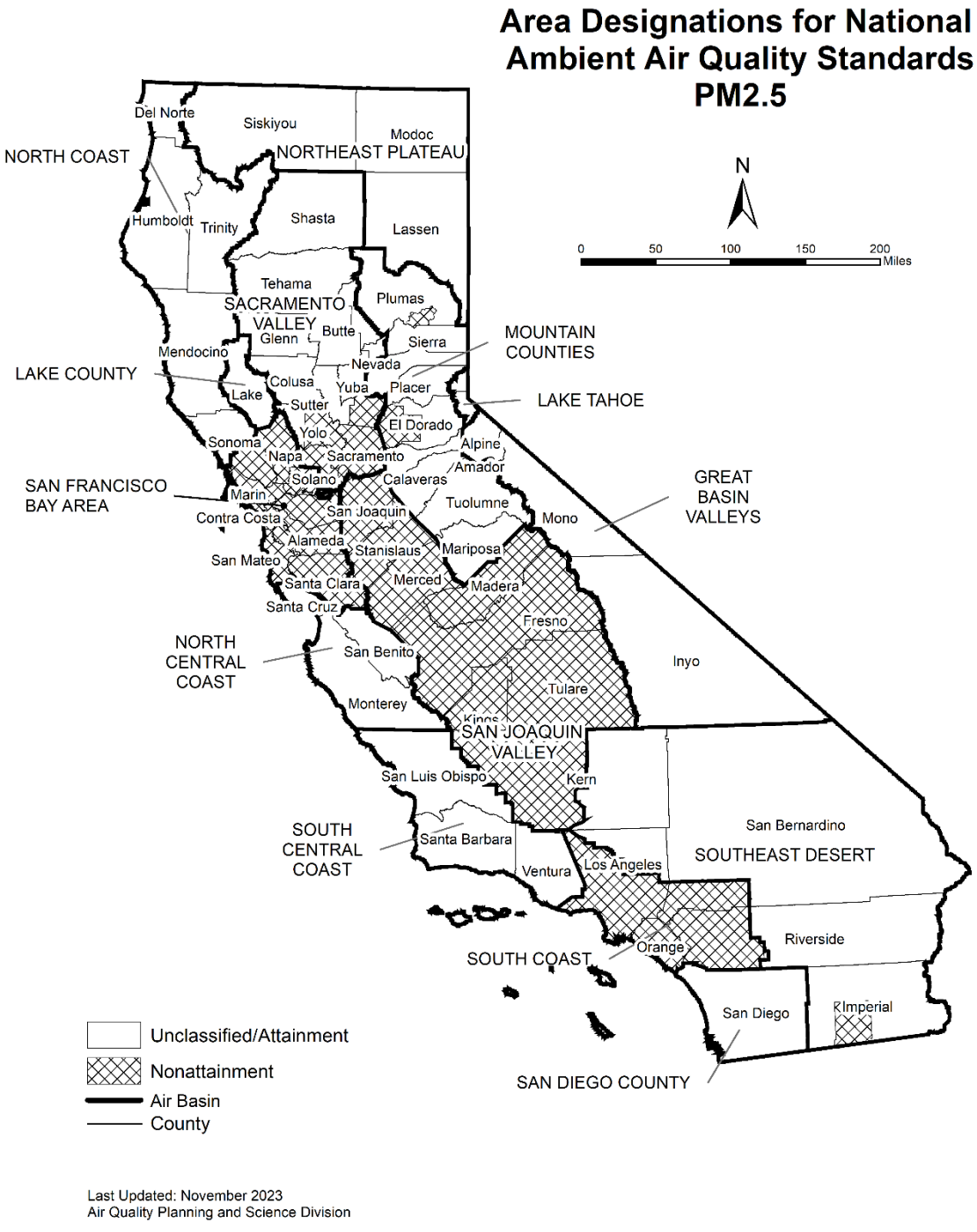

Area Designations for National Ambient Air Quality Standards PM2.5
N
0 50 100 150 200 Miles
NORTH COAST
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
Humboldt
Trinity
Shasta
Lassen
Tehama
SACRAMENTO VALLEY
Plumas
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Mendocino
Nevada
LAKE COUNTY
Colusa
Yuba
Placer
Lake
Sutter
LAKE TAHOE
El Dorado
Yolo
Sonoma
Alpine
Napa
Sacramento
Amador
SAN FRANCISCO BAY AREA
Solano
Calaveras
GREAT BASIN VALLEYS
Marin
Tuolumne
Contra Costa
San Joaquin
Mono
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
Fresno
NORTH CENTRAL COAST
San Benito
Inyo
Tulare
Monterey
Kings
SAN JOAQUIN VALLEY
San Luis Obispo
Kern
San Bernardino
SOUTH CENTRAL COAST
Santa Barbara
SOUTHEAST DESERT
Ventura
Los Angeles
Riverside
Orange
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
Unclassified/Attainment
Nonattainment
Air Basin
County
Last Updated: November 2023
Air Quality Planning and Science Division

Table 13
National Ambient Air Quality Standards Area Designations for Fine Particulate Matter ($PM_{2.5}$)

Area	N	U/A
GREAT BASIN VALLEYS AIR BASIN		U/A
LAKE COUNTY AIR BASIN		U/A
LAKE TAHOE AIR BASIN		U/A
MOUNTAIN COUNTIES AIR BASIN		
Plumas County		
- Portola Valley Portion of Plumas County	N	
- Remainder of Plumas County		U/A
Remainder of Air Basin		U/A
NORTH CENTRAL COAST AIR BASIN		U/A
NORTH COAST AIR BASIN		U/A
NORTHEAST PLATEAU AIR BASIN		U/A
SACRAMENTO VALLEY AIR BASIN		
Sacramento Metro Area[1]	N	
Remainder of Air Basin		U/A

Area	N	U/A
SAN DIEGO COUNTY		U/A
SAN FRANCISCO BAY AREA AIR BASIN[2]	N	
SAN JOAQUIN VALLEY AIR BASIN	N	
SOUTH CENTRAL COAST AIR BASIN		U/A
SOUTH COAST AIR BASIN[3]	N	
SOUTHEAST DESERT AIR BASIN		
Imperial County (portion)[4]	N	
Remainder of Air Basin		U/A

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305. This map reflects the 2006 24-hour $PM_{2.5}$ standard as well as the 1997 and 2012 $PM_{2.5}$ annual standards.

[1] For this purpose, Sacramento Metro Area comprises all of Sacramento and portions of El Dorado, Placer, Solano, and Yolo Counties. Air quality in this area meets the national $PM_{2.5}$ standards. A Determination of Attainment for the 2006 24-hour $PM_{2.5}$ standard was made by U.S. EPA in June 2017.

[2] Air quality in this area meets the national $PM_{2.5}$ standards. A Determination of Attainment for the 2006 24-hour $PM_{2.5}$ standard was made by U.S. EPA in June 2017.

[3] Those lands of the Santa Rosa Band of Cahulla Mission Indians in Riverside County are designated Unclassifiable/Attainment.

[4] That portion of Imperial County encompassing the urban and surrounding areas of Brawley, Calexico, El Centro, Heber, Holtville, Imperial, Seeley, and Westmorland. Air quality in this area meets the national $PM_{2.5}$ standards. A Determination of Attainment for the 2006 24-hour $PM_{2.5}$ standard was made by U.S. EPA in June 2017.

Figure 14

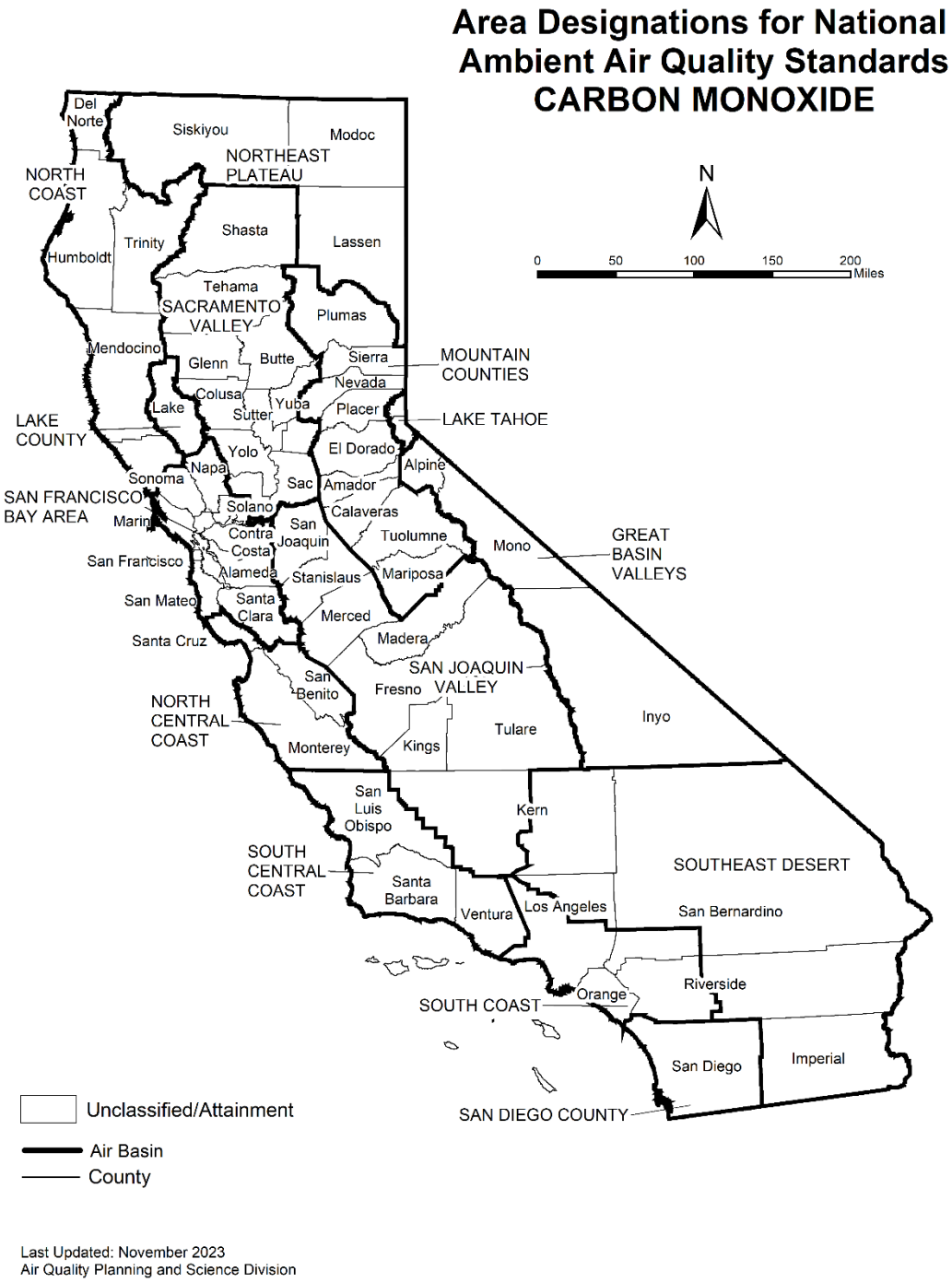

Area Designations for National Ambient Air Quality Standards
CARBON MONOXIDE
N
0 50 100 150 200 Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
Colusa
Lake
Sutter
Yuba
Placer
LAKE TAHOE
LAKE COUNTY
Yolo
El Dorado
Napa
Alpine
Sonoma
Sac
Amador
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
San Joaquin
Contra Costa
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Santa Cruz
Madera
SAN JOAQUIN VALLEY
San Benito
Fresno
NORTH CENTRAL COAST
Tulare
Inyo
Monterey
Kings
San Luis Obispo
Kern
SOUTH CENTRAL COAST
SOUTHEAST DESERT
Santa Barbara
Ventura
Los Angeles
San Bernardino
Riverside
Orange
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
Unclassified/Attainment
Air Basin
County
Last Updated: November 2023
Air Quality Planning and Science Division

Table 14
National Ambient Air Quality Standards Area Designations for Carbon Monoxide*

Area	N	U/A
GREAT BASIN VALLEYS AIR BASIN		U/A
LAKE COUNTY AIR BASIN		U/A
LAKE TAHOE AIR BASIN		U/A
MOUNTAIN COUNTIES AIR BASIN		U/A
NORTH CENTRAL COAST AIR BASIN		U/A
NORTH COAST AIR BASIN		U/A
NORTHEAST PLATEAU AIR BASIN		U/A

Area	N	U/A
SACRAMENTO VALLEY AIR BASIN		U/A
SAN DIEGO COUNTY		U/A
SAN FRANCISCO BAY AREA AIR BASIN		U/A
SAN JOAQUIN VALLEY AIR BASIN		U/A
SOUTH CENTRAL COAST AIR BASIN		U/A
SOUTH COAST AIR BASIN		U/A
SOUTHEAST DESERT AIR BASIN		U/A

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.

Figure 15

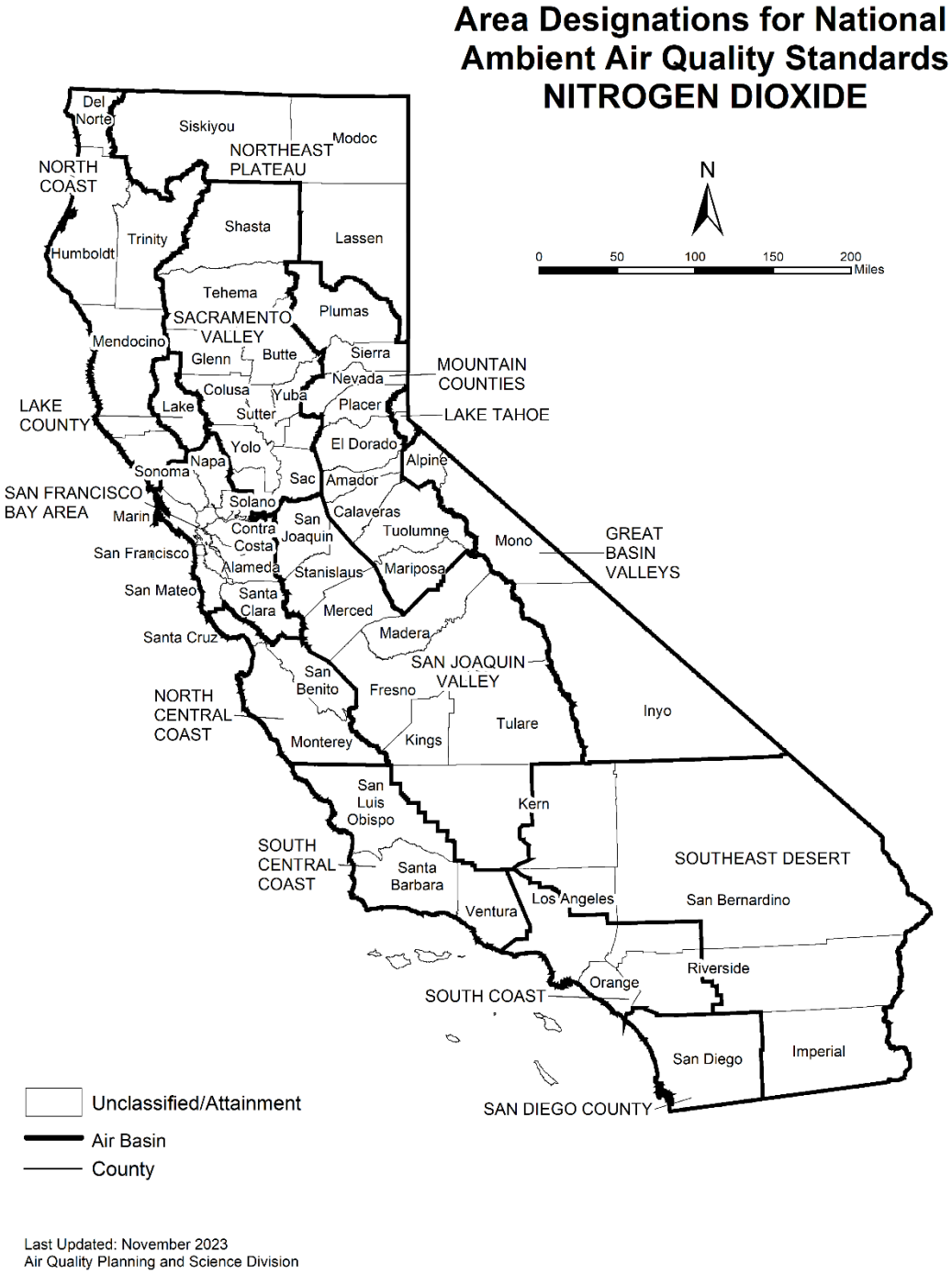

Area Designations for National Ambient Air Quality Standards
NITROGEN DIOXIDE
N
0 50 100 150 200 Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehema
Plumas
SACRAMENTO VALLEY
Mendocino
Glenn
Butte
Sierra
Nevada
MOUNTAIN COUNTIES
Colusa
Yuba
Placer
LAKE TAHOE
LAKE COUNTY
Lake
Sutter
Yolo
El Dorado
Napa
Alpine
Sonoma
Sac
Amador
SAN FRANCISCO BAY AREA
Solano
Marin
Calaveras
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Santa Cruz
Madera
SAN JOAQUIN VALLEY
San Benito
Fresno
NORTH CENTRAL COAST
Tulare
Inyo
Monterey
Kings
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
SOUTHEAST DESERT
Ventura
Los Angeles
San Bernardino
Riverside
Orange
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
Unclassified/Attainment
Air Basin
County
Last Updated: November 2023
Air Quality Planning and Science Division

Table 15
National Ambient Air Quality Standards Area Designations for Nitrogen Dioxide*

Area	N	U/A
GREAT BASIN VALLEYS AIR BASIN		U/A
LAKE COUNTY AIR BASIN		U/A
LAKE TAHOE AIR BASIN		U/A
MOUNTAIN COUNTIES AIR BASIN		U/A
NORTH CENTRAL COAST AIR BASIN		U/A
NORTH COAST AIR BASIN		U/A
NORTHEAST PLATEAU AIR BASIN		U/A

Area	N	U/A
SACRAMENTO VALLEY AIR BASIN		U/A
SAN DIEGO COUNTY		U/A
SAN FRANCISCO BAY AREA AIR BASIN		U/A
SAN JOAQUIN VALLEY AIR BASIN		U/A
SOUTH CENTRAL COAST AIR BASIN		U/A
SOUTH COAST AIR BASIN		U/A
SOUTHEAST DESERT AIR BASIN		U/A

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.

Figure 16

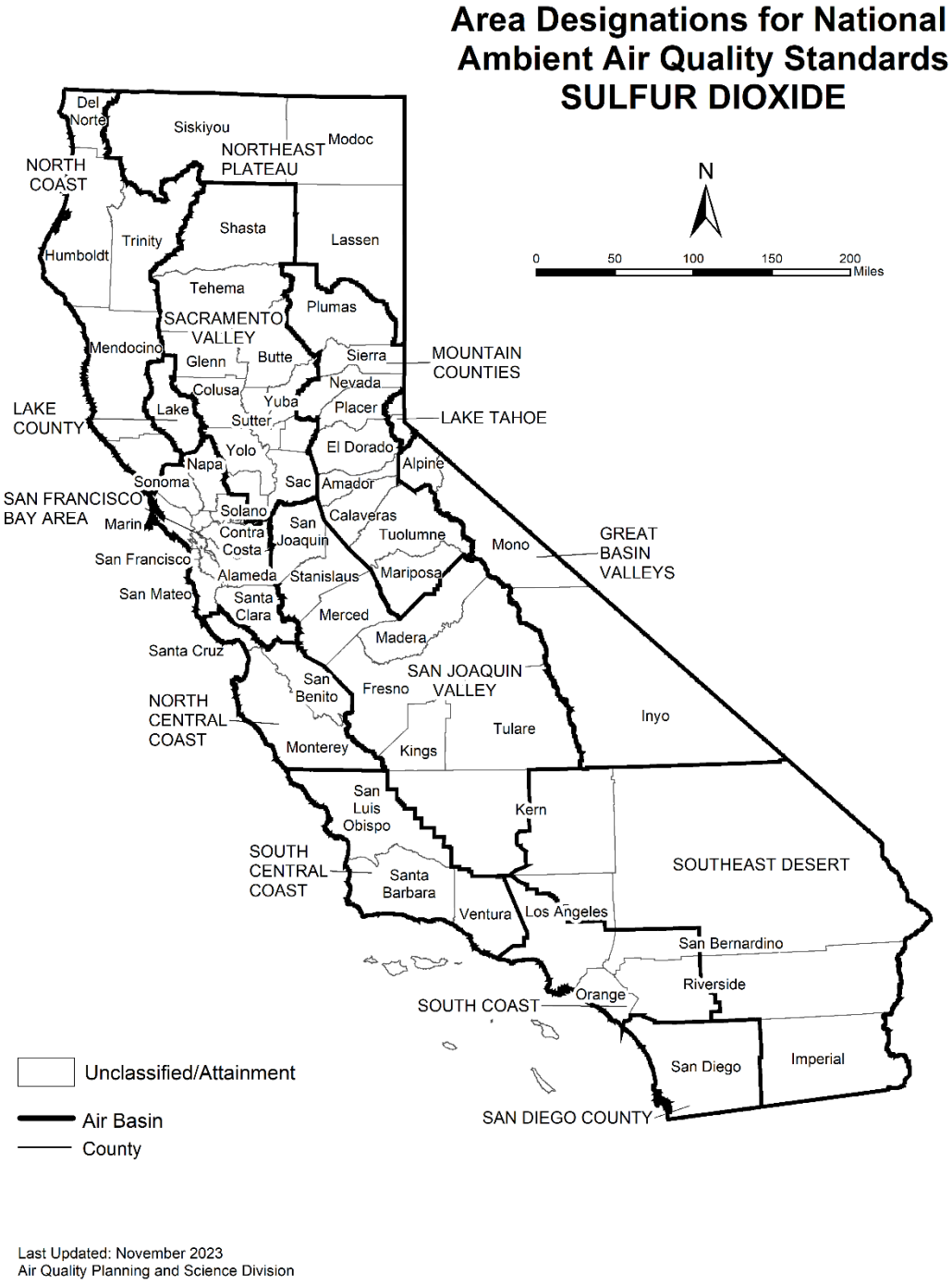

Area Designations for National Ambient Air Quality Standards
SULFUR DIOXIDE
N
0 50 100 150 200 Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehema
Plumas
SACRAMENTO VALLEY
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
Colusa
Yuba
Placer
LAKE TAHOE
LAKE COUNTY
Lake
Sutter
Yolo
El Dorado
Napa
Alpine
Sonoma
Sac
Amador
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
San Benito
Fresno
SAN JOAQUIN VALLEY
NORTH CENTRAL COAST
Inyo
Tulare
Monterey
Kings
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
SOUTHEAST DESERT
Ventura
Los Angeles
San Bernardino
Riverside
Orange
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
Unclassified/Attainment
Air Basin
County
Last Updated: November 2023
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Table 16
National Ambient Air Quality Standards Area Designations for Sulfur Dioxide*

Area	N	U/A
GREAT BASIN VALLEYS AIR BASIN		U/A
LAKE COUNTY AIR BASIN		U/A
LAKE TAHOE AIR BASIN		U/A
MOUNTAIN COUNTIES AIR BASIN		U/A
NORTH CENTRAL COAST AIR BASIN		U/A
NORTH COAST AIR BASIN		U/A
NORTHEAST PLATEAU AIR BASIN		U/A
SACRAMENTO VALLEY AIR BASIN		U/A
SAN DIEGO COUNTY		U/A
SAN FRANCISCO BAY AREA AIR BASIN		U/A
SAN JOAQUIN VALLEY AIR BASIN		U/A
SOUTH CENTRAL COAST AIR BASIN[1]		U/A
SOUTH COAST AIR BASIN		U/A
SOUTHEAST DESERT AIR BASIN		U/A

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.
NOTE: This map and table reflect the 2010 1-hour SO_2 standard of 75 ppb.

[1] South Central Coast Air Basin Channel Islands:
Santa Barbara County includes Santa Cruz, San Miguel, Santa Rosa, and Santa Barbara Islands.
Ventura County includes Anacapa and San Nicolas Islands.
Note that the San Clemente and Santa Catalina Islands are considered part of Los Angeles County, and therefore, are included as part of the South Coast Air Basin.

Figure 17

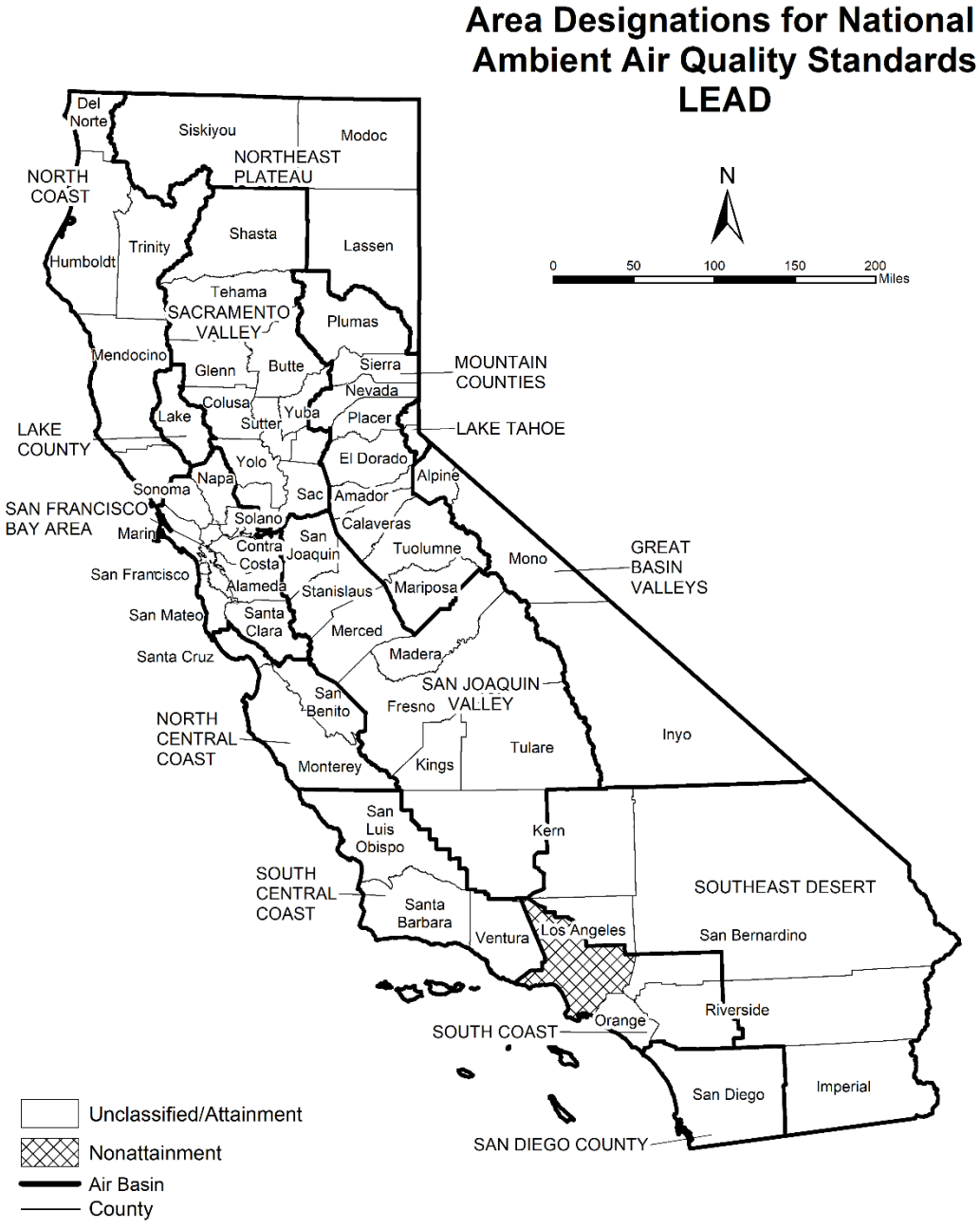

Area Designations for National Ambient Air Quality Standards
LEAD
N
0 50 100 150 200 Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
Colusa
Yuba
Placer
Lake
Sutter
LAKE TAHOE
LAKE COUNTY
Yolo
El Dorado
Napa
Alpine
Sonoma
Sac
Amador
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Santa Cruz
Madera
SAN JOAQUIN VALLEY
San Benito
Fresno
NORTH CENTRAL COAST
Inyo
Tulare
Monterey
Kings
San Luis Obispo
Kern
SOUTH CENTRAL COAST
SOUTHEAST DESERT
Santa Barbara
Ventura
Los Angeles
San Bernardino
Riverside
Orange
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
Unclassified/Attainment
Nonattainment
Air Basin
County
Last Updated: November 2023
Air Quality Planning and Science Division

Table 17
National Ambient Air Quality Standards Area Designations for Lead (particulate)

Area	N	U/A
GREAT BASIN VALLEYS AIR BASIN		U/A
LAKE COUNTY AIR BASIN		U/A
LAKE TAHOE AIR BASIN		U/A
MOUNTAIN COUNTIES AIR BASIN		U/A
NORTH CENTRAL COAST AIR BASIN		U/A
NORTH COAST AIR BASIN		U/A
NORTHEAST PLATEAU AIR BASIN		U/A
SACRAMENTO VALLEY AIR BASIN		U/A

Area	N	U/A
SAN DIEGO COUNTY		U/A
SAN FRANCISCO BAY AREA AIR BASIN		U/A
SAN JOAQUIN VALLEY AIR BASIN		U/A
SOUTH CENTRAL COAST AIR BASIN		U/A
SOUTH COAST AIR BASIN		
Los Angeles County (portion)[1]	N	
Remainder of Air Basin		U/A
SOUTHEAST DESERT AIR BASIN		U/A

[1] Portion of County in Air Basin, not including Channel Islands

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APPENDIX 3.1:

CALEEMOD PROJECT EMISSIONS MODEL OUTPUTS

15693 - Guasti and Holt Detailed Report

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4.5.1. Unmitigated

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4.6.1. Unmitigated

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5413

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5414

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	15693 - Guasti and Holt
Construction Start Date	6/3/2024
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.80
Precipitation (days)	20.8
Location	34.064251, -117.602592
County	San Bernardino-South Coast
City	Ontario
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5246
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
							5418	

Hotel	600	Room	6.90	649,498	0.00	—	—	—
Enclosed Parking with Elevator	436	1000sqft	3.53	436,410	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.90	39.4	85.1	72.3	0.32	2.50	13.2	15.7	2.12	3.84	5.96	—	45,639	45,639	4.53	6.28	82.8	47,705
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.54	3.67	20.7	46.5	0.06	0.61	7.30	7.91	0.57	1.77	2.33	—	13,573	13,573	0.77	0.98	1.04	13,886
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.34	10.3	14.7	25.6	0.05	0.45	4.00	4.30	0.40	0.96	1.32	—	8,081	8,081	0.61	0.82	8.83	8,349
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.43	1.88	2.68	4.67	0.01	0.08	0.73	0.78	0.07	0.18	0.24	—	1,338	1,338	0.10	0.14	1.46	1,382

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	9.90	4.86	85.1	59.6	0.32	2.50	13.2	15.7	2.12	3.84	5.96	—	45,639	45,639	4.53	6.28	82.8	47,705
2025	5.95	39.4	27.8	72.3	0.08	0.92	8.69	9.62	0.85	2.09	2.95	—	17,086	17,086	0.88	1.05	43.0	17,464
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.54	3.67	20.7	46.5	0.06	0.61	7.30	7.91	0.57	1.77	2.33	—	13,573	13,573	0.77	0.98	1.04	13,886
2025	4.11	3.30	19.1	43.8	0.06	0.54	7.30	7.84	0.50	1.77	2.27	—	13,368	13,368	0.76	0.98	0.97	13,681
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	2.34	1.64	14.7	20.5	0.05	0.45	3.44	3.89	0.40	0.92	1.32	—	8,081	8,081	0.61	0.82	8.21	8,349
2025	2.31	10.3	10.7	25.6	0.03	0.30	4.00	4.30	0.28	0.96	1.25	—	7,328	7,328	0.41	0.52	8.83	7,501
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.43	0.30	2.68	3.74	0.01	0.08	0.63	0.71	0.07	0.17	0.24	—	1,338	1,338	0.10	0.14	1.36	1,382
2025	0.42	1.88	1.96	4.67	0.01	0.06	0.73	0.78	0.05	0.18	0.23	—	1,213	1,213	0.07	0.09	1.46	1,242

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	30.6	43.3	23.8	224	0.44	0.76	35.0	35.7	0.72	8.88	9.60	206	60,032	60,238	24.3	2.13	521	62,001
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	20.8	34.1	24.8	148	0.42	0.68	35.0	35.6	0.66	8.88	9.54	206	57,197	57,403	24.4	2.19	368	59,034

5420

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	25.5	38.4	24.5	179	0.40	0.72	33.0	33.7	0.69	8.37	9.06	206	55,956	56,162	24.3	2.12	429	57,830
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.66	7.02	4.48	32.8	0.07	0.13	6.01	6.15	0.13	1.53	1.65	34.1	9,264	9,298	4.02	0.35	71.0	9,574

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	21.7	19.7	18.2	172	0.41	0.28	35.0	35.2	0.27	8.88	9.14	—	42,082	42,082	1.97	1.91	157	42,858
Area	8.40	23.3	0.40	47.2	< 0.005	0.08	—	0.08	0.06	—	0.06	—	194	194	0.01	< 0.005	—	195
Energy	0.57	0.29	5.21	4.38	0.03	0.40	—	0.40	0.40	—	0.40	—	17,656	17,656	1.63	0.14	—	17,740
Water	—	—	—	—	—	—	—	—	—	—	—	29.2	99.0	128	3.00	0.07	—	225
Waste	—	—	—	—	—	—	—	—	—	—	—	177	0.00	177	17.7	0.00	—	619
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	364	364
Total	30.6	43.3	23.8	224	0.44	0.76	35.0	35.7	0.72	8.88	9.60	206	60,032	60,238	24.3	2.13	521	62,001
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	20.2	18.2	19.6	144	0.38	0.28	35.0	35.2	0.27	8.88	9.14	—	39,442	39,442	2.05	1.98	4.06	40,086
Area	—	15.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.57	0.29	5.21	4.38	0.03	0.40	—	0.40	0.40	—	0.40	—	17,656	17,656	1.63	0.14	—	17,740
Water	—	—	—	—	—	—	—	—	—	—	—	29.2	99.0	128	3.00	0.07	—	225
Waste	—	—	—	—	—	—	—	—	—	—	—	177	0.00	177	17.7	0.00	—	619
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	364	3

Total	20.8	34.1	24.8	148	0.42	0.68	35.0	35.6	0.66	8.88	9.54	206	57,197	57,403	24.4	2.19	368	59,034
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	19.2	17.3	19.0	143	0.37	0.27	33.0	33.2	0.25	8.37	8.62	—	38,068	38,068	1.96	1.90	64.6	38,748
Area	5.75	20.9	0.27	32.3	< 0.005	0.06	—	0.06	0.04	—	0.04	—	133	133	0.01	< 0.005	—	134
Energy	0.57	0.29	5.21	4.38	0.03	0.40	—	0.40	0.40	—	0.40	—	17,656	17,656	1.63	0.14	—	17,740
Water	—	—	—	—	—	—	—	—	—	—	—	29.2	99.0	128	3.00	0.07	—	225
Waste	—	—	—	—	—	—	—	—	—	—	—	177	0.00	177	17.7	0.00	—	619
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	364	364
Total	25.5	38.4	24.5	179	0.40	0.72	33.0	33.7	0.69	8.37	9.06	206	55,956	56,162	24.3	2.12	429	57,830
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.50	3.15	3.48	26.1	0.07	0.05	6.01	6.06	0.05	1.53	1.57	—	6,303	6,303	0.32	0.32	10.7	6,415
Area	1.05	3.81	0.05	5.90	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.0	22.0	< 0.005	< 0.005	—	22.1
Energy	0.10	0.05	0.95	0.80	0.01	0.07	—	0.07	0.07	—	0.07	—	2,923	2,923	0.27	0.02	—	2,937
Water	—	—	—	—	—	—	—	—	—	—	—	4.83	16.4	21.2	0.50	0.01	—	37.2
Waste	—	—	—	—	—	—	—	—	—	—	—	29.3	0.00	29.3	2.93	0.00	—	103
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60.3	60.3
Total	4.66	7.02	4.48	32.8	0.07	0.13	6.01	6.15	0.13	1.53	1.65	34.1	9,264	9,298	4.02	0.35	71.0	9,574

3. Construction Emissions Details

3.1. Site Preparation (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	5.35	4.49	42.5	35.3	0.05	2.25	—	2.25	2.07	—	2.07	—	5,529	5,529	0.22	0.04	—	5,548
Dust From Material Movement	—	—	—	—	—	—	5.66	5.66	—	2.69	2.69	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.16	0.97	< 0.005	0.06	—	0.06	0.06	—	0.06	—	151	151	0.01	< 0.005	—	152
Dust From Material Movement	—	—	—	—	—	—	0.16	0.16	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.21	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	25.1	25.1	< 0.005	< 0.005	—	25.2
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.08	1.48	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	252	252	0.01	0.01	1.01	256

Vendor	0.02	< 0.005	0.18	0.10	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	157	157	0.01	0.02	0.44	164
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.42	6.42	< 0.005	< 0.005	0.01	6.51
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.30	4.30	< 0.005	< 0.005	0.01	4.50
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.06	1.06	< 0.005	< 0.005	< 0.005	1.08
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.71	0.71	< 0.005	< 0.005	< 0.005	0.75
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.69	3.94	37.6	31.4	0.06	1.77	—	1.77	1.63	—	1.63	—	6,715	6,715	0.27	0.05	—	6,738
Dust From Material Movement	—	—	—	—	—	—	2.74	2.74	—	0.99	0.99	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.39	0.32	3.09	2.58	0.01	0.15	—	0.15	0.13	—	0.13	—	552	552	0.02	< 0.005	—	554
Dust From Material Movement	—	—	—	—	—	—	0.22	0.22	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.56	0.47	< 0.005	0.03	—	0.03	0.02	—	0.02	—	91.4	91.4	< 0.005	< 0.005	—	91.7
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.10	1.69	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	288	288	0.01	0.01	1.15	292
Vendor	0.05	0.01	0.58	0.31	< 0.005	0.01	0.14	0.14	0.01	0.04	0.05	—	502	502	0.04	0.07	1.40	526
Hauling	5.04	0.80	46.9	26.2	0.25	0.72	10.0	10.8	0.48	2.75	3.23	—	38,134	38,134	4.20	6.14	80.3	40,149
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	22.0	22.0	< 0.005	< 0.005	0.04	22.3
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	41.2	41.2	< 0.005	0.01	0.05	43.2
Hauling	0.41	0.06	4.06	2.16	0.02	0.06	0.82	0.88	0.04	0.22	0.26	—	3,135	3,135	0.35	0.50	2.84	3,297
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.64	3.64	< 0.005	< 0.005	0.01	3.69
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.83	6.83	< 0.005	< 0.005	0.01	7.15
Hauling	0.08	0.01	0.74	0.39	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	519	519	0.06	0.08	0.47	546

3.5. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.55	1.30	12.2	14.2	0.03	0.54	—	0.54	0.49	—	0.49	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.55	1.30	12.2	14.2	0.03	0.54	—	0.54	0.49	—	0.49	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.40	3.72	4.34	0.01	0.16	—	0.16	0.15	—	0.15	—	803	803	0.03	0.01	—	806

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.07	0.68	0.79	< 0.005	0.03	—	0.03	0.03	—	0.03	—	133	133	0.01	< 0.005	—	133
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.61	2.39	2.21	38.6	0.00	0.00	5.96	5.96	0.00	1.40	1.40	—	6,566	6,566	0.28	0.23	26.3	6,667
Vendor	0.52	0.14	5.65	3.03	0.04	0.07	1.34	1.41	0.07	0.37	0.44	—	4,922	4,922	0.38	0.73	13.7	5,164
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.48	2.25	2.60	29.2	0.00	0.00	5.96	5.96	0.00	1.40	1.40	—	6,018	6,018	0.29	0.23	0.68	6,094
Vendor	0.51	0.13	5.88	3.07	0.04	0.07	1.34	1.41	0.07	0.37	0.44	—	4,925	4,925	0.38	0.73	0.36	5,153
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.75	0.68	0.80	9.35	0.00	0.00	1.80	1.80	0.00	0.42	0.42	—	1,863	1,863	0.09	0.07	3.46	1,889
Vendor	0.16	0.04	1.81	0.93	0.01	0.02	0.41	0.43	0.02	0.11	0.13	—	1,503	1,503	0.12	0.22	1.80	1,574
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.12	0.15	1.71	0.00	0.00	0.33	0.33	0.00	0.08	0.08	—	308	308	0.01	0.01	0.57	313
Vendor	0.03	0.01	0.33	0.17	< 0.005	< 0.005	0.07	0.08	< 0.005	0.02	0.02	—	249	249	0.02	0.04	0.30	261
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.45	1.21	11.3	14.1	0.03	0.47	—	0.47	0.43	—	0.43	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.45	1.21	11.3	14.1	0.03	0.47	—	0.47	0.43	—	0.43	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74	0.62	5.80	7.25	0.01	0.24	—	0.24	0.22	—	0.22	—	1,349	1,349	0.05	0.01	—	1,353
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	1.06	1.32	< 0.005	0.04	—	0.04	0.04	—	0.04	—	223	223	0.01	< 0.005	—	224
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.32	2.09	2.01	35.5	0.00	0.00	5.96	5.96	0.00	1.40	1.40	—	6,426	6,426	0.27	0.23	23.8	6,524
Vendor	0.48	0.14	5.38	2.91	0.04	0.07	1.34	1.41	0.07	0.37	0.44	—	4,843	4,843	0.38	0.73	13.6	5,085
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.19	1.96	2.21	26.8	0.00	0.00	5.96	5.96	0.00	1.40	1.40	—	5,892	5,892	0.28	0.23	0.62	5,967
Vendor	0.47	0.13	5.62	2.92	0.04	0.07	1.34	1.41	0.07	0.37	0.44	—	4,846	4,846	0.38	0.73	0.35	5,074
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.11	0.99	1.23	14.5	0.00	0.00	3.02	3.02	0.00	0.71	0.71	—	3,064	3,064	0.14	0.12	5.28	3,107
Vendor	0.24	0.07	2.90	1.48	0.02	0.04	0.68	0.72	0.04	0.19	0.22	—	2,484	2,484	0.19	0.38	3.03	2,604
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.18	0.22	2.64	0.00	0.00	0.55	0.55	0.00	0.13	0.13	—	507	507	0.02	0.02	0.87	514
Vendor	0.04	0.01	0.53	0.27	< 0.005	0.01	0.12	0.13	0.01	0.03	0.04	—	411	411	0.03	0.06	0.50	431
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.95	0.80	7.45	9.98	0.01	0.35	—	0.35	0.32	—	0.32	—	1,511	1,511	0.06	0.01	—	1,517
Paving	—	0.46	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.41	0.55	< 0.005	0.02	—	0.02	0.02	—	0.02	—	82.8	82.8	< 0.005	< 0.005	—	83.1
Paving	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.7	13.7	< 0.005	< 0.005	—	13.8
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.07	1.17	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	211	211	0.01	0.01	0.78	215
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.8	10.8	< 0.005	< 0.005	0.02	10.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.78	1.78	< 0.005	< 0.005	< 0.005	1.81
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.17	1.18	1.52	< 0.005	0.04	—	0.04	0.03	—	0.03	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	—	34.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.29	0.37	< 0.005	0.01	—	0.01	0.01	—	0.01	—	43.9	43.9	< 0.005	< 0.005	—	44.0
Architectural Coatings	—	8.40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.27	7.27	< 0.005	< 0.005	—	7.29
Architectural Coatings	—	1.53	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.42	0.40	7.10	0.00	0.00	1.19	1.19	0.00	0.28	0.28	—	1,285	1,285	0.05	0.05	4.77	1,305
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.12	1.39	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	295	295	0.01	0.01	0.51	299
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.25	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	48.8	48.8	< 0.005	< 0.005	0.08	49.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	21.7	19.7	18.2	172	0.41	0.28	35.0	35.2	0.27	8.88	9.14	—	42,082	42,082	1.97	1.91	157	42,858
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	21.7	19.7	18.2	172	0.41	0.28	35.0	35.2	0.27	8.88	9.14	—	42,082	42,082	1.97	1.91	157	42,858
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	20.2	18.2	19.6	144	0.38	0.28	35.0	35.2	0.27	8.88	9.14	—	39,442	39,442	2.05	1.98	4.06	40,086
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	20.2	18.2	19.6	144	0.38	0.28	35.0	35.2	0.27	8.88	9.14	—	39,442	39,442	2.05	1.98	4.06	40,086
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	3.50	3.15	3.48	26.1	0.07	0.05	6.01	6.06	0.05	1.53	1.57	—	6,303	6,303	0.32	0.32	10.7	6,415
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Total	3.50	3.15	3.48	26.1	0.07	0.05	6.01	6.06	0.05	1.53	1.57	—	6,303	6,303	0.32	0.32	10.7	6,415

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	9,900	9,900	0.94	0.11	—	9,957
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	1,539	1,539	0.15	0.02	—	1,548
Total	—	—	—	—	—	—	—	—	—	—	—	—	11,438	11,438	1.08	0.13	—	11,505
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	9,900	9,900	0.94	0.11	—	9,957
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	1,539	1,539	0.15	0.02	—	1,548
Total	—	—	—	—	—	—	—	—	—	—	—	—	11,438	11,438	1.08	0.13	—	11,505
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	1,639	1,639	0.16	0.02	—	1,648
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	255	255	0.02	< 0.005	—	256
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,894	1,894	0.18	0.02	—	1

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	0.57	0.29	5.21	4.38	0.03	0.40	—	0.40	0.40	—	0.40	—	6,218	6,218	0.55	0.01	—	6,235
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.57	0.29	5.21	4.38	0.03	0.40	—	0.40	0.40	—	0.40	—	6,218	6,218	0.55	0.01	—	6,235
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	0.57	0.29	5.21	4.38	0.03	0.40	—	0.40	0.40	—	0.40	—	6,218	6,218	0.55	0.01	—	6,235
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.57	0.29	5.21	4.38	0.03	0.40	—	0.40	0.40	—	0.40	—	6,218	6,218	0.55	0.01	—	6,235
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	0.10	0.05	0.95	0.80	0.01	0.07	—	0.07	0.07	—	0.07	—	1,029	1,029	0.09	< 0.005	—	1,032
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.10	0.05	0.95	0.80	0.01	0.07	—	0.07	0.07	—	0.07	—	1,029	1,029	0.09	< 0.005	—	1,032

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	13.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	8.40	7.75	0.40	47.2	< 0.005	0.08	—	0.08	0.06	—	0.06	—	194	194	0.01	< 0.005	—	195
Total	8.40	23.3	0.40	47.2	< 0.005	0.08	—	0.08	0.06	—	0.06	—	194	194	0.01	< 0.005	—	195
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	13.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	15.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	2.54	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landsca Equipment	1.05	0.97	0.05	5.90	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.0	22.0	< 0.005	< 0.005	—	22.1
Total	1.05	3.81	0.05	5.90	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.0	22.0	< 0.005	< 0.005	—	22.1

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	29.2	99.0	128	3.00	0.07	—	225
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	29.2	99.0	128	3.00	0.07	—	225
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	29.2	99.0	128	3.00	0.07	—	225
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	29.2	99.0	128	3.00	0.07	—	225
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	4.83	16.4	21.2	0.50	0.01	—	37.2

Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4.83	16.4	21.2	0.50	0.01	—	37.2

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	177	0.00	177	17.7	0.00	—	619
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	177	0.00	177	17.7	0.00	—	619
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	177	0.00	177	17.7	0.00	—	619
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	177	0.00	177	17.7	0.00	—	619
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	29.3	0.00	29.3	2.93	0.00	—	103

Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	29.3	0.00	29.3	2.93	0.00	—	103

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	364	364
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	364	364
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	364	364
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	364	364
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60.3	60.3
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60.3	60.3

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	6/3/2024	6/14/2024	5.00	10.0	—
Grading	Grading	6/17/2024	7/26/2024	5.00	30.0	—
Building Construction	Building Construction	7/29/2024	9/19/2025	5.00	300	—
Paving	Paving	8/25/2025	9/19/2025	5.00	20.0	—
Architectural Coating	Architectural Coating	5/19/2025	9/19/2025	5.00	90.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Crawler Tractors	Diesel	Average	4.00	8.00	87.0	0.43
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Crawler Tractors	Diesel	Average	2.00	8.00	87.0	0.43
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	5.00	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	16.0	10.2	HHDT,MHDT
Grading	Hauling	542	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	456	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	157	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	91.2	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT

Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	980,480	325,442	8,311

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	35.0	0.00	—
Grading	—	130,000	120	0.00	—
Paving	0.00	0.00	0.00	0.00	3.53

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt

Hotel	0.00	0%
Enclosed Parking with Elevator	3.53	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	349	0.03	< 0.005
2024	0.00	349	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Hotel	4,794	4,842	3,564	1,688,177	48,806	49,295	36,284	17,186,694
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	981,167	325,518	9,226

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Hotel	10,364,336	349	0.0330	0.0040	19,400,828
Enclosed Parking with Elevator	1,610,978	349	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Hotel	15,220,062	0.00
Enclosed Parking with Elevator	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Hotel	329	—
Enclosed Parking with Elevator	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Hotel	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Hotel	Other commercial A/C and heat pumps	User Defined	750	1.80	4.00	4.00	18.0
Hotel	User Defined	User Defined	150	< 0.005	7.50	7.50	20.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5449

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	20.2	annual days of extreme heat
Extreme Precipitation	5.10	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2

Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	88.8
AQ-PM	97.4
AQ-DPM	86.0
Drinking Water	93.3
Lead Risk Housing	97.4
Pesticides	14.9
Toxic Releases	71.7
Traffic	47.3
Effect Indicators	—
CleanUp Sites	96.3

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Groundwater	83.7
Haz Waste Facilities/Generators	96.6
Impaired Water Bodies	43.8
Solid Waste	92.8
Sensitive Population	—
Asthma	70.1
Cardio-vascular	82.9
Low Birth Weights	67.4
Socioeconomic Factor Indicators	—
Education	95.7
Housing	89.8
Linguistic	96.3
Poverty	94.2
Unemployment	19.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	5.184139612
Employed	38.86821506
Median HI	6.518670602
Education	—
Bachelor's or higher	4.157577313
High school enrollment	100
Preschool enrollment	44.43731554
Transportation	—

Auto Access	53.75336841
Active commuting	60.25920698
Social	—
2-parent households	47.31168998
Voting	7.776209419
Neighborhood	—
Alcohol availability	22.98216348
Park access	54.67727448
Retail density	38.34210189
Supermarket access	66.63672527
Tree canopy	31.84909534
Housing	—
Homeownership	26.45964327
Housing habitability	7.55806493
Low-inc homeowner severe housing cost burden	3.284999358
Low-inc renter severe housing cost burden	23.90606955
Uncrowded housing	9.611189529
Health Outcomes	—
Insured adults	1.796484024
Arthritis	48.2
Asthma ER Admissions	30.2
High Blood Pressure	56.0
Cancer (excluding skin)	94.8
Asthma	7.7
Coronary Heart Disease	28.5
Chronic Obstructive Pulmonary Disease	11.3
Diagnosed Diabetes	10.7

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Life Expectancy at Birth	49.6
Cognitively Disabled	70.6
Physically Disabled	78.7
Heart Attack ER Admissions	7.4
Mental Health Not Good	2.6
Chronic Kidney Disease	20.1
Obesity	4.2
Pedestrian Injuries	85.8
Physical Health Not Good	2.6
Stroke	22.5
Health Risk Behaviors	—
Binge Drinking	73.8
Current Smoker	3.5
No Leisure Time for Physical Activity	3.6
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	33.8
Elderly	95.7
English Speaking	3.6
Foreign-born	91.6
Outdoor Workers	9.3
Climate Change Adaptive Capacity	—
Impervious Surface Cover	63.3
Traffic Density	55.4
Traffic Access	70.1
Other Indices	—

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Hardship	94.8
Other Decision Support	—
2016 Voting	30.3

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	100
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Taken from site plan
Construction: Construction Phases	Taken from client data Building Construction, Paving, and Architectural Coating overlap to present a conservative analysis

Construction: Off-Road Equipment	T/L/B replaced with Crawler Tractor to accurately calculate disturbance for Site Preparation and Grading phases. Standard 8 hours work days
Construction: Trips and VMT	Vendor Trips adjusted based on CalEEMod defaults for Building Construction and number of days for Demolition, Site Preparation, Grading, and Building Construction
Construction: Architectural Coatings	SCAQMD Rule 1113
Operations: Vehicle Data	Taken from trip generation
Operations: Refrigerants	As of 1 January 2022, new commercial refrigeration equipment may not use refrigerants with a GWP of 150 or greater. Further, R-404A (the CalEEMod default) is unacceptable for new supermarket and cold storage systems as of 1 January 2019 and 2023, respectively Beginning 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater

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APPENDIX 3.2:

AERMOD LOCALIZED EMISSIONS MODEL OUTPUTS

```
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 12.0.0
** Lakes Environmental Software Inc.
** Date: 4/19/2024
** File: C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\Construction LST
CO\15693-Guasti & Holt.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti &
   MODELOPT DFAULT CONC
   AVERTIME 1 8 PERIOD
   URBANOPT 2035210 County_of_San_Bernardino
   POLLUTID CO
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "15693-Guasti & Holt.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     444242.944  3769467.059      293.700
   LOCATION VOL2         VOLUME     444272.020  3769484.508      293.810
   LOCATION VOL3         VOLUME     444300.793  3769498.282      293.730
   LOCATION VOL4         VOLUME     444329.261  3769513.893      293.600
   LOCATION VOL5         VOLUME     444357.422  3769528.280      293.640
   LOCATION VOL6         VOLUME     444385.889  3769541.748      293.610
   LOCATION VOL7         VOLUME     444413.132  3769549.401      293.400
   LOCATION VOL8         VOLUME     444441.600  3769548.483      293.090
   LOCATION VOL9         VOLUME     444469.455  3769555.829      292.810
   LOCATION VOL10        VOLUME     444469.761  3769527.974      292.810
   LOCATION VOL11        VOLUME     444470.679  3769499.813      292.190
   LOCATION VOL12        VOLUME     444461.190  3769471.345      291.870
   LOCATION VOL13        VOLUME     444441.293  3769520.934      293.100
```

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LOCATION VOL14        VOLUME     444442.518  3769499.200      292.910
LOCATION VOL15        VOLUME     444433.029  3769471.345      292.530
LOCATION VOL16        VOLUME     444462.108  3769443.796      290.990
LOCATION VOL17        VOLUME     444477.719  3769423.900      290.030
LOCATION VOL18        VOLUME     444479.250  3769395.738      289.870
LOCATION VOL19        VOLUME     444485.678  3769367.883      289.640
LOCATION VOL20        VOLUME     444485.678  3769347.375      289.640
LOCATION VOL21        VOLUME     444434.559  3769443.184      291.880
LOCATION VOL22        VOLUME     444413.744  3769521.852      293.250
LOCATION VOL23        VOLUME     444451.089  3769415.023      290.920
LOCATION VOL24        VOLUME     444457.211  3769387.780      290.450
LOCATION VOL25        VOLUME     444458.129  3769359.619      290.190
LOCATION VOL26        VOLUME     444456.905  3769347.375      290.200
LOCATION VOL27        VOLUME     444429.049  3769347.681      290.600
LOCATION VOL28        VOLUME     444401.500  3769347.681      291.160
LOCATION VOL29        VOLUME     444373.339  3769351.660      291.500
LOCATION VOL30        VOLUME     444344.260  3769360.537      291.890
LOCATION VOL31        VOLUME     444315.792  3769372.781      292.300
LOCATION VOL32        VOLUME     444287.325  3769382.576      292.690
LOCATION VOL33        VOLUME     444266.510  3769410.125      293.050
LOCATION VOL34        VOLUME     444246.613  3769438.593      293.350
LOCATION VOL35        VOLUME     444271.714  3769456.959      293.530
LOCATION VOL36        VOLUME     444273.550  3769438.286      293.340
LOCATION VOL37        VOLUME     444381.910  3769457.265      292.800
LOCATION VOL38        VOLUME     444385.583  3769513.893      293.330
LOCATION VOL39        VOLUME     444300.793  3769470.733      293.450
LOCATION VOL40        VOLUME     444328.954  3769486.344      293.320
LOCATION VOL41        VOLUME     444357.728  3769500.731      293.360
LOCATION VOL42        VOLUME     444413.744  3769494.915      293.000
LOCATION VOL43        VOLUME     444429.662  3769374.617      290.940
LOCATION VOL44        VOLUME     444429.049  3769402.473      291.450
LOCATION VOL45        VOLUME     444422.621  3769430.940      291.860
LOCATION VOL46        VOLUME     444407.010  3769458.489      292.560
LOCATION VOL47        VOLUME     444404.561  3769486.344      292.910
LOCATION VOL48        VOLUME     444377.012  3769485.426      293.130
LOCATION VOL49        VOLUME     444354.361  3769472.570      293.080
LOCATION VOL50        VOLUME     444301.099  3769442.878      293.170
LOCATION VOL51        VOLUME     444328.342  3769458.795      293.050
LOCATION VOL52        VOLUME     444294.671  3769411.043      292.910
LOCATION VOL53        VOLUME     444301.099  3769427.267      293.010
LOCATION VOL54        VOLUME     444315.180  3769400.942      292.600
LOCATION VOL55        VOLUME     444328.648  3769430.634      292.760
LOCATION VOL56        VOLUME     444356.810  3769444.408      292.790
LOCATION VOL57        VOLUME     444343.647  3769389.004      292.190
LOCATION VOL58        VOLUME     444343.341  3769416.553      292.500
LOCATION VOL59        VOLUME     444371.809  3769380.127      291.810
LOCATION VOL60        VOLUME     444400.582  3769376.148      291.470
LOCATION VOL61        VOLUME     444400.276  3769404.309      291.770
LOCATION VOL62        VOLUME     444371.502  3769408.289      292.210
LOCATION VOL63        VOLUME     444371.502  3769436.144      292.670
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   LOCATION VOL64        VOLUME     444395.991  3769430.328      292.140
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   SRCPARAM VOL60        0.0086938538     5.000     6.407     1.400
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   SRCPARAM VOL62        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL63        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL64        0.0086938538     5.000     6.407     1.400
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL37        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL38        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL39        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Sunday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL40        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL41        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL42        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL43        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL44        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL45        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL46        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Saturday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL47        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL48        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL49        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Sunday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL50        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL51        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL52        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL53        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL54        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL55        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL56        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Saturday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL57        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL58        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL59        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Sunday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL60        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL61        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL62        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL63        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL64        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED "15693-Guasti & Holt.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE KONT_V9_ADJU\KONT_v9.SFC
   PROFFILE KONT_V9_ADJU\KONT_v9.PFL
```

```
   SURFDATA 3102 2012
   UAIRDATA 3190 2012
   PROFBASE 289.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
   RECTABLE 8 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "15693-Guasti & Holt.AD\01H1GALL.PLT" 31
   PLOTFILE 8 ALL 1ST "15693-Guasti & Holt.AD\08H1GALL.PLT" 32
   PLOTFILE PERIOD ALL "15693-Guasti & Holt.AD\PE00GALL.PLT" 33
   SUMMFILE "15693-Guasti & Holt.sum"
OU FINISHED
**
**************************************
** Project Parameters
**************************************
** PROJCTN  CoordinateSystemUTM
** DESCPTN  UTM: Universal Transverse Mercator
** DATUM    North American Datum 1983
** DTMRGN   CONUS
** UNITS    m
** ZONE     11
** ZONEINX  0
**
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 12.0.0
** Lakes Environmental Software Inc.
** Date: 4/19/2024
** File: C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\Construction LST
CO\15693-Guasti & Holt.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
```

```
CO STARTING
   TITLEONE C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti &
   MODELOPT DFAULT CONC
   AVERTIME 1 8 PERIOD
   URBANOPT 2035210 County_of_San_Bernardino
   POLLUTID CO
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "15693-Guasti & Holt.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     444242.944  3769467.059      293.700
   LOCATION VOL2         VOLUME     444272.020  3769484.508      293.810
   LOCATION VOL3         VOLUME     444300.793  3769498.282      293.730
   LOCATION VOL4         VOLUME     444329.261  3769513.893      293.600
   LOCATION VOL5         VOLUME     444357.422  3769528.280      293.640
   LOCATION VOL6         VOLUME     444385.889  3769541.748      293.610
   LOCATION VOL7         VOLUME     444413.132  3769549.401      293.400
   LOCATION VOL8         VOLUME     444441.600  3769548.483      293.090
   LOCATION VOL9         VOLUME     444469.455  3769555.829      292.810
   LOCATION VOL10        VOLUME     444469.761  3769527.974      292.810
   LOCATION VOL11        VOLUME     444470.679  3769499.813      292.190
   LOCATION VOL12        VOLUME     444461.190  3769471.345      291.870
   LOCATION VOL13        VOLUME     444441.293  3769520.934      293.100
   LOCATION VOL14        VOLUME     444442.518  3769499.200      292.910
   LOCATION VOL15        VOLUME     444433.029  3769471.345      292.530
   LOCATION VOL16        VOLUME     444462.108  3769443.796      290.990
   LOCATION VOL17        VOLUME     444477.719  3769423.900      290.030
   LOCATION VOL18        VOLUME     444479.250  3769395.738      289.870
   LOCATION VOL19        VOLUME     444485.678  3769367.883      289.640
   LOCATION VOL20        VOLUME     444485.678  3769347.375      289.640
   LOCATION VOL21        VOLUME     444434.559  3769443.184      291.880
   LOCATION VOL22        VOLUME     444413.744  3769521.852      293.250
   LOCATION VOL23        VOLUME     444451.089  3769415.023      290.920
   LOCATION VOL24        VOLUME     444457.211  3769387.780      290.450
   LOCATION VOL25        VOLUME     444458.129  3769359.619      290.190
   LOCATION VOL26        VOLUME     444456.905  3769347.375      290.200
   LOCATION VOL27        VOLUME     444429.049  3769347.681      290.600
   LOCATION VOL28        VOLUME     444401.500  3769347.681      291.160
   LOCATION VOL29        VOLUME     444373.339  3769351.660      291.500
   LOCATION VOL30        VOLUME     444344.260  3769360.537      291.890
   LOCATION VOL31        VOLUME     444315.792  3769372.781      292.300
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   LOCATION VOL32        VOLUME     444287.325  3769382.576      292.690
   LOCATION VOL33        VOLUME     444266.510  3769410.125      293.050
   LOCATION VOL34        VOLUME     444246.613  3769438.593      293.350
   LOCATION VOL35        VOLUME     444271.714  3769456.959      293.530
   LOCATION VOL36        VOLUME     444273.550  3769438.286      293.340
   LOCATION VOL37        VOLUME     444381.910  3769457.265      292.800
   LOCATION VOL38        VOLUME     444385.583  3769513.893      293.330
   LOCATION VOL39        VOLUME     444300.793  3769470.733      293.450
   LOCATION VOL40        VOLUME     444328.954  3769486.344      293.320
   LOCATION VOL41        VOLUME     444357.728  3769500.731      293.360
   LOCATION VOL42        VOLUME     444413.744  3769494.915      293.000
   LOCATION VOL43        VOLUME     444429.662  3769374.617      290.940
   LOCATION VOL44        VOLUME     444429.049  3769402.473      291.450
   LOCATION VOL45        VOLUME     444422.621  3769430.940      291.860
   LOCATION VOL46        VOLUME     444407.010  3769458.489      292.560
   LOCATION VOL47        VOLUME     444404.561  3769486.344      292.910
   LOCATION VOL48        VOLUME     444377.012  3769485.426      293.130
   LOCATION VOL49        VOLUME     444354.361  3769472.570      293.080
   LOCATION VOL50        VOLUME     444301.099  3769442.878      293.170
   LOCATION VOL51        VOLUME     444328.342  3769458.795      293.050
   LOCATION VOL52        VOLUME     444294.671  3769411.043      292.910
   LOCATION VOL53        VOLUME     444301.099  3769427.267      293.010
   LOCATION VOL54        VOLUME     444315.180  3769400.942      292.600
   LOCATION VOL55        VOLUME     444328.648  3769430.634      292.760
   LOCATION VOL56        VOLUME     444356.810  3769444.408      292.790
   LOCATION VOL57        VOLUME     444343.647  3769389.004      292.190
   LOCATION VOL58        VOLUME     444343.341  3769416.553      292.500
   LOCATION VOL59        VOLUME     444371.809  3769380.127      291.810
   LOCATION VOL60        VOLUME     444400.582  3769376.148      291.470
   LOCATION VOL61        VOLUME     444400.276  3769404.309      291.770
   LOCATION VOL62        VOLUME     444371.502  3769408.289      292.210
   LOCATION VOL63        VOLUME     444371.502  3769436.144      292.670
   LOCATION VOL64        VOLUME     444395.991  3769430.328      292.140
** Source Parameters **
   SRCPARAM VOL1         0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL2         0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL3         0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL4         0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL5         0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL6         0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL7         0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL8         0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL9         0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL10        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL11        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL12        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL13        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL14        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL15        0.0086938538     5.000     6.407     1.400
   SRCPARAM VOL16        0.0086938538     5.000     6.407     1.400
```

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SRCPARAM VOL17        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL18        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL19        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL20        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL21        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL22        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL23        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL24        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL25        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL26        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL27        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL28        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL29        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL30        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL31        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL32        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL33        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL34        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL35        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL36        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL37        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL38        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL39        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL40        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL41        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL42        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL43        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL44        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL45        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL46        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL47        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL48        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL49        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL50        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL51        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL52        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL53        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL54        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL55        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL56        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL57        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL58        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL59        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL60        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL61        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL62        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL63        0.0086938538     5.000     6.407     1.400
SRCPARAM VOL64        0.0086938538     5.000     6.407     1.400
URBANSRC ALL
```

```
** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

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   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL37        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL38        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL39        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL40        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL41        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL42        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL43        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL44        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL45        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL46        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL47        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL48        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL49        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL50        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

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   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL51        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL52        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL53        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL54        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL55        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL56        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL57        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL58        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL59        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL60        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

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   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL61        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL62        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL63        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
```

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   EMISFACT VOL64        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED "15693-Guasti & Holt.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE KONT_V9_ADJU\KONT_v9.SFC
   PROFFILE KONT_V9_ADJU\KONT_v9.PFL
   SURFDATA 3102 2012
   UAIRDATA 3190 2012
   PROFBASE 289.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
   RECTABLE 8 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "15693-Guasti & Holt.AD\01H1GALL.PLT" 31
   PLOTFILE 8 ALL 1ST "15693-Guasti & Holt.AD\08H1GALL.PLT" 32
   PLOTFILE PERIOD ALL "15693-Guasti & Holt.AD\PE00GALL.PLT" 33
```

```
   SUMMFILE "15693-Guasti & Holt.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186    1153       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
      0.50
 ME W187    1153       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET


 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                         ***       10:05:50

                                   PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                            ***     MODEL SETUP OPTIONS SUMMARY
  ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -

 ** Model Options Selected:
      * Model Uses Regulatory DEFAULT Options
      * Model Is Setup For Calculation of Average CONCentration Values.
      * NO GAS DEPOSITION Data Provided.
      * NO PARTICLE DEPOSITION Data Provided.
      * Model Uses NO DRY DEPLETION. DDPLETE  =  F
      * Model Uses NO WET DEPLETION. WETDPLT  =  F
      * Stack-tip Downwash.
      * Model Accounts for ELEVated Terrain Effects.
```

```
      * Use Calms Processing Routine.
      * Use Missing Data Processing Routine.
      * No Exponential Decay.
      * Model Uses URBAN Dispersion Algorithm for the SBL for    64 Source(s),
        for Total of    1 Urban Area(s):
   Urban Population =   2035210.0 ;  Urban Roughness Length =  1.000 m
      * Urban Roughness Length of 1.0 Meter Used.
      * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
      * CCVR_Sub - Meteorological data includes CCVR substitutions
      * TEMP_Sub - Meteorological data includes TEMP substitutions
      * Model Accepts FLAGPOLE Receptor . Heights.
      * The User Specified a Pollutant Type of: CO

 **Model Calculates  2 Short Term Average(s) of:   1-HR   8-HR
     and Calculates PERIOD Averages

 **This Run Includes:     64 Source(s);       1 Source Group(s); and      27
Receptor(s)

                with:      0 POINT(s), including
                           0 POINTCAP(s) and      0 POINTHOR(s)
                 and:     64 VOLUME source(s)
                 and:      0 AREA type source(s)
                 and:      0 LINE source(s)
                 and:      0 RLINE/RLINEXT source(s)
                 and:      0 OPENPIT source(s)
                 and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                 and:      0 SWPOINT source(s)


 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  16216

 **Output Options Selected:
          Model Outputs Tables of PERIOD Averages by Receptor
          Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
Keyword)
          Model Outputs External File(s) of High Values for Plotting (PLOTFILE
Keyword)
          Model Outputs Separate Summary File of High Ranked Values (SUMMFILE
Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                 m for Missing
Hours
                                                                 b for Both Calm
and Missing Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   289.00 ;  Decay
```

Coef. =   0.000   ; Rot. Angle =   0.0
                  Emission Units = GRAMS/SEC   ;
Emission Rate Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =   3.6 MB of RAM.

 **Input Runstream File: aermod.inp

 **Output Print File: aermod.out

 **Detailed Error/Message File: 15693-Guasti & Holt.err

 **File for Summary of Results: 15693-Guasti & Holt.sum

 *** AERMOD - VERSION 23132 ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION 16216 ***   ***
                       ***   10:05:50

                                  PAGE   2
 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                                                *** VOLUME SOURCE DATA ***

               NUMBER EMISSION RATE   BASE   RELEASE   INIT.
INIT.   URBAN EMISSION RATE   AIRCRAFT
   SOURCE   PART. (GRAMS/SEC)   X   Y   ELEV.   HEIGHT   SY
SZ   SOURCE SCALAR VARY
     ID   CATS.   (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)   BY
 -
- - - - - - - - - - - - - - - - - - - -

 VOL1   0   0.86939E-02 444242.9 3769467.1   293.7   5.00   6.41
1.40   YES   HRDOW   NO
 VOL2   0   0.86939E-02 444272.0 3769484.5   293.8   5.00   6.41
1.40   YES   HRDOW   NO
 VOL3   0   0.86939E-02 444300.8 3769498.3   293.7   5.00   6.41
1.40   YES   HRDOW   NO
 VOL4   0   0.86939E-02 444329.3 3769513.9   293.6   5.00   6.41
1.40   YES   HRDOW   NO
 VOL5   0   0.86939E-02 444357.4 3769528.3   293.6   5.00   6.41
1.40   YES   HRDOW   NO
 VOL6   0   0.86939E-02 444385.9 3769541.7   293.6   5.00   6.41
1.40   YES   HRDOW   NO
 VOL7   0   0.86939E-02 444413.1 3769549.4   293.4   5.00   6.41

```
1.40     YES   HRDOW            NO
 VOL8             0   0.86939E-02  444441.6 3769548.5   293.1     5.00     6.41
1.40     YES   HRDOW            NO
 VOL9             0   0.86939E-02  444469.5 3769555.8   292.8     5.00     6.41
1.40     YES   HRDOW            NO
 VOL10            0   0.86939E-02  444469.8 3769528.0   292.8     5.00     6.41
1.40     YES   HRDOW            NO
 VOL11            0   0.86939E-02  444470.7 3769499.8   292.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL12            0   0.86939E-02  444461.2 3769471.3   291.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL13            0   0.86939E-02  444441.3 3769520.9   293.1     5.00     6.41
1.40     YES   HRDOW            NO
 VOL14            0   0.86939E-02  444442.5 3769499.2   292.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL15            0   0.86939E-02  444433.0 3769471.3   292.5     5.00     6.41
1.40     YES   HRDOW            NO
 VOL16            0   0.86939E-02  444462.1 3769443.8   291.0     5.00     6.41
1.40     YES   HRDOW            NO
 VOL17            0   0.86939E-02  444477.7 3769423.9   290.0     5.00     6.41
1.40     YES   HRDOW            NO
 VOL18            0   0.86939E-02  444479.2 3769395.7   289.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL19            0   0.86939E-02  444485.7 3769367.9   289.6     5.00     6.41
1.40     YES   HRDOW            NO
 VOL20            0   0.86939E-02  444485.7 3769347.4   289.6     5.00     6.41
1.40     YES   HRDOW            NO
 VOL21            0   0.86939E-02  444434.6 3769443.2   291.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL22            0   0.86939E-02  444413.7 3769521.9   293.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL23            0   0.86939E-02  444451.1 3769415.0   290.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL24            0   0.86939E-02  444457.2 3769387.8   290.4     5.00     6.41
1.40     YES   HRDOW            NO
 VOL25            0   0.86939E-02  444458.1 3769359.6   290.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL26            0   0.86939E-02  444456.9 3769347.4   290.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL27            0   0.86939E-02  444429.0 3769347.7   290.6     5.00     6.41
1.40     YES   HRDOW            NO
 VOL28            0   0.86939E-02  444401.5 3769347.7   291.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL29            0   0.86939E-02  444373.3 3769351.7   291.5     5.00     6.41
1.40     YES   HRDOW            NO
 VOL30            0   0.86939E-02  444344.3 3769360.5   291.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL31            0   0.86939E-02  444315.8 3769372.8   292.3     5.00     6.41
1.40     YES   HRDOW            NO
 VOL32            0   0.86939E-02  444287.3 3769382.6   292.7     5.00     6.41
```

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1.40     YES   HRDOW            NO
 VOL33           0   0.86939E-02  444266.5 3769410.1   293.1     5.00     6.41
1.40     YES   HRDOW            NO
 VOL34           0   0.86939E-02  444246.6 3769438.6   293.4     5.00     6.41
1.40     YES   HRDOW            NO
 VOL35           0   0.86939E-02  444271.7 3769457.0   293.5     5.00     6.41
1.40     YES   HRDOW            NO
 VOL36           0   0.86939E-02  444273.5 3769438.3   293.3     5.00     6.41
1.40     YES   HRDOW            NO
 VOL37           0   0.86939E-02  444381.9 3769457.3   292.8     5.00     6.41
1.40     YES   HRDOW            NO
 VOL38           0   0.86939E-02  444385.6 3769513.9   293.3     5.00     6.41
1.40     YES   HRDOW            NO
 VOL39           0   0.86939E-02  444300.8 3769470.7   293.4     5.00     6.41
1.40     YES   HRDOW            NO
 VOL40           0   0.86939E-02  444329.0 3769486.3   293.3     5.00     6.41
1.40     YES   HRDOW            NO
↟ *** AERMOD - VERSION 23132  ***   ***
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 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                                  *** VOLUME SOURCE DATA ***

               NUMBER EMISSION RATE                    BASE    RELEASE    INIT.
INIT.   URBAN  EMISSION RATE   AIRCRAFT
   SOURCE       PART.  (GRAMS/SEC)     X        Y      ELEV.   HEIGHT      SY
SZ     SOURCE  SCALAR VARY
     ID          CATS.               (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)              BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - -

 VOL41           0   0.86939E-02  444357.7 3769500.7   293.4     5.00     6.41
1.40     YES   HRDOW            NO
 VOL42           0   0.86939E-02  444413.7 3769494.9   293.0     5.00     6.41
1.40     YES   HRDOW            NO
 VOL43           0   0.86939E-02  444429.7 3769374.6   290.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL44           0   0.86939E-02  444429.0 3769402.5   291.4     5.00     6.41
1.40     YES   HRDOW            NO
 VOL45           0   0.86939E-02  444422.6 3769430.9   291.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL46           0   0.86939E-02  444407.0 3769458.5   292.6     5.00     6.41
1.40     YES   HRDOW            NO
```

```
 VOL47            0   0.86939E-02  444404.6 3769486.3   292.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL48            0   0.86939E-02  444377.0 3769485.4   293.1     5.00     6.41
1.40     YES   HRDOW            NO
 VOL49            0   0.86939E-02  444354.4 3769472.6   293.1     5.00     6.41
1.40     YES   HRDOW            NO
 VOL50            0   0.86939E-02  444301.1 3769442.9   293.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL51            0   0.86939E-02  444328.3 3769458.8   293.1     5.00     6.41
1.40     YES   HRDOW            NO
 VOL52            0   0.86939E-02  444294.7 3769411.0   292.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL53            0   0.86939E-02  444301.1 3769427.3   293.0     5.00     6.41
1.40     YES   HRDOW            NO
 VOL54            0   0.86939E-02  444315.2 3769400.9   292.6     5.00     6.41
1.40     YES   HRDOW            NO
 VOL55            0   0.86939E-02  444328.6 3769430.6   292.8     5.00     6.41
1.40     YES   HRDOW            NO
 VOL56            0   0.86939E-02  444356.8 3769444.4   292.8     5.00     6.41
1.40     YES   HRDOW            NO
 VOL57            0   0.86939E-02  444343.6 3769389.0   292.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL58            0   0.86939E-02  444343.3 3769416.6   292.5     5.00     6.41
1.40     YES   HRDOW            NO
 VOL59            0   0.86939E-02  444371.8 3769380.1   291.8     5.00     6.41
1.40     YES   HRDOW            NO
 VOL60            0   0.86939E-02  444400.6 3769376.1   291.5     5.00     6.41
1.40     YES   HRDOW            NO
 VOL61            0   0.86939E-02  444400.3 3769404.3   291.8     5.00     6.41
1.40     YES   HRDOW            NO
 VOL62            0   0.86939E-02  444371.5 3769408.3   292.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL63            0   0.86939E-02  444371.5 3769436.1   292.7     5.00     6.41
1.40     YES   HRDOW            NO
 VOL64            0   0.86939E-02  444396.0 3769430.3   292.1     5.00     6.41
1.40     YES   HRDOW            NO
 *** AERMOD - VERSION 23132  ***   ***
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 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                              *** SOURCE IDs DEFINING SOURCE GROUPS
***

 SRCGROUP ID                                            SOURCE IDs
```

                                        *** SOURCE IDs DEFINED AS URBAN SOURCES
***

  URBAN ID   URBAN POP   SOURCE IDs
  --------   ---------   ----------

              2035210.   VOL1   , VOL2   , VOL3   , VOL4   ,
VOL5   , VOL6   , VOL7   ,
 VOL8   ,

             VOL9   , VOL10   , VOL11   , VOL12   , VOL13   ,
VOL14   , VOL15   , VOL16   ,

```
             VOL17       , VOL18       , VOL19       , VOL20       , VOL21       ,
VOL22       , VOL23       , VOL24       ,

             VOL25       , VOL26       , VOL27       , VOL28       , VOL29       ,
VOL30       , VOL31       , VOL32       ,

             VOL33       , VOL34       , VOL35       , VOL36       , VOL37       ,
VOL38       , VOL39       , VOL40       ,

             VOL41       , VOL42       , VOL43       , VOL44       , VOL45       ,
VOL46       , VOL47       , VOL48       ,

             VOL49       , VOL50       , VOL51       , VOL52       , VOL53       ,
VOL54       , VOL55       , VOL56       ,

             VOL57       , VOL58       , VOL59       , VOL60       , VOL61       ,
VOL62       , VOL63       , VOL64       ,
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                         ***       10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL1          ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
```

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6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
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 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL2         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
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 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL3         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL4         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
```

```
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL5         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
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                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL6          ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50
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 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL7   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                  DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL8   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -

```
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL9          ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
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   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  15
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL10        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL11   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                    DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                    DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                    DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL12   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR

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 - - -
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```
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL14        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
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                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL15   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -

                                                 DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL16   ; SOURCE TYPE = VOLUME   :

```
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  22
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL17        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
```

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  23
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL18        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
```

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22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  24
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL19        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                  DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  25
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *
```

```
 SOURCE ID = VOL20         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:05:50

                                   PAGE  26
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL21         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
```

```
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  27
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL22        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
```

14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL23   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                 DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

```
                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL24        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  30
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL25        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
```

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14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  31
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL26        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
```

```
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL27        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL28        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL29        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
```

```
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL30        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

```
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL31        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50
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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL32 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL33 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

```
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  39
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL34        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
```

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   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  40
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL35        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
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                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL36   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL37   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR

```
 - - -
```

```
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL39        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
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                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL40   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                 DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL41   ; SOURCE TYPE = VOLUME   :

```
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL42        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
```

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL43        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
```

22 .0000E+00   23 .0000E+00   24 .0000E+00
↑ *** AERMOD - VERSION 23132 ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION 16216 ***   ***
                       ***   10:05:50

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 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL44   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                  DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
↑ *** AERMOD - VERSION 23132 ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION 16216 ***   ***
                       ***   10:05:50

                                  PAGE 50
 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

```
 SOURCE ID = VOL45        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  51
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL46        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
```

```
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  52
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL47        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
```

```
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  53
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL48        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  54
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
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```
                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL49        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL50        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
```

```
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  56
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL51        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
```

```
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  57
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL52        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL53        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  59
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL54        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
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6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL55        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
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                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL56        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
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 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL57   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                 DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL58   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -

```
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL59        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
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   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL60        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL61   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                    DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                    DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                    DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL62   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR

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 - - -
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```
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                   PAGE  69
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL64        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
```

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```
     ( 444219.0, 3769382.9,     292.8,     292.8,       2.0);         ( 443379.3,
3769584.1,     298.2,     298.2,       2.0);
     ( 444284.0, 3769574.3,     294.7,     294.7,       2.0);         ( 444350.0,
3769622.2,     294.8,     294.8,       2.0);
     ( 444673.5, 3770137.6,     299.6,     299.6,       2.0);         ( 444743.3,
3770127.5,     299.5,     299.5,       2.0);
     ( 445412.9, 3770137.2,     301.4,     301.4,       2.0);         ( 444636.5,
3769597.8,     294.0,     294.0,       2.0);
     ( 444745.5, 3769593.1,     293.8,     293.8,       2.0);         ( 444084.6,
3769528.2,     295.0,     295.0,       2.0);
     ( 444307.2, 3769666.6,     295.7,     295.7,       2.0);         ( 444155.1,
3769701.8,     297.0,     297.0,       2.0);
     ( 444913.2, 3769590.1,     293.7,     293.7,       2.0);         ( 445012.2,
3769616.9,     293.2,     293.2,       2.0);
     ( 444972.4, 3769760.1,     295.4,     295.4,       2.0);         ( 445292.2,
3769551.3,     294.0,     294.0,       2.0);
     ( 445542.1, 3769662.7,     295.6,     295.6,       2.0);         ( 445514.2,
3769455.1,     293.2,     293.2,       2.0);
     ( 445434.0, 3769977.3,     299.4,     299.4,       2.0);         ( 445471.4,
3769890.5,     298.7,     298.7,       2.0);
     ( 445125.4, 3770123.8,     298.8,     298.8,       2.0);         ( 445301.5,
3770041.4,     299.5,     299.5,       2.0);
     ( 445546.0, 3769740.4,     296.7,     296.7,       2.0);         ( 445513.5,
3769442.0,     293.1,     293.1,       2.0);
     ( 443901.8, 3769642.3,     296.9,     296.9,       2.0);         ( 443804.6,
3769565.5,     296.1,     296.1,       2.0);
     ( 443786.1, 3769428.4,     294.6,     294.6,       2.0);
```


*** METEOROLOGICAL DAYS SELECTED FOR

PROCESSING ***
(1=YES; 0=NO)

```
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
```

Surface station no.: 3102 Upper air station no.: 3190
Name: UNKNOWN Name: UNKNOWN

Year: 2012 Year: 2012

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
12	01	01	1	01	-16.4	0.171	-9.000	-9.000	-999.	170.	32.3	0.09	1.12	1.00	2.03	43.	7.9	285.9	2.0
12	01	01	1	02	-18.8	0.194	-9.000	-9.000	-999.	205.	41.3	0.09	1.12	1.00	2.28	34.	7.9	285.4	2.0
12	01	01	1	03	-17.8	0.182	-9.000	-9.000	-999.	187.	36.5	0.09	1.12	1.00	2.15	24.	7.9	282.0	2.0
12	01	01	1	04	-9.4	0.128	-9.000	-9.000	-999.	110.	19.6	0.09	1.12	1.00	1.55	41.	7.9	283.1	2.0
12	01	01	1	05	-16.9	0.173	-9.000	-9.000	-999.	173.	33.0	0.09	1.12	1.00	2.05	39.	7.9	280.4	2.0
12	01	01	1	06	-8.0	0.117	-9.000	-9.000	-999.	97.	17.8	0.09	1.12	1.00	1.43	21.	7.9	282.0	2.0
12	01	01	1	07	-7.6	0.115	-9.000	-9.000	-999.	93.	17.4	0.09	1.12	1.00	1.40	31.	7.9	282.5	2.0
12	01	01	1	08	-13.6	0.184	-9.000	-9.000	-999.	190.	40.5	0.09	1.12	0.54	2.16	34.	7.9	284.2	2.0
12	01	01	1	09	28.4	0.126	0.300	0.011	33.	108.	-6.2	0.09	1.12	0.32	1.03	29.	7.9	289.2	2.0
12	01	01	1	10	79.8	0.133	0.607	0.010	99.	116.	-2.6	0.09	1.12	0.25	0.94	173.	7.9	292.5	2.0
12	01	01	1	11	115.8	0.137	0.932	0.006	246.	121.	-2.0	0.09	1.12	0.22	0.92	172.	7.9	295.4	2.0
12	01	01	1	12	133.7	0.139	1.197	0.005	453.	125.	-1.8	0.09	1.12	0.21	0.92	146.	7.9	297.5	2.0
12	01	01	1	13	133.2	0.160	1.354	0.005	657.	153.	-2.7	0.09	1.12	0.21	1.14	117.	7.9	299.9	2.0
12	01	01	1	14	113.5	0.159	1.454	0.005	955.	151.	-3.1	0.09	1.12	0.23	1.16	285.	7.9	300.9	2.0
12	01	01	1	15	76.2	0.166	1.350	0.005	1138.	163.	-5.3	0.09	1.12	0.26	1.33	72.	7.9	302.0	2.0
12	01	01	1	16	23.5	0.175	0.925	0.005	1183.	175.	-19.9	0.09	1.12	0.35	1.65	107.	7.9	301.4	2.0
12	01	01	1	17	-6.1	0.107	-9.000	-9.000	-999.	86.	18.0	0.09	1.12	0.63	1.31	107.	7.9	298.1	2.0
12	01	01	1	18	-11.1	0.141	-9.000	-9.000	-999.	127.	22.1	0.09	1.12	1.00	1.69	86.	7.9	293.1	2.0
12	01	01	1	19	-3.2	0.076	-9.000	-9.000	-999.	51.	11.8	0.09	1.12	1.00	0.91	64.	7.9	292.0	2.0
12	01	01	1	20	-2.3	0.066	-9.000	-9.000	-999.	41.	11.2	0.09	1.12	1.00	0.74	73.	7.9	288.8	2.0

```
 12 01 01   1 21  -10.0  0.133 -9.000 -9.000 -999.  116.     20.5  0.09   1.12
1.00    1.60   14.    7.9  288.1    2.0
 12 01 01   1 22  -19.4  0.201 -9.000 -9.000 -999.  216.     44.5  0.09   1.12
1.00    2.36   22.    7.9  287.5    2.0
 12 01 01   1 23  -23.7  0.246 -9.000 -9.000 -999.  293.     66.5  0.09   1.12
1.00    2.86   40.    7.9  287.0    2.0
 12 01 01   1 24  -12.3  0.147 -9.000 -9.000 -999.  139.     23.8  0.09   1.12
1.00    1.76   40.    7.9  283.8    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 12 01 01 01    7.9 1   43.    2.03   286.0   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  73
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                             *** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL      ***
                             INCLUDING SOURCE(S):     VOL1        , VOL2
 , VOL3        , VOL4        , VOL5        ,
                 VOL6        , VOL7        , VOL8        , VOL9        , VOL10
 , VOL11       , VOL12       , VOL13       ,
                 VOL14       , VOL15       , VOL16       , VOL17       , VOL18
 , VOL19       , VOL20       , VOL21       ,
                 VOL22       , VOL23       , VOL24       , VOL25       , VOL26
 , VOL27       , VOL28       ,  . . .      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                       ** CONC OF CO       IN MICROGRAMS/M**3
                    **

       X-COORD (M)   Y-COORD (M)        CONC                        X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
         444218.99    3769382.94        1.05201                       443379.29
3769584.14        0.01112
         444283.97    3769574.32        0.87147                       444350.01
3769622.16        0.75547
         444673.49    3770137.65        0.04413                       444743.34
```

```
3770127.46        0.04873
         445412.86    3770137.16        0.04395                      444636.46
3769597.76        1.09413
         444745.49    3769593.07        0.64684                      444084.62
3769528.25        0.17475
         444307.19    3769666.57        0.33468                      444155.11
3769701.76        0.11977
         444913.20    3769590.10        0.32192                      445012.21
3769616.93        0.22571
         444972.40    3769760.11        0.19125                      445292.22
3769551.27        0.09608
         445542.14    3769662.68        0.06166                      445514.18
3769455.12        0.04855
         445433.98    3769977.29        0.05810                      445471.42
3769890.51        0.06302
         445125.39    3770123.84        0.05289                      445301.47
3770041.39        0.05842
         445545.96    3769740.36        0.06222                      445513.51
3769442.00        0.04715
         443901.79    3769642.26        0.04645                      443804.60
3769565.50        0.03506
         443786.15    3769428.43        0.03618

 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  74
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                             *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                INCLUDING SOURCE(S):     VOL1        , VOL2
 , VOL3        , VOL4        , VOL5        ,
                 VOL6        , VOL7        , VOL8        , VOL9        , VOL10
 , VOL11       , VOL12       , VOL13       ,
                 VOL14       , VOL15       , VOL16       , VOL17       , VOL18
 , VOL19       , VOL20       , VOL21       ,
                 VOL22       , VOL23       , VOL24       , VOL25       , VOL26
 , VOL27       , VOL28       ,  . . .      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                       ** CONC OF CO       IN MICROGRAMS/M**3
                    **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
```

```
Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       444218.99   3769382.94       57.26412  (14121616)               443379.29
 3769584.14        2.23862  (12021516)
       444283.97   3769574.32       45.28012  (14123015)               444350.01
 3769622.16       35.53224  (13112916)
       444673.49   3770137.65        7.16234  (16122116)               444743.34
 3770127.46        5.84764  (14120516)
       445412.86   3770137.16        3.49986  (15122116)               444636.46
 3769597.76       28.02643  (15120816)
       444745.49   3769593.07       19.69449  (16121216)               444084.62
 3769528.25       22.74172  (12021516)
       444307.19   3769666.57       24.85641  (13021809)               444155.11
 3769701.76       14.58427  (15012616)
       444913.20   3769590.10       13.49348  (16121216)               445012.21
 3769616.93       10.31882  (16121216)
       444972.40   3769760.11        6.86158  (15120816)               445292.22
 3769551.27        4.74005  (13112016)
       445542.14   3769662.68        3.58927  (16121216)               445514.18
 3769455.12        4.12030  (14120316)
       445433.98   3769977.29        3.00194  (15122116)               445471.42
 3769890.51        2.16685  (16121216)
       445125.39   3770123.84        4.27637  (12120416)               445301.47
 3770041.39        4.12258  (15122116)
       445545.96   3769740.36        3.81796  (16121216)               445513.51
 3769442.00        4.14256  (14120316)
       443901.79   3769642.26        8.03935  (15012916)               443804.60
 3769565.50        6.98161  (12021516)
       443786.15   3769428.43        6.73590  (16012116)

 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:05:50

                                   PAGE  75
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                               *** THE   1ST HIGHEST  8-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     VOL1        , VOL2
 , VOL3        , VOL4        , VOL5        ,
                 VOL6        , VOL7        , VOL8        , VOL9        , VOL10
 , VOL11       , VOL12       , VOL13       ,
                 VOL14       , VOL15       , VOL16       , VOL17       , VOL18
 , VOL19       , VOL20       , VOL21       ,
                 VOL22       , VOL23       , VOL24       , VOL25       , VOL26
 , VOL27       , VOL28       ,  . . .      ,
```

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF CO IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
444218.99	3769382.94	29.78275	(15122216)	443379.29	3769584.14	0.57939	(16012116)
444283.97	3769574.32	23.42151	(14121216)	444350.01	3769622.16	15.78756	(16010616)
444673.49	3770137.65	1.29563	(13020816)	444743.34	3770127.46	1.24700	(14120516)
445412.86	3770137.16	0.74761	(12110816)	444636.46	3769597.76	11.72592	(13111916)
444745.49	3769593.07	7.61931	(14020616)	444084.62	3769528.25	8.73496	(15112716)
444307.19	3769666.57	9.68197	(16010616)	444155.11	3769701.76	6.08477	(14121216)
444913.20	3769590.10	4.53377	(14020616)	445012.21	3769616.93	3.29367	(14020616)
444972.40	3769760.11	2.43215	(12110916)	445292.22	3769551.27	1.68239	(13112016)
445542.14	3769662.68	1.10009	(13112016)	445514.18	3769455.12	0.79077	(13110416)
445433.98	3769977.29	0.76112	(12110916)	445471.42	3769890.51	0.79659	(14111216)
445125.39	3770123.84	1.28363	(12021316)	445301.47	3770041.39	0.95807	(12110816)
445545.96	3769740.36	0.98955	(14020616)	445513.51	3769442.00	0.78988	(13110416)
443901.79	3769642.26	3.08263	(15112716)	443804.60	3769565.50	2.08644	(15112716)
443786.15	3769428.43	1.99832	(16102416)				

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** THE SUMMARY OF MAXIMUM PERIOD (43848 HRS) RESULTS ***

```
                                    ** CONC OF CO       IN MICROGRAMS/M**3
               **


                         NETWORK
GROUP ID                       AVERAGE CONC                RECEPTOR  (XR, YR,
ZELEV, ZHILL, ZFLAG)  OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - -

ALL       1ST HIGHEST VALUE IS       1.09413 AT (  444636.46,  3769597.76,
294.04,   294.04,    2.00)  DC
          2ND HIGHEST VALUE IS       1.05201 AT (  444218.99,  3769382.94,
292.78,   292.78,    2.00)  DC
          3RD HIGHEST VALUE IS       0.87147 AT (  444283.97,  3769574.32,
294.67,   294.67,    2.00)  DC
          4TH HIGHEST VALUE IS       0.75547 AT (  444350.01,  3769622.16,
294.79,   294.79,    2.00)  DC
          5TH HIGHEST VALUE IS       0.64684 AT (  444745.49,  3769593.07,
293.77,   293.77,    2.00)  DC
          6TH HIGHEST VALUE IS       0.33468 AT (  444307.19,  3769666.57,
295.68,   295.68,    2.00)  DC
          7TH HIGHEST VALUE IS       0.32192 AT (  444913.20,  3769590.10,
293.66,   293.66,    2.00)  DC
          8TH HIGHEST VALUE IS       0.22571 AT (  445012.21,  3769616.93,
293.20,   293.20,    2.00)  DC
          9TH HIGHEST VALUE IS       0.19125 AT (  444972.40,  3769760.11,
295.39,   295.39,    2.00)  DC
         10TH HIGHEST VALUE IS       0.17475 AT (  444084.62,  3769528.25,
295.01,   295.01,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                  PAGE  77
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                                *** THE SUMMARY OF HIGHEST  1-HR
RESULTS ***
```

```
                                    ** CONC OF CO       IN MICROGRAMS/M**3
               **

                                                          DATE
                                          NETWORK
GROUP ID                           AVERAGE CONC     (YYMMDDHH)             RECEPTOR
(XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS      57.26412  ON 14121616: AT (  444218.99,
3769382.94,   292.78,   292.78,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:05:50

                                   PAGE  78
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                                *** THE SUMMARY OF HIGHEST  8-HR
RESULTS ***


                                    ** CONC OF CO       IN MICROGRAMS/M**3
               **

                                                          DATE
                                          NETWORK
GROUP ID                           AVERAGE CONC     (YYMMDDHH)             RECEPTOR
(XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS      29.78275  ON 15122216: AT (  444218.99,
3769382.94,   292.78,   292.78,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of   0 Fatal Error Message(s)
 A Total of   2 Warning Message(s)
 A Total of   1628 Informational Message(s)

 A Total of   43848 Hours Were Processed

 A Total of   1278 Calm Hours Identified

 A Total of   350 Missing Hours Identified (0.80 Percent)

    ******** FATAL ERROR MESSAGES ********
               *** NONE ***

    ********   WARNING MESSAGES   ********
 ME W186   1153   MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
      0.50
 ME W187   1153   MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

    ****
    *** AERMOD Finishes Successfully ***
    ****
**
****
**
** AERMOD Input Produced by:
** AERMOD View Ver. 12.0.0
** Lakes Environmental Software Inc.
** Date: 4/19/2024
** File: C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\Construction LST
NOX\Construction LST NOX.ADI
**
****
**
**

```
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti &
   MODELOPT DFAULT CONC
   AVERTIME 1
   URBANOPT 2035210 County_of_San_Bernardino
   POLLUTID NOX
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "Construction LST NOX.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     444242.944  3769467.059      293.700
   LOCATION VOL2         VOLUME     444272.020  3769484.508      293.810
   LOCATION VOL3         VOLUME     444300.793  3769498.282      293.730
   LOCATION VOL4         VOLUME     444329.261  3769513.893      293.600
   LOCATION VOL5         VOLUME     444357.422  3769528.280      293.640
   LOCATION VOL6         VOLUME     444385.889  3769541.748      293.610
   LOCATION VOL7         VOLUME     444413.132  3769549.401      293.400
   LOCATION VOL8         VOLUME     444441.600  3769548.483      293.090
   LOCATION VOL9         VOLUME     444469.455  3769555.829      292.810
   LOCATION VOL10        VOLUME     444469.761  3769527.974      292.810
   LOCATION VOL11        VOLUME     444470.679  3769499.813      292.190
   LOCATION VOL12        VOLUME     444461.190  3769471.345      291.870
   LOCATION VOL13        VOLUME     444441.293  3769520.934      293.100
   LOCATION VOL14        VOLUME     444442.518  3769499.200      292.910
   LOCATION VOL15        VOLUME     444433.029  3769471.345      292.530
   LOCATION VOL16        VOLUME     444462.108  3769443.796      290.990
   LOCATION VOL17        VOLUME     444477.719  3769423.900      290.030
   LOCATION VOL18        VOLUME     444479.250  3769395.738      289.870
   LOCATION VOL19        VOLUME     444485.678  3769367.883      289.640
   LOCATION VOL20        VOLUME     444485.678  3769347.375      289.640
   LOCATION VOL21        VOLUME     444434.559  3769443.184      291.880
   LOCATION VOL22        VOLUME     444413.744  3769521.852      293.250
   LOCATION VOL23        VOLUME     444451.089  3769415.023      290.920
   LOCATION VOL24        VOLUME     444457.211  3769387.780      290.450
   LOCATION VOL25        VOLUME     444458.129  3769359.619      290.190
   LOCATION VOL26        VOLUME     444456.905  3769347.375      290.200
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   LOCATION VOL27        VOLUME     444429.049  3769347.681      290.600
   LOCATION VOL28        VOLUME     444401.500  3769347.681      291.160
   LOCATION VOL29        VOLUME     444373.339  3769351.660      291.500
   LOCATION VOL30        VOLUME     444344.260  3769360.537      291.890
   LOCATION VOL31        VOLUME     444315.792  3769372.781      292.300
   LOCATION VOL32        VOLUME     444287.325  3769382.576      292.690
   LOCATION VOL33        VOLUME     444266.510  3769410.125      293.050
   LOCATION VOL34        VOLUME     444246.613  3769438.593      293.350
   LOCATION VOL35        VOLUME     444271.714  3769456.959      293.530
   LOCATION VOL36        VOLUME     444273.550  3769438.286      293.340
   LOCATION VOL37        VOLUME     444381.910  3769457.265      292.800
   LOCATION VOL38        VOLUME     444385.583  3769513.893      293.330
   LOCATION VOL39        VOLUME     444300.793  3769470.733      293.450
   LOCATION VOL40        VOLUME     444328.954  3769486.344      293.320
   LOCATION VOL41        VOLUME     444357.728  3769500.731      293.360
   LOCATION VOL42        VOLUME     444413.744  3769494.915      293.000
   LOCATION VOL43        VOLUME     444429.662  3769374.617      290.940
   LOCATION VOL44        VOLUME     444429.049  3769402.473      291.450
   LOCATION VOL45        VOLUME     444422.621  3769430.940      291.860
   LOCATION VOL46        VOLUME     444407.010  3769458.489      292.560
   LOCATION VOL47        VOLUME     444404.561  3769486.344      292.910
   LOCATION VOL48        VOLUME     444377.012  3769485.426      293.130
   LOCATION VOL49        VOLUME     444354.361  3769472.570      293.080
   LOCATION VOL50        VOLUME     444301.099  3769442.878      293.170
   LOCATION VOL51        VOLUME     444328.342  3769458.795      293.050
   LOCATION VOL52        VOLUME     444294.671  3769411.043      292.910
   LOCATION VOL53        VOLUME     444301.099  3769427.267      293.010
   LOCATION VOL54        VOLUME     444315.180  3769400.942      292.600
   LOCATION VOL55        VOLUME     444328.648  3769430.634      292.760
   LOCATION VOL56        VOLUME     444356.810  3769444.408      292.790
   LOCATION VOL57        VOLUME     444343.647  3769389.004      292.190
   LOCATION VOL58        VOLUME     444343.341  3769416.553      292.500
   LOCATION VOL59        VOLUME     444371.809  3769380.127      291.810
   LOCATION VOL60        VOLUME     444400.582  3769376.148      291.470
   LOCATION VOL61        VOLUME     444400.276  3769404.309      291.770
   LOCATION VOL62        VOLUME     444371.502  3769408.289      292.210
   LOCATION VOL63        VOLUME     444371.502  3769436.144      292.670
   LOCATION VOL64        VOLUME     444395.991  3769430.328      292.140
** Source Parameters **
   SRCPARAM VOL1         0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL2         0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL3         0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL4         0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL5         0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL6         0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL7         0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL8         0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL9         0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL10        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL11        0.0104578241     5.000     6.407     1.400
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SRCPARAM VOL12        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL13        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL14        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL15        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL16        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL17        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL18        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL19        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL20        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL21        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL22        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL23        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL24        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL25        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL26        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL27        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL28        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL29        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL30        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL31        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL32        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL33        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL34        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL35        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL36        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL37        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL38        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL39        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL40        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL41        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL42        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL43        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL44        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL45        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL46        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL47        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL48        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL49        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL50        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL51        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL52        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL53        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL54        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL55        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL56        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL57        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL58        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL59        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL60        0.0104578241     5.000     6.407     1.400
SRCPARAM VOL61        0.0104578241     5.000     6.407     1.400
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   SRCPARAM VOL62        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL63        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL64        0.0104578241     5.000     6.407     1.400
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL37        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL38        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL39        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL40        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL41        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL42        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL43        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL44        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL45        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL46        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL47        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL48        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL49        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL50        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL51        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL52        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL53        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL54        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL55        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL56        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL57        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL58        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL59        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL60        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

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   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL61        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL62        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL63        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

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   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL64        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED "Construction LST NOX.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE KONT_V9_ADJU\KONT_v9.SFC
   PROFFILE KONT_V9_ADJU\KONT_v9.PFL
   SURFDATA 3102 2012
   UAIRDATA 3190 2012
   PROFBASE 289.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
```

```
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "CONSTRUCTION LST NOX.AD\01H1GALL.PLT" 31
   SUMMFILE "Construction LST NOX.sum"
OU FINISHED
**
**************************************
** Project Parameters
**************************************
** PROJCTN  CoordinateSystemUTM
** DESCPTN  UTM: Universal Transverse Mercator
** DATUM    North American Datum 1983
** DTMRGN   CONUS
** UNITS    m
** ZONE     11
** ZONEINX  0
**
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 12.0.0
** Lakes Environmental Software Inc.
** Date: 4/19/2024
** File: C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\Construction LST
NOX\Construction LST NOX.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti &
   MODELOPT DFAULT CONC
   AVERTIME 1
   URBANOPT 2035210 County_of_San_Bernardino
   POLLUTID NOX
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "Construction LST NOX.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
```

```
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     444242.944  3769467.059      293.700
   LOCATION VOL2         VOLUME     444272.020  3769484.508      293.810
   LOCATION VOL3         VOLUME     444300.793  3769498.282      293.730
   LOCATION VOL4         VOLUME     444329.261  3769513.893      293.600
   LOCATION VOL5         VOLUME     444357.422  3769528.280      293.640
   LOCATION VOL6         VOLUME     444385.889  3769541.748      293.610
   LOCATION VOL7         VOLUME     444413.132  3769549.401      293.400
   LOCATION VOL8         VOLUME     444441.600  3769548.483      293.090
   LOCATION VOL9         VOLUME     444469.455  3769555.829      292.810
   LOCATION VOL10        VOLUME     444469.761  3769527.974      292.810
   LOCATION VOL11        VOLUME     444470.679  3769499.813      292.190
   LOCATION VOL12        VOLUME     444461.190  3769471.345      291.870
   LOCATION VOL13        VOLUME     444441.293  3769520.934      293.100
   LOCATION VOL14        VOLUME     444442.518  3769499.200      292.910
   LOCATION VOL15        VOLUME     444433.029  3769471.345      292.530
   LOCATION VOL16        VOLUME     444462.108  3769443.796      290.990
   LOCATION VOL17        VOLUME     444477.719  3769423.900      290.030
   LOCATION VOL18        VOLUME     444479.250  3769395.738      289.870
   LOCATION VOL19        VOLUME     444485.678  3769367.883      289.640
   LOCATION VOL20        VOLUME     444485.678  3769347.375      289.640
   LOCATION VOL21        VOLUME     444434.559  3769443.184      291.880
   LOCATION VOL22        VOLUME     444413.744  3769521.852      293.250
   LOCATION VOL23        VOLUME     444451.089  3769415.023      290.920
   LOCATION VOL24        VOLUME     444457.211  3769387.780      290.450
   LOCATION VOL25        VOLUME     444458.129  3769359.619      290.190
   LOCATION VOL26        VOLUME     444456.905  3769347.375      290.200
   LOCATION VOL27        VOLUME     444429.049  3769347.681      290.600
   LOCATION VOL28        VOLUME     444401.500  3769347.681      291.160
   LOCATION VOL29        VOLUME     444373.339  3769351.660      291.500
   LOCATION VOL30        VOLUME     444344.260  3769360.537      291.890
   LOCATION VOL31        VOLUME     444315.792  3769372.781      292.300
   LOCATION VOL32        VOLUME     444287.325  3769382.576      292.690
   LOCATION VOL33        VOLUME     444266.510  3769410.125      293.050
   LOCATION VOL34        VOLUME     444246.613  3769438.593      293.350
   LOCATION VOL35        VOLUME     444271.714  3769456.959      293.530
   LOCATION VOL36        VOLUME     444273.550  3769438.286      293.340
   LOCATION VOL37        VOLUME     444381.910  3769457.265      292.800
   LOCATION VOL38        VOLUME     444385.583  3769513.893      293.330
   LOCATION VOL39        VOLUME     444300.793  3769470.733      293.450
   LOCATION VOL40        VOLUME     444328.954  3769486.344      293.320
   LOCATION VOL41        VOLUME     444357.728  3769500.731      293.360
   LOCATION VOL42        VOLUME     444413.744  3769494.915      293.000
   LOCATION VOL43        VOLUME     444429.662  3769374.617      290.940
   LOCATION VOL44        VOLUME     444429.049  3769402.473      291.450
   LOCATION VOL45        VOLUME     444422.621  3769430.940      291.860
   LOCATION VOL46        VOLUME     444407.010  3769458.489      292.560
   LOCATION VOL47        VOLUME     444404.561  3769486.344      292.910
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   LOCATION VOL48        VOLUME     444377.012  3769485.426      293.130
   LOCATION VOL49        VOLUME     444354.361  3769472.570      293.080
   LOCATION VOL50        VOLUME     444301.099  3769442.878      293.170
   LOCATION VOL51        VOLUME     444328.342  3769458.795      293.050
   LOCATION VOL52        VOLUME     444294.671  3769411.043      292.910
   LOCATION VOL53        VOLUME     444301.099  3769427.267      293.010
   LOCATION VOL54        VOLUME     444315.180  3769400.942      292.600
   LOCATION VOL55        VOLUME     444328.648  3769430.634      292.760
   LOCATION VOL56        VOLUME     444356.810  3769444.408      292.790
   LOCATION VOL57        VOLUME     444343.647  3769389.004      292.190
   LOCATION VOL58        VOLUME     444343.341  3769416.553      292.500
   LOCATION VOL59        VOLUME     444371.809  3769380.127      291.810
   LOCATION VOL60        VOLUME     444400.582  3769376.148      291.470
   LOCATION VOL61        VOLUME     444400.276  3769404.309      291.770
   LOCATION VOL62        VOLUME     444371.502  3769408.289      292.210
   LOCATION VOL63        VOLUME     444371.502  3769436.144      292.670
   LOCATION VOL64        VOLUME     444395.991  3769430.328      292.140
** Source Parameters **
   SRCPARAM VOL1         0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL2         0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL3         0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL4         0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL5         0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL6         0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL7         0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL8         0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL9         0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL10        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL11        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL12        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL13        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL14        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL15        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL16        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL17        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL18        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL19        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL20        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL21        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL22        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL23        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL24        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL25        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL26        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL27        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL28        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL29        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL30        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL31        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL32        0.0104578241     5.000     6.407     1.400
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   SRCPARAM VOL33        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL34        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL35        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL36        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL37        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL38        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL39        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL40        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL41        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL42        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL43        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL44        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL45        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL46        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL47        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL48        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL49        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL50        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL51        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL52        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL53        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL54        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL55        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL56        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL57        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL58        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL59        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL60        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL61        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL62        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL63        0.0104578241     5.000     6.407     1.400
   SRCPARAM VOL64        0.0104578241     5.000     6.407     1.400
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
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   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
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   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
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   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
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   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL37        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL38        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL39        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL40        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL41        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL42        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL43        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL44        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL45        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
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   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL46        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL47        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL48        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL49        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL50        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL51        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL52        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL53        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL54        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL55        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
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   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL56        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL57        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL58        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL59        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL60        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL61        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL62        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL63        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL64        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
```

```
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED "Construction LST NOX.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE KONT_V9_ADJU\KONT_v9.SFC
   PROFFILE KONT_V9_ADJU\KONT_v9.PFL
   SURFDATA 3102 2012
   UAIRDATA 3190 2012
   PROFBASE 289.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "CONSTRUCTION LST NOX.AD\01H1GALL.PLT" 31
   SUMMFILE "Construction LST NOX.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186    1153       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
```

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      0.50
 ME W187    1153       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET


 **********************************
 *** SETUP Finishes Successfully ***
 **********************************

 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                         ***       10:11:01

                                   PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                            ***     MODEL SETUP OPTIONS SUMMARY
  ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - -

 ** Model Options Selected:
      * Model Uses Regulatory DEFAULT Options
      * Model Is Setup For Calculation of Average CONCentration Values.
      * NO GAS DEPOSITION Data Provided.
      * NO PARTICLE DEPOSITION Data Provided.
      * Model Uses NO DRY DEPLETION. DDPLETE  =  F
      * Model Uses NO WET DEPLETION. WETDPLT  =  F
      * Stack-tip Downwash.
      * Model Accounts for ELEVated Terrain Effects.
      * Use Calms Processing Routine.
      * Use Missing Data Processing Routine.
      * No Exponential Decay.
      * Model Uses URBAN Dispersion Algorithm for the SBL for    64 Source(s),
        for Total of    1 Urban Area(s):
   Urban Population =   2035210.0 ;  Urban Roughness Length =  1.000 m
      * Urban Roughness Length of 1.0 Meter Used.
      * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
      * CCVR_Sub - Meteorological data includes CCVR substitutions
      * TEMP_Sub - Meteorological data includes TEMP substitutions
      * Model Accepts FLAGPOLE Receptor . Heights.
      * The User Specified a Pollutant Type of: NOX

 **Model Calculates  1 Short Term Average(s) of:   1-HR

 **This Run Includes:     64 Source(s);       1 Source Group(s); and      27
Receptor(s)

                with:      0 POINT(s), including
```

```
                    0 POINTCAP(s) and      0 POINTHOR(s)
               and:     64 VOLUME source(s)
               and:      0 AREA type source(s)
               and:      0 LINE source(s)
               and:      0 RLINE/RLINEXT source(s)
               and:      0 OPENPIT source(s)
               and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
               and:      0 SWPOINT source(s)


 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  16216

 **Output Options Selected:
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
Keyword)
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE
Keyword)
         Model Outputs Separate Summary File of High Ranked Values (SUMMFILE
Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                 m for Missing
Hours
                                                                 b for Both Calm
and Missing Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   289.00 ;  Decay
Coef. =    0.000     ;  Rot. Angle =     0.0
                  Emission Units = GRAMS/SEC                                ;
Emission Rate Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      3.6 MB of RAM.

 **Input Runstream File:          aermod.inp

 **Output Print File:             aermod.out


 **Detailed Error/Message File:   Construction LST NOX.err

 **File for Summary of Results:   Construction LST NOX.sum

 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                         ***        10:11:01
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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER EMISSION RATE PART. SCALAR CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	AIRCRAFT EMISSION RATE VARY BY
VOL1	0	0.10458E-01	444242.9	3769467.1	293.7	5.00	6.41	1.40	YES	HRDOW NO
VOL2	0	0.10458E-01	444272.0	3769484.5	293.8	5.00	6.41	1.40	YES	HRDOW NO
VOL3	0	0.10458E-01	444300.8	3769498.3	293.7	5.00	6.41	1.40	YES	HRDOW NO
VOL4	0	0.10458E-01	444329.3	3769513.9	293.6	5.00	6.41	1.40	YES	HRDOW NO
VOL5	0	0.10458E-01	444357.4	3769528.3	293.6	5.00	6.41	1.40	YES	HRDOW NO
VOL6	0	0.10458E-01	444385.9	3769541.7	293.6	5.00	6.41	1.40	YES	HRDOW NO
VOL7	0	0.10458E-01	444413.1	3769549.4	293.4	5.00	6.41	1.40	YES	HRDOW NO
VOL8	0	0.10458E-01	444441.6	3769548.5	293.1	5.00	6.41	1.40	YES	HRDOW NO
VOL9	0	0.10458E-01	444469.5	3769555.8	292.8	5.00	6.41	1.40	YES	HRDOW NO
VOL10	0	0.10458E-01	444469.8	3769528.0	292.8	5.00	6.41	1.40	YES	HRDOW NO
VOL11	0	0.10458E-01	444470.7	3769499.8	292.2	5.00	6.41	1.40	YES	HRDOW NO
VOL12	0	0.10458E-01	444461.2	3769471.3	291.9	5.00	6.41	1.40	YES	HRDOW NO
VOL13	0	0.10458E-01	444441.3	3769520.9	293.1	5.00	6.41	1.40	YES	HRDOW NO
VOL14	0	0.10458E-01	444442.5	3769499.2	292.9	5.00	6.41	1.40	YES	HRDOW NO
VOL15	0	0.10458E-01	444433.0	3769471.3	292.5	5.00	6.41	1.40	YES	HRDOW NO
VOL16	0	0.10458E-01	444462.1	3769443.8	291.0	5.00	6.41	1.40	YES	HRDOW NO
VOL17	0	0.10458E-01	444477.7	3769423.9	290.0	5.00	6.41	1.40	YES	HRDOW NO

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 VOL18            0   0.10458E-01  444479.2 3769395.7   289.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL19            0   0.10458E-01  444485.7 3769367.9   289.6     5.00     6.41
1.40     YES   HRDOW            NO
 VOL20            0   0.10458E-01  444485.7 3769347.4   289.6     5.00     6.41
1.40     YES   HRDOW            NO
 VOL21            0   0.10458E-01  444434.6 3769443.2   291.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL22            0   0.10458E-01  444413.7 3769521.9   293.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL23            0   0.10458E-01  444451.1 3769415.0   290.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL24            0   0.10458E-01  444457.2 3769387.8   290.4     5.00     6.41
1.40     YES   HRDOW            NO
 VOL25            0   0.10458E-01  444458.1 3769359.6   290.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL26            0   0.10458E-01  444456.9 3769347.4   290.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL27            0   0.10458E-01  444429.0 3769347.7   290.6     5.00     6.41
1.40     YES   HRDOW            NO
 VOL28            0   0.10458E-01  444401.5 3769347.7   291.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL29            0   0.10458E-01  444373.3 3769351.7   291.5     5.00     6.41
1.40     YES   HRDOW            NO
 VOL30            0   0.10458E-01  444344.3 3769360.5   291.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL31            0   0.10458E-01  444315.8 3769372.8   292.3     5.00     6.41
1.40     YES   HRDOW            NO
 VOL32            0   0.10458E-01  444287.3 3769382.6   292.7     5.00     6.41
1.40     YES   HRDOW            NO
 VOL33            0   0.10458E-01  444266.5 3769410.1   293.1     5.00     6.41
1.40     YES   HRDOW            NO
 VOL34            0   0.10458E-01  444246.6 3769438.6   293.4     5.00     6.41
1.40     YES   HRDOW            NO
 VOL35            0   0.10458E-01  444271.7 3769457.0   293.5     5.00     6.41
1.40     YES   HRDOW            NO
 VOL36            0   0.10458E-01  444273.5 3769438.3   293.3     5.00     6.41
1.40     YES   HRDOW            NO
 VOL37            0   0.10458E-01  444381.9 3769457.3   292.8     5.00     6.41
1.40     YES   HRDOW            NO
 VOL38            0   0.10458E-01  444385.6 3769513.9   293.3     5.00     6.41
1.40     YES   HRDOW            NO
 VOL39            0   0.10458E-01  444300.8 3769470.7   293.4     5.00     6.41
1.40     YES   HRDOW            NO
 VOL40            0   0.10458E-01  444329.0 3769486.3   293.3     5.00     6.41
1.40     YES   HRDOW            NO
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
VOL41	0	0.10458E-01	444357.7	3769500.7	293.4	5.00	6.41	1.40	YES	HRDOW	NO
VOL42	0	0.10458E-01	444413.7	3769494.9	293.0	5.00	6.41	1.40	YES	HRDOW	NO
VOL43	0	0.10458E-01	444429.7	3769374.6	290.9	5.00	6.41	1.40	YES	HRDOW	NO
VOL44	0	0.10458E-01	444429.0	3769402.5	291.4	5.00	6.41	1.40	YES	HRDOW	NO
VOL45	0	0.10458E-01	444422.6	3769430.9	291.9	5.00	6.41	1.40	YES	HRDOW	NO
VOL46	0	0.10458E-01	444407.0	3769458.5	292.6	5.00	6.41	1.40	YES	HRDOW	NO
VOL47	0	0.10458E-01	444404.6	3769486.3	292.9	5.00	6.41	1.40	YES	HRDOW	NO
VOL48	0	0.10458E-01	444377.0	3769485.4	293.1	5.00	6.41	1.40	YES	HRDOW	NO
VOL49	0	0.10458E-01	444354.4	3769472.6	293.1	5.00	6.41	1.40	YES	HRDOW	NO
VOL50	0	0.10458E-01	444301.1	3769442.9	293.2	5.00	6.41	1.40	YES	HRDOW	NO
VOL51	0	0.10458E-01	444328.3	3769458.8	293.1	5.00	6.41	1.40	YES	HRDOW	NO
VOL52	0	0.10458E-01	444294.7	3769411.0	292.9	5.00	6.41	1.40	YES	HRDOW	NO
VOL53	0	0.10458E-01	444301.1	3769427.3	293.0	5.00	6.41	1.40	YES	HRDOW	NO
VOL54	0	0.10458E-01	444315.2	3769400.9	292.6	5.00	6.41	1.40	YES	HRDOW	NO
VOL55	0	0.10458E-01	444328.6	3769430.6	292.8	5.00	6.41	1.40	YES	HRDOW	NO
VOL56	0	0.10458E-01	444356.8	3769444.4	292.8	5.00	6.41	1.40	YES	HRDOW	NO
VOL57	0	0.10458E-01	444343.6	3769389.0	292.2	5.00	6.41				

```
1.40     YES   HRDOW            NO
 VOL58           0   0.10458E-01  444343.3 3769416.6   292.5     5.00     6.41
1.40     YES   HRDOW            NO
 VOL59           0   0.10458E-01  444371.8 3769380.1   291.8     5.00     6.41
1.40     YES   HRDOW            NO
 VOL60           0   0.10458E-01  444400.6 3769376.1   291.5     5.00     6.41
1.40     YES   HRDOW            NO
 VOL61           0   0.10458E-01  444400.3 3769404.3   291.8     5.00     6.41
1.40     YES   HRDOW            NO
 VOL62           0   0.10458E-01  444371.5 3769408.3   292.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL63           0   0.10458E-01  444371.5 3769436.1   292.7     5.00     6.41
1.40     YES   HRDOW            NO
 VOL64           0   0.10458E-01  444396.0 3769430.3   292.1     5.00     6.41
1.40     YES   HRDOW            NO
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***       10:11:01

                                  PAGE   4
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                          *** SOURCE IDs DEFINING SOURCE GROUPS
***

 SRCGROUP ID                                          SOURCE IDs
 -----------                                          ----------


  ALL        VOL1        , VOL2        , VOL3        , VOL4        , VOL5        ,
VOL6        , VOL7        , VOL8        ,

             VOL9        , VOL10       , VOL11       , VOL12       , VOL13       ,
VOL14       , VOL15       , VOL16       ,

             VOL17       , VOL18       , VOL19       , VOL20       , VOL21       ,
VOL22       , VOL23       , VOL24       ,

             VOL25       , VOL26       , VOL27       , VOL28       , VOL29       ,
VOL30       , VOL31       , VOL32       ,

             VOL33       , VOL34       , VOL35       , VOL36       , VOL37       ,
VOL38       , VOL39       , VOL40       ,

             VOL41       , VOL42       , VOL43       , VOL44       , VOL45       ,
VOL46       , VOL47       , VOL48       ,
```

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             VOL49       , VOL50       , VOL51       , VOL52       , VOL53       ,
VOL54       , VOL55       , VOL56       ,

             VOL57       , VOL58       , VOL59       , VOL60       , VOL61       ,
VOL62       , VOL63       , VOL64       ,
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
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 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                          *** SOURCE IDs DEFINED AS URBAN SOURCES
***

  URBAN ID   URBAN POP                                  SOURCE IDs
  --------   ---------                                  ----------


              2035210.   VOL1        , VOL2        , VOL3        , VOL4        ,
VOL5        , VOL6        , VOL7        ,
 VOL8        ,

             VOL9        , VOL10       , VOL11       , VOL12       , VOL13       ,
VOL14       , VOL15       , VOL16       ,

             VOL17       , VOL18       , VOL19       , VOL20       , VOL21       ,
VOL22       , VOL23       , VOL24       ,

             VOL25       , VOL26       , VOL27       , VOL28       , VOL29       ,
VOL30       , VOL31       , VOL32       ,

             VOL33       , VOL34       , VOL35       , VOL36       , VOL37       ,
VOL38       , VOL39       , VOL40       ,

             VOL41       , VOL42       , VOL43       , VOL44       , VOL45       ,
VOL46       , VOL47       , VOL48       ,

             VOL49       , VOL50       , VOL51       , VOL52       , VOL53       ,
VOL54       , VOL55       , VOL56       ,

             VOL57       , VOL58       , VOL59       , VOL60       , VOL61       ,
VOL62       , VOL63       , VOL64       ,
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
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                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL1   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                  DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL2   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -

```
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL3         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
```

```
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL4         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL5   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL6   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR

```
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -
```

```
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL8         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL9 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

```
 SOURCE ID = VOL10        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

                                  PAGE  16
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL11        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

```
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

                                  PAGE  17
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL12        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
```

```
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:11:01

                                   PAGE  18
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL13        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                  DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:11:01

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
```

```
OF WEEK (HRDOW) *

 SOURCE ID = VOL14        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

                                  PAGE  20
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL15        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
```

```
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

                                  PAGE  21
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL16        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
```

```
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

                                  PAGE  22
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL17        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

                                  PAGE  23
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
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                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL18        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

                                  PAGE  24
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL19        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
```

```
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
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 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL20        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
```

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***       10:11:01

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL21        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
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 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL22   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                 DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL23   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                 DAY OF WEEK = WEEKDAY

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL24        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
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```
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL25        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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 *** AERMET - VERSION  16216 ***   ***
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                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL26   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                    DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                    DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                    DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL27   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -

```
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

                                  PAGE  33
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL28        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
```

```
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

                                   PAGE  34
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL29        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
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                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL30   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL31   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR

```
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -
```

```
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL33        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL34 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

```
 SOURCE ID = VOL35        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL36        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

```
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL37        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
```

```
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:11:01

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL38        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                  DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:11:01

                                   PAGE  44
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
```

```
OF WEEK (HRDOW) *

 SOURCE ID = VOL39        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL40        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
```

```
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL41        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
```

```
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

                                  PAGE  47
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL42        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

                                  PAGE  48
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
```

```
                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL43        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL44        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
```

```
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL45        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
```

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***       10:11:01

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL46        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***       10:11:01
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 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL47   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                 DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL48   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                 DAY OF WEEK = WEEKDAY

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL49        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
```

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22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL50        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL51 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL52 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

```
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

                                  PAGE  58
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL53        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
```

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14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

                                   PAGE  59
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL54        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL55   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL56   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR

```
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -
```

```
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL58        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL59 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

```
 SOURCE ID = VOL60        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL61        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

```
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:11:01

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL62        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
```

```
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
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 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL63        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                  DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
```

OF WEEK (HRDOW) *

 SOURCE ID = VOL64   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
↟ *** AERMOD - VERSION 23132 ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION 16216 ***   ***
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 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                                          *** DISCRETE CARTESIAN RECEPTORS ***
                                       (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                    (METERS)

     (444219.0, 3769382.9,   292.8,   292.8,   2.0);   (443379.3,
3769584.1,   298.2,   298.2,   2.0);
     (444284.0, 3769574.3,   294.7,   294.7,   2.0);   (444350.0,
3769622.2,   294.8,   294.8,   2.0);
     (444673.5, 3770137.6,   299.6,   299.6,   2.0);   (444743.3,
3770127.5,   299.5,   299.5,   2.0);
     (445412.9, 3770137.2,   301.4,   301.4,   2.0);   (444636.5,
3769597.8,   294.0,   294.0,   2.0);
     (444745.5, 3769593.1,   293.8,   293.8,   2.0);   (444084.6,

```
3769528.2,     295.0,     295.0,       2.0);
     ( 444307.2, 3769666.6,     295.7,     295.7,       2.0);         ( 444155.1,
3769701.8,     297.0,     297.0,       2.0);
     ( 444913.2, 3769590.1,     293.7,     293.7,       2.0);         ( 445012.2,
3769616.9,     293.2,     293.2,       2.0);
     ( 444972.4, 3769760.1,     295.4,     295.4,       2.0);         ( 445292.2,
3769551.3,     294.0,     294.0,       2.0);
     ( 445542.1, 3769662.7,     295.6,     295.6,       2.0);         ( 445514.2,
3769455.1,     293.2,     293.2,       2.0);
     ( 445434.0, 3769977.3,     299.4,     299.4,       2.0);         ( 445471.4,
3769890.5,     298.7,     298.7,       2.0);
     ( 445125.4, 3770123.8,     298.8,     298.8,       2.0);         ( 445301.5,
3770041.4,     299.5,     299.5,       2.0);
     ( 445546.0, 3769740.4,     296.7,     296.7,       2.0);         ( 445513.5,
3769442.0,     293.1,     293.1,       2.0);
     ( 443901.8, 3769642.3,     296.9,     296.9,       2.0);         ( 443804.6,
3769565.5,     296.1,     296.1,       2.0);
     ( 443786.1, 3769428.4,     294.6,     294.6,       2.0);

 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                         ***       10:11:01

                                   PAGE  71
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                          *** METEOROLOGICAL DAYS SELECTED FOR
PROCESSING ***
                                                              (1=YES; 0=NO)

           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1

                NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON
WHAT IS INCLUDED IN THE DATA FILE.
```

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: KONT_V9_ADJU\KONT_v9.SFC
Met Version: 16216
Profile file: KONT_V9_ADJU\KONT_v9.PFL

Surface format: FREE

Profile format: FREE

Surface station no.: 3102 Upper air station no.: 3190
Name: UNKNOWN Name: UNKNOWN

Year: 2012 Year: 2012

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
12	01	01	1	01	-16.4	0.171	-9.000	-9.000	-999.	170.	32.3	0.09	1.12	1.00	2.03	43.	7.9	285.9	2.0
12	01	01	1	02	-18.8	0.194	-9.000	-9.000	-999.	205.	41.3	0.09	1.12	1.00	2.28	34.	7.9	285.4	2.0
12	01	01	1	03	-17.8	0.182	-9.000	-9.000	-999.	187.	36.5	0.09	1.12	1.00	2.15	24.	7.9	282.0	2.0
12	01	01	1	04	-9.4	0.128	-9.000	-9.000	-999.	110.	19.6	0.09	1.12	1.00	1.55	41.	7.9	283.1	2.0
12	01	01	1	05	-16.9	0.173	-9.000	-9.000	-999.	173.	33.0	0.09	1.12	1.00	2.05	39.	7.9	280.4	2.0
12	01	01	1	06	-8.0	0.117	-9.000	-9.000	-999.	97.	17.8	0.09	1.12						

```
1.00    1.43   21.    7.9  282.0    2.0
 12 01 01   1 07   -7.6  0.115 -9.000 -9.000 -999.   93.     17.4  0.09   1.12
1.00    1.40   31.    7.9  282.5    2.0
 12 01 01   1 08  -13.6  0.184 -9.000 -9.000 -999.  190.     40.5  0.09   1.12
0.54    2.16   34.    7.9  284.2    2.0
 12 01 01   1 09   28.4  0.126  0.300  0.011   33.  108.     -6.2  0.09   1.12
0.32    1.03   29.    7.9  289.2    2.0
 12 01 01   1 10   79.8  0.133  0.607  0.010   99.  116.     -2.6  0.09   1.12
0.25    0.94  173.    7.9  292.5    2.0
 12 01 01   1 11  115.8  0.137  0.932  0.006  246.  121.     -2.0  0.09   1.12
0.22    0.92  172.    7.9  295.4    2.0
 12 01 01   1 12  133.7  0.139  1.197  0.005  453.  125.     -1.8  0.09   1.12
0.21    0.92  146.    7.9  297.5    2.0
 12 01 01   1 13  133.2  0.160  1.354  0.005  657.  153.     -2.7  0.09   1.12
0.21    1.14  117.    7.9  299.9    2.0
 12 01 01   1 14  113.5  0.159  1.454  0.005  955.  151.     -3.1  0.09   1.12
0.23    1.16  285.    7.9  300.9    2.0
 12 01 01   1 15   76.2  0.166  1.350  0.005 1138.  163.     -5.3  0.09   1.12
0.26    1.33   72.    7.9  302.0    2.0
 12 01 01   1 16   23.5  0.175  0.925  0.005 1183.  175.    -19.9  0.09   1.12
0.35    1.65  107.    7.9  301.4    2.0
 12 01 01   1 17   -6.1  0.107 -9.000 -9.000 -999.   86.     18.0  0.09   1.12
0.63    1.31  107.    7.9  298.1    2.0
 12 01 01   1 18  -11.1  0.141 -9.000 -9.000 -999.  127.     22.1  0.09   1.12
1.00    1.69   86.    7.9  293.1    2.0
 12 01 01   1 19   -3.2  0.076 -9.000 -9.000 -999.   51.     11.8  0.09   1.12
1.00    0.91   64.    7.9  292.0    2.0
 12 01 01   1 20   -2.3  0.066 -9.000 -9.000 -999.   41.     11.2  0.09   1.12
1.00    0.74   73.    7.9  288.8    2.0
 12 01 01   1 21  -10.0  0.133 -9.000 -9.000 -999.  116.     20.5  0.09   1.12
1.00    1.60   14.    7.9  288.1    2.0
 12 01 01   1 22  -19.4  0.201 -9.000 -9.000 -999.  216.     44.5  0.09   1.12
1.00    2.36   22.    7.9  287.5    2.0
 12 01 01   1 23  -23.7  0.246 -9.000 -9.000 -999.  293.     66.5  0.09   1.12
1.00    2.86   40.    7.9  287.0    2.0
 12 01 01   1 24  -12.3  0.147 -9.000 -9.000 -999.  139.     23.8  0.09   1.12
1.00    1.76   40.    7.9  283.8    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 12 01 01 01    7.9 1   43.    2.03   286.0   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***       10:11:01
```

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***

INCLUDING SOURCE(S): VOL1 , VOL2 , VOL3 , VOL4 , VOL5 ,
VOL6 , VOL7 , VOL8 , VOL9 , VOL10 , VOL11 , VOL12 , VOL13 ,
VOL14 , VOL15 , VOL16 , VOL17 , VOL18 , VOL19 , VOL20 , VOL21 ,
VOL22 , VOL23 , VOL24 , VOL25 , VOL26 , VOL27 , VOL28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF NOX IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
444218.99	3769382.94	68.88293	(14121616)	443379.29	3769584.14	2.69283	(12021516)
444283.97	3769574.32	54.46739	(14123015)	444350.01	3769622.16	42.74168	(13112916)
444673.49	3770137.65	8.61557	(16122116)	444743.34	3770127.46	7.03411	(14120516)
445412.86	3770137.16	4.20998	(15122116)	444636.46	3769597.76	33.71295	(15120816)
444745.49	3769593.07	23.69047	(16121216)	444084.62	3769528.25	27.35598	(12021516)
444307.19	3769666.57	29.89974	(13021809)	444155.11	3769701.76	17.54340	(15012616)
444913.20	3769590.10	16.23129	(16121216)	445012.21	3769616.93	12.41249	(16121216)
444972.40	3769760.11	8.25378	(15120816)	445292.22	3769551.27	5.70180	(13112016)
445542.14	3769662.68	4.31753	(16121216)	445514.18	3769455.12	4.95630	(14120316)
445433.98	3769977.29	3.61103	(15122116)	445471.42	3769890.51	2.60650	(16121216)
445125.39	3770123.84	5.14404	(12120416)	445301.47	3770041.39	4.95905	(15122116)
445545.96	3769740.36	4.59261	(16121216)	445513.51	3769442.00	4.98308	(14120316)
443901.79	3769642.26	9.67053	(15012916)	443804.60	3769565.50	8.39817	(12021516)

```
       443786.15   3769428.43        8.10260  (16012116)

 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:11:01

                                   PAGE  74
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                              *** THE SUMMARY OF HIGHEST  1-HR
RESULTS ***


                                    ** CONC OF NOX      IN MICROGRAMS/M**3
               **

                                                    DATE
                                         NETWORK
GROUP ID                           AVERAGE CONC     (YYMMDDHH)             RECEPTOR
(XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS      68.88293  ON 14121616: AT (  444218.99,
3769382.94,   292.78,   292.78,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:11:01

                                   PAGE  75
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of         1628 Informational Message(s)
```

```
 A Total of        43848 Hours Were Processed

 A Total of         1278 Calm Hours Identified

 A Total of          350 Missing Hours Identified (  0.80 Percent)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186    1153       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
      0.50
 ME W187    1153       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET


    ***********************************
    *** AERMOD Finishes Successfully ***
    ***********************************
**
*****************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 12.0.0
** Lakes Environmental Software Inc.
** Date: 4/19/2024
** File: C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\Construction LST
PM10\Construction LST PM10.ADI
**
*****************************************
**
**
*****************************************
** AERMOD Control Pathway
*****************************************
**
**
CO STARTING
   TITLEONE C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti &
   MODELOPT DFAULT CONC
   AVERTIME 24
   URBANOPT 2035210 County_of_San_Bernardino
   POLLUTID PM_10
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "Construction LST PM10.err"
CO FINISHED
**
*****************************************
```

```
** AERMOD Source Pathway
************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     444242.944  3769467.059      293.700
   LOCATION VOL2         VOLUME     444272.020  3769484.508      293.810
   LOCATION VOL3         VOLUME     444300.793  3769498.282      293.730
   LOCATION VOL4         VOLUME     444329.261  3769513.893      293.600
   LOCATION VOL5         VOLUME     444357.422  3769528.280      293.640
   LOCATION VOL6         VOLUME     444385.889  3769541.748      293.610
   LOCATION VOL7         VOLUME     444413.132  3769549.401      293.400
   LOCATION VOL8         VOLUME     444441.600  3769548.483      293.090
   LOCATION VOL9         VOLUME     444469.455  3769555.829      292.810
   LOCATION VOL10        VOLUME     444469.761  3769527.974      292.810
   LOCATION VOL11        VOLUME     444470.679  3769499.813      292.190
   LOCATION VOL12        VOLUME     444461.190  3769471.345      291.870
   LOCATION VOL13        VOLUME     444441.293  3769520.934      293.100
   LOCATION VOL14        VOLUME     444442.518  3769499.200      292.910
   LOCATION VOL15        VOLUME     444433.029  3769471.345      292.530
   LOCATION VOL16        VOLUME     444462.108  3769443.796      290.990
   LOCATION VOL17        VOLUME     444477.719  3769423.900      290.030
   LOCATION VOL18        VOLUME     444479.250  3769395.738      289.870
   LOCATION VOL19        VOLUME     444485.678  3769367.883      289.640
   LOCATION VOL20        VOLUME     444485.678  3769347.375      289.640
   LOCATION VOL21        VOLUME     444434.559  3769443.184      291.880
   LOCATION VOL22        VOLUME     444413.744  3769521.852      293.250
   LOCATION VOL23        VOLUME     444451.089  3769415.023      290.920
   LOCATION VOL24        VOLUME     444457.211  3769387.780      290.450
   LOCATION VOL25        VOLUME     444458.129  3769359.619      290.190
   LOCATION VOL26        VOLUME     444456.905  3769347.375      290.200
   LOCATION VOL27        VOLUME     444429.049  3769347.681      290.600
   LOCATION VOL28        VOLUME     444401.500  3769347.681      291.160
   LOCATION VOL29        VOLUME     444373.339  3769351.660      291.500
   LOCATION VOL30        VOLUME     444344.260  3769360.537      291.890
   LOCATION VOL31        VOLUME     444315.792  3769372.781      292.300
   LOCATION VOL32        VOLUME     444287.325  3769382.576      292.690
   LOCATION VOL33        VOLUME     444266.510  3769410.125      293.050
   LOCATION VOL34        VOLUME     444246.613  3769438.593      293.350
   LOCATION VOL35        VOLUME     444271.714  3769456.959      293.530
   LOCATION VOL36        VOLUME     444273.550  3769438.286      293.340
   LOCATION VOL37        VOLUME     444381.910  3769457.265      292.800
   LOCATION VOL38        VOLUME     444385.583  3769513.893      293.330
   LOCATION VOL39        VOLUME     444300.793  3769470.733      293.450
   LOCATION VOL40        VOLUME     444328.954  3769486.344      293.320
   LOCATION VOL41        VOLUME     444357.728  3769500.731      293.360
   LOCATION VOL42        VOLUME     444413.744  3769494.915      293.000
   LOCATION VOL43        VOLUME     444429.662  3769374.617      290.940
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   LOCATION VOL44        VOLUME     444429.049  3769402.473      291.450
   LOCATION VOL45        VOLUME     444422.621  3769430.940      291.860
   LOCATION VOL46        VOLUME     444407.010  3769458.489      292.560
   LOCATION VOL47        VOLUME     444404.561  3769486.344      292.910
   LOCATION VOL48        VOLUME     444377.012  3769485.426      293.130
   LOCATION VOL49        VOLUME     444354.361  3769472.570      293.080
   LOCATION VOL50        VOLUME     444301.099  3769442.878      293.170
   LOCATION VOL51        VOLUME     444328.342  3769458.795      293.050
   LOCATION VOL52        VOLUME     444294.671  3769411.043      292.910
   LOCATION VOL53        VOLUME     444301.099  3769427.267      293.010
   LOCATION VOL54        VOLUME     444315.180  3769400.942      292.600
   LOCATION VOL55        VOLUME     444328.648  3769430.634      292.760
   LOCATION VOL56        VOLUME     444356.810  3769444.408      292.790
   LOCATION VOL57        VOLUME     444343.647  3769389.004      292.190
   LOCATION VOL58        VOLUME     444343.341  3769416.553      292.500
   LOCATION VOL59        VOLUME     444371.809  3769380.127      291.810
   LOCATION VOL60        VOLUME     444400.582  3769376.148      291.470
   LOCATION VOL61        VOLUME     444400.276  3769404.309      291.770
   LOCATION VOL62        VOLUME     444371.502  3769408.289      292.210
   LOCATION VOL63        VOLUME     444371.502  3769436.144      292.670
   LOCATION VOL64        VOLUME     444395.991  3769430.328      292.140
   LOCATION PAREA1       AREAPOLY   444232.281  3769472.273      293.860
** Source Parameters **
   SRCPARAM VOL1         0.000554068     5.000     6.407     1.400
   SRCPARAM VOL2         0.000554068     5.000     6.407     1.400
   SRCPARAM VOL3         0.000554068     5.000     6.407     1.400
   SRCPARAM VOL4         0.000554068     5.000     6.407     1.400
   SRCPARAM VOL5         0.000554068     5.000     6.407     1.400
   SRCPARAM VOL6         0.000554068     5.000     6.407     1.400
   SRCPARAM VOL7         0.000554068     5.000     6.407     1.400
   SRCPARAM VOL8         0.000554068     5.000     6.407     1.400
   SRCPARAM VOL9         0.000554068     5.000     6.407     1.400
   SRCPARAM VOL10        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL11        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL12        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL13        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL14        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL15        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL16        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL17        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL18        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL19        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL20        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL21        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL22        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL23        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL24        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL25        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL26        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL27        0.000554068     5.000     6.407     1.400
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SRCPARAM VOL28        0.000554068     5.000     6.407     1.400
SRCPARAM VOL29        0.000554068     5.000     6.407     1.400
SRCPARAM VOL30        0.000554068     5.000     6.407     1.400
SRCPARAM VOL31        0.000554068     5.000     6.407     1.400
SRCPARAM VOL32        0.000554068     5.000     6.407     1.400
SRCPARAM VOL33        0.000554068     5.000     6.407     1.400
SRCPARAM VOL34        0.000554068     5.000     6.407     1.400
SRCPARAM VOL35        0.000554068     5.000     6.407     1.400
SRCPARAM VOL36        0.000554068     5.000     6.407     1.400
SRCPARAM VOL37        0.000554068     5.000     6.407     1.400
SRCPARAM VOL38        0.000554068     5.000     6.407     1.400
SRCPARAM VOL39        0.000554068     5.000     6.407     1.400
SRCPARAM VOL40        0.000554068     5.000     6.407     1.400
SRCPARAM VOL41        0.000554068     5.000     6.407     1.400
SRCPARAM VOL42        0.000554068     5.000     6.407     1.400
SRCPARAM VOL43        0.000554068     5.000     6.407     1.400
SRCPARAM VOL44        0.000554068     5.000     6.407     1.400
SRCPARAM VOL45        0.000554068     5.000     6.407     1.400
SRCPARAM VOL46        0.000554068     5.000     6.407     1.400
SRCPARAM VOL47        0.000554068     5.000     6.407     1.400
SRCPARAM VOL48        0.000554068     5.000     6.407     1.400
SRCPARAM VOL49        0.000554068     5.000     6.407     1.400
SRCPARAM VOL50        0.000554068     5.000     6.407     1.400
SRCPARAM VOL51        0.000554068     5.000     6.407     1.400
SRCPARAM VOL52        0.000554068     5.000     6.407     1.400
SRCPARAM VOL53        0.000554068     5.000     6.407     1.400
SRCPARAM VOL54        0.000554068     5.000     6.407     1.400
SRCPARAM VOL55        0.000554068     5.000     6.407     1.400
SRCPARAM VOL56        0.000554068     5.000     6.407     1.400
SRCPARAM VOL57        0.000554068     5.000     6.407     1.400
SRCPARAM VOL58        0.000554068     5.000     6.407     1.400
SRCPARAM VOL59        0.000554068     5.000     6.407     1.400
SRCPARAM VOL60        0.000554068     5.000     6.407     1.400
SRCPARAM VOL61        0.000554068     5.000     6.407     1.400
SRCPARAM VOL62        0.000554068     5.000     6.407     1.400
SRCPARAM VOL63        0.000554068     5.000     6.407     1.400
SRCPARAM VOL64        0.000554068     5.000     6.407     1.400
SRCPARAM PAREA1       2.1081E-06      0.000        43     1.000
AREAVERT PAREA1       444232.281 3769472.273 444254.454 3769481.948
AREAVERT PAREA1       444295.373 3769501.098 444329.237 3769517.425
AREAVERT PAREA1       444354.837 3769529.318 444382.654 3769543.428
AREAVERT PAREA1       444410.067 3769556.530 444420.549 3769561.368
AREAVERT PAREA1       444419.945 3769544.436 444459.251 3769562.980
AREAVERT PAREA1       444473.563 3769570.035 444482.230 3769553.305
AREAVERT PAREA1       444485.657 3769499.888 444472.555 3769498.276
AREAVERT PAREA1       444476.586 3769438.409 444490.092 3769439.014
AREAVERT PAREA1       444494.123 3769377.937 444498.759 3769377.736
AREAVERT PAREA1       444500.170 3769355.563 444489.487 3769332.382
AREAVERT PAREA1       444465.500 3769332.583 444435.869 3769333.188
AREAVERT PAREA1       444428.209 3769333.188 444416.316 3769333.793
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   AREAVERT PAREA1       444402.609 3769335.607 444383.662 3769338.227
   AREAVERT PAREA1       444361.690 3769344.275 444346.975 3769349.314
   AREAVERT PAREA1       444335.889 3769354.756 444322.787 3769361.207
   AREAVERT PAREA1       444311.902 3769368.665 444301.420 3769375.115
   AREAVERT PAREA1       444290.334 3769383.178 444281.666 3769390.636
   AREAVERT PAREA1       444268.967 3769402.731 444260.098 3769413.011
   AREAVERT PAREA1       444247.802 3769429.943 444240.948 3769440.425
   AREAVERT PAREA1       444234.700 3769451.108 444229.056 3769463.001
   AREAVERT PAREA1       444228.451 3769465.218 444228.048 3769467.637
   AREAVERT PAREA1       444229.459 3769469.451
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
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   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
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   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
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   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
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   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
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   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
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   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
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   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL37        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL38        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL39        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
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   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL40        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL41        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL42        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL43        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL44        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL45        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL46        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
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   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL47        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL48        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL49        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
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   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL50        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL51        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL52        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL53        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL54        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL55        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL56        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
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   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL57        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL58        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL59        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
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   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL60        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL61        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL62        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL63        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
```

```
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL64        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED "Construction LST PM10.rou"
RE FINISHED
```

```
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE KONT_V9_ADJU\KONT_v9.SFC
   PROFFILE KONT_V9_ADJU\KONT_v9.PFL
   SURFDATA 3102 2012
   UAIRDATA 3190 2012
   PROFBASE 289.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 24 ALL 1ST "CONSTRUCTION LST PM10.AD\24H1GALL.PLT" 31
   SUMMFILE "Construction LST PM10.sum"
OU FINISHED
**
**************************************
** Project Parameters
**************************************
** PROJCTN  CoordinateSystemUTM
** DESCPTN  UTM: Universal Transverse Mercator
** DATUM    North American Datum 1983
** DTMRGN   CONUS
** UNITS    m
** ZONE     11
** ZONEINX  0
**
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 12.0.0
** Lakes Environmental Software Inc.
** Date: 4/19/2024
** File: C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\Construction LST
PM10\Construction LST PM10.ADI
**
**************************************
**
```

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**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti &
   MODELOPT DFAULT CONC
   AVERTIME 24
   URBANOPT 2035210 County_of_San_Bernardino
   POLLUTID PM_10
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "Construction LST PM10.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     444242.944  3769467.059      293.700
   LOCATION VOL2         VOLUME     444272.020  3769484.508      293.810
   LOCATION VOL3         VOLUME     444300.793  3769498.282      293.730
   LOCATION VOL4         VOLUME     444329.261  3769513.893      293.600
   LOCATION VOL5         VOLUME     444357.422  3769528.280      293.640
   LOCATION VOL6         VOLUME     444385.889  3769541.748      293.610
   LOCATION VOL7         VOLUME     444413.132  3769549.401      293.400
   LOCATION VOL8         VOLUME     444441.600  3769548.483      293.090
   LOCATION VOL9         VOLUME     444469.455  3769555.829      292.810
   LOCATION VOL10        VOLUME     444469.761  3769527.974      292.810
   LOCATION VOL11        VOLUME     444470.679  3769499.813      292.190
   LOCATION VOL12        VOLUME     444461.190  3769471.345      291.870
   LOCATION VOL13        VOLUME     444441.293  3769520.934      293.100
   LOCATION VOL14        VOLUME     444442.518  3769499.200      292.910
   LOCATION VOL15        VOLUME     444433.029  3769471.345      292.530
   LOCATION VOL16        VOLUME     444462.108  3769443.796      290.990
   LOCATION VOL17        VOLUME     444477.719  3769423.900      290.030
   LOCATION VOL18        VOLUME     444479.250  3769395.738      289.870
   LOCATION VOL19        VOLUME     444485.678  3769367.883      289.640
   LOCATION VOL20        VOLUME     444485.678  3769347.375      289.640
   LOCATION VOL21        VOLUME     444434.559  3769443.184      291.880
   LOCATION VOL22        VOLUME     444413.744  3769521.852      293.250
   LOCATION VOL23        VOLUME     444451.089  3769415.023      290.920
   LOCATION VOL24        VOLUME     444457.211  3769387.780      290.450
   LOCATION VOL25        VOLUME     444458.129  3769359.619      290.190
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   LOCATION VOL26        VOLUME     444456.905  3769347.375      290.200
   LOCATION VOL27        VOLUME     444429.049  3769347.681      290.600
   LOCATION VOL28        VOLUME     444401.500  3769347.681      291.160
   LOCATION VOL29        VOLUME     444373.339  3769351.660      291.500
   LOCATION VOL30        VOLUME     444344.260  3769360.537      291.890
   LOCATION VOL31        VOLUME     444315.792  3769372.781      292.300
   LOCATION VOL32        VOLUME     444287.325  3769382.576      292.690
   LOCATION VOL33        VOLUME     444266.510  3769410.125      293.050
   LOCATION VOL34        VOLUME     444246.613  3769438.593      293.350
   LOCATION VOL35        VOLUME     444271.714  3769456.959      293.530
   LOCATION VOL36        VOLUME     444273.550  3769438.286      293.340
   LOCATION VOL37        VOLUME     444381.910  3769457.265      292.800
   LOCATION VOL38        VOLUME     444385.583  3769513.893      293.330
   LOCATION VOL39        VOLUME     444300.793  3769470.733      293.450
   LOCATION VOL40        VOLUME     444328.954  3769486.344      293.320
   LOCATION VOL41        VOLUME     444357.728  3769500.731      293.360
   LOCATION VOL42        VOLUME     444413.744  3769494.915      293.000
   LOCATION VOL43        VOLUME     444429.662  3769374.617      290.940
   LOCATION VOL44        VOLUME     444429.049  3769402.473      291.450
   LOCATION VOL45        VOLUME     444422.621  3769430.940      291.860
   LOCATION VOL46        VOLUME     444407.010  3769458.489      292.560
   LOCATION VOL47        VOLUME     444404.561  3769486.344      292.910
   LOCATION VOL48        VOLUME     444377.012  3769485.426      293.130
   LOCATION VOL49        VOLUME     444354.361  3769472.570      293.080
   LOCATION VOL50        VOLUME     444301.099  3769442.878      293.170
   LOCATION VOL51        VOLUME     444328.342  3769458.795      293.050
   LOCATION VOL52        VOLUME     444294.671  3769411.043      292.910
   LOCATION VOL53        VOLUME     444301.099  3769427.267      293.010
   LOCATION VOL54        VOLUME     444315.180  3769400.942      292.600
   LOCATION VOL55        VOLUME     444328.648  3769430.634      292.760
   LOCATION VOL56        VOLUME     444356.810  3769444.408      292.790
   LOCATION VOL57        VOLUME     444343.647  3769389.004      292.190
   LOCATION VOL58        VOLUME     444343.341  3769416.553      292.500
   LOCATION VOL59        VOLUME     444371.809  3769380.127      291.810
   LOCATION VOL60        VOLUME     444400.582  3769376.148      291.470
   LOCATION VOL61        VOLUME     444400.276  3769404.309      291.770
   LOCATION VOL62        VOLUME     444371.502  3769408.289      292.210
   LOCATION VOL63        VOLUME     444371.502  3769436.144      292.670
   LOCATION VOL64        VOLUME     444395.991  3769430.328      292.140
   LOCATION PAREA1       AREAPOLY   444232.281  3769472.273      293.860
** Source Parameters **
   SRCPARAM VOL1         0.000554068     5.000     6.407     1.400
   SRCPARAM VOL2         0.000554068     5.000     6.407     1.400
   SRCPARAM VOL3         0.000554068     5.000     6.407     1.400
   SRCPARAM VOL4         0.000554068     5.000     6.407     1.400
   SRCPARAM VOL5         0.000554068     5.000     6.407     1.400
   SRCPARAM VOL6         0.000554068     5.000     6.407     1.400
   SRCPARAM VOL7         0.000554068     5.000     6.407     1.400
   SRCPARAM VOL8         0.000554068     5.000     6.407     1.400
   SRCPARAM VOL9         0.000554068     5.000     6.407     1.400
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SRCPARAM VOL10        0.000554068     5.000     6.407     1.400
SRCPARAM VOL11        0.000554068     5.000     6.407     1.400
SRCPARAM VOL12        0.000554068     5.000     6.407     1.400
SRCPARAM VOL13        0.000554068     5.000     6.407     1.400
SRCPARAM VOL14        0.000554068     5.000     6.407     1.400
SRCPARAM VOL15        0.000554068     5.000     6.407     1.400
SRCPARAM VOL16        0.000554068     5.000     6.407     1.400
SRCPARAM VOL17        0.000554068     5.000     6.407     1.400
SRCPARAM VOL18        0.000554068     5.000     6.407     1.400
SRCPARAM VOL19        0.000554068     5.000     6.407     1.400
SRCPARAM VOL20        0.000554068     5.000     6.407     1.400
SRCPARAM VOL21        0.000554068     5.000     6.407     1.400
SRCPARAM VOL22        0.000554068     5.000     6.407     1.400
SRCPARAM VOL23        0.000554068     5.000     6.407     1.400
SRCPARAM VOL24        0.000554068     5.000     6.407     1.400
SRCPARAM VOL25        0.000554068     5.000     6.407     1.400
SRCPARAM VOL26        0.000554068     5.000     6.407     1.400
SRCPARAM VOL27        0.000554068     5.000     6.407     1.400
SRCPARAM VOL28        0.000554068     5.000     6.407     1.400
SRCPARAM VOL29        0.000554068     5.000     6.407     1.400
SRCPARAM VOL30        0.000554068     5.000     6.407     1.400
SRCPARAM VOL31        0.000554068     5.000     6.407     1.400
SRCPARAM VOL32        0.000554068     5.000     6.407     1.400
SRCPARAM VOL33        0.000554068     5.000     6.407     1.400
SRCPARAM VOL34        0.000554068     5.000     6.407     1.400
SRCPARAM VOL35        0.000554068     5.000     6.407     1.400
SRCPARAM VOL36        0.000554068     5.000     6.407     1.400
SRCPARAM VOL37        0.000554068     5.000     6.407     1.400
SRCPARAM VOL38        0.000554068     5.000     6.407     1.400
SRCPARAM VOL39        0.000554068     5.000     6.407     1.400
SRCPARAM VOL40        0.000554068     5.000     6.407     1.400
SRCPARAM VOL41        0.000554068     5.000     6.407     1.400
SRCPARAM VOL42        0.000554068     5.000     6.407     1.400
SRCPARAM VOL43        0.000554068     5.000     6.407     1.400
SRCPARAM VOL44        0.000554068     5.000     6.407     1.400
SRCPARAM VOL45        0.000554068     5.000     6.407     1.400
SRCPARAM VOL46        0.000554068     5.000     6.407     1.400
SRCPARAM VOL47        0.000554068     5.000     6.407     1.400
SRCPARAM VOL48        0.000554068     5.000     6.407     1.400
SRCPARAM VOL49        0.000554068     5.000     6.407     1.400
SRCPARAM VOL50        0.000554068     5.000     6.407     1.400
SRCPARAM VOL51        0.000554068     5.000     6.407     1.400
SRCPARAM VOL52        0.000554068     5.000     6.407     1.400
SRCPARAM VOL53        0.000554068     5.000     6.407     1.400
SRCPARAM VOL54        0.000554068     5.000     6.407     1.400
SRCPARAM VOL55        0.000554068     5.000     6.407     1.400
SRCPARAM VOL56        0.000554068     5.000     6.407     1.400
SRCPARAM VOL57        0.000554068     5.000     6.407     1.400
SRCPARAM VOL58        0.000554068     5.000     6.407     1.400
SRCPARAM VOL59        0.000554068     5.000     6.407     1.400
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   SRCPARAM VOL60        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL61        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL62        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL63        0.000554068     5.000     6.407     1.400
   SRCPARAM VOL64        0.000554068     5.000     6.407     1.400
   SRCPARAM PAREA1       2.1081E-06      0.000        43     1.000
   AREAVERT PAREA1       444232.281 3769472.273 444254.454 3769481.948
   AREAVERT PAREA1       444295.373 3769501.098 444329.237 3769517.425
   AREAVERT PAREA1       444354.837 3769529.318 444382.654 3769543.428
   AREAVERT PAREA1       444410.067 3769556.530 444420.549 3769561.368
   AREAVERT PAREA1       444419.945 3769544.436 444459.251 3769562.980
   AREAVERT PAREA1       444473.563 3769570.035 444482.230 3769553.305
   AREAVERT PAREA1       444485.657 3769499.888 444472.555 3769498.276
   AREAVERT PAREA1       444476.586 3769438.409 444490.092 3769439.014
   AREAVERT PAREA1       444494.123 3769377.937 444498.759 3769377.736
   AREAVERT PAREA1       444500.170 3769355.563 444489.487 3769332.382
   AREAVERT PAREA1       444465.500 3769332.583 444435.869 3769333.188
   AREAVERT PAREA1       444428.209 3769333.188 444416.316 3769333.793
   AREAVERT PAREA1       444402.609 3769335.607 444383.662 3769338.227
   AREAVERT PAREA1       444361.690 3769344.275 444346.975 3769349.314
   AREAVERT PAREA1       444335.889 3769354.756 444322.787 3769361.207
   AREAVERT PAREA1       444311.902 3769368.665 444301.420 3769375.115
   AREAVERT PAREA1       444290.334 3769383.178 444281.666 3769390.636
   AREAVERT PAREA1       444268.967 3769402.731 444260.098 3769413.011
   AREAVERT PAREA1       444247.802 3769429.943 444240.948 3769440.425
   AREAVERT PAREA1       444234.700 3769451.108 444229.056 3769463.001
   AREAVERT PAREA1       444228.451 3769465.218 444228.048 3769467.637
   AREAVERT PAREA1       444229.459 3769469.451
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
```

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   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL37        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL38        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL39        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL40        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL41        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL42        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL43        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL44        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL45        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL46        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL47        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL48        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL49        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL50        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL51        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL52        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL53        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL54        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL55        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL56        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL57        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL58        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL59        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL60        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL61        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL62        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL63        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL64        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

```
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**********************************
** AERMOD Receptor Pathway
**********************************
**
**
RE STARTING
   INCLUDED "Construction LST PM10.rou"
RE FINISHED
**
**********************************
** AERMOD Meteorology Pathway
**********************************
**
**
ME STARTING
   SURFFILE KONT_V9_ADJU\KONT_v9.SFC
   PROFFILE KONT_V9_ADJU\KONT_v9.PFL
   SURFDATA 3102 2012
   UAIRDATA 3190 2012
   PROFBASE 289.0 METERS
ME FINISHED
**
**********************************
** AERMOD Output Pathway
**********************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 24 ALL 1ST "CONSTRUCTION LST PM10.AD\24H1GALL.PLT" 31
   SUMMFILE "Construction LST PM10.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------
```

```
 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186    1192       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
      0.50
 ME W187    1192       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET


 *********************************
 *** SETUP Finishes Successfully ***
 *********************************

 *** AERMOD - VERSION 23132  ***   ***
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                                   PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                            ***     MODEL SETUP OPTIONS SUMMARY
  ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - -

 ** Model Options Selected:
      * Model Uses Regulatory DEFAULT Options
      * Model Is Setup For Calculation of Average CONCentration Values.
      * NO GAS DEPOSITION Data Provided.
      * NO PARTICLE DEPOSITION Data Provided.
      * Model Uses NO DRY DEPLETION. DDPLETE  =  F
      * Model Uses NO WET DEPLETION. WETDPLT  =  F
      * Stack-tip Downwash.
      * Model Accounts for ELEVated Terrain Effects.
      * Use Calms Processing Routine.
      * Use Missing Data Processing Routine.
      * No Exponential Decay.
      * Model Uses URBAN Dispersion Algorithm for the SBL for    65 Source(s),
        for Total of    1 Urban Area(s):
   Urban Population =   2035210.0 ;  Urban Roughness Length =  1.000 m
      * Urban Roughness Length of 1.0 Meter Used.
      * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
```

```
      * CCVR_Sub - Meteorological data includes CCVR substitutions
      * TEMP_Sub - Meteorological data includes TEMP substitutions
      * Model Accepts FLAGPOLE Receptor . Heights.
      * The User Specified a Pollutant Type of: PM_10

 **Model Calculates  1 Short Term Average(s) of:  24-HR

 **This Run Includes:     65 Source(s);       1 Source Group(s); and      27
Receptor(s)

                with:      0 POINT(s), including
                           0 POINTCAP(s) and      0 POINTHOR(s)
                 and:     64 VOLUME source(s)
                 and:      1 AREA type source(s)
                 and:      0 LINE source(s)
                 and:      0 RLINE/RLINEXT source(s)
                 and:      0 OPENPIT source(s)
                 and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                 and:      0 SWPOINT source(s)


 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  16216

 **Output Options Selected:
          Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
Keyword)
          Model Outputs External File(s) of High Values for Plotting (PLOTFILE
Keyword)
          Model Outputs Separate Summary File of High Ranked Values (SUMMFILE
Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                 m for Missing
Hours
                                                                 b for Both Calm
and Missing Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   289.00 ;  Decay
Coef. =    0.000     ;  Rot. Angle =     0.0
                  Emission Units = GRAMS/SEC                                 ;
Emission Rate Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      3.6 MB of RAM.

 **Input Runstream File:          aermod.inp

 **Output Print File:             aermod.out
```

**Detailed Error/Message File: Construction LST PM10.err

**File for Summary of Results: Construction LST PM10.sum

*** AERMOD - VERSION 23132 *** ***
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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
VOL1	0	0.55407E-03	444242.9	3769467.1	293.7	5.00	6.41	1.40	YES	HRDOW	NO
VOL2	0	0.55407E-03	444272.0	3769484.5	293.8	5.00	6.41	1.40	YES	HRDOW	NO
VOL3	0	0.55407E-03	444300.8	3769498.3	293.7	5.00	6.41	1.40	YES	HRDOW	NO
VOL4	0	0.55407E-03	444329.3	3769513.9	293.6	5.00	6.41	1.40	YES	HRDOW	NO
VOL5	0	0.55407E-03	444357.4	3769528.3	293.6	5.00	6.41	1.40	YES	HRDOW	NO
VOL6	0	0.55407E-03	444385.9	3769541.7	293.6	5.00	6.41	1.40	YES	HRDOW	NO
VOL7	0	0.55407E-03	444413.1	3769549.4	293.4	5.00	6.41	1.40	YES	HRDOW	NO
VOL8	0	0.55407E-03	444441.6	3769548.5	293.1	5.00	6.41	1.40	YES	HRDOW	NO
VOL9	0	0.55407E-03	444469.5	3769555.8	292.8	5.00	6.41	1.40	YES	HRDOW	NO
VOL10	0	0.55407E-03	444469.8	3769528.0	292.8	5.00	6.41	1.40	YES	HRDOW	NO
VOL11	0	0.55407E-03	444470.7	3769499.8	292.2	5.00	6.41	1.40	YES	HRDOW	NO
VOL12	0	0.55407E-03	444461.2	3769471.3	291.9	5.00	6.41				

```
1.40     YES   HRDOW            NO
 VOL13           0   0.55407E-03  444441.3 3769520.9   293.1     5.00     6.41
1.40     YES   HRDOW            NO
 VOL14           0   0.55407E-03  444442.5 3769499.2   292.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL15           0   0.55407E-03  444433.0 3769471.3   292.5     5.00     6.41
1.40     YES   HRDOW            NO
 VOL16           0   0.55407E-03  444462.1 3769443.8   291.0     5.00     6.41
1.40     YES   HRDOW            NO
 VOL17           0   0.55407E-03  444477.7 3769423.9   290.0     5.00     6.41
1.40     YES   HRDOW            NO
 VOL18           0   0.55407E-03  444479.2 3769395.7   289.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL19           0   0.55407E-03  444485.7 3769367.9   289.6     5.00     6.41
1.40     YES   HRDOW            NO
 VOL20           0   0.55407E-03  444485.7 3769347.4   289.6     5.00     6.41
1.40     YES   HRDOW            NO
 VOL21           0   0.55407E-03  444434.6 3769443.2   291.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL22           0   0.55407E-03  444413.7 3769521.9   293.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL23           0   0.55407E-03  444451.1 3769415.0   290.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL24           0   0.55407E-03  444457.2 3769387.8   290.4     5.00     6.41
1.40     YES   HRDOW            NO
 VOL25           0   0.55407E-03  444458.1 3769359.6   290.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL26           0   0.55407E-03  444456.9 3769347.4   290.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL27           0   0.55407E-03  444429.0 3769347.7   290.6     5.00     6.41
1.40     YES   HRDOW            NO
 VOL28           0   0.55407E-03  444401.5 3769347.7   291.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL29           0   0.55407E-03  444373.3 3769351.7   291.5     5.00     6.41
1.40     YES   HRDOW            NO
 VOL30           0   0.55407E-03  444344.3 3769360.5   291.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL31           0   0.55407E-03  444315.8 3769372.8   292.3     5.00     6.41
1.40     YES   HRDOW            NO
 VOL32           0   0.55407E-03  444287.3 3769382.6   292.7     5.00     6.41
1.40     YES   HRDOW            NO
 VOL33           0   0.55407E-03  444266.5 3769410.1   293.1     5.00     6.41
1.40     YES   HRDOW            NO
 VOL34           0   0.55407E-03  444246.6 3769438.6   293.4     5.00     6.41
1.40     YES   HRDOW            NO
 VOL35           0   0.55407E-03  444271.7 3769457.0   293.5     5.00     6.41
1.40     YES   HRDOW            NO
 VOL36           0   0.55407E-03  444273.5 3769438.3   293.3     5.00     6.41
1.40     YES   HRDOW            NO
 VOL37           0   0.55407E-03  444381.9 3769457.3   292.8     5.00     6.41
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1.40     YES   HRDOW            NO
 VOL38           0   0.55407E-03  444385.6 3769513.9   293.3     5.00     6.41
1.40     YES   HRDOW            NO
 VOL39           0   0.55407E-03  444300.8 3769470.7   293.4     5.00     6.41
1.40     YES   HRDOW            NO
 VOL40           0   0.55407E-03  444329.0 3769486.3   293.3     5.00     6.41
1.40     YES   HRDOW            NO
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                                    *** VOLUME SOURCE DATA ***

              NUMBER EMISSION RATE                    BASE    RELEASE    INIT.
INIT.   URBAN  EMISSION RATE   AIRCRAFT
   SOURCE       PART.  (GRAMS/SEC)     X        Y      ELEV.   HEIGHT      SY
SZ     SOURCE  SCALAR VARY
     ID          CATS.               (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)              BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -

 VOL41           0   0.55407E-03  444357.7 3769500.7   293.4     5.00     6.41
1.40     YES   HRDOW            NO
 VOL42           0   0.55407E-03  444413.7 3769494.9   293.0     5.00     6.41
1.40     YES   HRDOW            NO
 VOL43           0   0.55407E-03  444429.7 3769374.6   290.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL44           0   0.55407E-03  444429.0 3769402.5   291.4     5.00     6.41
1.40     YES   HRDOW            NO
 VOL45           0   0.55407E-03  444422.6 3769430.9   291.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL46           0   0.55407E-03  444407.0 3769458.5   292.6     5.00     6.41
1.40     YES   HRDOW            NO
 VOL47           0   0.55407E-03  444404.6 3769486.3   292.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL48           0   0.55407E-03  444377.0 3769485.4   293.1     5.00     6.41
1.40     YES   HRDOW            NO
 VOL49           0   0.55407E-03  444354.4 3769472.6   293.1     5.00     6.41
1.40     YES   HRDOW            NO
 VOL50           0   0.55407E-03  444301.1 3769442.9   293.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL51           0   0.55407E-03  444328.3 3769458.8   293.1     5.00     6.41
1.40     YES   HRDOW            NO
```

```
 VOL52            0   0.55407E-03  444294.7 3769411.0   292.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL53            0   0.55407E-03  444301.1 3769427.3   293.0     5.00     6.41
1.40     YES   HRDOW            NO
 VOL54            0   0.55407E-03  444315.2 3769400.9   292.6     5.00     6.41
1.40     YES   HRDOW            NO
 VOL55            0   0.55407E-03  444328.6 3769430.6   292.8     5.00     6.41
1.40     YES   HRDOW            NO
 VOL56            0   0.55407E-03  444356.8 3769444.4   292.8     5.00     6.41
1.40     YES   HRDOW            NO
 VOL57            0   0.55407E-03  444343.6 3769389.0   292.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL58            0   0.55407E-03  444343.3 3769416.6   292.5     5.00     6.41
1.40     YES   HRDOW            NO
 VOL59            0   0.55407E-03  444371.8 3769380.1   291.8     5.00     6.41
1.40     YES   HRDOW            NO
 VOL60            0   0.55407E-03  444400.6 3769376.1   291.5     5.00     6.41
1.40     YES   HRDOW            NO
 VOL61            0   0.55407E-03  444400.3 3769404.3   291.8     5.00     6.41
1.40     YES   HRDOW            NO
 VOL62            0   0.55407E-03  444371.5 3769408.3   292.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL63            0   0.55407E-03  444371.5 3769436.1   292.7     5.00     6.41
1.40     YES   HRDOW            NO
 VOL64            0   0.55407E-03  444396.0 3769430.3   292.1     5.00     6.41
1.40     YES   HRDOW            NO
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                                  *** AREAPOLY SOURCE DATA ***

              NUMBER EMISSION RATE   LOCATION OF AREA  BASE     RELEASE  NUMBER
  INIT.   URBAN  EMISSION RATE    AIRCRAFT
   SOURCE       PART.  (GRAMS/SEC       X        Y      ELEV.    HEIGHT  OF VERTS.
   SZ     SOURCE  SCALAR VARY
     ID         CATS.   /METER**2)   (METERS) (METERS) (METERS) (METERS)
(METERS)             BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - -

 PAREA1           0   0.21081E-05  444232.3 3769472.3   293.9     0.00      43
   1.00     YES   HRDOW            NO
↟ *** AERMOD - VERSION 23132  ***   ***
```

*** SOURCE IDs DEFINING SOURCE GROUPS
***

SRCGROUP ID	SOURCE IDs
ALL	VOL1 , VOL2 , VOL3 , VOL4 , VOL5 , VOL6 , VOL7 , VOL8 ,
	VOL9 , VOL10 , VOL11 , VOL12 , VOL13 , VOL14 , VOL15 , VOL16 ,
	VOL17 , VOL18 , VOL19 , VOL20 , VOL21 , VOL22 , VOL23 , VOL24 ,
	VOL25 , VOL26 , VOL27 , VOL28 , VOL29 , VOL30 , VOL31 , VOL32 ,
	VOL33 , VOL34 , VOL35 , VOL36 , VOL37 , VOL38 , VOL39 , VOL40 ,
	VOL41 , VOL42 , VOL43 , VOL44 , VOL45 , VOL46 , VOL47 , VOL48 ,
	VOL49 , VOL50 , VOL51 , VOL52 , VOL53 , VOL54 , VOL55 , VOL56 ,
	VOL57 , VOL58 , VOL59 , VOL60 , VOL61 , VOL62 , VOL63 , VOL64 ,
	PAREA1 ,

```
                                        *** SOURCE IDs DEFINED AS URBAN SOURCES
***

  URBAN ID   URBAN POP                                  SOURCE IDs
  --------   ---------                                  ----------


              2035210.   VOL1        , VOL2        , VOL3        , VOL4        ,
VOL5        , VOL6        , VOL7        ,
 VOL8        ,

              VOL9        , VOL10       , VOL11       , VOL12       , VOL13       ,
VOL14       , VOL15       , VOL16       ,

              VOL17       , VOL18       , VOL19       , VOL20       , VOL21       ,
VOL22       , VOL23       , VOL24       ,

              VOL25       , VOL26       , VOL27       , VOL28       , VOL29       ,
VOL30       , VOL31       , VOL32       ,

              VOL33       , VOL34       , VOL35       , VOL36       , VOL37       ,
VOL38       , VOL39       , VOL40       ,

              VOL41       , VOL42       , VOL43       , VOL44       , VOL45       ,
VOL46       , VOL47       , VOL48       ,

              VOL49       , VOL50       , VOL51       , VOL52       , VOL53       ,
VOL54       , VOL55       , VOL56       ,

              VOL57       , VOL58       , VOL59       , VOL60       , VOL61       ,
VOL62       , VOL63       , VOL64       ,

              PAREA1      ,
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL1         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
```

```
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
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                       ***        10:24:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL2          ; SOURCE TYPE = VOLUME    :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
```

```
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

                                  PAGE   9
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL3         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
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                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL4   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                             DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                             DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                             DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL5   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR

```
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -
```

```
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL7         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL8 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

```
 SOURCE ID = VOL9          ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

                                  PAGE  16
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL10         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
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```
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

                                  PAGE  17
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL11        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
```

```
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:24:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL12        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                  DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:24:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
```

OF WEEK (HRDOW) *

 SOURCE ID = VOL13   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL14   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01

```
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL15        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
```

```
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL16        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
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                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL17        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL18        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
```

```
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL19        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
```

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
*** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***       10:24:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL20        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
*** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***       10:24:44
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 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL21   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL22   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL23        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
```

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22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL24        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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 *** AERMET - VERSION  16216 ***   ***
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                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL25   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                  DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL26   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -

```
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
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 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL27        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
```

```
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL28        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL29   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL30   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR

```
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -
```

```
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL32        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL33 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

```
 SOURCE ID = VOL34        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

                                  PAGE  41
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL35        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

```
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

                                  PAGE  42
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL36        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
```

```
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:24:44

                                   PAGE  43
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL37        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                  DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:24:44

                                   PAGE  44
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
```

```
OF WEEK (HRDOW) *

 SOURCE ID = VOL38        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***       10:24:44

                                 PAGE  45
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL39        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
```

```
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

                                  PAGE  46
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL40        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
```

```
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

                                  PAGE  47
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL41        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

                                  PAGE  48
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
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```
                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL42        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL43        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
```

```
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL44        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
```

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
*** AERMOD - VERSION 23132  ***   ***
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 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL45        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
*** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL46   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL47   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
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 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL48        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
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22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL49        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL50 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL51 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

```
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

                                  PAGE  58
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL52        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
```

```
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL53        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL54   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL55   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR

```
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -
```

```
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL57        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL58 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

```
 SOURCE ID = VOL59        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***       10:24:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL60        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

```
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL61        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
```

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   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:24:44

                                   PAGE  68
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL62        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                  DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:24:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
```

OF WEEK (HRDOW) *

 SOURCE ID = VOL63   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL64   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01

```
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = PAREA1       ; SOURCE TYPE = AREAPOLY :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
```

```
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***       10:24:44

                                  PAGE  72
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                          *** DISCRETE CARTESIAN RECEPTORS ***
                                        (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                   (METERS)

     ( 444219.0, 3769382.9,     292.8,     292.8,       2.0);         ( 443379.3,
3769584.1,     298.2,     298.2,       2.0);
     ( 444284.0, 3769574.3,     294.7,     294.7,       2.0);         ( 444350.0,
3769622.2,     294.8,     294.8,       2.0);
     ( 444673.5, 3770137.6,     299.6,     299.6,       2.0);         ( 444743.3,
3770127.5,     299.5,     299.5,       2.0);
     ( 445412.9, 3770137.2,     301.4,     301.4,       2.0);         ( 444636.5,
3769597.8,     294.0,     294.0,       2.0);
     ( 444745.5, 3769593.1,     293.8,     293.8,       2.0);         ( 444084.6,
3769528.2,     295.0,     295.0,       2.0);
     ( 444307.2, 3769666.6,     295.7,     295.7,       2.0);         ( 444155.1,
3769701.8,     297.0,     297.0,       2.0);
     ( 444913.2, 3769590.1,     293.7,     293.7,       2.0);         ( 445012.2,
3769616.9,     293.2,     293.2,       2.0);
     ( 444972.4, 3769760.1,     295.4,     295.4,       2.0);         ( 445292.2,
3769551.3,     294.0,     294.0,       2.0);
     ( 445542.1, 3769662.7,     295.6,     295.6,       2.0);         ( 445514.2,
3769455.1,     293.2,     293.2,       2.0);
     ( 445434.0, 3769977.3,     299.4,     299.4,       2.0);         ( 445471.4,
3769890.5,     298.7,     298.7,       2.0);
     ( 445125.4, 3770123.8,     298.8,     298.8,       2.0);         ( 445301.5,
3770041.4,     299.5,     299.5,       2.0);
     ( 445546.0, 3769740.4,     296.7,     296.7,       2.0);         ( 445513.5,
3769442.0,     293.1,     293.1,       2.0);
     ( 443901.8, 3769642.3,     296.9,     296.9,       2.0);         ( 443804.6,
3769565.5,     296.1,     296.1,       2.0);
     ( 443786.1, 3769428.4,     294.6,     294.6,       2.0);

↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***       10:24:44
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*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***

(1=YES; 0=NO)

```
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
```

Surface format: FREE

Profile format: FREE

Surface station no.: 3102 Upper air station no.: 3190
Name: UNKNOWN Name: UNKNOWN

Year: 2012 Year: 2012

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
12	01	01	1	01	-16.4	0.171	-9.000	-9.000	-999.	170.	32.3	0.09	1.12	1.00	2.03	43.	7.9	285.9	2.0
12	01	01	1	02	-18.8	0.194	-9.000	-9.000	-999.	205.	41.3	0.09	1.12	1.00	2.28	34.	7.9	285.4	2.0
12	01	01	1	03	-17.8	0.182	-9.000	-9.000	-999.	187.	36.5	0.09	1.12	1.00	2.15	24.	7.9	282.0	2.0
12	01	01	1	04	-9.4	0.128	-9.000	-9.000	-999.	110.	19.6	0.09	1.12	1.00	1.55	41.	7.9	283.1	2.0
12	01	01	1	05	-16.9	0.173	-9.000	-9.000	-999.	173.	33.0	0.09	1.12	1.00	2.05	39.	7.9	280.4	2.0
12	01	01	1	06	-8.0	0.117	-9.000	-9.000	-999.	97.	17.8	0.09	1.12	1.00	1.43	21.	7.9	282.0	2.0
12	01	01	1	07	-7.6	0.115	-9.000	-9.000	-999.	93.	17.4	0.09	1.12	1.00	1.40	31.	7.9	282.5	2.0
12	01	01	1	08	-13.6	0.184	-9.000	-9.000	-999.	190.	40.5	0.09	1.12	0.54	2.16	34.	7.9	284.2	2.0
12	01	01	1	09	28.4	0.126	0.300	0.011	33.	108.	-6.2	0.09	1.12	0.32	1.03	29.	7.9	289.2	2.0
12	01	01	1	10	79.8	0.133	0.607	0.010	99.	116.	-2.6	0.09	1.12	0.25	0.94	173.	7.9	292.5	2.0
12	01	01	1	11	115.8	0.137	0.932	0.006	246.	121.	-2.0	0.09	1.12	0.22	0.92	172.	7.9	295.4	2.0
12	01	01	1	12	133.7	0.139	1.197	0.005	453.	125.	-1.8	0.09	1.12	0.21	0.92	146.	7.9	297.5	2.0
12	01	01	1	13	133.2	0.160	1.354	0.005	657.	153.	-2.7	0.09	1.12	0.21	1.14	117.	7.9	299.9	2.0
12	01	01	1	14	113.5	0.159	1.454	0.005	955.	151.	-3.1	0.09	1.12	0.23	1.16	285.	7.9	300.9	2.0
12	01	01	1	15	76.2	0.166	1.350	0.005	1138.	163.	-5.3	0.09	1.12	0.26	1.33	72.	7.9	302.0	2.0
12	01	01	1	16	23.5	0.175	0.925	0.005	1183.	175.	-19.9	0.09	1.12	0.35	1.65	107.	7.9	301.4	2.0
12	01	01	1	17	-6.1	0.107	-9.000	-9.000	-999.	86.	18.0	0.09	1.12	0.63	1.31	107.	7.9	298.1	2.0
12	01	01	1	18	-11.1	0.141	-9.000	-9.000	-999.	127.	22.1	0.09	1.12						

```
1.00    1.69   86.    7.9  293.1    2.0
 12 01 01   1 19   -3.2  0.076 -9.000 -9.000 -999.   51.     11.8  0.09   1.12
1.00    0.91   64.    7.9  292.0    2.0
 12 01 01   1 20   -2.3  0.066 -9.000 -9.000 -999.   41.     11.2  0.09   1.12
1.00    0.74   73.    7.9  288.8    2.0
 12 01 01   1 21  -10.0  0.133 -9.000 -9.000 -999.  116.     20.5  0.09   1.12
1.00    1.60   14.    7.9  288.1    2.0
 12 01 01   1 22  -19.4  0.201 -9.000 -9.000 -999.  216.     44.5  0.09   1.12
1.00    2.36   22.    7.9  287.5    2.0
 12 01 01   1 23  -23.7  0.246 -9.000 -9.000 -999.  293.     66.5  0.09   1.12
1.00    2.86   40.    7.9  287.0    2.0
 12 01 01   1 24  -12.3  0.147 -9.000 -9.000 -999.  139.     23.8  0.09   1.12
1.00    1.76   40.    7.9  283.8    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 12 01 01 01    7.9 1   43.    2.03   286.0   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:24:44

                                   PAGE  75
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                              *** THE   1ST HIGHEST 24-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     VOL1        , VOL2
 , VOL3        , VOL4        , VOL5        ,
                 VOL6        , VOL7        , VOL8        , VOL9        , VOL10
 , VOL11       , VOL12       , VOL13       ,
                 VOL14       , VOL15       , VOL16       , VOL17       , VOL18
 , VOL19       , VOL20       , VOL21       ,
                 VOL22       , VOL23       , VOL24       , VOL25       , VOL26
 , VOL27       , VOL28       ,  . . .      ,

                                        *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                     ** CONC OF PM_10    IN MICROGRAMS/M**3
                   **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
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       444218.99   3769382.94        2.72015  (15122224)               443379.29
 3769584.14        0.07006  (14120524)
       444283.97   3769574.32        1.93482  (14121224)               444350.01
 3769622.16        1.34300  (16010624)
       444673.49   3770137.65        0.12920c (12122124)               444743.34
 3770127.46        0.12564c (12101124)
       445412.86   3770137.16        0.08538  (14010724)               444636.46
 3769597.76        1.09345  (13111924)
       444745.49   3769593.07        0.68036  (14020624)               444084.62
 3769528.25        0.76671  (15112724)
       444307.19   3769666.57        0.86718  (16092024)               444155.11
 3769701.76        0.52708  (14121224)
       444913.20   3769590.10        0.43227  (14020624)               445012.21
 3769616.93        0.31607  (14020624)
       444972.40   3769760.11        0.23125c (12103124)               445292.22
 3769551.27        0.17007  (13112024)
       445542.14   3769662.68        0.11991  (13112024)               445514.18
 3769455.12        0.10582c (12120724)
       445433.98   3769977.29        0.08435  (13020524)               445471.42
 3769890.51        0.09934c (12103124)
       445125.39   3770123.84        0.12279c (12120424)               445301.47
 3770041.39        0.09832  (14010724)
       445545.96   3769740.36        0.09834  (13112024)               445513.51
 3769442.00        0.10570c (12120724)
       443901.79   3769642.26        0.28209  (15112724)               443804.60
 3769565.50        0.16675  (15112724)
       443786.15   3769428.43        0.18531  (16012124)

 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***       10:24:44

                                  PAGE  76
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                                *** THE SUMMARY OF HIGHEST 24-HR
RESULTS ***


                                   ** CONC OF PM_10    IN MICROGRAMS/M**3
              **

                                                      DATE
                                        NETWORK
GROUP ID                           AVERAGE CONC     (YYMMDDHH)             RECEPTOR
(XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
```

```
ALL      HIGH   1ST HIGH VALUE IS       2.72015  ON 15122224: AT (  444218.99,
3769382.94,   292.78,   292.78,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:24:44

                                  PAGE  77
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of         1628 Informational Message(s)

 A Total of        43848 Hours Were Processed

 A Total of         1278 Calm Hours Identified

 A Total of          350 Missing Hours Identified (  0.80 Percent)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186    1192       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
      0.50
 ME W187    1192       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET


    ***********************************
    *** AERMOD Finishes Successfully ***
    ***********************************
**
***************************************
**
** AERMOD Input Produced by:
```

```
** AERMOD View Ver. 12.0.0
** Lakes Environmental Software Inc.
** Date: 4/19/2024
** File: C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\Construction LST
PM25\Construction LST PM25.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti &
   MODELOPT DFAULT CONC
   AVERTIME 24
   URBANOPT 2035210 County_of_San_Bernardino
   POLLUTID PM_2.5
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "Construction LST PM25.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     444242.944  3769467.059      293.700
   LOCATION VOL2         VOLUME     444272.020  3769484.508      293.810
   LOCATION VOL3         VOLUME     444300.793  3769498.282      293.730
   LOCATION VOL4         VOLUME     444329.261  3769513.893      293.600
   LOCATION VOL5         VOLUME     444357.422  3769528.280      293.640
   LOCATION VOL6         VOLUME     444385.889  3769541.748      293.610
   LOCATION VOL7         VOLUME     444413.132  3769549.401      293.400
   LOCATION VOL8         VOLUME     444441.600  3769548.483      293.090
   LOCATION VOL9         VOLUME     444469.455  3769555.829      292.810
   LOCATION VOL10        VOLUME     444469.761  3769527.974      292.810
   LOCATION VOL11        VOLUME     444470.679  3769499.813      292.190
   LOCATION VOL12        VOLUME     444461.190  3769471.345      291.870
   LOCATION VOL13        VOLUME     444441.293  3769520.934      293.100
   LOCATION VOL14        VOLUME     444442.518  3769499.200      292.910
   LOCATION VOL15        VOLUME     444433.029  3769471.345      292.530
   LOCATION VOL16        VOLUME     444462.108  3769443.796      290.990
   LOCATION VOL17        VOLUME     444477.719  3769423.900      290.030
```

```
   LOCATION VOL18        VOLUME     444479.250  3769395.738      289.870
   LOCATION VOL19        VOLUME     444485.678  3769367.883      289.640
   LOCATION VOL20        VOLUME     444485.678  3769347.375      289.640
   LOCATION VOL21        VOLUME     444434.559  3769443.184      291.880
   LOCATION VOL22        VOLUME     444413.744  3769521.852      293.250
   LOCATION VOL23        VOLUME     444451.089  3769415.023      290.920
   LOCATION VOL24        VOLUME     444457.211  3769387.780      290.450
   LOCATION VOL25        VOLUME     444458.129  3769359.619      290.190
   LOCATION VOL26        VOLUME     444456.905  3769347.375      290.200
   LOCATION VOL27        VOLUME     444429.049  3769347.681      290.600
   LOCATION VOL28        VOLUME     444401.500  3769347.681      291.160
   LOCATION VOL29        VOLUME     444373.339  3769351.660      291.500
   LOCATION VOL30        VOLUME     444344.260  3769360.537      291.890
   LOCATION VOL31        VOLUME     444315.792  3769372.781      292.300
   LOCATION VOL32        VOLUME     444287.325  3769382.576      292.690
   LOCATION VOL33        VOLUME     444266.510  3769410.125      293.050
   LOCATION VOL34        VOLUME     444246.613  3769438.593      293.350
   LOCATION VOL35        VOLUME     444271.714  3769456.959      293.530
   LOCATION VOL36        VOLUME     444273.550  3769438.286      293.340
   LOCATION VOL37        VOLUME     444381.910  3769457.265      292.800
   LOCATION VOL38        VOLUME     444385.583  3769513.893      293.330
   LOCATION VOL39        VOLUME     444300.793  3769470.733      293.450
   LOCATION VOL40        VOLUME     444328.954  3769486.344      293.320
   LOCATION VOL41        VOLUME     444357.728  3769500.731      293.360
   LOCATION VOL42        VOLUME     444413.744  3769494.915      293.000
   LOCATION VOL43        VOLUME     444429.662  3769374.617      290.940
   LOCATION VOL44        VOLUME     444429.049  3769402.473      291.450
   LOCATION VOL45        VOLUME     444422.621  3769430.940      291.860
   LOCATION VOL46        VOLUME     444407.010  3769458.489      292.560
   LOCATION VOL47        VOLUME     444404.561  3769486.344      292.910
   LOCATION VOL48        VOLUME     444377.012  3769485.426      293.130
   LOCATION VOL49        VOLUME     444354.361  3769472.570      293.080
   LOCATION VOL50        VOLUME     444301.099  3769442.878      293.170
   LOCATION VOL51        VOLUME     444328.342  3769458.795      293.050
   LOCATION VOL52        VOLUME     444294.671  3769411.043      292.910
   LOCATION VOL53        VOLUME     444301.099  3769427.267      293.010
   LOCATION VOL54        VOLUME     444315.180  3769400.942      292.600
   LOCATION VOL55        VOLUME     444328.648  3769430.634      292.760
   LOCATION VOL56        VOLUME     444356.810  3769444.408      292.790
   LOCATION VOL57        VOLUME     444343.647  3769389.004      292.190
   LOCATION VOL58        VOLUME     444343.341  3769416.553      292.500
   LOCATION VOL59        VOLUME     444371.809  3769380.127      291.810
   LOCATION VOL60        VOLUME     444400.582  3769376.148      291.470
   LOCATION VOL61        VOLUME     444400.276  3769404.309      291.770
   LOCATION VOL62        VOLUME     444371.502  3769408.289      292.210
   LOCATION VOL63        VOLUME     444371.502  3769436.144      292.670
   LOCATION VOL64        VOLUME     444395.991  3769430.328      292.140
   LOCATION PAREA1       AREAPOLY   444232.281  3769472.273      293.860
** Source Parameters **
   SRCPARAM VOL1         0.0005097426     5.000     6.407     1.400
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SRCPARAM VOL3         0.0005097426     5.000     6.407     1.400
SRCPARAM VOL4         0.0005097426     5.000     6.407     1.400
SRCPARAM VOL5         0.0005097426     5.000     6.407     1.400
SRCPARAM VOL6         0.0005097426     5.000     6.407     1.400
SRCPARAM VOL7         0.0005097426     5.000     6.407     1.400
SRCPARAM VOL8         0.0005097426     5.000     6.407     1.400
SRCPARAM VOL9         0.0005097426     5.000     6.407     1.400
SRCPARAM VOL10        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL11        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL12        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL13        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL14        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL15        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL16        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL17        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL18        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL19        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL20        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL21        0.0005097426     5.000     6.407     1.400
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SRCPARAM VOL27        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL28        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL29        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL30        0.0005097426     5.000     6.407     1.400
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SRCPARAM VOL32        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL33        0.0005097426     5.000     6.407     1.400
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SRCPARAM VOL51        0.0005097426     5.000     6.407     1.400
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   SRCPARAM VOL53        0.0005097426     5.000     6.407     1.400
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   SRCPARAM VOL57        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL58        0.0005097426     5.000     6.407     1.400
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   SRCPARAM VOL61        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL62        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL63        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL64        0.0005097426     5.000     6.407     1.400
   SRCPARAM PAREA1       1.0001E-06     0.000       43     1.000
   AREAVERT PAREA1       444232.281 3769472.273 444254.454 3769481.948
   AREAVERT PAREA1       444295.373 3769501.098 444329.237 3769517.425
   AREAVERT PAREA1       444354.837 3769529.318 444382.654 3769543.428
   AREAVERT PAREA1       444410.067 3769556.530 444420.549 3769561.368
   AREAVERT PAREA1       444419.945 3769544.436 444459.251 3769562.980
   AREAVERT PAREA1       444473.563 3769570.035 444482.230 3769553.305
   AREAVERT PAREA1       444485.657 3769499.888 444472.555 3769498.276
   AREAVERT PAREA1       444476.586 3769438.409 444490.092 3769439.014
   AREAVERT PAREA1       444494.123 3769377.937 444498.759 3769377.736
   AREAVERT PAREA1       444500.170 3769355.563 444489.487 3769332.382
   AREAVERT PAREA1       444465.500 3769332.583 444435.869 3769333.188
   AREAVERT PAREA1       444428.209 3769333.188 444416.316 3769333.793
   AREAVERT PAREA1       444402.609 3769335.607 444383.662 3769338.227
   AREAVERT PAREA1       444361.690 3769344.275 444346.975 3769349.314
   AREAVERT PAREA1       444335.889 3769354.756 444322.787 3769361.207
   AREAVERT PAREA1       444311.902 3769368.665 444301.420 3769375.115
   AREAVERT PAREA1       444290.334 3769383.178 444281.666 3769390.636
   AREAVERT PAREA1       444268.967 3769402.731 444260.098 3769413.011
   AREAVERT PAREA1       444247.802 3769429.943 444240.948 3769440.425
   AREAVERT PAREA1       444234.700 3769451.108 444229.056 3769463.001
   AREAVERT PAREA1       444228.451 3769465.218 444228.048 3769467.637
   AREAVERT PAREA1       444229.459 3769469.451
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

```
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

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** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL37        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL38        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Saturday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL39        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL40        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL41        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Sunday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL42        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL43        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL44        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL45        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL46        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL47        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL48        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Saturday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL49        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL50        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL51        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

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** Sunday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL52        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL53        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL54        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

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** WeekDays:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL55        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL56        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL57        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL58        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

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** Saturday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL59        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL60        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL61        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Sunday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL62        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL63        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL64        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

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** WeekDays:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED "Construction LST PM25.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE KONT_V9_ADJU\KONT_v9.SFC
   PROFFILE KONT_V9_ADJU\KONT_v9.PFL
   SURFDATA 3102 2012
   UAIRDATA 3190 2012
   PROFBASE 289.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 24 ALL 1ST "CONSTRUCTION LST PM25.AD\24H1GALL.PLT" 31
```

```
   SUMMFILE "Construction LST PM25.sum"
OU FINISHED
**
**************************************
** Project Parameters
**************************************
** PROJCTN  CoordinateSystemUTM
** DESCPTN  UTM: Universal Transverse Mercator
** DATUM    North American Datum 1983
** DTMRGN   CONUS
** UNITS    m
** ZONE     11
** ZONEINX  0
**
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 12.0.0
** Lakes Environmental Software Inc.
** Date: 4/19/2024
** File: C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\Construction LST
PM25\Construction LST PM25.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti &
   MODELOPT DFAULT CONC
   AVERTIME 24
   URBANOPT 2035210 County_of_San_Bernardino
   POLLUTID PM_2.5
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "Construction LST PM25.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
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** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     444242.944  3769467.059      293.700
   LOCATION VOL2         VOLUME     444272.020  3769484.508      293.810
   LOCATION VOL3         VOLUME     444300.793  3769498.282      293.730
   LOCATION VOL4         VOLUME     444329.261  3769513.893      293.600
   LOCATION VOL5         VOLUME     444357.422  3769528.280      293.640
   LOCATION VOL6         VOLUME     444385.889  3769541.748      293.610
   LOCATION VOL7         VOLUME     444413.132  3769549.401      293.400
   LOCATION VOL8         VOLUME     444441.600  3769548.483      293.090
   LOCATION VOL9         VOLUME     444469.455  3769555.829      292.810
   LOCATION VOL10        VOLUME     444469.761  3769527.974      292.810
   LOCATION VOL11        VOLUME     444470.679  3769499.813      292.190
   LOCATION VOL12        VOLUME     444461.190  3769471.345      291.870
   LOCATION VOL13        VOLUME     444441.293  3769520.934      293.100
   LOCATION VOL14        VOLUME     444442.518  3769499.200      292.910
   LOCATION VOL15        VOLUME     444433.029  3769471.345      292.530
   LOCATION VOL16        VOLUME     444462.108  3769443.796      290.990
   LOCATION VOL17        VOLUME     444477.719  3769423.900      290.030
   LOCATION VOL18        VOLUME     444479.250  3769395.738      289.870
   LOCATION VOL19        VOLUME     444485.678  3769367.883      289.640
   LOCATION VOL20        VOLUME     444485.678  3769347.375      289.640
   LOCATION VOL21        VOLUME     444434.559  3769443.184      291.880
   LOCATION VOL22        VOLUME     444413.744  3769521.852      293.250
   LOCATION VOL23        VOLUME     444451.089  3769415.023      290.920
   LOCATION VOL24        VOLUME     444457.211  3769387.780      290.450
   LOCATION VOL25        VOLUME     444458.129  3769359.619      290.190
   LOCATION VOL26        VOLUME     444456.905  3769347.375      290.200
   LOCATION VOL27        VOLUME     444429.049  3769347.681      290.600
   LOCATION VOL28        VOLUME     444401.500  3769347.681      291.160
   LOCATION VOL29        VOLUME     444373.339  3769351.660      291.500
   LOCATION VOL30        VOLUME     444344.260  3769360.537      291.890
   LOCATION VOL31        VOLUME     444315.792  3769372.781      292.300
   LOCATION VOL32        VOLUME     444287.325  3769382.576      292.690
   LOCATION VOL33        VOLUME     444266.510  3769410.125      293.050
   LOCATION VOL34        VOLUME     444246.613  3769438.593      293.350
   LOCATION VOL35        VOLUME     444271.714  3769456.959      293.530
   LOCATION VOL36        VOLUME     444273.550  3769438.286      293.340
   LOCATION VOL37        VOLUME     444381.910  3769457.265      292.800
   LOCATION VOL38        VOLUME     444385.583  3769513.893      293.330
   LOCATION VOL39        VOLUME     444300.793  3769470.733      293.450
   LOCATION VOL40        VOLUME     444328.954  3769486.344      293.320
   LOCATION VOL41        VOLUME     444357.728  3769500.731      293.360
   LOCATION VOL42        VOLUME     444413.744  3769494.915      293.000
   LOCATION VOL43        VOLUME     444429.662  3769374.617      290.940
   LOCATION VOL44        VOLUME     444429.049  3769402.473      291.450
   LOCATION VOL45        VOLUME     444422.621  3769430.940      291.860
   LOCATION VOL46        VOLUME     444407.010  3769458.489      292.560
   LOCATION VOL47        VOLUME     444404.561  3769486.344      292.910
   LOCATION VOL48        VOLUME     444377.012  3769485.426      293.130
   LOCATION VOL49        VOLUME     444354.361  3769472.570      293.080
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   LOCATION VOL50        VOLUME     444301.099  3769442.878      293.170
   LOCATION VOL51        VOLUME     444328.342  3769458.795      293.050
   LOCATION VOL52        VOLUME     444294.671  3769411.043      292.910
   LOCATION VOL53        VOLUME     444301.099  3769427.267      293.010
   LOCATION VOL54        VOLUME     444315.180  3769400.942      292.600
   LOCATION VOL55        VOLUME     444328.648  3769430.634      292.760
   LOCATION VOL56        VOLUME     444356.810  3769444.408      292.790
   LOCATION VOL57        VOLUME     444343.647  3769389.004      292.190
   LOCATION VOL58        VOLUME     444343.341  3769416.553      292.500
   LOCATION VOL59        VOLUME     444371.809  3769380.127      291.810
   LOCATION VOL60        VOLUME     444400.582  3769376.148      291.470
   LOCATION VOL61        VOLUME     444400.276  3769404.309      291.770
   LOCATION VOL62        VOLUME     444371.502  3769408.289      292.210
   LOCATION VOL63        VOLUME     444371.502  3769436.144      292.670
   LOCATION VOL64        VOLUME     444395.991  3769430.328      292.140
   LOCATION PAREA1       AREAPOLY   444232.281  3769472.273      293.860
** Source Parameters **
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   SRCPARAM VOL2         0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL3         0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL4         0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL5         0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL6         0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL7         0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL8         0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL9         0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL10        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL11        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL12        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL13        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL14        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL15        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL16        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL17        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL18        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL19        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL20        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL21        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL22        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL23        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL24        0.0005097426     5.000     6.407     1.400
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   SRCPARAM VOL26        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL27        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL28        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL29        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL30        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL31        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL32        0.0005097426     5.000     6.407     1.400
   SRCPARAM VOL33        0.0005097426     5.000     6.407     1.400
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SRCPARAM VOL34        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL35        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL36        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL37        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL38        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL39        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL40        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL41        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL42        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL43        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL44        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL45        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL46        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL47        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL48        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL49        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL50        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL51        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL52        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL53        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL54        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL55        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL56        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL57        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL58        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL59        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL60        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL61        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL62        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL63        0.0005097426     5.000     6.407     1.400
SRCPARAM VOL64        0.0005097426     5.000     6.407     1.400
SRCPARAM PAREA1       1.0001E-06       0.000        43     1.000
AREAVERT PAREA1       444232.281 3769472.273 444254.454 3769481.948
AREAVERT PAREA1       444295.373 3769501.098 444329.237 3769517.425
AREAVERT PAREA1       444354.837 3769529.318 444382.654 3769543.428
AREAVERT PAREA1       444410.067 3769556.530 444420.549 3769561.368
AREAVERT PAREA1       444419.945 3769544.436 444459.251 3769562.980
AREAVERT PAREA1       444473.563 3769570.035 444482.230 3769553.305
AREAVERT PAREA1       444485.657 3769499.888 444472.555 3769498.276
AREAVERT PAREA1       444476.586 3769438.409 444490.092 3769439.014
AREAVERT PAREA1       444494.123 3769377.937 444498.759 3769377.736
AREAVERT PAREA1       444500.170 3769355.563 444489.487 3769332.382
AREAVERT PAREA1       444465.500 3769332.583 444435.869 3769333.188
AREAVERT PAREA1       444428.209 3769333.188 444416.316 3769333.793
AREAVERT PAREA1       444402.609 3769335.607 444383.662 3769338.227
AREAVERT PAREA1       444361.690 3769344.275 444346.975 3769349.314
AREAVERT PAREA1       444335.889 3769354.756 444322.787 3769361.207
AREAVERT PAREA1       444311.902 3769368.665 444301.420 3769375.115
AREAVERT PAREA1       444290.334 3769383.178 444281.666 3769390.636
AREAVERT PAREA1       444268.967 3769402.731 444260.098 3769413.011
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   AREAVERT PAREA1       444247.802 3769429.943 444240.948 3769440.425
   AREAVERT PAREA1       444234.700 3769451.108 444229.056 3769463.001
   AREAVERT PAREA1       444228.451 3769465.218 444228.048 3769467.637
   AREAVERT PAREA1       444229.459 3769469.451
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL7         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL11        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL11        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL12        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL12        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL17        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL27        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL37        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL37        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL38        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL39        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL40        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL41        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL42        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL43        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL44        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL45        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL46        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL47        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL47        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL48        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL49        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL50        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL51        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL52        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL53        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL54        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL55        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL56        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL57        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL57        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL58        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL59        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL60        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL61        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL62        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL63        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL64        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL64        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED "Construction LST PM25.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
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```
ME STARTING
   SURFFILE KONT_V9_ADJU\KONT_v9.SFC
   PROFFILE KONT_V9_ADJU\KONT_v9.PFL
   SURFDATA 3102 2012
   UAIRDATA 3190 2012
   PROFBASE 289.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 24 ALL 1ST "CONSTRUCTION LST PM25.AD\24H1GALL.PLT" 31
   SUMMFILE "Construction LST PM25.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186    1192       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
      0.50
 ME W187    1192       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET


 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58
```

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

***   MODEL SETUP OPTIONS SUMMARY
***

- - - -

```
 **Output Options Selected:
          Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
Keyword)
          Model Outputs External File(s) of High Values for Plotting (PLOTFILE
Keyword)
          Model Outputs Separate Summary File of High Ranked Values (SUMMFILE
Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                 m for Missing
Hours
                                                                 b for Both Calm
and Missing Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   289.00 ;  Decay
Coef. =    0.000     ;  Rot. Angle =     0.0
                  Emission Units = GRAMS/SEC                                ;
Emission Rate Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      3.6 MB of RAM.

 **Input Runstream File:          aermod.inp

 **Output Print File:             aermod.out


 **Detailed Error/Message File:   Construction LST PM25.err

 **File for Summary of Results:   Construction LST PM25.sum

 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:31:58

                                   PAGE   2
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                                  *** VOLUME SOURCE DATA ***

               NUMBER EMISSION RATE                    BASE    RELEASE    INIT.
INIT.   URBAN  EMISSION RATE   AIRCRAFT
   SOURCE       PART.  (GRAMS/SEC)     X        Y      ELEV.   HEIGHT      SY
SZ     SOURCE  SCALAR VARY
     ID         CATS.              (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)             BY
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```
1.40     YES   HRDOW            NO
 VOL25           0   0.50974E-03  444458.1 3769359.6   290.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL26           0   0.50974E-03  444456.9 3769347.4   290.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL27           0   0.50974E-03  444429.0 3769347.7   290.6     5.00     6.41
1.40     YES   HRDOW            NO
 VOL28           0   0.50974E-03  444401.5 3769347.7   291.2     5.00     6.41
1.40     YES   HRDOW            NO
 VOL29           0   0.50974E-03  444373.3 3769351.7   291.5     5.00     6.41
1.40     YES   HRDOW            NO
 VOL30           0   0.50974E-03  444344.3 3769360.5   291.9     5.00     6.41
1.40     YES   HRDOW            NO
 VOL31           0   0.50974E-03  444315.8 3769372.8   292.3     5.00     6.41
1.40     YES   HRDOW            NO
 VOL32           0   0.50974E-03  444287.3 3769382.6   292.7     5.00     6.41
1.40     YES   HRDOW            NO
 VOL33           0   0.50974E-03  444266.5 3769410.1   293.1     5.00     6.41
1.40     YES   HRDOW            NO
 VOL34           0   0.50974E-03  444246.6 3769438.6   293.4     5.00     6.41
1.40     YES   HRDOW            NO
 VOL35           0   0.50974E-03  444271.7 3769457.0   293.5     5.00     6.41
1.40     YES   HRDOW            NO
 VOL36           0   0.50974E-03  444273.5 3769438.3   293.3     5.00     6.41
1.40     YES   HRDOW            NO
 VOL37           0   0.50974E-03  444381.9 3769457.3   292.8     5.00     6.41
1.40     YES   HRDOW            NO
 VOL38           0   0.50974E-03  444385.6 3769513.9   293.3     5.00     6.41
1.40     YES   HRDOW            NO
 VOL39           0   0.50974E-03  444300.8 3769470.7   293.4     5.00     6.41
1.40     YES   HRDOW            NO
 VOL40           0   0.50974E-03  444329.0 3769486.3   293.3     5.00     6.41
1.40     YES   HRDOW            NO
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***       10:31:58

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                                *** VOLUME SOURCE DATA ***

              NUMBER EMISSION RATE                    BASE    RELEASE    INIT.
INIT.   URBAN  EMISSION RATE   AIRCRAFT
   SOURCE       PART.  (GRAMS/SEC)     X        Y      ELEV.   HEIGHT      SY
SZ     SOURCE  SCALAR VARY
     ID         CATS.              (METERS) (METERS) (METERS) (METERS) (METERS)
```

(METERS) BY
 - - -

```
 VOL64            0   0.50974E-03  444396.0 3769430.3   292.1     5.00     6.41
1.40     YES   HRDOW            NO
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:31:58

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                                *** AREAPOLY SOURCE DATA ***

               NUMBER EMISSION RATE   LOCATION OF AREA  BASE     RELEASE  NUMBER
  INIT.   URBAN  EMISSION RATE    AIRCRAFT
   SOURCE       PART.  (GRAMS/SEC       X        Y      ELEV.    HEIGHT  OF VERTS.
   SZ     SOURCE  SCALAR VARY
     ID         CATS.   /METER**2)   (METERS) (METERS) (METERS) (METERS)
(METERS)              BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -

 PAREA1           0   0.10001E-05  444232.3 3769472.3   293.9     0.00      43
   1.00     YES   HRDOW            NO
↑ *** AERMOD - VERSION 23132  ***   ***
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 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                             *** SOURCE IDs DEFINING SOURCE GROUPS
***

 SRCGROUP ID                                          SOURCE IDs
 -----------                                          ----------


  ALL        VOL1       , VOL2       , VOL3       , VOL4       , VOL5       ,
VOL6       , VOL7       , VOL8       ,

             VOL9       , VOL10      , VOL11      , VOL12      , VOL13      ,
VOL14      , VOL15      , VOL16      ,

             VOL17      , VOL18      , VOL19      , VOL20      , VOL21      ,
VOL22      , VOL23      , VOL24      ,
```

```
             VOL25       , VOL26       , VOL27       , VOL28       , VOL29       ,
VOL30       , VOL31       , VOL32       ,

             VOL33       , VOL34       , VOL35       , VOL36       , VOL37       ,
VOL38       , VOL39       , VOL40       ,

             VOL41       , VOL42       , VOL43       , VOL44       , VOL45       ,
VOL46       , VOL47       , VOL48       ,

             VOL49       , VOL50       , VOL51       , VOL52       , VOL53       ,
VOL54       , VOL55       , VOL56       ,

             VOL57       , VOL58       , VOL59       , VOL60       , VOL61       ,
VOL62       , VOL63       , VOL64       ,

             PAREA1      ,
 *** AERMOD - VERSION 23132  ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                        *** SOURCE IDs DEFINED AS URBAN SOURCES
***

  URBAN ID   URBAN POP                                  SOURCE IDs
  --------   ---------                                  ----------


              2035210.   VOL1        , VOL2        , VOL3        , VOL4        ,
VOL5        , VOL6        , VOL7        ,
 VOL8        ,

             VOL9        , VOL10       , VOL11       , VOL12       , VOL13       ,
VOL14       , VOL15       , VOL16       ,

             VOL17       , VOL18       , VOL19       , VOL20       , VOL21       ,
VOL22       , VOL23       , VOL24       ,

             VOL25       , VOL26       , VOL27       , VOL28       , VOL29       ,
VOL30       , VOL31       , VOL32       ,

             VOL33       , VOL34       , VOL35       , VOL36       , VOL37       ,
VOL38       , VOL39       , VOL40       ,
```

```
             VOL41       , VOL42       , VOL43       , VOL44       , VOL45       ,
VOL46       , VOL47       , VOL48       ,

             VOL49       , VOL50       , VOL51       , VOL52       , VOL53       ,
VOL54       , VOL55       , VOL56       ,

             VOL57       , VOL58       , VOL59       , VOL60       , VOL61       ,
VOL62       , VOL63       , VOL64       ,

             PAREA1      ,
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
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 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL1         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                  DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
```

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL2   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL3   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR

```
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -
```

```
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL5         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL6 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

```
 SOURCE ID = VOL7         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL8         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

```
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL9         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
```

```
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:31:58

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL10        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                  DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:31:58

                                   PAGE  17
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
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```
OF WEEK (HRDOW) *

 SOURCE ID = VOL11        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL12        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
```

```
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL13        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
```

```
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL14        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
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 *** AERMET - VERSION  16216 ***   ***
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                                  PAGE  21
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
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```
                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL15        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
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 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL16        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
```

```
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
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 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL17        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
```

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
*** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***       10:31:58

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL18        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
*** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***       10:31:58
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 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL19   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                 DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL20   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                 DAY OF WEEK = WEEKDAY

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL21        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
```

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22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL22        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL23 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL24 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

```
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL25        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
```

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14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

                                   PAGE  32
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL26        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL27   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL28   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR

```
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -
```

```
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL30        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL31 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

```
 SOURCE ID = VOL32        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL33        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

```
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL34        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
```

```
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:31:58

                                   PAGE  41
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL35        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                  DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                        ***        10:31:58

                                   PAGE  42
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
```

OF WEEK (HRDOW) *

 SOURCE ID = VOL36   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL37   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01

```
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

                                  PAGE  44
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL38        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
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    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

                                  PAGE  45
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL39        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

                                  PAGE  46
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
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```
                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL40        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                    DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                    DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                    DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

                                  PAGE  47
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL41        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                    DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
```

```
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

                                  PAGE  48
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL42        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
```

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
*** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL43        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
*** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL44   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -

                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL45   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -

                                                DAY OF WEEK = WEEKDAY

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL46        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
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22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL47        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
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                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL48   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                  DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL49   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -

```
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL50        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
```

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14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL51        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL52   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                  DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL53   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR

```
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -
```

```
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
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04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL55        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL56 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

```
 SOURCE ID = VOL57        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL58        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

```
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

                                  PAGE  65
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL59        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
```

```
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
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                                   PAGE  66
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL60        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
                                                  DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
```

```
OF WEEK (HRDOW) *

 SOURCE ID = VOL61        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL62        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
```

```
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL63        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
```

```
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = VOL64        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
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                                  PAGE  71
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
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```
                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
OF WEEK (HRDOW) *

 SOURCE ID = PAREA1       ; SOURCE TYPE = AREAPOLY :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 23132  ***   ***
C:\Users\adadabhoy\Desktop\AERMOD\15693-Guasti & Holt\15693-Guasti & ***
04/19/24
 *** AERMET - VERSION  16216 ***   ***
                       ***        10:31:58

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                          *** DISCRETE CARTESIAN RECEPTORS ***
                                        (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                    (METERS)

     ( 444219.0, 3769382.9,     292.8,     292.8,       2.0);         ( 443379.3,
3769584.1,     298.2,     298.2,       2.0);
     ( 444284.0, 3769574.3,     294.7,     294.7,       2.0);         ( 444350.0,
3769622.2,     294.8,     294.8,       2.0);
     ( 444673.5, 3770137.6,     299.6,     299.6,       2.0);         ( 444743.3,
3770127.5,     299.5,     299.5,       2.0);
     ( 445412.9, 3770137.2,     301.4,     301.4,       2.0);         ( 444636.5,
```

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3769597.8,     294.0,     294.0,       2.0);
     ( 444745.5, 3769593.1,     293.8,     293.8,       2.0);         ( 444084.6,
3769528.2,     295.0,     295.0,       2.0);
     ( 444307.2, 3769666.6,     295.7,     295.7,       2.0);         ( 444155.1,
3769701.8,     297.0,     297.0,       2.0);
     ( 444913.2, 3769590.1,     293.7,     293.7,       2.0);         ( 445012.2,
3769616.9,     293.2,     293.2,       2.0);
     ( 444972.4, 3769760.1,     295.4,     295.4,       2.0);         ( 445292.2,
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     ( 445542.1, 3769662.7,     295.6,     295.6,       2.0);         ( 445514.2,
3769455.1,     293.2,     293.2,       2.0);
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     ( 445125.4, 3770123.8,     298.8,     298.8,       2.0);         ( 445301.5,
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     ( 445546.0, 3769740.4,     296.7,     296.7,       2.0);         ( 445513.5,
3769442.0,     293.1,     293.1,       2.0);
     ( 443901.8, 3769642.3,     296.9,     296.9,       2.0);         ( 443804.6,
3769565.5,     296.1,     296.1,       2.0);
     ( 443786.1, 3769428.4,     294.6,     294.6,       2.0);

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                                  PAGE  73
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                          *** METEOROLOGICAL DAYS SELECTED FOR
PROCESSING ***
                                                              (1=YES; 0=NO)

           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1
```

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***

(METERS/SEC)

1.54,   3.09,   5.14,   8.23,   10.80,

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: KONT_V9_ADJU\KONT_v9.SFC
Met Version: 16216
Profile file: KONT_V9_ADJU\KONT_v9.PFL

Surface format: FREE

Profile format: FREE

Surface station no.: 3102 Upper air station no.: 3190
Name: UNKNOWN Name: UNKNOWN

Year: 2012 Year: 2012

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
12	01	01	1	01	-16.4	0.171	-9.000	-9.000	-999.	170.	32.3	0.09	1.12	1.00	2.03	43.	7.9	285.9	2.0
12	01	01	1	02	-18.8	0.194	-9.000	-9.000	-999.	205.	41.3	0.09	1.12	1.00	2.28	34.	7.9	285.4	2.0
12	01	01	1	03	-17.8	0.182	-9.000	-9.000	-999.	187.	36.5	0.09	1.12	1.00	2.15	24.	7.9	282.0	2.0
12	01	01	1	04	-9.4	0.128	-9.000	-9.000	-999.	110.	19.6	0.09	1.12	1.00	1.55	41.	7.9	283.1	2.0
12	01	01	1	05	-16.9	0.173	-9.000	-9.000	-999.	173.	33.0	0.09	1.12						

```
1.00    2.05   39.    7.9  280.4    2.0
 12 01 01   1 06   -8.0  0.117 -9.000 -9.000 -999.   97.     17.8  0.09   1.12
1.00    1.43   21.    7.9  282.0    2.0
 12 01 01   1 07   -7.6  0.115 -9.000 -9.000 -999.   93.     17.4  0.09   1.12
1.00    1.40   31.    7.9  282.5    2.0
 12 01 01   1 08  -13.6  0.184 -9.000 -9.000 -999.  190.     40.5  0.09   1.12
0.54    2.16   34.    7.9  284.2    2.0
 12 01 01   1 09   28.4  0.126  0.300  0.011   33.  108.     -6.2  0.09   1.12
0.32    1.03   29.    7.9  289.2    2.0
 12 01 01   1 10   79.8  0.133  0.607  0.010   99.  116.     -2.6  0.09   1.12
0.25    0.94  173.    7.9  292.5    2.0
 12 01 01   1 11  115.8  0.137  0.932  0.006  246.  121.     -2.0  0.09   1.12
0.22    0.92  172.    7.9  295.4    2.0
 12 01 01   1 12  133.7  0.139  1.197  0.005  453.  125.     -1.8  0.09   1.12
0.21    0.92  146.    7.9  297.5    2.0
 12 01 01   1 13  133.2  0.160  1.354  0.005  657.  153.     -2.7  0.09   1.12
0.21    1.14  117.    7.9  299.9    2.0
 12 01 01   1 14  113.5  0.159  1.454  0.005  955.  151.     -3.1  0.09   1.12
0.23    1.16  285.    7.9  300.9    2.0
 12 01 01   1 15   76.2  0.166  1.350  0.005 1138.  163.     -5.3  0.09   1.12
0.26    1.33   72.    7.9  302.0    2.0
 12 01 01   1 16   23.5  0.175  0.925  0.005 1183.  175.    -19.9  0.09   1.12
0.35    1.65  107.    7.9  301.4    2.0
 12 01 01   1 17   -6.1  0.107 -9.000 -9.000 -999.   86.     18.0  0.09   1.12
0.63    1.31  107.    7.9  298.1    2.0
 12 01 01   1 18  -11.1  0.141 -9.000 -9.000 -999.  127.     22.1  0.09   1.12
1.00    1.69   86.    7.9  293.1    2.0
 12 01 01   1 19   -3.2  0.076 -9.000 -9.000 -999.   51.     11.8  0.09   1.12
1.00    0.91   64.    7.9  292.0    2.0
 12 01 01   1 20   -2.3  0.066 -9.000 -9.000 -999.   41.     11.2  0.09   1.12
1.00    0.74   73.    7.9  288.8    2.0
 12 01 01   1 21  -10.0  0.133 -9.000 -9.000 -999.  116.     20.5  0.09   1.12
1.00    1.60   14.    7.9  288.1    2.0
 12 01 01   1 22  -19.4  0.201 -9.000 -9.000 -999.  216.     44.5  0.09   1.12
1.00    2.36   22.    7.9  287.5    2.0
 12 01 01   1 23  -23.7  0.246 -9.000 -9.000 -999.  293.     66.5  0.09   1.12
1.00    2.86   40.    7.9  287.0    2.0
 12 01 01   1 24  -12.3  0.147 -9.000 -9.000 -999.  139.     23.8  0.09   1.12
1.00    1.76   40.    7.9  283.8    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 12 01 01 01    7.9 1   43.    2.03   286.0   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***

INCLUDING SOURCE(S): VOL1 , VOL2 , VOL3 , VOL4 , VOL5 ,
VOL6 , VOL7 , VOL8 , VOL9 , VOL10 , VOL11 , VOL12 , VOL13 ,
VOL14 , VOL15 , VOL16 , VOL17 , VOL18 , VOL19 , VOL20 , VOL21 ,
VOL22 , VOL23 , VOL24 , VOL25 , VOL26 , VOL27 , VOL28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
444218.99	3769382.94	1.57238	(15122224)	443379.29	3769584.14	0.03859	(14120524)
444283.97	3769574.32	1.13960	(14121224)	444350.01	3769622.16	0.78658	(16010624)
444673.49	3770137.65	0.06772c	(12122124)	444743.34	3770127.46	0.07154c	(12101124)
445412.86	3770137.16	0.04656	(14010724)	444636.46	3769597.76	0.62974	(13111924)
444745.49	3769593.07	0.39489	(14020624)	444084.62	3769528.25	0.44642	(15112724)
444307.19	3769666.57	0.50085	(16092024)	444155.11	3769701.76	0.30765	(14121224)
444913.20	3769590.10	0.24799	(14020624)	445012.21	3769616.93	0.18112	(14020624)
444972.40	3769760.11	0.13300c	(12103124)	445292.22	3769551.27	0.09661	(13112024)
445542.14	3769662.68	0.06730	(13112024)	445514.18	3769455.12	0.05879c	(12120724)
445433.98	3769977.29	0.04729c	(12103124)	445471.42	3769890.51	0.05610c	(12103124)
445125.39	3770123.84	0.06912	(12021324)	445301.47	3770041.39	0.05389	(14010724)
445545.96	3769740.36	0.05571	(13112024)	445513.51	3769442.00	0.05876c	(12120724)

```
       443901.79   3769642.26        0.16300  (15112724)                443804.60
 3769565.50        0.09886  (15112724)
       443786.15   3769428.43        0.10421  (16012124)

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                                *** THE SUMMARY OF HIGHEST 24-HR
RESULTS ***


                                    ** CONC OF PM_2.5   IN MICROGRAMS/M**3
              **

                                                      DATE
                                          NETWORK
GROUP ID                           AVERAGE CONC     (YYMMDDHH)             RECEPTOR
(XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS       1.57238  ON 15122224: AT (  444218.99,
3769382.94,   292.78,   292.78,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
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                        ***        10:31:58

                                   PAGE  77
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
```

```
A Total of         1628 Informational Message(s)

A Total of        43848 Hours Were Processed

A Total of         1278 Calm Hours Identified

A Total of          350 Missing Hours Identified (  0.80 Percent)


   ******** FATAL ERROR MESSAGES ********
              ***  NONE  ***


   ********   WARNING MESSAGES   ********
ME W186    1192       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
     0.50
ME W187    1192       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET


   ***********************************
   *** AERMOD Finishes Successfully ***
   ***********************************
```

Appendix C
Biological Technical Report

Biological Technical Report
for the
Ontario Hotel Project

San Bernardino County, California

Prepared For:

Diversified Pacific Communities
10621 Civic Center Drive
Rancho Cucamonga, California 91730

Prepared By:



215 North 5th Street
Redlands, California 92374

December 2024

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Appendix D – Special-Status Plant Species Potential for Occurrence
Appendix E – Special-Status Wildlife Species Potential for Occurrence

Term	Definition
°F	Degrees Fahrenheit
APN	Assessor's Parcel Number
Cal-IPC	California Invasive Plant Council
CCR	Code of California Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CNPSEI	California Native Plant Society Electronic Inventory
CRPR	California Rare Plant Rank
CWA	Clean Water Act
DBH	Diameter at Breast Height
ESA	Endangered Species Act
GPS	Global Positioning System
HCP	Habitat Conservation Plan
ITP	Incidental Take Permit
LAPM	Los Angeles Pocket Mouse
MBTA	Migratory Bird Treaty Act
mph	Miles per Hour
NCCP	Natural Community Conservation Plan
NEPA	National Environmental Policy Act
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
NWPR	Navigable Waters Protection Rule
RWQCB	Regional Water Quality Control Boards
SAA	Streambed Alteration Agreement
SSC	California Species of Special Concern
USACE	U.S. Army Corps of Engineers
USC	U.S. Code
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WOTUS	Waters of the U.S.

1.0 INTRODUCTION

ECORP Consulting, Inc. conducted a biological reconnaissance survey at an approximately 10.47-acre property (Assessor's Parcel Number [APN] 0110-322-33) in the City of Ontario, San Bernardino County, California (Figure 1). The survey was conducted to identify any potential biological resources that could be affected by the proposed 10.47-Acre Ontario Hotel Project (Project) pursuant to the terms of the California Environmental Quality Act (CEQA), and for the purposes of identifying any biological constraints that would affect the proposed site plan for the Project. The Project will be subject to county, state, and federal regulations regarding compliance with the federal Endangered Species Act (ESA), California ESA, Migratory Bird Treaty Act (MBTA), Clean Water Act (CWA) regulations, California State Water Resources Control Board for state waters, and California Fish and Game Code.

1.1 Project Description and Location

The Project proposes to construct a 1,073,671-square-foot hotel complex and parking structure. The facility will include more than 650 rooms and suites, and could also include conference and meeting spaces, a pool and event lawn, ballrooms, retail and restaurant spaces, and a rooftop restaurant and bar.

The Project site consists of approximately 10.47 acres of property located in the southeastern quadrant of Section 22 of Township 1 South, Range 7 West, San Bernardino Base and Meridian as depicted on the Guasti, California, U.S. Geological Survey 7.5-minute topographic quadrangle map. It is also known as APN 0110-322-33. The Project Area is located at the intersection of East Holt Boulevard and East Guasti Road in the City of Ontario, California. The elevation of the Project site lies approximately 960 feet above mean seal level (Figure 2).

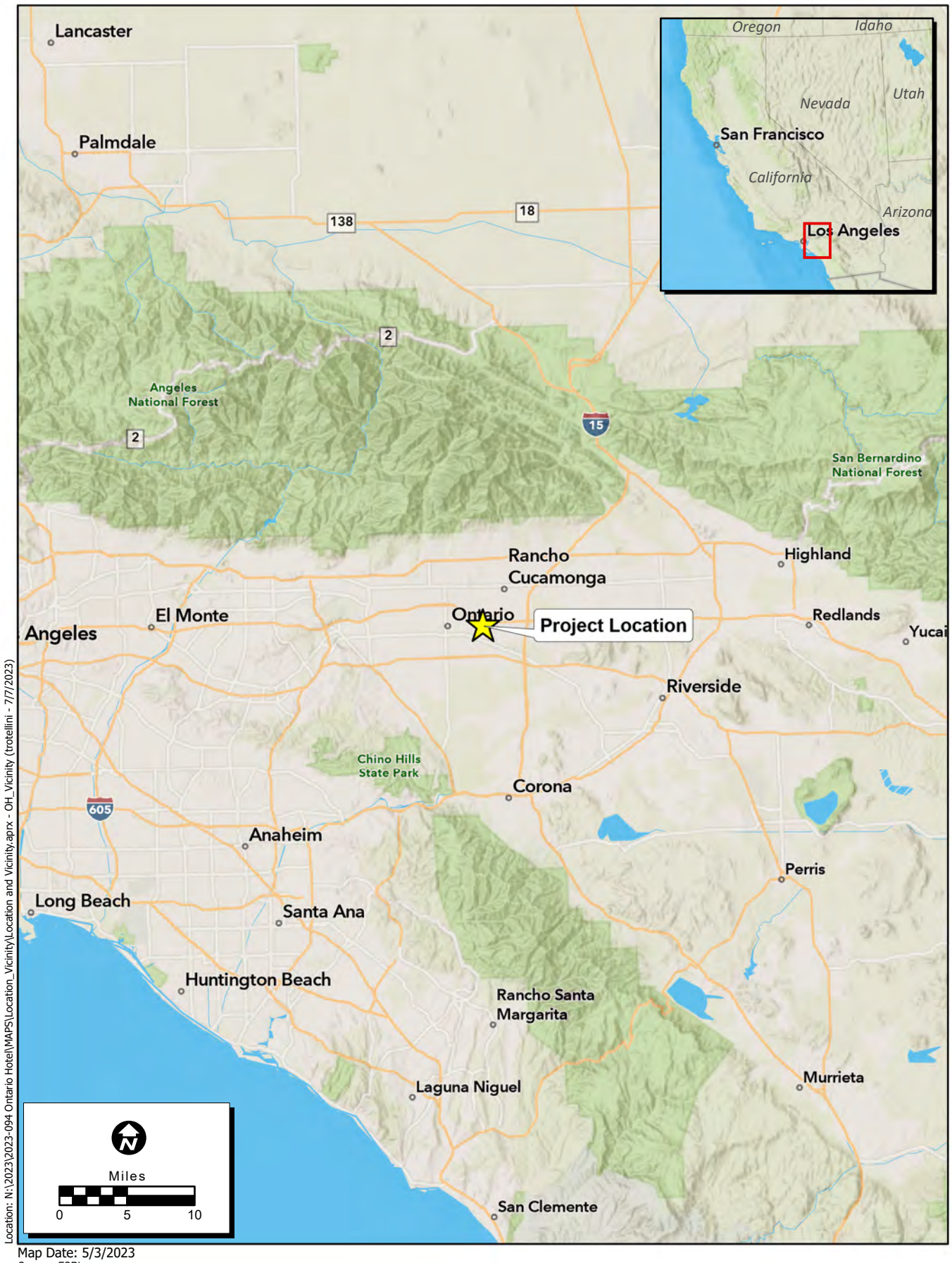
2.0 FEDERAL, STATE, AND LOCAL REGULATIONS

This biological reconnaissance survey was conducted to identify potential biological resource constraints and ensure compliance with federal, state, and local regulations regarding listed, protected, and special-status species and resources. The regulations are detailed below.

2.1 Federal Regulations

2.1.1 The Federal Endangered Species Act

The federal ESA protects plants and animals that are listed as endangered or threatened by the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service. Section 9 of the ESA prohibits the taking of endangered wildlife, where taking is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (50 Code of Federal Regulations [CFR] 17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any endangered plant on federal land and removing, cutting, digging up, damaging, or destroying any endangered plant on non-federal land in knowing violation of state law (16 U.S. Code [USC] 1538).



Location: N:\2023\2023-094 Ontario Hotel\MAPS\Location_Vicinity\Location and Vicinity.aprx - OH_Vicinity (trotellini - 7/7/2023)

Map Date: 5/3/2023

Sources: ESRI

Figure 1. Project Vicinity

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS



Location: N:\2023\2023-094 Ontario Hotel\MAPS\Location_Vicinity\Location and Vicinity.aprx - OH_Location (trotellini - 7/7/2023)

Map Date: 7/7/2023

Sources: ESRI

Figure 2. Project Location

Under Section 7 of the ESA, federal agencies are required to consult with the USFWS if their actions, including permit approvals or funding, could adversely affect a listed (or proposed) species (including plants) or its critical habitat. Through consultation and the issuance of a biological opinion, the USFWS may issue an incidental take statement allowing take of the species that is incidental to an otherwise authorized activity provided the activity will not jeopardize the continued existence of the species. Section 10 of the ESA provides for issuance of Incidental Take Permits (ITP) where no other federal actions are necessary provided a Habitat Conservation Plan (HCP) is developed.

2.1.2 National Environmental Policy Act

Signed into law on January 1, 1970, the National Environmental Policy Act (NEPA) requires all federal agencies to analyze the environmental impacts related to their proposed actions prior to making and implementing decisions or actions. This framework for evaluation of environmental and associated economic and social effects of proposed actions, described in 42 USC 4321, also provides the public opportunity to review and comment. Actions that are covered by NEPA include decision-making related to publicly owned facilities such as highways, permit applications, and federal land management.

2.1.3 Migratory Bird Treaty Act

The MBTA implements international treaties between the U.S. and other nations devised to protect migratory birds, any of their parts, eggs, and nests from activities including hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. As authorized by the MBTA, the USFWS issues permits to qualified applicants for the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (rehabilitation, education, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal. The regulations governing migratory bird permits can be found in 50 CFR Part 13 General Permit Procedures and 50 CFR Part 21 Migratory Bird Permits.

2.1.4 Federal Clean Water Act

The federal Clean Water Act's (CWA) purpose is to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." Section 404 of the CWA prohibits the discharge of dredged or fill material into Waters of the U.S. without a permit from the U.S. Army Corps of Engineers (USACE). The definition of Waters of the U.S. includes rivers, streams, estuaries, the territorial seas, ponds, lakes, and wetlands. Wetlands are defined as those areas "that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3 7b). The U.S. Environmental Protection Agency acts as a cooperating agency to set policy, guidance, and criteria for use in evaluation permit applications and reviews USACE permit applications.

The USACE regulates fill or dredging of fill material within its jurisdictional features. Fill material means any material used for the primary purpose of replacing an aquatic area with dry land or changing the bottom elevation of a water body. Substantial impacts to wetlands may require an individual permit. Projects that only minimally affect wetlands may meet the conditions of one of the existing Nationwide Permits. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for

Section 404 permit actions; this certification or waiver is issued by the State Water Quality Control Board, administered by each of nine California Regional Water Quality Control Boards.

In 2008, the U.S. Environmental Protection Agency (USEPA) and USACE issued a memorandum providing guidance on the definition of Waters of the U.S. (WOTUS) to include traditional navigable waters and their adjacent wetlands, and water that met either the relatively permanent or significant nexus standards (USACE and USEPA 2008). The USEPA and USACE have defined WOTUS several times, with three new definitions since 2015, including the Navigable Waters Protection Rule (NWPR), which became effective on June 22, 2020. In August 2021, a judge in the U.S. District Court for the District of Arizona ruled to vacate the NWPR. Following this order, the USEPA and USACE halted implementation of the NWPR nationwide and began interpreting Waters of the United States consistent with the pre-2015 regulatory regime.

On December 22, 2022, the USEPA and Department of the Army (Agencies) announced a final rule defining Waters of the U.S. The definition was founded upon the pre-2015 "Rapanos" decision, updated to reflect consideration of Supreme Court decisions, the science, and the Agencies' technical expertise. The final rule was published in the Federal Register on January 18, 2023, effective as of March 20, 2023.

On May 25, 2023, the Supreme Court of the United States adopted a narrower definition of Waters of the U.S. in the case Sackett v. Environmental Protection Agency. Under the majority opinion, Waters of the U.S. refers to "geographical features that are described in ordinary parlance as 'streams, oceans, rivers, and lakes' and to adjacent wetlands that are "indistinguishable" from those bodies of water due to a continuous surface connection."

On August 29, 2023 the Agencies issued a final rule to amend the final "Revised Definition of 'Waters of the United States'" rule, published in the Federal Register on September 8, 2023. This final rule conforms the definition of "waters of the United States" to the U.S. Supreme Court's May 25, 2023 decision in the case of *Sackett v. Environmental Protection Agency*. Parts of the January 2023 Rule are invalid under the Supreme Court's interpretation of the CWA in the Sackett decision. Therefore, the Agencies have amended key aspects of the regulatory text to conform it to the Court's decision.

The conforming rule became effective upon publication in the Federal Register. Where the January 2023 Rule is not enjoined, the agencies will implement the January 2023 Rule, as amended by the conforming rule.

2.2 State and Local Regulations

2.2.1 California Endangered Species Act

The California ESA generally parallels the main provisions of the ESA but, unlike its federal counterpart, the California ESA applies the take prohibitions to species proposed for listing (called "candidates" by the state). Section 2080 of the California Fish and Game Code prohibits the taking, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit or in the regulations. Take is defined in Section 86 of the California Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." The California ESA allows

for take incidental to otherwise lawful development projects. State lead agencies are required to consult with California Department of Fish and Wildlife (CDFW) to ensure that any action they undertake is not likely to jeopardize the continued existence of any endangered or threatened species or result in destruction or adverse modification of essential habitat.

2.2.2 Fully Protected Species

The State of California first began to designate species as *fully protected* prior to the creation of the federal and California ESAs. Lists of fully protected species were initially developed to provide protection to those animals that were rare or faced possible extinction, and included fish, amphibians and reptiles, birds, and mammals. Most fully protected species have since been listed as threatened or endangered under federal or California ESAs. The regulations that implement the Fully Protected Species Statute (California Fish and Game Code § 4700) provide that fully protected species may not be taken or possessed at any time. Furthermore, CDFW prohibits any state agency from issuing ITPs for fully protected species, except for necessary scientific research.

2.2.3 Native Plant Protection Act

The Native Plant Protection Act (NPPA) of 1977 (California Fish and Game Code §§ 1900-1913) was created with the intent to "*preserve, protect and enhance rare and endangered plants in this State*." The NPPA is administered by CDFW. The California Fish and Game Commission has the authority to designate native plants as "endangered" or "rare" and to protect endangered and rare plants from take. The California ESA of 1984 (California Fish and Game Code § 2050-2116) provided further protection for rare and endangered plant species, but the NPPA remains part of the California Fish and Game Code.

2.2.4 California Fish and Game Code

2.2.4.1 Streambed Alteration Agreement

Pursuant to Section 1602 of the California Fish and Game Code, a Streambed Alteration Agreement (SAA) application must be submitted for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake" (CDFW 2021). In Title 14 of the Code of California Regulations (CCR), Section 1.72, the CDFW defines a "stream" (including creeks and rivers) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation."

The CDFW's jurisdiction includes drainages with a definable bed, bank, or channel with the jurisdictional limit being the top-of-bank. It also includes areas that support intermittent, perennial, or subsurface flows; supports fish or other aquatic life; or supports riparian or hydrophytic vegetation. It also includes areas that have a hydrologic source.

The CDFW will determine if the proposed actions will result in diversion, obstruction, or change of the natural flow, bed, channel, or bank of any river, stream, or lake that supports fish or wildlife. The CDFW will

submit an SAA that includes measures to protect affected fish and wildlife resources; this SAA is the final proposal agreed upon by the CDFW and the applicant.

2.2.4.2 Migratory Birds

The CDFW enforces the protection of nongame native birds in §§ 3503, 3503.5, and 3800 of the California Fish and Game Code. Section 3513 of the California Fish and Game Code prohibits the possession or take of birds listed under the MBTA. These sections mandate the protection of California nongame native birds' nests and also make it unlawful to take these birds. All raptor species are also protected from "take" pursuant to California Fish and Game Code § 3503.5 and are also protected at the federal level by the MBTA of 1918 (USFWS 1918).

2.2.5 Porter-Cologne Water Quality Act

The Porter-Cologne Water Quality Control Act requires "any person discharging waste, or proposing to discharge waste, within any region that could affect the waters of the State to file a report of discharge" with the Regional Water Quality Control Boards (RWQCB) through State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures; California Code of Regulations [CCR], title 23, § 3855). "Waters of the State" is defined as any surface water or groundwater, including saline waters, within the boundaries of the state (California Water Code § 13050[e]). Pollution is defined as an alteration of the quality of the Waters of the State by waste to a degree that unreasonably affects its beneficial uses (California Water Code § 13050) and includes filling in Waters of the State. Note that CCR, title 23, § 3855 applies only to individual water quality certifications, but the new Procedures extend the application of § 3855 to individual waste discharge requirements for discharges of dredged or fill material to Waters of the State and waivers thereof.

Regardless, if a CWA Section 404 permit is not required for a project, a permit for impacts to Waters of the State may still be required under the Porter-Cologne Water Quality Control Act. To determine whether a project should be regulated pursuant to the Porter-Cologne Water Quality Control Act, the RWQCB considers whether project activities could impact the quality of Waters of the State.

2.2.6 California Environmental Quality Act Significance Criteria

Section 15064.7 of the CEQA Guidelines encourages local agencies to develop and publish the thresholds the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the CEQA checklist contained in Appendix G of the CEQA Guidelines. Appendix G provides examples of impacts that would normally be considered significant. Based on these examples, impacts to biological resources would normally be considered significant if a project would:

- have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;

- have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW or USFWS;
- interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and
- conflict with the provisions of an adopted HCP, Natural Community Conservation Plan, or other approved local, regional, or state HCP.

An evaluation of whether an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, state, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant according to CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish, or result in the permanent loss of an important resource on a population-wide or region-wide basis.

3.0 METHODS

3.1 Literature Review

Prior to conducting the biological reconnaissance survey, ECORP biologists performed a literature review using the CDFW's California Natural Diversity Database (CNDDB; CDFW 2023a) and the California Native Plant Society's (CNPS) Electronic Inventory (CNPSEI; CNPS 2023) to determine the special-status plant and wildlife species that have been documented near the Project site. ECORP searched CNDDB and CNPSEI records within the Project site boundaries as depicted on U.S. Geological Survey (USGS) 7.5-minute Redlands topographic quadrangle, plus the surrounding eight topographic quadrangles including Guasti, Fontana, Riverside West, Corona North, Prado Dam, Ontario, Mount Baldy, Cucamonga Peak, and Devore (USGS 2023). Due to the isolated nature of the Project site, the fact that it is surrounded by development, the Project site's long history of disturbance, and the lack of mobility for plant species, the CNDDB and CNPSEI searches for special-status plant species were limited to plant species that have been documented within five miles of the Project site. The CNDDB and CNPSEI contain records of reported occurrences of federally and/or state-listed endangered, threatened, proposed endangered or threatened species, California Species of Special Concern (SSC), or other special-status species or habitat that may occur within or near the Project. Additional information was gathered from the following sources and includes, but is not limited to:

- *State and Federally Listed Endangered and Threatened Animals of California* (CDFW 2023b);
- *Special Animals List* (CDFW 2023c);

- *The Jepson Manual: Vascular Plants of California* (Baldwin et al. 2012);
- *The Manual of California Vegetation*, 2nd Edition (Sawyer et al. 2009);
- Countywide – All Biotic Resources Overlay Map (County of San Bernardino 2012); and
- various online websites (e.g., Calflora 2023).

Using this information and observations in the field, a list of special-status plant and animal species that have the potential to occur on or near the Project site was generated. For the purposes of this assessment, special-status species are defined as plants or animals that:

- have been designated as either rare, threatened, or endangered by CDFW, CNPS, or the USFWS, or are protected under either the federal ESA or California ESA;
- are candidate species being considered or proposed for listing under these same acts;
- are fully protected by the California Fish and Game Code, §§ 3511, 4700, 5050, or 5515; or
- are of expressed concern to resource and regulatory agencies or local jurisdictions.

Special-status species reported for the region in the literature review or for which suitable habitat occurs on the site were assessed for their potential to occur within the Project site based on the following guidelines:

- *Present:* The species was observed onsite during a site visit or focused survey.
- *High:* Habitat (including soils and elevation factors) for the species occurs within the Project site and a known occurrence has recently been recorded (within the last 20 years) within five miles of the area.
- *Moderate:* Habitat (including soils and elevation factors) for the species occurs within the Project site and a documented observation occurs within the database search, but not within five miles of the area; a historic documented observation (more than 20 years old) was recorded within five miles of the Project site; or a recently documented observation occurs within five miles of the area and marginal or limited amounts of habitat occurs in the Project site.
- *Low:* Limited or marginal habitat for the species occurs within the Project site and a recently documented observation occurs within the database search, but not within five miles of the area; a historic documented observation (more than 20 years old) was recorded within five miles of the Project site; or suitable habitat strongly associated with the species occurs on site, but no records or only historic records were found within the database search.
- *Presumed Absent:* Species was not observed during a site visit or focused surveys conducted in accordance with protocol guidelines at an appropriate time for identification; habitat (including soils and elevation factors) does not exist on site; or the known geographic range of the species does not include the Project site.

Note that location information on some special-status species may be of questionable accuracy or unavailable. Therefore, for survey purposes, the environmental factors associated with a species' occurrence requirements may be considered sufficient reason to give a species a positive potential for occurrence. In addition, just because a record of a species does not exist in the databases does not mean it does not occur. In many cases, records may not be present in the databases because an area has not been surveyed for that species.

A review of the Natural Resources Conservation Service (NRCS 2023a) Web Soil Survey, NRCS Hydric Soils List (NRCS 2023b), National Wetlands Inventory (USFWS 2023a), and the corresponding USGS topographic maps was also conducted to determine if there were any blue line streams or drainages present on the Project site that potentially fall under the jurisdiction of either federal or state agencies.

3.2 Field Surveys

3.2.1 Biological Reconnaissance Survey

The biological reconnaissance survey was conducted by walking the entire Project site and a 500-foot buffer, where accessible, to determine the vegetation communities and wildlife habitats present on and adjacent to the site. Areas that were not accessible by foot were scanned using binoculars for suitable habitat. The biologists documented the plant and animal species present on the Project site, and the location and condition of the Project site were assessed for the potential to provide habitat for special-status plant and wildlife species. Data were recorded on a Global Positioning System (GPS) unit, field notebooks, or maps. Photographs were also taken during the survey to provide visual representation of the conditions within the Project site. The Project site was also examined to assess its potential to facilitate wildlife movement or function as a movement corridor for wildlife moving throughout the region. In addition, the biologists documented the vegetation communities present on the Project site.

Plant and wildlife species, including any special-status species that were observed during the survey, were recorded. Plant nomenclature follows that of *The Jepson Manual: Vascular Plants of California* (Baldwin et al. 2012). Wildlife nomenclature follows Society for the Study of Amphibians and Reptiles (2017), *Check-list of North American Birds* (Chesser et al. 2020), and the *Revised Checklist of North American Mammals North of Mexico* (Bradley et al. 2014).

In instances where a special-status species was observed, the date, species, location and habitat, and GPS coordinates were recorded. The locations of special-status species observations were recorded using a handheld GPS in North American Datum 1983, Universal Transverse Mercator coordinates, Zone 11S.

3.2.2 Tree Inventory

The tree inventory was conducted by a certified arborist, to ensure compliance with the minimum filling requirements for application submittal with the City of Ontario, Planning Department. During the survey, the area identified by Diversified Pacific as the Project site and the areas immediately adjacent to the Project site were walked and a sub-meter accuracy GPS unit was used in conjunction with ESRI's Collector Application to collect location and survey data. Data was collected for all trees that were either rooted

within the Project area, rooted immediately adjacent to the Project area, and/or had canopy overhang within the Project area.

Data collected for all inventoried trees included tree ID number, species, Diameter at Breast Height (DBH), and number of trunks. A formal assessment of health and structure was not conducted during this inventory. For the purposes of this inventory, DBH is defined as the trunk diameter at 4.5 feet above grade. Occasional deviations from this height were required for trees with branching at this level or with unusual structural configurations (e.g., horizontal trunks). On multi-trunked trees (trees with multiple vertical trunks in contact at or near ground level), the report lists total aggregate diameter along with the total number of trunks that were measured. Maximum dripline radius refers to the maximum distance from the trunk to the edge of the canopy.

Please note that the survey results are intended for general Project planning purposes only; therefore, these results should not be considered a detailed tree analysis (i.e., the results do not include hazard assessment, tree health diagnosis, preservation/removal recommendations, or pruning advisement).

4.0 RESULTS

Summarized below are the results of the literature review and field surveys, including site characteristics, vegetation communities, wildlife, special-status species, and special-status habitats (including any potential wildlife corridors).

4.1 Literature Review

4.1.1 Special-Status Plants and Wildlife

The literature review and database searches identified 12 special-status plant species records within five miles of the Project site and 50 special-status wildlife species were identified in the nine-quadrangle search, that have could occur on and/or near the Project site. A list was generated from the results of the literature review and the Project site was evaluated for suitable habitat that could support any of the special-status plant or wildlife species on the list. The Project site is located within the San Bernardino County biotic overlay for burrowing owl.

4.1.2 U.S. Fish and Wildlife Service Designated Critical Habitat

The Project site is not located within or near any USFWS-designated critical habitat (USFWS 2023b). There are no expected impacts to the critical habitat because there is no critical habitat on or adjacent to the Project site.

4.1.3 Preliminary Aquatic Resources Delineation Literature Review

The Project site itself does not include any state- or federally protected wetlands or Waters of the U.S. The desktop review of the National Wetlands Inventory (NWI) and the NRCS Web Soil Survey Map showed several mapped aquatic features outside of the Project boundary in the 500-foot buffer, including Cucamonga Creek, a concrete lined flood control channel, located adjacent to the Project site along the eastern border (NRCS 2023a, USFWS 2023b). The NWI mapping designation for Cucamonga Creek is

R4SBCr, which indicates that it is a riverine, intermittent streambed that is seasonally flooded and has an artificial substrate. Recent aerial photographs show evidence that aquatic features are likely present in the locations mapped by NWI, outside of the Project site. Although a desktop delineation was conducted, no formal delineation of aquatic resources was conducted.

4.2 Biological Reconnaissance Survey

The biological reconnaissance survey was conducted on June 28, 2023, by ECORP senior wildlife biologist Phillip Wasz. Summarized below are the results of the biological reconnaissance survey including site characteristics, plant communities, wildlife, special-status species, and special-status habitats (including any potential wildlife corridors). Weather conditions during the survey are summarized in Table 1.

Table 1. Weather Conditions During the Survey

Date	Surveyors	Time		Temperature (˚F)		Cloud Cover (%)		Wind Speed (mph)	
		Start	End	Min	Max	Min	Max	Min	Max
6/28/23	Phillip Wasz	0100	1400	83	83	0	0	0	5

Note: °F = Degrees Fahrenheit; mph = Miles per Hour

4.2.1 Property Characteristics

The Project site consists of an undeveloped lot containing ruderal vegetation that appears to have a long history of disturbance. The Project contained scattered river red gum (*Eucalyptus camaldulensis*) and Peruvian pepper (*Schinus molle*) trees and stockpiled dirt mounds and rocks were also present on the Project site. Soil types within the Project site consist of Tujunga loamy sand, 0 to 5 percent slopes (NRCS 2023a). The Project site is bounded by East Holt Boulevard, East Guasti Road, and a dike. The Project site is surrounded by development on all four sides. Historical aerial images show that the site was in active agriculture production until the early to mid-1980s and has since remained undeveloped. Over the years the site has been maintained through disking and mowing and evidence of disking within the last year or was observed during the survey. Aerial images from 2013 show that a large portion of the Project site in the northwest corner was completely graded and graveled and has remained relatively free of vegetation since then. Representative photographs of the Project site are presented in Appendix A.

4.2.2 Vegetation Communities

The Project site is within a developed environment that is generally subjected to repeated and ongoing disturbance from human activities. The vegetation communities on the Project site were identified as Eucalyptus groves and disturbed California buckwheat (*Eriogonum fasciculatum*) scrub (Figure 3). One land cover type, disturbed/developed land, was also observed on the Project site. Other disturbances included vehicle tracks, disking, mowing, and scattered trash. The vegetation height throughout most of the site was between 1 to 24 inches at the time of the survey.



Map Contents

- Project Area
- Dead Snags

Tree Locations

DBH ≥ 4 Inches

- Eucalyptus camaldulensis
- Pepper tree

DBH < 4 Inches

- Eucalyptus camaldulensis
- Pepper tree
- Tree tobacco

Sapling

- Eucalyptus camaldulensis
- Pepper tree

Vegetaiton Communities and Land Cover Types

- Disturbed California Buckwheat Scrub - 5.712 acres
- Disturbed/Developed - 3.080 acres
- Eucalyptus Grove - 1.682 acres

Sources: ESRI, Maxar (2023)
Other Related Info if Needed



Location: N:\2023\2023-094 Ontario Hotel\MAPS\Biological_Resources\Biological Resources.aprx - OH Biological Survey Results (trotellini - 9/25/2023)

Map Date: 9/22/2023

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Scale in Feet
0 50 100

Figure 3. Biological Survey Results

4.2.3 Plants

Plant species observed on the Project site were generally characteristic of disturbed native vegetation communities. Dominant plant species observed on the Project site included native and nonnative species, including Spanish lotus (*Acmispon americanus*), California buckwheat, river red gum, tree tobacco (*Nicotiana glauca*), red stemmed filaree (*Erodium cicutarium*), jimson weed (*Datura wrightii*), Russian thistle (*Salsola tragus*), mustard (*Brassica* spp.), and red brome (*Bromus madritensis* ssp. *rubens*). A full list of plant species observed on the Project site is included in Appendix B.

4.2.4 Wildlife

Despite the disturbed urban nature of the Project site, wildlife species were present. The species observed during the biological survey included one mammal, California ground squirrel (*Otospermophilus beecheyi*), one reptile, side blotched lizard (*Uta stansburiana*), and multiple bird species common in urban landscapes. A full list of wildlife species observed on and immediately adjacent to the Project site is included in Appendix C.

4.2.5 Potential for Special-Status Plant and Wildlife Species to Occur on the Project Site

The literature review and database searches identified 12 special-status plant species records within five miles of the Project site and 50 special-status wildlife species were identified in the nine-quadrangle search, that have could occur on and/or near the Project site. However, due to the high level of human disturbance at the Project site and lack of high-quality habitat for the special-status plant and wildlife species, many of the species are presumed absent from the Project site.

4.2.5.1 Special-Status Plants

There were 12 special-status plant species that appeared in the literature review and database searches as occurring within five miles of the Project site (CDFW 2023a; CNPS 2023). Of those, only one species federally and/or state listed (Slender-horned spineflower [*Dodecahema leptoceras*]). A list was generated from the results of the literature review and the Project was evaluated for suitable habitat that could support any of the special-status plant species on the list.

Due to the isolated nature of the Project site, the fact that it is surrounded by development, the Project site's long history of disturbance, and the lack of mobility for plant species, the results of the literature review were limited to plant species occurring within five miles of the Project site. Descriptions of the CNPS California Rare Plant Rank (CRPR) designations can be found in Table 2. A Potential for Occurrence table outlining each species and their designations can be found in Appendix D.

Table 2. CRPR Status Designations	
List Designation	**Meaning**
1A	Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere
1B	Plants Rare, Threatened, or Endangered in California and Elsewhere
2A	Plants Presumed Extirpated in California, But Common Elsewhere
2B	Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
3	Plants about which more information is needed; a review list
4	Plants of limited distribution; a watch list
List .1, .2 and .3 extension meanings:	
.1	Seriously threatened in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)
.2	Moderately threatened in California (20 to 80 percent occurrences threatened/moderate degree and immediacy of threat)
.3	Not very threatened in California (less than 20 percent of occurrences threatened/low degree and immediacy of threat or no current threats known)

Note: According to CNPS (Skinner and Pavlik 1994), plants on Lists 1B and 2 meet definitions for listing as threatened or endangered under Section 1901, Chapter 10, of the California Fish and Game Code (California Department of Fish and Game 1984). This interpretation is inconsistent with other definitions.

4.2.5.2 Plant Species with a Moderate Potential to Occur

Two species were found to have a moderate potential to occur on the Project site. Although, none of the species were identified on the Project site during the biological reconnaissance survey, the site provides marginal or limited amounts of habitat (including soils and elevation factors), and recently documented (less than 20 years old) observations occur within five miles of the Project site. The special-status plant species with a moderate potential are listed below and detailed in Appendix D.

- Parry's spineflower (*Chorizanthe parryi* var. *parryi*), CRPR 1B.1; and
- Brand's star phacelia (*Phacelia stellaris*), CRPR 1B.1.

4.2.5.3 Plant Species with a Low Potential to Occur

The following three species have a low potential to occur on the Project site because limited or marginally suitable habitat for the species occurs on site and a known historic documented occurrence (more than 20 years old) was recorded within five miles of the Project site; or suitable habitat strongly associated with the species occurs on site, but no records were found in the database search. The special-status plant species with a low potential are listed below and detailed in Appendix D.

- Mesa Horkelia (*Horkelia cuneata* var. *puberula*), CRPR 1B.1;
- Robinson's pepper grass (*Lepidium virginicum* var. *robinsonii*), CRPR 4.3; and

- San Bernardino aster (*Symphyotrichum defoliatum*), CRPR 1B.2.

4.2.5.4 Plant Species Presumed Absent

The following seven species were presumed absent from the Project site due to lack of suitable habitat on the Project site (including elevation, soils, vegetation communities), or because the Project is located outside of the known range for the species:

- California saw-grass (*Cladium californicum*), CRPR 2B.2;
- Slender-horned spineflower (*Dodecahema leptoceras*), CRPR 1B.1;
- California muhly (*Muhlenbergia californica*), CRPR 4.3;
- Aparejo grass (*Muhlenbergia utilis*), CRPR 2B.2;
- Prostrate vernal pool navarretia (*Navarretia prostrata*), CRPR 1B.2; and
- White rabbit-tobacco (*Pseudognaphalium leucocephalum*), CRPR 2B.2; and
- Salt spring checkerbloom (*Sidalcea neomexicana*), CRPR 2B.2.

4.2.5.5 Special-Status Wildlife

The literature search documented 50 special-status wildlife species that occur within the vicinity of the Project site. A list was generated from the results of the literature review and the Project site was evaluated for suitable habitat that could support any of the special-status wildlife species on the list. The Project site's disturbed nature, proximity to commercial development, and the presence of anthropogenic influences on the site likely preclude many of these species from occurring. A table outlining each species, their designations, and potential for occurrence on the Project site can be found in Appendix D.

4.2.5.6 Wildlife Species with a Moderate Potential to Occur

Five species were found to have a moderate potential to occur on the Project site. Although these species were not present on the Project site during the biological reconnaissance survey, habitat for the species occurs onsite, and a known occurrence has been reported in the database, but not within five miles of the site; or a historic documented observation (more than 20 years old) was recorded within five miles of the Project site; or a recently documented observation occurs within five miles of the site and marginal or limited amounts of habitat occurs onsite.

Crotch Bumble Bee

The Crotch bumble bee (*Bombus crotchii*) is a candidate species for listing (endangered) under the California ESA and is therefore afforded all the same legal protections as a fully listed species would receive under the California ESA. The Crotch bumble bee occurs in open grassland and scrub habitats ranging from coastal California, east to the Sierra-Cascade crest, and south into Mexico. The flight period for queens in California is from late February to late October, peaking in early April with a second pulse in

July. The flight period for workers and males in California is from late March through September, peaking in early July. The species prefers a diet consisting of certain plant species including milkweeds (*Asclepias* sp.), dusty maidens (*Chaenactis* sp.), lupines (*Lupinus* sp.), medics (*Medicago* sp.), phacelias (*Phacelia* sp.), sages (Salvia sp.), clarkias (*Clarkia* sp.), poppies (*Papaver* sp. or *Eschscholzia* sp.), and wild buckwheat (*Eriogonum* sp.). The nests of the species are often located underground in abandoned rodent nests or above ground in tufts of grass, old bird nests, rock piles, or cavities in dead trees. Overwintering sites utilized by Crotch bumble bee mated queens include soft, disturbed soils, or under leaf litter or other debris. Marginally suitable habitat was present within the disturbed California buckwheat scrub and rodent burrows for nesting and overwintering are present on the Project site. Additionally, there were two recent CNDDB occurrences from 2019 and 2020 (OCC 247 and 316) approximately 1.7 miles east of the Project site and one historical occurrence (OCC 187) recorded approximately 1.7 miles east of the Project site. Due to the presence of marginally suitable habitat for this species and the recent documented records near the Project site, this species has been determined to have a moderate potential to occur on the Project site.

Southern California Legless Lizard

The Southern California legless lizard (*Anniella stebbinsi*) is a CDFW SSC. The southern California legless lizard is found in coastal sand dunes and a variety of interior habitats including sandy washes and alluvial fans. The species also occurs in moist warm loose soil with plant cover and sparsely vegetated beach dunes, pine-oak woodlands, desert scrub, chaparral, and stream terraces with sycamores, cottonwoods, or oaks and is sometimes found in suburban gardens. Suitable habitat for this species is present within the disturbed California buckwheat scrub and Eucalyptus groves vegetation. Two historical CNDDB records were identified within five miles of the Project site, including OCC 11 from 1993 located approximately 0.5 miles south of the Project site and OCC 135 from 1938, which has a polygon that overlaps with the Project site centered around Cucamonga Creek. However, this observation was recorded when Cucamonga Creek was a natural channel that meandered through agriculture lands. Since that time, it has been completely channelized and concrete lined, and no longer represents suitable habitat for the species. Due to the presence of marginally suitable habitat for this species and the documented records near the Project site, this species has been determined to have a moderate potential to occur on the Project site.

Burrowing Owl

The burrowing owl (*Athene cunicularia*) is a CDFW SSC and state candidate for listing (endangered). Burrowing owls historically occurred throughout much of California and the western U.S.; however, many former California populations have been extirpated. Burrowing owls typically inhabit open habitats, primarily grasslands and deserts. Burrowing owls require burrows for roosting and nesting cover. Although they often nest in abandoned California ground squirrel (*Otospermophilus beecheyi*) burrows, they will also use other small mammal burrows, pipes, culverts, and nest boxes, particularly where burrows are scarce (Zeiner et al. 1990). The Project site provided marginally suitable burrowing owl habitat at the time of the survey. The low-growing vegetation was suitable for burrowing owls and soils within the Project site consisted of friable, sandy loam soils. The site also had many small mammal burrows of suitable size for burrowing owls. Due to the mobile nature of the burrowing owl, it is possible for

burrowing owl to move into the site due to the presence suitable burrows. There are 20 recent CNDDB occurrences of the species within five miles of the Project site (Occurrences: 636, 664, 1788, 561, 565, 1045, 1789, 940, 956, 957, 1198, 1199, 1787, 1044, 1935, 1936, 1937, 1046, 1790, 1792; CDFW 2023a). The most recent occurrence was recorded 1.7 miles away from the Project in 2016 (Occurrence 561; CDFW 2023a), the closest was recorded 1.6 miles away in 2004 (Occurrence 1045; CDFW 2023a) and the furthest was recorded 5.2 miles away in 2006 (Occurrence 957; CDFW 2023a). Based on the presence of marginally suitable burrowing habitat and the recent records of the species within five miles of the Project site, this species has a moderate potential to occur on the Project site.

Northwestern San Diego Pocket Mouse

The northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*) is a CDFW SSC that is typically found in sandy desert fans and shrub communities such as coastal sage scrub, chaparral, sagebrush, desert wash, desert scrub, desert succulent scrub, pinyon-juniper, and annual grassland habitats. Suitable habitat for this species is present in the disturbed California buckwheat scrub on the Project site. There were two recent CNDDB occurrences within five miles of the Project site (64, 65). Due to the presence of suitable habitat for this species and the recent documented records near the Project Area, this species has been determined to have a moderate potential to occur on the Project site.

Los Angeles Pocket Mouse

The Los Angeles Pocket Mouse (LAPM, *Perognathus longimembris brevinasus*) is a CDFW SSC that is typically found in areas containing fine sandy soils or sandy loams, which are excellent substrates for burrow excavation by this diminutive animal. Like many heteromyids, LAPM dig burrow systems near the base of shrubs or amidst other vegetation types and position themselves within the burrow as environmental conditions change. LAPM most commonly occur in coastal sage scrub and grassland habitats, but also in alluvial fan sage scrub habitats. Plant species composition varies greatly among LAPM occupied habitat areas, but typically encompasses both native and nonnative plants commonly associated with sandy or granular soils, and often in lower elevational alluvial systems. Marginally suitable habitat for this species was present within the disturbed California buckwheat scrub vegetation. There were three historic CNDDB occurrences (OCC 33, 36, 45) and one recent occurrence (OCC 44) of this species within five miles of the Project site. Due to the presence of suitable habitat for this species and the recent documented records near the Project Area, this species has been determined to have a moderate potential to occur on the Project site.

4.2.5.7 Wildlife Species with a Low Potential to Occur

The following four species have a low potential to occur on the Project site because limited habitat for the species occurs on site and a known occurrence has been reported in the database, but not within five miles of the site; or a historic documented observation (more than 20 years old) was recorded within five miles of the Project site; or suitable habitat strongly associated with the species occurs on site, but no records were found in the database search. The disturbed California buckwheat scrub and/or Eucalyptus groves habitat on the Project site on the Project site provides marginally suitable habitat for these species. The special-status wildlife species with a low potential are listed below and detailed in Appendix E

- California glossy snake (*Arizona elegans occidentalis*) CDFW SSC;
- Coastal whiptail (*Aspidoscelis tigris stejnegeri*), CDFW SSC;
- Red-diamond rattlesnake (*Crotalus ruber*), CDFW SSC;
- Coast horned lizard (*Phrynosoma blainvillii*) CDFW SSC;

4.2.5.8 Wildlife Species Presumed Absent

A total of 41 species were presumed absent. These species were not present at the site during the biological reconnaissance survey and the habitat present on the Project site was not suitable. For some species, there were historic or recent sightings near the site; however, due to the lack of suitable habitat within the Project site, these species are presumed absent. The species presumed absent are listed below and a table outlining each species, their designations, and potential for occurrence on the Project site can be found in Appendix D:

- Quino checkerspot butterfly (*Euphydryas editha quino*), federally listed (endangered);
- Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*), federally listed (endangered);
- Santa Ana sucker (*Catostomus santaanae*), federally listed (threatened);
- Arroyo chub (*Gila orcutti*), CDFW SSC;
- Steelhead - southern California Distinct Population Segment (*Oncorhynchus mykiss irideus* pop. *10)*, federally listed (endangered), state candidate for listing (endangered);
- Santa Ana speckled dace (*Rhinichthys osculus* ssp. *8*), CDFW SSC;
- Arroyo Toad (*Anaxyrus californicus*), federally listed (endangered), CDFW SSC;
- Foothill yellow-legged frog South Coast Distinct Population Segment (*Rana boylii* pop. 6), state listed (endangered);
- Southern mountain yellow-legged frog (*Rana muscosa*), federally listed (endangered), state listed (endangered);
- Western spadefoot (*Spea hammondii*), CDFW SSC;
- Coast range newt (*Taricha torosa*). CDFW SSC;
- Southern rubber boa (*Charina umbratical*), state listed (threatened);
- San Diego banded gecko (*Coleonyx variegatus abbotti*), CDFW SSC;
- Western pond turtle (*Emys marmorata*), CDFW SSC;
- Two-striped gartersnake (*Thamnophis hammondii*), CDFW SSC;
- Tricolored blackbird (*Agelaius tricolor*), state listed (threatened), CDFW SSC;

- Golden eagle (*Aquila chrysaetos*), CDFW Fully Protected;
- Grasshopper sparrow (*Ammodramus savannarum*), CDFW SSC;
- Long-eared owl (*Asio otus*), CDFW SSC;
- Swainson's hawk (*Buteo swainsoni*) state listed (threatened).
- Coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*), CDFW SSC;
- Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), federally listed (threatened), state-listed (endangered);
- Yellow rail (*Coturnicops noveboracensis*), CDFW SSC;
- Black swift (*Cypseloides niger*), CDFW SSC;
- White-tailed kite (*Elanus leucurus*), CDFW Fully Protected;
- Southwestern willow flycatcher (*Empidonax traillii extimus*), federally listed (endangered), state listed (endangered);
- Yellow-breasted chat (*Icteria virens*), CDFW SSC;
- California black rail (*Laterallus jamaicensis coturniculus*), state listed (threatened), CDFW Fully Protected;
- Coastal California gnatcatcher (*Polioptila californica californica*), federally listed (threatened), CDFW SSC;
- Yellow warbler (*Setophaga petechia*), CDFW SSC;
- Least Bell's vireo (*Vireo bellii pusillus*), federally listed (endangered), state listed (endangered);
- Pallid bat (*Antrozous pallidus*), CDFW SSC;
- Pallid San Diego pocket mouse (*Chaetodipus fallax pallidus*), CDFW SSC;
- San Bernardino kangaroo rat (*Dipodomys merriami parvus*), federally listed (endangered), state candidate for listing (endangered), CDFW SSC;
- Stephens' kangaroo rat (*Dipodomys stephensi*), federally listed (threatened), state listed (threatened);
- Western mastiff bat (*Eumops perotis californicus*), CDFW SSC;
- Western yellow bat (*Lasiurus xanthinus*), CDFW SSC;
- San Diego desert woodrat (*Neotoma lepida intermedia*), CDFW SSC;
- Pocketed free-tailed bat (*Nyctinomops femorosaccus*), CDFW SSC;
- Big free-tailed bat (*Nyctinomops macrotis*), CDFW SSC; and

- Desert bighorn sheep (*Ovis canadensis nelsoni*), CDFW Fully Protected.

4.2.6 Raptors and Migratory Birds

Potential nesting habitat for migratory birds and raptors protected by the MBTA and California Fish and Game Code was present in the river red gum and Peruvian pepper trees scattered through the Project site. Suitable nesting habitat for ground-nesting bird species, such as mourning doves, was also present on the Project site. Therefore, nesting birds could use the Project site during the nesting bird season (typically February 1 through August 31).

4.2.7 Wildlife Movement Corridors, Linkages, and Significant Ecological Areas

The concept of habitat corridors addresses the linkage between large blocks of habitat that allow the safe movement of mammals and other wildlife species from one habitat area to another. The definition of a corridor varies, but corridors may include such areas as greenbelts, refuge systems, underpasses, and biogeographic land bridges. In general, a corridor is described as a linear habitat embedded in a dissimilar matrix that connects two or more large blocks of habitat. Wildlife movement corridors are critical for the survivorship of ecological systems for several reasons. Corridors can connect water, food, and cover sources, spatially linking these three resources with wildlife in different areas. In addition, wildlife movement between habitat areas provides for the potential of genetic exchange between wildlife species populations, thereby maintaining genetic variability and adaptability to maximize the success of wildlife responses to changing environmental conditions. This is especially critical for small populations subject to loss of variability from genetic drift and effects of inbreeding. The nature of corridor usage and wildlife movement patterns vary greatly among species.

The Project site was assessed for its ability to function as a wildlife corridor. The Project site is disturbed and surrounded by paved roads and development. Although the Project site is undeveloped, it is surrounded by development and isolated from large, contiguous blocks of native habitat. The Project site is bordered by East Holt Boulevard to the north, East Guasti Road to the south and west, and a flood control channel to the east. These features isolate the habitat that is present within the Project site from its surrounding area and provide potential barriers to wildlife movement. Additionally, the lack of consistent vegetative cover within the Project site, the urban nature of the site, and the high level of disturbance on and in the vicinity of the site would likely deter wildlife from using the Project site for movement opportunities. Although wildlife could pass through the site while moving about their home range, it would not be considered a movement corridor, linkage, or significant ecological area.

4.3 Tree Inventory

The Tree inventory was conducted by Ms. Carley Adams, a certified arborist (International Society of Arboriculture Certification #WE 11837A). During the survey, a total of 63 trees were inventoried and mapped within the Project area or immediately adjacent to the Project area. Of the 63 trees included in the inventory, a total of 56 trees had a DBH of four inches or greater and all are nonnative or ornamental species. The nonnative trees inventoried included river red gum, Peruvian peppertree, and tree tobacco. Tree tobacco was included in the tree survey because it is considered a shrub or a small-tree; however, this species is listed as moderately invasive by the California Invasive Plant Council (Cal-IPC) and is

generally more shrub-like. Therefore, this species is typically not included in the mitigation planning process. In addition to the adult individuals of river red gum and Peruvian peppertree, 48 saplings of river red gum and 10 saplings of Peruvian peppertree were also mapped. Figure 3 shows the locations of all the trees and saplings included in the inventory and Table 3 below provides the data collected for each tree. Representative photographs of the trees inventoried in are provided in Attachment A.

Table 3. Tree Inventory Results

Tree ID Number	Common Name	Scientific Name	DBH (inches)	Number of Trunks
110	Tree Tobacco*	*Nicotiana glauca*	3.0	1
26	Tree Tobacco*	*Nicotiana glauca*	2.5	1
21	Tree Tobacco*	*Nicotiana glauca*	4.0	2
22	Tree Tobacco*	*Nicotiana glauca*	4.0	2
23	Tree Tobacco*	*Nicotiana glauca*	4.0	2
24	Tree Tobacco*	*Nicotiana glauca*	5.0	2
25	Tree Tobacco*	*Nicotiana glauca*	5.5	3
1	River Red Gum	*Eucalyptus camaldulensis*	31.0	2
2	River Red Gum	*Eucalyptus camaldulensis*	18.0	1
3	River Red Gum	*Eucalyptus camaldulensis*	23.0	2
4	River Red Gum	*Eucalyptus camaldulensis*	20.0	4
5	River Red Gum	*Eucalyptus camaldulensis*	26.5	4
107	River Red Gum	*Eucalyptus camaldulensis*	14.0	2
105	River Red Gum	*Eucalyptus camaldulensis*	45.5	7
106	River Red Gum	*Eucalyptus camaldulensis*	4.0	1
103	River Red Gum	*Eucalyptus camaldulensis*	21.0	1
104	River Red Gum	*Eucalyptus camaldulensis*	18.0	2
102	River Red Gum	*Eucalyptus camaldulensis*	21.0	4
101	River Red Gum	*Eucalyptus camaldulensis*	24.0	1
100	River Red Gum	*Eucalyptus camaldulensis*	9.5	1
99	River Red Gum	*Eucalyptus camaldulensis*	7.0	1
10	River Red Gum	*Eucalyptus camaldulensis*	42.0	3
11	River Red Gum	*Eucalyptus camaldulensis*	29.0	3
14	River Red Gum	*Eucalyptus camaldulensis*	3.0	1
17	River Red Gum	*Eucalyptus camaldulensis*	7.0	3

Table 3. Tree Inventory Results

Tree ID Number	Common Name	Scientific Name	DBH (inches)	Number of Trunks
18	River Red Gum	*Eucalyptus camaldulensis*	32.0	3
19	River Red Gum	*Eucalyptus camaldulensis*	4.0	1
20	River Red Gum	*Eucalyptus camaldulensis*	10.5	4
27	River Red Gum	*Eucalyptus camaldulensis*	17.0	2
29	River Red Gum	*Eucalyptus camaldulensis*	23.5	5
30	River Red Gum	*Eucalyptus camaldulensis*	7.0	1
34	River Red Gum	*Eucalyptus camaldulensis*	3.5	1
35	River Red Gum	*Eucalyptus camaldulensis*	17.0	3
38	River Red Gum	*Eucalyptus camaldulensis*	4.0	2
36	River Red Gum	*Eucalyptus camaldulensis*	6.5	1
37	River Red Gum	*Eucalyptus camaldulensis*	15.5	2
42	River Red Gum	*Eucalyptus camaldulensis*	9.5	2
44	River Red Gum	*Eucalyptus camaldulensis*	12.0	4
43	River Red Gum	*Eucalyptus camaldulensis*	10.5	2
46	River Red Gum	*Eucalyptus camaldulensis*	3.0	2
47	River Red Gum	*Eucalyptus camaldulensis*	15.0	2
48	River Red Gum	*Eucalyptus camaldulensis*	7.0	1
39	River Red Gum	*Eucalyptus camaldulensis*	30.0	2
40	River Red Gum	*Eucalyptus camaldulensis*	23.0	2
41	River Red Gum	*Eucalyptus camaldulensis*	31.0	1
61	River Red Gum	*Eucalyptus camaldulensis*	17.5	5
62	River Red Gum	*Eucalyptus camaldulensis*	16.0	2
65	River Red Gum	*Eucalyptus camaldulensis*	6.5	2
67	River Red Gum	*Eucalyptus camaldulensis*	11.5	4
68	River Red Gum	*Eucalyptus camaldulensis*	47.0	4
97	River Red Gum	*Eucalyptus camaldulensis*	25.5	3
91	River Red Gum	*Eucalyptus camaldulensis*	2.0	1
80	River Red Gum	*Eucalyptus camaldulensis*	14.0	1
79	River Red Gum	*Eucalyptus camaldulensis*	77.0	3

Table 3. Tree Inventory Results

Tree ID Number	Common Name	Scientific Name	DBH (inches)	Number of Trunks
90	River Red Gum	*Eucalyptus camaldulensis*	40.5	3
89	River Red Gum	*Eucalyptus camaldulensis*	2.0	1
88	River Red Gum	*Eucalyptus camaldulensis*	5.5	3
94	River Red Gum	*Eucalyptus camaldulensis*	28.0	2
93	River Red Gum	*Eucalyptus camaldulensis*	9.0	1
92	River Red Gum	*Eucalyptus camaldulensis*	24.0	2
84	Peruvian peppertree	*Schinus molle*	19.0	5
85	River Red Gum	*Eucalyptus camaldulensis*	42.0	2
87	River Red Gum	*Eucalyptus camaldulensis*	34.0	2

*Tree tobacco was included in the tree survey because it is considered a shrub or a small-tree; however, this species is listed as moderately invasive by Cal-IPC and is generally more shrub-like. Therefore, this species is typically not included in the mitigation planning process.

5.0 IMPACT ANALYSIS

5.1 Special-Status Species

The Project site consists of disturbed land and is situated within an urban environment, surrounded by high levels of disturbance. Vegetation communities onsite consisted primarily of disturbed California buckwheat scrub and Eucalyptus groves. Disturbances observed on the site included vehicle tracks, scattered trash, grading along the western boundary, and evidence of mowing and/or disking, likely associated with weed abatement. The literature review and database searches identified 12 special-status plant species that have been documented within five miles of the Project site. Of the 12 special-status plant species, two species (Parry's spineflower and Brand's star phacelia) were determined to have a moderate potential to occur on the Project site based on the habitat present and documented species records within five miles of the Project site. However, due to its isolated nature and history of disturbance the Project Site only provides marginally or limited amounts of suitable habitat (including soils, vegetation, and elevation factors). Further, Parry's spineflower and Brand's star phacelia are not federally or State-listed species. Therefore, it is not likely that the Project would require a mechanism for "take" of federally or state-listed plant species. If present on the Project site, these two species are only expected to occur in very low density and Project-related impacts would not be expected to contribute to the overall decline of populations for these species. Therefore, significant impacts to special-status plant species are not expected to occur.

The literature review and database searches identified 50 special-status wildlife species that could occur in the vicinity of the Project site, and although no special-status wildlife species were documented during the biological survey, the site contained suitable habitat for five species (that were determined to have a moderate potential and four species that were determined to have a low potential, based on the presence of suitable habitat in the Project Area and recent or historic documented records of the species occurring within 5 miles of the Project site. The remaining 41 special-status wildlife species were presumed absent from the Project Area due to lack of suitable habitat or because the Project site is outside of the known species range.

The five species with a moderate potential to occur included Crotch bumble bee, southern California legless lizard, burrowing owl, northwestern San Diego pocket mouse, and Los Angeles pocket mouse. The southern California legless lizard, northwestern San Diego pocket mouse, Los Angeles pocket mouse are all CDFW SSC and, if present on the Project site, these species could be subject to direct impacts through ground disturbance and indirect impacts from construction noise, vibrations, and increased human activity related to the development of the Project site. However, due to the lack of high-quality habitat within the Project Area, the site's long history of anthropogenic disturbances, and the presence of urban development immediately adjacent to the Project site, if present on the Project site, these species are only expected to occur in very low density and Project-related impacts would not be expected to contribute to the overall decline of populations for these species. Therefore, impacts to southern California legless lizard, northwestern San Diego pocket mouse, Los Angeles pocket mouse would not be considered significant under CEQA, and additional surveys and best management practices are not necessary for these species.

Crotch bumble bee and burrowing owl (State candidates for listing under CESA) were determined to have a moderate potential to occur on the Project site based on the presence of marginally suitable habitat and recent species records within five miles of the Project site. If present on the Project site, these species could be subject to direct impacts through ground disturbance and indirect impacts from construction noise, vibrations, and increased human activity related to the development of the Project site. However, the Project will ensure avoidance of these species through best management practices, including pre-construction surveys, monitoring, and other avoidance measures as described in Section 6.0.

The four species with a low potential to occur included California glossy snake, coastal whiptail, red-diamond rattlesnake, and coast horned lizard. The four reptile species are all CDFW SSC and, if present on the Project site, these species could be subject to direct impacts through ground disturbance and indirect impacts from construction noise, vibrations, and increased human activity related to the development of the Project site. However, due to the lack of high-quality habitat within the Project Area, the site's long history of anthropogenic disturbances, and the presence of urban development immediately adjacent to the Project site, if present on the Project site, these species are only expected to occur in very low density and Project-related impacts would not be expected to contribute to the overall decline of populations for these species. Therefore, impacts to California glossy snake, coastal whiptail, red-diamond rattlesnake, coast horned lizard would not be considered significant under CEQA, and additional surveys and best management practices are not necessary for these species.

The remaining 41 special-status wildlife species are presumed absent from occurring on or adjacent to the site due to the lack of suitable habitat; proximity to the surrounding residential, commercial, and industrial development; and the presence of anthropogenic disturbances associated with the commercial and industrial development surrounding the site. No significant impacts to the 41 special-status wildlife species that are presumed absent are anticipated to result from the development of this Project, and additional surveys and best management practices are not necessary for these species.

The river red gum trees and some of the larger shrubs on the Project site, as well as the trees immediately adjacent to the Project site, could provide nesting habitat for nesting birds and raptors protected by the MBTA and California Fish and Game Code. Furthermore, the Project site could provide nesting habitat for ground-nesting bird species. If construction of the proposed Project occurs during the bird breeding season (typically February 1 through August 31), ground-disturbing construction activities could directly affect birds protected by the MBTA and their nests through the removal of habitat on the Project site, and indirectly through increased noise, vibrations, and increased human activity. However, the Project will ensure compliance with the MBTA and California Fish and Game Code avoidance of through best management practices, including pre-construction surveys, monitoring, and other avoidance measures as described in Section 6.0.

The river red gum trees on the Project site could provide suitable roosting habitat for foliage roosting bat species that might occur in the vicinity of the Project site, including hoary bat (*Lasiurus cinereus*) and western red bat (*Lasiurus blossevillii*). If present on the Project site, ground-disturbing activities could directly affect through the removal of roosting habitat on the Project site, and indirectly through increased noise, vibrations, and increased human activity. However, the Project will ensure avoidance of roosting bats through best management practices, including pre-construction surveys, monitoring, and other avoidance measures as described in Section 6.0.

5.2 Sensitive Natural Communities

The Project site consists of disturbed land that supports mostly nonnative and native ruderal vegetation. The Project site does not contain any riparian habitat or other sensitive natural communities that would need to be preserved. No impacts to sensitive natural communities are anticipated to result from the development of this Project.

5.3 State and Federally Protected Wetlands and Waters of the United States

According to the results of the preliminary aquatic resources delineation, no state or federally protected wetlands or Waters of the U.S. were identified on the Project site, therefore no impacts to state or federally protected wetlands are expected to occur.

5.4 Wildlife Corridors and Nursery Sites

The Project site is not located within a designated wildlife corridor or linkage. The Project site is located within and adjacent to areas containing existing disturbances (e.g., paved roads, an airport, and residential and commercial development). Additionally, the site does not contain the structural topography and

vegetative cover that facilitate regional wildlife movement, is subject to a high level of ongoing human disturbance, and much of the Project and surrounding area is fenced or consists of active public roadways, which act as inhibitors to wildlife movement. Therefore, the Project site does not function as a wildlife movement corridor and would not interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors.

The Project site does, however, include non-native shrubs and trees (river red gum), which would be removed under the proposed Project. The Project area may potentially represent a nursery site if pallid bat or big free-tailed bat, or other non-special-status lasiurine bat species are found to be utilizing the large ornamental trees within the Project area as maternity roosts in a colonial or semi-colonial nature. Therefore, the proposed Project may affect wildlife nurseries if colonial or semi-colonial maternally roosting bats are present. However, the Project will ensure avoidance of roosting bats through best management practices, including pre-construction surveys, monitoring, and other avoidance measures as described in Section 6.0.

5.5 Local Policies, Ordinances, and Conservation Plans

The Project Area is not located within an HCP or Natural Community Conservation Plan (NCCP). Therefore, development of the Project Area will not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state HCP.

6.0 BEST MANAGEMNT PRACTICES AND RECOMMENDATIONS

To ensure compliance with environmental regulations, including the MBTA, it is recommended that a qualified biologist be retained to oversee and monitor project activities. This includes conducting preconstruction biological surveys and providing ongoing monitoring during initial ground-disturbing and vegetation-clearing activities.

Pre-construction Surveys: The biologist should conduct surveys for plants species covered by the CDNPA and/or the San Bernardino County Development Code – Plant Protection and Management (Chapter 88.01) and special-status wildlife species (e.g., desert tortoise, Crotch bumble bee, and burrowing owl), as well as for nesting birds. Surveys should follow established protocols provided by the California Department of Fish and Wildlife (CDFW) and/or U.S. Fish and Wildlife Service (USFWS), if applicable. If special-status species or nesting birds are identified, the biologist should coordinate with the Department of Water Resources, CDFW, and/or USFWS to develop and implement appropriate measures. These may include establishing protective buffer zones, rescheduling activities to avoid sensitive periods, or other measures.

Construction Monitoring: During initial ground-disturbing and vegetation-clearing activities, the biologist should conduct daily clearance surveys ("sweeps") to ensure compliance with environmental regulations, including the MBTA. If an active bird nest, protected by the MTBA or other special-status resource is located, the biologist should establish a visible disturbance-free buffer zone around the nest or resource. Construction activities within these buffer zones should only proceed once the biologist determines the nest is no longer active.

Response to Wildlife Observations: If special-status wildlife species are observed during monitoring, consultation with CDFW and/or USFWS is advised to establish and implement additional protective measures. These may include further monitoring or specific work restrictions to ensure compliance with environmental regulations, including the MBTA and California Fish and Game Code.

By adopting these recommendations, the project can comply with environmental regulations, avoid significant impacts on protected species, and promote responsible environmental stewardship.

6.1 Additional Recommendations

The following best management practices are not mitigation measures pursuant to CEQA but are recommended to further reduce impacts to species that have potential to occur on the property:

- Confine all work activities to a predetermined work area.
- To prevent inadvertent entrapment of wildlife during the construction phase of the Project, all excavated, steep-walled holes or trenches more than 2 feet deep should be covered at the close of each working day by plywood or similar materials. If the trenches cannot be closed, one or more escape ramps constructed of earthen fill or wooden planks shall be installed. Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals.
- Wildlife are often attracted to burrow- or den-like structures such as pipes and may enter stored pipes and become trapped or injured. To prevent wildlife use of these structures, all construction pipes, culverts, or similar structures with a diameter of 4 inches or greater should be capped while stored onsite.
- All food-related trash items such as wrappers, cans, bottles, and food scraps should be disposed of in securely closed containers and removed at least once a week from the construction or Project site.
- Use of rodenticides and herbicides on the Project site should be restricted. This is necessary to prevent primary or secondary poisoning of wildlife, and the depletion of prey populations on which they depend. All uses of such compounds should observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other state and federal legislation. If rodent control must be conducted, zinc phosphide should be used because it has a proven lower risk to predatory wildlife.

7.0 CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. Field work conducted for this assessment was performed by me or under my direct supervision. I certify that I have not signed a non-disclosure or consultant confidentiality agreement with the Project applicant or the applicant's representative and that I have no financial interest in the Project.

SIGNED:  DATE: 12/6/2024

Phillip Wasz
Senior Wildlife Biologist
ECORP Consulting, Inc.

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LIST OF APPENDICES

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APPENDIX A

Representative Site Photographs



Photo 1: Southeast corner of Project site; looking north.



Photo 2: Southeast corner of Project site; looking west.



Photo 3: Representative photo of disturbance on site; soil and construction debris pile.



Photo 4: Representative photo of river red gum trees (*Eucalyptus camaldulensis*) on site.



Photo 5. Representative photo of disturbed California buckwheat (*Eriogonum fasciculatum*).



Photo 6: Representative photo of disturbed/developed area in northwest portion of site.

APPENDIX B

Plant Species Observed

Plant Species Observed

SCIENTIFIC NAME	COMMON NAME
Acmispon americanus	Spanish lotus
Acmispon glaber	Deerweed
Amsinckia menziesii	Fiddleneck
*Avena fatua**	Wild oats
*Brassica nigra**	Black mustard
*Brassica rapa**	Common mustard
*Bromus madritensis ssp rubens**	Red brome
Croton setiger	Turkey-mullein
Datura wrightii	Jimsonweed
Eriogonum fasciculatum	California buckwheat
*Erodium cicutarium**	Coastal heron's bill
*Eucalyptus camaldulensis**	River red gum
*Festuca myuros**	Rattail sixweeks grass
Heterotheca grandiflora	Telegraph weed
Helianthus annuus	Hairy leaved sunflower
*Nicotiana glauca**	Tree tobacco
*Salsola tragus**	Russian thistle
*Schinus mole**	Peruvian peppertree
Yucca schidigera+	Mojave yucca

*Nonnative species
+Ornamental (Project site is not within normal species range)

APPENDIX C

Wildlife Species Observed

Wildlife Species Observed

SCIENTIFIC NAME	COMMON NAME
Birds	
Buteo jamaicensis	Red-tailed hawk
Haemorhous mexicanus	House finch
Mimus polyglottos	Northern mockingbird
*Sturnus vulgaris**	European starling
Zenaida macroura	Mourning dove
Reptiles	
Uta stansburiana	Side-blotched lizard
Mammals	
Otospermophilus beecheyi	California ground squirrel

*Nonnative species

APPENDIX D

Special-Status Plant Species Potential for Occurrence

Appendix D - Plant Potential for Occurrence Table

Scientific Name Common Name	Status		Bloom Period & Elevation (meters)	Habitat Requirements	Potential for Occurrence
Chorizanthe parryi var. *parryi* Parry's spineflower	Fed: Ca: CRPR:	none none 1B.1	Apr-Jun 275-1220	Occurs in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland habitats in openings in sandy or rocky soils.	Moderate Potential. Marginally suitable coastal sage scrub habitat is present within the distrubed buckwheat scrub vegetation on the Project site. Additionally, there was one one recent CNDDB record of this species approximately 4.5 miles northeast of the Project site documented in 1998 (OCC 86).
Cladium californicum California saw-grass	Fed: Ca: CRPR:	none none 2B.2	Jun-Sep 60-1600	Occurs in alkaline or freshwater marshes and swamps as well as meadows and seeps.	Presumed Absent. No suitable wetland or riparian habitat is present within the Project site. Additionally, there was only one historic CNDDB record of this species recorded approximately 2.9 miles north of the Project site documented in 1918 (OCC 3).
Dodecahema leptoceras Slender-horned spineflower	Fed: Ca: CRPR:	END END 1B.1	Apr-Jun 200-760	Occurs in alluvial fans within chaparral and coastal sage scrub.	Presumed Absent. No suitable alluvial fan habitat was observed on the Project site. There is one historic CNDDB occurrence recorded from 1905 approximately 2.5 miles northwest of the Project site (OCC 40). All other documented occurences are over 12 miles away from the Project site.
Horkelia cuneata var. *puberula* Mesa Horkelia	Fed: Ca: CRPR:	none none 1B.1	Feb-Jul(Sep) 70-810	Occurs in maritime chaparral, cismontane woodland, and coastal scrub in sandy or gravelly soils.	Low Potential. Marginally suitable coastal sage scrub habitat is present within the distrubed buckwheat scrub vegetation on the Project site. Additionally, there was one historical CNDDB occurrences of this species recorded approximately 2.5 miles northwest of the Project site in 1917 (OCC 13).
Lepidium virginicum var. *robinsonii* Robinson's pepper grass	Fed: Ca: CRPR:	none none 4.3	Jan-Jul 1-885	Occurs in chaparral and coastal sage scrub.	Low Potential. Marginally suitable coastal sage scrub habitat is present within the distrubed buckwheat scrub vegetation on the Project site. Additionally, there was one historical CNDDB occurrences of this species within five miles of the Project site, recorded approximately 4.8 miles southwest of the Project site in 1936 (OCC 3).
Muhlenbergia californica California muhly	Fed: Ca: CRPR:	none none 4.3	Mar-Oct 25-2325	Typically associated with riparian, streambanks, seeps, and meadows within coastal sage scrub, yellow pine forest, chaparral, and wetland-riparian habitats. Also occaisionally in non-wetlands.	Presumed Absent. No suitable riparian, streambanks, and/or meadows habitat was present on the Project site. Additionally, there was only one historic CNDDB record of this species recorded approximately 2.9 miles north of the Project site documented in 1916 (OCC 1).
Muhlenbergia utilis aparejo grass	Fed: Ca: CRPR:	none none 2B.2	Mar-Oct 25-2325	Occurs in chaparral, cismontane woodland, coastal scrub, marshes, swamps, meadows and seeps. Associated with alkaline and serpentine soils.	Presumed Absent. No suitable alkaline and/or serptentine soils were observed on the Project site. Additionally, there was only one historic CNDDB record of this species recorded approximately 2.9 miles north of the Project site documented in 1916 (OCC 1).
Navarretia prostrata prostrate vernal pool navarretia	Fed: Ca: CRPR:	none none 1B.2	Apr-Jul 3-1210	Occurs in mesic soils within coastal scrub, meadows, seeps, vernal pools, and alkaline valley and foothill grasslands.	Presumed Absent. No suitable mesic soils, seeps, vernal pools, or alkaline grassland habitats are are present within the Project site. However, there was one historic CNDDB record of this species recorded within five miles, located aproximately 3.0 miles north of the Project site in 1918 (OCC 15).

Appendix D - Plant Potential for Occurrence Table

Scientific Name Common Name	Status		Bloom Period & Elevation (meters)	Habitat Requirements	Potential for Occurrence
Phacelia stellaris Brand's star phacelia	Fed: Ca: CRPR:	none none 1B.1	Mar-Jun 1-400	Occurs in coastal scrub and dunes.	Moderate Potential. Marginally suitable coastal sage scrub habitat is present within the distrubed buckwheat scrub vegetation on the Project site. Additionally, there was only one recent CNDDB occurrence within five miles of the Project site, documented approximately 4.4 miles northeast of the Project site in 2003. However, this population is considered possibly extripated, as 2012 aerial imagery shows a shopping center built in the location of the record (OCC 16).
Pseudognaphalium leucocephalum white rabbit-tobacco	Fed: Ca: CRPR:	none none 2B.2	Jul(Aug)-Nov(Dec) 0-2100	Occurs in gravelly and sandy soils, usually on benches, dry stream bottoms, and canyon bottoms within chaparral, cismontane woodland, coastal scrub, and riparian woodland.	Presumed Absent. No suitable bench, dry stream bottom, or canyon bottom habitat was present on the Project site. Additionally, there was only one historical CNDDB occurrence of this species recorded approximately 3.0 miles northeast of the Project site in 1891 (OCC 46).
Sidalcea neomexicana salt spring checkerbloom	Fed: Ca: CRPR:	none none 2B.2	Mar-Jun 15-1530	Occurs in wet meadows and streamsides in moist usually strongly alkaline soils.	Presumed Absent. No suitable wet meadow or streamside habitat with moist alkaline soils are present on the Project site. Howerver, there was one historic CNDDB record of this species approximately 4.8 miles southwest of the Project site documented in 1902 (OCC 24).
Symphyotrichum defoliatum San Bernardino aster	Fed: Ca: CRPR:	none none 1B.2	Jul-Nov 2-2040	Typical habitat for this species consists of meadows, streams and springs. However, the literature indicates that this species can also grow in upland habitats including coastal sage scrub, southern oak woodland, and disturbed areas.	Low Potential. Marginally suitable coastal sage scrub habitat is present within the distrubed buckwheat scrub vegetation on the Project site. Additionally, there were three historical CNDDB records of this species within five miles of the Project site (OCC 20, 26, 77), that are all almost over 100 years old. The closest occurrence was recorded approximately 3.0 miles north of the Project site in 1916 (OCC 20).

Federal Designations:

(Federal Endangered Species Act,
END: federally listed, endangered
THR: federally listed, threatened

State designations:

(California Endangered Species Act, CDFG)
END: state-listed, endangered
THR: state-listed, threatened

CAN: Candidate for state listing
FP: Fully Protected Species
SSC: Species of Special Concern

CRPR Ranking

1A: Presumed extinct
1B: Rare, threatened, or endangered in California and elsewhe
2B: Rare, threatened, or endangered in California, but more common elsewhere
3: Review list of plants requiring more study
4: Plants of limited distribution watch list
CBR: Considered but rejected

CRPR Threat Code

0.1: Seriously threatened in California
0.2: Fairly threatened in California
0.3: Not very threatened in California

Source: California Natural Diversity Data Base (CNDDB) California Native Plant Society Electronic Inventory (CRPREI) Guasti, Fontana, Riverside West, Corona North, Prado Dam, Ontario, Mt. Baldy, Cucamonga Peak, and Devore 7.5-minute quads.

APPENDIX E

Special-Status Wildlife Species Potential for Occurrence

Appendix E - Wildlife Potential for Occurrence Table

Scientific Name Common Name	**Status**		**Habitat Requirements**	**Potential for Occurrence**
Insects				
Bombus crotchii Crotch bumble bee	Fed: CA:	none **CAN END**	Found in coastal California east to the Sierra-Cascade crest and south into Mexico. Occurs in open grassland and scrub habitats. Prefers a diet consisting of certain plant species including milkweeds, dusty maidens, lupines, medics, phacelias, sages, clarkias, poppies, and wild buckwheats. Nests are often located underground in abandoned rodent nests or above ground in tufts of grass, old bird nests, rock piles, or cavities in dead trees.	**Moderate Potential.** Marginally suitable nectaring habitat is present in the California buckwheat and deerweed. There were two recent CNDDB occurrences from 2019 and 2020 (OCC 247 and 316) approximately 1.7 miles east of the Project site and one historical occurrence (OCC 187) recorded approximately 1.5 miles east of the Project site.
Euphydryas editha quino quino checkerspot butterfly	Fed: CA:	**END** none	Occurs in chaparral and coastal sage scrublands, containing the proper host plants (i.e. dwarf plantain, white snapdragon, woolly plantain, and chinese houses) and abundant nectar resources.	**Presumed Absent.** No suitable habitat is present within the Project site. No host plants were observed. There were no CNDDB occurrences within five miles of the project site.
Rhaphiomidas terminatus abdominalis Delhi Sands flower-loving fly	Fed: CA:	**END** none	Occur in Delhi Sands series soils. Indicator plant species include telegraph weed (*Heterotheca grandiflora*), California buckwheat (*Eriogonum fasciculatum*), and California croton (*Croton californica*).	**Presumed Absent.** No suitable Delhi Sands soils are present on the Project site. There were no CNDDB occurrences within five miles of the project site.
Fish				
Catostomus santaanae Santa Ana sucker	Fed: CA:	**THR** none	Occurs in clean, shallow portions of rivers and streams. They occur in water systems that experience a range of currents from swift to sluggish.	**Presumed Absent.** No suitable river habitat is present within the Project site. There were no CNDDB occurrences within five miles of the Project site.
Gila orcuttii arroyo chub	Fed: CA:	none SSC	Occurs primarily in the warm streams and rivers of the Los Angeles plain.	**Presumed Absent.** No suitable stream habitat is present within the Project site. There were no CNDDB occurrences within five miles of the Project site.
Oncorhynchus mykiss irideus pop. 10 steelhead- southern California DPS	Fed: CA:	**END** **CAN END**	Occur in warmer water temperatures, up to 77°F. They depend on winter rains to provide passage through seasonal waterways.	**Presumed Absent.** No suitable river habitat is present within the Project site. There were no CNDDB occurrences within five miles of the Project site.
Rhinichthys osculus ssp. 8 Santa Ana speckled dace	Fed: CA:	none SSC	Occur in a variety of aquatic habitats including small springs, streams, large rivers, and deep lakes. They are found in waters that are clear, well oxygenated, and with currents or waves. Vegetative cover allows for protection against predation.	**Presumed Absent.** No suitable river or stream habitat is present within the Project site. There were no CNDDB occurrences within five miles of the Project site.
Amphibians				
Anaxyrus californicus Arroyo toad	Fed: CA:	**END** SSC	Occur in desert washes, riparian scrub, riparian woodland, south coast flowing waters, and south coast standing waters. Require sandy stream sides with stable terraces for burrowing and scattered vegetation for shelter. Typically found within wide, terraced riparian floodplains, rather than in narrow, rocky channels with “plunge” pools. Sandy river washes are an integral component of their habitat and they typically prefer an open, rather than closed, riparian canopy.	**Presumed Absent.** No suitable riparian habitat is present within the Project site. There were no CNDDB occurrences within five miles of the Project site.
Rana boylii pop. 6 foothill yellow-legged frog south coast DPS	Fed: CA:	**PR END** **END**	Occur in aquatic habitats, riparian forest, riparian scrub, riparian woodland, and south coast flowing waters. Found in rock perennial streams with open sunny banks.	**Presumed Absent.** No suitable aquatic habitat is present within the Project site. There were no CNDDB occurrences within five miles of the Project site.
Rana muscosa southern mountain yellow-legged frog	Fed: CA:	**END** **END**	Occur in glaciated, alpine lakes, ponds, springs, and streams. Lakes usually have grassy or muddy margins.	**Presumed Absent.** No suitable aquatic habitat is present within the Project site. There were no CNDDB occurrences within five miles of the Project site.

Appendix E - Wildlife Potential for Occurrence Table

Scientific Name Common Name	**Status**		**Habitat Requirements**	**Potential for Occurrence**
Spea hammondii western spadefoot	Fed: CA:	none SSC	Typically occurs in scrub, chaparral, vernal pools, and rivers with sandy banks, willows, cottonwoods, and sycamores with loose, gravelly areas of streams in drier parts of range.	**Presumed Absent.** No suitable habitat is present within the Project site. There were no CNDDB occurrences within five miles of the Project site.
Taricha torosa Coast Range newt	Fed: CA:	none SSC	Occur in oak woodlands, chaparral, and open grasslands. Breed in seasonal or permanent streams and deposit eggs to undersides of rocks.	**Presumed Absent.** No suitable habitat is present within the Project site. There were no CNDDB occurrences within five miles of the Project site.
Reptiles				
Anniella stebbinsi Southern California legless lizard	Fed: CA:	none SSC	Typically occurs in moist warm loose soil with plant cover in sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks.	**Moderate Potential.** Marginally suitable habitat in the sparsely vegetated areas. Two historical CNDDB records were identified within five miles of the Project site, including OCC 11 from 1993 located approximately 0.5 miles south of the Project site and OCC 135 from 1938, which has a polygon that overlaps with the Project site centered around Cucamonga Creek. However, this observation was recorded when Cucamonga Creek was a natural channel that meandered through agriculture lands. Since that time, it has been completely channelized and concrete lined, and no longer represents suitable habitat for the species.
Arizona elegans occidentalis California glossy snake	Fed: CA:	none SSC	Typically occurs in rocky washes, chaparral, scrub and grassland habitat, often with loose or sandy soils.	**Low Potential.** Marginally suitable disturbed California buckwheat scrub is present on site, however, the site is disturbed and surrounded by roadways and development reducing the likelihood of the species presence on the Project site. Only historical CNDDB records have been documented within five miles of the project site (OCC 220, 94, 95). The closest occurrence is over 100 years old and documented 1.7 miles away (OCC 94).
Aspidoscelis tigris stejnegeri coastal whiptail	Fed: CA:	none SSC	Found in a variety of habitats. They prefer hot, dry open areas that have little cover. Common habitats include chaparral, woodland, and riparian.	**Low Potential.** Marginally suitable habitat is present within the disturbed California buckwheat scrub and eucalyptus groves vegetation. However, there were no CNDDB occurrences within five miles of the Project site.
Charina umbratica southern rubber boa	Fed: CA:	none **THR**	Occurs in coniferous forests within riparian areas in the San Bernardino and San Jacinto Mountains. Preferred habitat is damp woodland, coniferous forests, grassy meadows, and moist sandy areas near streams. Downed logs and forest litter area also crucial habitat qualities.	**Presumed Absent.** The Project is outside the known range for this species and there is no suitable habitat. There were no CNDDB occurrences within five miles of the Project site.
Coleonyx variegatus abbotti San Diego banded gecko	Fed: CA:	none SSC	Occur within rocky areas in coastal sage scrub and chaparral habitats.	**Presumed Absent.** The Project is outside the known range for this species and there is no suitable habitat. There were no CNDDB occurrences within five miles of the Project site.
Crotalus ruber red-diamond rattlesnake	Fed: CA:	none SSC	Occur in arid scrub, coastal chaparral, oak and pine woodlands, rocky grasslands, and cultivated areas. Within desert slopes on mountains, often found within rocky desert flats.	**Low Potential.** Marginally suitable habitat is present within the disturbed California buckwheat scrub and eucalyptus groves vegetation. However, there were no CNDDB occurrences within five miles of the Project site.

Appendix E - Wildlife Potential for Occurrence Table

Scientific Name Common Name	**Status**		**Habitat Requirements**	**Potential for Occurrence**
Emys marmorata western pond turtle	Fed: CA:	none SSC	Occurs in aquatic, artificial flowing waters, Klamath/North coast flowing waters, Klamath/North coast standing waters, marsh & swamp, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, south coast flowing waters, south coast standing waters, and wetland habitats. Needs basking sites (logs, rocks, and exposed banks) and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	**Presumed Absent.** No suitable aquatic habitat on the Project site. There were no CNDDB occurrences within five miles of the Project site.
Phrynosoma blainvillii coast horned lizard	Fed: CA:	none SSC	Occurs in chaparral, cismontane woodland, coastal bluff scrub, coastal scrub, desert wash, pinon & juniper woodlands, riparian scrub, riparian woodland, and valley & foothill grassland habitats. Requires open areas for sunning, bushes to provide cover, and loose soil for burial. Diet consists mainly of ants and also small invertebrates. Most commonly found in lowlands along sandy washes with scattered low bushes.	**Low potential**. Marginally suitable habitat is present within the disturbed California buckwheat scrub and eucalyptus groves vegetation. There were three historical records of the species within five miles of the Project site (OCC 38, 437, 712). The closes occurrence was recorded 1.7 miles away in 1998 (OCC 437) and the furthest was recorded 4.3 miles away in 1999 (OCC 712).
Thamnophis hammondii two-striped gartersnake	Fed: CA:	none SSC	Typically occurs near permanent or semi-permanent water sources in a variety of habitats.	**Presumed Absent.** No suitable aquatic habitat is present on the site. There were no CNDDB occurrences within five miles of the Project.
Birds				
Agelaius tricolor tricolored blackbird (nesting colony)	Fed: CA:	none **THR**/SSC	Occurs in freshwater marsh, swamp, and wetland habitats. Largely endemic to California. Highly colonial species, most numerous in Central Valley & vicinity. Requires open water, protected nesting substrate, and foraging area with insect prep within a few kilometers of the colony. Forages in open habitat such as cultivated fields and pastures.	**Presumed Absent.** No suitable aquatic habitat is present on the site. There was one recent CNDDB occurrence of the species 3 miles from the Project site recorded in 2014 (OCC 414).
Aquila chrysaetos golden eagle (nesting & wintering)	Fed: CA:	none **FP**	Occurs in broadleaved upland forest, cismontane woodland, coastal prairie, Great Basin grassland, Great Basin scrub, lower montane coniferous forest, pinon & juniper woodlands, upper montane coniferous forest, and valley & foothill grassland habitats. Found in rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also large trees such as eucalyptus or oak in open areas.	**Presumed Absent.** The Project site is outside of this species known breeding range. The species is not expected to nest on the Project site due to its urban nature and proximity to the Ontario Airport and other high level disturbances. There was one recent CNDDB occurrence 4.6 miles from the Project site recorded in 2007 (OCC 125).
Ammodramus savannarum grasshopper sparrow	Fed: CA:	none SSC	Occur in valley and foothill grassland.	**Presumed Absent.** No suitable vally and foothill grassland habitat was present on the Project site and there were no CNDDB occurrences within five miles of the Project site.
Asio otus long-eared owl	Fed: CA:	none SSC	Occur in cismontane woodland, great basin scrub, riparian forest, riparian woodland, and upper montane coniferous forest. Forage in open landcover and nest in dense wooded areas.	**Presumed Absent.** No suitable habitat on the Project site. There were no CNDDB occurrences within five miles of the Project site.

Appendix E - Wildlife Potential for Occurrence Table

Scientific Name Common Name	**Status**		**Habitat Requirements**	**Potential for Occurrence**
Athene cunicularia burrowing owl (burrow & some wintering sites)	Fed: CA:	none **CAN**	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Occurs in coastal prairie, coastal scrub, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, and valley & foothill grassland habitats. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel. Also found in vacant lots and airports.	**Moderate Potential**. Suitable habitat exists due to the Project being a vacant lot with small mammal burrows (California ground squirrel) and low-growing vegetation. There were 20 recent CNDDB occurrences of the species within five miles of the Project site (OCC 636, 664, 1788, 561, 565, 1045, 1789, 940, 956, 957, 1198, 1199, 1787, 1044, 1935, 1936, 1937, 1046, 1790, 1792). The most recent occurrence was recorded 1.7 miles away from the Project in 2016 (OCC 561) and the closest was recorded 1.6 miles away in 2004 (OCC 1045).
Buteo swainsoni Swainson's hawk (nesting)	Fed: CA:	none **THR**	Occurs in Great Basin grassland, riparian forest, riparian woodland, and valley & foothill grassland habitats. Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees. Nests in solitary bush or tree, or in small groves. Requires adjacent suitable foraging areas such as grasslands or alfalfa/grain fields supporting rodent populations.	**Presumed Absent.** Due to the high level of disturbance, the sites proximity to development, and its generally urban nature would preclude this species from nesting on the site. Additionally the site is small and does not represent typical foraging habitat. There were no CNDDB records of the species within five miles of the Project.
Campylorhynchus brunneicapillus sandiegensis coastal cactus wren	Fed: CA:	none SSC	Occurs in coastal scrub. Require healthy stands of cactus for nesting.	**Presumed Absent.** No suitable habitat is present on the Project site. There were no CNDDB occurrences within five miles of the Project site.
Coccyzus americanus occidentalis western yellow-billed cuckoo (nesting)	Fed: CA:	**THR** **END**	Occurs in riparian forest habitat. Nests along the broad (≥ 12.4 acres) patches of multi-layered riparian woodland, often dominated by willows and cottonwoods of lower flood bottoms of larger river systems.	**Presumed Absent.** No suitable riparian habitat Is present on the Project site. There were no CNDDB occurrences within five miles of the Project site.
Coturnicops noveboracensis yellow rail	Fed: CA:	none SSC	Occur in freshwater marshes, meadows. Often nest is areas with shallow water and short vegetation.	**Presumed Absent.** No suitable aquatic habitat is present on the Project site. There were no CNDDB occurrences within five miles of the Project site.
Cypseloides niger black swift	Fed: CA:	none SSC	Coastal belt of Santa Cruz and Monterey counties; central & southern Sierra Nevada; San Bernardino & San Jacinto mountains. Often breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea-bluffs above the surf; forages widely.	**Presumed Absent.** No suitable cliff habitat is present on the Project site. There were no CNDDB occurrences within five miles of the Project site.
Elanus leucurus white-tailed kite	Fed: CA:	none **FP**	Occur in savannas, open woodlands, marshes, desert grasslands, cultivated fields, and other partially cleared areas. They will avoid areas that are too heavily grazed.	**Presumed Absent.** No suitable habitat is present on the Project site. There were no CNDDB occurrences within five miles of the Project site.
Empidonax traillii extimus southwestern willow flycatcher (nesting)	Fed: CA:	**END** **END**	Occurs in riparian woodland habitat in Southern California. Nests in densest areas of riparian tree and shrub communities associated with rivers, swamps, and other wetlands, including lakes and reservoirs. Nests are often in nonnative tamarisk (*Tamarisk* spp.) and native willow (*Salix* spp.), typically in vegetation stands of 4-7 m in height.	**Presumed Absent.** No suitable riparian habitat is present on the Project site. There were no CNDDB occurrences within five miles of the Project site.
Icteria virens yellow-breasted chat	Fed: CA:	none SSC	Occurs in riparian forest, riparian scrub, and riparian woodland habitats. Nests in low, dense riparian, consisting of willow, blackberry, wild grape along streams or at the edges of ponds or swamps. Forages and nests within 10 ft of ground.	**Presumed Absent.** No suitable riparian habitat is present on the Project site. There were no CNDDB occurrences within five miles of the Project site.

Appendix E - Wildlife Potential for Occurrence Table

Scientific Name Common Name	**Status**		**Habitat Requirements**	**Potential for Occurrence**
Laterallus jamaicensis coturniculus California black rail	Fed: CA:	none **THR/FP**	Occurs in marshes, wet meadows, riparian marshes, coastal prairies, saltmarshes, and impounded wetlands. Water levels are usually shallow, less than 2 inches deep. American glasswort (Salicornia *sp.*), bulrush species (*Typha angustifolia*), and alkali seaheath (*Frankenia salina*) are common plant species.	**Presumed Absent.** No suitable aquatic habitat is present on the Project site. There was one historical CNDDB occurrences over 80 years old within five miles of the Project site (OCC 63).
polioptila californica californica coastal California gnatcatcher	Fed: CA:	**THR** SSC	Occurs in coastal bluff scrub and coastal scrub.	**Presumed Absent.** No suitable habitat coastal bluff scrub or coastal scrub is present on the Project site. The disturbed California buckwheat scrub on site was very immature and sparse due to historical disturbances on site inculding a long history of agriculture and mowing and disking fro weed abatement. Additionally, there was only one historical CNDDB occurrences over 20 years old within five miles of the Project site (OCC 876).
Setophaga petechia yellow warbler (nesting)	Fed: CA:	none SSC	Occurs in riparian forest, riparian scrub, and riparian woodland habitats. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders. Diet consists primarily of insects.	**Presumed Absent.** No suitable riparian habitat is present on the Project site. There were no CNDDB occurrences within five miles of the Project site.
Vireo bellii pusillus least Bell's vireo (nesting)	Fed: CA:	**END** **END**	Occurs in riparian forest, riparian scrub, and riparian woodland habitats. Summer resident of Southern California in low riparian vegetation in the vicinity of water or in dry river bottoms, below 2,000 ft msl. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, mule fat, and mesquite.	**Presumed Absent.** No suitable riparian habitat is present on the Project site. There were no CNDDB occurrences within five miles of the Project site.
Mammals				
Antrozous pallidus pallid bat	Fed: CA:	none SSC	Occurs in chaparral, coastal scrub, desert wash, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, riparian woodland, Sonoran desert scrub, upper montane coniferous forest, and valley & foothill grassland habitats. Most commonly found in open, dry habitats with rocky areas for roosting. Day roosts are in caves, crevices, mines, and occasionally in hollow trees and buildings.	**Presumed Absent.** No suitable cave or crevice roosting habitat is present within the Project site. Additionally, there is a lot of disturbance near the Project site as it is surrounded by human development, including the Ontario Airport to the south. There was one historical CNDDB occurrence (OCC 243) approximately two miles from the Project site.
Chaetodipus fallax fallax northwestern San Diego pocket mouse	Fed: CA:	none SSC	Occur in sandy herbaceous areas, usually associated with rocks or coarse gravel in southwestern California. Primarily occurs in arid coastal and desert borders. Typical habitats include sandy desert fans and shrub communities such as coastal sage scrub, chaparral, sagebrush, desert wash, desert scrub, desert succulent scrub, pinyon-juniper, and annual grassland.	**Moderate Potential.** There is marginally suitable habitat in the shrub vegetation and rocky coarse gravel. There were two recent CNDDB occurrences within five miles of the Project site (64, 65).
Chaetodipus fallax pallidus pallid San Diego pocket mouse	Fed: CA:	none SSC	Occur in desert wash, pinon & juniper woodlands, and Sonoran desert scrub.	**Presumed Absent.** No suitable habitat is present on the Project site. There were no CNDDB occurrences within five miles of the Project site.
Dipodomys merriami parvus San Bernardino kangaroo rat	Fed: CA:	**END** **END**/SSC	Occur on the gentle slopes of alluvial fans, flood plains, washes, and adjacent habitats. Common habitats include alluvial sage scrub, coastal sage scrub, and chaparral.	**Presumed Absent.** No suitable alluvial wash habitat was present on or adjacent to the Project site. The Project site is outside of the area where this species occurs. No recent CNDDB records within five miles of the Project site.

Appendix E - Wildlife Potential for Occurrence Table

Scientific Name Common Name	Status		Habitat Requirements	Potential for Occurrence
Dipodomys stephensi Stephens' kangaroo rat	Fed: CA:	**END** **THR**	Occur in arid and semi-arid grasslands. Prefer open areas where the cover is less than 50%.	**Presumed Absent.** No suitable grassland habitat was present on or adjacent to the Project site. The Project site is outside of the area where this species occurs. No recent CNDDB records within five miles of the Project site.
Eumops perotis californicus western mastiff bat	Fed: CA:	none SSC	Occurs in open areas that have potential roosting areas. Primarily roosts in cliffs and rock crevices. Found in semi-arid to arid habitats.	**Presumed Absent.** No suitable cliff or rock crevice habitat is present on the Project site. There was one historical CNDDB occurrence within five miles of the Project site over 30 years old (OCC 134).
Lasiurus xanthinus western yellow bat	Fed: CA:	none SSC	Occurs within riparian woodland habitats with tree species such as Fremont cottonwood (*Populus fremontii*), Arizona sycamore (*Platanus wrightii*), and Arizona white oak (*Quercus arizonica*).	**Presumed Absent.** No suitable riparian habitat is present on the Project site. There was one historical CNDDB occurrence within five miles of the Project site over 30 years old (OCC 134).
Neotoma lepida intermedia San Diego desert woodrat	Fed: CA:	none SSC	Occur in a variety of habitats such as desert scrub. They are known to prefer rock outcroppings and cactus patches.	**Presumed Absent.** No suitable desert scrub habitat is present on the Project site. No woodrat middens were observed during the biological survey. There were two recent CNDDB occurrences within five miles of the Project site (OCC 52 and 49).
Nyctinomops femorosaccus pocketed free-tailed bat	Fed: CA:	none SSC	Occurs in pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oasis habitat. Primarily roosts in cliffs and rock crevices. This species is not known to roost in bridges.	**Presumed Absent**. No suitable roosting habitat is present within the Project site. There were no CNDDB occurrences of this species within five miles of the Project site.
Nyctinomops macrotis big free-tailed bat	Fed: CA:	none SSC	Occur in rocky arid landscapes including desert scrub, woodlands, and evergreen forests. Primarily roosts on rocky cliffs, but also in caves, buildings, and ocassionally in large tree cavities.	**Presumed Absent.** No suitable rocky cliff or cave habitat is present within the Project site and no large tree cavities were observed in the Eucalyptus tress on site. Additionally, there is a lot of disturbance near the Project site as it is surrounded by human development, including the Ontario Airport to the south. There were no CNDDB occurrences of this species within five miles of the Project site.
Ovis canadensis nelsoni desert bighorn sheep	Fed: CA:	none **FP**	Occurs in alpine, alpine dwarf scrub, chaparral, chenopod scrub, great basin scrub, mojavean desert scrub, montane dwarf scrub, pinon & juniper woodlands, riparian woodland, and Sonoran desert scrub. Prefer steep rocky terrain and require freestanding water.	**Presumed Absent**. No suitable montane habitat is present on the Project site. There were no CNDDB occurrences of this species within five miles of the Project site.
Perognathus longimembris brevinasus Los Angeles pocket mouse	Fed: CA:	none SSC	Occurs in low elevational grassland, alluvial sage scrub, and coastal sage scrub.	**Moderate Potential.** Marginally suitable habitat was present within the disturbed California buckwheat scrub. There were three historic CNDDB occurrences (OCC 33, 36, 45) and one recent occurrence (OCC 44) of this species within five miles of the Project site.

Federal Designations:
(Federal Endangered Species Act, U.S. Fish
END: Federally-listed, Endangered
THR: Federally-listed,
FC: Federal Candidate Species
DL: Federally-delisted
PR EN: Proposed Endangered

State designations:
(California Endangered Species Act, CDFW)
END: State-listed, Endangered
THR: State-listed, Threatened
PR EN: State-listed, Proposed Endangered
CAN EN: State- listed, Candidate Endangered
CAN: Candidate for state listing
SSC: Species of Special Concern
FP: Fully Protected Species

Source: California Natural Diversity Data Base (CNDDB) Guasti, Fontana, Riverside West, Corona North, Prado Dam, Ontario, Mt. Baldy, Cucamonga Peak, and Devore 7.5-minute quads.

Appendix D
Archaeological Resources Report

Archaeological Resources Inventory and Evaluation Report for the Ontario Hotel Project on the East Corner of Holt Boulevard and Guasti Road

San Bernardino County, California

Prepared For:

Diversified Pacific Communities
10621 Civic Center Drive
Rancho Cucamonga, California 91730

Prepared By:

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August 2023

MANAGEMENT SUMMARY

Diversified Pacific Communities retained ECORP Consulting, Inc. in 2023 to conduct an archaeological resources inventory for the Ontario Hotel Project in San Bernardino County, California. Diversified Pacific Communities proposes to construct a 1,073,671-square-foot hotel complex and parking structure on Assessor's Parcel Number 0110-322-33-000, which is a 10.47-acre lot located at the intersection of Holt Boulevard and Guasti Road in the City of Ontario, California.

The inventory included a records search, literature review, and field survey. The records search results indicated that 22 previous cultural resources studies have been conducted within the Project Area or the 1-mile search radius. As a result of those studies, no archaeological resources have been previously recorded within the Project Area. Consultation with Ontario Heritage indicated the possible presence of a historic building in the Project Area; however, no structure was identified through the literature review, historic aerial and topographic map review, or field survey.

As a result of the field survey, ECORP recorded a single isolated artifact within the Project Area, OH-1, a small shard of sun-colored amethyst glass. The resource has been evaluated using the National Register of Historic Places and California Register of Historical Resources eligibility criteria and found not eligible for listing under any criteria. Recommendations for the management of unanticipated discoveries are provided.

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LIST OF ACRONYMS AND ABBREVIATIONS

Term	Definition
AB	Assembly Bill
ACHP	Advisory Council on Historic Preservation
APE	Area of Potential Effects
APN	Assessor's Parcel Number
BLM	Bureau of Land Management
BP	Years Before present
Caltrans	California Department of Transportation
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CHL	California Historical Landmarks
CHRIS	California Historical Resources Information System
CRHR	California Register of Historical Resources
DPR	Department of Parks and Recreation
GLO	General Land Office
MLD	Most Likely Descendant
NAHC	Native American Heritage Commission
n.d.	No Date
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPS	National Park Service
NRHP	National Register of Historic Places
OHP	Office of Historic Preservation
PRC	Public Resources Code
Project	Ontario Hotel Project
RPA	Registered Professional Archaeologist
SCA	Sun-Colored Amethyst
SCCIC	South Central Coastal Information Center
SHPO	State Historic Preservation Officer
TCRs	Tribal Cultural Resources
USC	U.S. Code

1.0 INTRODUCTION

Diversified Pacific Communities retained ECORP Consulting, Inc. in 2023 to conduct an archaeological resources inventory for the Ontario Hotel Project in the City of Ontario, San Bernardino County, California. A survey of the Proposed Project Area was required to identify potentially eligible cultural resources (i.e., archaeological sites and historic buildings, structures, and objects) that could be affected by the Project.

1.1 Project Location

The Project Area consists of approximately 10.47 acres of property located in the southeastern quarter of the southwestern quarter, and the southwestern quarter of the southeastern quarter of Section 22 of Township 1 South, Range 7 West, San Bernardino Base and Meridian as depicted on the 1966 Guasti, California U.S. Geological Survey 7.5-minute topographic quadrangle map (Figure 1). It is also known as Assessor's Parcel Number (APN) 0110-322-33-000. The Project Area is located at the intersection of Holt Boulevard and Guasti Road in the City of Ontario, California.

1.2 Project Description

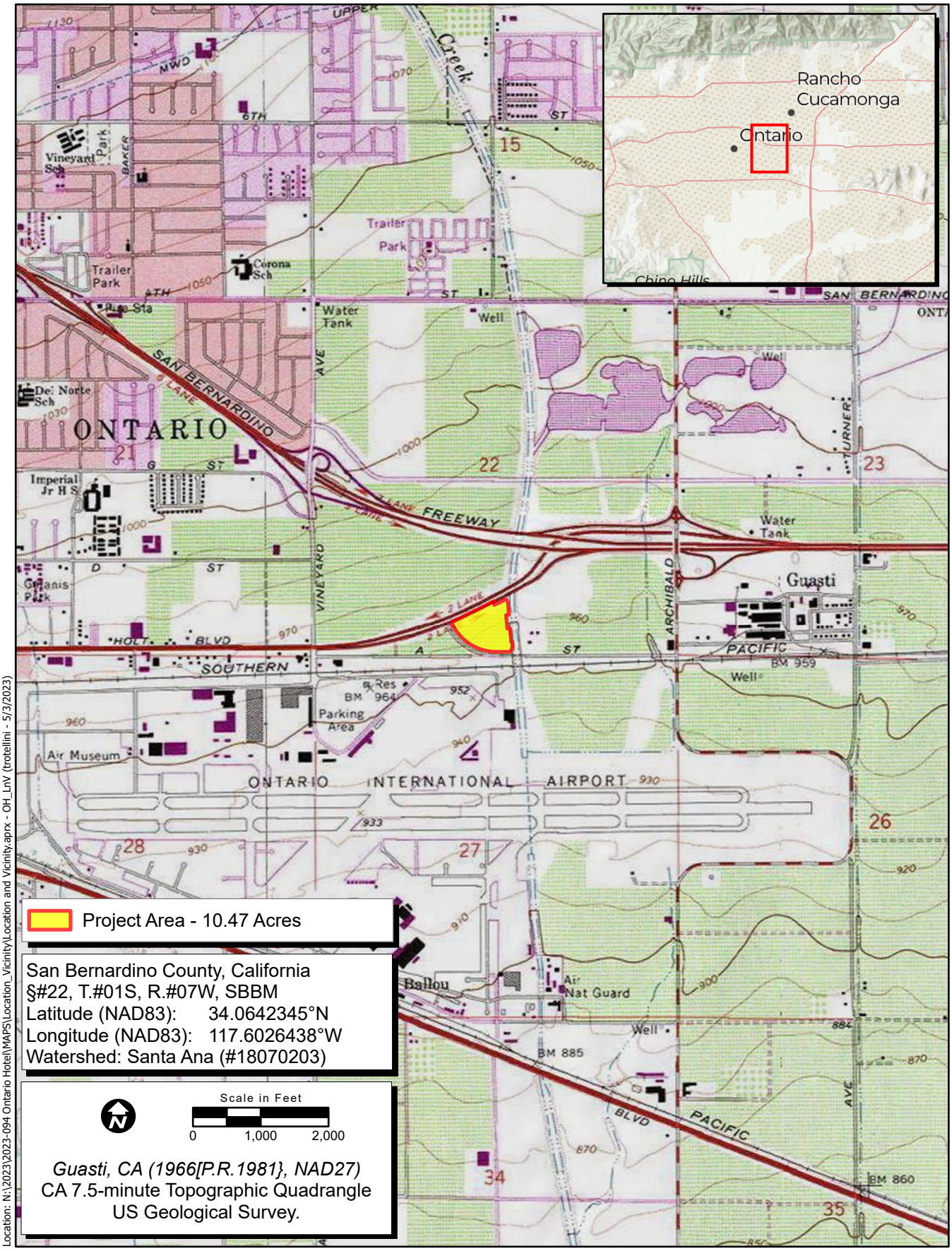
The Proposed Project currently entails the construction of a 1,073,671-square-foot hotel complex and parking structure. The facility will include between 600 and 640 rooms and may also include suites, conference and meeting spaces, a pool, an event lawn, two ballrooms, retail and restaurant spaces, including a destination rooftop restaurant bar. Final design has not been completed at this time.

1.3 Area of Potential Effects

The Area of Potential Effects (APE) consists of the horizontal and vertical limits of a project and includes the area within which significant impacts or adverse effects to Historical Resources or Historic Properties could occur as a result of the project. The APE is defined for projects subject to regulations implementing Section 106 (federal law and regulations). For projects subject to the California Environmental Quality Act (CEQA) review, the term Project Area is used rather than APE. The terms Project Area and APE are interchangeable for the purpose of this document.

The horizontal APE consists of all areas where activities associated with a project are proposed and, in the case of this Project, equals the Project Area subject to environmental review under the National Environmental Policy Act (NEPA) and CEQA. This includes areas proposed for construction, vegetation removal, grading, trenching, stockpiling, staging, paving, over-excavation, and other elements in the official Project description. The horizontal APE (i.e., the Project Area) is illustrated in Figure 1 and represents the survey coverage area.

The vertical APE is described as the maximum depth below the surface to which excavations for project foundations and facilities will extend. Therefore, the vertical APE for this Project includes all subsurface areas where archaeological deposits could be affected. The subsurface vertical APE varies across the Project Area but could extend as deep as 20 feet below the current surface; therefore, a review of geologic and soils maps was necessary to determine the potential for buried archaeological sites that cannot be seen on the surface.



Location: N:\2023\2023-094 Ontario Hotel\MAPS\Location_Vicinity\Location and Vicinity.aprx - OH_LnV (trotellini - 5/3/2023)

Map Date: 5/3/2023
Sources: ESRI, USGS

Figure 1. Project Location and Vicinity

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

2023-094 Ontario Hotel

The vertical APE also is described as the maximum height of structures that could impact the physical integrity and integrity of setting of cultural resources, including districts and traditional cultural properties. For this Project, the above-surface vertical APE is as high as 130 feet above the surface, which is the maximum height of the proposed building.

1.4 Regulatory Context

The CEQA lead agency for this Project is the City of Ontario, California. A review of the regulatory context is provided below; however, the inclusion of any of these laws and regulations in this report does not make a law or regulation apply when it otherwise would not. Similarly, the omission of any other laws and regulations from this section does not mean that they do not apply. Rather, the purpose of this section is to provide context in explaining why the study was carried out in the manner documented herein.

1.4.1 National Environmental Policy Act

NEPA establishes national policy for the protection and enhancement of the environment. Part of the function of the federal government in protecting the environment is to "preserve important historic, cultural, and natural aspects of our national heritage." Cultural resources need not be determined eligible for the National Register of Historic Places (NRHP) through the National Historic Preservation Act (NHPA) of 1966 (as amended) to receive consideration under NEPA. NEPA is implemented by regulations of the Council on Environmental Quality (40 Code of Federal Regulations [CFR] 1500-1508).

The definition of *effects* in the NEPA regulations includes adverse and beneficial effects on historic and cultural resources (40 CFR 1508.8). Therefore, the *Environmental Consequences* section of an Environmental Impact Statement [see 40 CFR 1502.16(f))] must analyze potential effects to historic or cultural resources that could result from the proposed action and each alternative. In considering whether an alternative may "significantly affect the quality of the human environment," a federal agency must consider, among other things:

- Unique characteristics of the geographic area, such as proximity to historic or cultural resources (40 CFR 1508.27(b)(3)), and
- The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the NRHP (40 CFR 1508.27(b)(8)).

Therefore, because historic properties are a subset of *cultural resources*, they are one aspect of the *human environment* defined by NEPA regulations.

1.4.2 National Historic Preservation Act

The federal law that covers cultural resources that could be affected by federal undertakings is the NHPA of 1966, as amended. Section 106 of the NHPA requires that federal agencies take into account the effects of a federal undertaking on properties listed in or eligible for the NRHP. The agencies must afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on the undertaking. A federal undertaking is defined in 36 CFR 800.16(y):

> "A federal undertaking means a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a federal agency, including those carried out by or on behalf of a federal agency; those carried out with Federal financial assistance; and those requiring a Federal permit, license, or approval."

The regulations that stipulate the procedures for complying with Section 106 are in 36 CFR 800. The Section 106 regulations require:

- definition of the APE;
- identification of cultural resources within the APE;
- evaluation of the identified resources in the APE using NRHP eligibility criteria;
- determination of whether the effects of the undertaking or project on eligible resources will be adverse; and
- agreement on and implementation of efforts to resolve adverse effects, if necessary.

The federal agency must seek comment from the State Historic Preservation Officer (SHPO) and, in some cases, the ACHP, for its determinations of eligibility, effects, and proposed mitigation measures. Section 106 procedures for a specific project can be modified by negotiation of a Memorandum of Agreement or Programmatic Agreement between the federal agency, the SHPO, and, in some cases, the project proponent.

Effects to a cultural resource are potentially adverse if the lead federal agency, with the SHPO's concurrence, determines the resource eligible for the NRHP, making it a Historic Property, and if application of the Criteria of Adverse Effects (36 CFR 800.5[a][2] et seq.) results in the conclusion that the effects will be adverse. The NRHP eligibility criteria, contained in 36 CFR 63, are as follows:

> The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of state and local importance that possess aspects of integrity of location, design, setting, materials, workmanship, feeling, association, and
>
> A. that are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> B. that are associated with the lives of persons significant in our past; or
>
> C. that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
>
> D. that have yielded, or may be likely to yield, information important in prehistory.

In addition, the resource must be at least 50 years old, barring exceptional circumstances (36 CFR 60.4). Resources that are eligible for, or listed on, the NRHP are *historic properties*.

Regulations implementing Section 106 of the NHPA (36 CFR 800.5) require that the federal agency, in consultation with the SHPO, apply the Criteria of Adverse Effect to historic properties within the APE. According to 36 CFR 800.5(a)(1):

> "An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling or association."

1.4.3 California Environmental Quality Act

CEQA is the state law that applies to a project's impacts on cultural resources. A project is an activity that may cause a direct or indirect physical change in the environment and that is undertaken or funded by a state or local agency, or requires a permit, license, or lease from a state or local agency. CEQA requires that impacts to Historical Resources be identified and, if the impacts will be significant, then apply mitigation measures to reduce the impacts.

A Historical Resource is a resource that 1) is listed in or has been determined eligible for listing in the California Register of Historical Resources (CRHR) by the State Historical Resources Commission, or has been determined historically significant by the CEQA lead agency because it meets the eligibility criteria for the CRHR, 2) is included in a local register of historical resources, as defined in Public Resources Code (PRC) 5020.1(k), or 3), and has been identified as significant in a historical resources survey, as defined in PRC 5024.1(g) (California Code of Regulations [CCR] Title 14, Section 15064.5(a)).

The eligibility criteria for the CRHR are as follows (CCR Title 14, Section 4852(b)):

(1) It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;

(2) It is associated with the lives of persons important to local, California, or national history;

(3) It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or

(4) It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

In addition, the resource must retain integrity, which is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association (CCR Title 14, Section 4852(c)). Resources that have been determined eligible for the NRHP are automatically eligible for the CRHR.

Impacts to a Historical Resource, as defined by CEQA (listed in an official historic inventory or survey or eligible for the CRHR), are significant if the resource is demolished or destroyed or if the characteristics that made the resource eligible are materially impaired (CCR Title 14, Section 15064.5(b)). Demolition or alteration of eligible buildings, structures, and features that they would no longer be eligible would result in a significant impact. Whole or partial destruction of eligible archaeological sites would result in a

significant impact. In addition to impacts from construction resulting in destruction or physical alteration of an eligible resource, impacts to the integrity of setting (sometimes termed *visual impacts*) of physical features in the Project Area could also result in significant impacts.

Tribal cultural resources (TCRs) are defined in Section 21074 of the California PRC as sites, features, places, cultural landscapes (geographically defined in terms of the size and scope), sacred places, and objects with cultural value to a California Native American tribe that are either included in or determined to be eligible for inclusion in the CRHR, or are included in a local register of historical resources as defined in subdivision (k) of Section 5020.1, or are a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. Section 1(b)(4) of Assembly Bill (AB) 52 established that only California Native American tribes, as defined in Section 21073 of the California PRC, are experts in the identification of TCRs and impacts thereto. Because ECORP does not meet the definition of a California Native American tribe, it only addresses information in this report for which it is qualified to identify and evaluate, and that which is needed to inform the cultural resources section of CEQA documents. This report, therefore, does not identify or evaluate TCRs. Should California Native American tribes ascribe additional importance to or interpretation of archaeological resources described herein, or provide information about non-archeological TCRs, that information is documented separately in the AB 52 tribal consultation record between the tribe(s) and lead agency and summarized in the TCRs section of the CEQA document, if applicable.

1.5 Report Organization

The following report documents the study and its findings and was prepared in conformance with the California Office of Historic Preservation's (OHP) *Archaeological Resource Management Reports: Recommended Contents and Format*. Appendix A includes the CHRIS record search request and historical society coordination. Appendix B contains documentation of a search of the Sacred Lands File. Appendix C presents photographs of the Project Area. Appendix D contains confidential cultural resource site location and site record.

Sections 6253, 6254, and 6254.10 of the California Code authorize state agencies to exclude archaeological site information from public disclosure under the Public Records Act. In addition, the California Public Records Act (Government Code Section 6250 et seq.) and California's open meeting laws (The Brown Act, Government Code Section 54950 et seq.) protect the confidentiality of Native American cultural place information. Because the disclosure of information about the location of cultural resources is prohibited by the Archaeological Resources Protection Act of 1979 (16 U.S. Code [USC] 552 470hh) and Section 307103 of the NHPA, it is exempted from disclosure under Exemption 3 of the federal Freedom of Information Act (5 USC 552) Likewise, the Information Centers of the California Historical Resources Information System (CHRIS) maintained by the OHP prohibit public dissemination of records search information. In compliance with these requirements, the results of this cultural resource investigation were prepared as a confidential document, which is not intended for public distribution.

2.0 SETTING

2.1 Environmental Setting

Elevations within the Project Area range from 954 to 970 feet above mean sea level. The Project Area is located immediately adjacent to a channelized portion of Cucamonga Creek.

2.2 Geology and Soils

According to Cox and Morton (1978), the Project Area is late Pleistocene and early Holocene alluvium, which is characterized by slightly to moderately consolidated deposits consisting mostly of fine to coarse-grained sand, but with thin beds of pebbles, gravels, or silt. Most of the vicinity is alluvial fans and stream valleys removed from mountains.

A search of the Natural Resources Conservation Service Web Soil Survey (2023) indicated that the soil of the Project Area consists entirely of Tujunga loamy sand, 0 to 5 percent slopes. This soil is classified as farmland of statewide importance, is derived from granite, and forms alluvial fans. The depth to water and restrictive feature is both more than 80 inches.

There exists the potential for buried pre-contact archaeological sites within the Project Area due to the presence of deep soils deposited during the Holocene period, when humans were present on this continent, and the likelihood of pre-contact archaeological sites located along perennial waterways such as Cucamonga Creek, which is currently restrained in a constructed channel that forms the eastern boundary of the Project Area.

2.3 Vegetation and Wildlife

The Project Area is located in an urban environment. Former use as vineyards, and modern planting practice has eliminated the majority of native species from the Project Area. The dominant plant community within the Project Area includes eucalyptus trees, ragweed, and Russian thistle. Wildlife species that may occur within the Project Area include ground squirrels, raccoons, possums, crows, and pigeons.

3.0 CULTURAL CONTEXT

3.1 Regional Pre-Contact History

3.1.1 Paleo-Indian Period/Terminal Pleistocene (12,000 to 10,000 BP)

The first inhabitants of southern California were big game hunters and gatherers exploiting extinct species of Pleistocene megafauna (e.g., mammoth and other Rancholabrean fauna). Local "fluted point" assemblages comprised of large spear points or knives are stylistically and technologically similar to the Clovis Paleo-Indian cultural tradition dated to this period elsewhere in North America (Moratto 1984). Archaeological evidence for this period in southern California is limited to a few small temporary camps with fluted points found around late Pleistocene lake margins in the Mojave Desert and around Tulare

Lake in the southern San Joaquin Valley. Single points are reported from Ocotillo Wells and Cuyamaca Pass in eastern San Diego County and from the Yuha Desert in Imperial County (Rondeau et al. 2007).

3.1.2 Early Archaic Period/Early Holocene (10,000 to 8,500 BP)

Approximately 10,000 years ago, at the beginning of the Holocene, warming temperatures, and the extinction of the megafauna resulted in changing subsistence strategies with an emphasis hunting smaller game and increasing reliance on plant gathering. Previously, Early Holocene sites were represented by only a few sites and isolates from the Lake Mojave and San Dieguito complexes found along former lakebeds and grasslands of the Mojave Desert and in inland San Diego County. More recently, southern California Early Holocene sites have been found along the Santa Barbara Channel (Erlandson 1994), in western Riverside County (Goldberg 2001; Grenda 1997), and along the San Diego County coast (Gallegos 1991; Koerper et al. 1991; Warren 1967).

The San Dieguito Complex was defined based on material found at the Harris site (CA-SDI-149) on the San Dieguito River near Lake Hodges in San Diego County. San Dieguito artifacts include large leaf-shaped points; leaf-shaped knives; large ovoid, domed, and rectangular end and side scrapers; engraving tools; and crescents (Koerper et al. 1991). The San Dieguito Complex at the Harris site dates to 9,000 to 7,500 BP (Gallegos 1991). However, sites from this time period in coastal San Diego County have yielded artifacts and subsistence remains characteristic of the succeeding Encinitas Tradition, including manos, metates, core-cobble tools, and marine shell (Gallegos 1991; Koerper et al. 1991).

3.1.3 Encinitas Tradition or Milling Stone Period/Middle Holocene (8,500 to 1,250 BP)

The Encinitas Tradition (Warren 1968) and the Milling Stone Period (Wallace 1955) refer to a long period of time during which small mobile bands of people who spoke an early Hokan language foraged for a wide variety of resources including hard seeds, berries, and roots/tubers (yucca in inland areas), rabbits and other small animals, and shellfish and fish in coastal areas. Sites from the Encinitas Tradition consist of residential bases and resource acquisition locations with no evidence for overnight stays. Residential bases have hearths and fire-affected rock indicating overnight stays and food preparation. Residential bases along the coast have large amounts of shell and are often termed shell middens.

The Encinitas Tradition as originally defined (Warren 1968) applied to all of the non-desert areas of southern California. Recently, four patterns within the Encinitas Tradition have been proposed which apply to different regions of southern California (Sutton and Gardner 2010). The Topanga Pattern includes archaeological material from the Los Angeles Basin and Orange County. The Greven Knoll Pattern pertains to southwestern San Bernardino County and western Riverside County (Sutton and Gardner 2010). Each of the patterns is divided into temporal phases. The Topanga Pattern included the Los Angeles Basin and Orange County. The Topanga I phase extends from 8,500 to 5,000 Years Before Present (BP) and Topanga II runs from 5,000 to 3,500 BP. The Topanga Pattern ended about 3,500 BP with the arrival of Takic speakers, except in the Santa Monica Mountains where the Topanga III phase lasted until about 2,000 BP.

The Encinitas Tradition in inland areas east of the Topanga Pattern (southwestern San Bernardino County and western Riverside County) is the Greven Knoll Pattern (Sutton and Gardner 2010). Greven Knoll I

(9,400 to 4,000 BP) has abundant manos and metates. Projectile points are few and are mostly Pinto points. Greven Knoll II (4,000 to 3,000 BP) has abundant manos and metates and core tools. Projectile points are mostly Elko points. The Elsinore site on the east shore of Lake Elsinore was occupied during Greven Knoll I and Greven Knoll II. During Greven Knoll I faunal processing (butchering) took place at the lakeshore and floral processing (seed grinding), cooking, and eating took place farther from the shore. The primary foods were rabbit meat and seeds from grasses, sage, and ragweed. A few deer, waterfowl, and reptiles were consumed. The recovered archaeological material suggests that a highly mobile population visited the site at a specific time each year. It is possible that their seasonal round included the ocean coast at other times of the year. These people had an unspecialized technology as exemplified by the numerous crescents, a multi-purpose tool. The few projectile points suggest that most of the small game was trapped using nets and snares (Grenda 1997:279). During Greven Knoll II, which included a warmer drier climatic episode known as the Altithermal, it is thought that populations in interior southern California concentrated at oases and that Lake Elsinore was one of them. The Elsinore site (CA-RIV-2798) is one of five known Middle Holocene residential sites around Lake Elsinore. Tools were mostly manos, metates, and hammerstones. Scraper planes were absent. Flaked-stone tools consisted mostly of utilized flakes used as scrapers. The Elsinore site during the Middle Holocene was a "recurrent extended encampment" which could have been occupied during much of the year.

The Encinitas Tradition lasted longer in inland areas because Takic speakers did not move east into these areas until circa 1,000 BP. Greven Knoll III (3,000 to 1,000 BP) is present at the Liberty Grove site in Cucamonga (Salls 1983) and at sites in Cajon Pass that were defined as part of the Sayles Complex (Kowta 1969). Greven Knoll III sites have a large proportion of manos and metates and core tools as well as scraper planes. Kowta (1969) suggested the scraper planes may have been used to process yucca and agave. The faunal assemblage consists of large quantities of lagomorphs (rabbits and hares) and lesser quantities of deer, rodents, birds, carnivores, and reptiles.

3.1.4 Palomar Tradition (1,250 to 150 BP)

The native people of southern California (north of a line from Agua Hedionda to Lake Henshaw in San Diego County) spoke Takic languages which form a branch or subfamily of the Uto-Aztecan language family. The Takic languages are divided into the Gabrielino-Fernandeño language, the Serrano-Kitanemuk group (the Serrano [includes the Vanyume dialect] and Kitanemuk languages), the Tataviam language, and the Cupan group (the Luiseño-Juaneño language, the Cahuilla Language, and the Cupeño language) (Golla 2011). According to Sutton (2009), Takic speakers occupied the southern San Joaquin Valley before 3,500 BP. Perhaps as a result of the arrival of Yokutsan speakers (a language in the Penutian language family) from the north, Takic speakers moved southeast. The ancestors of the Kitanemuk moved into the Tehachapi Mountains and the ancestors of the Tataviam moved into the upper Santa Clara River drainage. The ancestors of the Gabrielino (Tongva) moved into the Los Angeles Basin about 3,500 BP, replacing the native Hokan speakers. Speakers of proto-Gabrielino reached the southern Channel Islands by 3,200 BP (Sutton 2009) and moved as far south as Aliso Creek in Orange County by 3,000 BP.

Takic people moved south into southern Orange County after 1,250 BP and became the ancestors of the Juaneño. Takic people moved inland from southern Orange County about 1,000 BP, becoming the ancestors of the Luiseño, Cupeño, and Cahuilla. Takic people from the Kitanemuk area moved east along

the northern slopes of the San Gabriel Mountains and spread into the San Bernardino Mountains and along the Mojave River becoming the ancestors of the Serrano and the Vanyume.

The material culture of the inland areas where Takic languages were spoken at the time of Spanish contact is part of the Palomar Tradition (Sutton 2011). San Luis Rey I Phase (1,000 to 500 BP) and San Luis Rey II Phase (500 to 150 BP) pertain to the area occupied by the Luiseño at the time of Spanish contact. The Peninsular I (1,000 to 750 BP), II (750 to 300 BP), and III (300 to 150 BP) Phases are used in the areas occupied by the Cahuilla and Serrano (Sutton 2011).

San Luis Rey I is characterized by Cottonwood Triangular arrow points, use of bedrock mortars, stone pendants, shell beads, quartz crystals, and bone tools. San Luis Rey II sees the addition of ceramics, including ceramic cremation urns, red pictographs on boulders in village sites, and steatite arrow straighteners. San Luis Rey II represents the archaeological manifestation of the antecedents of the historically known Luiseño (Goldberg 2001). During San Luis Rey I there were a series of small permanent residential bases at water sources, each occupied by a kin group (probably a lineage). During San Luis Rey II people from several related residential bases moved into a large village located at the most reliable water source (Waugh 1986). Each village had a territory that included acorn harvesting camps at higher elevations. Villages have numerous bedrock mortars, large dense midden areas with a full range of flaked and ground stone tools, rock art, and a cemetery.

3.2 Ethnohistory

Ethnographic accounts of Native Americans indicate that the Gabrieliño (also known as Gabrieleno, or Tongva) once occupied the region that encompasses the Project Area. At the time of contact with Europeans, the Gabrieliño were the main occupants of the southern Channel Islands, the Los Angeles Basin, much of Orange County, and extended as far east as the western San Bernardino Valley. The term "Gabrieliño" came from the group's association with Mission San Gabriel Arcángel, established in 1771. The Gabrieliño are believed to have been one of the most populous and wealthy Native American tribes In southern California prior to European contact, (Bean and Smith 1978; McCawley 1996; Moratto 1984) and spoke a Takic language. The Takic group of languages is part of the Uto-Aztecan language family.

The Gabrieliño occupied villages located along rivers and at the mouths of canyons. Populations ranged from 50 to 200 inhabitants. Residential structures within the villages were domed, circular, and made from thatched tule or other available wood. Gabrieliño society was organized by kinship groups, with each group composed of several related families who together owned hunting and gathering territories. Settlement patterns varied according to the availability of floral and faunal resources (Bean and Smith 1978; McCawley 1996; Miller 1991).

Vegetal staples consisted of acorns, chia, seeds, piñon nuts, sage, cacti, roots, and bulbs. Animals hunted included deer, antelope, coyote, rabbits, squirrels, rodents, birds, and snakes. The Gabrieliño also fished and collected marine shellfish (Bean and Smith 1978; McCawley 1996; Miller 1991).

By the late 18th century, Gabrieliño population had significantly dwindled due to introduced European diseases and dietary deficiencies. Gabrieliño communities disintegrated as families were taken to the

missions (Bean and Smith 1978; McCawley 1996; Miller 1991). However, current descendants of the Gabrieliño are preserving Gabrieliño culture.

3.3 Southern California Regional History

The first European to visit California was Spanish maritime explorer Juan Rodriguez Cabrillo in 1542. Cabrillo was sent north by the Viceroy of New Spain (Mexico) to look for the Northwest Passage. Cabrillo visited San Diego Bay, Catalina Island, San Pedro Bay, and the northern Channel Islands. The English adventurer Francis Drake visited the Miwok Native American group at Drake's Bay or Bodega Bay in 1579. Sebastian Vizcaíno explored the coast as far north as Monterey in 1602. He reported that Monterey was a11xcellent location for a port (Castillo 1978). Vizcaíno also named San Diego Bay to commemorate Saint Didacus. The name began to appear on European maps of the New World by 1624 (Gudde 1998:332).

Colonization of California began with the Spanish Portolá land expedition. The expedition, led by Captain Gaspar de Portolá of the Spanish army and Father Junipero Serra, a Franciscan missionary, explored the California coast from San Diego to the Monterrey Bay Area in 1769. As a result of this expedition, Spanish missions to convert the native population, presidios (forts), and towns were established. The Franciscan missionary friars established 21 missions in Alta California (the area north of Baja California) beginning with Mission San Diego in 1769 and ending with the mission in Sonoma established in 1823. The purpose of the missions and presidios was to establish Spanish economic, military, political, and religious control over the Alta California territory. Mission San Diego was established to convert the Native Americans that lived in the area, known as the Kumeyaay or Diegueño. Mission San Gabriel Archangel was founded in 1771 east of what is now Los Angeles to convert the Tongva or Gabrielino. Mission San Fernando, also in Tongva/Gabrielino territory, was established in 1797. Mission San Juan Capistrano was established in 1776 on San Juan Creek (in what is now southern Orange County) to convert the Acjachemen or Juaneño. Mission San Luis Rey was established in 1798 on the San Luis Rey River (in what is now northern San Diego County) to convert the Luiseño. Missions San Buenaventura and Santa Barbara were founded in Chumash territory in 1782 and 1786, respectively (Castillo 1978:100).

Some missions later established outposts in inland areas. An *assistencia* (mission outpost) of Mission San Luis Rey, known as San Antonio de Pala, was built in Luiseño territory along the upper San Luis Rey River near Mount Palomar in 1810 (Pourade 1961). A chapel administered by Mission San Gabriel Archangel was established in the San Bernardino area in 1819 (Bean and Smith 1978). The present Asistencia within the western outskirts of present-day Redlands was built circa 1830 (Haenszel and Reynolds 1975). The missions sustained themselves through cattle ranching and traded hides and tallow for supplies brought by ship. Large cattle ranches were established by Mission San Luis Rey at Temecula and San Jacinto (Gunther 1984). The Spanish also constructed presidios, or forts, at San Diego and Santa Barbara, and a pueblo, or town, was established at Los Angeles. The Spanish period in California began in 1769 with the Portola expedition and ended in 1821 with Mexican independence.

After Mexico became independent from Spain in 1821, what is now California became the Mexican province of Alta California. The Mexican government closed the missions in the 1830s and former mission lands were granted to retired soldiers and other Mexican citizens for use as cattle ranches. Much of the land along the coast and in the interior valleys became part of Mexican land grants or "ranchos"

(Robinson 1948). During the Mexican period there were small towns at San Diego (near the presidio), San Juan Capistrano (around the mission), and Los Angeles. The rancho owners lived in one of the towns or in an adobe house on the rancho. The Mexican Period includes the years 1821 to 1848.

The American period began when the Treaty of Guadalupe Hidalgo was signed between Mexico and the United States in 1848. As a result of the treaty, Alta California became part of the United States as the territory of California. Rapid population increase occasioned by the Gold Rush of 1849 allowed California to become a state in 1850. Most Mexican land grants were confirmed to the grantees by U.S. courts, but usually with more restricted boundaries which were surveyed by the U.S. Surveyor General's office. Land that was not part of a land grant was owned by the U.S. government until it was acquired by individuals through purchase or homesteading. Floods and drought in the 1860s greatly reduced the cattle herds on the ranchos, making it difficult to pay the new American taxes on the thousands of acres they owned. Many Mexican-American cattle ranchers borrowed money at usurious rates from newly arrived Anglo-Americans. The resulting foreclosures and land sales transferred most of the land grants into the hands of Anglo-Americans (Cleland 1941:137-138).

3.4 Ontario History

The Project Area is located just to the northeast of the Santa Ana Del Chino Land Grant and to the South of the Rancho Cucamonga Land Grant but was not in private hands at the time California achieved statehood.

The project is located within the present-day city limits of Ontario, California. In 1881, Canadian engineer George Chaffey saw the potential of this area, then known as the Cucamonga Desert. Believing that this land, if properly irrigated, could become profitable, he designed a pipe irrigation system and created the Etiwanda Water Company, which became the standard for Southern California water management. George Chaffey and his brother William established then established the Etiwanda Colony in 1881, eventually becoming Upland. Following their initial success, in 1882 they purchased land encompassing an area known as the "San Antonio lands" to form the Ontario Colony, named after their previous home, the province of Ontario, Canada (City of Ontario n.d.a and n.d.b; Upland Heritage 2021).

In 1887, the Atchison, Topeka, and Santa Fe Railroad reached Ontario and Etiwanda colonies and a railway station was subsequently constructed by the Bedford Brothers. This helped spur growth in the area (Upland Heritage 2021). On December 10, 1891, Ontario was incorporated as a city.

Ontario initially developed as an agricultural community dominated by the citrus industry (City of Ontario n.d.b) and continued to grow. In 1901, Chaffey College was established by the Chaffey brothers as an agricultural and general education college. Recognizing Ontario's success, an act of congress in 1903 declared Ontario a "Model Irrigation Colony" (City of Ontario n.d.b), noting innovations in standards of urban living, and it served as an example of a successful irrigation project. Concrete irrigation systems and municipal water schemes like those of the Chaffey brothers would be copied in nearby areas for years to come (City of Ontario n.d.b). In 1923, taking advantage of some flat, unused crop land, Latimer Field was established by Waldo Waterman and Archie Mitchell. Continued development forced Mitchell and Waterman to move their aviation facilities farther east, finally taking up their permanent location in an area south of the intersection of Vineyard Avenue and Holt Boulevard. The airfield went on to serve as a

vital training ground for pilots during World War II. After World War II, in response to the growth of the area, the airport developed into Ontario International Airport (City of Ontario n.d. b)

During the latter half of the Twentieth Century, the citrus groves were gradually supplanted by residential development as Ontario transformed into a suburban community. Today, Ontario is a diverse community with a population of approximately 173,000, with an economy centered on manufacturing and industrial (City of Ontario n.d. a, and n.d. b).

4.0 METHODS

4.1 Personnel Qualifications

Registered Professional Archaeologist (RPA) Sonia Sifuentes, M.S., who meets the Secretary of the Interior's Professional Qualifications Standards for prehistoric and historical archaeology, supervised this cultural resource investigation. Staff Archaeologist Robert Cunningham conducted the fieldwork. Associate Archaeologists Nicholas Bizzell and Steve Wintergerst prepared the technical report. Lisa Westwood, RPA provided technical report review and quality assurance.

Sonia Sifuentes, RPA is a Senior Archaeologist and the Southern California Cultural Resources Manager at ECORP and has more than 15 years of experience in cultural resources management, primarily in southern California. Ms. Sifuentes holds a M.S. in Archaeology of the North. She has participated in and supervised numerous surveys, test programs, and data recovery excavations for both prehistoric and historical sites; and has cataloged, identified, and curated thousands of artifacts. She has conducted evaluations of cultural resources for eligibility for the NRHP and CRHR. Ms. Sifuentes is experienced in the organization and execution of field projects in compliance with Section 106 of the NHPA and CEQA. She has contributed to and authored numerous cultural resources technical reports, research designs, and cultural resources management plans.

Robert Cunningham has 17 years of experience in cultural resources management, with an emphasis on the recordation, analysis, and evaluation of historic-period resources. He has participated in all aspects of archaeological fieldwork, including survey, test excavation, and construction monitoring. He has served as Field Director for archaeological inventories and site evaluation projects. He has recorded and mapped numerous prehistoric and historic-period archaeological sites and has identified and documented hundreds of prehistoric and historic artifacts. Mr. Cunningham has prepared numerous archaeological site records and has authored and contributed to a variety of cultural resources technical reports.

Nicholas Bizzell is an Associate Archaeologist with ECORP and has over 12 years of experience in cultural resources management. He holds a B.A. in Anthropology from Sonoma State University in Rohnert Park, California. Mr. Bizzell has participated in numerous archaeological projects throughout California, experience that includes working with clients in both public and private sectors. Mr. Bizzell has substantial archaeological experience with cultural resources monitoring, inventory surveys, excavation and subsurface testing, and laboratory analysis for projects in northern and southern California. Additionally, Mr. Bizzell is cross trained as a paleontological monitor for projects requiring both archaeological and paleontological monitoring.

Steve Wintergerst is an Associate Archaeologist with 13 years of experience in cultural resources management. He holds a B.A. in Anthropology. Mr. Wintergerst has participated in all aspects of archaeological fieldwork and laboratory process, with extensive experience throughout California and western Arizona. His experience has involved working as an archaeological crew chief, archaeological technician, archaeological monitor, paleontological monitor, and paleontological preparator. He is experienced in the organization and execution of field projects in compliance with CEQA and Section 106 of the NHPA. completed expeditiously.

Lisa Westwood, RPA has 28 years of experience and meets the Secretary of the Interior's Professional Qualifications Standards for prehistoric and historical archaeology. She holds a B.A. in Anthropology and an M.A. in Anthropology (Archaeology). She is the Director of Cultural Resources for ECORP.

4.2 Records Search Methods

ECORP conducted a records search for the Project Area at the South-Central Coastal Information Center (SCCIC) of the CHRIS at California State University, Fullerton on May 25, 2023 (Appendix A). The purpose of the records search was to determine the extent of previous surveys within a 1-mile (1,600-meter) radius of the Proposed Project Area, and whether previously documented pre-contact or historic archaeological sites, architectural resources, or traditional cultural properties exist within this area.

In addition to the official records and maps for archaeological sites and surveys in San Bernardino County, the following historic references were also reviewed: Built Environment Resource Directory (OHP 2023a); the National Register Information System (National Park Service [NPS] 2023); Office of Historic Preservation, California Historical Landmarks [CHL] OHP 2023b); California Points of Historical Interest (OHP 2023c) Caltrans State Bridge Inventory (California Department of Transportation [Caltrans] 2015); and *Historic Spots in California* (Kyle 2002).

Other references examined include a RealQuest Property Search and historic General Land Office (GLO) land patent records (Bureau of Land Management [BLM] 2023). Historic maps reviewed include:

- 1858 BLM GLO Plat map for Township 1 South, Range 7 West;
- 1865 BLM GLO Plat map for Township 1 South, Range 7 West;
- 1897 Cucamonga, California topographic quadrangle map (1:62,500 scale);
- 1900 Cucamonga, California topographic quadrangle map (1:62,500 scale);
- 1903 Cucamonga, California topographic quadrangle map (1:62,500 scale);
- 1944 Cucamonga, California topographic quadrangle map (1:62,500 scale);
- 1953 Guasti, California topographic quadrangle map (1:24,000 scale);
- 1954 Ontario, California topographic quadrangle map (1:62,500 scale);
- 1966 Guasti, California topographic quadrangle map (1:24,000 scale); and
- 2021 Guasti, California topographic quadrangle map (1:24,000 scale).

ECORP reviewed historic aerial photographs taken in 1938, 1948, 1959, 1980, and from 1985 to 2020 for any indications of property usage and built environment.

ECORP conducted a search for a local historical registry. Ontario Heritage is the nearest historical society, which is in the City of Ontario.

4.3 Sacred Lands File Coordination Methods

In addition to the records search, ECORP contacted the California Native American Heritage Commission (NAHC) on May 3, 2023 to request a search of the Sacred Lands File for the Project Area (Appendix B). This search determines whether the California Native American tribes within the Project Area have recorded Sacred Lands, because the Sacred Lands File is populated by members of the Native American community with knowledge about the locations of tribal resources. In requesting a search of the Sacred Lands File, ECORP solicited information from the Native American community regarding TCRs, but the responsibility to formally consult with the Native American community lies exclusively with the federal and local agencies under applicable state and federal laws. The lead agencies do not delegate government-to-government authority to any private entity to conduct tribal consultation.

4.4 Other Interested Party Consultation Methods

ECORP emailed a letter to Ontario Heritage on May 9, 2023 to solicit comments or obtain historical information that the repository might have regarding events, people, or resources of historical significance in the area (Appendix A).

4.5 Field Methods

ECORP subjected the Project Area to an intensive pedestrian survey on June 1, 2023 under the guidance of the *Secretary of the Interior's Standards for the Identification of Historic Properties* (NPS 1983) using 15-meter-spaced transects. ECORP expended one person-day in the field. ECORP examined the ground surface for indications of surface or subsurface cultural resources and inspected the general morphological characteristics of the ground surface for indications of subsurface deposits that may be manifested on the surface, such as circular depressions or ditches. Whenever possible, ECORP examined the locations of subsurface exposures caused by such factors as rodent activity, water or soil erosion, or vegetation disturbances for artifacts or for indications of buried deposits. ECORP did not conduct subsurface investigations or artifact collections during the pedestrian survey.

Standard professional practice requires that all cultural resources encountered during the survey be recorded using Department of Parks and Recreation (DPR) 523-series forms approved by the California OHP. The resources are usually photographed, mapped using a handheld Global Positioning System receiver, and sketched as necessary to document their presence using appropriate DPR forms.

5.0 RESULTS

5.1 Records Search

The records search consisted of a review of previous research and literature, records on file with the SCCIC for previously recorded resources, and historical aerial photographs and maps of the vicinity.

5.1.1 Previous Research

Twenty-two previous cultural resource investigations have been conducted within the Project Area or the 1-mile search radius, covering approximately 25 percent of the total area surrounding the Project Area within the records search radius (Table 1). Of the 22 studies conducted within the 1-mile search radius, two overlapped a portion of the Project Area. Appendix A lists the reports located within 1 mile of the Project Area. These studies revealed the presence of historical sites, including historic buildings, a historic railroad, and historic drainage channels, and a multicomponent site containing both historic and prehistoric artifacts, none of which are located within the Project Area. The previous studies were conducted between 1976 and 2016 and vary in size from 0.1 to 280 acres.

Table 1. Previous Cultural Studies within 1 Mile of the Project Area

Report Number	Author(s)	Report Title	Year	Includes Portion of the Project Area?
SB-00317	Martz, Patricia	Description and Evaluation of the Cultural Resources: Cucamonga, Demens, Deer and Hillside Creek Channels, San Bernardino and Riverside Counties, California	1976	Yes
SB-02863	Wlodarski, Robert J.	Negative Archaeological Survey Report, Provide High Occupancy Vehicle (HOV) Lanes on I-10 Between Mills and I-15	1993	No
SB-03248	Smith, Francesca and Robert Wlodarski	Historic Property Survey Report: Provide High Occupancy Vehicle Lanes on I-10 Between the Los Angeles/San Bernardino County Line & I-15 in San Bernardino County, California	1994	No
SB-03586	Love, Bruce	Ontario to Colton Pipeline, San Bernardino County, California	2000	No
SB-04138	Tang, Bai	Identification & Evaluation of Historic Properties: Fourth St Recycled Water Pipeline in And Near the Cities of Ontario & Rancho Cucamonga, San Bernardino County, California	2002	No
SB-04151	Budinger, Fred E.	Verizon Wireless Site: Turner B Cow, 200 E. Holt Ave, Ontario, California	2001	No

Table 1. Previous Cultural Studies within 1 Mile of the Project Area

Report Number	Author(s)	Report Title	Year	Includes Portion of the Project Area?
SB-04152	Billat, Lorna	Nextel Communications Proposed Wireless Telecommunications Service Facilities in Southern California—-CA 6685E Ontario	2002	No
SB-04167	Dahdul, Miriam	Identification and Evaluation of Historic Properties: Ontario Senior Housing Project, 1449 East D St, City of Ontario, San Bernardino County, California	2003	No
SB-04671	Dice, Michael	Cultural Resource Records Search and Site Visit Results for the Proposed Ontario Airport TIS Transmitter Site, Located Near Parking Lot D & F of the Ontario International Airport, Ontario, San Bernardino County, California	2005	No
SB-04678	Encarnacion, Deirdre, Bai Tang, Michael Hogan, John J. Eddy, And Daniel Ballester	Historical/Archaeological Resources Survey Report: San Antonio Channel (West Edison) Recycled Water Pipeline Project in the Cities of Montclair and Ontario, San Bernardino County, California	2005	No
SB-05358	Sider, W.A.	Cucamonga Creek 1776-1976 After 200 Years	1976	Yes
SB-05367	Marvin, Judith and Riordan Goodwin	Cultural Resource Assessment: Hofer Ranch Airport Business Park Specific Plan Amendment, City of Ontario, San Bernardino County, California	2004	No
SB-05481	Budinger, Fred E.	Proposed Wireless Device Monopalm and Associated Equipment; Branding Site, 1175 North Del Rio Place, Ontario, California, 91761	2005	No
SB-06072	Bonner, Wayne H. and Marnie Aislin-Kay	Cultural Resource Records Search Results for Royal Street Communications, California LLC Candidate LA0726A (Ontario Corporate Center), 430 North Vineyard Avenue, Ontario, San Bernardino County, California	2008	No
SB-06522	Bonner, Wayne H. And Sarah A. Williams	Cultural Resources Records Search and Site Visit for T-Mobile USA Candidate IE 25501F (Hellman Row), 6th Street and Hellman Avenue, Ontario, San Bernardino County, California	2009	No
SB-07006	Puckett, Heather R.	Yale, 2235 East 4th Street, Ontario, California	2011	No

Table 1. Previous Cultural Studies within 1 Mile of the Project Area

Report Number	Author(s)	Report Title	Year	Includes Portion of the Project Area?
SB-07755	McKenna, Jeanette A.	A Phase I Cultural Resources Investigation of the Meredith International Centre Project Area in the City of Ontario, San Bernardino County, California	2014	No
SB-07853	Fulton, Phil and Casey Tibbett	Cultural Resource Assessment Class III Inventory: Verizon Wireless Services Elma Facility, City of Ontario, County of San Bernardino, California	2014	No
SB-08071	McKenna, Jeanette A.	Archaeological/Paleontological Monitoring, Vineyard Industrial, LLC, Project Area, Ontario, San Bernardino County, California	2015	No
SB-08204	McKenna, Jeanette A.	Archaeological/Paleontological Monitoring, Vineyard Industrial I, LLC, Building 3 Project Area, Ontario, San Bernardino County, California	2015	No
SB-08228	McKenna, Jeanette A.	Archaeological/Paleontological Monitoring Program, 4th Street Sewer Pipe Installation Between Vineyard Avenue and Archibald Avenue, Ontario, San Bernardino County, California	2016	No
SB-08257	Tang, Bai	Due-Diligence Historical/Archaeological Resources Study Inland Empire Utilities Agency Recharge Basin Maintenance Plan Chino Basin Area, San Bernardino and Riverside Counties, California CRM TECH Contract No. 2989	2016	No

The results of the records search indicate that less than 5 percent of the Project Area has been previously surveyed for cultural resources. The most recent survey that overlapped the Project Area was conducted in 1976. For these reasons, a survey of the entire Project Area was warranted.

The records search also determined that nine resources have been previously recorded within 1 mile of the Project Area (Table 2). Of these, one multi-component site (CA-SBR-016708/H) is believed to be associated with Native American and European occupation of the vicinity. The other eight historic-era resources consist of one mixed agricultural and residential historic district, one mansion, one church building, Ontario Airport Terminal One, a segment of the Union Pacific Railroad, a drainage channel, and two sites associated with early European-American agriculture. There are no previously recorded cultural resources within the Project Area.

Table 2. Previously Recorded Cultural Resources within 1 Mile of the Project Area

Site Number	Primary Number	Recorder and Year	Age/ Period	Site Description
CA-SBR-010330H	P-36-010330	S. Ashkar, Jones & Stokes Associates, Inc. 1999; Goodwin, R., LSA Associates, Inc. 2002; Harper, C.D., SWCA 2008; Tibbet, C., LSA Associates, Inc. 2010; Paul, Daniel D., ICF International 2012	Historic	Union Pacific Railroad
–	P-36-012630	Taniguchi+Taniguchi, Galvin & Associates 2005; Shannon Davis and Marilyn Novell, ASM 2016	Historic	Ontario International Airport Terminal; Terminal One
–	P-36-015469	Clement Meighan 1975	Historic	Guasti/Brookside Winery
–	P-36-015471	Clement Meighan 1975; Warner, Solie, Ontario Planning Department 1985	Historic	Church of San Secondo d'Asti
–	P-36-015990	Jim Warner, Ontario Planning Dept 1985	Historic	Guasti Historic District
–	P-36-016279	Warner, Solie, Ontario Planning Dept 1985	Historic	Guasti Mansion
CA-SBR-016708/H	P-36-026315	Jeanette McKenna, McKenna et al. 2014; Jeanette McKenna, McKenna et al. 2015; Jeanette McKenna, McKenna et al. 2015; Jeanette McKenna, McKenna et al. 2017	Prehistoric, Historic	Historic Agricultural site
–	P-36-031377	Jeanette McKenna, McKenna et al. 2017	Historic	Rock Lined Drainage Channel
CA-SBR-033067H	P-36-033067	Jeanette McKenna, McKenna et al. 2018	Historic	Romolo Winery

5.1.2 Records

The OHP's Built Environment Resource Directory for San Bernardino County (dated May 9, 2023) included four built environment resources within 1 mile of the Project Area (OHP 2023a):

- the Bob Hope United Service Organizations building, located at 1940 East Moore Way, approximately 0.54 mile southwest of the Project Area;
- the Guasti Mansion, located at 2903 East Guasti Road, approximately 0.91 mile east of the Project Area;
- Hangar 20, which is currently the Southwest Airlines cargo building, located approximately 0.24 mile south of the Project Area; and
- Hangar 21, located approximately 0.21 mile south of the Project Area.

The National Register Information System (NPS 2023) failed to reveal any eligible or listed properties within the Project Area. The nearest National Register property is Hofer Ranch, located at 11248 South Turner Avenue, approximately 1.15 miles southwest of the Project Area.

ECORP reviewed resources listed as CHLs by the OHP (2023b) on May 3, 2023.The nearest listed landmark is #490, the Cucamonga Rancho Winder. The plaque is located 2.91 miles north of the Project Area.

Historic Spots in California (Kyle 2002) mentions Euclid Avenue in the cities of Ontario and Upland, approximately 2.5 miles west of the Project Area. Kyle notes four historic trails that cross Euclid Avenue: the Mojave trail, which crossed Euclid Avenue around Foothill Boulevard; the Anza trail, which crossed Euclid Avenue near Phillips Street; the old Emigrant Trail, which crossed Euclid Avenue at the same place as Anza trail, near Phillips Street; and the Colorado Road trail, which crossed Euclid Avenue and became the Butterfield Overland Mail stagecoach line. Any one of these roads may pass near the Project Area.

Historic GLO land patent records from the BLM's patent information database (BLM 2023) revealed that the western half of Section 22 was patented to Patrizio Marsicano on March 20, 1886 and was listed as a cash sale entry.

A RealQuest online property search for APN 0110-322-33-000 shows that the Project Area is owned by J.C. Horizon Ltd. And was purchased in 2018 for $8,000,000 by way of a Corporation Grant Deed from Qualco, Inc. The property is described as 10.47 acres of vacant land. No other information is available.

The Caltrans Bridge Local and State Inventories (Caltrans 2018, 2019) lists seven historic-period bridges within 1 mile of the Project Area.

- Local Bridge 54C0202 is located 0.84-mile northeast of the Project Area and carries Archibald Avenue over Archibald Reservoir Channel, south of Fourth Street and north of Inland Empire Boulevard. It was constructed in 1970 and was evaluated by Caltrans as a Category 5 bridge, not eligible for the NRHP under Criterion C.
- Local Bridge 54C0397 is located 0.42 mile north-northeast of the Project Area and carries Inland Empire Boulevard over Cucamonga Creek, east of QVC Way and west of Archibald Avenue. It was constructed in 1967 and was evaluated by Caltrans as a Category 5 bridge, not eligible for the NRHP under Criterion C.
- State Bridge 54-0438L, the Cucamonga Wash overpass, carries Interstate 10 westbound lanes over Cucamonga Wash and is located 0.27 miles north-northwest of the Project Area. It was constructed in 1953 and was evaluated by Caltrans as a Category 5 bridge, not eligible for the NRHP under Criterion C.
- State Bridge 54-0438R, the Cucamonga Wash overpass, carries Interstate 10 eastbound lanes over Cucamonga Wash and is located 0.23 mile north-northwest of the Project Area. It was constructed in 1953 and was evaluated by Caltrans as a Category 5 bridge, not eligible for the NRHP under Criterion C.
- State Bridge 54-0437R, the Holt Boulevard off ramp undercrossing westbound, carries Interstate 10 over Holt Boulevard and is located 0.31 mile north-northwest of the Project Area. It was

constructed in 1953 and was evaluated by Caltrans as a Category 5 bridge, not eligible for the NRHP under Criterion C.

- State Bridge 54-0437L, the Holt Boulevard off ramp undercrossing westbound, carries Interstate 10 over Holt Boulevard and is located 0.30 mile north-northwest of the Project Area. It was constructed in 1966 and was evaluated by Caltrans as a Category 5 bridge, not eligible for the NRHP under Criterion C.
- State Bridge 54-0439, the Vineyard Avenue overcrossing, carries Vineyard Avenue over Interstate 10 and is located 0.67 mile northwest of the Project Area. It was constructed in 1966 and was evaluated by Caltrans as a Category 5 bridge, not eligible for the NRHP under Criterion C.

The *Handbook of North American Indians* (Lowell and Bean 1978) does not list any nearby Native Villages. The Project Area is approximately 25 miles east of Mission San Gabriel and approximately 28 miles west of the San Bernardino Asistencia.

5.1.3 Map Review and Aerial Photographs

The review of historical aerial photographs and maps of the Project Area provides information on the past land uses of the property and potential for buried archaeological sites. This information shows the Project Area was initially used for farming. Following is a summary of the review of historical maps and photographs.

- The 1858 BLM GLO Plat map for Township 1 South, Range 7 West depicts a wagon road from Los Angeles to San Bernardino roughly following the alignment of present-day Interstate 10, north of the Project Area. Cucamonga Creek is depicted as an unnamed dry wash just east of the Project Area.
- The 1865 BLM GLO Plat map for Township 1 South, Range 7 West shows the same information as the 1858 GLO Plat map.
- The 1897 Cucamonga, California topographic quadrangle map (1:62,500 scale) depicts the Project Area as undeveloped. The Southern Pacific Railroad is south of the Project Area.
- The 1900 Cucamonga, California topographic quadrangle map (1:62,500 scale) depicts the same information as the 1897 Cucamonga, California topographic quadrangle map.
- The 1903 Cucamonga, California topographic quadrangle map (1:62,500 scale) depicts the same information as the 1900 and 1897 Cucamonga, California topographic quadrangle maps.
- Aerial photographs from 1938 show that the Project Area is agricultural groves. "A Street", which roughly follows the alignment of East Guasti Road, and the Southern Pacific Railroad can be seen to the immediate south of the Project Area. No structures are visible within the Project Area.
- The 1944 Cucamonga, California topographic quadrangle map (1:62,500 scale) depicts an unnamed east–west-oriented road, which roughly follows the alignment of present-day East

Guasti Road, immediately north of the railroad tracks. Holt Boulevard is shown as part of Highway 99/70.

- Aerial photographs from 1948 show that Cucamonga Creek has been channelized, which indicated that it was channelized sometime between 1938 and 1948. No structures are visible within the Project Area.
- The 1953 Guasti, California topographic quadrangle map (1:24,000 scale) depicts the same information within the Project Area as the 1944 Cucamonga, California topographic quadrangle map. The map depicts Ontario International Airport southwest of the Project Area.
- The 1954 Ontario, California topographic quadrangle map (1:62,500 scale) depicts the same information as the 1953 Guasti, California topographic quadrangle map.
- Aerial photographs from 1959 depict Highway 99/70 in roughly the same alignment as present-day Interstate 10, north of the Project Area.
- The 1966 Guasti, California topographic quadrangle map (1:24,000 scale) depicts "A Street", which roughly follows the alignment of East Guasti Road. Highway 99/70 has been relabeled as Interstate 10.
- Aerial photographs from 1980 show the addition of East Guasti Road, which forms the southwest border of the Project Area.
- All other aerial photographs from 1985 to 2020 show the Project Area in its current state and indicate that the Project Area has never been developed.
- The 2021 Guasti, California topographic quadrangle map (1:24,000 scale) depicts the Project Area in its current undeveloped state.

In sum, the Project Area has been used for agricultural purposes with no visible structures present until the early to mid-1980s and is located adjacent to the Ontario International Airport.

5.2 Sacred Lands File Results

A search of the Sacred Lands File by the NAHC failed to indicate the presence of Native American cultural resources within the Project Area. A record of all correspondence is provided in Appendix B.

5.3 Other Interested Party Consultation Results

ECORP reached out to Ontario Heritage via email on May 9, 2023 to solicit any information about the history of the Project Area. Ontario Mayor pro tempore Debi Porada responded via email on June 27, 2023 offering the following information about the property.

The land originally belonged to the Italian Vineyard Company, also known as Guasti Winery. The company owned over 5,000 acres of vineyards and was known as the largest winery in the world in the 1930s and 1940s. With the onsite of Prohibition, Guasti Winery struggled to stay in business and decided to shifted to grape juice production. Ms. Porada also reported there was once a mission-style building made of

concrete on or near the property which was called the Bond House. This building was reportedly used to store distilled spirits until they were ready for sale. In the late 1950s, the Interstate 10 Freeway was built through the property.

5.4 Field Survey Results

ECORP Archaeologist Robert Cunningham surveyed the Project Area for cultural resources on June 1, 2023. The Project Area is fenced-off from the surrounding area and several large eucalyptus trees are in the center of the property (Figures 2 and 3). The ground cover within the Project Area is covered with weeds, which reduced visibility to 40 to 50 percent. The lowest visibility was in the center of the Project Area; the higher visibility areas were along the southern and western margins of the Project Area. The westernmost quarter of the Project Area had been cleared and compacted. The southern half of the Project Area has been utilized for dumping, as evidenced by piles of modern sand and concrete present in this area. Other impacts to the Project Area include modern refuse dumping throughout the area, with the greatest concentration of modern refuse being in the area surrounding the trees in the center of the Project Area. This refuse consists of modern cans, clothing, tires, a shopping cart, and other modern refuse.



Figure 2. Project Area from Northeastern Corner (view southwest; June 1, 2023).



Figure 3. Project Area Overview (view southwest; June 1, 2023).

The Project Area is a former agricultural grove; however, the trees have been removed and ECORP did not identify any irrigation features during the survey. Furthermore, the archaeological survey did not identify any evidence of previous structures, or foundations,. The archaeologist identified one isolate archaeological resource, which was recorded as OH-1 (Figure 4). This resource is discussed in the next subsection.

5.4.1 Cultural Resources

As a result of previous investigations by other firms, no resources had previously been recorded within the Project Area. ECORP recorded one isolate (OH-1) during the pedestrian survey on June 1, 2023.

OH-1 is a historic-period isolated find consisting of a single shard of SCA glass. The shard measures 7/8 inch long, 5/8 inch wide, and 1/4 inch thick and contains a few gas seeds (Figure 4). The archaeologist found it on the surface in a heavily disturbed area, which has been cleared and graded repeatedly over several years. A resource overview map is included in confidential Appendix D.

One of the basic ingredients of glass is sand, and most sand contains iron impurities that result in various hues of glass that range from green to dark amber. Beginning in the mid-1870s, the market for colorless glass was growing. Because low iron sand was not commonly available, glass makers added manganese to decolorize the final products like tableware and flat window glass (Lockhart 2006). When manganese-containing glass is exposed to ultraviolet (UV) radiation from sunlight over an extended period, however, a chemical reaction occurs. The UV radiation interacts with the manganese ions in the glass, causing them to change their oxidation state. This leads to the formation of tiny particles of amorphous manganese dioxide within the glass, which impart a purple or amethyst color to the glass's appearance. This color change is known as "sun-purpled" glass and can be observed in glassware that has been exposed to sunlight for many years. During World War I, manganese was more difficult to obtain and technological

changes in glassmaking led to the use of other decoloring agents like selenium. Although some specialty bottles were still using manganese glass until the 1930s, the use of manganese in glassmaking precipitously dropped after 1920 and is generally concurrent with the end of mouth-blown bottle production (Lockhart 2006).



Figure 4. Closeup View of OH-1, an Isolated Sun-Colored Amethyst Glass Fragment (detail view; June 1, 2023)

6.0 EVALUATION CRITERIA

6.1 Federal Evaluation Criteria

Under Federal law, resources are evaluated using the NRHP eligibility criteria following the regulations implementing Section 106 of the NHPA (36 CFR Part 800). The eligibility criteria for the NRHP are as follows (36 CFR 60.4):

> "The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of state and local importance that possess aspects of integrity of location, design, setting, materials, workmanship, feeling, association, and
>
> (a) that are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> (b) that are associated with the lives of persons significant in our past; or

(c) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

(d) that have yielded, or may be likely to yield, information important in prehistory or history.

In addition, the resource must be at least 50 years old, except in exceptional circumstances (36 CFR 60.4).

Historical buildings, structures, and objects are usually eligible under Criteria A, B, and C based on historical research and architectural or engineering characteristics. Archaeological sites are usually eligible under Criterion D, the potential to yield information important in prehistory or history. The lead federal agency makes the determination of eligibility and seeks concurrence from the SHPO.

Effects to NRHP-eligible resources (historic properties) are adverse if the project may alter, directly or indirectly, any of the characteristics of a Historic Property that qualify the property for inclusion in the NRHP in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association.

6.1.1 State Evaluation Criteria

Under State law (CEQA), cultural resources are evaluated using CRHR eligibility criteria in order to determine whether any of the sites are Historical Resources, as defined by CEQA. CEQA requires that impacts to Historical Resources be identified and, if the impacts would be significant, that mitigation measures to reduce the impacts be applied.

A Historical Resource is a resource that:

1. is listed in or has been determined eligible for listing in the CRHR by the State Historical Resources Commission;

2. is included in a local register of historical resources, as defined in PRC 5020.1(k);

3. has been identified as significant in a historical resources survey, as defined in PRC 5024.1(g); or

4. is determined to be historically significant by the CEQA lead agency CCR Title 14, Section 15064.5(a)]. In making this determination, the CEQA lead agency usually applies the CRHR eligibility criteria.

The eligibility criteria for the CRHR (CCR Title 14, Section 4852(b)) state that a resource is eligible if:

1. it is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the U.S.;

2. it is associated with the lives of persons important to local, California, or national history.

3. it embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or

4. it has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the Nation.

In addition, the resource must retain integrity. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association (CCR Title 14, Section 4852(c)).

Historical buildings, structures, and objects are usually eligible under Criteria 1, 2, and 3 based on historical research and architectural or engineering characteristics. Archaeological sites are usually eligible under Criterion 4, the potential to yield information important in prehistory or history. The CEQA lead agency makes the determination of eligibility. Cultural resources determined eligible for the NRHP by a federal agency are automatically eligible for the CRHR.

Impacts to a Historical Resource (as defined by CEQA) are significant if the resource is demolished or destroyed or if the characteristics that made the resource eligible are materially impaired (CCR Title 14, Section 15064.5(a)).

Lastly, a Tribal Cultural Resource, as defined in Section 21074 of the California PRC, can only be identified and evaluated by culturally-affiliated California Native American tribes through government-to-government consultation. As such, only the consultation record of the CEQA lead agency, and not this technical report, addresses Tribal Cultural Resources.

7.0 EVALUATION

OH-1 is a historic-age isolate and does not require further study. Isolates are unassociated artifacts or minor features that represent either accidental inclusion or are otherwise disconnected from the human activity that produced it. Isolates typically do not individually contribute to the broad patterns of history because they cannot be connected to a particular event (NRHP Criterion A/CRHR Criterion 1). Isolates are similarly difficult to associate with specific individuals due to their lack of association with archaeological or historical sites, and generally no information exists in the archival record to associate isolates with important individuals in history (NRHP Criterion B/CRHR Criterion 2). OH-1 is a non-diagnostic glass shard. Isolates like this do not, therefore, embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possess high artistic values (NRHP Criterion C/CRHR Criterion 3). Finally, isolates in general do not provide important information in history or prehistory (NRHP Criterion D/CRHR Criterion 4). Therefore, isolate OH-1 does not meet the eligibility criteria for inclusion in the NRHP or CRHR as an individual resource. The isolate does not contribute to any known or suspected historic districts; and is neither considered to be a Historic Property for the purpose of Section 106 NHPA, nor a Historical Resource under CEQA.

Lastly, OH-1 is not listed in the local register of historical resources, as defined in PRC 5020.1(k), has not been identified as significant in a historical resources survey, as defined in PRC 5024.1(g), and has not been determined to be historically significant by the CEQA lead agency [CCR Title 14, Section 15064.5(a)]. Therefore, it is not a historical resource under CEQA and is not a historic property under Section 106 of the NHPA.

8.0 MANAGEMENT CONSIDERATIONS

8.1 Conclusions

The records search did not yield any historic-period or pre-contact cultural resources within the Project Area. Although outreach with the Ontario Heritage reported a possible structure previously within the Project Area, there is no evidence of a structure indicated in reviews of historic aerials or the field survey. The field survey identified a single historic-period isolated find. Isolated finds are not considered Historic Properties under Section 106, nor are they considered historic properties under CEQA. Therefore, no Historic Properties under Section 106 of the NHPA or Historical Resources under CEQA will be affected by the Proposed Project. Until the lead agencies concur with the identification and evaluation of eligibility of cultural resources, no Project activity should occur.

8.2 Likelihood for Subsurface Cultural Resources

Due to the Project Area being covered by Holocene alluvium deposited during the period of human occupation in the Americas and the proximity to Cucamonga Creek, which was channelized during the historic period, there exists a potential for buried pre-contact and historic archaeological sites within the Project Area. However, due to the past agricultural use of the Project Area and the presence of only a single pre-contact resource within a 1-mile radius of the Project Area, the potential for intact precontact subsurface cultural deposits is low. A request for information from Ontario Heritage suggests a historic

structure may have been located on this site. However, review of historic topographical maps and aerial photographs suggest the area was used only for agricultural purposes, with no historic structures. Field investigation showed no indication of historic structures and found only one historic isolate. Due to a history of agricultural usage, and evidence of earthmoving activities related to the canal, the Interstate 10 freeway, and the onramp, the potential for intact historic subsurface cultural deposits is low.

8.3 Recommendations

8.3.1 Post-Review Discoveries

There always remains the potential for ground-disturbing activities to expose previously unrecorded cultural resources. Both CEQA and Section 106 of the NHPA require the lead agency to address any unanticipated cultural resource discoveries during Project construction. Therefore, ECORP recommends the following procedures.

- If subsurface deposits believed to be cultural or human in origin are discovered during construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:
    - If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately and no agency notifications are required.
    - If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, the archaeologist shall immediately notify the lead agencies. The agencies shall consult on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined by CEQA or a historic property under Section 106 NHPA, if applicable. Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the site either: 1) is not a Historical Resource under CEQA or a Historic Property under Section 106; or 2) that the treatment measures have been completed to their satisfaction.
    - If the find includes human remains, or remains that are potentially human, they shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641). The archaeologist shall notify the San Bernardino County Coroner (per Section 7050.5 of the Health and Safety Code). The provisions of Section 7050.5 of the California Health and Safety Code, Section 5097.98 of the California PRC, and AB 2641 will be implemented. If the coroner determines the remains are Native American and not the result of a crime scene, the coroner will notify the NAHC, which then will designate a Native American Most Likely Descendant (MLD) for the Project (Section 5097.98 of the PRC). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the

recommendations of the MLD, the NAHC can mediate (Section 5097.94 of the PRC). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (Section 5097.98 of the PRC). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.

The lead agency is responsible for ensuring compliance with these mitigation measures. Section 15097 of Title 14, Chapter 3, Article 7 of CEQA, *Mitigation Monitoring or Reporting*, "The public agency shall adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects. A public agency may delegate reporting or monitoring responsibilities to another public agency or to a private entity which accepts the delegation; however, until mitigation measures have been completed the lead agency remains responsible for ensuring compliance with these measures.

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LIST OF APPENDICES

Appendix A –Records Search Confirmation and Historical Society Coordination

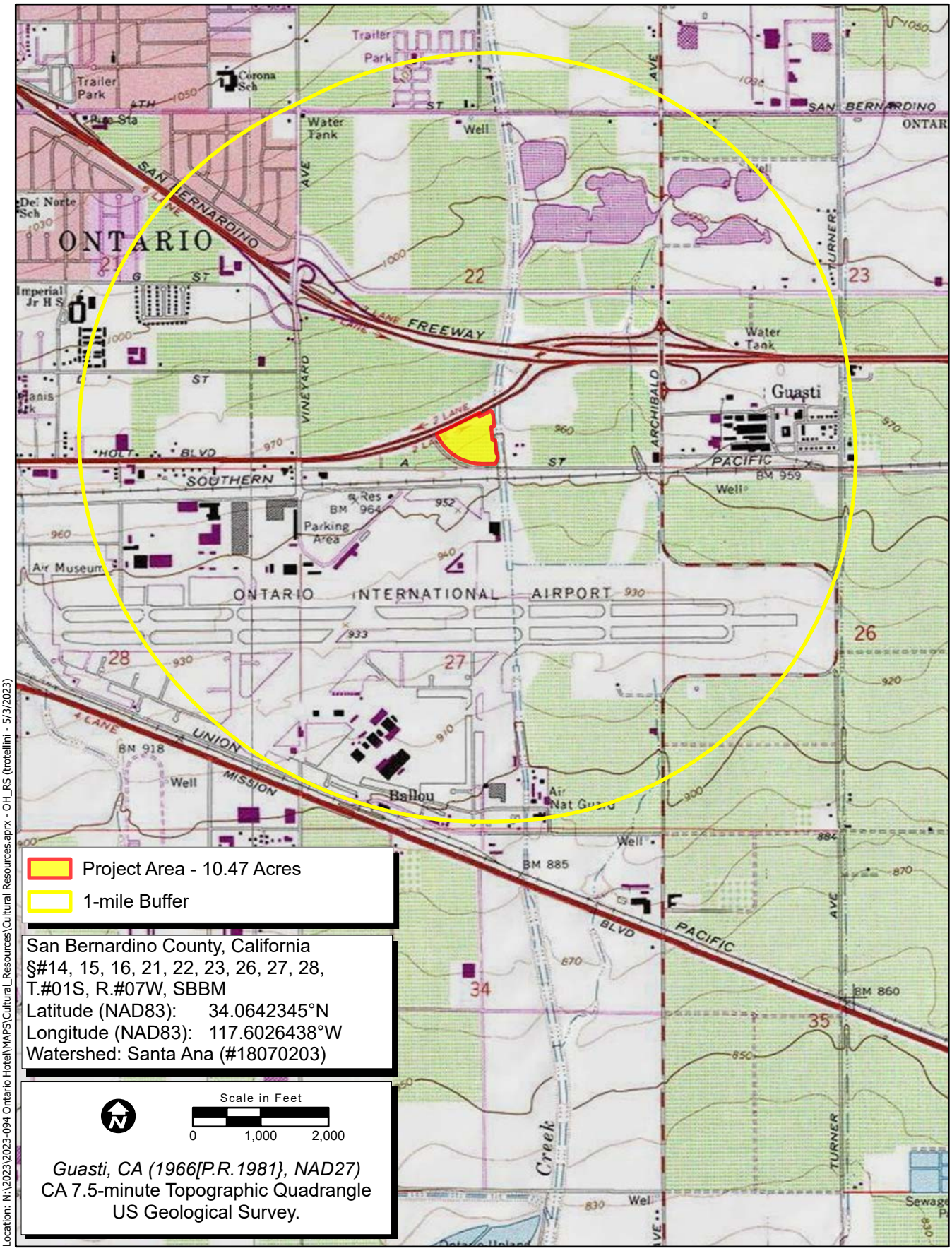
Appendix B – Sacred Lands File Coordination

Appendix C – Project Area Photographs

Appendix D – ***Confidential*** Cultural Resource Site Locations and Site Records

APPENDIX A

Records Search Confirmation and Historical Society Coordination



Location: N:\2023\2023-094 Ontario Hotel\MAPS\Cultural_Resources\Cultural Resources.aprx - OH_RS (trotellini - 5/3/2023)

Map Date: 5/3/2023
Sources: ESRI, USGS

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Records Search

2023-094 Ontario Hotel

6001

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
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Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
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ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

May 9, 2023

Ontario Historical Society
Ontario, CA 91762
Sent via email: Info@ontarioheritage.org

RE: Cultural Resources Identification Effort for the Ontario Hotel Project, San Bernardino County, California

Dear Ontario Heritage:

ECORP Consulting, Inc. has been retained to assist in the planning of the development on the project indicated above. The proposed project area consists of a roughly triangular area comprising a total of approximately 10.47 acres located in the City of Ontario This area Is located between the Holt Boulevard on-ramp, the Southern pacific Railroad, and a creek in the Southeast quarter of the southwest quarter of section 22 in Township 1 south, Range 7 west as depicted on the 1981 Photo revised version of the 1966 Guasti, California 7.5 minute topographical map, as shown in the highlighted area on the enclosed map. As part of the identification effort, we are seeking information from all parties that may have knowledge of or concerns with historic properties or cultural resources in the area of potential effect.

Included is a map showing the project area outlined. We would appreciate input on this undertaking from the historical society with concerns about possible cultural properties or potential impacts within or adjacent to the area of potential effect. If you have any questions, please contact me at (909) 307-0046 or ssifuentes@ecorpconsulting.com.

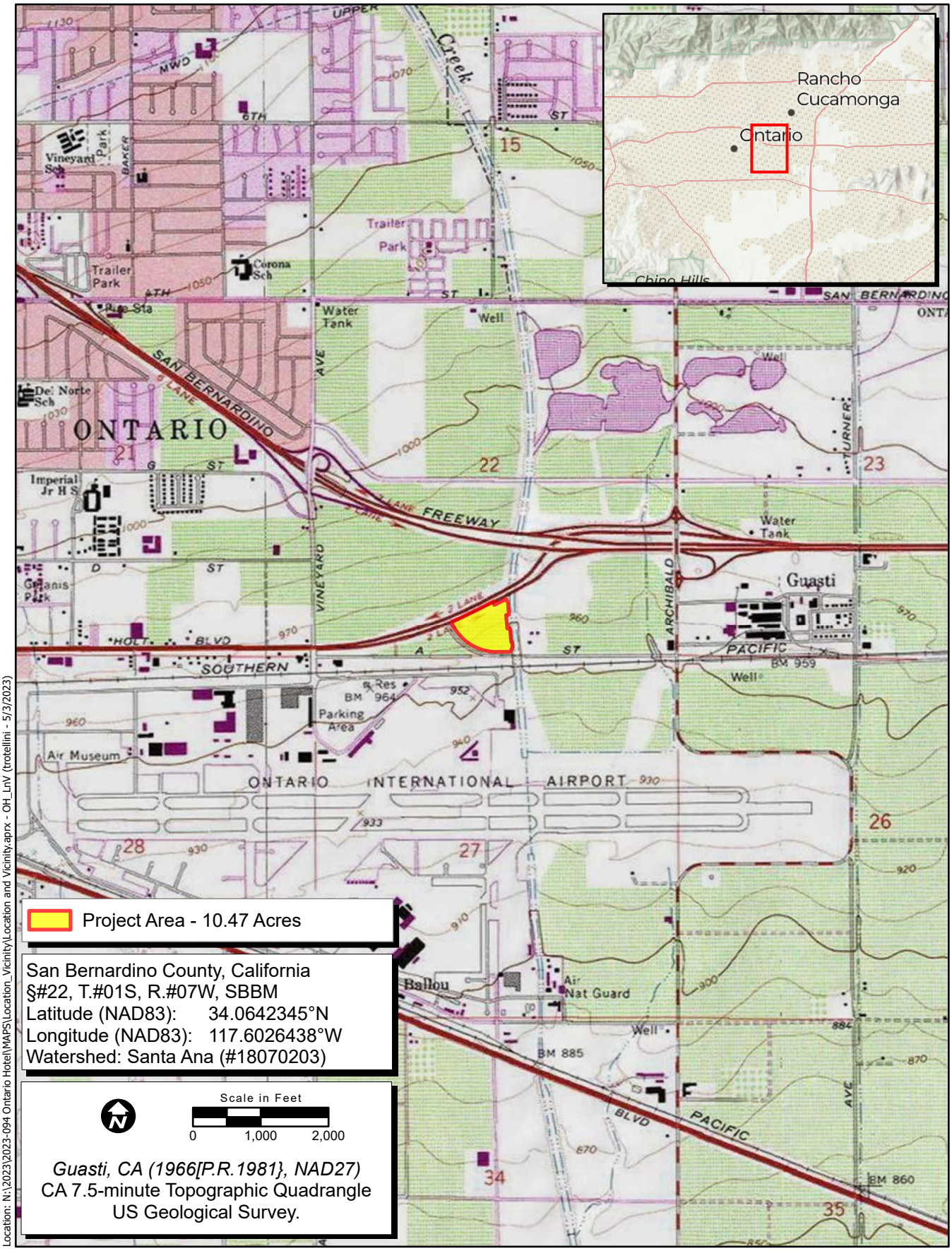
Thank you in advance for your assistance in our cultural resource management study.

Sincerely,

Sonia Sifuentes

Southern California Cultural
Resources Manager/Senior
Archaeologist

Attachment:
Project Location and Vicinity Map



Location: N:\2023\2023-094 Ontario Hotel\MAPS\Location_Vicinity\Location and Vicinity.aprx - OH_LnV (trotellini - 5/3/2023)

Map Date: 5/3/2023
Sources: ESRI, USGS

Figure 1. Project Location and Vicinity

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

2023-094 Ontario Hotel

APPENDIX B

Sacred Lands File Coordination

Sacred Lands File & Native American Contacts List Request

Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691
916-373-3710
916-373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: 2023-094 Ontario Hotel

County: San Bernardino

USGS Quadrangle Name: Guasti, California

Township: 1 South **Range:** 7 West **Section(s):** 22

Company/Firm/Agency: ECORP Consulting, Inc.

Street Address: 215 North 5th Street

City: Redlands, CA **Zip:** 92374

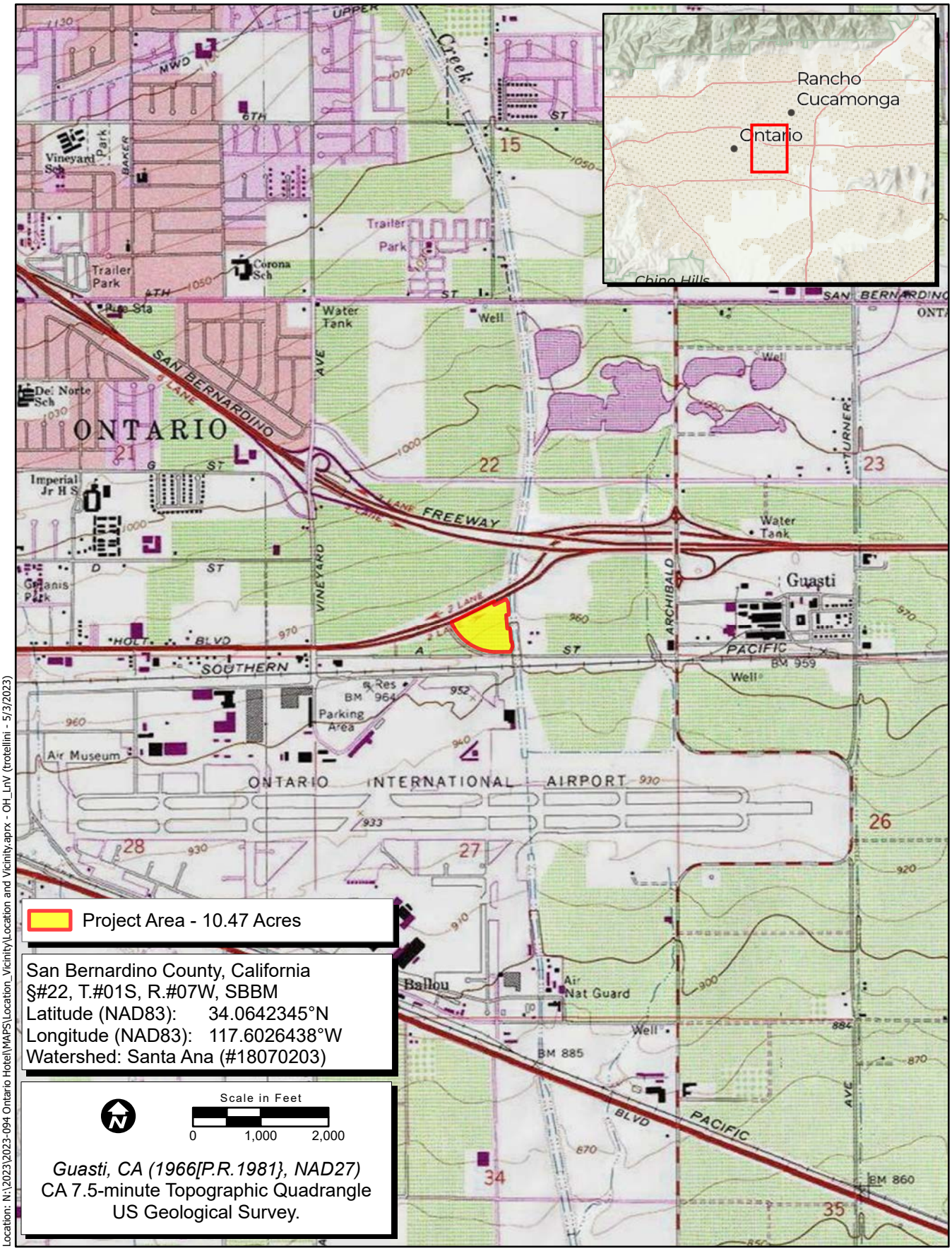
Phone: (909)307-0046

Fax: (909)307-0056

Email: rjcunningham@ecorpconsulting.com

Project Description:

Diversified Pacific Communities proposes the development of a 1,073,671 square foot hotel and parking facility located on an 10.47 acre lot also known as APN(0110-322-33).Please refer to project number 2023-094 and CC rjcunningham@ecorpconsulting.com and ssifuentes@ecorpconsulting.com in all correspenence.



Location: N:\2023\2023-094 Ontario Hotel\MAPS\Location_Vicinity\Location and Vicinity.aprx - OH_LnV (trotellini - 5/3/2023)

Map Date: 5/3/2023
Sources: ESRI, USGS

Figure 1. Project Location and Vicinity

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

2023-094 Ontario Hotel

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
[Vacant]

VICE CHAIRPERSON
Reginald Pagaling
Chumash

SECRETARY
Sara Dutschke
Miwok

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

COMMISSIONER
Wayne Nelson
Luiseño

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
[Vacant]

COMMISSIONER
[Vacant]

EXECUTIVE SECRETARY
Raymond C.
Hitchcock
Miwok/Nisenan

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

June 4, 2023

Robert Cunningham
ECORP Consulting, Inc.

Via Email to: rjcunningham@ecorpconsulting.com

Re: 2023-094 Ontario Hotel Project, San Bernardino County

Dear Mr. Cunningham:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Cameron.vela@nahc.ca.gov.

Sincerely,

Cameron Vela

Cameron Vela
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
San Bernardino County
6/4/2023

Agua Caliente Band of Cahuilla Indians
Reid Milanovich, Chairperson
5401 Dinah Shore Drive — Cahuilla
Palm Springs, CA, 92264
Phone: (760) 699 - 6800
Fax: (760) 699-6919
laviles@aguacaliente.net

Agua Caliente Band of Cahuilla Indians
Patricia Garcia-Plotkin, Director
5401 Dinah Shore Drive — Cahuilla
Palm Springs, CA, 92264
Phone: (760) 699 - 6907
Fax: (760) 699-6924
ACBCI-THPO@aguacaliente.net

Augustine Band of Cahuilla Mission Indians
Amanda Vance, Chairperson
84-001 Avenue 54 — Cahuilla
Coachella, CA, 92236
Phone: (760) 398 - 4722
Fax: (760) 369-7161
hhaines@augustinetribe.com

Cabazon Band of Mission Indians
Doug Welmas, Chairperson
84-245 Indio Springs Parkway — Cahuilla
Indio, CA, 92203
Phone: (760) 342 - 2593
Fax: (760) 347-7880
jstapp@cabazonindians-nsn.gov

Cahuilla Band of Indians
Daniel Salgado, Chairperson
52701 U.S. Highway 371 — Cahuilla
Anza, CA, 92539
Phone: (951) 763 - 5549
Fax: (951) 763-2808
Chairman@cahuilla.net

Gabrieleno Band of Mission Indians - Kizh Nation
Andrew Salas, Chairperson
P.O. Box 393 — Gabrieleno
Covina, CA, 91723
Phone: (844) 390 - 0787
admin@gabrielenoindians.org

Gabrieleno/Tongva San Gabriel Band of Mission Indians
Anthony Morales, Chairperson
P.O. Box 693 — Gabrieleno
San Gabriel, CA, 91778
Phone: (626) 483 - 3564
Fax: (626) 286-1262
GTTribalcouncil@aol.com

Gabrielino /Tongva Nation
Sandonne Goad, Chairperson
106 1/2 Judge John Aiso St., #231 — Gabrielino
Los Angeles, CA, 90012
Phone: (951) 807 - 0479
sgoad@gabrielino-tongva.com

Gabrielino Tongva Indians of California Tribal Council
Robert Dorame, Chairperson
P.O. Box 490 — Gabrielino
Bellflower, CA, 90707
Phone: (562) 761 - 6417
Fax: (562) 761-6417
gtongva@gmail.com

Gabrielino Tongva Indians of California Tribal Council
Christina Conley, Cultural Resource Administrator
P.O. Box 941078 — Gabrielino
Simi Valley, CA, 93094
Phone: (626) 407 - 8761
christina.marsden@alumni.usc.edu

Gabrielino-Tongva Tribe
Charles Alvarez, Chairperson
23454 Vanowen Street — Gabrielino
West Hills, CA, 91307
Phone: (310) 403 - 6048
Chavez1956metro@gmail.com

Gabrielino-Tongva Tribe
Sam Dunlap, Cultural Resource Director
P.O. Box 3919 — Gabrielino
Seal Beach, CA, 90740
Phone: (909) 262 - 9351
tongvatcr@gmail.com

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed 2023-094 Ontario Hotel Project, San Bernardino County.

Los Coyotes Band of Cahuilla and Cupeño Indians
Ray Chapparosa, Chairperson
P.O. Box 189 — Cahuilla
Warner Springs, CA, 92086-0189
Phone: (760) 782 - 0711
Fax: (760) 782-0712

Morongo Band of Mission Indians
Robert Martin, Chairperson
12700 Pumarra Road — Cahuilla
Banning, CA, 92220 — Serrano
Phone: (951) 755 - 5110
Fax: (951) 755-5177
abrierty@morongo-nsn.gov

Morongo Band of Mission Indians
Ann Brierty, THPO
12700 Pumarra Road — Cahuilla
Banning, CA, 92220 — Serrano
Phone: (951) 755 - 5259
Fax: (951) 572-6004
abrierty@morongo-nsn.gov

Pala Band of Mission Indians
Shasta Gaughen, Tribal Historic Preservation Officer
PMB 50, 35008 Pala Temecula Road — Cupeno, Luiseno
Pala, CA, 92059
Phone: (760) 891 - 3515
Fax: (760) 742-3189
sgaughen@palatribe.com

Pala Band of Mission Indians
Alexis Wallick, Assistant THPO
PMB 50, 35008 Pala Temecula Road — Cupeno, Luiseno
Pala, CA, 92059
Phone: (760) 891 - 3537
awallick@palatribe.com

Pechanga Band of Indians
Paul Macarro, Cultural Resources Coordinator
P.O. Box 1477 — Luiseno
Temecula, CA, 92593
Phone: (951) 770 - 6306
Fax: (951) 506-9491
pmacarro@pechanga-nsn.gov

Pechanga Band of Indians
Mark Macarro, Chairperson
P.O. Box 1477 — Luiseno
Temecula, CA, 92593
Phone: (951) 770 - 6000
Fax: (951) 695-1778
epreston@pechanga-nsn.gov

Quechan Tribe of the Fort Yuma Reservation
Jill McCormick, Historic Preservation Officer
P.O. Box 1899 — Quechan
Yuma, AZ, 85366
Phone: (928) 261 - 0254
historicpreservation@quechantribe.com

Quechan Tribe of the Fort Yuma Reservation
Jordan Joaquin, President, Quechan Tribal Council
P.O.Box 1899 — Quechan
Yuma, AZ, 85366
Phone: (760) 919 - 3600
executivesecretary@quechantribe.com

Quechan Tribe of the Fort Yuma Reservation
Manfred Scott, Acting Chairman - Kw'ts'an Cultural Committee
P.O. Box 1899 — Quechan
Yuma, AZ, 85366
Phone: (928) 210 - 8739
culturalcommittee@quechantribe.com

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This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed 2023-094 Ontario Hotel Project, San Bernardino County.

Ramona Band of Cahuilla
John Gomez, Environmental Coordinator
P. O. Box 391670 Cahuilla
Anza, CA, 92539
Phone: (951) 763 - 4105
Fax: (951) 763-4325
jgomez@ramona-nsn.gov

Ramona Band of Cahuilla
Joseph Hamilton, Chairperson
P.O. Box 391670 Cahuilla
Anza, CA, 92539
Phone: (951) 763 - 4105
Fax: (951) 763-4325
admin@ramona-nsn.gov

Rincon Band of Luiseno Indians
Laurie Gonzalez, Tribal Council/Culture Committee Member
One Government Center Lane Luiseno
Valley Center, CA, 92082
Phone: (760) 484 - 4835
lgonzalez@rincon-nsn.gov

Rincon Band of Luiseno Indians
Joseph Linton, Tribal Council/Culture Committee Member
One Government Center Lane Luiseno
Valley Center, CA, 92082
Phone: (760) 803 - 3548
jlinton@rincon-nsn.gov

Rincon Band of Luiseno Indians
Cheryl Madrigal, Cultural Resources Manager/Tribal Historic Preservation Officer
One Government Center Lane Luiseno
Valley Center, CA, 92082
Phone: (760) 648 - 3000
cmadrigal@rincon-nsn.gov

San Manuel Band of Mission Indians
Alexandra McCleary, Cultural Lands Manager
26569 Community Center Drive Serrano
Highland, CA, 92346
Phone: (909) 633 - 0054
alexandra.mccleary@sanmanuel-nsn.gov

Santa Rosa Band of Cahuilla Indians
Lovina Redner, Tribal Chair
P.O. Box 391820 Cahuilla
Anza, CA, 92539
Phone: (951) 659 - 2700
Fax: (951) 659-2228
lsaul@santarosa-nsn.gov

Serrano Nation of Mission Indians
Mark Cochrane, Co-Chairperson
P. O. Box 343 Serrano
Patton, CA, 92369
Phone: (909) 528 - 9032
serranonation1@gmail.com

Serrano Nation of Mission Indians
Wayne Walker, Co-Chairperson
P. O. Box 343 Serrano
Patton, CA, 92369
Phone: (253) 370 - 0167
serranonation1@gmail.com

Soboba Band of Luiseno Indians
Joseph Ontiveros, Cultural Resource Department
P.O. BOX 487 Cahuilla
San Jacinto, CA, 92581 Luiseno
Phone: (951) 663 - 5279
Fax: (951) 654-4198
jontiveros@soboba-nsn.gov

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed 2023-094 Ontario Hotel Project, San Bernardino County.

Soboba Band of Luiseno Indians
Isaiah Vivanco, Chairperson
P. O. Box 487 — Cahuilla
San Jacinto, CA, 92581 — Luiseno
Phone: (951) 654 - 5544
Fax: (951) 654-4198
ivivanco@soboba-nsn.gov

Torres-Martinez Desert Cahuilla Indians
Cultural Committee,
P.O. Box 1160 — Cahuilla
Thermal, CA, 92274
Phone: (760) 397 - 0300
Fax: (760) 397-8146
Cultural-Committee@torresmartinez-nsn.gov

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed 2023-094 Ontario Hotel Project, San Bernardino County.

APPENDIX C

Project Area Photographs

PHOTOGRAPH RECORD

Page 1 **of** 1 **Project Name or #: Ontario Hotel 2023-094** **Year** 2023
Camera Format: Digital Lens Size: 35mm
Film Type and Speed: Digital Negatives Kept at: ECORP Consulting, Inc.

Mo.	Day	Time	Exp./Frame	Subject/Description	View Toward	Accession #
6	1		1846	Project Area overview from southeast corner	North	
6	1		1847	Project overview from SE corner	Northwest	
6	1		1848	Project overview from SE corner	West	
6	1		1849	Ground disturbance along southern boundary	Ground	
6	1		1850	Project Area overview from NE corner	South	
6	1		1851	Project Area overview from northest corner	Southwest	
6	1		1852	Ground conditions	Ground	
6	1		1853	Eucalyptus trees in center of property	Northwest	
6	1		1854	Modern dumping	West	
6	1		1855	Roots of felled tree	West	
6	1		1856	Soil and concrete debris piles	West	
6	1		1857	Stump of felled tree	East	
6	1		1858	Overview from center of Project Area	North	
6	1		1859	Overview from center of Project Area	East	
6	1		1860	Overview from center of Project Area	South	
6	1		1861	Overview from center of Project Area	West	
6	1		1862	OH-1 SCA glass shard	Ground	
6	1		1863	OH-1 SCA glass shard	Ground	
6	1		1864	Project Area overview from western end	Northeast	
6	1		1865	Project Area overview from western end	East	
6	1		1866	Project Area overview from western end	South	
6	1		1867	Overview of cleared and graded western ¼ of Project Area	Southeast	
6	1		1868	Ground conditions in cleared ¼ of Project Area	Ground	

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IMG_1847.JPG

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IMG_1868.JPG









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UKD126/0095
0126
M11




UKD126/0095
0126
M11









Confidential Cultural Resource Site Location and Site Record

This Attachment contains information on the specific location of cultural resources. This information is not for publication or release to the general public. It is for planning, management and research purposes only. Information on the specific location of pre-contact and historic sites is exempt from the Freedom of Information Act and California Public Records Act.

Appendix E
Energy Analysis

Energy Calculations
Electricty and Natural Gas Usage

Land Use	Electricity Use		Natural Gas Use	
	(kWh/yr)	(MWh/yr)	(kBTU/yr)	(Therms/yr)
Hotel	10,364,336	10,364	19,400,828	194,008
Enclosed Parking with Elevator	1,610,978	1,611	0	0
Total	***11,975,314***	***11,975***	***19,400,828***	***194,008***

Source: Refer to CalEEMod outputs for assumptions used in this analysis.

Energy Type	Project Annual Energy Consumption	San Bernardino County Annual Energy Consumption (2022)[1,2]	Percentage Increase Countywide
Electricity (MWh)	11,975	16,629,614	0.0720%
Natural Gas (therms)	194,008	562,123,065	0.0345%

Notes:

1. County annual electricity consumption data source: California Energy Commission, *Electricity Consumption by County* , http://www.ecdms.energy.ca.gov/elecbycounty.aspx.
2. County annual natural gas consumption data source: California Energy Commission, *Gas Consumption by County* , http://www.ecdms.energy.ca.gov/gasbycounty.aspx.

Source: Refer to CalEEMod outputs for assumptions used in this analysis.

Energy Calculations
Construction Off-Road (Equipment)
Fuel Consumption

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	Fuel Consumption Rate (gallon/hour)[1]	Duration (total hours/day)	# days	Total Fuel Consumption (gallon)
Site Preparation	Rubber Tired Dozers	3	8	367	0.4	5.87	24	10	1,409.28
Site Preparation	Crawler Tractors	4	8	87	0.43	1.50	32	10	478.85
Grading	Graders	1	8	148	0.41	2.43	8	30	582.53
Grading	Excavators	2	8	36	0.38	0.55	16	30	262.66
Grading	Scrapers	2	8	423	0.48	8.12	16	30	3,898.37
Grading	Rubber Tired Dozers	1	8	367	0.4	5.87	8	30	1,409.28
Grading	Crawler Tractors	2	8	87	0.43	1.50	16	30	718.27
Building Construction	Forklifts	3	8	82	0.2	0.66	24	300	4,723.20
Building Construction	Generator Sets	1	8	14	0.74	0.41	8	300	994.56
Building Construction	Cranes	1	8	367	0.29	4.26	8	300	10,217.28
Building Construction	Welders	1	8	46	0.45	0.83	8	300	1,987.20
Building Construction	Tractors/Loaders/Backhoes	3	8	84	0.37	1.24	24	300	8,951.04
Paving	Pavers	2	8	81	0.42	1.36	16	20	435.46
Paving	Paving Equipment	2	8	89	0.36	1.28	16	20	410.11
Paving	Rollers	2	8	36	0.38	0.55	16	20	175.10
Architectural Coating	Air Compressors	1	8	37	0.48	0.71	8	90	511.49
								Total Construction Off-Road Fuel Consumption (gallon)	***37,164.67***
								Countywide Off-Road Fuel Consumption (2024) (gallon)[2]	***18,336,278.40***
								Percentage Increase Countywide	***0.2027%***

Notes:

1. Fuel Consumption Rate = Horsepower x Load Factor x Fuel Consumption Factor

Where:

Fuel Consumption Factor for a diesel engine is 0.04 gallons per horsepower per hour (gal/hp/hr) and a gasoline engine is 0.06 gal/hp/hr.

2. Countywide operational fuel consumption, off-road construction equipment diesel fuel consumption, and on-road fuel consumption are from CARB's OFFROAD2021 (v1.0.5) Emissions Inventory.

Source: Refer to CalEEMod outputs for assumptions used in this analysis.

Energy Calculations
Constrution On-Road (Mobile) Fuel Consumption

WORKER TRIPS						
Phase	**Phase Length (# days)**	**# Worker Trips**	**Worker Trip Length**	**Total VMT**	**Fuel Consumption Factor (Miles/Gallon/Day)**	**Total Fuel Consumption (gallon)**
Site Preparation	10	17.5	18.5	3,238		130.01
Grading	30	20	18.5	11,100		445.73
Building Construction	300	456	18.5	2,530,800	**24.90284233**	101,626.95
Paving	20	15	18.5	5,550		222.87
Architectural Coating	90	91.2	18.5	151,848		6,097.62
					Worker Trips Total	*108,523.17*
VENDOR TRIPS						
Phase	**Phase Length (# days)**	**# Vendor Trips**	**Vendor Trip Length**	**Total VMT**	**Fuel Consumption Factor (Miles/Gallon/Day)**	**Total Fuel Consumption (gallon)**
Site Preparation	10	5	10.2	510		61.12
Grading	30	16	10.2	4,896		586.78
Building Construction	300	157	10.2	480,420	**8.343886151**	57,577.49
Paving	20	0	10.2	0		0.00
Architectural Coating	90	0	10.2	0		0.00
					Vendor Trips Total	*58,225.39*
HAULING TRIPS						
Phase	**Phase Length (# days)**	**# Hauling Trips**	**Hauling Trip Length**	**Total VMT**	**Fuel Consumption Factor (Miles/Gallon/Day)[1]**	**Total Fuel Consumption (gallon)**
Site Preparation	10	0	20	0		0.00
Grading	30	542	20	325,200		38,974.64
Building Construction	300	0	20	0	**8.343886151**	0.00
Paving	20	0	20	0		0.00
Architectural Coating	90	0	20	0		0.00
					Hauling Trips Total	*38,974.64*
					Total Construction On-Road (Mobile) Fuel Consumption (gallon)	**205,723.21**
					Countywide On-Road Fuel Consumption (2024) (gallon) [1]	*205,723,206*
					Percentage Increase Countywide	***0.1000%***

Notes:

1. Countywide operational fuel consumption, off-road construction equipment diesel fuel consumption, and on-road fuel consumption are from CARB's EMFAC2021.

Source: Refer to CalEEMod outputs for assumptions used in this analysis.

Empire Groves Specific Plan

Energy Calculations

Operation On-Road (Mobile) Fuel Consumption

Vehicle Type	Percent of Vehicle Trips[1]	Daily Trips[2]	Annual Vehicle Miles Traveled	Average Fuel Economy (miles per gallon)[3]	Total Annual Fuel Consumption (gallon)[4]
Passenger Cars	0.49	2,382	8,455,972	22	384,362
Light/Medium Trucks	0.48	2,319	8,229,813	17.3	475,712
Heavy Trucks/Other	0.03	141	500,909	6.4	78,267
Total	***1.00***	**4,842**	***17,186,694***	**--**	***938,341***
				Total Operational On-Road (Mobile) Fuel Consumption (gallon)	**938,341**
				Countywide On-Road Fuel Consumption (2025) (gallon)[5]	*1,110,012,646*
				Percentage Increase Countywide	***0.0845%***

Notes:

1. Percent of Vehicle Trip distribution based on trip characteristics within the CalEEMod model.
2. Daily Trips taken from Traffic Study
3. Average fuel economy derived from the Department of Transportation.
4. Total Daily Fuel Consumption calculated by dividing the daily VMT by the average fuel economy (i.e., VMT/Average Fuel Economy).
5. Countywide operational fuel consumption, off-road construction equipment diesel fuel consumption, and on-road fuel consumption are from CARB's EMFAC2021.

Source: Refer to CalEEMod outputs for assumptions used in this analysis.

Appendix F
Geotechnical Evaluation

PRELIMINARY GEOTECHNICAL EVALUATION
PROPOSED EMPIRE RESORT AND SPA PROJECT
APPROXIMATELY 10.4 ACRES OF VACANT LAND AT SOUTHEAST CORNER OF E. HOLT BOULEVARD AND E. GUASTI ROAD, APN 011 032 233
CITY OF ONTARIO, SAN BERNARDINO, CALIFORNIA

DIVERSIFIED PACIFIC COMMUNITIES

February 10, 2023
J.N. 22-398

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February 10, 2023
J.N. 22-398

DIVERSIFIED PACIFIC COMMUNITIES
10621 Civic Center Drive
Rancho Cucamonga, California 91730

Attention: Mr. Nolan Leggio

Subject: **Preliminary Geotechnical Evaluation, Proposed Empire Resort and Spa Project, Approximately 10.4 Acres of Vacant Land at Southeast Corner of E. Holt Boulevard and E. Guasti Road, APN 011 032 233, City of Ontario, San Bernardino, California**

Dear Mr. Leggio:

Petra Geosciences, Inc. (Petra) is submitting herewith our preliminary geotechnical evaluation report for the proposed Empire Resort and Spa project in the city of Ontario, California. This evaluation was performed in accordance with the scope of work outlined in our Proposal No. 22-398P dated November 18, 2022. This report is prepared based on the requirements of the 2022 California Building Code (2022 CBC) and presents our findings, engineering judgment, opinions, conclusions, and recommendations pertaining to geotechnical design aspects of the proposed development. It should be noted that this geotechnical and geological evaluation does not address soil contamination or other environmental issues, which may affect the property.

It has been a pleasure to be of service to you on this project. Please contact us if you have any questions regarding the contents of this report or require additional information.

Respectfully submitted,

PETRA GEOSCIENCES, INC.

Douglass Johnston, CEG
Senior Associate Geologist

Siamak Jafroudi, PhD, GE
Senior Principal Engineer

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FIGURE 1 – SITE LOCATION MAP
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PRELIMINARY GEOTECHNICAL EVALUATION REPORT
PROPOSED EMPIRE RESORT AND SPA PROJECT
APPROXIMATELY 10.4 ACRES OF VACANT LAND AT SOUTHEAST CORNER OF
E. HOLT BOULEVARD AND E. GUASTI ROAD, APN 011 032 233
CITY OF ONTARIO, SAN BERNARDINO, CALIFORNIA

INTRODUCTION

Petra Geosciences, Inc. (Petra) is presenting herein the results of our preliminary geotechnical evaluation for the proposed development of a 10-story hotel building with 2-levels of subterranean parking and appurtenant facilities within the subject 10.4-acre property situated at the southeast corner of E. Holt Boulevard and E. Guasti Road in the city of Ontario, California. The purpose of this study was to obtain subsurface and subsurface information on the general geologic and geotechnical conditions within the project area in order to provide preliminary conclusions and recommendations for the feasibility of the proposed project, as well as preliminary geotechnical recommendations for site preparation, grading and general site improvements. As grading plans, foundation and basement plans, and structural building loads are still being developed at this time, geotechnical recommendations for the building foundations will be provided under a separate cover at the appropriate time.

SCOPE OF WORK

The scope of our evaluation consisted of the following.

- Review of available published and unpublished reports, maps and data concerning geologic and soil conditions within the site and nearby area that could have an impact on the proposed development (see References).
- Review of readily available satellite imagery of the site and surrounding area.
- Coordinate with Underground Service Alert [USA] to obtain an underground-utility clearance, prior to commencement of the subsurface exploration.
- Geotechnical excavation, logging, and sampling of 12 exploratory test pits utilizing a conventional backhoe, 6 exploratory borings utilizing a hollow-stem auger drill rig, 3 Cone Penetrometer Test (CPT) soundings and performing one geophysical survey. Log and visually classify soil and materials encountered in the borings and test pits in accordance with the Unified Soil Classification System (USCS).
- Conducting laboratory testing of representative in-situ drive and bulk samples obtained from the borings and test pits to determine their engineering properties.
- Engineering and geologic analysis of the research, field exploration findings and laboratory data with respect to the proposed site development.
- Preparation of this preliminary geotechnical report presenting the results of our evaluation and providing recommendations for the proposed site development in general conformance with the requirements of the 2022 CBC, as well as in accordance with applicable state and local jurisdictional requirements.

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LOCATION AND SITE DESCRIPTION

The subject property is roughly triangular-shaped and 10.4 acres± in size, situated south of E. Holt Boulevard, north and east of E. Guasti Road and west of the concrete-lined Cucamonga Creek flood control channel. Figure 1 depicts the general site location. The property is surrounded by chain link fencing; however, two gates are present along Guasti Road on the southwest. A graded slope and dirt pathway is present along the eastern property line allowing access to the flood control channel to a concrete ramp. Structures are not known to be present however surface of the site appears to have been generally disturbed most notably in the western corner. Overhead power lines are also present along the very southern portion along Guasti and underground utilities are likely to be present adjacent to Guasti and Road and Holt Boulevard.

The property is relatively flat, sloping very gently towards the south-southeast with site elevations ranging from approximately 968 feet above mean sea level (msl) in the northwest corner to approximately 954 feet in the southeast corner. The site is essentially vacant with the exception of a number of mature trees that are present in the central potions of the site. The remainder of the site is covered with a light growth of grasses and weeds, a few remnant tree trunks as well as scattered dumped debris and trash and occasional scattered cobbles.

PROPOSED DEVELOPMENT

Based on the conceptual planning and massing exhibits prepared by Gensler dated January 9, 2023, the planned development is a mixed-use resort complex including a 10-story, 672,850 square-foot hotel, spa, convention center and retail building with 2-stories of underground parking. Ancillary site improvements are expected to include driveway and parking lot pavements, underground utilities (sewer, water, storm drain and dry utilities), an outdoor pool complex, perimeter masonry walls, sidewalks and landscaping. The building types and loads are currently unknown.

Conceptual grading plans and proposed building and underground garage elevations are not currently developed, however based on the topography of the site, we expected cuts or fills from existing grades to be on the order of 4 feet or less, with the exception of the areas for the underground parking garage. No notable cut or fills slopes are anticipated.

Literature and Online Imagery Review

Petra researched and reviewed available published and unpublished geologic data pertaining to regional geology, faulting and geologic hazards that may affect the site, see references. Available online aerial

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imagery and historic aerial photos were reviewed to assess previous land use. Based on historic aerial photos reviewed, the subject site appears to have been utilized for agricultural row crops since at least 1938. Holt Boulevard, a paved single lane road, was present on the north by 1938 and Cucamonga Creek on the east was essentially an uncontrolled natural stream channel. By 1949 Holt Boulevard was widened to a two-lane road which included a culvert just northeast of the site; Cucamonga Creek was graded as a linear earthen channel and another culvert was built to the southeast of the site. Ontario airport had also been built to the south/southwest of the site. In 1953 the site conditions were the same.

By 1977 Guasti Road was paved on the south and west and Cucamonga Creek was further graded and widened as an earthen channel which included a new culvert under Guasti Road just off the southeast property corner. Row crops were still present in 1977. By 1994 the row crops were absent, a number of mature trees were present in the center of the site, and Cucamonga Creek had been fully improved as a concrete-lined channel including additional grading along the eastern property line area and the adjacent descending concrete access ramp. The site appears to have been essentially unchanged since that time other than surficial ground disturbance, mostly notably on the west.

Field Exploration and Testing

Subsurface explorations were conducted under the supervision of an engineering geologist from Petra between December 12 and 30, 2022. Subsurface exploration involved exploration consisted of 6 hollow-stem auger borings (B-1 to B-6) utilizing a conventional drill rig equipped with 8-inch diameter augers. The borings were drilled and sampled to depths ranging from 51.5 to 101.5 feet below grades. Twelve exploratory test pits (TP-1 through TP-12) were excavated to depths between 8 to 15 feet below existing site grades utilizing a conventional backhoe. The test trenches were loosely backfilled. Earth materials encountered within the exploratory borings and test pits were classified and logged in accordance with the visual-manual procedures of the Unified Soil Classification System (USCS).

Additionally, 3 Cone Penetration Test soundings (CPT-1 to CPT-3) were advanced to approximate depths between 10 and 24 feet below surface grades utilizing a truck-mounted CPT rig where they encountered refusal at all three locations on subsurface gravels or cobbles. Lastly, the fieldwork included performing one surface seismic shear-wave survey (SW-1) by a registered geophysicist to characterize the shear wave velocity to a depth of at least 100 feet beneath the site. The approximate locations of the points of explorations are shown on the attached Figure 2 including the outline of the hotel tower location and descriptive logs are presented in Appendix A.

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Associated with the subsurface exploration was the collection of bulk and relatively undisturbed samples of the soil materials for laboratory testing. Disturbed bulk samples and relatively undisturbed ring samples of soil materials were collected for classification, laboratory testing and engineering analyses. Undisturbed samples were obtained using a 3-inch outside diameter modified California split-spoon soil sampler lined with brass rings. The soil sampler was driven with successive 30-inch drops of a free-fall, 140-pound automatic trip hammer. The central portions of the driven-core samples were placed in sealed containers and transported to our laboratory for testing. The number of blows required to drive the split-spoon sampler 18 inches into the soil were recorded for each 6-inch driving increment and are noted in the boring logs as *Blows per 6 inches*.

Standard Penetration Tests (SPT) were also performed at selected depth intervals in accordance with ASTM D 1586. This method consists of mechanically driving an unlined, 2.5-inch outside diameter (OD) standard split-barrel sampler 18 inches into the soil with successive 30-inch drops of the 140-pound automatic trip hammer. Blow counts for each 6-inch driving increment were recorded on the exploration logs. The number of blows required to drive the standard split-spoon sampler for each 6 inch increment are identified as the uncorrected standard penetration resistance (N). Disturbed soil samples from the unlined standard split-spoon samplers were placed in sealed plastic bags and transported to our laboratory for testing.

Laboratory Testing

Laboratory testing for selected samples of onsite soils materials included in-situ dry density and moisture content, maximum dry density and optimum moisture content, expansion index, plasticity index, consolidation potential, grain-size sieve analysis and general soil corrosivity screening potential (sulfate content, chloride content, pH/resistivity). A description of laboratory test methods and laboratory testing are presented in Appendix B and the in-site dry density and moisture content results are presented on the boring logs (Appendix A).

FINDINGS

Regional Geologic Setting

The subject property is situated within the northernmost portion of the Peninsular Ranges Geomorphic Province. Bedrock underlying the site at significant depths is part of the Perris Block which is composed of Cretaceous-age granitic and Mesozoic-age metamorphic crystalline bedrock. The Perris Block is bounded on the east by the San Jacinto fault zone, on the west by the Elsinore-Chino fault zone, on the north by the Cucamonga fault and the San Gabriel Mountains. The southern boundary of the block is vague, with an approximate boundary coincident with the hills south of Temecula, California.

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Locally, the subject site is located on the medial portion of several large coalescing alluvial fans related to San Antonio Creek, Cucamonga Creek, Deer Creek and Day Canyon washes, extending southward from the flanks of the San Gabriel Mountain range further to the north. The alluvial-fan deposits in the general vicinity of the site reportedly extend to depths of approximately 300 feet or more. The former natural stream Cucamonga Creek has been improved as a concrete-line flood control channel along the eastern boundary of the site involving unknown extent of earthwork grading.

Local Geology and Subsurface Soil Conditions

Based on the earth units encountered within our field evaluation, the surface of the site is mantled by shallow undocumented fill generally ranging in depth from 2 to 4 feet below ground surface (bgs). The surficial artificial fills are underlain by natural younger alluvial fan deposits and further underlain by older alluvial fan deposits related to the ancestral alluvial fan to the total depth explored. The onsite soil units are discussed in detail below and a generalized geologic cross section is attached as Figure 3.

- Artificial Fill – Undocumented, artificial fills soils were observed mantling the site and overlying natural alluvial soils. The fills were found to range in depth from approximately 2 to 4 feet bgs, averaging approximately 3 below grades and slightly deeper in the westerly side of the site. These soils were generally composed of dry and loose, silty fine to medium sands to occasional layers of sand with varying amount of gravels and occasional small cobbles, debris and fine roots.

- Younger Alluvial Fan Deposits – Young alluvial fan deposits were observed beneath the surface fills to approximate depths between 20 and 25 feet bgs. These upper alluvial fan deposits primarily consisted of medium dense, moist, silty sand with gravels and occasional small to medium cobbles with some thin to thickly interbedded sand with silt to poorly grades sand layers also with gravels and occasional small cobbles. Minor caving was observed in the deeper test pit excavations around 13 to 15 feet bgs.

- Older Alluvial Fan Deposits – Older alluvial fan deposits are present beneath the younger alluvium beginning at an approximate depth of 20 to 25 feet bgs and extending to the total depth explored. These soil materials consisted of dense to very dense, moist, thickly bedded silty sands with variable gravel content and several poorly graded sands/sand with silt interbeds. A notable moist and hard sandy silt bed is present at approximately 50 to 60 feet bgs and again at approximately 70 to 75 feet. Difficult drilling with apparent caving was encountered around 80 to 83 feet bgs.

Groundwater

Neither groundwater nor seepage was encountered in the borings during our subsurface exploration to a maximum depth of 101.5 feet bgs. Based on our research and review of published geotechnical literature including the Chino Basin Watermaster, the current depths to groundwater in the general area is reported to be in excess of 300 feet bgs. Regional groundwater is not anticipated to affect the proposed development.

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Faulting

Based on our review of published and unpublished geotechnical maps and literature pertaining to site geology, no active or potentially active faults are known to project through the site and the site does not lie within the bounds of an "Earthquake Fault Zone" as defined by the State of California in the Alquist-Priolo (AP) Earthquake Fault Hazard Zoning Act (Bryant and Hart, 2007) nor within a San Bernardino County fault zone. In addition, we did not observe any features in the field that would indicate active faulting. The closest known Quaternary fault is the Red Hill – Etiwanda fault which lies approximately 1,500 feet to the north. The potential for active fault rupture at the site is considered to be very low.

Secondary Seismic Effects

Secondary effects of seismic activity normally considered as possible hazards to a site include several types of ground failure and seismically induced flooding. Various general types of ground failures, which might occur as a consequence of severe ground shaking at the site, include landsliding, ground subsidence, ground lurching and lateral spreading. The probability of occurrence of each type of ground failure depends on the severity of the earthquake, distance from faults, topography, subsurface soil and groundwater conditions, in addition to other factors. The subject property proposed for development exhibits nearly level topography that is not subject to landsliding, and the potential for ground lurching and lateral spreading are considered very low. The potential for seismically-induced flooding due to tsunami or seiche (i.e., a wave-like oscillation of the surface of water in an enclosed basin) is considered negligible at this site.

Liquefaction and Seismically Induced Settlement

Liquefaction occurs when strong seismic shaking of a saturated sand or silt causes intergranular fluid (pore-water) pressures to increase to levels where grain-to-grain contact is lost, and material temporarily behaves as a viscous fluid. Liquefaction can cause settlement of the ground surface, loss of bearing, settlement and tilting of structures, lateral movement of soil masses, flotation and buoyancy of buried structures and fissuring of the ground surface. A common surface manifestation of liquefaction is the formation of sand boils – short-lived fountains of soil and water that emerge from fissures or vents and leave freshly deposited, usually conical mounds of sand or silt on the ground surface.

For sandy soils above the water table, strong seismic shaking can also result in rearrangement of the granular soil structure leading to densification of sandy soils, ground settlement and settlement and tilting of superstructures. Assessment of liquefaction or dry sand settlement potential for a particular site requires knowledge of a number of regional as well as site-specific parameters, including the estimated design earthquake magnitude, and the associated probable peak horizontal ground acceleration at the site,

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subsurface stratigraphy and soil characteristics. Parameters such as estimated probable peak horizontal ground acceleration can readily be determined using published references, or by utilizing a commercially available computer program specifically designed to perform a probabilistic analysis. On the other hand, stratigraphy and soil characteristics can only be accurately determined by means of a site-specific subsurface investigation combined with appropriate laboratory analysis of representative samples of onsite soils.

Propagating earthquake waves induce shearing stresses and strains in soil materials during strong ground shaking. This process rearranges the structure of granular soils such that there is an increase in density, with a corresponding decrease in volume, which results in vertical settlement. Dynamic settlement has been well documented in wet, sandy deposits undergoing liquefaction (see Tokimatsu and Seed, 1987) and in relatively dry sediments as well (Stewart et al, 1996). Specific methods to analyze potential wet and dry dynamic settlement are reported in Tokimatsu and Seed (1987), and specifically dry settlement in Pradel (1998) and Stewart et al. (2001; 2002) respectively. Most of the referenced papers focus on the seismic effects on dry, clean sands of a uniform grain size, though several reports extend the literature to fine-grained soils (Stewart et al., 2001 & 2002). State guidelines for evaluating dynamic settlement are provided in the California Geological Survey Special Publication 117A (CGS, 2008).

San Bernardino County has identified the general subject area within a low liquefaction zone. Groundwater is currently reported at depths of great that 300 feet bgs and considering the very dense underlying older alluvial fans deposits, liquefaction-induced settlement is considered negligible.

Dynamic Settlement Potential Analysis

A stated above, propagating earthquake waves induce shearing stresses and strains in soil materials during strong ground shaking. This process rearranges the structure of granular soils such that there is an increase in density, with a corresponding decrease in volume, which results in vertical settlement. To determine the estimated seismically induced settlement from the SPT blow counts, an idealized soil profile was constructed using the SPT blow count results from Borings B-1 through B-6. Using the dry sand settlement method presented by Pradel (1998), the total calculated settlement was significantly less than ¼ inch based on the peak ground acceleration, PGA, of 0.75g and an earthquake magnitude of 6.9. Therefore, total seismic settlement of dry soils constitutes an insignificant portion of the total settlement.

Compressible Soils

A notable geotechnical factor affecting the project site is the presence of existing artificial fills and low-density and dry, younger alluvial soils. For relatively light-weight structures, these upper materials, ranging

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in depth from approximately 6 to 10 feet bgs across the majority site, in their current state are not considered suitable for support of anticipated loads. Therefore, these materials should be removed to an approximate depth of 10 feet and replaced with engineered fill. Any such building may be supported on a shallow spread footing system embedded in compacted fill soils. The removed soils are considered to be suitable for re-use as engineered fill.

The lower approximately 10 feet of the younger alluvial soils are not expected to be suitable for the support of the main, moderate- to high-rise structure, however a portion of the proposed structure is expected to be supported on footings that are within the 2-story subterranean parking. As such, no remedial grading, i.e., over-excavation and replacement is deemed necessary in this area. Conversely, depending on the anticipated loads, considerations maybe given to removing the upper approximately 15 to 20 feet of soils consisting of younger alluvial fan deposits to support the other parts of the proposed main structure. Accordingly, these materials will require removal (over-excavation) to expose the underlying competent older alluvial fan deposits, to be verified in the field by the geotechnical consultant. The removed soils are considered to be suitable for re-use as engineered fill.

CONCLUSIONS AND RECOMMENDATIONS

Development Feasibility

Based on our field explorations, research and review of pertinent geologic literature, and preliminary laboratory testing and analysis, development of the project site is considered feasible for the proposed mixed-use development from a soils engineering, geologic and geotechnical standpoint. When grading plans and foundation/structural plans for the proposed development are available, a comprehensive plan review should be performed by this firm. The following geotechnical factors should be considered during the preliminary design process.

Seismic Shaking

The site is located within an active tectonic area of southern California with several significant faults capable of producing moderate to strong earthquakes. The site will likely be subjected to very strong seismically related ground shaking during the anticipated life span of the project and structures within the site should therefore be designed and constructed to resist the effects of strong ground motion in accordance with the most current edition of the 2022 California Building Code.

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Earthwork Recommendations

General Recommendations

Earthwork should be performed in accordance with the Grading Code of the City of Ontario and to the applicable provisions of the 2022 CBC and should also be performed in accordance with the following site-specific recommendations prepared by Petra herein based on the proposed construction.

Geotechnical Observations and Testing

Prior to the start of earthwork, a meeting should be held at the site with the owner, contractor and geotechnical consultant to discuss the work schedule and geotechnical aspects of the grading. Earthwork, which in this instance will generally entail removal and re-compaction of existing unsuitable soils, over-excavation, subterranean parking excavation and, if applicable, shoring elements installation, should be accomplished under full-time observation and testing of the geotechnical consultant. A representative of the project geotechnical consultant should be present onsite during all earthwork operations to document proper placement and compaction of fills, as well as to document compliance with the other recommendations presented herein.

Clearing and Grubbing

All existing trees and vegetation throughout the site should be removed from the site. Clearing operations should also include the removal of any trash, debris, vegetation and similar deleterious materials including the root balls for any trees. Any cavities or excavations created upon removal of any unknown subsurface structures should be cleared of loose soil, shaped to provide access for backfilling and compaction equipment and then backfilled with engineered fill. Note that buried deleterious materials may be encountered within the site (i.e., buried debris) due to the past site usage and may need to be removed by hand (i.e. root pickers), during grading operations.

The project geotechnical consultant should provide periodic observation and testing services during final clearing and grubbing operations to document compliance with the above recommendations. In addition, should unusual or adverse soil conditions or buried structures be encountered during grading that are not described herein, these conditions should be brought to the immediate attention of the project geotechnical consultant for corrective recommendations.

Suitability of On-Site Materials for Use as Engineered Fill

Based on our field observations and subsurface soil conditions encountered in our test pits, the onsite soil materials would be suitable for use as engineered fill, provided they are clean of organics, construction

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debris or other deleterious materials and oversize rock fragments greater than 12 inches in diameter. Soils exposed at or near the surface will likely require moisture-conditioning, i.e. pre-watering, to near optimum moisture for use as engineered fill during the onset of grading.

Excavation Characteristics

The existing site soils consisting of native older and younger alluvial fan deposits are expected to be readily excavated with conventional earthmoving equipment. The presence of concentrated gravels. cobble layers or low-cohesion sand layers may prohibit vertical excavation in localized areas.

Ground Preparation

Geotechnical Observations

A representative of the project geotechnical consultant should also be present on site during major grading operations to document that proper placement and adequate compaction of fills has been achieved, as well as to observe compliance with the other recommendations presented herein. Exposed bottom surfaces in remedial removal areas should be observed and approved by a representative of the project geotechnical consultant ***prior to the placement of fill***. It is the grading contractor's responsibility to notify the project geotechnical consultant at least 24 hours prior to requiring observation (including excavation bottom verification).

Unsuitable Soil Removals and Bottom Processing

The existing roughly 6 to 10 feet of upper soils are not considered suitable for support of proposed fills, structures and other improvements and should be removed to underlying competent alluvial materials as approved by the project geotechnical consultant. Further, due to anticipated large structural building loads, considerations should be given to removing the upper approximately 15 to 20 feet of soils consisting of younger alluvial fan deposits to support these anticipated heavy buildings loads on a shallow spread footing system. No removal and over-excavation is expected in areas where the building will consist of a subterranean parking.

Soil removals may need to be locally deeper depending in other areas upon the exposed conditions encountered during grading. Remedial removals should extend horizontally at least 10 feet beyond the limits of the building foundations. The actual depths and horizontal limits of removals and over-excavations should be evaluated during grading on the basis of observations and testing performed by the project geotechnical consultant.

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Remedial soil removals in parking lot, driveways and other non-building pad or retaining wall areas may be reduced to a minimum of 4 feet below existing site grades.

Prior to placing engineered fill or processing, the exposed bottom surfaces in the removal areas should be approved by a representative of project geotechnical consultant first. The exposed bottom(s) should then be scarified to a minimum depth of 12 inches, moisture-conditioned or air-dried to achieve approximately two percent above optimum moisture content and then compacted with a heavy construction equipment prior to placement of fill. Minimum compaction of the upper 12 inches of the removal bottom should meet or exceed 90 percent relative compaction. The laboratory maximum dry density, the standard for determining relative compaction, and optimum moisture content for each change in soil type should be determined in accordance with Test Method ASTM D 1557.

Fill Placement

Clean onsite soils free of oversize rocks and used for fill materials supporting the building structures should be placed in approximately 6- to 8-inch thick loose lifts, watered or air-dried as necessary to achieve a moisture content of at least 2 above optimum moisture condition, and then compacted in-place to a minimum relative compaction of 95 percent The laboratory maximum dry density and optimum moisture content for each change in soil type should be determined in accordance with ASTM D 1557. Fill materials in non-building structure areas should follow the same procedures as above but may be compacted in-place to a minimum relative compaction of 90 percent.

Temporary Excavations

Temporary excavations varying up to a depth of up to roughly 20 feet below existing grades may be required to accomplish the recommended over-excavation of existing soils and possibly deeper for construction of basement foundations and walls. Based on the physical properties of the onsite soils, temporary excavations which are constructed exceeding 4 feet in height should be cut /laid back to an inclination of 1:1 (h:v) or flatter for the duration of the over-excavation of unsuitable soil material and replacement as compacted fill, as well as placement of underground utilities. The 1:1 (h:v) recommendation may possibly be steepened, depending on conditions observed by a representative of the project geotechnical consultant. Other factors which should be considered with respect to the stability of the temporary slopes include construction traffic and/or storage of materials on or near the tops of the slopes, construction scheduling, presence of nearby walls or structures on adjacent properties and weather conditions at the time of construction. Applicable requirements of the California Construction and General Industry Safety Orders, the Occupational Safety and Health act of 1970 and the Construction Safety Act should also be followed.

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Shoring Considerations

Based on the construction scheduling and available adjacent space for excavation of the subterranean parking area, it may not be possible to cut and lay back the excavated slopes of the subterranean parking at a 1:1 (h:v) gradient. As such, the excavation may require shoring support. Recommendations for design and construction of the shoring system will be provided once more detailed project specifications and requirements are available.

Import Soils for Grading

If imported soils are needed to attain proposed design grades, they should be free of deleterious materials, oversize rock and any hazardous materials. The soils should also be essentially low or non-expansive, and essentially non-corrosive and approved by the project geotechnical consultant *prior* to being brought onsite. The geotechnical consultant should visit the potential borrow site(s) and conduct testing of the soil at least three days before the commencement of import operations.

Volumetric Changes - Shrinkage and Subsidence

Volumetric changes in earth quantities will occur when onsite soils are excavated and replaced as properly compacted fill. Based on our observations of earth materials encountered in the borings, an *estimated* shrinkage factor on the order of 10 to 15 percent may be considered during removal and re-compaction of the upper native alluvial fan soils. The actual shrinkage that will occur during grading will depend on the average degree of relative compaction achieved. A subsidence of approximately 0.1 feet may be anticipated as a result of the scarification and re-compaction of the exposed bottom surfaces within the removal areas.

The above estimates of shrinkage and subsidence are intended for use by project planners in estimating earthwork quantities and should not be considered absolute values. Contingencies should be made for balancing earthwork quantities based on actual shrinkage and subsidence that will occur during site grading.

Seismic Design Parameters

Earthquake loads on earthen structures and buildings are a function of ground acceleration which may be determined from the site-specific ground motion analysis. Owing to the conceptual structural details, i.e., structures with stories in excess of 10, it is expected that the structure's natural vibration period to be in excess of 0.5 second. As such, a site-specific ground motion analysis is currently in progress, the results of which will be published under a separate cover.

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General Corrosivity Screening

As a screening level study, limited chemical and electrical tests were performed on samples considered representative of the onsite soils to identify potential corrosive characteristics of these soils. The common indicators associated with soil corrosivity include water-soluble sulfate and chloride levels, pH (a measure of acidity), and minimum electrical resistivity.

> *It should be noted that Petra does not practice corrosion engineering; therefore, the test results, opinion and engineering judgment provided herein should be considered as general guidelines only. Additional analyses would be warranted, especially, for cases where buried metallic building materials (such as copper and cast or ductile iron pipes) in contact with site soils are planned for the project. In many cases, the project geotechnical engineer may not be informed of these choices. Therefore, for conditions where such elements are considered, we recommend that other, relevant project design professionals (e.g., the architect, landscape architect, civil and/or structural engineer) also consider recommending a qualified corrosion engineer to conduct additional sampling and testing of near-surface soils during the final stages of site grading to provide a complete assessment of soil corrosivity. Recommendations to mitigate the detrimental effects of corrosive soils on buried metallic and other building materials that may be exposed to corrosive soils should be provided by the corrosion engineer as deemed appropriate.*

In general, a soil's water-soluble sulfate levels and pH relate to the potential for concrete degradation; water-soluble chlorides in soils impact ferrous metals embedded or encased in concrete, e.g., reinforcing steel; and electrical resistivity is a measure of a soil's corrosion potential to a variety of buried metals used in the building industry, such as copper tubing and cast or ductile iron pipes. Table 2, below, presents the range of each category of individual test results with an interpretation of current code indicators and guidelines that are commonly used in this industry. The table includes the code-related classifications of the soils as they relate to the various tests, as well as a general recommendation for possible mitigation measures in view of the potential adverse impact on various components of the proposed structures in direct contact with site soils. The guidelines provided herein should be evaluated and confirmed, or modified, in their entirety by the project structural engineer, corrosion engineer and/or the contractor responsible for concrete placement for structural concrete used in exterior and interior footings, interior slabs on-ground, garage slabs, wall foundations and concrete exposed to weather such as driveways, patios, porches, walkways, ramps, steps, curbs, etc.

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TABLE 2

Soil Corrosivity Screening Results

Test	Test Results	Classification	General Recommendations
Soluble Sulfates (Cal 417)	0.002 percent	S0[(1)]	Type II cement; min. f'c= 2,500 psi; no water/cement ratio restrictions
pH (Cal 643)	7.8 to 8.1	Slightly to Moderately Alkaline	No special recommendations
Soluble Chloride (Cal 422)	240 to 262 ppm	C1[(2)]	No special recommendations
Resistivity (Cal 643)	4,600 to 5,000 ohm-cm	Corrosive to Moderately Corrosive[3]	Consult with professional corrosion engineer

Notes:
1. ACI 318-14, Section 19.3
2. ACI 318-14, Section 19.3
3. Pierre R. Roberge, "Handbook of Corrosion Engineering"

Post-Grading Considerations

Utility Trenches

All utility trench backfill should be compacted to a minimum relative compaction of 90 percent. Trench backfill materials should be screened on rocks greater than 6-inches in diameter and placed in lifts no greater than approximately 12 inches in thickness, watered or air-dried as necessary to achieve near optimum moisture conditions, and then mechanically compacted in place to a minimum relative compaction of 90 percent. A representative of the project geotechnical consultant should probe and test the backfills to verify adequate compaction.

As an alternative for shallow trenches where pipe or utility lines may be damaged by mechanical compaction equipment, such as under building floor slabs, clean sand having a sand equivalent (SE) value of 30 or greater may be utilized. The sand backfill materials should be watered to achieve near optimum moisture conditions and then tamped into place. No specific relative compaction will be required; however, observation, probing, and if deemed necessary, testing should be performed by a representative of the project geotechnical consultant to verify an adequate degree of compaction.

If clean, imported sand is to be used for backfill of exterior utility trenches, it is recommended that the upper 12 inches of trench backfill materials consist of properly compacted onsite soil materials. This is to mitigate infiltration of irrigation and rainwater into granular trench backfill materials.

Where an exterior and/or interior utility trench is proposed in a direction parallel to a building footing, the bottom of the trench should not extend below a 1:1 (horizontal to vertical) plane projected downward from

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the bottom edge of the adjacent footing. Where this condition occurs, the adjacent footing should be deepened or the utility constructed and the trench backfilled and compacted prior to footing construction. Where utility trenches cross under a building footing, these trenches should be backfilled with on-site soils at the point where the trench crosses under the footing to reduce the potential for water to migrate under the floor slabs.

Site Drainage

Positive surface drainage systems consisting of a combination of sloped concrete flatwork/asphalt pavement, sheet flow gradients, swales and surface area drains (where needed) should be provided around all buildings, structures and within the planter areas to collect and direct all surface waters to an appropriate drainage facility as determined by the project civil engineer. The ground surfaces of planter and landscape areas that are located within 10 feet of building foundations should be sloped at a minimum gradient of 5 percent away from the foundations and towards the nearest area drains. The ground surface of planter and landscape areas that are located more than 10 feet away from building foundations may be sloped at a minimum gradient of 2 percent away from the foundations and towards the nearest area drains.

Concrete flatwork surfaces that are located within 10 feet of building foundations should be inclined at a minimum gradient of one percent away from the building foundations and towards the nearest area drains. Concrete flatwork surfaces that are located more than 10 feet away from building foundations may be sloped at a minimum gradient of 1 percent towards the nearest area drains. Surface waters should not be allowed to collect or pond against building foundations and within the level areas of the site. All drainage devices should be properly maintained throughout the lifetime of the development. Future changes to site improvements, or planting and watering practices, should not be allowed to cause over-saturation of site soils adjacent to the structures.

RETAINING WALLS

Conventional Retaining Walls

The design and construction of any proposed conventional retaining walls, those that are not a part of the subterranean parking, should be performed in general compliance with the following recommendations.

Footing Embedment

The base of retaining-wall footings constructed on level ground may be founded at a depth of 12 inches or more below the lowest adjacent final grade for low height walls. Where retaining walls are proposed on or within 15 feet from the top of adjacent descending fill slope, the footings should be deepened such that a

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horizontal clearance of 5 feet or more is maintained between the outside bottom edges of the footings and the face of the slope. Footing trenches should be observed by the project geotechnical representative to document that the footing trenches have been excavated into competent bearing soils and to the embedment recommended above. These observations should be performed prior to placing forms or reinforcing steel.

Allowable Bearing Capacity and Lateral Resistance

In the areas where light-weight structures are proposed, a basic allowable soil bearing capacity of 1,500 pounds per square foot, including dead and live loads, may be utilized for design of 12-inch-wide continuous footings founded at a minimum depth of 12 inches below the lowest adjacent final grade. This value may be increased by 20 percent for each additional foot of depth and by 10 percent for each additional foot of width to a maximum value of 2,500 pounds per square foot. Recommended allowable bearing values include both dead and live loads and may be increased by one-third for short duration wind and seismic forces.

In the areas where moderate- to heavy-weight structures are proposed, an allowable soil bearing capacity of 3,500 pounds per square foot, including dead and live loads, may be utilized for design of 24-inch-wide continuous footings founded at a minimum depth of 24 inches below the lowest adjacent final grade. This value may be increased by 20 percent for each additional foot of depth and by 10 percent for each additional foot of width to a maximum value of 6,000 pounds per square foot. Recommended allowable bearing values include both dead and live loads and may be increased by one-third for short duration wind and seismic forces.

A passive earth pressure of 300 pounds per square foot per foot of depth, to a maximum value of 3,000 pounds per square foot, may be used to determine lateral bearing resistance for footings. In addition, a coefficient of friction of 0.35 times the dead load forces may be used between concrete and the supporting soils to determine lateral sliding resistance. The above values may be increased by one-third when designing for transient wind or seismic forces.

It should be noted that the above values are based on the condition where footings are cast in direct contact with compacted fill or competent native soils. In cases where the footing sides are formed, all backfill placed against the footings upon removal of forms should be compacted to at least 90 percent of the applicable maximum dry density. Lateral support derived from the upper 6 inches of soil placed against the outside edge of the footing, however, should be ignored, except where the ground surface is paved or covered by concrete flatwork.

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Active Earth Pressures

Onsite Soils Used for Backfill

Onsite soils are sandy and silty with generally a very low to low expansive potential and maybe used for retaining wall backfill.

Utilizing this range of expansion potential soils for wall backfill, an active lateral earth pressure equivalent fluid having a density of 45 pounds per cubic foot (pcf) should be used for design of cantilevered walls retaining a drained level backfill. Where the wall backfill slopes upward at 2:1 (h:v), the above value should be increased to 65 pcf. For top-restrained retaining walls, above values should be increased by 50 percent.

Retaining walls should be constructed with a proper subdrain system (see Figure RW-1). All walls should be designed to support any adjacent structural surcharge loads imposed by other nearby walls or footings in addition to the above recommended active and at-rest earth pressures.

All structural calculations and details should be provided to the project geotechnical consultant for verification purposes prior to construction.

Import Soils Used for Backfill

Very low or low expansive soils may be imported into the site for use as retaining wall backfill and should be tested prior to placement to verify they exhibit a very low to low expansion potential.

Utilizing very low to low expansion potential soils for wall backfill, an active lateral earth pressure equivalent fluid having a density of 40 pounds per cubic foot (pcf) should be used for design of cantilevered walls retaining a drained level backfill. Where the wall backfill slopes upward at 2:1 (h:v), the above value should be increased to 61 pcf. For top-restrained retaining walls, above values should be increased by 50 percent.

Retaining walls should be constructed with a proper subdrain system (see Figure RW-1). All walls should be designed to support any adjacent structural surcharge loads imposed by other nearby walls or footings in addition to the above recommended active and at-rest earth pressures.

All structural calculations and details should be provided to the project geotechnical consultant for verification purposes prior to construction.

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Imported Sand, Pea Gravel or Rock Used for Wall Backfill

Imported clean sand exhibiting a sand equivalent value (SE) of 30 or greater, or pea gravel or crushed rock may also be considered for wall backfill. The sand, pea gravel or rock backfill materials should extend behind the walls to a minimum horizontal distance of 2 feet at the base of the wall or to a horizontal distance equal to the heel width of the footing, whichever is greater (see Figures RW-2 and RW-3).

For the above conditions, an active lateral earth pressure equivalent fluid having a density of 30 pounds per cubic foot (pcf) should be used for design of cantilevered walls retaining a drained level backfill. Where the wall backfill slopes upward at 2:1 (h:v), the above value should be increased to 41 pcf. The above values should be increased by 50 percent for top-restrained retaining walls. These values are also for retaining walls supplied with a proper subdrain system. Furthermore, as with imported soil backfill, the walls should be designed to support any adjacent structural surcharge loads imposed by other nearby walls or footings in addition to the recommended active and at-rest earth pressures.

Earthquake Loads

Section 1803.5.12 of the 2019 CBC requires the determination of lateral loads on retaining walls from earthquake forces for structures in seismic design categories D through E that are supporting in excess of 6 feet of retained height. Since the exact retaining walls configurations are not known, design recommendations for retaining walls supporting in excess of 6 feet of backfill will provided once the structural details are further determined.

Geotechnical Observation and Testing

All grading associated with retaining wall construction, including backcut excavations, observation of the footing trenches, installation of the backdrain systems, and placement of backfill should be provided by a representative of the project geotechnical consultant.

Backdrains

To reduce the likelihood of the entrapment of water in the backfill soils, weepholes or open vertical masonry joints may be considered for retaining walls not exceeding a height of 3 feet. Weepholes, if used, should be 3-inches minimum diameter and provided at intervals of 6 feet or less along the wall. Open vertical masonry joints, if used, should be provided at 32-inch intervals. A continuous gravel fill, 3 inches by 12 inches, should be placed behind the weepholes or open masonry joints. The gravel should be wrapped in filter fabric to prevent infiltration of fines and subsequent clogging of the gravel. Filter fabric may consist of Mirafi 140N or equivalent.

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A perforated pipe-and-gravel backdrain should be constructed behind retaining walls exceeding a height of 3 feet (see Figures RW-1, RW-2 and RW-3). Perforated pipe should consist of 4-inch-minimum diameter PVC Schedule 40, or ABS SDR-35, with the perforations laid down. The pipe should be encased in a 1-foot-wide column of ¾-inch to 1½-inch open-graded gravel. The open-graded gravel should be completely wrapped in filter fabric consisting of Mirafi 140N or equivalent. Solid outlet pipes should be connected to the subdrains and then routed to a suitable area for discharge of accumulated water.

Waterproofing

The backfilled sides of retaining walls should be coated with an approved waterproofing compound or covered with a similar material to inhibit migration of moisture through the walls.

Temporary Excavations

Temporary slopes may be cut at a gradient no steeper than 1:1 (h:v). However, the project geotechnical engineer should observe temporary slopes for evidence of potential instability. Depending on the results of these observations, flatter slopes may be necessary. The potential effects of various parameters such as weather, heavy equipment travel, storage near the tops of the temporary excavations and construction scheduling should also be considered in the stability of temporary slopes.

Wall Backfill Placement

Recommended active pressure for design of retaining walls are based on the physical and mechanical properties of the onsite soil materials. The backfill behind the proposed retaining walls, they should be placed in approximately 6- to 8-inch-thick maximum lifts, watered as necessary to achieve near optimum moisture conditions, and then mechanically compacted in place to a relative compaction of no less than 90 percent. Flooding or jetting of the backfill materials should be avoided. A representative of the project geotechnical consultant should observe the backfill procedures and test the wall backfill to verify adequate compaction.

Masonry Screen Walls

Construction on Level Ground

Where masonry walls are proposed on level ground and 5 feet or more from the tops of descending slopes, the footings for these walls may be founded 18 inches or more below the lowest adjacent final grade. These footings should also be reinforced with two No. 4 bars, one near top and one near bottom.

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Construction Joints

In order to reduce the potential for unsightly cracking related to the effects of differential settlement, positive separations (construction joints) should be provided in the walls at horizontal intervals of approximately 20 to 25 feet and at each corner. The separations should be provided in the blocks only and not extend through the footings. The footings should be placed monolithically with continuous rebars to serve as effective "grade beams" along the full lengths of the walls.

Preliminary Pavement Design Recommendations

The final pavement section should be designed once site rough grading has occurred and the R-Value of the resulting subgrade can be determined. For the purposes of this preliminary evaluation, we assumed an R-value of 70 based on the very sandy soil types encountered in near-surface soils. The following pavement sections have been computed in accordance with Caltrans design procedures and presented in the following tables, Table 3 and 4. Based upon our experience, the thicker pavement section is provided below is recommended due to increased performance and life.

TABLE 3

Preliminary Structural Asphalt Pavement Sections

Location	Preliminary Design R-value	Traffic Index	Pavement Section
Auto Parking Spaces	70	4.5	3 in. AC / 4 in. AB
Auto Driveways	70	5.0	3 in. AC / 4 in. AB
Truck Driveways/Parking	70	8.0	4 in. AC / 8 in. AB

Note: AC = Asphalt Concrete AB = Aggregate Base

TABLE 4

Preliminary Structural Concrete Pavement Sections

Location	Preliminary Design R-value	Traffic Index	Pavement Section
Heavy Truck Driveways/Parking	70	8.0	6 in. PCC

Note: PCC = Portland Cement Concrete

Final pavement design recommendations should be provided based on sampling and testing at the completion of rough grading and the values of traffic indices that should be provided by the project civil engineer. Subgrade soils should be properly compacted, smooth, and non-yielding prior to pavement construction. The subgrade soils should be compacted to at least 95 percent of ASTM D 1557.

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Aggregate base materials should be Crushed Aggregate Base, Crushed Miscellaneous Base, or Processed Miscellaneous Base conforming to Section 200-2 of the Standard Specifications for Public Works Construction (Greenbook). The base materials should be brought to uniform moisture near optimum moisture then compacted to at least 95 percent of the applicable maximum density standard as determined per ASTM D 1557. Asphaltic concrete materials and construction should conform to Section 203 of the Greenbook.

Concrete Loading Docks

1. The slab subgrade should be graded such that it accommodates placement of 7-inch thick concrete pavement section. Subgrade compaction shall be no less than 95 percent relative compaction with reference to ASTM D 1557.

2. Prior to placing concrete, the subgrade soils below the slab should be pre-watered to achieve a moisture content that is at least optimum moisture content, but not overly wet.

3. The concrete pavement section should be a minimum 7 inches thick and reinforced with No. 4 bars spaced a maximum of 18 inches on centers (both ways). The reinforcement should be properly positioned near the middle of the slabs.

4. Concrete shall exhibit an unconfined compressive strength of no less than 3,250 psi.

5. The minimum dimensions and reinforcement recommended herein for equipment slab may be modified (increased or decreased subject to the constraints of the 2022 CBC) by the Structural Engineer based on his/her calculations, engineering experience and judgment.

Non-Pavement Exterior Concrete Flatwork

General

Near-surface compacted fill soils within the site are expected to exhibit an expansion index of 0 to 20, i.e. non-expansive. We recommend that all exterior concrete flatwork such as sidewalks, patio slabs, large decorative slabs, concrete subslabs that will be covered with decorative pavers within and adjacent to the site be designed by the project architect and/or structural engineer with consideration given to mitigating the potential cracking and uplift that can develop in soils exhibiting expansion index values that fall in the very low category.

The guidelines that follow should be considered as minimums and are subject to review and revision by the project architect, structural engineer and/or landscape consultant as deemed appropriate.

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Thickness and Joint Spacing

To reduce the potential of unsightly cracking, concrete walkways, patio-type slabs, large decorative slabs and concrete subslabs to be covered with decorative pavers should be at least 4 inches thick and provided with construction joints or expansion joints every 6 feet or less.

Reinforcement

All concrete flatwork having their largest plan-view panel dimension exceeding 10 feet should be reinforced with a minimum of No. 3 bars spaced 24 inches on centers, both ways. Alternatively, the slab reinforcement may consist of welded wire mesh of the sheet type (not rolled) with 6x6/W1.4xW1.4 designation in accordance with the Wire Reinforcement Institute (WRI). The reinforcement should be properly positioned near the middle of the slabs.

> *The reinforcement recommendations provided herein are intended as guidelines to achieve adequate performance for anticipated soil conditions. The project architect, civil and/or structural engineer should make appropriate adjustments in reinforcement type, size and spacing to account for concrete internal (e.g., shrinkage and thermal) and external (e.g., applied loads) forces as deemed necessary.*

Subgrade Preparation

Compaction

To reduce the potential for distress to concrete flatwork, the subgrade soils below concrete flatwork areas to a minimum depth of 12 inches (or deeper, as either prescribed elsewhere in this report or determined in the field) should be moisture conditioned to at least equal to, or slightly greater than, the optimum moisture content and then compacted to a relative compaction of no less than 90 percent. Where concrete public roads, concrete segments of roads and/or concrete access driveways are proposed, the upper 6 inches of subgrade soil should be compacted to no less than 95 percent relative compaction.

Pre-Moistening

As a further measure to reduce the potential for concrete flatwork cracking, subgrade soils should be thoroughly moistened prior to placing concrete. The moisture content of the soils should be approximately 1.2 times the optimum moisture content and penetrate to a minimum depth of 12 inches into the subgrade. Flooding or ponding of the subgrade is not considered feasible to achieve the above moisture conditions since this method would likely require construction of numerous earth berms to contain the water. Therefore, moisture conditioning should be achieved with a light spray applied to the subgrade over a period

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of few to several days just prior to pouring concrete. Pre-watering of the soils is intended to promote uniform curing of the concrete, reduce the development of shrinkage cracks and reduce the potential for differential expansion pressure on freshly poured flatwork. A representative of the project geotechnical consultant should observe and verify the density and moisture content of the soils, and the depth of moisture penetration prior to pouring concrete.

Drainage

Drainage from patios and other flatwork areas should be directed to local area drains and/or graded earth swales designed to carry runoff water to the adjacent streets or other approved drainage structures. The concrete flatwork should be sloped at a minimum gradient of one percent, or as prescribed by project civil engineer or local codes, away from building foundations, retaining walls, masonry garden walls and slope areas.

Tree Wells

Tree wells are not recommended in concrete flatwork areas since they introduce excessive water into the subgrade soils and allow root invasion, both of which can cause heaving and cracking of the flatwork.

GRADING, EXCAVATION AND STRUCTURAL PLAN REVIEWS

This report is based on the existing site conditions and the current Gensler conceptual planning and massing exhibits. We recommend that our firm be retained to review the grading plan, basement wall plan and structural foundation plans once when they become available. Additional recommendations and/or modification of the recommendations provided herein will be provided if necessary, depending on the results of the plan reviews.

If additional or alternative improvements are considered in the future, our firm should be notified so that we may provide design recommendations. It is further recommended that we be engaged to review the final design drawings, specifications and grading plan prior to any new construction. If we are not provided the opportunity to review these documents with respect to the geotechnical aspects of new construction and grading, it should not be assumed that the recommendations provided herein are wholly or in part applicable to the proposed construction.

We recommend that Petra be retained to provide soil-engineering services during excavation, grading, construction and foundation phases of the work. This is to observe compliance with the design,

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specifications or recommendations and to allow design changes in the event that subsurface conditions differ from those anticipated prior to start of construction.

REPORT LIMITATIONS

This report is based on the project site and our field explorations, laboratory testing and geotechnical analysis performed to date. The materials encountered on the project site and utilized in our laboratory evaluations are believed representative of the total area; however, soil types, gravel and cobble percentages and soil moisture conditions can vary in characteristics between excavations, both laterally and vertically.

The conclusions and opinions contained in this report are based on the results of the described geotechnical evaluations and represent our professional judgment. This report has been prepared consistent with that level of care being provided by other professionals providing similar services at the same locale and in the same time period. The contents of this report are professional opinions and as such, are not to be considered a guaranty or warranty. This report has not been prepared for use by parties or projects other than those named or described herein. This report may not contain sufficient information for other parties or other purposes. In addition, this report should be reviewed and updated after a period of 1 year or if the site ownership or project concept changes from that described herein.

It has been a pleasure to be of service to you on this project. Should you have questions regarding the contents of this report or should you require additional information, please contact this office.

Respectfully submitted,

PETRA GEOSCIENCES, INC.

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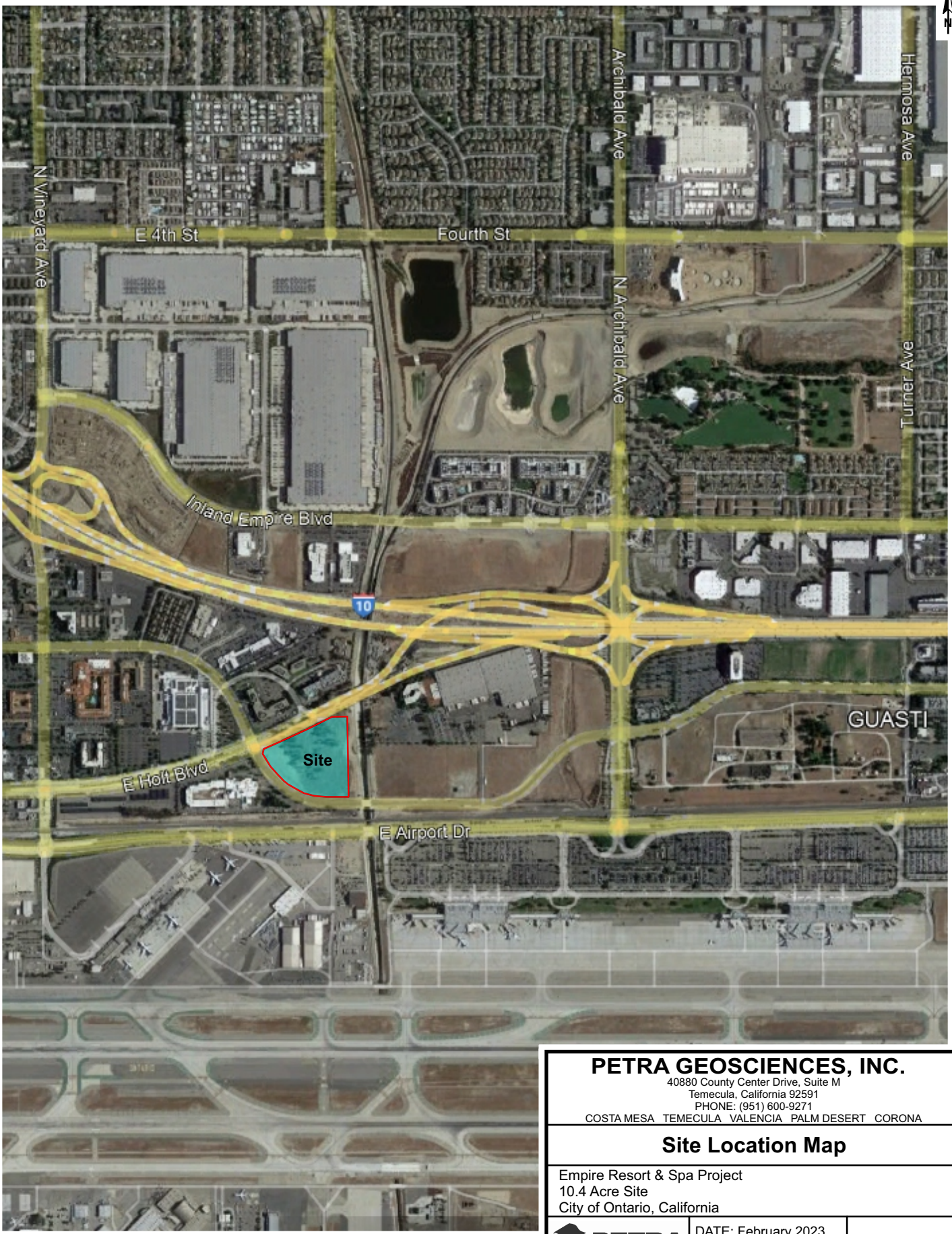
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FIGURES

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Reference: Google Earth, 2021 image

PETRA GEOSCIENCES, INC.
40880 County Center Drive, Suite M
Temecula, California 92591
PHONE: (951) 600-9271
COSTA MESA TEMECULA VALENCIA PALM DESERT CORONA

Site Location Map

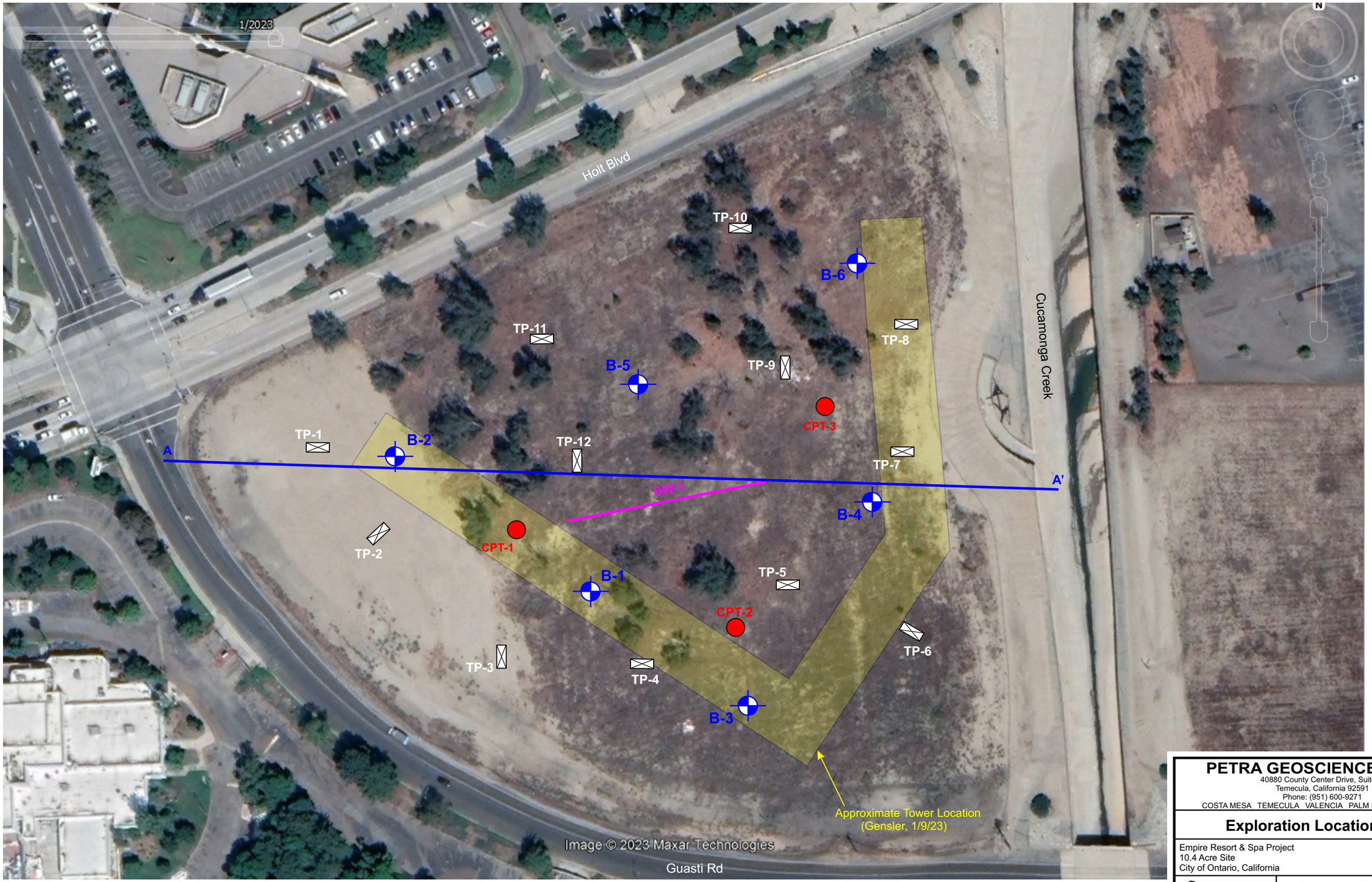
Empire Resort & Spa Project
10.4 Acre Site
City of Ontario, California

PETRA GEOSCIENCES INC.

DATE: February 2023

J.N.: 22-398

Figure 1



Reference: Google Earth, 9/15/22 Image

Approximate Scale: 1" = 100'

PETRA GEOSCIENCES, INC.
40880 County Center Drive, Suite M
Temecula, California 92591
Phone: (951) 600-9271
COSTA MESA TEMECULA VALENCIA PALM DESERT CORONA

Exploration Location Map

Empire Resort & Spa Project
10.4 Acre Site
City of Ontario, California

PETRA GEOSCIENCES INC.

DATE: February 2023
J.N.: 22-398

Figure 2

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APPENDIX A

EXPLORATION LOGS
(Borings, Test Pits, Seismic Line and CPT's)

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EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **B-1**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **967±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/12/22**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **130 lbs/ 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**YOUNG ALLUVIAL FAN DEPOSITS (Qyf)** Silty Sand (SM): Light brown, dry to slightly moist, medium- to coarse-grained, trace gravel.							
5		medium dense, no gravel.		11 14 20	■		2.1	110.0	DS
10		with gravel.		8 14 20	■		1.8		
15		Sand with Silt (SP-SM): Very light brown, dry, dense, medium- to coarse-grained, with gravel, trace broken cobble.		15 19 24	■		1.0		
20		**OLDER ALLUVIAL FAN DEPOSITS (Qof)** Silty Sand to Sandy Silt (SM-ML): Red brown, dry, dense, fine- to medium-grained, trace gravel.		40 21 31	■		4.0	113.8	DS
25		Silty Sand (SM): Red brown, dry, dense, medium- to coarse-grained, trace gravel.		12 13 19	◪		2.5		
30		very dense.		39 50/5"	◪		2.6		

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PLATE

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **B-1**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **967±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/12/22**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **130 lbs/ 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
35		Light brown.		19 30 50/5"	■		2.3		
40		Light brown to brown.		30 50/5"	■		3.7		
45		Sand with Silt (SP-SM): Light brown to brown, dry, very dense, medium- to coarse-grained, trace gravel.		38 50/2"	■		3.5		
50		Sandy Silt (ML): Brown, dry, hard, fine-grained.		15 29 34	■		9.8		
55		dry to slightly moist.		32 50/4"	■		8.4	105.2	CON, DS
60		Sand (SP): Light gray to light brown, dry, dense, fine- to coarse-grained.		15 23 22	■		3.5		
		Clayey Sand (SC): Red brown, dry, hard, fine- to coarse-grained, trace silt.							
65		: slightly moist.		15 23 34	■		14.5	117.7	DS

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PLATE

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **B-1**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **967±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/12/22**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **130 lbs/ 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
70		Sandy Silt: Red brown, dry, hard, fine- to medium-grained, trace clay.		14 16 24	■				
75		Silty Sand (SM): Light red brown.		10 19 24	■		11.6		
80		Sand with Silt (SP-SM): Light brown to gray, dry, very dense, fine- to medium-grained.		20 29 32	■		5.6		
85		Silty Sand (SM): Red brown, dry, dense, fine- to coarse-grained.		15 18 26	■		14.0		
90		medium dense, fine- to medium-grained.		15 16 24	■		6.4		
95		Light red brown, very dense, less silt.		15 24 28	■		6.2		
100		trace gravel.		17 24 40	■		5.9		
		Total Depth = 101.5' No ground water encountered Boring backfilled with cuttings.							

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PLATE

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **B-2**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **966±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/12/22**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **130" lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): Light red brown, dry to slightly moist, with gravel, trace cobble, trace asphalt pieces.							
		YOUNG ALLUVIAL FAN DEPOSITS (Qyf) (SM).							
5		Silty Sand (SM): Light red brown, dry to slightly moist, medium dense, trace gravel.		9 14 21	■		6.2	117.2	
10		with gravel, little recovery possible due to cobble.		12 13 14	■		3.4		
15		Sand w/ Silt (SP-SM): Light brown to gray, dry, medium dense, fine- to coarse-grained, trace gravel.		8 9 8	◪		1.6		
20		Sand (SP): Light gray, dry, dense, medium- to coarse-grained, with gravel.		20 34 22	■		1.4		
25		**OLDER ALLUVIAL FAN DEPOSITS (Qof)** Silty Sand (SM): Red brown, dry to slightly moist, very dense, medium- to coarse-grained, trace gravel.		20 29 34	◪		3.8		
30				18 34 50	■		3.5	115.7	

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PLATE A-2

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **B-2**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **966±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/12/22**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **130" lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
35				18 28 31			3.2		
40		Sand with Silt (SP-SM): Red brown, dry to slightly moist, very dense, medium- to coarse-grained, with gravel.		50/3"			4.8	116.0	
45		Silty Sand (SM): Red brown to light gray, dry to slightly moist, very dense, medium- to coarse-grained, with gravel.		24 38 38			3.4		
50		fine- to medium-grained.		50/6"			7.7		
		Total Depth = 51.5' No ground water encountered Boring backfilled with cuttings.							
55									
60									
65									

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PLATE A-2

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **B-3**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **958±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/13/22**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **130 lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**YOUNG ALLUVIAL FAN DEPOSITS (Qyf)** Silty Sand (SM): Light brown, dry to slightly moist, fine- to medium-grained, trace gravel, trace cobble.							
5		medium dense, fine-grained, with gravel, no cobble.		6 8 10	■		3.6		
10		light brown to gray, dense.		14 16 21	■		1.5		
15		Sand with Silt (SP-SM): Light Brown to gray, dry, very dense, fine-grained, with gravel.		24 35 28	■		1.4		
20		**OLDER ALLUVIAL FAN DEPOSITS (Qof)** Silty Sand (SM): Red brown, dry to slightly moist, loose, medium- to coarse-grained, trace gravel.		7 8 13	■		6.3		
25		Orange brown, dense, no trace gravel.		7 14 29	■		7.4	113.1	CON
30		Red brown, medium dense.		8 14 12	■		11.9		

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PLATE A-3

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **B-3**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **958±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/13/22**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **130 lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
35		very dense, with gravel.		50/6"	■		2.6		
40		Light brown to tan.		34 50/5"	◪		4.7		
45		Red brown.		50/6"	■		4.3	118.1	
50		Sandy Silt (ML): Red brown, dry to slightly moist, hard, fine-grained.		17 18 21	◪		12.7		ATT
		Total Depth = 51.5' No ground water encountered Boring backfilled with cuttings.							
55									
60									
65									

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PLATE A-3

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **B-4**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **959±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/13/22**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **130 lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ASPHALT (A/C)** 4" Thick.							
		YOUNG ALLUVIAL FAN DEPOSITS (Qyf) Silty Sand (SM): Brown, slightly moist, fine- to medium-grained, trace gravel.							
5		medium dense.		7 11 13	■		4.3	110.2	
10		dry to slightly moist, medium- to coarse-grained.		6 6 7	◪		4.5		
15		Light brown to tan, very dense, with gravel.		30 39 38	■		1.4		
20		**OLDER ALLUVIAL FAN DEPOSITS (Qof)** Silty Sand (SM): Red brown, slightly moist, medium dense, medium- to coarse-grained, with gravel.		7 11 10	◪		10.5		
25		Orange brown to tan, very dense, with gravel.		29 36 34	■		4.5	118.4	
30		Sand with Silt (SP-SM): Light brown to tan, dry to slightly moist, dense, medium- to coarse-grained, with gravel.		18 24 24	◪		3.3		

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PLATE A-4

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **B-4**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **959±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/13/22**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **130 lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
35		Silty Sand (SM): Orange brown, dry to slightly moist, very dense, medium- to coarse-grained, with gravel.		50/6"	■		2.8		
40		medium dense.		16 16 14	◪		4.7		
45		dense.		12 16 30	■		5.3	119.2	
50		Sandy Silt (ML): Red brown, slightly moist, very stiff, fine-grained.		5 10 17	◪		18.7		
		Total Depth = 51.5' No ground water encountered Boring backfilled with cuttings.							
55									
60									
65									

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PLATE A-4

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **B-5**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **967±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/13/22**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **130 lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**YOUNG ALLUVIAL FAN DEPOSITS (Qyf)** Silty Sand (SM): Light brown, dry to slightly moist, fine- to medium-grained, trace gravel, trace cobble.							
5		Light brown to brown, dense, no cobble, no gravel.		12 16 22	■		3.1	116.1	
10		No recovery.		12 16 32	▨				
15		medium- to coarse-grained, with gravel, trace cobble.		12 21 23	◪		1.1		
20		Sand with Silt (SP-SM): Light brown to gray, dry, very dense, medium- to coarse-grained, with gravel.		23 40 40	■		1.0		
25		**OLDER ALLUVIAL FAN DEPOSITS (Qof)** Silty Sand (SM): Red brown to orange, dry to slightly moist, dense, medium- to coarse-grained, trace gravel.		13 21 19	◪		4.2		
30		No recovery.		30 50/5"	▨				

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PLATE A-5

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **B-5**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **967±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/13/22**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **130 lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
35		very dense, no gravel.		22 26 30			2.8		
40		with gravel.		50/6"			2.3		
45		Light red brown.		19 50/3"			3.1		
50				50/6"			3.8		
		Total Depth = 51.5' No ground water encountered Backfilled with cuttings.							
55									
60									
65									

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PLATE A-5

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **B-6**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **963±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/13/22**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **130 lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**YOUNG ALLUVIAL FAN DEPOSITS (Qyf)** Silty Sand (SM): Light brown, dry to slightly moist, fine- to medium-grained, trace sand, trace gravel.							
5		no gravel, no cobbles.		14 16 24	■		2.9	112.8	
10		No recovery - loose gravel, trace cobble.		16 19 26	▨				
15		Light brown gray, dry, very dense, medium- to coarse-grained, with gravel, trace cobbles.		15 18 32	◪		1.3		
20		**OLDER ALLUVIAL FAN DEPOSITS (Qof)** Silty Sand (SM): Red brown, slightly moist, dense.		14 17 23	■		9.2	121.2	DS
25		Orange brown, medium dense, no gravel.		12 8 7	◪		6.9		
30		Light orange brown, very dense, with gravel, trace cobble.		50/6"	■		2.0		

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PLATE A-6

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **B-6**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **963±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/13/22**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **130 lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
35		No recovery.		20 31 41					
40		very dense.		50"6			5.4	112.6	
45		Red brown, slightly moist, dense, fine- to medium-grained, no gravel.		10 12 19			9.5		
50		Sandy Silt (ML): Orange brown, slightly moist, hard, fine-grained.		14 28 44			9.9	118.6	CON
55		Silty Sand (SM): Light brown to brown, dry to slightly moist, dense, medium- to coarse-grained.		12 23 32			4.8		
60				48 50/6"			6.4	112.5	
65									

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PLATE A-6

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **TP-1**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **967±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/27/22**
Drill Method:	**Backhoe**	Driving Weight:	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)**							
		Silty Sand (SM): Light brown, dry, fine- to medium-grained, with gravel (20-30%).							
		Sand (SP): Light brown to gray, dry, fine- to medium-grained, with gravel (20-30%).							
		YOUNG ALLUVIAL FAN DEPOSITS (Qyf)							
5		Silty Sand (SM): Orangish brown, dry, fine- to medium-grained, with gravel.				■			MAX, EI, MA, pH., CL, SO4 RES
		moist.							
		Total Depth = 8'							
		Trench backfilled with cuttings							
		No groundwater encountered							
10		No caving.							
15									
20									
25									
30									

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PLATE A-7

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **TP-2**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **965±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/27/22**
Drill Method:	**Backhoe**	Driving Weight:	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)**							
		Silty Sand (SM): Light brown, dry, fine- to medium-grained, with gravel (20-30%), trace cobbles.							
		Sand (SP): Light brown to gray, dry, fine- to medium-grained, with gravel (20-30%), trace cobbles.							
		YOUNG ALLUVIAL FAN DEPOSITS (Qyf)							
		Sand with Silt (SP-SM): Orangeish brown, dry, fine- to medium-grained, with gravel.							
5		slightly moist.							
10		with 3-4" cobbles (15-25%), trace 8-12" cobbles.							
		minor caving.							
15						■			MA
		Total Depth = 15'							
		Trench backfilled with cuttings							
		No groundwater encountered.							
20									
25									
30									

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PLATE A-8

Petra Geosciences, Inc.

6078

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **TP-3**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **961±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/27/22**
Drill Method:	**Backhoe**	Driving Weight:	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): Light brown to brown, dry, fine- to medium-grained, with gravel (20-30%), with 3-4" cobbles (20-30%).							
		YOUNG ALLUVIAL FAN DEPOSITS (Qyf) Silty Sand (SM): Light brown to brown, dry, fine- to medium-grained, with gravel, no cobbles.							
5		dry to slightly moist.							
		Total Depth = 8' Trench backfilled with cuttings No groundwater encountered No caving.							
10									
15									
20									
25									
30									

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PLATE A-9

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **TP-4**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **965±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/27/22**
Drill Method:	**Backhoe**	Driving Weight:	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)**							
		Silty Sand (SM): Orangish-brown, dry, fine- to medium-grained, with gravel (20-30%), trace cobble.							
		with gravel (10-20%), with 4-6" cobble (15-25%).							
		YOUNG ALLUVIAL FAN DEPOSITS (Qyf)							
		Silty Sand (SM): Brown to gray, dry, fine- to medium-grained, with gravel, no cobbles.							
5		trace cobbles.							
		Total Depth = 8'							
		Trench backfilled with cuttings							
		No groundwater encountered							
10		No caving.							
15									
20									
25									
30									

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PLATE A-10

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **TP-5**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **961±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/27/22**
Drill Method:	**Backhoe**	Driving Weight:	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): Light brown to orange, dry, fine- to medium-grained, with gravel (20-30%),trace cobbles.							
5		**YOUNG ALLUVIAL FAN DEPOSITS (Qyf)** Silty Sand (SM): Light brown to orange, dry, fine- to medium-grained, with gravel, no cobbles.							
		trace cobbles.							
10		minor caving.							
15		Total Depth = 15' Trench backfilled with cuttings No groundwater encountered.				■			MA, pH, CL, SO4, RES
20									
25									
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PLATE A-11

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **TP-6**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **956±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/27/22**
Drill Method:	**Backhoe**	Driving Weight:	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): Light brown to brown, dry, fine- to medium-grained, with gravel (10-20%), trace cobble.							
5		**YOUNG ALLUVIAL FAN DEPOSITS (Qyf)** Silty Sand (SM): Brown to gray, dry, fine- to medium-grained, with gravel, no cobbles.							
10		Total Depth = 8' Trench backfilled with cuttings No groundwater encountered No caving.							
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PLATE A-12

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **TP-7**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **961±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/27/22**
Drill Method:	**Backhoe**	Driving Weight:	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): Light brown to brown, dry, fine- to medium-grained, with gravel (10-20%), trace cobbles.							
5		**YOUNG ALLUVIAL FAN DEPOSITS (Qyf)** Silty Sand (SM): Light brown to brown, dry, fine- to medium-grained, with gravel, no cobbles.							
10		Total Depth = 8' Trench backfilled with cuttings No groundwater encountered No caving.							
15									
20									
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PLATE A-13

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **TP-8**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **962±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/27/22**
Drill Method:	**Backhoe**	Driving Weight:	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Sand with Silt (SP-SM): Light brown to brown, dry, fine- to medium-grained, with gravel.							
		Silty Sand (SM): Light brown to brown, dry, fine- to medium-grained, with gravel (10-20%), trace cobbles.							MA
5		**YOUNG ALLUVIAL FAN DEPOSITS (Qyf)** silty Sand (SM): Light Brown to brown, dry, fine- to medium-grained, with gravel, no cobbles. with cobbles.							
		Total Depth = 8' Trench backfilled with cuttings No groundwater encountered No caving.							
10									
15									
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25									
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PLATE A-14

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **TP-9**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **965±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/27/22**
Drill Method:	**Backhoe**	Driving Weight:	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): Light brown to brown, dry, fine- to medium-grained, with gravel (20-30%), trace cobbles.							
5		**YOUNG ALLUVIAL FAN DEPOSITS (Qyf)** Silty Sand (SM): Light brown to brown, dry, fine- to medium-grained, with gravel, no cobbles.							
10		Total Depth = 8' Trench backfilled with cuttings No groundwater encountered No caving.							
15									
20									
25									
30									

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PLATE A-15

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **TP-10**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **970±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/27/22**
Drill Method:	**Backhoe**	Driving Weight:	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): Light brown to brown, dry, fine- to medium-grained, with gravel (10-20%), trace cobbles.							
		YOUNG ALLUVIAL FAN DEPOSITS (Qyf) Silty Sand (SM): Light brown to brown, dry, fine- to medium-grained, with gravel, no cobbles.							
5		Light brown, with gravel (10-15%), trace cobbles.							
10		with 4-6" cobbles (20-30%).							
		minor caving.							
15		Total Depth = 15' Trench backfilled with cuttings No groundwater encountered.							
20									
25									
30									

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PLATE A-16

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **TP-11**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **959±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/27/22**
Drill Method:	**Backhoe**	Driving Weight:	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): Light brown to brown, slightly moist, fine- to medium-grained, with gravel (20-30%), trace cobbles. 12" concrete chunk, 18" asphalt chunk.							
5		**YOUNG ALLUVIAL FAN DEPOSITS (Qyf)** Silty Sand (SM): Light brown to brown, dry, fine- to medium-grained, with gravel, no cobbles. trace cobbles.							
10		Total Depth = 8' Trench backfilled with cuttings No groundwater encountered No caving.							
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25									
30									

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PLATE A-17

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **TP-12**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **966±**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **12/27/22**
Drill Method:	**Backhoe**	Driving Weight:	Logged By: **SS**

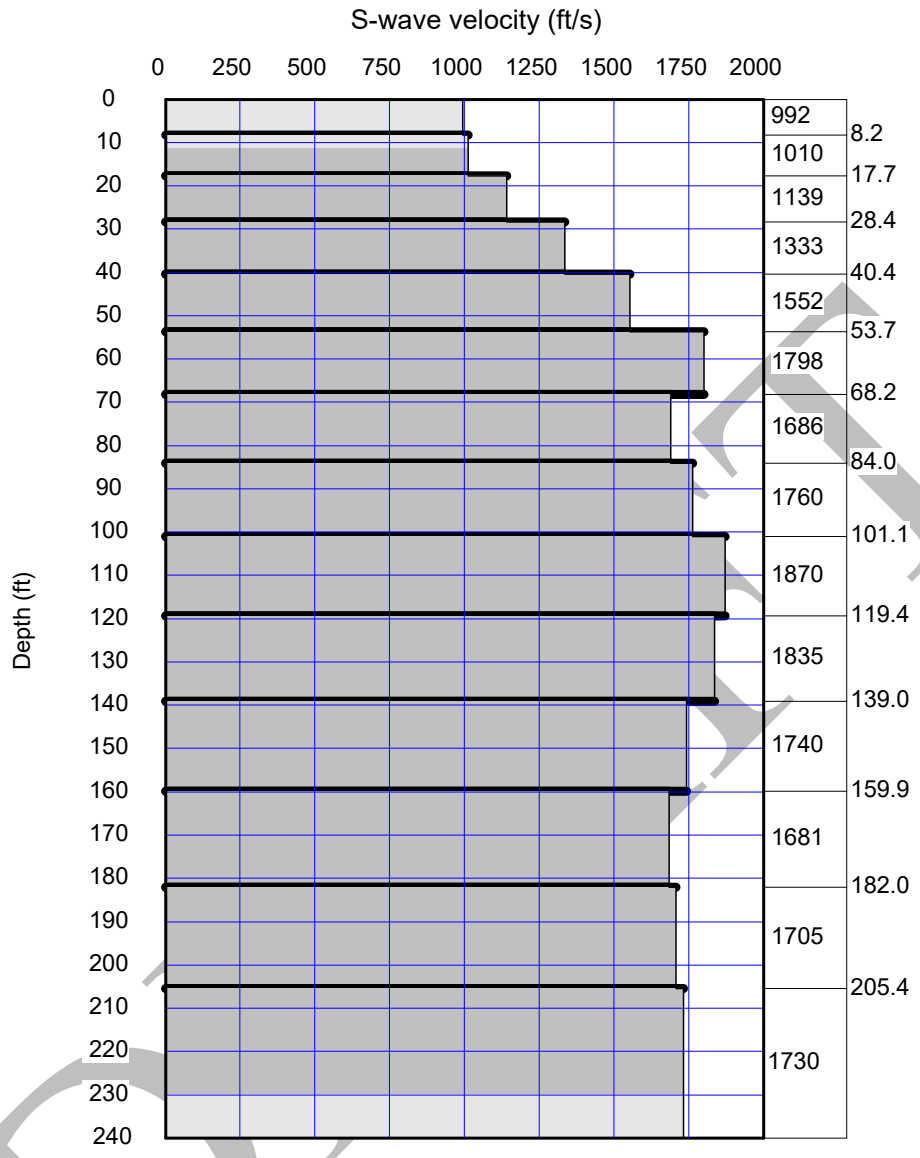
Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): Orange to brown, dry, fine- to medium-grained, with gravel (20-30%), trace cobbles.							
5		**YOUNG ALLUVIAL FAN DEPOSITS (Qyf)** Silty Sand (SM): Brown to gray, dry, fine- to medium-grained, trace gravel, no cobbles.							
10		Total Depth = 8' Trench backfilled with cuttings No groundwater encountered No caving.							
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PLATE A-18

Petra Geosciences, Inc.

SEISMIC LINE SW-1
SHEAR-WAVE MODEL



SHEAR-WAVE VELOCITY MODEL: Average Vs 100ft = 1,405.6 ft/sec

Site Classification (ASCE 7-16 Ch. 20)- "C" ("Very Dense Soil and Soft Rock")

Client: Petra Geosciences, Inc. **Petra Job No. 22-398**

Project Name: Ontario Hotel Project, Ontario, California

Survey Line End Coordinates: 34.064180, -117.602930 / 34.064255, -117.602331

Date: 12/30/22

PROFESSIONAL GEOPHYSICIST
DONN C. SCHWARTZKOPF
No. 1002
STATE OF CALIFORNIA

TERRA GEOSCIENCES
P.O. Box 1090
Loma Linda, CA 92354

TG Project No. 223907-1

6089

SUMMARY

OF

CONE PENETRATION TEST DATA

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2236 E. Holt Blvd.
Ontario, CA
December 29, 2022

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Mr. Doug Johnston
Petra Geosciences, Inc.
40880 County Center Drive, Ste M
Temecula, CA 92591
Office (951) 600-9271 / Fax (951) 600-9215

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KEHOE TESTING & ENGINEERING
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2. **SUMMARY OF FIELD WORK**
3. **FIELD EQUIPMENT & PROCEDURES**
4. **CONE PENETRATION TEST DATA & INTERPRETATION**

APPENDIX

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SUMMARY

OF

CONE PENETRATION TEST DATA

1. INTRODUCTION

[illegible] report [illegible] the results [illegible] cone penetration tests [illegible] performed [illegible] the project [illegible] described [illegible] [illegible] [illegible]

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4. CONE PENETRATION TEST DATA & INTERPRETATION

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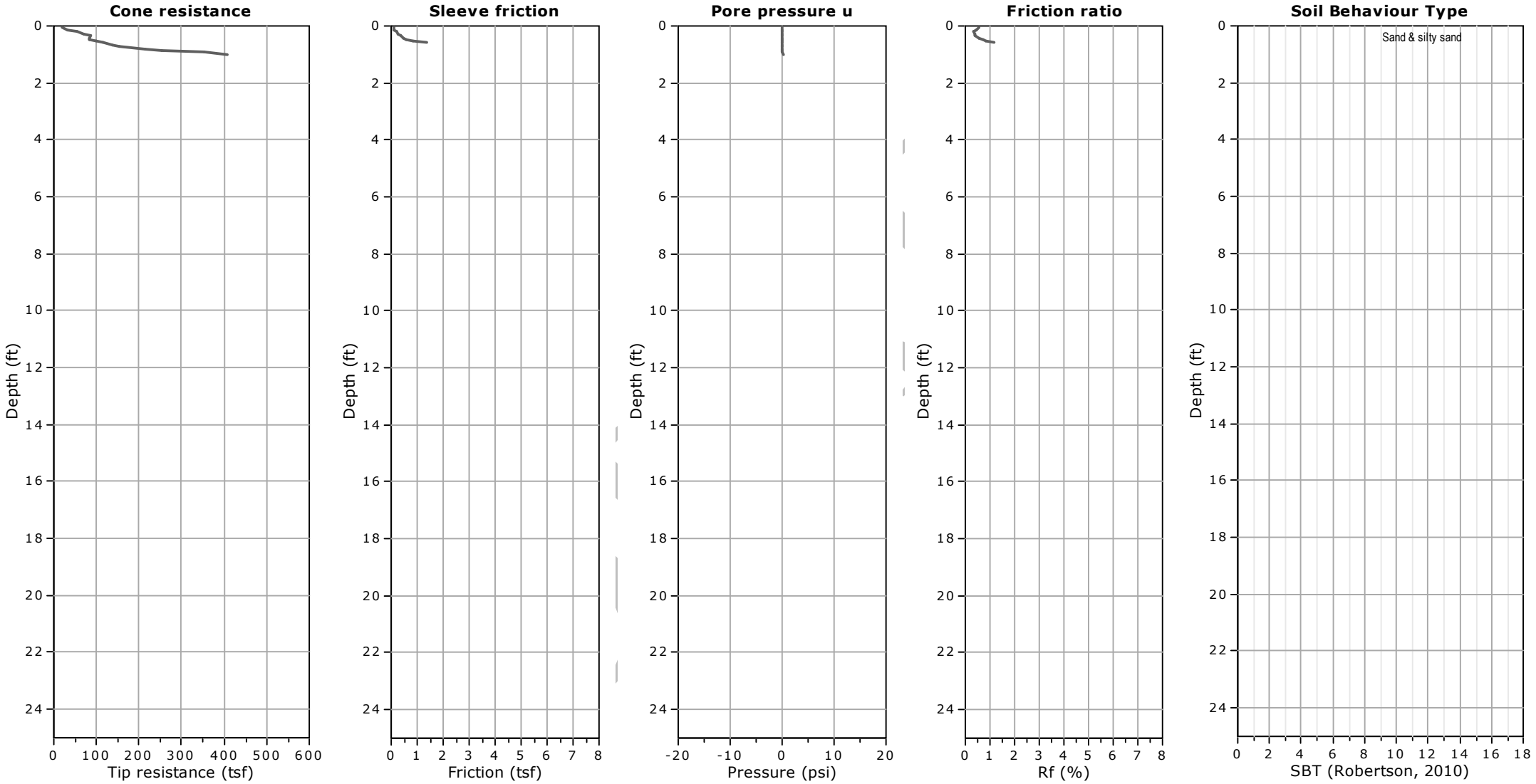
APPENDIX

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Kehoe Testing and Engineering
714-901-7270
steve@kehoetesting.com
www.kehoetesting.com

Project: **Petra Geosicences**
Location: **2236 E. Holt Blvd, Ontario, CA**

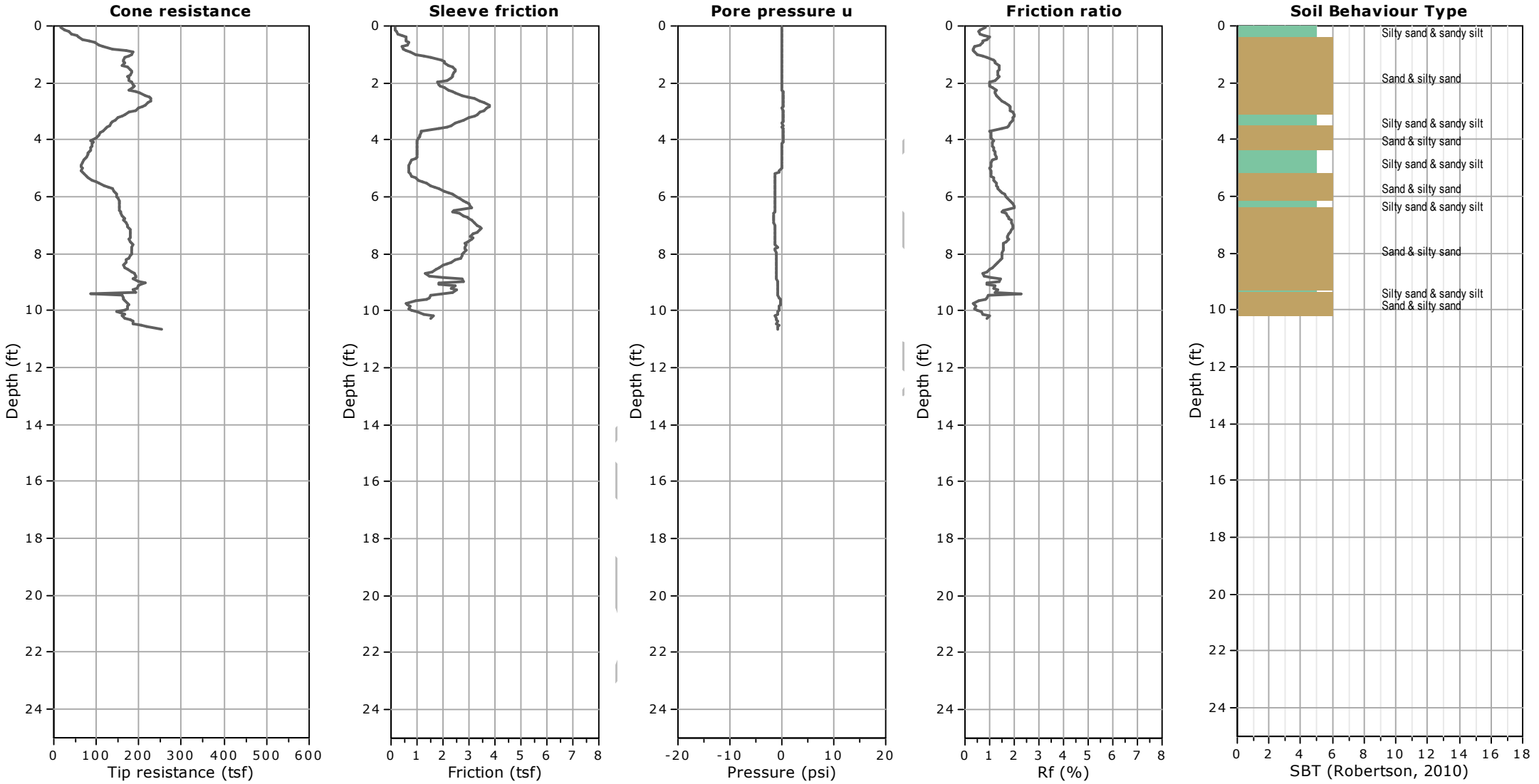
CPT-1
Total depth: 0.99 ft, Date: 12/29/2022



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steve@kehoetesting.com
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Project: **Petra Geosicences**
Location: **2236 E. Holt Blvd, Ontario, CA**

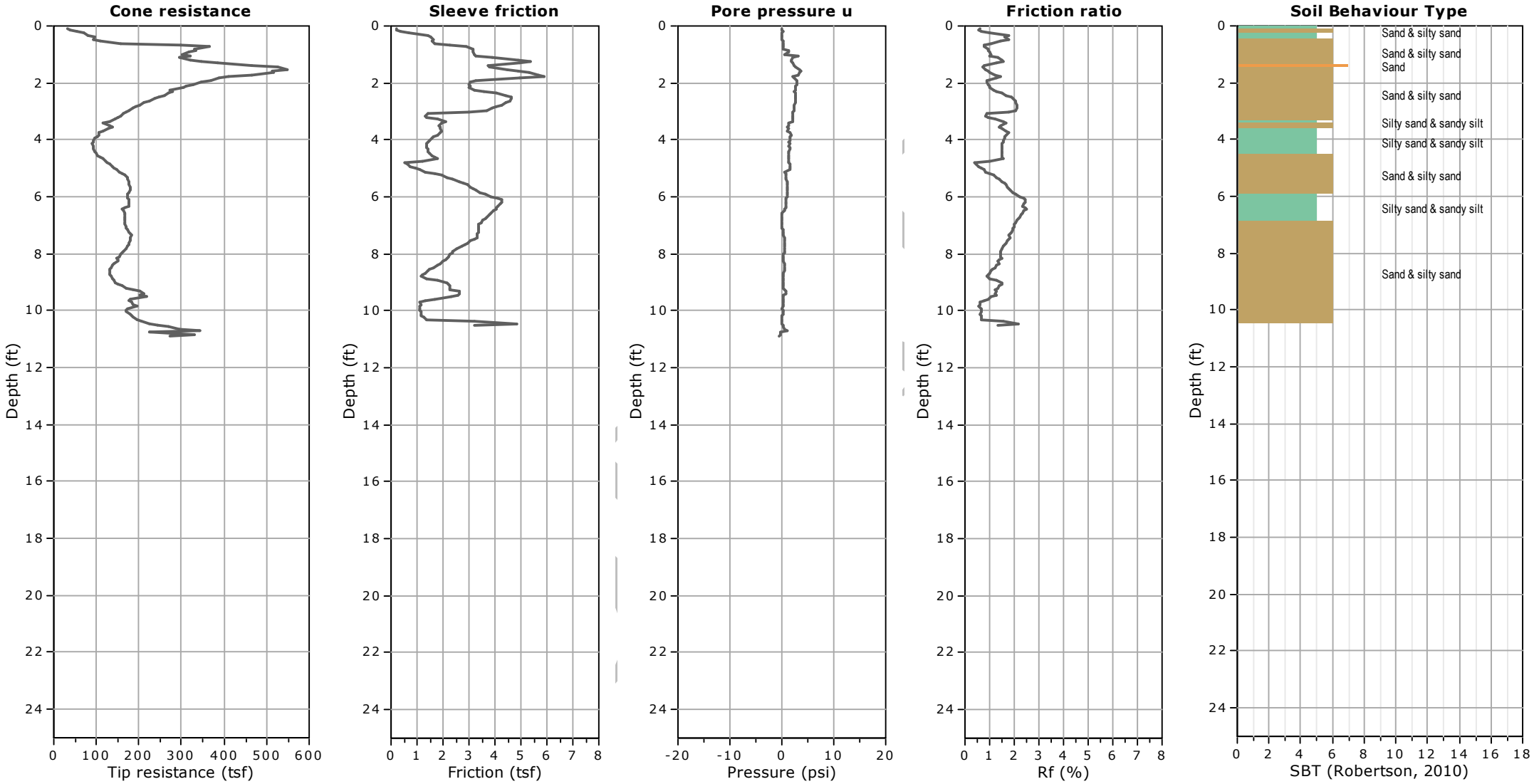
CPT-1A
Total depth: 10.64 ft, Date: 12/29/2022



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www.kehoetesting.com

Project: **Petra Geosicences**
Location: **2236 E. Holt Blvd, Ontario, CA**

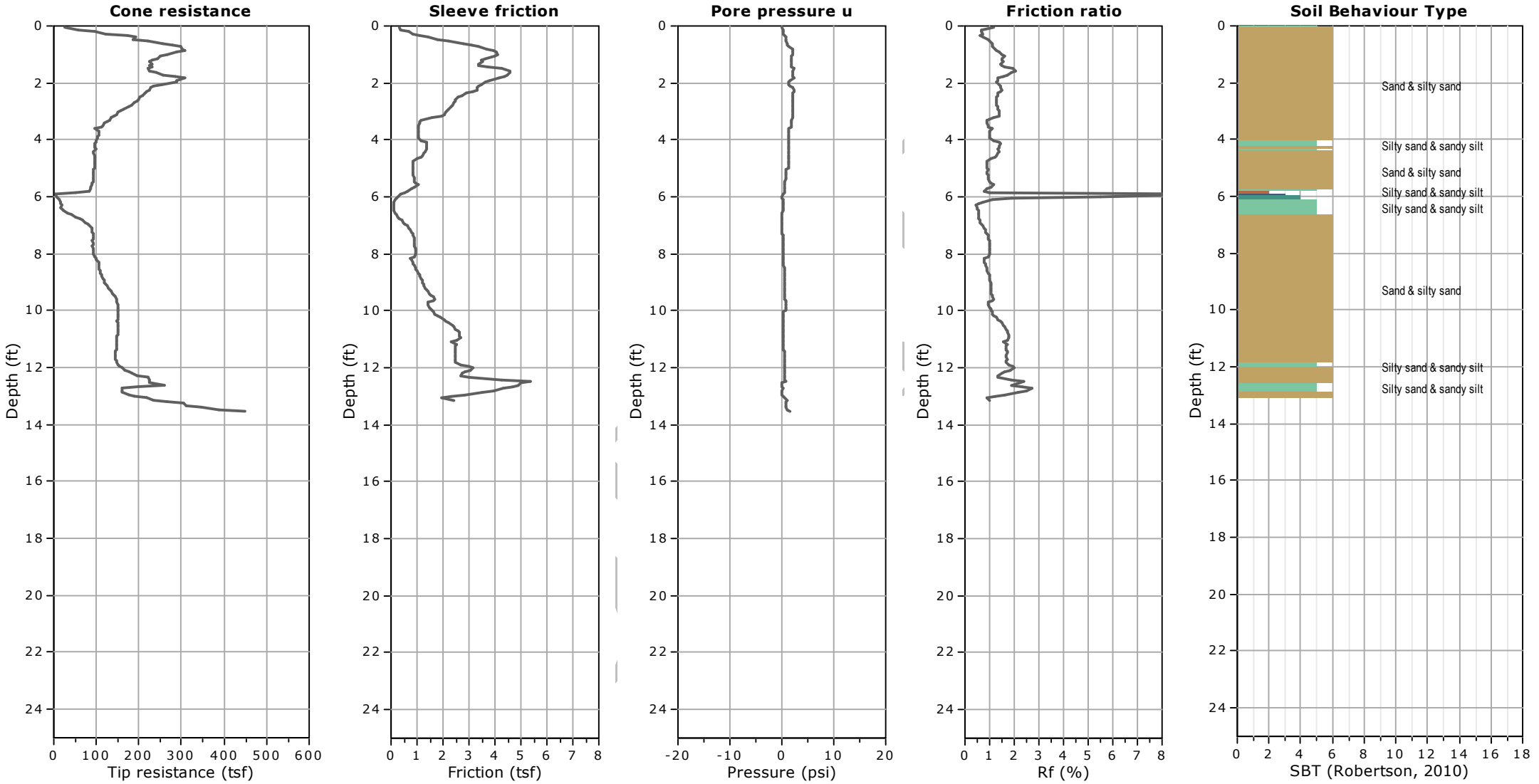
CPT-1B
Total depth: 10.90 ft, Date: 12/29/2022



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Project: **Petra Geosicences**
Location: **2236 E. Holt Blvd, Ontario, CA**

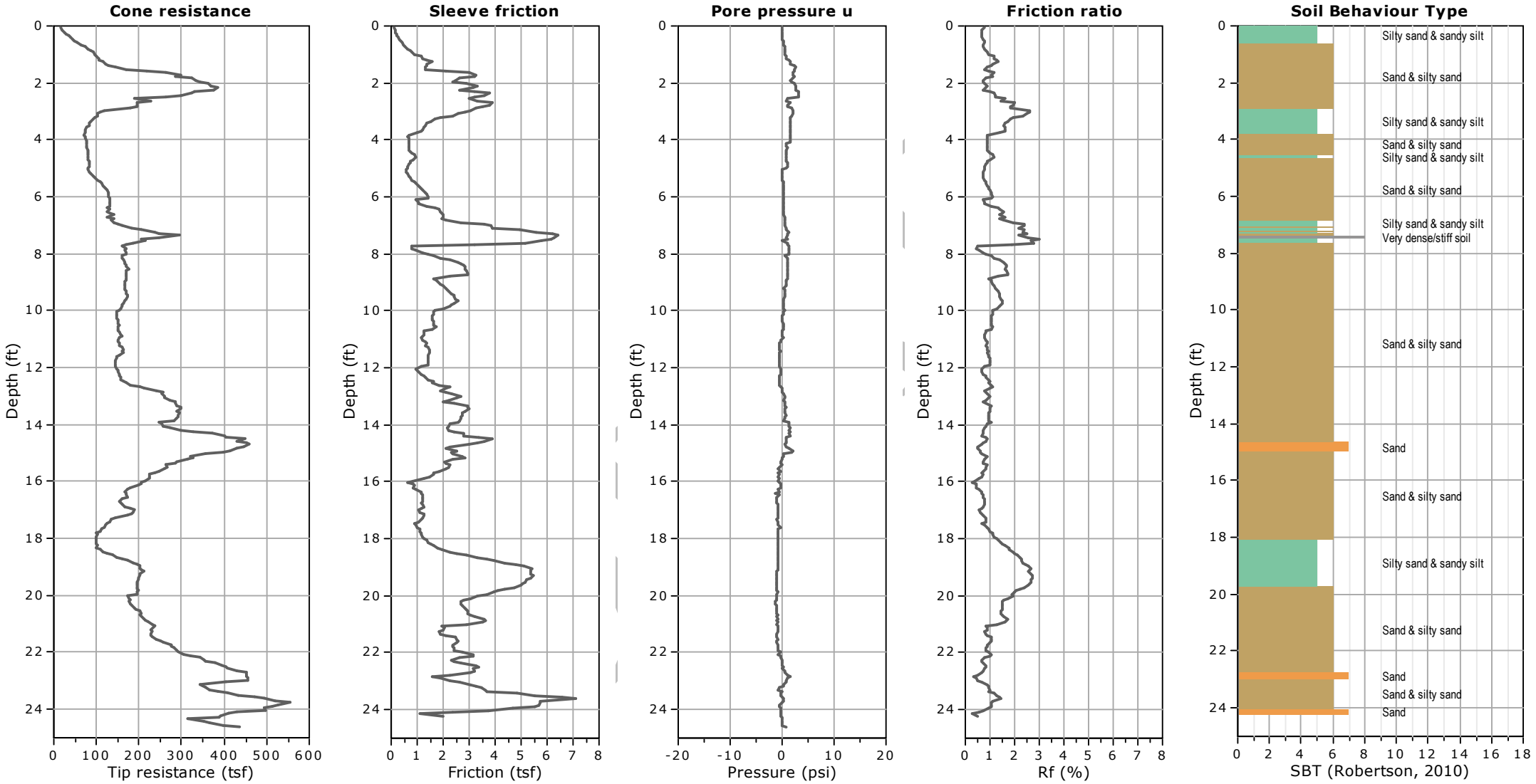
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Total depth: 13.52 ft, Date: 12/29/2022



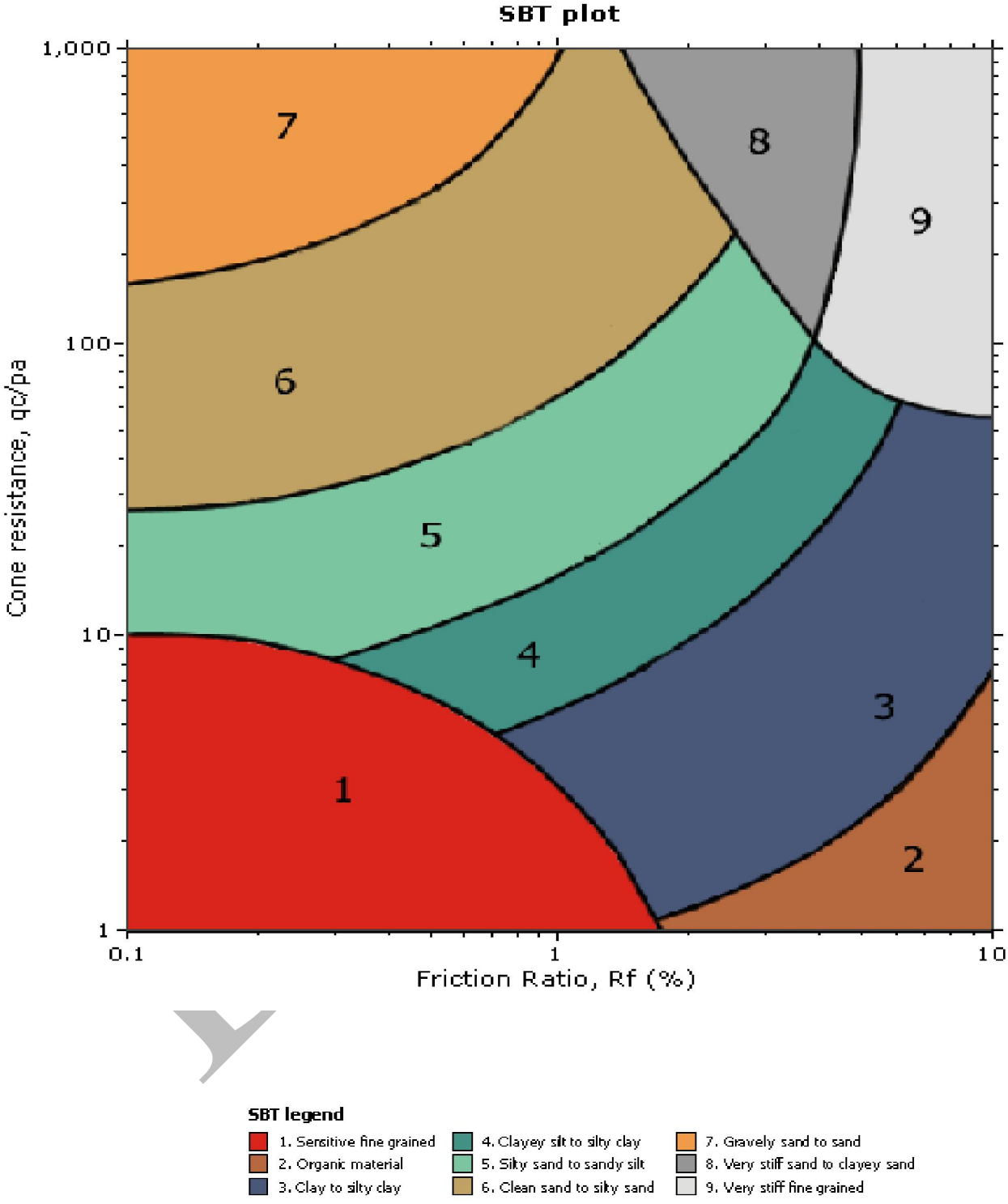
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Project: **Petra Geosicences**
Location: **2236 E. Holt Blvd, Ontario, CA**

CPT-3
Total depth: 24.61 ft, Date: 12/29/2022



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APPENDIX B

LABORATORY TEST PROCEDURES

LABORATORY DATA SUMMARY

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LABORATORY TEST PROCEDURES

Soil Classification

Soils encountered within the exploration borings were initially classified in the field in general accordance with the visual-manual procedures of the Unified Soil Classification System (ASTM D 2488). The samples were re-examined in the laboratory and the classifications revised if appropriate. The assigned group symbols are presented on the exploration logs, Appendix A.

In Situ Moisture and Density

Moisture content and dry density of the in place soils were determined in representative strata in the borings in accordance with test method ASTM D 2216. Test data are presented in the boring logs, Appendix A.

Expansion Index

An expansion index test was performed on a selected sample of soil in accordance with ASTM D 4829. The expansion potential classification was determined from 2019 CBC Section 1802.3.2 on the basis of the expansion index value. The test result and expansion potentials are presented on Plate B-1.

Atterberg Limits

Atterberg limit tests (Liquid Limit, Plastic Limit and Plasticity Index) were performed on selected samples to verify visual classifications. These tests were performed in accordance with ASTM D 4318. Test results are presented on Plate B-1.

Soil Corrosivity

Chemical analyses were performed on a selected sample of soil to determine concentrations of soluble sulfate and chloride, as well as pH and resistivity. These tests were performed in accordance with California Test Method Nos. 417 (sulfate), 422 (chloride) and 643 (pH and resistivity). Test results are included on Plate B-1.

Laboratory Maximum Dry Density/Optimum Moisture

The maximum dry density and optimum moisture content of the on-site soils were determined for a selected sample in accordance with ASTM D 1557. The result of this test is presented on Plate B-1.

Grain-Size Analysis

Grain-size analyses were performed on selected samples to verify visual classifications performed in the field. These tests were performed in accordance with ASTM D 422 or 1140. Test results are presented on Plate B-2 thru B-5.

Direct Shear

The Coulomb shear strength parameters, angle of internal friction and cohesion, were determined for undisturbed and disturbed (bulk) samples remolded to approximately 90 percent of maximum dry density. These tests were performed in general accordance with ASTM D3080. Three specimens were prepared for each test. The test specimens were artificially saturated, and then sheared under varied normal loads at a maximum constant rate of strain of 0.05 inches per minute. Results are summarized on Plates B-6 thru B-10.

Consolidation

Volume change (settlement or heave) characteristics of select undisturbed soils were determined by one-dimensional consolidation tests. These tests were performed in general accordance with the latest version of the Test Method ASTM D 2435. Additionally, heave or hydro-consolidation tests were performed in general accordance with the latest version of Test Method ASTM D 4546, or ASTM D 5333 respectively. Axial loads were applied in several increments to laterally restrained 1-inch-high samples. The resulting deformations were recorded at selected time intervals. The test samples were inundated at the approximate in-situ and/or anticipated design overburden pressure in order to evaluate the effect of an increase in moisture content, e.g., hydro-consolidation potential or heave. Results of these tests are graphically presented on Plate B-11 thru B-13.

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LABORATORY DATA SUMMARY														
Boring/ Test Pit Number	Sample Depth (ft.)	Soil Description[1]	Compaction[2]		Expansion[3]		Atterberg Limits[4]			Corrosivity Screening				Percent Passing No. 200 Sieve[8]
			Maximum Dry Unit Weight (pcf)	Optimum Moisture (%)	Index	Potential	LL	PL	PI	Soluble Sulfate Content[5] (%)	Chloride Content[6] (ppm)	pH[7] (Acidity)	Minimum Resistivity[7] (Ohm-cm)	
TP-1	4	Sily Sand	118.0	10.5	0	Very Low	--	--	--	0.002	262	7.8	5,000	22
TP-2	15	Sand with Silt	--	--	--	--	--	--	--	--	--	--	--	7
TP-5	15	Silty Sand	--	--	--	--	--	--	--	0.002	240	8.1	4,600	26
TP-8	2	Sand with Silt	--	--	--	--	--	--	--	--	--	--	--	9
B-5	50	Sandy Silt	--	--	--	--	28	22	6	--	--	--	--	--

(--) Tests Not Performed

Test Procedures:

[1] Per Test Method ASTM D 2488

[2] Per Test Method ASTM D 1557

[3] Per Test Method ASTM D 4829

[4] Per Test Method ASTM D 4318

[5] Per California Test Method CTM 417

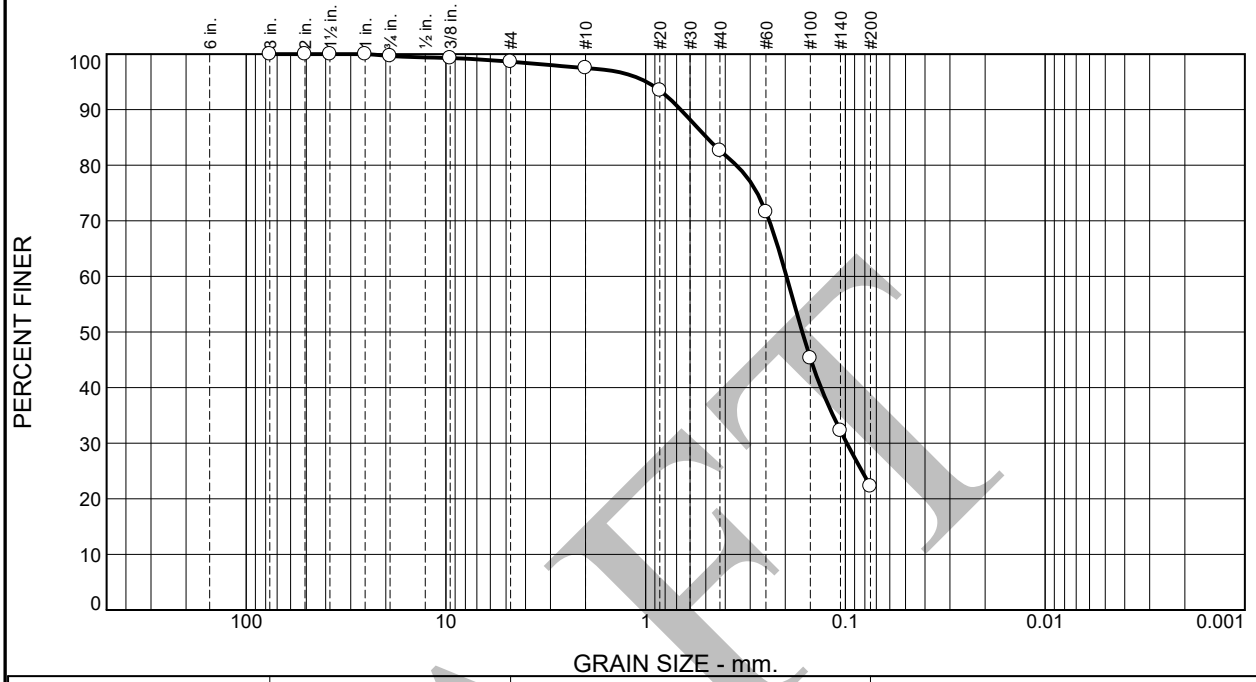
[6] Per California Test Method CTM 422

[7] Per California Test Method CTM 643

[8] Per Test Method ASTM C 117

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Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.3	1.1	1.1	14.9	60.4	22.2	

TEST RESULTS

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	99.7		
.375	99.3		
#4	98.6		
#10	97.5		
#20	93.5		
#40	82.6		
#60	71.6		
#100	45.3		
#140	32.3		
#200	22.2		

* (no specification provided)

Material Description

Olive Brown Fine to Medium Sand with Silt

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 0.6679 D_{85}= 0.4953 D_{60}= 0.1972
D_{50}= 0.1645 D_{30}= 0.0984 D_{15}=
D_{10}= C_u= C_c=

Remarks

Date Received: **Date Tested:** 1/11/2023

Tested By: DI

Checked By:

Title:

Source of Sample: 22L363 **Depth:** 4 **Date Sampled:**

Sample Number: TP-1

Laboratory:
1251 West Pomona Road, Unit #103, Corona, Ca 92882 Phone #: 714.549.8921

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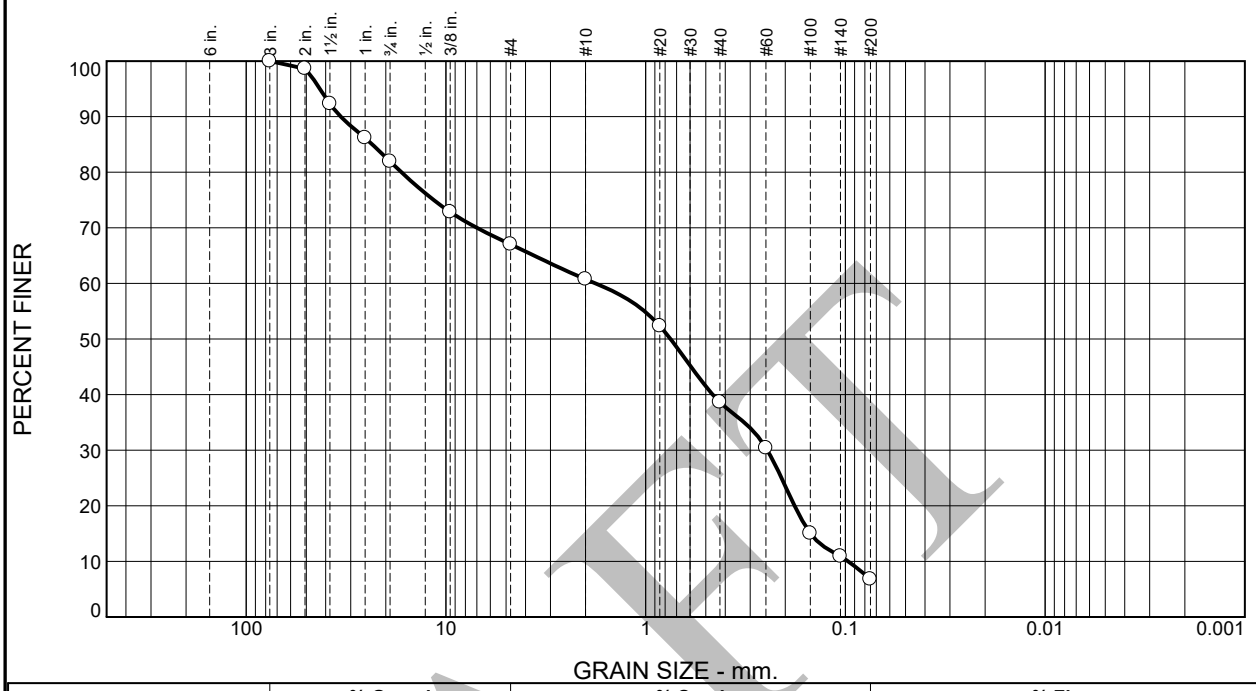
Client: Diversified Pacific Communities

Project: Ontario Hotel

Project No: 22-398 **Figure** B-2

DRAFT

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	18.1	14.9	6.3	22.1	31.8	6.8	

TEST RESULTS

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3	100.0		
2	98.6		
1.5	92.3		
1	86.2		
.75	81.9		
.375	72.9		
#4	67.0		
#10	60.7		
#20	52.3		
#40	38.6		
#60	30.4		
#100	15.1		
#140	10.9		
#200	6.8		

* (no specification provided)

Material Description

Olive Brown Gravelly Fine to Medium Sand

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 33.6170 D_{85}= 23.3855 D_{60}= 1.7847
D_{50}= 0.7510 D_{30}= 0.2462 D_{15}= 0.1496
D_{10}= 0.0969 C_u= 18.41 C_c= 0.35

Remarks

Date Received: _____ **Date Tested:** 1/11/2023

Tested By: DI

Checked By: _____

Title: _____

Source of Sample: 22L363 **Depth:** 15 **Date Sampled:**

Sample Number: TP-2

Laboratory:
1251 West Pomona Road, Unit #103, Corona, Ca 92882 Phone #: 714.549.8921

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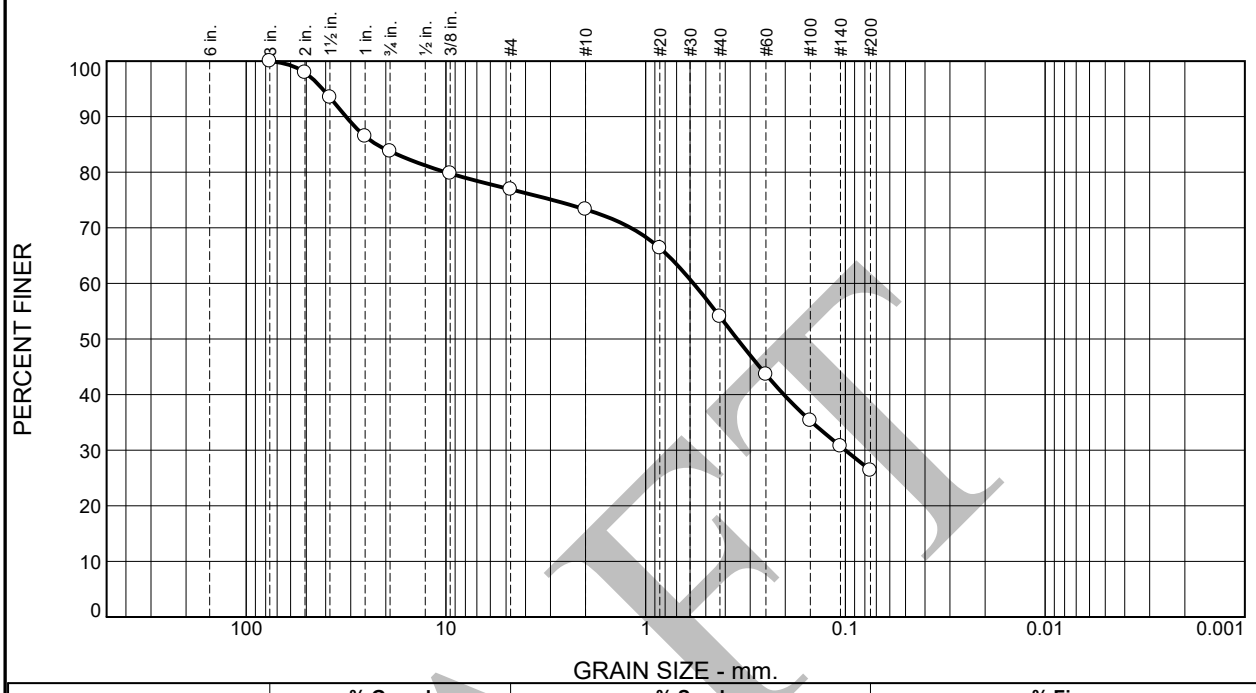
Client: Diversified Pacific Communities

Project: Ontario Hotel

Project No: 22-398 **Figure** B-3

DRAFT

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	16.2	6.9	3.6	19.3	27.6	26.4	

TEST RESULTS

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3	100.0		
2	97.9		
1.5	93.4		
1	86.5		
.75	83.8		
.375	79.8		
#4	76.9		
#10	73.3		
#20	66.4		
#40	54.0		
#60	43.6		
#100	35.3		
#140	30.7		
#200	26.4		

* (no specification provided)

Material Description

Brown Gravelly Silty Fine to Medium Sand

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 31.6767 D_{85}= 22.2486 D_{60}= 0.5768
D_{50}= 0.3480 D_{30}= 0.1001 D_{15}=
D_{10}= C_u= C_c=

Remarks

Date Received: **Date Tested:** 1/11/2023

Tested By: DI

Checked By:

Title:

Source of Sample: 22L363 **Depth:** 15 **Date Sampled:**

Sample Number: TP-5

Laboratory:
1251 West Pomona Road, Unit #103, Corona, Ca 92882 Phone #: 714.549.8921

PETRA GEOSCIENCES INC.

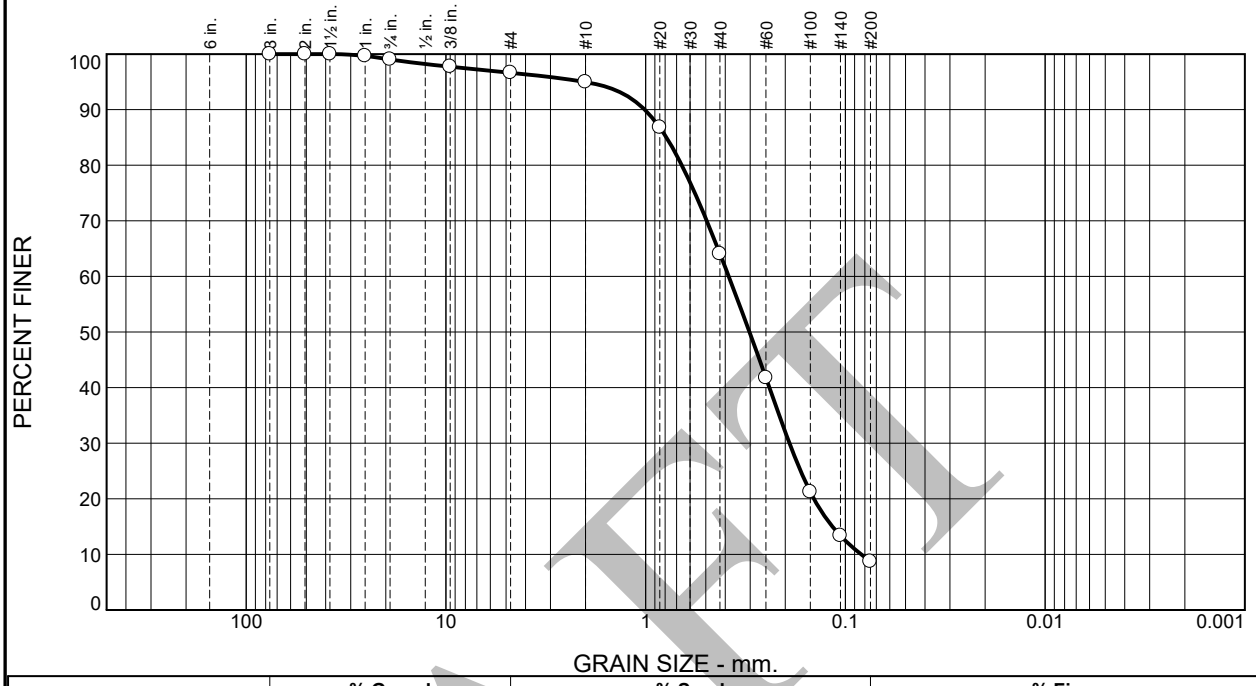
Client: Diversified Pacific Communities

Project: Ontario Hotel

Project No: 22-398 **Figure** B-4

DRAFT

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	1.0	2.4	1.7	30.8	55.4	8.7	

TEST RESULTS

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3	100.0		
2	100.0		
1.5	100.0		
1	99.7		
.75	99.0		
.375	97.7		
#4	96.6		
#10	94.9		
#20	86.8		
#40	64.1		
#60	41.7		
#100	21.2		
#140	13.4		
#200	8.7		

* (no specification provided)

Material Description

Brown Silty Fine to Medium Sand

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 1.0115 D_{85}= 0.7879 D_{60}= 0.3841
D_{50}= 0.3024 D_{30}= 0.1907 D_{15}= 0.1163
D_{10}= 0.0834 C_u= 4.60 C_c= 1.13

Remarks

Date Received: **Date Tested:** 1/11/2023

Tested By: DI

Checked By:

Title:

Source of Sample: 22L363 **Depth:** 2 **Date Sampled:**

Sample Number: TP-8

Laboratory:
1251 West Pomona Road, Unit #103, Corona, Ca 92882 Phone #: 714.549.8921

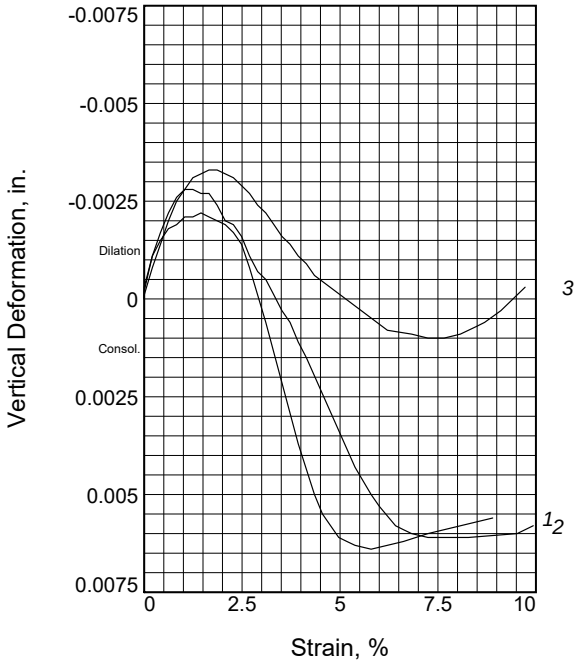
PETRA GEOSCIENCES INC.

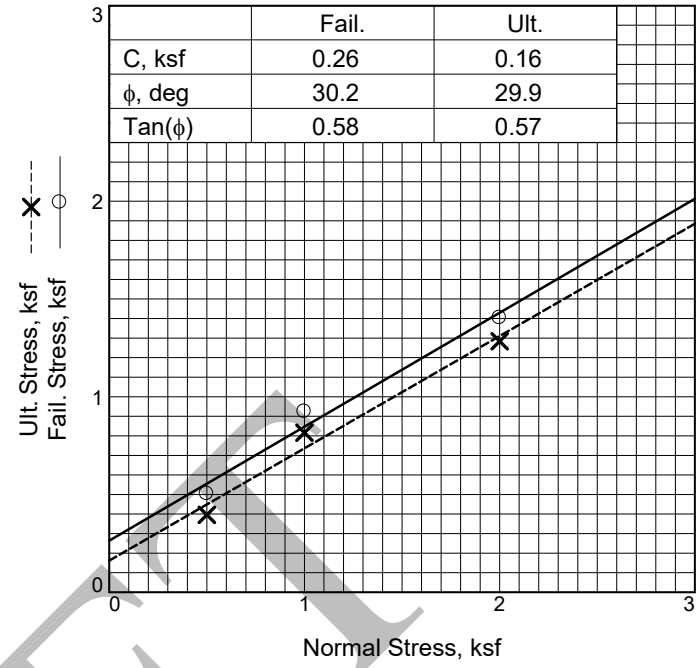
Client: Diversified Pacific Communities

Project: Ontario Hotel

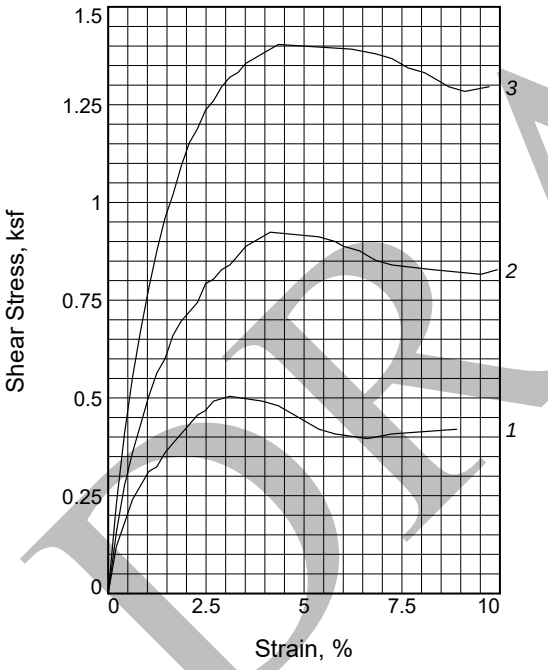
Project No: 22-398 **Figure** B-5

DRAFT





	Fail.	Ult.
C, ksf	0.26	0.16
ϕ, deg	30.2	29.9
Tan(ϕ)	0.58	0.57



Sample No.		1	2	3
Initial	Water Content, %	2.1	2.1	2.1
	Dry Density, pcf	107.4	108.1	108.1
	Saturation, %	10.2	10.3	10.4
	Void Ratio	0.5410	0.5310	0.5310
	Diameter, in.	2.42	2.42	2.42
	Height, in.	1.01	1.00	1.01
At Test	Water Content, %	20.4	20.0	20.0
	Dry Density, pcf	107.4	108.1	108.1
	Saturation, %	100.0	99.7	99.6
	Void Ratio	0.5410	0.5310	0.5310
	Diameter, in.	2.42	2.42	2.42
	Height, in.	1.01	1.00	1.01
Normal Stress, ksf		0.50	1.00	2.00
Fail. Stress, ksf		0.50	0.92	1.40
Strain, %		3.1	4.1	4.3
Ult. Stress, ksf		0.40	0.82	1.28
Strain, %		6.6	9.5	9.1
Strain rate, in./min.		0.040	0.040	0.040

Sample Type:

Description: Brown fine to coarse Sand with Silt

Specific Gravity= 2.65

Remarks:

Client: Diversified Pacific Communities

Project: Ontario Hotel

Source of Sample: 22L363 **Depth:** 5

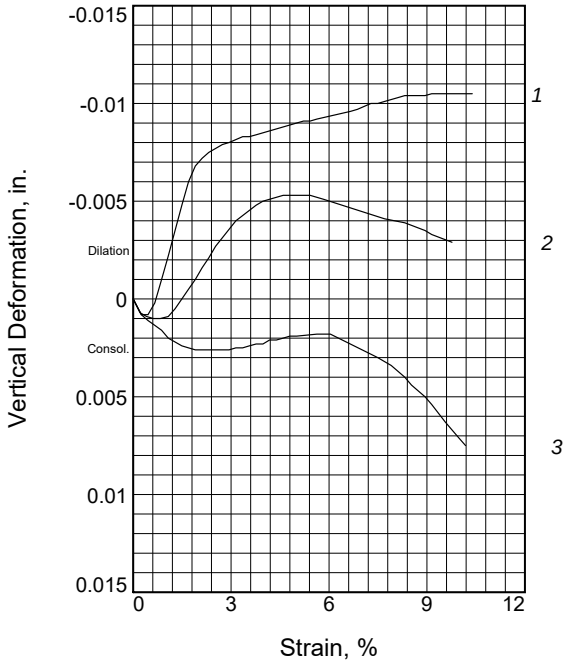
Sample Number: B-1

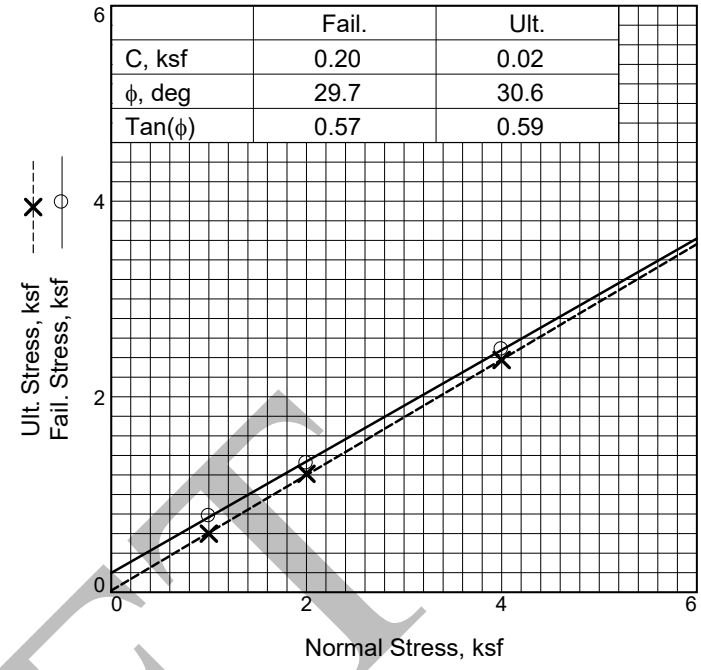
Proj. No.: 22-398 **Date Sampled:**

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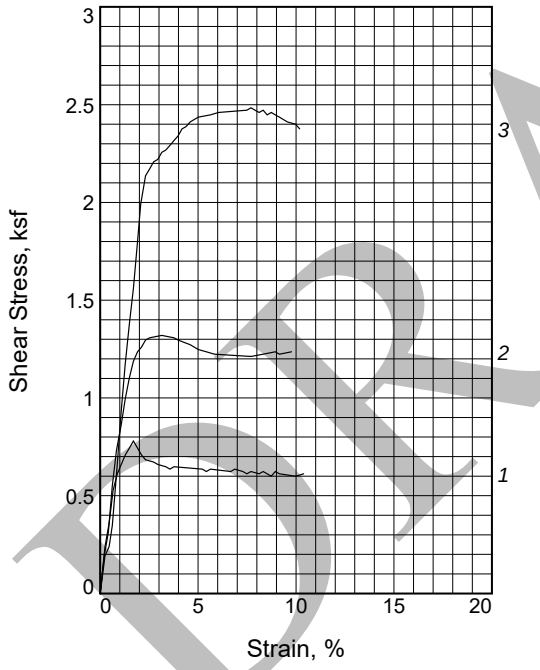
Figure B-6

DRAFT





	Fail.	Ult.
C, ksf	0.20	0.02
ϕ, deg	29.7	30.6
Tan(ϕ)	0.57	0.59



Sample No.		1	2	3
Initial	Water Content, %	4.0	4.0	4.0
	Dry Density, pcf	120.4	118.9	112.2
	Saturation, %	28.1	26.8	22.1
	Void Ratio	0.3738	0.3912	0.4744
	Diameter, in.	2.42	2.42	2.42
	Height, in.	1.02	1.01	1.01
At Test	Water Content, %	13.4	14.7	17.8
	Dry Density, pcf	120.4	118.9	112.2
	Saturation, %	95.2	99.5	99.2
	Void Ratio	0.3738	0.3912	0.4744
	Diameter, in.	2.42	2.42	2.42
	Height, in.	1.02	1.01	1.01
Normal Stress, ksf		1.00	2.00	4.00
Fail. Stress, ksf		0.78	1.32	2.48
Strain, %		1.7	3.1	7.7
Ult. Stress, ksf		0.60	1.21	2.38
Strain, %		10.0	7.7	10.2
Strain rate, in./min.		5.000	0.040	0.040

Sample Type:

Description: Yellowish brown Silty Sand

Specific Gravity= 2.65

Remarks:

Client: Diversified Pacific Communities

Project: Ontario Hotel

Source of Sample: 22L363 **Depth:** 20

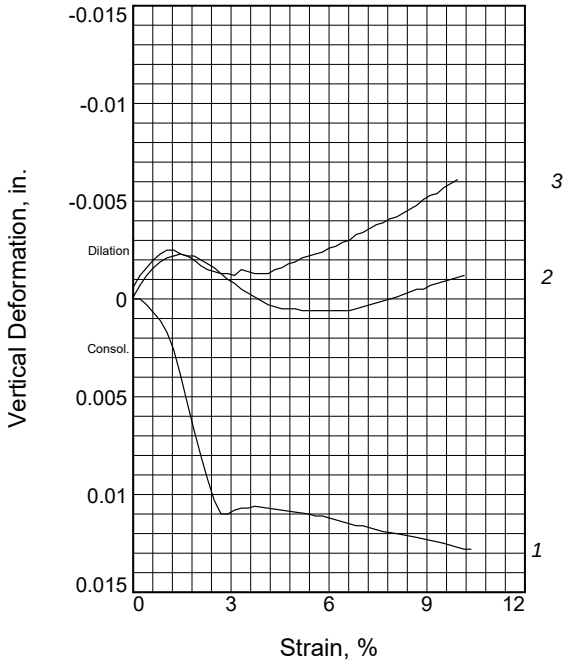
Sample Number: B-1

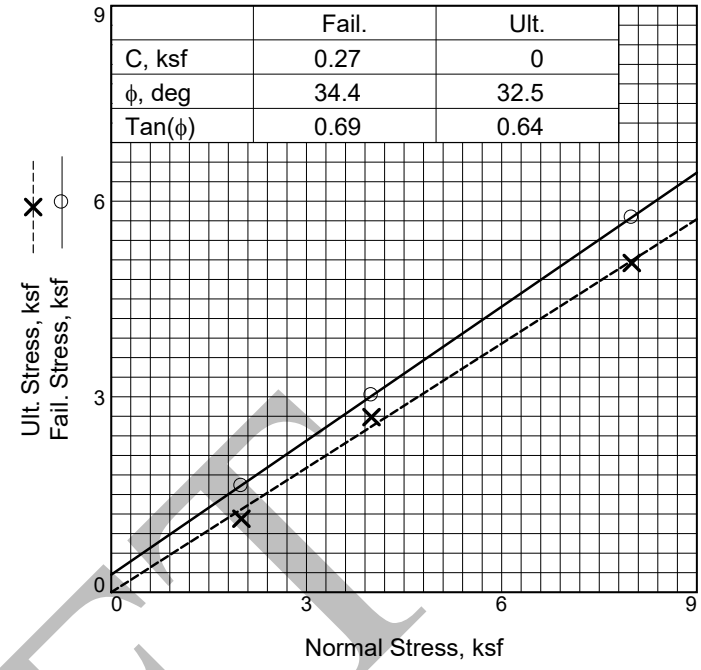
Proj. No.: 22-398 **Date Sampled:** 12/21/2022

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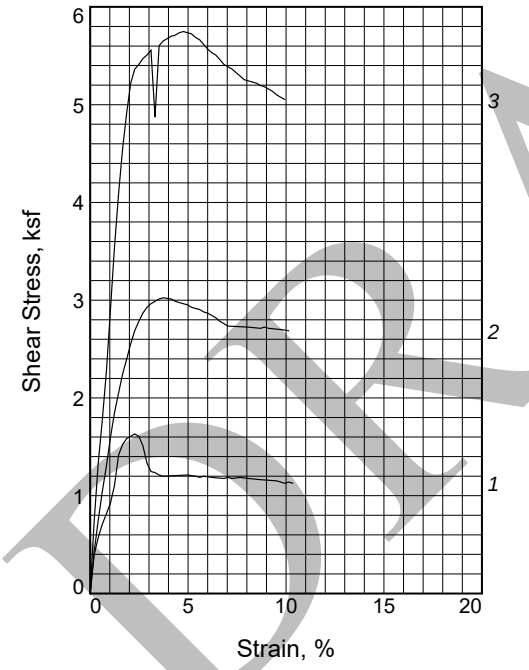
Figure B-7

DRAFT





	Fail.	Ult.
C, ksf	0.27	0
ϕ, deg	34.4	32.5
Tan(ϕ)	0.69	0.64



Sample No.		1	2	3
Initial	Water Content, %	8.4	8.4	8.4
	Dry Density, pcf	110.4	98.8	101.6
	Saturation, %	44.7	33.0	35.5
	Void Ratio	0.4979	0.6752	0.6277
	Diameter, in.	2.42	2.42	2.42
	Height, in.	1.02	1.01	1.02
At Test	Water Content, %	18.7	25.3	23.5
	Dry Density, pcf	110.4	98.8	101.6
	Saturation, %	99.5	99.2	99.2
	Void Ratio	0.4979	0.6752	0.6277
	Diameter, in.	2.42	2.42	2.42
	Height, in.	1.02	1.01	1.02
Normal Stress, ksf		2.00	4.00	8.00
Fail. Stress, ksf		1.63	3.02	5.75
Strain, %		2.3	3.7	4.8
Ult. Stress, ksf		1.13	2.69	5.05
Strain, %		10.3	10.1	9.9
Strain rate, in./min.		0.040	0.040	0.040

Sample Type:

Description: Light olive brown Silty fine to medium Sand

Specific Gravity= 2.65

Remarks:

Client: Diversified Pacific Communities

Project: Ontario Hotel

Source of Sample: 22L363 **Depth:** 55

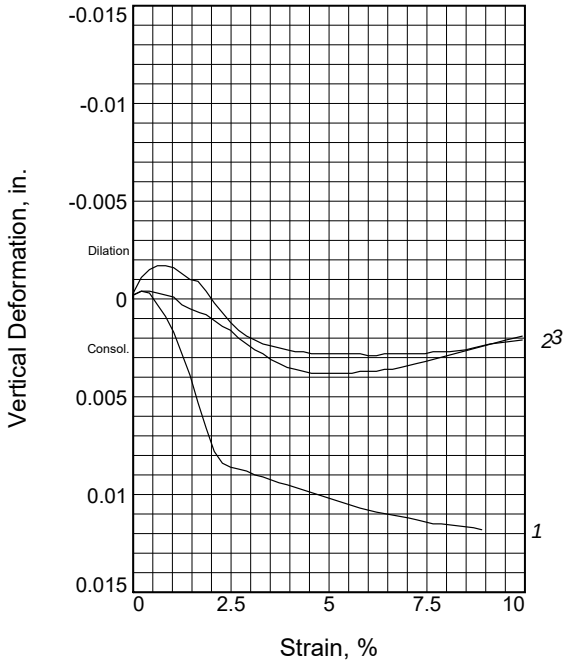
Sample Number: B-1

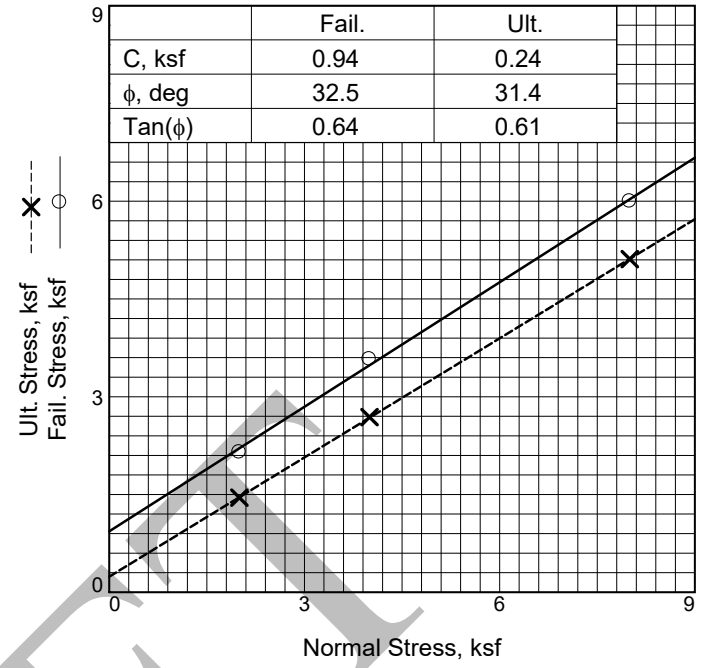
Proj. No.: 22-398 **Date Sampled:**

PETRA GEOSCIENCES INC.

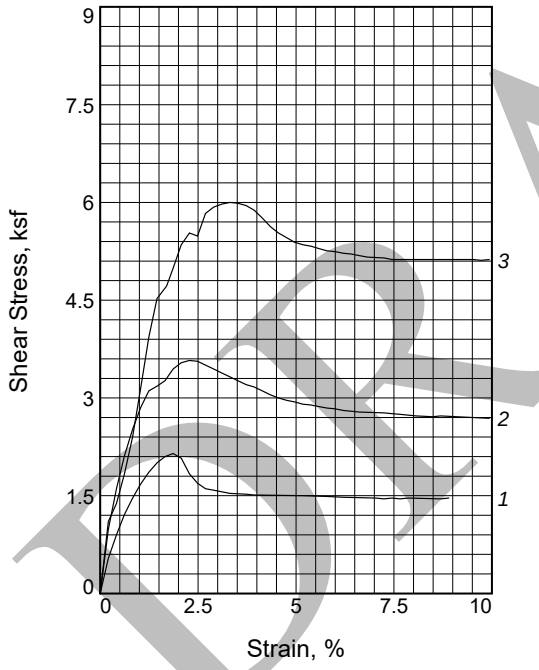
Figure B-8

DRAFT





	Fail.	Ult.
C, ksf	0.94	0.24
ϕ, deg	32.5	31.4
Tan(ϕ)	0.64	0.61



Sample No.		1	2	3
Initial	Water Content, %	14.5	14.5	N/A
	Dry Density, pcf	N/A	N/A	N/A
	Saturation, %	N/A	N/A	N/A
	Void Ratio	N/A	N/A	N/A
	Diameter, in.	2.42	2.42	2.42
	Height, in.	0.00	0.00	0.00
At Test	Water Content, %	N/A	N/A	N/A
	Dry Density, pcf			
	Saturation, %			
	Void Ratio			
	Diameter, in.			
	Height, in.			
Normal Stress, ksf		2.00	4.00	8.00
Fail. Stress, ksf		2.15	3.58	6.00
Strain, %		1.9	2.3	3.3
Ult. Stress, ksf		1.45	2.69	5.11
Strain, %		8.7	9.9	9.7
Strain rate, in./min.		0.040	0.040	0.040

Sample Type:

Description: Light brrown Silty fine to coarse Sand

Specific Gravity=

Remarks:

Client: Diversified Pacific Communities

Project: Ontario Hotel

Source of Sample: 22L363 **Depth:** 65

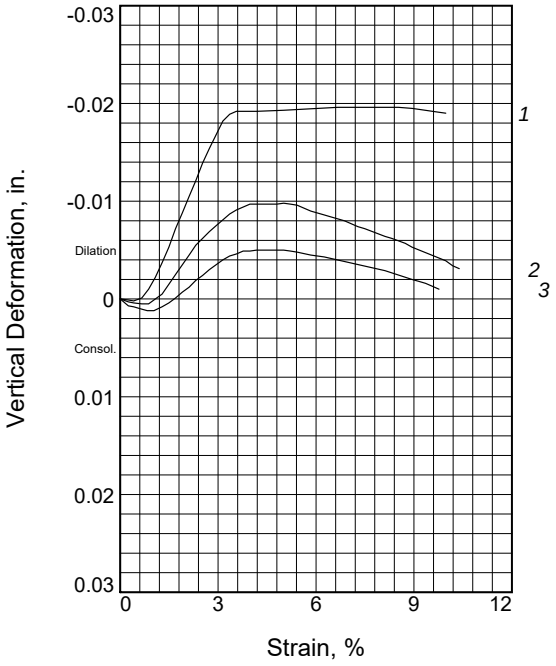
Sample Number: B-1

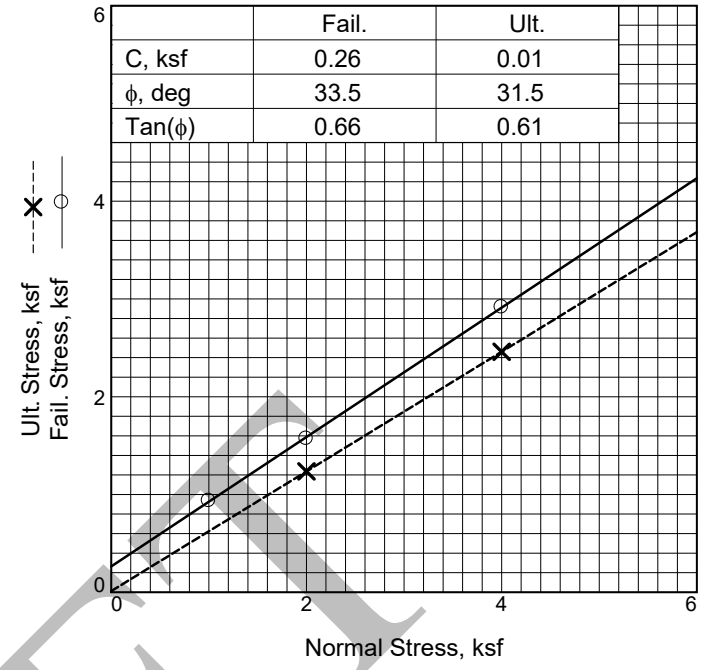
Proj. No.: 22-398 **Date Sampled:**

PETRA GEOSCIENCES INC.

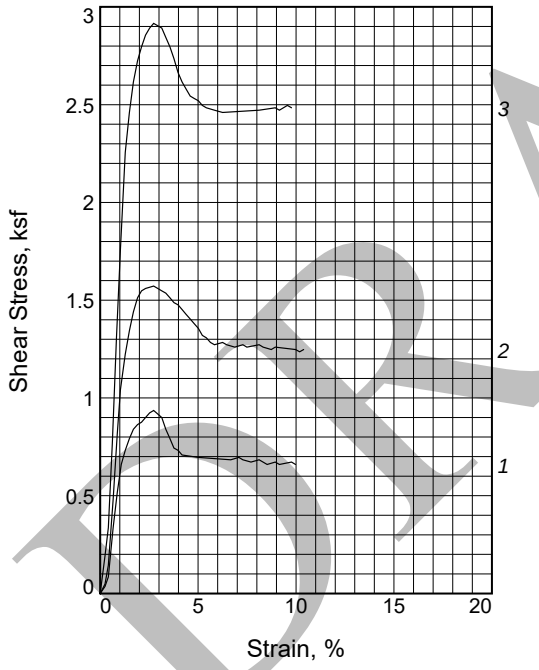
Figure B-9

DRAFT





	Fail.	Ult.
C, ksf	0.26	0.01
ϕ, deg	33.5	31.5
Tan(ϕ)	0.66	0.61



Sample No.		1	2	3
Initial	Water Content, %	9.2	9.2	9.2
	Dry Density, pcf	N/A	N/A	N/A
	Saturation, %	N/A	N/A	N/A
	Void Ratio	N/A	N/A	N/A
	Diameter, in.	2.42	2.42	2.42
	Height, in.	0.00	0.00	0.00
At Test	Water Content, %	N/A	N/A	N/A
	Dry Density, pcf			
	Saturation, %			
	Void Ratio			
	Diameter, in.			
	Height, in.			
Normal Stress, ksf		1.00	2.00	4.00
Fail. Stress, ksf		0.94	1.57	2.92
Strain, %		2.7	2.7	2.7
Ult. Stress, ksf			1.24	2.46
Strain, %			10.2	6.3
Strain rate, in./min.		0.040	0.040	0.040

Sample Type:
Description:

Specific Gravity=
Remarks:

Client: Diversified Pacific Communities

Project: Ontario Hotel

Source of Sample: 22L363 **Depth:** 20

Sample Number: B-6

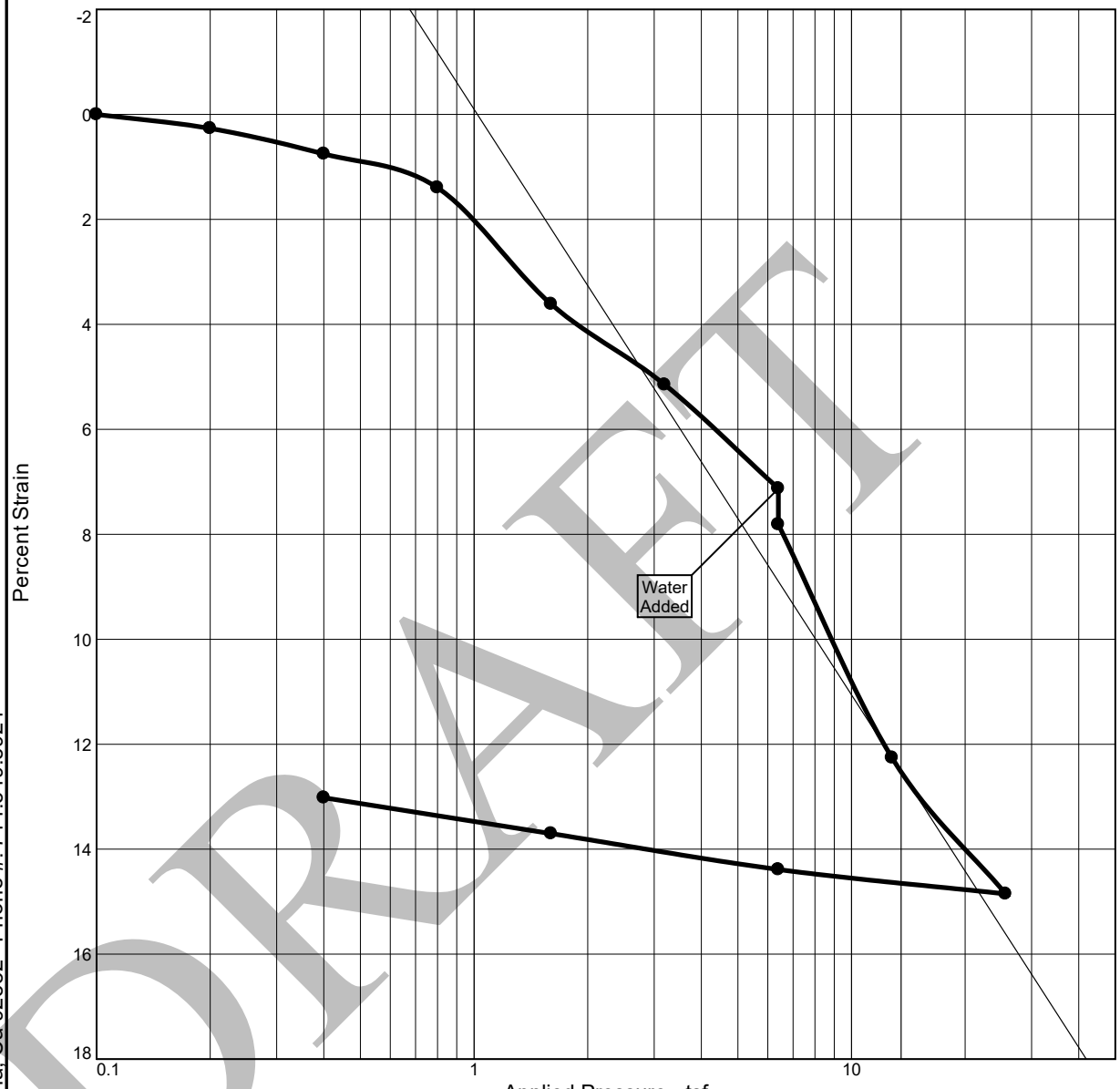
Proj. No.: 22-398 **Date Sampled:**

PETRA GEOSCIENCES INC.

Figure B-10

DRAFT

CONSOLIDATION TEST REPORT



Natural Saturation	Natural Moisture	Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (tsf)	P_c (tsf)	C_c	C_r	Initial Void Ratio
	8.4 %	93.2				5.556584	13.6			

MATERIAL DESCRIPTION	USCS	AASHTO
Light olive brown Silty fine to medium Sand		

Project No. 22-398 **Client:** Diversified Pacific Communities

Project: Ontario Hotel

Source of Sample: 22L363 **Depth:** 55 **Sample Number:** B-1

Remarks:

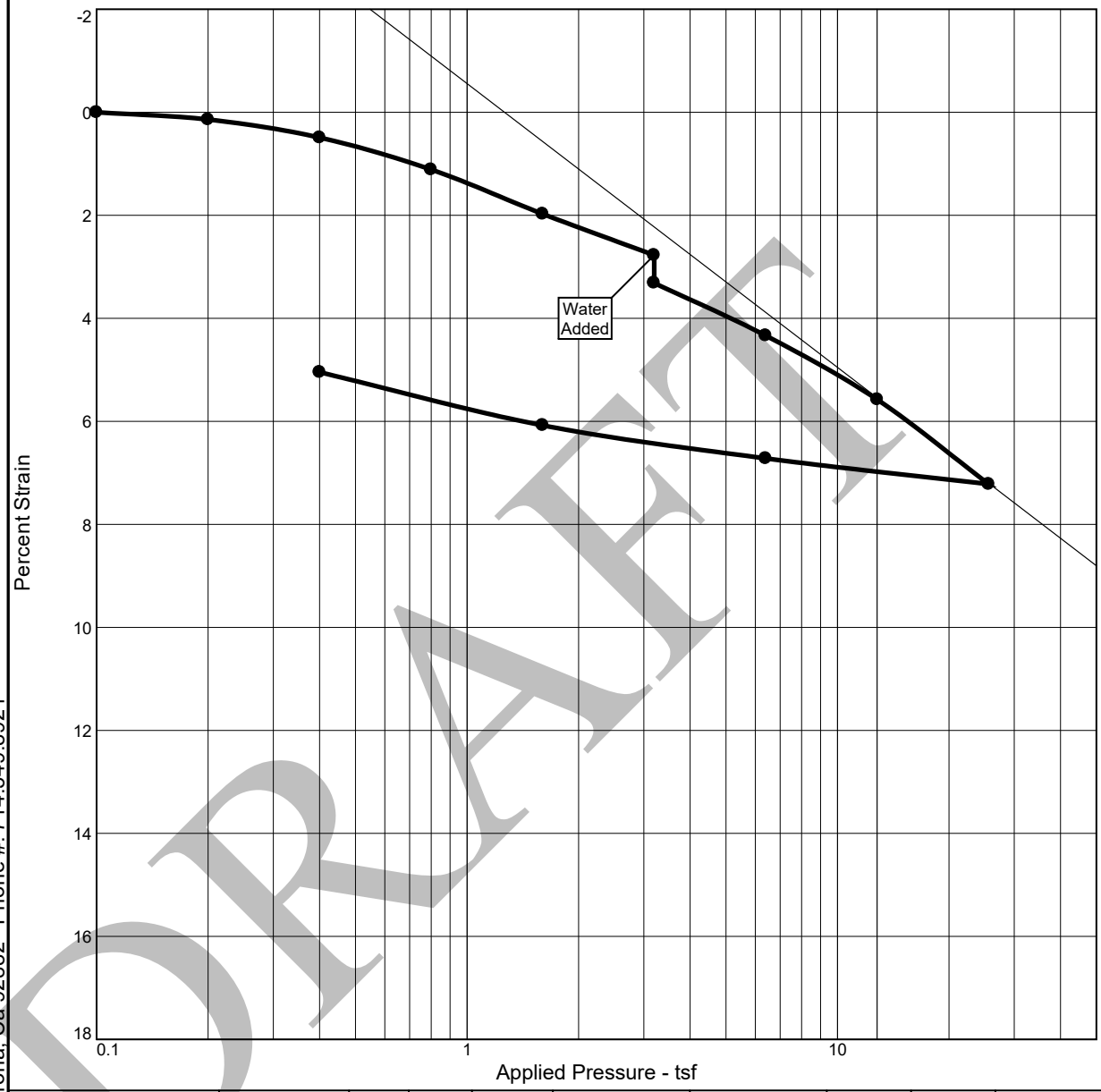
PETRA GEOSCIENCES INC.

Figure B-11

Laboratory:
1251 West Pomona Road, Unit #103, Corona, Ca 92882 Phone #. 714.549.8921

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CONSOLIDATION TEST REPORT



Natural Saturation	Natural Moisture	Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (tsf)	P_c (tsf)	C_c	C_r	Initial Void Ratio
37.7 %	7.4 %	108.8			2.65	2.92128	13.1	0.08	0.02	0.520

MATERIAL DESCRIPTION	USCS	AASHTO
Light brown Silty fine to coarse Sand		

Project No. 22-398 **Client:** Diversified Pacific Communities

Project: Ontario Hotel

Source of Sample: 22L363 **Depth:** 25 **Sample Number:** B-3

Remarks:

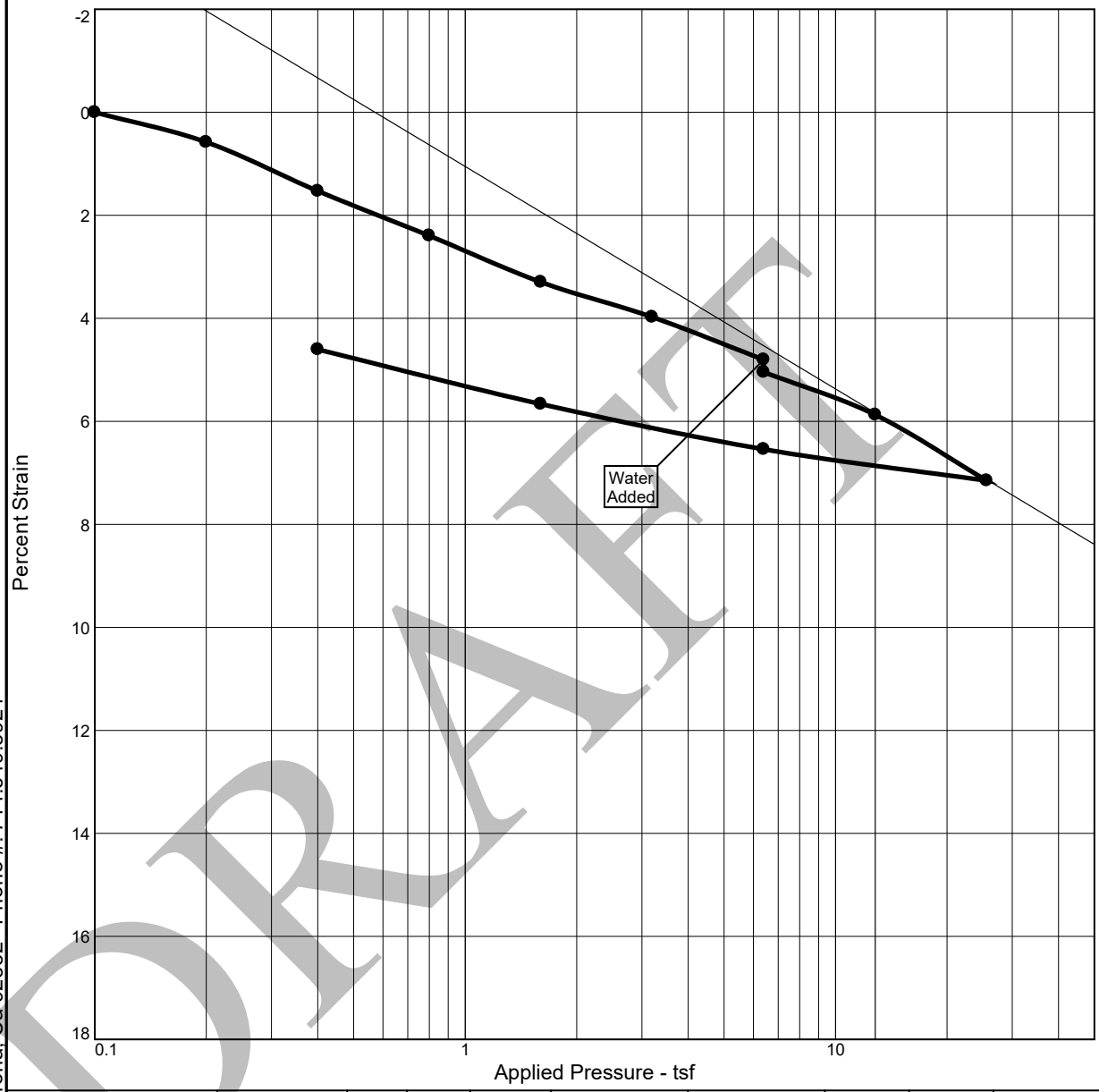
PETRA GEOSCIENCES INC.

Figure B-12

Laboratory:
1251 West Pomona Road, Unit #103, Corona, Ca 92882 Phone #. 714.549.8921

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CONSOLIDATION TEST REPORT



Natural Saturation	Natural Moisture	Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (tsf)	P_c (tsf)	C_c	C_r	Initial Void Ratio
71.2 %	9.9 %	121.0			2.65	6.64895	13.3	0.06	0.02	0.367

MATERIAL DESCRIPTION	USCS	AASHTO
Yellowish brown Silty fine to coarse Sand		

Project No. 22-398 **Client:** Diversified Pacific Communities

Project: Ontario Hotel

Source of Sample: 22L363 **Depth:** 50 **Sample Number:** B-6

Remarks:

PETRA GEOSCIENCES INC.

Figure B-13

Laboratory:
1251 West Pomona Road, Unit #103, Corona, Ca 92882 Phone #. 714.549.8921

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APPENDIX C

STANDARD GRADING SPECIFICATIONS

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STANDARD GRADING SPECIFICATIONS

These specifications present the usual and minimum requirements for projects on which Petra Geosciences, Inc. (Petra) is the geotechnical consultant. No deviation from these specifications will be allowed, except where specifically superseded in the preliminary geology and soils report, or in other written communication signed by the Soils Engineer and Engineering Geologist of record (Geotechnical Consultant).

I. GENERAL

A. The Geotechnical Consultant is the Owner's or Builder's representative on the project. For the purpose of these specifications, participation by the Geotechnical Consultant includes that observation performed by any person or persons employed by, and responsible to, the licensed Soils Engineer and Engineering Geologist signing the soils report.

B. The contractor should prepare and submit to the Owner and Geotechnical Consultant a work plan that indicates the sequence of earthwork grading, the number of "spreads" and the estimated quantities of daily earthwork to be performed prior to the commencement of grading. This work plan should be reviewed by the Geotechnical Consultant to schedule personnel to perform the appropriate level of observation, mapping, and compaction testing as necessary.

C. All clearing, site preparation, or earthwork performed on the project shall be conducted by the Contractor in accordance with the recommendations presented in the geotechnical report and under the observation of the Geotechnical Consultant.

D. It is the Contractor's responsibility to prepare the ground surface to receive the fills to the satisfaction of the Geotechnical Consultant and to place, spread, mix, water, and compact the fill in accordance with the specifications of the Geotechnical Consultant. The Contractor shall also remove all material considered unsatisfactory by the Geotechnical Consultant.

E. It is the Contractor's responsibility to have suitable and sufficient compaction equipment on the job site to handle the amount of fill being placed. If necessary, excavation equipment will be shut down to permit completion of compaction to project specifications. Sufficient watering apparatus will also be provided by the Contractor, with due consideration for the fill material, rate of placement, and time of year.

F. After completion of grading a report will be submitted by the Geotechnical Consultant.

II. SITE PREPARATION

A. Clearing and Grubbing

1. All vegetation such as trees, brush, grass, roots, and deleterious material shall be disposed of offsite. This removal shall be concluded prior to placing fill.

2. Any underground structures such as cesspools, cisterns, mining shafts, tunnels, septic tanks, wells, pipe lines, etc., are to be removed or treated in a manner prescribed by the Geotechnical Consultant.

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III. FILL AREA PREPARATION

A. Remedial Removals/Overexcavations

1. Remedial removals, as well as overexcavation for remedial purposes, shall be evaluated by the Geotechnical Consultant. Remedial removal depths presented in the geotechnical report and shown on the geotechnical plans are estimates only. The actual extent of removal should be determined by the Geotechnical Consultant based on the conditions exposed during grading. All soft, loose, dry, saturated, spongy, organic-rich, highly fractured or otherwise unsuitable ground shall be overexcavated to competent ground as determined by the Geotechnical Consultant.

2. Soil, alluvium, or bedrock materials determined by the Soils Engineer as being unsuitable for placement in compacted fills shall be removed from the site. Any material incorporated as a part of a compacted fill must be approved by the Geotechnical Consultant.

3. Should potentially hazardous materials be encountered, the Contractor should stop work in the affected area. An environmental consultant specializing in hazardous materials should be notified immediately for evaluation and handling of these materials prior to continuing work in the affected area.

B. Evaluation/Acceptance of Fill Areas

All areas to receive fill, including removal and processed areas, key bottoms, and benches, shall be observed, mapped, elevations recorded, and/or tested prior to being accepted by the Geotechnical Consultant as suitable to receive fill. The contractor shall obtain a written acceptance from the Geotechnical Consultant prior to fill placement. A licensed surveyor shall provide sufficient survey control for determining locations and elevations of processed areas, keys, and benches.

C. Processing

After the ground surface to receive fill has been declared satisfactory for support of fill by the Geotechnical Consultant, it shall be scarified to a minimum depth of 6 inches and until the ground surface is uniform and free from ruts, hollows, hummocks, or other uneven features which may prevent uniform compaction.

The scarified ground surface shall then be brought to optimum moisture, mixed as required, and compacted to a minimum relative compaction of 90 percent.

D. Subdrains

Subdrainage devices shall be constructed in compliance with the ordinances of the controlling governmental agency, and/or with the recommendations of the Geotechnical Consultant. (Typical Canyon Subdrain details are given on Plate SG-1).

E. Cut/Fill & Deep Fill/Shallow Fill Transitions

In order to provide uniform bearing conditions in cut/fill and deep fill/shallow fill transition lots, the cut and shallow fill portions of the lot should be overexcavated to the depths and the horizontal limits discussed in the approved geotechnical report and replaced with compacted fill. (Typical details are given on Plate SG-7.)

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IV. COMPACTED FILL MATERIAL

A. General

Materials excavated on the property may be utilized in the fill, provided each material has been determined to be suitable by the Geotechnical Consultant. Material to be used for fill shall be essentially free of organic material and other deleterious substances. Roots, tree branches, and other matter missed during clearing shall be removed from the fill as recommended by the Geotechnical Consultant. Material that is spongy, subject to decay, or otherwise considered unsuitable shall not be used in the compacted fill.

Soils of poor quality, such as those with unacceptable gradation, high expansion potential, or low strength shall be placed in areas acceptable to the Geotechnical Consultant or mixed with other soils to achieve satisfactory fill material.

B. Oversize Materials

Oversize material defined as rock, or other irreducible material with a maximum dimension greater than 12 inches in diameter, shall be taken offsite or placed in accordance with the recommendations of the Geotechnical Consultant in areas designated as suitable for rock disposal (Typical details for Rock Disposal are given on Plate SG-4).

Rock fragments less than 12 inches in diameter may be utilized in the fill provided, they are not nested or placed in concentrated pockets; they are surrounded by compacted fine grained soil material and the distribution of rocks is approved by the Geotechnical Consultant.

C. Laboratory Testing

Representative samples of materials to be utilized as compacted fill shall be analyzed by the laboratory of the Geotechnical Consultant to determine their physical properties. If any material other than that previously tested is encountered during grading, the appropriate analysis of this material shall be conducted by the Geotechnical Consultant as soon as possible.

D. Import

If importing of fill material is required for grading, proposed import material should meet the requirements of the previous section. The import source shall be given to the Geotechnical Consultant at least 2 working days prior to importing so that appropriate tests can be performed and its suitability determined.

V. FILL PLACEMENT AND COMPACTION

A. Fill Layers

Material used in the compacting process shall be evenly spread, watered, processed, and compacted in thin lifts not to exceed 6 inches in thickness to obtain a uniformly dense layer. The fill shall be placed and compacted on a horizontal plane, unless otherwise approved by the Geotechnical Consultant.

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B. Moisture Conditioning

Fill soils shall be watered, dried back, blended, and/or mixed, as necessary to attain a relatively uniform moisture content at or slightly above optimum moisture content.

C. Compaction

Each layer shall be compacted to 90 percent of the maximum density in compliance with the testing method specified by the controlling governmental agency. (In general, ASTM D 1557-02, will be used.)

If compaction to a lesser percentage is authorized by the controlling governmental agency because of a specific land use or expansive soils condition, the area to received fill compacted to less than 90 percent shall either be delineated on the grading plan or appropriate reference made to the area in the soils report.

D. Failing Areas

If the moisture content or relative density varies from that required by the Geotechnical Consultant, the Contractor shall rework the fill until it is approved by the Geotechnical Consultant.

E. Benching

All fills shall be keyed and benched through all topsoil, colluvium, alluvium or creep material, into sound bedrock or firm material where the slope receiving fill exceeds a ratio of 5 horizontal to 1 vertical, in accordance with the recommendations of the Geotechnical Consultant.

VI. SLOPES

A. Fill Slopes

The contractor will be required to obtain a minimum relative compaction of 90 percent out to the finish slope face of fill slopes, buttresses, and stabilization fills. This may be achieved by either overbuilding the slope and cutting back to the compacted core, or by direct compaction of the slope face with suitable equipment, or by any other procedure that produces the required compaction.

B. Side Hill Fills

The key for side hill fills shall be a minimum of 15 feet within bedrock or firm materials, unless otherwise specified in the soils report. (See detail on Plate SG-5.)

C. Fill-Over-Cut Slopes

Fill-over-cut slopes shall be properly keyed through topsoil, colluvium or creep material into rock or firm materials, and the transition shall be stripped of all soils prior to placing fill. (see detail on Plate SG-6).

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D. Landscaping

All fill slopes should be planted or protected from erosion by other methods specified in the soils report.

E. Cut Slopes

1. The Geotechnical Consultant should observe all cut slopes at vertical intervals not exceeding 10 feet.

2. If any conditions not anticipated in the preliminary report such as perched water, seepage, lenticular or confined strata of a potentially adverse nature, unfavorably inclined bedding, joints or fault planes are encountered during grading, these conditions shall be evaluated by the Geotechnical Consultant, and recommendations shall be made to treat these problems (Typical details for stabilization of a portion of a cut slope are given in Plates SG-2 and SG-3.).

3. Cut slopes that face in the same direction as the prevailing drainage shall be protected from slope wash by a non-erodible interceptor swale placed at the top of the slope.

4. Unless otherwise specified in the soils and geological report, no cut slopes shall be excavated higher or steeper than that allowed by the ordinances of controlling governmental agencies.

5. Drainage terraces shall be constructed in compliance with the ordinances of controlling governmental agencies, or with the recommendations of the Geotechnical Consultant.

VII. GRADING OBSERVATION

A. General

All cleanouts, processed ground to receive fill, key excavations, subdrains, and rock disposals must be observed and approved by the Geotechnical Consultant prior to placing any fill. It shall be the Contractor's responsibility to notify the Geotechnical Consultant when such areas are ready.

B. Compaction Testing

Observation of the fill placement shall be provided by the Geotechnical Consultant during the progress of grading. Location and frequency of tests shall be at the Consultants discretion based on field conditions encountered. Compaction test locations will not necessarily be selected on a random basis. Test locations may be selected to verify adequacy of compaction levels in areas that are judged to be susceptible to inadequate compaction.

C. Frequency of Compaction Testing

In general, density tests should be made at intervals not exceeding 2 feet of fill height or every 1000 cubic yards of fill placed. This criteria will vary depending on soil conditions and the size of the job. In any event, an adequate number of field density tests shall be made to verify that the required compaction is being achieved.

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VIII. CONSTRUCTION CONSIDERATIONS

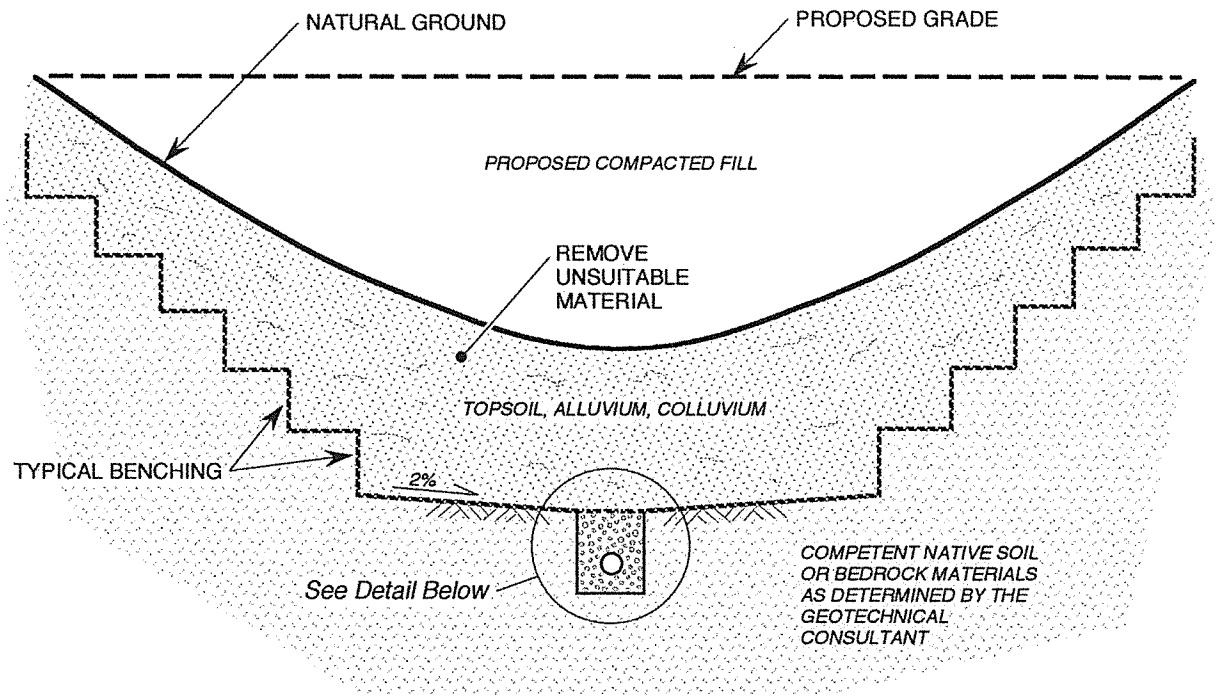
A. Erosion control measures, when necessary, shall be provided by the Contractor during grading and prior to the completion and construction of permanent drainage controls.

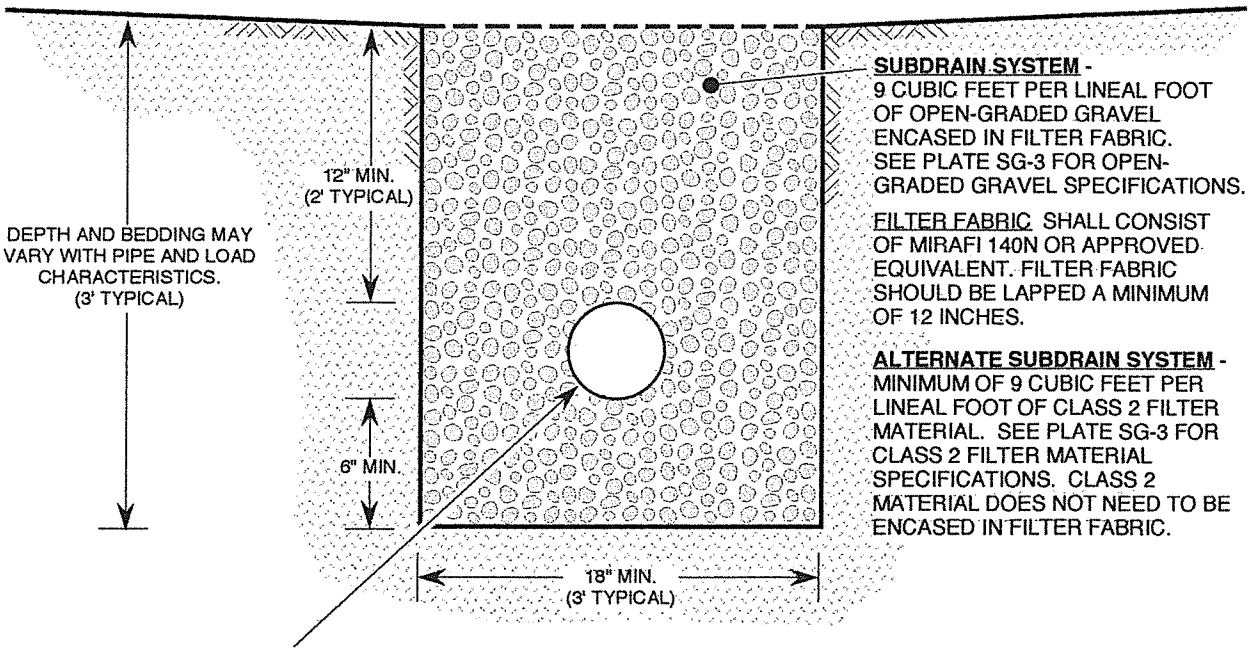
B. Upon completion of grading and termination of observations by the Geotechnical Consultant, no further filling or excavating, including that necessary for footings, foundations, large tree wells, retaining walls, or other features shall be performed without the approval of the Geotechnical Consultant.

C. Care shall be taken by the Contractor during final grading to preserve any berms, drainage terraces, interceptor swales, or other devices of permanent nature on or adjacent to the property.

S:\!BOILERS-WORK\REPORT INSERTS\STANDARD GRADING SPECS

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SUBDRAIN SYSTEM - 9 CUBIC FEET PER LINEAL FOOT OF OPEN-GRADED GRAVEL ENCASED IN FILTER FABRIC. SEE PLATE SG-3 FOR OPEN-GRADED GRAVEL SPECIFICATIONS.

FILTER FABRIC SHALL CONSIST OF MIRAFI 140N OR APPROVED EQUIVALENT. FILTER FABRIC SHOULD BE LAPPED A MINIMUM OF 12 INCHES.

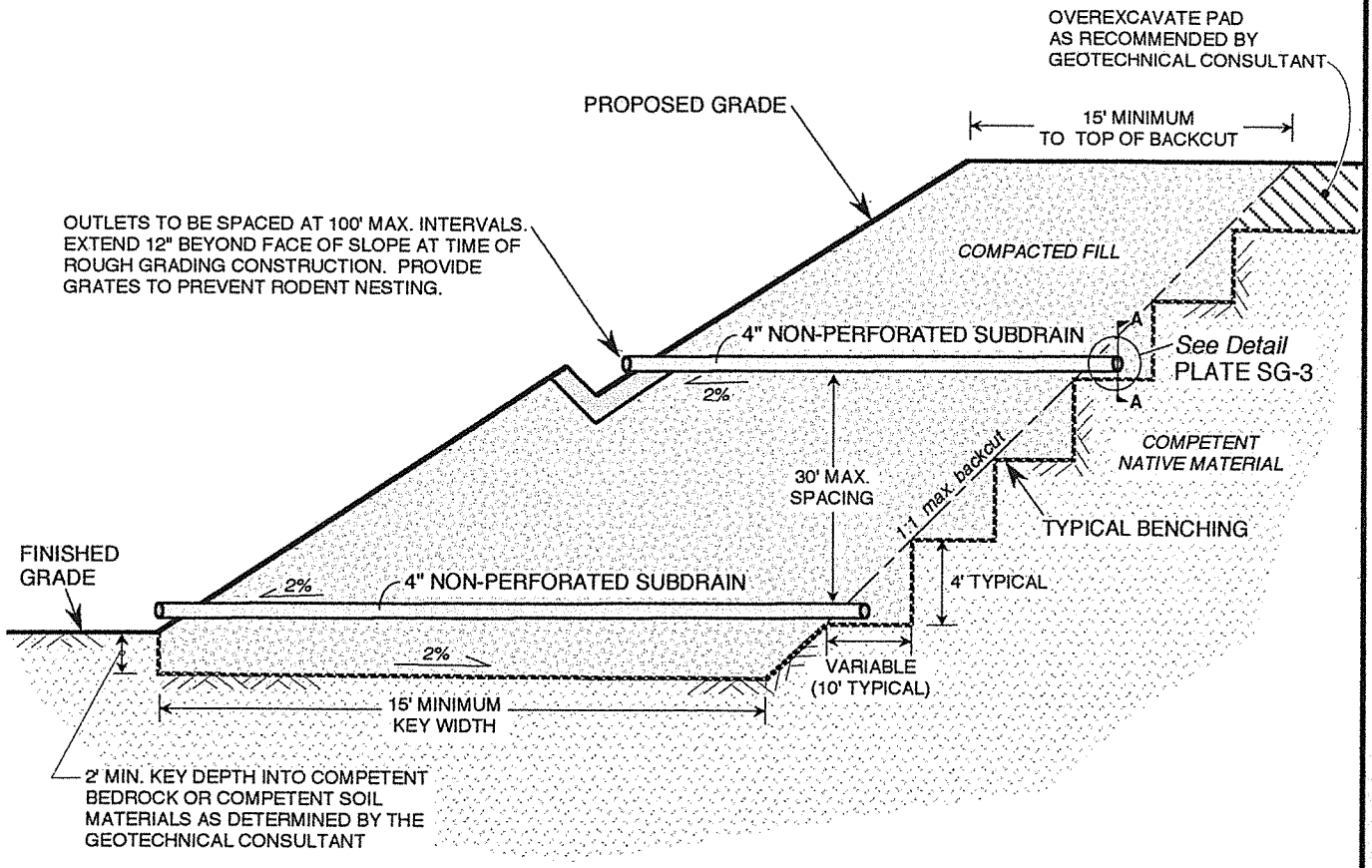
ALTERNATE SUBDRAIN SYSTEM - MINIMUM OF 9 CUBIC FEET PER LINEAL FOOT OF CLASS 2 FILTER MATERIAL. SEE PLATE SG-3 FOR CLASS 2 FILTER MATERIAL SPECIFICATIONS. CLASS 2 MATERIAL DOES NOT NEED TO BE ENCASED IN FILTER FABRIC.

MINIMUM 6-INCH DIAMETER PVC SCHEDULE 40, OR ABS SDR-35 WITH A MINIMUM OF EIGHT 1/4-INCH DIAMETER PERFORATIONS PER LINEAL FOOT IN BOTTOM HALF OF PIPE. PIPE TO BE LAID WITH PERFORATIONS FACING DOWN.

NOTES:

1. FOR CONTINUOUS RUNS IN EXCESS OF 500 FEET USE 8-INCH DIAMETER PIPE.
2. FINAL 20 FEET OF PIPE AT OUTLET SHALL BE NON-PERFORATED AND BACKFILLED WITH FINE-GRAINED MATERIAL.

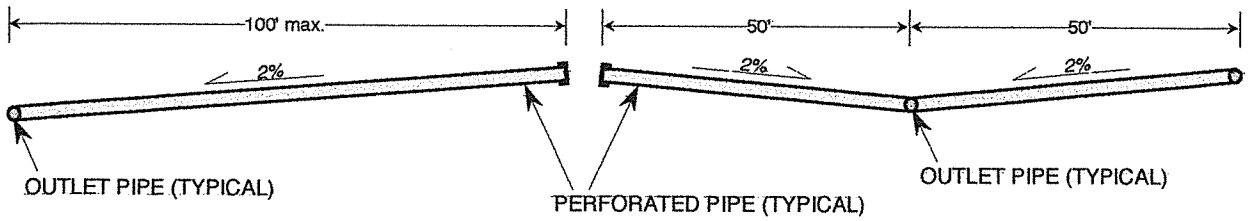
PETRA	CANYON SUBDRAIN DETAIL	PLATE SG-1



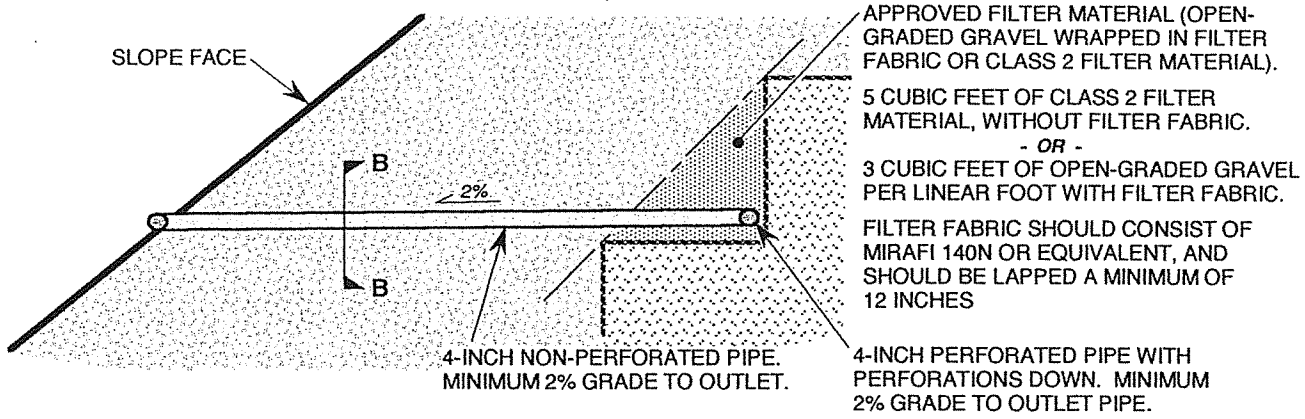
NOTES:

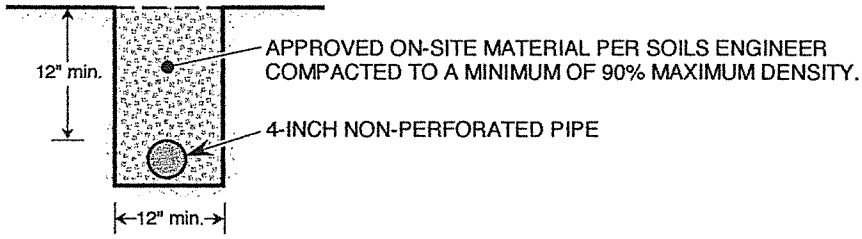
1. 30' MAXIMUM VERTICAL SPACING BETWEEN SUBDRAIN SYSTEMS.
2. 100' MAXIMUM HORIZONTAL DISTANCE BETWEEN NON-PERFORATED OUTLET PIPES. *(See Below)*
3. MINIMUM GRADIENT OF 2% FOR ALL PERFORATED AND NON-PERFORATED PIPE.

SECTION A-A (PERFORATED PIPE PROFILE)



PETRA	BUTTRESS OR STABILIZATION FILL DETAIL	PLATE SG-2





SECTION B-B (OUTLET PIPE)

PIPE SPECIFICATIONS:

1. 4-INCH MINIMUM DIAMETER, PVC SCHEDULE 40 OR ABS SDR-35.
2. FOR PERFORATED PIPE, MINIMUM 8 PERFORATIONS PER FOOT ON BOTTOM HALF OF PIPE.

FILTER MATERIAL/FABRIC SPECIFICATIONS:

OPEN-GRADED GRAVEL ENCASED IN FILTER FABRIC.
(MIRAFI 140N OR EQUIVALENT)

OPEN-GRADED GRAVEL

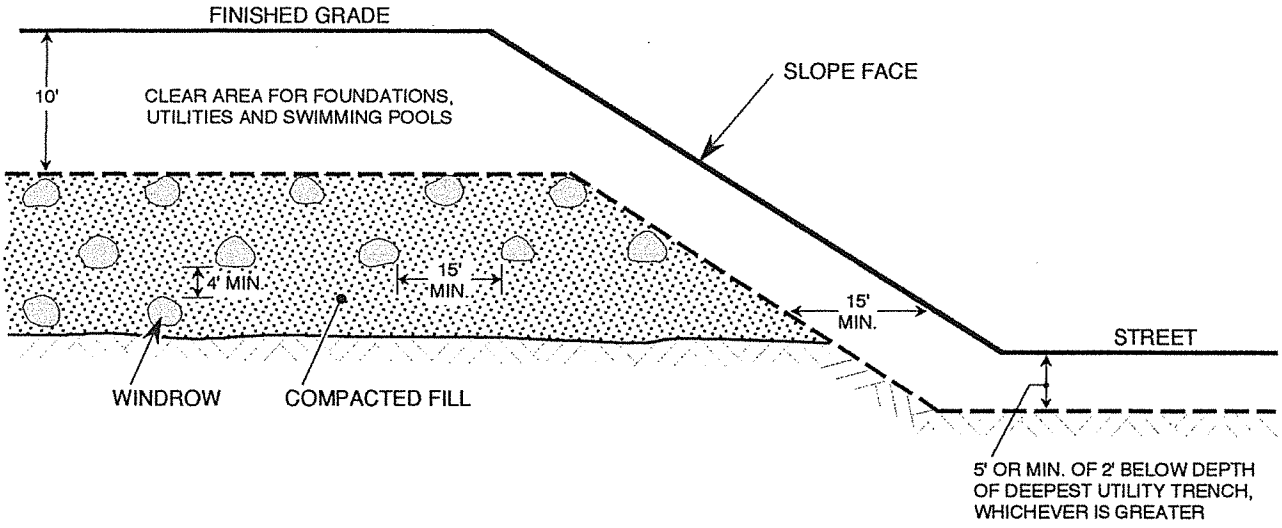
SIEVE SIZE	PERCENT PASSING
1 1/2-INCH	88 - 100
1-INCH	5 - 40
3/4-INCH	0 - 17
3/8-INCH	0 - 7
No. 200	0 - 3

ALTERNATE:

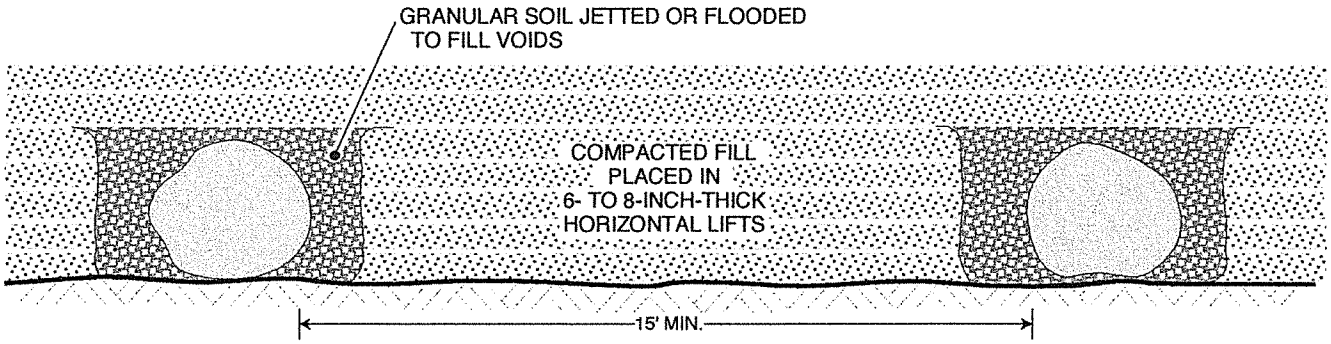
CLASS 2 PERMEABLE FILTER MATERIAL PER CALTRANS STANDARD SPECIFICATION 68-1.025.

CLASS 2 FILTER MATERIAL

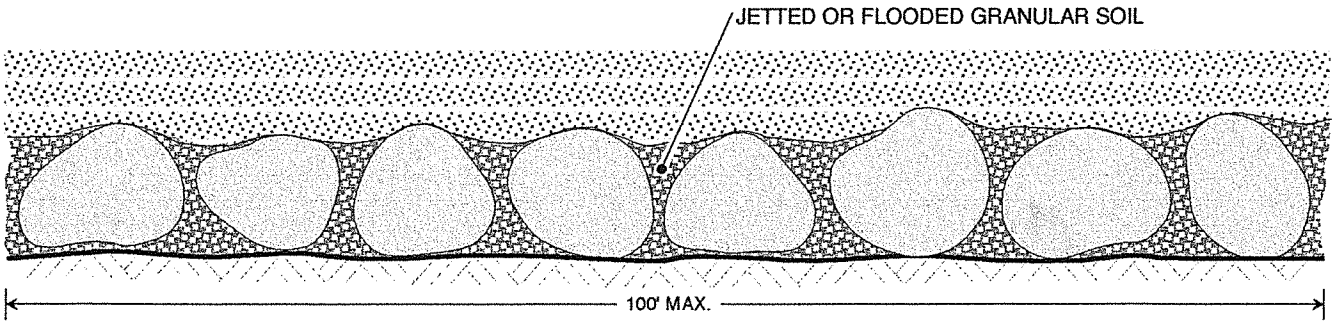
SIEVE SIZE	PERCENT PASSING
1-INCH	100
3/4-INCH	90 - 100
3/8-INCH	40 - 100
No. 4	25 - 40
No. 8	18 - 33
No. -30	5 - 15
No. -50	0 - 7
No. 200	0 - 3



TYPICAL WINDROW DETAIL (END VIEW)

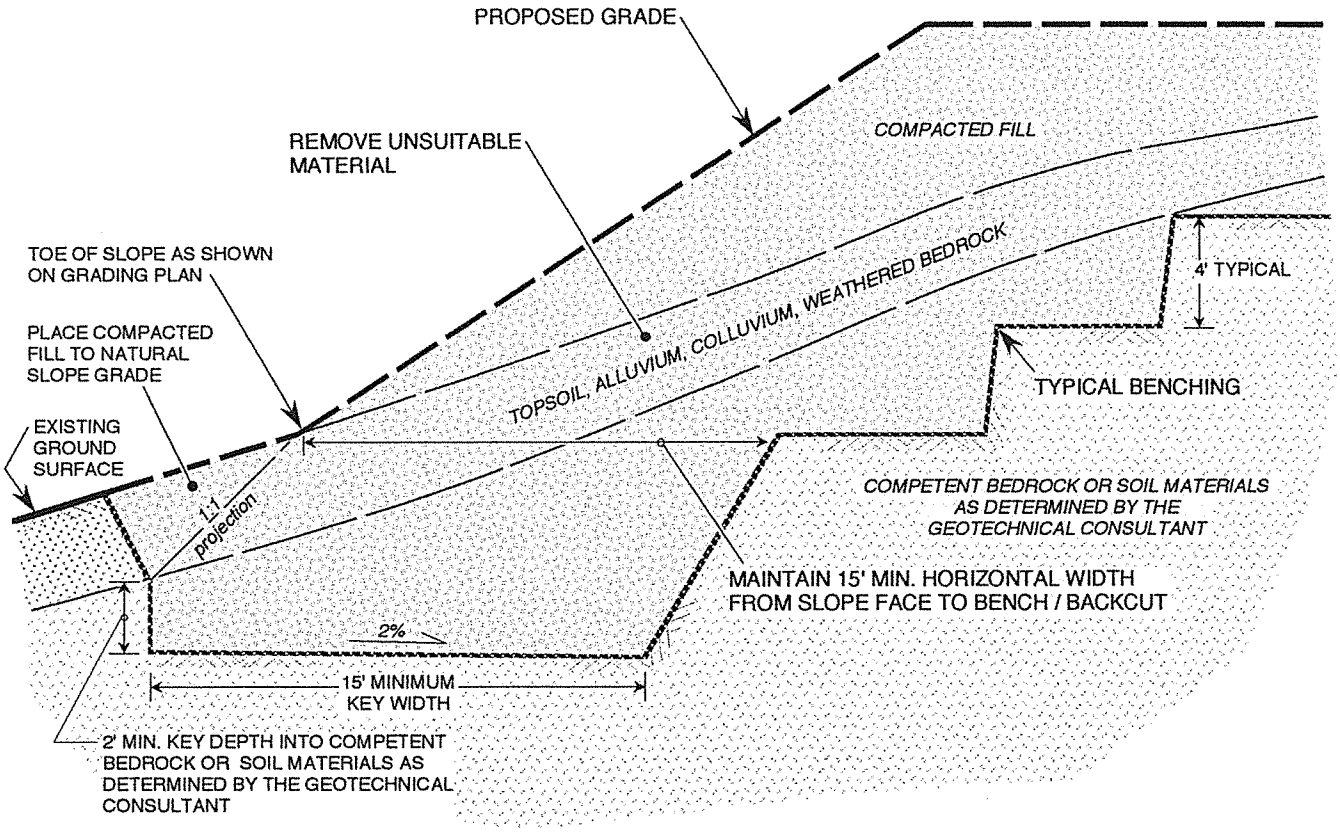


TYPICAL WINDROW DETAIL (PROFILE VIEW)



NOTE: OVERSIZE ROCK IS DEFINED AS CLASTS HAVING A MAXIMUM DIMENSION OF 12" OR LARGER

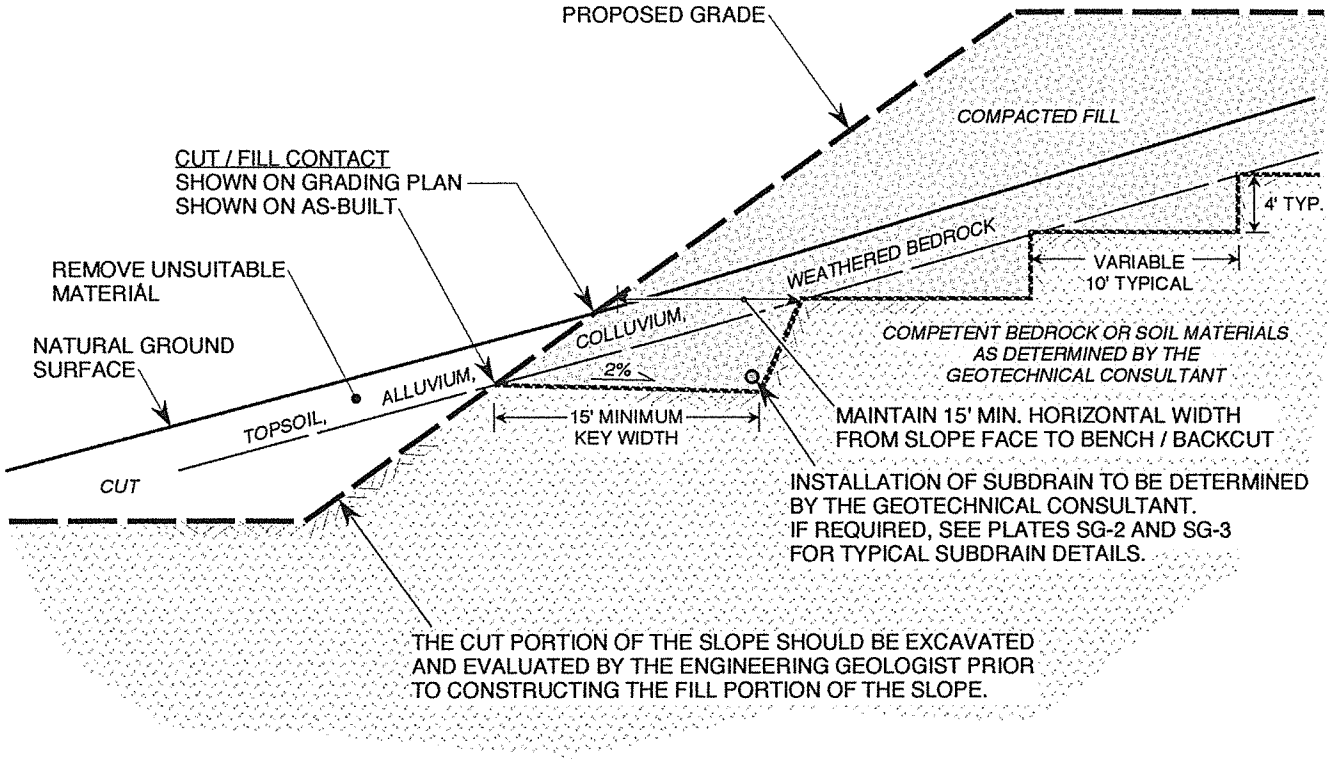
PETRA	TYPICAL ROCK DISPOSAL DETAIL	PLATE SG-4



NOTES:

1. WHERE NATURAL SLOPE GRADIENT IS 5:1 OR LESS, BENCHING IS NOT NECESSARY; HOWEVER, FILL IS NOT TO BE PLACED ON COMPRESSIBLE OR UNSUITABLE MATERIAL.
2. SOILS ENGINEER TO DETERMINE IF SUBDRAIN IS REQUIRED.

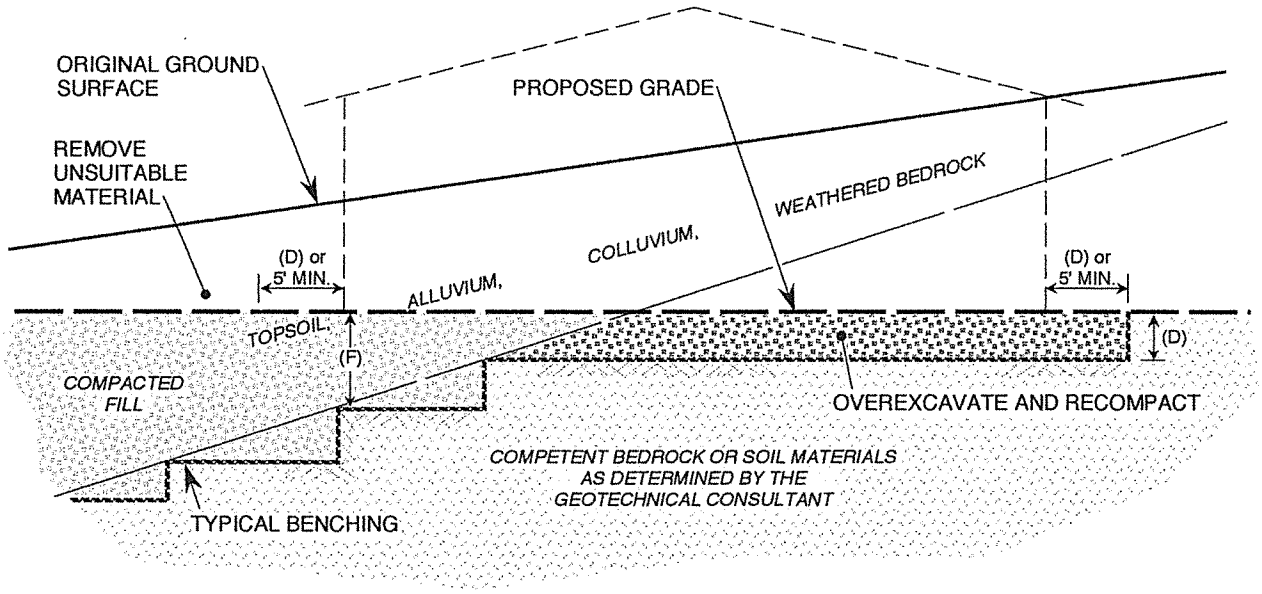
PETRA	FILL SLOPE ABOVE NATURAL SLOPE	PLATE SG-5



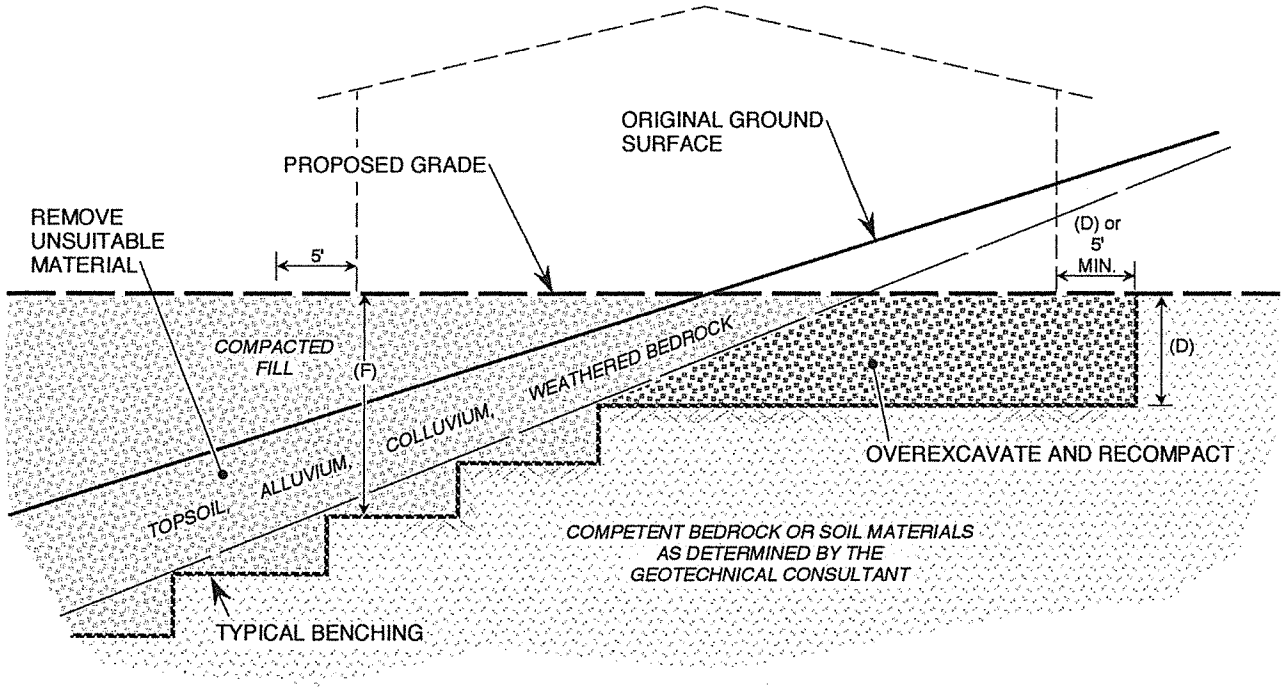
PETRA	FILL SLOPE ABOVE CUT SLOPE	PLATE SG-6

CUT LOT

UNSUITABLE MATERIAL EXPOSED IN PORTION OF CUT PAD

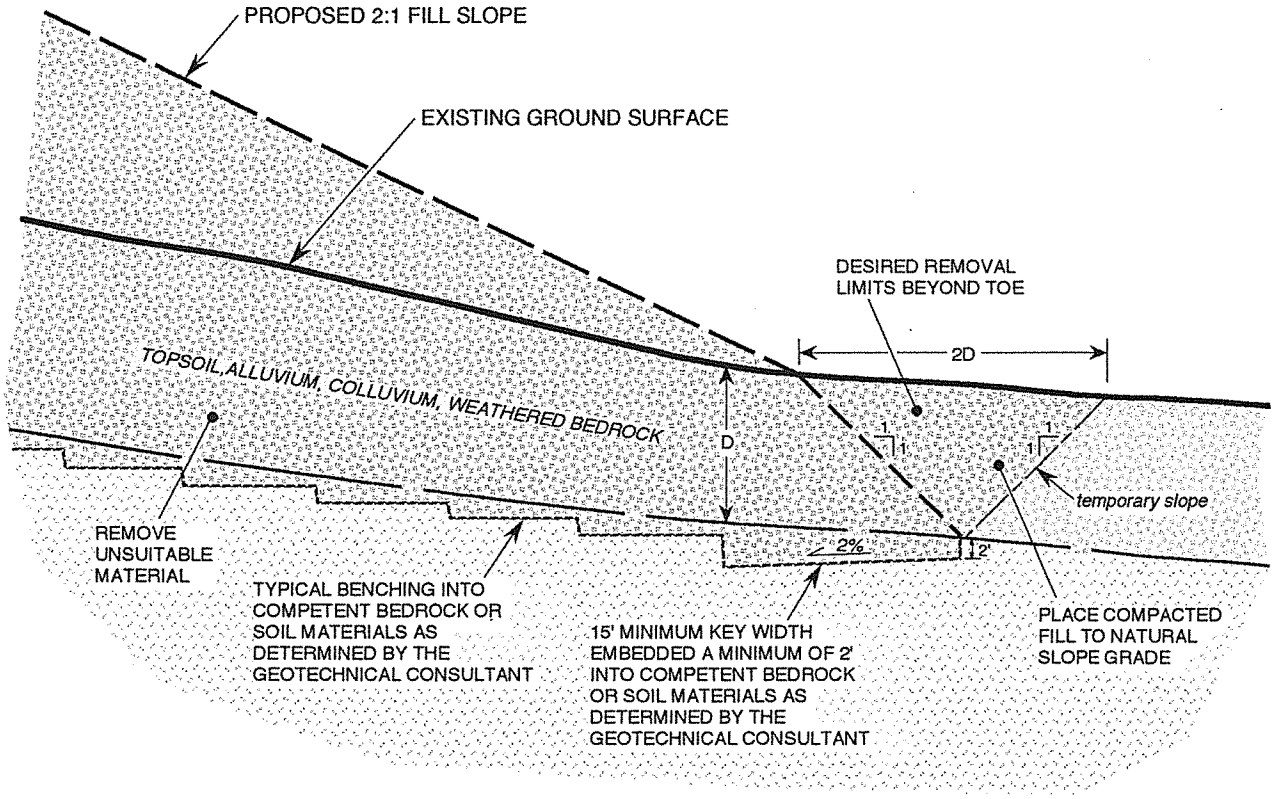


CUT-FILL TRANSITION LOT



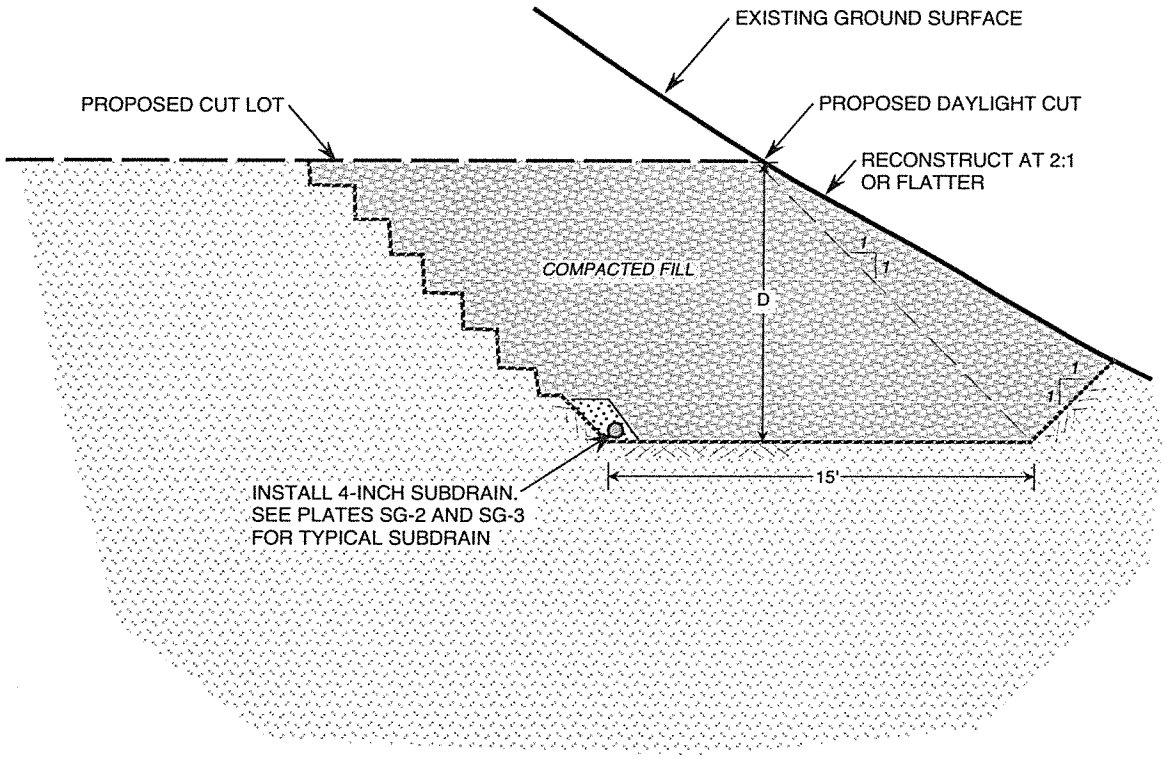
MAXIMUM FILL THICKNESS (F)	DEPTH OF OVEREXCAVATION (D)
FOOTING DEPTH TO 3 FEET	EQUAL DEPTH
3 TO 6 FEET	3 FEET
GREATER THAN 6 FEET	1/2 THE THICKNESS OF DEEPEST FILL PLACED WITHIN THE "FILL" PORTION (F) TO 15 FEET MAXIMUM

PETRA	CUT LOTS AND CUT-FILL TRANSITION LOTS	PLATE SG-7



D = RECOMMENDED DEPTH OF REMOVAL
PER GEOTECHNICAL REPORT

PETRA	TYPICAL REMOVALS BEYOND TOE OF PROPOSED FILL SLOPE	PLATE SG-8



NOTE:

1. "D" SHALL BE 10 FEET MINIMUM OR AS DETERMINED BY SOILS ENGINEER.

PETRA	SHEAR KEY ON DAYLIGHT CUT LOTS	PLATE SG-9

Empire Groves Hotel

GREENHOUSE GAS ANALYSIS

CITY OF ONTARIO

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SEPTEMBER 9, 2024

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LIST OF ABBREVIATED TERMS

%	Percent
°C	Degrees Celsius
°F	Degrees Fahrenheit
(1)	Reference
2017 Scoping Plan	*Final 2017 Scoping Plan Update*
AB	Assembly Bill
AB 32	Global Warming Solutions Act of 2006
AB 1493	Pavley Fuel Efficiency Standards
AB 1881	California Water Conservation Landscaping Act of 2006
Annex I	Industrialized Nations
AQIA	*Empire Groves Hotel Air Quality Impact Analysis*
BAU	Business as Usual
C_2F_6	Hexafluoroethane
C_2H_6	Ethane
$C_2H_2F_4$	Tetrafluroethane
$C_2H_4F_2$	Ethylidene Fluoride
CAA	Federal Clean Air Act
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGAPS	California LBNL GHG Analysis of Policies Spreadsheet
CALGreen	California Green Building Standards Code
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resource Board
CEC	California Energy Commission
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CEQA Guidelines	*CEQA Statute and Guidelines*
CDFA	California Department of Food and Agriculture
CF_4	Tetrafluoromethane
CFC	Chlorofluorocarbons
CFC-113	Trichlorotrifluoroethane
CH_4	Methane
City	City of Ontario
CNRA	California Natural Resources Agency
CNRA 2009	*2009 California Climate Adaptation Strategy*
CO_2	Carbon Dioxide

CO_2e	Carbon Dioxide Equivalent
Convention	United Nation's Framework Convention on Climate Change
COP	Conference of the Parties
CPUC	California Public Utilities Commission
DWR	Department of Water Resources
EMFAC	Emission Factor Model
EPA	Environmental Protection Agency
EV	Electric Vehicle
GCC	Global Climate Change
Gg	Gigagram
GHGA	Greenhouse Gas Analysis
gpd	Gallons Per Day
gpm	Gallons Per Minute
GWP	Global Warming Potential
H_2O	Water
HFC	Hydrofluorocarbons
HDT	Heavy-Duty Trucks
HFC-23	Fluoroform
HFC-134a	1,1,1,2-tetrafluoroethane
HFC-152a	1,1-difluoroethane
HHDT	Heavy-Heavy-Duty Trucks
hp	Horsepower
IPCC	Intergovernmental Panel on Climate Change
ISO	Independent System Operator
ITE	Institute of Transportation Engineers
kWh	Kilowatt Hours
lbs	Pounds
LBNL	Lawrence Berkeley National Laboratory
LCA	Life-Cycle Analysis
LCD	Liquid Crystal Display
LCFS	Low Carbon Fuel Standard or Executive Order S-01-07
LDA	Light-Duty Auto
LDT1/LDT2	Light-Duty Trucks
LEV III	Low-Emission Vehicle
LHDT1/LHDT2	Light-Heavy-Duty Trucks
LULUCF	Land-Use, Land-Use Change and Forestry
MCY	Motorcycles
MDT	Medium-Duty Trucks

MDV	Medium-Duty Vehicles
MHDT	Medium-Heavy-Duty Tucks
$MMTCO_2e$	Million Metric Ton of Carbon Dioxide Equivalent
mpg	Miles Per Gallon
MPOs	Metropolitan Planning Organizations
$MMTCO_2e/yr$	Million Metric Ton of Carbon Dioxide Equivalent Per Year
MT/yr	Metric Tons Per Year
$MTCO_2e$	Metric Ton of Carbon Dioxide Equivalent
$MTCO_2e/yr$	Metric Ton of Carbon Dioxide Equivalent Per Year
MW	Megawatts
MWh	Megawatts Per Hour
MWELO	California Department of Water Resources' Model Water Efficient
N_2O	Nitrous Oxide
NDC	Nationally Determined Contributions
NF_3	Nitrogen Trifluoride
NHTSA	National Highway Traffic Safety Administration
NIOSH	National Institute for Occupational Safety and Health
NO_X	Nitrogen Oxides
Non-Annex I	Developing Nations
OAL	Office of Administrative Law
OPR	Office of Planning and Research
PFC	Perfluorocarbons
ppb	Parts Per Billion
ppm	Parts Per Million
ppt	Parts Per Trillion
Project	Empire Groves Hotel
RTP	Regional Transportation Plan
SAFE	Safer Affordable Fuel-Efficient Vehicles Rule
SB	Senate Bill
SB 32	California Global Warming Solutions Act of 2006
SB 375	Regional GHG Emissions Reduction Targets/Sustainable Communities Strategies
SB 1078	Renewable Portfolio Standards
SB 1368	Statewide Retail Provider Emissions Performance Standards
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments

SCAQMD	South Coast Air Quality Management District
Scoping Plan	California Air Resources Board Climate Change Scoping Plan
SCS	Sustainable Communities Strategy
sf	Square Feet
SF_6	Sulfur Hexaflouride
SLPS	Short-Lived Climate Pollutant Strategy
SP	Service Population
TDM	Transportation Demand Measures
Title 20	Appliance Energy Efficiency Standards
Title 24	California Building Code
U.N.	United Nations
U.S.	United States
UNFCCC	United Nations' Framework Convention on Climate Change
VMT	Vehicle Miles Traveled
WCI	Western Climate Initiative
WRI	World Resources Institute
ZE/NZE	Zero and Near-Zero Emissions
ZEV	Zero-Emissions Vehicles

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EXECUTIVE SUMMARY

ES.1 SUMMARY OF FINDINGS

The results of this *Empire Groves Hotel Greenhouse Gas Analysis* (GHGA) are summarized below based on the significance criteria in Section 3 of this report consistent with Appendix G of the *Guidelines for Implementation of the California Environmental Quality Act* (*CEQA Guidelines*) (1). Table ES-1 shows the findings of significance for potential greenhouse gas (GHG) impacts under the California Environmental Quality Act (CEQA).

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS

Analysis	Report Section	Significance Findings	
		Unmitigated	Mitigated
GHG Impact #1: Would the Project generate GHG emissions either directly or indirectly, that may have a significant impact on the environment?	3.7	*Less Than Significant*	*n/a*
GHG Impact #2: Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?	3.7	*Less Than Significant*	*n/a*

ES.2 PROJECT REQUIREMENTS

The Project would be required to comply with regulations imposed by the State of California, the South Coast Air Quality Management District (SCAQMD), and the City of Perris aimed at the reduction of air pollutant emissions. Those that are directly and indirectly applicable to the Project and that would assist in the reduction of GHG emissions include:

- Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32) (2).
- Regional GHG Emissions Reduction Targets/Sustainable Communities Strategies (Senate Bill [SB] 375) (3).
- Pavley Fuel Efficiency Standards (AB 1493). Establishes fuel efficiency ratings for new vehicles (4).
- California Building Code (Title 24 California Code of Regulations [CCR]). Establishes energy efficiency requirements for new construction (5).
- Appliance Energy Efficiency Standards (Title 20 CCR). Establishes energy efficiency requirements for appliances (6).
- Low Carbon Fuel Standard (LCFS). Requires carbon content of fuel sold in California to be 10 percent (%) less by 2020 (7).

- Statewide Retail Provider Emissions Performance Standards (SB 1368). Requires energy generators to achieve performance standards for GHG emissions (8).
- Renewable Portfolio Standards (RPS). Requires electric corporations to increase the amount of energy obtained from eligible renewable energy resources to 20% by 2010 and 33% by 2020. SB 350 mandated a 50% RPS by 2030. SB 100 increased the RPS requirements to 60% by 2030 with new interim targets of 44% by 2024 and 52% by 2027 (9).
- California Global Warming Solutions Act of 2006 (SB 32). Requires the state to reduce statewide GHG emissions to 40% below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15 (10).

Promulgated regulations that would affect the Project's emissions are accounted for in the Project's GHG calculations provided in this report. In particular, AB 1493, LCFS, and RPS are accounted for in the Project's emission calculations.

ES.3 PROJECT DESIGN FEATURES

PDF GHG-1

Project development proposals shall implement Screening Table Measures that achieve the requisite points per the City's Community Climate Action Plan (CCAP) Screening Tables. The City shall verify that Screening Table Measures achieving the requisite points are incorporated in development plans prior to the issuance of building permit(s) and/or site plans (as applicable). The City shall verify implementation of the selected Screening Table Measures prior to the issuance of Certificate(s) of Occupancy. At the discretion of the City, measures that provide GHG reductions equivalent to GHG emissions reductions achieved via the Screening Table Measures may be implemented. Alternatively, the Project shall demonstrate that annual GHG emissions would not exceed the target thresholds or other alternative compliance mechanisms in the CCAP or subsequent updates. Appendix 3.2 includes the CCAP Screening Tables measures anticipated to be implemented by the proposed Project.

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1 INTRODUCTION

This report presents the results of the GHGA prepared by Urban Crossroads, Inc., for the proposed Empire Groves Hotel Project (Project). The purpose of this GHGA is to evaluate Project-related construction and operational emissions and determine the level of GHG impacts as a result of constructing and operating the Project.

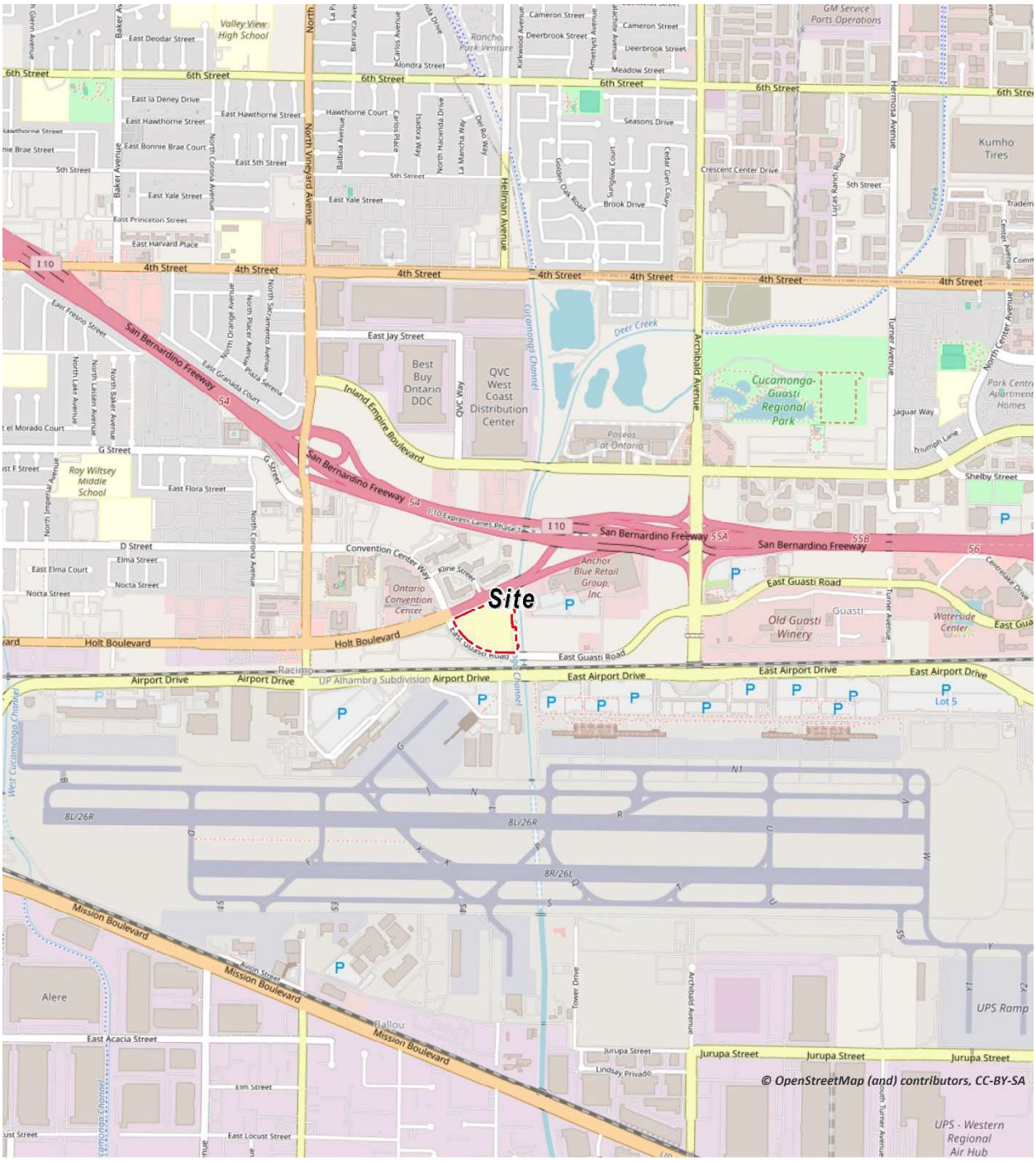
1.1 SITE LOCATION

The proposed Project site is located at the northeast corner of Holt Boulevard and Guasti Road in the City of Ontario, as shown in Exhibit 1-A.

1.2 PROJECT DESCRIPTION

The Project consists of a hotel that includes 600 rooms and suites, 2 ballrooms, a spa & fitness center, meeting and conference rooms as well as an outdoor pool and event lawn on 10.43 acres. A preliminary site plan for the proposed hotel development is shown on Exhibit 1-B. The Project will be developed within a single phase with an anticipated opening year of 2025.

EXHIBIT 1-A: LOCATION MAP



LEGEND:

N

Site Boundary

EXHIBIT 1-B: SITE PLAN



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2 CLIMATE CHANGE SETTING

2.1 INTRODUCTION TO GLOBAL CLIMATE CHANGE (GCC)

GCC is defined as the change in average meteorological conditions on the earth with respect to temperature, precipitation, and storms. The majority of scientists believe that the climate shift taking place since the Industrial Revolution is occurring at a quicker rate and magnitude than in the past. Scientific evidence suggests that GCC is the result of increased concentrations of GHGs in the earth's atmosphere, including carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated gases. The majority of scientists believe that this increased rate of climate change is the result of GHGs resulting from human activity and industrialization over the past 200 years.

An individual project, like the Project evaluated in this GHGA, cannot generate enough GHG emissions to affect a discernible change in global climate. However, the Project may participate in the potential for GCC by its incremental contribution of GHGs combined with the cumulative increase of all other sources of GHGs, which when taken together constitute potential influences on GCC. Because these changes may have serious environmental consequences, Section 3 will evaluate the potential for the Project to have a significant effect upon the environment as a result of its potential contribution to the greenhouse effect.

2.2 GLOBAL CLIMATE CHANGE DEFINED

GCC refers to the change in average meteorological conditions on the earth with respect to temperature, wind patterns, precipitation, and storms. Global temperatures are regulated by naturally occurring atmospheric gases such as water vapor, CO_2, N_2O, CH_4, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). These particular gases are important due to their residence time (duration they stay) in the atmosphere, which ranges from 10 years to more than 100 years. These gases allow solar radiation into the earth's atmosphere, but prevent radiative heat from escaping, thus warming the earth's atmosphere. GCC can occur naturally as it has in the past with the previous ice ages.

Gases that trap heat in the atmosphere are often referred to as GHGs. GHGs are released into the atmosphere by both natural and anthropogenic activity. Without the natural GHG effect, the earth's average temperature would be approximately 61 degrees Fahrenheit (°F) cooler than it is currently. The cumulative accumulation of these gases in the earth's atmosphere is considered to be the cause for the observed increase in the earth's temperature.

2.3 GHGS

2.3.1 GHGS AND HEALTH EFFECTS

GHGs trap heat in the atmosphere, creating a GHG effect that results in global warming and climate change. Many gases demonstrate these properties as discussed in Table 2-1. For the purposes of this analysis, emissions of CO_2, CH_4, and N_2O were evaluated because these gases are the primary contributors to GCC from development projects. Although there are other substances such as fluorinated gases that also contribute to GCC, these fluorinated gases were

not evaluated as their sources are not well-defined and do not contain accepted emissions factors or methodology to accurately calculate these gases.

TABLE 2-1: GHGS

GHGs	Description	Sources	Health Effects
Water	Water is the most abundant, important, and variable GHG in the atmosphere. Water vapor is not considered a pollutant; in the atmosphere, it maintains a climate necessary for life. Changes in its concentration are primarily considered to be a result of climate feedbacks related to the warming of the atmosphere rather than a direct result of industrialization. Climate feedback is an indirect, or secondary, change, either positive or negative, that occurs within the climate system in response to a forcing mechanism. The feedback loop in which water is involved is critically important to projecting future climate change. As the temperature of the atmosphere rises, more water is evaporated from ground storage (rivers, oceans, reservoirs, soil). Because the air is warmer, the relative humidity can be higher (in essence, the air is able to 'hold' more water when it is warmer), leading to more water vapor in the atmosphere. As a GHG, the higher concentration of water vapor is then able to absorb more thermal indirect energy radiated from the earth, thus further warming the atmosphere. The warmer atmosphere can then hold more water vapor and so on. This is referred to as a "positive feedback loop." The extent to which this positive feedback loop would continue is unknown as there are also dynamics that hold the positive feedback loop	The main source of water vapor is evaporation from the oceans (approximately 85%). Other sources include evaporation from other water bodies, sublimation (change from solid to gas) from sea ice and snow, and transpiration from plant leaves.	There are no known direct health effects related to water vapor at this time. It should be noted however that when some pollutants react with water vapor, the reaction forms a transport mechanism for some of these pollutants to enter the human body through water vapor.

GHGs	Description	Sources	Health Effects
	in check. As an example, when water vapor increases in the atmosphere, more of it would eventually condense into clouds, which are more able to reflect incoming solar radiation (thus allowing less energy to reach the earth's surface and heat it up) (11).		
CO_2	CO_2 is an odorless and colorless GHG. Since the industrial revolution began in the mid-1700s, the sort of human activity that increases GHG emissions has increased dramatically in scale and distribution. Data from the past 50 years suggests a corollary increase in levels and concentrations. As an example, prior to the industrial revolution, CO_2 concentrations were fairly stable at 280 parts per million (ppm). Today, they are around 370 ppm, an increase of more than 30%. Left unchecked, the concentration of CO_2 in the atmosphere is projected to increase to a minimum of 540 ppm by 2100 as a direct result of anthropogenic sources (12).	CO_2 is emitted from natural and manmade sources. Natural sources include: the decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources include: the burning of coal, oil, natural gas, and wood. CO_2 is naturally removed from the air by photosynthesis, dissolution into ocean water, transfer to soils and ice caps, and chemical weathering of carbonate rocks (13).	Outdoor levels of CO_2 are not high enough to result in negative health effects. According to the National Institute for Occupational Safety and Health (NIOSH) high concentrations of CO_2 can result in health effects such as: headaches, dizziness, restlessness, difficulty breathing, sweating, increased heart rate, increased cardiac output, increased blood pressure, coma, asphyxia, and/or convulsions. It should be noted that current concentrations of CO_2 in the earth's atmosphere are estimated to be approximately 370 ppm, the actual reference exposure level (level at which adverse health effects typically occur) is at exposure levels of 5,000 ppm averaged over 10 hours in a 40-hour workweek and short-term reference exposure levels of 30,000 ppm averaged over a 15-minute period (14).

GHGs	Description	Sources	Health Effects
CH_4	CH_4 is an extremely effective absorber of radiation, although its atmospheric concentration is less than CO_2 and its lifetime in the atmosphere is brief (10-12 years), compared to other GHGs.	CH_4 in the atmosphere is generated by many different sources, such as fossil fuel production, transport and use, from the decay of organic matter in wetlands, and as a byproduct of digestion by ruminant animals such as cows. Determining which specific sources are responsible for variations in annual increases of CH_4 is complex, but scientists estimate that fossil fuel production and use contributes roughly 30% of the total CH_4 emissions. These industrial sources of CH_4 are relatively simple to pinpoint and control using current technology (15).	CH_4 is extremely reactive with oxidizers, halogens, and other halogen-containing compounds. Exposure to elevated levels of CH_4 can cause asphyxiation, loss of consciousness, headache and dizziness, nausea and vomiting, weakness, loss of coordination, and an increased breathing rate.
N_2O	N_2O, also known as laughing gas, is a colorless GHG. Concentrations of N_2O also began to rise at the beginning of the industrial revolution. In 1998, the global concentration was 314 parts per billion (ppb).	N_2O is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions)	N_2O can cause dizziness, euphoria, and sometimes slight hallucinations. In small doses, it is considered harmless. However, in some cases, heavy and extended use can cause Olney's Lesions (brain damage) (16).

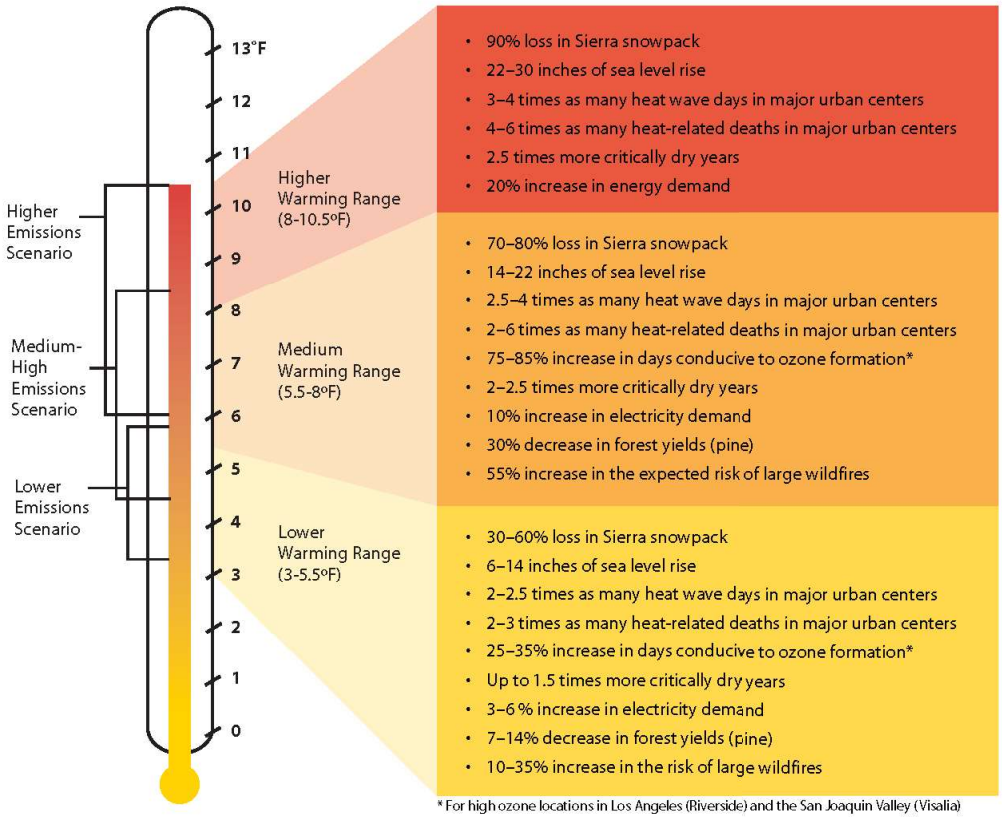
GHGs	Description	Sources	Health Effects
		also contribute to its atmospheric load. It is used as an aerosol spray propellant, i.e., in whipped cream bottles. It is also used in potato chip bags to keep chips fresh. It is used in rocket engines and in race cars. N_2O can be transported into the stratosphere, be deposited on the earth's surface, and be converted to other compounds by chemical reaction (16).	
Chlorofluorocarbons (CFCs)	CFCs are gases formed synthetically by replacing all hydrogen atoms in CH_4 or ethane (C_2H_6) with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble and chemically unreactive in the troposphere (the level of air at the earth's surface).	CFCs have no natural source. They are found in aerosol sprays, blowing agents for foams and packing materials, as solvents, and as refrigerants. (17).	In confined indoor locations, working with CFC-113 or other CFCs is thought to result in death by cardiac arrhythmia (heart frequency too high or too low) or asphyxiation.
HFCs	HFCs are synthetic, man-made chemicals that are used as a substitute for CFCs. Out of all the GHGs, they are one of three groups with the highest global warming potential (GWP). The HFCs with the largest measured atmospheric abundances are (in order), Fluoroform (HFC-23), 1,1,1,2-tetrafluoroethane (HFC-134a), and 1,1-difluoroethane (HFC-152a). Prior to 1990, the only significant emissions were of HFC-23. HCF-134a emissions are increasing due to its use as a refrigerant.	HFCs are manmade for applications such as automobile air conditioners and refrigerants.	No health effects are known to result from exposure to HFCs.

GHGs	Description	Sources	Health Effects
PFCs	PFCs have stable molecular structures and do not break down through chemical processes in the lower atmosphere. High-energy ultraviolet rays, which occur about 60 kilometers above earth's surface, are able to destroy the compounds. Because of this, PFCs have exceptionally long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane (CF_4) and hexafluoroethane (C_2F_6). The EPA estimates that concentrations of CF_4 in the atmosphere are over 70 parts per trillion (ppt).	The two main sources of PFCs are primary aluminum production and semiconductor manufacture.	No health effects are known to result from exposure to PFCs.
SF_6	SF_6 is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It also has the highest GWP of any gas evaluated (23,900) (18). The EPA indicates that concentrations in the 1990s were about 4 ppt.	SF_6 is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.	In high concentrations in confined areas, the gas presents the hazard of suffocation because it displaces the oxygen needed for breathing.

GHGs	Description	Sources	Health Effects
Nitrogen Trifluoride (NF_3)	NF_3 is a colorless gas with a distinctly moldy odor. The World Resources Institute (WRI) indicates that NF_3 has a 100-year GWP of 17,200 (19).	NF_3 is used in industrial processes and is produced in the manufacturing of semiconductors, Liquid Crystal Display (LCD) panels, types of solar panels, and chemical lasers.	Long-term or repeated exposure may affect the liver and kidneys and may cause fluorosis (20).

The potential health effects related directly to the emissions of CO_2, CH_4, and N_2O as they relate to development projects, such as the Project, are still being debated in the scientific community. Their cumulative effects to GCC have the potential to cause adverse effects to human health. Increases in Earth's ambient temperatures would result in more intense heat waves, causing more heat-related deaths. Exhibit 2-A presents the potential impacts of global warming (21).

EXHIBIT 2-A: SUMMARY OF PROJECTED GLOBAL WARMING IMPACT, 2070-2099 (AS COMPARED WITH 1961-1990)



Source: Barbara H. Allen-Diaz. "Climate change affects us all." *University of California, Agriculture and Natural Resources*, 2009.

2.4 GLOBAL WARMING POTENTIAL (GWP)

GHGs have varying GWP values. GWP of a GHG indicates the amount of warming a gas cause over a given period of time and represents the potential of a gas to trap heat in the atmosphere. CO_2 is utilized as the reference gas for GWP, and thus has a GWP of 1. CO_2 equivalent (CO_2e) is a term used for describing the different GHGs in a common unit. CO_2e signifies the amount of CO_2 which would have the equivalent GWP.

The Intergovernmental Panel on Climate Change (IPCC) is the international body for assessing the science related to climate change. IPCC Assessment Reports cover the full scientific, technical and socio-economic assessment of climate change. The atmospheric lifetime and GWP of selected GHGs are summarized at Table 2-2. As shown in the table below, GWP for the 2nd Assessment Report range from 1 for CO_2 to 23,900 for SF_6 and GWP for the 6th Assessment Report range from 1 for CO_2 to 25,200 for SF_6 (22).

TABLE 2-2: GWP AND ATMOSPHERIC LIFETIME OF SELECT GHGS

Gas	Atmospheric Lifetime (years)	GWP (100-year time horizon)	
		2nd Assessment Report	6th Assessment Report
CO_2	Multiple	1	1
CH_4	11.8	21	28
N_2O	109	310	273
HFC-23	228	11,700	14,600
HFC-134a	14	1,300	1,526
HFC-152a	1.6	140	164
SF_6	3,200	23,900	25,200

Source: IPCC Second Assessment Report, 1995 and IPCC Sixth Assessment Report, 2022

2.5 GHG EMISSIONS INVENTORIES

2.5.1 GLOBAL

Worldwide anthropogenic GHG emissions are tracked by the IPCC for industrialized nations (referred to as Annex I) and developing nations (referred to as Non-Annex I). Human GHG emissions data for Annex I nations are available through 2021. Based on the latest available data, the sum of these emissions totaled approximately 28,272,940 gigagram (Gg) CO_2e[1] (23) (24) as summarized on Table 2-3.

[1] The global emissions are the sum of Annex I and non-Annex I countries, without counting Land-Use, Land-Use Change and Forestry (LULUCF). For countries without 2021 data, the United Nations' Framework Convention on Climate Change (UNFCCC) data for the most recent year were used U.N. Framework Convention on Climate Change, "Annex I Parties – GHG total without LULUCF," The most recent GHG emissions for China and India are from 2014 and 2016, respectively.

2.5.2 UNITED STATES

As noted in Table 2-3, the United States, as a single country, was the number two producer of GHG emissions in 2021.

TABLE 2-3: TOP GHG PRODUCING COUNTRIES AND THE EUROPEAN UNION

Emitting Countries	GHG Emissions (Gg CO_2e)
China	12,300,200
United States	6,340,228
European Union (27-member countries)	3,468,394
India	2,839,425
Russian Federation	2,156,599
Japan	1,168,094
Total	**28,272,940**

2.5.3 STATE OF CALIFORNIA

California has significantly slowed the rate of growth of GHG emissions due to the implementation of energy efficiency programs as well as adoption of strict emission controls but is still a substantial contributor to the United States (U.S.) emissions inventory total (16). The California Air Resource Board (CARB) compiles GHG inventories for the State of California. Based upon the 2023 GHG inventory data (i.e., the latest year for which data are available) for the 2000-2021 GHG emissions period, California emitted an average 381.3 million metric tons of CO_2e per year ($MMTCO_2e/yr$) or 381,300 Gg CO_2e (6.01% of the total United States GHG emissions) (25). Based on data published by the U.S. Energy Information Administration, California's per capita (9.12 metric tons) GHG emissions are much less than the nationwide per capita (15.8 metric ton) average (26).

2.6 EFFECTS OF CLIMATE CHANGE IN CALIFORNIA

2.6.1 PUBLIC HEALTH

Higher temperatures may increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to ozone formation could increase from 25 to 35% under the lower warming range to 75 to 85% under the medium warming range. In addition, if global background ozone levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances, depending on wind conditions. Based on *Our Changing Climate Assessing the Risks to California by the California Climate Change Center*, large wildfires could become up to 55% more frequent if GHG emissions are not significantly reduced (27).

In addition, under the higher warming range scenario, there could be up to 100 more days per year with temperatures above 90°F in Los Angeles and 95°F in Sacramento by 2100. This is a

significant increase over historical patterns and approximately twice the increase projected if temperatures remain within or below the lower warming range. Rising temperatures could increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat.

2.6.2 WATER RESOURCES

A vast network of man-made reservoirs and aqueducts captures and transports water throughout the state from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snowpack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snowpack, increasing the risk of summer water shortages.

If temperatures continue to increase, more precipitation could fall as rain instead of snow, and the snow that does fall could melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90%. Under the lower warming range scenario, snowpack losses could be only half as large as those possible if temperatures were to rise to the higher warming range. How much snowpack could be lost depends in part on future precipitation patterns, the projections for which remain uncertain. However, even under the wetter climate projections, the loss of snowpack could pose challenges to water managers and hamper hydropower generation. It could also adversely affect winter tourism. Under the lower warming range, the ski season at lower elevations could be reduced by as much as a month. If temperatures reach the higher warming range and precipitation declines, there might be many years with insufficient snow for skiing and snowboarding.

The State's water supplies are also at risk from rising sea levels. An influx of saltwater could degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta – a major fresh water supply.

2.6.3 AGRICULTURE

Increased temperatures could cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products statewide. First, California farmers could possibly lose as much as 25% of the water supply needed. Although higher CO_2 levels can stimulate plant production and increase plant water-use efficiency, California's farmers could face greater water demand for crops and a less reliable water supply as temperatures rise. Crop growth and development could change, as could the intensity and frequency of pest and disease outbreaks. Rising temperatures could aggravate ozone pollution, which makes plants more susceptible to disease and pests and interferes with plant growth.

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development for many crops, so rising temperatures could worsen the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits, and nuts.

In addition, continued GCC could shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion could occur in many species while range contractions may be less likely in rapidly evolving species with significant populations already established. Should range contractions occur, new or different weed species could fill the emerging gaps. Continued GCC could alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates.

2.6.4 FORESTS AND LANDSCAPES

GCC has the potential to intensify the current threat to forests and landscapes by increasing the risk of wildfire and altering the distribution and character of natural vegetation. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55%, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors, including precipitation, winds, temperature, and landscape and vegetation conditions, future risks would not be uniform throughout the state. In contrast, wildfires in northern California could increase by up to 90% due to decreased precipitation.

Moreover, continued GCC has the potential to alter natural ecosystems and biological diversity within the state. For example, alpine and subalpine ecosystems could decline by as much as 60 to 80% by the end of the century as a result of increasing temperatures. The productivity of the state's forests has the potential to decrease as a result of GCC.

2.6.5 RISING SEA LEVELS

Rising sea levels, more intense coastal storms, and warmer water temperatures could increasingly threaten the state's coastal regions. Under the higher warming range scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Elevations of this magnitude would inundate low-lying coastal areas with saltwater, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats. Under the lower warming range scenario, sea level could rise 12-14 inches.

2.7 REGULATORY SETTING

2.7.1 INTERNATIONAL

Climate change is a global issue involving GHG emissions from all around the world; therefore, countries such as the ones discussed below have made an effort to reduce GHGs.

IPCC

In 1988, the United Nations (U.N.) and the World Meteorological Organization established the IPCC to assess the scientific, technical, and socioeconomic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation.

UNITED NATION'S FRAMEWORK CONVENTION ON CLIMATE CHANGE (UNFCCC)

On March 21, 1994, the U.S. joined a number of countries around the world in signing the Convention. Under the UNFCCC, governments gather and share information on GHG emissions, national policies, and best practices; launch national strategies for addressing GHG emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of climate change.

INTERNATIONAL CLIMATE CHANGE TREATIES

The Kyoto Protocol is an international agreement linked to the UNFCCC. The major feature of the Kyoto Protocol is that it sets binding targets for 37 industrialized countries and the European community for reducing GHG emissions at an average of 5% against 1990 levels over the five-year period 2008–2012. The Convention (as discussed above) encouraged industrialized countries to stabilize emissions; however, the Protocol commits them to do so. Developed countries have contributed more emissions over the last 150 years; therefore, the Protocol places a heavier burden on developed nations under the principle of "common but differentiated responsibilities."

In 2001, President George W. Bush indicated that he would not submit the treaty to the U.S. Senate for ratification, which effectively ended American involvement in the Kyoto Protocol. In December 2009, international leaders met in Copenhagen to address the future of international climate change commitments post-Kyoto. No binding agreement was reached in Copenhagen; however, the UN Climate Change Committee identified the long-term goal of limiting the maximum global average temperature increase to no more than 2 degrees Celsius (°C) above pre-industrial levels, subject to a review in 2015. The Committee held additional meetings in Durban, South Africa in November 2011; Doha, Qatar in November 2012; and Warsaw, Poland in November 2013. The meetings gradually gained consensus among participants on individual climate change issues.

On September 23, 2014, more than 100 Heads of State and Government and leaders from the private sector and civil society met at the Climate Summit in New York hosted by the U.N. At the Summit, heads of government, business and civil society announced actions in areas that would have the greatest impact on reducing emissions, including climate finance, energy, transport, industry, agriculture, cities, forests, and building resilience.

Parties to the UNFCCC reached a landmark agreement on December 12, 2015, in Paris, charting a fundamentally new course in the two-decade-old global climate effort. Culminating a four-year negotiating round, the new treaty ends the strict differentiation between developed and developing countries that characterized earlier efforts, replacing it with a common framework that commits all countries to put forward their best efforts and to strengthen them in the years ahead. This includes, for the first time, requirements that all parties report regularly on their emissions and implementation efforts and undergo international review.

The agreement and a companion decision by parties were the key outcomes of the conference, known as the 21st session of the UNFCCC Conference of the Parties (COP) 21. Together, the Paris Agreement and the accompanying COP decision:

- Reaffirm the goal of limiting global temperature increase well below 2°C, while urging efforts to limit the increase to 1.5 degrees;
- Establish binding commitments by all parties to make "nationally determined contributions" (NDCs), and to pursue domestic measures aimed at achieving them;
- Commit all countries to report regularly on their emissions and "progress made in implementing and achieving" their NDCs, and to undergo international review;
- Commit all countries to submit new NDCs every five years, with the clear expectation that they would "represent a progression" beyond previous ones;
- Reaffirm the binding obligations of developed countries under the UNFCCC to support the efforts of developing countries, while for the first time encouraging voluntary contributions by developing countries too;
- Extend the current goal of mobilizing $100 billion a year in support by 2020 through 2025, with a new, higher goal to be set for the period after 2025;
- Extend a mechanism to address "loss and damage" resulting from climate change, which explicitly would not "involve or provide a basis for any liability or compensation;"
- Require parties engaging in international emissions trading to avoid "double counting;" and
- Call for a new mechanism, similar to the Clean Development Mechanism under the Kyoto Protocol, enabling emission reductions in one country to be counted toward another country's NDC (C2ES 2015a) (28).

Following President Biden's day one executive order, the United States officially rejoined the landmark Paris Agreement on February 19, 2021, positioning the country to once again be part of the global climate solution. Meanwhile, city, state, business, and civic leaders across the country and around the world have been ramping up efforts to drive the clean energy advances needed to meet the goals of the agreement and put the brakes on dangerous climate change.

2.7.2 NATIONAL

Prior to the last decade, there have been no concrete federal regulations of GHGs or major planning for climate change adaptation. The following are actions regarding the federal government, GHGs, and fuel efficiency.

GHG ENDANGERMENT

In *Massachusetts v. Environmental Protection Agency* 549 U.S. 497 (2007), decided on April 2, 2007, the United States Supreme Court (Supreme Court) found that four GHGs, including CO_2, are air pollutants subject to regulation under Section 202(a)(1) of the Clean Air Act (CAA). The Supreme Court held that the EPA Administrator must determine whether emissions of GHGs from new motor vehicles cause or contribute to air pollution, which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned

decision. On December 7, 2009, the EPA Administrator signed two distinct findings regarding GHGs under Section 202(a) of the CAA:

- Endangerment Finding: The Administrator finds that the current and projected concentrations of the six key well-mixed GHGs— CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6—in the atmosphere threaten the public health and welfare of current and future generations.
- Cause or Contribute Finding: The Administrator finds that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution, which threatens public health and welfare.

These findings do not impose requirements on industry or other entities. However, this was a prerequisite for implementing GHG emissions standards for vehicles, as discussed in the section "Clean Vehicles" below. After a lengthy legal challenge, the Supreme Court declined to review an Appeals Court ruling that upheld the EPA Administrator's findings (29).

CLEAN VEHICLES

Congress first passed the Corporate Average Fuel Economy law in 1975 to increase the fuel economy of cars and light duty trucks. The law has become more stringent over time. On May 19, 2009, President Obama put in motion a new national policy to increase fuel economy for all new cars and trucks sold in the U.S. On April 1, 2010, the EPA, and the Department of Transportation's National Highway Traffic Safety Administration (NHTSA) announced a joint final rule establishing a national program that would reduce GHG emissions and improve fuel economy for new cars and trucks sold in the U.S.

The first phase of the national program applies to passenger cars, light-duty trucks, and medium-duty (MD) passenger vehicles, covering model years 2012 through 2016. They require these vehicles to meet an estimated combined average emissions level of 250 grams of CO_2 per mile, equivalent to 35.5 miles per gallon (mpg) if the automobile industry were to meet this CO_2 level solely through fuel economy improvements. Together, these standards would cut CO_2 emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012–2016). In August 2012, the EPA and the NHTSA issued final rules on a second-phase joint rulemaking establishing national standards for light-duty vehicles for model years 2017 through 2025. The new standards apply to passenger cars, light-duty trucks, and MD passenger vehicles. The final standards are projected to result in an average industry fleetwide level of 163 grams/mile of CO_2 in model year 2025, which is equivalent to 54.5 mpg if achieved exclusively through fuel economy improvements.

The EPA and the U.S. Department of Transportation issued final rules for the first national standards to reduce GHG emissions and improve fuel efficiency of heavy-duty trucks (HDT) and buses on September 15, 2011, effective November 14, 2011. For combination tractors, the agencies are proposing engine and vehicle standards that begin in the 2014 model year and achieve up to a 20% reduction in CO_2 emissions and fuel consumption by the 2018 model year. For HDT and vans, the agencies are proposing separate gasoline and diesel truck standards, which phase in starting in the 2014 model year and achieve up to a 10% reduction for gasoline vehicles and a 15% reduction for diesel vehicles by the 2018 model year (12 and 17%, respectively if accounting for air conditioning leakage). Lastly, for vocational vehicles, the engine and vehicle

standards would achieve up to a 10% reduction in fuel consumption and CO_2 emissions from the 2014 to 2018 model years.

On April 2, 2018, the EPA signed the Mid-term Evaluation Final Determination, which declared that the MY 2022-2025 GHG standards are not appropriate and should be revised (30). This Final Determination serves to initiate a notice to further consider appropriate standards for MY 2022-2025 light-duty vehicles. On August 2, 2018, the NHTSA in conjunction with the EPA, released a notice of proposed rulemaking, the *Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks* (SAFE Vehicles Rule). The SAFE Vehicles Rule was proposed to amend existing Corporate Average Fuel Economy (CAFE) and tailpipe CO_2 standards for passenger cars and light trucks and to establish new standards covering model years 2021 through 2026. As of March 31, 2020, the NHTSA and EPA finalized the SAFE Vehicle Rule which increased stringency of CAFE and CO_2 emissions standards by 1.5% each year through model year 2026 (31). On December 21, 2021, after reviewing all the public comments submitted on NHTSA's April 2021 Notice of Proposed Rulemaking, NHTSA finalizes the CAFE Preemption rulemaking to withdraw its portions of the so-called SAFE I Rule. The final rule concludes that the SAFE I Rule overstepped the agency's legal authority and established overly broad prohibitions that did not account for a variety of important state and local interests. The final rule ensures that the SAFE I Rule will no longer form an improper barrier to states exploring creative solutions to address their local communities' environmental and public health challenges (32).

On March 31, 2022, NHTSA finalized CAFE standards for MY 2024-2026. The standards for passenger cars and light trucks for MYs 2024-2025 were increased at a rate of 8% per year and then increased at a rate of 10% per year for MY 2026 vehicles. NHTSA currently projects that the revised standards would require an industry fleet-wide average of roughly 49 mpg in MY 2026 and would reduce average fuel outlays over the lifetimes of affected vehicles that provide consumers hundreds of dollars in net savings. These standards are directly responsive to the agency's statutory mandate to improve energy conservation and reduce the nation's energy dependence on foreign sources (33).

MANDATORY REPORTING OF GHGS

The Consolidated Appropriations Act of 2008, passed in December 2007, requires the establishment of mandatory GHG reporting requirements. On September 22, 2009, the EPA issued the Final Mandatory Reporting of GHGs Rule, which became effective January 1, 2010. The rule requires reporting of GHG emissions from large sources and suppliers in the U.S. and is intended to collect accurate and timely emissions data to inform future policy decisions. Under the rule, suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons per year (MT/yr) or more of GHG emissions are required to submit annual reports to the EPA.

NEW SOURCE REVIEW

The EPA issued a final rule on May 13, 2010, that establishes thresholds for GHGs that define when permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities. This final rule

"tailors" the requirements of these CAA permitting programs to limit which facilities would be required to obtain Prevention of Significant Deterioration and Title V permits. In the preamble to the revisions to the Federal Code of Regulations, the EPA states:

> *"This rulemaking is necessary because without it the Prevention of Significant Deterioration and Title V requirements would apply, as of January 2, 2011, at the 100 or 250 tons per year levels provided under the CAA, greatly increasing the number of required permits, imposing undue costs on small sources, overwhelming the resources of permitting authorities, and severely impairing the functioning of the programs. EPA is relieving these resource burdens by phasing in the applicability of these programs to GHG sources, starting with the largest GHG emitters. This rule establishes two initial steps of the phase-in. The rule also commits the agency to take certain actions on future steps addressing smaller sources but excludes certain smaller sources from Prevention of Significant Deterioration and Title V permitting for GHG emissions until at least April 30, 2016."*

The EPA estimates that facilities responsible for nearly 70% of the national GHG emissions from stationary sources would be subject to permitting requirements under this rule. This includes the nation's largest GHG emitters—power plants, refineries, and cement production facilities.

STANDARDS OF PERFORMANCE FOR GHG EMISSIONS FOR NEW STATIONARY SOURCES: ELECTRIC UTILITY GENERATING UNITS

As required by a settlement agreement, the EPA proposed new performance standards for emissions of CO_2 for new, affected, fossil fuel-fired electric utility generating units on March 27, 2012. New sources greater than 25 megawatts (MW) would be required to meet an output-based standard of 1,000 pounds (lbs) of CO_2 per MW-hour (MWh), based on the performance of widely used natural gas combined cycle technology. It should be noted that on February 9, 2016, the Supreme Court issued a stay of this regulation pending litigation. Additionally, the current EPA Administrator has also signed a measure to repeal the Clean Power Plan, including the CO_2 standards. The Clean Power Plan was officially repealed on June 19, 2019, when the EPA issued the final Affordable Clean Energy rule (ACE). Under ACE, new state-specific emission guidelines were established that provided existing coal-fired electric utility generating units with achievable standards.

On January 19, 2021, the D.C. Circuit Court of Appeals ruled that the EPA's ACE Rule for GHG emissions from power plants rested on an erroneous interpretation of the CAA that barred EPA from considering measures beyond those that apply at and to an individual source. The court therefore vacated and remanded the ACE Rule and adopted a replacement rule which regulates CO_2 emissions from existing power plants, potentially again considering generation shifting and other measures to more aggressively target power sector emissions.

CAP-AND-TRADE

Cap-and-trade refers to a policy tool where emissions are limited to a certain amount and can be traded or provides flexibility on how the emitter can comply. Successful examples in the U.S. include the Acid Rain Program and the N_2O Budget Trading Program and Clean Air Interstate Rule in the northeast. There is no federal GHG cap-and-trade program currently; however, some states have joined to create initiatives to provide a mechanism for cap-and-trade.

The Regional GHG Initiative is an effort to reduce GHGs among the states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. Each state caps CO_2 emissions from power plants, auctions CO_2 emission allowances, and invests the proceeds in strategic energy programs that further reduce emissions, save consumers money, create jobs, and build a clean energy economy. The Initiative began in 2008 and has retained all participating states as of 2020.

The Western Climate Initiative (WCI) partner jurisdictions have developed a comprehensive initiative to reduce regional GHG emissions to 15% below 2005 levels by 2020. The partners were originally California, British Columbia, Manitoba, Ontario, and Quebec. However, Manitoba and Ontario are not currently participating. California linked with Quebec's cap-and-trade system January 1, 2014, and joint offset auctions took place in 2015. While the WCI has yet to publish whether it has successfully reached the 2020 emissions goal initiative set in 2007, SB 32 requires that California, a major partner in the WCI, adopt the goal of reducing statewide GHG emissions to 40% below the 1990 level by 2030.

SMARTWAY PROGRAM

The SmartWay Program is a public-private initiative between the EPA, large and small trucking companies, rail carriers, logistics companies, commercial manufacturers, retailers, and other federal and state agencies. Its purpose is to improve fuel efficiency and the environmental performance (reduction of both GHG emissions and air pollution) of the goods movement supply chains. SmartWay is comprised of four components (34):

1. SmartWay Transport Partnership: A partnership in which freight carriers and shippers commit to benchmark operations, track fuel consumption, and improve performance annually.
2. SmartWay Technology Program: A testing, verification, and designation program to help freight companies identify equipment, technologies, and strategies that save fuel and lower emissions.
3. SmartWay Vehicles: A program that ranks light-duty cars and small trucks and identifies superior environmental performers with the SmartWay logo.
4. SmartWay International Interests: Guidance and resources for countries seeking to develop freight sustainability programs modeled after SmartWay.

SmartWay effectively refers to requirements geared towards reducing fuel consumption. Most large trucking fleets driving newer vehicles are compliant with SmartWay design requirements. Moreover, over time, all HDTs would have to comply with the CARB GHG Regulation that is designed with the SmartWay Program in mind, to reduce GHG emissions by making them more fuel-efficient. For instance, in 2015, 53 foot or longer dry vans or refrigerated trailers equipped

with a combination of SmartWay-verified low-rolling resistance tires and SmartWay-verified aerodynamic devices would obtain a total of 10% or more fuel savings over traditional trailers.

Through the SmartWay Technology Program, the EPA has evaluated the fuel-saving benefits of various devices through grants, cooperative agreements, emissions, and fuel economy testing, demonstration projects and technical literature review. As a result, the EPA has determined the following types of technologies provide fuel saving and/or emission reducing benefits when used properly in their designed applications, and has verified certain products:

- Idle reduction technologies – less idling of the engine when it is not needed would reduce fuel consumption.
- Aerodynamic technologies minimize drag and improve airflow over the entire tractor-trailer vehicle. Aerodynamic technologies include gap fairings that reduce turbulence between the tractor and trailer, side skirts that minimize wind under the trailer, and rear fairings that reduce turbulence and pressure drop at the rear of the trailer.
- Low rolling resistance tires can roll longer without slowing down, thereby reducing the amount of fuel used. Rolling resistance (or rolling friction or rolling drag) is the force resisting the motion when a tire rolls on a surface. The wheel would eventually slow down because of this resistance.
- Retrofit technologies include things such as diesel particulate filters, emissions upgrades (to a higher tier), etc., which would reduce emissions.
- Federal excise tax exemptions.

EXECUTIVE ORDER 13990

On January 20, 2021, Federal agencies were directed to immediately review, and take action to address, Federal regulations promulgated and other actions taken during the last 4 years that conflict with national objectives to improve public health and the environment; ensure access to clean air and water; limit exposure to dangerous chemicals and pesticides; hold polluters accountable, including those who disproportionately harm communities of color and low-income communities; reduce GHG emissions; bolster resilience to the impacts of climate change; restore and expand our national treasures and monuments; and prioritize both environmental justice and employment.

2.7.3 CALIFORNIA

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California's energy consumption relatively flat even with rapid population growth.

2.7.3.1 LEGISLATIVE ACTIONS TO REDUCE GHGS

The State of California legislature has enacted a series of bills that constitute the most aggressive program to reduce GHGs of any state in the nation. Some legislation, such as the landmark AB 32, was specifically enacted to address GHG emissions. Other legislation, such as Title 24 and Title 20 energy standards, were originally adopted for other purposes such as energy and water conservation, but also provide GHG reductions. This section describes the major provisions of the legislation.

AB 1881

The Water Conservation in Landscaping Act of 2006 requires local agencies to adopt the updated DWR model ordinance or equivalent. AB 1881 also requires the CEC to consult with the DWR to adopt, by regulation, performance standards and labeling requirements for landscape irrigation equipment, including irrigation controllers, moisture sensors, emission devices, and valves to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy or water.

SB 1368

California SB 1368 adds Sections 8340 and 8341 to the Public Utilities Code (effective January 1, 2007) with the intent "to prevent long-term investments in power plants with GHG emissions in excess of those produced by a combined-cycle natural gas power plant" with the aim of "reducing emissions of GHGs from the state's electricity consumption, not just the state's electricity production." SB 1368 provides a mechanism for reducing the GHG emissions of electricity providers, both in-state and out-of-state, thereby assisting CARB in meeting its mandate under AB 32, the Global Warming Solutions Act of 2006.

AB 32

The California State Legislature enacted AB 32, which required that GHGs emitted in California be reduced to 1990 levels by the year 2020 (this goal has been met[2]). GHGs, as defined under AB 32, include CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6. Since AB 32 was enacted, a seventh chemical, NF_3, has also been added to the list of GHGs. CARB is the state agency charged with monitoring and regulating sources of GHGs. Pursuant to AB 32, CARB adopted regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 states the following:

> *"Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems."*

SB 375

On September 30, 2008, SB 375 was signed by Governor Schwarzenegger. According to SB 375, the transportation sector is the largest contributor of GHG emissions, which emits over 40% of the total GHG emissions in California. SB 375 states, "Without improved land use and transportation policy, California would not be able to achieve the goals of AB 32." SB 375 does the following: it (1) requires metropolitan planning organizations (MPOs) to include sustainable community strategies in their

[2] Based upon the 2023 GHG inventory data (i.e., the latest year for which data are available) for the 2000-2021 GHG emissions period, California emitted an average 381.3 $MMTCO_2e$ (25). This is less than the 2020 emissions target of 431 $MMTCO_2e$. This is less than the 2020 emissions target of 431 $MMTCO_2e$.

regional transportation plans for reducing GHG emissions; (2) aligns planning for transportation and housing; and (3) creates specified incentives for the implementation of the strategies.

SB 375 requires MPOs to prepare a Sustainable Communities Strategy (SCS) within the Regional Transportation Plan (RTP) that guides growth while taking into account the transportation, housing, environmental, and economic needs of the region. SB 375 uses CEQA streamlining as an incentive to encourage residential projects, which help achieve AB 32 goals to reduce GHG emissions. Although SB 375 does not prevent CARB from adopting additional regulations, such actions are not anticipated in the foreseeable future.

Concerning CEQA, SB 375, as codified in Public Resources Code Section 21159.28, states that CEQA findings for certain projects are not required to reference, describe, or discuss (1) growth inducing impacts, or (2) any project-specific or cumulative impacts from cars and light-duty truck trips generated by the project on global warming or the regional transportation network, if the project:

1. Is in an area with an approved sustainable communities strategy or an alternative planning strategy that CARB accepts as achieving the GHG emission reduction targets.
2. Is consistent with that strategy (in designation, density, building intensity, and applicable policies).
3. Incorporates the MMs required by an applicable prior environmental document.

AB 1493 - PAVLEY FUEL EFFICIENCY STANDARDS

The second phase of the implementation for the Pavley bill was incorporated into Amendments to the Low-Emission Vehicle Program (LEV III) or the Advanced Clean Cars (ACC) program. The ACC program combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of requirements for MY 2017 through 2025. The regulation will reduce GHGs from new cars by 34% from 2016 levels by 2025. The new rules will clean up gasoline and diesel-powered cars, and deliver increasing numbers of zero-emission technologies, such as full battery electric cars, newly emerging plug-in hybrid EV and hydrogen fuel cell cars. The package will also ensure adequate fueling infrastructure is available for the increasing numbers of hydrogen fuel cell vehicles planned for deployment in California. On March 9, EPA reinstated California's authority under the Clean Air Act to implement its own GHG emission standards for cars and light trucks, which other states can also adopt and enforce. With this authority restored, EPA will continue partnering with states to advance the next generation of clean vehicle technologies.

CLEAN ENERGY AND POLLUTION REDUCTION ACT OF 2015 (SB 350)

In October 2015, the legislature approved, and Governor Jerry Brown signed SB 350, which reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the RPS, higher energy efficiency requirements for buildings, initial strategies towards a regional electricity grid, and improved infrastructure for EV charging stations. Provisions for a 50% reduction in the use of petroleum statewide were removed from the Bill because of opposition and concern that it would prevent the Bill's passage. Specifically, SB 350 requires the following to reduce statewide GHG emissions:

- Increase the amount of electricity procured from renewable energy sources from 33% to 50% by 2030, with interim targets of 40% by 2024, and 45% by 2027.
- Double the energy efficiency in existing buildings by 2030. This target would be achieved through the California Public Utilities Commission (CPUC), the California Energy Commission (CEC), and local publicly owned utilities.
- Reorganize the Independent System Operator (ISO) to develop more regional electrify transmission markets and to improve accessibility in these markets, which would facilitate the growth of renewable energy markets in the western United States.

SB 32

On September 8, 2016, Governor Brown signed SB 32 and its companion bill, AB 197. SB 32 requires the state to reduce statewide GHG emissions to 40% below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15. The new legislation builds upon the AB 32 goal and provides an intermediate goal to achieving S-3-05, which sets a statewide GHG reduction target of 80% below 1990 levels by 2050. AB 197 creates a legislative committee to oversee regulators to ensure that CARB not only responds to the Governor, but also the Legislature (10).

2017 CARB SCOPING PLAN

In November 2017, CARB released the *Final 2017 Scoping Plan Update* (*2017 Scoping Plan*), which identifies the State's post-2020 reduction strategy. The *2017 Scoping Plan* reflects the 2030 target of a 40% reduction below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. Key programs that the proposed Second Update builds upon include the Cap-and-Trade Regulation, the LCFS, and much cleaner cars, trucks, and freight movement, utilizing cleaner, renewable energy, and strategies to reduce CH_4 emissions from agricultural and other wastes.

The *2017 Scoping Plan* establishes a new emissions limit of 260 $MMTCO_2e$ for the year 2030, which corresponds to a 40% decrease in 1990 levels by 2030 (35).

California's climate strategy would require contributions from all sectors of the economy, including the land base, and would include enhanced focus on zero and near-zero emission (ZE/NZE) vehicle technologies; continued investment in renewables, including solar roofs, wind, and other distributed generation; greater use of low carbon fuels; integrated land conservation and development strategies; coordinated efforts to reduce emissions of short-lived climate pollutants (CH_4, black carbon, and fluorinated gases); and an increased focus on integrated land use planning to support livable, transit-connected communities and conservation of agricultural and other lands. Requirements for direct GHG reductions at refineries would further support air quality co-benefits in neighborhoods, including in disadvantaged communities historically located adjacent to these large stationary sources, as well as efforts with California's local air pollution control and air quality management districts (air districts) to tighten emission limits on a broad spectrum of industrial sources. Major elements of the *2017 Scoping Plan* framework include:

- Implementing and/or increasing the standards of the Mobile Source Strategy, which include increasing zero-emission vehicles (ZEV) buses and trucks.

- LCFS, with an increased stringency (18% by 2030).
- Implementing SB 350, which expands the RPS to 50% RPS and doubles energy efficiency savings by 2030.
- California Sustainable Freight Action Plan, which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of ZEV trucks.
- Implementing the proposed Short-Lived Climate Pollutant Strategy (SLPS), which focuses on reducing CH_4 and HCF emissions by 40% and anthropogenic black carbon emissions by 50% by year 2030.
- Continued implementation of SB 375.
- Post-2020 Cap-and-Trade Program that includes declining caps.
- 20% reduction in GHG emissions from refineries by 2030.
- Development of a Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

Note, however, that the *2017 Scoping Plan* acknowledges that:

> *"[a]chieving net zero increases in GHG emissions, resulting in no contribution to GHG impacts, may not be feasible or appropriate for every project, however, and the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA."*

In addition to the statewide strategies listed above, the *2017 Scoping Plan* also identifies local governments as essential partners in achieving the State's long-term GHG reduction goals and identifies local actions to reduce GHG emissions. As part of the recommended actions, CARB recommends that local governments achieve a community-wide goal to achieve emissions of no more than 6 metric tons of CO_2e ($MTCO_2e$) or less per capita by 2030 and 2 $MTCO_2e$ or less per capita by 2050. For CEQA projects, CARB states that lead agencies may develop evidence-based bright-line numeric thresholds—consistent with the *2017 Scoping Plan* and the State's long-term GHG goals—and projects with emissions over that amount may be required to incorporate on-site design features and MMs that avoid or minimize project emissions to the degree feasible; or a performance-based metric using a CAP or other plan to reduce GHG emissions is appropriate.

According to research conducted by the Lawrence Berkeley National Laboratory (LBNL) and supported by CARB, California, under its existing and proposed GHG reduction policies, could achieve the 2030 goals under SB 32. The research utilized a new, validated model known as the California LBNL GHG Analysis of Policies Spreadsheet (CALGAPS), which simulates GHG and criteria pollutant emissions in California from 2010 to 2050 in accordance to existing and future GHG-reducing policies. The CALGAPS model showed that by 2030, emissions could range from 211 to 428 $MTCO_2e$ per year ($MTCO_2e$/yr), indicating that "even if all modeled policies are not implemented, reductions could be sufficient to reduce emissions 40% below the 1990 level [of SB 32]." CALGAPS analyzed emissions through 2050 even though it did not generally account for policies that might be put in place after 2030. Although the research indicated that the emissions

would not meet the State's 80% reduction goal by 2050, various combinations of policies could allow California's cumulative emissions to remain very low through 2050 (36) (37).

CAP-AND-TRADE PROGRAM

The *2017 Scoping Plan* identifies a Cap-and-Trade Program as one of the key strategies for California to reduce GHG emissions. According to CARB, a cap-and-trade program would help put California on the path to meet its goal of achieving a 40% reduction in GHG emissions from 1990 levels by 2030. Under cap-and-trade, an overall limit on GHG emissions from capped sectors is established, and facilities subject to the cap would be able to trade permits to emit GHGs within the overall limit.

CARB adopted a California Cap-and-Trade Program pursuant to its authority under AB 32. The Cap-and-Trade Program is designed to reduce GHG emissions from regulated entities by more than 16% between 2013 and 2020, and by an additional 40% by 2030. The statewide cap for GHG emissions from the capped sectors (e.g., electricity generation, petroleum refining, and cement production) commenced in 2013 and would decline over time, achieving GHG emission reductions throughout the program's duration.

Covered entities that emit more than 25,000 $MTCO_2e$/yr must comply with the Cap-and-Trade Program. Triggering of the 25,000 $MTCO_2e$/yr "inclusion threshold" is measured against a subset of emissions reported and verified under the California Regulation for the Mandatory Reporting of GHG Emissions (Mandatory Reporting Rule or "MRR").

Under the Cap-and-Trade Program, CARB issues allowances equal to the total amount of allowable emissions over a given compliance period and distributes these to regulated entities. Covered entities are allocated free allowances in whole or part (if eligible), and may buy allowances at auction, purchase allowances from others, or purchase offset credits. Each covered entity with a compliance obligation is required to surrender "compliance instruments" for each $MTCO_2e$ of GHG they emit. There also are requirements to surrender compliance instruments covering 30% of the prior year's compliance obligation by November of each year (38).

The Cap-and-Trade Program provides a firm cap, which provides the highest certainty of achieving the 2030 target. An inherent feature of the Cap-and-Trade program is that it does not guarantee GHG emissions reductions in any discrete location or by any particular source. Rather, GHG emissions reductions are only guaranteed on an accumulative basis. As summarized by CARB in the *First Update to the Climate Change Scoping Plan*:

> *"The Cap-and-Trade Regulation gives companies the flexibility to trade allowances with others or take steps to cost-effectively reduce emissions at their own facilities. Companies that emit more have to turn in more allowances or other compliance instruments. Companies that can cut their GHG emissions have to turn in fewer allowances. But as the cap declines, aggregate emissions must be reduced. In other words, a covered entity theoretically could increase its GHG emissions every year and still comply with the Cap-and-Trade Program if there is a reduction in GHG emissions from other covered entities. Such a focus on aggregate GHG emissions*

> *is considered appropriate because climate change is a global phenomenon, and the effects of GHG emissions are considered cumulative."* (39)

The Cap-and-Trade Program covers approximately 80% of California's GHG emissions (35). The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, whether generated in-state or imported. Accordingly, GHG emissions associated with CEQA projects' electricity usage are covered by the Cap-and-Trade Program. The Cap-and-Trade Program also covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and from combustion of other fossil fuels not directly covered at large sources in the Program's first compliance period. The Cap-and-Trade Program covers the GHG emissions associated with the combustion of transportation fuels in California, whether refined in-state or imported.

2022 CARB SCOPING PLAN

On December 15, 2022, CARB adopted the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) (40). The 2022 Scoping Plan builds on the 2017 Scoping Plan as well as the requirements set forth by AB 1279, which directs the state to become carbon neutral no later than 2045. To achieve this statutory objective, the 2022 Scoping Plan lays out how California can reduce GHG emissions by 85% below 1990 levels and achieve carbon neutrality by 2045. The Scoping Plan scenario to do this is to "deploy a broad portfolio of existing and emerging fossil fuel alternatives and clean technologies, and align with statutes, Executive Orders, Board direction, and direction from the governor." The 2022 Scoping Plan sets one of the most aggressive approaches to reach carbon neutrality in the world. Unlike the 2017 Scoping Plan, CARB no longer includes a numeric per capita threshold and instead advocates for compliance with a local GHG reduction strategy (CAP) consistent with *CEQA Guidelines* section 15183.5.

The key elements of the 2022 CARB Scoping Plan focus on transportation - the regulations that will impact this sector are adopted and enforced by CARB on vehicle manufacturers and outside the jurisdiction and control of local governments. As stated in the Plan's executive summary:

> "The major element of this unprecedented transformation is the aggressive reduction of fossil fuels wherever they are currently used in California, building on and accelerating carbon reduction programs that have been in place for a decade and a half. That means rapidly moving to zero-emission transportation; electrifying the cars, buses, trains, and trucks that now constitute California's single largest source of planet-warming pollution."
>
> "[A]pproval of this plan catalyzes a number of efforts, including the development of new regulations as well as amendments to strengthen regulations and programs already in place, not just at CARB but across state agencies."

Under the 2022 Scoping Plan, the State will lead efforts to meet the 2045 carbon neutrality goal through implementation of the following objectives:

- Reimagine roadway projects that increase VMT in a way that meets community needs and reduces the need to drive.

- Double local transit capacity and service frequencies by 2030.
- Complete the High-Speed Rail (HSR) System and other elements of the intercity rail network by 2040.
- Expand and complete planned networks of high-quality active transportation infrastructure.
- Increase availability and affordability of bikes, e-bikes, scooters, and other alternatives to light-duty vehicles, prioritizing needs of underserved communities.
- Shift revenue generation for transportation projects away from the gas tax into more durable sources by 2030.
- Authorize and implement roadway pricing strategies and reallocate revenues to equitably improve transit, bicycling, and other sustainable transportation choices.
- Prioritize addressing key transit bottlenecks and other infrastructure investments to improve transit operational efficiency over investments that increase VMT.
- Develop and implement a statewide transportation demand management (TDM) framework with VMT mitigation requirements for large employers and large developments.
- Prevent uncontrolled growth of autonomous vehicle (AV) VMT, particularly zero-passenger miles.
- Channel new mobility services towards pooled use models, transit complementarity, and lower VMT outcomes.
- Establish an integrated statewide system for trip planning, booking, payment, and user accounts that enables efficient and equitable multimodal systems.
- Provide financial support for low-income and disadvantaged Californians' use of transit and new mobility services.
- Expand universal design features for new mobility services.
- Accelerate infill development in existing transportation-efficient places and deploy strategic resources to create more transportation-efficient locations.
- Encourage alignment in land use, housing, transportation, and conservation planning in adopted regional plans (RTP/SCS and RHNA) and local plans (e.g., general plans, zoning, and local transportation plans).
- Accelerate production of affordable housing in forms and locations that reduce VMT and affirmatively further fair housing policy objectives.
- Reduce or eliminate parking requirements (and/or enact parking maximums, as appropriate) and promote redevelopment of excess parking, especially in infill locations.
- Preserve and protect existing affordable housing stock and protect existing residents and businesses from displacement and climate risk.

Included in the 2022 Scoping Plan is a set of Local Actions (Appendix D to the 2022 Scoping Plan) aimed at providing local jurisdictions with tools to reduce GHGs and assist the state in meeting the ambitious targets set forth in the 2022 Scoping Plan. Appendix D to the 2022 Scoping Plan includes a section on evaluating plan-level and project-level alignment with the State's Climate Goals in CEQA GHG analyses. In this section, CARB identifies several recommendations and strategies that should be considered for new development in order to determine consistency with the 2022 Scoping Plan. Notably, this section is focused on Residential and Mixed-Use Projects, in fact CARB states in Appendix D (page 4): "…focuses primarily on climate action plans

(CAPs) and local authority over new residential development. It does not address other land use types (e.g., industrial) or air permitting."

Additionally on Page 21 in Appendix D, CARB states: "The recommendations outlined in this section apply only to residential and mixed-use development project types. California currently faces both a housing crisis and a climate crisis, which necessitates prioritizing recommendations for residential projects to address the housing crisis in a manner that simultaneously supports the State's GHG and regional air quality goals. CARB plans to continue to explore new approaches for other land use types in the future." As such, it would be inappropriate to apply the requirements contained in Appendix D of the 2022 Scoping Plan to any land use types other than residential or mixed-use residential development.

2.7.3.2 EXECUTIVE ORDERS RELATED TO GHG EMISSIONS

California's Executive Branch has taken several actions to reduce GHGs through the use of Executive Orders. Although not regulatory, they set the tone for the state and guide the actions of state agencies.

EXECUTIVE ORDER S-3-05

California Governor Arnold Schwarzenegger announced on June 1, 2005, through Executive Order S-3-05, the following reduction targets for GHG emissions:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80% below 1990 levels.

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that would stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an executive order, the goals are not legally enforceable for local governments or the private sector.

EXECUTIVE ORDER S-01-07 (LCFS)

Governor Schwarzenegger signed Executive Order S-01-07 on January 18, 2007. The order mandates that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10% by 2020. CARB adopted the LCFS on April 23, 2009.

After a series of legal changes, in order to address the Court ruling, CARB was required to bring a new LCFS regulation to the Board for consideration in February 2015. The proposed LCFS regulation was required to contain revisions to the 2010 LCFS as well as new provisions designed to foster investments in the production of the low-carbon intensity fuels, offer additional flexibility to regulated parties, update critical technical information, simplify and streamline program operations, and enhance enforcement. On November 16, 2015, the Office of Administrative Law (OAL) approved the Final Rulemaking Package. The new LCFS regulation became effective on January 1, 2016.

In 2018, CARB approved amendments to the regulation, which included strengthening the carbon intensity benchmarks through 2030 in compliance with the SB 32 GHG emissions reduction target for 2030. The amendments included crediting opportunities to promote zero emission vehicle adoption, alternative jet fuel, carbon capture and sequestration, and advanced technologies to achieve deep decarbonization in the transportation sector (41).

EXECUTIVE ORDER S-13-08

Executive Order S-13-08 states that "climate change in California during the next century is expected to shift precipitation patterns, accelerate sea level rise and increase temperatures, thereby posing a serious threat to California's economy, to the health and welfare of its population and to its natural resources." Pursuant to the requirements in the Order, the *2009 California Climate Adaptation Strategy* (*CNRA 2009*) was adopted, which is the "…first statewide, multi-sector, region-specific, and information-based climate change adaptation strategy in the United States." Objectives include analyzing risks of climate change in California, identifying, and exploring strategies to adapt to climate change, and specifying a direction for future research.

EXECUTIVE ORDER B-30-15

On April 29, 2015, Governor Brown issued an executive order to establish a California GHG reduction target of 40% below 1990 levels by 2030. The Governor's executive order aligned California's GHG reduction targets with those of leading international governments ahead of the U.N. Climate Change Conference in Paris late 2015. The Order sets a new interim statewide GHG emission reduction target to reduce GHG emissions to 40% below 1990 levels by 2030 in order to ensure California meets its target of reducing GHG emissions to 80% below 1990 levels by 2050 and directs CARB to update the *2017 Scoping Plan* to express the 2030 target in terms of $MMTCO_2e$. The Order also requires the state's climate adaptation plan to be updated every three years, and for the State to continue its climate change research program, among other provisions. As with Executive Order S-3-05, this Order is not legally enforceable to local governments and the private sector. Legislation that would update AB 32 to make post 2020 targets and requirements a mandate is in process in the State Legislature.

EXECUTIVE ORDER B-55-18 AND SB 100

SB 100 and Executive Order B-55-18 were signed by Governor Brown on September 10, 2018. Under the existing RPS, 25% of retail sales of electricity are required to be from renewable sources by December 31, 2016, 33% by December 31, 2020, 40% by December 31, 2024, 45% by December 31, 2027, and 50% by December 31, 2030. SB 100 raises California's RPS requirement to 50% renewable resources target by December 31, 2026, and to achieve a 60% target by December 31, 2030. SB 100 also requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt hours (kWh) of those products sold to their retail end-use customers achieve 44% of retail sales by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030. In addition to targets under AB 32 and SB 32, Executive Order B-55-18 establishes a carbon neutrality goal for the state of California by 2045; and sets a goal to maintain net negative emissions thereafter. The Executive Order directs the California Natural

Resources Agency (CNRA), California EPA (CalEPA), the California Department of Food and Agriculture (CDFA), and CARB to include sequestration targets in the Natural and Working Lands Climate Change Implementation Plan consistent with the carbon neutrality goal.

2.7.3.3 CALIFORNIA REGULATIONS AND BUILDING CODES

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California's energy consumption relatively flat even with rapid population growth.

TITLE 20 CCR SECTIONS 1601 ET SEQ. – APPLIANCE EFFICIENCY REGULATIONS

The Appliance Efficiency Regulations regulate the sale of appliances in California. The Appliance Efficiency Regulations include standards for both federally regulated appliances and non-federally regulated appliances. Twenty-three categories of appliances are included in the scope of these regulations. The standards within these regulations apply to appliances that are sold or offered for sale in California, except those sold wholesale in California for final retail sale outside the state and those designed and sold exclusively for use in recreational vehicles (RV) or other mobile equipment (CEC 2012).

TITLE 24 ENERGY EFFICIENCY STANDARDS AND CALIFORNIA GREEN BUILDING STANDARDS

California Code of Regulations (CCR) Title 24 Part 6: The California Energy Code was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption.

The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. CCR, Title 24, Part 11: California Green Building Standards Code (CALGreen) is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on August 1, 2009, and is administered by the California Building Standards Commission.

CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2022 California Green Building Code Standards that became effective on January 1, 2023. The CEC anticipates that the 2022 energy code will provide $1.5 billion in consumer benefits and reduce GHG emissions by 10 million metric tons (42). The Project would be required to comply with the applicable standards in place at the time plan check submittals are made. These require, among other items (43):

RESIDENTIAL MANDATORY MEASURES

- Electric vehicle (EV) charging stations. New construction shall comply with Section 4.106.4.1, 4.106.4.2, 4.106.4.3, to facilitate future installation and use of EV chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the *California Electrical Code*, Article 625. (4.106.4).
    - New one- and two-family dwellings and town-houses with attached private garages. For each dwelling unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location

of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces. The service panel and/or subpanel shall provide capacity to install a 40-ampere 208/240-volt minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.

- New hotels and motels. All newly constructed hotels and motels shall provide EV spaces capable of supporting future installation of EVSE. The construction documents shall identify the location of the EV spaces. The number of required EV spaces shall be based on the total number of parking spaces provided for all types of parking facilities in accordance with Table 4.106.4.3.1.

- Water conserving plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with Sections 4.303.1.1, 4.303.1.2, 4.303.1.3, and 4.303.1.4.
- Outdoor potable water use in landscape areas. Residential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent.
- Operation and maintenance manual. At the time of final inspection, a manual, compact disc, web-based reference or other media acceptable to the enforcing agency which includes all of the following shall be placed in the building:
  - Directions to the owner or occupant that the manual shall remain with the building throughout the life cycle of the structure.
  - Operations and maintenance instructions for the following:
    - Equipment and appliances, including water-saving devices and systems, HVAC systems, photovoltaic systems, EV chargers, water-heating systems and other major appliances and equipment.
    - Roof and yard drainage, including gutter and downspouts.
    - Space conditioning systems, including condensers and air filters.
    - Landscape irrigation systems.
    - Water reuse systems.
  - Information from local utility, water and waste recovery providers on methods to further reduce future resource consumption, including recycling programs and locations.
  - Public transportation and/or carpool options available in the area.
  - Educational material on the positive impacts of an interior relative humidity between 30-60% and what methods occupants may use to maintain the relative humidity level in that range.
  - Information about water-conserving landscape and irrigation design and controllers which conserve water.
  - Instructions for maintaining gutters and downspouts and the importance of diverting water at least 5 feet away from the foundation.
  - Information about state solar energy and incentive programs available.
  - A copy of all special inspection verifications required by the enforcing agency of this code.
  - Information from CALFIRE on maintenance of defensible space around residential structures.

- Any installed gas fireplace shall be direct-vent sealed-combustion type. Any installed woodstove or pellet stove shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as applicable, and shall have a permanent label indicating they are certified to meet the emission limits. Woodstoves, pellet stoves and fireplaces shall also comply with applicable local ordinances.
- Paints and coatings. Architectural paints and coatings shall comply with VOC limits in Table 1 of the CARB Architectural Suggested Control Measure, as shown in Table 4.504.3, unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 4.504.3 shall be determined by classifying the coating as a Flat, Nonflat, or Nonflat-high Gloss coating, based on its glass, as defined in subsections 4.21, 4.36, and 4.37 of the 2007 CARB, Suggested Control Measure, and the corresponding Flat, Nonflat, Nonflat-high Gloss VOC limit in Table 4.504.3 shall apply.

CARB REFRIGERANT MANAGEMENT PROGRAM

CARB adopted a regulation in 2009 to reduce refrigerant GHG emissions from stationary sources through refrigerant leak detection and monitoring, leak repair, system retirement and retrofitting, reporting and recordkeeping, and proper refrigerant cylinder use, sale, and disposal. The regulation is set forth in sections 95380 to 95398 of Title 17, CCR. The rules implementing the regulation establish a limit on statewide GHG emissions from stationary facilities with refrigeration systems with more than 50 pounds of a high GWP refrigerant. The refrigerant management program is designed to (1) reduce emissions of high-GWP GHG refrigerants from leaky stationary, non-residential refrigeration equipment; (2) reduce emissions from the installation and servicing of refrigeration and air-conditioning appliances using high-GWP refrigerants; and (3) verify GHG emission reductions.

TRACTOR-TRAILER GHG REGULATION

The tractors and trailers subject to this regulation must either use EPA SmartWay certified tractors and trailers or retrofit their existing fleet with SmartWay verified technologies. The regulation applies primarily to owners of 53-foot or longer box-type trailers, including both dry-van and refrigerated-van trailers, and owners of the HD tractors that pull them on California highways. These owners are responsible for replacing or retrofitting their affected vehicles with compliant aerodynamic technologies and low rolling resistance tires. Sleeper cab tractors MY 2011 and later must be SmartWay certified. All other tractors must use SmartWay verified low rolling resistance tires. There are also requirements for trailers to have low rolling resistance tires and aerodynamic devices.

PHASE I AND 2 HEAVY-DUTY VEHICLE GHG STANDARDS

In September 2011, CARB adopted a regulation for GHG emissions from HDTs and engines sold in California. It establishes GHG emission limits on truck and engine manufacturers and harmonizes with the EPA rule for new trucks and engines nationally. Existing HD vehicle regulations in California include engine criteria emission standards, tractor-trailer GHG requirements to implement SmartWay strategies (i.e., the Heavy-Duty Tractor-Trailer GHG Regulation), and in-use fleet retrofit requirements such as the Truck and Bus Regulation. The EPA rule has compliance requirements for new compression and spark ignition engines, as well

as trucks from Class 2b through Class 8. Compliance requirements began with MY 2014 with stringency levels increasing through MY 2018. The rule organizes truck compliance into three groupings, which include a) HD pickups and vans; b) vocational vehicles; and c) combination tractors. The EPA rule does not regulate trailers.

CARB staff has worked jointly with the EPA and the NHTSA on the next phase of federal GHG emission standards for medium-duty trucks (MDT) and HDT vehicles, called federal Phase 2. The federal Phase 2 standards were built on the improvements in engine and vehicle efficiency required by the Phase 1 emission standards and represent a significant opportunity to achieve further GHG reductions for 2018 and later MY HDT vehicles, including trailers. The EPA and NHTSA have proposed to roll back GHG and fuel economy standards for cars and light-duty trucks, which suggests a similar rollback of Phase 2 standards for MDT and HDT vehicles may be pursued.

SB 97 AND THE CEQA GUIDELINES UPDATE

Passed in August 2007, SB 97 added Section 21083.05 to the Public Resources Code. The code states "(a) On or before July 1, 2009, the Office of Planning and Research (OPR) shall prepare, develop, and transmit to the Resources Agency guidelines for the mitigation of GHG emissions or the effects of GHG emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption. (b) On or before January 1, 2010, the Resources Agency shall certify and adopt guidelines prepared and developed by the OPR pursuant to subdivision (a)."

In 2012, Public Resources Code Section 21083.05 was amended to state:

> *"The Office of Planning and Research and the Natural Resources Agency shall periodically update the guidelines for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption, to incorporate new information or criteria established by the State Air Resources Board pursuant to Division 25.5 (commencing with Section 38500) of the Health and Safety Code."*

On December 28, 2018, the Natural Resources Agency announced the OAL approved the amendments to the *CEQA Guidelines* for implementing CEQA. The CEQA Amendments provide guidance to public agencies regarding the analysis and mitigation of the effects of GHG emissions in CEQA documents. The CEQA Amendments fit within the existing CEQA framework by amending existing *CEQA Guidelines* to reference climate change.

Section 15064.4 was added to the *CEQA Guidelines* and states that in determining the significance of a project's GHG emissions, the lead agency should focus its analysis on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change. A project's incremental contribution may be cumulatively considerable even if it appears relatively insignificant compared to statewide, national, or global emissions. The agency's analysis should consider a timeframe that is appropriate for the project. The agency's analysis also must reasonably reflect evolving scientific knowledge and state regulatory schemes. Additionally, a lead agency may use a model or methodology to estimate GHG emissions resulting

from a project. The lead agency has discretion to select the model or methodology it considers most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change. The lead agency must support its selection of a model or methodology with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use (44).

2.7.4 REGIONAL

The Project site is located within the South Coast Air Basin (SCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD).

SCAQMD

The SCAQMD is the agency responsible for air quality planning and regulation in the SCAB. The SCAQMD addresses the impacts to climate change of projects subject to SCAQMD permit as a lead agency if they are the only agency having discretionary approval for the project and acts as a responsible agency when a land use agency must also approve discretionary permits for the project. The SCAQMD acts as an expert commenting agency for impacts to air quality. This expertise carries over to GHG emissions, so the agency helps local land use agencies through the development of models and emission thresholds that can be used to address GHG emissions.

The SCAQMD has been evaluating GHG significance thresholds since April 2008. On December 5, 2008, the SCAQMD Governing Board adopted an Interim CEQA Greenhouse Gas Significance Threshold of 10,000 $MTCO_2e$ per year for stationary source/industrial projects for which the SCAQMD is the lead agency. The SCAQMD has continued to consider then adoption of significance thresholds for projects where the SCAQMD is not the lead agency. The most recent proposal issued in September 2010 uses the following tiered approach to evaluate potential GHG impacts from various uses:

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.
- Tier 2 consists of determining whether the project is consistent with a locally adopted GHG reduction plan. If a project is consistent with a qualifying locally adopted GHG reduction plan, it does not have significant GHG emissions.
- Tier 3 consists of screening thresholds, which the lead agency can choose, but must be consistent with all projects within its jurisdiction. A project's construction emissions are averaged over 30 years and are added to the project's operational emissions. If a project's emissions are below one of the following screening thresholds, then the project is less than significant:
  - Residential and commercial land use: 3,000 $MTCO_2e$/yr
  - Industrial land use: 10,000 $MTCO_2e$/yr
  - Option 1: Based on land use type: residential: 3,500 $MTCO_2e$/yr; commercial: 1,400 $MTCO_2e$/yr; or mixed use: 3,000 $MTCO_2e$/yr
  - Option 2: All non-indstural alnd uses: 3,000 $MTCO_2e$/yr
- Tier 4 has the following options:
  - Option 1: Percent emission reduction target; this percentage is currently undefined.

- Option 2: Early implementation of applicable AB 32 Scoping Plan measures
- Option 3: 2020 target for service populations (SP), which includes residents and employees: 4.8 $MTCO_2e$ per SP per year for projects and 6.6 $MTCO_2e$ per SP per year for plans;
- Option 3, 2035 target: 3.0 $MTCO_2e$ per SP per year for projects and 4.1 $MTCO_2e$ per SP per year for plans

- Tier 5 involves mitigation offsets to achieve target significance threshold.

The SCAQMD's draft thresholds used the Executive Order S-3-05-year 2050 goal as the basis for the Tier 3 screening level. Achieving the Executive Order's objective would contribute to worldwide efforts to cap CO_2 concentrations at 450 ppm, thus stabilizing global climate.

SCAQMD Regulation XXVII, adopted in 2009 includes the following rules:

- Rule 2700 defines terms and post global warming potentials.
- Rule 2701, SoCal Climate Solutions Exchange, establishes a voluntary program to encourage, quantify, and certify voluntary, high quality certified GHG emission reductions in the SCAQMD.
- Rule 2702, GHG Reduction Program created a program to produce GHG emission reductions within the SCAQMD. The SCAQMD would fund projects through contracts in response to requests for proposals or purchase reductions from other parties.

2.7.5 CITY OF ONTARIO COMMUNITY CLIMATE ACTION PLAN

The City of Ontario adopted the Community Climate Action Plan (CCAP) on December 16, 2014. The CAP contains further guidance on the City of Ontario's GHG Inventory reduction goals, policies, guidelines, and implementation programs. The purpose of the CAP is to provide guidance on how to analyze GHG emissions and determine significance during the CEQA review of proposed development projects within the City of Ontario (45). The CAP builds upon the Reduction Plan to address City-specific information and City-specific GHG reduction measures. To address the state's requirement to reduce GHG emissions, the City prepared its CAP with the goal of reducing GHG emissions within the City by 15% below 2008 levels by the year 2020. The City's target is consistent with the AB 32 target and ensures that the City of Ontario achieves GHG reductions locally that complement and are consistent with state efforts to reduce GHG emissions.

As part of the CAP, the City of Ontario published a guidance document titled "Greenhouse Gas Emissions, CEQA Thresholds and Screening Tables" (December 2014). As part of this guidance, the City determined that if GHG emissions of a given project exceeds 3,000 $MTCO_2e$/yr, then project emissions would need to be reduced by 25 percent when compared to year 2008 emissions levels. Alternatively, the project would need to achieve a minimum of 100 points pursuant to measures identified in the Screening Tables.

The Ontario Plan (TOP) 2050 includes an update to the City's Community Climate Action Plan (CCAP Update) which was adopted in 2014. The CCAP Update is a plan to reduce greenhouse gas (GHG) emissions and improve community resilience to hazardous conditions associated with climate change. The update to the CCAP includes updated emissions inventories; updated emissions forecasts; identifies GHG emissions reduction targets to achieve the GHG reduction

goals of the City of Ontario consistent with Senate Bill 32, Executive Order S-03-05, and substantial progress toward the State's carbon neutrality goals of Executive Order B-55-18; and measures, that when quantified, achieve the GHG reduction targets for the City. As noted in *The Ontario Plan 2050 Final Supplemental Environmental Impact Report* (SCH No. 2021070364) certified by the City in 2022 (TOP 2050 SEIR), the measures included in the 2022 CCAP Update are not substantially different than that of the 2014 CCAP and therefore there is no change in the environmental impacts associated with the CCAP.

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3 PROJECT GHG IMPACT

3.1 INTRODUCTION

The Project has been evaluated to determine if it will result in a significant GHG impact. The significance of these potential impacts is described in the following sections.

3.2 STANDARDS OF SIGNIFICANCE

The criteria used to determine the significance of potential Project-related GHG impacts are taken from the Initial Study Checklist in Appendix G of the State *CEQA Guidelines* (14 CCR of Regulations §§15000, et seq.). Based on these thresholds, the following questions are utilized to determine if a project would result in a significant impact related to GHG (46):

- **Would the project generate direct or indirect GHG emissions that would result in a significant impact on the environment (see Impact GHG-1)?**
- **Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of GHGs (see Impact GHG-2)?**

The evaluation of an impact under CEQA requires measuring data from a project against both existing conditions and a "threshold of significance." For establishing significance thresholds, the Office of Planning and Research's amendments to the CEQA Guidelines Section 15064.7(c) state "[w]hen adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence."

CEQA Guidelines Section 15064.4(a) further states, ". . . A lead agency shall have discretion to determine, in the context of a particular project, whether to: (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use . . .; or (2) Rely on a qualitative analysis or performance-based standards."

CEQA Guidelines Section 15064.4 provides that a lead agency should consider the following factors, among others, in assessing the significance of impacts from greenhouse gas emissions:

- **Consideration #1**: The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.
- **Consideration #2**: Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- **Consideration #3**: The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. In determining the significance of impacts, the lead agency may consider a project's consistency with the State's long-term climate goals or strategies, provided that substantial

evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable.

As noted above in Section 2.7.5, the update to the CCAP includes updated emissions inventories; updated emissions forecasts; identifies GHG emissions reduction targets to achieve the GHG reduction goals of the City of Ontario consistent with Senate Bill 32, Executive Order S-03-05, and substantial progress toward the State's carbon neutrality goals of Executive Order B-55-18; and measures, that when quantified, achieve the GHG reduction targets for the City. As noted in the TOP EIR, the measures included in the 2022 update to the CCAP are not substantially different than that of the 2014 CCAP. Because the 2022 Update to the CCAP addresses GHG emissions reductions and is consistent with the requirements of AB 32, SB 32, and international efforts to reduce GHG emissions, Projects that comply with the CCAP Update would have a less than significant GHG impact.

3.3 MODELS EMPLOYED TO ANALYZE GHGS

3.3.1 CALIFORNIA EMISSIONS ESTIMATOR MODEL (CALEEMOD)

In August 2023, the California Air Pollution Control Officers Association (CAPCOA) in conjunction with other California air districts including the SCAQMD, released the latest version of the California Emissions Estimator Model (CalEEMod) version 2022.1.1.22. The purpose of this model is to calculate construction-source and operational-source criteria pollutants and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures (47). Accordingly, the latest version of CalEEMod has been used for this Project to determine GHG emissions. Output from the model runs for construction and operational activity are provided in Appendix 3.1. CalEEMod includes GHG emissions from the following source categories: construction, area, energy, mobile, waste, water, and refrigerants.

3.4 LIFE-CYCLE ANALYSIS NOT REQUIRED

A full life-cycle analysis (LCA) for construction and operational activity is not included in this analysis due to the lack of consensus guidance on LCA methodology at this time (48). Life-cycle analysis (i.e., assessing economy-wide GHG emissions from the processes in manufacturing and transporting all raw materials used in the Project development, infrastructure, and on-going operations) depends on emission factors or econometric factors that are not well established for all processes. At this time, an LCA would be extremely speculative and thus has not been prepared.

Additionally, the SCAQMD recommends analyzing direct and indirect project GHG emissions generated within California and not life-cycle emissions because the life-cycle effects from a project could occur outside of California, might not be very well understood, or documented, and would be challenging to mitigate (49). Additionally, the science to calculate life cycle emissions is not yet established or well defined; therefore, the SCAQMD has not recommended, and is not requiring, life-cycle emissions analysis.

3.5 CONSTRUCTION EMISSIONS

Project construction activities would generate CO_2 and CH_4 emissions. The *Empire Groves Hotel Air Quality Impact Analysis* (AQIA) report contains detailed information regarding Project construction activities (50). As discussed in the AQIA, construction-related emissions are expected from the following activities:

- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

3.5.1 CONSTRUCTION DURATION

For purposes of analysis, construction of Project is expected to commence June 2026 and would last through September 2025. The construction schedule utilized in the analysis, shown in Table 3-1, represents a "conservative" analysis scenario should construction occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent.[3] The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per the *CEQA Guidelines* (51).

TABLE 3-1: CONSTRUCTION DURATION

Construction Activity	Start Date	End Date	Working Days
Site Preparation	6/3/2024	6/14/2024	10
Grading	6/17/2024	7/26/2024	30
Building Construction	7/29/2024	9/19/2025	300
Paving	8/25/2025	9/19/2025	20
Architectural Coating	5/19/2025	9/19/2025	90

3.5.2 CONSTRUCTION EQUIPMENT

Consistent with industry standards and typical construction practices, each piece of equipment listed in Table 3-2 is assumed to operate up to a total of eight (8) hours per day, or more than two-thirds of the period during which construction activities are allowed pursuant to the City code.

TABLE 3-2: CONSTRUCTION EQUIPMENT ASSUMPTIONS

[3] As shown in the CalEEMod User's Guide Version 2022, Appendix G "Table G-11. Statewide Average Annual Offoad Equipment Emission Factors" as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

Construction Activity	Equipment	Amount	Hours Per Day
Site Preparation	Rubber Tired Dozers	3	8
	Crawler Tractors	4	8
Grading	Graders	1	8
	Excavators	2	8
	Scrapers	2	8
	Rubber Tired Dozers	1	8
	Crawler Tractors	1	8
Building Construction	Forklifts	2	8
	Generator Sets	3	8
	Cranes	1	8
	Welders	1	8
	Tractors/Loaders/Backhoes	1	8
Paving	Pavers	2	8
	Paving Equipment	2	8
	Rollers	2	8
Architectural Coating	Air Compressors	1	8

3.5.3 CONSTRUCTION EMISSIONS SUMMARY

For construction phase Project emissions, GHGs are quantified and amortized over the life of the Project. To amortize the emissions over the life of the Project, the SCAQMD recommends calculating the total GHG emissions for the construction activities, dividing it by a 30-year Project life then adding that number to the annual operational phase GHG emissions (52). As such, construction emissions were amortized over a 30-year period and added to the annual operational phase GHG emissions. The amortized construction emissions are presented in Table 3-3.

TABLE 3-3: AMORTIZED ANNUAL CONSTRUCTION EMISSIONS

Year	Emissions (MT/yr)				
	CO_2	CH_4	N_2O	Refrigerants	Total CO_2e[4]
2024	1,337.97	0.10	0.14	1.36	1,382.21
2025	1,213.29	0.07	0.09	1.46	1,241.89
Total GHG Emissions	2,551.26	0.17	0.22	2.82	2,624.10
Amortized Construction Emissions	**85.04**	**5.65E-03**	**7.36E-03**	**9.40E-02**	**87.47**

[4] CalEEMod reports the most common GHGs emitted which include CO_2, CH_4, and N_2O. These GHGs are then converted into the CO_2e by multiplying the individual GHG by the GWP.

Source: CalEEMod annual construction-source emissions are presented in Appendix 3.1.

3.6 OPERATIONAL EMISSIONS

Operational activities associated with the Project would result in emissions of CO_2, CH_4, N_2O, and Refrigerant emissions from the following primary sources:

- Area Source Emissions
- Energy Source Emissions
- Mobile Source Emissions
- Water Supply, Treatment, and Distribution
- Solid Waste
- Refrigerants

3.6.1 AREA SOURCE EMISSIONS

LANDSCAPE MAINTENANCE EQUIPMENT

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shedders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the Project. It should be noted that on October 9, 2021, Governor Gavin Newsom signed AB 1346. The bill aims to ban the sale of new gasoline-powered equipment under 25 gross horsepower (known as small off-road engines [SOREs]) by 2024, which is now effective. For purposes of analysis, the emissions associated with landscape maintenance equipment were calculated based on assumptions provided in CalEEMod.

3.6.2 ENERGY SOURCE EMISSIONS

COMBUSTION EMISSIONS ASSOCIATED WITH NATURAL GAS AND ELECTRICITY

GHGs are emitted from buildings as a result of activities for which electricity and natural gas are typically used as energy sources. Combustion of any type of fuel emits CO_2 and other GHGs directly into the atmosphere; these emissions are considered direct emissions associated with a building; the building energy use emissions do not include street lighting.[5] GHGs are also emitted during the generation of electricity from fossil fuels; these emissions are considered to be indirect emissions. Electricity and natural gas usage associated with the Project was calculated by CalEEMod using default parameters.

3.6.3 MOBILE SOURCE EMISSIONS

The Project related GHG emissions derive primarily from vehicle trips generated by the Project, including employee trips to and from the site associated with the proposed uses. Trip

[5] The CalEEMod emissions inventory model does not include indirect emission related to street lighting. Indirect emissions related to street lighting are expected to be negligible and cannot be accurately quantified at this time as there is insufficient information as to the number and type of street lighting that would occur.

characteristics available from the *Empire Groves Hotel Traffic Analysis* were utilized in this analysis (53).

3.6.4 WATER SUPPLY, TREATMENT, AND DISTRIBUTION

Indirect GHG emissions result from the production of electricity used to convey, treat, and distribute water and wastewater. The amount of electricity required to convey, treat, and distribute water depends on the volume of water as well as the sources of the water. Unless otherwise noted, CalEEMod default parameters were used.

3.6.5 SOLID WASTE

The proposed land uses would result in the generation and disposal of solid waste. A percentage of this waste would be diverted from landfills by a variety of means, such as reducing the amount of waste generated, recycling, and/or composting. The remainder of the waste not diverted would be disposed of at a landfill. GHG emissions from landfills are associated with the anaerobic breakdown of material. GHG emissions associated with the disposal of solid waste associated with the proposed Project were calculated by CalEEMod using default parameters.

3.6.6 REFRIGERANTS

Air conditioning (A/C) and refrigeration equipment associated with the buildings are anticipated to generate GHG emissions. CalEEMod automatically generates a default A/C and refrigeration equipment inventory for each project land use subtype based on industry data from the USEPA (2016b). CalEEMod quantifies refrigerant emissions from leaks during regular operation and routine servicing over the equipment lifetime and then derives average annual emissions from the lifetime estimate. Note that CalEEMod does not quantify emissions from the disposal of refrigeration and A/C equipment at the end of its lifetime. Per 17 CCR 95371, new facilities with refrigeration equipment containing more than 50 pounds of refrigerant are prohibited from utilizing refrigerants with a GWP of 150 or greater as of January 1, 2022. Additionally, beginning January 1, 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater. GHG emissions associated with refrigerants were calculated by CalEEMod using default parameters.

3.6.7 EMISSIONS SUMMARY

The estimated Project-related GHG emissions are summarized in Table 3-4. Detailed operation model outputs for the Project are presented in Appendix 3.1. As shown in Table 3-4, construction and operation of the Project would generate approximately 9,661.88 $MTCO_2e$/yr.

TABLE 3-4: PROJECT GHG EMISSIONS

Emission Source	Emissions (MT/yr)				
	CO_2	CH_4	N_2O	Refrigerants	Total CO_2e
Annual construction-related emissions amortized over 30 years	85.04	5.65E-03	7.36E-03	9.40E-02	87.47
Mobile Source	6302.52	0.32	0.32	10.69	6415.24
Area Source	22.02	0.00	0.00	0.00	22.10
Energy Source	2923.18	0.27	0.02	0.00	2936.99
Water Usage	21.21	0.50	0.01	0.00	37.19
Waste	29.31	2.93	0.00	0.00	102.55
Refrigerants	0.00	0.00	0.00	60.33	60.33
Total CO_2e (All Sources)	**9,661.88**				

Source: CalEEMod output, See Appendix 3.1 for detailed model outputs.

3.7 GHG EMISSIONS FINDINGS AND RECOMMENDATIONS

GHG -1: Would the Project generate GHG emissions either directly or indirectly, that may have a significant impact on the environment?

GHG-2: Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

The purpose of the 2022 CCAP Update is to provide guidance on how to analyze GHG emissions and determine significance during the CEQA review of proposed development projects within the City. Because the 2022 CCAP Update addresses GHG emissions reductions and is consistent with the requirements of AB 32, SB 32, and international efforts to reduce GHG emissions, compliance with the CAP Update fulfills the description of mitigation found in the State CEQA Guidelines.

The Project will implement Screening Table Measures that achieve the requisite points pursuant to PDF GHG-1. The City shall verify that Screening Table Measures achieving the requisite points are incorporated in development plans prior to the issuance of building permit(s) and/or site plans (as applicable). The City shall verify implementation of the selected Screening Table Measures prior to the issuance of Certificate(s) of Occupancy. At the discretion of the City, measures that provide GHG reductions equivalent to GHG emissions reductions achieved via the Screening Table Measures may be implemented. Alternatively, the Project shall demonstrate that annual GHG emissions would not exceed the target thresholds or other alternative compliance mechanisms in the CCAP or subsequent updates. As such, the Project would be consistent with the GHG Development Review Process' requirement to achieve the requisite amount of points and thus the Project is considered to have a less than significant individual and cumulatively considerable impact on GHG emissions. Appendix 3.2 includes the CCAP Screening Tables measures anticipated to be implemented by the proposed Project.

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5 CERTIFICATIONS

The contents of this GHG study report represent an accurate depiction of the GHG impacts associated with the proposed Empire Groves Hotel Project. The information contained in this GHG report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at hqureshi@urbanxroads.com.

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Master of Science in Environmental Studies
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AEP – Association of Environmental Professionals
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Planned Communities and Urban Infill – Urban Land Institute • June 2011
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APPENDIX 3.1:

CALEEMOD PROJECT EMISSIONS MODEL OUTPUTS

15693 - Guasti and Holt Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	15693 - Guasti and Holt
Construction Start Date	6/3/2024
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.80
Precipitation (days)	20.8
Location	34.064251, -117.602592
County	San Bernardino-South Coast
City	Ontario
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5246
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Hotel	600	Room	6.90	649,498	0.00	—	—	—
Enclosed Parking with Elevator	436	1000sqft	3.53	436,410	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.90	39.4	85.1	72.3	0.32	2.50	13.2	15.7	2.12	3.84	5.96	—	45,639	45,639	4.53	6.28	82.8	47,705
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.54	3.67	20.7	46.5	0.06	0.61	7.30	7.91	0.57	1.77	2.33	—	13,573	13,573	0.77	0.98	1.04	13,886
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.34	10.3	14.7	25.6	0.05	0.45	4.00	4.30	0.40	0.96	1.32	—	8,081	8,081	0.61	0.82	8.83	8,349
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.43	1.88	2.68	4.67	0.01	0.08	0.73	0.78	0.07	0.18	0.24	—	1,338	1,338	0.10	0.14	1.46	1,382

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	9.90	4.86	85.1	59.6	0.32	2.50	13.2	15.7	2.12	3.84	5.96	—	45,639	45,639	4.53	6.28	82.8	47,705
2025	5.95	39.4	27.8	72.3	0.08	0.92	8.69	9.62	0.85	2.09	2.95	—	17,086	17,086	0.88	1.05	43.0	17,464
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.54	3.67	20.7	46.5	0.06	0.61	7.30	7.91	0.57	1.77	2.33	—	13,573	13,573	0.77	0.98	1.04	13,886
2025	4.11	3.30	19.1	43.8	0.06	0.54	7.30	7.84	0.50	1.77	2.27	—	13,368	13,368	0.76	0.98	0.97	13,681
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	2.34	1.64	14.7	20.5	0.05	0.45	3.44	3.89	0.40	0.92	1.32	—	8,081	8,081	0.61	0.82	8.21	8,349
2025	2.31	10.3	10.7	25.6	0.03	0.30	4.00	4.30	0.28	0.96	1.25	—	7,328	7,328	0.41	0.52	8.83	7,501
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.43	0.30	2.68	3.74	0.01	0.08	0.63	0.71	0.07	0.17	0.24	—	1,338	1,338	0.10	0.14	1.36	1,382
2025	0.42	1.88	1.96	4.67	0.01	0.06	0.73	0.78	0.05	0.18	0.23	—	1,213	1,213	0.07	0.09	1.46	1,242

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	30.6	43.3	23.8	224	0.44	0.76	35.0	35.7	0.72	8.88	9.60	206	60,032	60,238	24.3	2.13	521	62,001
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	20.8	34.1	24.8	148	0.42	0.68	35.0	35.6	0.66	8.88	9.54	206	57,197	57,403	24.4	2.19	368	59,034

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	25.5	38.4	24.5	179	0.40	0.72	33.0	33.7	0.69	8.37	9.06	206	55,956	56,162	24.3	2.12	429	57,830
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.66	7.02	4.48	32.8	0.07	0.13	6.01	6.15	0.13	1.53	1.65	34.1	9,264	9,298	4.02	0.35	71.0	9,574

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	21.7	19.7	18.2	172	0.41	0.28	35.0	35.2	0.27	8.88	9.14	—	42,082	42,082	1.97	1.91	157	42,858
Area	8.40	23.3	0.40	47.2	< 0.005	0.08	—	0.08	0.06	—	0.06	—	194	194	0.01	< 0.005	—	195
Energy	0.57	0.29	5.21	4.38	0.03	0.40	—	0.40	0.40	—	0.40	—	17,656	17,656	1.63	0.14	—	17,740
Water	—	—	—	—	—	—	—	—	—	—	—	29.2	99.0	128	3.00	0.07	—	225
Waste	—	—	—	—	—	—	—	—	—	—	—	177	0.00	177	17.7	0.00	—	619
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	364	364
Total	30.6	43.3	23.8	224	0.44	0.76	35.0	35.7	0.72	8.88	9.60	206	60,032	60,238	24.3	2.13	521	62,001
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	20.2	18.2	19.6	144	0.38	0.28	35.0	35.2	0.27	8.88	9.14	—	39,442	39,442	2.05	1.98	4.06	40,086
Area	—	15.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.57	0.29	5.21	4.38	0.03	0.40	—	0.40	0.40	—	0.40	—	17,656	17,656	1.63	0.14	—	17,740
Water	—	—	—	—	—	—	—	—	—	—	—	29.2	99.0	128	3.00	0.07	—	225
Waste	—	—	—	—	—	—	—	—	—	—	—	177	0.00	177	17.7	0.00	—	619
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	364	364

Total	20.8	34.1	24.8	148	0.42	0.68	35.0	35.6	0.66	8.88	9.54	206	57,197	57,403	24.4	2.19	368	59,034
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	19.2	17.3	19.0	143	0.37	0.27	33.0	33.2	0.25	8.37	8.62	—	38,068	38,068	1.96	1.90	64.6	38,748
Area	5.75	20.9	0.27	32.3	< 0.005	0.06	—	0.06	0.04	—	0.04	—	133	133	0.01	< 0.005	—	134
Energy	0.57	0.29	5.21	4.38	0.03	0.40	—	0.40	0.40	—	0.40	—	17,656	17,656	1.63	0.14	—	17,740
Water	—	—	—	—	—	—	—	—	—	—	—	29.2	99.0	128	3.00	0.07	—	225
Waste	—	—	—	—	—	—	—	—	—	—	—	177	0.00	177	17.7	0.00	—	619
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	364	364
Total	25.5	38.4	24.5	179	0.40	0.72	33.0	33.7	0.69	8.37	9.06	206	55,956	56,162	24.3	2.12	429	57,830
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.50	3.15	3.48	26.1	0.07	0.05	6.01	6.06	0.05	1.53	1.57	—	6,303	6,303	0.32	0.32	10.7	6,415
Area	1.05	3.81	0.05	5.90	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.0	22.0	< 0.005	< 0.005	—	22.1
Energy	0.10	0.05	0.95	0.80	0.01	0.07	—	0.07	0.07	—	0.07	—	2,923	2,923	0.27	0.02	—	2,937
Water	—	—	—	—	—	—	—	—	—	—	—	4.83	16.4	21.2	0.50	0.01	—	37.2
Waste	—	—	—	—	—	—	—	—	—	—	—	29.3	0.00	29.3	2.93	0.00	—	103
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60.3	60.3
Total	4.66	7.02	4.48	32.8	0.07	0.13	6.01	6.15	0.13	1.53	1.65	34.1	9,264	9,298	4.02	0.35	71.0	9,574

3. Construction Emissions Details

3.1. Site Preparation (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	5.35	4.49	42.5	35.3	0.05	2.25	—	2.25	2.07	—	2.07	—	5,529	5,529	0.22	0.04	—	5,548
Dust From Material Movemen	—	—	—	—	—	—	5.66	5.66	—	2.69	2.69	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.16	0.97	< 0.005	0.06	—	0.06	0.06	—	0.06	—	151	151	0.01	< 0.005	—	152
Dust From Material Movemen	—	—	—	—	—	—	0.16	0.16	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.21	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	25.1	25.1	< 0.005	< 0.005	—	25.2
Dust From Material Movemen	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.08	1.48	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	252	252	0.01	0.01	1.01	256

Vendor	0.02	< 0.005	0.18	0.10	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	157	157	0.01	0.02	0.44	164
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.42	6.42	< 0.005	< 0.005	0.01	6.51
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.30	4.30	< 0.005	< 0.005	0.01	4.50
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.06	1.06	< 0.005	< 0.005	< 0.005	1.08
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.71	0.71	< 0.005	< 0.005	< 0.005	0.75
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.69	3.94	37.6	31.4	0.06	1.77	—	1.77	1.63	—	1.63	—	6,715	6,715	0.27	0.05	—	6,738
Dust From Material Movemen:	—	—	—	—	—	—	2.74	2.74	—	0.99	0.99	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.39	0.32	3.09	2.58	0.01	0.15	—	0.15	0.13	—	0.13	—	552	552	0.02	< 0.005	—	554
Dust From Material Movemen:	—	—	—	—	—	—	0.22	0.22	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.56	0.47	< 0.005	0.03	—	0.03	0.02	—	0.02	—	91.4	91.4	< 0.005	< 0.005	—	91.7
Dust From Material Movemen:	—	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.10	1.69	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	288	288	0.01	0.01	1.15	292
Vendor	0.05	0.01	0.58	0.31	< 0.005	0.01	0.14	0.14	0.01	0.04	0.05	—	502	502	0.04	0.07	1.40	526
Hauling	5.04	0.80	46.9	26.2	0.25	0.72	10.0	10.8	0.48	2.75	3.23	—	38,134	38,134	4.20	6.14	80.3	40,149
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	22.0	22.0	< 0.005	< 0.005	0.04	22.3
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	41.2	41.2	< 0.005	0.01	0.05	43.2
Hauling	0.41	0.06	4.06	2.16	0.02	0.06	0.82	0.88	0.04	0.22	0.26	—	3,135	3,135	0.35	0.50	2.84	3,297
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.64	3.64	< 0.005	< 0.005	0.01	3.69
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.83	6.83	< 0.005	< 0.005	0.01	7.15
Hauling	0.08	0.01	0.74	0.39	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	519	519	0.06	0.08	0.47	546

3.5. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.55	1.30	12.2	14.2	0.03	0.54	—	0.54	0.49	—	0.49	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.55	1.30	12.2	14.2	0.03	0.54	—	0.54	0.49	—	0.49	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.40	3.72	4.34	0.01	0.16	—	0.16	0.15	—	0.15	—	803	803	0.03	0.01	—	806

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.07	0.68	0.79	< 0.005	0.03	—	0.03	0.03	—	0.03	—	133	133	0.01	< 0.005	—	133
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.61	2.39	2.21	38.6	0.00	0.00	5.96	5.96	0.00	1.40	1.40	—	6,566	6,566	0.28	0.23	26.3	6,667
Vendor	0.52	0.14	5.65	3.03	0.04	0.07	1.34	1.41	0.07	0.37	0.44	—	4,922	4,922	0.38	0.73	13.7	5,164
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.48	2.25	2.60	29.2	0.00	0.00	5.96	5.96	0.00	1.40	1.40	—	6,018	6,018	0.29	0.23	0.68	6,094
Vendor	0.51	0.13	5.88	3.07	0.04	0.07	1.34	1.41	0.07	0.37	0.44	—	4,925	4,925	0.38	0.73	0.36	5,153
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.75	0.68	0.80	9.35	0.00	0.00	1.80	1.80	0.00	0.42	0.42	—	1,863	1,863	0.09	0.07	3.46	1,889
Vendor	0.16	0.04	1.81	0.93	0.01	0.02	0.41	0.43	0.02	0.11	0.13	—	1,503	1,503	0.12	0.22	1.80	1,574
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.12	0.15	1.71	0.00	0.00	0.33	0.33	0.00	0.08	0.08	—	308	308	0.01	0.01	0.57	313
Vendor	0.03	0.01	0.33	0.17	< 0.005	< 0.005	0.07	0.08	< 0.005	0.02	0.02	—	249	249	0.02	0.04	0.30	261
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.45	1.21	11.3	14.1	0.03	0.47	—	0.47	0.43	—	0.43	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.45	1.21	11.3	14.1	0.03	0.47	—	0.47	0.43	—	0.43	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74	0.62	5.80	7.25	0.01	0.24	—	0.24	0.22	—	0.22	—	1,349	1,349	0.05	0.01	—	1,353
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	1.06	1.32	< 0.005	0.04	—	0.04	0.04	—	0.04	—	223	223	0.01	< 0.005	—	224
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.32	2.09	2.01	35.5	0.00	0.00	5.96	5.96	0.00	1.40	1.40	—	6,426	6,426	0.27	0.23	23.8	6,524
Vendor	0.48	0.14	5.38	2.91	0.04	0.07	1.34	1.41	0.07	0.37	0.44	—	4,843	4,843	0.38	0.73	13.6	5,085
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.19	1.96	2.21	26.8	0.00	0.00	5.96	5.96	0.00	1.40	1.40	—	5,892	5,892	0.28	0.23	0.62	5,967
Vendor	0.47	0.13	5.62	2.92	0.04	0.07	1.34	1.41	0.07	0.37	0.44	—	4,846	4,846	0.38	0.73	0.35	5,074
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.11	0.99	1.23	14.5	0.00	0.00	3.02	3.02	0.00	0.71	0.71	—	3,064	3,064	0.14	0.12	5.28	3,107
Vendor	0.24	0.07	2.90	1.48	0.02	0.04	0.68	0.72	0.04	0.19	0.22	—	2,484	2,484	0.19	0.38	3.03	2,604
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.18	0.22	2.64	0.00	0.00	0.55	0.55	0.00	0.13	0.13	—	507	507	0.02	0.02	0.87	514
Vendor	0.04	0.01	0.53	0.27	< 0.005	0.01	0.12	0.13	0.01	0.03	0.04	—	411	411	0.03	0.06	0.50	431
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.95	0.80	7.45	9.98	0.01	0.35	—	0.35	0.32	—	0.32	—	1,511	1,511	0.06	0.01	—	1,517
Paving	—	0.46	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.41	0.55	< 0.005	0.02	—	0.02	0.02	—	0.02	—	82.8	82.8	< 0.005	< 0.005	—	83.1
Paving	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.7	13.7	< 0.005	< 0.005	—	13.8
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.07	1.17	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	211	211	0.01	0.01	0.78	215
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.8	10.8	< 0.005	< 0.005	0.02	10.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.78	1.78	< 0.005	< 0.005	< 0.005	1.81
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.17	1.18	1.52	< 0.005	0.04	—	0.04	0.03	—	0.03	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	—	34.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.29	0.37	< 0.005	0.01	—	0.01	0.01	—	0.01	—	43.9	43.9	< 0.005	< 0.005	—	44.0
Architectural Coatings	—	8.40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.27	7.27	< 0.005	< 0.005	—	7.29
Architectural Coatings	—	1.53	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.42	0.40	7.10	0.00	0.00	1.19	1.19	0.00	0.28	0.28	—	1,285	1,285	0.05	0.05	4.77	1,305
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.12	1.39	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	295	295	0.01	0.01	0.51	299
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.25	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	48.8	48.8	< 0.005	< 0.005	0.08	49.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	21.7	19.7	18.2	172	0.41	0.28	35.0	35.2	0.27	8.88	9.14	—	42,082	42,082	1.97	1.91	157	42,858
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	21.7	19.7	18.2	172	0.41	0.28	35.0	35.2	0.27	8.88	9.14	—	42,082	42,082	1.97	1.91	157	42,858
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	20.2	18.2	19.6	144	0.38	0.28	35.0	35.2	0.27	8.88	9.14	—	39,442	39,442	2.05	1.98	4.06	40,086
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	20.2	18.2	19.6	144	0.38	0.28	35.0	35.2	0.27	8.88	9.14	—	39,442	39,442	2.05	1.98	4.06	40,086
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	3.50	3.15	3.48	26.1	0.07	0.05	6.01	6.06	0.05	1.53	1.57	—	6,303	6,303	0.32	0.32	10.7	6,415
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Total	3.50	3.15	3.48	26.1	0.07	0.05	6.01	6.06	0.05	1.53	1.57	—	6,303	6,303	0.32	0.32	10.7	6,415

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	9,900	9,900	0.94	0.11	—	9,957
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	1,539	1,539	0.15	0.02	—	1,548
Total	—	—	—	—	—	—	—	—	—	—	—	—	11,438	11,438	1.08	0.13	—	11,505
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	9,900	9,900	0.94	0.11	—	9,957
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	1,539	1,539	0.15	0.02	—	1,548
Total	—	—	—	—	—	—	—	—	—	—	—	—	11,438	11,438	1.08	0.13	—	11,505
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	1,639	1,639	0.16	0.02	—	1,648
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	255	255	0.02	< 0.005	—	256
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,894	1,894	0.18	0.02	—	1,905

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	0.57	0.29	5.21	4.38	0.03	0.40	—	0.40	0.40	—	0.40	—	6,218	6,218	0.55	0.01	—	6,235
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.57	0.29	5.21	4.38	0.03	0.40	—	0.40	0.40	—	0.40	—	6,218	6,218	0.55	0.01	—	6,235
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	0.57	0.29	5.21	4.38	0.03	0.40	—	0.40	0.40	—	0.40	—	6,218	6,218	0.55	0.01	—	6,235
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.57	0.29	5.21	4.38	0.03	0.40	—	0.40	0.40	—	0.40	—	6,218	6,218	0.55	0.01	—	6,235
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	0.10	0.05	0.95	0.80	0.01	0.07	—	0.07	0.07	—	0.07	—	1,029	1,029	0.09	< 0.005	—	1,032
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.10	0.05	0.95	0.80	0.01	0.07	—	0.07	0.07	—	0.07	—	1,029	1,029	0.09	< 0.005	—	1,032

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	13.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	8.40	7.75	0.40	47.2	< 0.005	0.08	—	0.08	0.06	—	0.06	—	194	194	0.01	< 0.005	—	195
Total	8.40	23.3	0.40	47.2	< 0.005	0.08	—	0.08	0.06	—	0.06	—	194	194	0.01	< 0.005	—	195
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	13.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	15.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	2.54	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landsca Equipment	1.05	0.97	0.05	5.90	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.0	22.0	< 0.005	< 0.005	—	22.1
Total	1.05	3.81	0.05	5.90	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.0	22.0	< 0.005	< 0.005	—	22.1

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	29.2	99.0	128	3.00	0.07	—	225
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	29.2	99.0	128	3.00	0.07	—	225
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	29.2	99.0	128	3.00	0.07	—	225
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	29.2	99.0	128	3.00	0.07	—	225
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	4.83	16.4	21.2	0.50	0.01	—	37.2

Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4.83	16.4	21.2	0.50	0.01	—	37.2

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	177	0.00	177	17.7	0.00	—	619
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	177	0.00	177	17.7	0.00	—	619
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	177	0.00	177	17.7	0.00	—	619
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	177	0.00	177	17.7	0.00	—	619
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	29.3	0.00	29.3	2.93	0.00	—	103

Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	29.3	0.00	29.3	2.93	0.00	—	103

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	364	364
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	364	364
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	364	364
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	364	364
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60.3	60.3
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60.3	60.3

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	6/3/2024	6/14/2024	5.00	10.0	—
Grading	Grading	6/17/2024	7/26/2024	5.00	30.0	—
Building Construction	Building Construction	7/29/2024	9/19/2025	5.00	300	—
Paving	Paving	8/25/2025	9/19/2025	5.00	20.0	—
Architectural Coating	Architectural Coating	5/19/2025	9/19/2025	5.00	90.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Crawler Tractors	Diesel	Average	4.00	8.00	87.0	0.43
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Crawler Tractors	Diesel	Average	2.00	8.00	87.0	0.43
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	5.00	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	16.0	10.2	HHDT,MHDT
Grading	Hauling	542	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	456	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	157	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	91.2	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT

Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	980,480	325,442	8,311

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	35.0	0.00	—
Grading	—	130,000	120	0.00	—
Paving	0.00	0.00	0.00	0.00	3.53

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt

Hotel	0.00	0%
Enclosed Parking with Elevator	3.53	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	349	0.03	< 0.005
2024	0.00	349	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Hotel	4,794	4,842	3,564	1,688,177	48,806	49,295	36,284	17,186,694
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	981,167	325,518	9,226

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Hotel	10,364,336	349	0.0330	0.0040	19,400,828
Enclosed Parking with Elevator	1,610,978	349	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Hotel	15,220,062	0.00
Enclosed Parking with Elevator	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Hotel	329	—
Enclosed Parking with Elevator	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Hotel	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Hotel	Other commercial A/C and heat pumps	User Defined	750	1.80	4.00	4.00	18.0
Hotel	User Defined	User Defined	150	< 0.005	7.50	7.50	20.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	20.2	annual days of extreme heat
Extreme Precipitation	5.10	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2

Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	88.8
AQ-PM	97.4
AQ-DPM	86.0
Drinking Water	93.3
Lead Risk Housing	97.4
Pesticides	14.9
Toxic Releases	71.7
Traffic	47.3
Effect Indicators	—
CleanUp Sites	96.3

Groundwater	83.7
Haz Waste Facilities/Generators	96.6
Impaired Water Bodies	43.8
Solid Waste	92.8
Sensitive Population	—
Asthma	70.1
Cardio-vascular	82.9
Low Birth Weights	67.4
Socioeconomic Factor Indicators	—
Education	95.7
Housing	89.8
Linguistic	96.3
Poverty	94.2
Unemployment	19.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	5.184139612
Employed	38.86821506
Median HI	6.518670602
Education	—
Bachelor's or higher	4.157577313
High school enrollment	100
Preschool enrollment	44.43731554
Transportation	—

Auto Access	53.75336841
Active commuting	60.25920698
Social	—
2-parent households	47.31168998
Voting	7.776209419
Neighborhood	—
Alcohol availability	22.98216348
Park access	54.67727448
Retail density	38.34210189
Supermarket access	66.63672527
Tree canopy	31.84909534
Housing	—
Homeownership	26.45964327
Housing habitability	7.55806493
Low-inc homeowner severe housing cost burden	3.284999358
Low-inc renter severe housing cost burden	23.90606955
Uncrowded housing	9.611189529
Health Outcomes	—
Insured adults	1.796484024
Arthritis	48.2
Asthma ER Admissions	30.2
High Blood Pressure	56.0
Cancer (excluding skin)	94.8
Asthma	7.7
Coronary Heart Disease	28.5
Chronic Obstructive Pulmonary Disease	11.3
Diagnosed Diabetes	10.7

Life Expectancy at Birth	49.6
Cognitively Disabled	70.6
Physically Disabled	78.7
Heart Attack ER Admissions	7.4
Mental Health Not Good	2.6
Chronic Kidney Disease	20.1
Obesity	4.2
Pedestrian Injuries	85.8
Physical Health Not Good	2.6
Stroke	22.5
Health Risk Behaviors	—
Binge Drinking	73.8
Current Smoker	3.5
No Leisure Time for Physical Activity	3.6
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	33.8
Elderly	95.7
English Speaking	3.6
Foreign-born	91.6
Outdoor Workers	9.3
Climate Change Adaptive Capacity	—
Impervious Surface Cover	63.3
Traffic Density	55.4
Traffic Access	70.1
Other Indices	—

Hardship	94.8
Other Decision Support	—
2016 Voting	30.3

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	100
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Taken from site plan
Construction: Construction Phases	Taken from client data Building Construction, Paving, and Architectural Coating overlap to present a conservative analysis

Construction: Off-Road Equipment	T/L/B replaced with Crawler Tractor to accurately calculate disturbance for Site Preparation and Grading phases. Standard 8 hours work days
Construction: Trips and VMT	Vendor Trips adjusted based on CalEEMod defaults for Building Construction and number of days for Demolition, Site Preparation, Grading, and Building Construction
Construction: Architectural Coatings	SCAQMD Rule 1113
Operations: Vehicle Data	Taken from trip generation
Operations: Refrigerants	As of 1 January 2022, new commercial refrigeration equipment may not use refrigerants with a GWP of 150 or greater. Further, R-404A (the CalEEMod default) is unacceptable for new supermarket and cold storage systems as of 1 January 2019 and 2023, respectively Beginning 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater

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APPENDIX 3.2:

CCAP SCREENING TABLES

Table 6. Screening Table for Implementing GHG Performance Standards for Commercial, Office, Medical, Hotel, Fitness, Industrial, and Retail Development, 2030 (Circle Applicable Project Points, 100 points minimum)

Description	Feature	Project Points
Reduction Measure 1: Building Electrification		
Replacement of gas appliance with efficient electric appliance (select all that apply)	Electric space heater	8
	Electric water heater	10
	Electric stove	4
	Electric Dryer	4
	Electric pool heater	2
	Electric spa heater	2
Lack of natural gas infrastructure	Project site does not have any natural gas infrastructure.	8
	Total for measure	*34*
Reduction Measure 2: Solar Energy Systems for all other non-residential land use types *(required for all other non-residential projects)*[21]		
Installation of rooftop solar energy systems at new non-residential buildings (select one option)	Installation of rooftop solar energy system which generates enough electricity to meet 45% of annual electricity demand.	3
	Installation of rooftop solar energy system which generates enough electricity to meet 90% of annual electricity demand.	6
Installation of battery storage at new non-residential buildings (select one option)	Solar battery storage installation with a capacity of 200-799 kW (DC).	1
	Solar battery storage installation with a capacity of 800-1200 kW (DC).	2
	Total for measure	*8*
Reduction Measure 3: Green Roofs		
Installation of a roof with a planted layer of vegetation over a waterproof surface for non-residential buildings (select one option)	Medium Green Roof – Total vegetated area makes up 50% of combined non-residential floor area (in square feet).	1
	Large Green Roof – Total vegetated area makes up 100% or	2

[21] Measure 2 requires solar photovoltaic panels or other appropriate onsite renewable energy generation systems for the following types of projects:

New commercial and office buildings, or existing commercial and office building expansions greater or equal to 45,000 square feet in size and

New industrial or existing industrial buildings expansions greater or equal to 100,000 square feet in size.

Description	Feature	Project Points
	more of combined non-residential floor area (in square feet).	
	Total for measure	2
Reduction Measure 4: Urban Cooling		
On-site tree planting (select one option)[22]	1 tree per each required on-site vehicle parking space.	6
	2 trees per each required on-site vehicle parking space.	12
	3 trees per each required on-site vehicle parking space.	18
	Total for measure	*18*
Reduction Measure 5: Transit Oriented Communities (TOCs)		
New development is located in a transit-oriented community (TOC)	Development site is located within ½ mile radius of one or more of the following: a Bus Rapid Transit (BRT) stop, bus transit center, light rail station, the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods, and/or High-Quality Transit Corridor defined as a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.[23]	2
	Total for measure	2
Reduction Measure 6: Increase Transit Ridership		
Provision of free transit passes in a quantity equivalent to the expected number of employees at the non-	One free annual transit pass for every employee.	6

[22] This strategy specifies the ratio of additional trees per required vehicle parking spaces. Based upon total on-site vehicle parking spaces required per the City of Ontario Development Code for the project, the Applicant will calculate the number of trees required to meet this measure and obtain points. The landscape plan will show onsite trees and the tree matrix shall identify all trees associated with the Urban Cooling Measure compliance. The City code requires trees onsite and within paved areas to reduce the associated heat build-up from development. The Landscape Planning Division will consider these trees in the calculation to be counted toward the Urban Cooling Measure.

[23] A project shall be considered to be within one-half mile of a major transit stop or high-quality transit corridor if all parcels within the project have no more than 25 percent of their area farther than one-half mile from the stop or corridor and if not more than 10 percent of the residential units or 100 units, whichever is less, in the project are farther than one-half mile from the stop or corridor.

Description	Feature	Project Points
residential building. Transit passes shall be provided for a period of 5 years after completion of construction [24]		
	Total for measure	*6*
Reduction Measure 7: Vehicle Electrification[25]		
Installation of EV charging stations for employee vehicle parking spaces (select one option)	Installation of Level 2 or higher EV charging stations at a rate of 5-9% of planned employee vehicle parking spaces.	3
	Installation of Level 2 or higher EV charging stations at a rate of 10-19% of planned employee vehicle parking spaces with Level 2 EV charging stations.	5
	Installation of Level 2 or higher EV charging stations at a rate of 20% or more of planned employee vehicle parking spaces Level 2 EV charging stations.	10
	Total for measure	*10*
Reduction Measure 8: Active Transportation		
Installation or improvement of bicycle facilities (select all that apply)	Bicycle parking facilities with 1:20 ratio of bicycle parking to employee vehicle parking space	3
	Construct or improve a single bicycle lane facility (only Class I, II, or IV) that 1) connects to a larger existing bikeway network or 2) closes an existing bikeway network gap that is at least 0.5 miles long.	4
Installation or improvement of pedestrian facilities (select one option)	Two or three pedestrian infrastructure improvements to street design on private streets, including, but not limited to curb extensions, raised crosswalks, speed humps/bumps, street tree plantings in parkways or street medians, and elevated pavement markings.	4
	Four or more pedestrian infrastructure improvements to	8

[24] Provision for annual transit passes to be incorporated into CC&R's bylaws or separate parking agreement, as appropriate.

[25] EV charging station levels 1-3 are defined in the California Green Building Standards or CALGreen Code, accessed at https://www.dgs.ca.gov/BSC/CALGreen.

Description	Feature	Project Points
	street design on private streets, including, but not limited to curb extensions, raised crosswalks, speed humps/bumps, street tree plantings in parkways or street medians, and elevated pavement markings.	
	Total for measure	*15*
Reduction Measure 9: Parking Policy		
Require that employee vehicle parking spaces be purchased at an additional cost. This does not include client/visitor vehicle parking spaces [26]	Unbundle, or separate, 100% of non-residential project's parking costs from property costs, requiring those who wish to purchase parking spaces to do so at an additional cost.	1
	Total for measure	*1*
Reduction Measure 10: Electric construction equipment[27]		
Use electric construction equipment for a portion of the construction project (select one option)	One-third (33%) of construction equipment used for construction (during building phase, not including grading phase), measured by number of hours of operation, is zero emission equipment.	4
	Half (50%) of construction equipment used for construction (during the building phase, not including the grading phase), measured by the number of hours of operation, is zero emission equipment.	7
	Two-thirds (66%) or more of construction equipment used for construction (during the building phase, not including the grading phase), measured by number of hours of operation, is zero emission equipment.	11
	Total for measure	*11*

[26] Provision to unbundle parking shall be incorporated into CC&R's bylaws or separate parking agreement, as appropriate.

[27] Electric construction equipment includes electric compact excavators, electric motors, electric generators, and mobile charging equipment.

Description	Feature	Project Points
Reduction Measure 11: Waste diversion		
Design and plan commercial, office, and industrial developments to include onsite areas for municipal compost/green waste and recycling bins	Site design allocates sufficient space for storage and collection of green waste, organic waste, and recyclables.	30
	Total for measure	*30*
Reduction Measure 12: Water conservation		
Implement indoor water efficiency measures (select all that apply)	Install water-efficient faucets and showerheads.	3
	Install on-demand water circulators on commercial sinks or dishwashing equipment.	3
Incorporate outdoor water efficiency measures	Design and plan outdoor landscapes planted with drought-tolerant, low maintenance plants with a 1) drip irrigation system or 2) sprinkler irrigation system with a weather-based irrigation controller.	8
	Total for measure	*14*
	Commercial/etc. Total for all measures	***151***
	Commercial/etc. Project Points Subtotal	
Additional Recommended Measures		
AR-1: Meet CalGreen voluntary tiers (selected one)	CalGreen Tier 1 compliance	5
	CalGreen Tier 2 compliance	10
AR-2: Recycled Water	Use recycled water for at least 80% of outdoor water needs	5
AR-3: Reflective Paving	Use high-reflectivity pavement for all hardscaped areas, including parking areas, walking paths, and patios.	5
AR-4: Zero Emission Cargo Equipment	Use of zero emission offroad cargo handling equipment for a minimum of 50% of building phase (measured in number of hours).	4
AR-5: Alternative Fueling conduit	Installation of conduit for zero emission vehicle charging so that facilities are prepared for the transition to electric fleets.	4
AR-6: Alternative Fueling Facility	Installation of alternative fuel facilities, such as CNG, biofuels, or hydrogen fueling stations.	8

Description	Feature	Project Points
	Total additional recommended measures	36
	Commercial/etc. Project Points Subtotal	
	Total Commercial/etc. Points Possible	***187***
	COMMERCIAL/etc. PROJECT POINTS TOTAL	

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Appendix H
Hydrology Report/WQMP

Preliminary Hydrology Report

for

Diversified Empire Hotel

APN: 0110-322-33

Southeast of Holt Blvd and Guasti Road

OCTOBER 2023

PREPARED FOR:

Diversified Pacific Communities
10621 Civic Center Drive
Rancho Cucamonga, CA 91730

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KHA Project # 195256007

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Certification by Engineer

_____ _____

Robert Otte, PE Date

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References

San Bernardino Hydrology Manual, August 1986.

INTRODUCTION

Kimley-Horn and Associates has been retained to prepare a Preliminary Hydrology Report for the proposed Diversified Empire Hotel in Ontario, California. The purpose of this report is to demonstrate preliminary analysis of the hydrologic and hydraulic conditions associated with the development of the project site. To do so, the following is the scope of this report:

- Discuss the pre-development discharge patterns and points
- Discuss the post-development discharge patterns and points
- Determine the offsite flow rates for the 10-year and 100-year events
- Determine the pre-development onsite flow rates for the 10-year and 100-year events
- Determine the post-development un-mitigated flow rates for the 10-year and 100-year events
- Determine required post-development onsite mitigation for the 100-year event

Even though this report discusses stormwater, this report is not a Stormwater Pollution Prevention Plan (SWPPP), a Groundwater Study, a Geotechnical Report, nor a Water Quality Management Plan (WQMP). Each of these separate reports discusses separate aspects of stormwater. Portions of the Geotechnical Report are utilized and referenced for the purpose of this report. Similarly, the requirements of the WQMP are considered for the stormwater mitigation and sizing of outlet structures for this project.

PROJECT DESCRIPTION

The existing vacant lot will be developed into the proposed Diversified Empire Hotel. The proposed development will include a hotel with 11 levels, loading docks, pools, above and below ground parking, offices, ballrooms, lobbies, courtyards, storage rooms, kitchens, etc. Site improvements will include landscaping, concrete hardscape, and asphalt paving. The associated improvements include, but are not limited to onsite grading, domestic water service, sanitary sewer service, storm drain infrastructure, concrete and asphalt pavement, landscaping, and irrigation. The project site is approximately 10.43 acres and is located in the City of Ontario, within San Bernadino County. The APN for the project site area: is 0110-322-33. Appendix A contains an aerial photograph that depicts the project location.

LOCATION

The site is located in the southeast corner of Holt Blvd and Guasti Road in the City of Ontario, within San Bernardino County. The project site is bordered by Ontario Gateway Hotel to the west, Holt Blvd to the north, Cucamonga Creek Channel to east, and the Ontario airport to the south. For reference see Appendix A and Figure 1 for the Location Map.

FIGURE 1: LOCATION MAP



METHODOLOGY

The hydrologic and hydraulic analyses were completed following the methods outlined in the San Bernadino County Hydrology Manual. The rational method was used to estimate time of concentrations and peak flow rates generated from the existing and proposed 10-year and 100-year storm events. The synthetic unit hydrograph method was used to determine the onsite existing and proposed hydrographs for the 24-hour duration of the 100-year storm event. The CivilDesign (CivilD) Engineering Software – 2018 Version 9.0 was used to complete the rational method and synthetic unit hydrograph analyses. The results of the rational method analyses are included in Appendix H and the results of the synthetic unit hydrograph analyses are included in Appendix I. Complete onsite and offsite drainage system analyses will be provided in the Final Hydrology Report.

The rainfall data used for the analyses is important for the flow and runoff results. NOAA Atlas 14 for Ontario, CA was used for the rational method and unit hydrograph analysis. See Appendix D and F for rainfall data.

The type of soil and soil conditions are major factors affecting infiltration/detention and resultant storm water runoff. The Natural Resources Conservation Service (NRCS) has classified soil into one general hydrologic soil group for comparing infiltration and runoff rates. The group is based on properties that influence runoff, such as water infiltration rate, texture, natural discharge, and moisture condition. The runoff potential is based on the amount of runoff at the end of a long duration storm that occurs after wetting and swelling of

the soil not protected by vegetation. Using the United States Department of Agriculture Natural Resources Conservation Service Web Soil Survey online tool, it was determined that the hydrologic soil group classification onsite is A. Soil type A is defined as soils having high infiltration rates (low runoff potential). Similarly, per the Geotechnical Engineering Investigation prepared by Petra Geosciences, Inc. dated April 24, 2023, the site is considered to have good percolation rates, with the observed an design percolation rate of 15.38 in/hr. See Appendix D and L for the soil information.

In addition, antecedent moisture condition (AMC) II was used to calculate the 10-year peak flows and AMC III was used to calculate the 100-year peak flows based on the hydrology manual. The land use for the proposed drainage subareas were selected based on the characteristics of the proposed development. See

DRAINAGE CHARACTERISTICS

FEMA MAPPING

The site is mainly located in Zone X-unshaded and Zone X-shaded per the Federal Emergency Management Administration (FEMA) Flood Insurance Rate Map (FIRM) panel 06071C8628J, dated February 18, 2015. Flood Zone X-unshaded is defined by FEMA to have minimal flood hazard. Flood Zone X-shaded is defined by FEMA to have a 0.2% annual change flood hazard, and areas of 1% annual chance flood average depth less than one foot or with drainage areas of less than one square mile. For reference, see Appendix B, FIRM Map.

PRE-DEVELOPMENT CONDITION

The existing site is currently vacant, approximately 10.43 acres, and generally drains in the southeast direction. The existing site consists of two main drainage area (DA 1 & DA 2). Runoff for DA 1 flow southeast towards Guasti Road. Guasti Road does not have existing curb and gutter for the side of the road adjacent to the project but does have curb and gutter on the other side of the road with an existing catch basin. Guasti Road also has a 108" public line that collects stormwater for nearby properties. DA 2 runoff flows to the east towards the Cucamonga Channel. **See Appendix G** for the existing hydrology map, **Appendix H** for the rational method calculations, and **Table 1** below for a summary of the pre-development flows.

Table 1: Pre-Development Flows

Drainage Area	Drainage Area (AC)	Q_{10} (cfs)	Q_{100} (cfs)
DA 1	9.00	7.04	15.74
DA 2	1.43	3.41	5.37
Total	10.43	10.45	21.11

POST-DEVELOPMENT CONDITION

The post-development condition for the project site consists of one main drainage area which is comprised of five (5) sub-areas. Runoff from drainage sub-areas DA 1, DA 2, DA 3, DA 4, and DA 5 is intercepted by a combination of trench drains, area drains, and curb inlets which stormwater is then conveyed into the proposed underground detention system located southeast of the site. Due to the proposed elevations in the southeast side, a stormwater pump is required to pump DA 4's runoff into the proposed underground detention system. The treated runoff will then be conveyed into the 108" storm drain pipe located in Guasti Road. See **Table 2 below for** a summary of the post-development flows without detention, **Appendix G** for the Proposed Drainage Map, and **Appendix H** for the rational method calculations.

Table 2: Post-Development Flows (Un-mitigated)

Drainage Area/s	Drainage Area (AC)	Q_{10} (cfs)	Q_{100} (cfs)
DA 1	4.51	17.09	25.48
DA 2	2.29	5.99	8.97
DA 3	2.25	7.10	10.60
DA 4	0.85	3.37	5.02
DA 5	0.53	1.95	2.91
Total	10.43	35.50	52.98

STORMWATER MITIGATION

For proposed onsite flows, stormwater mitigation is needed to ensure the proposed flows do not negatively impact the existing downstream drainage facilities. By comparing the results from **Table 1** and **Table 2**, the proposed development increases onsite flows discharging from the site. To mitigate the increase in flows, an underground stormwater detention system is proposed.

The volume of storage provided in the underground detention system along with the size of the outflow riser structure is intended to restrict peak flows in the proposed condition to levels equal to or less than the existing flows. Based on 100-year 24-hr duration of the 100-year storm event, the highest routed (mitigated) onsite outflows from the underground detention system result in proposed flows that are less than the existing flows for the onsite. Basin routing will be provided in final engineering.

HYDRAULIC ANALYSIS

The calculated peak flows from the analyses discussed above will be used to size the onsite drainage devices. All drainage devices will be sized in the Final Hydrology Report.

CONCLUSION

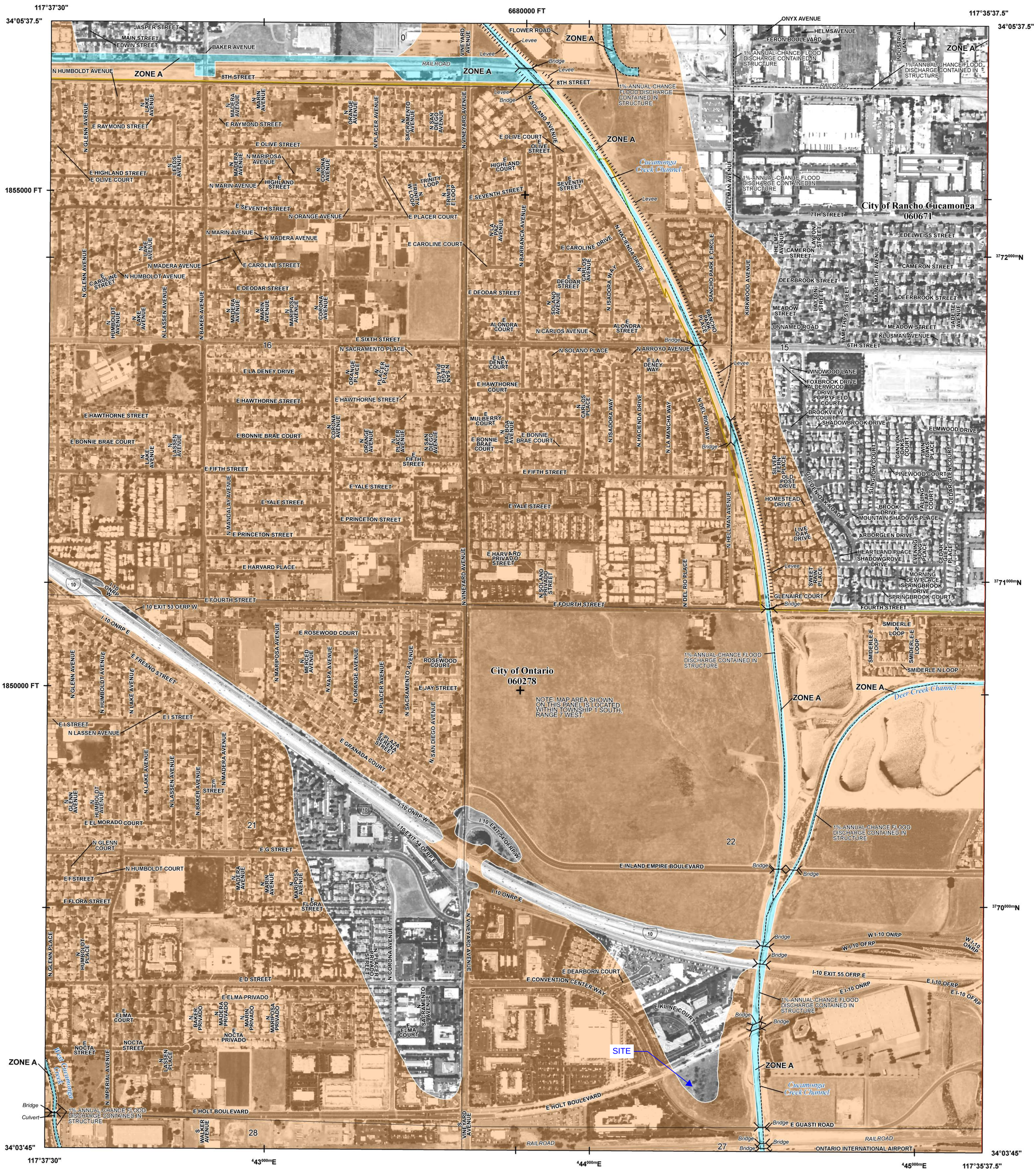
In conclusion, the following was covered in this report:

- The pre-development discharge patterns and points were discussed
- The post-development discharge patterns and points were discussed
- The pre-development flow rates for the 10-year and 100-year events were determined
- The post-development un-mitigated flow rates for the 10-year and 100-year events were determined
- The post-development stormwater mitigation for the 100-year event was analyzed
- The post-development final flow rate was proven to be less than the existing design flowrate for the downstream systems

As discussed in the contents of this report, the development of the existing vacant site into the proposed development is not expected to cause a significant impact to downstream systems for storms up to the 100-year condition. The mitigated development discharges less stormwater flows than the existing site conditions.

Appendix A - Location Map

Appendix B - FIRM MAP



FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT HTTP://MSC.FEMA.GOV

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Change Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee See Notes *Zone X*

OTHER AREAS
- NO SCREEN Areas of Minimal Flood Hazard *Zone X*
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert or Storm Sewer
- Accredited or Provisionally Accredited Levee, Dike or Floodwall
- Non-accredited Levee, Dike or Floodwall
- 18.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation (BFE)
- 8 Coastal Transect
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature
- 513 Base Flood Elevation Line (BFE)

OTHER FEATURES
- Limit of Study
- Jurisdiction Boundary

NOTES TO USERS

For information and questions about this map, available products associated with this FIRM including historic versions of this FIRM, how to order products or the National Flood Insurance Program in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Map Service Center website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website. Users may determine the current map date for each FIRM panel by visiting the FEMA Map Service Center website or by calling the FEMA Map Information eXchange.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Map Service Center at the number listed above.

For community and countywide map dates refer to the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Base map information shown on this FIRM was derived from digital orthophotography collected by the U.S. Department of Agriculture Farm Service Agency. This imagery was flown in 2012 and was produced with a 1-meter ground sample distance.

SCALE

N

Map Projection:
UTM Zone 11N; North American Datum 1983;
Western Hemisphere; Vertical Datum: North American Vertical Datum of 1988

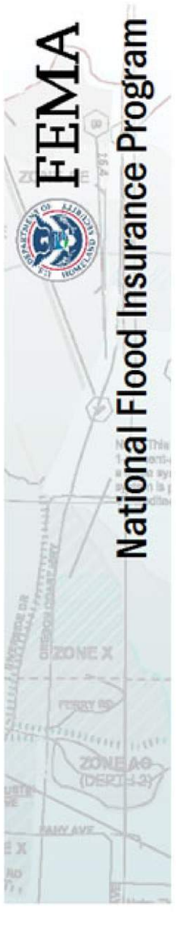
1 inch = 500 feet 1:6,000

0 250 500 750 1,000 2,000 Feet

0 125 250 500 Meters

PANEL LOCATOR





NATIONAL FLOOD INSURANCE PROGRAM

FLOOD INSURANCE RATE MAP

SAN BERNARDINO COUNTY, CALIFORNIA
and Incorporated Areas
Panel 8628 of 9400

FEMA

Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
ONTARIO, CITY OF	060278	8628	J
RANCHO CUCAMONGA, CITY OF	060671	8628	J

VERSION NUMBER
2.3.2.3

MAP NUMBER
06071C8628J

MAP REVISED
FEBRUARY 18, 20[illegible]

Appendix C - Hydrology Manual Reference Material

Curve (1) Numbers of Hydrologic Soil-Cover Complexes For Pervious Areas-AMC II

Cover Type (3)	Quality of Cover (2)	Soil Group A	B	C	D
NATURAL COVERS -					
Barren (Rockland, eroded and graded land)		78	86	91	93
Chaparral, Broadleaf (Manzonita, ceanothus and scrub oak)	Poor	53	70	80	85
	Fair	40	63	75	81
	Good	31	57	71	78
Chaparral, Narrowleaf (Chamise and redshank)	Poor	71	82	88	91
	Fair	55	72	81	86
Grass, Annual or Perennial	Poor	67	78	86	89
	Fair	50	69	79	84
	Good	38	61	74	80
Meadows or Cienegas (Areas with seasonally high water table, principal vegetation is sod forming grass)	Poor	63	77	85	88
	Fair	51	70	80	84
	Good	30	58	71	78
Open Brush (Soft wood shrubs - buckwheat, sage, etc.)	Poor	62	76	84	88
	Fair	46	66	77	83
	Good	41	63	75	81
Woodland (Coniferous or broadleaf trees predominate. Canopy density is at least 50 percent.)	Poor	45	66	77	83
	Fair	36	60	73	79
	Good	25	55	70	77
Woodland, Grass (Coniferous or broadleaf trees with canopy density from 20 to 50 percent)	Poor	57	73	82	86
	Fair	44	65	77	82
	Good	33	58	72	79
URBAN COVERS -					
Residential or Commercial Landscaping (Lawn, shrubs, etc.)	Good	32	56	69	75
Turf (Irrigated and mowed grass)	Poor	58	74	83	87
	Fair	44	65	77	82
	Good	33	58	72	79
AGRICULTURAL COVERS -					
Fallow (Land plowed but not tilled or seeded)		77	86	91	94

SAN BERNARDINO COUNTY
HYDROLOGY MANUAL

CURVE NUMBERS FOR PERVIOUS AREAS

Figure C-3 (1 of 2)

Appendix D - NOAA Rain Data

NOAA Atlas 14, Volume 6, Version 2
Location name: Ontario, California, USA*
Latitude: 34.0643°, Longitude: -117.6027°
Elevation: 965 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.115 (0.096-0.140)	0.156 (0.130-0.189)	0.206 (0.171-0.250)	0.244 (0.201-0.299)	0.293 (0.233-0.372)	0.328 (0.255-0.425)	0.361 (0.274-0.481)	0.394 (0.290-0.540)	0.436 (0.307-0.623)	0.466 (0.317-0.691)
10-min	0.166 (0.138-0.200)	0.224 (0.186-0.271)	0.295 (0.245-0.359)	0.350 (0.288-0.429)	0.419 (0.334-0.533)	0.469 (0.365-0.609)	0.518 (0.393-0.689)	0.565 (0.416-0.774)	0.624 (0.441-0.894)	0.668 (0.455-0.991)
15-min	0.200 (0.167-0.242)	0.271 (0.225-0.328)	0.357 (0.296-0.434)	0.423 (0.348-0.519)	0.507 (0.403-0.644)	0.568 (0.442-0.737)	0.626 (0.475-0.833)	0.683 (0.503-0.936)	0.755 (0.533-1.08)	0.808 (0.550-1.20)
30-min	0.306 (0.255-0.370)	0.414 (0.344-0.501)	0.545 (0.453-0.663)	0.646 (0.532-0.793)	0.775 (0.616-0.984)	0.867 (0.675-1.13)	0.956 (0.726-1.27)	1.04 (0.769-1.43)	1.15 (0.814-1.65)	1.23 (0.840-1.83)
60-min	0.449 (0.374-0.544)	0.607 (0.505-0.736)	0.800 (0.665-0.973)	0.949 (0.781-1.16)	1.14 (0.905-1.44)	1.27 (0.991-1.65)	1.40 (1.06-1.87)	1.53 (1.13-2.10)	1.69 (1.20-2.42)	1.81 (1.23-2.69)
2-hr	0.673 (0.562-0.816)	0.898 (0.748-1.09)	1.17 (0.972-1.42)	1.38 (1.14-1.69)	1.64 (1.30-2.08)	1.83 (1.42-2.37)	2.01 (1.52-2.67)	2.18 (1.61-2.99)	2.40 (1.70-3.44)	2.56 (1.74-3.80)
3-hr	0.844 (0.704-1.02)	1.12 (0.931-1.36)	1.45 (1.20-1.76)	1.70 (1.40-2.09)	2.02 (1.61-2.57)	2.25 (1.75-2.92)	2.47 (1.87-3.29)	2.68 (1.97-3.67)	2.94 (2.08-4.21)	3.13 (2.13-4.65)
6-hr	1.20 (0.998-1.45)	1.58 (1.32-1.91)	2.04 (1.70-2.48)	2.39 (1.97-2.94)	2.84 (2.26-3.60)	3.16 (2.46-4.10)	3.46 (2.62-4.60)	3.75 (2.76-5.14)	4.11 (2.90-5.89)	4.38 (2.98-6.49)
12-hr	1.55 (1.30-1.88)	2.05 (1.71-2.49)	2.66 (2.21-3.24)	3.13 (2.58-3.84)	3.72 (2.96-4.72)	4.14 (3.22-5.37)	4.54 (3.44-6.04)	4.93 (3.63-6.76)	5.42 (3.82-7.76)	5.77 (3.93-8.56)
24-hr	2.06 (1.82-2.38)	2.75 (2.44-3.18)	3.60 (3.18-4.17)	4.26 (3.73-4.97)	5.09 (4.31-6.14)	5.69 (4.72-7.00)	6.27 (5.08-7.90)	6.84 (5.39-8.86)	7.56 (5.72-10.2)	8.08 (5.91-11.3)
2-day	2.45 (2.17-2.83)	3.35 (2.96-3.86)	4.46 (3.93-5.16)	5.32 (4.66-6.21)	6.44 (5.45-7.76)	7.26 (6.02-8.93)	8.06 (6.52-10.1)	8.84 (6.97-11.4)	9.85 (7.45-13.3)	10.6 (7.75-14.8)
3-day	2.62 (2.32-3.02)	3.63 (3.21-4.19)	4.90 (4.32-5.68)	5.90 (5.16-6.88)	7.20 (6.10-8.68)	8.16 (6.77-10.0)	9.10 (7.37-11.5)	10.0 (7.91-13.0)	11.3 (8.52-15.2)	12.2 (8.90-17.0)
4-day	2.83 (2.50-3.26)	3.96 (3.50-4.57)	5.39 (4.76-6.24)	6.52 (5.71-7.61)	8.01 (6.78-9.65)	9.11 (7.56-11.2)	10.2 (8.26-12.9)	11.3 (8.90-14.6)	12.7 (9.62-17.2)	13.8 (10.1-19.2)
7-day	3.28 (2.90-3.78)	4.68 (4.13-5.40)	6.46 (5.70-7.48)	7.89 (6.90-9.20)	9.78 (8.28-11.8)	11.2 (9.30-13.8)	12.6 (10.2-15.9)	14.1 (11.1-18.2)	16.0 (12.1-21.6)	17.4 (12.7-24.3)
10-day	3.52 (3.12-4.06)	5.08 (4.49-5.87)	7.09 (6.25-8.20)	8.70 (7.61-10.2)	10.9 (9.20-13.1)	12.5 (10.4-15.4)	14.2 (11.5-17.8)	15.8 (12.5-20.5)	18.1 (13.7-24.4)	19.8 (14.5-27.6)
20-day	4.24 (3.75-4.88)	6.18 (5.47-7.14)	8.75 (7.72-10.1)	10.8 (9.49-12.7)	13.7 (11.6-16.5)	15.9 (13.2-19.6)	18.2 (14.8-23.0)	20.6 (16.2-26.7)	23.8 (18.0-32.1)	26.3 (19.3-36.7)
30-day	4.98 (4.41-5.74)	7.24 (6.40-8.35)	10.3 (9.05-11.9)	12.8 (11.2-14.9)	16.3 (13.8-19.6)	19.0 (15.8-23.4)	21.8 (17.7-27.5)	24.8 (19.6-32.1)	28.9 (21.9-39.0)	32.2 (23.6-45.0)
45-day	6.07 (5.37-7.00)	8.68 (7.68-10.0)	12.2 (10.8-14.2)	15.2 (13.3-17.8)	19.5 (16.5-23.5)	22.9 (19.0-28.1)	26.4 (21.4-33.3)	30.2 (23.8-39.2)	35.6 (26.9-48.0)	39.9 (29.2-55.7)
60-day	7.15 (6.33-8.25)	10.0 (8.86-11.6)	14.0 (12.3-16.2)	17.4 (15.2-20.3)	22.3 (18.8-26.8)	26.2 (21.7-32.2)	30.4 (24.6-38.3)	34.9 (27.5-45.2)	41.4 (31.3-55.8)	46.7 (34.1-65.1)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

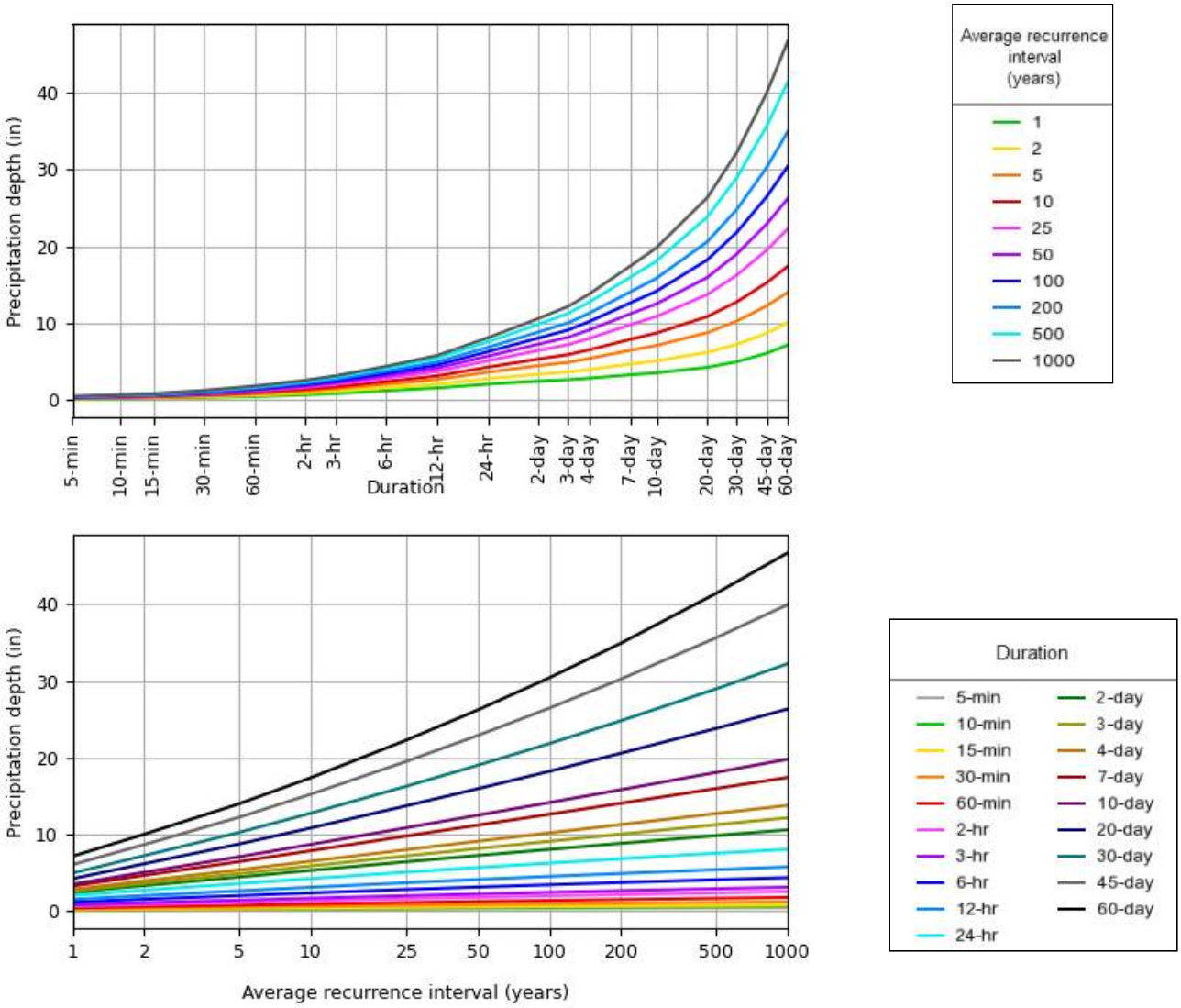
Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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PF graphical

PDS-based depth-duration-frequency (DDF) curves
Latitude: 34.0643°, Longitude: -117.6027°



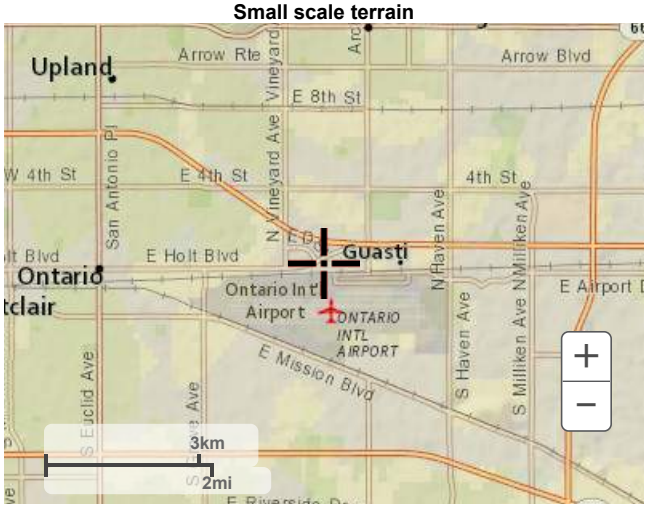
NOAA Atlas 14, Volume 6, Version 2

Created (GMT): Wed Oct 4 00:08:06 2023

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Maps & aerials

Small scale terrain



Large scale terrain



Large scale map



Large scale aerial

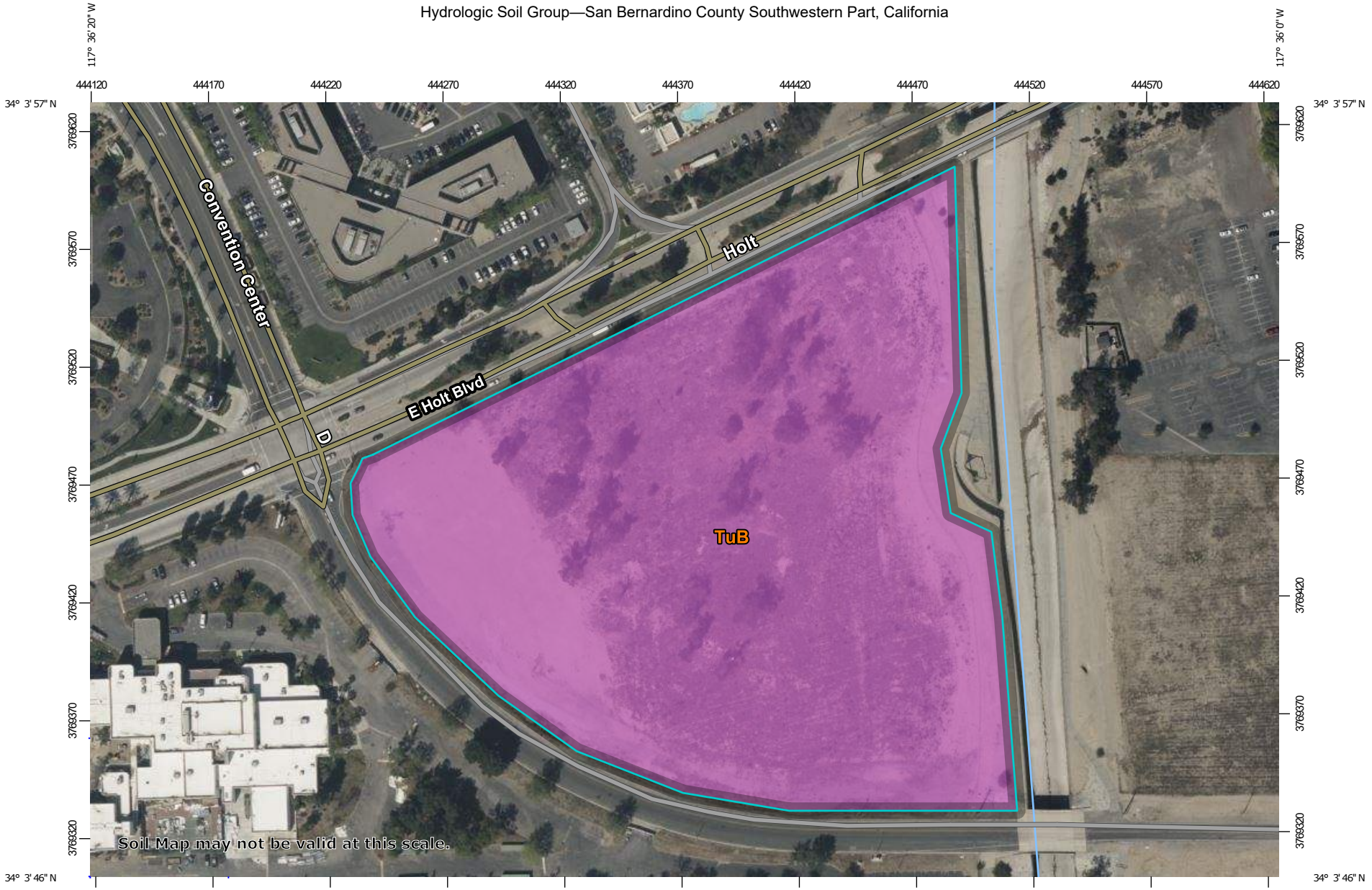


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US Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service
National Water Center
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

Disclaimer

Appendix E - Web Soils Report



Map Scale: 1:2,320 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 30 60 120 180

Feet
0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Bernardino County Southwestern Part, California
Survey Area Data: Version 15, Aug 30, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 17, 2022—Jun 12, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
TuB	Tujunga loamy sand, 0 to 5 percent slopes	A	12.3	100.0%
Totals for Area of Interest			**12.3**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Appendix F - Reference As-Built Plans

Q = 803 c.f.s.

Q = 827 c.f.s.

MATCH LINE - STA 12+00

11+85 E M.H. "B" Set Top of M.H. 6" Above Exist. Surface

Exist Surface Over ℄ Storm Drain

Finish Surface Over ℄ Storm Drain

H.G. LINE

S=0.0055

S=0.0040

S=0.0040

El. 942.76

El. 940.70

El. 940.73

6+90 M.H. "B"

2+81.61 M.H. "B"

73.07' Alternate 108" R.C.P. 3000 Alternate 7'-6"×9'-0" R.C.B.(No C.I.P.P. Alt.

T.S. "A"

2+05.04 End Transition Structure

Join Exist 90" R.C.P.

WALL OF EXIST CHANNEL

El. 931.90 Min

El. (930.82)

1+63.32

1+72.64

3+05 Inlet No. 1 (Single) D-24"/18" R.C.P. W Grate

1+65.41 No. 1 (Single) Q = 2.4 c.f.s.

3+05.08

S=0.0200

8.32'

1+91.59 E.C.

1+76.09

1+91.59 B.C.

480'
Alternate 108" R.C.P. - 1050 D
Alternate 7'-6" × 9'-0" R.C.B. "B"
Alternate 108" C.I.P.P.

404'
Alternate 108" R.C.P. - 850 D
Alternate 7'-6" × 9'-0" R.C.B. "C"
Alternate 108" C.I.P.P.

PROFILE SCALES
Horiz. 1"=40'
Vert. 1"=8'

12 11 10 9 8 7 6 5 4 3 2 1 0

Note
T = 10 1/2" For C.I.P.P. Wall Thickness
5000 PSI

℄ GUASTI ROAD

"A" (VACATED) ST

SEE SHT 3 FOR LINE

11+85 M.H. "B"

120' TEMPORARY CONSTRUCTION EASEMENT

1" = 40'

12+00.00 MATCH

20' WIDE EASEMENT FOR STORM DRAIN PURPOSES

RR R/W

EASEMENT LINE

EASEMENT LINE

N01°55'51"W 15.00'

6+90 M.H. "B"

100'

℄ SOUTHERN PACIFIC R R

Exist Elsinore M.H.

Const 8" A.C. Pavement

2+92.88 E.C.

P.C. COLLAR

SEE DETAIL AT RIGHT

Remove & Dispose of Exist. Guard Rail

Install 45.1 LF 30" R.C.P. - 1750 & Connect To Exist Inlet

See Detail At Right

Exist S.D. M.H. - Remove & Dispose

Exist Bridge Guardrail - Remove & Reconstruct or Protect In Place

CUCAMONGA CREEK CHANNEL

2+05.04 END TRANSITION STRUCTURE

1+51.64 B.C. - BEGIN TRANSITION TO JOIN EXIST 90" R.C.P.

Remove & Salvage 40 L.F. of Exist. 90" R.C.P.

1+69.54 ℄ EXIST OUTLET TO CHANNEL

Exist Drainage Structure w/ Manhole, & Fence Remove & Dispose

Exist 30" R.C.P. Remove & Salvage

N00°51'44"W 17.42'

Exist CL Gate

Exist Conc Rip-Rap

Exist 36" CMP

EXIST PAVEMENT

EXIST INLET

℄ GUASTI RD

8"

12" W.M.

SCE 12KV

M.H. NOT SHOWN

S=0.0100

P.C. COLLAR

30" RCP (LOWERED TO CLEAR UTILITIES)

El. 943.90

DETAIL
CONNECTOR PIPE
STA 2+81.61
NO SCALE

FILL DITCH W/NATIVE SOIL TO 90% MAX DENSITY

EXIST A.C. PAVEMENT

SECTION A-A
NO SCALE

NOTE	DESCRIPTION	RCP	RCB ALTERNATE	CIPP ALTERNATE
(2)	Manhole "B"	Manhole No 2	Manhole No 3 Junction Str No. 3	Manhole No. 2
(5)	Junction Str "A"	Junction Str. No 4	Junction Str. No. 3	Junction Str. No. 2
(7)	Transition Str "A" L=14'	Trans. Str. No 3	Trans. Str No. 1	----

STORM DRAIN ℄ CURVE DATA

○	Δ	R	L	T
1	64°30'58"	90'	101.34'	56.80'
2	7°24'04"	120'	15.50'	7.76'

D 10795

AS BUILTS PLOTTED - 6 SEPT, '84 BY RLW - SYMBOL ■

EDA NO 07-2100015

REVISIONS			
MARK	DATE	BY	APPROVED/RCE NO

DIETERICH POST 6532B FILM

DESIGNED BY _____ DATE _____
DRAWN BY _____ DATE _____
CHECKED BY _____ DATE _____

CITY OF ONTARIO

RECOMMENDED BY Roy A. Maddock, ASS'T CITY ENGINEER — 23087 C.E. No — 11-8-83 DATE
APPROVED BY Larry D. Bonelli, CITY ENGINEER — 22880 C.E. No — 11-8-83 DATE

BENCH MARK No. 1250 ELEV 964.98
LOCATION. HOLT BLVD E/O VINEYARD AVE
NAIL & WASHER IN TOP OF DRAINAGE STRUCTURE, IN CENTER MEDIAN OF HOLT 870'± E/O VINEYARD AVE

LDKING
L D KING, INC
517 N EUCLID AVENUE
ONTARIO, CALIF 91762
(714) 988-5492

D H Mauk 10/28/83
BRANCH MANAGER - RCE Nº 21062 DATE
Project Engineer 10-28-83
PROJECT ENGINEER - RCE Nº 5324 DATE

DESIGNED BY DW DATE 10-28-83
DRAWN BY N.O. DATE 10-28-83
CHECKED BY DW DATE 10-28-83

PLAN & PROFILE
HOLT BLVD. STORM DRAIN
STA 12+00.00 TO CUCAMONGA CREEK CHANNEL
PROJECT LIMITS CUCAMONGA CREEK CHANNEL TO IMPERIAL AVENUE

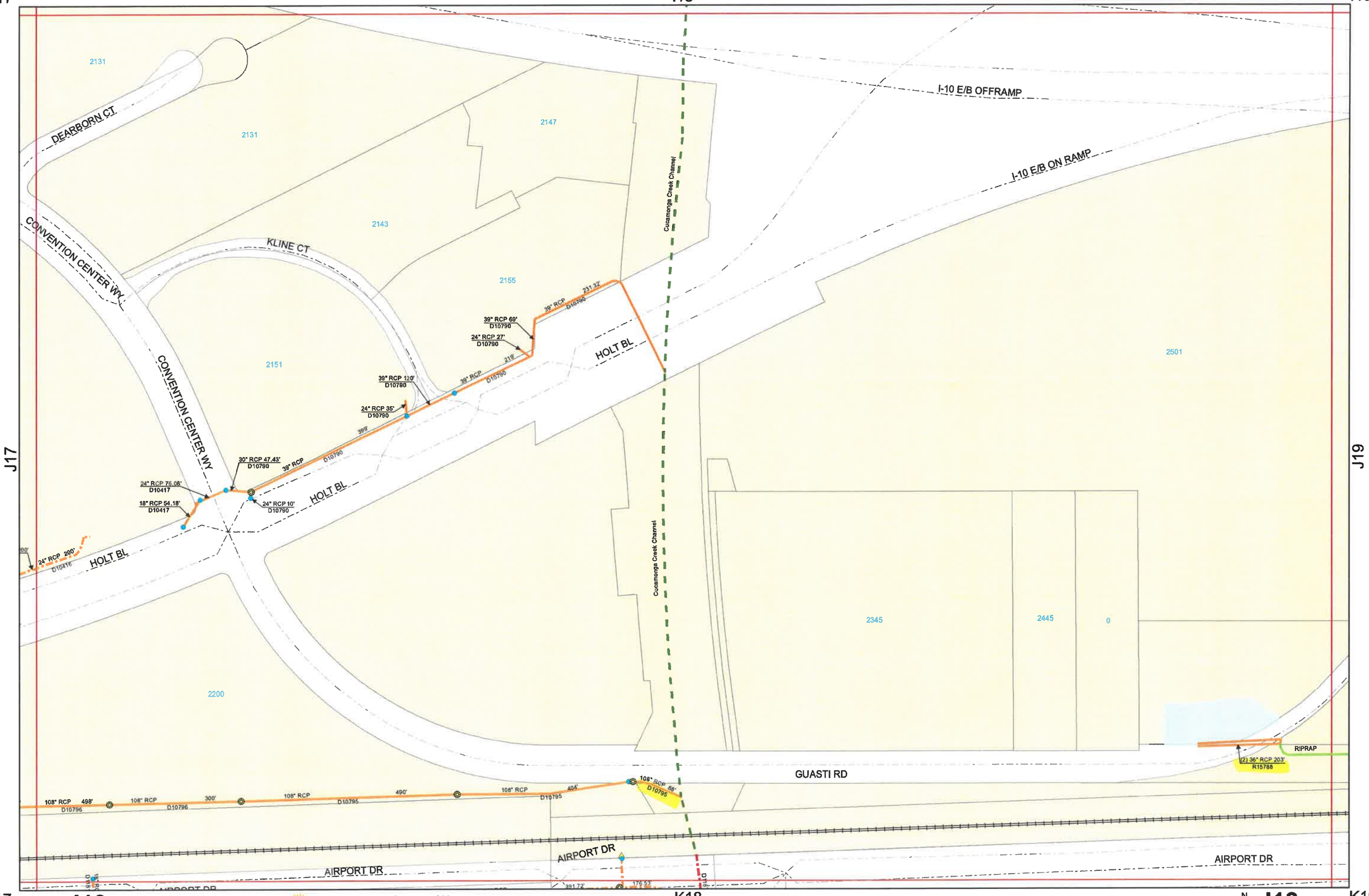
SHEET 2 OF 15
CONTRACT 8384-13
ACCOUNT 2177484
DWG NO D-608

MICROFILMED 9-5-89

MICROFILMED SEP 05 1989

110-32

6279



1 inch = 200 feet

0 100 200 Feet

STORM DRAIN ATLAS

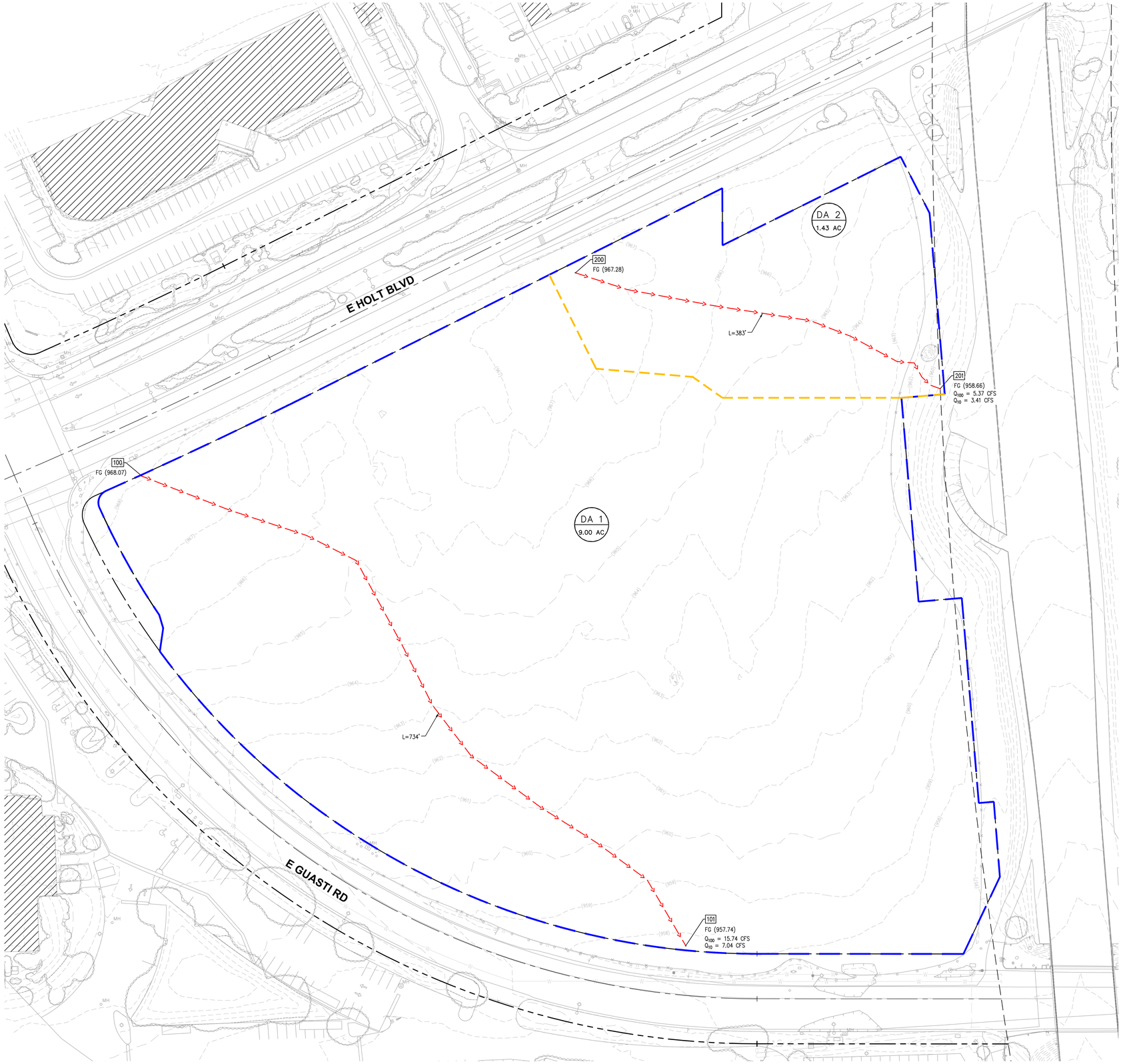
This map rapresents a visual aid to assist City personnel with the managament of the Storm Drain System. Data provided heron is not a guarantee of actual field conditions nor a substituta for record drawings and field verification.

PRINTED: March 13, 2014

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Appendix G - Existing and Proposed Drainage Maps



LEGEND

DMA ID — DA XX / XX AC — ACREAGE

DMA ID — XXX

L=XXX' — FLOW PATH LENGTH (FEET)

OVERALL DMA BOUNDARY

SUB-DMA BOUNDARY

FLOWLINE

EX MAJOR CONTOURS

EX MINOR CONTOURS

NORTH

GRAPHIC SCALE IN FEET
0 20 40 80

THE EMPIRE GROVES HOTEL

Ontario CA 91730

Gensler

500 South Figueroa Street
Los Angeles, California 90071
United States

Tel 213.327.3600
Fax 213.327.3601

Kimley»Horn

© 2023 KIMLEY-HORN AND ASSOCIATES, INC.

3801 UNIVERSITY AVENUE, SUITE 300, RIVERSIDE, CA 92501
PHONE: (951) 543-9868
WWW.KIMLEY-HORN.COM

△ Date	Description

Seal / Signature

NOT FOR CONSTRUCTION

Project Name

Diversified Pacific Communities

Project Number

05.4382.000

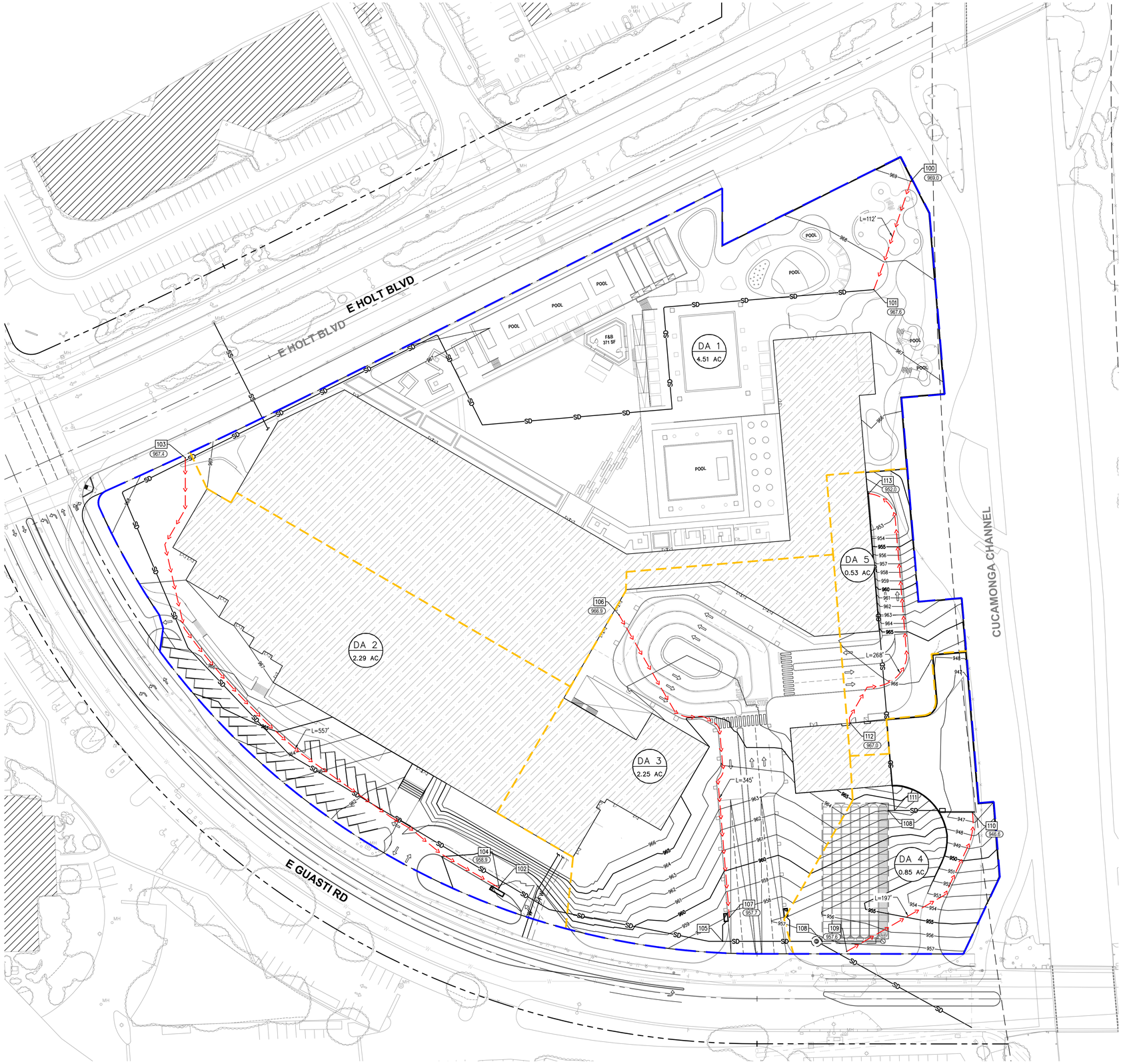
Description

EXISTING DRAINAGE MAP

Scale

PER PLAN

9/26/2023 10:32:52 AM Autodesk Docs://005.4382.000 - DPH/Sheets - 05.4382.000 - DPH.rvt



LEGEND

DMA ID
DA XX
XX AC
ACREAGE

DMA ID

L=XXX' FLOW PATH LENGTH (FEET)

OVERALL DMA BOUNDARY

SUB-DMA BOUNDARY

FLOWLINE

EX MAJOR CONTOURS

EX MINOR CONTOURS

SUMMARY TABLE:

DA #	AREA (AC)	Q_{100} (CFS)	Q_{10} (CFS)
DA 1	4.51	25.48	17.09
DA 2	2.29	8.97	5.99
DA 3	2.25	10.60	7.10
DA 4	0.85	5.02	3.37
DA 5	0.53	2.91	1.95
TOTAL	10.43	52.98	35.50

NORTH

GRAPHIC SCALE IN FEET
0 20 40 80

THE EMPIRE GROVES HOTEL

Ontario CA 91730

Gensler

500 South Figueroa Street
Los Angeles, California 90071
United States

Tel 213.327.3600
Fax 213.327.3601

Kimley»Horn

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3801 UNIVERSITY AVENUE, SUITE 300, RIVERSIDE, CA 92501
PHONE: (951) 543-9868
WWW.KIMLEY-HORN.COM

△ Date	Description

Seal / Signature

NOT FOR CONSTRUCTION

Project Name
Diversified Pacific Communities

Project Number
05.4382.000

Description
PROPOSED DRAINAGE MAP

Scale
PER PLAN

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6283

Appendix H - Rational Method Analysis

San Bernardino County Rational Hydrology Program

(Hydrology Manual Date - August 1986)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2018 Version 9.0
Rational Hydrology Study Date: 10/03/23

DIVERSIFIED EMPIRE HOTEL
EXISITING CONDITION RATIONAL METHOD ANALYSIS
10-YR - 1 HR DESIGN STORM
BY LUIS PEREZ 10/03/23

Program License Serial Number 6443

********* Hydrology Study Control Information **********

Rational hydrology study storm event year is 10.0
Computed rainfall intensity:
Storm year = 10.00 1 hour rainfall = 0.949 (In.)
Slope used for rainfall intensity curve b = 0.6000
Soil antecedent moisture condition (AMC) = 2

++

Process from Point/Station 100.000 to Point/Station 101.000
**** INITIAL AREA EVALUATION ****

UNDEVELOPED (average cover) subarea
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 50.00
Pervious ratio(Ap) = 1.0000 Max loss rate(Fm)= 0.810(In/Hr)
Initial subarea data:
Initial area flow distance = 734.000(Ft.)
Top (of initial area) elevation = 968.070(Ft.)
Bottom (of initial area) elevation = 957.740(Ft.)
Difference in elevation = 10.330(Ft.)
Slope = 0.01407 s(%)= 1.41
TC = k(0.706)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 23.195 min.
Rainfall intensity = 1.678(In/Hr) for a 10.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.466
Subarea runoff = 7.039(CFS)

```
Total initial stream area =        9.000(Ac.)
Pervious area fraction = 1.000
Initial area Fm value =    0.810(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      200.000 to Point/Station      201.000
**** INITIAL AREA EVALUATION ****
________________________________________________________________________
RESIDENTIAL(8 - 10 dwl/acre)
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Pervious ratio(Ap) = 0.4000     Max loss rate(Fm)=     0.391(In/Hr)
Initial subarea data:
Initial area flow distance =   383.000(Ft.)
Top (of initial area) elevation =   967.280(Ft.)
Bottom (of initial area) elevation =   958.660(Ft.)
Difference in elevation =     8.620(Ft.)
Slope =    0.02251  s(%)=       2.25
TC = k(0.374)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    8.624 min.
Rainfall intensity =      3.039(In/Hr) for a    10.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.784
Subarea runoff =      3.408(CFS)
Total initial stream area =        1.430(Ac.)
Pervious area fraction = 0.400
Initial area Fm value =    0.391(In/Hr)
End of computations, Total Study Area =           10.43 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.
Note: These figures do not consider reduced effective area
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 0.918
Area averaged SCS curve number =  47.5
```

San Bernardino County Rational Hydrology Program

(Hydrology Manual Date - August 1986)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2018 Version 9.0
Rational Hydrology Study Date: 10/03/23

DIVERSIFIED EMPIRE HOTEL
EXISITING CONDITION RATIONAL METHOD ANALYSIS
100-YR - 1 HR DESIGN STORM
BY LUIS PEREZ 10/03/23

Program License Serial Number 6443

********* Hydrology Study Control Information **********

Rational hydrology study storm event year is 100.0
Computed rainfall intensity:
Storm year = 100.00 1 hour rainfall = 1.400 (In.)
Slope used for rainfall intensity curve b = 0.6000
Soil antecedent moisture condition (AMC) = 3

++

Process from Point/Station 100.000 to Point/Station 101.000
**** INITIAL AREA EVALUATION ****

UNDEVELOPED (average cover) subarea
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 50.00
Adjusted SCS curve number for AMC 3 = 70.00
Pervious ratio(Ap) = 1.0000 Max loss rate(Fm)= 0.532(In/Hr)
Initial subarea data:
Initial area flow distance = 734.000(Ft.)
Top (of initial area) elevation = 968.070(Ft.)
Bottom (of initial area) elevation = 957.740(Ft.)
Difference in elevation = 10.330(Ft.)
Slope = 0.01407 s(%)= 1.41
TC = k(0.706)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 23.195 min.
Rainfall intensity = 2.476(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.706

```
Subarea runoff =     15.744(CFS)
Total initial stream area =        9.000(Ac.)
Pervious area fraction = 1.000
Initial area Fm value =    0.532(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      200.000 to Point/Station      201.000
**** INITIAL AREA EVALUATION ****
________________________________________________________________________
RESIDENTIAL(8 - 10 dwl/acre)
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Adjusted SCS curve number for AMC 3 = 52.00
Pervious ratio(Ap) = 0.4000     Max loss rate(Fm)=     0.314(In/Hr)
Initial subarea data:
Initial area flow distance =   383.000(Ft.)
Top (of initial area) elevation =   967.280(Ft.)
Bottom (of initial area) elevation =   958.660(Ft.)
Difference in elevation =     8.620(Ft.)
Slope =    0.02251  s(%)=       2.25
TC = k(0.374)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    8.624 min.
Rainfall intensity =      4.483(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.837
Subarea runoff =      5.366(CFS)
Total initial stream area =        1.430(Ac.)
Pervious area fraction = 0.400
Initial area Fm value =    0.314(In/Hr)
End of computations, Total Study Area =           10.43 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.
Note: These figures do not consider reduced effective area
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 0.918
Area averaged SCS curve number =  47.5
```

San Bernardino County Rational Hydrology Program

(Hydrology Manual Date - August 1986)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2018 Version 9.0
Rational Hydrology Study Date: 10/04/23

DIVERSIFIED EMPIRE HOTEL
PROPOSED CONDITION RATIONAL METHOD ANALYSIS
10-YR DESIGN STORM
BY LUIS PEREZ 10/03/23

Program License Serial Number 6443

********* Hydrology Study Control Information **********

Rational hydrology study storm event year is 10.0
Computed rainfall intensity:
Storm year = 10.00 1 hour rainfall = 0.949 (In.)
Slope used for rainfall intensity curve b = 0.6000
Soil antecedent moisture condition (AMC) = 2

++

Process from Point/Station 100.000 to Point/Station 101.000
**** INITIAL AREA EVALUATION ****

COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 32.00
Pervious ratio(Ap) = 0.1000 Max loss rate(Fm)= 0.098(In/Hr)
Initial subarea data:
Initial area flow distance = 112.000(Ft.)
Top (of initial area) elevation = 969.000(Ft.)
Bottom (of initial area) elevation = 967.600(Ft.)
Difference in elevation = 1.400(Ft.)
Slope = 0.01250 s(%)= 1.25
TC = k(0.304)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 4.821 min.
Rainfall intensity = 4.308(In/Hr) for a 10.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.880
Subarea runoff = 17.088(CFS)

```
Total initial stream area =        4.510(Ac.)
Pervious area fraction = 0.100
Initial area Fm value =    0.098(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      101.000 to Point/Station      102.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =   966.000(Ft.)
Downstream point/station elevation =   958.570(Ft.)
Pipe length  =  1486.00(Ft.)   Manning's N = 0.012
No. of pipes = 11  Required pipe flow  =    17.088(CFS)
Nearest computed pipe diameter  =     12.00(In.)
Calculated individual pipe flow  =     1.553(CFS)
Normal flow depth in pipe =    6.49(In.)
Flow top width inside pipe =   11.96(In.)
Critical Depth =    6.35(In.)
Pipe flow velocity =      3.59(Ft/s)
Travel time through pipe =    6.90 min.
Time of concentration (TC) =    11.73 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      102.000 to Point/Station      102.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =      4.510(Ac.)
Runoff from this stream =     17.088(CFS)
Time of concentration =   11.73 min.
Rainfall intensity =     2.527(In/Hr)
Area averaged loss rate (Fm) =    0.0978(In/Hr)
Area averaged Pervious ratio (Ap) = 0.1000


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      103.000 to Point/Station      104.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Pervious ratio(Ap) = 0.1000     Max loss rate(Fm)=     0.098(In/Hr)
Initial subarea data:
Initial area flow distance =   557.000(Ft.)
Top (of initial area) elevation =   967.400(Ft.)
```

```
Bottom (of initial area) elevation =   958.900(Ft.)
Difference in elevation =     8.500(Ft.)
Slope =    0.01526  s(%)=       1.53
TC = k(0.304)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    8.800 min.
Rainfall intensity =      3.002(In/Hr) for a    10.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.871
Subarea runoff =      5.986(CFS)
Total initial stream area =        2.290(Ac.)
Pervious area fraction = 0.100
Initial area Fm value =    0.098(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      104.000 to Point/Station      102.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =   958.900(Ft.)
Downstream point/station elevation =   958.570(Ft.)
Pipe length  =     9.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     5.986(CFS)
Nearest computed pipe diameter  =     12.00(In.)
Calculated individual pipe flow  =     5.986(CFS)
Normal flow depth in pipe =    8.19(In.)
Flow top width inside pipe =   11.17(In.)
Critical depth could not be calculated.
Pipe flow velocity =     10.48(Ft/s)
Travel time through pipe =    0.01 min.
Time of concentration (TC) =     8.81 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      102.000 to Point/Station      102.000
**** CONFLUENCE OF MINOR STREAMS ****
________________________________________________________________________
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      2.290(Ac.)
Runoff from this stream =      5.986(CFS)
Time of concentration =    8.81 min.
Rainfall intensity =     2.999(In/Hr)
Area averaged loss rate (Fm) =    0.0978(In/Hr)
Area averaged Pervious ratio (Ap) = 0.1000
Summary of stream data:

Stream Flow rate    Area    TC     Fm       Rainfall Intensity
 No.    (CFS)   (Ac.)       (min) (In/Hr)     (In/Hr)


1     17.09     4.510     11.73    0.098      2.527
2      5.99     2.290      8.81    0.098      2.999
```

```
Qmax(1) =
           1.000 *    1.000 *    17.088) +
           0.837 *    1.000 *     5.986) + =      22.101
Qmax(2) =
           1.194 *    0.752 *    17.088) +
           1.000 *    1.000 *     5.986) + =      21.328

Total of 2 streams to confluence:
Flow rates before confluence point:
      17.088       5.986
Maximum flow rates at confluence using above data:
       22.101       21.328
Area of streams before confluence:
        4.510        2.290
Effective area values after confluence:
        6.800        5.680
Results of confluence:
Total flow rate =     22.101(CFS)
Time of concentration =    11.725 min.
Effective stream area after confluence =      6.800(Ac.)
Study area average Pervious fraction(Ap) =  0.100
Study area average soil loss rate(Fm) =    0.098(In/Hr)
Study area total (this main stream) =       6.80(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      102.000 to Point/Station      105.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =   958.570(Ft.)
Downstream point/station elevation =   957.440(Ft.)
Pipe length  =   226.00(Ft.)   Manning's N = 0.012
No. of pipes = 3  Required pipe flow  =    22.101(CFS)
Nearest computed pipe diameter  =     18.00(In.)
Calculated individual pipe flow  =     7.367(CFS)
Normal flow depth in pipe =   13.55(In.)
Flow top width inside pipe =   15.53(In.)
Critical Depth =   12.61(In.)
Pipe flow velocity =      5.16(Ft/s)
Travel time through pipe =    0.73 min.
Time of concentration (TC) =    12.45 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      105.000 to Point/Station      105.000
**** CONFLUENCE OF MINOR STREAMS ****
________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =      6.800(Ac.)
Runoff from this stream =     22.101(CFS)
```

```
Time of concentration =   12.45 min.
Rainfall intensity =     2.438(In/Hr)
Area averaged loss rate (Fm) =    0.0978(In/Hr)
Area averaged Pervious ratio (Ap) = 0.1000


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      106.000 to Point/Station      107.000
**** INITIAL AREA EVALUATION ****
________________________________________________________________________
COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Pervious ratio(Ap) = 0.1000     Max loss rate(Fm)=     0.098(In/Hr)
Initial subarea data:
Initial area flow distance =   345.000(Ft.)
Top (of initial area) elevation =   966.900(Ft.)
Bottom (of initial area) elevation =   957.700(Ft.)
Difference in elevation =     9.200(Ft.)
Slope =    0.02667  s(%)=       2.67
TC = k(0.304)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    6.498 min.
Rainfall intensity =      3.601(In/Hr) for a    10.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.876
Subarea runoff =      7.095(CFS)
Total initial stream area =        2.250(Ac.)
Pervious area fraction = 0.100
Initial area Fm value =    0.098(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      107.000 to Point/Station      105.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =   957.700(Ft.)
Downstream point/station elevation =   957.440(Ft.)
Pipe length  =    21.00(Ft.)   Manning's N = 0.012
No. of pipes = 2  Required pipe flow  =     7.095(CFS)
Nearest computed pipe diameter  =     12.00(In.)
Calculated individual pipe flow  =     3.547(CFS)
Normal flow depth in pipe =    8.32(In.)
Flow top width inside pipe =   11.07(In.)
Critical Depth =    9.65(In.)
Pipe flow velocity =      6.11(Ft/s)
Travel time through pipe =    0.06 min.
Time of concentration (TC) =     6.56 min.
```

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Process from Point/Station      105.000 to Point/Station      105.000
**** CONFLUENCE OF MINOR STREAMS ****
_____________________________________________________________________________
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      2.250(Ac.)
Runoff from this stream =      7.095(CFS)
Time of concentration =    6.56 min.
Rainfall intensity =     3.582(In/Hr)
Area averaged loss rate (Fm) =    0.0978(In/Hr)
Area averaged Pervious ratio (Ap) = 0.1000
Summary of stream data:

Stream Flow rate    Area    TC     Fm       Rainfall Intensity
 No.    (CFS)   (Ac.)       (min) (In/Hr)     (In/Hr)


1     22.10     6.800     12.45    0.098      2.438
2      7.09     2.250      6.56    0.098      3.582
Qmax(1) =
           1.000 *    1.000 *    22.101) +
           0.671 *    1.000 *     7.095) + =      26.865
Qmax(2) =
           1.489 *    0.526 *    22.101) +
           1.000 *    1.000 *     7.095) + =      24.420

Total of 2 streams to confluence:
Flow rates before confluence point:
      22.101       7.095
Maximum flow rates at confluence using above data:
       26.865       24.420
Area of streams before confluence:
        6.800        2.250
Effective area values after confluence:
        9.050        5.829
Results of confluence:
Total flow rate =     26.865(CFS)
Time of concentration =    12.455 min.
Effective stream area after confluence =      9.050(Ac.)
Study area average Pervious fraction(Ap) =  0.100
Study area average soil loss rate(Fm) =    0.098(In/Hr)
Study area total (this main stream) =       9.05(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      105.000 to Point/Station      108.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
_____________________________________________________________________________
Upstream point/station elevation =   957.440(Ft.)
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Downstream point/station elevation =   956.950(Ft.)
Pipe length  =    87.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =    26.865(CFS)
Nearest computed pipe diameter  =     30.00(In.)
Calculated individual pipe flow  =    26.865(CFS)
Normal flow depth in pipe =   20.39(In.)
Flow top width inside pipe =   28.00(In.)
Critical Depth =   21.21(In.)
Pipe flow velocity =      7.56(Ft/s)
Travel time through pipe =    0.19 min.
Time of concentration (TC) =    12.65 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      108.000 to Point/Station      108.000
**** CONFLUENCE OF MAIN STREAMS ****
________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =      9.050(Ac.)
Runoff from this stream =     26.865(CFS)
Time of concentration =   12.65 min.
Rainfall intensity =     2.415(In/Hr)
Area averaged loss rate (Fm) =    0.0978(In/Hr)
Area averaged Pervious ratio (Ap) = 0.1000
Program is now starting with Main Stream No. 2


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      109.000 to Point/Station      110.000
**** INITIAL AREA EVALUATION ****
________________________________________________________________________
COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Pervious ratio(Ap) = 0.1000     Max loss rate(Fm)=     0.098(In/Hr)
Initial subarea data:
Initial area flow distance =   197.000(Ft.)
Top (of initial area) elevation =   957.600(Ft.)
Bottom (of initial area) elevation =   946.600(Ft.)
Difference in elevation =    11.000(Ft.)
Slope =    0.05584  s(%)=       5.58
TC = k(0.304)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    4.480 min.
Rainfall intensity =      4.502(In/Hr) for a    10.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.880
Subarea runoff =      3.369(CFS)
```

```
Total initial stream area =        0.850(Ac.)
Pervious area fraction = 0.100
Initial area Fm value =    0.098(In/Hr)


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Process from Point/Station      110.000 to Point/Station      111.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =   943.600(Ft.)
Downstream point/station elevation =   943.380(Ft.)
Pipe length  =    44.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     3.369(CFS)
Nearest computed pipe diameter  =     15.00(In.)
Calculated individual pipe flow  =     3.369(CFS)
Normal flow depth in pipe =    9.08(In.)
Flow top width inside pipe =   14.66(In.)
Critical Depth =    8.88(In.)
Pipe flow velocity =      4.34(Ft/s)
Travel time through pipe =    0.17 min.
Time of concentration (TC) =     4.65 min.


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Process from Point/Station      111.000 to Point/Station      111.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 2 in normal stream number 1
Stream flow area =      0.850(Ac.)
Runoff from this stream =      3.369(CFS)
Time of concentration =    4.65 min.
Rainfall intensity =     4.403(In/Hr)
Area averaged loss rate (Fm) =    0.0978(In/Hr)
Area averaged Pervious ratio (Ap) = 0.1000


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      112.000 to Point/Station      113.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Pervious ratio(Ap) = 0.1000     Max loss rate(Fm)=     0.098(In/Hr)
Initial subarea data:
Initial area flow distance =   268.000(Ft.)
Top (of initial area) elevation =   967.000(Ft.)
```

```
Bottom (of initial area) elevation =   952.000(Ft.)
Difference in elevation =    15.000(Ft.)
Slope =    0.05597  s(%)=       5.60
TC = k(0.304)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    5.064 min.
Rainfall intensity =      4.182(In/Hr) for a    10.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.879
Subarea runoff =      1.948(CFS)
Total initial stream area =        0.530(Ac.)
Pervious area fraction = 0.100
Initial area Fm value =    0.098(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      113.000 to Point/Station      111.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =   952.000(Ft.)
Downstream point/station elevation =   941.970(Ft.)
Pipe length  =   283.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     1.948(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     1.948(CFS)
Normal flow depth in pipe =    4.90(In.)
Flow top width inside pipe =    8.96(In.)
Critical Depth =    7.63(In.)
Pipe flow velocity =      7.91(Ft/s)
Travel time through pipe =    0.60 min.
Time of concentration (TC) =     5.66 min.


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Process from Point/Station      111.000 to Point/Station      111.000
**** CONFLUENCE OF MINOR STREAMS ****
________________________________________________________________________
Along Main Stream number: 2 in normal stream number 2
Stream flow area =      0.530(Ac.)
Runoff from this stream =      1.948(CFS)
Time of concentration =    5.66 min.
Rainfall intensity =     3.912(In/Hr)
Area averaged loss rate (Fm) =    0.0978(In/Hr)
Area averaged Pervious ratio (Ap) = 0.1000
Summary of stream data:

Stream Flow rate    Area    TC     Fm       Rainfall Intensity
 No.    (CFS)   (Ac.)       (min) (In/Hr)     (In/Hr)


1      3.37     0.850      4.65    0.098      4.403
2      1.95     0.530      5.66    0.098      3.912
```

```
Qmax(1) =
          1.000 *    1.000 *     3.369) +
          1.129 *    0.821 *     1.948) + =       5.175
Qmax(2) =
          0.886 *    1.000 *     3.369) +
          1.000 *    1.000 *     1.948) + =       4.934

Total of 2 streams to confluence:
Flow rates before confluence point:
       3.369       1.948
Maximum flow rates at confluence using above data:
        5.175        4.934
Area of streams before confluence:
        0.850        0.530
Effective area values after confluence:
        1.285        1.380
Results of confluence:
Total flow rate =      5.175(CFS)
Time of concentration =     4.649 min.
Effective stream area after confluence =      1.285(Ac.)
Study area average Pervious fraction(Ap) =  0.100
Study area average soil loss rate(Fm) =    0.098(In/Hr)
Study area total (this main stream) =       1.38(Ac.)


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Process from Point/Station      111.000 to Point/Station      108.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =   943.380(Ft.)
Downstream point/station elevation =   943.350(Ft.)
Pipe length  =     6.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     5.175(CFS)
Nearest computed pipe diameter  =     18.00(In.)
Calculated individual pipe flow  =     5.175(CFS)
Normal flow depth in pipe =   10.50(In.)
Flow top width inside pipe =   17.75(In.)
Critical Depth =   10.50(In.)
Pipe flow velocity =      4.84(Ft/s)
Travel time through pipe =    0.02 min.
Time of concentration (TC) =     4.67 min.


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Process from Point/Station      108.000 to Point/Station      108.000
**** CONFLUENCE OF MAIN STREAMS ****
________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =      1.285(Ac.)
```

```
Runoff from this stream =      5.175(CFS)
Time of concentration =    4.67 min.
Rainfall intensity =     4.391(In/Hr)
Area averaged loss rate (Fm) =    0.0978(In/Hr)
Area averaged Pervious ratio (Ap) = 0.1000
Summary of stream data:

Stream Flow rate    Area    TC     Fm       Rainfall Intensity
 No.    (CFS)   (Ac.)       (min) (In/Hr)     (In/Hr)


1     26.86     9.050     12.65    0.098      2.415
2      5.18     1.285      4.67    0.098      4.391
Qmax(1) =
           1.000 *    1.000 *    26.865) +
           0.540 *    1.000 *     5.175) + =      29.658
Qmax(2) =
           1.853 *    0.369 *    26.865) +
           1.000 *    1.000 *     5.175) + =      23.552

Total of 2 main streams to confluence:
Flow rates before confluence point:
      27.865       6.175
Maximum flow rates at confluence using above data:
       29.658       23.552
Area of streams before confluence:
        9.050        1.285
Effective area values after confluence:
       10.335        4.627


Results of confluence:
Total flow rate =     29.658(CFS)
Time of concentration =    12.647 min.
Effective stream area after confluence  =     10.335(Ac.)
Study area average Pervious fraction(Ap) =  0.100
Study area average soil loss rate(Fm) =    0.098(In/Hr)
Study area total =      10.34(Ac.)
End of computations, Total Study Area =           10.43 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.
Note: These figures do not consider reduced effective area
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 0.100
Area averaged SCS curve number =  32.0
```

San Bernardino County Rational Hydrology Program

(Hydrology Manual Date - August 1986)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2018 Version 9.0
Rational Hydrology Study Date: 10/04/23

DIVERSIFIED EMPIRE HOTEL
PROPOSED CONDITION RATIONAL METHOD ANALYSIS
100-YR DESIGN STORM
BY LUIS PEREZ 10/03/23

Program License Serial Number 6443

********* Hydrology Study Control Information **********

Rational hydrology study storm event year is 100.0
Computed rainfall intensity:
Storm year = 100.00 1 hour rainfall = 1.400 (In.)
Slope used for rainfall intensity curve b = 0.6000
Soil antecedent moisture condition (AMC) = 3

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Process from Point/Station 100.000 to Point/Station 101.000
**** INITIAL AREA EVALUATION ****

COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 32.00
Adjusted SCS curve number for AMC 3 = 52.00
Pervious ratio(Ap) = 0.1000 Max loss rate(Fm)= 0.079(In/Hr)
Initial subarea data:
Initial area flow distance = 112.000(Ft.)
Top (of initial area) elevation = 969.000(Ft.)
Bottom (of initial area) elevation = 967.600(Ft.)
Difference in elevation = 1.400(Ft.)
Slope = 0.01250 s(%)= 1.25
TC = k(0.304)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 4.821 min.
Rainfall intensity = 6.355(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.889

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Subarea runoff =     25.476(CFS)
Total initial stream area =        4.510(Ac.)
Pervious area fraction = 0.100
Initial area Fm value =    0.079(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      101.000 to Point/Station      102.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =   966.000(Ft.)
Downstream point/station elevation =   958.570(Ft.)
Pipe length  =  1486.00(Ft.)   Manning's N = 0.012
No. of pipes = 11  Required pipe flow  =    25.476(CFS)
Nearest computed pipe diameter  =     12.00(In.)
Calculated individual pipe flow  =     2.316(CFS)
Normal flow depth in pipe =    8.48(In.)
Flow top width inside pipe =   10.92(In.)
Critical Depth =    7.81(In.)
Pipe flow velocity =      3.90(Ft/s)
Travel time through pipe =    6.35 min.
Time of concentration (TC) =    11.17 min.


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Process from Point/Station      102.000 to Point/Station      102.000
**** CONFLUENCE OF MINOR STREAMS ****
________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =      4.510(Ac.)
Runoff from this stream =     25.476(CFS)
Time of concentration =   11.17 min.
Rainfall intensity =     3.838(In/Hr)
Area averaged loss rate (Fm) =    0.0785(In/Hr)
Area averaged Pervious ratio (Ap) = 0.1000


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Process from Point/Station      103.000 to Point/Station      104.000
**** INITIAL AREA EVALUATION ****
________________________________________________________________________
COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Adjusted SCS curve number for AMC 3 = 52.00
Pervious ratio(Ap) = 0.1000     Max loss rate(Fm)=     0.079(In/Hr)
Initial subarea data:
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Initial area flow distance =   557.000(Ft.)
Top (of initial area) elevation =   967.400(Ft.)
Bottom (of initial area) elevation =   958.900(Ft.)
Difference in elevation =     8.500(Ft.)
Slope =    0.01526  s(%)=       1.53
TC = k(0.304)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    8.800 min.
Rainfall intensity =      4.429(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.884
Subarea runoff =      8.967(CFS)
Total initial stream area =        2.290(Ac.)
Pervious area fraction = 0.100
Initial area Fm value =    0.079(In/Hr)


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Process from Point/Station      104.000 to Point/Station      102.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =   958.900(Ft.)
Downstream point/station elevation =   958.570(Ft.)
Pipe length  =     9.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     8.967(CFS)
Nearest computed pipe diameter  =     15.00(In.)
Calculated individual pipe flow  =     8.967(CFS)
Normal flow depth in pipe =    8.98(In.)
Flow top width inside pipe =   14.71(In.)
Critical Depth =   13.85(In.)
Pipe flow velocity =     11.70(Ft/s)
Travel time through pipe =    0.01 min.
Time of concentration (TC) =     8.81 min.


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Process from Point/Station      102.000 to Point/Station      102.000
**** CONFLUENCE OF MINOR STREAMS ****
________________________________________________________________________
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      2.290(Ac.)
Runoff from this stream =      8.967(CFS)
Time of concentration =    8.81 min.
Rainfall intensity =     4.425(In/Hr)
Area averaged loss rate (Fm) =    0.0785(In/Hr)
Area averaged Pervious ratio (Ap) = 0.1000
Summary of stream data:

Stream Flow rate    Area    TC     Fm       Rainfall Intensity
 No.    (CFS)   (Ac.)       (min) (In/Hr)     (In/Hr)
```

```
1     25.48     4.510     11.17    0.079      3.838
2      8.97     2.290      8.81    0.079      4.425
Qmax(1) =
           1.000 *    1.000 *    25.476) +
           0.865 *    1.000 *     8.967) + =      33.231
Qmax(2) =
           1.156 *    0.789 *    25.476) +
           1.000 *    1.000 *     8.967) + =      32.200

Total of 2 streams to confluence:
Flow rates before confluence point:
      25.476       8.967
Maximum flow rates at confluence using above data:
       33.231       32.200
Area of streams before confluence:
        4.510        2.290
Effective area values after confluence:
        6.800        5.847
Results of confluence:
Total flow rate =     33.231(CFS)
Time of concentration =    11.173 min.
Effective stream area after confluence =      6.800(Ac.)
Study area average Pervious fraction(Ap) =  0.100
Study area average soil loss rate(Fm) =    0.079(In/Hr)
Study area total (this main stream) =       6.80(Ac.)


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Process from Point/Station      102.000 to Point/Station      105.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =   958.570(Ft.)
Downstream point/station elevation =   957.440(Ft.)
Pipe length  =   226.00(Ft.)   Manning's N = 0.012
No. of pipes = 3  Required pipe flow  =    33.231(CFS)
Nearest computed pipe diameter  =     21.00(In.)
Calculated individual pipe flow  =    11.077(CFS)
Normal flow depth in pipe =   15.75(In.)
Flow top width inside pipe =   18.19(In.)
Critical Depth =   14.88(In.)
Pipe flow velocity =      5.72(Ft/s)
Travel time through pipe =    0.66 min.
Time of concentration (TC) =    11.83 min.


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Process from Point/Station      105.000 to Point/Station      105.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
```

```
Stream flow area =      6.800(Ac.)
Runoff from this stream =     33.231(CFS)
Time of concentration =   11.83 min.
Rainfall intensity =     3.708(In/Hr)
Area averaged loss rate (Fm) =    0.0785(In/Hr)
Area averaged Pervious ratio (Ap) = 0.1000


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Process from Point/Station      106.000 to Point/Station      107.000
**** INITIAL AREA EVALUATION ****
________________________________________________________________________
COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Adjusted SCS curve number for AMC 3 = 52.00
Pervious ratio(Ap) = 0.1000     Max loss rate(Fm)=     0.079(In/Hr)
Initial subarea data:
Initial area flow distance =   345.000(Ft.)
Top (of initial area) elevation =   966.900(Ft.)
Bottom (of initial area) elevation =   957.700(Ft.)
Difference in elevation =     9.200(Ft.)
Slope =    0.02667  s(%)=       2.67
TC = k(0.304)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    6.498 min.
Rainfall intensity =      5.313(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.887
Subarea runoff =     10.600(CFS)
Total initial stream area =        2.250(Ac.)
Pervious area fraction = 0.100
Initial area Fm value =    0.079(In/Hr)


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Process from Point/Station      107.000 to Point/Station      105.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =   957.700(Ft.)
Downstream point/station elevation =   957.440(Ft.)
Pipe length  =    21.00(Ft.)   Manning's N = 0.012
No. of pipes = 2  Required pipe flow  =    10.600(CFS)
Nearest computed pipe diameter  =     15.00(In.)
Calculated individual pipe flow  =     5.300(CFS)
Normal flow depth in pipe =    9.08(In.)
Flow top width inside pipe =   14.66(In.)
Critical Depth =   11.19(In.)
Pipe flow velocity =      6.83(Ft/s)
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```
Travel time through pipe =    0.05 min.
Time of concentration (TC) =     6.55 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      105.000 to Point/Station      105.000
**** CONFLUENCE OF MINOR STREAMS ****
________________________________________________________________________
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      2.250(Ac.)
Runoff from this stream =     10.600(CFS)
Time of concentration =    6.55 min.
Rainfall intensity =     5.288(In/Hr)
Area averaged loss rate (Fm) =    0.0785(In/Hr)
Area averaged Pervious ratio (Ap) = 0.1000
Summary of stream data:

Stream Flow rate    Area    TC     Fm       Rainfall Intensity
 No.    (CFS)   (Ac.)       (min) (In/Hr)     (In/Hr)


1     33.23     6.800     11.83    0.079      3.708
2     10.60     2.250      6.55    0.079      5.288
Qmax(1) =
           1.000 *    1.000 *    33.231) +
           0.697 *    1.000 *    10.600) + =      40.617
Qmax(2) =
           1.435 *    0.554 *    33.231) +
           1.000 *    1.000 *    10.600) + =      37.001

Total of 2 streams to confluence:
Flow rates before confluence point:
      33.231      10.600
Maximum flow rates at confluence using above data:
       40.617       37.001
Area of streams before confluence:
        6.800        2.250
Effective area values after confluence:
        9.050        6.014
Results of confluence:
Total flow rate =     40.617(CFS)
Time of concentration =    11.832 min.
Effective stream area after confluence =      9.050(Ac.)
Study area average Pervious fraction(Ap) =  0.100
Study area average soil loss rate(Fm) =    0.079(In/Hr)
Study area total (this main stream) =       9.05(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      105.000 to Point/Station      108.000
```

```
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
_____________________________________________________________________
Upstream point/station elevation =   957.440(Ft.)
Downstream point/station elevation =   956.950(Ft.)
Pipe length  =    87.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =    40.617(CFS)
Nearest computed pipe diameter  =     33.00(In.)
Calculated individual pipe flow  =    40.617(CFS)
Normal flow depth in pipe =   25.55(In.)
Flow top width inside pipe =   27.60(In.)
Critical Depth =   25.45(In.)
Pipe flow velocity =      8.23(Ft/s)
Travel time through pipe =    0.18 min.
Time of concentration (TC) =    12.01 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      108.000 to Point/Station      108.000
**** CONFLUENCE OF MAIN STREAMS ****
_____________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =      9.050(Ac.)
Runoff from this stream =     40.617(CFS)
Time of concentration =   12.01 min.
Rainfall intensity =     3.676(In/Hr)
Area averaged loss rate (Fm) =    0.0785(In/Hr)
Area averaged Pervious ratio (Ap) = 0.1000
Program is now starting with Main Stream No. 2


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      109.000 to Point/Station      110.000
**** INITIAL AREA EVALUATION ****
_____________________________________________________________________
COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Adjusted SCS curve number for AMC 3 = 52.00
Pervious ratio(Ap) = 0.1000     Max loss rate(Fm)=     0.079(In/Hr)
Initial subarea data:
Initial area flow distance =   197.000(Ft.)
Top (of initial area) elevation =   957.600(Ft.)
Bottom (of initial area) elevation =   946.600(Ft.)
Difference in elevation =    11.000(Ft.)
Slope =    0.05584  s(%)=       5.58
TC = k(0.304)*[(length^3)/(elevation change)]^0.2
```

```
Initial area time of concentration =    4.480 min.
Rainfall intensity =      6.641(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.889
Subarea runoff =      5.021(CFS)
Total initial stream area =        0.850(Ac.)
Pervious area fraction = 0.100
Initial area Fm value =    0.079(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      110.000 to Point/Station      111.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =   943.600(Ft.)
Downstream point/station elevation =   943.380(Ft.)
Pipe length  =    44.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     5.021(CFS)
Nearest computed pipe diameter  =     18.00(In.)
Calculated individual pipe flow  =     5.021(CFS)
Normal flow depth in pipe =   10.30(In.)
Flow top width inside pipe =   17.81(In.)
Critical Depth =   10.34(In.)
Pipe flow velocity =      4.80(Ft/s)
Travel time through pipe =    0.15 min.
Time of concentration (TC) =     4.63 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      111.000 to Point/Station      111.000
**** CONFLUENCE OF MINOR STREAMS ****
________________________________________________________________________
Along Main Stream number: 2 in normal stream number 1
Stream flow area =      0.850(Ac.)
Runoff from this stream =      5.021(CFS)
Time of concentration =    4.63 min.
Rainfall intensity =     6.509(In/Hr)
Area averaged loss rate (Fm) =    0.0785(In/Hr)
Area averaged Pervious ratio (Ap) = 0.1000


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      112.000 to Point/Station      113.000
**** INITIAL AREA EVALUATION ****
________________________________________________________________________
COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
```

```
Adjusted SCS curve number for AMC 3 = 52.00
Pervious ratio(Ap) = 0.1000     Max loss rate(Fm)=     0.079(In/Hr)
Initial subarea data:
Initial area flow distance =   268.000(Ft.)
Top (of initial area) elevation =   967.000(Ft.)
Bottom (of initial area) elevation =   952.000(Ft.)
Difference in elevation =    15.000(Ft.)
Slope =    0.05597  s(%)=       5.60
TC = k(0.304)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    5.064 min.
Rainfall intensity =      6.170(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.889
Subarea runoff =      2.906(CFS)
Total initial stream area =        0.530(Ac.)
Pervious area fraction = 0.100
Initial area Fm value =    0.079(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      113.000 to Point/Station      111.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =   952.000(Ft.)
Downstream point/station elevation =   941.970(Ft.)
Pipe length  =   283.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     2.906(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     2.906(CFS)
Normal flow depth in pipe =    6.44(In.)
Flow top width inside pipe =    8.12(In.)
Critical depth could not be calculated.
Pipe flow velocity =      8.59(Ft/s)
Travel time through pipe =    0.55 min.
Time of concentration (TC) =     5.61 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      111.000 to Point/Station      111.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 2 in normal stream number 2
Stream flow area =      0.530(Ac.)
Runoff from this stream =      2.906(CFS)
Time of concentration =    5.61 min.
Rainfall intensity =     5.801(In/Hr)
Area averaged loss rate (Fm) =    0.0785(In/Hr)
Area averaged Pervious ratio (Ap) = 0.1000
Summary of stream data:

Stream Flow rate    Area    TC     Fm       Rainfall Intensity
```

```
 No.    (CFS)   (Ac.)       (min) (In/Hr)     (In/Hr)


1      5.02     0.850      4.63    0.079      6.509
2      2.91     0.530      5.61    0.079      5.801
Qmax(1) =
           1.000 *    1.000 *     5.021) +
           1.124 *    0.825 *     2.906) + =       7.715
Qmax(2) =
           0.890 *    1.000 *     5.021) +
           1.000 *    1.000 *     2.906) + =       7.373

Total of 2 streams to confluence:
Flow rates before confluence point:
       5.021       2.906
Maximum flow rates at confluence using above data:
        7.715        7.373
Area of streams before confluence:
        0.850        0.530
Effective area values after confluence:
        1.287        1.380
Results of confluence:
Total flow rate =      7.715(CFS)
Time of concentration =     4.633 min.
Effective stream area after confluence =      1.287(Ac.)
Study area average Pervious fraction(Ap) =  0.100
Study area average soil loss rate(Fm) =    0.079(In/Hr)
Study area total (this main stream) =       1.38(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      111.000 to Point/Station      108.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =   943.380(Ft.)
Downstream point/station elevation =   943.350(Ft.)
Pipe length  =     6.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     7.715(CFS)
Nearest computed pipe diameter  =     18.00(In.)
Calculated individual pipe flow  =     7.715(CFS)
Normal flow depth in pipe =   14.13(In.)
Flow top width inside pipe =   14.79(In.)
Critical Depth =   12.91(In.)
Pipe flow velocity =      5.19(Ft/s)
Travel time through pipe =    0.02 min.
Time of concentration (TC) =     4.65 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      108.000 to Point/Station      108.000
```

**** CONFLUENCE OF MAIN STREAMS ****

The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area = 1.287(Ac.)
Runoff from this stream = 7.715(CFS)
Time of concentration = 4.65 min.
Rainfall intensity = 6.493(In/Hr)
Area averaged loss rate (Fm) = 0.0785(In/Hr)
Area averaged Pervious ratio (Ap) = 0.1000
Summary of stream data:

Stream No.	Flow rate (CFS)	Area (Ac.)	TC (min)	Fm (In/Hr)	Rainfall Intensity (In/Hr)
1	40.62	9.050	12.01	0.079	3.676
2	7.72	1.287	4.65	0.079	6.493

Qmax(1) =
1.000 * 1.000 * 40.617) +
0.561 * 1.000 * 7.715) + = 44.944
Qmax(2) =
1.783 * 0.387 * 40.617) +
1.000 * 1.000 * 7.715) + = 35.775

Total of 2 main streams to confluence:
Flow rates before confluence point:
41.617 8.715
Maximum flow rates at confluence using above data:
44.944 35.775
Area of streams before confluence:
9.050 1.287
Effective area values after confluence:
10.337 4.793

Results of confluence:
Total flow rate = 44.944(CFS)
Time of concentration = 12.008 min.
Effective stream area after confluence = 10.337(Ac.)
Study area average Pervious fraction(Ap) = 0.100
Study area average soil loss rate(Fm) = 0.079(In/Hr)
Study area total = 10.34(Ac.)
End of computations, Total Study Area = 10.43 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.
Note: These figures do not consider reduced effective area
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 0.100

Area averaged SCS curve number = 32.0

Appendix I - Unit Hydrograph Analysis

U n i t H y d r o g r a p h A n a l y s i s

Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2018, Version 9.0

Study date 10/05/23

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San Bernardino County Synthetic Unit Hydrology Method
Manual date - August 1986

Program License Serial Number 6443

DIVERSIFIED EMPIRE HOTEL
UNIT HYDROGRAPH ANALYSIS
100-YR EXISTING DESIGN STORM
BY LUIS PEREZ 10/05/23

Storm Event Year = 100

Antecedent Moisture Condition = 3

English (in-lb) Input Units Used

English Rainfall Data (Inches) Input Values Used

English Units used in output format

Area averaged rainfall intensity isohyetal data:

Sub-Area (Ac.)	Duration (hours)	Isohyetal (In)
Rainfall data for year 10		
10.43	1	0.95
Rainfall data for year 2		
10.43	6	1.58
Rainfall data for year 2		
10.43	24	2.75
Rainfall data for year 100		

```
            10.43            1            1.40
-------------------------------------------------------------------------
Rainfall data for year 100
            10.43            6            3.46
-------------------------------------------------------------------------
Rainfall data for year 100
            10.43           24            6.27
-------------------------------------------------------------------------
+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

******** Area-averaged max loss rate, Fm ********


SCS curve  SCS curve     Area     Area     Fp(Fig C6)    Ap      Fm
No.(AMCII) NO.(AMC 3)    (Ac.)    Fraction     (In/Hr)  (dec.)   (In/Hr)
 32.0      52.0         10.43      1.000     0.785    1.000    0.785

Area-averaged adjusted loss rate Fm (In/Hr) =  0.785

********* Area-Averaged low loss rate fraction, Yb **********

Area       Area          SCS CN    SCS CN      S     Pervious
 (Ac.)      Fract         (AMC2)    (AMC3)           Yield Fr
    10.43   1.000         32.0      52.0       9.23     0.229

Area-averaged catchment yield fraction, Y =  0.229
Area-averaged low loss fraction, Yb =  0.771
Direct entry of lag time by user
+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Watershed area =      10.43(Ac.)
Catchment Lag time =   0.309 hours
Unit interval =   5.000 minutes
Unit interval percentage of lag time = 26.9426
Hydrograph baseflow =     0.00(CFS)
Average maximum watershed loss rate(Fm) =  0.785(In/Hr)
Average low loss rate fraction (Yb) = 0.771 (decimal)
VALLEY DEVELOPED S-Graph Selected
Computed peak 5-minute rainfall =  0.518(In)
Computed peak 30-minute rainfall =  1.061(In)
Specified peak 1-hour rainfall =  1.400(In)
Computed peak 3-hour rainfall =  2.438(In)
Specified peak 6-hour rainfall =  3.460(In)
Specified peak 24-hour rainfall =  6.270(In)


Rainfall depth area reduction factors:
Using a total area of      10.43(Ac.) (Ref: fig. E-4)

5-minute factor = 1.000     Adjusted rainfall =  0.518(In)
30-minute factor = 1.000    Adjusted rainfall =  1.060(In)
```

1-hour factor = 1.000 Adjusted rainfall = 1.399(In)
3-hour factor = 1.000 Adjusted rainfall = 2.438(In)
6-hour factor = 1.000 Adjusted rainfall = 3.460(In)
24-hour factor = 1.000 Adjusted rainfall = 6.270(In)

U n i t H y d r o g r a p h

Interval Number	'S' Graph Mean values	Unit Hydrograph ((CFS))
	(K = 126.14 (CFS))	
1	1.695	2.139
2	8.881	9.064
3	24.008	19.081
4	44.467	25.806
5	67.606	29.187
6	81.667	17.736
7	90.303	10.893
8	94.934	5.842
9	97.441	3.162
10	98.407	1.219
11	98.892	0.612
12	99.377	0.612
13	100.000	0.306

Peak Unit Number	Adjusted mass rainfall (In)	Unit rainfall (In)
1	0.5179	0.5179
2	0.6834	0.1655
3	0.8037	0.1203
4	0.9017	0.0980
5	0.9859	0.0842
6	1.0605	0.0746
7	1.1279	0.0674
8	1.1898	0.0619
9	1.2472	0.0574
10	1.3009	0.0537
11	1.3515	0.0506
12	1.3993	0.0479
13	1.4571	0.0578
14	1.5127	0.0556
15	1.5664	0.0537
16	1.6183	0.0519
17	1.6686	0.0503
18	1.7175	0.0489
19	1.7651	0.0476
20	1.8115	0.0464
21	1.8567	0.0452

22	1.9009	0.0442
23	1.9440	0.0432
24	1.9863	0.0423
25	2.0277	0.0414
26	2.0683	0.0406
27	2.1081	0.0398
28	2.1472	0.0391
29	2.1856	0.0384
30	2.2234	0.0378
31	2.2606	0.0372
32	2.2971	0.0366
33	2.3331	0.0360
34	2.3686	0.0355
35	2.4036	0.0350
36	2.4380	0.0345
37	2.4720	0.0340
38	2.5055	0.0335
39	2.5386	0.0331
40	2.5713	0.0327
41	2.6035	0.0323
42	2.6354	0.0319
43	2.6669	0.0315
44	2.6980	0.0311
45	2.7288	0.0308
46	2.7593	0.0305
47	2.7894	0.0301
48	2.8192	0.0298
49	2.8488	0.0295
50	2.8780	0.0292
51	2.9069	0.0289
52	2.9355	0.0286
53	2.9639	0.0284
54	2.9920	0.0281
55	3.0199	0.0279
56	3.0475	0.0276
57	3.0748	0.0274
58	3.1020	0.0271
59	3.1289	0.0269
60	3.1555	0.0267
61	3.1820	0.0265
62	3.2082	0.0262
63	3.2343	0.0260
64	3.2601	0.0258
65	3.2857	0.0256
66	3.3111	0.0254
67	3.3364	0.0252
68	3.3614	0.0251
69	3.3863	0.0249
70	3.4110	0.0247
71	3.4355	0.0245

72	3.4599	0.0244
73	3.4804	0.0205
74	3.5008	0.0204
75	3.5210	0.0202
76	3.5411	0.0201
77	3.5610	0.0199
78	3.5807	0.0198
79	3.6003	0.0196
80	3.6198	0.0195
81	3.6391	0.0193
82	3.6583	0.0192
83	3.6774	0.0191
84	3.6963	0.0189
85	3.7152	0.0188
86	3.7338	0.0187
87	3.7524	0.0186
88	3.7708	0.0184
89	3.7892	0.0183
90	3.8074	0.0182
91	3.8254	0.0181
92	3.8434	0.0180
93	3.8613	0.0179
94	3.8790	0.0178
95	3.8967	0.0176
96	3.9142	0.0175
97	3.9316	0.0174
98	3.9490	0.0173
99	3.9662	0.0172
100	3.9833	0.0171
101	4.0004	0.0170
102	4.0173	0.0169
103	4.0341	0.0168
104	4.0509	0.0168
105	4.0676	0.0167
106	4.0841	0.0166
107	4.1006	0.0165
108	4.1170	0.0164
109	4.1333	0.0163
110	4.1495	0.0162
111	4.1657	0.0161
112	4.1817	0.0161
113	4.1977	0.0160
114	4.2136	0.0159
115	4.2294	0.0158
116	4.2451	0.0157
117	4.2608	0.0157
118	4.2764	0.0156
119	4.2919	0.0155
120	4.3073	0.0154
121	4.3226	0.0154

122	4.3379	0.0153
123	4.3531	0.0152
124	4.3683	0.0151
125	4.3834	0.0151
126	4.3984	0.0150
127	4.4133	0.0149
128	4.4282	0.0149
129	4.4430	0.0148
130	4.4577	0.0147
131	4.4724	0.0147
132	4.4870	0.0146
133	4.5015	0.0145
134	4.5160	0.0145
135	4.5305	0.0144
136	4.5448	0.0144
137	4.5591	0.0143
138	4.5734	0.0142
139	4.5875	0.0142
140	4.6017	0.0141
141	4.6157	0.0141
142	4.6297	0.0140
143	4.6437	0.0140
144	4.6576	0.0139
145	4.6714	0.0138
146	4.6852	0.0138
147	4.6990	0.0137
148	4.7126	0.0137
149	4.7263	0.0136
150	4.7399	0.0136
151	4.7534	0.0135
152	4.7669	0.0135
153	4.7803	0.0134
154	4.7937	0.0134
155	4.8070	0.0133
156	4.8203	0.0133
157	4.8335	0.0132
158	4.8467	0.0132
159	4.8598	0.0131
160	4.8729	0.0131
161	4.8859	0.0130
162	4.8989	0.0130
163	4.9119	0.0129
164	4.9248	0.0129
165	4.9376	0.0129
166	4.9504	0.0128
167	4.9632	0.0128
168	4.9759	0.0127
169	4.9886	0.0127
170	5.0012	0.0126
171	5.0138	0.0126

172	5.0264	0.0126
173	5.0389	0.0125
174	5.0514	0.0125
175	5.0638	0.0124
176	5.0762	0.0124
177	5.0885	0.0123
178	5.1008	0.0123
179	5.1131	0.0123
180	5.1253	0.0122
181	5.1375	0.0122
182	5.1497	0.0122
183	5.1618	0.0121
184	5.1739	0.0121
185	5.1859	0.0120
186	5.1979	0.0120
187	5.2099	0.0120
188	5.2218	0.0119
189	5.2337	0.0119
190	5.2456	0.0119
191	5.2574	0.0118
192	5.2692	0.0118
193	5.2809	0.0118
194	5.2927	0.0117
195	5.3043	0.0117
196	5.3160	0.0116
197	5.3276	0.0116
198	5.3392	0.0116
199	5.3507	0.0115
200	5.3622	0.0115
201	5.3737	0.0115
202	5.3852	0.0114
203	5.3966	0.0114
204	5.4080	0.0114
205	5.4193	0.0114
206	5.4306	0.0113
207	5.4419	0.0113
208	5.4532	0.0113
209	5.4644	0.0112
210	5.4756	0.0112
211	5.4868	0.0112
212	5.4979	0.0111
213	5.5090	0.0111
214	5.5201	0.0111
215	5.5312	0.0110
216	5.5422	0.0110
217	5.5532	0.0110
218	5.5641	0.0110
219	5.5751	0.0109
220	5.5860	0.0109
221	5.5968	0.0109

222	5.6077	0.0108
223	5.6185	0.0108
224	5.6293	0.0108
225	5.6401	0.0108
226	5.6508	0.0107
227	5.6615	0.0107
228	5.6722	0.0107
229	5.6828	0.0107
230	5.6935	0.0106
231	5.7041	0.0106
232	5.7147	0.0106
233	5.7252	0.0106
234	5.7357	0.0105
235	5.7462	0.0105
236	5.7567	0.0105
237	5.7672	0.0104
238	5.7776	0.0104
239	5.7880	0.0104
240	5.7983	0.0104
241	5.8087	0.0103
242	5.8190	0.0103
243	5.8293	0.0103
244	5.8396	0.0103
245	5.8498	0.0103
246	5.8601	0.0102
247	5.8703	0.0102
248	5.8805	0.0102
249	5.8906	0.0102
250	5.9008	0.0101
251	5.9109	0.0101
252	5.9210	0.0101
253	5.9310	0.0101
254	5.9411	0.0100
255	5.9511	0.0100
256	5.9611	0.0100
257	5.9710	0.0100
258	5.9810	0.0100
259	5.9909	0.0099
260	6.0008	0.0099
261	6.0107	0.0099
262	6.0206	0.0099
263	6.0304	0.0098
264	6.0403	0.0098
265	6.0501	0.0098
266	6.0598	0.0098
267	6.0696	0.0098
268	6.0793	0.0097
269	6.0891	0.0097
270	6.0988	0.0097
271	6.1084	0.0097

272	6.1181	0.0097
273	6.1277	0.0096
274	6.1373	0.0096
275	6.1469	0.0096
276	6.1565	0.0096
277	6.1661	0.0096
278	6.1756	0.0095
279	6.1851	0.0095
280	6.1946	0.0095
281	6.2041	0.0095
282	6.2136	0.0095
283	6.2230	0.0094
284	6.2324	0.0094
285	6.2418	0.0094
286	6.2512	0.0094
287	6.2606	0.0094
288	6.2699	0.0093

Unit Period (number)	Unit Rainfall (In)	Unit Soil-Loss (In)	Effective Rainfall (In)
1	0.0093	0.0072	0.0021
2	0.0094	0.0072	0.0021
3	0.0094	0.0073	0.0021
4	0.0094	0.0073	0.0022
5	0.0095	0.0073	0.0022
6	0.0095	0.0073	0.0022
7	0.0095	0.0073	0.0022
8	0.0095	0.0074	0.0022
9	0.0096	0.0074	0.0022
10	0.0096	0.0074	0.0022
11	0.0096	0.0074	0.0022
12	0.0097	0.0074	0.0022
13	0.0097	0.0075	0.0022
14	0.0097	0.0075	0.0022
15	0.0098	0.0075	0.0022
16	0.0098	0.0075	0.0022
17	0.0098	0.0076	0.0022
18	0.0098	0.0076	0.0023
19	0.0099	0.0076	0.0023
20	0.0099	0.0076	0.0023
21	0.0100	0.0077	0.0023
22	0.0100	0.0077	0.0023
23	0.0100	0.0077	0.0023
24	0.0100	0.0077	0.0023
25	0.0101	0.0078	0.0023
26	0.0101	0.0078	0.0023
27	0.0102	0.0078	0.0023
28	0.0102	0.0079	0.0023

29	0.0102	0.0079	0.0023
30	0.0103	0.0079	0.0023
31	0.0103	0.0079	0.0024
32	0.0103	0.0080	0.0024
33	0.0104	0.0080	0.0024
34	0.0104	0.0080	0.0024
35	0.0104	0.0081	0.0024
36	0.0105	0.0081	0.0024
37	0.0105	0.0081	0.0024
38	0.0106	0.0081	0.0024
39	0.0106	0.0082	0.0024
40	0.0106	0.0082	0.0024
41	0.0107	0.0082	0.0024
42	0.0107	0.0083	0.0024
43	0.0108	0.0083	0.0025
44	0.0108	0.0083	0.0025
45	0.0108	0.0084	0.0025
46	0.0109	0.0084	0.0025
47	0.0109	0.0084	0.0025
48	0.0110	0.0085	0.0025
49	0.0110	0.0085	0.0025
50	0.0110	0.0085	0.0025
51	0.0111	0.0086	0.0025
52	0.0111	0.0086	0.0025
53	0.0112	0.0086	0.0026
54	0.0112	0.0087	0.0026
55	0.0113	0.0087	0.0026
56	0.0113	0.0087	0.0026
57	0.0114	0.0088	0.0026
58	0.0114	0.0088	0.0026
59	0.0115	0.0089	0.0026
60	0.0115	0.0089	0.0026
61	0.0116	0.0089	0.0026
62	0.0116	0.0090	0.0027
63	0.0117	0.0090	0.0027
64	0.0117	0.0090	0.0027
65	0.0118	0.0091	0.0027
66	0.0118	0.0091	0.0027
67	0.0119	0.0092	0.0027
68	0.0119	0.0092	0.0027
69	0.0120	0.0093	0.0027
70	0.0120	0.0093	0.0028
71	0.0121	0.0093	0.0028
72	0.0122	0.0094	0.0028
73	0.0122	0.0094	0.0028
74	0.0123	0.0095	0.0028
75	0.0123	0.0095	0.0028
76	0.0124	0.0096	0.0028
77	0.0125	0.0096	0.0029
78	0.0125	0.0097	0.0029

79	0.0126	0.0097	0.0029
80	0.0126	0.0097	0.0029
81	0.0127	0.0098	0.0029
82	0.0128	0.0098	0.0029
83	0.0129	0.0099	0.0029
84	0.0129	0.0100	0.0029
85	0.0130	0.0100	0.0030
86	0.0130	0.0101	0.0030
87	0.0131	0.0101	0.0030
88	0.0132	0.0102	0.0030
89	0.0133	0.0102	0.0030
90	0.0133	0.0103	0.0030
91	0.0134	0.0104	0.0031
92	0.0135	0.0104	0.0031
93	0.0136	0.0105	0.0031
94	0.0136	0.0105	0.0031
95	0.0137	0.0106	0.0031
96	0.0138	0.0106	0.0032
97	0.0139	0.0107	0.0032
98	0.0140	0.0108	0.0032
99	0.0141	0.0109	0.0032
100	0.0141	0.0109	0.0032
101	0.0142	0.0110	0.0033
102	0.0143	0.0110	0.0033
103	0.0144	0.0111	0.0033
104	0.0145	0.0112	0.0033
105	0.0146	0.0113	0.0033
106	0.0147	0.0113	0.0034
107	0.0148	0.0114	0.0034
108	0.0149	0.0115	0.0034
109	0.0150	0.0116	0.0034
110	0.0151	0.0116	0.0034
111	0.0152	0.0117	0.0035
112	0.0153	0.0118	0.0035
113	0.0154	0.0119	0.0035
114	0.0155	0.0120	0.0035
115	0.0157	0.0121	0.0036
116	0.0157	0.0121	0.0036
117	0.0159	0.0123	0.0036
118	0.0160	0.0123	0.0037
119	0.0161	0.0124	0.0037
120	0.0162	0.0125	0.0037
121	0.0164	0.0126	0.0037
122	0.0165	0.0127	0.0038
123	0.0167	0.0129	0.0038
124	0.0168	0.0129	0.0038
125	0.0169	0.0131	0.0039
126	0.0170	0.0131	0.0039
127	0.0172	0.0133	0.0039
128	0.0173	0.0134	0.0040

129	0.0175	0.0135	0.0040
130	0.0176	0.0136	0.0040
131	0.0179	0.0138	0.0041
132	0.0180	0.0139	0.0041
133	0.0182	0.0140	0.0042
134	0.0183	0.0141	0.0042
135	0.0186	0.0143	0.0042
136	0.0187	0.0144	0.0043
137	0.0189	0.0146	0.0043
138	0.0191	0.0147	0.0044
139	0.0193	0.0149	0.0044
140	0.0195	0.0150	0.0045
141	0.0198	0.0152	0.0045
142	0.0199	0.0154	0.0046
143	0.0202	0.0156	0.0046
144	0.0204	0.0157	0.0047
145	0.0244	0.0188	0.0056
146	0.0245	0.0189	0.0056
147	0.0249	0.0192	0.0057
148	0.0251	0.0193	0.0057
149	0.0254	0.0196	0.0058
150	0.0256	0.0198	0.0059
151	0.0260	0.0201	0.0059
152	0.0262	0.0202	0.0060
153	0.0267	0.0206	0.0061
154	0.0269	0.0207	0.0061
155	0.0274	0.0211	0.0063
156	0.0276	0.0213	0.0063
157	0.0281	0.0217	0.0064
158	0.0284	0.0219	0.0065
159	0.0289	0.0223	0.0066
160	0.0292	0.0225	0.0067
161	0.0298	0.0230	0.0068
162	0.0301	0.0232	0.0069
163	0.0308	0.0238	0.0070
164	0.0311	0.0240	0.0071
165	0.0319	0.0246	0.0073
166	0.0323	0.0249	0.0074
167	0.0331	0.0255	0.0076
168	0.0335	0.0259	0.0077
169	0.0345	0.0266	0.0079
170	0.0350	0.0270	0.0080
171	0.0360	0.0278	0.0082
172	0.0366	0.0282	0.0084
173	0.0378	0.0291	0.0086
174	0.0384	0.0296	0.0088
175	0.0398	0.0307	0.0091
176	0.0406	0.0313	0.0093
177	0.0423	0.0326	0.0097
178	0.0432	0.0333	0.0099

179	0.0452	0.0349	0.0103
180	0.0464	0.0358	0.0106
181	0.0489	0.0377	0.0112
182	0.0503	0.0388	0.0115
183	0.0537	0.0414	0.0123
184	0.0556	0.0429	0.0127
185	0.0479	0.0369	0.0109
186	0.0506	0.0390	0.0116
187	0.0574	0.0443	0.0131
188	0.0619	0.0477	0.0141
189	0.0746	0.0575	0.0170
190	0.0842	0.0649	0.0192
191	0.1203	0.0654	0.0549
192	0.1655	0.0654	0.1000
193	0.5179	0.0654	0.4525
194	0.0980	0.0654	0.0326
195	0.0674	0.0520	0.0154
196	0.0537	0.0414	0.0123
197	0.0578	0.0446	0.0132
198	0.0519	0.0401	0.0119
199	0.0476	0.0367	0.0109
200	0.0442	0.0341	0.0101
201	0.0414	0.0319	0.0095
202	0.0391	0.0302	0.0089
203	0.0372	0.0287	0.0085
204	0.0355	0.0274	0.0081
205	0.0340	0.0262	0.0078
206	0.0327	0.0252	0.0075
207	0.0315	0.0243	0.0072
208	0.0305	0.0235	0.0070
209	0.0295	0.0228	0.0067
210	0.0286	0.0221	0.0065
211	0.0279	0.0215	0.0064
212	0.0271	0.0209	0.0062
213	0.0265	0.0204	0.0060
214	0.0258	0.0199	0.0059
215	0.0252	0.0195	0.0058
216	0.0247	0.0191	0.0056
217	0.0205	0.0158	0.0047
218	0.0201	0.0155	0.0046
219	0.0196	0.0151	0.0045
220	0.0192	0.0148	0.0044
221	0.0188	0.0145	0.0043
222	0.0184	0.0142	0.0042
223	0.0181	0.0140	0.0041
224	0.0178	0.0137	0.0041
225	0.0174	0.0134	0.0040
226	0.0171	0.0132	0.0039
227	0.0168	0.0130	0.0039
228	0.0166	0.0128	0.0038

229	0.0163	0.0126	0.0037
230	0.0161	0.0124	0.0037
231	0.0158	0.0122	0.0036
232	0.0156	0.0120	0.0036
233	0.0154	0.0118	0.0035
234	0.0151	0.0117	0.0035
235	0.0149	0.0115	0.0034
236	0.0147	0.0114	0.0034
237	0.0145	0.0112	0.0033
238	0.0144	0.0111	0.0033
239	0.0142	0.0109	0.0032
240	0.0140	0.0108	0.0032
241	0.0138	0.0107	0.0032
242	0.0137	0.0106	0.0031
243	0.0135	0.0104	0.0031
244	0.0134	0.0103	0.0031
245	0.0132	0.0102	0.0030
246	0.0131	0.0101	0.0030
247	0.0129	0.0100	0.0030
248	0.0128	0.0099	0.0029
249	0.0127	0.0098	0.0029
250	0.0126	0.0097	0.0029
251	0.0124	0.0096	0.0028
252	0.0123	0.0095	0.0028
253	0.0122	0.0094	0.0028
254	0.0121	0.0093	0.0028
255	0.0120	0.0092	0.0027
256	0.0119	0.0091	0.0027
257	0.0118	0.0091	0.0027
258	0.0116	0.0090	0.0027
259	0.0115	0.0089	0.0026
260	0.0114	0.0088	0.0026
261	0.0114	0.0088	0.0026
262	0.0113	0.0087	0.0026
263	0.0112	0.0086	0.0026
264	0.0111	0.0085	0.0025
265	0.0110	0.0085	0.0025
266	0.0109	0.0084	0.0025
267	0.0108	0.0083	0.0025
268	0.0107	0.0083	0.0025
269	0.0107	0.0082	0.0024
270	0.0106	0.0082	0.0024
271	0.0105	0.0081	0.0024
272	0.0104	0.0080	0.0024
273	0.0103	0.0080	0.0024
274	0.0103	0.0079	0.0023
275	0.0102	0.0079	0.0023
276	0.0101	0.0078	0.0023
277	0.0101	0.0078	0.0023
278	0.0100	0.0077	0.0023

279	0.0099	0.0077	0.0023
280	0.0099	0.0076	0.0023
281	0.0098	0.0076	0.0022
282	0.0097	0.0075	0.0022
283	0.0097	0.0075	0.0022
284	0.0096	0.0074	0.0022
285	0.0096	0.0074	0.0022
286	0.0095	0.0073	0.0022
287	0.0094	0.0073	0.0022
288	0.0094	0.0072	0.0021

Total soil rain loss = 4.40(In)
Total effective rainfall = 1.87(In)
Peak flow rate in flood hydrograph = 17.06(CFS)

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24 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	5.0	10.0	15.0	20.0
0+ 5	0.0000	0.00	Q	|	|	|	|
0+10	0.0002	0.02	Q	|	|	|	|
0+15	0.0006	0.06	Q	|	|	|	|
0+20	0.0015	0.12	Q	|	|	|	|
0+25	0.0027	0.18	Q	|	|	|	|
0+30	0.0043	0.22	Q	|	|	|	|
0+35	0.0059	0.25	Q	|	|	|	|
0+40	0.0077	0.26	Q	|	|	|	|
0+45	0.0095	0.27	Q	|	|	|	|
0+50	0.0114	0.27	Q	|	|	|	|
0+55	0.0133	0.27	Q	|	|	|	|
1+ 0	0.0152	0.27	Q	|	|	|	|
1+ 5	0.0170	0.28	Q	|	|	|	|
1+10	0.0189	0.28	Q	|	|	|	|
1+15	0.0209	0.28	Q	|	|	|	|
1+20	0.0228	0.28	Q	|	|	|	|
1+25	0.0247	0.28	Q	|	|	|	|
1+30	0.0266	0.28	Q	|	|	|	|
1+35	0.0285	0.28	Q	|	|	|	|
1+40	0.0305	0.28	Q	|	|	|	|
1+45	0.0324	0.28	Q	|	|	|	|
1+50	0.0344	0.28	Q	|	|	|	|
1+55	0.0363	0.28	Q	|	|	|	|
2+ 0	0.0383	0.28	Q	|	|	|	|
2+ 5	0.0403	0.29	Q	|	|	|	|

2+10	0.0422	0.29	QV	|	|	|	|
2+15	0.0442	0.29	QV	|	|	|	|
2+20	0.0462	0.29	QV	|	|	|	|
2+25	0.0482	0.29	QV	|	|	|	|
2+30	0.0502	0.29	QV	|	|	|	|
2+35	0.0522	0.29	QV	|	|	|	|
2+40	0.0542	0.29	QV	|	|	|	|
2+45	0.0562	0.29	QV	|	|	|	|
2+50	0.0583	0.29	QV	|	|	|	|
2+55	0.0603	0.30	QV	|	|	|	|
3+ 0	0.0624	0.30	QV	|	|	|	|
3+ 5	0.0644	0.30	QV	|	|	|	|
3+10	0.0665	0.30	QV	|	|	|	|
3+15	0.0685	0.30	QV	|	|	|	|
3+20	0.0706	0.30	QV	|	|	|	|
3+25	0.0727	0.30	QV	|	|	|	|
3+30	0.0748	0.30	QV	|	|	|	|
3+35	0.0769	0.30	QV	|	|	|	|
3+40	0.0790	0.31	QV	|	|	|	|
3+45	0.0811	0.31	Q V	|	|	|	|
3+50	0.0832	0.31	Q V	|	|	|	|
3+55	0.0853	0.31	Q V	|	|	|	|
4+ 0	0.0875	0.31	Q V	|	|	|	|
4+ 5	0.0896	0.31	Q V	|	|	|	|
4+10	0.0918	0.31	Q V	|	|	|	|
4+15	0.0939	0.31	Q V	|	|	|	|
4+20	0.0961	0.32	Q V	|	|	|	|
4+25	0.0983	0.32	Q V	|	|	|	|
4+30	0.1005	0.32	Q V	|	|	|	|
4+35	0.1027	0.32	Q V	|	|	|	|
4+40	0.1049	0.32	Q V	|	|	|	|
4+45	0.1071	0.32	Q V	|	|	|	|
4+50	0.1093	0.32	Q V	|	|	|	|
4+55	0.1116	0.32	Q V	|	|	|	|
5+ 0	0.1138	0.33	Q V	|	|	|	|
5+ 5	0.1161	0.33	Q V	|	|	|	|
5+10	0.1183	0.33	Q V	|	|	|	|
5+15	0.1206	0.33	Q V	|	|	|	|
5+20	0.1229	0.33	Q V	|	|	|	|
5+25	0.1252	0.33	Q V	|	|	|	|
5+30	0.1275	0.33	Q V	|	|	|	|
5+35	0.1298	0.34	Q V	|	|	|	|
5+40	0.1321	0.34	Q V	|	|	|	|
5+45	0.1344	0.34	Q V	|	|	|	|
5+50	0.1368	0.34	Q V	|	|	|	|
5+55	0.1391	0.34	Q V	|	|	|	|
6+ 0	0.1415	0.34	Q V	|	|	|	|
6+ 5	0.1439	0.34	Q V	|	|	|	|
6+10	0.1462	0.35	Q V	|	|	|	|
6+15	0.1486	0.35	Q V	|	|	|	|

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 6+20       0.1510      0.35  Q  V      |          |          |          |
 6+25       0.1535      0.35  Q  V      |          |          |          |
 6+30       0.1559      0.35  Q  V      |          |          |          |
 6+35       0.1583      0.35  Q  V      |          |          |          |
 6+40       0.1608      0.36  Q  V      |          |          |          |
 6+45       0.1633      0.36  Q   V     |          |          |          |
 6+50       0.1657      0.36  Q   V     |          |          |          |
 6+55       0.1682      0.36  Q   V     |          |          |          |
 7+ 0       0.1707      0.36  Q   V     |          |          |          |
 7+ 5       0.1732      0.37  Q   V     |          |          |          |
 7+10       0.1758      0.37  Q   V     |          |          |          |
 7+15       0.1783      0.37  Q   V     |          |          |          |
 7+20       0.1809      0.37  Q   V     |          |          |          |
 7+25       0.1834      0.37  Q   V     |          |          |          |
 7+30       0.1860      0.38  Q   V     |          |          |          |
 7+35       0.1886      0.38  Q   V     |          |          |          |
 7+40       0.1912      0.38  Q   V     |          |          |          |
 7+45       0.1939      0.38  Q   V     |          |          |          |
 7+50       0.1965      0.38  Q   V     |          |          |          |
 7+55       0.1992      0.39  Q   V     |          |          |          |
 8+ 0       0.2018      0.39  Q   V     |          |          |          |
 8+ 5       0.2045      0.39  Q    V    |          |          |          |
 8+10       0.2072      0.39  Q    V    |          |          |          |
 8+15       0.2099      0.39  Q    V    |          |          |          |
 8+20       0.2127      0.40  Q    V    |          |          |          |
 8+25       0.2154      0.40  Q    V    |          |          |          |
 8+30       0.2182      0.40  Q    V    |          |          |          |
 8+35       0.2210      0.40  Q    V    |          |          |          |
 8+40       0.2238      0.41  Q    V    |          |          |          |
 8+45       0.2266      0.41  Q    V    |          |          |          |
 8+50       0.2294      0.41  Q    V    |          |          |          |
 8+55       0.2323      0.41  Q    V    |          |          |          |
 9+ 0       0.2351      0.42  Q    V    |          |          |          |
 9+ 5       0.2380      0.42  Q    V    |          |          |          |
 9+10       0.2409      0.42  Q    V    |          |          |          |
 9+15       0.2439      0.43  Q     V   |          |          |          |
 9+20       0.2468      0.43  Q     V   |          |          |          |
 9+25       0.2498      0.43  Q     V   |          |          |          |
 9+30       0.2528      0.43  Q     V   |          |          |          |
 9+35       0.2558      0.44  Q     V   |          |          |          |
 9+40       0.2588      0.44  Q     V   |          |          |          |
 9+45       0.2619      0.44  Q     V   |          |          |          |
 9+50       0.2649      0.45  Q     V   |          |          |          |
 9+55       0.2680      0.45  Q     V   |          |          |          |
10+ 0       0.2711      0.45  Q     V   |          |          |          |
10+ 5       0.2743      0.46  Q     V   |          |          |          |
10+10       0.2775      0.46  Q     V   |          |          |          |
10+15       0.2806      0.46  Q     V   |          |          |          |
10+20       0.2839      0.47  Q      V  |          |          |          |
10+25       0.2871      0.47  Q      V  |          |          |          |
```

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10+30       0.2904      0.47  Q      V  |          |          |          |
10+35       0.2937      0.48  Q      V  |          |          |          |
10+40       0.2970      0.48  Q      V  |          |          |          |
10+45       0.3003      0.49  Q      V  |          |          |          |
10+50       0.3037      0.49  Q      V  |          |          |          |
10+55       0.3071      0.49  Q      V  |          |          |          |
11+ 0       0.3106      0.50  Q      V  |          |          |          |
11+ 5       0.3140      0.50  |Q     V  |          |          |          |
11+10       0.3175      0.51  |Q     V  |          |          |          |
11+15       0.3211      0.51  |Q     V  |          |          |          |
11+20       0.3246      0.52  |Q      V |          |          |          |
11+25       0.3282      0.52  |Q      V |          |          |          |
11+30       0.3319      0.53  |Q      V |          |          |          |
11+35       0.3355      0.53  |Q      V |          |          |          |
11+40       0.3393      0.54  |Q      V |          |          |          |
11+45       0.3430      0.54  |Q      V |          |          |          |
11+50       0.3468      0.55  |Q      V |          |          |          |
11+55       0.3506      0.56  |Q      V |          |          |          |
12+ 0       0.3545      0.56  |Q      V |          |          |          |
12+ 5       0.3584      0.57  |Q      V |          |          |          |
12+10       0.3624      0.58  |Q      V |          |          |          |
12+15       0.3666      0.61  |Q       V|          |          |          |
12+20       0.3710      0.63  |Q       V|          |          |          |
12+25       0.3755      0.67  |Q       V|          |          |          |
12+30       0.3803      0.69  |Q       V|          |          |          |
12+35       0.3851      0.70  |Q       V|          |          |          |
12+40       0.3901      0.72  |Q       V|          |          |          |
12+45       0.3951      0.73  |Q       V|          |          |          |
12+50       0.4002      0.74  |Q       V|          |          |          |
12+55       0.4053      0.75  |Q        V          |          |          |
13+ 0       0.4105      0.76  |Q        V          |          |          |
13+ 5       0.4158      0.77  |Q        V          |          |          |
13+10       0.4211      0.78  |Q        V          |          |          |
13+15       0.4266      0.79  |Q        V          |          |          |
13+20       0.4320      0.80  |Q        V          |          |          |
13+25       0.4376      0.81  |Q        V          |          |          |
13+30       0.4432      0.82  |Q        V          |          |          |
13+35       0.4490      0.83  |Q         |V         |          |          |
13+40       0.4548      0.84  |Q         |V         |          |          |
13+45       0.4607      0.86  |Q         |V         |          |          |
13+50       0.4667      0.87  |Q         |V         |          |          |
13+55       0.4728      0.89  |Q         |V         |          |          |
14+ 0       0.4790      0.90  |Q         |V         |          |          |
14+ 5       0.4853      0.92  |Q         | V        |          |          |
14+10       0.4917      0.93  |Q         | V        |          |          |
14+15       0.4983      0.95  |Q         | V        |          |          |
14+20       0.5050      0.97  |Q         | V        |          |          |
14+25       0.5118      0.99  |Q         | V        |          |          |
14+30       0.5188      1.01  | Q        | V        |          |          |
14+35       0.5259      1.04  | Q        |  V       |          |          |
```

14+40	0.5332	1.06	Q	V			
14+45	0.5407	1.09	Q	V			
14+50	0.5484	1.12	Q	V			
14+55	0.5563	1.15	Q	V			
15+ 0	0.5644	1.18	Q	V			
15+ 5	0.5728	1.22	Q	V			
15+10	0.5815	1.26	Q	V			
15+15	0.5905	1.31	Q	V			
15+20	0.5998	1.36	Q	V			
15+25	0.6095	1.41	Q	V			
15+30	0.6195	1.45	Q	V			
15+35	0.6296	1.47	Q	V			
15+40	0.6399	1.49	Q	V			
15+45	0.6504	1.52	Q	V			
15+50	0.6615	1.61	Q	V			
15+55	0.6741	1.83	Q	V			
16+ 0	0.6908	2.43	Q	V			
16+ 5	0.7215	4.45	Q	V			
16+10	0.7811	8.66	Q V				
16+15	0.8763	13.83	V Q				
16+20	0.9917	16.75	V	Q			
16+25	1.1091	17.06	V	Q			
16+30	1.1867	11.27	Q V				
16+35	1.2381	7.46	Q	V			
16+40	1.2707	4.73	Q	V			
16+45	1.2926	3.19	Q	V			
16+50	1.3073	2.14	Q	V			
16+55	1.3192	1.73	Q	V			
17+ 0	1.3302	1.59	Q	V			
17+ 5	1.3395	1.35	Q	V			
17+10	1.3474	1.14	Q	V			
17+15	1.3548	1.08	Q	V			
17+20	1.3618	1.03	Q	V			
17+25	1.3686	0.98	Q	V			
17+30	1.3751	0.94	Q	V			
17+35	1.3814	0.91	Q	V			
17+40	1.3874	0.88	Q	V			
17+45	1.3933	0.85	Q	V			
17+50	1.3990	0.82	Q	V			
17+55	1.4045	0.80	Q	V			
18+ 0	1.4099	0.78	Q	V			
18+ 5	1.4151	0.76	Q	V			
18+10	1.4201	0.73	Q	V			
18+15	1.4250	0.70	Q	V			
18+20	1.4295	0.66	Q	V			
18+25	1.4338	0.62	Q	V			
18+30	1.4379	0.60	Q	V			
18+35	1.4419	0.57	Q	V			
18+40	1.4457	0.56	Q	V			
18+45	1.4494	0.54	Q	V			

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18+50       1.4531      0.53  |Q        |         |         |    V    |
18+55       1.4567      0.52  |Q        |         |         |     V   |
19+ 0       1.4602      0.51  |Q        |         |         |     V   |
19+ 5       1.4636      0.50  |Q        |         |         |     V   |
19+10       1.4670      0.49  Q         |         |         |     V   |
19+15       1.4704      0.48  Q         |         |         |     V   |
19+20       1.4736      0.48  Q         |         |         |     V   |
19+25       1.4769      0.47  Q         |         |         |     V   |
19+30       1.4800      0.46  Q         |         |         |     V   |
19+35       1.4832      0.45  Q         |         |         |     V   |
19+40       1.4862      0.45  Q         |         |         |     V   |
19+45       1.4893      0.44  Q         |         |         |     V   |
19+50       1.4923      0.43  Q         |         |         |     V   |
19+55       1.4952      0.43  Q         |         |         |      V  |
20+ 0       1.4981      0.42  Q         |         |         |      V  |
20+ 5       1.5010      0.42  Q         |         |         |      V  |
20+10       1.5039      0.41  Q         |         |         |      V  |
20+15       1.5067      0.41  Q         |         |         |      V  |
20+20       1.5094      0.40  Q         |         |         |      V  |
20+25       1.5122      0.40  Q         |         |         |      V  |
20+30       1.5149      0.39  Q         |         |         |      V  |
20+35       1.5175      0.39  Q         |         |         |      V  |
20+40       1.5202      0.38  Q         |         |         |      V  |
20+45       1.5228      0.38  Q         |         |         |      V  |
20+50       1.5254      0.38  Q         |         |         |      V  |
20+55       1.5280      0.37  Q         |         |         |      V  |
21+ 0       1.5305      0.37  Q         |         |         |      V  |
21+ 5       1.5330      0.36  Q         |         |         |      V  |
21+10       1.5355      0.36  Q         |         |         |       V |
21+15       1.5379      0.36  Q         |         |         |       V |
21+20       1.5404      0.35  Q         |         |         |       V |
21+25       1.5428      0.35  Q         |         |         |       V |
21+30       1.5452      0.35  Q         |         |         |       V |
21+35       1.5475      0.34  Q         |         |         |       V |
21+40       1.5499      0.34  Q         |         |         |       V |
21+45       1.5522      0.34  Q         |         |         |       V |
21+50       1.5545      0.33  Q         |         |         |       V |
21+55       1.5568      0.33  Q         |         |         |       V |
22+ 0       1.5590      0.33  Q         |         |         |       V |
22+ 5       1.5613      0.33  Q         |         |         |       V |
22+10       1.5635      0.32  Q         |         |         |       V |
22+15       1.5657      0.32  Q         |         |         |       V |
22+20       1.5679      0.32  Q         |         |         |       V |
22+25       1.5701      0.32  Q         |         |         |       V |
22+30       1.5722      0.31  Q         |         |         |       V |
22+35       1.5744      0.31  Q         |         |         |       V |
22+40       1.5765      0.31  Q         |         |         |        V|
22+45       1.5786      0.31  Q         |         |         |        V|
22+50       1.5807      0.30  Q         |         |         |        V|
22+55       1.5828      0.30  Q         |         |         |        V|
```

```
   23+ 0       1.5848      0.30  Q          |          |          |         V|
   23+ 5       1.5869      0.30  Q          |          |          |         V|
   23+10       1.5889      0.30  Q          |          |          |         V|
   23+15       1.5909      0.29  Q          |          |          |         V|
   23+20       1.5929      0.29  Q          |          |          |         V|
   23+25       1.5949      0.29  Q          |          |          |         V|
   23+30       1.5969      0.29  Q          |          |          |         V|
   23+35       1.5989      0.29  Q          |          |          |         V|
   23+40       1.6008      0.28  Q          |          |          |         V|
   23+45       1.6028      0.28  Q          |          |          |         V|
   23+50       1.6047      0.28  Q          |          |          |         V|
   23+55       1.6066      0.28  Q          |          |          |         V|
   24+ 0       1.6085      0.28  Q          |          |          |         V|
   24+ 5       1.6104      0.27  Q          |          |          |         V|
   24+10       1.6121      0.25  Q          |          |          |         V|
   24+15       1.6135      0.21  Q          |          |          |         V|
   24+20       1.6145      0.15  Q          |          |          |         V|
   24+25       1.6151      0.09  Q          |          |          |         V|
   24+30       1.6155      0.05  Q          |          |          |         V|
   24+35       1.6156      0.03  Q          |          |          |         V|
   24+40       1.6157      0.01  Q          |          |          |         V|
   24+45       1.6158      0.01  Q          |          |          |         V|
   24+50       1.6158      0.00  Q          |          |          |         V|
   24+55       1.6158      0.00  Q          |          |          |         V|
   25+ 0       1.6158      0.00  Q          |          |          |          V
-------------------------------------------------------------------------
```

U n i t H y d r o g r a p h A n a l y s i s

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Study date 10/05/23

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San Bernardino County Synthetic Unit Hydrology Method
Manual date - August 1986

Program License Serial Number 6443

Storm Event Year = 100

Antecedent Moisture Condition = 3

English (in-lb) Input Units Used

English Rainfall Data (Inches) Input Values Used

English Units used in output format

Area averaged rainfall intensity isohyetal data:

Sub-Area (Ac.)	Duration (hours)	Isohyetal (In)
Rainfall data for year 10		
10.43	1	0.95
Rainfall data for year 2		
10.43	6	1.58
Rainfall data for year 2		
10.43	24	2.75

Rainfall data for year 100

```
            10.43            1           1.40
-------------------------------------------------------------------------
Rainfall data for year 100
            10.43            6           3.46
-------------------------------------------------------------------------
Rainfall data for year 100
            10.43           24           6.27
-------------------------------------------------------------------------
+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

******** Area-averaged max loss rate, Fm ********


SCS curve  SCS curve     Area     Area     Fp(Fig C6)    Ap      Fm
No.(AMCII) NO.(AMC 3)    (Ac.)    Fraction     (In/Hr)  (dec.)   (In/Hr)
 32.0      52.0         10.43      1.000     0.785    0.200    0.157

Area-averaged adjusted loss rate Fm (In/Hr) =  0.157

********* Area-Averaged low loss rate fraction, Yb **********

Area       Area          SCS CN    SCS CN      S     Pervious
 (Ac.)      Fract         (AMC2)    (AMC3)           Yield Fr
     2.09   0.200         32.0      52.0       9.23     0.229
     8.34   0.800         98.0      98.0       0.20     0.962

Area-averaged catchment yield fraction, Y =  0.815
Area-averaged low loss fraction, Yb =  0.185
Direct entry of lag time by user
+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Watershed area =      10.43(Ac.)
Catchment Lag time =   0.160 hours
Unit interval =  15.000 minutes
Unit interval percentage of lag time = 156.1524
Hydrograph baseflow =     0.00(CFS)
Average maximum watershed loss rate(Fm) =  0.157(In/Hr)
Average low loss rate fraction (Yb) = 0.185 (decimal)
VALLEY DEVELOPED S-Graph Selected
Computed peak 5-minute rainfall =  0.518(In)
Computed peak 30-minute rainfall =  1.061(In)
Specified peak 1-hour rainfall =  1.400(In)
Computed peak 3-hour rainfall =  2.438(In)
Specified peak 6-hour rainfall =  3.460(In)
Specified peak 24-hour rainfall =  6.270(In)


Rainfall depth area reduction factors:
Using a total area of      10.43(Ac.) (Ref: fig. E-4)

5-minute factor = 1.000     Adjusted rainfall =  0.518(In)
```

30-minute factor = 1.000 Adjusted rainfall = 1.060(In)
1-hour factor = 1.000 Adjusted rainfall = 1.399(In)
3-hour factor = 1.000 Adjusted rainfall = 2.438(In)
6-hour factor = 1.000 Adjusted rainfall = 3.460(In)
24-hour factor = 1.000 Adjusted rainfall = 6.270(In)

U n i t H y d r o g r a p h

Interval Number	'S' Graph Mean values	Unit Hydrograph ((CFS))
	(K = 42.05 (CFS))	
1	36.342	15.280
2	96.001	25.084
3	100.000	1.682

Peak Unit Number	Adjusted mass rainfall (In)	Unit rainfall (In)
1	0.8037	0.1203
2	1.0605	0.0746
3	1.2472	0.0574
4	1.3993	0.0479
5	1.5664	0.0537
6	1.7175	0.0489
7	1.8567	0.0452
8	1.9863	0.0423
9	2.1081	0.0398
10	2.2234	0.0378
11	2.3331	0.0360
12	2.4380	0.0345
13	2.5386	0.0331
14	2.6354	0.0319
15	2.7288	0.0308
16	2.8192	0.0298
17	2.9069	0.0289
18	2.9920	0.0281
19	3.0748	0.0274
20	3.1555	0.0267
21	3.2343	0.0260
22	3.3111	0.0254
23	3.3863	0.0249
24	3.4599	0.0244
25	3.5210	0.0202
26	3.5807	0.0198
27	3.6391	0.0193
28	3.6963	0.0189
29	3.7524	0.0186
30	3.8074	0.0182

31	3.8613	0.0179
32	3.9142	0.0175
33	3.9662	0.0172
34	4.0173	0.0169
35	4.0676	0.0167
36	4.1170	0.0164
37	4.1657	0.0161
38	4.2136	0.0159
39	4.2608	0.0157
40	4.3073	0.0154
41	4.3531	0.0152
42	4.3984	0.0150
43	4.4430	0.0148
44	4.4870	0.0146
45	4.5305	0.0144
46	4.5734	0.0142
47	4.6157	0.0141
48	4.6576	0.0139
49	4.6990	0.0137
50	4.7399	0.0136
51	4.7803	0.0134
52	4.8203	0.0133
53	4.8598	0.0131
54	4.8989	0.0130
55	4.9376	0.0129
56	4.9759	0.0127
57	5.0138	0.0126
58	5.0514	0.0125
59	5.0885	0.0123
60	5.1253	0.0122
61	5.1618	0.0121
62	5.1979	0.0120
63	5.2337	0.0119
64	5.2692	0.0118
65	5.3043	0.0117
66	5.3392	0.0116
67	5.3737	0.0115
68	5.4080	0.0114
69	5.4419	0.0113
70	5.4756	0.0112
71	5.5090	0.0111
72	5.5422	0.0110
73	5.5751	0.0109
74	5.6077	0.0108
75	5.6401	0.0108
76	5.6722	0.0107
77	5.7041	0.0106
78	5.7357	0.0105
79	5.7672	0.0104
80	5.7983	0.0104

81	5.8293	0.0103
82	5.8601	0.0102
83	5.8906	0.0102
84	5.9210	0.0101
85	5.9511	0.0100
86	5.9810	0.0100
87	6.0107	0.0099
88	6.0403	0.0098
89	6.0696	0.0098
90	6.0988	0.0097
91	6.1277	0.0096
92	6.1565	0.0096
93	6.1851	0.0095
94	6.2136	0.0095
95	6.2418	0.0094
96	6.2699	0.0093

Unit Period (number)	Unit Rainfall (In)	Unit Soil-Loss (In)	Effective Rainfall (In)
1	0.0281	0.0052	0.0229
2	0.0284	0.0052	0.0231
3	0.0286	0.0053	0.0233
4	0.0289	0.0053	0.0236
5	0.0292	0.0054	0.0238
6	0.0294	0.0054	0.0240
7	0.0297	0.0055	0.0243
8	0.0300	0.0055	0.0245
9	0.0304	0.0056	0.0247
10	0.0307	0.0057	0.0250
11	0.0310	0.0057	0.0253
12	0.0313	0.0058	0.0255
13	0.0317	0.0059	0.0258
14	0.0320	0.0059	0.0261
15	0.0324	0.0060	0.0264
16	0.0328	0.0061	0.0267
17	0.0332	0.0061	0.0270
18	0.0336	0.0062	0.0274
19	0.0340	0.0063	0.0277
20	0.0344	0.0064	0.0281
21	0.0349	0.0064	0.0284
22	0.0353	0.0065	0.0288
23	0.0358	0.0066	0.0292
24	0.0363	0.0067	0.0296
25	0.0368	0.0068	0.0300
26	0.0374	0.0069	0.0305
27	0.0380	0.0070	0.0309
28	0.0385	0.0071	0.0314
29	0.0392	0.0072	0.0319

30	0.0398	0.0073	0.0324
31	0.0405	0.0075	0.0330
32	0.0412	0.0076	0.0336
33	0.0419	0.0077	0.0342
34	0.0427	0.0079	0.0348
35	0.0435	0.0080	0.0355
36	0.0443	0.0082	0.0362
37	0.0453	0.0084	0.0369
38	0.0462	0.0085	0.0377
39	0.0473	0.0087	0.0385
40	0.0483	0.0089	0.0394
41	0.0495	0.0091	0.0404
42	0.0507	0.0094	0.0414
43	0.0521	0.0096	0.0425
44	0.0535	0.0099	0.0436
45	0.0551	0.0102	0.0449
46	0.0567	0.0105	0.0462
47	0.0586	0.0108	0.0478
48	0.0605	0.0112	0.0493
49	0.0737	0.0136	0.0601
50	0.0761	0.0141	0.0621
51	0.0789	0.0146	0.0644
52	0.0819	0.0151	0.0667
53	0.0854	0.0158	0.0696
54	0.0892	0.0165	0.0727
55	0.0938	0.0173	0.0765
56	0.0989	0.0183	0.0806
57	0.1054	0.0195	0.0859
58	0.1127	0.0208	0.0919
59	0.1227	0.0227	0.1000
60	0.1348	0.0249	0.1099
61	0.1529	0.0282	0.1247
62	0.1540	0.0284	0.1256
63	0.1939	0.0358	0.1581
64	0.3700	0.0393	0.3307
65	0.6834	0.0393	0.6441
66	0.1634	0.0302	0.1332
67	0.1331	0.0246	0.1086
68	0.1117	0.0206	0.0911
69	0.0981	0.0181	0.0800
70	0.0886	0.0164	0.0722
71	0.0814	0.0150	0.0664
72	0.0758	0.0140	0.0618
73	0.0602	0.0111	0.0491
74	0.0564	0.0104	0.0460
75	0.0533	0.0098	0.0434
76	0.0505	0.0093	0.0412
77	0.0482	0.0089	0.0393
78	0.0461	0.0085	0.0376
79	0.0442	0.0082	0.0361

80	0.0426	0.0079	0.0347
81	0.0411	0.0076	0.0335
82	0.0397	0.0073	0.0324
83	0.0384	0.0071	0.0313
84	0.0373	0.0069	0.0304
85	0.0362	0.0067	0.0295
86	0.0353	0.0065	0.0287
87	0.0344	0.0063	0.0280
88	0.0335	0.0062	0.0273
89	0.0327	0.0060	0.0267
90	0.0320	0.0059	0.0261
91	0.0313	0.0058	0.0255
92	0.0306	0.0057	0.0250
93	0.0300	0.0055	0.0245
94	0.0294	0.0054	0.0240
95	0.0288	0.0053	0.0235
96	0.0283	0.0052	0.0231

Total soil rain loss = 1.04(In)
Total effective rainfall = 5.23(In)
Peak flow rate in flood hydrograph = 18.75(CFS)

++

24 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 15 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	5.0	10.0	15.0	20.0
0+15	0.0072	0.35	Q	|	|	|	|
0+30	0.0264	0.93	VQ	|	|	|	|
0+45	0.0466	0.98	VQ	|	|	|	|
1+ 0	0.0669	0.98	VQ	|	|	|	|
1+15	0.0874	0.99	VQ	|	|	|	|
1+30	0.1082	1.00	V Q	|	|	|	|
1+45	0.1291	1.01	|VQ	|	|	|	|
2+ 0	0.1502	1.02	|VQ	|	|	|	|
2+15	0.1716	1.03	|VQ	|	|	|	|
2+30	0.1931	1.04	|VQ	|	|	|	|
2+45	0.2149	1.05	|VQ	|	|	|	|
3+ 0	0.2370	1.07	| Q	|	|	|	|
3+15	0.2592	1.08	| Q	|	|	|	|
3+30	0.2817	1.09	| Q	|	|	|	|
3+45	0.3045	1.10	| Q	|	|	|	|
4+ 0	0.3275	1.11	| Q	|	|	|	|
4+15	0.3508	1.13	| QV	|	|	|	|
4+30	0.3744	1.14	| QV	|	|	|	|

4+45	0.3983	1.16	QV				
5+ 0	0.4225	1.17	QV				
5+15	0.4469	1.18	QV				
5+30	0.4718	1.20	Q V				
5+45	0.4969	1.22	Q V				
6+ 0	0.5224	1.23	Q V				
6+15	0.5482	1.25	Q V				
6+30	0.5744	1.27	Q V				
6+45	0.6010	1.29	Q V				
7+ 0	0.6281	1.31	Q V				
7+15	0.6555	1.33	Q V				
7+30	0.6834	1.35	Q V				
7+45	0.7117	1.37	Q V				
8+ 0	0.7405	1.40	Q V				
8+15	0.7699	1.42	Q V				
8+30	0.7997	1.45	Q V				
8+45	0.8301	1.47	Q V				
9+ 0	0.8611	1.50	Q V				
9+15	0.8928	1.53	Q V				
9+30	0.9251	1.56	Q V				
9+45	0.9580	1.60	Q V				
10+ 0	0.9918	1.63	Q V				
10+15	1.0263	1.67	Q V				
10+30	1.0616	1.71	Q V				
10+45	1.0979	1.75	Q V				
11+ 0	1.1351	1.80	Q V				
11+15	1.1733	1.85	Q V				
11+30	1.2127	1.91	Q V				
11+45	1.2533	1.96	Q V				
12+ 0	1.2952	2.03	Q V				
12+15	1.3414	2.24	Q V				
12+30	1.3939	2.54	Q V				
12+45	1.4485	2.64	Q V				
13+ 0	1.5050	2.74	Q V				
13+15	1.5639	2.85	Q V				
13+30	1.6252	2.97	Q V				
13+45	1.6895	3.11	Q V				
14+ 0	1.7571	3.27	Q V				
14+15	1.8286	3.46	Q V				
14+30	1.9050	3.70	Q V				
14+45	1.9872	3.98	Q V				
15+ 0	2.0769	4.34	Q V				
15+15	2.1767	4.83	Q V				
15+30	2.2848	5.23	Q V				
15+45	2.4041	5.77	Q V				
16+ 0	2.5948	9.23	Q V				
16+15	2.9750	18.40	V	Q			
16+30	3.3624	18.75	V	Q			
16+45	3.4881	6.08	Q V				
17+ 0	3.5777	4.34	Q V				

```
17+15       3.6540      3.69  |      Q  |         |         | V       |
17+30       3.7214      3.26  |     Q   |         |         | V       |
17+45       3.7826      2.96  |    Q    |         |         |  V      |
18+ 0       3.8390      2.73  |    Q    |         |         |  V      |
18+15       3.8888      2.41  |   Q     |         |         |   V     |
18+30       3.9309      2.04  |   Q     |         |         |   V     |
18+45       3.9702      1.90  |  Q      |         |         |   V     |
19+ 0       4.0073      1.80  |  Q      |         |         |    V    |
19+15       4.0426      1.71  |  Q      |         |         |    V    |
19+30       4.0762      1.63  |  Q      |         |         |    V    |
19+45       4.1085      1.56  |  Q      |         |         |     V   |
20+ 0       4.1394      1.50  | Q       |         |         |     V   |
20+15       4.1692      1.44  | Q       |         |         |     V   |
20+30       4.1980      1.39  | Q       |         |         |     V   |
20+45       4.2258      1.35  | Q       |         |         |      V  |
21+ 0       4.2528      1.31  | Q       |         |         |      V  |
21+15       4.2789      1.27  | Q       |         |         |      V  |
21+30       4.3044      1.23  | Q       |         |         |      V  |
21+45       4.3291      1.20  | Q       |         |         |       V |
22+ 0       4.3533      1.17  | Q       |         |         |       V |
22+15       4.3768      1.14  | Q       |         |         |       V |
22+30       4.3998      1.11  | Q       |         |         |       V |
22+45       4.4223      1.09  | Q       |         |         |       V |
23+ 0       4.4443      1.06  | Q       |         |         |        V|
23+15       4.4658      1.04  | Q       |         |         |        V|
23+30       4.4870      1.02  | Q       |         |         |        V|
23+45       4.5077      1.00  | Q       |         |         |        V|
24+ 0       4.5280      0.98  |Q        |         |         |        V|
-------------------------------------------------------------------------
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Appendix J - Basin Routing Analysis

User Inputs

Chamber Model:	MC-3500
Outlet Control Structure:	No
Project Name:	
Engineer:	N/A
Project Location:	
Measurement Type:	Imperial
Required Storage Volume:	40200 cubic ft.
Stone Porosity:	40%
Stone Foundation Depth:	12 in.
Stone Above Chambers:	12 in.
Average Cover Over Chambers:	18 in.
Design Constraint Dimensions:	(110 ft. x 150 ft.)

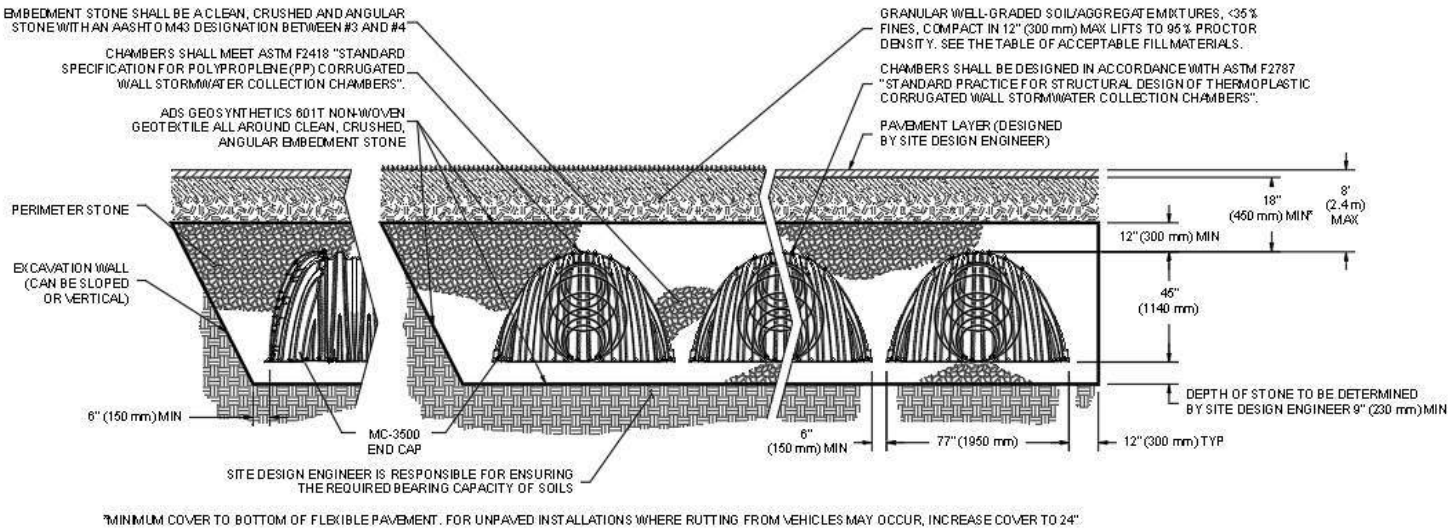
Results

System Volume and Bed Size

Installed Storage Volume:	40932.80 cubic ft.
Storage Volume Per Chamber:	109.90 cubic ft.
Number Of Chambers Required:	214
Number Of End Caps Required:	22
Chamber Rows:	11
Maximum Length:	153.57 ft.
Maximum Width:	77.58 ft.
Approx. Bed Size Required:	11576.07 square ft.

System Components

Amount Of Stone Required:	1583 cubic yards
Volume Of Excavation (Not Including Fill):	2466 cubic yards
Total Non-woven Geotextile Required:	3442 square yards
Woven Geotextile Required (excluding Isolator Row):	151 square yards
Woven Geotextile Required (Isolator Row):	172 square yards
Total Woven Geotextile Required:	323 square yards
Impervious Liner Required:	0 square yards



Advanced Drainage Systems, Inc.

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FOR STORMTECH INSTALLATION INSTRUCTIONS VISIT OUR APP

MC-3500 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH MC-3500.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 450 LBS/FT/%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
   - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
   - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
   - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-3500 CHAMBER SYSTEM

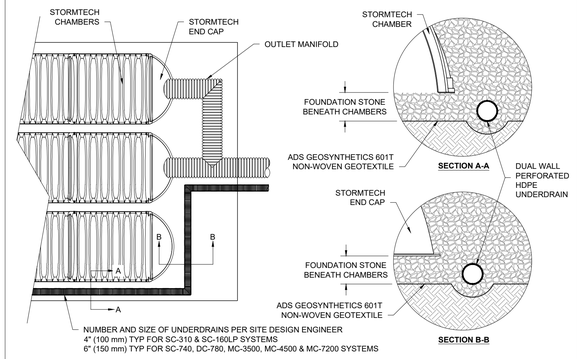
1. STORMTECH MC-3500 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONESHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
8. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
9. STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
10. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
11. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

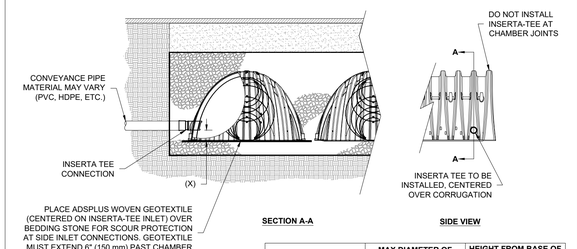
1. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
2. THE USE OF EQUIPMENT OVER MC-3500 CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.



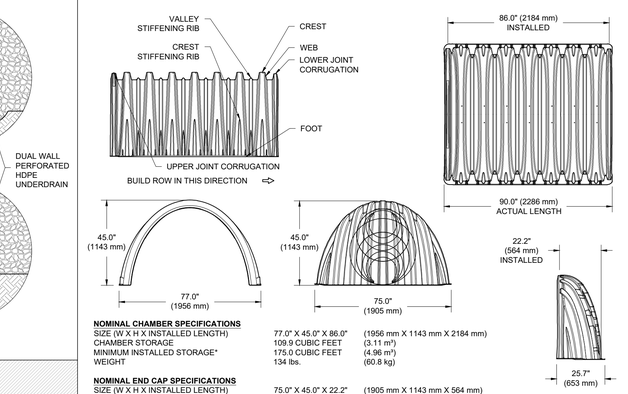
5 UNDERDRAIN DETAIL



CHAMBER	MAX DIAMETER OF INSERTA TEE	HEIGHT FROM BASE OF CHAMBER (X)
SC-310	6" (150 mm)	4" (100 mm)
SC-740	10" (250 mm)	4" (100 mm)
DC-780	10" (250 mm)	4" (100 mm)
MC-3500	12" (300 mm)	6" (150 mm)
MC-4500	12" (300 mm)	8" (200 mm)
MC-7200	12" (300 mm)	8" (200 mm)
INSERTA TEE FITTINGS AVAILABLE FOR SDR 26, SDR 35, SCH 40 IPS GASKETED & SOLVENT WELD, N-12, HP STORM, C-900 OR DUCTILE IRON		

NOTES:
- PART NUMBERS WILL VARY BASED ON INLET PIPE MATERIALS. CONTACT STORMTECH FOR MORE INFORMATION.
- CONTACT ADS ENGINEERING SERVICES IF INSERTA TEE INLET MUST BE RAISED AS NOT ALL INVERTS ARE POSSIBLE.

6 INSERTA-TEE SIDE INLET DETAIL



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	77.0" X 45.0" X 86.0"	(1956 mm X 1143 mm X 2184 mm)
CHAMBER STORAGE	109.9 CUBIC FEET	(3.11 m³)
MINIMUM INSTALLED STORAGE*	175.0 CUBIC FEET	(4.96 m³)
WEIGHT	134 lbs.	(60.8 kg)

NOMINAL END CAP SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	75.0" X 45.0" X 22.2"	(1905 mm X 1143 mm X 564 mm)
END CAP STORAGE	14.9 CUBIC FEET	(0.42 m³)
MINIMUM INSTALLED STORAGE*	45.1 CUBIC FEET	(1.28 m³)
WEIGHT	49 lbs.	(22.2 kg)

*ASSUMES 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION, 6" (152 mm) STONE BETWEEN CHAMBERS, 6" (152 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY.

PARTIAL CUT HOLES AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
PARTIAL CUT HOLES AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
END CAPS WITH A PREFABRICATED WELDED STUB END WITH "W"
END CAPS WITH A WELDED CROWN PLATE END WITH "C"

PART #	STUB	B	C
MC3500IEPP06T	6" (150 mm)	33.21" (844 mm)	---
MC3500IEPP06B		---	0.66" (17 mm)
MC3500IEPP08T	8" (200 mm)	31.16" (791 mm)	---
MC3500IEPP08B		---	0.81" (21 mm)
MC3500IEPP10T	10" (250 mm)	29.04" (738 mm)	---
MC3500IEPP10B		---	0.93" (24 mm)
MC3500IEPP12T	12" (300 mm)	26.36" (670 mm)	---
MC3500IEPP12B		---	1.35" (34 mm)
MC3500IEPP15T	15" (375 mm)	23.39" (594 mm)	---
MC3500IEPP15B		---	1.50" (38 mm)
MC3500IEPP18TC	18" (450 mm)	20.03" (509 mm)	---
MC3500IEPP18TW			
MC3500IEPP18BC		---	1.77" (45 mm)
MC3500IEPP18BW			
MC3500IEPP24TC	24" (600 mm)	14.48" (368 mm)	---
MC3500IEPP24TW			
MC3500IEPP24BC		---	2.06" (52 mm)
MC3500IEPP24BW			
MC3500IEPP30BC	30" (750 mm)	---	2.75" (70 mm)

NOTE: ALL DIMENSIONS ARE NOMINAL

CUSTOM PARTIAL CUT INVERTS ARE AVAILABLE UPON REQUEST. INVENTORIED MANIFOLDS INCLUDE 12-24" (300-600 mm) SIZE ON SIZE AND 15-48" (375-1200 mm) ECCENTRIC MANIFOLDS. CUSTOM INVERT LOCATIONS ON THE MC-3500 END CAP CUT IN THE FIELD ARE NOT RECOMMENDED FOR PIPE SIZES GREATER THAN 10" (250 mm). THE INVERT LOCATION IN COLUMN 'B' ARE THE HIGHEST POSSIBLE FOR THE PIPE SIZE.

2 MC-3500 TECHNICAL SPECIFICATIONS

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

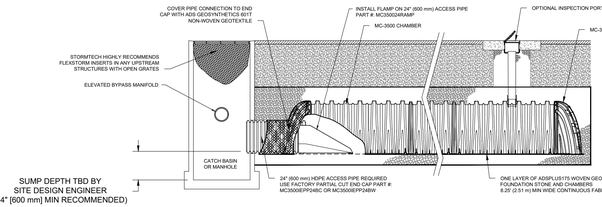
STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

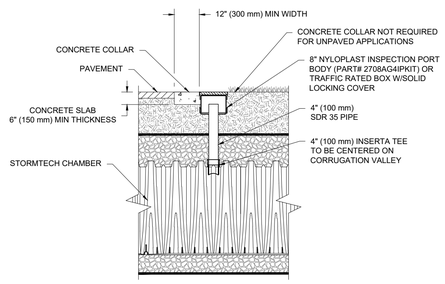
STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

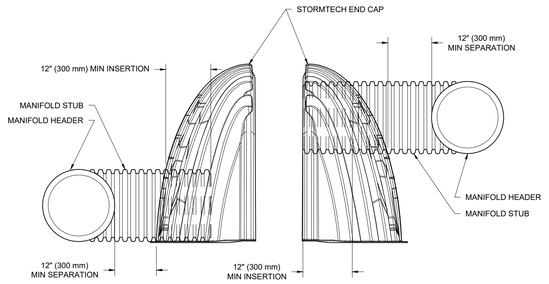


3 MC-3500 ISOLATOR ROW PLUS DETAIL



NOTE:
INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CORRUGATION VALLEY.

4 4" PVC INSPECTION PORT DETAIL (MC SERIES CHAMBER)



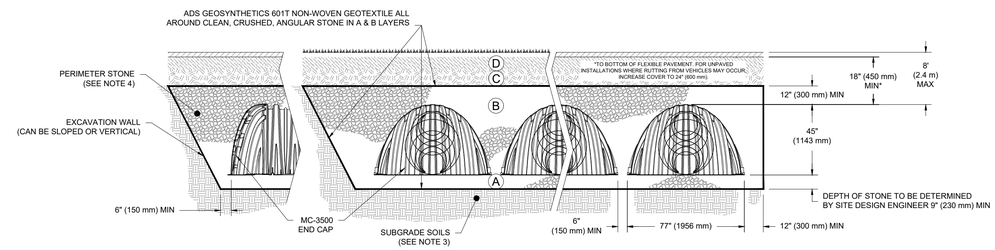
NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING.

7 MC-SERIES END CAP INSERTION DETAIL

ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 4	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



NOTES:

1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
2. MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 500 LBS/FT/%. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

1 MC-3500 CROSS SECTION DETAIL

DRAWN: | DATE:
REVIEWED: | PROJECT NO:
REV: | NOT TO SCALE

MC-3500 STANDARD DETAILS

StormTech® Chamber System
888-892-2694 | WWW.STORMTECH.COM

4640 TRUEMAN BLVD
HILLIARD, OH 43026

Advanced Drainage Systems, Inc.

SHEET

6345

ADVANCED DRAINAGE SYSTEMS, INC. ("ADS") HAS PREPARED THIS DETAIL BASED ON REFERENCED STANDARDS. ADS HAS NOT PERFORMED ANY ENGINEERING OR DESIGN SERVICES FOR THIS PROJECT. NOR HAS ADS INDEPENDENTLY VERIFIED THE INFORMATION SUPPLIED. THE INSTALLATION DETAILS PROVIDED HEREIN ARE GENERAL RECOMMENDATIONS AND ARE NOT SPECIFIC FOR THIS PROJECT. UNLESS THE PLANS ARE SIGNED AND SEALED BY THE SITE DESIGN ENGINEER. THE SITE DESIGN ENGINEER SHALL REVIEW THESE DETAILS PRIOR TO CONSTRUCTION AND SEALING THE DOCUMENT. IT IS THE SITE DESIGN ENGINEER'S RESPONSIBILITY TO ENSURE THE DETAILS PROVIDED HEREIN ARE ACCEPTABLE FOR THIS PROJECT.

Appendix K - Sizing Calculations

TO BE PROVIDED IN FINAL ENGINEERING

Appendix L - Hydraulic Calculations

TO BE PROVIDED IN FINAL ENGINEERING

Appendix M - Excerpt from Geotechnical Report

April 24, 2023
J.N. 22-398

DIVERSIFIED PACIFIC COMMUNITIES
10621 Civic Center Drive
Rancho Cucamonga, California 91730

Attention: Mr. Nolan Leggio

Subject: **Field Percolation Tests Results, Proposed Empire Resort and Spa Project, Approximately 10.4 Acres of Vacant Land at Southeast Corner of E. Holt Boulevard and E. Guasti Road, City of Ontario, San Bernardino, California**

Reference: Petra Geosciences, Inc. 2023, DRAFT Preliminary Geotechnical Evaluation, Proposed Empire Resort and Spa Project, Approximately 10.4 Acres of Vacant Land at Southeast Corner of E. Holt Boulevard and E. Guasti Road, APN 011 032 233, City of Ontario, San Bernardino, California, J.N. 22-398 dated February 10.

Dear Mr. Leggio:

Petra Geosciences, Inc. (Petra) has prepared this letter report presenting the results of our percolation testing for the subject project.

Objective

The objective of this investigation was to evaluate infiltration rates of the site soils, consisting of upper younger alluvial deposits, for the preliminary design of onsite infiltration facilities. To achieve this objective, we have drilled five test borings on the order of 5 to 15 feet using a hollow-stem drill equipment, conducted borehole percolation tests of the lower part of each borehole, and calculated the infiltration rate. The project site and the locations of the percolation boreholes are shown in Figure 1.

Test Method and Scope of Services

Percolation test to evaluate site infiltration rate was performed in conformance with Design Handbook for Low Impact Development, Best Management Practices, by Riverside County Flood Control and Water Conservation District, dated September 2011 (RCFFCWCD, 2011). As such, our scope of work included the following:

1. Collect and review readily available literature and maps about soil and geologic conditions within and adjacent to the site including our prior soil and boring data, see reference.

2. Consult with project civil engineer on targeted test locations and depths.

3. Drill 5 exploratory borings using the hollow-stem auger drilling method and perform falling-head percolation test in each borehole. The percolation tests results and infiltration rate calculations are presented in Appendix A.

4. Log and field-classify soil materials encountered in each boring in accordance with the visual-manual procedures outlined in the Unified Soil Classification System and the American Society for Testing and Materials (ASTM) Procedure D 2488-90. All field activities were performed by or under the direct observation of a State of California Certified Engineering Geologist.

5. Collect representative bulk soil samples near the bottom of each borehole utilizing a 1.4- inch inside diameter Standard Penetration Test (SPT) split-spoon sampler. Perform a laboratory derived grain size analysis (sieve) on each sample.

6. Prepare this letter report presenting the results of our evaluations.

Test Description and Results

The falling head percolation testing method was used in accordance with the cited reference. The borings for the percolation tests were advanced using an 8-inch diameter hollow-stem auger to depths between approximately 5 and 15 feet below the existing ground surface. As anticipated, surficial fills underlain by alluvial deposits were encountered in each test borings. The excavated materials in the generally upper 5 to 8 consisted of silty fine to medium sands with variable gravels that were medium-dense and slightly moist. The soil materials below approximately 8 feet generally consisted of interbedded silty sand with less fines to sand with silts also with variable gravel content that were medium dense and slightly moist. Percolation testing was performed in the bottom 4 to 5 feet of the boreholes. The locations of the percolation test borings are shown on the Test Location Map (Figure 1) and the boring logs are presented in Appendix A.

Following a presoaking period, field testing was conducted in a perforated pipe lowered into the borehole, with ¾-inch gravel surrounding the pipe, at 10-minute intervals for a period of approximately 1 hour. The falling-head percolation test data were utilized in determining the test infiltration rate, I_t, expressed in units of inches/hour, utilizing the Porchet Method (RCFCWCD, 2011). The infiltration rate, I_t, was calculated by determining the volumetric water flow rate through the wetted borehole surface area, expressed in terms of inches per hour. The un-factored test results are summarized in the following table, Table 1 and the field test data and laboratory test results are presented in Appendix B and C.

TABLE 1

Un-Factored Infiltration Test Results

Test No.	Borehole Total Depth (feet)	Approximate Test Zone (feet below existing grade)	Geologic Unit / Soil Description	Infiltration Test Rate, I_t (in/hr)
P-1	5	1-5	Qal (SM)	0.9
P-2	15	10-15	Qal (SP-SM)	49.3
P-3	10	5-10	Qal (SP-SM)	50.6
P-4	7	2-7	Qal (SM)	2.3
P-5	5	1-5	Qal (SM)	2.1

The test data indicates the alluvial deposits greater than approximately 9 feet below existing site grades are considered permeable. As observed, the shallow subsurface native soils, for containing high fines content, exhibit variable permeability, as measured by percolation tests at different depths. As such, it is our professional opinion that the infiltration rates approximately 9 feet below surface are more suitable for the intended infiltration purposes.

Discussion

Suitability Assessment

In view of the test data, certain jurisdictions consider such factors as infiltration assessment method, soil texture, site soils variability, and depth to groundwater/impervious layer to assign a Suitability Assessment Safety Factor that should be applied to the infiltration rates.

To perform such an evaluation, we have adopted a procedure provided by Santa Ana Regional Water Quality Control Board (SARWQCB) in their Technical Guidance Document (TGD) for the Preparation of Conceptual/Preliminary and/or Project Water Quality Management Plans (WQMPs), with Appendices, For Santa Ana Regional Board consideration, dated December 20, 2013 (SARWQCB, 2013). Based on Appendix D of this document, using Table VII.3: Suitability Assessment Related Considerations for Infiltration Facility Safety Factors, and Worksheet H: Factor of Safety and Design Infiltration Rate and Worksheet, of the Orange County BMP Design Manual, the following is presented.

TABLE 2

Site Suitability Reduction Factor (Category A) for Infiltration Rate

Considerations		Concern		Reduction Factor
Description	**Weight**	**Level**	**Safety Factor**	**Weight x Safety Factor**
Soil Assessment Method	0.25	Low	1.0	0.25
Predominant Soil Texture	0.25	Low	1.0	0.25
Site Soil Variability	0.25	medium	2.0	0.50
Depth to Groundwater/Impervious Layer	0.25	Low	1.0	0.25
Reduction Factor (sum of individual Reduction Factors)				**1.25**

Based on the information provided in Table 2, a Reduction Factor of 1.25 should be applied to the values of Infiltration Rate, I_t, provided in Table 1, above, for Site Suitability considerations.

Construction Procedure

The infiltration rates provided herein are considered representative of the native soils in the vicinity of the percolation test locations. Care should be taken to minimize disturbance of the exposed bottom surface of the basins as fill placement or any compaction effort applied to the area will have a detrimental effect on the anticipated infiltration rate of the proposed infiltration areas.

Environmental Impact

It should be noted that clean, potable water was used for the test. Surface runoff usually carries with it debris and fine particles that are typically expected to reduce the calculated infiltration rate.

Factor of Safety

The values of infiltration rate provided in Table 1 are raw test values. As discussed above, these values should be corrected for site Suitability considerations by applying a Reduction factor as provided in Table 2. Further, the project civil engineer needs to consider a Design Safety Factor, which incorporates such items as tributary area size, level of pretreatment/expected sediment load, redundancy/contingency plan and compaction during construction, in combination with the Suitability Assessment Safety/Reduction Factor for the design of the system.

This report may be subject to review by the controlling agency.

Respectfully submitted,

PETRA GEOSCIENCES, INC.

Douglass Johnston
Senior Associate Geologist
CEG 2477

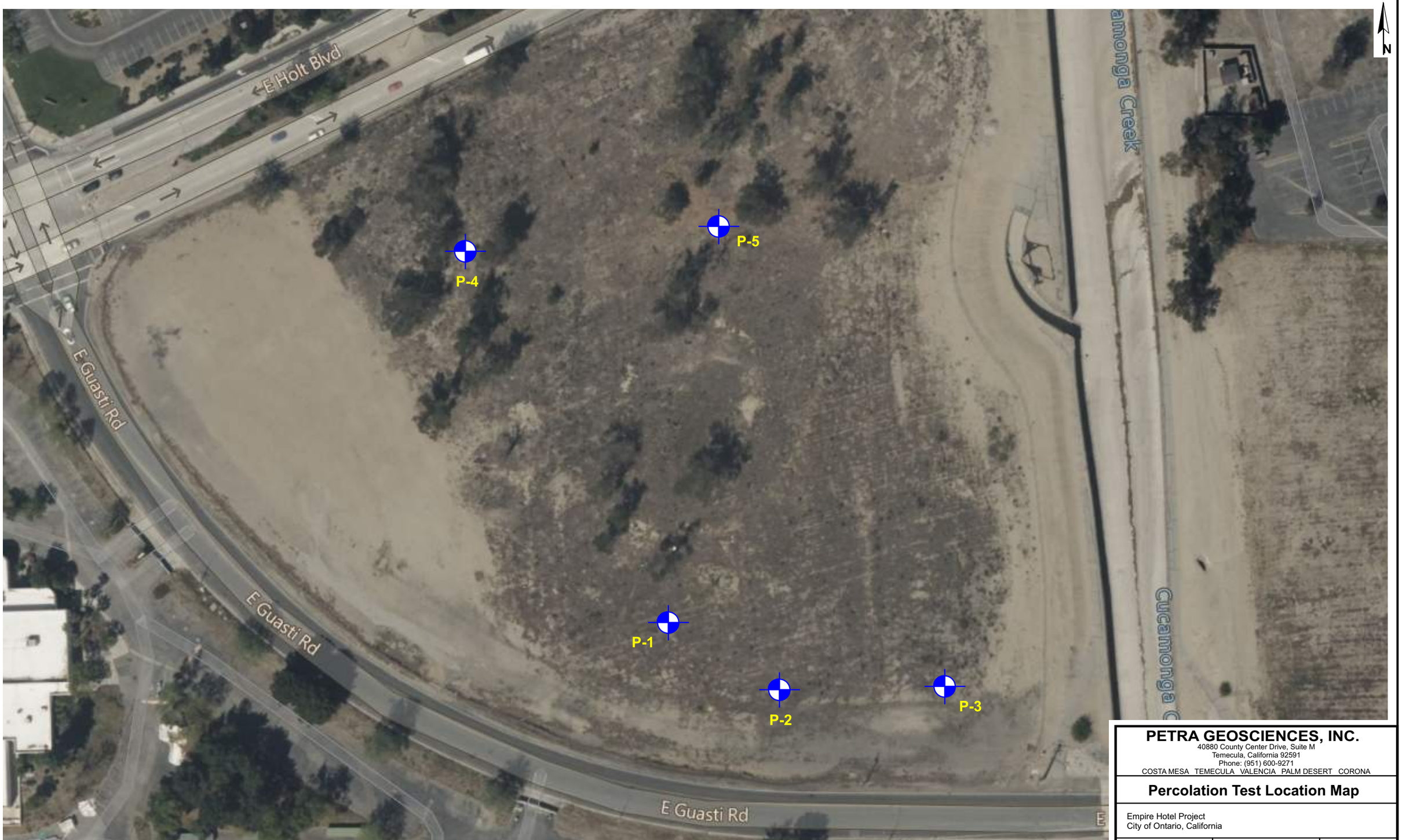
Siamak Jafroudi, PhD
Senior Principal Engineer
GE 2024

DJ/SJ/lv

Attachments: Figure 1 – Test Location Map
Appendix A – Boring Logs
Appendix B – Percolation Test Data
Appendix C – Sieve Analysis Graphs

W:\2020-2025\2022\300\22-398\Reports\22-398 120 Field Percolation Test Report.docx

FIGURE



Reference: Google Earth, 2020 Image

PETRA GEOSCIENCES, INC.
40880 County Center Drive, Suite M
Temecula, California 92591
Phone: (951) 600-9271
COSTA MESA TEMECULA VALENCIA PALM DESERT CORONA

Percolation Test Location Map

Empire Hotel Project
City of Ontario, California

PETRA GEOSCIENCES INC.

DATE: April 2023
J.N.: 22-398

Figure 1

APPENDIX A

BORING LOGS

Key to Soil and Bedrock Symbols and Terms

PETRA

Unified Soil Classification System

Coarse-grained Soils > 1/2 of materials is larger than #200 sieve	The No. 200 U.S. Standard Sieve is about the smallest particle visible to the naked eye	**GRAVELS** more than half of coarse fraction is larger than #4 sieve	Clean Gravels (less than 5% fines)	**GW**	Well-graded gravels, gravel-sand mixtures, little or no fines
				GP	Poorly-graded gravels, gravel-sand mixtures, little or no fines
			Gravels with fines	**GM**	Silty Gravels, poorly-graded gravel-sand-silt mixtures
				GC	Clayey Gravels, poorly-graded gravel-sand-clay mixtures
		SANDS more than half of coarse fraction is smaller than #4 sieve	Clean Sands (less than 5% fines)	**SW**	Well-graded sands, gravelly sands, little or no fines
				SP	Poorly-graded sands, gravelly sands, little or no fines
			Sands with fines	**SM**	Silty Sands, poorly-graded sand-gravel-silt mixtures
				SC	Clayey Sands, poorly-graded sand-gravel-clay mixtures
Fine-grained Soils > 1/2 of materials is smaller than #200 sieve		**SILTS & CLAYS** Liquid Limit Less Than 50		**ML**	Inorganic silts & very fine sands, silty or clayey fine sands, clayey silts with slight plasticity
				CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
				OL	Organic silts & clays of low plasticity
		SILTS & CLAYS Liquid Limit Greater Than 50		**MH**	Inorganic silts, micaceous or diatomaceous fine sand or silt
				CH	Inorganic clays of high plasticity, fat clays
				OH	Organic silts and clays of medium-to-high plasticity
Highly Organic Soils				**PT**	Peat, humus swamp soils with high organic content

Grain Size

Description		Sieve Size	Grain Size	Approximate Size
Boulders		>12"	>12"	Larger than basketball-sized
Cobbles		3 - 12"	3 - 12"	Fist-sized to basketball-sized
Gravel	coarse	3/4 - 3"	3/4 - 3"	Thumb-sized to fist-sized
	fine	#4 - 3/4"	0.19 - 0.75"	Pea-sized to thumb-sized
Sand	coarse	#10 - #4	0.079 - 0.19"	Rock salt-sized to pea-sized
	medium	#40 - #10	0.017 - 0.079"	Sugar-sized to rock salt-sized
	fine	#200 - #40	0.0029 - 0.017"	Flour-sized to sugar-sized to
Fines		Passing #200	<0.0029"	Flour-sized and smaller

Modifiers

Trace	< 1 %
Few	1 - 5%
Some	5 - 12 %
Numerous	12 - 20 %

Laboratory Test Abbreviations

MAX	Maximum Dry Density	MA	Mechanical (Particle Size) Analysis
EXP	Expansion Potential	AT	Atterberg Limits
SO4	Soluble Sulfate Content	#200	#200 Screen Wash
RES	Resistivity	DSU	Direct Shear (Undisturbed Sample)
pH	Acidity	DSR	Direct Shear (Remolded Sample)
CON	Consolidation	HYD	Hydrometer Analysis
SW	Swell	SE	Sand Equivalent
CL	Chloride Content	OC	Organic Content
RV	R-Value	COMP	Mortar Cylinder Compression

Bedrock Hardness

Soft	Can be crushed and granulated by hand; "soil like" and structureless
Moderately Hard	Can be grooved with fingernails; gouged easily with butter knife; crumbles under light hammer blows
Hard	Cannot break by hand; can be grooved with a sharp knife; breaks with a moderate hammer blow
Very Hard	Sharp knife leaves scratch; chips with repeated hammer blows

Sampler and Symbol Descriptions

Approximate Depth of Groundwater Encountered

Approximate Depth of Standing Groundwater

Modified California Split Spoon Sample

No Recovery in Mod. Calif. Split Spoon Sample

Standard Penetration Test

Shelby Tube Sample

Bulk Sample

No Recovery in SPT Sampler

No Recovery in Shelby Tube

Notes:

Blows Per Foot: Number of blows required to advance sampler 1 foot (unless a lesser distance is specified). Samplers in general were driven into the soil or bedrock at the bottom of the hole with a standard (140 lb.) hammer dropping a standard 30 inches unless noted otherwise in Log Notes. Drive samples collected in bucket auger borings may be obtained by dropping non-standard weight from variable heights. When a SPT sampler is used the blow count conforms to ASTM D-1586

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **P-1**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **±953**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **4/13/23**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **140 lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): Light brown, slightly moist, fine- to coarse-grained, some cobbles, some gravel.							
		YOUNG ALLUVIAL FAN DEPOSITS (Qyf) Silty Sand (SM): Light Brown to brown, slightly moist, fine- to coarse-grained, trace gravel. slightly moist, loose.		2 3 2					MA
5		Total Depth = 5' No groundwater encountered Boring was backfilled with cuttings after percolation testing.							
10									
15									
20									
25									
30									

PLATE A-19

Petra Geosciences, Inc.

6358

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **P-2**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **±952**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **4/13/23**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **140 lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): Light Brown, slightly moist, fine- to coarse-grained, some cobles, some gravel.							
		YOUNG ALLUVIAL FAN DEPOSITS (Qyf) Silty Sand (SM): Light brown to brown, slightly moist, fine- to coarse-grained, few gravel.							
5									
10		Light brown.							
		Sand w/ Silt (SP-SM): Light brown to gray, slightly moist, medium dense, fine- to coarse-grained, few gravel.		12 9 9					MA
15		Total Depth = 15' No groundwater encountered Boring was backfilled with cuttings after percolation testing.							
20									
25									
30									

PLATE A-20

Petra Geosciences, Inc.

6359

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **P-3**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **±951**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **4/13/23**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **140 lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): Light brown, slightly moist, fine- to coarse-grained, some cobbles, some gravel.							
		YOUNG ALLUVIAL FAN DEPOSITS (Qyf) Silty Sand (SM): light brown to brown, slightly moist, fine- to coarse-grained, few gravel.							
5									
		Sand with Silt (SP-SM): light brown, slightly moist, medium dense, fine- to coarse-grained.		3 5 7					MA
10		Total Depth = 10' No groundwater encountered Boring was backfilled with cuttings after percolation testing.							
15									
20									
25									
30									

PLATE A-21

Petra Geosciences, Inc.

6360

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **P-4**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **±959**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **4/13/23**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **140 lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): Light brown, slightly moist, fine- to coarse-grained, some cobbles, some gravel.							
		YOUNG ALLUVIAL FAN DEPOSITS (Qyf) Silty Sand (SM): Light brown to brown, slightly moist, fine- to coarse-grained, few gravel.							
5		loose.		3 3 4					MA
		Total Depth = 7' No groundwater encountered Boring was backfilled with cuttings after percolation testing.							
10									
15									
20									
25									
30									

PLATE A-22

Petra Geosciences, Inc.

6361

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **P-5**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **±960**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **4/13/23**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **140 lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): light brown, slightly moist, fine- to coarse-grained, some cobbles, some gravel.							
		YOUNG ALLUVIAL FAN DEPOSITS (Qyf) Silty Sand (SM): light brown to brown, slightly moist, loose, fine- to coarse-grained, trace gravel.		4 5 3					MA
5		Total Depth = 5' No groundwater encountered Boring was backfilled with cuttings after percolation testing.							
10									
15									
20									
25									
30									

PLATE

Petra Geosciences, Inc.

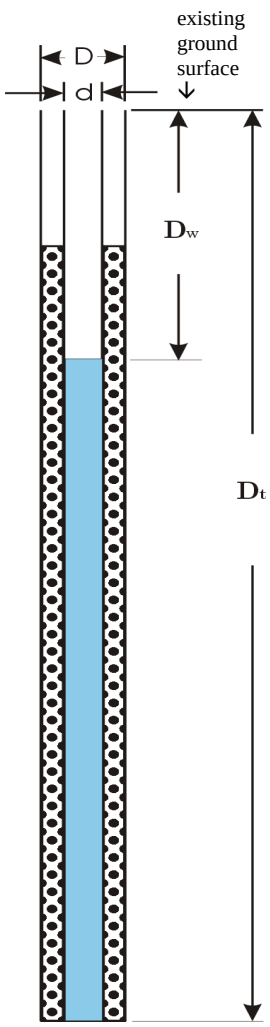
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APPENDIX B

PERCOLATION TEST DATA

Boring/Test Number: P-1

Total Depth of Boring, D_T (ft):	5	**Test Date:**	4/14/2023
Diameter of Hole, D (in):	8	**Tested By:**	SS
Diameter of Casing, d (in):	3	**USCS Soil Type:**	SM
Depth of Slotted Casing (ft):	0 to 5	**Depth to Groundwater (ft):**	N/A
Porosity of Annulus Material, *n* :	0.44	**Ground Elevation (msl ft):**	±953
Depth from Existing Ground Surface to Bottom of Prop. Inflitration System (ft):			0.0



SANDY SOIL CRITERIA TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔD (in.)	Change in Height of Water Greater Than or Equal to 6"? (Yes/No)*
		Initial, D_o (ft.)	Final, D_f (ft.)		
1	25	3.00	3.58	6.96	yes
2	25	3.00	3.53	6.36	yes
Standard Time Interval Between Readings (min.), [* if yes = 10, if no = 30]:					10

PERCOLATION TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔH (in.)	Percolation Rate	
		Initial, D_o (ft.)	Final, D_f (ft.)		(min/in.)	(gal/day/ft^2)
1	10	3.00	3.24	2.88	3.47	10.92
2	10	3.00	3.23	2.76	3.62	10.44
3	10	3.00	3.23	2.76	3.62	10.44
4	10	3.00	3.23	2.76	3.62	10.44
5	10	3.00	3.23	2.76	3.62	10.44
6	10	3.00	3.23	2.76	3.62	10.44
7	10	3.00	3.23	2.76	3.62	10.44
8	10	3.00	3.23	2.76	3.62	10.44

TEST RESULTS**

Inflitration Rate [Porchet Method]# (inches/hour)	Percolation Rate	
	(min/in.)	(gal/day/ft^2)
0.90	**3.62**	**10.44**

**Raw Results. Does Not Include a Factor of Safety

FACTOR OF SAFETY WORKSHEET

Factor Category[Φ]		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = (w) x (v)
A	Suitability Assessment	Soil Assessment Methods	0.25		0
		Predominant Soil Texture	0.25		0
		Site Soil Variability	0.25		0
		Depth to Groundwater / Impervious Layer	0.25		0
		Suitability Assessment Safety Factor, $S_A = \Sigma p$			**0**

[Φ] Factor Category B Should Be Provided and Calculated by Project Civil Engineer

[#] Where Infiltration Rate, It = ΔH (60r) / Δt (r + 2Havg)

$r = D / 2$

$Ho = D_T - Do$

$H_f = D_T - D_f$

$\Delta H = \Delta D = H_o - H_f$

$H_{avg} = (H_o + H_f) / 2$

Reference:

RCFCWCD, Design Handbook for LID, dated June, 2014

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PERCOLATION TEST SUMMARY

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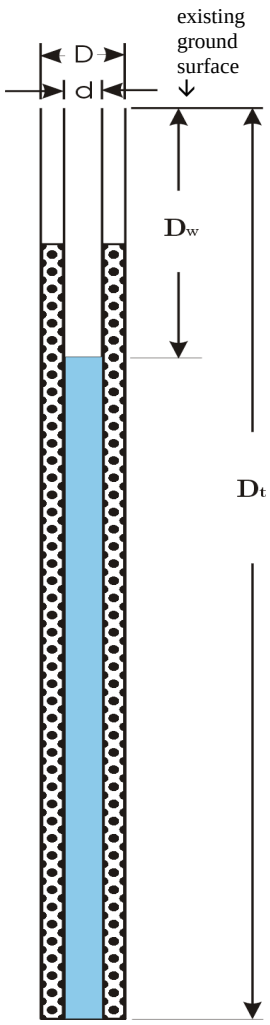
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Appendix B

Boring/Test Number: P-2

Total Depth of Boring, D_T (ft):	15	**Test Date:**	4/17/2023
Diameter of Hole, D (in):	8	**Tested By:**	SS
Diameter of Casing, d (in):	3	**USCS Soil Type:**	SM
Depth of Slotted Casing (ft):	10 to 15	**Depth to Groundwater (ft):**	N/A
Porosity of Annulus Material, *n* :	0.44	**Ground Elevation (msl ft):**	±952
Depth from Existing Ground Surface to Bottom of Prop. Inflitration System (ft):			0.0



SANDY SOIL CRITERIA TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔD (in.)	Change in Height of Water Greater Than or Equal to 6"? (Yes/No)*
		Initial, D_o (ft.)	Final, D_f (ft.)		
1	25	13.00	4.40	-103.2	yes
2	25	13.00	4.28	-104.64	yes
Standard Time Interval Between Readings (min.), [* if yes = 10, if no = 30]:					10

PERCOLATION TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔH (in.)	Percolation Rate	
		Initial, D_o (ft.)	Final, D_f (ft.)		(min/in.)	(gal/day/ft^2)
1	1.02	13.00	14.00	12.00	0.08	549.63
2	1.00	13.00	14.00	12.00	0.08	558.79
3	1.00	13.00	14.00	12.00	0.08	558.79
4	0.98	13.00	14.00	12.00	0.08	568.27
5	0.98	13.00	14.00	12.00	0.08	568.27
6	0.98	13.00	14.00	12.00	0.08	568.27
7	1.00	13.00	14.00	12.00	0.08	558.79
8	1.00	13.00	14.00	12.00	0.08	558.79
9	0.98	13.00	14.00	12.00	0.08	568.27
10	1.00	13.00	14.00	12.00	0.08	558.79
11	0.98	13.00	14.00	12.00	0.08	568.27
12	0.98	13.00	14.00	12.00	0.08	568.27

TEST RESULTS**

Inflitration Rate [Porchet Method]# (inches/hour)	Percolation Rate	
	(min/in.)	(gal/day/ft^2)
49.32	**0.08**	**568.27**

**Raw Results. Does Not Include a Factor of Safety

FACTOR OF SAFETY WORKSHEET

Factor Category[Φ]		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = (w) x (v)
A	Suitability Assessment	Soil Assessment Methods	0.25		0
		Predominant Soil Texture	0.25		0
		Site Soil Variability	0.25		0
		Depth to Groundwater / Impervious Layer	0.25		0
		Suitability Assessment Safety Factor, $S_A = \Sigma p$			**0**

[Φ] Factor Category B Should Be Provided and Calculated by Project Civil Engineer

[#] Where Infiltration Rate, It = ΔH (60r) / Δt (r + 2Havg)

$r = D / 2$

$Ho = D_T - Do$

$H_f = D_T - D_f$

$\Delta H = \Delta D = H_o - H_f$

$H_{avg} = (H_o + H_f) / 2$

Reference:

RCFCWCD, Design Handbook for LID, dated June, 2014

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PERCOLATION TEST SUMMARY

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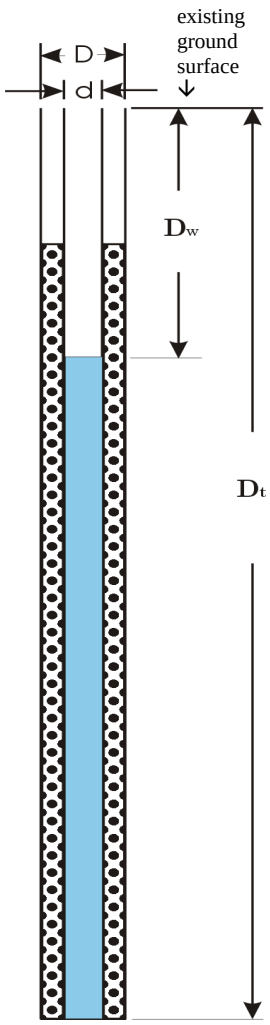
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Appendix B

Boring/Test Number: P-3

Total Depth of Boring, D_T (ft):	10	**Test Date:**	4/17/2023
Diameter of Hole, D (in):	8	**Tested By:**	SS
Diameter of Casing, d (in):	3	**USCS Soil Type:**	SM
Depth of Slotted Casing (ft):	5 to 10	**Depth to Groundwater (ft):**	N/A
Porosity of Annulus Material, *n* :	0.44	**Ground Elevation (msl ft):**	±951
Depth from Existing Ground Surface to Bottom of Prop. Inflitration System (ft):			0.0



SANDY SOIL CRITERIA TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔD (in.)	Change in Height of Water Greater Than or Equal to 6"? (Yes/No)*
		Initial, D_o (ft.)	Final, D_f (ft.)		
1	25	9.50	11.36	22.32	yes
2	25	9.50	11.08	18.96	yes
Standard Time Interval Between Readings (min.), [* if yes = 10, if no = 30]:					10

PERCOLATION TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔH (in.)	Percolation Rate	
		Initial, D_o (ft.)	Final, D_f (ft.)		(min/in.)	(gal/day/ft^2)
1	10	9.50	10.49	11.88	0.84	537.09
2	10	9.50	10.43	11.16	0.90	429.49
3	10	9.50	10.43	11.16	0.90	429.49
4	10	9.50	10.43	11.16	0.90	429.49
5	10	9.50	10.43	11.16	0.90	429.49
6	10	9.50	10.43	11.16	0.90	429.49
7	10	9.50	10.44	11.28	0.89	445.14
8	10	9.50	10.43	11.16	0.90	429.49

TEST RESULTS**

Inflitration Rate [Porchet Method]# (inches/hour)	Percolation Rate	
	(min/in.)	(gal/day/ft^2)
50.61	**0.90**	**429.49**

**Raw Results. Does Not Include a Factor of Safety

FACTOR OF SAFETY WORKSHEET

Factor Category[Φ]		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = (w) x (v)
A	Suitability Assessment	Soil Assessment Methods	0.25		0
		Predominant Soil Texture	0.25		0
		Site Soil Variability	0.25		0
		Depth to Groundwater / Impervious Layer	0.25		0
		Suitability Assessment Safety Factor, $S_A = \Sigma p$			**0**

[Φ] Factor Category B Should Be Provided and Calculated by Project Civil Engineer

[#] Where Infiltration Rate, It = ΔH (60r) / Δt (r + 2Havg)

$r = D / 2$

$Ho = D_T - Do$

$H_f = D_T - D_f$

$\Delta H = \Delta D = H_o - H_f$

$H_{avg} = (H_o + H_f) / 2$

Reference:

RCFCWCD, Design Handbook for LID, dated June, 2014

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PERCOLATION TEST SUMMARY

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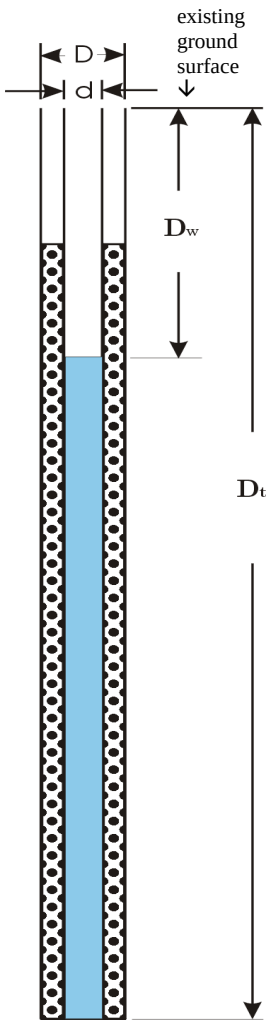
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Appendix B

Boring/Test Number: P-4

Total Depth of Boring, D_T (ft):	7	**Test Date:**	4/14/2023
Diameter of Hole, D (in):	8	**Tested By:**	SS
Diameter of Casing, d (in):	3	**USCS Soil Type:**	SM
Depth of Slotted Casing (ft):	2 to 7	**Depth to Groundwater (ft):**	N/A
Porosity of Annulus Material, *n* :	0.44	**Ground Elevation (msl ft):**	±959
Depth from Existing Ground Surface to Bottom of Prop. Inflitration System (ft):			0.0



SANDY SOIL CRITERIA TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔD (in.)	Change in Height of Water Greater Than or Equal to 6"? (Yes/No)*
		Initial, D_o (ft.)	Final, D_f (ft.)		
1	25	6.00	6.83	9.96	yes
2	25	6.00	6.58	6.96	yes
Standard Time Interval Between Readings (min.), [* if yes = 10, if no = 30]:					10

PERCOLATION TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔH (in.)	Percolation Rate	
		Initial, D_o (ft.)	Final, D_f (ft.)		(min/in.)	(gal/day/ft^2)
1	10	6.00	6.29	3.48	2.87	26.44
2	10	6.00	6.30	3.60	2.78	27.48
3	10	6.00	6.30	3.60	2.78	27.48
4	10	6.00	6.29	3.48	2.87	26.44
5	10	6.00	6.29	3.48	2.87	26.44
6	10	6.00	6.29	3.48	2.87	26.44
7	10	6.00	6.29	3.48	2.87	26.44
8	10	6.00	6.29	3.48	2.87	26.44

TEST RESULTS**

Inflitration Rate [Porchet Method]# (inches/hour)	Percolation Rate	
	(min/in.)	(gal/day/ft^2)
2.35	**2.87**	**26.44**

**Raw Results. Does Not Include a Factor of Safety

FACTOR OF SAFETY WORKSHEET

Factor Category[Φ]		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = (w) x (v)
A	Suitability Assessment	Soil Assessment Methods	0.25		0
		Predominant Soil Texture	0.25		0
		Site Soil Variability	0.25		0
		Depth to Groundwater / Impervious Layer	0.25		0
		Suitability Assessment Safety Factor, $S_A = \Sigma p$			**0**

[Φ] Factor Category B Should Be Provided and Calculated by Project Civil Engineer

[#] Where Infiltration Rate, It = ΔH (60r) / Δt (r + 2Havg)

$r = D / 2$

$Ho = D_T - Do$

$H_f = D_T - D_f$

$\Delta H = \Delta D = H_o - H_f$

$H_{avg} = (H_o + H_f) / 2$

Reference:

RCFCWCD, Design Handbook for LID, dated June, 2014

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PERCOLATION TEST SUMMARY

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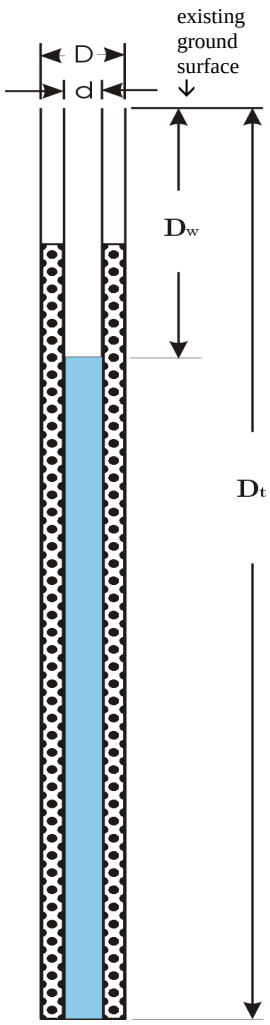
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Appendix B

Boring/Test Number: P-5

Total Depth of Boring, D_T (ft):	5	**Test Date:**	4/14/2023
Diameter of Hole, D (in):	8	**Tested By:**	SS
Diameter of Casing, d (in):	3	**USCS Soil Type:**	SM
Depth of Slotted Casing (ft):	0 to 5	**Depth to Groundwater (ft):**	N/A
Porosity of Annulus Material, *n* :	0.44	**Ground Elevation (msl ft):**	±960
Depth from Existing Ground Surface to Bottom of Prop. Inflitration System (ft):			0.0



SANDY SOIL CRITERIA TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔD (in.)	Change in Height of Water Greater Than or Equal to 6"? (Yes/No)*
		Initial, D_o (ft.)	Final, D_f (ft.)		
1	25	3.00	4.40	16.8	yes
2	25	3.00	4.28	15.36	yes
Standard Time Interval Between Readings (min.), [* if yes = 10, if no = 30]:					10

PERCOLATION TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔH (in.)	Percolation Rate	
		Initial, D_o (ft.)	Final, D_f (ft.)		(min/in.)	(gal/day/ft^2)
1	10	3.00	3.56	6.72	1.49	27.64
2	10	3.00	3.53	6.36	1.57	25.96
3	10	3.00	3.52	6.24	1.60	25.40
4	10	3.00	3.54	6.48	1.54	26.52
5	10	3.00	3.52	6.24	1.60	25.40
6	10	3.00	3.51	6.12	1.63	24.85
7	10	3.00	3.51	6.12	1.63	24.85
8	10	3.00	3.51	6.12	1.63	24.85

TEST RESULTS**

Inflitration Rate [Porchet Method]# (inches/hour)	Percolation Rate	
	(min/in.)	(gal/day/ft^2)
2.15	**1.63**	**24.85**

**Raw Results. Does Not Include a Factor of Safety

FACTOR OF SAFETY WORKSHEET

Factor Category[Φ]		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = (w) x (v)
A	Suitability Assessment	Soil Assessment Methods	0.25		0
		Predominant Soil Texture	0.25		0
		Site Soil Variability	0.25		0
		Depth to Groundwater / Impervious Layer	0.25		0
		Suitability Assessment Safety Factor, $S_A = \Sigma p$			**0**

[Φ] Factor Category B Should Be Provided and Calculated by Project Civil Engineer

[#] Where Infiltration Rate, It = ΔH (60r) / Δt (r + 2Havg)

$r = D / 2$

$Ho = D_T - Do$

$H_f = D_T - D_f$

$\Delta H = \Delta D = H_o - H_f$

$H_{avg} = (H_o + H_f) / 2$

Reference:
RCFCWCD, Design Handbook for LID, dated June, 2014

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PERCOLATION TEST SUMMARY

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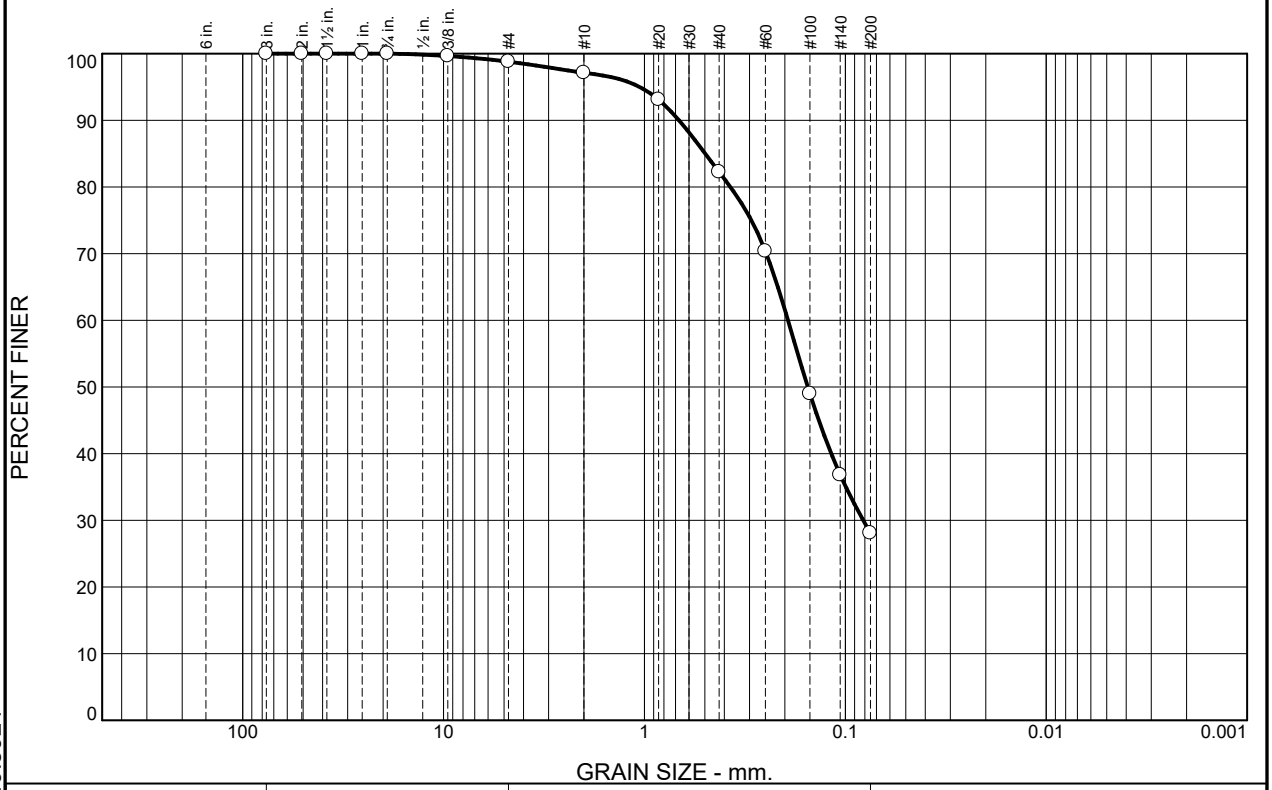
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Appendix B

APPENDIX C

SIEVE ANALYSIS GRAPHS

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	1.2	1.7	14.9	54.1	28.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.375	99.6		
#4	98.8		
#10	97.1		
#20	93.1		
#40	82.2		
#60	70.4		
#100	49.0		
#140	36.8		
#200	28.1		

* (no specification provided)

Material Description

Brown Silty Fine to Medium Sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.6728 D_{85}= 0.4980 D_{60}= 0.1930
D_{50}= 0.1537 D_{30}= 0.0814 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Source of Sample: 23L085 **Depth:** 3.5
Sample Number: P-1 **Date:** 4/20/2023

Laboratory:
1251 West Pomona Road, Unit #103, Corona, Ca 92882 Phone #. 714.549.8921

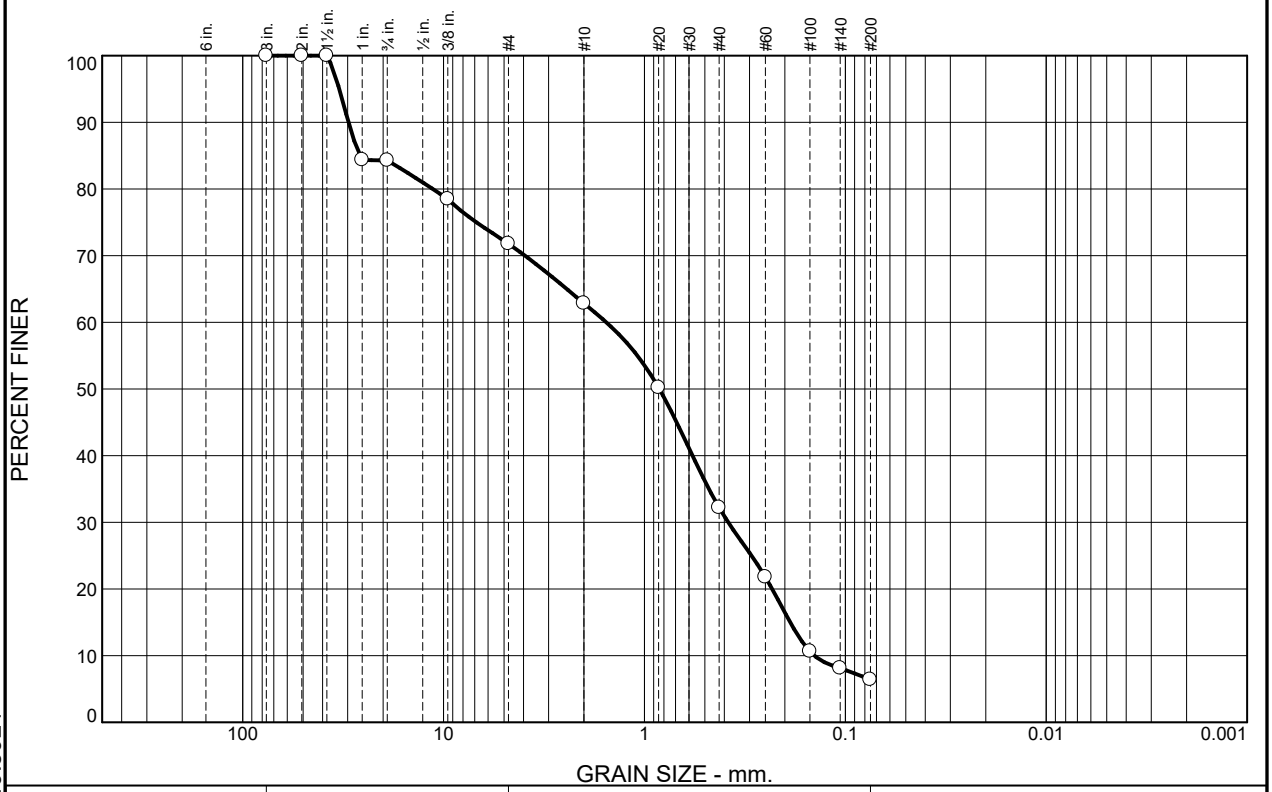
PETRA GEOSCIENCES INC.

Client: Diversified Pacific Communities
Project: Ontario Hotel

Project No: 22-398 **Figure**

Tested By: DI

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	15.7	12.5	8.9	30.7	25.8	6.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	84.4		
.75	84.3		
.375	78.5		
#4	71.8		
#10	62.9		
#20	50.2		
#40	32.2		
#60	21.8		
#100	10.6		
#140	8.1		
#200	6.4		

* (no specification provided)

Material Description

Gray Brown Gravelly Fine to Coarse Sand with Silt

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 29.6943 D_{85}= 26.0677 D_{60}= 1.5491
D_{50}= 0.8423 D_{30}= 0.3827 D_{15}= 0.1881
D_{10}= 0.1427 C_u= 10.86 C_c= 0.66

Classification

USCS= AASHTO=

Remarks

Source of Sample: 23L085 **Depth:** 13.5
Sample Number: P-2 **Date:** 4/20/2023

Laboratory:
1251 West Pomona Road, Unit #103, Corona, Ca 92882 Phone #. 714.549.8921

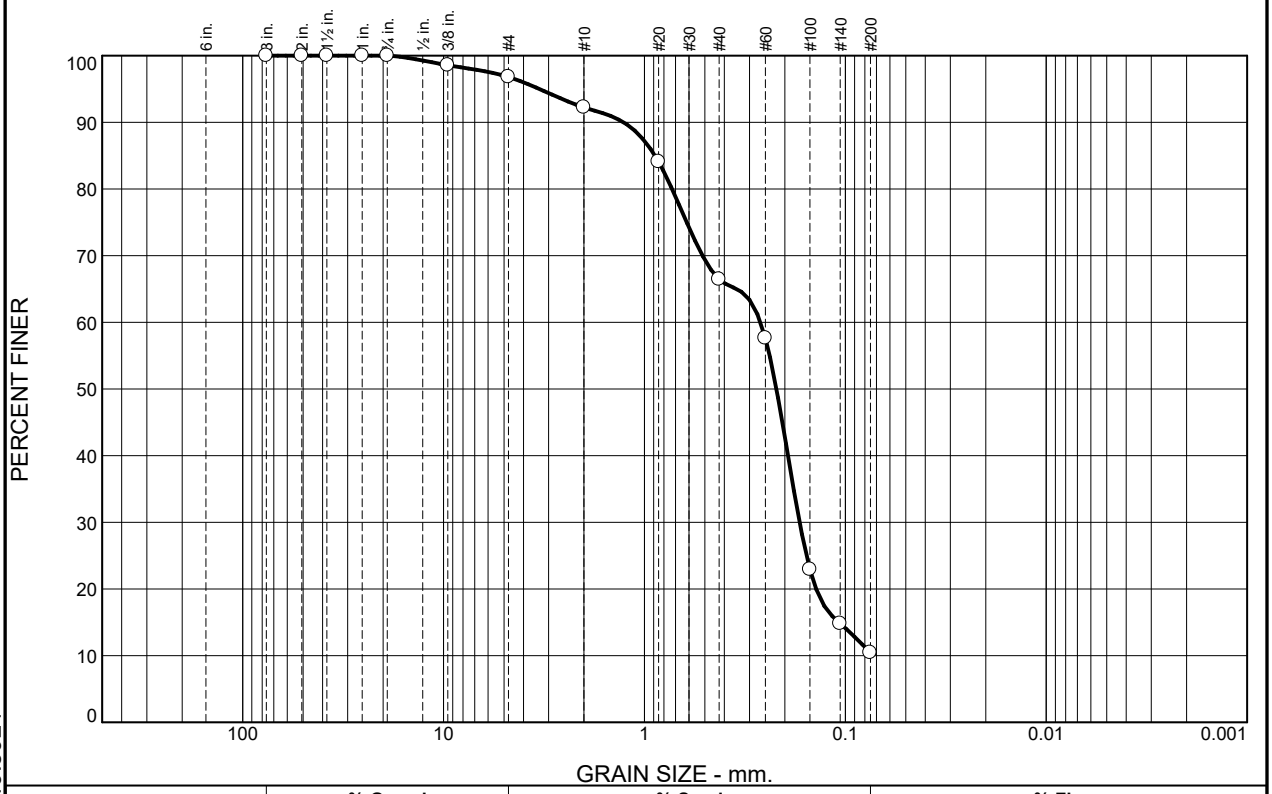
PETRA GEOSCIENCES INC.

Client: Diversified Pacific Communities
Project: Ontario Hotel

Project No: 22-398 **Figure**

Tested By: DI

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	3.2	4.6	25.7	56.0	10.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.375	98.6		
#4	96.8		
#10	92.2		
#20	84.1		
#40	66.5		
#60	57.6		
#100	22.9		
#140	14.8		
#200	10.5		

* (no specification provided)

Material Description

Olive Brown Fine to Medium Sand with Silt

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 1.2713 D_{85}= 0.8857 D_{60}= 0.2643
D_{50}= 0.2205 D_{30}= 0.1688 D_{15}= 0.1077
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Source of Sample: 23L085 **Depth:** 8.5
Sample Number: P-3 **Date:** 4/20/2023

Laboratory:
1251 West Pomona Road, Unit #103, Corona, Ca 92882 Phone #. 714.549.8921

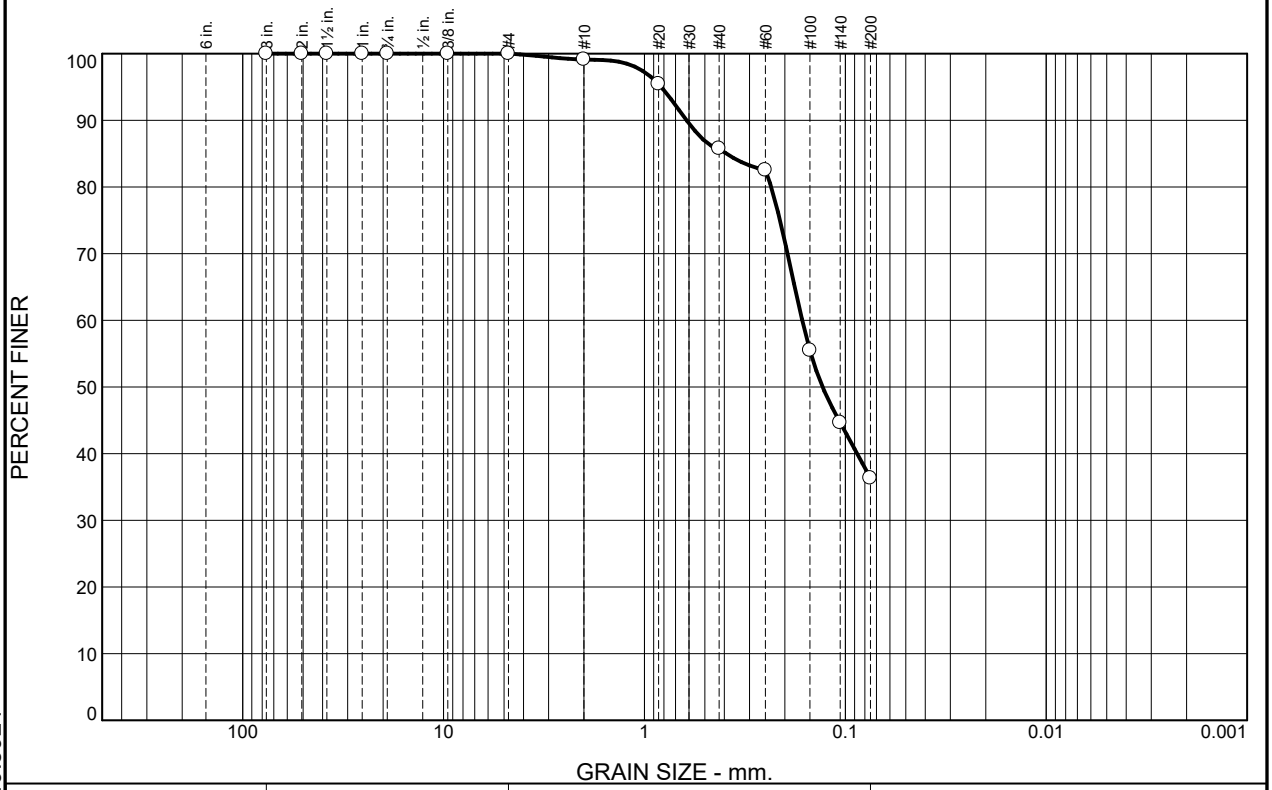
PETRA GEOSCIENCES INC.

Client: Diversified Pacific Communities
Project: Ontario Hotel

Project No: 22-398 **Figure**

Tested By: DI

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.9	13.4	49.4	36.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.375	100.0		
#4	100.0		
#10	99.1		
#20	95.4		
#40	85.7		
#60	82.5		
#100	55.5		
#140	44.6		
#200	36.3		

* (no specification provided)

Material Description

Brown Silty Fine to Medium Sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.6164 D_{85}= 0.3909 D_{60}= 0.1638
D_{50}= 0.1299 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Source of Sample: 23L085 **Depth:** 5.5
Sample Number: P-4 **Date:** 4/20/2023

Laboratory:
1251 West Pomona Road, Unit #103, Corona, Ca 92882 Phone #. 714.549.8921

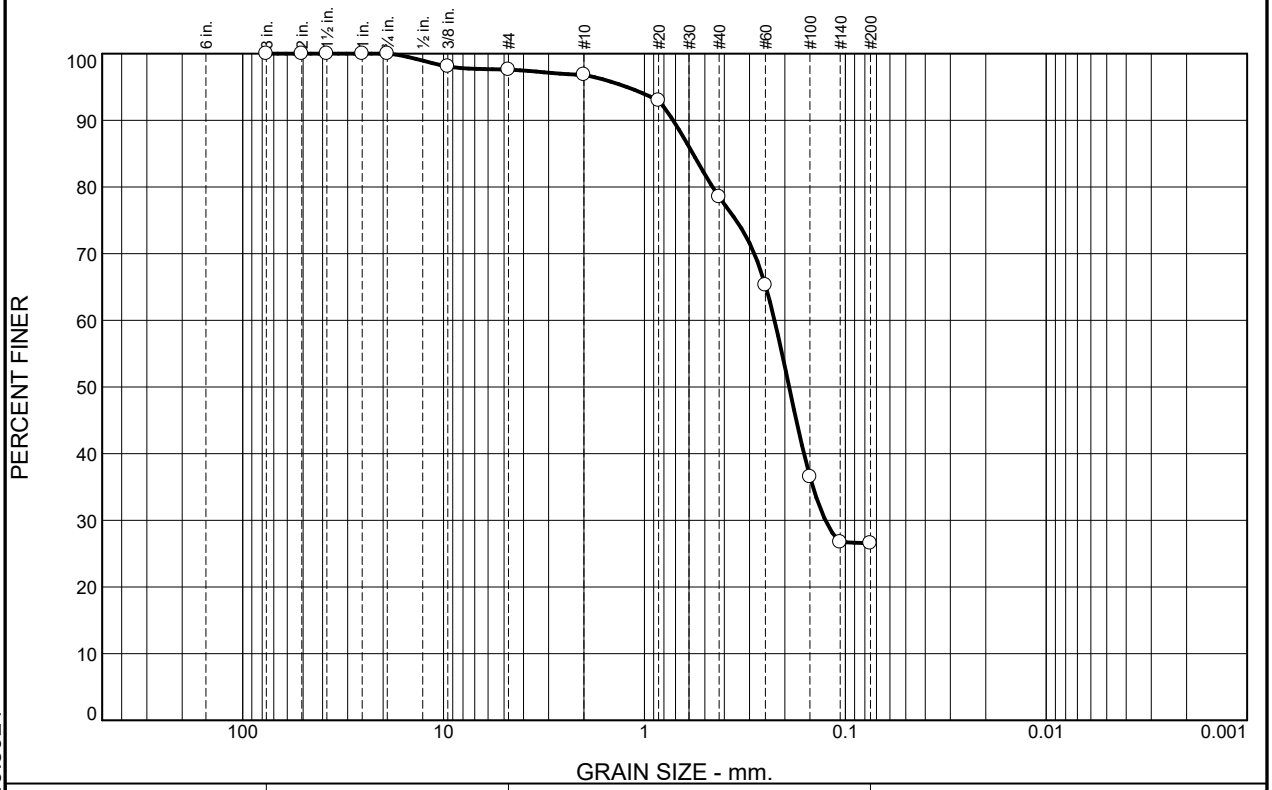
PETRA GEOSCIENCES INC.

Client: Diversified Pacific Communities
Project: Ontario Hotel

Project No: 22-398 **Figure**

Tested By: DI

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	2.4	0.8	18.3	52.0	26.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.375	98.1		
#4	97.6		
#10	96.8		
#20	93.0		
#40	78.5		
#60	65.3		
#100	36.5		
#140	26.7		
#200	26.5		

* (no specification provided)

Material Description

Brown Silty Fine to Medium Sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.7197 D_{85}= 0.5737 D_{60}= 0.2252
D_{50}= 0.1904 D_{30}= 0.1258 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Source of Sample: 23L085 **Depth:** 3.5
Sample Number: P-5 **Date:** 4/20/2023

Laboratory:
1251 West Pomona Road, Unit #103, Corona, Ca 92882 Phone #. 714.549.8921

PETRA GEOSCIENCES INC.

Client: Diversified Pacific Communities
Project: Ontario Hotel

Project No: 22-398 **Figure**

Tested By: DI

Water Quality Management Plan

For:

EMPIRE HOTEL

APN: 011032233

Prepared for:

Diversified Pacific Communities

10621 Civic Center Drive

Rancho Cucamonga, CA 91730

909-481-1150

Prepared by:

Kimley-Horn and Associates

3801 University Avenue, Suite 300

Riverside, CA 92501

(951)-543-9868

Submittal Date:

Revision Date:

Approval Date:_____

Project Owner's Certification

This Water Quality Management Plan (WQMP) has been prepared for Diversified Pacific by Kimley-Horn and Associates. The WQMP is intended to comply with the requirements of the City of Ontario, San Bernardino County and the NPDES Areawide Stormwater Program requiring the preparation of a WQMP. The undersigned, while it owns the subject property, is responsible for the implementation of the provisions of this plan and will ensure that this plan is amended as appropriate to reflect up-to-date conditions on the site consistent with San Bernardino County's Municipal Storm Water Management Program and the intent of the NPDES Permit for San Bernardino County and the incorporated cities of San Bernardino County within the Santa Ana Region. Once the undersigned transfers its interest in the property, its successors in interest and the city/county shall be notified of the transfer. The new owner will be informed of its responsibility under this WQMP. A copy of the approved WQMP shall be available on the subject site in perpetuity.

"I certify under a penalty of law that the provisions (implementation, operation, maintenance, and funding) of the WQMP have been accepted and that the plan will be transferred to future successors."

.

Project Data			
Permit/Application Number(s):		Grading Permit Number(s):	
Tract/Parcel Map Number(s):		Building Permit Number(s):	
CUP, SUP, and/or APN (Specify Lot Numbers if Portions of Tract):			APN: 011032233

Owner's Signature			
Owner Name: Nolan C. Leggio			
Title	Owner		
Company	Diversified Pacific Communities		
Address	10621 Civic Center Drive, Rancho Cucamonga, CA 91730		
Email	NLeggio@DiversifiedPacific.com		
Telephone #	(909)-373-2628		
Signature		Date	

Preparer's Certification

Project Data			
Permit/Application Number(s):		Grading Permit Number(s):	
Tract/Parcel Map Number(s):		Building Permit Number(s):	
CUP, SUP, and/or APN (Specify Lot Numbers if Portions of Tract):			APN: 011032233

"The selection, sizing and design of stormwater treatment and other stormwater quality and quantity control measures in this plan were prepared under my oversight and meet the requirements of Regional Water Quality Control Board Order No. R8-2010-0036."

Engineer: Robert Otte		PE Stamp Below
Title	Civil Engineer	
Company	Kimley-Horn and Associates, Inc.	
Address	3801 University Avenue, Suite 300, Riverside, CA 92501	
Email	Rob.Otte@kimley-horn.com	
Telephone #	(951) 534-5630	
Signature		
Date		

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Section 1 Discretionary Permit(s)

Form 1-1 Project Information					
Project Name	Empire Hotel				
Project Owner Contact Name:	Nolan C. Leggio				
Mailing Address:	10621 Civic Center Drive, Rancho Cucamonga, CA 91730	E-mail Address:	NLeggio@DiversifiedPacific.com	Telephone:	(909)-373-2628
Permit/Application Number(s):			Tract/Parcel Map Number(s):		
Additional Information/ Comments:					
Description of Project:	The development site is approximately 10.4 acres in size. The site is located at the southeast corner of E. Holt Boulevard and E. Gausti Road, in the City of Ontario, San Bernardino County, California. The development will include a hotel, pool, and outdoor recreation spaces, and subterrainian parking.				
Provide summary of Conceptual WQMP conditions (if previously submitted and approved). Attach complete copy.					

Section 2 Project Description

2.1 Project Information

This section of the WQMP should provide the information listed below. The information provided for Conceptual/ Preliminary WQMP should give sufficient detail to identify the major proposed site design and LID BMPs and other anticipated water quality features that impact site planning. Final Project WQMP must specifically identify all BMP incorporated into the final site design and provide other detailed information as described herein.

The purpose of this information is to help determine the applicable development category, pollutants of concern, watershed description, and long-term maintenance responsibilities for the project, and any applicable water quality credits. This information will be used in conjunction with the information in Section 3, Site Description, to establish the performance criteria and to select the LID BMP or other BMP for the project or other alternative programs that the project will participate in, which are described in Section 4.

Form 2.1-1 Description of Proposed Project

1 Development Category (Select all that apply):

☐ Significant re-development involving the addition or replacement of 5,000 ft² or more of impervious surface on an already developed site	☒ New development involving the creation of 10,000 ft² or more of impervious surface collectively over entire site	☐ Automotive repair shops with standard industrial classification (SIC) codes 5013, 5014, 5541, 7532- 7534, 7536-7539	☐ Restaurants (with SIC code 5812) where the land area of development is 5,000 ft² or more
☐ Hillside developments of 5,000 ft² or more which are located on areas with known erosive soil conditions or where the natural slope is 25 percent or more	☐ Developments of 2,500 ft² of impervious surface or more adjacent to (within 200 ft) or discharging directly into environmentally sensitive areas or waterbodies listed on the CWA Section 303(d) list of impaired waters.	☐ Parking lots of 5,000 ft² or more exposed to storm water	☐ Retail gasoline outlets that are either 5,000 ft² or more, or have a projected average daily traffic of 100 or more vehicles per day

☐ Non-Priority / Non-Category Project *May require source control LID BMPs and other LIP requirements. Please consult with local jurisdiction on specific requirements*.

2 Project Area (ft2):	454,257	**3** Number of Dwelling Units:		**4** SIC Code:	7011

5 Is Project going to be phased? Yes ☐ No ☐ *If yes, ensure that the WQMP evaluates each phase as a distinct DA, requiring LID BMPs to address runoff at time of completion.*

6 Does Project include roads? Yes ☐ No ☐ *If yes, ensure that applicable requirements for transportation projects are addressed (see Appendix A of TGD for WQMP)*

2.2 Property Ownership/Management

Describe the ownership/management of all portions of the project and site. State whether any infrastructure will transfer to public agencies (City, County, Caltrans, etc.) after project completion. State if a homeowners or property owners association will be formed and be responsible for the long-term maintenance of project stormwater facilities. Describe any lot-level stormwater features that will be the responsibility of individual property owners.

Form 2.2-1 Property Ownership/Management

Describe property ownership/management responsible for long-term maintenance of WQMP stormwater facilities:
Ownership, managment and maintenance of WQMP facililites will be the responsibility of the private owner.

2.3 Potential Stormwater Pollutants

Determine and describe expected stormwater pollutants of concern based on land uses and site activities (refer to Table 3-3 in the TGD for WQMP).

Form 2.3-1 Pollutants of Concern			
Pollutant	Please check: E=Expected, N=Not Expected		Additional Information and Comments
Pathogens (Bacterial / Virus)	E ☒	N ☐	Expected in commercial development per WQMP TGD Table 3-3
Nutrients - Phosphorous	E ☒	N ☐	Expected in commercial development per WQMP TGD Table 3-3
Nutrients - Nitrogen	E ☒	N ☐	Expected in commercial development per WQMP TGD Table 3-3
Noxious Aquatic Plants	E ☒	N ☐	Expected in commercial development per WQMP TGD Table 3-3
Sediment	E ☒	N ☐	Expected in commercial development per WQMP TGD Table 3-3
Metals	E ☒	N ☐	Expected in commercial development per WQMP TGD Table 3-3
Oil and Grease	E ☒	N ☐	Expected in commercial development per WQMP TGD Table 3-3
Trash/Debris	E ☒	N ☐	Expected in commercial development per WQMP TGD Table 3-3
Pesticides / Herbicides	E ☒	N ☐	Expected in commercial development per WQMP TGD Table 3-3
Organic Compounds	E ☒	N ☐	Expected in commercial development per WQMP TGD Table 3-3
Other:	E ☐	N ☐	
Other:	E ☐	N ☐	
Other:	E ☐	N ☐	
Other:	E ☐	N ☐	
Other:	E ☐	N ☐	

2.4 Water Quality Credits

A water quality credit program is applicable for certain types of development projects if it is not feasible to meet the requirements for on-site LID. Proponents for eligible projects, as described below, can apply for water quality credits that would reduce project obligations for selecting and sizing other treatment BMP or participating in other alternative compliance programs. Refer to Section 6.2 in the TGD for WQMP to determine if water quality credits are applicable for the project.

Form 2.4-1 Water Quality Credits

1 Project Types that Qualify for Water Quality Credits: *Select all that apply*			
☐ Redevelopment projects that reduce the overall impervious footprint of the project site. [Credit = % impervious reduced]	Higher density development projects ☐ Vertical density [20%] ☐ 7 units/ acre [5%]	☐ Mixed use development, (combination of residential, commercial, industrial, office, institutional, or other land uses which incorporate design principles that demonstrate environmental benefits not realized through single use projects) [20%]	☐ Brownfield redevelopment (redevelop real property complicated by presence or potential of hazardous contaminants) [25%]
☐ Redevelopment projects in established historic district, historic preservation area, or similar significant core city center areas [10%]	☒ Transit-oriented developments (mixed use residential or commercial area designed to maximize access to public transportation) [20%]	☐ In-fill projects (conversion of empty lots & other underused spaces < 5 acres, substantially surrounded by urban land uses, into more beneficially used spaces, such as residential or commercial areas) [10%]	☐ Live-Work developments (variety of developments designed to support residential and vocational needs) [20%]
2 Total Credit % *(Total all credit percentages up to a maximum allowable credit of 50 percent)*			
Description of Water Quality Credit Eligibility (if applicable)			

Section 3 Site and Watershed Description

Describe the project site conditions that will facilitate the selection of BMP through an analysis of the physical conditions and limitations of the site and its receiving waters. Identify distinct drainage areas (DA) that collect flow from a portion of the site and describe how runoff from each DA (and sub-watershed DMAs) is conveyed to the site outlet(s). Refer to Section 3.2 in the TGD for WQMP. The form below is provided as an example. Then complete Forms 3.2 and 3.3 for each DA on the project site. ***If the project has more than one drainage area for stormwater management, then complete additional versions of these forms for each DA / outlet.***

Form 3-1 Site Location and Hydrologic Features

Site coordinates *take GPS measurement at approximate center of site*	Latitude 34° 3'51.12"N	Longitude 117°36'10.53"W	Thomas Bros Map page
1 San Bernardino County climatic region: ☒ Valley ☐ Mountain			
2 Does the site have more than one drainage area (DA): Yes☐ No☒ *If no, proceed to Form 3-2. If yes, then use this form to show a conceptual schematic describing DMAs and hydrologic feature connecting DMAs to the site outlet(s).*			

Conveyance	Briefly describe on-site drainage features to convey runoff that is not retained within a DMA
DA1 DMA A flows to Outlet 1	*Onsite drainage flows via network of local storm drains to underground infiltration system and then to existing 108" storm drain located south of Guasti Avenue. 108" SD connects to Cucamonga Creek.*

Form 3-2 Existing Hydrologic Characteristics for Drainage Area 1

For Drainage Area 1's sub-watershed DMA, provide the following characteristics	DMA A	DMA B	DMA C	DMA D
1 DMA drainage area (ft^2)	454,257			
2 Existing site impervious area (ft^2)	0			
3 Antecedent moisture condition *For desert areas, use http://www.sbcounty.gov/dpw/floodcontrol/pdf/20100412_map.pdf*	II			
4 Hydrologic soil group *Refer to Watershed Mapping Tool – http://permitrack.sbcounty.gov/wap/*	**A**			
5 Longest flowpath length (ft)	890			
6 Longest flowpath slope (ft/ft)	0.0124			
7 Current land cover type(s) *Select from Fig C-3 of Hydrology Manual*	Grass, Annual			
8 Pre-developed pervious area condition: *Based on the extent of wet season vegetated cover good >75%; Fair 50-75%; Poor <50% Attach photos of site to support rating*	Fair			

Form 3-3 Watershed Description for Drainage Area

Receiving waters *Refer to Watershed Mapping Tool - http://permitrack.sbcounty.gov/wap/ See 'Drainage Facilities" link at this website*	Cucamonga Creek Reach 1 (Valley Reach), Santa Ana River Reach 4, 3, 2 and 1,
Applicable TMDLs *Refer to Local Implementation Plan*	TMDL required - Cadmium (2016) TMDL required - Copper (2016) TMDL required - Lead (2016) TMDL required - Zinc (2016)
303(d) listed impairments *Refer to Local Implementation Plan and Watershed Mapping Tool – http://permitrack.sbcounty.gov/wap/ and State Water Resources Control Board website – http://www.waterboards.ca.gov/santaana/water_issues/programs/tmdl/index.shtml*	Cadmium, Copper, Lead, Zinc
Environmentally Sensitive Areas (ESA) *Refer to Watershed Mapping Tool – http://permitrack.sbcounty.gov/wap/*	None
Unlined Downstream Water Bodies *Refer to Watershed Mapping Tool – http://permitrack.sbcounty.gov/wap/*	Santa Ana River
Hydrologic Conditions of Concern	☐ Yes *Complete Hydrologic Conditions of Concern (HCOC) Assessment. Include Forms 4.2-2 through Form 4.2-5 and Hydromodification BMP Form 4.3-10 in submittal* ☒ No
Watershed–based BMP included in a RWQCB approved WAP	☐ Yes *Attach verification of regional BMP evaluation criteria in WAP* • *More Effective than On-site LID* • *Remaining Capacity for Project DCV* • *Upstream of any Water of the US* • *Operational at Project Completion* • *Long-Term Maintenance Plan* ☒ No

Section 4 Best Management Practices (BMP)

4.1 Source Control BMP

4.1.1 Pollution Prevention

Non-structural and structural source control BMP are required to be incorporated into all new development and significant redevelopment projects. Form 4.1-1 and 4.1-2 are used to describe specific source control BMPs used in the WQMP or to explain why a certain BMP is not applicable. Table 7-3 of the TGD for WQMP provides a list of applicable source control BMP for projects with specific types of potential pollutant sources or activities. The source control BMP in this table must be implemented for projects with these specific types of potential pollutant sources or activities.

The preparers of this WQMP have reviewed the source control BMP requirements for new development and significant redevelopment projects. The preparers have also reviewed the specific BMP required for project as specified in Forms 4.1-1 and 4.1-2. All applicable non-structural and structural source control BMP shall be implemented in the project.

Form 4.1-1 Non-Structural Source Control BMPs

Identifier	Name	Check One		Describe BMP Implementation OR, if not applicable, state reason
		Included	Not Applicable	
N1	Education of Property Owners, Tenants and Occupants on Stormwater BMPs	☒	☐	provide environmental awareness education materials, made available by the municipalities, to maintenance staff. Among other things, these materials will describe the use of chemicals (including household type) that should be limited to the property, with no discharge of wastes via hosing or other direct discharge to gutters, catch basins and storm drains. Educational materials available from the San Bernardino Stormwater Program and can be downloaded at: http://www.sbcountystormwater.org/gov_out.html
N2	Activity Restrictions	☒	☐	Use restrictions will be developed by building operator through lease terms, and City restrictions will be imposed via permits and local ordinance
N3	Landscape Management BMPs	☒	☐	Identify on-going landscape maintenance requirements consistent with applicable local ordinances that may include fertilizer and/or pesticide usage
N4	BMP Maintenance	☒	☐	Identify responsibility for implementation and scheduled cleaning/maintenance of BMPs. (See Section 5)
N5	Title 22 CCR Compliance (How development will comply)	☐	☒	No community care facility is proposed
N6	Local Water Quality Ordinances	☒	☐	Site must comply with any applicable local water quality ordinances set by the local jurisdiction
N7	Spill Contingency Plan	☒	☐	Prepare spill contingency plan and provide to maintenance staff
N8	Underground Storage Tank Compliance	☐	☒	No underground storage tanks proposed
N9	Hazardous Materials Disclosure Compliance	☒	☐	

Form 4.1-1 Non-Structural Source Control BMPs

Identifier	Name	Check One		Describe BMP Implementation OR, if not applicable, state reason
		Included	Not Applicable	
N10	Uniform Fire Code Implementation	☒	☐	Adhere to requirements of UFC
N11	Litter/Debris Control Program	☒	☐	implement trash management and litter control procedures in the common areas aimed at reducing pollution of drainage water. The owner may contract with their landscape maintenance firms to provide this service during regularly scheduled maintenance, which should consist of litter patrol, emptying of trash receptacles in common areas,
N12	Employee Training	☒	☐	Implement training program
N13	Housekeeping of Loading Docks	☒	☐	Maintain loading docks in accordance with CASQA standards
N14	Catch Basin Inspection Program	☒	☐	The owner is required to have at least 80 percent of drainage facilities inspected, cleaned and maintained on an annual basis with 100 percent of the facilities included in a two-year period. Cleaning should take place in the late summer/early fall prior to the start of the rainy season. Drainage facilities include catch basins (storm drain inlets), detention basins, retention basins, sediment basins, open drainage channels and lift stations.
N15	Vacuum Sweeping of Private Streets and Parking Lots	☒	☐	Streets and parking lots are required to be swept on a regular frequency based on usage and field observations of waste accumulation, using a vacuum assisted sweeper. At a minimum all paved areas of a business shall be swept, in late summer or early fall, prior to the start of the rainy season or equivalent, as required by the governing jurisdiction
N16	Other Non-structural Measures for Public Agency Projects	☐	☒	No public agency projects associated.

Form 4.1-1 Non-Structural Source Control BMPs				
N17	Comply with all other applicable NPDES permits	☒	☐	Permittees shall comply with other NPDES permits such as General Industrial permits, etc., to include BMPs that are required as a part of a SWPPP

Form 4.1-2 Structural Source Control BMPs

Identifier	Name	Check One		Describe BMP Implementation OR, If not applicable, state reason
		Included	Not Applicable	
S1	Provide storm drain system stencilling and signage (CASQA New Development BMP Handbook SD-13)	☒	☐	Provide stenciling or labeling on all storm drain inlets and catch basins. Post signs and prohibitive language and/or graphical icons that prohibit illegal dumping
S2	Design and construct outdoor material storage areas to reduce pollution introduction (CASQA New Development BMP Handbook SD-34)	☐	☒	No outdoor material storage is proposed
S3	Design and construct trash and waste storage areas to reduce pollution introduction (CASQA New Development BMP Handbook SD-32)	☒	☐	All trash container areas shall be paved with an impervious surface with no run-on from adjoining areas and bins will have attached lids to prevent exposure to precipitation
S4	Use efficient irrigation systems & landscape design, water conservation, smart controllers, and source control (Statewide Model Landscape Ordinance; CASQA New Development BMP Handbook SD-12)	☒	☐	Landscape should employ rain shutoff devices, flow reducers or shutoff valves triggered by a pressure drop, mulches, appropriate plant material, etc. The timing and application methods of irrigation water must be designed to minimize the runoff of excess irrigation water into the municipal storm drain system.
S5	Finish grade of landscaped areas at a minimum of 1-2 inches below top of curb, sidewalk, or pavement	☒	☐	All landscaping shall be finish-graded at a minimum of 1-2 inches below top of curb, sidewalk or pavement.
S6	Protect slopes and channels and provide energy dissipation (CASQA New Development BMP Handbook SD-10)	☒	☐	Vegetate slopes with native drought tolerant vegetation and, if necessary, provide water efficient irrigation.
S7	Covered dock areas (CASQA New Development BMP Handbook SD-31)	☒	☐	Dock is located at basement level
S8	Covered maintenance bays with spill containment plans (CASQA New Development BMP Handbook SD-31)	☐	☒	No maintenance bays proposed
S9	Vehicle wash areas with spill containment plans (CASQA New Development BMP Handbook SD-33)	☐	☒	No vehicle wash areas proposed

S10	Covered outdoor processing areas (CASQA New Development BMP Handbook SD-36)	☐	☐	

Form 4.1-2 Structural Source Control BMPs

Identifier	Name	Check One		Describe BMP Implementation OR, If not applicable, state reason
		Included	Not Applicable	
S11	Equipment wash areas with spill containment plans (CASQA New Development BMP Handbook SD-33)	☐	☒	No equipment wash area proposed
S12	Fueling areas (CASQA New Development BMP Handbook SD-30)	☐	☒	No fueling area proposed
S13	Hillside landscaping (CASQA New Development BMP Handbook SD-10)	☐	☒	Not a hillside project
S14	Wash water control for food preparation areas	☒	☐	Food preparation within restaurants per health code requirements
S15	Community car wash racks (CASQA New Development BMP Handbook SD-33)	☐	☒	No community car wash proposed

4.1.2 Preventative LID Site Design Practices

Site design practices associated with new LID requirements in the MS4 Permit should be considered in the earliest phases of a project. Preventative site design practices can result in smaller DCV for LID BMP and hydromodification control BMP by reducing runoff generation. Describe site design and drainage plan including:

- A narrative of site design practices utilized or rationale for not using practices
- A narrative of how site plan incorporates preventive site design practices
- Include an attached Site Plan layout which shows how preventative site design practices are included in WQMP

Refer to Section 5.2 of the TGD for WQMP for more details.

Form 4.1-3 Preventative LID Site Design Practices Checklist

Site Design Practices *If yes, explain how preventative site design practice is addressed in project site plan. If no, other LID BMPs must be selected to meet targets*
Minimize impervious areas: Yes ☒ No ☐ Explanation: Impervious areas have been minimized by designing those surfaces to minimum widths while still meeting City and accessibility requirements.
Maximize natural infiltration capacity: Yes ☒ No ☐ Explanation: Limit compaction in landscape areas to maximize infiltration capacity
Preserve existing drainage patterns and time of concentration: Yes ☐ No ☒ Explanation: Area DA1, will be developed and provide hotel building and infrastructure and cannot maintain existing time of concentration but does maintain the overall drainage pattern direction towards the southeast corner of the development
Disconnect impervious areas: Yes ☒ No ☐ Explanation: Recreational open spaces provided and greenbelt surrounds the proposed structure.
Protect existing vegetation and sensitive areas: Yes ☐ No ☒ Explanation: Area DA1 will be developed and is barren; scattered grass onsite will be removed.
Re-vegetate disturbed areas: Yes ☒ No ☐ Explanation: The project proposes extensive landscape of open recreation areas.
Minimize unnecessary compaction in stormwater retention/infiltration basin/trench areas: Yes ☐ No ☒ Explanation: No basin is proposed. Project will utilize underground storage.
Utilize vegetated drainage swales in place of underground piping or imperviously lined swales: Yes ☒ No ☐ Explanation: Where feasible, drainage swales will be incorporated
Stake off areas that will be used for landscaping to minimize compaction during construction: Yes ☒ No ☐ Explanation: The proposed landscape areas will be staked off during construction

4.2 Project Performance Criteria

The purpose of this section of the Project WQMP is to establish targets for post-development hydrology based on performance criteria specified in the MS4 Permit. These targets include runoff volume for water quality control (referred to as LID design capture volume), and runoff volume, time of concentration, and peak runoff for protection of any downstream waterbody segments with a HCOC. ***If the project has more than one outlet for stormwater runoff, then complete additional versions of these forms for each DA / outlet.***

Methods applied in the following forms include:

- For LID BMP Design Capture Volume (DCV), the San Bernardino County Stormwater Program requires use of the P_6 method (MS4 Permit Section XI.D.6a.ii) – Form 4.2-1
- For HCOC pre- and post-development hydrologic calculation, the San Bernardino County Stormwater Program requires the use of the Rational Method (San Bernardino County Hydrology Manual Section D). Forms 4.2-2 through Form 4.2-5 calculate hydrologic variables including runoff volume, time of concentration, and peak runoff from the project site pre- and post-development using the Hydrology Manual Rational Method approach. For projects greater than 640 acres (1.0 mi^2), the Rational Method and these forms should not be used. For such projects, the Unit Hydrograph Method (San Bernardino County Hydrology Manual Section E) shall be applied for hydrologic calculations for HCOC performance criteria.

Refer to Section 4 in the TGD for WQMP for detailed guidance and instructions.

Form 4.2-1 LID BMP Performance Criteria for Design Capture Volume (DA 1)

1 Project area DA 1 (ft^2): 454,257	**2** Imperviousness after applying preventative site design practices (Imp%): 80%	**3** Runoff Coefficient (Rc): 0.5933 *$R_c = 0.858(Imp\%)^{\wedge 3}-0.78(Imp\%)^{\wedge 2}+0.774(Imp\%)+0.04$*
4 Determine 1-hour rainfall depth for a 2-year return period $P_{2yr\text{-}1hr}$ (in): 0.609 *http://hdsc.nws.noaa.gov/hdsc/pfds/sa/sca_pfds.html*		
5 Compute P_6, Mean 6-hr Precipitation (inches): 0.902 *P_6 = Item 4 *C_1, where C_1 is a function of site climatic region specified in Form 3-1 Item 1 (Valley = 1.4807; Mountain = 1.909; Desert = 1.2371)*		
6 Drawdown Rate *Use 48 hours as the default condition. Selection and use of the 24 hour drawdown time condition is subject to approval by the local jurisdiction. The necessary BMP footprint is a function of drawdown time. While shorter drawdown times reduce the performance criteria for LID BMP design capture volume, the depth of water that can be stored is also reduced.*		24-hrs ☐ 48-hrs ☒
7 Compute design capture volume, DCV (ft^3): 40,157 *DCV = 1/12 * [Item 1* Item 3 *Item 5 * C_2], where C_2 is a function of drawdown rate (24-hr = 1.582; 48-hr = 1.963)* *Compute separate DCV for each outlet from the project site per schematic drawn in Form 3-1 Item 2*		

Form 4.2-2 Summary of HCOC Assessment (DA 1)

Does project have the potential to cause or contribute to an HCOC in a downstream channel: Yes No

Go to: http://permitrack.sbcounty.gov/wap/

If "Yes", then complete HCOC assessment of site hydrology for 2yr storm event using Forms 4.2-3 through 4.2-5 and insert results below

(Forms 4.2-3 through 4.2-5 may be replaced by computer software analysis based on the San Bernardino County Hydrology Manual)

If "No," then proceed to Section 4.3 Project Conformance Analysis

NOT APPLICABLE

Condition	Runoff Volume (ft^3)	Time of Concentration (min)	Peak Runoff (cfs)
Pre-developed	**1** *Form 4.2-3 Item 12*	**2** *Form 4.2-4 Item 13*	**3** *Form 4.2-5 Item 10*
Post-developed	**4** *Form 4.2-3 Item 13*	**5** *Form 4.2-4 Item 14*	**6** *Form 4.2-5 Item 14*
Difference	**7** *Item 4 – Item 1*	**8** *Item 2 – Item 5*	**9** *Item 6 – Item 3*
Difference (as % of pre-developed)	**10** % *Item 7 / Item 1*	**11** % *Item 8 / Item 2*	**12** % *Item 9 / Item 3*

Form 4.2-3 HCOC Assessment for Runoff Volume (DA 1)

Weighted Curve Number Determination for: Pre-developed DA	DMA A	DMA B	DMA C	DMA D	DMA E	DMA F	DMA G	DMA H
1a Land Cover type								
2a Hydrologic Soil Group (HSG)								
3a DMA Area, ft² *sum of areas of DMA should equal area of DA*								
4a Curve Number (CN) *use Items 1 and 2 to select the appropriate CN from Appendix C-2 of the TGD for WQMP*								
Weighted Curve Number Determination for: Post-developed DA	DMA A	DMA B	DMA C	DMA D	DMA E	DMA F	DMA G	DMA H
1b Land Cover type								
2b Hydrologic Soil Group (HSG)								
3b DMA Area, ft² *sum of areas of DMA should equal area of DA*								
4b Curve Number (CN) *use Items 5 and 6 to select the appropriate CN from Appendix C-2 of the TGD for WQMP*								

5 Pre-Developed area-weighted CN:	**7** Pre-developed soil storage capacity, S (in): *S = (1000 / Item 5) - 10*	**9** Initial abstraction, I_a (in): *I_a = 0.2 * Item 7*
6 Post-Developed area-weighted CN:	**8** Post-developed soil storage capacity, S (in): *S = (1000 / Item 6) - 10*	**10** Initial abstraction, I_a (in): *I_a = 0.2 * Item 8*

11 Precipitation for 2 yr, 24 hr storm (in):
Go to: http://hdsc.nws.noaa.gov/hdsc/pfds/sa/sca_pfds.html

12 Pre-developed Volume (ft³):
*V_{pre} =(1 / 12) * (Item sum of Item 3) * [(Item 11 – Item 9)^2 / ((Item 11 – Item 9 + Item 7)*

13 Post-developed Volume (ft³):
*V_{pre} =(1 / 12) * (Item sum of Item 3) * [(Item 11 – Item 10)^2 / ((Item 11 – Item 10 + Item 8)*

14 Volume Reduction needed to meet HCOC Requirement, (ft³):
*V_{HCOC} = (Item 13 * 0.95) – Item 12*

NOT APPLICABLE

Form 4.2-4 HCOC Assessment for Time of Concentration (DA 1)

Compute time of concentration for pre and post developed conditions for each DA *(For projects using the Hydrology Manual complete the form below)*

Variables	Pre-developed DA1 *Use additional forms if there are more than 4 DMA*				Post-developed DA1 *Use additional forms if there are more than 4 DMA*			
	DMA A	DMA B	DMA C	DMA D	DMA A	DMA B	DMA C	DMA D
1 Length of flowpath (ft) *Use Form 3-2 Item 5 for pre-developed condition*								
2 Change in elevation (ft)								
3 Slope (ft/ft), S_o = *Item 2 / Item 1*								
4 Land cover								
5 Initial DMA time of concentration (min) *Appendix C of the TGD for WQMP*								
6 Length of conveyance from DMA outlet to project site outlet (ft) *May be zero if DMA outlet is at project site outlet*								
7 Cross-sectional area of channel (ft^2)								
8 Wetted perimeter of channel (ft)								
9 Manning's roughness of channel (n)								
10 Channel flow velocity (ft/sec) V_{fps} = *(1.49 / Item 9) * (Item 7/Item 8)^0.67 * (Item 3)^0.5*								
11 Travel time to outlet (min) T_t = *Item 6 / (Item 10 * 60)*								
12 Total time of concentration (min) T_c = *Item 5 + Item 11*								

NOT APPLICABLE

13 Pre-developed time of concentration (min): *Minimum of Item 12 pre-developed DMA*

14 Post-developed time of concentration (min): *Minimum of Item 12 post-developed DMA*

15 Additional time of concentration needed to meet HCOC requirement (min): $T_{C\text{-}HCOC}$ = *(Item 13 * 0.95) – Item 14*

Form 4.2-5 HCOC Assessment for Peak Runoff (DA 1)

NOT APPLICABLE

Compute peak runoff for pre- and post-developed conditions

Variables		Pre-developed DA to Project Outlet (*Use additional forms if more than 3 DMA*)			Post-developed DA to Project Outlet (*Use additional forms if more than 3 DMA*)		
		DMA A	DMA B	DMA C	DMA A	DMA B	DMA C
1 Rainfall Intensity for storm duration equal to time of concentration *I_{peak} = 10^(LOG Form 4.2-1 Item 4 - 0.6 LOG Form 4.2-4 Item 5 /60)*							
2 Drainage Area of each DMA (Acres) *For DMA with outlet at project site outlet, include upstream DMA (Using example schematic in Form 3-1, DMA A will include drainage from DMA C)*							
3 Ratio of pervious area to total area *For DMA with outlet at project site outlet, include upstream DMA (Using example schematic in Form 3-1, DMA A will include drainage from DMA C)*							
4 Pervious area infiltration rate (in/hr) *Use pervious area CN and antecedent moisture condition with Appendix C-3 of the TGD for WQMP*							
5 Maximum loss rate (in/hr) *F_m = Item 3 * Item 4* *Use area-weighted F_m from DMA with outlet at project site outlet, include upstream DMA (Using example schematic in Form 3-1, DMA A will include drainage from DMA C)*							
6 Peak Flow from DMA (cfs) *Q_p =Item 2 * 0.9 * (Item 1 - Item 5)*							
7 Time of concentration adjustment factor for other DMA to site discharge point *Form 4.2-4 Item 12 DMA / Other DMA upstream of site discharge point (If ratio is greater than 1.0, then use maximum value of 1.0)*	DMA A	*n/a*			*n/a*		
	DMA B		*n/a*			*n/a*	
	DMA C			*n/a*			*n/a*

8 Pre-developed Q_p at T_c for DMA A: *Q_p = Item 6_{DMAA} + [Item 6_{DMAB} * (Item 1_{DMAA} - Item 5_{DMAB})/(Item 1_{DMAB} - Item 5_{DMAB})* Item $7_{DMAA/2}$] + [Item 6_{DMAC} * (Item 1_{DMAA} - Item 5_{DMAC})/(Item 1_{DMAC} - Item 5_{DMAC})* Item $7_{DMAA/3}$]*	9 Pre-developed Q_p at T_c for DMA B: *Q_p = Item 6_{DMAB} + [Item 6_{DMAA} * (Item 1_{DMAB} - Item 5_{DMAA})/(Item 1_{DMAA} - Item 5_{DMAA})* Item $7_{DMAB/1}$] + [Item 6_{DMAC} * (Item 1_{DMAB} - Item 5_{DMAC})/(Item 1_{DMAC} - Item 5_{DMAC})* Item $7_{DMAB/3}$]*	10 Pre-developed Q_p at T_c for DMA C: *Q_p = Item 6_{DMAC} + [Item 6_{DMAA} * (Item 1_{DMAC} - Item 5_{DMAA})/(Item 1_{DMAA} - Item 5_{DMAA})* Item $7_{DMAC/1}$] + [Item 6_{DMAB} * (Item 1_{DMAC} - Item 5_{DMAB})/(Item 1_{DMAB} - Item 5_{DMAB})* Item $7_{DMAC/2}$]*
10 Peak runoff from pre-developed condition confluence analysis (cfs): *Maximum of Item 8, 9, and 10 (including additional forms as needed)*		
11 Post-developed Q_p at T_c for DMA A: *Same as Item 8 for post-developed values*	12 Post-developed Q_p at T_c for DMA B: *Same as Item 9 for post-developed values*	13 Post-developed Q_p at T_c for DMA C: *Same as Item 10 for post-developed values*
14 Peak runoff from post-developed condition confluence analysis (cfs): *Maximum of Item 11, 12, and 13 (including additional forms as needed)*		
15 Peak runoff reduction needed to meet HCOC Requirement (cfs): *$Q_{p\text{-}HCOC}$ = (Item 14 * 0.95) – Item 10*		

4.3 Project Conformance Analysis

Complete the following forms for each project site DA to document that the proposed LID BMPs conform to the project DCV developed to meet performance criteria specified in the MS4 Permit (WQMP Template Section 4.2). For the LID DCV, the forms are ordered according to hierarchy of BMP selection as required by the MS4 Permit (see Section 5.3.1 in the TGD for WQMP). The forms compute the following for on-site LID BMP:

- Site Design and Hydrologic Source Controls (Form 4.3-2)
- Retention and Infiltration (Form 4.3-3)
- Harvested and Use (Form 4.3-4) or
- Biotreatment (Form 4.3-5).

At the end of each form, additional fields facilitate the determination of the extent of mitigation provided by the specific BMP category, allowing for use of the next category of BMP in the hierarchy, if necessary.

The first step in the analysis, using Section 5.3.2.1 of the TGD for WQMP, is to complete Forms 4.3-1 and 4.3-3) to determine if retention and infiltration BMPs are infeasible for the project. For each feasibility criterion in Form 4.3-1, if the answer is "Yes," provide all study findings that includes relevant calculations, maps, data sources, etc. used to make the determination of infeasibility.

Next, complete Forms 4.3-2 and 4.3-4 to determine the feasibility of applicable HSC and harvest and use BMPs, and, if their implementation is feasible, the extent of mitigation of the DCV.

If no site constraints exist that would limit the type of BMP to be implemented in a DA, evaluate the use of combinations of LID BMPs, including all applicable HSC BMPs to maximize on-site retention of the DCV. If no combination of BMP can mitigate the entire DCV, implement the single BMP type, or combination of BMP types, that maximizes on-site retention of the DCV within the minimum effective area.

If the combination of LID HSC, retention and infiltration, and harvest and use BMPs are unable to mitigate the entire DCV, then biotreatment BMPs may be implemented by the project proponent. If biotreatment BMPs are used, then they must be sized to provide sufficient capacity for effective treatment of the remainder of the volume-based performance criteria that cannot be achieved with LID BMPs (TGD for WQMP Section 5.4.4.2). **Under no circumstances shall any portion of the DCV be released from the site without effective mitigation and/or treatment**.

Form 4.3-1 Infiltration BMP Feasibility (DA 1)

Feasibility Criterion – Complete evaluation for each DA on the Project Site

[1] Would infiltration BMP pose significant risk for groundwater related concerns? Yes ☐ No ☒
Refer to Section 5.3.2.1 of the TGD for WQMP

If Yes, Provide basis: (attach)

[2] Would installation of infiltration BMP significantly increase the risk of geotechnical hazards? Yes ☐ No ☒
(Yes, if the answer to any of the following questions is yes, as established by a geotechnical expert):

- The location is less than 50 feet away from slopes steeper than 15 percent
- The location is less than eight feet from building foundations or an alternative setback.
- A study certified by a geotechnical professional or an available watershed study determines that stormwater infiltration would result in significantly increased risks of geotechnical hazards.

If Yes, Provide basis: (attach)

[3] Would infiltration of runoff on a Project site violate downstream water rights? Yes ☐ No ☒

If Yes, Provide basis: (attach)

[4] Is proposed infiltration facility located on hydrologic soil group (HSG) D soils or does the site geotechnical investigation indicate presence of soil characteristics, which support categorization as D soils? Yes ☐ No ☒

If Yes, Provide basis: (attach)

[5] Is the design infiltration rate, after accounting for safety factor of 2.0, below proposed facility less than 0.3 in/hr (accounting for soil amendments)? Yes ☐ No ☒

If Yes, Provide basis: (attach)

[6] Would on-site infiltration or reduction of runoff over pre-developed conditions be partially or fully inconsistent with watershed management strategies as defined in the WAP, or impair beneficial uses? Yes ☐ No ☒
See Section 3.5 of the TGD for WQMP and WAP

If Yes, Provide basis: (attach)

[7] Any answer from Item 1 through Item 3 is "Yes": Yes ☐ No ☐
If yes, infiltration of any volume is not feasible onsite. Proceed to Form 4.3-4, Harvest and Use BMP. If no, then proceed to Item 8 below.

[8] Any answer from Item 4 through Item 6 is "Yes": Yes ☐ No ☐
If yes, infiltration is permissible but is not required to be considered. Proceed to Form 4.3-2, Hydrologic Source Control BMP.
If no, then proceed to Item 9, below.

[9] All answers to Item 1 through Item 6 are "No":
Infiltration of the full DCV is potentially feasible, LID infiltration BMP must be designed to infiltrate the full DCV to the MEP.
Proceed to Form 4.3-2, Hydrologic Source Control BMP.

4.3.1 Site Design Hydrologic Source Control BMP

Section XI.E. of the Permit emphasizes the use of LID preventative measures; and the use of LID HSC BMPs reduces the portion of the DCV that must be addressed in downstream BMPs. Therefore, all applicable HSC shall be provided except where they are mutually exclusive with each other, or with other BMPs. Mutual exclusivity may result from overlapping BMP footprints such that either would be potentially feasible by itself, but both could not be implemented. Please note that while there are no numeric standards regarding the use of HSC, if a project cannot feasibly meet BMP sizing requirements or cannot fully address HCOCs, feasibility of all applicable HSC must be part of demonstrating that the BMP system has been designed to retain the maximum feasible portion of the DCV. Complete Form 4.3-2 to identify and calculate estimated retention volume from implementing site design HSC BMP. Refer to Section 5.4.1 in the TGD for more detailed guidance.

Form 4.3-2 Site Design Hydrologic Source Control BMPs (DA 1)

1 Implementation of Impervious Area Dispersion BMP (i.e. routing runoff from impervious to pervious areas), excluding impervious areas planned for routing to on-lot infiltration BMP: Yes ☐ No ☒ *If yes, complete Items 2-5; If no, proceed to Item 6*	DA DMA BMP Type	DA DMA BMP Type	DA DMA BMP Type *(Use additional forms for more BMPs)*
2 Total impervious area draining to pervious area (ft^2)			
3 Ratio of pervious area receiving runoff to impervious area			
4 Retention volume achieved from impervious area dispersion (ft^3) *V = Item2 * Item 3 * (0.5/12), assuming retention of 0.5 inches of runoff*			
5 Sum of retention volume achieved from impervious area dispersion (ft^3):	$V_{retention}$ *=Sum of Item 4 for all BMPs*		
6 Implementation of Localized On-lot Infiltration BMPs (e.g. on-lot rain gardens): Yes ☐ No ☒ *If yes, complete Items 7-13 for aggregate of all on-lot infiltration BMP in each DA; If no, proceed to Item 14*	DA DMA BMP Type	DA DMA BMP Type	DA DMA BMP Type *(Use additional forms for more BMPs)*
7 Ponding surface area (ft^2)			
8 Ponding depth (ft)			
9 Surface area of amended soil/gravel (ft^2)			
10 Average depth of amended soil/gravel (ft)			
11 Average porosity of amended soil/gravel			
12 Retention volume achieved from on-lot infiltration (ft^3) $V_{retention}$ *= (Item 7 *Item 8) + (Item 9 * Item 10 * Item 11)*			
13 Runoff volume retention from on-lot infiltration (ft^3):	$V_{retention}$ *=Sum of Item 12 for all BMPs*		

Form 4.3-2 Site Design Hydrologic Source Control BMPs (DA 1)

Form 4.3-2 cont. Site Design Hydrologic Source Control BMPs (DA 1)

14 Implementation of evapotranspiration BMP (green, brown, or blue roofs): Yes ☐ No ☒ *If yes, complete Items 15-20. If no, proceed to Item 21*	DA DMA BMP Type	DA DMA BMP Type	DA DMA BMP Type *(Use additional forms for more BMPs)*
15 Rooftop area planned for ET BMP (ft^2)			
16 Average wet season ET demand (in/day) *Use local values, typical ~ 0.1*			
17 Daily ET demand (ft^3/day) *Item 15 * (Item 16 / 12)*			
18 Drawdown time (hrs) *Copy Item 6 in Form 4.2-1*			
19 Retention Volume (ft^3) $V_{retention}$ *= Item 17 * (Item 18 / 24)*			
20 Runoff volume retention from evapotranspiration BMPs (ft^3): $V_{retention}$ *=Sum of Item 19 for all BMPs*			
21 Implementation of Street Trees: Yes ☐ No ☒ *If yes, complete Items 22-25. If no, proceed to Item 26*	DA DMA BMP Type	DA DMA BMP Type	DA DMA BMP Type *(Use additional forms for more BMPs)*
22 Number of Street Trees			
23 Average canopy cover over impervious area (ft^2)			
24 Runoff volume retention from street trees (ft^3) $V_{retention}$ *= Item 22 * Item 23 * (0.05/12) assume runoff retention of 0.05 inches*			
25 Runoff volume retention from street tree BMPs (ft^3): $V_{retention}$ *= Sum of Item 24 for all BMPs*			
26 Implementation of residential rain barrel/cisterns: Yes ☐ No ☒ *If yes, complete Items 27-29; If no, proceed to Item 30*	DA DMA BMP Type	DA DMA BMP Type	DA DMA BMP Type *(Use additional forms for more BMPs)*
27 Number of rain barrels/cisterns			
28 Runoff volume retention from rain barrels/cisterns (ft^3) $V_{retention}$ *= Item 27 * 3*			
29 Runoff volume retention from residential rain barrels/Cisterns (ft3): $V_{retention}$ *=Sum of Item 28 for all BMPs*			
30 Total Retention Volume from Site Design Hydrologic Source Control BMPs: 0 *Sum of Items 5, 13, 20, 25 and 29*			

4.3.2 Infiltration BMPs

Use Form 4.3-3 to compute on-site retention of runoff from proposed retention and infiltration BMPs. Volume retention estimates are sensitive to the percolation rate used, which determines the amount of runoff that can be infiltrated within the specified drawdown time. The infiltration safety factor reduces field measured percolation to account for potential inaccuracy associated with field measurements, declining BMP performance over time, and compaction during construction. Appendix D of the TGD for WQMP provides guidance on estimating an appropriate safety factor to use in Form 4.3-3.

If site constraints limit the use of BMPs to a single type and implementation of retention and infiltration BMPs mitigate no more than 40% of the DCV, then they are considered infeasible and the Project Proponent may evaluate the effectiveness of BMPs lower in the LID hierarchy of use (Section 5.5.1 of the TGD for WQMP)

If implementation of infiltrations BMPs is feasible as determined using Form 4.3-1, then LID infiltration BMPs shall be implemented to the MEP (section 4.1 of the TGD for WQMP).

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Form 4.3-3 Infiltration LID BMP - including underground BMPs (DA 1)

1 Remaining LID DCV not met by site design HSC BMP (ft^3): 40,157 *V_{unmet} = Form 4.2-1 Item 7 - Form 4.3-2 Item 30*

BMP Type *Use columns to the right to compute runoff volume retention from proposed infiltration BMP (select BMP from Table 5-4 in TGD for WQMP) - Use additional forms for more BMPs*	DA 1 DMA A BMP Type Chambers	DA DMA BMP Type	DA DMA BMP Type *(Use additional forms for more BMPs)*
2 Infiltration rate of underlying soils (in/hr) *See Section 5.4.2 and Appendix D of the TGD for WQMP for minimum requirements for assessment methods*	50		
3 Infiltration safety factor *See TGD Section 5.4.2 and Appendix D*	3.25		
4 Design percolation rate (in/hr) *P_{design} = Item 2 / Item 3*	15.38		
5 Ponded water drawdown time (hr) *Copy Item 6 in Form 4.2-1*	48		
6 Maximum ponding depth (ft) *BMP specific, see Table 5-4 of the TGD for WQMP for BMP design details*	0		
7 Ponding Depth (ft) *d_{BMP} = Minimum of (1/12*Item 4*Item 5) or Item 6*	0		
8 Infiltrating surface area, SA_{BMP} (ft^2) *the lesser of the area needed for infiltration of full DCV or minimum space requirements from Table 5.7 of the TGD for WQMP*	0		
9 Amended soil depth, d_{media} (ft) *Only included in certain BMP types, see Table 5-4 in the TGD for WQMP for reference to BMP design details*	0		
10 Amended soil porosity	0		
11 Gravel depth, d_{media} (ft) *Only included in certain BMP types, see Table 5-4 of the TGD for WQMP for BMP design details*	0		
12 Gravel porosity	0		
13 Duration of storm as basin is filling (hrs) *Typical ~ 3hrs*	3		
14 Above Ground Retention Volume (ft^3) *$V_{retention}$ = Item 8 * [Item7 + (Item 9 * Item 10) + (Item 11 * Item 12) + (Item 13 * (Item 4 / 12))]*	0		
15 Underground Retention Volume (ft^3) *Volume determined using manufacturer's specifications and calculations*	40,933		

16 Total Retention Volume from LID Infiltration BMPs: 40,933 *(Sum of Items 14 and 15 for all infiltration BMP included in plan)*

17 Fraction of DCV achieved with infiltration BMP: 102% *Retention% = Item 16 / Form 4.2-1 Item 7*

18 Is full LID DCV retained onsite with combination of hydrologic source control and LID retention/infiltration BMPs? Yes ☒ No ☐

If yes, demonstrate conformance using Form 4.3-10; If no, then reduce Item 3, Factor of Safety to 2.0 and increase Item 8, Infiltrating Surface Area, such that the portion of the site area used for retention and infiltration BMPs equals or exceeds the minimum effective area thresholds (Table 5-7 of the TGD for WQMP) for the applicable category of development and repeat all above calculations.

4.3.3 Harvest and Use BMP

Harvest and use BMP may be considered if the full LID DCV cannot be met by maximizing infiltration BMPs. Use Form 4.3-4 to compute on-site retention of runoff from proposed harvest and use BMPs.

Volume retention estimates for harvest and use BMPs are sensitive to the on-site demand for captured stormwater. Since irrigation water demand is low in the wet season, when most rainfall events occur in San Bernardino County, the volume of water that can be used within a specified drawdown period is relatively low. The bottom portion of Form 4.3-4 facilitates the necessary computations to show infeasibility if a minimum incremental benefit of 40 percent of the LID DCV would not be achievable with MEP implementation of on-site harvest and use of stormwater (Section 5.5.4 of the TGD for WQMP).

Form 4.3-4 Harvest and Use BMPs (DA 1)

1 Remaining LID DCV not met by site design HSC or infiltration BMP (ft^3): 0 *V_{unmet} = Form 4.2-1 Item 7 - Form 4.3-2 Item 30 – Form 4.3-3 Item 16*			
BMP Type(s) *Compute runoff volume retention from proposed harvest and use BMP (Select BMPs from Table 5-4 of the TGD for WQMP) - Use additional forms for more BMPs*	DA DMA BMP Type	DA DMA BMP Type	DA DMA BMP Type *(Use additional forms for more BMPs)*
2 Describe cistern or runoff detention facility			
3 Storage volume for proposed detention type (ft^3) *Volume of cistern*			
4 Landscaped area planned for use of harvested stormwater (ft^2)			
5 Average wet season daily irrigation demand (in/day) Use local values, typical ~ 0.1 in/day			
6 Daily water demand (ft^3/day) *Item 4 * (Item 5 / 12)*			
7 Drawdown time (hrs) *Copy Item 6 from Form 4.2-1*			
8 Retention Volume (ft^3) *$V_{retention}$ = Minimum of (Item 3) or (Item 6 * (Item 7 / 24))*			
9 Total Retention Volume (ft^3) from Harvest and Use BMP *Sum of Item 8 for all harvest and use BMP included in plan*			
10 Is the full DCV retained with a combination of LID HSC, retention and infiltration, and harvest & use BMPs? Yes No *If yes, demonstrate conformance using Form 4.3-10. If no, then re-evaluate combinations of all LID BMP and optimize their implementation such that the maximum portion of the DCV is retained on-site (using a single BMP type or combination of BMP types). If the full DCV cannot be mitigated after this optimization process, proceed to Section 4.3.4.*			

NOT APPLICABLE

4.3.4 Biotreatment BMP

Biotreatment BMPs may be considered if the full LID DCV cannot be met by maximizing retention and infiltration, and harvest and use BMPs. A key consideration when using biotreatment BMP is the effectiveness of the proposed BMP in addressing the pollutants of concern for the project (see Table 5-5 of the TGD for WQMP).

Use Form 4.3-5 to summarize the potential for volume based and/or flow based biotreatment options to biotreat the remaining unmet LID DCV w. Biotreatment computations are included as follows:

- Use Form 4.3-6 to compute biotreatment in small volume based biotreatment BMP (e.g. bioretention w/underdrains);
- Use Form 4.3-7 to compute biotreatment in large volume based biotreatment BMP (e.g. constructed wetlands);
- Use Form 4.3-8 to compute sizing criteria for flow-based biotreatment BMP (e.g. bioswales)

Form 4.3-5 Selection and Evaluation of Biotreatment BMP (DA 1)

1 Remaining LID DCV not met by site design HSC, infiltration, or harvest and use BMP for potential biotreatment (ft³): 0 *Form 4.2-1 Item 7 - Form 4.3-2 Item 30 – Form 4.3-3 Item 16- Form 4.3-4 Item 9*	List pollutants of concern *Copy from Form 2.3-1.*	
2 Biotreatment BMP Selected *(Select biotreatment BMP(s) necessary to ensure all pollutants of concern are addressed through Unit Operations and Processes, described in Table 5-5 of the TGD for WQMP)*	Volume-based biotreatment *Use Forms 4.3-6 and 4.3-7 to compute treated volume*	Flow-based biotreatment *Use Form 4.3-8 to compute treated volume*
	Bioretention with underdrain Planter box with underdrain Constructed wetland Wet extended detention Dry extended detention	Vegetated swale Vegetated filter strip Proprietary biotreatment
3 Volume biotreated in volume based biotreatment BMP (ft³): *Form 4.3-6 Item 15 + Form 4.3-7 Item*	4 Compute remaining LID DCV with implementation of volume based biotreatment BMP (ft³): *Item 1 – Item 3*	5 Remaining fraction of LID DCV for sizing flow based biotreatment BMP: % *Item 4 / Item 1*
6 Flow-based biotreatment BMP capacity provided (cfs): *Use Figure 5-2 of the TGD for WQMP to determine flow capacity required to provide biotreatment of remaining percentage of unmet LID DCV (Item 5), for the project's precipitation zone (Form 3-1 Item 1)*		
7 Metrics for MEP determination: • Provided a WQMP with the portion of site area used for suite of LID BMP equal to minimum thresholds in Table 5-7 of the TGD for WQMP for the proposed category of development: *If maximized on-site retention BMPs is feasible for partial capture, then LID BMP implementation must be optimized to retain and infiltrate the maximum portion of the DCV possible within the prescribed minimum effective area. The remaining portion of the DCV shall then be mitigated using biotreatment BMP.*		

NOT APPLICABLE

Form 4.3-6 Volume Based Biotreatment (DA 1) – Bioretention and Planter Boxes with Underdrains

Biotreatment BMP Type *(Bioretention w/underdrain, planter box w/underdrain, other comparable BMP)*	DA DMA BMP Type	DA DMA BMP Type	DA DMA BMP Type *(Use additional forms for more BMPs)*
1 Pollutants addressed with BMP *List all pollutant of concern that will be effectively reduced through specific Unit Operations and Processes described in Table 5-5 of the TGD for WQMP*			
2 Amended soil infiltration rate *Typical ~ 5.0*			
3 Amended soil infiltration safety factor *Typical ~ 2.0*			
4 Amended soil design percolation rate (in/hr) P_{design} = *Item 2 / Item 3*			
5 Ponded water drawdown time (hr) *Copy Item 6 from Form 4.2-1*			
6 Maximum ponding depth (ft) *see Table 5-6 of the TGD for WQMP for reference to BMP design details*			
7 Ponding Depth (ft) d_{BMP} = *Minimum of (1/12 * Item 4 * Item 5) or Item 6*			
8 Amended soil surface area (ft²)			
9 Amended soil depth (ft) *see Table 5-6 of the TGD for WQMP for reference to BMP design details*			
10 Amended soil porosity, *n*			
11 Gravel depth (ft) *see Table 5-6 of the TGD for WQMP for reference to BMP design details*			
12 Gravel porosity, *n*			
13 Duration of storm as basin is filling (hrs) *Typical ~ 3hrs*			
14 Biotreated Volume (ft³) $V_{biotreated}$ = *Item 8 * [(Item 7/2) + (Item 9 * Item 10) +(Item 11 * Item 12) + (Item 13 * (Item 4 / 12))]*			
15 Total biotreated volume from bioretention and/or planter box with underdrains BMP: *Sum of Item 14 for all volume-based BMPs included in this form*			

NOT APPLICABLE

Form 4.3-7 Volume Based Biotreatment (DA 1) – Constructed Wetlands and Extended Detention

Biotreatment BMP Type *Constructed wetlands, extended wet detention, extended dry detention, or other comparable proprietary BMP. If BMP includes multiple modules (e.g. forebay and main basin), provide separate estimates for storage and pollutants treated in each module.*	DA DMA BMP Type		DA DMA BMP Type *(Use additional forms for more BMPs)*	
	Forebay	Basin	Forebay	Basin
1 Pollutants addressed with BMP forebay and basin *List all pollutant of concern that will be effectively reduced through specific Unit Operations and Processes described in Table 5-5 of the TGD for WQMP*				
2 Bottom width (ft)				
3 Bottom length (ft)				
4 Bottom area (ft^2) A_{bottom} = Item 2 * Item 3				
5 Side slope (ft/ft)				
6 Depth of storage (ft)				
7 Water surface area (ft^2) $A_{surface}$ =(Item 2 + (2 * Item 5 * Item 6)) * (Item 3 + (2 * Item 5 * Item 6))				
8 Storage volume (ft^3) *For BMP with a forebay, ensure fraction of total storage is within ranges specified in BMP specific fact sheets, see Table 5-6 of the TGD for WQMP for reference to BMP design details* V =Item 6 / 3 * [Item 4 + Item 7 + (Item 4 * Item 7)^0.5]				
9 Drawdown Time (hrs) *Copy Item 6 from Form 2.1*				
10 Outflow rate (cfs) Q_{BMP} = (Item $8_{forebay}$ + Item 8_{basin}) / (Item 9 * 3600)				
11 Duration of design storm event (hrs)				
12 Biotreated Volume (ft^3) $V_{biotreated}$ = (Item $8_{forebay}$ + Item 8_{basin}) +(Item 10 * Item 11 * 3600)				

13 Total biotreated volume from constructed wetlands, extended dry detention, or extended wet detention :
(Sum of Item 12 for all BMP included in plan)

NOT APPLICABLE

Form 4.3-8 Flow Based Biotreatment (DA 1)

Biotreatment BMP Type *Vegetated swale, vegetated filter strip, or other comparable proprietary BMP*	DA DMA BMP Type	DA DMA BMP Type	DA DMA BMP Type *(Use additional forms for more BMPs)*
1 Pollutants addressed with BMP *List all pollutant of concern that will be effectively reduced through specific Unit Operations and Processes described in TGD Table 5-5*			
2 Flow depth for water quality treatment (ft) *BMP specific, see Table 5-6 of the TGD for WQMP for reference to BMP design details*			
3 Bed slope (ft/ft) *BMP specific, see Table 5-6 of the TGD for WQMP for reference to BMP design details*			
4 Manning's roughness coefficient			
5 Bottom width (ft) b_w = *(Form 4.3-5 Item 6 * Item 4) / (1.49 * Item 2^1.67 * Item 3^0.5)*			
6 Side Slope (ft/ft) *BMP specific, see Table 5-6 of the TGD for WQMP for reference to BMP design details*			
7 Cross sectional area (ft^2) *A = (Item 5 * Item 2) + (Item 6 * Item 2^2)*			
8 Water quality flow velocity (ft/sec) *V = Form 4.3-5 Item 6 / Item 7*			
9 Hydraulic residence time (min) *Pollutant specific, see Table 5-6 of the TGD for WQMP for reference to BMP design details*			
10 Length of flow based BMP (ft) *L = Item 8 * Item 9 * 60*			
11 Water surface area at water quality flow depth (ft^2) SA_{top} = *(Item 5 + (2 * Item 2 * Item 6)) * Item 10*			

NOT APPLICABLE

4.3.5 Conformance Summary

Complete Form 4.3-9 to demonstrate how on-site LID DCV is met with proposed site design hydrologic source control, infiltration, harvest and use, and/or biotreatment BMP. The bottom line of the form is used to describe the basis for infeasibility determination for on-site LID BMP to achieve full LID DCV, and provides methods for computing remaining volume to be addressed in an alternative compliance plan. If the project has more than one outlet, then complete additional versions of this form for each outlet.

Form 4.3-9 Conformance Summary and Alternative Compliance Volume Estimate (DA 1)

1 Total LID DCV for the Project DA-1 (ft^3):40,157 *Copy Item 7 in Form 4.2-1*

2 On-site retention with site design hydrologic source control LID BMP (ft^3): 0 *Copy Item 30 in Form 4.3-2*

3 On-site retention with LID infiltration BMP (ft^3):40,933 *Copy Item 16 in Form 4.3-3*

4 On-site retention with LID harvest and use BMP (ft^3): 0 *Copy Item 9 in Form 4.3-4*

5 On-site biotreatment with volume based biotreatment BMP (ft^3): 0 *Copy Item 3 in Form 4.3-5*

6 Flow capacity provided by flow based biotreatment BMP (cfs): 0 *Copy Item 6 in Form 4.3-5*

7 LID BMP performance criteria are achieved if answer to any of the following is "Yes":

- Full retention of LID DCV with site design HSC, infiltration, or harvest and use BMP: Yes ☒ No ☐
  If yes, sum of Items 2, 3, and 4 is greater than Item 1
- Combination of on-site retention BMPs for a portion of the LID DCV and volume-based biotreatment BMP that address all pollutants of concern for the remaining LID DCV: Yes ☐ No ☐
  If yes, a) sum of Items 2, 3, 4, and 5 is greater than Item 1, and Items 2, 3 and 4 are maximized; or b) Item 6 is greater than Form 4.3--5 Item 6 and Items 2, 3 and 4 are maximized
- On-site retention and infiltration is determined to be infeasible and biotreatment BMP provide biotreatment for all pollutants of concern for full LID DCV: Yes ☐ No ☐
  If yes, Form 4.3-1 Items 7 and 8 were both checked yes

8 If the LID DCV is not achieved by any of these means, then the project may be allowed to develop an alternative compliance plan. Check box that describes the scenario which caused the need for alternative compliance:

- Combination of HSC, retention and infiltration, harvest and use, and biotreatment BMPs provide less than full LID DCV capture: ☐
  Checked yes for Form 4.3-5 Item 7, Item 6 is zero, and sum of Items 2, 3, 4, and 5 is less than Item 1. If so, apply water quality credits and calculate volume for alternative compliance, V_{alt} *= (Item 1 – Item 2 – Item 3 – Item 4 – Item 5) * (100 - Form 2.4-1 Item 2)%*
- An approved Watershed Action Plan (WAP) demonstrates that water quality and hydrologic impacts of urbanization are more effective when managed in at an off-site facility: ☐
  Attach appropriate WAP section, including technical documentation, showing effectiveness comparisons for the project site and regional watershed

4.3.6 Hydromodification Control BMP

Use Form 4.3-10 to compute the remaining runoff volume retention, after LID BMP are implemented, needed to address HCOC, and the increase in time of concentration and decrease in peak runoff necessary to meet targets for protection of waterbodies with a potential HCOC. Describe hydromodification control BMP that address HCOC, which may include off-site BMP and/or in-stream controls. Section 5.6 of the TGD for WQMP provides additional details on selection and evaluation of hydromodification control BMP.

Form 4.3-10 Hydromodification Control BMPs (DA 1)

1 Volume reduction needed for HCOC performance criteria (ft^3): *(Form 4.2-2 Item 4 * 0.95) – Form 4.2-2 Item 1*	2 On-site retention with site design hydrologic source control, infiltration, and harvest and use LID BMP (ft^3): *Sum of Form 4.3-9 Items 2, 3, and 4 Evaluate option to increase implementation of on-site retention in Forms 4.3-2, 4.3-3, and 4.3-4 in excess of LID DCV toward achieving HCOC volume reduction*
3 Remaining volume for HCOC volume capture (ft^3): *Item 1 – Item 2*	4 Volume capture provided by incorporating additional on-site or off-site retention BMPs (ft^3): *Existing downstream BMPs may be used to demonstrate additional volume capture (if so, attach to this WQMP a hydrologic analysis showing how the additional volume would be retained during a 2-yr storm event for the regional watershed)*

5 If Item 4 is less than Item 3, incorporate in-stream controls on downstream waterbody segment to prevent impacts due to hydromodification *Attach in-stream control BMP selection and evaluation to this WQMP*

6 Is Form 4.2-2 Item 11 less than or equal to 5%: Yes No

If yes, HCOC performance criteria is achieved. If no, select one or more mitigation options below:

- Demonstrate increase in time of concentration achieved by proposed LID site design, LID BMP, and additional on-site or off-site retention BMP

  BMP upstream of a waterbody segment with a potential HCOC may be used to demonstrate increased time of concentration through hydrograph attenuation (if so, show that the hydraulic residence time provided in BMP for a 2-year storm event is equal or greater than the addition time of concentration requirement in Form 4.2-4 Item 15)
- Increase time of concentration by preserving pre-developed flow path and/or increase travel time by reducing slope and increasing cross-sectional area and roughness for proposed on-site conveyance facilities
- Incorporate appropriate in-stream controls for downstream waterbody segment to prevent impacts due to hydromodification, in a plan approved and signed by a licensed engineer in the State of California

7 Form 4.2-2 Item 12 less than or equal to 5%: Yes No

If yes, HCOC performance criteria is achieved. If no, select one or more mitigation options below:

- Demonstrate reduction in peak runoff achieved by proposed LID site design, LID BMPs, and additional on-site or off-site retention BMPs

  BMPs upstream of a waterbody segment with a potential HCOC may be used to demonstrate additional peak runoff reduction through hydrograph attenuation (if so, attach to this WQMP, a hydrograph analysis showing how the peak runoff would be reduced during a 2-yr storm event)
- Incorporate appropriate in-stream controls for downstream waterbody segment to prevent impacts due to hydromodification, in a plan approved and signed by a licensed engineer in the State of California

NOT APPLICABLE

4.4 Alternative Compliance Plan (if applicable)

Describe an alternative compliance plan (if applicable) for projects not fully able to infiltrate, harvest and use, or biotreat the DCV via on-site LID practices. A project proponent must develop an alternative compliance plan to address the remainder of the LID DCV. Depending on project type some projects may qualify for water quality credits that can be applied to reduce the DCV that must be treated prior to development of an alternative compliance plan (see Form 2.4-1, Water Quality Credits). Form 4.3-9 Item 8 includes instructions on how to apply water quality credits when computing the DCV that must be met through alternative compliance. Alternative compliance plans may include one or more of the following elements:

- On-site structural treatment control BMP - All treatment control BMP should be located as close to possible to the pollutant sources and should not be located within receiving waters;
- Off-site structural treatment control BMP - Pollutant removal should occur prior to discharge of runoff to receiving waters;
- Urban runoff fund or In-lieu program, if available

Depending upon the proposed alternative compliance plan, approval by the executive officer may or may not be required (see Section 6 of the TGD for WQMP).

Section 5 Inspection and Maintenance Responsibility for Post Construction BMP

All BMP included as part of the project WQMP are required to be maintained through regular scheduled inspection and maintenance (refer to Section 8, Post Construction BMP Requirements, in the TGD for WQMP). Fully complete Form 5-1 summarizing all BMP included in the WQMP. Attach additional forms as needed. The WQMP shall also include a detailed Operation and Maintenance Plan for all BMP and may require a Maintenance Agreement (consult the jurisdiction's LIP). If a Maintenance Agreement is required, it must also be attached to the WQMP.

Form 5-1 BMP Inspection and Maintenance (use additional forms as necessary)

BMP	Reponsible Party(s)	Inspection/ Maintenance Activities Required	Minimum Frequency of Activities
Litter/Debris Control Program SD-32, N11, N15, S3	Owner	Litter shall be picked up, trash enclosure areas shall be swept and cleaned, dumpsters shall be emptied.	Weekly
Housekeeping of Loading Docks N13	Owner	Loading docks shall be inspected to ensure proper maintenance is completed.	Weekly
Catch Basin Inspection Program SD-11, N14, S1	Owner	Catch basins shall be inspected to ensure proper operation.	Monthly during rainy season (Oct-May) and before and after each storm event
Parking Lot Sweeping SC-43, SC-71	Owner	Parking lots must be swept	Quarterly (Minimum), Weekly during rainy season (Oct-May)
Landscape Management SC-73, SD-10, SD-12, N3, S4, S5	Owner	Gardening and lawn care practices to prevent landscape waste to exit project site per SC-73	Weekly

Underground Infiltration Chambers N4	Owner	See manufacturer information in O&M information. See Appendix D	See manufacturer information in O&M information. See Appendix D
N1, N2, N6, N12, N17	Owner	Educational material distributed to maintain compliance of activity restrictions, local water quality ordinances, and employee training	As Needed

Section 6 WQMP Attachments

6.1. Site Plan and Drainage Plan

Include a site plan and drainage plan sheet set containing the following minimum information:

- Project location
- Site boundary
- Land uses and land covers, as applicable
- Suitability/feasibility constraints
- Structural Source Control BMP locations
- Site Design Hydrologic Source Control BMP locations
- LID BMP details
- Drainage delineations and flow information
- Drainage connections

6.2 Electronic Data Submittal

Minimum requirements include submittal of PDF exhibits in addition to hard copies. Format must not require specialized software to open. If the local jurisdiction requires specialized electronic document formats (as described in their local Local Implementation Plan), this section will describe the contents (e.g., layering, nomenclature, geo-referencing, etc.) of these documents so that they may be interpreted efficiently and accurately.

6.3 Post Construction

Attach all O&M Plans and Maintenance Agreements for BMP to the WQMP.

6.4 Other Supporting Documentation

- BMP Educational Materials
- Activity Restriction – C, C&R's & Lease Agreements

Attachment A – Site Plan

Attachment B – HCOC Map

Attachment C – Calculations

Worksheet H: Factor of Safety and Design Infiltration Rate and Worksheet

Factor Category		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = w x v
A	Suitability Assessment	Soil assessment methods	0.25	1	0.25
		Predominant soil texture	0.25	1	0.25
		Site soil variability	0.25	2	0.50
		Depth to groundwater / impervious layer	0.25	1	0.25
		Suitability Assessment Safety Factor, $S_A = \Sigma p$			1.25
B	Design	Tributary area size	0.25	2	0.5
		Level of pretreatment/ expected sediment loads	0.25	2	0.5
		Redundancy	0.25	2	0.5
		Compaction during construction	0.25	2	0.5
		Design Safety Factor, $S_B = \Sigma p$			2.0
Combined Safety Factor, $S_{TOT} = S_A \times S_B$					3.25
Measured Infiltration Rate, inch/hr, K_M (corrected for test-specific bias)					50
Design Infiltration Rate, in/hr, $K_{DESIGN} = S_{TOT} \times K_M$					15.38

Supporting Data

Briefly describe infiltration test and provide reference to test forms:

Note: The minimum combined adjustment factor shall not be less than 2.0 and the maximum combined adjustment factor shall not exceed 9.0.

NOAA Atlas 14, Volume 6, Version 2 GUASTI PARK
Station ID: 79-1075
Location name: Ontario, California, USA*
Latitude: 34.0719°, Longitude: -117.5928°
Elevation:
Elevation (station metadata): 995 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.115 (0.096-0.139)	0.157 (0.131-0.191)	0.208 (0.173-0.253)	0.247 (0.203-0.303)	0.295 (0.235-0.375)	0.330 (0.257-0.428)	0.363 (0.275-0.483)	0.394 (0.290-0.540)	0.434 (0.306-0.621)	0.462 (0.314-0.685)
10-min	0.165 (0.137-0.200)	0.225 (0.188-0.273)	0.298 (0.248-0.363)	0.354 (0.291-0.434)	0.423 (0.337-0.538)	0.473 (0.368-0.614)	0.520 (0.394-0.692)	0.565 (0.416-0.775)	0.621 (0.439-0.889)	0.662 (0.451-0.982)
15-min	0.199 (0.166-0.241)	0.272 (0.227-0.330)	0.361 (0.300-0.439)	0.428 (0.352-0.525)	0.512 (0.407-0.650)	0.572 (0.445-0.742)	0.629 (0.477-0.837)	0.683 (0.503-0.937)	0.752 (0.530-1.08)	0.800 (0.545-1.19)
30-min	0.304 (0.253-0.368)	0.415 (0.346-0.504)	0.550 (0.457-0.669)	0.653 (0.537-0.801)	0.781 (0.621-0.992)	0.872 (0.679-1.13)	0.959 (0.727-1.28)	1.04 (0.768-1.43)	1.15 (0.809-1.64)	1.22 (0.831-1.81)
60-min	0.445 (0.371-0.539)	0.609 (0.507-0.738)	0.806 (0.670-0.981)	0.956 (0.788-1.17)	1.14 (0.910-1.45)	1.28 (0.995-1.66)	1.40 (1.07-1.87)	1.53 (1.12-2.09)	1.68 (1.18-2.40)	1.79 (1.22-2.65)
2-hr	0.670 (0.559-0.812)	0.899 (0.749-1.09)	1.17 (0.975-1.43)	1.38 (1.14-1.70)	1.64 (1.30-2.08)	1.82 (1.42-2.37)	2.00 (1.52-2.66)	2.16 (1.59-2.97)	2.37 (1.67-3.39)	2.52 (1.71-3.73)
3-hr	0.843 (0.703-1.02)	1.12 (0.934-1.36)	1.46 (1.21-1.77)	1.71 (1.41-2.10)	2.02 (1.61-2.57)	2.25 (1.75-2.92)	2.46 (1.86-3.27)	2.66 (1.96-3.64)	2.90 (2.05-4.16)	3.08 (2.10-4.57)
6-hr	1.20 (1.00-1.46)	1.59 (1.32-1.93)	2.06 (1.71-2.50)	2.41 (1.98-2.95)	2.84 (2.26-3.61)	3.15 (2.45-4.09)	3.44 (2.61-4.58)	3.72 (2.74-5.10)	4.07 (2.87-5.82)	4.31 (2.94-6.40)
12-hr	1.57 (1.31-1.90)	2.08 (1.73-2.52)	2.69 (2.24-3.28)	3.16 (2.60-3.88)	3.74 (2.98-4.76)	4.16 (3.24-5.40)	4.55 (3.45-6.06)	4.92 (3.63-6.75)	5.39 (3.80-7.72)	5.72 (3.90-8.49)
24-hr	2.08 (1.85-2.40)	2.80 (2.48-3.23)	3.67 (3.24-4.25)	4.33 (3.79-5.05)	5.16 (4.37-6.22)	5.76 (4.78-7.08)	6.33 (5.12-7.97)	6.87 (5.42-8.90)	7.56 (5.72-10.2)	8.05 (5.89-11.2)
2-day	2.50 (2.21-2.88)	3.42 (3.03-3.95)	4.56 (4.02-5.28)	5.44 (4.76-6.35)	6.56 (5.55-7.90)	7.36 (6.10-9.05)	8.13 (6.59-10.2)	8.88 (7.00-11.5)	9.84 (7.44-13.3)	10.5 (7.70-14.7)
3-day	2.68 (2.37-3.09)	3.73 (3.30-4.31)	5.04 (4.44-5.83)	6.05 (5.29-7.05)	7.34 (6.22-8.85)	8.29 (6.87-10.2)	9.20 (7.45-11.6)	10.1 (7.95-13.1)	11.2 (8.50-15.1)	12.1 (8.82-16.8)
4-day	2.89 (2.56-3.34)	4.08 (3.61-4.71)	5.56 (4.90-6.44)	6.71 (5.87-7.83)	8.20 (6.94-9.88)	9.29 (7.70-11.4)	10.3 (8.38-13.0)	11.4 (8.98-14.8)	12.7 (9.63-17.2)	13.7 (10.0-19.1)
7-day	3.33 (2.94-3.84)	4.81 (4.25-5.55)	6.67 (5.88-7.72)	8.14 (7.12-9.50)	10.1 (8.52-12.1)	11.5 (9.54-14.1)	12.9 (10.5-16.3)	14.3 (11.3-18.5)	16.2 (12.2-21.8)	17.5 (12.8-24.5)
10-day	3.57 (3.16-4.11)	5.22 (4.62-6.02)	7.32 (6.46-8.48)	9.00 (7.87-10.5)	11.2 (9.50-13.5)	12.9 (10.7-15.8)	14.5 (11.8-18.3)	16.2 (12.8-21.0)	18.4 (13.9-24.8)	20.1 (14.7-28.0)
20-day	4.26 (3.78-4.92)	6.32 (5.59-7.29)	9.00 (7.94-10.4)	11.2 (9.78-13.0)	14.1 (12.0-17.0)	16.4 (13.6-20.2)	18.7 (15.2-23.6)	21.1 (16.6-27.3)	24.3 (18.4-32.8)	26.8 (19.6-37.5)
30-day	5.03 (4.46-5.80)	7.41 (6.55-8.55)	10.6 (9.32-12.2)	13.2 (11.5-15.4)	16.8 (14.2-20.2)	19.6 (16.2-24.1)	22.5 (18.2-28.3)	25.5 (20.1-33.0)	29.7 (22.5-40.1)	33.0 (24.1-46.1)
45-day	6.15 (5.45-7.09)	8.86 (7.83-10.2)	12.5 (11.0-14.5)	15.6 (13.7-18.2)	20.0 (16.9-24.1)	23.5 (19.5-28.9)	27.1 (21.9-34.1)	31.0 (24.4-40.1)	36.5 (27.6-49.2)	40.9 (29.9-57.0)
60-day	7.27 (6.44-8.38)	10.2 (9.02-11.8)	14.2 (12.6-16.5)	17.7 (15.5-20.7)	22.7 (19.2-27.3)	26.7 (22.2-32.9)	31.0 (25.1-39.1)	35.6 (28.1-46.1)	42.3 (32.0-57.0)	47.7 (34.9-66.6)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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PF graphical

Curve (1) Numbers of Hydrologic Soil-Cover Complexes For Pervious Areas-AMC II

Cover Type (3)	Quality of Cover (2)	Soil Group A	B	C	D
NATURAL COVERS -					
Barren (Rockland, eroded and graded land)		78	86	91	93
Chaparral, Broadleaf (Manzonita, ceanothus and scrub oak)	Poor	53	70	80	85
	Fair	40	63	75	81
	Good	31	57	71	78
Chaparral, Narrowleaf (Chamise and redshank)	Poor	71	82	88	91
	Fair	55	72	81	86
Grass, Annual or Perennial	Poor	67	78	86	89
	Fair	50	69	79	84
	Good	38	61	74	80
Meadows or Cienegas (Areas with seasonally high water table, principal vegetation is sod forming grass)	Poor	63	77	85	88
	Fair	51	70	80	84
	Good	30	58	71	78
Open Brush (Soft wood shrubs - buckwheat, sage, etc.)	Poor	62	76	84	88
	Fair	46	66	77	83
	Good	41	63	75	81
Woodland (Coniferous or broadleaf trees predominate. Canopy density is at least 50 percent.)	Poor	45	66	77	83
	Fair	36	60	73	79
	Good	25	55	70	77
Woodland, Grass (Coniferous or broadleaf trees with canopy density from 20 to 50 percent)	Poor	57	73	82	86
	Fair	44	65	77	82
	Good	33	58	72	79
URBAN COVERS -					
Residential or Commercial Landscaping (Lawn, shrubs, etc.)	Good	32	56	69	75
Turf (Irrigated and mowed grass)	Poor	58	74	83	87
	Fair	44	65	77	82
	Good	33	58	72	79
AGRICULTURAL COVERS -					
Fallow (Land plowed but not tilled or seeded)		77	86	91	94

SAN BERNARDINO COUNTY
HYDROLOGY MANUAL

CURVE NUMBERS FOR PERVIOUS AREAS

Figure C-3 (1 of 2)

User Inputs

Chamber Model:	MC-3500
Outlet Control Structure:	No
Project Name:	
Engineer:	N/A
Project Location:	
Measurement Type:	Imperial
Required Storage Volume:	40200 cubic ft.
Stone Porosity:	40%
Stone Foundation Depth:	12 in.
Stone Above Chambers:	12 in.
Average Cover Over Chambers:	18 in.
Design Constraint Dimensions:	(110 ft. x 150 ft.)

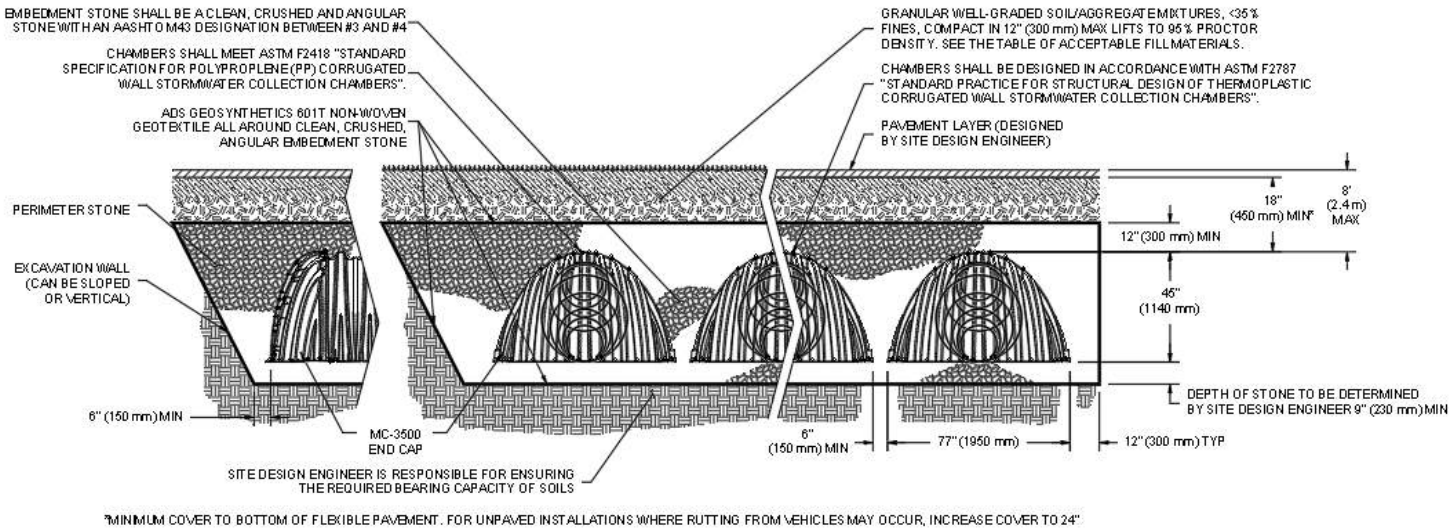
Results

System Volume and Bed Size

Installed Storage Volume:	40932.80 cubic ft.
Storage Volume Per Chamber:	109.90 cubic ft.
Number Of Chambers Required:	214
Number Of End Caps Required:	22
Chamber Rows:	11
Maximum Length:	153.57 ft.
Maximum Width:	77.58 ft.
Approx. Bed Size Required:	11576.07 square ft.

System Components

Amount Of Stone Required:	1583 cubic yards
Volume Of Excavation (Not Including Fill):	2466 cubic yards
Total Non-woven Geotextile Required:	3442 square yards
Woven Geotextile Required (excluding Isolator Row):	151 square yards
Woven Geotextile Required (Isolator Row):	172 square yards
Total Woven Geotextile Required:	323 square yards
Impervious Liner Required:	0 square yards



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MC-3500 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH MC-3500.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 450 LBS/FT/%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
   - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
   - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
   - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-3500 CHAMBER SYSTEM

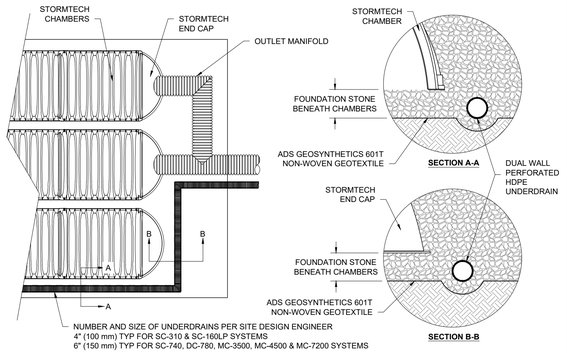
1. STORMTECH MC-3500 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONESHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
8. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
9. STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
10. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
11. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

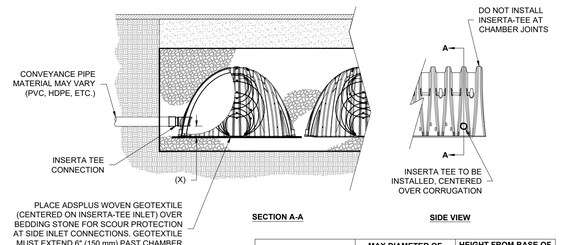
1. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
2. THE USE OF EQUIPMENT OVER MC-3500 CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.



5 UNDERDRAIN DETAIL

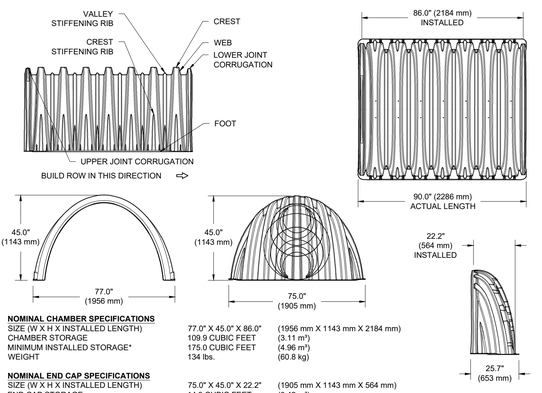


NOTES:
- PART NUMBERS WILL VARY BASED ON INLET PIPE MATERIALS. CONTACT STORMTECH FOR MORE INFORMATION.
- CONTACT ADS ENGINEERING SERVICES IF INSERTA TEE INLET MUST BE RAISED AS NOT ALL INVERTS ARE POSSIBLE.

CHAMBER	MAX DIAMETER OF INSERTA TEE	HEIGHT FROM BASE OF CHAMBER (X)
SC-310	6" (150 mm)	4" (100 mm)
SC-740	10" (250 mm)	4" (100 mm)
DC-780	10" (250 mm)	4" (100 mm)
MC-3500	12" (300 mm)	6" (150 mm)
MC-4500	12" (300 mm)	8" (200 mm)
MC-7200	12" (300 mm)	8" (200 mm)

INSERTA TEE FITTINGS AVAILABLE FOR SDR 26, SDR 35, SCH 40 IPS GASKETED & SOLVENT WELD, N-12, HP STORM, C-900 OR DUCTILE IRON

6 INSERTA-TEE SIDE INLET DETAIL



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	77.0" X 45.0" X 86.0"	(1956 mm X 1143 mm X 2184 mm)
CHAMBER STORAGE	109.9 CUBIC FEET	(3.11 m³)
MINIMUM INSTALLED STORAGE*	175.0 CUBIC FEET	(4.96 m³)
WEIGHT	134 lbs.	(60.8 kg)

NOMINAL END CAP SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	75.0" X 45.0" X 22.2"	(1905 mm X 1143 mm X 564 mm)
END CAP STORAGE	14.9 CUBIC FEET	(0.42 m³)
MINIMUM INSTALLED STORAGE*	45.1 CUBIC FEET	(1.28 m³)
WEIGHT	49 lbs.	(22.2 kg)

*ASSUMES 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION, 6" (152 mm) STONE BETWEEN CHAMBERS, 6" (152 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY.

PARTIAL CUT HOLES AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
PARTIAL CUT HOLES AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
END CAPS WITH A PREFABRICATED WELDED STUB END WITH "W"
END CAPS WITH A WELDED CROWN PLATE END WITH "C"

PART #	STUB	B	C
MC3500IEPP06T	6" (150 mm)	33.21" (844 mm)	---
MC3500IEPP06B		---	0.66" (17 mm)
MC3500IEPP08T	8" (200 mm)	31.16" (791 mm)	---
MC3500IEPP08B		---	0.81" (21 mm)
MC3500IEPP10T	10" (250 mm)	29.04" (738 mm)	---
MC3500IEPP10B		---	0.93" (24 mm)
MC3500IEPP12T	12" (300 mm)	26.36" (670 mm)	---
MC3500IEPP12B		---	1.35" (34 mm)
MC3500IEPP15T	15" (375 mm)	23.39" (594 mm)	---
MC3500IEPP15B		---	1.50" (38 mm)
MC3500IEPP18TC	18" (450 mm)	20.03" (509 mm)	---
MC3500IEPP18TW			
MC3500IEPP18BC		---	1.77" (45 mm)
MC3500IEPP18BW			
MC3500IEPP24TC	24" (600 mm)	14.48" (368 mm)	---
MC3500IEPP24TW			
MC3500IEPP24BC		---	2.06" (52 mm)
MC3500IEPP24BW			
MC3500IEPP30BC	30" (750 mm)	---	2.75" (70 mm)

NOTE: ALL DIMENSIONS ARE NOMINAL

CUSTOM PARTIAL CUT INVERTS ARE AVAILABLE UPON REQUEST. INVENTORIED MANIFOLDS INCLUDE 12-24" (300-600 mm) SIZE ON SIZE AND 15-48" (375-1200 mm) ECCENTRIC MANIFOLDS. CUSTOM INVERT LOCATIONS ON THE MC-3500 END CAP CUT IN THE FIELD ARE NOT RECOMMENDED FOR PIPE SIZES GREATER THAN 10" (250 mm). THE INVERT LOCATION IN COLUMN 'B' ARE THE HIGHEST POSSIBLE FOR THE PIPE SIZE.

2 MC-3500 TECHNICAL SPECIFICATIONS

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

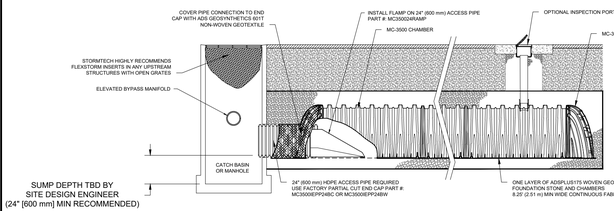
STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

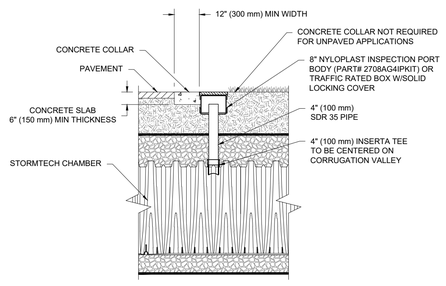
STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

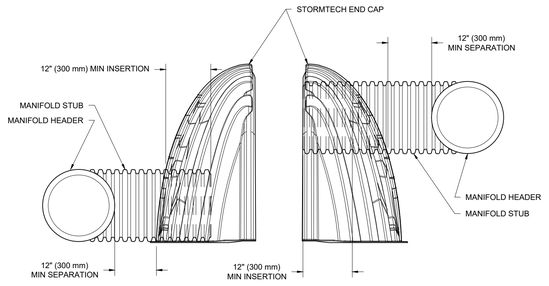


3 MC-3500 ISOLATOR ROW PLUS DETAIL



NOTE:
INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CORRUGATION VALLEY.

4 4" PVC INSPECTION PORT DETAIL (MC SERIES CHAMBER)



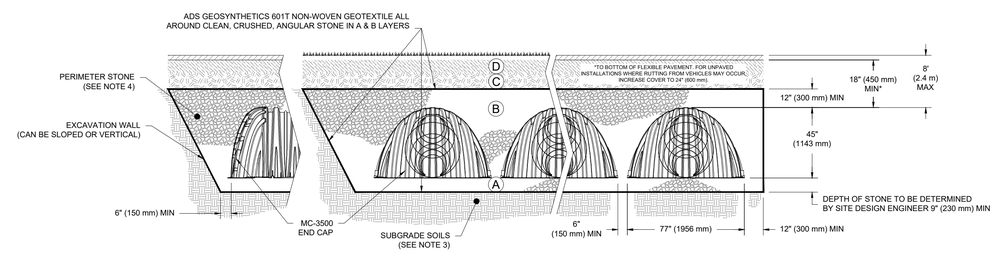
NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING.

7 MC-SERIES END CAP INSERTION DETAIL

ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 4	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



NOTES:

1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
2. MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 500 LBS/FT/%. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

1 MC-3500 CROSS SECTION DETAIL

DRAWN: | DATE:
REVIEWED: | PROJECT NO:
REV: | NOT TO SCALE

MC-3500 STANDARD DETAILS

StormTech® Chamber System
888-892-2694 | WWW.STORMTECH.COM

4640 TRUEMAN BLVD
HILLIARD, OH 43026

ADS® Advanced Drainage Systems, Inc.

SHEET

6425

ADVANCED DRAINAGE SYSTEMS, INC. ("ADS") HAS PREPARED THIS DETAIL BASED ON REFERENCED STANDARDS. ADS HAS NOT PERFORMED ANY ENGINEERING OR DESIGN SERVICES FOR THIS PROJECT, NOR HAS ADS INDEPENDENTLY VERIFIED THE INFORMATION SUPPLIED. THE INSTALLATION DETAILS PROVIDED HEREIN ARE GENERAL RECOMMENDATIONS AND ARE NOT SPECIFIC FOR THIS PROJECT. UNLESS THE PLANS ARE SIGNED AND SEALED BY THE SITE DESIGN ENGINEER. THE SITE DESIGN ENGINEER SHALL REVIEW THESE DETAILS PRIOR TO CONSTRUCTION AND SEALING THE DOCUMENT. IT IS THE SITE DESIGN ENGINEER'S RESPONSIBILITY TO ENSURE THE DETAILS PROVIDED HEREIN ARE ACCEPTABLE FOR THIS PROJECT.

Attachment D – BMP Fact Sheet

Attachment E – Geotechnical Report

April 24, 2023
J.N. 22-398

DIVERSIFIED PACIFIC COMMUNITIES
10621 Civic Center Drive
Rancho Cucamonga, California 91730

Attention: Mr. Nolan Leggio

Subject: **Field Percolation Tests Results, Proposed Empire Resort and Spa Project, Approximately 10.4 Acres of Vacant Land at Southeast Corner of E. Holt Boulevard and E. Guasti Road, City of Ontario, San Bernardino, California**

Reference: Petra Geosciences, Inc. 2023, DRAFT Preliminary Geotechnical Evaluation, Proposed Empire Resort and Spa Project, Approximately 10.4 Acres of Vacant Land at Southeast Corner of E. Holt Boulevard and E. Guasti Road, APN 011 032 233, City of Ontario, San Bernardino, California, J.N. 22-398 dated February 10.

Dear Mr. Leggio:

Petra Geosciences, Inc. (Petra) has prepared this letter report presenting the results of our percolation testing for the subject project.

Objective

The objective of this investigation was to evaluate infiltration rates of the site soils, consisting of upper younger alluvial deposits, for the preliminary design of onsite infiltration facilities. To achieve this objective, we have drilled five test borings on the order of 5 to 15 feet using a hollow-stem drill equipment, conducted borehole percolation tests of the lower part of each borehole, and calculated the infiltration rate. The project site and the locations of the percolation boreholes are shown in Figure 1.

Test Method and Scope of Services

Percolation test to evaluate site infiltration rate was performed in conformance with Design Handbook for Low Impact Development, Best Management Practices, by Riverside County Flood Control and Water Conservation District, dated September 2011 (RCFFCWCD, 2011). As such, our scope of work included the following:

1. Collect and review readily available literature and maps about soil and geologic conditions within and adjacent to the site including our prior soil and boring data, see reference.

2. Consult with project civil engineer on targeted test locations and depths.

3. Drill 5 exploratory borings using the hollow-stem auger drilling method and perform falling-head percolation test in each borehole. The percolation tests results and infiltration rate calculations are presented in Appendix A.

4. Log and field-classify soil materials encountered in each boring in accordance with the visual-manual procedures outlined in the Unified Soil Classification System and the American Society for Testing and Materials (ASTM) Procedure D 2488-90. All field activities were performed by or under the direct observation of a State of California Certified Engineering Geologist.

5. Collect representative bulk soil samples near the bottom of each borehole utilizing a 1.4- inch inside diameter Standard Penetration Test (SPT) split-spoon sampler. Perform a laboratory derived grain size analysis (sieve) on each sample.

6. Prepare this letter report presenting the results of our evaluations.

Test Description and Results

The falling head percolation testing method was used in accordance with the cited reference. The borings for the percolation tests were advanced using an 8-inch diameter hollow-stem auger to depths between approximately 5 and 15 feet below the existing ground surface. As anticipated, surficial fills underlain by alluvial deposits were encountered in each test borings. The excavated materials in the generally upper 5 to 8 consisted of silty fine to medium sands with variable gravels that were medium-dense and slightly moist. The soil materials below approximately 8 feet generally consisted of interbedded silty sand with less fines to sand with silts also with variable gravel content that were medium dense and slightly moist. Percolation testing was performed in the bottom 4 to 5 feet of the boreholes. The locations of the percolation test borings are shown on the Test Location Map (Figure 1) and the boring logs are presented in Appendix A.

Following a presoaking period, field testing was conducted in a perforated pipe lowered into the borehole, with ¾-inch gravel surrounding the pipe, at 10-minute intervals for a period of approximately 1 hour. The falling-head percolation test data were utilized in determining the test infiltration rate, I_t, expressed in units of inches/hour, utilizing the Porchet Method (RCFCWCD, 2011). The infiltration rate, I_t, was calculated by determining the volumetric water flow rate through the wetted borehole surface area, expressed in terms of inches per hour. The un-factored test results are summarized in the following table, Table 1 and the field test data and laboratory test results are presented in Appendix B and C.

TABLE 1

Un-Factored Infiltration Test Results

Test No.	Borehole Total Depth (feet)	Approximate Test Zone (feet below existing grade)	Geologic Unit / Soil Description	Infiltration Test Rate, I_t (in/hr)
P-1	5	1-5	Qal (SM)	0.9
P-2	15	10-15	Qal (SP-SM)	49.3
P-3	10	5-10	Qal (SP-SM)	50.6
P-4	7	2-7	Qal (SM)	2.3
P-5	5	1-5	Qal (SM)	2.1

The test data indicates the alluvial deposits greater than approximately 9 feet below existing site grades are considered permeable. As observed, the shallow subsurface native soils, for containing high fines content, exhibit variable permeability, as measured by percolation tests at different depths. As such, it is our professional opinion that the infiltration rates approximately 9 feet below surface are more suitable for the intended infiltration purposes.

Discussion

Suitability Assessment

In view of the test data, certain jurisdictions consider such factors as infiltration assessment method, soil texture, site soils variability, and depth to groundwater/impervious layer to assign a Suitability Assessment Safety Factor that should be applied to the infiltration rates.

To perform such an evaluation, we have adopted a procedure provided by Santa Ana Regional Water Quality Control Board (SARWQCB) in their Technical Guidance Document (TGD) for the Preparation of Conceptual/Preliminary and/or Project Water Quality Management Plans (WQMPs), with Appendices, For Santa Ana Regional Board consideration, dated December 20, 2013 (SARWQCB, 2013). Based on Appendix D of this document, using Table VII.3: Suitability Assessment Related Considerations for Infiltration Facility Safety Factors, and Worksheet H: Factor of Safety and Design Infiltration Rate and Worksheet, of the Orange County BMP Design Manual, the following is presented.

TABLE 2

Site Suitability Reduction Factor (Category A) for Infiltration Rate

Considerations		Concern		Reduction Factor
Description	**Weight**	**Level**	**Safety Factor**	**Weight x Safety Factor**
Soil Assessment Method	0.25	Low	1.0	0.25
Predominant Soil Texture	0.25	Low	1.0	0.25
Site Soil Variability	0.25	medium	2.0	0.50
Depth to Groundwater/Impervious Layer	0.25	Low	1.0	0.25
Reduction Factor (sum of individual Reduction Factors)				**1.25**

Based on the information provided in Table 2, a Reduction Factor of 1.25 should be applied to the values of Infiltration Rate, I_t, provided in Table 1, above, for Site Suitability considerations.

Construction Procedure

The infiltration rates provided herein are considered representative of the native soils in the vicinity of the percolation test locations. Care should be taken to minimize disturbance of the exposed bottom surface of the basins as fill placement or any compaction effort applied to the area will have a detrimental effect on the anticipated infiltration rate of the proposed infiltration areas.

Environmental Impact

It should be noted that clean, potable water was used for the test. Surface runoff usually carries with it debris and fine particles that are typically expected to reduce the calculated infiltration rate.

Factor of Safety

The values of infiltration rate provided in Table 1 are raw test values. As discussed above, these values should be corrected for site Suitability considerations by applying a Reduction factor as provided in Table 2. Further, the project civil engineer needs to consider a Design Safety Factor, which incorporates such items as tributary area size, level of pretreatment/expected sediment load, redundancy/contingency plan and compaction during construction, in combination with the Suitability Assessment Safety/Reduction Factor for the design of the system.

This report may be subject to review by the controlling agency.

Respectfully submitted,

PETRA GEOSCIENCES, INC.

Douglass Johnston
Senior Associate Geologist
CEG 2477

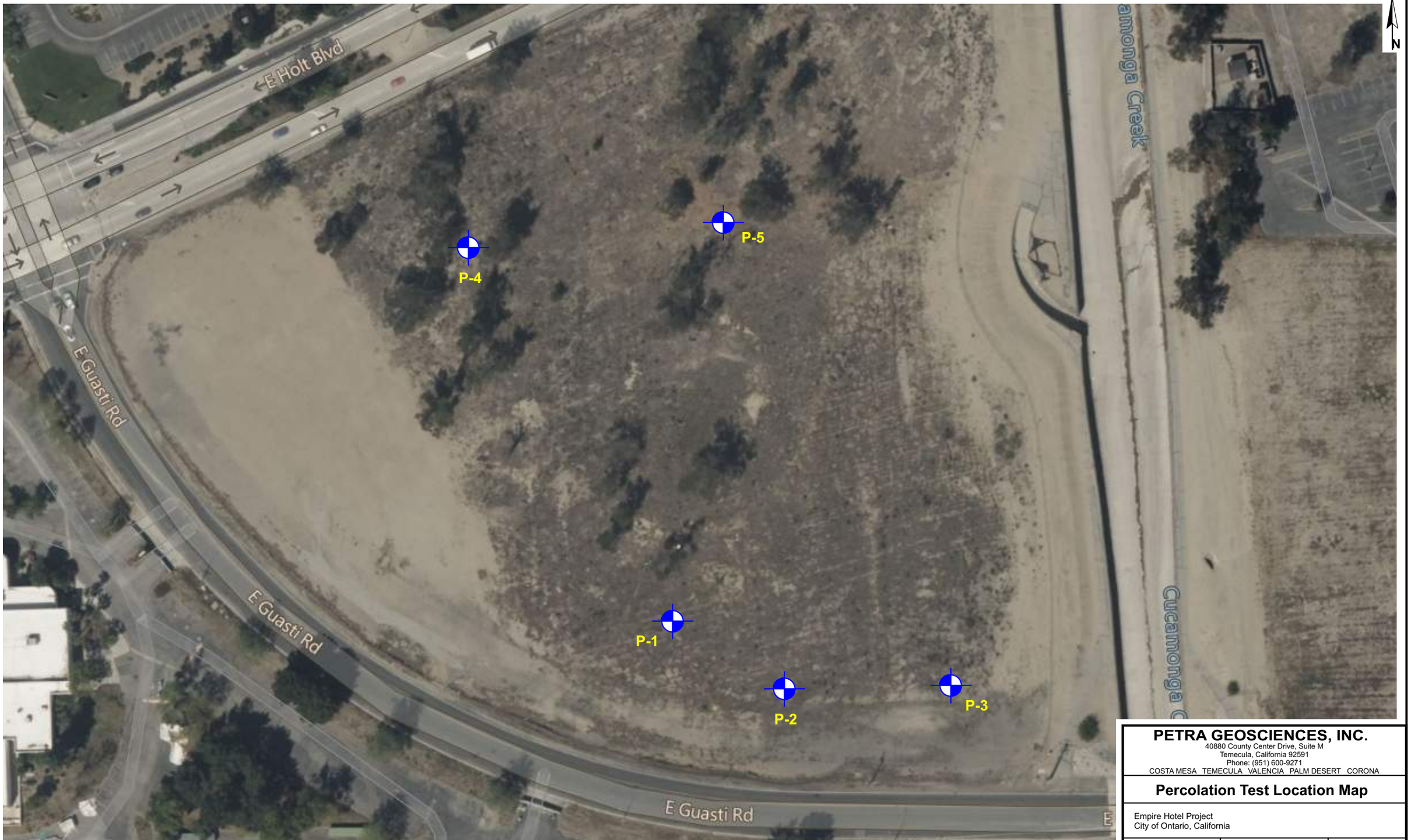
Siamak Jafroudi, PhD
Senior Principal Engineer
GE 2024

DJ/SJ/lv

Attachments: Figure 1 – Test Location Map
Appendix A – Boring Logs
Appendix B – Percolation Test Data
Appendix C – Sieve Analysis Graphs

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FIGURE



Reference: Google Earth, 2020 Image

PETRA GEOSCIENCES, INC.
40880 County Center Drive, Suite M
Temecula, California 92591
Phone: (951) 600-9271
COSTA MESA TEMECULA VALENCIA PALM DESERT CORONA

Percolation Test Location Map

Empire Hotel Project
City of Ontario, California

PETRA GEOSCIENCES INC.

DATE: April 2023
J.N.: 22-398

Figure 1

APPENDIX A

BORING LOGS

Key to Soil and Bedrock Symbols and Terms

PETRA

Unified Soil Classification System

Coarse-grained Soils > 1/2 of materials is larger than #200 sieve	The No. 200 U.S. Standard Sieve is about the smallest particle visible to the naked eye	**GRAVELS** more than half of coarse fraction is larger than #4 sieve	Clean Gravels (less than 5% fines)	**GW**	Well-graded gravels, gravel-sand mixtures, little or no fines
				GP	Poorly-graded gravels, gravel-sand mixtures, little or no fines
			Gravels with fines	**GM**	Silty Gravels, poorly-graded gravel-sand-silt mixtures
				GC	Clayey Gravels, poorly-graded gravel-sand-clay mixtures
		SANDS more than half of coarse fraction is smaller than #4 sieve	Clean Sands (less than 5% fines)	**SW**	Well-graded sands, gravelly sands, little or no fines
				SP	Poorly-graded sands, gravelly sands, little or no fines
			Sands with fines	**SM**	Silty Sands, poorly-graded sand-gravel-silt mixtures
				SC	Clayey Sands, poorly-graded sand-gravel-clay mixtures
Fine-grained Soils > 1/2 of materials is smaller than #200 sieve		**SILTS & CLAYS** Liquid Limit Less Than 50		**ML**	Inorganic silts & very fine sands, silty or clayey fine sands, clayey silts with slight plasticity
				CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
				OL	Organic silts & clays of low plasticity
		SILTS & CLAYS Liquid Limit Greater Than 50		**MH**	Inorganic silts, micaceous or diatomaceous fine sand or silt
				CH	Inorganic clays of high plasticity, fat clays
				OH	Organic silts and clays of medium-to-high plasticity
Highly Organic Soils				**PT**	Peat, humus swamp soils with high organic content

Grain Size

Description		Sieve Size	Grain Size	Approximate Size
Boulders		>12"	>12"	Larger than basketball-sized
Cobbles		3 - 12"	3 - 12"	Fist-sized to basketball-sized
Gravel	coarse	3/4 - 3"	3/4 - 3"	Thumb-sized to fist-sized
	fine	#4 - 3/4"	0.19 - 0.75"	Pea-sized to thumb-sized
Sand	coarse	#10 - #4	0.079 - 0.19"	Rock salt-sized to pea-sized
	medium	#40 - #10	0.017 - 0.079"	Sugar-sized to rock salt-sized
	fine	#200 - #40	0.0029 - 0.017"	Flour-sized to sugar-sized to
Fines		Passing #200	<0.0029"	Flour-sized and smaller

Modifiers

Trace	< 1 %
Few	1 - 5%
Some	5 - 12 %
Numerous	12 - 20 %

Laboratory Test Abbreviations

MAX	Maximum Dry Density	MA	Mechanical (Particle Size) Analysis
EXP	Expansion Potential	AT	Atterberg Limits
SO4	Soluble Sulfate Content	#200	#200 Screen Wash
RES	Resistivity	DSU	Direct Shear (Undisturbed Sample)
pH	Acidity	DSR	Direct Shear (Remolded Sample)
CON	Consolidation	HYD	Hydrometer Analysis
SW	Swell	SE	Sand Equivalent
CL	Chloride Content	OC	Organic Content
RV	R-Value	COMP	Mortar Cylinder Compression

Bedrock Hardness

Soft	Can be crushed and granulated by hand; "soil like" and structureless
Moderately Hard	Can be grooved with fingernails; gouged easily with butter knife; crumbles under light hammer blows
Hard	Cannot break by hand; can be grooved with a sharp knife; breaks with a moderate hammer blow
Very Hard	Sharp knife leaves scratch; chips with repeated hammer blows

Sampler and Symbol Descriptions


Approximate Depth of Groundwater Encountered


Approximate Depth of Standing Groundwater


Modified California Split Spoon Sample


No Recovery in Mod. Calif. Split Spoon Sample


Standard Penetration Test


Shelby Tube Sample


Bulk Sample


No Recovery in SPT Sampler


No Recovery in Shelby Tube

Notes:
Blows Per Foot: Number of blows required to advance sampler 1 foot (unless a lesser distance is specified). Samplers in general were driven into the soil or bedrock at the bottom of the hole with a standard (140 lb.) hammer dropping a standard 30 inches unless noted otherwise in Log Notes. Drive samples collected in bucket auger borings may be obtained by dropping non-standard weight from variable heights. When a SPT sampler is used the blow count conforms to ASTM D-1586

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EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **P-1**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **±953**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **4/13/23**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **140 lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): Light brown, slightly moist, fine- to coarse-grained, some cobbles, some gravel.							
		YOUNG ALLUVIAL FAN DEPOSITS (Qyf) Silty Sand (SM): Light Brown to brown, slightly moist, fine- to coarse-grained, trace gravel. slightly moist, loose.		2 3 2					MA
5		Total Depth = 5' No groundwater encountered Boring was backfilled with cuttings after percolation testing.							
10									
15									
20									
25									
30									

PLATE A-19

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **P-2**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **±952**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **4/13/23**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **140 lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): Light Brown, slightly moist, fine- to coarse-grained, some cobles, some gravel.							
		YOUNG ALLUVIAL FAN DEPOSITS (Qyf) Silty Sand (SM): Light brown to brown, slightly moist, fine- to coarse-grained, few gravel.							
5									
10		Light brown.							
		Sand w/ Silt (SP-SM): Light brown to gray, slightly moist, medium dense, fine- to coarse-grained, few gravel.		12 9 9					MA
15		Total Depth = 15' No groundwater encountered Boring was backfilled with cuttings after percolation testing.							
20									
25									
30									

PLATE A-20

Petra Geosciences, Inc.

EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **P-3**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **±951**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **4/13/23**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **140 lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): Light brown, slightly moist, fine- to coarse-grained, some cobbles, some gravel.							
		YOUNG ALLUVIAL FAN DEPOSITS (Qyf) Silty Sand (SM): light brown to brown, slightly moist, fine- to coarse-grained, few gravel.							
5									
		Sand with Silt (SP-SM): light brown, slightly moist, medium dense, fine- to coarse-grained.		3 5 7					MA
10		Total Depth = 10' No groundwater encountered Boring was backfilled with cuttings after percolation testing.							
15									
20									
25									
30									

PLATE A-21

Petra Geosciences, Inc.

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EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **P-4**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **±959**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **4/13/23**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **140 lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): Light brown, slightly moist, fine- to coarse-grained, some cobbles, some gravel.							
		YOUNG ALLUVIAL FAN DEPOSITS (Qyf) Silty Sand (SM): Light brown to brown, slightly moist, fine- to coarse-grained, few gravel.							
5		loose.		3 3 4					MA
		Total Depth = 7' No groundwater encountered Boring was backfilled with cuttings after percolation testing.							
10									
15									
20									
25									
30									

PLATE A-22

Petra Geosciences, Inc.

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EXPLORATION LOG

Project:	**Ontario Hotel**		Boring No.: **P-5**
Location:	**E Holt Blvd. at E Guasti Rd.**		Elevation: **±960**
Job No.:	**22-398**	Client: **Diversified Pacific**	Date: **4/13/23**
Drill Method:	**8" Hollow Stem Auger**	Driving Weight: **140 lbs / 30"**	Logged By: **SS**

Depth (Feet)	Lith-ology	Material Description	WATER	Samples: Blows per 6 in.	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
0		**ARTIFICIAL FILL (af)** Silty Sand (SM): light brown, slightly moist, fine- to coarse-grained, some cobbles, some gravel.							
		YOUNG ALLUVIAL FAN DEPOSITS (Qyf) Silty Sand (SM): light brown to brown, slightly moist, loose, fine- to coarse-grained, trace gravel.		4 5 3					MA
5		Total Depth = 5' No groundwater encountered Boring was backfilled with cuttings after percolation testing.							
10									
15									
20									
25									
30									

PLATE

Petra Geosciences, Inc.

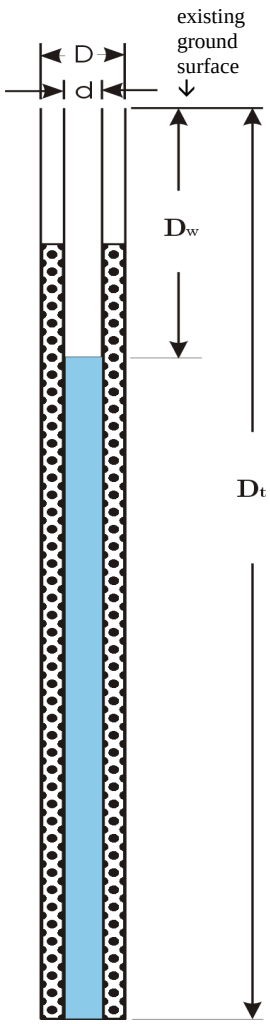
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APPENDIX B

PERCOLATION TEST DATA

Boring/Test Number: P-1

Total Depth of Boring, D_T (ft):	5	**Test Date:**	4/14/2023
Diameter of Hole, D (in):	8	**Tested By:**	SS
Diameter of Casing, d (in):	3	**USCS Soil Type:**	SM
Depth of Slotted Casing (ft):	0 to 5	**Depth to Groundwater (ft):**	N/A
Porosity of Annulus Material, *n* :	0.44	**Ground Elevation (msl ft):**	±953
Depth from Existing Ground Surface to Bottom of Prop. Inflitration System (ft):			0.0



SANDY SOIL CRITERIA TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔD (in.)	Change in Height of Water Greater Than or Equal to 6"? (Yes/No)*
		Initial, D_o (ft.)	Final, D_f (ft.)		
1	25	3.00	3.58	6.96	yes
2	25	3.00	3.53	6.36	yes
Standard Time Interval Between Readings (min.), [* if yes = 10, if no = 30]:					10

PERCOLATION TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔH (in.)	Percolation Rate	
		Initial, D_o (ft.)	Final, D_f (ft.)		(min/in.)	(gal/day/ft^2)
1	10	3.00	3.24	2.88	3.47	10.92
2	10	3.00	3.23	2.76	3.62	10.44
3	10	3.00	3.23	2.76	3.62	10.44
4	10	3.00	3.23	2.76	3.62	10.44
5	10	3.00	3.23	2.76	3.62	10.44
6	10	3.00	3.23	2.76	3.62	10.44
7	10	3.00	3.23	2.76	3.62	10.44
8	10	3.00	3.23	2.76	3.62	10.44

TEST RESULTS**

Inflitration Rate [Porchet Method]# (inches/hour)	Percolation Rate	
	(min/in.)	(gal/day/ft^2)
0.90	**3.62**	**10.44**

**Raw Results. Does Not Include a Factor of Safety

FACTOR OF SAFETY WORKSHEET

Factor Category[Φ]		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = (w) x (v)
A	Suitability Assessment	Soil Assessment Methods	0.25		0
		Predominant Soil Texture	0.25		0
		Site Soil Variability	0.25		0
		Depth to Groundwater / Impervious Layer	0.25		0
		Suitability Assessment Safety Factor, $S_A = \Sigma p$			**0**

[Φ] Factor Category B Should Be Provided and Calculated by Project Civil Engineer

[#] Where Infiltration Rate, It = ΔH (60r) / Δt (r + 2Havg)

$r = D / 2$

$Ho = D_T - Do$

$H_f = D_T - D_f$

$\Delta H = \Delta D = H_o - H_f$

$H_{avg} = (H_o + H_f) / 2$

Reference:

RCFCWCD, Design Handbook for LID, dated June, 2014

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PERCOLATION TEST SUMMARY

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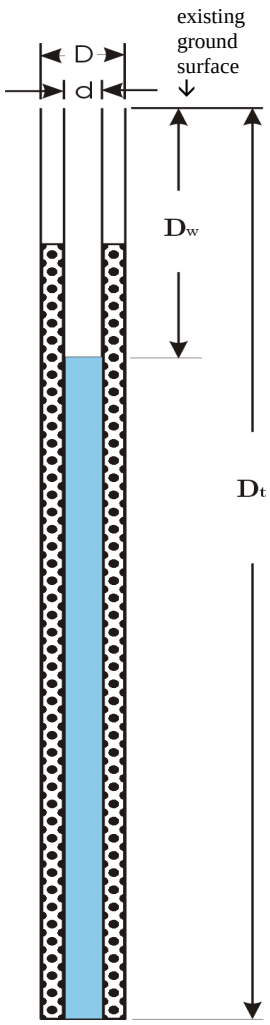
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Appendix B

Boring/Test Number: P-2

Total Depth of Boring, D_T (ft):	15	**Test Date:**	4/17/2023
Diameter of Hole, D (in):	8	**Tested By:**	SS
Diameter of Casing, d (in):	3	**USCS Soil Type:**	SM
Depth of Slotted Casing (ft):	10 to 15	**Depth to Groundwater (ft):**	N/A
Porosity of Annulus Material, *n* :	0.44	**Ground Elevation (msl ft):**	±952
Depth from Existing Ground Surface to Bottom of Prop. Inflitration System (ft):			0.0



SANDY SOIL CRITERIA TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔD (in.)	Change in Height of Water Greater Than or Equal to 6"? (Yes/No)*
		Initial, D_o (ft.)	Final, D_f (ft.)		
1	25	13.00	4.40	-103.2	yes
2	25	13.00	4.28	-104.64	yes
Standard Time Interval Between Readings (min.), [* if yes = 10, if no = 30]:					10

PERCOLATION TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔH (in.)	Percolation Rate	
		Initial, D_o (ft.)	Final, D_f (ft.)		(min/in.)	(gal/day/ft^2)
1	1.02	13.00	14.00	12.00	0.08	549.63
2	1.00	13.00	14.00	12.00	0.08	558.79
3	1.00	13.00	14.00	12.00	0.08	558.79
4	0.98	13.00	14.00	12.00	0.08	568.27
5	0.98	13.00	14.00	12.00	0.08	568.27
6	0.98	13.00	14.00	12.00	0.08	568.27
7	1.00	13.00	14.00	12.00	0.08	558.79
8	1.00	13.00	14.00	12.00	0.08	558.79
9	0.98	13.00	14.00	12.00	0.08	568.27
10	1.00	13.00	14.00	12.00	0.08	558.79
11	0.98	13.00	14.00	12.00	0.08	568.27
12	0.98	13.00	14.00	12.00	0.08	568.27

TEST RESULTS**

Inflitration Rate [Porchet Method]# (inches/hour)	Percolation Rate	
	(min/in.)	(gal/day/ft^2)
49.32	**0.08**	**568.27**

**Raw Results. Does Not Include a Factor of Safety

FACTOR OF SAFETY WORKSHEET

Factor Category[Φ]		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = (w) x (v)
A	Suitability Assessment	Soil Assessment Methods	0.25		0
		Predominant Soil Texture	0.25		0
		Site Soil Variability	0.25		0
		Depth to Groundwater / Impervious Layer	0.25		0
		Suitability Assessment Safety Factor, $S_A = \Sigma p$			**0**

[Φ] Factor Category B Should Be Provided and Calculated by Project Civil Engineer

[#] Where Infiltration Rate, It = ΔH (60r) / Δt (r + 2Havg)

$r = D / 2$

$Ho = D_T - Do$

$H_f = D_T - D_f$

$\Delta H = \Delta D = H_o - H_f$

$H_{avg} = (H_o + H_f) / 2$

Reference:

RCFCWCD, Design Handbook for LID, dated June, 2014

PETRA GEOSCIENCES, INC.

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PERCOLATION TEST SUMMARY

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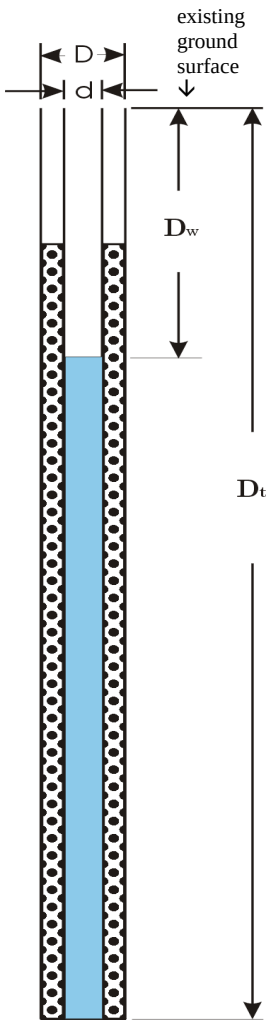
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Appendix B

Boring/Test Number: P-3

Total Depth of Boring, D_T (ft):	10	**Test Date:**	4/17/2023
Diameter of Hole, D (in):	8	**Tested By:**	SS
Diameter of Casing, d (in):	3	**USCS Soil Type:**	SM
Depth of Slotted Casing (ft):	5 to 10	**Depth to Groundwater (ft):**	N/A
Porosity of Annulus Material, *n* :	0.44	**Ground Elevation (msl ft):**	±951
Depth from Existing Ground Surface to Bottom of Prop. Inflitration System (ft):			0.0



SANDY SOIL CRITERIA TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔD (in.)	Change in Height of Water Greater Than or Equal to 6"? (Yes/No)*
		Initial, D_o (ft.)	Final, D_f (ft.)		
1	25	9.50	11.36	22.32	yes
2	25	9.50	11.08	18.96	yes
Standard Time Interval Between Readings (min.), [* if yes = 10, if no = 30]:					10

PERCOLATION TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔH (in.)	Percolation Rate	
		Initial, D_o (ft.)	Final, D_f (ft.)		(min/in.)	(gal/day/ft^2)
1	10	9.50	10.49	11.88	0.84	537.09
2	10	9.50	10.43	11.16	0.90	429.49
3	10	9.50	10.43	11.16	0.90	429.49
4	10	9.50	10.43	11.16	0.90	429.49
5	10	9.50	10.43	11.16	0.90	429.49
6	10	9.50	10.43	11.16	0.90	429.49
7	10	9.50	10.44	11.28	0.89	445.14
8	10	9.50	10.43	11.16	0.90	429.49

TEST RESULTS**

Inflitration Rate [Porchet Method]# (inches/hour)	Percolation Rate	
	(min/in.)	(gal/day/ft^2)
50.61	**0.90**	**429.49**

**Raw Results. Does Not Include a Factor of Safety

FACTOR OF SAFETY WORKSHEET

Factor Category[Φ]		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = (w) x (v)
A	Suitability Assessment	Soil Assessment Methods	0.25		0
		Predominant Soil Texture	0.25		0
		Site Soil Variability	0.25		0
		Depth to Groundwater / Impervious Layer	0.25		0
		Suitability Assessment Safety Factor, $S_A = \Sigma p$			**0**

[Φ] Factor Category B Should Be Provided and Calculated by Project Civil Engineer

[#] Where Infiltration Rate, It = ΔH (60r) / Δt (r + 2Havg)

$r = D / 2$

$Ho = D_T - Do$

$H_f = D_T - D_f$

$\Delta H = \Delta D = H_o - H_f$

$H_{avg} = (H_o + H_f) / 2$

Reference:

RCFCWCD, Design Handbook for LID, dated June, 2014

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PERCOLATION TEST SUMMARY

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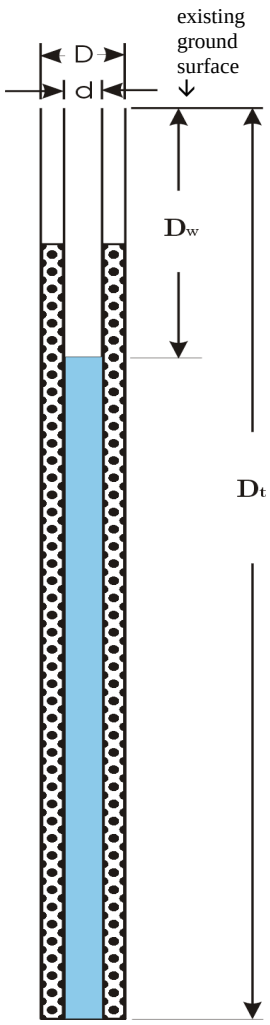
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Appendix B

Boring/Test Number: P-4

Total Depth of Boring, D_T (ft):	7	**Test Date:**	4/14/2023
Diameter of Hole, D (in):	8	**Tested By:**	SS
Diameter of Casing, d (in):	3	**USCS Soil Type:**	SM
Depth of Slotted Casing (ft):	2 to 7	**Depth to Groundwater (ft):**	N/A
Porosity of Annulus Material, *n* :	0.44	**Ground Elevation (msl ft):**	±959
Depth from Existing Ground Surface to Bottom of Prop. Inflitration System (ft):			0.0



SANDY SOIL CRITERIA TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔD (in.)	Change in Height of Water Greater Than or Equal to 6"? (Yes/No)*
		Initial, D_o (ft.)	Final, D_f (ft.)		
1	25	6.00	6.83	9.96	yes
2	25	6.00	6.58	6.96	yes
Standard Time Interval Between Readings (min.), [* if yes = 10, if no = 30]:					10

PERCOLATION TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔH (in.)	Percolation Rate	
		Initial, D_o (ft.)	Final, D_f (ft.)		(min/in.)	(gal/day/ft^2)
1	10	6.00	6.29	3.48	2.87	26.44
2	10	6.00	6.30	3.60	2.78	27.48
3	10	6.00	6.30	3.60	2.78	27.48
4	10	6.00	6.29	3.48	2.87	26.44
5	10	6.00	6.29	3.48	2.87	26.44
6	10	6.00	6.29	3.48	2.87	26.44
7	10	6.00	6.29	3.48	2.87	26.44
8	10	6.00	6.29	3.48	2.87	26.44

TEST RESULTS**

Inflitration Rate [Porchet Method]# (inches/hour)	Percolation Rate	
	(min/in.)	(gal/day/ft^2)
2.35	**2.87**	**26.44**

**Raw Results. Does Not Include a Factor of Safety

FACTOR OF SAFETY WORKSHEET

Factor Category[Φ]		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = (w) x (v)
A	Suitability Assessment	Soil Assessment Methods	0.25		0
		Predominant Soil Texture	0.25		0
		Site Soil Variability	0.25		0
		Depth to Groundwater / Impervious Layer	0.25		0
		Suitability Assessment Safety Factor, $S_A = \Sigma p$			**0**

[Φ] Factor Category B Should Be Provided and Calculated by Project Civil Engineer

[#] Where Infiltration Rate, It = ΔH (60r) / Δt (r + 2Havg)

$r = D / 2$

$Ho = D_T - Do$

$H_f = D_T - D_f$

$\Delta H = \Delta D = H_o - H_f$

$H_{avg} = (H_o + H_f) / 2$

Reference:

RCFCWCD, Design Handbook for LID, dated June, 2014

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PERCOLATION TEST SUMMARY

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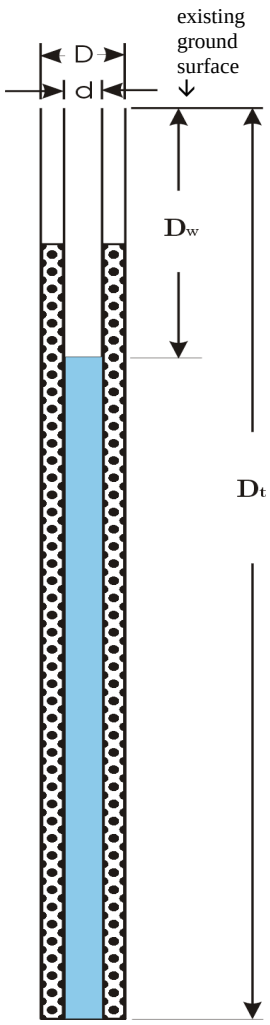
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Appendix B

Boring/Test Number: P-5

Total Depth of Boring, D_T (ft):	5	**Test Date:**	4/14/2023
Diameter of Hole, D (in):	8	**Tested By:**	SS
Diameter of Casing, d (in):	3	**USCS Soil Type:**	SM
Depth of Slotted Casing (ft):	0 to 5	**Depth to Groundwater (ft):**	N/A
Porosity of Annulus Material, *n* :	0.44	**Ground Elevation (msl ft):**	±960
Depth from Existing Ground Surface to Bottom of Prop. Inflitration System (ft):			0.0



SANDY SOIL CRITERIA TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔD (in.)	Change in Height of Water Greater Than or Equal to 6"? (Yes/No)*
		Initial, D_o (ft.)	Final, D_f (ft.)		
1	25	3.00	4.40	16.8	yes
2	25	3.00	4.28	15.36	yes
Standard Time Interval Between Readings (min.), [* if yes = 10, if no = 30]:					10

PERCOLATION TEST

Trial No.	Time Interval Δt (min.)	Depth to Water, D_w		Change in Water Level ΔH (in.)	Percolation Rate	
		Initial, D_o (ft.)	Final, D_f (ft.)		(min/in.)	(gal/day/ft^2)
1	10	3.00	3.56	6.72	1.49	27.64
2	10	3.00	3.53	6.36	1.57	25.96
3	10	3.00	3.52	6.24	1.60	25.40
4	10	3.00	3.54	6.48	1.54	26.52
5	10	3.00	3.52	6.24	1.60	25.40
6	10	3.00	3.51	6.12	1.63	24.85
7	10	3.00	3.51	6.12	1.63	24.85
8	10	3.00	3.51	6.12	1.63	24.85

TEST RESULTS**

Inflitration Rate [Porchet Method]# (inches/hour)	Percolation Rate	
	(min/in.)	(gal/day/ft^2)
2.15	**1.63**	**24.85**

**Raw Results. Does Not Include a Factor of Safety

FACTOR OF SAFETY WORKSHEET

Factor Category[Φ]		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = (w) x (v)
A	Suitability Assessment	Soil Assessment Methods	0.25		0
		Predominant Soil Texture	0.25		0
		Site Soil Variability	0.25		0
		Depth to Groundwater / Impervious Layer	0.25		0
		Suitability Assessment Safety Factor, $S_A = \Sigma p$			**0**

[Φ] Factor Category B Should Be Provided and Calculated by Project Civil Engineer

[#] Where Infiltration Rate, It = ΔH (60r) / Δt (r + 2Havg)

$r = D / 2$

$Ho = D_T - Do$

$H_f = D_T - D_f$

$\Delta H = \Delta D = H_o - H_f$

$H_{avg} = (H_o + H_f) / 2$

Reference:

RCFCWCD, Design Handbook for LID, dated June, 2014

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PERCOLATION TEST SUMMARY

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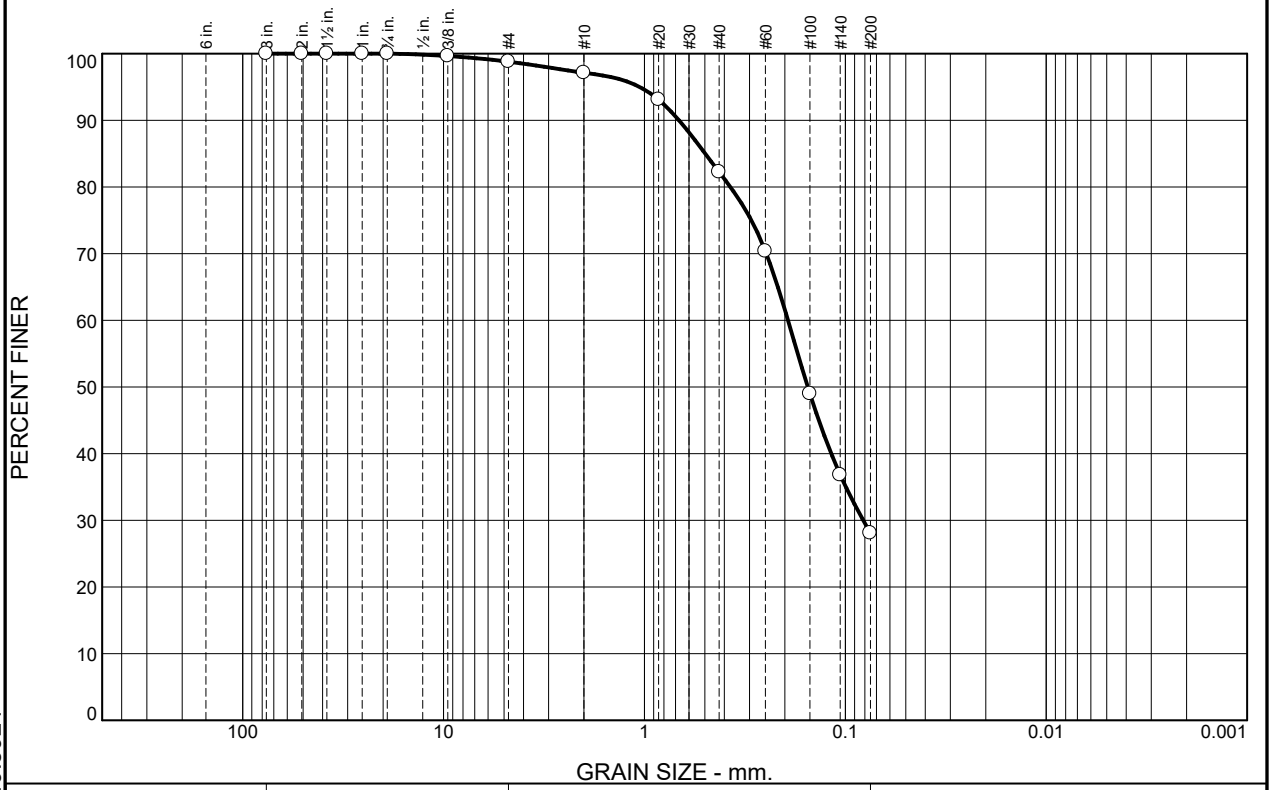
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Appendix B

APPENDIX C

SIEVE ANALYSIS GRAPHS

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	1.2	1.7	14.9	54.1	28.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.375	99.6		
#4	98.8		
#10	97.1		
#20	93.1		
#40	82.2		
#60	70.4		
#100	49.0		
#140	36.8		
#200	28.1		

* (no specification provided)

Material Description

Brown Silty Fine to Medium Sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.6728 D_{85}= 0.4980 D_{60}= 0.1930
D_{50}= 0.1537 D_{30}= 0.0814 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Source of Sample: 23L085 **Depth:** 3.5
Sample Number: P-1 **Date:** 4/20/2023

Laboratory:
1251 West Pomona Road, Unit #103, Corona, Ca 92882 Phone #. 714.549.8921

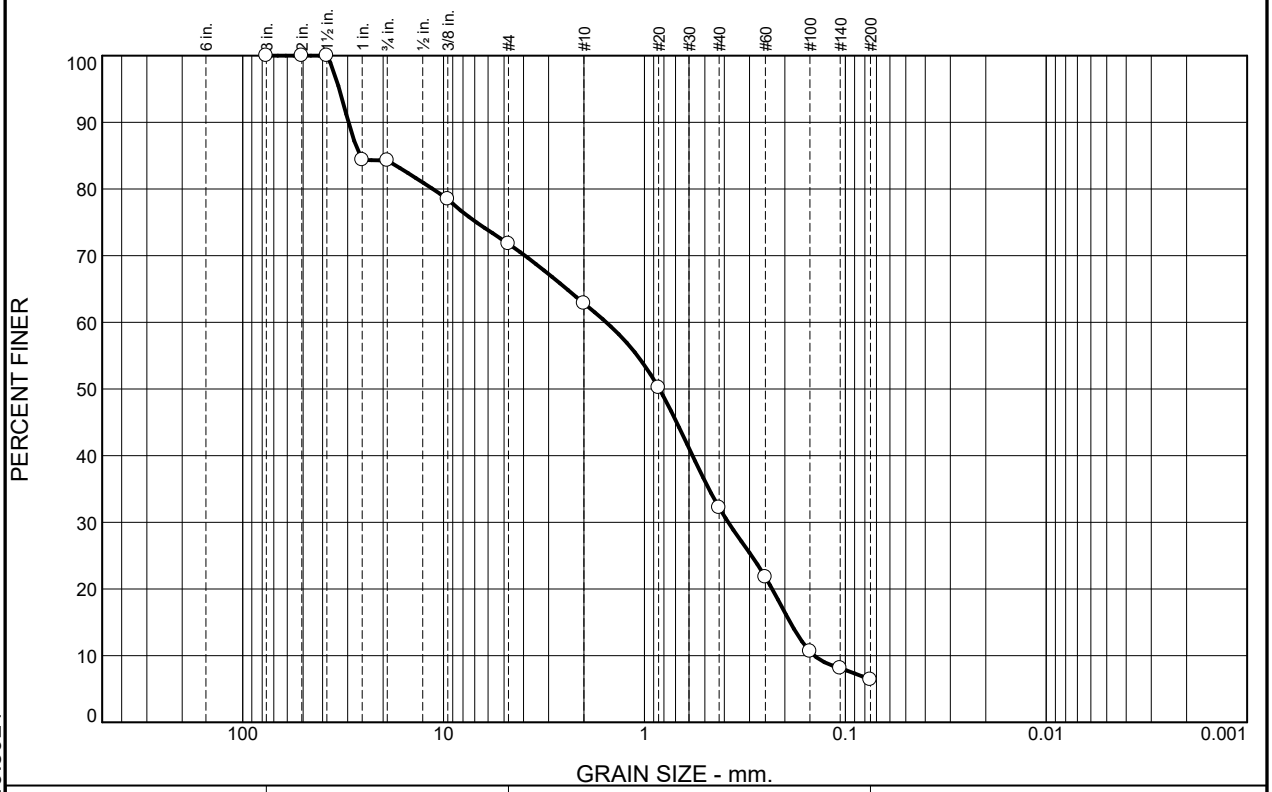
PETRA GEOSCIENCES INC.

Client: Diversified Pacific Communities
Project: Ontario Hotel

Project No: 22-398 **Figure**

Tested By: DI

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	15.7	12.5	8.9	30.7	25.8	6.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	84.4		
.75	84.3		
.375	78.5		
#4	71.8		
#10	62.9		
#20	50.2		
#40	32.2		
#60	21.8		
#100	10.6		
#140	8.1		
#200	6.4		

* (no specification provided)

Material Description

Gray Brown Gravelly Fine to Coarse Sand with Silt

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 29.6943 D_{85}= 26.0677 D_{60}= 1.5491
D_{50}= 0.8423 D_{30}= 0.3827 D_{15}= 0.1881
D_{10}= 0.1427 C_u= 10.86 C_c= 0.66

Classification

USCS= AASHTO=

Remarks

Source of Sample: 23L085 **Depth:** 13.5
Sample Number: P-2 **Date:** 4/20/2023

Laboratory:
1251 West Pomona Road, Unit #103, Corona, Ca 92882 Phone #. 714.549.8921

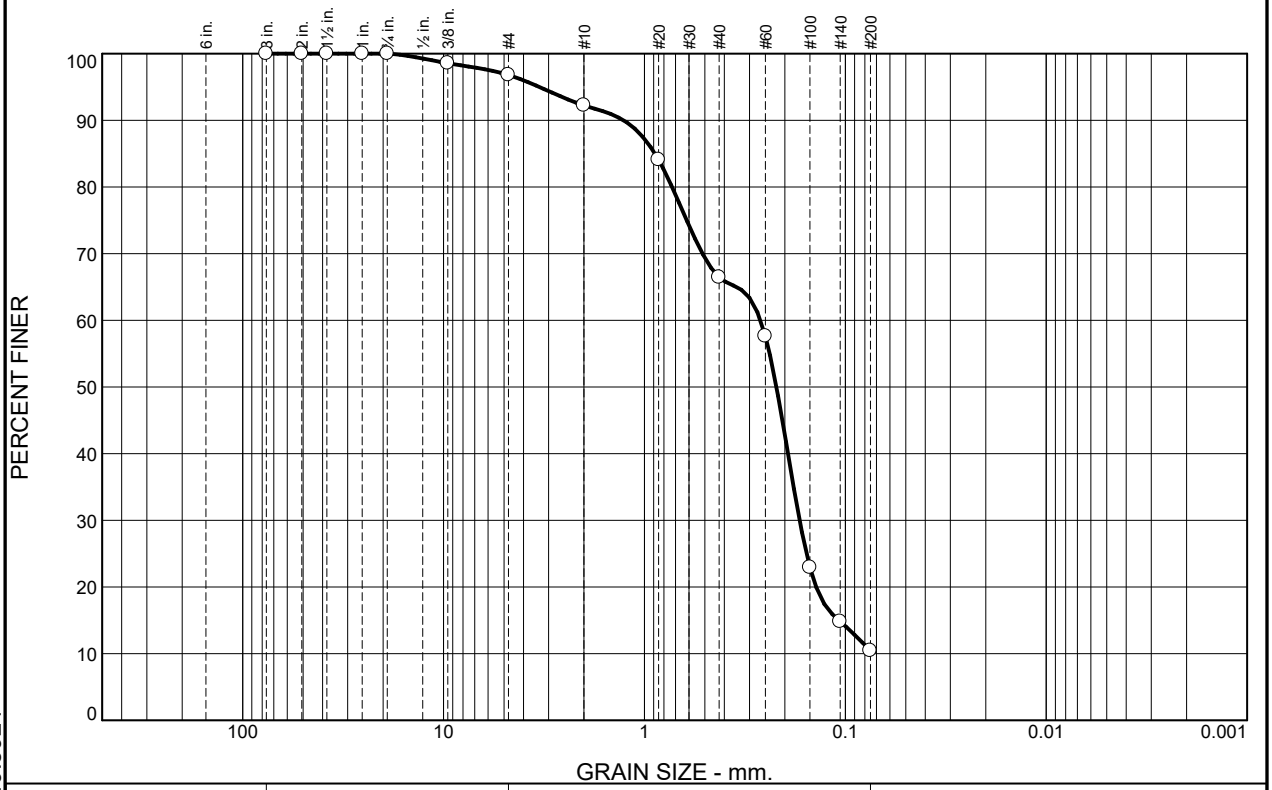
PETRA GEOSCIENCES INC.

Client: Diversified Pacific Communities
Project: Ontario Hotel

Project No: 22-398 **Figure**

Tested By: DI

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	3.2	4.6	25.7	56.0	10.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.375	98.6		
#4	96.8		
#10	92.2		
#20	84.1		
#40	66.5		
#60	57.6		
#100	22.9		
#140	14.8		
#200	10.5		

* (no specification provided)

Material Description

Olive Brown Fine to Medium Sand with Silt

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 1.2713 D_{85}= 0.8857 D_{60}= 0.2643
D_{50}= 0.2205 D_{30}= 0.1688 D_{15}= 0.1077
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Source of Sample: 23L085 **Depth:** 8.5
Sample Number: P-3 **Date:** 4/20/2023

Laboratory:
1251 West Pomona Road, Unit #103, Corona, Ca 92882 Phone #: 714.549.8921

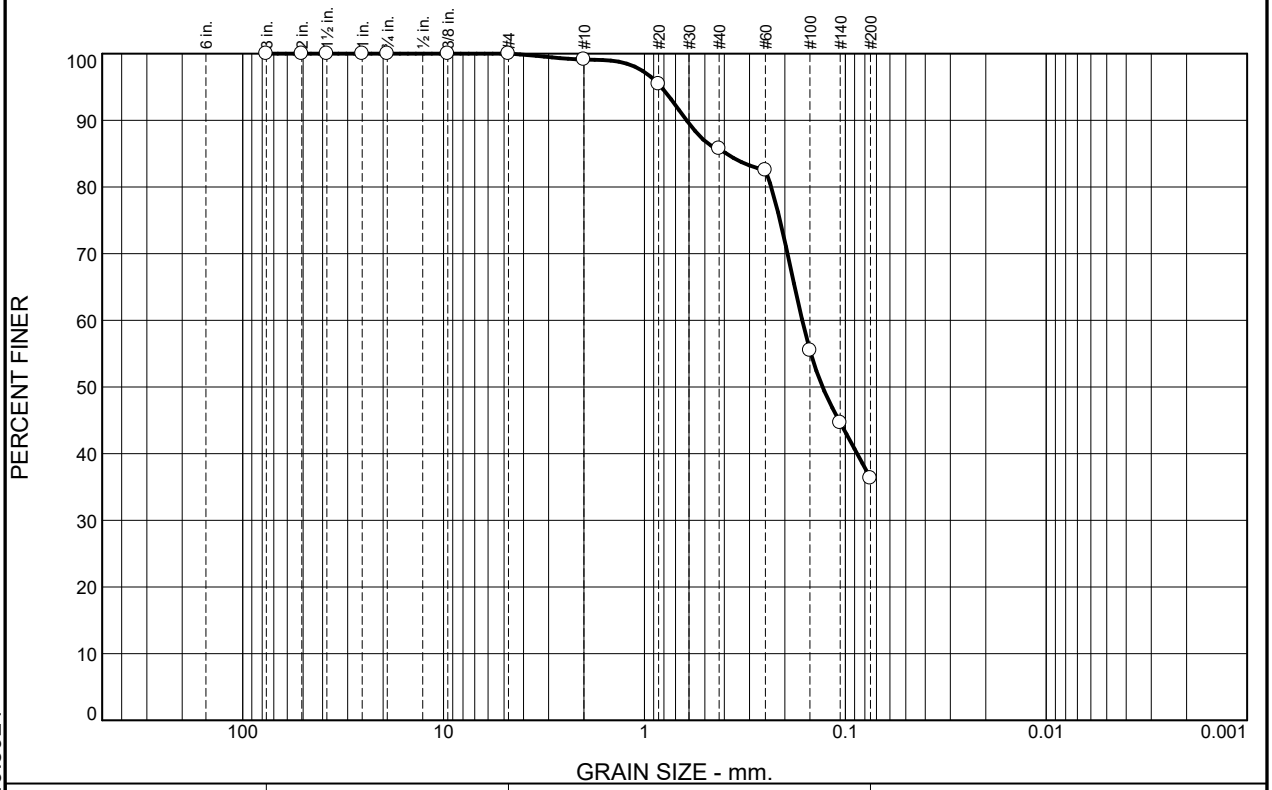
PETRA GEOSCIENCES INC.

Client: Diversified Pacific Communities
Project: Ontario Hotel

Project No: 22-398 **Figure**

Tested By: DI

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.9	13.4	49.4	36.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.375	100.0		
#4	100.0		
#10	99.1		
#20	95.4		
#40	85.7		
#60	82.5		
#100	55.5		
#140	44.6		
#200	36.3		

* (no specification provided)

Material Description

Brown Silty Fine to Medium Sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.6164 D_{85}= 0.3909 D_{60}= 0.1638
D_{50}= 0.1299 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Source of Sample: 23L085 **Depth:** 5.5
Sample Number: P-4 **Date:** 4/20/2023

Laboratory:
1251 West Pomona Road, Unit #103, Corona, Ca 92882 Phone #. 714.549.8921

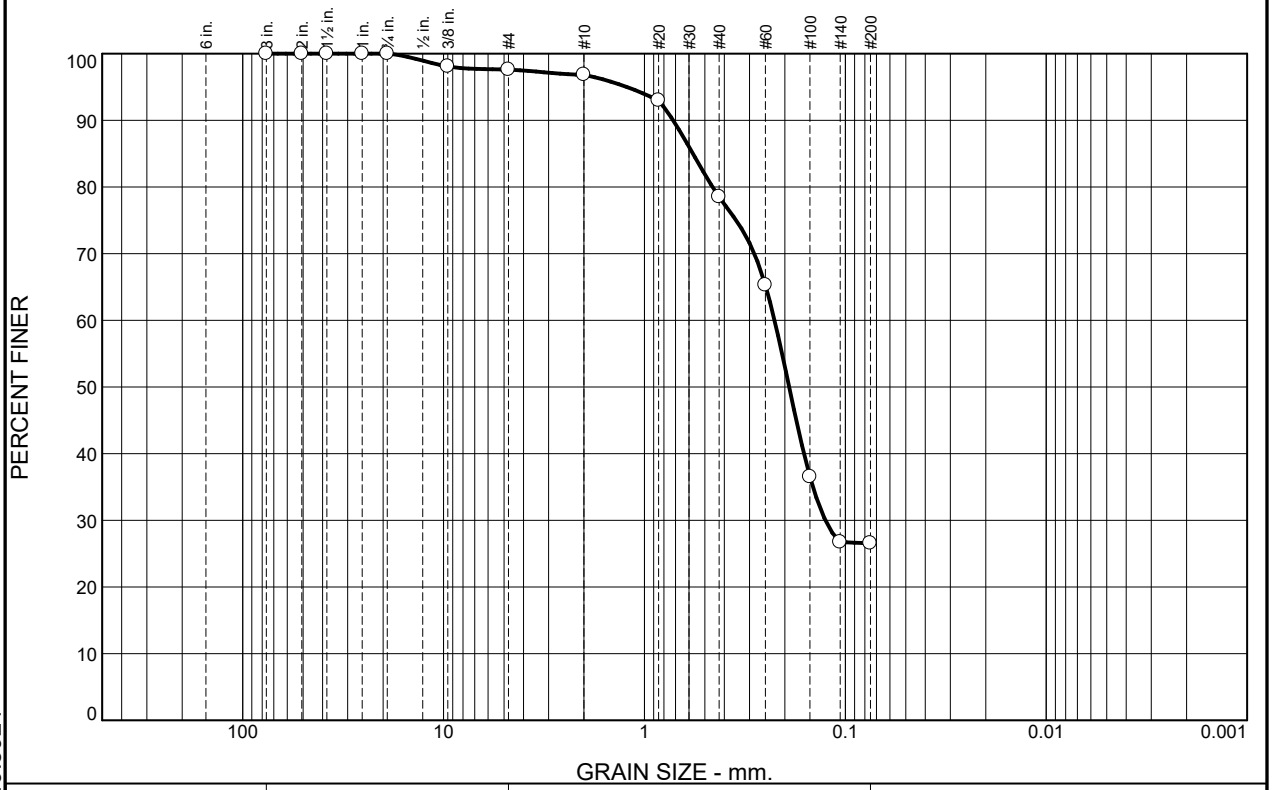
PETRA GEOSCIENCES INC.

Client: Diversified Pacific Communities
Project: Ontario Hotel

Project No: 22-398 **Figure**

Tested By: DI

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	2.4	0.8	18.3	52.0	26.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.375	98.1		
#4	97.6		
#10	96.8		
#20	93.0		
#40	78.5		
#60	65.3		
#100	36.5		
#140	26.7		
#200	26.5		

* (no specification provided)

Material Description

Brown Silty Fine to Medium Sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.7197 D_{85}= 0.5737 D_{60}= 0.2252
D_{50}= 0.1904 D_{30}= 0.1258 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Source of Sample: 23L085 **Depth:** 3.5
Sample Number: P-5 **Date:** 4/20/2023

Laboratory:
1251 West Pomona Road, Unit #103, Corona, Ca 92882 Phone #. 714.549.8921

PETRA GEOSCIENCES INC.

Client: Diversified Pacific Communities
Project: Ontario Hotel

Project No: 22-398 **Figure**

Tested By: DI

Attachment F – Educational Materials

Attachment G – 303d List

Cucamonga Creek Reach 1 (Valley Reach)	River & Stream	80121000 / 18070203	• Cadmium ◦ Source Unknown	9.6 Miles	2010	5A	2021
			• Coliform Bacteria ◦ Unknown Nonpoint Source	9.6 Miles	1998	5B	2007
			• Copper ◦ Source Unknown	9.6 Miles	2010	5A	2021
			• Lead ◦ Source Unknown	9.6 Miles	2010	5A	2021
			• Zinc ◦ Source Unknown	9.6 Miles	2010	5A	202

Attachment H – Operation and Maintenance Plan

Appendix I
Noise Impact Analysis

EMPIRE GROVES HOTEL

NOISE IMPACT ANALYSIS

CITY OF ONTARIO

PREPARED BY:

William Maddux
bmaddux@urbanxroads.com
(619) 778-1971

MAY 13, 2024

15693-02 Noise Study.docx

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LIST OF ABBREVIATED TERMS

(1)	Reference
ADT	Average Daily Traffic
CEQA	California Environmental Quality Act
CNEL	Community Noise Equivalent Level
dBA	A-weighted decibels
EPA	Environmental Protection Agency
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
INCE	Institute of Noise Control Engineering
L_{eq}	Equivalent continuous (average) sound level
L_{max}	Maximum level measured over the time interval
L_{min}	Minimum level measured over the time interval
mph	Miles per hour
NR	Noise Reduction
Project	Empire Groves Hotel
REMEL	Reference Energy Mean Emission Level
TNM	Traffic Noise Model
STC	Sound Transmission Class

EXECUTIVE SUMMARY

Urban Crossroads, Inc. has prepared this noise study to determine the noise exposure and the necessary noise abatement measures for the proposed Empire Groves Hotel development ("Project"). The Project site is located at the northeast corner of Holt Boulevard and Guasti Road in the City of Ontario. The Project includes the development of a hotel that includes 600 rooms, 2 ballrooms, a spa and fitness center, meeting and conference rooms as well as an outdoor pool and event lawn. This noise impact analysis was prepared to satisfy the City of Ontario noise level standards and ensure that adequate noise abatement measures are incorporated into the Project's development. In addition, recommendations for exterior and interior noise abatement are identified based on the latest Project site plans.

SUMMARY OF CEQA SIGNIFICANCE FINDINGS

The results of this Empire Groves Hotel Noise Impact Analysis are summarized below based on the significance criteria in Section 4 of this report consistent with Appendix G of the California Environmental Quality Act (CEQA) Guidelines. (1)(1) Table ES-1 shows the findings of significance for each potential noise and/or vibration impact under CEQA.

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS

Analysis	Report Section	Significance Findings	
		Unmitigated	Mitigated
On-Site Traffic Noise	7	*Less Than Significant*	-
On-Site Rail Noise		*Less Than Significant*	-
Aircraft Noise		*Less Than Significant*	-
Off-Site Traffic Noise	8	*Less Than Significant*	-
Operational Noise	10	*Less Than Significant*	-
Construction Noise	11	*Less Than Significant*	-
Construction Vibration		*Less Than Significant*	-

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1 INTRODUCTION

This noise analysis has been completed to determine the noise impacts associated with the development of the proposed Empire Groves Hotel ("Project"). This noise study briefly describes the proposed Project, provides information regarding noise fundamentals, sets out the local regulatory setting, presents the study methods and procedures noise analysis, evaluates the potential noise impacts from operation and construction of the Project, and as necessary, identifies mitigation measures to reduce impacts.

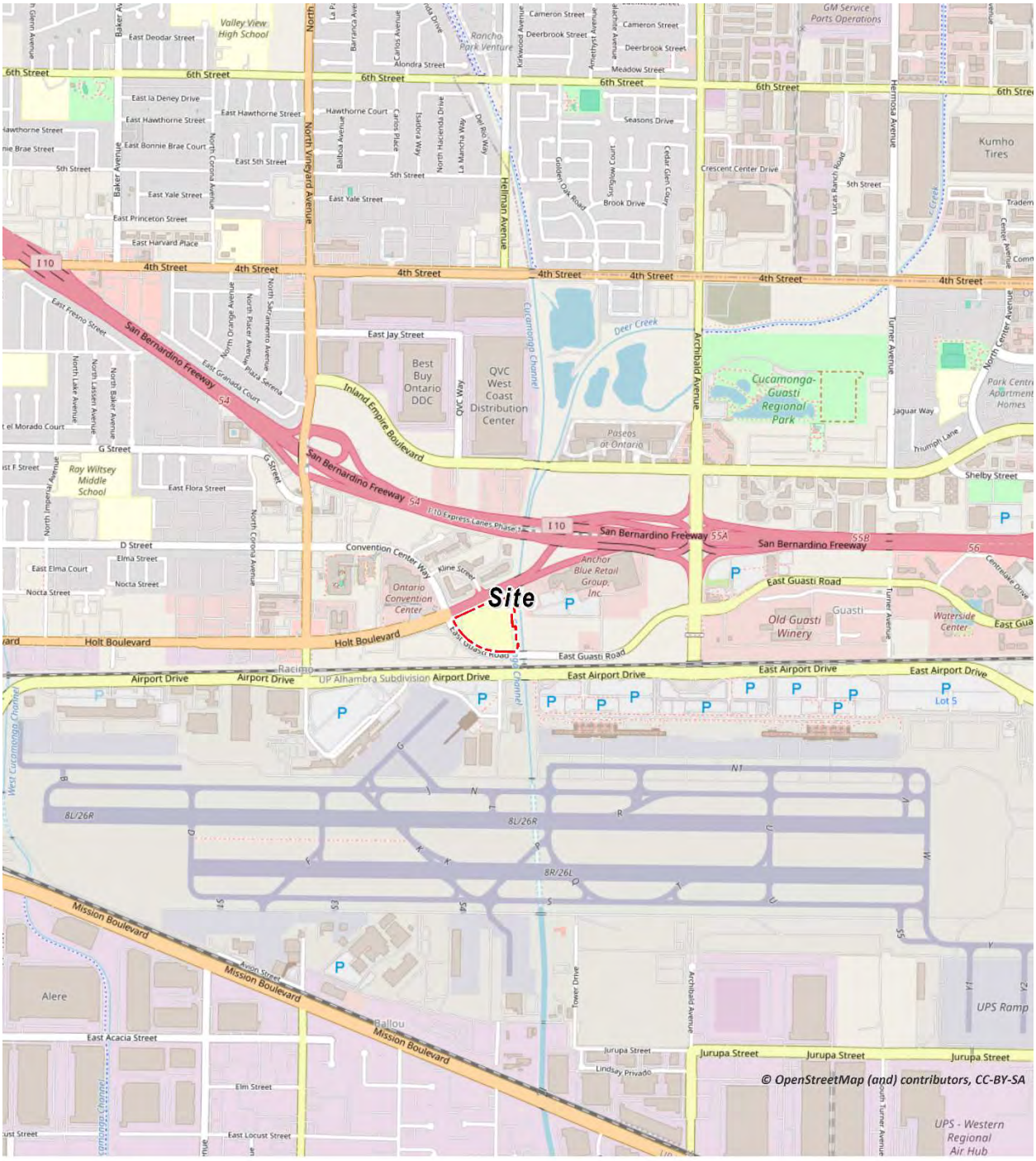
1.1 SITE LOCATION

The proposed Empire Groves Hotel site is located at the northeast corner of Holt Boulevard and Guasti Road in the City of Ontario, as shown on Exhibit 1-A. The project site is approximately 834 feet south of Interstate 10, and approximately 325 feet north of Ontario International Airport.

1.2 PROJECT DESCRIPTION

The Project consists of a hotel that includes 600 rooms, 2 ballrooms, a spa and fitness center, meeting and conference rooms as well as an outdoor pool and event lawn on 10.43 acres. A preliminary site plan for the proposed hotel development is shown on Exhibit 1-B.

EXHIBIT 1-A: LOCATION MAP



LEGEND:

N

Site Boundary

EXHIBIT 1-B: SITE PLAN



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2 FUNDAMENTALS

Noise is simply defined as "unwanted sound." Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm or when it has adverse effects on health. Noise is measured on a logarithmic scale of sound pressure level known as a decibel (dB). A-weighted decibels (dBA) approximate the subjective response of the human ear to broad frequency noise source by discriminating against very low and very high frequencies of the audible spectrum. They are adjusted to reflect only those frequencies which are audible to the human ear. Exhibit 2-A presents a summary of the typical noise levels and their subjective loudness and effects that are described in more detail below.

EXHIBIT 2-A: TYPICAL NOISE LEVELS

COMMON OUTDOOR ACTIVITIES	COMMON INDOOR ACTIVITIES	A - WEIGHTED SOUND LEVEL dBA	SUBJECTIVE LOUDNESS	EFFECTS OF NOISE
THRESHOLD OF PAIN		140	INTOLERABLE OR DEAFENING	HEARING LOSS
NEAR JET ENGINE		130		
		120		
JET FLY-OVER AT 300m (1000 ft)	ROCK BAND	110		
LOUD AUTO HORN		100	VERY NOISY	
GAS LAWN MOWER AT 1m (3 ft)		90		
DIESEL TRUCK AT 15m (50 ft), at 80 km/hr (50 mph)	FOOD BLENDER AT 1m (3 ft)	80		SPEECH INTERFERENCE
NOISY URBAN AREA, DAYTIME	VACUUM CLEANER AT 3m (10 ft)	70	LOUD	
HEAVY TRAFFIC AT 90m (300 ft)	NORMAL SPEECH AT 1m (3 ft)	60		
QUIET URBAN DAYTIME	LARGE BUSINESS OFFICE	50	MODERATE	SLEEP DISTURBANCE
QUIET URBAN NIGHTTIME	THEATER, LARGE CONFERENCE ROOM (BACKGROUND)	40		
QUIET SUBURBAN NIGHTTIME	LIBRARY	30	FAINT	NO EFFECT
QUIET RURAL NIGHTTIME	BEDROOM AT NIGHT, CONCERT HALL (BACKGROUND)	20		
	BROADCAST/RECORDING STUDIO	10	VERY FAINT	
LOWEST THRESHOLD OF HUMAN HEARING	LOWEST THRESHOLD OF HUMAN HEARING	0		

Source: Environmental Protection Agency Office of Noise Abatement and Control, Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety (EPA/ONAC 550/9-74-004) March 1974.

2.1 RANGE OF NOISE

Since the range of intensities that the human ear can detect is so large, the scale frequently used to measure intensity is a scale based on multiples of 10, the logarithmic scale. The scale for measuring intensity is the decibel scale. Each interval of 10 decibels indicates a sound energy ten times greater than before, which is perceived by the human ear as being roughly twice as loud. (2) The most common sounds vary between 40 dBA (very quiet) to 100 dBA (very loud). Normal conversation at three feet is roughly at 60 dBA, while loud jet engine noises equate to 110 dBA

at approximately 100 feet, which can cause serious discomfort. (3) Another important aspect of noise is the duration of the sound and the way it is described and distributed in time.

2.2 NOISE DESCRIPTORS

Environmental noise descriptors are generally based on averages, rather than instantaneous, noise levels. The most used figure is the equivalent level (L_{eq}). Equivalent sound levels are not measured directly but are calculated from sound pressure levels typically measured in A-weighted decibels (dBA). The equivalent sound level (L_{eq}) represents a steady state sound level containing the same total energy as a time varying signal over a given sample period (typically one hour) and is commonly used to describe the "average" noise levels within the environment.

Peak hour or average noise levels, while useful, do not completely describe a given noise environment. Noise levels lower than peak hour may be disturbing if they occur during times when quiet is most desirable, namely evening and nighttime (sleeping) hours. To account for this, the Community Noise Equivalent Level (CNEL), representing a composite 24-hour noise level is utilized. The CNEL is the weighted average of the intensity of a sound, with corrections for time of day, and averaged over 24 hours. The time-of-day corrections require the addition of 5 decibels to dBA L_{eq} sound levels in the evening from 7:00 p.m. to 10:00 p.m., and the addition of 10 decibels to dBA L_{eq} sound levels at night between 10:00 p.m. and 7:00 a.m. These additions are made to account for the noise sensitive time periods during the evening and night hours when sound appears louder. CNEL does not represent the actual sound level heard at any time, but rather represents the total sound exposure. The City of Ontario relies on the 24-hour CNEL level to assess land use compatibility with transportation related noise sources.

2.3 SOUND PROPAGATION

When sound propagates over a distance, it changes in level and frequency content. The way noise reduces with distance depends on the following factors.

2.3.1 GEOMETRIC SPREADING

Sound from a localized source (i.e., a stationary point source) propagates uniformly outward in a spherical pattern. The sound level attenuates (or decreases) at a rate of 6 dB for each doubling of distance from a point source. Highways consist of several localized noise sources on a defined path and hence can be treated as a line source, which approximates the effect of several point sources. Noise from a line source propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of 3 dB for each doubling of distance from a line source. (2)

2.3.2 GROUND ABSORPTION

The propagation path of noise from a highway to a receiver is usually very close to the ground. Noise attenuation from ground absorption and reflective wave canceling adds to the attenuation associated with geometric spreading. Traditionally, the excess attenuation has also been expressed in terms of attenuation per doubling of distance. This approximation is usually

sufficiently accurate for distances of less than 200 ft. For acoustically hard sites (i.e., sites with a reflective surface between the source and the receiver, such as a parking lot or body of water), no excess ground attenuation is assumed. For acoustically absorptive or soft sites (i.e., those sites with an absorptive ground surface between the source and the receiver such as soft dirt, grass, or scattered bushes and trees), an excess ground attenuation value of 1.5 dB per doubling of distance is normally assumed. When added to the cylindrical spreading, the excess ground attenuation results in an overall drop-off rate of 4.5 dB per doubling of distance from a line source. (4)

2.3.3 ATMOSPHERIC EFFECTS

Receivers located downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels. Sound levels can be increased at large distances (e.g., more than 500 feet) due to atmospheric temperature inversion (i.e., increasing temperature with elevation). Other factors such as air temperature, humidity, and turbulence can also have significant effects. (2)

2.3.4 SHIELDING

A large object or barrier in the path between a noise source and a receiver can substantially attenuate noise levels at the receiver. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Shielding by trees and other such vegetation typically only has an "out of sight, out of mind" effect. That is, the perception of noise impact tends to decrease when vegetation blocks the line-of-sight to nearby residents. However, for vegetation to provide a substantial, or even noticeable, noise reduction, the vegetation area must be at least 15 feet in height, 100 feet wide and dense enough to completely obstruct the line-of sight between the source and the receiver. This size of vegetation may provide up to 5 dBA of noise reduction. The Federal Highway Administration (FHWA) does not consider the planting of vegetation to be a noise abatement measure (4).

2.4 NOISE CONTROL

Noise control is the process of obtaining an acceptable noise environment for an observation point or receiver by controlling the noise source, transmission path, receiver, or all three. This concept is known as the source-path-receiver concept. In general, noise control measures can be applied to these three elements.

2.5 NOISE BARRIER ATTENUATION

Effective noise barriers can reduce noise levels by up to 10 to 15 dBA, cutting the loudness of traffic noise in half. A noise barrier is most effective when placed close to the noise source or receiver. Noise barriers, however, do have limitations. For a noise barrier to work, it must be high enough and long enough to block the path of the noise source (4).

2.6 LAND USE COMPATIBILITY WITH NOISE

Some land uses are more tolerant of noise than others. For example, schools, hospitals, churches, and residences are more sensitive to noise intrusion than are commercial or industrial developments and related activities. As ambient noise levels affect the perceived amenity or livability of a development, so too can the mismanagement of noise impacts impair the economic health and growth potential of a community by reducing the area's desirability as a place to live, shop and work. For this reason, land use compatibility with the noise environment is an important consideration in the planning and design process. The FHWA encourages State and Local government to regulate land development in such a way that noise-sensitive land uses are either prohibited from being located adjacent to a highway, or that the developments are planned, designed, and constructed in such a way that noise impacts are minimized (5).

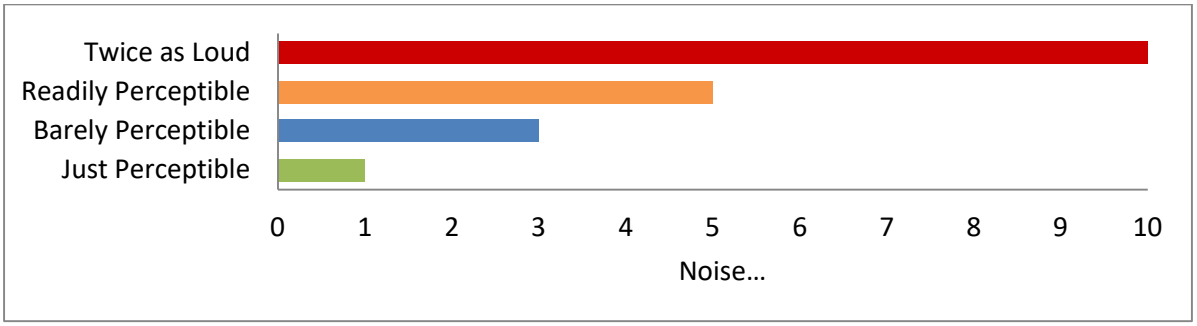
2.7 COMMUNITY RESPONSE TO NOISE

Community responses to noise may range from registering a complaint by telephone or letter, to initiating court action, depending upon everyone's susceptibility to noise and personal attitudes about noise. Several factors are related to the level of community annoyance including:

- Fear associated with noise producing activities;
- Socio-economic status and educational level;
- Perception that those affected are being unfairly treated;
- Attitudes regarding the usefulness of the noise-producing activity;
- Belief that the noise source can be controlled.

Approximately ten percent of the population has a very low tolerance for noise and will object to any noise not of their making. Consequently, even in the quietest environment, some complaints will occur. Twenty-five percent of the population will not complain even in very severe noise environments. Thus, a variety of reactions can be expected from people exposed to any given noise environment. (6) Surveys have shown that about ten percent of the people exposed to traffic noise of 60 dBA will report being highly annoyed with the noise, and each increase of one dBA is associated with approximately two percent more people being highly annoyed. When traffic noise exceeds 60 dBA or aircraft noise exceeds 55 dBA, people may begin to complain. (6) Despite this variability in behavior on an individual level, the population can be expected to exhibit the following responses to changes in noise levels as shown on Exhibit 2-B. A change of 3 dBA is considered *barely perceptible*, and changes of 5 dBA are considered *readily perceptible*. (4)

EXHIBIT 2-B: NOISE LEVEL INCREASE PERCEPTION



2.8 VIBRATION

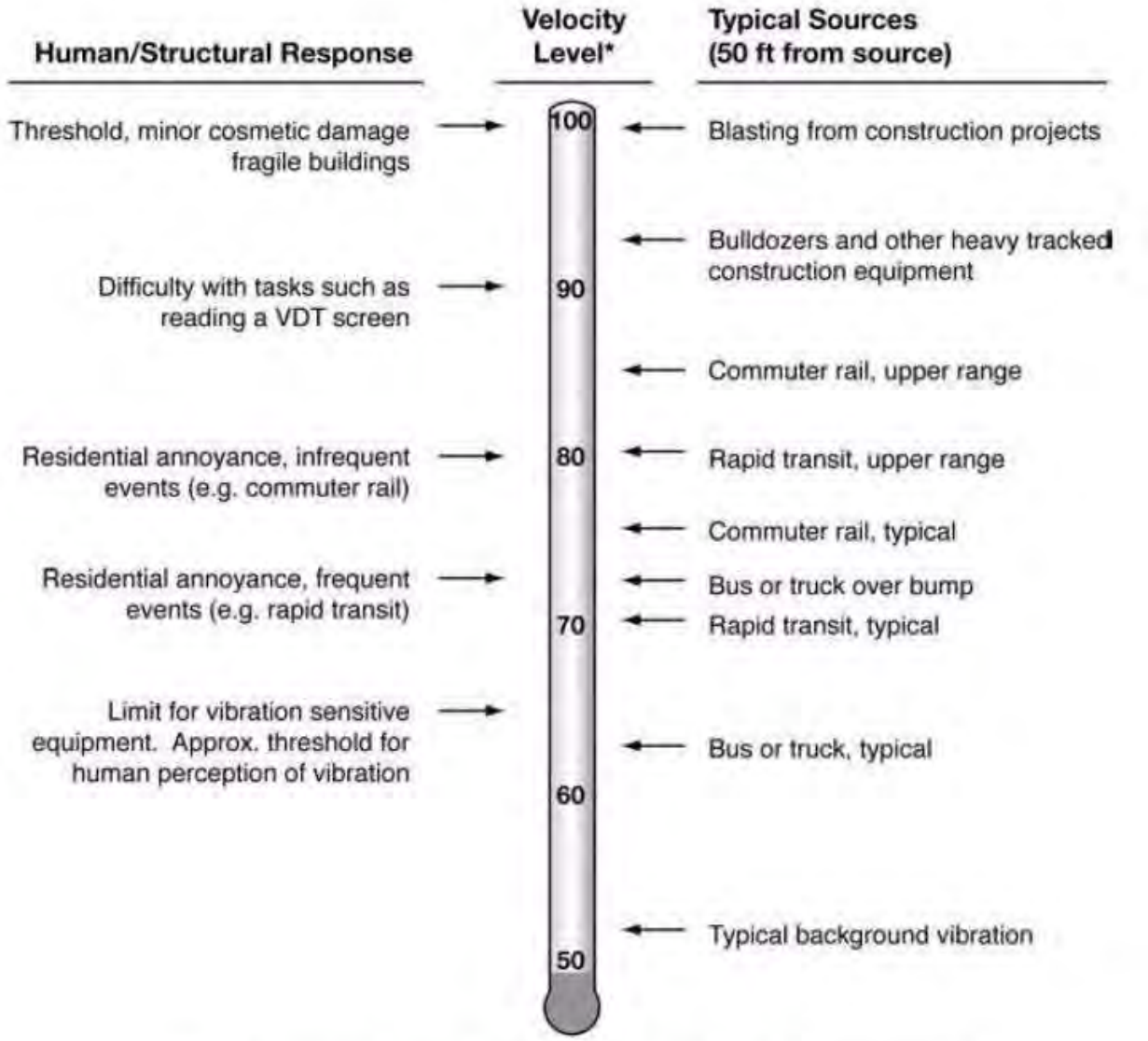
Per the Federal Transit Administration (FTA) *Transit Noise and Vibration Impact Assessment Manual* (7), vibration is the periodic oscillation of a medium or object. Vibration is the periodic oscillation of a medium or object. The rumbling sound caused by the vibration of room surfaces is called structure-borne noise. Sources of ground-borne vibrations include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or human-made causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, such as factory machinery, or transient, such as explosions. As is the case with airborne sound, ground-borne vibrations may be described by amplitude and frequency.

There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings but is not always suitable for evaluating human response (annoyance) because it takes some time for the human body to respond to vibration signals. Instead, the human body responds to average vibration amplitude often described as the root mean square (RMS). The RMS amplitude is defined as the average of the squared amplitude of the signal and is most frequently used to describe the effect of vibration on the human body. However, the RMS amplitude and PPV are related mathematically, and the RMS amplitude can be calculated from the PPV. The RMS amplitude is approximately 70% of the PPV (in/sec) (8). Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration. Sensitive receivers for vibration include structures (especially older masonry structures), people (especially residents, the elderly, and sick), and vibration-sensitive equipment and/or activities.

While not universally accepted, vibration decibel notation (VdB) is used by the FTA in their guidance manual to describe vibration levels and provide a background of common vibration levels (9). As stated in the FTA guidance manual, the background vibration-velocity level in residential areas is generally 50 VdB. Ground-borne vibration is normally perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground-borne vibration is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background

vibration-velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings. Exhibit 2-C illustrates common vibration sources and the human and structural response to ground-borne vibration.

EXHIBIT 2-C: TYPICAL LEVELS OF GROUND-BORNE VIBRATION



Source: Federal Transit Administration (FTA) Transit Noise Impact and Vibration Assessment Manual

3 REGULATORY SETTING

The federal government, the State of California, various county governments, and most municipalities in the state have established standards and ordinances to control noise. In most areas, automobile and truck traffic is the major source of environmental noise. Traffic activity generally produces an average sound level that remains constant with time. Air and rail traffic, and commercial and industrial activities are also major sources of noise in some areas. Federal, state, and local agencies regulate different aspects of environmental noise. Federal and state agencies generally set noise standards for mobile sources such as aircraft and motor vehicles, while regulation of stationary sources is left to local agencies.

3.1 STATE OF CALIFORNIA NOISE REQUIREMENTS

The State of California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards, and provides guidance for local land use compatibility. State law requires that each county and city adopt a General Plan that includes a Noise Element which is to be prepared per guidelines adopted by the Governor's Office of Planning and Research (OPR). (10) The purpose of the Noise Element is to *limit the exposure of the community to excessive noise levels*. In addition, the California Environmental Quality Act (CEQA) requires that all known environmental effects of a project be analyzed, including environmental noise impacts.

3.2 STATE OF CALIFORNIA BUILDING CODE

The State of California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards, and provides guidance for local land use compatibility. State law requires that each county and city adopt a General Plan that includes a Noise Element which is to be prepared per guidelines adopted by the Governor's Office of Planning and Research (OPR). (11) The purpose of the Noise Element is to *limit the exposure of the community to excessive noise levels*. In addition, the California Environmental Quality Act (CEQA) requires that all known environmental effects of a project be analyzed, including environmental noise impacts.

3.2.1 RESIDENTIAL CONSTRUCTION

The State of California's noise insulation standards for all residential units are codified in the California Code of Regulations (CCR), Title 24, Building Standards Administrative Code, Chapter 12, Section 1206. These noise standards are applied to new construction that contains dwelling units or sleeping units, such as residential and hotel or motel uses, in California for controlling interior noise levels resulting from exterior noise sources. For new buildings, the acceptable interior noise limit is 45 dBA CNEL in habitable rooms (12).

3.2.2 NON-RESIDENTIAL CONSTRUCTION

The State of California's Green Building Standards Code contains mandatory measures for non-residential building construction in Section 5.507 on Environmental Comfort. (13) These noise

standards are applied to new construction in California for controlling interior noise levels resulting from exterior noise sources. The regulations specify that acoustical studies must be prepared when non-residential structures are developed in areas where the exterior noise levels exceed 65 dBA CNEL, such as within a noise contour of an airport, freeway, railroad, and other noise source. If the development falls within an airport or freeway 65 dBA CNEL noise contour, buildings shall be construction to provide an interior noise level environment attributable to exterior sources that does not exceed an hourly equivalent level of 50 dBA L_{eq} in occupied areas during any hour of operation.

3.3 CITY OF ONTARIO GENERAL PLAN NOISE ELEMENT

The City of Ontario General Plan (Policy Plan) identifies several policies to minimize the impacts of excessive noise levels throughout the community. Policy Plan Section S4, Noise Hazards, establishes a goal of maintaining *an environment where noise does not adversely affect the public's health, safety, and welfare.* (14) To satisfy this goal, the Policy Plan identifies seven policies related to: noise mitigation; coordination with transportation authorities; noise mitigation; truck traffic; roadway design; airport noise compatibility and rail noise mitigation. The noise criteria identified on Table 5-13-3 of The Ontario Plan 2050 Final Supplemental Environmental Impact Report (FSEIR) (15) provide guidelines to evaluate land use compatibility within various noise environments. Table 5-13-3 is reproduced here as Exhibit 3-A *Ontario Noise Level Exposure and Land Use Compatibility Guidelines*.

EXHIBIT 3-A: ONTARIO NOISE LEVEL EXPOSURE AND LAND USE COMPATIBILITY GUIDELINES

Land Use Categories		Community Noise Equivalent Level (CNEL)			
Category	Uses	Clearly Acceptable[1]	Normally Acceptable[2]	Normally Unacceptable[3]	Clearly Unacceptable[4]
Residential/Lodging	Single Family/Duplex	<60	60-65	65-70	70-85
	Multifamily	<60	60-65	65-75	75-85
	Mobile Homes	<60	60-65	-	65-85
	Hotel/Motel	<65	65-70	70-80	80-85
Public/Institutional	Schools/Hospitals	<60	60-65	65-70	70-85
	Churches/Libraries	<60	60-65	65-70	70-85
	Auditoriums/Concert Halls	<55	55-60	60-70	70-85
Commercial	Offices	<65	65-75	75-80	80-85
	Retail	<70	70-75	75-80	80-85
Industrial	Manufacturing	<70	70-75	75-85	-
	Warehousing	<70	70-80	80-85	-
Recreational/Open Space	Parks/Playgrounds	<65	65-70	70-75	75-85
	Golf Course/Riding Stables	<65	65-70	70-75	75-85
	Outdoor Spectator Sports	<60	60-65	65-70	
	Outdoor Music Shells/Amphitheaters	-	<60	60-65	65-85
	Livestock/Wildlife Preserves	<70	-	70-75	75-85
	Crop Agriculture	<55-85	-	-	-

Source: Ontario 2010.
1 No special noise insulation required, assuming buildings of normal conventional construction.
2 Acoustical reports will be required for major new residential construction. Conventional construction with closed windows and fresh air supply systems of air conditions will normally suffice.
3 New construction should be discouraged. Noise/aviation easements required for all new construction. If new construction does proceed, a detailed analysis of noise reduction requirements must be made, and necessary noise insulation features included.
4 No new construction should be permitted.

Source: The Ontario Plan 2050 Draft SEIR (Table 5.13-3).

3.3 OPERATIONAL NOISE STANDARDS

To analyze noise impacts originating from a designated fixed location or private property such as the Empire Groves Hotel, stationary-source (operational) noise levels are evaluated against standards established under a City's Municipal Code. The City of Ontario requires that noise from new stationary sources in the City comply with the City's Noise Ordinance, which limits the acceptable noise at the property line of the impacted property, to reduce nuisances to sensitive land uses. Compliance with the City's Noise Ordinance would result in noise levels that are acceptable to the City and would result in less than significant noise impacts from stationary sources. The City of Ontario Municipal Code, Title 5, Chapter 29 noise standards are included in Appendix 3.1.

Section 5-29.04(a) identifies the allowable daytime and nighttime ambient exterior noise standards for each land use type. For Manufacturing and Industrial land uses (Noise Zone V), such as the Project, ambient exterior noise levels may not exceed 65 dBA L_{eq} during the daytime hours (7:00 a.m. to 10:00 p.m.) and may not exceed 60 dBA L_{eq} during the nighttime hours (10:00 p.m. to 7:00 a.m.). For residential land uses (Noise Zone I), ambient exterior noise levels may not exceed 65 dBA L_{eq} during the daytime hours (7:00 a.m. to 10:00 p.m.) and may not exceed 45 dBA L_{eq} during the nighttime hours (10:00 p.m. to 7:00 a.m.) (16). The lower noise level standard shall apply on the boundary between two (2) different noise zones. If the ambient noise level exceeds the resulting standard, the ambient noise level shall be the standard. The maximum acceptable Project-related operational noise levels received at off-site land uses in the City of Ontario are identified on Table 3-1.

TABLE 3-1: OPERATIONAL NOISE STANDARDS

Noise Zone	Land Use	Exterior Noise Levels (dBA Leq)[2]	
		Daytime (7am-10pm)	Nighttime (10pm-7am)
I	Single-Family Residential	65	45
II	Multi-Family Residential	65	50
III	Commercial	65	60
IV	Residential Mixed-Use	70	70
V	Manufacturing and Industrial	70	70

[1] Source: Section 5-29.04 of the City of Ontario Municipal Code (Appendix 3.1).
[2] L_{eq} represents a steady state sound level containing the same total energy as a time varying signal over a given period.

3.4 CONSTRUCTION NOISE STANDARDS

The City of Ontario has set restrictions to control noise impacts associated with construction. Section 5-29.09 of the Municipal Code states: *No person, while engaged in construction, remodeling, digging, grading, demolition or any other related building activity, shall operate any tool, equipment or machine in a manner that produces loud noise that disturbs a person of normal sensitivity who works or resides in the vicinity, or a Police or Code Enforcement Officer, on any weekday except between the hours of 7:00 a.m. and 6:00 p.m. or on Saturday or Sunday between*

the hours of 9:00 a.m. and 6:00 p.m. (16) While the City Section 5-29.09 stablishes limits to the hours during which construction activity may take place, it does not identify specific noise level limits for construction noise levels at potentially affected receiver locations for CEQA analysis purposes.

Construction noise would be considered significant if construction activities occurring outside of the hours specified (7:00 AM and 6:00 PM weekdays and 9:00 AM to 6:00 PM weekends, excluding federal holidays) or if construction activities substantially elevate the ambient noise environment at noise-sensitive uses for a substantial period. It is assumed that the Modified Project construction activities would comply with the City's hour of activity restrictions, thereby precluding construction activities during noise-sensitive time periods. However, neither the City of Ontario General Plan Noise Element or Municipal Codes establish numeric maximum acceptable construction source noise levels at potentially affected receivers, which would allow for a quantified determination of what CEQA constitutes a *substantial temporary or permanent increase in ambient noise levels*. Therefore, a numerical construction threshold based on Federal Transit Administration (FTA) *Transit Noise and Vibration Impact Assessment Manual* is used for analysis of daytime construction impacts. The FTA considers a daytime exterior construction noise level of 80 dBA L_{eq} as a reasonable threshold for noise sensitive land uses and 85 dBA L_{eq} for non-noise sensitive commercial land uses. (17)

3.5 VIBRATION STANDARDS

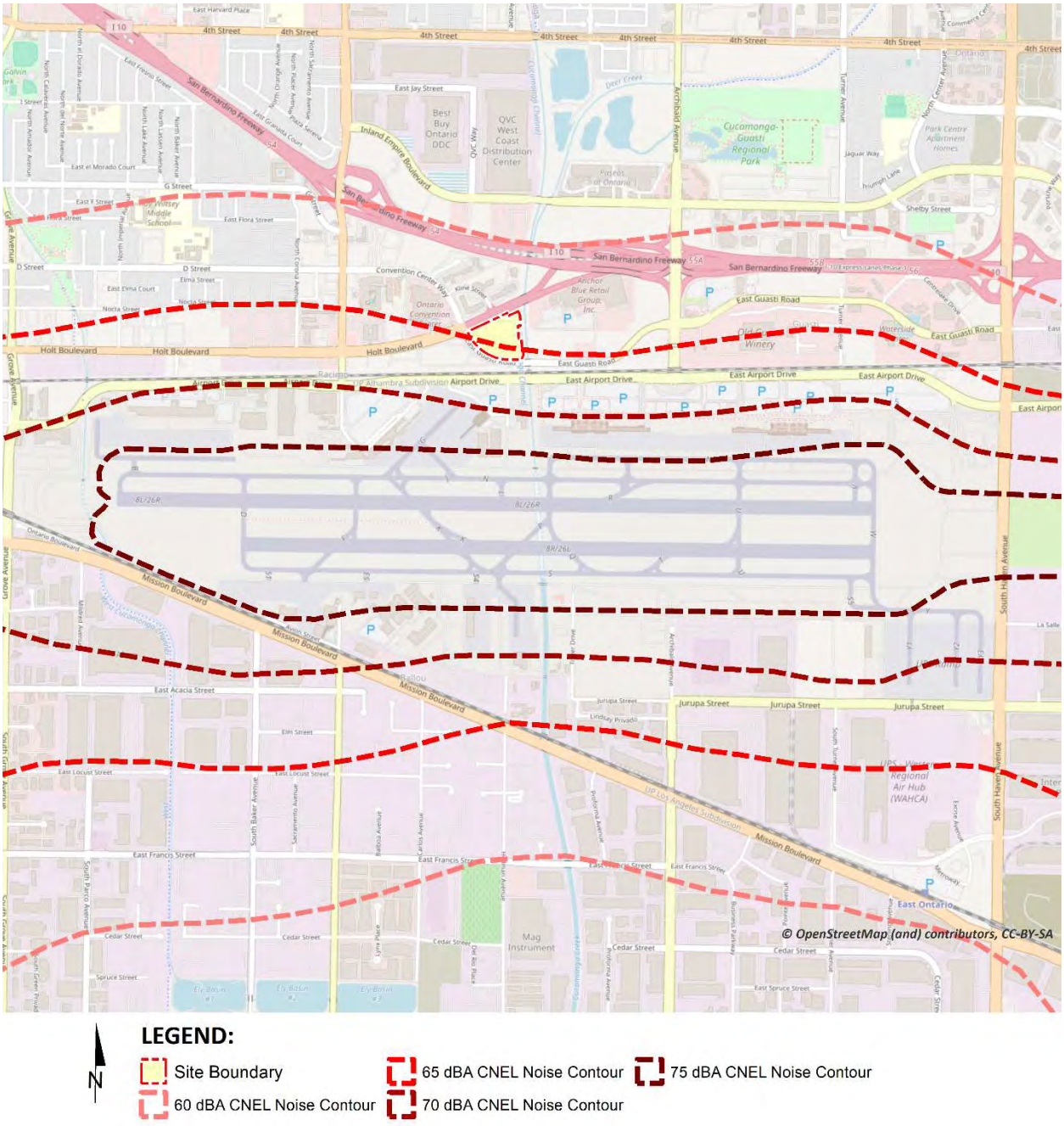
To analyze vibration impacts originating from the operation and construction of Empire Groves Hotel, vibration-generating activities are appropriately evaluated against standards established under a City's Municipal Code, if such standards exist. However, the City of Ontario does not identify specific vibration level limits. Therefore, for analysis purposes, the Caltrans *Transportation and Construction Vibration Guidance Manual* (8), vibration damage criteria are used in this noise study to assess potential vibration-related impacts at adjacent building locations. The nearest buildings adjacent to the Project site can best be described as "modern industrial/commercial buildings" with a maximum acceptable continuous vibration threshold of 0.5 PPV (in/sec).

3.6 AIRPORT LAND USE COMPATIBILITY

The Project site is located approximately 350 feet north of the Ontario International Airport (ONT). This places the Project site within the ONT Airport Influence Area according to Policy Map 2-1 of the *Ontario International Airport Land Use Compatibility Plan (ONT ALUCP).* The ONT ALUCP was amended July 2018 to promote compatibility between airport and the land uses that surround it (18). Since the Project site is located within the ONT Airport Influence Area, the Project is subject to the Noise Criteria established on Table 2-3 in the ONT ALUCP (Appendix 3.2). As shown on Exhibit 3-B, the Project site is located within the 60 to 70 dBA CNEL airport noise level contours. According to Table 2-3 of the ONT ALUCP, the short-term lodging land uses located within the 60 to 70 dBA CNEL, are considered a conditionally compatible land use which must demonstrate compliance with the interior noise standards of 45 CNEL for residential and 50 CNEL for . For "*conditional"* land use*,* the *building structure must be capable of attenuating*

exterior noise from all noise sources to the indoor CNEL indicated by the number in the cell (either 45 or 50), and *caution should be exercised with regard to noise-sensitive outdoor uses; these uses are likely to be disrupted by aircraft noise events; acceptability is dependent upon characteristics of the specific use*. The ONT ALUCP identifies the noise-sensitive uses as *residential, hospitals, nursing facilities, intermediate care facilities, educational facilities, libraries, museums, places of worship, child-care facilities, and certain types of passive recreational parks and open space*.

EXHIBIT 3-B: ONTARIO INTERNATIONAL AIRPORT NOISE LEVEL CONTOURS AND THE PROJECT SITE



4 SIGNIFICANCE CRITERIA

The following significance criteria are based on currently adopted guidance provided by Appendix G of the California Environmental Quality Act (CEQA) Guidelines. (19) For the purposes of this report, impacts would be potentially significant if the Project results in or causes:

A. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

B. Generation of excessive ground-borne vibration or ground-borne noise levels?

C. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

4.1 NOISE LEVEL INCREASES (THRESHOLD A)

Noise level increases resulting from the Project are evaluated based on the Appendix G CEQA Guidelines described above at the closest sensitive receiver locations. Under CEQA, consideration must be given to the magnitude of the increase, the existing baseline ambient noise levels, and the location of noise-sensitive receivers to determine if a noise increase represents a significant adverse environmental impact. This approach recognizes *that there is no single noise increase that renders the noise impact significant.* (20) This is primarily because of the wide variation in individual thresholds of annoyance and differing individual experiences with noise. Thus, an important way of determining a person's subjective reaction to a new noise is the comparison of it to the existing environment to which one has adapted—the so-called *ambient* environment. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will typically be judged.

4.1.1 NOISE-SENSITIVE RECEIVERS

The Federal Interagency Committee on Noise (FICON) (21) developed guidance to be used for the assessment of project-generated increases in noise levels that consider the ambient noise level. The FICON recommendations are based on studies that relate aircraft noise levels to the percentage of persons highly annoyed by aircraft noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, these recommendations are often used in environmental noise impact assessments involving the use of cumulative noise exposure metrics, such as the average-daily noise level (CNEL) and equivalent continuous noise level (L_{eq}).

As previously stated, the approach used in this noise study recognizes *that there is no single noise increase that renders the noise impact significant*, based on a 2008 California Court of Appeal ruling on Gray v. County of Madera. (20) For example, if the ambient noise environment is quiet (<60 dBA) and the new noise source greatly increases the noise levels, an impact may occur if the noise criteria may be exceeded. Therefore, for this analysis, a *readily perceptible* 5 dBA or greater project-related noise level increase is considered a significant impact when the without project noise levels are below 60 dBA. Per the FICON, in areas where the without project noise levels

range from 60 to 65 dBA, a 3 dBA *barely perceptible* noise level increase appears to be appropriate for most people. When the without project noise levels already exceed 65 dBA, any increase in community noise louder than 1.5 dBA or greater is considered a significant impact if the noise criteria for a given land use is exceeded, since it likely contributes to an existing noise exposure exceedance. The FICON guidance provides an established source of criteria to assess the impacts of substantial temporary or permanent increase in baseline ambient noise levels. Based on the FICON criteria, the amount to which a given noise level increase is considered acceptable is reduced when the without Project (baseline) noise levels are already shown to exceed certain land-use specific exterior noise level criteria. The specific levels are based on typical responses to noise level increases of 5 dBA or *readily perceptible*, 3 dBA or *barely perceptible*, and 1.5 dBA depending on the underlying without Project noise levels for noise-sensitive uses. These levels of increases and their perceived acceptance are consistent with guidance provided by both the Federal Highway Administration (22 p. 9) and Caltrans (23 p. 2_48).

4.1.2 NON-NOISE-SENSITIVE RECEIVERS

The *Ontario Noise Level Exposure and Land Use Compatibility Guidelines* were used to establish the satisfactory noise levels of significance for the non-noise-sensitive land uses in the Project study area. As previously shown on Exhibit 3-A, the *normally acceptable* exterior noise level for non-noise-sensitive general industrial land uses is 75 dBA CNEL. Noise levels greater than 75 dBA CNEL are considered *normally unacceptable.* (14)

To determine if Project-related traffic noise level increases are significant at off-site non-noise-sensitive general industrial land uses, a *barely perceptible* 3 dBA criteria is used. When the without Project noise levels are greater than the *normally acceptable* 75 dBA CNEL land use compatibility criteria, a *barely perceptible* 3 dBA or greater noise level increase is considered a significant impact since the noise level criteria is already exceeded. The noise level increases used to determine significant impacts for non-noise-sensitive land uses is generally consistent with the FICON noise level increase thresholds for noise-sensitive land uses but instead rely on *Ontario Noise Level Exposure and Land Use Compatibility Guidelines normally acceptable* 75 dBA CNEL exterior noise level criteria for non-noise sensitive general industrial land uses.

4.2 VIBRATION (THRESHOLD B)

As described in Section 3.5, the vibration impacts originating from the construction of the Empire Groves Hotel, vibration-generating activities are appropriately evaluated using the Caltrans vibration damage thresholds to assess potential temporary construction-related impacts at adjacent building locations. The nearest noise sensitive buildings adjacent to the Project site can best be described as “modern industrial/commercial buildings” with a maximum acceptable continuous vibration threshold of 0.5 PPV (in/sec).

4.3 CEQA GUIDELINES NOT FURTHER ANALYZED (THRESHOLD C)

CEQA Noise Threshold C applies when there are nearby public and private airports and/or air strips and focuses on land use compatibility of the Project to nearby airports and airstrips. The

closest airport which would require additional noise analysis under CEQA guideline C is the Ontario International Airport. As previously indicated in Section 3.6, the Project site is located within the ONT Airport Influence Area and between the 60 and 70 dBA CNEL airport noise impact zones.

4.4 SIGNIFICANCE CRITERIA SUMMARY

Noise impacts shall be considered significant if any of the following occur as a direct result of the proposed development. Table 4-1 shows the significance criteria summary matrix that includes the allowable criteria used to identify potentially significant incremental noise level increases.

TABLE 4-1: SIGNIFICANCE CRITERIA SUMMARY

Analysis	Land Use	Condition(s)	Significance Criteria	
			Daytime	Nighttime
On-Site Traffic Noise	All	Exterior Noise Level Criteria	See Exhibit 3-A	
	Residential	Interior Noise Level Standard	45 dBA CNEL[1]	
	Non-Residential	Interior Noise Level Standard	50 dBA CNEL[2]	
Off-Site	Noise-Sensitive	if ambient is < 60 dBA CNEL	≥ 5 dBA CNEL Project increase[3]	
		if ambient is 60 - 65 dBA CNEL	≥ 3 dBA CNEL Project increase[3]	
		if ambient is > 65 dBA CNEL	≥ 1.5 dBA CNEL Project increase[3]	
	Non-Noise Sensitive	if ambient is > 75 dBA CNEL	≥ 3 dBA CNEL Project increase	
Operational	Residential	Exterior Noise Level Limit[4]	55 dBA L_{eq}	45 dBA L_{eq}
	Commercial		65 dBA L_{eq}	60 dBA L_{eq}
	Noise-Sensitive	if ambient is < 60 dBA L_{eq}	≥ 5 dBA L_{eq} Project increase[3]	
		if ambient is 60 - 65 dBA L_{eq}	≥ 3 dBA L_{eq} Project increase[3]	
		if ambient is > 65 dBA L_{eq}	≥ 1.5 dBA L_{eq} Project increase[3]	
Construction	Residential	Noise Level Threshold[5]	80 dBA L_{eq}	70 dBA L_{eq}
	Commercial		85 dBA L_{eq}	80 dBA L_{eq}
	Commercial	Vibration Level Threshold[6]	0.5 PPV (in/sec)	n/a
Airport Noise	Long- and Short-Term Lodging	Exterior Noise Level Criteria	70 dBA CNEL[7]	
		Interior Noise Level Standard	45 dBA CNEL[7]	

[1] CCR, Title 24, Part 2, Volume 1, Chapter 12, Section 1206.4
[2] CALGreen Code, Section 5.507.
[3] FICON, 1992.
[4] City of Ontario Municipal Code Section 5-29.09(a)(Appendix 3.2)
[5] Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual.
[6] Caltrans Transportation and Construction Vibration Manual.
[7] The Ontario Plan 2050, LU-07 Noise Level Exposure and Land Use Compatibility Guidelines.
"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m. "n/a" = construction activities are not planned during the nighttime hours; "PPV" = peak particle velocity.

5 EXISTING NOISE LEVEL MEASUREMENTS

To assess the existing noise level environment, 24-hour noise level measurements were taken at five locations in the Project study area. The receiver locations were selected to describe and document the existing noise environment within the Project study area. Exhibit 5-A provides the boundaries of the Project study area and the noise level measurement locations. To fully describe the existing noise conditions, noise level measurements were collected by Urban Crossroads, Inc. on Wednesday, April 24, 2024. Appendix 5.1 includes study area photos.

5.1 MEASUREMENT PROCEDURE AND CRITERIA

To describe the existing noise environment, the hourly noise levels were measured during typical weekday conditions over a 24-hour period. By collecting individual hourly noise level measurements, it is possible to describe the daytime and nighttime hourly noise levels and calculate the 24-hour CNEL. The long-term noise readings were recorded using Piccolo Type 2 integrating sound level meter and dataloggers. The Piccolo sound level meters were calibrated using a Larson-Davis calibrator, Model CAL 150. All noise meters were programmed in "slow" mode to record noise levels in "A" weighted form. The sound level meters and microphones were equipped with a windscreen during all measurements. All noise level measurement equipment satisfies the American National Standards Institute (ANSI) standard specifications for sound level meters ANSI S1.4-2014/IEC 61672-1:2013. (24)

5.2 NOISE MEASUREMENT LOCATIONS

The long-term noise level measurements were positioned as close to the nearest sensitive receiver locations as possible to assess the existing ambient hourly noise levels surrounding the Project site. Both Caltrans and the FTA recognize that it is not reasonable to collect noise level measurements that can fully represent every part of a private yard, patio, deck, or balcony normally used for human activity when estimating impacts for new development projects. This is demonstrated in the Caltrans general site location guidelines which indicate that, *sites must be free of noise contamination by sources other than sources of interest. Avoid sites located near sources such as barking dogs, lawnmowers, pool pumps, and air conditioners unless it is the express intent of the analyst to measure these sources*. (2) Further, FTA guidance states, t*hat it is not necessary nor recommended that existing noise exposure be determined by measuring at every noise-sensitive location in the project area. Rather, the recommended approach is to characterize the noise environment for clusters of sites based on measurements or estimates at representative locations in the community*. (17)

EXHIBIT 5-A: NOISE MEASUREMENT LOCATIONS



Based on recommendations of Caltrans and the FTA, it is not necessary to collect measurements at each individual building or residence, because each receiver measurement represents a group of buildings that share acoustical equivalence. (17) In other words, the area represented by the receiver shares similar shielding, terrain, and geometric relationship to the reference noise source. Receivers represent a location of noise sensitive areas and are used to estimate the future noise level impacts. Collecting reference ambient noise level measurements at the nearby sensitive receiver locations allows for a comparison of the before and after Project noise levels and is necessary to assess potential noise impacts due to the Project's contribution to the ambient noise levels.

5.3 NOISE MEASUREMENT RESULTS

The noise measurements presented below focus on the average or equivalent sound levels (L_{eq}). The equivalent sound level (L_{eq}) represents a steady state sound level containing the same total energy as a time varying signal over a given sample period. Table 5-1 identifies the hourly daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) noise levels at each noise level measurement location.

TABLE 5-1: 24-HOUR AMBIENT NOISE LEVEL MEASUREMENTS

Location[1]	Description	Energy Average Noise Level (dBA L_{eq})[2]	
		Daytime	Nighttime
L1	Located west of the site near the hotel at 2200 Holt Blvd.	64.2	61.2
L2	Located west of the site near the residence at 304 N Placer Privado	59.1	58.3
L3	Located north of the site near the residence at 2155 Convention Center Way	62.0	58.3
L4	Located northeast of the site near the residence at 2505 Date Palm Paseo	71.7	67.7
L5	Located northeast of the site near the residence at 3045 Inland Empire Blvd	66.5	61.7

[1] See Exhibit 5-A for the noise level measurement locations.
[2] Energy (logarithmic) average levels. The long-term 24-hour measurement worksheets are included in Appendix 5.2.
"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

Table 5-1 provides the (energy average) noise levels used to describe the daytime and nighttime ambient conditions. These daytime and nighttime energy average noise levels represent the average of all hourly noise levels observed during these time periods expressed as a single number. Appendix 5.2 provides summary worksheets of the noise levels for each hour as well as the minimum, maximum, L_1, L_2, L_5, L_8, L_{25}, L_{50}, L_{90}, L_{95}, and L_{99} percentile noise levels observed during the daytime and nighttime periods.

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6 TRAFFIC NOISE METHODS AND PROCEDURES

The following section outlines the methods and procedures used to estimate and analyze the future traffic noise environment. Consistent with City of Ontario *Noise Level Exposure and Land Use Compatibility Guidelines* (see Exhibit 3-A), all transportation related noise levels are presented in terms of the 24-hour CNEL's.

6.1 FHWA TRAFFIC NOISE PREDICTION MODEL

The estimated roadway noise impacts from vehicular traffic were calculated using a computer program that replicates the Federal Highway Administration (FHWA) Traffic Noise Prediction Model- FHWA-RD-77-108. (25) The FHWA Model arrives at a predicted noise level through a series of adjustments to the Reference Energy Mean Emission Level (REMEL). In California the national REMELs are substituted with the California Vehicle Noise (Calveno) Emission Levels. (26) Adjustments are then made to the REMEL to account for: the roadway classification (e.g., collector, secondary, major or arterial), the roadway active width (i.e., the distance between the center of the outermost travel lanes on each side of the roadway), the total average daily traffic (ADT), the travel speed, the percentages of automobiles, medium trucks, and heavy trucks in the traffic volume, the roadway grade, the angle of view (e.g., whether the roadway view is blocked), the site conditions ("hard" or "soft" relates to the absorption of the ground, pavement, or landscaping), and the percentage of total ADT which flows each hour throughout a 24-hour period.

6.1.1 OFF-SITE TRAFFIC NOISE PREDICTION MODEL INPUTS

Table 6-1 presents the roadway parameters used to assess the Project's off-site transportation noise impacts for Existing, Opening Year (2025), and General Plan Buildout (2045) Conditions, with and without Project Conditions. Table 6-1 identifies the twenty-one (21) study area roadway segments, the distance from the centerline to adjacent land use based on the functional roadway classifications per the City of Ontario General Plan and the posted vehicle speeds.

The average daily traffic volumes used for this study are presented on Table 6-2 and are based on *Empire Groves Hotel Traffic Impact Analysis* prepared by Translations, Inc. (27)

TABLE 6-1: OFF-SITE ROADWAY PARAMETERS

ID	Roadway	Segment	Classification	Distance from Centerline to Nearest Adjacent Land Use (Feet)[2]	Vehicle Speed (mph)[3]
1	Vineyard Ave.	Inland Empire Blvd.	Principal Arterial	76'	45
2	Vineyard Ave.	Inland Empire Blvd.	Principal Arterial	76'	45
3	Vineyard Ave.	I-10 WB Ramp	Principal Arterial	76'	45
4	Vineyard Ave.	I-10 EB Ramp	Principal Arterial	76'	45
5	Vineyard Ave.	G St.	Principal Arterial	76'	45
6	Vineyard Ave.	D St.	Principal Arterial	76'	45
7	Vineyard Ave.	Holt Blvd.	Principal Arterial	76'	45
8	Archibold Ave.	I-10 Ramps	Principal Arterial	76'	50
9	Archibold Ave.	I-10 Ramps	Principal Arterial	76'	50
10	Archibold Ave.	Guasti Rd.	Principal Arterial	76'	50
11	Inland Empire Blvd.	Vineyard Ave.	Minor Arterial	50'	45
12	G St.	Vineyard Ave.	Local Roadway	30'	40
13	D St.	Vineyard Ave.	Local Roadway	30'	40
14	Convention Center Way	Vineyard Ave.	Collector	50'	40
15	Convention Center Way	Kline St.	Collector	50'	40
16	Guasti Rd.	Holt Blvd.	Minor Arterial	50'	40
17	Guasti Rd.	Cardena's Dwy.	Minor Arterial	50'	40
18	Guasti Rd.	Archibold Ave.	Minor Arterial	50'	40
19	Holt Blvd.	Vineyard Ave.	Principal Arterial	60'	45
20	Holt Blvd.	Vineyard Ave.	Principal Arterial	60'	45
21	Holt Blvd.	Convention Center Way	Principal Arterial	60'	45

[1] Source: City of Ontario Land Use Element.
[2] Distance to adjacent land use is based upon the right-of-way distances for each functional roadway classification.
[3] Posted speed limits in the Project study area.

TABLE 6-2: AVERAGE DAILY TRAFFIC VOLUMES

ID	Roadway	Segment	Existing		OY 2026		Cumulative 2050	
			Without Project	With Project	Without Project	With Project	Without Project	With Project
1	Vineyard Ave.	Inland Empire Blvd.	7,630	7,740	9,490	9,600	11,540	11,650
2	Vineyard Ave.	Inland Empire Blvd.	16,530	16,630	19,230	19,330	23,190	23,290
3	Vineyard Ave.	I-10 WB Ramp	13,580	13,980	16,220	16,620	19,380	19,780
4	Vineyard Ave.	I-10 EB Ramp	10,050	10,450	12,380	12,780	18,590	18,990
5	Vineyard Ave.	G St.	8,540	8,960	10,290	10,710	18,300	18,720
6	Vineyard Ave.	D St.	5,750	5,800	6,720	6,770	12,380	12,430
7	Vineyard Ave.	Holt Blvd.	5,400	5,710	5,820	6,130	6,920	7,230
8	Archibold Ave.	I-10 Ramps	15,020	15,230	20,360	20,570	23,770	23,980
9	Archibold Ave.	I-10 Ramps	14,350	14,550	18,920	19,120	23,350	23,550
10	Archibold Ave.	Guasti Rd.	11,510	11,690	12,090	12,270	18,410	18,590
11	Inland Empire Blvd.	Vineyard Ave.	2,250	2,250	4,890	4,890	5,140	5,140
12	G St.	Vineyard Ave.	2,860	2,880	3,690	3,710	3,870	3,890
13	D St.	Vineyard Ave.	2,490	2,560	3,140	3,210	3,300	3,370
14	Convention Center Way	Vineyard Ave.	2,910	3,350	3,650	4,090	7,150	7,590
15	Convention Center Way	Kline St.	2,670	3,130	3,400	3,860	7,580	8,040
16	Guasti Rd.	Holt Blvd.	1,590	2,840	2,890	4,140	10,710	11,960
17	Guasti Rd.	Cardena's Dwy.	1,340	1,800	2,600	3,060	10,490	10,950
18	Guasti Rd.	Archibold Ave.	3,090	3,160	7,550	7,620	10,130	10,200
19	Holt Blvd.	Vineyard Ave.	9,400	9,650	12,070	12,320	18,040	18,290
20	Holt Blvd.	Vineyard Ave.	10,300	10,890	10,600	11,190	14,990	15,580
21	Holt Blvd.	Convention Center Way	10,090	10,300	10,710	10,920	13,130	13,340

[1] Empire Gove Hotel Traffic Impact Analysis, Translutions, Inc.

Table 6-3 presents the time-of-day vehicle splits by vehicle type, and Table 6-4 presents the total traffic flow distributions (vehicle mixes) used for this analysis. The vehicle mix provides the hourly distribution percentages of automobile, medium trucks, and heavy trucks for input into the FHWA Model based on roadway types. To predict the future noise environment at each building within the Project site, coordinate information was collected to identify the noise transmission path between the noise source and receiver. The coordinate information is based on the Project site plan showing the plotting of each Project building in relationship to surrounding roadways, as shown in Exhibit 1-B and in Appendix 6.1.

TABLE 6-3: TIME OF DAY VEHICLE SPLITS

Time Period	Vehicle Type		
	Autos	Medium Trucks	Heavy Trucks
Daytime (7:00 a.m. - 7:00 p.m.)	77.5%	84.8%	86.5%
Evening (7:00 p.m. - 10:00 p.m.)	12.9%	4.9%	2.7%
Nighttime (10:00 p.m. - 7:00 a.m.)	9.6%	10.3%	10.8%
Total:	100.0%	100.0%	100.0%

Source: Typical Southern California vehicle mix.

TABLE 6-4: DISTRIBUTION OF FLOW BY VEHICLE TYPE (VEHICLE MIX)

Roadway	Total % Traffic Flow			Total
	Autos	Medium Trucks	Heavy Trucks	
All Roadways	97.42%	1.84%	0.74%	100.00%

Source: Typical Southern California vehicle mix.

6.1.2 ON-SITE TRAFFIC NOISE PREDICTION MODEL INPUTS

The on-site roadway parameters including the average daily traffic (ADT) volumes used for this study are presented on Table 6-5. Future average daily traffic volumes needed to assess the future on-site traffic noise environment and to identify the appropriate noise abatement measures that address the worst-case future noise conditions, shown on Table 6-5, were obtained from the *Empire Groves Hotel Traffic Impact Analysis*. (28) The vehicle speed is based on the posted speed limit for Lampson Avenue. Soft site conditions were used to analyze the traffic noise impacts within the Project study area which account for the sound propagation loss over natural surfaces such as normal earth and ground vegetation. Research conducted by Caltrans has shown that due to the mix of ground types in actual situations, the hard site condition over predicted traffic noise levels and the use of soft site conditions is more appropriate for the application of the FHWA traffic noise prediction model. (29)

TABLE 6-5: ON SITE ROADWAY PARAMATERS

Location	Classification[1]	Lanes	Average Daily Traffic Volume[2]	Speed Limit (mph)[3]	Site Conditions
Holt Boulevard	Principal Arterial	4	13,340	50	Soft
Guasti Road	Minor Arterial	2	11,960	45	Soft

[1] Road classifications based upon the City of Ontario General Plan Mobility Element.
[2] Empire Groves Hotel Traffic Impact Analysis. Translutions, Inc.
[3] Posted Speed Limit

6.2 ON-SITE RAIL NOISE PREDICTION MODEL

The estimated railroad noise impacts from the railroad lines south of the Project site are calculated using the Federal Transit Administration (FTA) General Transit Noise Assessment

Model. The FTA Model calculates the predicted noise level based on the type of train, distance to receiver, number of trains per hour, speed, number of cars per train, and type of railroad tracks. The planned future train volumes and speeds are shown on Table 6-5 and were obtained from the *Ontario Gateway Specific Plan Environmental Impact Report* (EIR) prepared by the City of Ontario. (30) According to the EIR noise section, by future Year 2030 conditions, the UPRR railroad is expected to support a combination of approximately 46 Metrolink trains and 65 Freight trains daily. The EIR did not have a projection for Amtrack train activity, however, based on the Amtrack schedules, Amtrack operates the Sunset Limited and Texas Eagle trains, which would equate to approximately 5 train pass-byes per day on average.

TABLE 6-6: ON-SITE RAILROAD PARAMETERS

Rail Activity1	Speed (mph)	Future Trains Per Day			
		Daytime (7am-7pm)	Evening (7pm-10pm)	Nighttime (10pm-7am)	Total (24 Hours)
Amtrak	50	5	0	0	5
Metrolink	50	27	8	12	46
Freight	50	25	3	36	65
Totals:		57	11	48	116

[1] Source: Gateway Specific Plan Environmental Impact Report.

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7 OFF-SITE TRANSPORTATION NOISE IMPACTS

To assess the off-site traffic CNEL noise level impacts associated with development of the proposed Project, noise level contours were developed based on *Empire Groves Hotel Traffic Impact Analysis.* (28) Noise level contour boundaries represent the equal levels of noise exposure and are measured in CNEL from the center of the roadway. Noise level contours were developed for the following traffic scenarios:

- Existing Conditions: This scenario refers to existing traffic conditions.
- Existing Plus Project Conditions (E+P): This scenario refers to existing traffic conditions plus project traffic increases.
- Opening Year (2025) Conditions (OY 2025): This scenario includes Existing traffic volumes plus an ambient growth factor of 8.24% plus traffic from pending and approved but not yet constructed known development projects in the area.
- Opening Year (2025) Plus Project Conditions (OY 2025+P): This scenario includes Opening Year Cumulative (2025) Without Project volumes plus Project traffic increases.
- General Plan Buildout (2045) Without Project Conditions (GBPO): This scenario includes Existing traffic volumes plus an ambient growth factor of 14% plus traffic from pending and approved but not yet constructed known development projects in the area.
- General Plan Buildout (2045) With Project Conditions (GBPO+P): This scenario includes General Plan Buildout Without Project volumes plus Project traffic increases.

7.1 TRAFFIC NOISE LEVEL CONTOURS

Noise contours were used to assess the Project's incremental 24-hour dBA CNEL traffic-related noise impacts at land uses adjacent to roadways conveying Project traffic. The noise contours represent the distance to noise levels of a constant value and are measured from the center of the roadway for the 70, 65, and 60 dBA CNEL noise levels. The noise contours do not consider the effect of any existing noise barriers or topography that may attenuate ambient noise levels. In addition, because the noise contours reflect modeling of vehicular noise on area roadways, they appropriately do not reflect noise contributions from the surrounding stationary noise sources within the Project study area.

Tables 7-1 through 7-6 present a summary of the exterior dBA CNEL traffic noise levels. Roadway segments are analyzed in each of the following timeframes: Existing, Opening Year 2022 with and without Project Buildout, General Plan Buildout (2045) with and without Project conditions. Appendix 7.1 includes a summary of the dBA CNEL traffic noise level contours for each of the traffic scenarios.

TABLE 7-1: EXISTING WITHOUT PROJECT CONDITIONS NOISE LEVEL CONTOURS

ID	Road	Segment	Receiving Land Use[1]	CNEL at Nearest Receiving Land Use (dBA)[2]	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Vineyard Ave.	Inland Empire Blvd.	Residential	63.6	RW	RW	131
2	Vineyard Ave.	Inland Empire Blvd.	Residential	66.9	RW	102	220
3	Vineyard Ave.	I-10 WB Ramp	Residential	66.1	RW	89	193
4	Vineyard Ave.	I-10 EB Ramp	Commercial	64.8	RW	RW	158
5	Vineyard Ave.	G St.	Commercial	64.0	RW	RW	141
6	Vineyard Ave.	D St.	Commercial	62.3	RW	RW	109
7	Vineyard Ave.	Holt Blvd.	Commercial	62.1	RW	RW	104
8	Archibold Ave.	I-10 Ramps	Residential	67.6	RW	114	246
9	Archibold Ave.	I-10 Ramps	Commercial	67.5	RW	111	239
10	Archibold Ave.	Guasti Rd.	Institutional	66.5	RW	96	206
11	Inland Empire Blvd.	Vineyard Ave.	Residential	61.0	RW	RW	58
12	G St.	Vineyard Ave.	Residential	63.2	RW	RW	49
13	D St.	Vineyard Ave.	Residential	62.6		RW	44
14	Convention Center Wy	Vineyard Ave.	Commercial	60.3	RW	RW	52
15	Convention Center Wy	Kline St.	Commercial	59.9	RW	RW	50
16	Guasti Rd.	Holt Blvd.	Commercial	58.2	RW	RW	RW
17	Guasti Rd.	Cardena's Dwy.	Commercial	57.5	RW	RW	RW
18	Guasti Rd.	Archibold Ave.	Commercial	61.1	RW	RW	59
19	Holt Blvd.	Vineyard Ave.	Commercial	65.4	RW	64	138
20	Holt Blvd.	Vineyard Ave.	Commercial	65.8	RW	68	147
21	Holt Blvd.	Convention Center Wy	Commercial	65.7	RW	67	145

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest receiving land use.
"RW" = Location of the respective noise contour falls within the right-of-way of the road.

TABLE 7-2: EXISTING WITH PROJECT CONDITIONS NOISE LEVEL CONTOURS

ID	Road	Segment	Receiving Land Use[1]	CNEL at Nearest Receiving Land Use (dBA)[2]	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Vineyard Ave.	Inland Empire Blvd.	Residential	63.6	RW	RW	132
2	Vineyard Ave.	Inland Empire Blvd.	Residential	66.9	RW	102	221
3	Vineyard Ave.	I-10 WB Ramp	Residential	66.2	RW	91	196
4	Vineyard Ave.	I-10 EB Ramp	Commercial	64.9	RW	RW	162
5	Vineyard Ave.	G St.	Commercial	64.3	RW	RW	146
6	Vineyard Ave.	D St.	Commercial	62.4	RW	RW	109
7	Vineyard Ave.	Holt Blvd.	Commercial	62.3	RW	RW	108
8	Archibold Ave.	I-10 Ramps	Residential	67.7	RW	115	248
9	Archibold Ave.	I-10 Ramps	Commercial	67.5	RW	112	241
10	Archibold Ave.	Guasti Rd.	Institutional	66.6	RW	97	208
11	Inland Empire Blvd.	Vineyard Ave.	Residential	61.0	RW	RW	58
12	G St.	Vineyard Ave.	Residential	63.2	RW	RW	49
13	D St.	Vineyard Ave.	Residential	62.7		RW	45
14	Convention Center Wy	Vineyard Ave.	Commercial	60.9	RW	RW	58
15	Convention Center Wy	Kline St.	Commercial	60.6	RW	RW	55
16	Guasti Rd.	Holt Blvd.	Commercial	60.7	RW	RW	56
17	Guasti Rd.	Cardena's Dwy.	Commercial	58.7	RW	RW	RW
18	Guasti Rd.	Archibold Ave.	Commercial	61.2	RW	RW	60
19	Holt Blvd.	Vineyard Ave.	Commercial	65.5	RW	65	140
20	Holt Blvd.	Vineyard Ave.	Commercial	66.1	RW	71	152
21	Holt Blvd.	Convention Center Wy	Commercial	65.8	RW	68	147

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest receiving land use.
"RW" = Location of the respective noise contour falls within the right-of-way of the road.

TABLE 7-3: OY 2026 WITHOUT PROJECT CONDITIONS NOISE LEVEL CONTOURS

ID	Road	Segment	Receiving Land Use[1]	CNEL at Nearest Receiving Land Use (dBA)[2]	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Vineyard Ave.	Inland Empire Blvd.	Residential	64.5	RW	RW	152
2	Vineyard Ave.	Inland Empire Blvd.	Residential	67.6	RW	113	243
3	Vineyard Ave.	I-10 WB Ramp	Residential	66.8	RW	101	217
4	Vineyard Ave.	I-10 EB Ramp	Commercial	65.7	RW	84	181
5	Vineyard Ave.	G St.	Commercial	64.9	RW	RW	160
6	Vineyard Ave.	D St.	Commercial	63.0	RW	RW	121
7	Vineyard Ave.	Holt Blvd.	Commercial	62.4	RW	RW	110
8	Archibold Ave.	I-10 Ramps	Residential	69.0	RW	140	301
9	Archibold Ave.	I-10 Ramps	Commercial	68.7	RW	133	287
10	Archibold Ave.	Guasti Rd.	Institutional	66.7	RW	99	213
11	Inland Empire Blvd.	Vineyard Ave.	Residential	64.4	RW	RW	98
12	G St.	Vineyard Ave.	Residential	64.3	RW	RW	58
13	D St.	Vineyard Ave.	Residential	63.6		RW	52
14	Convention Center Wy	Vineyard Ave.	Commercial	61.3	RW	RW	61
15	Convention Center Wy	Kline St.	Commercial	61.0	RW	RW	58
16	Guasti Rd.	Holt Blvd.	Commercial	60.8	RW	RW	57
17	Guasti Rd.	Cardena's Dwy.	Commercial	60.3	RW	RW	53
18	Guasti Rd.	Archibold Ave.	Commercial	65.0	RW	50	107
19	Holt Blvd.	Vineyard Ave.	Commercial	66.5	RW	76	163
20	Holt Blvd.	Vineyard Ave.	Commercial	65.9	RW	69	149
21	Holt Blvd.	Convention Center Wy	Commercial	66.0	RW	70	150

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest receiving land use.
"RW" = Location of the respective noise contour falls within the right-of-way of the road.

TABLE 7-4: OY 2026 WITH PROJECT CONDITIONS NOISE LEVEL CONTOURS

ID	Road	Segment	Receiving Land Use[1]	CNEL at Nearest Receiving Land Use (dBA)[2]	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Vineyard Ave.	Inland Empire Blvd.	Residential	64.6	RW	RW	153
2	Vineyard Ave.	Inland Empire Blvd.	Residential	67.6	RW	113	244
3	Vineyard Ave.	I-10 WB Ramp	Residential	66.9	RW	102	220
4	Vineyard Ave.	I-10 EB Ramp	Commercial	65.8	RW	86	185
5	Vineyard Ave.	G St.	Commercial	65.0	RW	76	164
6	Vineyard Ave.	D St.	Commercial	63.0	RW	RW	121
7	Vineyard Ave.	Holt Blvd.	Commercial	62.6	RW	RW	113
8	Archibold Ave.	I-10 Ramps	Residential	69.0	RW	141	303
9	Archibold Ave.	I-10 Ramps	Commercial	68.7	RW	134	289
10	Archibold Ave.	Guasti Rd.	Institutional	66.8	RW	100	215
11	Inland Empire Blvd.	Vineyard Ave.	Residential	64.4	RW	RW	98
12	G St.	Vineyard Ave.	Residential	64.3	RW	RW	58
13	D St.	Vineyard Ave.	Residential	63.7		RW	53
14	Convention Center Wy	Vineyard Ave.	Commercial	61.8	RW	RW	66
15	Convention Center Wy	Kline St.	Commercial	61.5	RW	RW	63
16	Guasti Rd.	Holt Blvd.	Commercial	62.4	RW	RW	72
17	Guasti Rd.	Cardena's Dwy.	Commercial	61.0	RW	RW	59
18	Guasti Rd.	Archibold Ave.	Commercial	65.0	RW	50	108
19	Holt Blvd.	Vineyard Ave.	Commercial	66.6	RW	77	165
20	Holt Blvd.	Vineyard Ave.	Commercial	66.2	RW	72	155
21	Holt Blvd.	Convention Center Wy	Commercial	66.1	RW	71	152

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest receiving land use.
"RW" = Location of the respective noise contour falls within the right-of-way of the road.

TABLE 7-5: CUMULATIVE 2050 WITHOUT PROJECT CONDITIONS NOISE LEVEL CONTOURS

ID	Road	Segment	Receiving Land Use[1]	CNEL at Nearest Receiving Land Use (dBA)[2]	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Vineyard Ave.	Inland Empire Blvd.	Residential	65.4	RW	80	173
2	Vineyard Ave.	Inland Empire Blvd.	Residential	68.4	RW	128	275
3	Vineyard Ave.	I-10 WB Ramp	Residential	67.6	RW	113	244
4	Vineyard Ave.	I-10 EB Ramp	Commercial	67.4	RW	110	238
5	Vineyard Ave.	G St.	Commercial	67.4	RW	109	235
6	Vineyard Ave.	D St.	Commercial	65.7	RW	84	181
7	Vineyard Ave.	Holt Blvd.	Commercial	63.1	RW	RW	123
8	Archibold Ave.	I-10 Ramps	Residential	69.6	RW	155	334
9	Archibold Ave.	I-10 Ramps	Commercial	69.6	RW	153	330
10	Archibold Ave.	Guasti Rd.	Institutional	68.5	RW	131	282
11	Inland Empire Blvd.	Vineyard Ave.	Residential	64.6	RW	RW	101
12	G St.	Vineyard Ave.	Residential	64.5	RW	RW	60
13	D St.	Vineyard Ave.	Residential	63.8		RW	54
14	Convention Center Wy	Vineyard Ave.	Commercial	64.2	RW	RW	96
15	Convention Center Wy	Kline St.	Commercial	64.5	RW	RW	99
16	Guasti Rd.	Holt Blvd.	Commercial	66.5	RW	63	135
17	Guasti Rd.	Cardena's Dwy.	Commercial	66.4	RW	62	134
18	Guasti Rd.	Archibold Ave.	Commercial	66.2	RW	61	130
19	Holt Blvd.	Vineyard Ave.	Commercial	68.2	RW	99	213
20	Holt Blvd.	Vineyard Ave.	Commercial	67.4	RW	87	188
21	Holt Blvd.	Convention Center Wy	Commercial	66.9	RW	80	172

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest receiving land use.
"RW" = Location of the respective noise contour falls within the right-of-way of the road.

TABLE 7-6: CUMULATIVE 2050 WITH PROJECT CONDITIONS NOISE LEVEL CONTOURS

ID	Road	Segment	Receiving Land Use[1]	CNEL at Nearest Receiving Land Use (dBA)[2]	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Vineyard Ave.	Inland Empire Blvd.	Residential	65.4	RW	81	174
2	Vineyard Ave.	Inland Empire Blvd.	Residential	68.4	RW	128	276
3	Vineyard Ave.	I-10 WB Ramp	Residential	67.7	RW	115	248
4	Vineyard Ave.	I-10 EB Ramp	Commercial	67.5	RW	112	241
5	Vineyard Ave.	G St.	Commercial	67.5	RW	111	239
6	Vineyard Ave.	D St.	Commercial	65.7	RW	84	182
7	Vineyard Ave.	Holt Blvd.	Commercial	63.3	RW	RW	127
8	Archibold Ave.	I-10 Ramps	Residential	69.7	RW	156	336
9	Archibold Ave.	I-10 Ramps	Commercial	69.6	RW	154	332
10	Archibold Ave.	Guasti Rd.	Institutional	68.6	RW	132	283
11	Inland Empire Blvd.	Vineyard Ave.	Residential	64.6	RW	RW	101
12	G St.	Vineyard Ave.	Residential	64.5	RW	RW	60
13	D St.	Vineyard Ave.	Residential	63.9		RW	54
14	Convention Center Wy	Vineyard Ave.	Commercial	64.5	RW	RW	99
15	Convention Center Wy	Kline St.	Commercial	64.7	RW	RW	103
16	Guasti Rd.	Holt Blvd.	Commercial	67.0	RW	68	146
17	Guasti Rd.	Cardena's Dwy.	Commercial	66.6	RW	64	137
18	Guasti Rd.	Archibold Ave.	Commercial	66.3	RW	61	131
19	Holt Blvd.	Vineyard Ave.	Commercial	68.3	RW	100	215
20	Holt Blvd.	Vineyard Ave.	Commercial	67.6	RW	90	193
21	Holt Blvd.	Convention Center Wy	Commercial	66.9	RW	81	174

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest receiving land use.
"RW" = Location of the respective noise contour falls within the right-of-way of the road.

7.2 EXISTING CONDITION PROJECT TRAFFIC NOISE LEVELS

Table 7-1 presents the Existing without Project conditions CNEL noise levels, which are expected to range from 57.5 to 67.6 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 7-2 shows the Existing with Project conditions will range from 58.7 to 67.7 dBA CNEL. As shown on Table 7-7 the Existing with Project will generate a noise level increase of up to 2.5 dBA CNEL on the study area roadway segments. Based on the significance criteria in Section 4.2 for off-site traffic noise impacts, the Project-related noise level increases are considered less than significant under Existing conditions at the land uses adjacent to roadways conveying Project traffic.

7.3 OY 2026 TRAFFIC NOISE LEVEL INCREASES

Table 7-3 presents the OY 2026 without Project conditions CNEL noise levels, which are expected to range from 60.3 to 69.0 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 7-4 shows the OY 2026 with Project conditions will range from 61.0 to 69.0 dBA CNEL. Table 7-8 shows that the OY 2026 Project off-site traffic noise level increases of up to 1.6 dBA CNEL. Based on the significance criteria for off-site traffic noise presented in Section 4.2 for off-site traffic noise impacts, land uses adjacent to the study area roadway segments would experience *less than significant* noise level increases due to unmitigated OY 2026 Project-related traffic noise levels.

7.4 CUMULATIVE 2050 TRAFFIC NOISE LEVEL INCREASES

Table 7-5 presents the Cumulative 2050 without Project conditions CNEL noise levels, which are expected to range from 63.1 to 69.6 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 7-6 shows the Cumulative 2050 with Project conditions will range from 66.3 to 69.7 CNEL. Table 7-9 shows that the Project off-site contribution to cumulative traffic noise level increases up to 0.5 dBA CNEL. Based on the significance criteria for off-site traffic noise presented in Section 4.2 for off-site traffic noise impacts, land uses adjacent to the study area roadway segments would not experience substantial noise level increases due to Project-related traffic noise level increases and would be considered a *less than significant impact*.

TABLE 7-7: EXISTING OFF-SITE PROJECT-RELATED TRAFFIC NOISE IMPACTS

ID	Road	Segment	Receiving Land Use[1]	CNEL at Receiving Land Use (dBA)[2]			Noise-Sensitive Land Use?	Incremental Noise Level Increase Threshold[3]	
				No Project	With Project	Project Addition		Limit	Exceeded?
1	Vineyard Ave.	Inland Empire Blvd.	Residential	63.6	63.6	0.1	Yes	3.0	No
2	Vineyard Ave.	Inland Empire Blvd.	Residential	66.9	66.9	0.0	Yes	1.5	No
3	Vineyard Ave.	I-10 WB Ramp	Residential	66.1	66.2	0.1	Yes	1.5	No
4	Vineyard Ave.	I-10 EB Ramp	Commercial	64.8	64.9	0.2	No	n/a	No
5	Vineyard Ave.	G St.	Commercial	64.0	64.3	0.2	No	n/a	No
6	Vineyard Ave.	D St.	Commercial	62.3	62.4	0.0	No	n/a	No
7	Vineyard Ave.	Holt Blvd.	Commercial	62.1	62.3	0.2	No	n/a	No
8	Archibold Ave.	I-10 Ramps	Residential	67.6	67.7	0.1	Yes	1.5	No
9	Archibold Ave.	I-10 Ramps	Commercial	67.5	67.5	0.1	No	n/a	No
10	Archibold Ave.	Guasti Rd.	Institutional	66.5	66.6	0.1	No	n/a	No
11	Inland Empire Blvd.	Vineyard Ave.	Residential	61.0	61.0	0.0	Yes	3.0	No
12	G St.	Vineyard Ave.	Residential	63.2	63.2	0.0	Yes	3.0	No
13	D St.	Vineyard Ave.	Residential	62.6	62.7	0.1	Yes	3.0	No
14	Convention Center Wy	Vineyard Ave.	Commercial	60.3	60.9	0.6	No	n/a	No
15	Convention Center Wy	Kline St.	Commercial	59.9	60.6	0.7	No	n/a	No
16	Guasti Rd.	Holt Blvd.	Commercial	58.2	60.7	2.5	No	n/a	No
17	Guasti Rd.	Cardena's Dwy.	Commercial	57.5	58.7	1.3	No	n/a	No
18	Guasti Rd.	Archibold Ave.	Commercial	61.1	61.2	0.1	No	n/a	No
19	Holt Blvd.	Vineyard Ave.	Commercial	65.4	65.5	0.1	No	n/a	No
20	Holt Blvd.	Vineyard Ave.	Commercial	65.8	66.1	0.2	No	n/a	No
21	Holt Blvd.	Convention Center Wy	Commercial	65.7	65.8	0.1	No	n/a	No

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.
[3] Does the Project create an incremental noise level increase exceeding the significance criteria (Table 4-1)?

TABLE 7-8: OY 2026 OFF-SITE PROJECT-RELATED TRAFFIC NOISE IMPACTS

ID	Road	Segment	Receiving Land Use[1]	CNEL at Receiving Land Use (dBA)[2]			Noise-Sensitive Land Use?	Incremental Noise Level Increase Threshold[3]	
				No Project	With Project	Project Addition		Limit	Exceeded?
1	Vineyard Ave.	Inland Empire Blvd.	Residential	64.5	64.6	0.1	Yes	3.0	No
2	Vineyard Ave.	Inland Empire Blvd.	Residential	67.6	67.6	0.0	Yes	1.5	No
3	Vineyard Ave.	I-10 WB Ramp	Residential	66.8	66.9	0.1	Yes	1.5	No
4	Vineyard Ave.	I-10 EB Ramp	Commercial	65.7	65.8	0.1	No	n/a	No
5	Vineyard Ave.	G St.	Commercial	64.9	65.0	0.2	No	n/a	No
6	Vineyard Ave.	D St.	Commercial	63.0	63.0	0.0	No	n/a	No
7	Vineyard Ave.	Holt Blvd.	Commercial	62.4	62.6	0.2	No	n/a	No
8	Archibold Ave.	I-10 Ramps	Residential	69.0	69.0	0.0	Yes	1.5	No
9	Archibold Ave.	I-10 Ramps	Commercial	68.7	68.7	0.0	No	n/a	No
10	Archibold Ave.	Guasti Rd.	Institutional	66.7	66.8	0.1	No	n/a	No
11	Inland Empire Blvd.	Vineyard Ave.	Residential	64.4	64.4	0.0	Yes	3.0	No
12	G St.	Vineyard Ave.	Residential	64.3	64.3	0.0	Yes	3.0	No
13	D St.	Vineyard Ave.	Residential	63.6	63.7	0.1	Yes	3.0	No
14	Convention Center Wy	Vineyard Ave.	Commercial	61.3	61.8	0.5	No	n/a	No
15	Convention Center Wy	Kline St.	Commercial	61.0	61.5	0.6	No	n/a	No
16	Guasti Rd.	Holt Blvd.	Commercial	60.8	62.4	1.6	No	n/a	No
17	Guasti Rd.	Cardena's Dwy.	Commercial	60.3	61.0	0.7	No	n/a	No
18	Guasti Rd.	Archibold Ave.	Commercial	65.0	65.0	0.0	No	n/a	No
19	Holt Blvd.	Vineyard Ave.	Commercial	66.5	66.6	0.1	No	n/a	No
20	Holt Blvd.	Vineyard Ave.	Commercial	65.9	66.2	0.2	No	n/a	No
21	Holt Blvd.	Convention Center Wy	Commercial	66.0	66.1	0.1	No	n/a	No

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.
[3] Does the Project create an incremental noise level increase exceeding the significance criteria (Table 4-1)?

TABLE 7-9: CUMUALTIVE 2050 OFF-SITE PROJECT-RELATED TRAFFIC NOISE IMPACTS

ID	Road	Segment	Receiving Land Use[1]	CNEL at Receiving Land Use (dBA)[2]			Noise-Sensitive Land Use?	Incremental Noise Level Increase Threshold[3]	
				No Project	With Project	Project Addition		Limit	Exceeded?
1	Vineyard Ave.	Inland Empire Blvd.	Residential	65.4	65.4	0.0	Yes	1.5	No
2	Vineyard Ave.	Inland Empire Blvd.	Residential	68.4	68.4	0.0	Yes	1.5	No
3	Vineyard Ave.	I-10 WB Ramp	Residential	67.6	67.7	0.1	Yes	1.5	No
4	Vineyard Ave.	I-10 EB Ramp	Commercial	67.4	67.5	0.1	No	n/a	No
5	Vineyard Ave.	G St.	Commercial	67.4	67.5	0.1	No	n/a	No
6	Vineyard Ave.	D St.	Commercial	65.7	65.7	0.0	No	n/a	No
7	Vineyard Ave.	Holt Blvd.	Commercial	63.1	63.3	0.2	No	n/a	No
8	Archibold Ave.	I-10 Ramps	Residential	69.6	69.7	0.0	Yes	1.5	No
9	Archibold Ave.	I-10 Ramps	Commercial	69.6	69.6	0.0	No	n/a	No
10	Archibold Ave.	Guasti Rd.	Institutional	68.5	68.6	0.0	No	n/a	No
11	Inland Empire Blvd.	Vineyard Ave.	Residential	64.6	64.6	0.0	Yes	3.0	No
12	G St.	Vineyard Ave.	Residential	64.5	64.5	0.0	Yes	3.0	No
13	D St.	Vineyard Ave.	Residential	63.8	63.9	0.1	Yes	3.0	No
14	Convention Center Wy	Vineyard Ave.	Commercial	64.2	64.5	0.3	No	n/a	No
15	Convention Center Wy	Kline St.	Commercial	64.5	64.7	0.3	No	n/a	No
16	Guasti Rd.	Holt Blvd.	Commercial	66.5	67.0	0.5	No	n/a	No
17	Guasti Rd.	Cardena's Dwy.	Commercial	66.4	66.6	0.2	No	n/a	No
18	Guasti Rd.	Archibold Ave.	Commercial	66.2	66.3	0.0	No	n/a	No
19	Holt Blvd.	Vineyard Ave.	Commercial	68.2	68.3	0.1	No	n/a	No
20	Holt Blvd.	Vineyard Ave.	Commercial	67.4	67.6	0.2	No	n/a	No
21	Holt Blvd.	Convention Center Wy	Commercial	66.9	66.9	0.1	No	n/a	No

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.
[3] Does the Project create an incremental noise level increase exceeding the significance criteria (Table 4-1)?

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8 ON-SITE NOISE ANALYSIS

An on-site exterior noise impact analysis has been completed to determine the noise exposure levels that would result from adjacent transportation noise sources in the Project study area, and to identify potential noise attenuation measures that would achieve acceptable Project exterior and interior noise levels. The primary source of transportation noise affecting the Project site is anticipated to be from Holt Avenue and Guasti Road.

8.1 ON-SITE TRAFFIC NOISE ANALYSIS

Using the FHWA traffic noise prediction model and the parameters outlined in Tables 6-1 to 6-4, the expected future exterior noise levels for the on-site Project land uses were estimated. Table 8-1 presents a summary of future on-site exterior traffic noise levels at future building facades. The on-site traffic noise analysis calculations are provided in Appendix 8.1.

TABLE 8-1: EXTERIOR TRAFFIC NOISE LEVELS

Location[1]	Roadway	Unmitigated Exterior Noise Level (dBA CNEL)	Land Use Compatibility[2]
R1	Holt Boulevard	65.2	*Normally Unacceptable*
R2	Holt Boulevard	58.9	*Clearly Acceptable*
R3	Guasti Road	61.3	*Clearly Acceptable*
R4	Guasti Road	61.1	*Clearly Acceptable*
R5	Guasti Road	59.5	*Clearly Acceptable*
R6	Guasti Road	58.2	*Clearly Acceptable*
R7	Holt Boulevard	58.4	*Clearly Acceptable*
R8	Holt Boulevard	62.5	*Clearly Acceptable*
R9	Guasti Road	60.5	*Clearly Acceptable*
R10	Holt Boulevard	62.0	*Clearly Acceptable*

[1] Locations are shown in Exhibit 8-A.
[2] Based on Exhibit 3-A.

8.2 ON-SITE TRAIN NOISE ANALYSIS

The Union Pacific Railroad (UPRR) is located approximately 350 feet south of the Project site. Using the train parameters outlined in Table 6-5, the expected future exterior noise levels for the on-site Project land uses were estimated. Table 8-2 presents a summary of future on-site exterior train noise levels at future building facades. The on-site train noise analysis calculations are provided in Appendix 8.2.

TABLE 8-2: EXTERIOR TRAIN NOISE LEVELS

Location[1]	Distance (feet)	Noise Level dBA CNEL
O3	552'	66.4
O4	468'	67.1
O5	347'	68.4
O6	370'	68.1
O9	613'	65.9

Source: Federal Transit Administration

8.3 ON-SITE AIRCRAFT NOISE ANALYSIS

The ONT is located approximately 350 feet south of the Project site. Exhibit 3-B shows the Project site in relation to the airport's projected noise level contour boundaries (31). As shown on Exhibit 8-A, the 65 dBA CNEL noise level contours cross the southern portion of the Project site, while the remainder of Project site would be located between the 60 and 65 CNEL noise level contours of Ontario Airport.

8.4 ON-SITE NOISE ANALYSIS

The on-site exterior traffic noise analysis indicates that on-site locations will experience exterior noise levels ranging from 65.9 to 69.8 CNEL from all transportation sources.

TABLE 8-4: TOTAL TRANSPORTATION NOISE LEVELS

Location[1]	Traffic Noise Level (dBA CNEL)	Aircraft Noise Level (dBA CNEL)	Train Noise Level (dBA CNEL)	Total Noise Level (dBA CNEL)
O1	65.2	65.0	0.0	68.1
O2	58.9	65.0	0.0	66.0
O3	61.3	65.0	65.4	69.0
O4	61.1	65.0	66.1	69.3
O5	59.5	65.0	67.4	69.8
O6	58.2	65.0	67.1	69.5
O7	58.4	65.0	0.0	65.9
O8	62.5	65.0	0.0	66.9
O9	60.5	65.0	64.9	68.7
O10	62.0	65.0	0.0	66.8

8.5 EXTERIOR NOISE LEVEL COMPATIBILITY

Based on City of Ontario *Land Use Compatibility for Community Noise Exposure* shown on Exhibit 3-A, the commercial and lodging land uses are considered as *clearly acceptable to normally acceptable* with unmitigated exterior noise levels of less than 70 dBA CNEL. This noise analysis shows that the Project will satisfy the City of Ontario 70 dBA CNEL exterior noise level standards for lodging land uses without additional noise abatement measures.

8.6 INTERIOR NOISE ANALYSIS

To ensure that the interior noise levels comply with the interior noise level standards, future exterior noise levels were calculated at the estimated at the first through ninth floor building façade locations. On-site receiver locations are shown in Exhibit 8-A.

8.6.1 NOISE REDUCTION METHODOLOGY

The interior noise level is the difference between the predicted exterior noise level at the building facade and the noise reduction of the structure. Typical building construction will provide a Noise Reduction (NR) of approximately 12 dBA with "windows open" and a minimum 25 dBA noise reduction with "windows closed." (22) (32) However, sound leaks, cracks and openings within the window assembly can greatly diminish its effectiveness in reducing noise. Several methods are used to improve interior noise reduction, including: [1] weather-stripped solid core exterior doors; [2] upgraded dual glazed windows; [3] mechanical ventilation/air conditioning; and [4] exterior wall/roof assembles free of cut outs or openings.

8.6.2 INTERIOR NOISE LEVEL ASSESSMENT

To provide the necessary interior noise level reduction, Tables 8-4 through 8-12 indicate that Project land uses adjacent to Holt Avenue and Guasti Road will require a windows-closed condition and a means of mechanical ventilation (e.g. air conditioning). Tables 8-4 through 8-12 show that the future unmitigated interior traffic noise levels at the first through ninth floor are expected to range from 40.9 to 44.8 dBA CNEL. The interior noise assessment shows that the City of Ontario interior noise level standard can be satisfied using standard construction techniques.

8.6.3 INTERIOR TRAFFIC NOISE LEVEL COMPLIANCE

Tables 8-4 through 8-12 shows that on-site interior traffic noise levels will not exceed the 45 dBA CNEL interior noise level standard for lodging rooms or the 50 CNEL standard for non-residential areas and additional noise abatement measures are not needed.

EXHIBIT 8-A: ON-SITE RECEIVER LOCATIONS

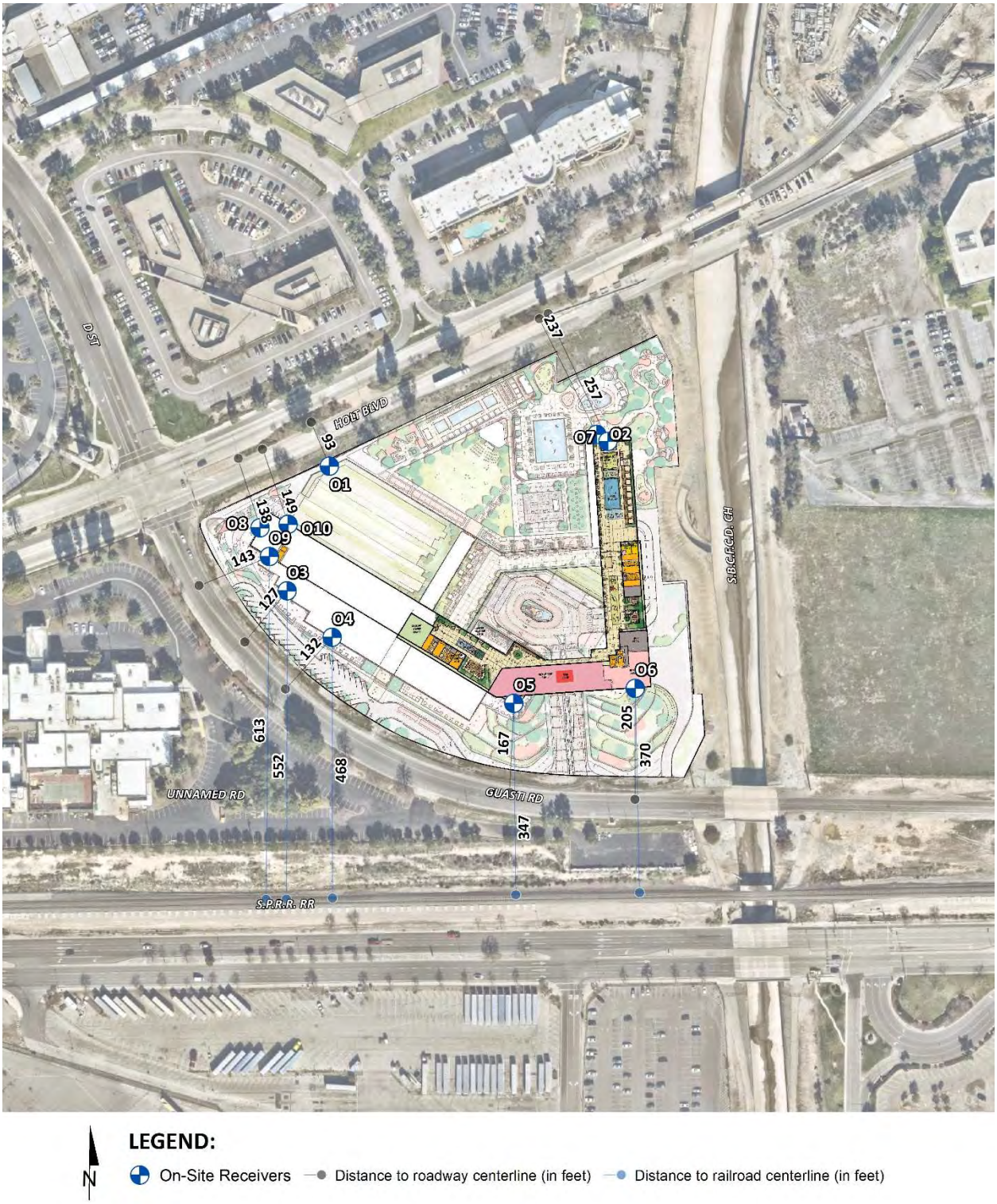


TABLE 8-4: FIRST FLOOR INTERIOR NOISE LEVELS (CNEL)

Location[1]	Roadway	Noise Level at Façade[2]	Required Interior Noise Reduction[3]	Estimated Interior Noise Reduction[4]	Upgraded Windows[5]	Interior Noise Level[6]	Threshold[7]	Threshold Exceeded?
O1	Holt Boulevard	68.1	18.1	25.0	No	43.1	50	No
O2	Holt Boulevard	66.0	16.0	25.0	No	41.0	50	No
O3	Guasti Road	69.0	19.0	25.0	No	44.0	50	No
O4	Guasti Road	69.3	19.3	25.0	No	44.3	50	No
O5	Guasti Road	69.8	19.8	25.0	No	44.8	50	No
O6	Guasti Road	69.5	19.5	25.0	No	44.5	50	No
O7	Holt Boulevard	65.9	15.9	25.0	No	40.9	50	No
O8	Holt Boulevard	66.9	16.9	25.0	No	41.9	50	No
O9	Guasti Road	68.7	18.7	25.0	No	43.7	50	No
O10	Holt Boulevard	66.8	16.8	25.0	No	41.8	50	No

[1] Locations shown on Exhibit 10-A.
[2] Exterior noise level at the facade with a windows closed condition requiring a means of mechanical ventilation (e.g. air conditioning). See Appendix 8.1.
[3] Noise reduction to satisfy the interior noise level threshold.
[4] A minimum of 30 dBA noise reduction is assumed with standard building construction.
[5] Does the required interior noise reduction trigger upgraded windows?
[6] Estimated interior noise level with minimum STC rating for all windows.
[7] Interior noise level threshold: 50 dBA CNEL for non-residential use (CALGreen Code)

TABLE 8-5: SECOND FLOOR INTERIOR NOISE LEVELS (CNEL)

Location[1]	Roadway	Noise Level at Façade[2]	Required Interior Noise Reduction[3]	Estimated Interior Noise Reduction[4]	Upgraded Windows[5]	Interior Noise Level[6]	Threshold[7]	Threshold Exceeded?
O5	Guasti Road	69.8	24.8	25.0	No	44.8	45	No
O6	Guasti Road	69.5	24.5	25.0	No	44.5	45	No
O7	Holt Boulevard	65.9	20.9	25.0	No	40.9	45	No
O8	Holt Boulevard	66.8	21.8	25.0	No	41.8	45	No
O9	Guasti Road	68.7	23.7	25.0	No	43.7	45	No
O10	Holt Boulevard	66.7	20.7	25.0	No	41.7	46	No

[1] Locations shown on Exhibit 10-A.
[2] Exterior noise level at the facade with a windows closed condition requiring a means of mechanical ventilation (e.g. air conditioning). See Appendix 8.1.
[3] Noise reduction to satisfy the interior noise level threshold.
[4] A minimum of 25 dBA noise reduction is assumed with standard building construction and approximately 2 dBA less than the STC rating for upgraded windows.
[5] Does the required interior noise reduction trigger upgraded windows?
[6] Estimated interior noise level with minimum STC rating for all windows.
[7] Interior noise level threshold: 45 dBA CNEL for residential use (California Code of Regulations, Title 24, Building Standards Administrative Code)

TABLE 8-6: THIRD FLOOR INTERIOR NOISE LEVELS (CNEL)

Location[1]	Roadway	Noise Level at Façade[2]	Required Interior Noise Reduction[3]	Estimated Interior Noise Reduction[4]	Upgraded Windows[5]	Interior Noise Level[6]	Threshold[7]	Threshold Exceeded?
O5	Guasti Road	69.8	24.8	25.0	No	44.8	45	No
O6	Guasti Road	69.5	24.5	25.0	No	44.5	45	No
O7	Holt Boulevard	65.9	20.9	25.0	No	40.9	45	No
O8	Holt Boulevard	66.8	21.8	25.0	No	41.8	45	No
O9	Guasti Road	68.7	23.7	25.0	No	43.7	45	No
O10	Holt Boulevard	66.7	20.7	25.0	No	41.7	46	No

[1] Locations shown on Exhibit 10-A.
[2] Exterior noise level at the facade with a windows closed condition requiring a means of mechanical ventilation (e.g. air conditioning). See Appendix 8.1.
[3] Noise reduction to satisfy the interior noise level threshold.
[4] A minimum of 25 dBA noise reduction is assumed with standard building construction and approximately 2 dBA less than the STC rating for upgraded windows.
[5] Does the required interior noise reduction trigger upgraded windows?
[6] Estimated interior noise level with minimum STC rating for all windows.
[7] Interior noise level threshold: 45 dBA CNEL for residential use (California Code of Regulations, Title 24, Building Standards Administrative Code)

TABLE 8-7: FOURTH FLOOR INTERIOR NOISE LEVELS (CNEL)

Location[1]	Roadway	Noise Level at Façade[2]	Required Interior Noise Reduction[3]	Estimated Interior Noise Reduction[4]	Upgraded Windows[5]	Interior Noise Level[6]	Threshold[7]	Threshold Exceeded?
O5	Guasti Road	69.8	24.8	25.0	No	44.8	45	No
O6	Guasti Road	69.5	24.5	25.0	No	44.5	45	No
O7	Holt Boulevard	65.9	20.9	25.0	No	40.9	45	No
O8	Holt Boulevard	66.8	21.8	25.0	No	41.8	45	No
O9	Guasti Road	68.7	23.7	25.0	No	43.7	45	No
O10	Holt Boulevard	66.7	20.7	25.0	No	41.7	46	No

[1] Locations shown on Exhibit 10-A.
[2] Exterior noise level at the facade with a windows closed condition requiring a means of mechanical ventilation (e.g. air conditioning). See Appendix 8.1.
[3] Noise reduction to satisfy the interior noise level threshold.
[4] A minimum of 25 dBA noise reduction is assumed with standard building construction and approximately 2 dBA less than the STC rating for upgraded windows.
[5] Does the required interior noise reduction trigger upgraded windows?
[6] Estimated interior noise level with minimum STC rating for all windows.
[7] Interior noise level threshold: 45 dBA CNEL for residential use (California Code of Regulations, Title 24, Building Standards Administrative Code)

TABLE 8-8: FIFTH FLOOR INTERIOR NOISE LEVELS (CNEL)

Location[1]	Roadway	Noise Level at Façade[2]	Required Interior Noise Reduction[3]	Estimated Interior Noise Reduction[4]	Upgraded Windows[5]	Interior Noise Level[6]	Threshold[7]	Threshold Exceeded?
O5	Guasti Road	69.8	24.8	25.0	No	44.8	45	No
O6	Guasti Road	69.5	24.5	25.0	No	44.5	45	No
O7	Holt Boulevard	65.9	20.9	25.0	No	40.9	45	No
O8	Holt Boulevard	66.8	21.8	25.0	No	41.8	45	No
O9	Guasti Road	68.7	23.7	25.0	No	43.7	45	No
O10	Holt Boulevard	66.7	20.7	25.0	No	41.7	46	No

[1] Locations shown on Exhibit 10-A.
[2] Exterior noise level at the facade with a windows closed condition requiring a means of mechanical ventilation (e.g. air conditioning). See Appendix 8.1.
[3] Noise reduction to satisfy the interior noise level threshold.
[4] A minimum of 25 dBA noise reduction is assumed with standard building construction and approximately 2 dBA less than the STC rating for upgraded windows.
[5] Does the required interior noise reduction trigger upgraded windows?
[6] Estimated interior noise level with minimum STC rating for all windows.
[7] Interior noise level threshold: 45 dBA CNEL for residential use (California Code of Regulations, Title 24, Building Standards Administrative Code)

TABLE 8-9: SIXTH FLOOR INTERIOR NOISE LEVELS (CNEL)

Location[1]	Roadway	Noise Level at Façade[2]	Required Interior Noise Reduction[3]	Estimated Interior Noise Reduction[4]	Upgraded Windows[5]	Interior Noise Level[6]	Threshold[7]	Threshold Exceeded?
O5	Guasti Road	69.8	24.8	25.0	No	44.8	45	No
O6	Guasti Road	69.5	24.5	25.0	No	44.5	45	No
O7	Holt Boulevard	65.9	20.9	25.0	No	40.9	45	No
O8	Holt Boulevard	66.8	21.8	25.0	No	41.8	45	No
O9	Guasti Road	68.7	23.7	25.0	No	43.7	45	No
O10	Holt Boulevard	66.7	20.7	25.0	No	41.7	46	No

[1] Locations shown on Exhibit 10-A.
[2] Exterior noise level at the facade with a windows closed condition requiring a means of mechanical ventilation (e.g. air conditioning). See Appendix 8.1.
[3] Noise reduction to satisfy the interior noise level threshold.
[4] A minimum of 25 dBA noise reduction is assumed with standard building construction and approximately 2 dBA less than the STC rating for upgraded windows.
[5] Does the required interior noise reduction trigger upgraded windows?
[6] Estimated interior noise level with minimum STC rating for all windows.
[7] Interior noise level threshold: 45 dBA CNEL for residential use (California Code of Regulations, Title 24, Building Standards Administrative Code)

TABLE 8-10: SEVENTH FLOOR INTERIOR NOISE LEVELS (CNEL)

Location[1]	Roadway	Noise Level at Façade[2]	Required Interior Noise Reduction[3]	Estimated Interior Noise Reduction[4]	Upgraded Windows[5]	Interior Noise Level[6]	Threshold[7]	Threshold Exceeded?
O5	Guasti Road	69.8	24.8	25.0	No	44.8	45	No
O6	Guasti Road	69.5	24.5	25.0	No	44.5	45	No
O7	Holt Boulevard	65.9	20.9	25.0	No	40.9	45	No
O8	Holt Boulevard	66.8	21.8	25.0	No	41.8	45	No
O9	Guasti Road	68.7	23.7	25.0	No	43.7	45	No
O10	Holt Boulevard	66.7	20.7	25.0	No	41.7	46	No

[1] Locations shown on Exhibit 10-A.
[2] Exterior noise level at the facade with a windows closed condition requiring a means of mechanical ventilation (e.g. air conditioning). See Appendix 8.1.
[3] Noise reduction to satisfy the interior noise level threshold.
[4] A minimum of 25 dBA noise reduction is assumed with standard building construction and approximately 2 dBA less than the STC rating for upgraded windows.
[5] Does the required interior noise reduction trigger upgraded windows?
[6] Estimated interior noise level with minimum STC rating for all windows.
[7] Interior noise level threshold: 45 dBA CNEL for residential use (California Code of Regulations, Title 24, Building Standards Administrative Code)

TABLE 8-11: EIGTH FLOOR INTERIOR NOISE LEVELS (CNEL)

Location[1]	Roadway	Noise Level at Façade[2]	Required Interior Noise Reduction[3]	Estimated Interior Noise Reduction[4]	Upgraded Windows[5]	Interior Noise Level[6]	Threshold[7]	Threshold Exceeded?
O5	Guasti Road	69.8	24.8	25.0	No	44.8	45	No
O6	Guasti Road	69.5	24.5	25.0	No	44.5	45	No
O7	Holt Boulevard	65.9	20.9	25.0	No	40.9	45	No
O8	Holt Boulevard	66.8	21.8	25.0	No	41.8	45	No
O9	Guasti Road	68.7	23.7	25.0	No	43.7	45	No
O10	Holt Boulevard	66.7	20.7	25.0	No	41.7	46	No

[1] Locations shown on Exhibit 10-A.
[2] Exterior noise level at the facade with a windows closed condition requiring a means of mechanical ventilation (e.g. air conditioning). See Appendix 8.1.
[3] Noise reduction to satisfy the interior noise level threshold.
[4] A minimum of 25 dBA noise reduction is assumed with standard building construction and approximately 2 dBA less than the STC rating for upgraded windows.
[5] Does the required interior noise reduction trigger upgraded windows?
[6] Estimated interior noise level with minimum STC rating for all windows.
[7] Interior noise level threshold: 45 dBA CNEL for residential use (California Code of Regulations, Title 24, Building Standards Administrative Code)

TABLE 8-12: NINTH FLOOR INTERIOR NOISE LEVELS (CNEL)

Location[1]	Roadway	Noise Level at Façade[2]	Required Interior Noise Reduction[3]	Estimated Interior Noise Reduction[4]	Upgraded Windows[5]	Interior Noise Level[6]	Threshold[7]	Threshold Exceeded?
O5	Guasti Road	69.8	24.8	25.0	No	44.8	45	No
O6	Guasti Road	69.5	24.5	25.0	No	44.5	45	No
O7	Holt Boulevard	65.9	20.9	25.0	No	40.9	45	No
O8	Holt Boulevard	66.8	21.8	25.0	No	41.8	45	No
O9	Guasti Road	68.7	23.7	25.0	No	43.7	45	No
O10	Holt Boulevard	66.7	20.7	25.0	No	41.7	46	No

[1] Locations shown on Exhibit 10-A.
[2] Exterior noise level at the facade with a windows closed condition requiring a means of mechanical ventilation (e.g. air conditioning). See Appendix 8.1.
[3] Noise reduction to satisfy the interior noise level threshold.
[4] A minimum of 25 dBA noise reduction is assumed with standard building construction and approximately 2 dBA less than the STC rating for upgraded windows.
[5] Does the required interior noise reduction trigger upgraded windows?
[6] Estimated interior noise level with minimum STC rating for all windows.
[7] Interior noise level threshold: 45 dBA CNEL for residential use (California Code of Regulations, Title 24, Building Standards Administrative Code)

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9 SENSITIVE RECEIVER LOCATIONS

To assess the potential for off-site operational and short-term construction noise impacts, the following receiver locations, as shown on Exhibit 9-A, were identified as representative locations for analysis. Sensitive receiver locations are generally defined as "[a]n area where noise interferes with normal activities associated with its use. Normally, noise sensitive areas include residential, educational, health, and religious structures and sites, and parks, recreational areas, areas with wilderness characteristics, wildlife refuges, and cultural and historical sites (33)." Moderately noise-sensitive land uses typically include multi-family dwellings, hotels, motels, dormitories, out-patient clinics, cemeteries, golf courses, country clubs, athletic/tennis clubs, and equestrian clubs. Land uses that are considered relatively insensitive to noise include business, commercial, and professional developments. Land uses that are typically not affected by noise include: industrial, manufacturing, utilities, agriculture, undeveloped land, parking lots, warehousing, liquid and solid waste facilities, salvage yards, and transit terminals.

To describe the potential off-site Project noise levels, five receiver locations in the vicinity of the Project site were identified. All distances are measured from the Project site boundary to the outdoor living areas (e.g., private backyards) or at the building façade, whichever is closer to the Project site. Other sensitive land uses in the Project study area that are located at greater distances than those identified in this noise study will experience lower noise levels than those presented in this report due to the additional attenuation from distance and the shielding of intervening structures. Distance is measured in a straight line from the project boundary to each receiver location.

R1: Location R1 represents an existing hotel Ontario Gateway Hotel located at 2200 E Holt Boulevard, approximately 176 feet south of the Project site. A 24-hour noise measurement was taken near this location, L1, to describe the existing ambient noise environment.

R2: Location R2 represents an existing residence at located 1795 E D St, approximately 2,802 feet west of the Project site. The 24-hour noise measurement L2 is representative the existing ambient noise environment.

R3: Location R3 represents the Frontier Center located at 2151 E Convention Center Way, approximately 237 feet northwest of the Project site. A 24-hour noise measurement was taken near this location, L4, to describe the existing ambient noise environment.

R4: Location R4 represents the Paseos Apartment located at 2505 E Date Palm Paseo, approximately 1,968 feet north of the Project site. A 24-hour noise measurement was taken near this location, L4, to describe the existing ambient noise environment.

R5: Location R5 represents an existing residence located at 705 Via Dolcetto, approximately 3,593 feet northeast of the Project site. A 24-hour noise measurement was taken near this location, L5, to describe the existing ambient noise environment.

EXHIBIT 9-A: RECEIVER LOCATIONS



10 OPERATIONAL NOISE IMPACTS

This section analyzes the potential operational noise impacts resulting from the operation of events with amplified sound, outdoor activities, swimming pool/spa activities, roof-mounted air conditioning units, loading dock activities, and parking lot vehicle movement

10.1 OPERATIONAL NOISE SOURCES

This operational noise analysis is intended to describe noise level impacts associated with the expected typical of daytime and nighttime activities at the Project site. To analyze noise impacts originating from the Project, the operational noise levels are evaluated against standards established in the City of Ontario Municipal Code, 5-29.04(a). Section 5-29.04(a) of the City of Ontario Municipal Code (included in Appendix 3.1) sets a stationary-source average L_{eq} exterior noise limit for not to be exceeded 65 dBA L_{eq} during daytime hours and 45 dBA L_{eq} during nighttime hours at residential properties and 65 dBA L_{eq} during daytime hours and 60 dBA L_{eq} during nighttime hours at commercial properties, such as those nearest the Project site.

10.2 REFERENCE NOISE LEVELS

To estimate the Project operational noise impacts, reference noise levels were collected from sample manufacturers specifications for similar equipment, published research, and/or measurements of similar activities that represent the noise levels expected with the development of the Project. This section provides a detailed description of the reference noise level shown on Table 11-1, which are used to estimate the Project operational noise impacts. It is important to note that the following predicted noise levels assume the worst-case noise environment with the events with amplified sound, outdoor activities, swimming pool/spa activities, roof-mounted air conditioning units, loading dock activities, and parking lot vehicle movement all operating continuously. These sources of noise activity will likely vary throughout the day.

EXHIBIT 10-A: OPERATIONAL NOISE SOURCE LOCATIONS

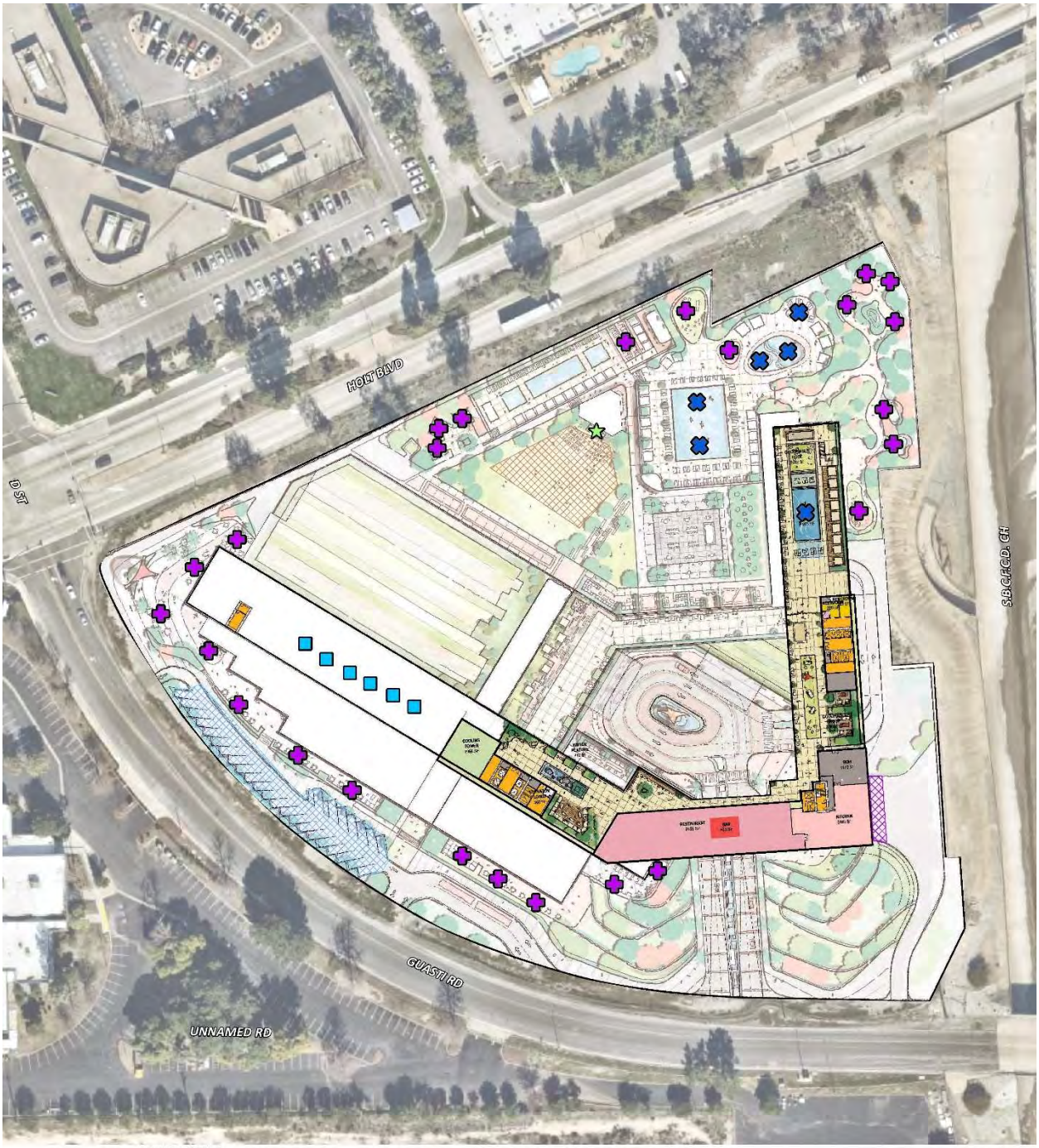


TABLE 10-1: REFERENCE NOISE LEVELS

Noise Source[1]	Noise Source Height (Feet)	Min./ Hour[2]		Reference Noise Level (dBA L_{eq}) @ 50 Feet	Sound Power Level (dBA)[3]
		Day	Night		
Event/Announcement Speaker	5'	60	60	75.6	107.2
Outdoor Gatherings	5'	60	60	59.9	91.5
Swimming Pool Activities	5'	60	60	63.0	94.6
Roof-Top Air Conditioning Units	5'	45	30	77.4	109.0
Loading Dock Activities	8'	60	60	71.8	103.4
Parking Lot Vehicle Movements	0'	60	60	31.4	63.0

[1] As measured by Urban Crossroads, Inc.
[2] Anticipated duration (minutes within the hour) of noise activity during typical hourly conditions expected at the Project site. "Daytime" = 7:00 a.m. - 10:00 p.m.; "Nighttime" = 10:00 p.m. - 7:00 a.m.
[3] Sound power level represents the total amount of acoustical energy (noise level) produced by a sound source independent of distance or surroundings. Sound power levels calculated using the CadnaA noise model at the reference distance to the noise source. Numbers may vary due to size differences between point and area noise sources.

10.2.1 MEASUREMENT PROCEDURES

The reference noise level measurements presented in this section were collected using a Larson Davis LxT Type 1 precisions sound level meter (serial number 01146). The LxT sound level meter was calibrated using a Larson-Davis calibrator, Model CAL 200, was programmed in "slow" mode to record noise levels in "A" weighted form and was located at approximately five feet above the ground elevation for each measurement. The sound level meters and microphones were equipped with a windscreen during all measurements. All noise level measurement equipment satisfies the American National Standards Institute (ANSI) standard specifications for sound level meters ANSI S1.4-2014/IEC 61672-1:2013. (24)

10.2.2 EVENT ANNOUNCEMENTS/SPEAKERS

To describe the potential noise level impacts associated with potential activities at the event yard, a reference noise level measurements were collected of dancing, with a MC and amplified speakers; and outdoor dining and a wedding venue. The dancing included several common wedding dance songs, cheering, shouting, dancing, and announcements by the MC. Based on reference noise level measurements collected by Urban Crossroads, Inc. these activities averaged 75.6 dBA L_{eq} at a uniform reference distance of 50 feet. The dining and wedding included announcements, groups of guests talking and eating in an outdoor setting. The event announcements and music may occur after 10:00 p.m. Therefore, event announcements activity is modeled as occurring the full hour during the nighttime hours. Based on reference noise level measurements collected by Urban Crossroads, Inc. these activities averaged 85 dBA L_{eq} at a uniform reference distance of 50 feet.

10.2.3 OUTDOOR GATHERING ACTIVITY

To represent the noise levels associated with outdoor gathering activities, Urban Crossroads, Inc. collected a reference noise level measurement at an existing conference hotel in Anaheim. The

outdoor gathering activities included people dining, drinking, with background music etc. on outdoor patio /seating areas. The outdoor activities and events may be expected to occur after 10:00 p.m. Therefore, outdoor activities are modeled as occurring the full hour during the nighttime hours. The measured reference noise level at the uniform 50-foot reference distance is 59.9 dBA L_{eq}.

10.2.4 SWIMMING POOL ACTIVITY

To represent the noise levels associated with pool activities, Urban Crossroads collected a reference noise level measurement at an existing outdoor pool and spa. The measured reference noise level at the uniform 50-foot reference distance is 54.7 dBA Leq for pool activity. The pool activity noise levels include kids playing, running, screaming, splashing, playing with a ball, and parents talking. Typically, noise associated with pool activities is expected to occur between 7:00 a.m. and 10:00 p.m. however, due to the type of land use pool activity may be expected to occur after 10:00 p.m. Therefore, pool activity is modeled as occurring the full hour during the nighttime hours.

10.2.5 ROOF-TOP AIR CONDITIONING UNITS

Mechanical equipment, such as generators, trash compactors, heating, ventilation and air conditioning (HVAC) units would be included as part of the proposed improvements. Mechanical equipment would be utilized in commercial as well as institutional areas. The noise level measurements describe a single mechanical roof-top air conditioning unit. The reference noise level represents a Trane Quiet Curb Series 130-ton model packaged air conditioning unit (Appendix 10.1). At the uniform reference distance of 50 feet, the reference noise level is 77.4 dBA L_{eq}. Based on the typical operating conditions, the roof-top air conditioning units are estimated to operate for and average 45 minutes per hour during the daytime hours, and 30 minutes per hour during the nighttime hours. These operating conditions reflect peak cooling requirements. For this noise analysis, the air conditioning units are expected to be located on the roof of the Project buildings.

10.2.6 LOADING DOCK ACTIVITY

To describe the noise levels associated with a loading dock activity, Urban Crossroads collected a reference noise level measurement at an existing loading dock. The loading dock activity noise levels describe two trucks idling, deliveries, backup alarms, unloading/loading a truck, docking including a combination of tractor trailer semi-trucks, two-axle delivery trucks, and background forklift operations. The measured reference noise level at the uniform 50-foot reference distance is 71.8 dBA L_{eq} for the loading dock activity. The loading dock activity and events may be expected to occur after 10:00 p.m. Therefore, loading dock activity is modeled as occurring the full hour during the nighttime hours.

10.2.7 PARKING LOT ACTIVITY

Parking activities are based on the area of the parking spaces. The Project includes approximately 30 new surface parking spaces, which are assumed to have a maximum of 4 movements per hour for a total of 120 events in an hour. Based on studies conducted in Europe and Australia, the

average parking procedure, which included movement associated with either entering or exiting the parking area, parking the vehicles, and opening and closing doors resulted in a sound power level of approximately 63 dBA L_w/square meter per event (34) (35). Parking lot activity is assumed to occur during the daytime and nighttime hours.

10.3 CADNAA NOISE PREDICTION MODEL

To fully describe the exterior operational noise levels from the Project, Urban Crossroads, Inc. developed a noise prediction model using the CadnaA (Computer Aided Noise Abatement) computer program. CadnaA can analyze multiple types of noise sources using the spatially accurate Project site plan, georeferenced Nearmap aerial imagery, topography, buildings, and barriers in its calculations to predict outdoor noise levels.

Using the ISO 9613 protocol, CadnaA will calculate the distance from each noise source to the noise receiver locations, using the ground absorption, distance, and barrier/building attenuation inputs to provide a summary of noise level at each receiver and the partial noise level contributions by noise source. Consistent with the ISO 9613 protocol, the CadnaA noise prediction model relies on the reference sound power level (L_w) to describe individual noise sources. While sound pressure levels (e.g., L_{eq}) quantify in decibels the intensity of given sound sources at a reference distance, sound power levels (L_w) are connected to the sound source and are independent of distance. Sound pressure levels vary substantially with distance from the source and diminish because of intervening obstacles and barriers, air absorption, wind, and other factors. Sound power is the acoustical energy emitted by the sound source and is an absolute value that is not affected by the environment.

The operational noise level calculations provided in this noise study account for the distance attenuation provided due to geometric spreading, when sound from a localized stationary source (i.e., a point source) propagates uniformly outward in a spherical pattern. A default ground attenuation factor of 0.5 was used in the CadnaA noise analysis to account for mixed ground representing a combination of hard and soft surfaces. Appendix 10.2 includes the detailed noise model inputs used to estimate the Project operational noise levels presented in this section.

10.4 PROJECT OPERATIONAL NOISE LEVELS

Using the reference noise levels to represent the proposed Project operations that include events with amplified sound, outdoor activities, swimming pool/spa activities, roof-mounted air conditioning units, loading dock activities, and parking lot vehicle movement, Urban Crossroads, Inc. calculated the operational source noise levels that are expected to be generated at the Project site and the Project-related noise level increases that would be experienced at each of the sensitive receiver locations. Table 10-2 shows the Project operational noise levels during the daytime hours of 7:00 a.m. to 10:00 p.m. The daytime hourly noise levels at the off-site receiver locations are expected to range from 37.9 to 56.3 dBA L_{eq}.

TABLE 10-2: DAYTIME PROJECT OPERATIONAL NOISE LEVELS

Noise Source[1]	Operational Noise Levels by Receiver Location (dBA Leq)				
	R1	R2	R3	R4	R5
Event/Announcement Speaker	22.1	31.0	51.8	34.8	29.1
Outdoor Gatherings	49.4	31.3	49.6	34.0	27.7
Swimming Pool Activities	18.5	28.2	48.1	32.3	27.0
Roof-Top Air Conditioning Units	52.8	38.6	50.8	40.3	35.5
Loading Dock Activities	20.8	5.0	22.0	33.1	28.5
Parking Lot Vehicle Movements	30.2	5.2	0.0	0.0	0.0
Total (All Noise Sources)	**54.4**	**40.2**	**56.3**	**43.0**	**37.9**

[1] See Exhibit 11-A for the noise source locations. CadnaA noise model calculations are included in Appendix 11.1.

Table 10-3 shows the Project operational noise levels during the nighttime hours of 10:00 p.m. to 7:00 a.m. The nighttime hourly noise levels at the off-site receiver locations are expected to range from 36.1 to 55.0 dBA L_{eq}.

TABLE 10-3: NIGHTTIME PROJECT OPERATIONAL NOISE LEVELS

Noise Source[1]	Operational Noise Levels by Receiver Location (dBA Leq)				
	R1	R2	R3	R4	R5
Event/Announcement Speaker	21.1	30.1	50.8	33.9	28.2
Outdoor Gatherings	48.4	30.4	48.8	33.1	26.8
Swimming Pool Activities	17.6	27.2	47.2	31.3	26.0
Roof-Top Air Conditioning Units	50.1	35.9	48.1	37.6	32.7
Loading Dock Activities	20.8	5.0	22.0	33.1	28.5
Parking Lot Vehicle Movements	30.2	5.2	0.0	0.0	0.0
Total (All Noise Sources)	**52.4**	**38.2**	**55.0**	**41.3**	**36.1**

[1] See Exhibit 10-A for the noise source locations. CadnaA noise model calculations are included in Appendix 10.1.

10.5 PROJECT OPERATIONAL NOISE LEVEL COMPLIANCE

To demonstrate compliance with local noise regulations, the Project-only operational noise levels are evaluated against exterior noise level thresholds based on the City of Ontario exterior noise level standards at nearby noise-sensitive receiver locations. Table 10-4 shows the operational noise levels associated with Empire Groves Hotel Project will satisfy the City of Ontario 65 dBA L_{eq} exterior noise level standards at all nearby receiver locations. Therefore, the operational noise impacts are considered *less than significant* at the nearby noise-sensitive receiver locations.

TABLE 10-4: OPERATIONAL NOISE LEVEL COMPLIANCE

Receiver Location[1]	Project Operational Noise Levels (dBA Leq)[2]		Noise Level Standards (dBA Leq)[3]		Noise Level Standards Exceeded?[4]	
	Daytime	Nighttime	Daytime	Nighttime	Daytime	Nighttime
R1	54.4	52.4	65.0	60.0	No	No
R2	40.2	38.2	65.0	45.0	No	No
R3	56.3	55.0	65.0	60.0	No	No
R4	43.0	41.3	65.0	45.0	No	No
R5	37.9	36.1	65.0	45.0	No	No

[1] See Exhibit 9-A for the receiver locations.
[2] Proposed Project operational noise level calculations are included in Appendix 10.2.
[3] Section 5-29.04 of the City of Ontario Municipal Code (Appendix 3.1).
[4] Do the estimated Project operational noise source activities exceed the noise level standards? "Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

10.6 PROJECT OPERATIONAL NOISE LEVEL INCREASES

To describe the Project operational noise level increases, the Project operational noise levels are combined with the existing ambient noise levels measurements for the nearest receiver locations potentially impacted by Project operational noise sources. Since the units used to measure noise, decibels (dB), are logarithmic units, the Project-operational and existing ambient noise levels cannot be combined using standard arithmetic equations. (2) Instead, they must be logarithmically added using the following base equation:

$$SPL_{Total} = 10\log_{10}[10^{SPL1/10} + 10^{SPL2/10} + \ldots 10^{SPLn/10}]$$

Where "SPL1," "SPL2," etc. are equal to the sound pressure levels being combined, or in this case, the Project-operational and existing ambient noise levels. The difference between the combined Project and ambient noise levels describes the Project noise level increases to the existing ambient noise environment. As indicated on Tables 10-5 and 10-6, the Project will generate daytime and nighttime operational noise level increases are expected to range up to 1.7 dBA L_{eq} at the nearest receiver locations. Project-related operational noise level increases will satisfy the operational noise level increase significance criteria presented on Table 4-1. Therefore, the incremental Project operational noise level increase is considered *less than significant* at all receiver locations.

TABLE 10-5: DAYTIME PROJECT OPERATIONAL NOISE LEVEL INCREASES

Receiver Location[1]	Total Project Operational Noise Level[2]	Measurement Location[3]	Reference Ambient Noise Levels[4]	Combined Project and Ambient[5]	Project Increase[6]	Increase Criteria	Increase Criteria Exceeded?
R1	54.4	L1	64.2	64.6	0.4	3.0	No
R2	40.2	L2	59.1	59.2	0.1	5.0	No
R3	56.3	L3	62.0	63.0	1.0	3.0	No
R4	43.0	L4	71.7	71.7	0.0	1.5	No
R5	37.9	L5	66.5	66.5	0.0	1.5	No

[1] See Exhibit 9-A for the receiver locations.
[2] Total Project daytime operational noise levels as shown on Table 10-2.
[3] Reference noise level measurement locations as shown on Exhibit 5-A.
[4] Observed nighttime ambient noise levels as shown on Table 5-1.
[5] Represents the combined ambient conditions plus the Project activities.
[6] The noise level increase expected with the addition of the proposed Project activities.

TABLE 10-6: NIGHTTIME OPERATIONAL NOISE LEVEL INCREASES

Receiver Location[1]	Total Project Operational Noise Level[2]	Measurement Location[3]	Reference Ambient Noise Levels[4]	Combined Project and Ambient[5]	Project Increase[6]	Increase Criteria	Increase Criteria Exceeded?
R1	52.4	L1	61.2	61.7	0.5	3.0	No
R2	38.2	L2	58.3	58.3	0.0	5.0	No
R3	55.0	L3	58.3	60.0	1.7	5.0	No
R4	41.3	L4	67.7	67.7	0.0	1.5	No
R5	36.1	L5	61.7	61.7	0.0	3.0	No

[1] See Exhibit 9-A for the receiver locations.
[2] Total Project nighttime operational noise levels as shown on Table 10-3.
[3] Reference noise level measurement locations as shown on Exhibit 5-A.
[4] Observed nighttime ambient noise levels as shown on Table 5-1.
[5] Represents the combined ambient conditions plus the Project activities.
[6] The noise level increase expected with the addition of the proposed Project activities.

11 CONSTRUCTION IMPACTS

This section analyzes potential impacts resulting from the short-term construction activities associated with the development of the Project. Exhibit 11-A shows the construction activity boundaries in relation to the nearest sensitive receiver locations previously described in Section 8. According to Section 5-29.09 of the Municipal Code states: *No person, while engaged in construction, remodeling, digging, grading, demolition or any other related building activity, shall operate any tool, equipment or machine in a manner that produces loud noise that disturbs a person of normal sensitivity who works or resides in the vicinity, or a Police or Code Enforcement Officer, on any weekday except between the hours of 7:00 a.m. and 6:00 p.m. or on Saturday or Sunday between the hours of 9:00 a.m. and 6:00 p.m.* (16)

In addition, since neither the City of Ontario General Plan or Municipal Code establish numeric maximum acceptable construction source noise levels at potentially affected receivers for CEQA analysis purposes. Therefore, a numerical construction threshold based on Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual is used for analysis of daytime construction impacts. The FTA considers a daytime exterior construction noise level of 80 dBA L_{eq} as a reasonable threshold for noise sensitive residential land use. (17).

11.1 CONSTRUCTION NOISE LEVELS

Noise generated by the Project construction equipment will include a combination of trucks, power tools, concrete mixers, and portable generators that when combined can reach high levels. The number and mix of construction equipment are expected to occur in the following stages:

- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

11.2 TYPICAL CONSTRUCTION REFERENCE NOISE LEVELS

To describe construction noise activities, this construction noise analysis was prepared using reference construction equipment noise levels from the Federal Highway Administration (FHWA) published the Roadway Construction Noise Model (RCNM), which includes a national database of construction equipment reference noise emission levels. (36) The RCNM equipment database, provides a comprehensive list of the noise generating characteristics for specific types of construction equipment. In addition, the database provides an acoustical usage factor to estimate the fraction of time each piece of construction equipment is operating at full power (i.e., its loudest condition) during a construction operation. The equipment shown Table 11-1 represents the loudest pieces of equipment anticipated during each phase of construction.

EXHIBIT 11-A: CONSTRUCTION NOISE SOURCE AND RECEIVER LOCATIONS



TABLE 11-1: CONSTRUCTION REFERENCE NOISE LEVELS

Construction Stage	Reference Construction Activity	Reference Noise Level @ 50 Feet (dBA L_{eq})[1]	Combined Noise Level (dBA L_{eq})[2]
Site Preparation	Crawler Tractors	78	80
	Hauling Trucks	72	
	Rubber Tired Dozers	75	
Grading	Graders	81	83
	Excavators	77	
	Compactors	76	
Building Construction	Cranes	73	81
	Tractors	80	
	Welders	70	
Paving	Pavers	74	83
	Paving Equipment	82	
	Rollers	73	
Architectural Coating	Cranes	73	77
	Air Compressors	74	
	Generator Sets	70	

[1] FHWA Roadway Construction Noise Model (RCNM).
[2] Represents the combined noise level for all equipment assuming they operate at the same time consistent with FTA Transit Noise and Vibration Impact Assessment guidance.
[3] Sound power level represents the total amount of acoustical energy (noise level) produced by a sound source independent of distance or surroundings. Sound power levels calibrated using the CadnaA noise model at the reference distance to the noise source.

11.3 CONSTRUCTION NOISE ANALYSIS

Using the reference construction equipment noise levels and the CadnaA noise prediction model, calculations of the Project construction noise level impacts at the nearby sensitive receiver locations were completed. For construction noise assessment, construction equipment can be considered to operate in two modes: stationary and mobile. As defined, stationary equipment operates in a single location for one or more days at a time, with either fixed-power operation (e.g., pumps, generators, and compressors) or variable-power operation (e.g., pile drivers, rock drills, and pavement breakers). Mobile equipment moves around the construction site with power applied in cyclic fashion, such as bulldozers, graders, and loaders (FTA 2018). The FTA and FHWA recommend noise impacts from stationary equipment be assessed from the center of the equipment location, while noise impacts from mobile construction equipment should be assessed from the center of the equipment activity area (e.g., construction site). Thus, to assess a more realistic and reasonable worst-case construction scenario while accounting for the dynamic nature of construction activities, this Project construction noise analysis models the equipment combination with the highest reference combined level as a moving point within the construction area (Project site boundary). Construction impacts are based on the highest noise level calculated at each receiver location. As shown on Table 11-2, the construction noise levels

are expected to range from 34.4 to 60.0 dBA L_{eq}, and the highest construction levels are expected to range from 40.4 to 60.0 dBA L_{eq} at the nearest receiver locations. Appendix 11.1 includes the detailed CadnaA construction noise model inputs.

TABLE 11-2: CONSTRUCTION EQUIPMENT NOISE LEVEL SUMMARY

Receiver Location[1]	Construction Noise Levels (dBA L_{eq})					
	Site Preparation	Grading	Building Construction	Paving	Architectural Coating	Highest Levels[2]
R1	57.0	60.0	58.0	60.0	54.0	60.0
R2	39.5	42.5	40.5	42.5	36.5	42.5
R3	56.3	59.3	57.3	59.3	53.3	59.3
R4	42.5	45.5	43.5	45.5	39.5	45.5
R5	37.4	40.4	38.4	40.4	34.4	40.4

[1] Noise receiver locations are shown on Exhibit 9-A.
[2] Construction noise level calculations based on distance from the construction activity, which is measured from the Project site boundary to the nearest receiver locations. CadnaA construction noise model inputs are included in Appendix 11.1.

11.4 CONSTRUCTION NOISE LEVEL COMPLIANCE

To evaluate whether the Project will generate potentially significant short-term noise levels at nearest receiver locations, a construction-related daytime noise level threshold of 80 dBA L_{eq} is used as a reasonable threshold to assess the daytime construction noise level impacts at residential locations. The construction noise analysis shows that the nearest receiver locations will satisfy the reasonable daytime significance thresholds shown in Table 4-1 during Project construction activities as shown on Table 11-3. Therefore, the noise impacts due to Project construction noise is considered *less than significant* at all receiver locations.

TABLE 11-3: CONSTRUCTION NOISE LEVEL COMPLIANCE

Receiver Location[1]	Construction Noise Levels (dBA L_{eq})		
	Highest Construction Noise Levels[2]	Threshold[3]	Threshold Exceeded?[4]
R1	60.0	80	No
R2	42.5	80	No
R3	59.3	80	No
R4	45.5	80	No
R5	40.4	80	No

[1] Noise receiver locations are shown on Exhibit 9-A.
[2] Highest construction noise level calculations based on distance from the construction noise source activity to the nearest receiver locations as shown on Table 11-2.
[3] Construction noise level thresholds as shown on Table 4-1.
[4] Do the estimated Project construction noise levels exceed the construction noise level threshold?

11.5 CONSTRUCTION VIBRATION ANALYSIS

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods used, distance to the affected structures and soil type. It is expected that ground-borne vibration from Project construction activities would cause only intermittent, localized intrusion. Ground-borne vibration levels resulting from typical construction activities occurring within the Project site were estimated by data published by the Federal Transit Administration (FTA) (17) and Caltrans (8). However, while vehicular traffic is rarely perceptible, construction has the potential to result in varying degrees of temporary ground vibration, depending on the specific construction activities and equipment used.

Ground vibration levels associated with various types of construction equipment are summarized on Table 11-4. Based on the representative vibration levels presented for various construction equipment types, it is possible to estimate the potential Project construction vibration levels using the following vibration assessment methods defined by Caltrans. Caltrans provides the following equation: $PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$ (8).

TABLE 11-4: VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT

Equipment	PPV (in/sec) at 25 feet
Small bulldozer	0.003
Jackhammer	0.035
Loaded Trucks	0.076
Large bulldozer	0.089

Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual

Table 11-5 presents the expected Project related vibration levels at the nearby receiver locations. At distances ranging from 176 feet to 3,593 feet from Project construction activities (at the Project site boundary), construction vibration levels are estimated to be less than 0.01 PPV (in/sec) at the nearest vibration sensitive receiver. Based on maximum acceptable continuous vibration threshold of 0.50 PPV (in/sec), the typical Project construction vibration levels will fall below the building damage thresholds at all the receiver locations. Therefore, the Project-related vibration impacts are considered less than significant during typical construction activities at the Project site.

Further, vibration levels at the site of the closest sensitive receiver are unlikely to be sustained during the entire construction period but will occur rather only during the times that heavy construction equipment is operating simultaneously adjacent to the Project site perimeter.

TABLE 11-5: PROJECT CONSTRUCTION VIBRATION LEVELS

Receiver[1]	Distance to Const. Activity (Feet)[2]	Typical Construction Vibration Levels PPV (in/sec)[3]					Thresholds PPV (in/sec)[4]	Thresholds Exceeded?[5]
		Small bulldozer	Jackhammer	Loaded Trucks	Large bulldozer	Highest Vibration Level		
R1	176'	0.00	0.00	0.00	0.00	0.00	0.50	No
R2	2,802'	0.00	0.00	0.00	0.00	0.00	0.50	No
R3	237'	0.00	0.00	0.00	0.00	0.00	0.50	No
R4	1,968'	0.00	0.00	0.00	0.00	0.00	0.50	No
R5	3,593'	0.00	0.00	0.00	0.00	0.00	0.50	No

[1] Receiver locations are shown on Exhibit 10-A.
[2] Distance from receiver location to Project construction boundary (Project site boundary).
[3] Based on the Vibration Source Levels of Construction Equipment (Table 12-4).
[4] Caltrans Transportation and Construction Vibration Manual, April 2020 Table 19.
[5] Does the peak vibration exceed the acceptable vibration thresholds?
"PPV" = Peak Particle Velocity

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13 CERTIFICATION

The contents of this noise study report represent an accurate depiction of the noise environment and impacts associated with the proposed Empire Groves Hotel Project. The information contained in this noise study report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at (619) 778-1971.

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(619) 788-1971
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EDUCATION

Bachelor of Science in Urban and Regional Planning
California Polytechnic State University, Pomona • June 2000

PROFESSIONAL AFFILIATIONS

ASA – Acoustical Society of America
AEP – Association of Environmental Planners
AWMA – Air and Waste Management Association
INCE – Institute of Noise Control Engineers

PROFESSIONAL CERTIFICATIONS

Approved Acoustical Consultant • County of San Diego
FHWA Traffic Noise Model of Training • November 2004
CadnaA Basic and Advanced Training Certificate • October 2008.

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APPENDIX 3.1:

CITY OF ONTARIO MUNICIPAL CODE

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CHAPTER 29: NOISE

5-29.01 Declaration of findings and policy

5-29.02 Definitions

5-29.03 Designated noise zones

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5-29.15 Noise level measurement

5-29.16 Prima facie violation

5-29.17 Penalty

5-29.18 Enforcement and administration

5-29.19 City Manager waiver

5-29.20 Noise abatement program

Sec. 5-29.01. Declaration of findings and policy.

It is hereby found and declared that:

(a) The making and creation of excessive, unnecessary or unusually loud noises within the limits of the City is a condition that has existed for some time, however, the extent and volume of such noises is increasing;

(b) The making, creation or maintenance of such excessive, unnecessary, unnatural or unusually loud noises that are prolonged, unusual and unnatural in their time, place and use affect and are a detriment to public health, comfort, convenience, safety, welfare and prosperity of the residents of the City; and

(c) The necessity in the public interest for the provisions and prohibitions hereinafter contained and enacted, is declared as a matter of legislative determination and public policy, and it is further declared that the provisions and prohibitions hereinafter contained and enacted are in pursuance of and for the purpose of securing and promoting the public health, comfort, convenience, safety, welfare and prosperity and the peace and quiet of the residents of the City.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.02. Definitions.

As used in this chapter, specific words and phrases are defined as follows:

(a) "Ambient noise level" shall mean the all-encompassing noise level associated with a given environment and is a composite of sounds from all sources, excluding the alleged offensive noise or excessive sound, at the location and approximate time at which a comparison with the alleged offensive noise is to be made.

(b) "Applicable (noise) zone" shall mean the noise zone category based on the actual use of the property, provided that the actual use is a legal use in the City.

(c) "A-weighted sound level" shall mean the sound pressure level in decibels (dBAs) as measured with a sound level meter using the A-weighted filter network (scale) at slow response and at a pressure of twenty (20) micropascals. The A-weighted filter de-emphasizes the very low and a very high frequency component of sound in a manner similar to the response of the human ear, and is a numerical method of rating human judgment of loudness.

(d) "Decibel (dBA)" shall mean a unit for measuring the amplitude of a sound, equal to twenty (20) times the logarithm to the base ten (10) of the ratio of pressure of the sound measured to the reference pressure of twenty (20) micropascals.

(e) "Equivalent sound or noise level (Leq)" shall mean the International Electrotechnical Commission (IEC) 60804 Standard for measurement, or the most recent revision thereof, for the sound level corresponding to a steady state noise level over a given sample period with the same amount of acoustic energy as the actual time varying noise level or the energy average noise level during the sample period. The measurement period for the purposes of this chapter is fifteen (15) minutes.

(f) "Impulsive noise" shall mean a noise of short duration usually less than one (1) second and of high intensity, with an abrupt onset and rapid decay. Such objectionable noises may also be repetitive.

(g) "Intrusive noise" shall mean that noise that intrudes over and above the ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, time of occurrence and tonal information content, as well as the prevailing ambient noise level.

(h) "Maintenance" shall mean the upkeep, repair or preservation of existing property or structures.

(i) "Noise" shall mean any unwanted sound or sound that is undesirable because it interferes with speech and hearing, or is intense enough to damage hearing or is otherwise annoying.

(j) "Noise level (sound level)" shall mean the weighted sound pressure level obtained by use of a sound level meter having a standard frequency filter for attenuating part of the sound spectrum. For purposes of this chapter, all noise levels (sound levels) shall be A-weighted sound pressure level.

(k) "Noise (sound) level meter" shall mean an instrument, including a microphone, an amplifier, an output meter and frequency weighting networks for the measurement and determination of noise and sound levels. For the purposes of this chapter, the sound level meter must meet the International Electrotechnical Commission (IEC) 60651 and 60804 Standards, or the most recent revisions thereof, for Type 1 sound level meters or an instrument and the associated recording and analyzing equipment that will provide equivalent data.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.03. Designated noise zones.

The properties hereinafter described shall be assigned to the following noise zones:

Noise Zone I:	All single-family residential properties;
Noise Zone II:	All multi-family residential properties and mobile home parks;

Noise Zone III:	All commercial property;
Noise Zone IV:	The residential portion of mixed use properties;
Noise Zone V:	All manufacturing or industrial properties and all other uses.

The actual use of the property, and not necessarily its zoning designation, shall be the determining factor in establishing whether a property is in Noise Zone I, II, III, IV or V, provided that the actual use is a legal use within the applicable zone.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.04. Exterior noise standards.

(a) The following exterior noise standards, unless otherwise specifically indicated, shall apply to all properties within a designated noise zone.

Allowable Exterior Noise Level (1)		***Allowed Equivalent Noise Level, Leq. (2)***	
Noise Zone	***Type of Land Use***	***7 a.m. to 10 p.m.***	***10 p.m. to 7 a.m.***
I	Single-Family Residential	65 dBA	45 dBA
II	Multi-Family Residential, Mobile Home Parks	65 dBA	50 dBA
III	Commercial Property	65 dBA	60 dBA
IV	Residential Portion of Mixed Use	70 dBA	70 dBA
V	Manufacturing and Industrial, Other Uses	70 dBA	70 dBA

(1) If the ambient noise level exceeds the resulting standard, the ambient noise level shall be the standard.

(2) Measurements for compliance are made on the affected property pursuant to § 5-29.15.

(b) It is unlawful for any person at any location within the incorporated area of the City to create noise, or to allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person, which noise causes the noise level, when measured at any location on any other property, to exceed either of the following:

(1) The noise standard for the applicable zone for any fifteen-minute (15) period; and

(2) A maximum instantaneous (single instance) noise level equal to the value of the noise standard plus twenty (20) dBA for any period of time (measured using A-weighted slow response).

(c) In the event the ambient noise level exceeds the noise standard, the maximum allowable noise level under such category shall be increased to reflect the maximum ambient noise level.

(d) The Noise Zone IV standard shall apply to that portion of residential property falling within one hundred (100) feet of a commercial property or use, if the noise originates from that commercial property or use.

(e) If the measurement location is on a boundary between two (2) different noise zones, the lower noise level standard applicable to the noise zone shall apply.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.05. Interior noise standards.

(a) The following interior noise standards, unless otherwise specifically indicated, shall apply to all properties within a designated noise zone.

Allowable Interior Noise Level (1)		**Allowed Equivalent Noise Level, Leq.** (2)	
Noise Zone	***Type of Land Use***	***7 a.m. to 10 p.m.***	***10 p.m. to 7 a.m.***
I	Single-Family Residential	45 dBA	40 dBA
II	Multi-Family Residential, Mobile Home Parks	45 dBA	40 dBA
IV	Residential Portion of Mixed Use	45 dBA	40 dBA

(1) If the ambient noise level exceeds the resulting standard, the ambient noise level shall be the standard.

(2) Measurements for compliance are made on the affected property pursuant to § 5-29.15.

(b) It is unlawful for any person at any location within the incorporated area of the City to create noise, or to allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person, which noise causes the noise level, when measured at any location on any other property, to exceed either of the following:

(1) The noise standard for the applicable zone for any fifteen-minute (15) period;

(2) A maximum instantaneous (single instance) noise level equal to the value of the noise standard plus twenty (20) dBA for any period of time (measured using A-weighted slow response).

(c) In the event the ambient noise level exceeds the noise standard, the maximum allowable noise level under such category shall be increased to reflect the maximum ambient noise level.

(d) The Noise Zone IV standard shall apply to that portion of residential property falling within one hundred (100) feet of a commercial property or use, if the noise originates from that commercial property or use.

(e) If the measurement location is on a boundary between two (2) different noise zones, the lower noise level standard applicable to the noise zone shall apply.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.06. Exemptions.

The following activities shall be exempted from the provisions of this chapter:

(a) Any activity conducted on public property, or on private property with the consent of the owner, by any public entity or its officers, employees, representatives, agents, subcontractors, permittees, licensees or lessees that the public entity has authorized are exempt from the provisions of this chapter. This includes, without limitation, sporting and recreational activities that are sponsored, co-sponsored, permitted or allowed by the City or any school district within the City's jurisdictional boundaries. This also includes, without limitation, occasional outdoor gatherings, public dances, shows or sporting and entertainment events, provided such events are conducted pursuant to an approval, authorization, contract, lease, permit or sublease by the appropriate public entity, specifically the planning commission or City Council;

(b) Occasional outdoor gatherings, public dances, show, sporting and entertainment events, provided said events are conducted pursuant to a permit or license issued by the appropriate jurisdiction relative to the staging of said events;

(c) Any mechanical device, apparatus or equipment used, related to or connected with emergency machinery, vehicle, work or warning alarm or bell, provided the sounding of any bell or alarm on any building or motor vehicle shall terminate its operation within forty-five (45) minutes in any hour of its being activated;

(d) Noise sources associated with construction, repair, remodeling, demolition or grading of any real property. Such activities shall instead be subject to the provisions of § 5-29.09;

(e) Noise sources associated with construction, repair, remodeling, demolition or grading of public rights-of-way or during authorized seismic surveys;

(f) All mechanical devices, apparatus or equipment associated with agriculture operations provided that:

(1) Operations do not take place between 8:00 p.m. and 7:00 a.m.;

(2) Such operations and equipment are utilized for the protection or salvage of agricultural crops during periods of potential or actual frost damage or other adverse weather conditions; or

(3) Such operations and equipment are associated with agricultural pest control through pesticide application, provided the application is made in accordance with permits issued by or regulations enforced by the California Department of Agriculture;

(g) Noise sources associated with the maintenance of real property. Such activities shall instead be subject to the provisions of § 5-29.08;

(h) Any activity to the extent regulation thereof has been preempted by state or federal law;

(i) Any noise sources associated with people and/or music associated with a party at a residential property. Such noise shall be subject to the provisions of OMC § 5-29.07;

(j) Any noise source emanating from an ice cream truck within the City. Such noise shall be subject to the provisions of OMC § 4-18.04;

(k) Any noise sources associated with barking dogs or other intermittent noises made by animals on any properly within the City. Such noise shall be subject to the provisions of OMC Chapter 1, Title 6;

(l) Noise sources related to uses approved by a permit or development agreement adopted prior to the date of adoption of this chapter and that contains acoustic or noise standard conditions of approval. This exemption shall only be applicable during the effective period of the City-approved permit or development agreement.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.07. Loud and disturbing noise.

(a) It is unlawful for any person or property owner within the City to make, cause or allow to be made any loud, excessive, impulsive or intrusive noise, disturbance or commotion that disturbs the peace or quiet of any area or that causes discomfort or annoyance to any reasonable person of normal sensitivities in the area, after a Police or Code Enforcement Officer has first requested that the person or property owner cease and desist from making such noise. The types of loud, disturbing, excessive, impulsive or intrusive noise may include, but shall not be limited to, yelling, shouting, hooting, whistling, singing, playing a musical instrument, or emitting or transmitting any loud music or noise from any mechanical or electrical sound making or sound-amplifying device.

(b) The factors, standards, and conditions that may be considered in determining whether a violation of the provisions of this section has been committed, included, but not limited to, the following:

(1) The level of the noise;

(2) The level and intensity of the background (ambient) noise, if any;

(3) The proximity of the noise to residential or commercial sleeping areas;

(4) The nature and zoning of the area within which the noise emanates;

(5) The density of inhabitation of the area within which the noise emanates;

(6) The time of day and night the noise occurs;

(7) The duration of the noise;

(8) Whether the noise is constant, recurrent or intermittent;

(9) Whether the noise is produced by a commercial or noncommercial activity; and

(10) Whether the use is lawful under the provisions of Title 5 of this Code and whether the noise is one that could reasonably be expected from the activity or allowed use.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.08. Real property maintenance noise regulations.

(a) No person, while engaged in maintenance of real property, shall operate any tool, equipment or machine in a manner that produces loud noise that disturbs a person of normal sensitivity who works or resides in the vicinity, or a Police or Code Enforcement Officer, except between the hours of 8:00 a.m. and 6:00 p.m.

(b) Trimming or pruning that requires the use of chainsaws or mulching machines shall only be allowed between the hours of 8:00 a.m. and 6:00 p.m. on a weekday and between the hours of 9:00 a.m. and 5:00 p.m. on Saturday or Sunday.

(c) The use of electrical or gasoline powered blowers, such as commonly used by gardeners or other persons for cleaning lawns, yards, driveways, gutters and other property shall only be allowed between the hours of 8:00 a.m. and 6:00 p.m. on a weekday and between the hours of 9:00 a.m. and 5:00 p.m. on Saturday or Sunday.

(d) No landowner, gardener, property maintenance service, contractor, subcontractor or employer shall permit or allow any person or persons working under his or her direction or control to operate any tool, equipment or machine in violation of the provisions of this section.

(e) Exceptions. The provisions of this section shall not apply to the following:

(1) Emergency property maintenance required by the building official;

(2) The maintenance, repair or improvement of any public work or facility by public employees, by any person or persons acting pursuant to a public works contract, or by any person or persons performing such work or pursuant to the direction of, or on behalf of, any public agency; provided, however, this exception shall not apply to the City, or its employees, contractors or agents, unless:

(i) The City Manager or department head determines that the maintenance, repair or improvement is immediately necessary to maintain public service,

(ii) The maintenance, repair or improvement is of a nature that cannot feasibly be conducted during normal business hours, or

(iii) The City Council has approved project specifications, contract provisions, or an environmental document that specifically authorizes maintenance during hours of the day that would otherwise be prohibited pursuant to this section; and

(3) Any maintenance that complies with the noise limits specified in § 5-29.04.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.09. Construction activity noise regulations.

(a) No person, while engaged in construction, remodeling, digging, grading, demolition or any other related building activity, shall operate any tool, equipment or machine in a manner that produces loud noise that disturbs a person of normal sensitivity who works or resides in the vicinity, or a Police or Code Enforcement Officer, on any weekday except between the hours of 7:00 a.m. and 6:00 p.m. or on Saturday or Sunday between the hours of 9:00 a.m. and 6:00 p.m.

(b) No landowner, construction company owner, contractor, subcontractor, or employer shall permit or allow any person or persons working under their direction and control to operate any tool, equipment or machine in violation of the provisions of this section.

(c) Exceptions.

(1) The provisions of this section shall not apply to emergency construction work performed by a private party when authorized by the City Manager or his or her designee;

(2) The maintenance, repair or improvement of any public work or facility by public employees, by any person or persons acting pursuant to a public works contract, or by any person or persons performing such work or pursuant to the direction of, or on behalf of, any public agency; provided, however, this exception shall not apply to the City, or its employees, contractors or agents, unless:

(i) The City Manager or a department head determines that the maintenance, repair or improvement is immediately necessary to maintain public services,

(ii) The maintenance, repair or improvement is of a nature that cannot feasibly be conducted during normal business hours, or

(iii) The City Council has approved project specifications, contract provisions, or an environmental document that specifically authorizes construction during hours of the day that would otherwise be prohibited pursuant to this section; and

(3) Any construction that complies with the noise limits specified in §§ 5-29.04 or 5-29.05.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.10. Other public agency exceptions.

The provisions of this chapter shall not be construed to prohibit any work at different hours by or under the direction of any other public agency or public or private utility companies in cases of necessity or emergency.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.11. Schools, day care centers, churches, libraries, museums, health care institutions; Special provisions.

It is unlawful for any person to create any noise that causes the outdoor noise level at any school, day care center, hospital or similar health care institution, church, library or museum while the same is in use, to exceed the noise standards specified in § 5-29.04 prescribed for the assigned Noise Zone I.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.12. Sound amplifying equipment.

Loudspeakers, sound amplifiers, public address systems or similar devices used to amplify sounds shall be subject to the provisions of § 5-29.13. Such sound amplifying equipment shall not be construed to include electronic devices, including but not limited to, radios, tape players, tape recorders, compact disc players, MP3 players, electric keyboards, music synthesizers, record players or televisions, which are designed and operated for personal use, or used entirely within a building and are not designed or used to convey the human voice, music or any other sound to an audience outside such building, or which are used in vehicles and heard only by occupants of the vehicle in which installed.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.13. Amplified sound.

(a) The City Council enacts the following legislation for the sole purpose of securing and promoting the public health, comfort, safety and welfare for its citizenry. While recognizing that the use of sound amplifying equipment may be entitled to certain protection by the constitutional rights of freedom of speech and assembly, the City Council finds that in order to protect the public safety and the correlative rights of the citizens of this community to privacy and freedom from public nuisance of loud and unnecessary noise, reasonable regulation of the time, place and manner of the use of amplifying equipment is necessary. In no event shall approval or authorization

required herein be withheld by reason of the constitutionally protected content of any material proposed to be broadcast through amplifying equipment.

(b) It is unlawful for any person, other than personnel of law enforcement or governmental agencies, to install, use or operate a loudspeaker or sound amplifying device in a fixed or movable position or mounted upon any vehicle within the City for the purpose of giving instructions, directions, talks, addresses or lectures to any persons or assemblages of persons in or upon any street, alley, sidewalk, park, place or public property without a permit to do so from the Police Chief or his or her designee. Notwithstanding any other provision of this chapter, the provisions of this section shall also apply to the use of sound amplifying equipment upon public or private property when used in connection with outdoor or indoor public or private events, whether or not admission is charged or food or beverages are sold, when such activity is to be attended by more than one hundred (100) persons and the noise emanating from the event will be audible at the property plane, or in the case of a street dance or concert on the nearest residential property. Those activities listed in § 5-29.06(a) are exempt from the requirements of this section.

(c) The Police Chief or his or her designee is authorized to approve and issue permits under this section.

(d) An application for a permit required by this section shall be filed with the Police Chief at least sixteen (16) days and no more than one hundred twenty (120) days prior to the date on which the sound amplifying equipment is intended to be used. Applications for events covered by the First Amendment of the United States Constitution are exempt from the time requirements of this section if it is shown that circumstances require a shorter filing period and the event will not constitute an unsafe condition. The application shall contain the following information:

(1) The name, address and telephone number of both the owner and the user of the sound amplifying equipment;

(2) The license number, if a sound truck is to be used;

(3) A general description of the sound amplifying equipment which is to be used;

(4) Whether sound amplifying equipment will be used for commercial or noncommercial purpose;

(5) The dates and times upon and within which, and the streets or property over or upon which, the equipment is proposed to be operated;

(6) The name or names of one (1) or more persons who will be present during the conduct of any activities for which registration is sought and who will have authority to reduce the volume of any sound amplifying equipment during the course of the activities if required pursuant to this chapter and, otherwise, to insure compliance with the provisions of this chapter;

(7) A statement by the applicant that he or she is willing and able to comply with the provisions of this chapter and the conditions of the permit; and

(8) A sketch of the area or facilities within which the activities are to be conducted, with approximate dimensions and illustration of the location and orientation of all sound-amplifying equipment.

(e) The Police Chief shall deny the permit application or revoke any permit if the chief finds any of the following:

(1) The application contains materially false or intentionally misleading information;

(2) The use of sound amplifying equipment at an event or activity proposed will be located in or upon a premises, building or structure that is hazardous to the health or safety of the employees or patrons of the premises, business, activity, or event, or the general public, under the standards established by the Uniform Building or Fire Codes, or other applicable codes, as set forth in OMC Titles 4 and 8;

(3) The use of sound amplifying equipment at an event or activity proposed in or upon a premises, building or structure that lacks adequate on-site parking for participants attending the proposed event or activity under the applicable standards set forth in OMC Title 9;

(4) The conditions of any motor vehicle movement are such that, in his or her opinion, the use of the equipment would constitute an unreasonable interference with traffic safety;

(5) The conditions of pedestrian movement are such that the use of the equipment would constitute a detriment to traffic safety;

(6) The application submitted by the applicant reveals that the applicant would violate the provisions of this section or any other provision of federal, state and/or local law;

(7) The applicant is unwilling or unable to comply with the provisions of this chapter or any conditions imposed upon any permit issued;

(8) There had already been a permitted event at the intended location, or within a two hundred (200) yard radius of the intended location and the prior permitted event was located on residentially zoned property or on a street, alley, public parking lot or neighborhood park within three (3) months prior to the intended event. Community parks are exempt from this subsection (8); or

(9) The applicant or location has had previous violations within the past calendar year, and in the judgment of the Police Chief, issuance would be contrary to the intent of this section.

(f) In determining whether the use of the equipment would constitute an unreasonable interference with or detriment to traffic safety, the Police Chief shall consider, but shall not necessarily be limited to:

(1) The volumes, patterns and speed of vehicular and pedestrian traffic in the proposed area of use;

(2) The relationship of the proposed use of equipment and potential impacts upon traffic patterns;

(3) Availability of sufficient room for the operation of the equipment without significantly interfering with the traffic patterns;

(4) Proximity to schools, playgrounds and similar facilities where use of such equipment might attract children into traffic patterns; or

(5) Proximity to busy intersections or other potentially hazardous conditions where use of such equipment might constitute a hazard by reason of its tendency to distract drivers of vehicles or pedestrians.

(g) Issuance or denial.

(1) If the application is approved, the Police Chief shall return an approved copy of the application to the applicant and shall issue a permit. The permit shall constitute permission for the use of the sound amplifying equipment as requested.

(2) Any application filed shall be either approved or disapproved within five (5) days of the filing thereof.

(3) If the application is disapproved, the Police Chief shall return a disapproved copy forthwith to the applicant with a written statement on the reason for disapproval.

(i) Any person aggrieved by a decision of the Police Chief or his or her designee may file an appeal to the City Manager. A complete and proper appeal shall be filed with the City Clerk within ten (10) calendar days of the action that is the subject of the appeal. If the applicant fails to file an appeal within the ten (10) day filing period provided herein, denial shall take effect immediately upon expiration of such filing period. All appeals shall be in writing and shall contain the following information: (a) name(s) of the person filing the appeal, (b) a brief statement in ordinary and concise language of the relief sought, and (c) the signatures of all parties named as appellants and their mailing addresses. After receiving the appeal, the City Clerk shall immediately forward the matter to the City Manager for handling.

(ii) The City Manager shall, upon receipt of the appeal, set the matter for hearing before the City Manager or a hearing officer. Any hearing officer shall be a licensed attorney or recognized mediator designated by the City Manager. The hearing shall be set for not more than ten (10) calendar days after the receipt of the appeal unless a longer time is requested or consented to by the appellant. Notice of such hearing shall be given in writing and mailed at least five (5) calendar days prior to the date of the hearing, by U.S. mail, with a proof of service attached, addressed to the address listed on the permit application, or the written appeal if differen

the permit application. The notice shall state the grounds of the complaint or reason for the denial and shall state the time and place where such hearing will be held.

(iii) The City Manager or hearing officer shall, within ten (10) calendar days following the conclusion of the hearing, make a written finding and decision, which shall be delivered to the City and the appellant by first class mail. Notwithstanding any provision in this Code, the decision of the City Manager or hearing officer shall be the final administrative decision of the City. Any party dissatisfied with the decision of the City Manager or hearing officer may seek review of such decision under the provisions of Code Civil Procedure, §§ 1094.5 and 1094.8, as amended from time to time.

(h) In addition to any other provisions of this Code, the use of sound-amplifying equipment and sound trucks in the City shall be subject to the following regulations:

(1) The only sounds permitted are music and human speech;

(2) Sound shall not be emitted within one hundred (100) yards of hospitals, churches, schools and City Hall;

(3) The volume of sound shall be controlled so that it will not be audible for a distance in excess of one hundred (100) feet from the sound amplifying equipment or sound truck, and so that the volume is not unreasonably loud, raucous, jarring, disturbing or a nuisance to persons within the range of allowed audibility; or

(4) The sound amplifying equipment or sound truck shall not be used between the hours of 8:00 p.m. and 8:00 a.m.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.14. Motor vehicles.

The use of any motor vehicle in such a condition as to create excessive, impulsive or intrusive noises is prohibited. The discharge into the open air of the exhaust of any internal combustion engine, stationary or mounted on wheels, motorboat or motor vehicle, including motor cycle, whether or not discharged through a muffler or other similar device, which discharge creates excessive, unusual, impulsive or intrusive noise is prohibited. Motor vehicles shall comply with the noise regulations of the California Vehicle Code.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.15. Noise level measurement.

(a) The location selected for measuring exterior noise levels in a residential area shall be at any part of a private yard, patio, deck or balcony normally used for human activity and identified by the owner or, if occupied by someone other than the owner, the occupant of the affected property as suspected of exceeding the noise level standard. This location may be the closest point in the private yard or patio, or on the deck or balcony, to the noise source, but should not be located in nonhuman activity areas such as trash container storage areas, planter beds, above or contacting a property line fence, or other areas not normally used as part of the yard, patio, deck or balcony. The location selected for measuring exterior noise levels in a nonresidential area shall be at the closest point to the noise source. The measurement microphone height shall be five (5) feet above finish elevation or, in the case of a deck or balcony, the measurement microphone height shall be five (5) feet above the finished floor level.

(b) The location selected for measuring interior noise levels shall be made within the affected residential unit. The measurements shall be made at a point at least four (4) feet from the wall, ceiling or floor, or within the frame of a window opening, nearest the noise source. The measurements shall be made with windows in an open position.

(c) Any decibel measurement made pursuant to the provisions of this chapter shall be measured in decibels (dBAs) as measured with a sound level meter using the A-weighted sound pressure level.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.16. Prima facie violation.

Any noise exceeding the noise level standard as specified in §§ 5-29.04 and 5-29.05, shall be deemed to be prima facie evidence of a violation of the provisions of this chapter.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.17. Penalty.

(a) Any person who negligently or knowingly violates any provision of this chapter shall be guilty of an infraction and upon conviction shall be punishable by a fine specified in OMC § 1-2.01. Each day a violation occurs shall constitute a separate offense and shall be punishable as such.

(b) Any person who negligently or knowingly violates any provision of this chapter may also be subject to fine(s) specified in the administrative citation schedule of fines set forth in OMC § 1-5.04. The manner of issuing administrative citations shall comply with all the procedures specified in OMC Chapter 5, Title 1.

(c) As an additional remedy, the operation or maintenance of any device, instrument, vehicle or machinery in violation of any provisions of this chapter, which operation or maintenance causes or creates sound levels exceeding the allowable standards as specified in this chapter, shall be deemed and is declared to be a public nuisance and may be subject to abatement by a restraining order or injunction issued by a court of competent jurisdiction.

(d) Any violation of this chapter is declared to be a public nuisance and may be abated in accordance with law. The expense of enforcing this chapter is declared to be public nuisance and may be by resolution of the City Council declared to be a lien and special assessment against the property on which such nuisance is maintained, and any such charge shall also be a personal obligation of the property owner.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.18. Enforcement and administration.

(a) It shall be the responsibility of Police or Code Enforcement Officers to enforce the provisions of this chapter and to perform all other functions required by this chapter. Such duties shall include, but not be limited to investigating potential violations, issuing warning notices and citations, and providing evidence to the City prosecutor for legal action.

(b) For violations of § 5-29.07, Police or Code Enforcement Officers shall obtain a declaration under penalty of perjury from two (2) declarants living in separate households within a sixty (60) day period stating in detail all of the following:

(1) That the declarant is a resident of a residential neighborhood located within two hundred (200) yards of the noise source; and

(2) Within the past month declarant has heard noise for substantially long periods to the extreme annoyance of the declarant.

(3) Declarations from two (2) declarants are required to prove a violation of § 5-29.07, but are not required to prove that a person has violated any other provision of this chapter.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.19. City Manager waiver.

The City Manager is authorized to grant a temporary waiver to the provisions of this chapter for a period of time necessary to correct the violations of this chapter, if such temporary waiver would be in the public interest and there is no feasible and prudent alternative to the activity, or the method of conducting the activity, for which the temporary waiver is sought. This time period may include a commitment to a program that includes placing necessary orders and entering into necessary contracts within thirty (30) days for repair or installation.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.20. Noise abatement program.

(a) In circumstances where adopted community-wide noise standards and policies prove impractical in controlling noise generated from a specific source, the City Council may establish a noise abatement program that recognizes the characteristics of the noise source and affected property and that incorporates specialized mitigation measures.

(b) Noise abatement programs shall set forth in detail the approved terms, conditions and requirements for achieving maximum compliance with noise standards and policies. Said terms, conditions and requirements may include, but shall not be limited to, limitations, restrictions, or prohibitions on operating hours, location of operations, and the types of equipment.

(§ 2, Ord. 2888, eff. March 6, 2008)

APPENDIX 3.2:

ONTARIO INTERNATIONAL AIRPORT
ALUC NOISE CRITERIA

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Table 2-3
Noise Criteria

Legend: Land use compatibility
(A detailed explanation of each land use acceptability category is provided on pg. 2-50 of this table.)

Normally Compatible Land Use	Conditional Land Use (45/50)	Incompatible Land Use

- Cells that are conditionally compatible that have a number, indicate the interior noise level standard condition for use consistency.

Land Use Category [1] *Note: Multiple land use categories and compatibility criteria may apply to a project*	Noise Impact Zones Exterior Noise Exposure [2] (CNEL dB) ≤ 60	60-65	65-70	70-75	≥ 75	Criteria for Conditional Uses *Note: Interior noise level limits shown in yellow cells also apply (See **Policy N4**)*
Outdoor Uses (limited or no activities in buildings)						
Natural Land Areas: desert, brush lands						Compatible at levels indicated, but noise disruption of natural quiet will occur
Water: flood plains, wetlands, lakes, reservoirs						
Agriculture (except residences and livestock): crops, orchards, vineyards, pasture, range land						
Livestock Uses: feed lots, stockyards, breeding, fish hatcheries, horse stables						Exercise caution with uses involving noise-sensitive animals
Outdoor Major Assembly Facilities: spectator-oriented outdoor stadiums, amphitheaters, fairgrounds, zoos [3]						Exercise caution if clear audibility by users is essential
Group Recreation (limited spectator stands): athletic fields, water recreation facilities, picnic areas						Exercise caution if clear audibility by users is essential
Small/Non-Group Recreation: golf courses, tennis courts, shooting ranges						Exercise caution if clear audibility by users is essential
Local Parks: children-oriented neighborhood parks, playgrounds						Exercise caution if clear audibility by users is essential
Camping: campgrounds, recreational vehicle/motor home parks						
Cemeteries (excluding chapels)						Compatible at levels indicated, but noise disruption of outdoor activities will occur
Residential and Lodging Uses						
Residential (<8 d.u./acre): individual dwellings, townhouses, mobile homes, bed & breakfast inns [4]		**45**				
Residential (≥8 d.u./acre) [4]		**45**	**45**			
Long-Term Lodging (>30 nights): extended-stay hotels, dormitories		**45**	**45**			
Short-Term Lodging (≤ 30 nights): hotels, motels, other transient lodging (except conference/assembly facilities)		**45**	**45**			

Table 2-3
Noise Criteria

Legend: Land use compatibility
(A detailed explanation of each land use acceptability category is provided on pg. 2-50 of this table.)

Normally Compatible Land Use	Conditional Land Use (45/50)	Incompatible Land Use

- Cells that are conditionally compatible that have a number, indicate the interior noise level standard condition for use consistency.

Land Use Category [1] *Note: Multiple land use categories and compatibility criteria may apply to a project*	Noise Impact Zones Exterior Noise Exposure [2] (CNEL dB) ≤ 60	60-65	65-70	70-75	≥ 75	Criteria for Conditional Uses *Note: Interior noise level limits shown in yellow cells also apply (See **Policy N4**)*
Congregate Care: retirement homes, assisted living, nursing homes, intermediate care facilities		45	45			
Educational and Institutional Uses						
Family day care homes (≤14 children) [4]		45				
Children's Schools: K-12, day care centers (>14 children); school libraries		45				
Adult Education classroom space: adult schools, colleges, universities		45	45			Applies only to classrooms; offices, laboratory facilities, gymnasiums, outdoor athletic facilities, and other uses to be evaluated as indicated for those land use categories
Community Libraries		45				
Indoor Major Assembly Facilities: auditoriums, conference centers, concert halls, indoor arenas [3]		45	45			
Indoor Large Assembly Facilities: movie theaters, places of worship, cemetery chapels, mortuaries [3]		45	45			
Indoor Recreation: gymnasiums, club houses, athletic clubs, dance studios			50			
In-Patient Medical: hospitals, mental hospitals		45	45			
Out-Patient Medical: health care centers, clinics		45	45	45		
Penal Institutions: prisons, reformatories		45	45			
Public Safety Facilities: police, fire stations			50	50		
Commercial, Office, and Service Uses						
Major Retail: regional shopping centers, 'big box' retail			50	50		Outdoor dining or gathering places incompatible above CNEL 70 dB
Local Retail: community/neighborhood shopping centers, grocery stores			50	50		Outdoor dining or gathering places incompatible above CNEL 70 dB
Eating/Drinking Establishments: restaurants, fast-food dining, bars			50	50		Outdoor dining or gathering places incompatible above CNEL 70 dB
Limited Retail/Wholesale: furniture, automobiles, heavy equipment, lumber yards, nurseries			50	50		

Table 2-3
Noise Criteria

Legend: Land use compatibility
(A detailed explanation of each land use acceptability category is provided on pg. 2-50 of this table.)

Normally Compatible Land Use	Conditional Land Use (45/50)	Incompatible Land Use

- Cells that are conditionally compatible that have a number, indicate the interior noise level standard condition for use consistency.

Land Use Category [1] *Note: Multiple land use categories and compatibility criteria may apply to a project*	Noise Impact Zones Exterior Noise Exposure [2] (CNEL dB) ≤ 60	60-65	65-70	70-75	≥ 75	Criteria for Conditional Uses *Note: Interior noise level limits shown in yellow cells also apply (See **Policy N4**)*
Offices: professional services, doctors, finance, civic; radio, television & recording studios, office space associated with other listed uses			50	50		
Personal & Miscellaneous Services: barbers, car washes, print shops			50	50		
Vehicle Fueling: gas stations, trucking & transportation terminals				50	50	
Industrial, Manufacturing, and Storage Uses						
Hazardous Materials Production: oil refineries, chemical plants (≥6,000 gallons)						
Heavy Industrial						
Light Industrial, High Intensity: food products preparation, electronic equipment				50	50	
Light Industrial, Low Intensity: machine shops, wood products, auto repair				50	50	
Research & Development			50	50		
Indoor Storage: wholesale sales, warehouses, mini/other indoor storage, barns, greenhouses						
Outdoor Storage: public works yards, automobile dismantling						
Mining & Extraction						
Transportation, Communication, and Utilities						
Rail & Bus Stations				50	50	
Transportation Routes: road & rail rights-of-way, bus stops						
Auto Parking: surface lots, structures						
Communications Facilities: emergency communications, broadcast & cell towers						
Power Plants						
Electrical Substations						
Wastewater Facilities: treatment, disposal						
Solid Waste Disposal Facilities: landfill, incineration						
Solid Waste Transfer Facilities, Recycle Centers						

Land Use Compatibility	Interpretation/Comments
Normally Compatible	*Indoor Uses:* Either the activities associated with the land use are inherently noisy or standard construction methods will sufficiently attenuate exterior noise to an acceptable indoor community noise equivalent level (CNEL); for land use types that are compatible because of inherent noise levels, sound attenuation must be provided for associated office, retail, and other noise-sensitive indoor spaces sufficient to reduce exterior noise to an interior maximum of CNEL 50 dB *Outdoor Uses:* Except as noted in the table, activities associated with the land use may be carried out with minimal interference from aircraft noise
Conditional	*Indoor Uses:* Building structure must be capable of attenuating exterior noise from all noise sources to the indoor CNEL indicated by the number in the cell (either 45 or 50) *Outdoor Uses:* Caution should be exercised with regard to noise-sensitive outdoor uses; these uses are likely to be disrupted by aircraft noise events; acceptability is dependent upon characteristics of the specific use [5]
Incompatible	*Indoor Uses:* Unacceptable noise interference if windows are open; at exposures above CNEL 65 dB, extensive mitigation techniques required to make the indoor environment acceptable for performance of activities associated with the land use *Outdoor Uses:* Severe noise interference makes the outdoor environment unacceptable for performance of activities associated with the land use

Notes

[1] Land uses not specifically listed shall be evaluated using the criteria for similar uses.

[2] For the purposes of these criteria, the exterior noise exposure generated by aircraft activity at ONT is defined by the projected noise impact zones illustrated on **Map 2-3** of this *Compatibility Plan*.

[3] A *Major Assembly Facility* is defined as having a capacity of ≥1,000 people, while a *Large Assembly Facility* has a capacity of 300 to 999 people. Source: International Building Code.

[4] In accordance with **Policies S1, N2,** and **SP2**, construction of a single-family home, including a second dwelling unit as defined by state law, is allowed on a legal lot of record if such use is permitted by local land use regulations. A family day care home (serving ≤14 children) may be established in any dwelling.

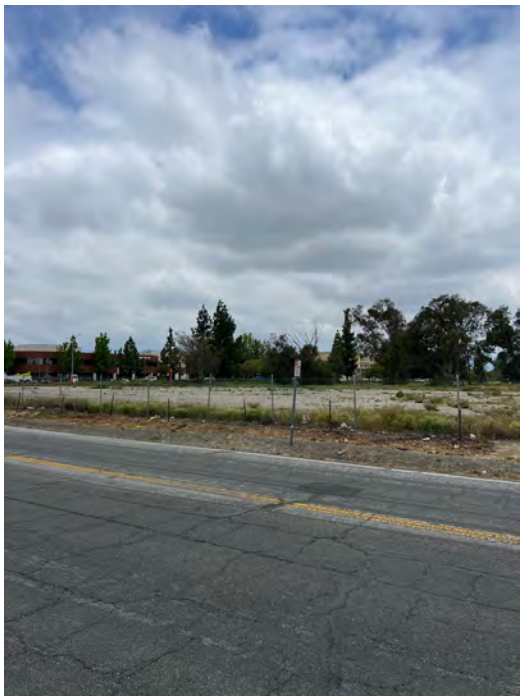
[5] Noise-sensitive land uses are ones for which the associated primary activities, whether indoor or outdoor, are susceptible to disruption by loud noise events. The most common types of noise-sensitive land uses include, but are not limited to, the following: residential, hospitals, nursing facilities, intermediate care facilities, educational facilities, libraries, museums, places of worship, child-care facilities, and certain types of passive recreational parks and open space.

APPENDIX 5.1:

STUDY AREA PHOTOS

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15693 - Empire Grove Hotel



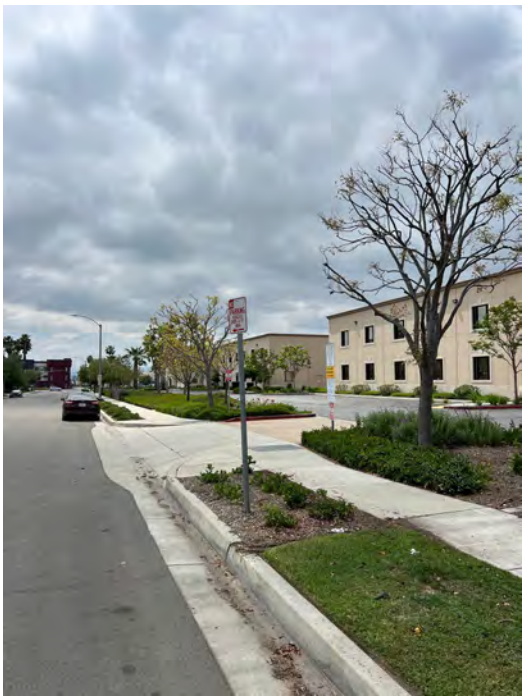






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APPENDIX 7.1:

OFF-SITE TRAFFIC NOISE CALCULATIONS

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □□□□□□□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□□
Road Segment: □□□□□d □□ □□re □□□d□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	Day	Evening	Night	Daily
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.99*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.25*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □□□□□□□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□□
Road Segment: □□□□□d □□ □□re □□□d□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□	□□□□	□□□□	*-4.86*	□□□□	□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□	*-4.99*	□□□□	□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□	□□□□	*-5.25*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □□□□□□□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□□
Road Segment: □□□□ □ □ R□□ □

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.99*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.25*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □□□□□□□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□□
Road Segment: □□□□ □□ R□□ □

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.99*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.25*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □□□□□□□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□□
Road Segment: □ □□□□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□		
Medium Trucks:	□□□□□□		
Heavy Trucks:	□□□□□□	*Grade Adjustment:*	□□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□□	□□□□□□	□□□□□□	*-4.86*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□□	□□□□□□	□□□□□□	*-4.99*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□□	□□□□□□	□□□□□□	*-5.25*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□□	□□□	□□□□	□□□□
CNEL:	□□□	□□□	□□□□	□□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □□□□□□□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□□
Road Segment: D □□□□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□	
Medium Trucks:	□□□□□□	
Heavy Trucks:	□□□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□□	□□□□□□	□□□□□□	*-4.86*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□□	□□□□□□	□□□□□□	*-4.99*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□□	□□□□□□	□□□□□□	*-5.25*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□□	□□□	□□□□	□□□□
CNEL:	□□□	□□□	□□□□	□□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □□□□□□□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□□
Road Segment: □ □□□□□□d□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□□e□
Peak Hour Percentage:	□□□□□□□
Peak Hour Volume:	□□□□ □e□□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□□ □ee□
Road Elevation:	□□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□□ de□ree□
Right View:	□□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□		
Medium Trucks:	□□□□□□		
Heavy Trucks:	□□□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□□	□□□□□□	□□□□□□	*-4.86*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□□	□□□□□□	□□□□□□	*-4.99*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□□	□□□□□□	□□□□□□	*-5.25*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□□	□□□	□□□	□□□□
CNEL:	□□□	□□□	□□□□	□□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □□□□□□□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □r□□□□□□d □□e□ *Job Number:* □□□□□□
Road Segment: □□□□ R□□ □□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.99*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.25*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□□	□□□	□□□
CNEL:	□□	□□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □□□□□□□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □r□□□□□□d □□e□ *Job Number:* □□□□□□
Road Segment: □□□□ R□□ □□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.99*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.25*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□□	□□□	□□□
CNEL:	□□	□□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □□□□□□□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □r□□□□□□d □□e□ *Job Number:* □□□□□□
Road Segment: □u□□□□Rd□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□□ □e□□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□□ □ee□
Road Elevation:	□□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□□ de□ree□
Right View:	□□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□		
Medium Trucks:	□□□□□□		
Heavy Trucks:	□□□□□□	*Grade Adjustment:*	□□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□□	□□□□□□	□□□□□□	*-4.86*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□□	□□□□□□	□□□□□□	*-4.99*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□□	□□□□□□	□□□□□□	*-5.25*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□□	□□□	□□□□	□□□□
CNEL:	□□□	□□□	□□□□	□□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □□□□□□□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□□□d □□ □□re □□d□ *Job Number:* □□□□□□
Road Segment: □□□ey□rd □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□	□□□□□	*-4.65*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-4.87*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-5.43*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□	□□□
CNEL:	□□	□□	□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □□□□□□□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □ □□□ *Job Number:* □□□□□□
Road Segment: □□□ey□rd □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□	□□□□□	*-4.49*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-5.77*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□	□□
CNEL:	□□	□□	□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □□□□□□□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: D □□□ *Job Number:* □□□□□□
Road Segment: □□□ey□rd □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□	□□□□□	*-4.49*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-5.77*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□	□□	□□	□□
CNEL:	□□	□□	□□	□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □□□□□□□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□□e□□□□□ □e□□er □ □y *Job Number:* □□□□□□
Road Segment: □□□ey□rd □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□	□□□□□	*-4.65*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-4.87*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-5.43*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□	□□□
CNEL:	□□	□□	□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □□□□□□□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□□e□□□□□ □e□□er □ □y *Job Number:* □□□□□□
Road Segment: □□□□e □□□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□□e□
Peak Hour Percentage:	□□□□□□□
Peak Hour Volume:	□□□□ □e□□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□□ □ee□
Road Elevation:	□□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□□ de□ree□
Right View:	□□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□	
Medium Trucks:	□□□□□□	
Heavy Trucks:	□□□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□	*-4.65*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-4.87*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-5.43*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□□	□□□	□□□	□□□□
CNEL:	□□□	□□□	□□□	□□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □□□□□□□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □u□□□□Rd□ *Job Number:* □□□□□□
Road Segment: □ □□□□□□d□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□□e□
Peak Hour Percentage:	□□□□□□□
Peak Hour Volume:	□□□□ □e□□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□□ □ee□
Road Elevation:	□□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□□ de□ree□
Right View:	□□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□		
Medium Trucks:	□□□□□□		
Heavy Trucks:	□□□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□	*-4.65*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-4.87*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-5.43*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□	□□	□□	□□
CNEL:	□	□□	□□	□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □□□□□□□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □u□□□□Rd□ *Job Number:* □□□□□□
Road Segment: □□rde□□□□ D□y□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□		
Medium Trucks:	□□□□□□		
Heavy Trucks:	□□□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-4.65*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-4.87*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-5.43*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□	□□	□□	□□
CNEL:	□	□□	□□	□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □□□□□□□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □u□□□□Rd□ *Job Number:* □□□□□□
Road Segment: □r□□□□□□d □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□		
Medium Trucks:	□□□□□□		
Heavy Trucks:	□□□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□	*-4.65*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-4.87*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-5.43*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□□	□□□	□□□	□□□□
CNEL:	□□□	□□□	□□□	□□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □□□□□□□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □ □□□□□□d□ *Job Number:* □□□□□□
Road Segment: □□□ey□rd □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□	
Medium Trucks:	□□□□□□	
Heavy Trucks:	□□□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□□	□□□□□□	□□□□□□	*-4.69*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□	□□□□□□	□□□□□□	*-4.88*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□	□□□□□□	□□□□□□	*-5.34*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□□	□□□	□□□□	□□□□
CNEL:	□□□	□□□	□□□□	□□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □□□□□□□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □ □□□□□□d□ *Job Number:* □□□□□□
Road Segment: □□□ey□rd □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.69*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.88*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.34*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □□□□□□□□□□ *Project Name:* □□□□r□□ □□□e□
Road Name: □□□□□□□d□ *Job Number:* □□□□□□
Road Segment: □□□□e□□□□ □e□□er □ □y

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.69*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.88*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.34*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□
Road Segment: □□□□□d □□ □□re □□□d□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.99*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.25*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□
Road Segment: □□□□□d □□ □□re □□d□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□	□□□□	□□□□	*-4.86*	□□□□	□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□	*-4.99*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□□	□□□□	□□□□	*-5.25*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□□
Road Segment: □□□□ □ □ R□□ □

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.99*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.25*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□□
Road Segment: □□□□ □□ R□□ □

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	Day	Evening	Night	Daily
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.99*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.25*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□□
Road Segment: □ □□□□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□	
Medium Trucks:	□□□□□□	
Heavy Trucks:	□□□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□□	□□□□□□	□□□□□□	*-4.86*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□	□□□□□□	□□□□□□	*-4.99*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□	□□□□□□	□□□□□□	*-5.25*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□□	□□□	□□□□	□□□□
CNEL:	□□□	□□□	□□□□	□□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□□
Road Segment: D □□□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.99*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.25*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□□
Road Segment: □ □□□□□□d□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.99*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.25*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □r□□□□□d □□e□ *Job Number:* □□□□□□
Road Segment: □□□□ R□□ □□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.99*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.25*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□□	□□□	□□□
CNEL:	□□	□□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □r□□□□□d □□e□ *Job Number:* □□□□□□
Road Segment: □□□□ R□□ □□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.99*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.25*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□□	□□□	□□□
CNEL:	□□	□□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □r□□□□□d □□e□ *Job Number:* □□□□□
Road Segment: □u□□□□Rd□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.99*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.25*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□□□d □□ □□re □□d□ *Job Number:* □□□□□□
Road Segment: □□□ey□rd □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□	□□□□□	*-4.65*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-4.87*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-5.43*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□	□□□
CNEL:	□□	□□	□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □ □□□ *Job Number:* □□□□□□
Road Segment: □□□ey□rd □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□		
Medium Trucks:	□□□□□□		
Heavy Trucks:	□□□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□	*-4.49*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-4.86*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-5.77*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□□	□□□	□□□	□□□
CNEL:	□□□	□□□	□□□	□□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□ □ □□e□
Road Name: D □□□ *Job Number:* □□□□□□
Road Segment: □□□ey□rd □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□	
Medium Trucks:	□□□□□□	
Heavy Trucks:	□□□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□	*-4.49*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-4.86*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-5.77*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□	□□	□□	□□
CNEL:	□□	□□	□□	□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □□e□

Road Name: □□□□e□□□□□ □e□□er □ □y *Job Number:* □□□□□□

Road Segment: □□□ey□rd □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□	□□□□□	*-4.65*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-4.87*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-5.43*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□	□□□
CNEL:	□□	□□	□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□□e□□□□□ □e□□er □ □y *Job Number:* □□□□□□
Road Segment: □□□□e □□□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□	□□□□□	*-4.65*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-4.87*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-5.43*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□	□□□
CNEL:	□□	□□	□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □u□□□□Rd□ *Job Number:* □□□□□□
Road Segment: □ □□□□□□d□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□		
Medium Trucks:	□□□□□□		
Heavy Trucks:	□□□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□	*-4.65*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-4.87*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-5.43*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□□	□□□	□□□	□□□□
CNEL:	□□□	□□□	□□□	□□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □u□□□□Rd□ *Job Number:* □□□□□□
Road Segment: □□rde□□□□ D□y□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□	
Medium Trucks:	□□□□□□	
Heavy Trucks:	□□□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□	*-4.65*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-4.87*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-5.43*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□	□□	□□	□□
CNEL:	□	□□	□□	□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □u□□□□Rd□ *Job Number:* □□□□□□
Road Segment: □r□□□□□□d □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□	
Medium Trucks:	□□□□□□	
Heavy Trucks:	□□□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□	*-4.65*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-4.87*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-5.43*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□□	□□□	□□□	□□□□
CNEL:	□□□	□□□	□□□	□□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □□e□
Road Name: □□□□□□d□ *Job Number:* □□□□□□
Road Segment: □□□ey□rd □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□		
Medium Trucks:	□□□□□□		
Heavy Trucks:	□□□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□□	□□□□□□	□□□□□□	*-4.69*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□	□□□□□□	□□□□□□	*-4.88*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□	□□□□□□	□□□□□□	*-5.34*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□□	□□□	□□□□	□□□□
CNEL:	□□□	□□□	□□□□	□□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □ □□□□□□d□ *Job Number:* □□□□□□
Road Segment: □□□ey□rd □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.69*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.88*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.34*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □□e□

Road Name: □□□□□□d□ *Job Number:* □□□□□□

Road Segment: □□□□e□□□□ □e□□er □ □y

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.69*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.88*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.34*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□
Road Segment: □□□□□d □□ □□re □□d□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.99*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.25*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□
Road Segment: □□□□□d □□ □□re □□□d□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□□ □e□□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□□ □ee□
Road Elevation:	□□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□□ de□ree□
Right View:	□□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□	
Medium Trucks:	□□□□□□	
Heavy Trucks:	□□□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□	□□□□□□	□□□□□□	*-4.86*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□□	□□□□□□	□□□□□□	*-4.99*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□□	□□□□□□	□□□□□□	*-5.25*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□□	□□□□	□□□□	□□□□
CNEL:	□□□	□□□□	□□□□	□□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□□
Road Segment: □□□□ □ □ R□□ □

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□	□□□□	□□□□	*-4.86*	□□□□	□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□	*-4.99*	□□□□	□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□	□□□□	*-5.25*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□□
Road Segment: □□□□ □□ R□□ □

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	Day	Evening	Night	Daily
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.99*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.25*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□□
Road Segment: □ □□□□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	Day	Evening	Night	Daily
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.99*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.25*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□□
Road Segment: D □□□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.99*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.25*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□□
Road Segment: □ □□□□□□d□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□		
Medium Trucks:	□□□□□□		
Heavy Trucks:	□□□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□□	□□□□□□	□□□□□□	*-4.86*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□□	□□□□□□	□□□□□□	*-4.99*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□□	□□□□□□	□□□□□□	*-5.25*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□□	□□□	□□□□	□□□□
CNEL:	□□□	□□□	□□□□	□□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □r□□□□□d □□e□ *Job Number:* □□□□□□
Road Segment: □□□□ R□□ □□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□	□□□□	□□□□	*-4.86*	□□□□	□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□	*-4.99*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□□	□□□□	□□□□	*-5.25*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□□	□□□	□□□
CNEL:	□□	□□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □r□□□□□d □□e□ *Job Number:* □□□□□□
Road Segment: □□□□ R□□ □□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□	□□□□	□□□□	*-4.86*	□□□□	□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□	*-4.99*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□□	□□□□	□□□□	*-5.25*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□□	□□□	□□□
CNEL:	□□	□□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □r□□□□□□d □□e□ *Job Number:* □□□□□□
Road Segment: □u□□□□Rd□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□□ □e□□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□□ □ee□
Road Elevation:	□□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□□ de□ree□
Right View:	□□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□	
Medium Trucks:	□□□□□□	
Heavy Trucks:	□□□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□□	□□□□□□	□□□□□□	*-4.86*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□	□□□□□□	□□□□□□	*-4.99*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□	□□□□□□	□□□□□□	*-5.25*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□□	□□□	□□□□	□□□□
CNEL:	□□□	□□□	□□□□	□□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□□□d □□ □□re □□d□ *Job Number:* □□□□□□
Road Segment: □□□ey□rd □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□	□□□□□	*-4.65*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-4.87*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-5.43*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□	□□□
CNEL:	□□	□□	□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □□e□
Road Name: □ □□□ *Job Number:* □□□□□□
Road Segment: □□□ey□rd □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□□	□□□□	□□□□□	□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□	
Medium Trucks:	□□□□□	
Heavy Trucks:	□□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□	□□□□□	*-4.49*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-5.77*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□	□□□
CNEL:	□□	□□	□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □□e□
Road Name: D □□□ *Job Number:* □□□□□
Road Segment: □□□ey□rd □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□	□□□□□	*-4.49*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-5.77*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□	□□□
CNEL:	□□	□□	□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□

Road Name: □□□□e□□□□□ □e□□er □ □y *Job Number:* □□□□□□

Road Segment: □□□ey□rd □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□	□□□□□	*-4.65*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-4.87*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-5.43*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□	□□□
CNEL:	□□	□□	□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □□e□
Road Name: □□□□e□□□□□ □e□□er □ □y *Job Number:* □□□□□□
Road Segment: □□□□e □□□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□		
Medium Trucks:	□□□□□□		
Heavy Trucks:	□□□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□	*-4.65*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-4.87*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-5.43*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□□	□□□	□□□	□□□□
CNEL:	□□□	□□□	□□□	□□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □u□□□□Rd□ *Job Number:* □□□□□□
Road Segment: □ □□□□□□d□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□□e□
Peak Hour Percentage:	□□□□□□□
Peak Hour Volume:	□□□□ □e□□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□□ □ee□
Road Elevation:	□□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□□ de□ree□
Right View:	□□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□	
Medium Trucks:	□□□□□□	
Heavy Trucks:	□□□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□	*-4.65*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-4.87*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-5.43*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□□	□□□	□□□	□□□□
CNEL:	□□□	□□□	□□□	□□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□ē□
Road Name: □u□□□□Rd□ *Job Number:* □□□□□□
Road Segment: □□rde□□□□□ D□y□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□□ē□
Peak Hour Percentage:	□□□□□□□
Peak Hour Volume:	□□□□ □e□□□□ē□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ēe□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□□
Centerline Dist. to Barrier:	□□□□□ □ēe□
Centerline Dist. to Observer:	□□□□□ □ēe□
Barrier Distance to Observer:	□□□□ □ēe□
Observer Height (Above Pad):	□□□□ □ēe□
Pad Elevation:	□□□□ □ēe□
Road Elevation:	□□□□ □ēe□
Road Grade:	□□□□□
Left View:	□□□□□□ de□ree□
Right View:	□□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□	
Medium Trucks:	□□□□□□	
Heavy Trucks:	□□□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□	*-4.65*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-4.87*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-5.43*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□□	□□□	□□□	□□□□
CNEL:	□□□	□□□	□□□	□□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □u□□□□Rd□ *Job Number:* □□□□□□
Road Segment: □r□□□□□□d □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□	
Medium Trucks:	□□□□□□	
Heavy Trucks:	□□□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□	*-4.65*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-4.87*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-5.43*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□□	□□□	□□□□	□□□□
CNEL:	□□□	□□□	□□□□	□□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □ □□□□□□d□ *Job Number:* □□□□□□
Road Segment: □□□ey□rd □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□□ □e□□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.69*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.88*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.34*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □ □□□□□□d□ *Job Number:* □□□□□□
Road Segment: □□□ey□rd □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.69*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.88*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.34*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □□r□e□□□□ *Project Name:* □ □□□r□□ □□e□
Road Name: □□□□□□d□ *Job Number:* □□□□□□
Road Segment: □□□□e□□□□ □e□□er □ □y

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.69*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.88*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.34*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □r□e□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□
Road Segment: □□□□□d □□ □□re □□□d□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.99*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.25*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □r□e□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□
Road Segment: □□□□□d □□ □□re □□□d□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□	□□□□□	□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□		
Medium Trucks:	□□□□□		
Heavy Trucks:	□□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□	□□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.99*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.25*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□□	□□□	□□□
CNEL:	□□	□□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □r□e□□ *Project Name:* □ □□□r□□ □ □e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□
Road Segment: □□□□ □ □ R□□ □

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□	□□□□	□□□□	*-4.86*	□□□□	□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□	*-4.99*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□□	□□□□	□□□□	*-5.25*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □r□e□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□
Road Segment: □□□□ □□ R□□ □

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.99*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.25*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □r□e□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□
Road Segment: □ □□□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.99*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.25*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □r□e□□ *Project Name:* □ □□□r□□ □ □e□
Road Name: □□ey□rd □□e□ *Job Number:* □□□□□
Road Segment: D □□□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.99*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.25*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □r□e□□ *Project Name:* □ □□□r□□ □ □e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□
Road Segment: □ □□□□□□d□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.99*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.25*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □r□e□□ *Project Name:* □ □□□r□□ □ □e□
Road Name: □r□□□□□d □□e□ *Job Number:* □□□□□
Road Segment: □□□□ R□□ □□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt): □□□□□□ □e□□□e□
Peak Hour Percentage: □□□□□□
Peak Hour Volume: □□□□□ □e□□□e□
Vehicle Speed: □□ □ □□
Near/Far Lane Distance: □□ □ee□

Site Data

Barrier Height: **0.0 feet**
Barrier Type (0-Wall, 1-Berm): □□□
Centerline Dist. to Barrier: □□□□ □ee□
Centerline Dist. to Observer: □□□□ □ee□
Barrier Distance to Observer: □□□ □ee□
Observer Height (Above Pad): □□□ □ee□
Pad Elevation: □□□ □ee□
Road Elevation: □□□ □ee□
Road Grade: □□□□
Left View: □□□□ de□ree□
Right View: □□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos: □□
Medium Trucks (2 Axles): □□
Heavy Trucks (3+ Axles): □□

Vehicle Mix

VehicleType	Day	Evening	Night	Daily
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos: □□□□
Medium Trucks: □□□□
Heavy Trucks: □□□□ *Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos: □□□□□
Medium Trucks: □□□□□
Heavy Trucks: □□□□□

FHWA Noise Model Calculations

VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	□□□□□	□□□□	□□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.99*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.25*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	□□	□□□	□□□	□□□
CNEL:	□□	□□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □r□e□□ *Project Name:* □ □□□r□□ □ □e□
Road Name: □r□□□□□d □□e□ *Job Number:* □□□□□
Road Segment: □□□□ R□□ □□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□	□□□□	□□□□	*-4.86*	□□□□	□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□	*-4.99*	□□□□	□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□	□□□□	*-5.25*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□□	□□□	□□□
CNEL:	□□	□□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □r□e□□ *Project Name:* □ □□□r□□ □ □e□
Road Name: □r□□□□□d □□e□ *Job Number:* □□□□□
Road Segment: □u□□□Rd□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.99*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.25*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □r□e□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□□□d □□ □□re □□d□ *Job Number:* □□□□□
Road Segment: □□□ey□rd □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□	□□□□□	*-4.65*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-4.87*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-5.43*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□	□□□
CNEL:	□□	□□	□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □r□e□□ *Project Name:* □ □□□r□□ □ □e□
Road Name: □ □□□ *Job Number:* □□□□□
Road Segment: □□□ey□rd □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□	□□□□□	*-4.49*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-5.77*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□	□□□
CNEL:	□□	□□	□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □r□e□□ *Project Name:* □ □□□r□□ □ □e□
Road Name: D □□□ *Job Number:* □□□□□
Road Segment: □□□ey□rd □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□	□□□□□	*-4.49*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-5.77*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□	□□□
CNEL:	□□	□□	□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □r□e□□ *Project Name:* □ □□□r□□ □ □e□

Road Name: □□□□e□□□□□ □e□□er □ □y *Job Number:* □□□□□□

Road Segment: □□□ey□rd □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□□	□□□□	□□□□□	□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□	
Medium Trucks:	□□□□□	
Heavy Trucks:	□□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□	□□□□□	*-4.65*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-4.87*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-5.43*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□	□□□
CNEL:	□□	□□	□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □r□e□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □ □□□e□□□□ □e□□er □ □y *Job Number:* □□□□□□
Road Segment: □□□□e □□□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□		
Medium Trucks:	□□□□□□		
Heavy Trucks:	□□□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□	*-4.65*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-4.87*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-5.43*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□□	□□□	□□□	□□□□
CNEL:	□□□	□□□	□□□	□□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □r□e□□ *Project Name:* □ □□□r□□ □ □e□
Road Name: □u□□□□Rd□ *Job Number:* □□□□□
Road Segment: □ □□□□□□d□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□	□□□□□	*-4.65*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-4.87*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-5.43*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□	□□□
CNEL:	□□	□□	□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □r□e□□ *Project Name:* □ □□□r□□ □ □e□
Road Name: □u□□□□Rd□ *Job Number:* □□□□□□
Road Segment: □□rde□□□□ D□y□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□	
Medium Trucks:	□□□□□□	
Heavy Trucks:	□□□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□	*-4.65*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-4.87*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-5.43*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□□	□□□	□□□	□□□□
CNEL:	□□□	□□□	□□□	□□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □r□□e□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □u□□□□Rd□ *Job Number:* □□□□□□
Road Segment: □r□□□□□□d □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□	
Medium Trucks:	□□□□□□	
Heavy Trucks:	□□□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□	*-4.65*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-4.87*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-5.43*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□□	□□□	□□□□	□□□□
CNEL:	□□□	□□□	□□□□	□□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □r□e□□ *Project Name:* □ □□□r□□ □ □e□
Road Name: □ □□□□□d□ *Job Number:* □□□□□
Road Segment: □□□ey□rd □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.69*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.88*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.34*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □r□e□□ *Project Name:* □ □□□r□□ □ □e□
Road Name: □ □□□□□d□ *Job Number:* □□□□□
Road Segment: □□□ey□rd □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.69*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.88*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.34*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □ □ □r□e□□ *Project Name:* □ □□□r□□ □ □e□
Road Name: □ □□□□□d□ *Job Number:* □□□□□
Road Segment: □ □□□e□□□□ □e□□er □ □y

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.69*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.88*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.34*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □□□□ *Project Name:* □ □□□r□ □ □□e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□
Road Segment: □□□□□d □□ □□re □□□d□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.99*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.25*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □□□□ *Project Name:* □ □□□r□ □ □□e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□
Road Segment: □□□□□d □□ □□re □□□d□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□	□□□□	□□□□	*-4.86*	□□□□	□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□	*-4.99*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□□	□□□□	□□□□	*-5.25*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□□	□□□	□□□
CNEL:	□□	□□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □□□□ *Project Name:* □ □□□r□□ □□e□
Road Name: □□ey□rd □□e□ *Job Number:* □□□□□
Road Segment: □□□□ □ □ R□□ □

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□	□□□□	□□□□	*-4.86*	□□□□	□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□	*-4.99*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□□	□□□□	□□□□	*-5.25*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□□	□□□	□□□
CNEL:	□□	□□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □□□□ *Project Name:* □ □□□r□ □ □□e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□□
Road Segment: □□□□ □□ R□□ □

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□	□□□□	□□□□	*-4.86*	□□□□	□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□	*-4.99*	□□□□	□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□	□□□□	*-5.25*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□□	□□□	□□□
CNEL:	□□	□□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □□□□ *Project Name:* □ □□□r□ □ □□e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□
Road Segment: □ □□□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□	□□□□	□□□□	*-4.86*	□□□□	□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□	*-4.99*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□□	□□□□	□□□□	*-5.25*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□□	□□□	□□□
CNEL:	□□	□□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □□□□ *Project Name:* □ □□□r□ □ □□e□
Road Name: □□ey□rd □□e□ *Job Number:* □□□□□
Road Segment: D □□□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.99*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.25*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □□□□□ *Project Name:* □ □□□r□□ □□e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□□
Road Segment: □ □□□□□□d□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□	
Medium Trucks:	□□□□□□	
Heavy Trucks:	□□□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□□	□□□□□□	□□□□□□	*-4.86*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□□	□□□□□□	□□□□□□	*-4.99*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□□	□□□□□□	□□□□□□	*-5.25*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□□	□□□	□□□□	□□□□
CNEL:	□□□	□□□	□□□□	□□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □r□□□□□d □□e□ *Job Number:* □□□□□
Road Segment: □□□□ R□□ □□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□	□□□□	□□□□	*-4.86*	□□□□	□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□	*-4.99*	□□□□	□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□	□□□□	*-5.25*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□□	□□□	□□□
CNEL:	□□	□□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □r□□□□□d □□e□ *Job Number:* □□□□□
Road Segment: □□□□ R□□ □□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□	□□□□	□□□□	*-4.86*	□□□□	□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□	*-4.99*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□□	□□□□	□□□□	*-5.25*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□□	□□□	□□□
CNEL:	□□	□□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □□□□ *Project Name:* □ □□□r□ □ □□e□
Road Name: □r□□□□□d □□e□ *Job Number:* □□□□□
Road Segment: □u□□□Rd□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□	□□□□	□□□□	*-4.86*	□□□□	□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□	*-4.99*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□□	□□□□	□□□□	*-5.25*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□□	□□□	□□□
CNEL:	□□	□□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□□□d □□ □□re □□d□ *Job Number:* □□□□□
Road Segment: □□□ey□rd □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□	□□□□□	*-4.65*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-4.87*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-5.43*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □□□□ *Project Name:* □ □□□r□ □ □e□
Road Name: □ □□□ *Job Number:* □□□□□
Road Segment: □□□ey□rd □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□	□□□□□	*-4.49*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-5.77*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□	□□□
CNEL:	□□	□□	□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □□□□ *Project Name:* □ □□□r□ □ □e□
Road Name: D □□□ *Job Number:* □□□□□
Road Segment: □□□ey□rd □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□	□□□□□	*-4.49*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-5.77*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□	□□□
CNEL:	□□	□□	□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □□□□ *Project Name:* □ □□□r□ □ □□e□
Road Name: □□□□e□□□□ □e□□er □ □y *Job Number:* □□□□□
Road Segment: □□□ey□rd □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□	□□□□□	*-4.65*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-4.87*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-5.43*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□	□□□
CNEL:	□□	□□	□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □□□□ *Project Name:* □ □□□r□ □ □□e□
Road Name: □ □□□e□□□□ □e□□er □ □y *Job Number:* □□□□□
Road Segment: □□□e □□□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□	□□□□□	*-4.65*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-4.87*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-5.43*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□	□□□
CNEL:	□□	□□	□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □□□□ *Project Name:* □ □□□r□ □ □□e□
Road Name: □u□□□□Rd□ *Job Number:* □□□□□□
Road Segment: □ □□□□□□d□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□□ □e□□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□□ □ee□
Road Elevation:	□□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□□ de□ree□
Right View:	□□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□		
Medium Trucks:	□□□□□□		
Heavy Trucks:	□□□□□□	*Grade Adjustment:*	□□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□	*-4.65*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-4.87*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-5.43*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□□	□□□	□□□□	□□□□
CNEL:	□□□	□□□	□□□□	□□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □□□□ *Project Name:* □ □□□r□ □ □□e□
Road Name: □u□□□□Rd□ *Job Number:* □□□□□□
Road Segment: □□rde□□□□ D□y□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□	□□□□□	*-4.65*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-4.87*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-5.43*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □□□□ *Project Name:* □ □□□r□□ □□e□
Road Name: □u□□□□Rd□ *Job Number:* □□□□□
Road Segment: □r□□□□□d □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt): □□□□□□ □e□□□e□
Peak Hour Percentage: □□□□□
Peak Hour Volume: □□□□□ □e□□□e□
Vehicle Speed: □□ □ □□
Near/Far Lane Distance: □□ □ee□

Site Data

Barrier Height: **0.0 feet**
Barrier Type (0-Wall, 1-Berm): □□□
Centerline Dist. to Barrier: □□□□ □ee□
Centerline Dist. to Observer: □□□□ □ee□
Barrier Distance to Observer: □□□ □ee□
Observer Height (Above Pad): □□□ □ee□
Pad Elevation: □□□ □ee□
Road Elevation: □□□ □ee□
Road Grade: □□□□
Left View: □□□□ de□ree□
Right View: □□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos: □□
Medium Trucks (2 Axles): □□
Heavy Trucks (3+ Axles): □□

Vehicle Mix

VehicleType	Day	Evening	Night	Daily
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos: □□□□
Medium Trucks: □□□□
Heavy Trucks: □□□□ *Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos: □□□□□
Medium Trucks: □□□□□
Heavy Trucks: □□□□□

FHWA Noise Model Calculations

VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	□□□□□	□□□□□	□□□□	□□□□□	-4.65	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□□	-4.87	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□	□□□□□	-5.43	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □□□□ *Project Name:* □ □□□r□ □ □□e□
Road Name: □ □□□□□□d□ *Job Number:* □□□□□
Road Segment: □□□ey□rd □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□	□□□□□	□□□□□	*-4.69*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.88*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.34*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □□□□ *Project Name:* □ □□□r□ □ □e□
Road Name: □ □□□□□d□ *Job Number:* □□□□□
Road Segment: □□□ey□rd □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.69*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.88*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.34*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □□□□ *Project Name:* □ □□□r□ □ □e□
Road Name: □ □□□□□d□ *Job Number:* □□□□□
Road Segment: □ □□□e□□□ □e□□er □ □y

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.69*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.88*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.34*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□
Road Segment: □□□□□d □□ □□re □□□d□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□□ □e□□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.99*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.25*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□
Road Segment: □□□□□d □□ □□re □□□d□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□□ □e□□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□□ □ee□
Road Elevation:	□□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□□ de□ree□
Right View:	□□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□	
Medium Trucks:	□□□□□□	
Heavy Trucks:	□□□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□	□□□□□□	□□□□□□	*-4.86*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□□	□□□□□□	□□□□□□	*-4.99*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□□	□□□□□□	□□□□□□	*-5.25*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□□	□□□□	□□□□	□□□□
CNEL:	□□□	□□□□	□□□□	□□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□□
Road Segment: □□□□ □ □ R□□ □

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□	□□□□	□□□□	*-4.86*	□□□□	□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□	*-4.99*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□□	□□□□	□□□□	*-5.25*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□□	□□□	□□□
CNEL:	□□	□□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□□
Road Segment: □□□□ □□ R□□ □

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□□	□□□□	□□□□□	□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□	
Medium Trucks:	□□□□□	
Heavy Trucks:	□□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□	□□□□	□□□□	*-4.86*	□□□□	□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□	*-4.99*	□□□□	□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□	□□□□	*-5.25*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□□	□□□	□□□
CNEL:	□□	□□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□□
Road Segment: □ □□□□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□□ □e□□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□□ □ee□
Road Elevation:	□□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□□ de□ree□
Right View:	□□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□		
Medium Trucks:	□□□□□□		
Heavy Trucks:	□□□□□□	*Grade Adjustment:*	□□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□	□□□□□□	□□□□□□	*-4.86*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□□	□□□□□□	□□□□□□	*-4.99*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□□	□□□□□□	□□□□□□	*-5.25*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□□	□□□□	□□□□	□□□□
CNEL:	□□□	□□□□	□□□□	□□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □□□ey□rd □□e□ *Job Number:* □□□□□□
Road Segment: D □□□□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□□ □e□□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□□ □ee□
Road Elevation:	□□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□□ de□ree□
Right View:	□□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□	
Medium Trucks:	□□□□□□	
Heavy Trucks:	□□□□□□	*Grade Adjustment:* □□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□□	□□□□□□	□□□□□□	*-4.86*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□□	□□□□□□	□□□□□□	*-4.99*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□□	□□□□□□	□□□□□□	*-5.25*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□□	□□□	□□□□	□□□□
CNEL:	□□□	□□□	□□□□	□□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □□r□e□□□□ *Project Name:* □□□r□ □□e□
Road Name: □□ey□rd □□e□ *Job Number:* □□□□□
Road Segment: □□□□□□d□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.86*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.99*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.25*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □r□□□□□□d □□e□ *Job Number:* □□□□□□
Road Segment: □□□□ R□□ □□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□□ □e□□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□□ □ee□
Road Elevation:	□□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□□ de□ree□
Right View:	□□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□		
Medium Trucks:	□□□□□□		
Heavy Trucks:	□□□□□□	*Grade Adjustment:*	□□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□	□□□□□□	□□□□□□	*-4.86*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□□	□□□□□□	□□□□□□	*-4.99*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□□	□□□□□□	□□□□□□	*-5.25*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□□	□□□	□□□
CNEL:	□□	□□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □r□□□□□□d □□e□ *Job Number:* □□□□□□
Road Segment: □□□□ R□□ □□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□□ □e□□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□□ □ee□
Road Elevation:	□□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□□ de□ree□
Right View:	□□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□		
Medium Trucks:	□□□□□□		
Heavy Trucks:	□□□□□□	*Grade Adjustment:*	□□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□	□□□□□□	□□□□□□	*-4.86*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□□	□□□□□□	□□□□□□	*-4.99*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□□	□□□□□□	□□□□□□	*-5.25*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□□	□□□□	□□□□	□□□□
CNEL:	□□□	□□□□	□□□□	□□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □r□□□□□□d □□e□ *Job Number:* □□□□□□
Road Segment: □u□□□□Rd□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□□ □e□□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□□ □ee□
Road Elevation:	□□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□□ de□ree□
Right View:	□□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□	
Medium Trucks:	□□□□□□	
Heavy Trucks:	□□□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□	□□□□□□	□□□□□□	*-4.86*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□□	□□□□□□	□□□□□□	*-4.99*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□□	□□□□□□	□□□□□□	*-5.25*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□□	□□□	□□□
CNEL:	□□	□□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □□r□e□□□□ *Project Name:* □□□r□□ □□e□
Road Name: □□□□d □□ □re □□d□ *Job Number:* □□□□□
Road Segment: □□ey□rd □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□	□□□□□	*-4.65*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-4.87*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-5.43*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □ □□□ *Job Number:* □□□□□□
Road Segment: □□□ey□rd □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□		
Medium Trucks:	□□□□□□		
Heavy Trucks:	□□□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□	*-4.49*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-4.86*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-5.77*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□□	□□□	□□□	□□□□
CNEL:	□□□	□□□	□□□	□□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: D □□□ *Job Number:* □□□□□□
Road Segment: □□□ey□rd □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□		
Medium Trucks:	□□□□□□		
Heavy Trucks:	□□□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□	*-4.49*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-4.86*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-5.77*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□□	□□□	□□□	□□□□
CNEL:	□□□	□□□	□□□	□□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□

Road Name: □ □□□e□□□□□ □e□□e□r □ □y *Job Number:* □□□□□□

Road Segment: □□□ey□rd □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□□e□
Peak Hour Percentage:	□□□□□□□
Peak Hour Volume:	□□□□ □e□□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□□ □ee□
Road Elevation:	□□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□□ de□ree□
Right View:	□□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□		
Medium Trucks:	□□□□□□		
Heavy Trucks:	□□□□□□	*Grade Adjustment:*	□□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□	*-4.65*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-4.87*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-5.43*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□□	□□□	□□□	□□□□
CNEL:	□□□	□□□	□□□	□□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □ □□□e□□□□□ □e□□□er □ □y *Job Number:* □□□□□□
Road Segment: □□□□e □□□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□ □e□□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□		
Medium Trucks:	□□□□□□		
Heavy Trucks:	□□□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□	*-4.65*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-4.87*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-5.43*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□□	□□□	□□□	□□□□
CNEL:	□□□	□□□	□□□□	□□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □u□□□□Rd□ *Job Number:* □□□□□□
Road Segment: □ □□□□□□d□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□□	□□□□	□□□□□	□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□		
Medium Trucks:	□□□□□		
Heavy Trucks:	□□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□	□□□□□	*-4.65*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-4.87*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□	□□□□□	*-5.43*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□ē□
Road Name: □u□□□□Rd□ *Job Number:* □□□□□□
Road Segment: □□rde□□□□□ D□y□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□□ □e□□□□ē□
Peak Hour Percentage:	□□□□□□□
Peak Hour Volume:	□□□□□□□ □e□□□□ē□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ēe□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□□
Centerline Dist. to Barrier:	□□□□□ □ēe□
Centerline Dist. to Observer:	□□□□□ □ēe□
Barrier Distance to Observer:	□□□□ □ēe□
Observer Height (Above Pad):	□□□□ □ēe□
Pad Elevation:	□□□□ □ēe□
Road Elevation:	□□□□ □ēe□
Road Grade:	□□□□□
Left View:	□□□□□□ de□ree□
Right View:	□□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□	
Medium Trucks:	□□□□□□	
Heavy Trucks:	□□□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□	*-4.65*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-4.87*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-5.43*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □u□□□□Rd□ *Job Number:* □□□□□□
Road Segment: □r□□□□□□d □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□□ □e□□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□□ □ee□
Road Elevation:	□□□□ □ee□
Road Grade:	□□□□□
Left View:	□□□□□□ de□ree□
Right View:	□□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□□
Medium Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□	□□□□□□	□□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□□	
Medium Trucks:	□□□□□□	
Heavy Trucks:	□□□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□□	□□□□□□	□□□□□	□□□□□□	*-4.65*	□□□□□□	□□□□□□
Medium Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-4.87*	□□□□□□	□□□□□□
Heavy Trucks:	□□□□□□	□□□□□□□	□□□□□	□□□□□□	*-5.43*	□□□□□□	□□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□
Vehicle Noise:	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□	□□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□□	□□□	□□□□	□□□□
CNEL:	□□□	□□□	□□□□	□□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □ □□□□□□d□ *Job Number:* □□□□□□
Road Segment: □□□ey□rd □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□□ □e□□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□□	□□□□	□□□□□	□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□		
Medium Trucks:	□□□□□		
Heavy Trucks:	□□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□	□□□□□	□□□□□	*-4.69*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.88*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.34*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □ □□□□□□d□ *Job Number:* □□□□□□
Road Segment: □□□ey□rd □□e□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.69*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.88*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.34*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: □Y □ □□r□e□□□□ *Project Name:* □ □□□r□□ □ □□e□
Road Name: □ □□□□□□d□ *Job Number:* □□□□□□
Road Segment: □ □□□e□□□□ □e□□er □ □y

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□□e□
Peak Hour Percentage:	□□□□□□
Peak Hour Volume:	□□□□□□ □e□□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Road Grade:	□□□□
Left View:	□□□□ de□ree□
Right View:	□□□□ de□ree□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.69*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.88*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.34*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	□□	□□	□□□	□□□
CNEL:	□□	□□	□□□	□□□

M□□d□y□M□y □□□□□□

APPENDIX 8.1:

ON-SITE TRAFFIC NOISE CALCULATIONS

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □r□□□□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□□e□
Road Name: □□□□□u□e□□rd *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-4.87*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-4.97*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-5.18*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □r□□□□□r □ □ □ □□□ *Project Name:* □□ □re □r□□e□ □□□e□
Road Name: □□□□□u□e□□rd *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-4.88*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-4.92*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-5.01*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □r□□□□□r □ □□ □ □□ *Project Name:* □□ □re □r□□e□ □□e□
Road Name: □u□□□R□□d *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-4.87*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-4.95*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-5.10*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □r□□□□□r □ □□ □ □□ *Project Name:* □□ □re □r□□e□ □□e□
Road Name: □u□□□R□□d *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-4.87*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-4.95*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-5.10*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □r□□□□□r □ □□ □ □□ *Project Name:* □□ □re □r□□e□ □□e□
Road Name: □u□□□R□□d *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-4.88*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-4.94*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-5.05*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □r□□□□□r □ □□ □ □□ *Project Name:* □□ □re □r□□e□ □□e□
Road Name: □u□□□R□□d *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-4.88*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-4.93*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-5.02*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □r□□□□□r □ □ □ □□□ *Project Name:* □□ □re □r□□e□ □□□e□
Road Name: □□□□□u□e□□rd *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-4.88*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-4.92*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-5.00*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □r□□□□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□□e□
Road Name: □□□□□u□e□□rd *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.87*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-4.95*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-5.09*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □r□□□□□r □ □□ □ □□ *Project Name:* □□ □re □r□□e□ □□e□
Road Name: □u□□□R□□d *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-4.87*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-4.94*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-5.08*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □r□□□□□r □ □ □ □□□ *Project Name:* □□ □re □r□□e□ □□□e□
Road Name: □□□□□u□e□□rd *Job Number:* □□□□□
Lot No: R□□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-4.88*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-4.94*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-5.07*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □e□□□d □□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□e□
Road Name: □□□□□u□e□□rd *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-12.96*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-13.26*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-13.85*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □e□□□d □□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□e□
Road Name: □□□□□u□e□□rd *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-13.41*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-13.52*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-13.76*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □e□□□d □□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□e□
Road Name: □u□□□R□□d *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-13.16*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-13.37*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-13.81*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □e□□□d □□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□e□
Road Name: □u□□□R□□d *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□□	□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□	□□□□□	□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□		
Medium Trucks:	□□□□□		
Heavy Trucks:	□□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-13.18*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-13.39*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-13.80*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □e□□□d □□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□e□
Road Name: □u□□□R□□d *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-13.29*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-13.45*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-13.78*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □e□□□d □□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□e□
Road Name: □u□□□R□□d *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-13.36*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-13.50*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-13.76*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □e□□□d □□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□e□
Road Name: □□□□□u□e□□rd *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-13.43*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-13.54*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-13.75*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □e□□□d □□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□e□
Road Name: □□□□u□□rd *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-13.20*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-13.40*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-13.80*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □e□□□d □□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□e□
Road Name: □u□□□R□□d *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-13.22*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-13.41*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-13.79*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □e□□□d □□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□e□
Road Name: □□□□□u□e□□rd *Job Number:* □□□□□
Lot No: R□□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-13.24*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-13.42*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-13.79*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□rd □□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□e□
Road Name: □□□□u□□rd *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-20.23*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-20.71*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-21.66*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□rd □□□□r □ □□□ □ □□□
Road Name: □□□□□u□e□□rd
Lot No: R□

Project Name: □□ □re □r□□e□ □□□e□
Job Number: □□□□□
Analyst: □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-21.60*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-21.79*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-22.17*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□rd □□□r □ □□ □ □□□ | *Project Name:* □□ □re □r□□e□ □□e□
Road Name: □u□□□R□□d | *Job Number:* □□□□□
Lot No: R□ | *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-20.83*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-21.18*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-21.89*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□rd □□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□e□
Road Name: □u□□□R□□d *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-20.89*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-21.23*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-21.91*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□rd □□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□e□
Road Name: □u□□□R□□d *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□□	□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□	□□□□□	□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□		
Medium Trucks:	□□□□□		
Heavy Trucks:	□□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-21.23*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-21.50*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-22.03*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□rd □□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□e□
Road Name: □u□□□R□□d *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-21.46*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-21.68*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-22.12*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□rd □□□□r □ □□□ □ □□□ *Project Name:* □□ □re □r□□e□ □□□e□
Road Name: □□□□□u□e□□rd *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-21.67*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-21.85*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-22.20*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□rd □□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□e□
Road Name: □□□□u□□rd *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-20.96*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-21.29*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-21.94*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□rd □□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□e□
Road Name: □u□□□R□□d *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-21.02*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-21.33*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-21.96*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□rd □□□□r □ □□□ □ □□□
Road Name: □□□□□□u□e□□rd
Lot No: R□□

Project Name: □□ □re □r□□e□ □□□e□
Job Number: □□□□□
Analyst: □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□□	□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□	□□□□□	□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□	
Medium Trucks:	□□□□□	
Heavy Trucks:	□□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-21.08*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-21.38*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-21.98*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□ur□ □□□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□□e□
Road Name: □□□□□u□e□□rd *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□□	□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□	□□□□□	□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□		
Medium Trucks:	□□□□□		
Heavy Trucks:	□□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-26.71*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-27.36*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-28.67*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□ur□ □□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□e□
Road Name: □□□□u□e□rd *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-29.47*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-29.73*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-30.26*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□ur□ □□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□e□
Road Name: □u□□□R□□d *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-27.90*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-28.39*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-29.36*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□ur□ □□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□e□
Road Name: □u□□□R□□d *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-28.03*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-28.49*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-29.43*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□ur□ □□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□e□
Road Name: □u□□□R□□d *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-28.71*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-29.08*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-29.82*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□ur□ □□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□e□
Road Name: □u□□□R□□d *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-29.18*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-29.48*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-30.09*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□ur□ □□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□e□
Road Name: □□□□□u□e□□rd *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-29.61*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-29.85*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-30.34*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□ur□ □□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□e□
Road Name: □□□□u□□rd *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-28.17*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-28.61*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-29.51*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□ur□ □□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□e□
Road Name: □u□□□R□□d *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-28.28*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-28.71*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-29.57*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□ur□ □□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□e□
Road Name: □□□□□u□e□□rd *Job Number:* □□□□□
Lot No: R□□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-28.40*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-28.81*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-29.64*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□□□ □□□□r □ □□□ □ □□□ *Project Name:* □□ □re □r□□e□ □□□e□
Road Name: □□□□□u□e□□rd *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-32.46*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-33.26*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-34.89*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□□□ □□□□r □ □□□ □ □□□ *Project Name:* □□ □re □r□□e□ □□□e□
Road Name: □□□□□u□e□□rd *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-37.00*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-37.34*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-38.01*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□□□ □□□r □ □□ □ □□ *Project Name:* □□ □re □r□e□ □□e□
Road Name: □u□□R□□d *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□ □ee□
Road Elevation:	□□ □ee□
Barrier Elevation:	□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-34.40*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-35.01*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-36.24*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□□□ □□□□r □ □□□ □ □□□ *Project Name:* □□ □re □r□□e□ □□□e□
Road Name: □u□□□R□□d *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-34.61*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-35.20*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-36.38*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□□□ □□□r □ □□ □ □□ *Project Name:* □□ □re □r□e□ □□e□
Road Name: □u□□R□□d *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□ □ee□
Road Elevation:	□□ □ee□
Barrier Elevation:	□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-35.73*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-36.20*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-37.14*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□□□ □□□r □ □□ □ □□ *Project Name:* □□ □re □r□e□ □□e□
Road Name: □u□□R□□d *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□ □ee□
Road Elevation:	□□ □ee□
Barrier Elevation:	□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-36.53*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-36.91*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-37.69*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□□□ □□□r □ □□ □ □□ *Project Name:* □□ □re □r□e□ □□e□
Road Name: □□□□u□e□rd *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-37.24*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-37.55*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-38.17*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□□□ □□□□r □ □□□ □ □□□ *Project Name:* □□ □re □r□□e□ □□□e□
Road Name: □□□□□u□e□□rd *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-34.84*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-35.40*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-36.54*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□□□ □□□r □ □□ □ □□ *Project Name:* □□ □re □r□e□ □□e□
Road Name: □u□□R□□d *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□ □ee□
Road Elevation:	□□ □ee□
Barrier Elevation:	□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-35.02*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-35.56*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-36.66*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□□□ □□□r □ □□ □ □□ *Project Name:* □□ □re □r□e□ □□e□
Road Name: □□□□u□□rd *Job Number:* □□□□□
Lot No: R□□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-35.22*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-35.74*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-36.79*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□□□□ □□□□r □ □□□ □ □□□ *Project Name:* □□ □re □r□□e□ □□□e□
Road Name: □□□□□□u□e□□rd *Job Number:* □□□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-37.54*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-38.48*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-40.41*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□□□□ □□□□r □ □□□ □ □□□ *Project Name:* □□ □re □r□□e□ □□□e□
Road Name: □□□□□□u□e□□rd *Job Number:* □□□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-44.22*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-44.63*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-45.44*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□□□□ □□□□r □ □□□ □ □□□ *Project Name:* □□ □re □r□□e□ □□□e□
Road Name: □u□□□R□□d *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-40.36*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-41.08*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-42.55*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□□□□ □□□□r □ □□□ □ □□□ *Project Name:* □□ □re □r□□e□ □□□e□
Road Name: □u□□□R□□d *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-40.66*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-41.36*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-42.78*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□□□□ □□□□r □ □□□ □ □□□ *Project Name:* □□ □re □r□□e□ □□□e□
Road Name: □u□□□R□□d *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-42.32*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-42.88*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-44.02*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□□□□ □□□□r □ □□□ □ □□□
Road Name: □u□□□R□□d
Lot No: R□

Project Name: □□ □re □r□□e□ □□□e□
Job Number: □□□□□
Analyst: □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-43.51*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-43.97*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-44.91*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□□□□ □□□□r □ □□□ □ □□□ *Project Name:* □□ □re □r□□e□ □□□e□
Road Name: □□□□□u□e□□rd *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-44.58*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-44.95*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-45.71*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□□□□ □□□□r □ □□□ □ □□□ *Project Name:* □□ □re □r□□e□ □□□e□
Road Name: □□□□□u□e□□rd *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-41.00*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-41.67*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-43.03*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□□□□ □□□□r □ □□□ □ □□□ *Project Name:* □□ □re □r□□e□ □□□e□
Road Name: □u□□□R□□d *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□	
Medium Trucks:	□□□□	
Heavy Trucks:	□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-41.26*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-41.91*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-43.23*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - 6/2/2013

Scenario: □□□□□ □□□□r □ □□□ □ □□□ *Project Name:* □□ □re □r□□e□ □□□e□
Road Name: □□□□□□u□e□□rd *Job Number:* □□□□□□
Lot No: R□□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□□	□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□	□□□□□	□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□□	
Medium Trucks:	□□□□□	
Heavy Trucks:	□□□□□	*Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-41.56*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-42.18*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-43.45*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: □r□□□□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□□e□
Road Name: □u□□□R□□d *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-47.48*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-48.26*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-50.21*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

□□ur□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: □r□□□□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□□e□
Road Name: □u□□□R□□d *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-49.35*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-49.99*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-51.59*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

□□ur□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: □r□□□□□r □ □□ □ □□□ *Project Name:* □□ □r□ □r□□e□ □□□e□
Road Name: □□□□□u□e□rd *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□□	□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□	□□□□□	□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-50.47*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-51.03*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-52.42*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

□□ur□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: □r□□□□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□e□
Road Name: □□□□□ue□rd *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-43.45*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-44.51*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-47.18*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

□□ur□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: □r□□□□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□□e□
Road Name: □u□□□R□□d *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□□	□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□	□□□□□	□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-45.82*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-46.72*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-48.97*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

□□ur□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: □r□□□□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□e□
Road Name: □□□□u□e□rd *Job Number:* □□□□□
Lot No: R□□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-44.60*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-45.57*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-48.05*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

□□ur□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: □e□□□d □□□r □ □□□ □ □□□ *Project Name:* □□ □r□ □r□□e□ □ □□e□
Road Name: □u□□□R□□d *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-53.06*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-53.94*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-56.15*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: □e□□□d □□□r □ □□□ □ □□□
Road Name: □u□□□R□□d
Lot No: R□

Project Name: □□ □r□ □r□□e□ □□□e□
Job Number: □□□□□
Analyst: □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□□	□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□	□□□□□	□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-55.48*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-56.21*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-58.03*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

□□ur□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: □e□□□d □□□r □ □□ □ □□□ *Project Name:* □□ □r□ □r□□e□ □ □□e□
Road Name: □□□□□u□e□rd *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-56.94*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-57.58*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-59.17*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

□□ur□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: □e□□□d □□□r □ □□ □ □□□ *Project Name:* □□ □r□ □r□□e□ □ □□e□
Road Name: □□□□□u□e□rd *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt): □□□□□□ □e□□□e□
Peak Hour Percentage: □□□
Peak Hour Volume: □□□□□ □e□□□e□
Vehicle Speed: □□ □ □□
Near/Far Lane Distance: □□ □ee□

Site Data

Barrier Height: **0.0 feet**
Barrier Type (0-Wall, 1-Berm): □□□
Centerline Dist. to Barrier: □□□□□ □ee□
Centerline Dist. to Observer: □□□□□ □ee□
Barrier Distance to Observer: □□□ □ee□
Observer Height (Above Pad): □□□□ □ee□
Pad Elevation: □□□ □ee□
Road Elevation: □□□ □ee□
Barrier Elevation: □□□ □ee□
Road Grade: □□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos: □□
Medium Trucks (2 Axles): □□
Heavy Trucks (3+ Axles): □□

Vehicle Mix

VehicleType	Day	Evening	Night	Daily
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos: □□□□
Medium Trucks: □□□□
Heavy Trucks: □□□□ *Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos: □□□□□□
Medium Trucks: □□□□□□
Heavy Trucks: □□□□□□

FHWA Noise Model Calculations

VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	-47.92	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	-49.09	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	-52.08	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

□□ur□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: □e□□□d □□□r □ □□□ □ □□□ *Project Name:* □□ □r□ □r□□e□ □ □□e□
Road Name: □u□□□R□□d *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-50.93*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-51.93*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-54.47*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: □e□□□d □□□r □ □□ □ □□□ *Project Name:* □□ □r□ □r□□e□ □ □□e□
Road Name: □□□□□u□e□□rd *Job Number:* □□□□□
Lot No: R□□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□□	□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□	□□□□□	□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-49.37*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-50.46*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-53.23*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

□□ur□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: □□rd □□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□□e□
Road Name: □u□□□R□□d *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□□	□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□	□□□□□	□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-58.25*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-59.22*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-61.68*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

□□ur□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: □□rd □□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□□e□
Road Name: □u□□□R□□d *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt): □□□□□□ □e□□□e□
Peak Hour Percentage: □□□
Peak Hour Volume: □□□□□ □e□□□e□
Vehicle Speed: □□ □ □□
Near/Far Lane Distance: □□ □ee□

Site Data

Barrier Height: **0.0 feet**
Barrier Type (0-Wall, 1-Berm): □□□
Centerline Dist. to Barrier: □□□□□ □ee□
Centerline Dist. to Observer: □□□□□ □ee□
Barrier Distance to Observer: □□□ □ee□
Observer Height (Above Pad): □□□□ □ee□
Pad Elevation: □□□ □ee□
Road Elevation: □□□ □ee□
Barrier Elevation: □□□ □ee□
Road Grade: □□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos: □□
Medium Trucks (2 Axles): □□
Heavy Trucks (3+ Axles): □□

Vehicle Mix

VehicleType	Day	Evening	Night	Daily
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□	□□□□□	□□□□□

Noise Source Elevations (in feet)

Autos: □□□□
Medium Trucks: □□□□
Heavy Trucks: □□□□ *Grade Adjustment:* □□□

Lane Equivalent Distance (in feet)

Autos: □□□□□□□
Medium Trucks: □□□□□□□
Heavy Trucks: □□□□□□□

FHWA Noise Model Calculations

VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	-61.27	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	-62.08	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	-64.12	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

□□ur□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: □□rd □□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□□e□
Road Name: □□□□□ue□rd *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□
Medium Trucks:	□□□□□□
Heavy Trucks:	□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-63.11*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-63.82*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-65.61*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

□□ur□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: □□rd □□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□□e□
Road Name: □□□□□ue□rd *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□ □ee□
Centerline Dist. to Observer:	□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□
Medium Trucks:	□□□□	□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□	□□□□	□□□□

Noise Source Elevations (in feet)

Autos:	□□□	
Medium Trucks:	□□□	
Heavy Trucks:	□□□	*Grade Adjustment:* □□

Lane Equivalent Distance (in feet)

Autos:	□□□□□
Medium Trucks:	□□□□□
Heavy Trucks:	□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□	□□□□	□□□□	□□□□	*-51.94*	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	*-53.22*	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	*-56.49*	□□□□	□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

□□ur□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: □□rd □□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□□e□
Road Name: □u□□□R□□d *Job Number:* □□□□□
Lot No: R□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□□	□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□	□□□□□	□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-55.62*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-56.72*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-59.53*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

□□ur□d□y□M□y □□□□□□

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: □□rd □□□r □ □□ □ □□□ *Project Name:* □□ □re □r□□e□ □□□e□
Road Name: □□□□□ue□rd *Job Number:* □□□□□
Lot No: R□□ *Analyst:* □□M□ddu□

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	□□□□□□ □e□□□e□
Peak Hour Percentage:	□□□
Peak Hour Volume:	□□□□□ □e□□□e□
Vehicle Speed:	□□ □ □□
Near/Far Lane Distance:	□□ □ee□

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	□□□
Centerline Dist. to Barrier:	□□□□□ □ee□
Centerline Dist. to Observer:	□□□□□ □ee□
Barrier Distance to Observer:	□□□ □ee□
Observer Height (Above Pad):	□□□□ □ee□
Pad Elevation:	□□□ □ee□
Road Elevation:	□□□ □ee□
Barrier Elevation:	□□□ □ee□
Road Grade:	□□□□

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	□□
Medium Trucks (2 Axles):	□□
Heavy Trucks (3+ Axles):	□□

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	□□□□□	□□□□□	□□□□	□□□□□□
Medium Trucks:	□□□□□	□□□□	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□	□□□□□	□□□□□

Noise Source Elevations (in feet)

Autos:	□□□□		
Medium Trucks:	□□□□		
Heavy Trucks:	□□□□	*Grade Adjustment:*	□□□

Lane Equivalent Distance (in feet)

Autos:	□□□□□□□
Medium Trucks:	□□□□□□□
Heavy Trucks:	□□□□□□□

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	□□□□□	□□□□□	□□□□□	□□□□□	*-53.70*	□□□□□	□□□□□
Medium Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-54.90*	□□□□□	□□□□□
Heavy Trucks:	□□□□□	□□□□□	□□□□□	□□□□□	*-57.95*	□□□□□	□□□□□

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Medium Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Heavy Trucks:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□
Vehicle Noise:	□□□□	□□□□	□□□□	□□□□	□□□□	□□□□

□□ur□d□y□M□y □□□□□□

APPENDIX 8.2:

ON-SITE RAILROAD NOISE CALCULATIONS

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Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
Developed for Chicago Create Project
Copyright 2006, HMMH Inc.
Case: Empire Groves Hotel

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	68	69	58
Source 1	67	68	56
Source 2	60	60	50
Source 3	52	51	43
Source 4	48	51	15
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS								
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**	
Source Num.	Freight Locomotive	9	Freight Cars	10	RRT/LRT	4	RRT/LRT	4
Distance (source to receiver)	distance (ft)	300	distance (ft)	300	distance (ft)	300	distance (ft)	300
Daytime Hours	speed (mph)	50	speed (mph)	50	speed (mph)	50	speed (mph)	50
(7 AM - 10 PM)	trains/hour	4	trains/hour	4	trains/hour	2	trains/hour	1
	locos/train	2	length of cars (ft) / train	300	cars/train	3	cars/train	6
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	60	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.25	trains/hour	0.25	trains/hour	0.25	trains/hour	0
	locos/train	2	length of cars (ft) / train	300	cars/train	3	cars/train	0
Wheel Flats?		n	% of cars w/ wheel flats	n	% of cars w/ wheel flats	n	% of cars w/ wheel flats	n
Jointed Track?	Y/N	y	Y/N	y	Y/N	y	Y/N	y
Embedded Track?	Y/N	y	Y/N	y	Y/N	y	Y/N	y
Aerial Structure?	Y/N	n	Y/N	n	Y/N	n	Y/N	n
Barrier Present?	Y/N	n	Y/N	n	Y/N	n	Y/N	n
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0

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APPENDIX 10.1:
SAMPLE AIR CONDITIONING UNIT

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Sound Power and Sound Pressure Data for IntelliPak Large Rooftops

Table 1 - 20-55 Ton Large Commercial Packaged Rooftops - Sound Power Ratings S*FC-C20 THROUGH S*FC-C55 60 Hz MODELS

Table 1:

Octave Band (Hz)	Octave Band Sound Power Levels, dB re 1 pW					
	20 ton	25 ton	30 ton	40 ton	50 ton	55 ton
63	100	100	100	102	102	102
125	99	99	99	101	101	101
250	97	97	97	99	99	99
500	95	95	95	97	97	97
1000	92	92	92	94	94	94
2000	89	89	89	91	91	91
4000	85	85	85	87	87	87
8000	78	78	78	80	80	80
A-Weighted	97	97	97	99	99	99

Table 2 - 60-130 Ton Large Commercial Packaged Rooftops - Sound Power Ratings S*FC-C60 THROUGH S*GC-D13 60 Hz MODELS

Table 2:

Octave Band (Hz)	Octave Band Sound Power Levels, dB re 1 pW					
	60 ton	70/75 ton	90 ton	105 ton	115 ton	130 ton
63	102	102	103	104	105	106
125	101	98	100	101	102	103
250	99	98	103	104	105	106
500	97	98	101	102	103	104
1000	94	98	97	98	99	100
2000	91	92	96	97	98	99
4000	87	88	90	91	92	93
8000	80	81	85	86	87	88
A-Weighted	99	102	103	104	105	106

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APPENDIX 10.2:
CADNAA OPERATIONAL NOISE CALCULATIONS

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15693 - Empire Groves Hotel

CadnaA Noise Prediction Model: 15693-02_Operation.cna
Date: 07.05.24
Analyst: B. Maddux

Calculation Configuration

Configuration	
Parameter	**Value**
General	
Max. Error (dB)	**0.00**
Max. Search Radius (#(Unit,LEN))	**2000.01**
Min. Dist Src to Rcvr	**0.00**
Partition	
Raster Factor	**0.50**
Max. Length of Section (#(Unit,LEN))	**999.99**
Min. Length of Section (#(Unit,LEN))	**1.01**
Min. Length of Section (%)	**0.00**
Proj. Line Sources	**On**
Proj. Area Sources	**On**
Ref. Time	
Daytime Penalty (dB)	**0.00**
Recr. Time Penalty (dB)	**5.00**
Night-time Penalty (dB)	**10.00**
DTM	
Standard Height (m)	**0.00**
Model of Terrain	**Triangulation**
Reflection	
max. Order of Reflection	**2**
Search Radius Src	**100.00**
Search Radius Rcvr	**100.00**
Max. Distance Source - Rcvr	**1000.00 1000.00**
Min. Distance Rvcr - Reflector	**1.00 1.00**
Min. Distance Source - Reflector	**0.10**
Industrial (ISO 9613)	
Lateral Diffraction	**some Obj**
Obst. within Area Src do not shield	**On**
Screening	**Incl. Ground Att. over Barrier**
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	**3.0 20.0 0.0**
Temperature (#(Unit,TEMP))	**10**
rel. Humidity (%)	**70**
Ground Absorption G	**0.50**
Wind Speed for Dir. (#(Unit,SPEED))	**3.0**
Roads (TNM)	
Railways (FTA/FRA)	
Aircraft (???)	
Strictly acc. to AzB	

Receiver Noise Levels

Name	M.	ID	Level Lr			Limit. Value			Land Use			Height		Coordinates		
			Day	Night	CNEL	Day	Night	CNEL	Type	Auto	Noise Type			X	Y	Z
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)
R1		R1	55.6	55.6	62.3	0.0	0.0	0.0		x	Total	5.00	a	6151417.97	2333367.85	5.00
R2		R2	40.7	40.7	47.4	0.0	0.0	0.0		x	Total	5.00	a	6148699.36	2334028.62	5.00
R3		R3	56.7	56.7	63.4	0.0	0.0	0.0		x	Total	5.00	a	6151917.46	2334107.68	5.00
R4		R4	43.4	43.4	50.1	0.0	0.0	0.0		x	Total	5.00	a	6153006.91	2335790.62	5.00
R5		R5	38.2	38.2	44.9	0.0	0.0	0.0		x	Total	5.00	a	6155375.83	2335784.02	5.00

Point Source(s)

Name	M.	ID	Result. PWL			Lw / Li			Operating Time			Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Special	Night			X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(ft)		(ft)	(ft)	(ft)
POOL1		POOL1	95.1	95.1	95.1	Lw	95.1					5.00	a	6152192.55	2333889.26	5.00
POOL2		POOL2	95.1	95.1	95.1	Lw	95.1					5.00	a	6152181.44	2333848.98	5.00
POOL3		POOL3	95.1	95.1	95.1	Lw	95.1					5.00	a	6152152.27	2333839.26	5.00
POOL4		POOL4	95.1	95.1	95.1	Lw	95.1					5.00	a	6152087.69	2333796.90	5.00
POOL5		POOL5	95.1	95.1	95.1	Lw	95.1					5.00	a	6152090.47	2333752.46	5.00
POOL6		POOL6	95.1	95.1	95.1	Lw	95.1					5.00	g	6152199.49	2333683.71	78.00
OUTDOOR01		OUTDOOR01	95.1	95.1	95.1	Lw	95.1					5.00	a	6152254.35	2333685.09	5.00
OUTDOOR02		OUTDOOR02	95.1	95.1	95.1	Lw	95.1					5.00	a	6152076.58	2333890.65	5.00
OUTDOOR03		OUTDOOR03	95.1	95.1	95.1	Lw	95.1					5.00	a	6152121.02	2333850.37	5.00
OUTDOOR04		OUTDOOR04	95.1	95.1	95.1	Lw	95.1					5.00	a	6152261.99	2333928.84	5.00
OUTDOOR05		OUTDOOR05	95.1	95.1	95.1	Lw	95.1					5.00	a	6152286.30	2333920.51	5.00
OUTDOOR06		OUTDOOR06	95.1	95.1	95.1	Lw	95.1					5.00	a	6152241.85	2333896.90	5.00
OUTDOOR07		OUTDOOR07	95.1	95.1	95.1	Lw	95.1					5.00	a	6152291.16	2333879.54	5.00
OUTDOOR08		OUTDOOR08	95.1	95.1	95.1	Lw	95.1					5.00	a	6152280.05	2333789.26	5.00
OUTDOOR09		OUTDOOR09	95.1	95.1	95.1	Lw	95.1					5.00	a	6152289.77	2333753.84	5.00

Name	M.	ID	Result. PWL			Lw / Li			Operating Time			Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Special	Night			X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(ft)		(ft)	(ft)	(ft)
OUTDOOR10		OUTDOOR10	95.1	95.1	95.1	Lw	95.1					5.00	a	6152014.77	2333858.71	5.00
OUTDOOR11		OUTDOOR11	95.1	95.1	95.1	Lw	95.1					5.00	a	6151615.47	2333655.93	5.00
OUTDOOR12		OUTDOOR12	95.1	95.1	95.1	Lw	95.1					5.00	a	6151571.72	2333627.46	5.00
OUTDOOR13		OUTDOOR13	95.1	95.1	95.1	Lw	95.1					5.00	a	6151536.99	2333579.54	5.00
OUTDOOR14		OUTDOOR14	95.1	95.1	95.1	Lw	95.1					5.00	a	6151586.30	2333541.34	5.00
OUTDOOR15		OUTDOOR15	95.1	95.1	95.1	Lw	95.1					5.00	a	6151616.85	2333486.48	5.00
OUTDOOR16		OUTDOOR16	95.1	95.1	95.1	Lw	95.1					5.00	a	6151677.97	2333434.40	5.00
OUTDOOR17		OUTDOOR17	95.1	95.1	95.1	Lw	95.1					5.00	a	6151733.52	2333398.29	5.00
OUTDOOR18		OUTDOOR18	95.1	95.1	95.1	Lw	95.1					5.00	a	6151846.72	2333330.93	5.00
OUTDOOR19		OUTDOOR19	95.1	95.1	95.1	Lw	95.1					5.00	a	6151883.52	2333307.32	5.00
OUTDOOR20		OUTDOOR20	95.1	95.1	95.1	Lw	95.1					5.00	a	6151922.41	2333283.01	5.00
OUTDOOR21		OUTDOOR21	95.1	95.1	95.1	Lw	95.1					5.00	a	6152002.97	2333301.76	5.00
OUTDOOR22		OUTDOOR22	95.1	95.1	95.1	Lw	95.1					5.00	a	6152047.41	2333315.65	5.00
OUTDOOR23		OUTDOOR23	95.1	95.1	95.1	Lw	95.1					5.00	a	6151821.02	2333749.68	5.00
OUTDOOR24		OUTDOOR24	95.1	95.1	95.1	Lw	95.1					5.00	a	6151822.41	2333769.82	5.00
OUTDOOR25		OUTDOOR25	95.1	95.1	95.1	Lw	95.1					5.00	a	6151846.72	2333780.23	5.00
SPEAKER1		SPEAK1	105.0	105.0	105.0	Lw	105					5.00	a	6151984.91	2333767.73	5.00
AC1		AC1	109.0	109.0	109.0	Lw	109					5.00	g	6151797.41	2333484.17	98.00
AC2		AC2	109.0	109.0	109.0	Lw	109					5.00	g	6151775.88	2333495.97	98.00
AC3		AC3	109.0	109.0	109.0	Lw	109					5.00	g	6151752.27	2333507.78	98.00
AC4		AC4	109.0	109.0	109.0	Lw	109					5.00	g	6151731.44	2333518.89	98.00
AC5		AC5	109.0	109.0	109.0	Lw	109					5.00	g	6151707.13	2333532.78	98.00
AC6		AC6	109.0	109.0	109.0	Lw	109					5.00	g	6151685.60	2333548.75	98.00

Line Source(s)

Name	M.	ID	Result. PWL			Result. PWL'			Lw / Li			Operating Time			Moving Pt. Src				Height
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	Number			Speed	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	Day	Evening	Night	(mph)	(ft)

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Area Source(s)

Name	M.	ID	Result. PWL			Result. PWL''			Lw / Li			Operating Time			Height	
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	(ft)	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)		
OUT1		OUT1	94.5	94.5	94.5	66.0	66.0	66.0	Lw''	66					5	a
PARK1		PARK1	86.0	86.0	86.0	56.1	56.1	56.1	Lw	86					0	a
LOAD1		LOAD1	103.4	103.4	103.4	84.1	84.1	84.1	Lw	103.4					8	a

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
OUT1	OUT1	5.00 a		6151957.13	2333772.59	5.00	0.00
				6151998.10	2333752.46	5.00	0.00
				6152006.44	2333711.48	5.00	0.00
				6151966.85	2333667.73	5.00	0.00
				6151875.19	2333729.54	5.00	0.00
PARK1	PARK1	0.00 a		6151566.06	2333502.26	0.00	0.00
				6151577.78	2333507.90	0.00	0.00
				6151682.38	2333390.71	0.00	0.00
				6151687.59	2333397.66	0.00	0.00
				6151700.18	2333399.83	0.00	0.00
				6151765.28	2333351.65	0.00	0.00
				6151771.36	2333326.48	0.00	0.00
				6151763.98	2333314.76	0.00	0.00
				6151742.28	2333309.98	0.00	0.00
				6151720.58	2333324.74	0.00	0.00
				6151699.31	2333339.06	0.00	0.00
				6151670.66	2333361.20	0.00	0.00
				6151641.58	2333388.54	0.00	0.00
				6151622.49	2333406.34	0.00	0.00
				6151595.58	2333433.68	0.00	0.00
				6151549.57	2333494.44	0.00	0.00
				6151550.87	2333503.13	0.00	0.00
LOAD1	LOAD1	8.00 a		6152264.99	2333413.37	8.00	0.00
				6152278.18	2333413.37	8.00	0.00
				6152283.04	2333343.92	8.00	0.00
				6152269.15	2333346.70	8.00	0.00

Barrier(s)

Name	Sel.	M.	ID	Absorption		Z-Ext.	Cantilever		Height				Coordinates			
				left	right		horz.	vert.	Begin		End		x	y	z	Ground
						(ft)	(ft)	(ft)	(ft)		(ft)		(ft)	(ft)	(ft)	(ft)
									6.00	g			6151597.02	2333647.19	99.00	0.00
													6151563.52	2333592.83	99.00	0.00
													6151823.95	2333436.38	99.00	0.00
													6151854.92	2333490.74	99.00	0.00
													6151596.98	2333647.14	99.00	0.00

Building(s)

Name	Sel.	M.	ID	RB	Residents	Absorption	Height		Coordinates			
							Begin		x	y	z	Ground
							(ft)		(ft)	(ft)	(ft)	(ft)
1stFlr			1stFlr1	x	0		20.00	a	6152233.03	2333777.32	20.00	0.00
									6152257.24	2333412.55	20.00	0.00
									6152191.22	2333407.96	20.00	0.00
									6152187.54	2333495.38	20.00	0.00
									6152096.57	2333550.93	20.00	0.00
									6152004.90	2333543.64	20.00	0.00
									6151942.06	2333439.48	20.00	0.00
									6152012.19	2333397.11	20.00	0.00
									6152028.86	2333422.46	20.00	0.00
									6152082.68	2333389.48	20.00	0.00
									6152034.76	2333308.23	20.00	0.00
									6151983.37	2333339.82	20.00	0.00
									6151949.69	2333283.23	20.00	0.00
									6151658.03	2333458.92	20.00	0.00
									6151667.40	2333474.89	20.00	0.00
									6151636.50	2333494.34	20.00	0.00
									6151641.36	2333503.02	20.00	0.00
									6151606.29	2333523.50	20.00	0.00
									6151614.62	2333536.00	20.00	0.00
									6151575.39	2333560.66	20.00	0.00
									6151585.81	2333577.67	20.00	0.00
									6151562.54	2333592.25	20.00	0.00
									6151596.57	2333648.16	20.00	0.00
									6151619.83	2333635.31	20.00	0.00
									6151670.53	2333716.21	20.00	0.00
									6151732.33	2333743.64	20.00	0.00
									6152004.56	2333578.71	20.00	0.00
									6152165.67	2333589.13	20.00	0.00
									6152151.43	2333784.96	20.00	0.00
									6152192.40	2333787.74	20.00	0.00
									6152193.10	2333774.20	20.00	0.00
BUILDING			BUILDING00002	x	0		0.00	a	6152257.24	2333412.55	0.00	0.00
									6152261.41	2333348.67	0.00	0.00
									6152166.96	2333341.72	0.00	0.00
									6152162.45	2333405.96	0.00	0.00
BUILDING			BUILDING00003	x	0		73.00	g	6151562.54	2333592.25	93.00	0.00
									6151596.57	2333648.16	93.00	0.00
									6152012.19	2333397.11	93.00	0.00
									6152028.86	2333422.46	93.00	0.00
									6152082.68	2333389.48	93.00	0.00
									6152034.76	2333308.23	93.00	0.00
BUILDING			BUILDING00004	x	0		73.00	g	6152166.96	2333341.72	73.00	0.00
									6152162.45	2333405.96	73.00	0.00
									6152191.22	2333407.96	73.00	0.00
									6152167.03	2333770.99	73.00	0.00
									6152233.03	2333777.32	73.00	0.00
									6152261.41	2333348.67	73.00	0.00
BUILDING			BUILDING00005	x	0		14.00	g	6152244.81	2333599.80	14.00	0.00
									6152251.37	2333501.06	14.00	0.00
									6152221.76	2333498.94	14.00	0.00
									6152214.16	2333598.77	14.00	0.00
BUILDING			BUILDING00006	x	0		14.00	g	6152255.40	2333439.33	34.00	0.00
									6152261.82	2333340.65	34.00	0.00
									6151996.72	2333323.98	34.00	0.00
									6151979.66	2333333.59	34.00	0.00
									6152006.09	2333374.50	34.00	0.00
									6152194.63	2333387.53	34.00	0.00
									6152195.15	2333397.94	34.00	0.00
									6152206.57	2333398.03	34.00	0.00
									6152207.56	2333409.10	34.00	0.00
									6152212.96	2333409.47	34.00	0.00
									6152210.91	2333439.26	34.00	0.00
BUILDING			BUILDING00007	x	0		14.00	g	6151846.19	2333471.90	107.00	0.00
									6151886.30	2333447.42	107.00	0.00
									6151879.53	2333436.48	107.00	0.00
									6151943.59	2333396.90	107.00	0.00

Name	Sel.	M.	ID	RB	Residents	Absorption	Height	Coordinates			
							Begin	x	y	z	Ground
							(ft)	(ft)	(ft)	(ft)	(ft)
								6151928.52	2333372.13	107.00	0.00
								6151824.34	2333434.79	107.00	0.00

Ground Absorption(s)

Name	Sel.	M.	ID	G	Coordinates	
					x	y
					(ft)	(ft)

Contour(s)

Name	Sel.	M.	ID	OnlyPts	Height		Coordinates		
					Begin	End	x	y	z
					(ft)	(ft)	(ft)	(ft)	(ft)

Vertical Area Source(s)

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Rail

Name	Sel.	M.	ID	Lw'		Train Class	Correct.	Vmax
				Day	Night		Track	
				(dBA)	(dBA)		(dB)	(km(mph)

Sound Level Spectra

Name	ID	Type	Oktave Spectrum (dB)											Source
			Weight.	31.5	63	125	250	500	1000	2000	4000	8000	A	lin	

Roads

Name	Sel.	M.	ID	Lme			Count Data		exact Count Data						Speed Limit		SCS	Surface		Gradient	Mult. Reflection		
				Day	Evening	Night	DTV	Str.class.	M			p (%)			Auto	Truck	Dist.	Dstro	Type		Drefl	Hbuild	Dist.
				(dBA)	(dBA)	(dBA)			Day	Evening	Night	Day	Evening	Night	(mph)	(mph)		(dB)		(%)	(dB)	(ft)	(ft)

RoadsGeo

Name	Height			Coordinates				Dist	LSlope
	Begin		End	x	y	z	Ground	(ft)	(%)
	(ft)		(ft)	(ft)	(ft)	(ft)	(ft)		

APPENDIX 11.1:

CADNAA CONSTRUCTION NOISE CALCULATIONS

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15693 - Empire Groves Hotel

CadnaA Noise Prediction Model: 15693-02_Construction.cna
Date: 06.05.24
Analyst: B. Maddux

Calculation Configuration

Configuration	
Parameter	**Value**
General	
Max. Error (dB)	**0.00**
Max. Search Radius (#(Unit,LEN))	**2000.01**
Min. Dist Src to Rcvr	**0.00**
Partition	
Raster Factor	**0.50**
Max. Length of Section (#(Unit,LEN))	**999.99**
Min. Length of Section (#(Unit,LEN))	**1.01**
Min. Length of Section (%)	**0.00**
Proj. Line Sources	**On**
Proj. Area Sources	**On**
Ref. Time	
Daytime Penalty (dB)	**0.00**
Recr. Time Penalty (dB)	**5.00**
Night-time Penalty (dB)	**10.00**
DTM	
Standard Height (m)	**0.00**
Model of Terrain	**Triangulation**
Reflection	
max. Order of Reflection	**2**
Search Radius Src	**100.00**
Search Radius Rcvr	**100.00**
Max. Distance Source - Rcvr	**1000.00 1000.00**
Min. Distance Rvcr - Reflector	**1.00 1.00**
Min. Distance Source - Reflector	**0.10**
Industrial (ISO 9613)	
Lateral Diffraction	**some Obj**
Obst. within Area Src do not shield	**On**
Screening	**Incl. Ground Att. over Barrier**
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	**3.0 20.0 0.0**
Temperature (#(Unit,TEMP))	**10**
rel. Humidity (%)	**70**
Ground Absorption G	**0.50**
Wind Speed for Dir. (#(Unit,SPEED))	**3.0**
Roads (TNM)	
Railways (FTA/FRA)	
Aircraft (???)	
Strictly acc. to AzB	

Receiver Noise Levels

Name	M.	ID	Level Lr			Limit. Value			Land Use			Height		Coordinates		
			Day	Night	CNEL	Day	Night	CNEL	Type	Auto	Noise Type			X	Y	Z
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)
R1		R1	60.0	-40.0	57.0	0.0	0.0	0.0		x	Total	5.00	a	6151417.97	2333367.85	5.00
R2		R2	42.5	-57.4	39.5	0.0	0.0	0.0		x	Total	5.00	a	6148699.36	2334028.62	5.00
R3		R3	59.3	-40.7	56.3	0.0	0.0	0.0		x	Total	5.00	a	6151917.46	2334107.68	5.00
R4		R4	45.5	-54.4	42.5	0.0	0.0	0.0		x	Total	5.00	a	6153006.91	2335790.62	5.00
R5		R5	40.4	-59.6	37.4	0.0	0.0	0.0		x	Total	5.00	a	6155375.83	2335784.02	5.00

Point Source(s)

Name	M.	ID	Result. PWL			Lw / Li			Operating Time			Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Special	Night			X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(ft)		(ft)	(ft)	(ft)

Line Source(s)

Name	M.	ID	Result. PWL			Result. PWL'			Lw / Li			Operating Time			Moving Pt. Src				Height
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	Number			Speed	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	Day	Evening	Night	(mph)	(ft)

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Area Source(s)

Name	M.	ID	Result. PWL			Result. PWL''			Lw / Li			Operating Time			Height	
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	(ft)	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)		
ConstructionArea1		ConstructionArea1	115.6	15.6	15.6	69.3	-30.7	-30.7	PWL-Pt	115.6					8	a

Name	ID	Height				Coordinates			
		Begin		End		x	y	z	Ground
		(ft)		(ft)		(ft)	(ft)	(ft)	(ft)
ConstructionArea1	ConstructionArea1	8.00	a			6151518.66	2333658.47	8.00	0.00
						6151828.20	2333802.56	8.00	0.00
						6151968.09	2333869.30	8.00	0.00
						6152104.08	2333934.19	8.00	0.00
						6152103.80	2333911.16	8.00	0.00
						6152103.39	2333878.46	8.00	0.00
						6152123.88	2333888.23	8.00	0.00
						6152153.76	2333902.49	8.00	0.00
						6152185.83	2333917.79	8.00	0.00
						6152232.54	2333940.08	8.00	0.00
						6152279.05	2333962.27	8.00	0.00
						6152292.68	2333934.37	8.00	0.00
						6152306.17	2333906.77	8.00	0.00
						6152307.61	2333885.37	8.00	0.00
						6152310.00	2333849.88	8.00	0.00
						6152313.82	2333793.25	8.00	0.00
						6152318.11	2333729.49	8.00	0.00
						6152275.71	2333726.64	8.00	0.00
						6152289.15	2333527.08	8.00	0.00
						6152331.55	2333529.94	8.00	0.00
						6152337.30	2333444.69	8.00	0.00
						6152345.09	2333329.04	8.00	0.00
						6152359.56	2333330.02	8.00	0.00
						6152361.48	2333301.52	8.00	0.00
						6152364.51	2333256.50	8.00	0.00
						6152327.42	2333181.44	8.00	0.00
						6152283.92	2333182.21	8.00	0.00
						6152214.97	2333183.42	8.00	0.00
						6152125.90	2333184.98	8.00	0.00
						6152073.47	2333187.80	8.00	0.00
						6152048.27	2333190.51	8.00	0.00
						6151973.47	2333203.90	8.00	0.00
						6151900.47	2333225.04	8.00	0.00
						6151876.68	2333233.76	8.00	0.00
						6151830.08	2333253.69	8.00	0.00
						6151796.11	2333270.73	8.00	0.00
						6151724.68	2333314.46	8.00	0.00
						6151670.50	2333355.93	8.00	0.00
						6151597.82	2333426.48	8.00	0.00
						6151557.65	2333475.46	8.00	0.00
						6151496.69	2333571.70	8.00	0.00
						6151485.24	2333594.31	8.00	0.00
						6151474.59	2333617.31	8.00	0.00
						6151473.07	2333628.15	8.00	0.00
						6151484.09	2333643.36	8.00	0.00

Barrier(s)

Name	Sel.	M.	ID	Absorption		Z-Ext.	Cantilever		Height		Coordinates			
				left	right		horz.	vert.	Begin	End	x	y	z	Ground
						(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Building(s)

Name	Sel.	M.	ID	RB	Residents	Absorption	Height	Coordinates				
							Begin	x	y	z	Ground	
							(ft)	(ft)	(ft)	(ft)	(ft)	

Ground Absorption(s)

Name	Sel.	M.	ID	G	Coordinates	
					x	y
					(ft)	(ft)

Contour(s)

Name	Sel.	M.	ID	OnlyPts	Height		Coordinates		
					Begin	End	x	y	z
					(ft)	(ft)	(ft)	(ft)	(ft)

Vertical Area Source(s)

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Rail

Name	Sel.	M.	ID	Lw'		Train Class	Correct.	Vmax
				Day	Night		Track	
				(dBA)	(dBA)		(dB)	(km(mph)

Sound Level Spectra

Name	ID	Type	Oktave Spectrum (dB)											Source
			Weight.	31.5	63	125	250	500	1000	2000	4000	8000	A	lin	

Roads

Name	Sel.	M.	ID	Lme			Count Data		exact Count Data						Speed Limit		SCS	Surface		Gradient	Mult. Reflection		
				Day	Evening	Night	DTV	Str.class.	M			p (%)			Auto	Truck	Dist.	Dstro	Type		Drefl	Hbuild	Dist.
				(dBA)	(dBA)	(dBA)			Day	Evening	Night	Day	Evening	Night	(mph)	(mph)		(dB)		(%)	(dB)	(ft)	(ft)

RoadsGeo

Name	Height		Coordinates				Dist	LSlope
	Begin	End	x	y	z	Ground	(ft)	(%)
	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)		

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Appendix J
VMT Analysis

translutions, inc.
17632 Irvine Boulevard, Suite 200
Tustin, California 92780
(949) 656 3131
solutions@translutions.com

October 12, 2023

Mr. Jay Bautista, Traffic/Transportation Manager
City of Ontario
303 E. B Street
Ontario, California 91764

Subject: Empire Groves Hotel – VMT Analysis

Dear Mr. Bautista,

Translutions, Inc. (Translutions) is pleased to provide this letter discussing the Vehicle Miles Traveled (VMT) analysis for the proposed hotel and ancillary uses to be located south of Holt Boulevard and east of Guasti Road.

PROJECT DESCRIPTION

The proposed project includes a 600-room hotel and ancillary uses such as ball rooms, restaurants and a street facing retail component. Figure 1 shows the site plan for the proposed project.

VMT IMPACT THRESHOLDS

The City of Ontario has adopted guidelines to help ensure that land use development and transportation projects comply with the latest requirements of the California Environmental Quality Act (CEQA) regarding Vehicle Miles Traveled (VMT). The guidelines provide the City with standardized criteria and established thresholds of significance to be used for analyzing transportation impacts for CEQA. The guidelines were adopted on May 26, 2020 by the Planning Commission.

Based on the City Guidelines, a project would result in a significant project generated VMT impact if either of the following conditions are satisfied:

1. **Project Generated VMT:** A significant impact would occur if the project VMT/SP exceeds the Citywide average for Service Population under General Plan Buildout Conditions.
2. **Project Effect on VMT:** A significant impact would occur if the project causes total daily VMT within the City to be higher than the no project alternative under cumulative conditions.

MODELING METHODOLOGY

The analysis methodology for the project generated VMT and project effect of VMT were developed consistent with the City VMT guidelines. The analysis was conducted using the San Bernardino Transportation Analysis Model (SBTAM) with the City's General Plan socio-economic data.

Socio-Economic Data. The project socio-economic date (SED) for retail uses were based on the ratio of the ITE trip generation based on gross leasable area for retail uses (or the number of rooms for hotel) and employees.

Other Edits. No network edits were made for the project beyond aggregating zones to represent the project.

Model Runs. Each model was run for 5 loops, and the convergence criteria was set at 0.01. Final assignment runs were completed.

MODEL OUTPUTS

The analysis methodology for the project generated VMT and project effect of VMT were developed consistent with the City VMT guidelines. The model outputs were checked for reasonableness by comparing the trip generation of the modified zones and adjacent zones. The results were found to be consistent. VMT data was extracted using the time-of-day Origin-Destination (OD) matrices multiplied by the time-of-day skims. Per standard modeling practice, the data reported is daily weekday VMT. Table A shows the model outputs and calculations for the project generated VMT, and Table B shows the outputs for project effect on VMT.

Table A: Project Generated VMT (General Plan Buildout)

	General Plan Buildout	
	Project	**City**
Population		258,143
Employment	372	175,983
Retail Consumers	1,305	
Service Population	1,677	434,126
OD VMT	53,871	14,129,050
OD VMT per service population	**32.13**	**32.55**

Table B - Project Effect on VMT (General Plan Buildout)

	Future Year (2045)	
	Without Project	**With Project**
Roadway VMT	9,868,972	9,864,411
Service Population	434,126	435,803
VMT per service population	22.73	22.64

VMT EVALUATION

Future Year Project Generated VMT. As seen on Table A, the future year OD VMT forecast for the City is 32.55 VMT/SP whereas the project generated VMT is 32.13 VMT/SP which shows that the project will have a less than significant impact on VMT.

Future Year Project Effect on VMT. As seen on Table B, the forecast Citywide segment level VMT under no project conditions is 22.73 VMT/SP. The Citywide segment level VMT with the proposed project is forecast to be 22.64 VMT/SP. Therefore, the proposed project results in a lower VMT/SP and therefore, has a less than significant impact.

CONCLUSION

As seen above, the buildout project generated VMT of 32.13 is less than the City threshold of 32.55. The project effect on VMT is also lower than the threshold under buildout conditions, which means that the project will result in a reduction in overall VMT/SP for the City as well as VMT on the City roadways. Based on the adopted guidelines, the VMT impacts of the proposed project are anticipated to be less than significant.

We hope you will find this information helpful. Should you have any questions, please don't hesitate to call me at (949) 656-3131 or by email at sandipan@translutions.com.

Sincerely,

translutions, Inc.

Sandipan Bhattacharjee, P.E., T.E., AICP, ENV SP
Principal





Attachments:
Figure 1 – Site Plan

03 HOTEL AS HUB

Level 01

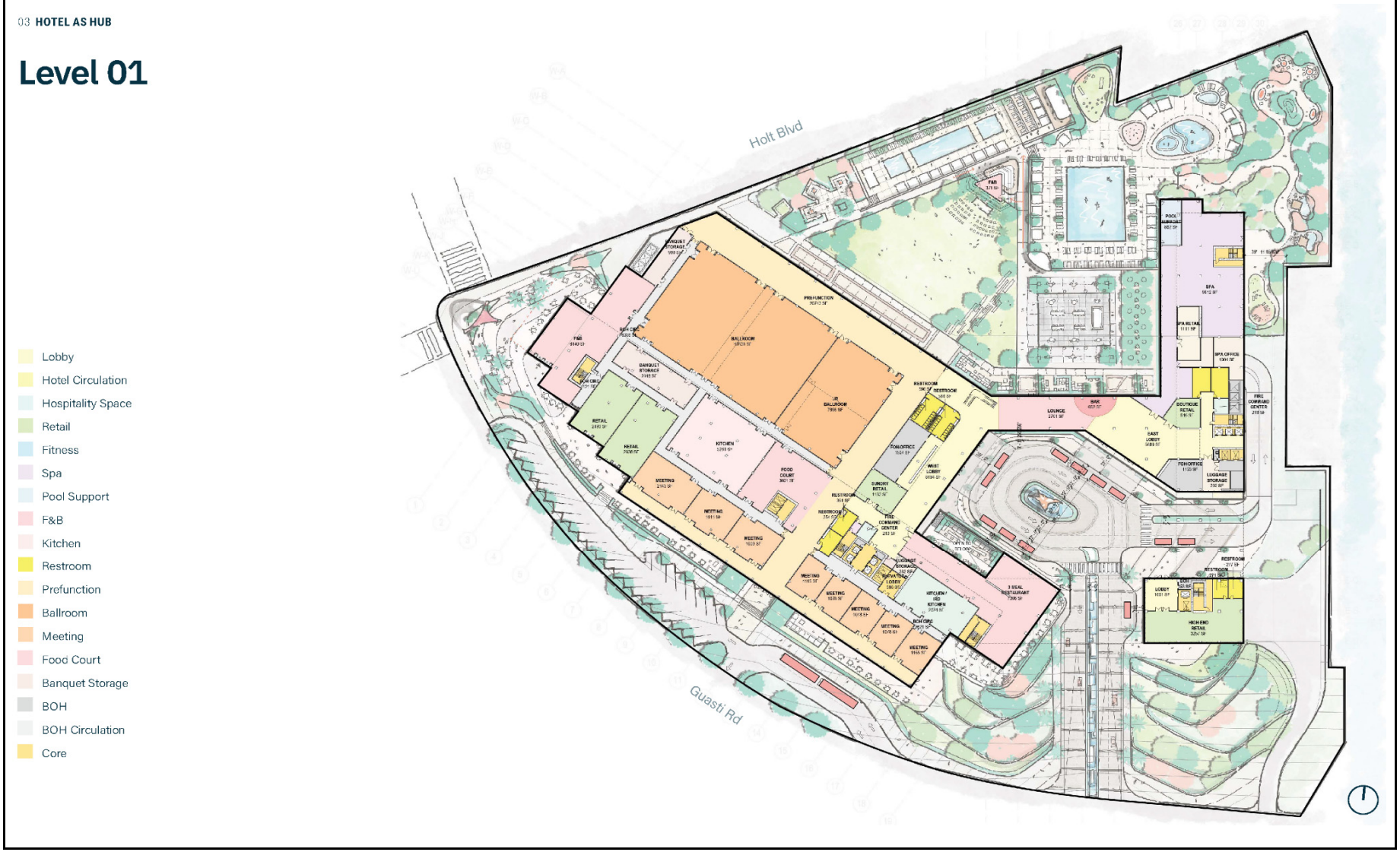


FIGURE 1

Empire Groves Hotel
Site Plan

translutions
the transportation solutions company...

P:\DP - Ontario Hotel\scope\Z30 Site Plan Landscape (9/26/2023)

August 2024

Water Supply Assessment and Written Verification of Sufficient Water Supply for the Empire Groves Hotel Specific Plan

City of Ontario

Prepared for:

City of Ontario
Ontario Municipal Utilities Company
Alexis Mascarinas, Associate Engineer
1425 S. Bon View Avenue
Ontario CA 91764
909.395.2694

Project Number:
OMUC-01.0

Prepared by:

PlaceWorks
Dina El Chammas Gass, P.E. Senior Engineer
3 MacArthur Place, Suite 1100
Santa Ana, CA 92707

PLACEWORKS

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1. Introduction

1.1 INTRODUCTION

This document prepared for the City of Ontario is a Water Supply Assessment and Written Verification of Sufficient Water Supply (WSA/WV) intended to meet the requirements of Senate Bill (SB) 610 and SB 221. The water demand for the Empire Groves Hotel Specific Plan ("proposed project") is calculated and the adequacy of water supplies to meet the proposed land use changes is evaluated.

SB 610 established the primary legal standards for assessing the sufficiency of water supplies for new development projects. This statute requires as part of the environmental review conducted for a qualifying project pursuant to the California Environmental Quality Act (CEQA), that the public water supplier or land use agency – in this case the City of Ontario – prepare a Water Supply Assessment (WSA) of the reliability of water supplies for the project, considering normal, single dry, and multiple dry years over a 20-year horizon. The basic requirement is that a WSA must "include a discussion with regard to whether the public water system's total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed project, in addition to the water system's existing and planned future uses, including agricultural and manufacturing uses." Since the proposed project includes the development of a hotel with more than 500 rooms, it meets the definition of a project as defined by Government Code Section 10912(a)(1) and requires the preparation of a WSA.

SB 221 mandates affirmative written verification from the water purveyor of the public water system that sufficient water supplies are available for certain residential subdivisions of property prior to approval of a tentative map. Since the proposed project requires the approval of a development agreement and includes the addition of more than 500 hotel rooms, it meets the definition of a subdivision in Government Code Section 66473.7(a)(1) and therefore triggers the need for a Written Verification of Sufficient Water Supply (WV) pursuant to SB 221.

References used in preparing this document include the following:

- Diversified Pacific, December 2023. *Empire Groves Hotel Specific Plan*.
- City of Ontario, June 2021. *2020 Urban Water Management Plan (UWMP)*. Prepared by Stetson Engineering.
- AKM Consulting Engineers, June 2020. *Draft City of Ontario Water Master Plan Update*.
- Chino Basin Desalter Authority, June 2021. *2020 Urban Water Management Plan*. Prepared by Stetson Engineering.
- Inland Empire Utilities Agency, June 2021. *2020 Urban Water Management Plan*. Prepared by Kennedy Jenks.
- San Antonio Water Company, September 2021. *2020 Urban Water Management Plan*. Prepared by WSC.
- Metropolitan Water District of Southern California, June 2021. *2020 Urban Water Management Plan*.

- City of Ontario, May 2022. *The Ontario Plan (TOP) 2050 Supplemental Environmental Impact Report*. Prepared by PlaceWorks.

1.2 SITE LOCATION AND EXISTING CONDITIONS

The Empire Groves Hotel Specific Plan (proposed project) site is situated in the southeastern quadrant of the intersection of East Holt Boulevard and East Guasti Road in the City of Ontario. The project area is a triangular plot of land spanning 10.43 acres. The site is bounded to the north by Holt Boulevard and to the south and southwest by Guasti Road. The eastern boundary is defined by the existing flood channel and a trail called Cucamonga Creek Trail. Regional location is provided in Figure 1, *Regional Location Map*. The project site is currently vacant land with no temporary or permanent structures (see Figure 2, *Aerial Photograph*).

1.3 PROJECT DESCRIPTION AND HISTORY

The Empire Groves Hotel project comprises two primary zones: hotel and local-serving retail. The hotel component within the Specific Plan area comprises a 600-room, full-service hotel equipped with various guest amenities. These amenities include banquet halls, conference rooms, restaurants, a café, a day spa, pool facilities, and a rooftop terrace. The first floor of the hotel consists of the lobby, lounge, upscale restaurant and bar, spa, retail area, small meeting rooms, and a spacious banquet/conference center. The first-floor mezzanine level has a game room, fitness area, meeting rooms, and a board room in addition to mechanical and electrical equipment. The second-floor houses offices and a fitness center. The remaining floors are dedicated to spacious guest suites with a range of amenities. The hotel's rooftop is designed with a pool and lounge terrace that offers views and features a full-service restaurant and bar. The hotel's entrance includes a porte-cochere with decorative pavers and landscaping. This motor court is accessible from Guasti Road and offers check-in and valet services for guests. The local serving retails Small may include coffee shops, food and beverage outlets, retail, print shops, laundry or tailoring services that will serve the needs of the local community. The proposed buildout is shown in Table 1, *Proposed Buildout*, and Figure 3, *Conceptual Plan*.

Table 1 Proposed Buildout

Land Use	Total Square Feet	Notes
Hotel Rooms	366,808	600 rooms and secondary uses
Restaurants/Café/Bar/Lounge	30,839	3 meals and signature restaurants, rooftop bar and restaurant, and lobby bar and lounge
Day Spa	11, 357	
Gym	7,906	Including Lux Fitness – 5,415 SF and Business Hotel Fitness – 2,491 SF
Banquet/Meeting Rooms	45,882	25,528 SF Ballrooms, 20,354 SF Meeting Rooms
Admin/Office	4,262	
Lobby/Public Circulation/Prefunction/Public Bathrooms	98,598	
Local Serving Retail	11,946	
Covered Outdoor Area	20,813	

Table 1 Proposed Buildout

Utility Areas and Parking	452,491	
TOTAL	**1,050,902**	—

Source: Diversified Pacific, December 2023, Empire Groves Hotel Specific Plan.
SF = Square Feet

1.3.1 Landscaping

1.3.1.1 LEVEL 1 – STREET LEVEL

The Level 1 conceptual landscape plan includes an entrance area; edge treatment; a courtyard, pool, and spa areas; and pedestrian paths as shown in Figure 4, *Recreation and Open Space Concept - Level 1*.

The landscape concept for the entrance employs an array of elements, such as multiple palm varieties and landscaped features with varying heights and geometrical profiles to create a visually appealing entrance. The entranceway has a canal water feature that bisects the entrance roadway and leads to a spacious entrance plaza area. The entrance plaza area includes an arrival fountain and sculpture.

Street edge treatments within the Specific Plan area provide a transition between the surrounding uses and the proposed project specifically along Holt Boulevard and Guasti Road. The street edge treatments encompass an array of street trees and decorative flowering trees. The proposed meandering sidewalks will connect off-street parking areas along Guasti Road to a plaza area within the retail development at the intersection of Holt Boulevard and Guasti Road. This plaza features decorative pavers, accent plantings and raised planters, palm trees, and outdoor shaded seating areas.

The hotel courtyard, pool, and spa areas are in the northeastern section of the proposed project, encircled by Holt Boulevard to the north, the hotel itself to the south and west, and the Cucamonga Creek to the east. This outdoor can be accessed via the hotel lobby and comprises of three distinct pool areas, a water garden, large and small event spaces, a wellness garden, and a food and beverage pavilion. One of the three pool areas will include a splash pad and a jacuzzi. These amenities will also include passive covered seating areas and comfortable outdoor furnishings, interspersed with water features and landscaping. Landscaping within this outdoor space will be characterized by low hedges and accent plantings, deciduous canopy trees, and shade trees.

A series of interconnecting sidewalks and paths will be provided throughout the Specific Plan area to connect to the hotel amenities and public gathering spaces. Low hedge and accent plantings will be used to enhance the pedestrian paths, while deciduous canopy trees will be used to provide shade and visual comfort.

A buffer will be created between Cucamonga Creek and the eastern edge of the project site to ensure privacy from the trail users. To accomplish this, a dense, 6- to 7-foot-high hedge is proposed.

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1.3.1.2 LEVEL 3 – BUILDING THIRD FLOOR

The Level 3 conceptual landscape plan is shown in Figure 5, *Recreation and Open Space Concept - Level 3*. The plan uses a meadow concept of landscaping. Meadow-type landscaping refers to the design of outdoor spaces to mimic the characteristics of a natural meadow. A meadow is typically an open field or grassland area, often found in natural settings, which is characterized by a diverse growth of wildflowers, grasses, and other native vegetation.

1.3.1.3 LEVEL 9 – ROOFTOP

The Level 9 conceptual landscape plan is shown in Figure 6, *Recreation and Open Space Concept - Level 9*. The plan is divided into two distinct areas: Sky Island on the west and High Gardens on the east. These areas will be linked by a corridor.

The Sky Island will include a central water feature, a stone landscaping area, seating areas, and an expansive outdoor wooden deck. The High Gardens will include a VIP pool, various seating options and outdoor living rooms.

The total landscaping proposed is 133,374 square feet.[1] All proposed landscaping will utilize, to the greatest extent possible, sustainable landscaping practices and technology and water conservation methods. All plants will be water-conserving, drought-tolerant plants. Permanent and automatic irrigation or drip irrigation systems will be used for all landscaped areas. All landscape irrigation would be with recycled water. The canal, arrival fountain, and water features will be recirculated systems that use recycled water.

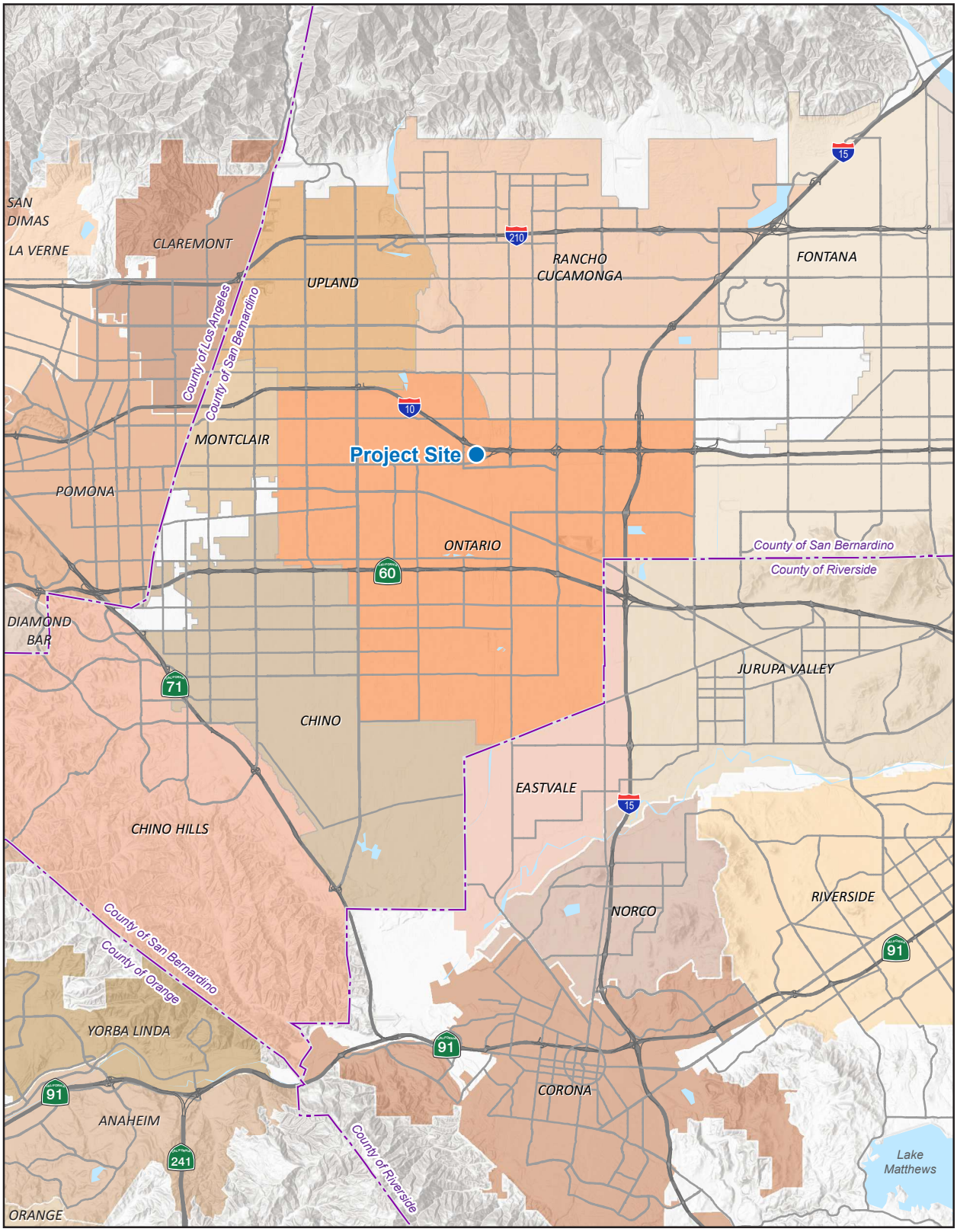
1.3.2 Infrastructure Improvements

An existing 6-inch water link is located under Holt Boulevard to the north and an existing 12-inch water line is located under Rio Hondo Avenue to the west. The proposed project will connect to the existing water line under Holt Boulevard through a new domestic water line that will run along the eastern, southern, and the southern half of the western boundary of the project site.

There are recycled water mains in the vicinity of the project site, with a point of connection located at the intersection of Guasti Road and Holt Boulevard. Recycled water infrastructure improvements will include installing an 8-inch recycled water main in Guasti Road that connects to the 8-inch recycled water main in Convention Center Way, north of Holt Boulevard.

[1] Emails from Alexis Mascarinas, Associate Engineer, dated May 13, 2024 and June 5, 2024.

Figure 1 - Regional Location



Note: Unincorporated county areas are shown in white.

Source: Generated using ArcMap 2023.

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Figure 2 - Aerial Photograph



Project Boundary

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Scale (Feet)

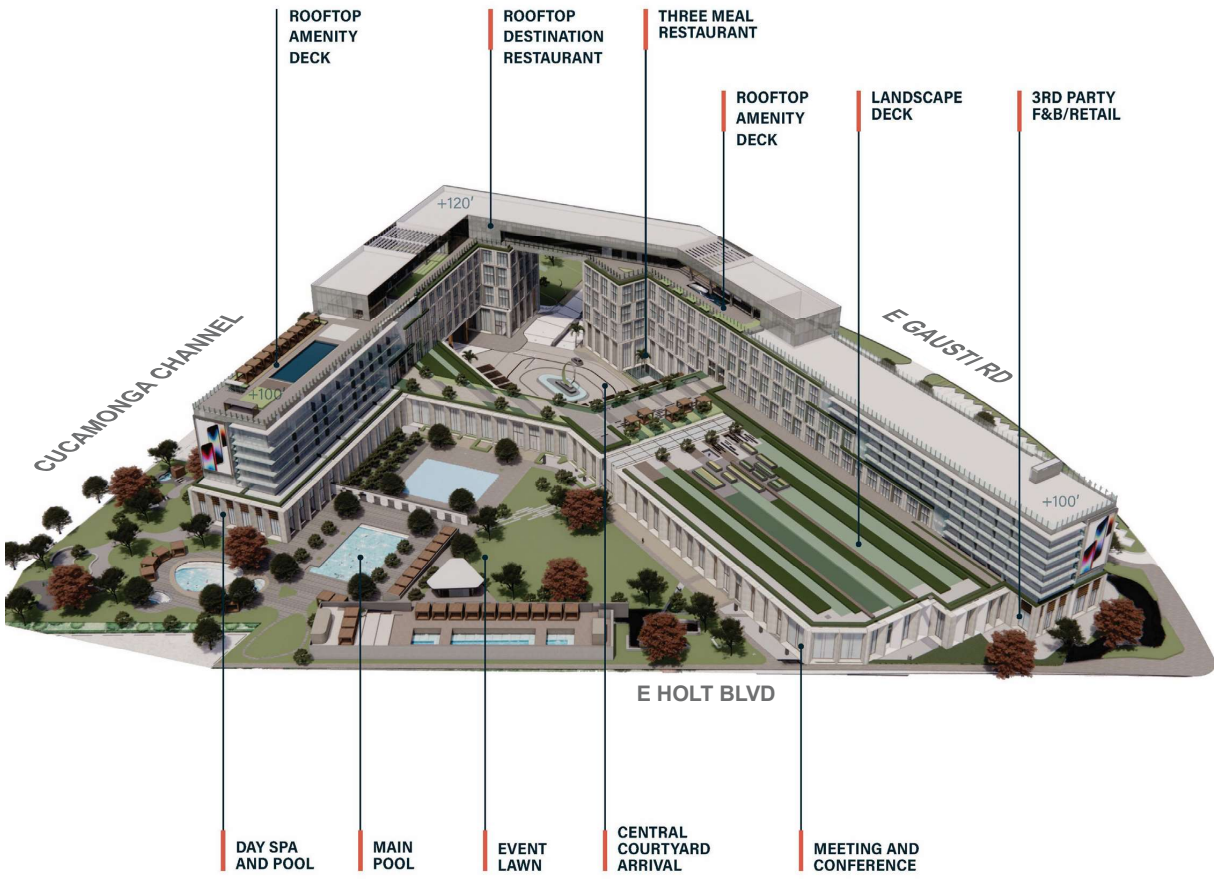
Source: Nearmap 2024.

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Figure 3 - Conceptual Plan



NO SCALE

Source: Diversified Pacific 2023.

PlaceWorks

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Figure 4 - Recreation and Open Space Concept - Level 1



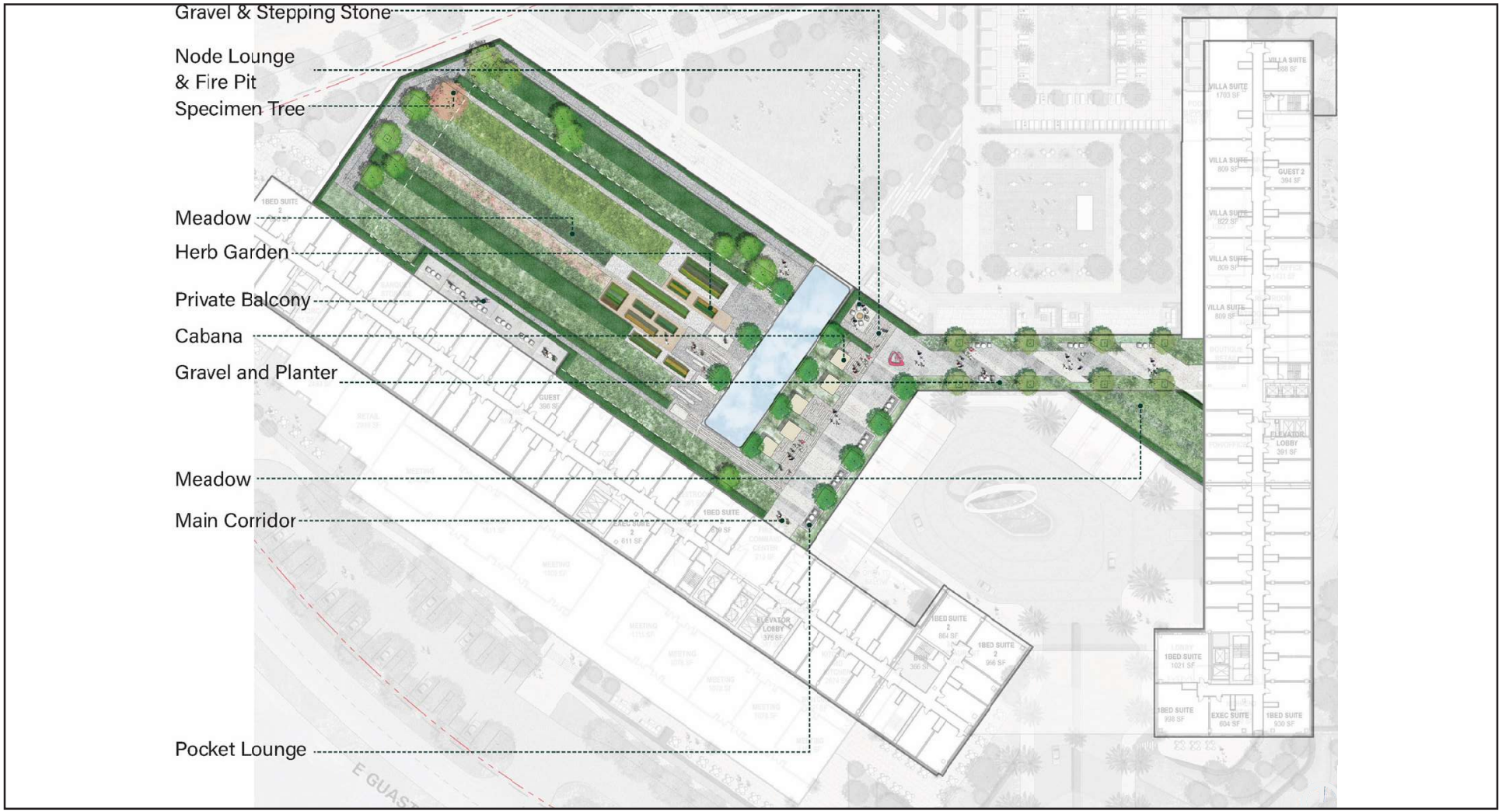
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Scale (Feet)

Source: Diversified Pacific 2023.

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Figure 5 - Recreation and Open Space Concept - Level 3



Source: Diversified Pacific 2023.

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Figure 6 - Recreation and Open Space Concept - Level 9



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Scale (Feet)

Source: Diversified Pacific 2023.

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2. Water Supply Assessment

2.1 WATER PURVEYOR

The Ontario Municipal Utilities Company (OMUC) provides water service to residents, businesses, and other users in the City of Ontario, including areas surrounding the project site. As of 2020, OMUC provided water to a population of approximately 181,107 people. The primary source of water is groundwater from the Chino Groundwater Basin (Chino Basin). Other water supplies include treated groundwater from the Chino Basin Desalter Authority (CDA), recycled water from Inland Empire Utilities Agency (IEUA), imported water from the Water Facilities Authority (WFA), and purchased water from the San Antonio Water Company (SAWCo).

According to the City's 2020 Water Master Plan Update[2] (WMP), the City's water system consists of the following:

- Five primary pressure zones (925, 1010, 1074, 1212, and 1348)
- Over 620 miles of water transmission and distribution pipelines ranging in size from 2 inches to 42 inches in diameter
- 7,277 fire hydrants
- 35,906 water meters
- 17 active wells
- Twelve reservoirs with a total volume of 75 million gallons
- Six active booster pump stations
- Fifteen pressure reducing stations
- Two connections to Water Facilities Authority
- Two connections to Chino Desalter Authority
- Five inter-agency connections
- Two ion exchange treatment facilities
- Four altitude valves

In 2023, potable water demands were 28,990 acre-feet per year (AFY) and recycled water demand was 9,088 AFY.[3] The total demands in the year 2045 are projected to be 73,668 AFY. Potable water demands are projected to be 57,609 AFY and recycled water demands are projected to be 16,059 AFY (including agricultural demands).

[2] AKM Consulting Engineers, June 2020. *Draft City of Ontario Water Master Plan Update.*
[3] Ontario Municipal Utilities Company. 2024. *2023 Water Production Summary.*

The passage of SB X7-7 (also known as the Water Conservation Act of 2009) resulted in increased efforts to reduce potable water usage by requiring all California urban water suppliers to achieve a 20 percent reduction in demands (from a historical baseline) by 2020. Using a 15-year base period of 1995 to 2004, the City's baseline water usage averaged 245 gallons per capita per day (GPCD). The City's per-capita water use during Fiscal Year 2019-20 was 161 GPCD, which is below the 2020 target of 196 GPCD.[4]

It is required that every urban water supplier assess the reliability to provide water service to its customers under normal, single dry, and multiple dry years. As discussed in the City's 2020 Urban Water Management Plan (UWMP), the City is capable of meeting the water demands of its customers in normal, single dry, and multiple dry years between 2020 and 2045.[5]

2.2 LEGAL REQUIREMENTS

SB 610 established the primary legal standards for assessing the sufficiency of water supplies for new development projects that qualify as a project pursuant to CEQA. Affected land developments are those that meet certain size thresholds. The proposed project meets the threshold for a proposed hotel of more than 500 rooms. Therefore, the proposed project, as described in Section 1.3, meets the criteria for preparation of a WSA.

SB 221 requires that a sufficient water supply shall be available prior to the approval of a tentative map that includes a subdivision. A subdivision is defined as a proposed residential development of more than 500 dwelling units, except for a public water system that has fewer than 5,000 service connections, in which case a subdivision means any proposed residential development that would account for an increase of 10 percent or more in the number of the public water system's existing service connections. OMUC has more than 5,000 service connections and the proposed project includes more than 500 hoel rooms. Therefore, as described in Section 1.3, the proposed project requires a WV.

The basic requirement is that a WSA/WV must "include a discussion with regard to whether the public water system's total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed project, in addition to the water system's existing and planned future uses, including agricultural and manufacturing uses." If the water demand for a proposed project is accounted for in an adopted UWMP, the WSA/WV preparer may incorporate that information into the WSA/WV.

The WSA/WV also requires additional analysis if any portion of the water purveyor's water supplies include groundwater. A description of any groundwater basin or basins from which the proposed project will be supplied in addition to a detailed description and analysis of the amount and location of groundwater pumped by the public water system for the past five years should be provided. The WSA/WV should also include an analysis of the sufficiency of the groundwater from the basin or basins from which the proposed project will be supplied to meet the projected water demand associated with the proposed project. For a basin for which a

[4] City of Ontario, 2021. *2020 Urban Water Management Plan.*
[5] City of Ontario, 2021. *2020 Urban Water Management Plan.*

court or the State Water Resources Control Board has adjudicated the rights to pump groundwater, the order or decree adopted by the court, or the State Water Resources Control Board should be included.

Upon adoption, the WSA/WV is incorporated into the CEQA document being prepared for the project, and the lead agency must determine, based on the entire record, whether projected water supplies will be sufficient to satisfy demands for the project, in addition to existing and future uses.

2.3 WATER DEMAND ANALYSIS

This section provides the current and projected future water demands for the City of Ontario, the estimated water demand for the proposed project, and assesses if the proposed project was included in the projection of future water demands for the City of Ontario, as described in the 2020 UWMP. As per Section 10910 (c) (2) of the California Water Code:

> *"if the projected water demand associated with the proposed project was accounted for in the most recently adopted urban water management plan, the public water system may incorporate the requested information from the urban water management plan in preparing the elements of the assessment required to comply with subdivisions (d), (e), (f), and (g)."*

2.3.1 City of Ontario Water Demands

The primary source of water for the proposed project would be existing water supplies used by the City to provide service to its customers. This section analyzes the water demands of existing and planned future City customers.

Current and projected potable and recycled water demands by customer class are presented in Table 2. The City's total 2020 demand was 39,921 AFY. Potable water demands were 32,109 AFY and recycled water demands were 7,812 AFY (including agricultural demands). The projected 2045 total demand is 73,668 AFY, with potable water demands projected to be 57,609 AFY and recycled water demands projected to be 16,059 AFY (including agricultural demands).

Table 2 Current and Projected Water Demands for the City of Ontario (AFY)

Use Type	2020	2025	2030	2035	2040	2045
Potable Water Demand						
Single Family	12,502	15,723	17,540	19,109	22,431	22,431
Multi-Family	5,068	6,374	7,110	7,746	9,093	9,093
Commercial	5,359	6,740	7,519	8,191	9,615	9,615
Industrial	2,078	2,613	2,915	3,176	3,728	3,728
Institutional/Governmental	538	677	755	822	965	965
Landscape	4,631	5,824	6,497	7,078	8,309	8,309
Losses	1,565	1,968	2,196	2,392	2,808	2,808
Other	368	463	516	562	660	660
Sub Total	**32,109**	**40,382**	**45,058**	**49,076**	**57,609**	**57,609**
Recycled Water Demand						
Recycled Water Demand	7,812	12,168	13,465	14,762	16,059	16,059

2. Water Supply Assessment

Table 2 Current and Projected Water Demands for the City of Ontario (AFY)

Use Type	2020	2025	2030	2035	2040	2045
Total	39,921	52,550	58,513	63,838	73,668	73,668

AFY = Acre-feet/year
Source: City of Ontario 2020 UWMP, 2021.

2.3.2 Proposed Project Water Demand

A description of the proposed project and buildout projections are provided in Table 1 above. The project site is vacant and there are no current uses on the site. Therefore, the proposed development would require connections to the City's water mains for potable and recycled water use.

Table 3 provides the total indoor water demand estimate for the proposed development. Indoor water demand was determined using potable water demand factors from the City's 2020 WMP. Since the 2020 WMP does not include a rate for restaurants and banquet halls, demand rates from the Jamul Casino Hotel and Event Center Project Assessment of Wastewater and Water Related Environmental Off-Site Impacts Report were used.[6] Occupancy rates, number of seats, days of operation, and the number of events per year were provided by the applicant.[7]

Table 3 Indoor Water Demand for the Proposed Project

Land Use	Units	Occupancy Rate (%)	Water Demand Rate	Water Demand (gpd)	Number of Operational Days or Events per Year[4]	Total Domestic Water Usage (afy)
Hotel Rooms	600 rooms	70	130 gpd/room[1]	54,600	365	61.15
Restaurants/Café/ Bar/Lounge	610 seats	40	30 gpd/seat[2]	7,320	350	7.86
Day Spa	11,357 sf	-	1,000 gpd/ac[1]	261	350	0.28
Gym	7,906 sf	-	11 gal/yr/sf[3]	238	350	0.26
Banquet/Meeting Rooms	100 seats	-	30 gpd/seat[2]	3,000	900	8.29
Admin/Office	4,262 sf	-	2,500 gpd/ac[1]	245	350	0.26
Local Serving Retail	11,946 sf	-	1,800 gpd/ac[1]	494	350	0.53
					Total	78.63

ac = acre; sf = square foot; gpd = gallons per day; yr=year.
[1] Source: AKM Consulting Engineers, June 2020. Draft City of Ontario Water Master Plan Update. Rates with recycled water from Table 4-8 were used. Hospitality rate used for hotel rooms. Office Commercial rate used for offices. Neighborhood Commercial rate used for retail. Open Space Recreational used for Day Spa.
[2] Source: EEC Environmental. September 26, 2022. Rates from Table 7 of the Jamul Casino Hotel and Event Center Project Assessment of Wastewater and Water Related Environmental Off-Site Impacts Report. Dining One rate used for restaurants/cafe/bar/lounge. Banquet Dining used for Banquet Hall/Conference Rooms.
[3] Rate for Fitness Center provided by OMUC in an Email from Alexis Mascarinas dated June 5, 2024.

[6] EEC Environmental. September 26, 2022. Jamul Casino Hotel and Event Center Project Assessment of Wastewater and Water Related Environmental Off-Site Impacts Report.
[7] Emails from Alexis Mascarinas, Associate Engineer, dated May 13, 2024 and June 5, 2024.

2. Water Supply Assessment

The proposed project also includes landscaping, pools, jacuzzies, a children's splash area, fountains, canals, and other water features. The potable and recycled water demands for these features are included in Table 4. The average water evaporation rate off the surface of the pools and jacuzzies was assumed to be about a quarter of an inch of water per day.[8] It is also assumed that the splash pad would be a recirculated spray park. A recirculating spray park only uses water to initially fill the holding tank and then water to make up for losses due to evaporation and bather carry off. It is assumed that the recirculated system would have a 1,500-gallon underground tank and that 25 percent is lost to evaporation and bather carry off.[9,10] For the fountains, canals, and other outdoor water features, a factor of 50% is added to the evaporation rate for pools when compared to the rate of a swimming pool to account for the spray.

The outdoor landscaping water demand is calculated using the Department of Water Resource's Water Budget Workbook for New and Rehabilitate Non-Residential Landscapes.[11] The Maximum Applied Water Allowance (MAWA) shown in Table 4 was calculated using a reference evapotranspiration (Eto) of 49.20 inches and a total annual precipitation of 10.68 inches/year[12] (see Attachment A). Since all irrigation would be with recycled water, the landscaped areas were entered into the workbook as Special Landscape Areas (SLA).

Table 4 Outdoor Water Demand for the Proposed Project

Land Use	Square Footage	Water Losses	Water Demand Rate (gpd)
Potable Water Demand			
Pools and Jacuzzies	8,789	0.021 ft/day	1,381[1]
Splash Pad	353	25%	375[2]
		Total	**1,756**
Recycled Water Demand			
Fountains/Canals/Other Water Features	5,844	0.032 ft/day	1,377[3]
Landscaping	133,374	-	10,542
		Total	**11,919**

ft = feet; gpd=gallons per day.

[1] Evaporation off the surface of the pools and jacuzzies is calculated by multiplying 0.021 ft/day (half an inch a day) by the surface area (8,789 square feet) for a total of 184.6 cubic feet per day of water lost to evaporation. 184.6 cubic feet per day is 1,381 gpd.

[2] It is assumed that the splash play area includes a recirculated spray park that is only drained when contamination occurs since the water quality in the tank must be tested daily in compliance with health codes. A recirculating spray park only uses water to initially fill the holding tank and then water to make up for losses due to evaporation and bather carry off. It is assumed that the recirculated system would have a 1,500-gallon underground tank and that 25 percent is lost to evaporation and bather carry off. Therefore, the daily water loss is 1,500 x 0.25 = 375 gpd.

[3] Evaporation off the surface of the fountains, canals, and other outdoor water features is calculated by multiplying 0.032 ft/day (150% of the pool evaporation rate) by the surface area (5,844 square feet) for a total of 187 cubic feet per day of water lost to evaporation. 187 cubic feet per day is 1,377 gpd.

As shown in Table 3, the total indoor water demand is estimated to be 78.63 AFY. As shown in Table 4, the total outdoor potable water demand is estimated to be 7,037 gpd or 1.97 AFY. Therefore, the total potable water demand for the project would be 80.60 AFY. The total recycled water use is 11,919 gpd or 13.35 AFY.

[8] American Leak Detection. 2022. *How Much Water Evaporates from a Pool Each Day?*
[9] CIRSA. 2004. *Water Spray Park Safety Guidelines.*
[10] Playquest. 2023. *Spray Park Frequently Asked Questions.*
[11] California Department of Water Resources, June 13, 2017. *Water Budget Workbook for New and Rehabilitate Non-Residential Landscapes.*

2.3.3 Proposed Project with Respect to the 2020 UWMP

To evaluate water supply reliability, California statutes require the consideration of water supplies and demands in three types of water conditions: normal, single dry, and multiple dry water years.[13] The 2020 UWMP indicates that the City can meet the water demands of its customers in normal, single dry, and multiple dry years between 2020 and 2045.

The 2020 UWMP projected water demands are based on future land uses as specified in the City's 2010 General Plan. The 2010 General Plan designates the project site as mixed-use within the "Multi-Modal" area.[14] The mixed-use land use category accommodates a horizontal and/or vertical mixture of retail, service, office, restaurant, entertainment, cultural, and residential uses.[15]

The 2010 General Plan includes buildout statistics for APN# 011032233 as shown in Table 5. Based on the land use for the project site included in the 2020 UWMP, the water demand for the project site that was included in the UWMP is shown in Table 5.

Table 5 Water Demand Estimate for the Project Site Based on Land Use in the 2020 UWMP

Land Use	Unit	Water Demand Rate	Total Domestic Water Usage (gpd)
Potable Water			
Multi-Family Residential	63 du	60 gpd/person[1]	12,814
Office	205,317 sf	2,500 gpd/ac[1]	11,784
Commercial	205,317 sf	1,800 gpd/ac[1]	8,484
Total	**-**	**-**	**33,082**
Recycled Water			
Multi-Family Residential	0.79 ac[2]	1,500 gpd/ac[3]	1,185
Office	205,317 sf	1,500 gpd/ac[3]	7,070
Commercial	205,317 sf	1,100 gpd/ac[3]	5,185
Total	**-**	**-**	**13,440**

Source: City of Ontario 2020 UWMP, 2021; PlaceWorks, 2024; United States Census, 2023.
sf = square feet; du = dwelling unit; ac = acre; gpd = gallons per day
[1] Table 4-8 of the City of Ontario's 2020 Water Master Plan (Appendix E of the UWMP) was used to establish the water demand rate. The Mixed Use "High Density Residential (w/ RW)" rate, "Non-Office (w/ RW)" rate, and "Office (w/RW)" rate were chosen to account for potable water demand. It is assumed that the multi-family units will accommodate 3.39 people/du.
[2] The 2010 General Plan allows a minimum of 20 du/acre and a maximum of 80 du/acre for residential units within the Mixed-Use designation. As a conservative approach, the maximum density of 80 du/acre is assumed for this analysis.
[3] Table 5-3 of the City of Ontario's Recycled Water Master Plan Update (Appendix K of the UWMP) was used to establish the water demand rate. The "Mixed Use" rate was chosen to account for recycled water demand for multi-family residential and office uses. The "General Commercial" rate was used for commercial uses.

As shown in Table 5, the total potable water demand within the site area that was accounted for in the 2020 UWMP is estimated to be 33,082 gpd (37.05 AFY). The proposed project's total potable water demand of

[13] Department of Water Resources, 2005. California Water Plan, Bulletin 160-05, Volume III ("Each district has different assumptions and policies that guide their planning").
[14] Email from Alexis Mascarinas, Associate Engineer, dated June 10, 2024.
[15] PlaceWorks. 2009. *The Ontario Plan Draft EIR*.

80.60 AFY results in a net increase of 43.55 AFY when compared to the water demand accounted for the site in the 2020 UWMP.

The total recycled water demand that was accounted for in the 2020 UWMP is estimated to be 13,440 gpd (15.06 AFY) resulting in a net decrease of 1.71 AFY.

2.4 WATER SUPPLY ANALYSIS

This section identifies the sources of water used by the City of Ontario and evaluates the water supplies that would be used by the City and the proposed project during normal, single-dry, and multiple-dry years through the year 2045. Water sources used by the City include groundwater from the Chino Basin, treated groundwater from CDA, recycled water from IEUA, imported water from WFA, and purchased water from SAWCo.

The City of Ontario extracts groundwater from 17 active wells within the Chino Basin. Groundwater from the Chino Basin is used by the City of Ontario either directly by pumping into its distribution system or by treating the groundwater at one of its two treatment plants and then pumping the treated groundwater into the City of Ontario's distribution system. The ultimate capacity of Ontario's existing and future wells is projected to be 98.5 million gallons per day (mgd) or 110,337 AFY. Additional information on the City's groundwater resources and groundwater rights is provided in Section 2.5.

In addition to its well production, the City of Ontario also purchases treated Chino Basin groundwater from the CDA. The CDA was formed in 2002 as a Joint Powers Authority consisting of IEUA; Jurupa Community Services District; Cities of Chino, Chino Hills, Norco and Ontario, and Santa Ana River Water Company. Western Municipal Water District joined in 2010.

CDA can produce up to 40,000 AF from the Chino Basin every year for the purpose of groundwater cleanup and control of contaminant migration. The member agencies have contract entitlements to receive a total of 35,200 AFY of treated water from CDA. The City's current contract entitlement is 8,533 AFY; however, this may increase in years where the amount of water produced is greater than the projected amount of 40,000 AF. The CDA currently owns and operates two desalters (Chino I and Chino II Desalters) that consist of groundwater extraction wells connected to pumps and pipelines that direct water to advanced treatment facilities. The final product is a high-quality drinking water, which is sold to member agencies through "take or pay" contracts.[16]

Recycled water is provided to the City of Ontario by IEUA, which owns and operates four regional water recycling plants that produce disinfected and filtered tertiary treated recycled water in compliance with California Title 22 regulations. IEUA provides recycled water to the City of Ontario and their local agencies through a distribution system consisting of pipelines, booster pump stations, pressure regulating station, and reservoirs.[17]

[16] City of Ontario, 2021. *2020 Urban Water Management Plan.*
[17] Inland Empire Utilities Agency. 2021. *2020 Urban Water Management Plan.*

2. Water Supply Assessment

The City has been obtaining recycled water from IEUA since 1972. Currently, recycled water is used in the City for agricultural irrigation, landscape irrigation, golf course irrigation, and industrial uses. As stated in the City's 2020 UWMP, the City has the right of first purchase of their Base Entitlement. Base Entitlement is defined as the total quantity of sewage delivered into the regional sewerage system by the City less normal processing losses resulting from the treatment of sewage. Based on the City's current Recycled Water Master Plan and the 2020 UWMP, the City has enough recycled water rights to meet future recycled water demands. In 2023, the City used 9,088 AFY of recycled water.[18] IEUA estimated that the Base Entitlement for the City during FY 2022-23 was approximately 13,853 AFY. In the same fiscal year, the City used 8,790 AF of recycled water for direct use and 3,517 AFY of recycled water for groundwater recharge.[19]

The City also obtains treated imported water from the WFA, which is a wholesale water supplier to the cities of Chino, Chino Hills, Ontario, Upland, and the Monte Vista Water District. The WFA purchases imported water from IEUA, which in turn purchases untreated water from the Metropolitan Water District (MWD).[20] The MWD obtains its water from the State Water Project (SWP) and has projected 100 percent water supply reliability over the next 20 years, as per its 2020 UWMP.[21]

WFA owns and operates the Agua de Lejos Treatment Plant located in the City of Upland. The Agua de Lejos Treatment Plant is a conventional surface water treatment facility that treats and disinfects imported water supplies from the SWP delivered by MWD through IEUA. The Agua de Lejos Treatment Plant began operating in 1988 and has a treatment capacity of 81 mgd.[22] The City owns 31.4 percent of the plant capacity (25.4 mgd, 28,500 AFY). The maximum capacity available to the City is 19,924 AFY, which equals the total capacity of 28,000 AFY less the Dry Year Yield shift obligation of 8,076 AFY.[23]

The City also purchases water from SAWCo which delivers potable and irrigation water to a variety of shareholders. These shareholders include most residents of San Antonio Heights (an unincorporated area of San Bernardino County), the Cities of Upland and Ontario, Monte Vista Water District, the United States Forest Service, the San Bernardino County Flood Control District, local golf courses, rock quarries, and grove irrigators. In 2020, SAWCo's total active share entitlement was 12,570 AF. The City has an entitlement of 600 AF. SAWCo's water supply sources include surface water obtained from the San Antonio Canyon, water from the San Antonio Tunnel, and groundwater sources from the Chino Basin, Six Basins, and Cucamonga Basin.[24]

Water supplies provided to the City for the year 2023 are summarized in Table 6.

[18] Ontario Municipal Utilities Company. 2024. 2023 Water Production Summary.
[19] Inland Empire Utilities Agency. 2023. *FY 2022-23 Exhibit for Recycled Water Reconciliation.*
[20] City of Ontario, 2021. *2020 Urban Water Management Plan.*
[21] Metropolitan Water District of Southern California. 2021. *2020 Urban Water Management Plan.*
[22] City of Ontario. 2021. *2020 Urban Water Management Plan.*
[23] City of Ontario. 2016. *2015 Urban Water Management Plan.*
[24] City of Ontario. 2016. *2015 Urban Water Management Plan.*

Table 6 Water Supply Sources for the City of Ontario in 2023

Water Supplier	Water Source	Amount (AFY)
City of Ontario	Groundwater	15,077
Chino Basin Desalter Authority (CDA)	Purchased/Imported Water	8,664
Water Facilities Authority (WFA)	Purchased/Imported Water	4,753
San Antonio Water Company (SAWCo)	Purchased/Imported Water	496
Inland Empire Utilities Authority (IEUA)	Recycled Water	9,088
Total		**38,078**

Source: City of Ontario 2023 Water Production Summary, 2024.
AFY = Acre-feet per year

It is required that every urban water supplier assess the reliability to provide water service to its customers under normal, dry, and multiple dry water years. This evaluation from the 2020 UWMP is provided in Table 7. The City depends on a combination of imported and local supplies to meet its water demands and has taken numerous steps to ensure that it has adequate supplies. The City's projected water supplies are based on historical long-term averages and supplies during previous dry year conditions obtained from CDA, SAWCo, WFA and groundwater supplies from the Chino Basin. In the event that water from CDA, SAWCo, and WFA may be limited, the City has the flexibility to increase groundwater production from the Chino Basin. Consequently, water supplies available to the City are projected to meet demands for the next 25 years during normal years, single-dry years, and multiple-dry years, as shown in Table 7.[25]

Table 7 Normal, Single Dry, and Multiple Dry Year Supply and Demand (AFY)

		2025	2030	2035	2040	2045
Normal Year						
Supply Totals		52,550	58,513	63,838	73,668	73,668
Demand Totals		52,550	58,513	63,838	73,668	73,668
Difference		0	0	0	0	0
Single Dry Year						
Supply Totals		57,058	63,534	68,847	79,989	79,989
Demand Totals		57,058	63,534	68,847	79,989	79,989
Difference		0	0	0	0	0
Multiple Dry Year						
First Year	Supply Totals	56,080	62,445	67,667	78,618	78,618
	Demand Totals	56,080	62,445	67,667	78,618	78,618
	Difference	0	0	0	0	0
Second Year	Supply Totals	56,248	62,632	67,870	78,853	78,853
	Demand Totals	56,248	62,632	67,870	78,853	78,853
	Difference	0	0	0	0	0
Third Year	Supply Totals	59,493	66,246	71,786	83,403	83,403
	Demand Totals	59,493	66,246	71,786	83,403	83,403
	Difference	0	0	0	0	0

[25] City of Ontario. 2021. *2020 Urban Water Management Plan*.

Table 7 Normal, Single Dry, and Multiple Dry Year Supply and Demand (AFY)

		2025	2030	2035	2040	2045
Fourth Year	Supply Totals	54,628	60,428	65,481	76,078	76,078
	Demand Totals	54,628	60,428	65,481	76,078	76,078
	Difference	0	0	0	0	0
Fifth Year	Supply Totals	47,463	52,820	57,237	66,500	66,500
	Demand Totals	47,463	52,820	57,237	66,500	66,500
	Difference	0	0	0	0	0

Source: City of Ontario 2020 UWMP, 2021.
Notes: Supply and demand are equal for years 2040 and 2045 because the City anticipates buildout to occur in 2040.

The City will increase its total normal-year water supply from 39,921 AF of water delivered in 2020 to 73,668 AF in 2045. The increased water supply will come from full utilization of the City's groundwater rights in the Chino Basin (including increased groundwater recharge with recycled water). The Chino Basin was adjudicated under the Chino Basin Judgment in 1978. During drought cycles, the Chino Basin has been managed to maintain sustainable groundwater levels. Therefore, based on historical and on-going management practices, the City will be able to rely on the Chino Basin for adequate supply over the next 25 years under single dry years and drought periods of five consecutive years.[26]

Additionally, an increase in imported water is assumed to be available in wet and normal years. With the ability for the City to store water in the Chino Basin, in its local and supplemental storage accounts as well as the MWD's Dry-Year Yield (DDY) Program storage account, the City has the capability and water supply available to reduce imported water deliveries in dry years and increase groundwater production to meet future demands. Section 2.5 provides a description of the management of groundwater resources in the Chino Basin, as well as information on basin management.

2.5 GROUNDWATER ANALYSIS

Since most of the potable water supplied by the City of Ontario comes from groundwater, SB 610 requires a groundwater analysis to be included as part of the WSA. The Water Code requires that the WSA include:

- Groundwater information from the 2020 UWMP
- Groundwater basin description including the legal rights to pump
- Historic use of groundwater from the 2020 UWMP
- Projected use of groundwater
- Sufficiency of groundwater from the Chino Basin

[26] City of Ontario. 2021. *2020 Urban Water Management Plan.*

Per SB 221, where a water supply for a proposed subdivision includes groundwater, the public water system serving the proposed subdivision needs to evaluate, based on substantial evidence, the extent to which it has the right to extract the additional groundwater needed to supply the proposed subdivision.[27]

The City of Ontario's legal right to pump water in an amount necessary to meet its demands has been adjudicated and the safe yield of the aquifer has been determined. The construction of Wells 45, 46, and 47, as part of the Dry Year Yield Storage Program, increases the City's groundwater pumping capacity to meet peak demands. The City also has stored water in the Chino Basin and participates in an ongoing groundwater recharge program, using stormwater, dry-weather runoff, and recycled water, that ensures the safe yield of the Chino Basin is not exceeded. In addition, the City participates in water conservation efforts, adopts ordinances pertaining to water shortage contingency planning and the prevention of water waste, conservation pricing, and various public outreach programs to encourage its customers to reduce their water consumption.

2.5.1 Groundwater Information from the 2020 UWMP

The 2020 UWMP adopted by the City in June 2021 contains a description of the Chino Groundwater Basin, the City's current and projected water supplies and demands, the reliability of the water supply, water shortage plans, the Optimum Basin Management Plan, and the adjudication judgment administered by the Chino Basin Watermaster. In addition, Appendix E of the UWMP explains the methods and calculations by which the future water demand of the City was estimated, based on the land use designations in the General Plan.

2.5.1.1 GROUNDWATER BASIN DESCRIPTION

The City of Ontario obtains its groundwater from the Chino Groundwater Basin. The Chino Basin encompasses about 235 square miles of the upper Santa Ana River watershed and lies within portions of San Bernardino, Riverside, and Los Angeles counties. The Chino Basin has approximately five to six million-acre feet of water in storage and an estimated one million acre-feet of storage capacity. The Chino Basin is divided into five management zones, based on similar hydrologic conditions, as shown in Figure 7, *Chino Groundwater Basin Management Zones*. The City of Ontario is located approximately in the center of the Chino Basin.

Groundwater quality in Chino Basin is generally good with better quality in the northern portion of the basin where recharge occurs. Salinity (TDS) and nitrate-nitrogen concentrations are higher in the southern portion of the basin. The Chino Basin has been extensively studied by the Chino Basin Watermaster. Reports are available at this website: http://www.cbwm.org/.

The Chino Basin Watermaster began development of the Optimum Basin Management Program (OBMP) in 1998 and completed it in 2000. The OBMP was updated in 2020. The purpose of the program is to address both water quality and water supply considerations. The southern portion of the Chino Basin requires groundwater treatment to control the outflow of salts and nitrates into the Santa Ana River. As such, one of the main benefits of the CDA is to remove salts and nitrates to clean up the Chino Basin. CDA operates 22 groundwater extraction wells that prevent brackish groundwater from flowing into the Santa Ana River. CDA removes salts from brackish groundwater extracted from the lower Chino Basin through the Chino I and II

[27] Government Code Section 66473.7(h).

2. Water Supply Assessment

Desalter facilities. The Chino I Desalter is in the City of Chino and has a total capacity of 14.2 MGD. The Chino II Desalter is in Jurupa Valley and was expanded in 2017 to have a total capacity of 33 MGD.[28]

The OBMP and its implementation agreement, the Peace Agreement, was approved by the Court in October 2000. One of the stipulations of the OBMP requires member agencies to extract approximately 40,000 AFY of groundwater from the southern portion of the Chino Basin, treat it to potable water standards, and then deliver it to the member agencies. Member agencies have contract entitlements to receive a total of 35,200 AFY of treated water from CDA. The City's current contract entitlement is 8,533 AFY.[29]

2.5.1.1 LEGAL RIGHT TO PUMP FROM THE CHINO BASIN

Water rights to the Chino Basin were adjudicated in 1978 by the Superior Court of the State of California for San Bernardino County. Since that time, the Chino Basin has been sustainably managed, as required by the Judgment, under the direction of the court-appointed Watermaster. The original Watermaster was the Chino Basin Municipal Water District (now IEUA). Since 1998, the Watermaster has been the Chino Basin Watermaster.

Multiple cities and water purveyors pump groundwater from the Chino Basin for all or part of their municipal and industrial water supplies. Agricultural users also pump groundwater from the Basin. The safe yield of the Chino Basin is 131,000 AFY as of 2020. The safe yield quantity is allocated among three pools of right holders as follows:

- Overlying Agricultural Pool (dairymen, farmers, and the State of California)
- Overlying Non-Agricultural Pool (businesses and industries)
- Appropriative Pool (local cities, public water districts, and private water companies)

The Operating Safe Yield (OSY) is defined as the annual amount of groundwater which the Watermaster determines can be produced from the Appropriative Pool parties without replenishment obligation. The City of Ontario is a member of both the Overlying Non-Agricultural Pool and the Appropriative Pool and is therefore subject to the regulations imposed by the Chino Basin Watermaster. The Judgment allocates a portion of the safe yield to the Overlying Non-Agricultural Pool and a portion of the OSY to the Appropriative Pool.

Pursuant to the Judgment, the City has appropriative rights to approximately 21 percent of the OSY allocated to the Appropriative Pool and 53 percent of the safe yield assigned to the Overlying Non-Agricultural Pool.[30] With an OSY of 40,834 AFY, the City's current appropriative right is approximately 8,470 AFY as of July 2021. As of July 2021, the safe yield is allocated at 82,800 AFY to the Overlying Agricultural Pool and 7,350 AFY to the Overlying Non-Agricultural Pool. The City has purchased and has rights to 3,921 AF of Overlying Non-Agricultural Pool water.[31]

[28] City of Ontario. 2021. *2020 Urban Water Management Plan.*
[29] City of Ontario. 2021. *2020 Urban Water Management Plan.*
[30] City of Ontario. 2021. *2020 Urban Water Management Plan.*
[31] City of Ontario. 2021. *2020 Urban Water Management Plan.*

2. Water Supply Assessment

The Judgment states that all Chino Basin users can pump enough water from the Basin to meet their requirements. If pumping by a party exceeds its share of the safe yield, assessments are levied by the Chino Basin Watermaster to replace overproduction. The Judgment also recognizes that there is a substantial amount of available unused groundwater storage capacity in the Chino Basin that can be used for storage and the conjunctive use of supplemental and basin waters.[32] The Chino Basin Watermaster has the authority to reallocate shares of unallocated safe yield water on an annual basis, as per the latest 2019 Watermaster Resolution No. 2019-03.[33] The Watermaster publishes an annual report that summarizes the status and management of the Chino Basin. A copy of the Chino Basin Judgment and latest Watermaster Annual Report can be found at www.cbwm.org.

The City of Ontario also participates in the Dry Year Yield (DYY) Storage Program, which is a cooperative conjunctive use program involving MWD, IEUA, Chino Basin Watermaster, Three Valleys Municipal Water District, and some of the Chino Basin groundwater producers. Under the DYY Program, MWD is allowed to store up to 100,000 AF of water in the Chino Basin when surplus water is available and the Chino Basin groundwater producers can extract 33,000 AFY for three years in dry, drought, or emergency periods. The City authorized execution of an agreement with IEUA to participate in the DYY program in 2003. Participation obligates the City to reduce its use of imported water compared to a baseline by a fixed amount, known as the "shift obligation." The City's shift obligation is 8,076 AFY. During years when MWD calls for extraction, the City's WFA purchases would be reduced by up to 8,076 AFY compared to the previous year. Because Jurupa Community Services District does not have an imported water connection, it has entered into an agreement with the City to meet its shift obligation. Under this agreement, Jurupa Community Services District conveys groundwater to the City in an amount equal to its shift obligation. This program allows the City to be less reliant upon imported water supplies and the additional groundwater capacity allows the City to increase the percentage of groundwater supply used to meet peak demands.[34]

In addition to the appropriative pool and overlying non-agricultural pool water rights, as well as the contract obligations through the DYY Program, the following is a summary of other groundwater rights for Chino Basin:

- **LAND USE CONVERSIONS**

  As of 2023, the City receives 5,586 AFY from the Chino Basin due to conversions from agricultural to non-agricultural land uses. The Chino Basin Watermaster reallocates the unused portion of the Chino Basin Safe Yield from the Overlying Agricultural Pool to the Appropriative Pool members as a supplement to the Appropriative Pool share of Operating Safe Yield rights in any year.[35,36]

[32] Wildermuth Environmental, Inc. September 2018. *2018 Recharge Master Plan. Prepared for the Chino Basin Watermaster and the Inland Empire Utilities Agency.*
[33] Chino Basin Watermaster. 2019. *Watermaster Resolution No. 2019-03. Resolution of the Chino Basin Watermaster Regarding 2018 Appropriative Pool Pooling Plan and CAMA Amendments.*
[34] City of Ontario. 2021. 2020 *Urban Water Management Plan.*
[35] City of Ontario. 2021. 2020 *Urban Water Management Plan.*
[36] Chino Basin Watermaster. 2023. *2023-2024 Assessment Package.*

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- **FONTANA RECYCLED WATER RIGHTS**

  The City also has a long-term contract to purchase up to 3,000 AFY of recharged recycled water rights from the City of Fontana, which does not operate its own water system.[37]

- **CITY GROUNDWATER STORAGE**

  The City has rights to store water in the Chino Basin (Appropriative and Overlying Non- Agricultural) and has been increasing its various storage accounts in recent years. The City holds water in both local storage accounts and supplemental accounts. Local storage accounts hold unpumped OSY groundwater rights and stormwater that has been recharged into the Chino Basin. Supplemental accounts hold both imported water and recycled water that has been recharged into the Chino Basin. As of June 30, 2023, the City has 123,135 AF in storage pursuant to Appropriative rights and zero AF in storage pursuant to Overlying Non-Agricultural rights.[38,39]

- **INCREASED GROUNDWATER RECHARGE**

  The City is entitled to water rights due to groundwater recharge with stormwater and recycled water in the Chino Basin. The credited amount is based on the volume recharged and therefore varies annually but is projected to increase over time. In fiscal year 2022, 6,932 AF was recharged for the City including 3,000 AF from the city of Fontana. In fiscal year 2023, 6,420 was recharged for the City including 2,903 AF from the city of Fontana.[40,41]

The various groundwater rights held by the City of Ontario are summarized in Table 8.

Table 8 City of Ontario Groundwater Rights Summary

	Current as of 2023 (AFY)
Dry Year Storage Program	0
Appropriative Pool	8,470
Overlying Non-Agricultural Pool	3,921
Land Use Conversions	5,586
Groundwater Recharge Credits	Varies
Fontana Recycled Water Rights	Max. 3,000
Groundwater Storage Accounts	Appropriative Pool: 123,135
	Overlying Non-Agricultural: 0

Source: Chino Basin Watermaster 2023-2024 Assessment Package, 2023 and City of Ontario 2020 UWMP, 2021.

[37] City of Ontario. 2021. 2020 *Urban Water Management Plan.*
[38] City of Ontario. 2021. 2020 *Urban Water Management Plan.*
[39] Chino Basin Watermaster. 2023. *2023-2024 Assessment Package.*
[40] Inland Empire Utilities Agency. 2022. FY 2021-22 Exhibit for Recycled Water Reconciliation.
[41] Inland Empire Utilities Agency. 2023. FY 2022-23 Exhibit for Recycled Water Reconciliation.

2.5.2 Historic Use of Groundwater

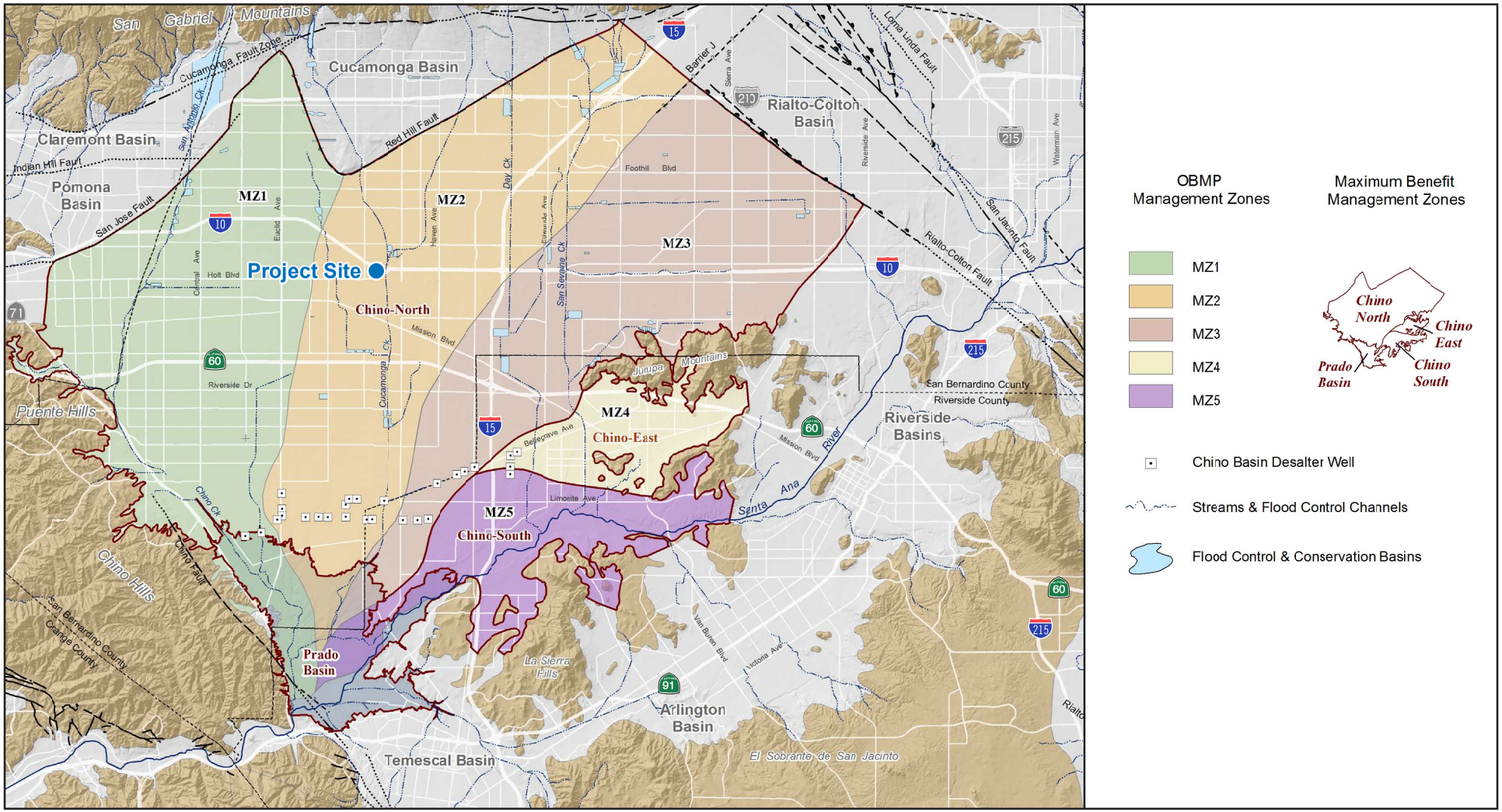
The City owns and operates 17 active groundwater wells. The amount of groundwater pumped by the City of Ontario from the Chino Basin since 2016 is listed below in Table 9. A map of the location of the groundwater wells and pressure zones is shown on Figure 8, *Ontario Ultimate Water System.*

Table 9 Historic Groundwater Production

Calendar Year	Groundwater produced (AFY)
2016	22,751
2017	24,672
2018	26,109
2019	19,604
2020	18,395
2021	17,171
2022	18,967
2023	15,077
Average	

Source: Chino Basin Watermaster 2021-2022 Assessment Package, 2021, Ontario Municipal Utilities Company 2022 Water Production Summary, 2023, Ontario Municipal Utilities Company 2023 Water Production Summary, 2024, and City of Ontario 2020 UWMP, 2021.

Figure 7 - Chino Groundwater Basin Management Zones



Source: Wildermuth International 2017.

2. Water Supply Assessment

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2.5.3 Projected Use of Groundwater

The proposed project will receive water from the City of Ontario, using groundwater extracted from the Chino Basin, treated groundwater from the CDA, recycled water from the IEUA, and imported water from the WFA.

Groundwater from the Chino Basin will be directly pumped by the City of Ontario into its distribution system or by treating the groundwater at the City's two ion-exchange facilities before pumping it into the distribution system. The City's current well capacity is 38,600 gallons per minute (gpm) or 55.6 mgd. The City's ultimate source of supply will be equal to or greater than 68,404 gpm, this includes the nine future wells.

The projected amount of groundwater pumped by the City of Ontario from the Chino Basin up to the year 2045 is listed below in Table 10.

Table 10 Projected Groundwater Production

Calendar Year	Groundwater produced (AFY)
2025	20,249
2030	22,915
2035	24,943
2040	31,476
2045	31,476

Source: City of Ontario 2020 UWMP, 2021.

2.5.4 Sufficiency of Groundwater from Chino Basin

According to the 2020 UWMP, the City's water supply (including conservation measures) will be sufficient to supply all its needs to residential, commercial, and industrial customers through the year 2045 during normal, single dry, and multiple dry years. The City of Ontario's legal right to pump water in an amount necessary to meet its demands has been adjudicated and will ensure the long-term reliability of the groundwater source as the safe yield of the aquifer has been determined.

Approximately two-thirds of the City's water supply is groundwater pumped through its own wells located in the Chino Basin. The construction of Wells 45, 46, and 47, as part of the DYY Storage Program, increases the City's groundwater pumping capacity to meet peak demands. The City also has 123,135 AF of stored water in the Chino Basin as of 2023 and participates in an ongoing groundwater recharge program, using stormwater, dry-weather runoff, and recycled water, that ensures the safe yield of the Chino Basin is not exceeded. The expansion of the groundwater desalter program and ongoing expansion of the recycled water program will reduce the City's dependence on groundwater pumping. In addition, the City adopts ordinances pertaining to water shortage contingency planning and the prevention of water waste, conservation pricing, and various public outreach programs to encourage its customers to reduce their water consumption.[42]

[42] City of Ontario. 2021. 2020 *Urban Water Management Plan*.

2.5.5 Ability of Water Supplies to Accommodate the Proposed Project

As noted in Section 2.3.3 the proposed project would result in a net increase of 43.55 AFY in potable water demand and decrease of 1.71 AFY in recycled water demand when compared to the water demand accounted for the site in the 2020 UWMP. The net increase in potable water is within the projected potable water demand increases shown in Table 7 for the years 2025 to 2030, the timeframe in which the proposed project is anticipated to be completed.

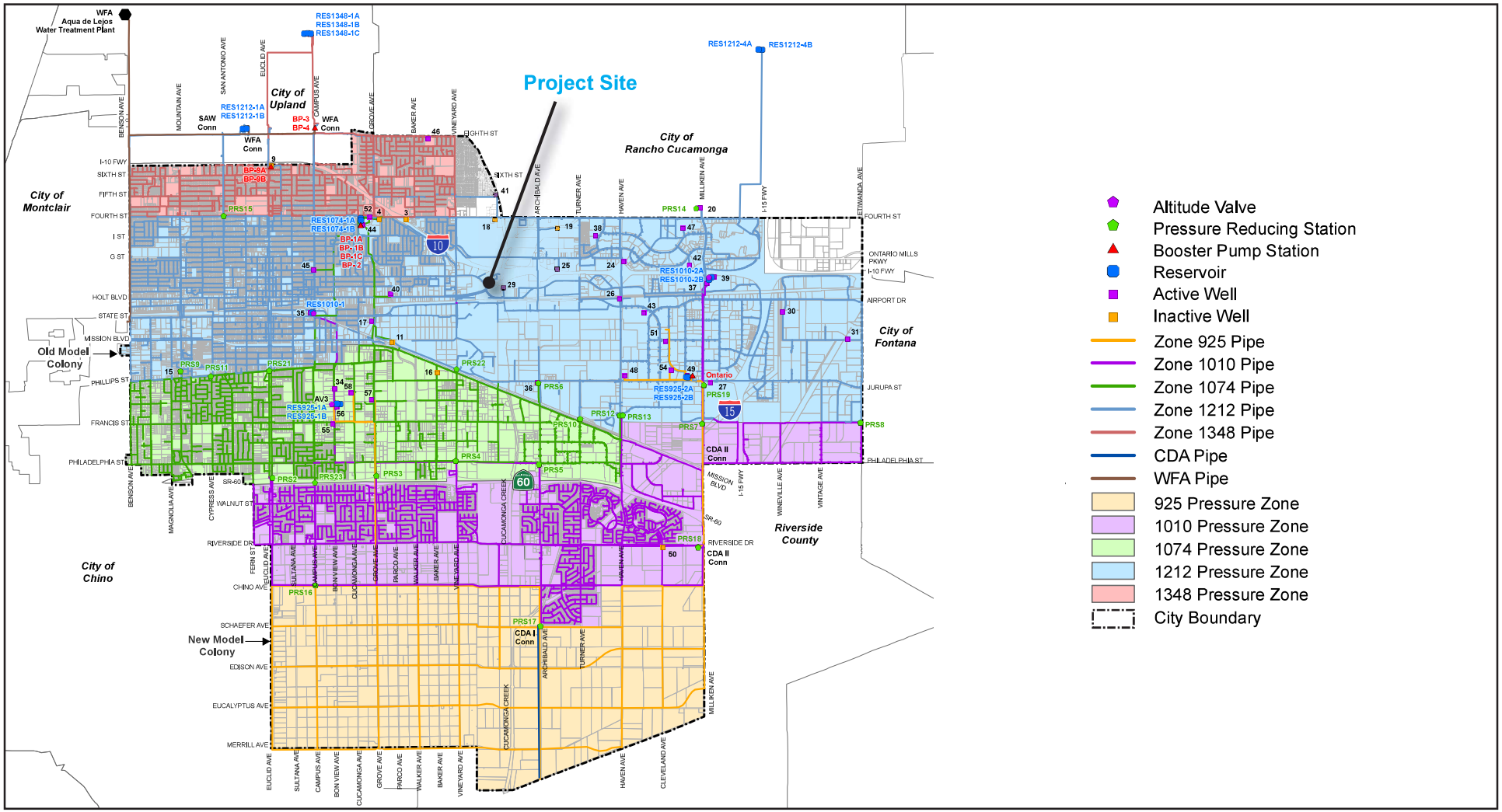
Furthermore, although Table 7 does not include any residual water supply capacities, the City has the flexibility to increase groundwater production from the Chino Basin. An increase in imported water is also available to the City in wet and normal years. Projected groundwater production is shown in Table 10 and capped at 31,476 AFY for the years 2040 and 2045. This amount is what is needed for the projected water demands. However, the City can increase this production as shown in Table 8. As of June 30, 2023, the City has 123,135 AF in storage pursuant to Appropriative rights. Along with the other groundwater supply allocations shown in Table 8, the City has the capability to accommodate the net increase in water demand associated with the proposed project.

2.6 WATER SHORTAGE CONTINGENCY PLANNING

To prepare for water shortages, the City adopted Ordinance No. 3027 on September 1, 2015, in response to the Emergency Conservation Regulations mandated by the State Water Resources Control Board. Under this ordinance, the Water Conservation Plan was updated with more stringent prohibitions and penalties. Ordinance 3027 updated the City's Water Conservation Plan that is codified in Chapter 8A, Title 6 of the City's Municipal Code ("Water Conservation Plan").

The City Council adopted its 2020 Water Shortage Contingency Plan in June 2021, which describes the methods to achieve and the implication of reducing water supplies to at least 50 percent. The City and OMUC implement various programs to reduce customer water consumption, including stringent use restrictions, actions, and penalties, as well as public outreach, education, and communication programs.

Figure 8 - Ontario Ultimate Water System



Source: AKM 2011.

2. Water Supply Assessment

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Depending on the initiative of the City's customers to voluntarily conserve water at times of crisis, the City can determine when and how quickly to implement the mandatory conservation phases. The severity of the water shortage will influence which methods will be implemented. The demand reduction stages that correspond to water shortage levels are as follows:

- Stage 1 – Water supply shortage of up to 10 percent or as otherwise directed by executive order or State agency regulation
- Stage 2 – Water supply shortage between 10 and 20 percent
- Stage 3 – Water supply shortage between 20 and 30 percent
- Stage 4 – Water supply shortage between 30 and 40 percent
- Stage 5 – Water supply shortage between 40 and 50 percent
- Stage 6 – Water supply shortage greater than 50 percent

As of May 2023, the City entered into a Voluntary Conservation Stage where the public is encouraged to voluntariy conserve water described in the Water Shortage Contingecy Plan.

2.7 WATER EFFICIENCY STRATEGIES

The City has implemented "Demand Management Measures" to reduce its water demands and achieve its water use targets. These measures include:

- Adoption of an ordinance to promote conservation and prevent water waste. The City adopted Ordinance No. 3027 in October 2015 to establish water conservation measures, staged water supply shortage demand management measures, and prevent water waste. The adoption of Ordinance No. 3027 was part of a comprehensive water shortage planning effort to manage the City's response to water supply challenges it may encounter.
- Metering of all customer connections, including separate metering for single-family residential, commercial, industrial, large landscape, and institutional/governmental facilities.
- Implementation of conservation pricing. The City's current water rate structure is tiered to promote water conservation by customers. In the event the customer uses more than the amount of water allotted for the budgeted allocation, a Drought Surcharge rate would apply.
- Development of public education and outreach programs regarding water conservation. The City developed a public information program to educate the public on the benefits of water conservation. The program involves the dissemination of information through literature provided at City Hall and other City of Ontario facilities and articles in the City of Ontario newsletter. The City includes periodic information flyers with the water bills to address water conservation and other important matters. The City also periodically holds public seminars and workshops with other local agencies to promote water conservation.
- Implementation of actions to assess and manage water distribution system losses. The City has water conservation literature that alerts customers to be on the lookout for water system leaks and to correct them promptly. As part of normal operation and maintenance of the water system, City staff performs preventive maintenance. This includes regular checks on valves and meters and pipeline maintenance. If leaks are encountered or suspected during routine inspection of the system, further evaluation is conducted

and leaks are subsequently repaired. The City also monitors the water system for loss by comparing water production to water sales.

- Provision of rebate programs. The City routinely hosts seminars and workshops in the community to promote landscape and offers a rebate program for the purchase of landscape-related items to both residential and commercial customers to promote water conservation. The City also offers a rebate program for the purchase of high-efficiency washing machines, high-efficiency toilets, and weather-based irrigation controllers. [43]

Furthermore, the City along with other IEUA member agencies implement a Regional Water Use Efficiency Business Plan. The Business Plan references SB X7-7 and the State Water Resources Control Board's Emergency Conservation Regulations that help guide the development of water reduction goals. The Business Plan describes in detail how the region and the City will achieve the water reduction goals. In addition, the City participates in water conservation efforts through the California Urban Water Conservation Council committing to implement Best Management Practices for more efficient use or conservation of water.[44]

2.8 SUMMARY

A WSA/WV was prepared to assess the water demand and supply conditions with implementation of the proposed project. As shown in Table 3 and 4, the total potable water demand for the proposed project is conservatively estimated to be 80.60 AFY and the total recycled water demand is estimated at 13.35 AFY.

According to the City's 2020 UWMP, the City has adequate supplies to serve 100 percent of its customers during normal, dry year, and multiple dry year demand through 2045 with projected population increases and future development projects. The proposed project would result in a net increase of 43.55 AFY in potable water demand and net 1.71 AFY decrease in recycled water demand when compared to the water demand accounted for the site in the 2020 UWMP. This net increase is within the 2020 UWMP projected potable and recycled water demand increases for the years 2025 to 2030, the timeframe in which the proposed project is anticipated to be completed. Furthermore, the City has the flexibility to increase groundwater production from the Chino Basin and increases in imported water is also available to the City in wet and normal years. As shown in Section 2.5.5, the City has adequate groundwater allocations to accommodate the net increase in water demand associated with the proposed project.

This WSA/WV concludes that the City will have sufficient water supplies available during normal, single dry, and multiple dry years through the year 2045 to meet all projected water demands associated with its existing and future customers, including the proposed project. In the unlikely event of a water shortage, implementation of the City's Water Conservation Plan and water efficiency strategies would ensure that sufficient water supplies were available to serve its customers, including the project and existing and future users.

[43] City of Ontario. 2021. *2020 Urban Water Management Plan.*
[44] Inland Empire Utilities Agency. 2022. Regional *Water Use Efficiency Business Plan FY 2022-24.*

2. Water Supply Assessment

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Attachment A – Detailed Landscaping Water Demand Calculations

Water Budget Workbook for New and Rehabilitated Non-Residential Landscapes

Beta Version 1.30

June 13, 2017

Califonia Department of Water Resources
Statewide Integrated Water Management
Water Use and Efficiency Branch

This program calculates Maximum Applied Water Allowance (MAWA) and Estimated Total Water Use (ETWU) based on reference evapotranspiration from Appendix A in the Model Water Efficiency Landscape Ordinance

All information provided by the Department of Water Resources is made available to provide immediate access for the convenience of interested persons. While the Department believes the information to be reliable, human or mechanical error remains a possibility. Therefore, the Department does not guarantee the accuracy, completeness, timeliness, or correct sequencing of the information. Neither the Department of Water Resources nor any of the sources of the information shall be responsible for any errors or omissions, or for the use or results obtained from the use of this information.

Instructions

This Worksheet for calculation of special landscape MAWA only

Cells with pale blue background are for entering data

Results show in cells with tan background

Messages and warnings are displayed in cells with yellow background

1) Select city by clicking on pale blue cell and choosing a city from the drop down menu

ETo appears in the tan cell below the name of the city

2) Enter Specila Landscape Area (SLA)

3) MAWA results appear in the tan cells

4) If you are considering effective precipitation (Eppt), enter the total annual precipition

5) Effective precipitation

6) For comparison, MAWA without effective precipitation is displayed below

4,067,907.00

MAWA without Eppt (Gallons)

Maximum Applied Water Allowance Calculations for New and Rehabilitated Special Landscapes

Enter value in Pale Blue Cells

Tan Cells Show Results

Messages and Warnings

Click on the blue cell on right to Pick City Name	Ontario	Name of City
ET_o of City from Appendix A	49.20	ET_o (inches/year)
Enter SLA	133,374.00	SLA (ft^2)
Results:		
MAWA = (ET_o) x (0.62) x [SLA)]	-	Gallons
	-	Cubic Feet
	-	HCF
	-	Acre-feet
	-	Millions of Gallons
MAWA calculation incorporating Effective Precipitation (Optional)		
ET_o of City from Appendix A	49.20	ET_o (inches/year)
Speical Landscape Area	133,374.00	SLA (ft^2)
	10.68	
Enter Effective Precipitation	2.67	Eppt (in/yr)
Results:		
MAWA=(ET_o - Eppt) x (0.62) x [SLA)]	3,847,839.90	Gallons
	514,383.09	Cubic Feet
	5,143.83	HCF
	11.81	Acre-feet
	3.85	Millions of Gallons

Attachment A – Detailed Water Demand Calculations

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ORDINANCE NO. _____

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING FILE NO. PDA23-005, A DEVELOPMENT AGREEMENT BETWEEN THE CITY OF ONTARIO AND DIVERSIFIED PACIFIC DEVELOPMENT GROUP, LLC, TO ESTABLISH THE TERMS AND CONDITIONS ASSOCIATED WITH A DEVELOPMENT PLAN (FILE NO. PDEV23-039), FOR A 10.43 ACRE PROPERTY LOCATED ON THE SOUTHEAST CORNER OF GUASTI ROAD AND HOLT BOULEVARD WITHIN THE PROPOSED PA1 (HOSPITALITY MIXED-USE) DISTRICT OF THE EMPIRE GROVES SPECIFIC PLAN, AND MAKING FINDINGS IN SUPPORT THEREOF—APN: 110-322-33.

WHEREAS, DIVERSIFIED PACIFIC DEVELOPMENT GROUP, LLC ("Applicant") has filed an Application for the approval of a Development Agreement, File No. PDA23-005, as described in the title of this Ordinance (hereinafter referred to as "Application" or "Project"); and

WHEREAS, the Application applies to 10.43 acres of land generally located on southeast corner of Guasti Road and Holt Boulevard, within the proposed Empire Groves Specific Plan; and

WHEREAS, the properties to the north of the Project site are within the CCS (Convention Center Support Commercial) zoning district and are developed with offices and hotel. The property to the east is within the UC (Utilities Corridor) zoning district and is developed with a flood control channel. The property to the south and west is within the CCS (Convention Center Support Commercial) zoning district, and is developed with hotel; and

WHEREAS, the applicant submitted a Development Plan (File No. PDEV23-039) to construct a 600,000 square foot hotel and commercial building consisting of 600 rooms; and

WHEREAS, in conjunction with the Project, the Applicant also filed an application for a Specific Plan (Empire Groves), File No. PSP23-001, to establish the land use district, development standards, guidelines, and infrastructure improvements for the development of up to 600,000 square feet of hospitality and commercial land uses on the project site; and

WHEREAS, on February 25, 2025, the Planning Commission conducted a public hearing and approved Resolution No. PC25-006, recommending the City Council approve a Resolution adopting an Addendum to the Ontario Plan 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364), certified by the City Council on August 16, 2022, in conjunction with File No. PGPA20-002. The Addendum finds that the proposed project introduces no new significant environmental impacts. Furthermore, all mitigation measures previously adopted with the Certified Environmental Impact Report are incorporated into the Project by reference; and

WHEREAS, the City's "Local Guidelines for the Implementation of the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed; and

WHEREAS, the Application is a project pursuant to the California Environmental Quality Act (Public Resources Code Section 21000 et seq.) ("CEQA") and an initial study has been prepared to determine possible environmental impacts; and

WHEREAS, Ontario Development Code Table 2.02-1 (Review Matrix) grants the City Council the responsibility and authority to review and act on the subject Application; and

WHEREAS, the Project is located within the Airport Influence Area of Ontario International Airport ("ONT"), which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and is subject to, and must be consistent with, the policies and criteria set forth in the Ontario International Airport Land Use Compatibility Plan (ALUCP), which applies only to jurisdictions within San Bernardino County, and addresses the noise, safety, airspace protection, and overflight impacts of current and future airport activity; and

WHEREAS, City of Ontario Development Code Division 2.03 (Public Hearings) prescribes the manner in which public notification shall be provided and hearing procedures to be followed, and all such notifications and procedures have been completed; and

WHEREAS, on February 25, 2025, the Planning Commission of the City of Ontario conducted a hearing to consider the SEIR Addendum and the Project, and concluded said hearing on that date, voting to issue Resolution No. PC25-007, recommending the City Council approve the Application; and

WHEREAS, as the first action on the Project, on March 18, 2025, the City Council approved a Resolution adopting an SEIR Addendum to a previous Certified EIR prepared pursuant to CEQA, the State CEQA Guidelines and the City of Ontario Local CEQA Guidelines, which indicated that all potential environmental impacts from the Project were less than significant or could be mitigated to a level of significance; and

WHEREAS, on March 18, 2025, the City Council of the City of Ontario conducted a hearing to consider the Project, and concluded said hearing on that date; and

WHEREAS, all legal prerequisites to the adoption of this Ordinance have occurred.

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED, AND ORDAINED by the City Council of the City of Ontario, as follows:

SECTION 1: ***Environmental Determination and Findings.*** As the decision-making body for the Project, the City Council has reviewed and considered the information contained in the previous Certified EIR and supporting documentation. Based upon the facts and information contained in the previous Certified EIR and supporting documentation, the City Council finds as follows:

(1) The environmental impacts of this project were reviewed in conjunction with an Addendum to TOP 2050 Supplemental Environmental Impact Report, certified by the City of Ontario City Council on August 16, 2022, in conjunction with File No. PGPA20-002.

(2) The Addendum and administrative record have been completed in compliance with CEQA, the State CEQA Guidelines, and the City of Ontario Local CEQA Guidelines; and

(3) The City's "Guidelines for the Implementation of the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed. This Application introduces no new significant environmental impacts; and

(4) The Addendum contains a complete and accurate reporting of the environmental impacts associated with the Project, and reflects the independent judgment of the City Council; and

(5) There is no substantial evidence in the administrative record supporting a fair argument that the project may result in significant environmental impacts; and

(6) The proposed project will introduce no new significant environmental impacts beyond those previously analyzed in the Certified EIR, and all mitigation measures previously adopted by the Certified EIR, are incorporated herein by this reference.

SECTION 2: ***Additional Environmental Review Not Required.*** Based on the Addendum, all related information presented to the City Council, and the specific findings set forth in Section 1, above, the City Council finds that the preparation of a subsequent or supplemental Certified EIR is not required for the Project, as the Project:

(1) Does not constitute substantial changes to the Certified EIR that will require major revisions to the Certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and

(2) Does not constitute substantial changes with respect to the circumstances under which the Certified EIR was prepared, that will require major revisions to the Certified EIR due to the involvement of new significant environmental

effects or a substantial increase in the severity of the previously identified significant effects; and

(3) Does not contain new information of substantial importance that was not known and could not have been known with the exercise of reasonable diligence at the time the Certified EIR was certified/adopted, that shows any of the following:

(a) The project will have one or more significant effects not discussed in the Certified EIR; or

(b) Significant effects previously examined will be substantially more severe than shown in the Certified EIR; or

(c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the City declined to adopt such measures; or

(d) Mitigation measures or alternatives considerably different from those analyzed in the Certified EIR would substantially reduce one or more significant effects on the environment, but which the City declined to adopt.

SECTION 3: ***Airport Land Use Compatibility Plan ("ALUCP") Compliance.*** The California State Aeronautics Act (Public Utilities Code Section 21670 et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

(1) On April 19, 2011, the City Council of the City of Ontario approved and adopted the Ontario International Airport Land use Compatibility Plan, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the decision-making body for the Project, the City Council has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the City Council, therefore, finds and determines that the Project, when implemented in conjunction with the conditions of

approval, will be consistent with the policies and criteria set forth within the ONT ALUCP; and

SECTION 4: ***Concluding Facts and Reasons.*** Based upon the substantial evidence presented to the City Council during the above-referenced hearing, and upon the specific findings set forth in Section 1 through 3, above, the City Council hereby concludes as follows:

The provisions of the development agreement are consistent with the goals, policies, plans, and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan, and any applicable specific plans. The Development Agreement applies to approximately 10.43 acres of land located on the southeast corner of Guasti Road and Holt Boulevard within the proposed Empire Groves Specific Plan (File No. PSP23-001). The Development Agreement establishes parameters for the development of land within the Empire Groves Specific Plan. The Development Agreement also grants the Applicant, the right to develop, the Project site. These terms and conditions are consistent with The Ontario Plan Policy Plan (General Plan), design guidelines and development standards for the proposed Empire Groves Specific Plan and will help further the vision of the Guasti District, the Multimodal Mixed-Use Land Use designation, and support the nearby Convention Center.

SECTION 5: ***City Council Action.*** Based upon the findings and conclusions set forth in Sections 1 through 4, above, the City Council hereby APPROVES the herein described Development Agreement, attached hereto as "Attachment A," and incorporated herein by this reference.

SECTION 6: ***Indemnification.*** The Applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void, or annul this approval. The City of Ontario shall promptly notify the applicant of any such claim, action, or proceeding, and the City of Ontario shall cooperate fully in the defense.

SECTION 7: ***Custodian of Records.*** The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East "B" Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario.

SECTION 8: ***Severability.*** If any section, sentence, clause or phrase of this Ordinance or the application thereof to any entity, person or circumstance is held for any reason to be invalid or unconstitutional, such invalidity or unconstitutionality shall not affect other provisions or applications of this Ordinance which can be given effect without the invalid provision or application, and to this end the provisions of this Ordinance are severable. The People of the City of Ontario hereby declare that they would have adopted this Ordinance and each section, sentence, clause or phrase thereof, irrespective of the fact that any one or more section, subsections, sentences, clauses or phrases be declared invalid or unconstitutional.

SECTION 9: ***Effective Date.*** This Ordinance shall become effective 30 days following its adoption.

SECTION 10: ***Publication and Posting.*** The Mayor shall sign this Ordinance and the City Clerk shall certify as to the adoption and shall cause a summary thereof to be published at least once, in a newspaper of general circulation in the City of Ontario, California within 15 days following the adoption. The City Clerk shall post a certified copy of this ordinance, including the vote for and against the same, in the Office of the City Clerk, in accordance with Government Code Section 36933.

PASSED, APPROVED, AND ADOPTED this _____ day of _____ 2025.

_____
PAUL S. LEON, MAYOR

ATTEST:

_____
SHEILA MAUTZ, CITY CLERK

APPROVED AS TO FORM:

_____
BEST BEST & KRIEGER LLP
CITY ATTORNEY

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO)
CITY OF ONTARIO)

I, SHEILA MAUTZ, City Clerk of the City of Ontario, DO HEREBY CERTIFY that foregoing Ordinance No. _____ was duly introduced at a regular meeting of the City Council of the City of Ontario held _____ and adopted at the regular meeting held _____, 2025 by the following roll call vote, to wit:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

I hereby certify that the foregoing is the original of Ordinance No. _____ duly passed and adopted by the Ontario City Council at their regular meeting held _____ and that Summaries of the Ordinance were published on _____ and _____, in the Inland Valley Daily Bulletin newspaper.

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

ATTACHMENT A:

File No. PDA23-005
Development Agreement

(Document follows this page)

RECORDING REQUESTED BY AND
WHEN RECORDED MAIL TO:

CITY OF ONTARIO
CITY CLERK / RECORDS MANAGEMENT
303 EAST "B" STREET
ONTARIO, CA 91764-4196

Exempt from Fees Per Gov. Code § 6103 and 27383

Space above this line for Recorder's Use Only

FILE NO. PDA_____

DEVELOPMENT AGREEMENT

By and Between

City of Ontario
a California municipal corporation

and

DIVERSIFIED PACIFIC DEVELOPMENT GROUP LLC,
a California limited liability company

_____, 2025

San Bernardino County, California

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DEVELOPMENT AGREEMENT NO. PDA_____

This Development Agreement (hereinafter "Agreement") is dated as of _____, 2025, for reference purposes only, and is entered into by and between the City of Ontario, a California municipal corporation (hereinafter "CITY"), and DIVERSIFIED PACIFIC DEVELOPMENT GROUP LLC, a California limited liability company (hereinafter "OWNER"):

RECITALS

WHEREAS, CITY is authorized to enter into binding development agreements with persons having legal or equitable interests in real property for the development of such property, pursuant to Section 65864, et seq. of the Government Code and Section 4.01.015 of the Ontario Development Code; and

WHEREAS, OWNER and CITY desire that they enter into a development agreement and proceedings have been taken in accordance with the rules and regulations of CITY; and

WHEREAS, by electing to enter into this Agreement, CITY shall bind future City Councils of CITY by the obligations specified herein and limit the future exercise of certain governmental and proprietary powers of CITY; and

WHEREAS, the terms and conditions of this Agreement have undergone extensive review by CITY and the City Council and have been found to be fair, just and reasonable; and

WHEREAS, the best interests of the citizens of CITY and the public health, safety and welfare will be served by entering into this Agreement; and

WHEREAS, all of the procedures of the California Environmental Quality Act, Public Resources Code §§21000, et seq. ("CEQA") have been met with respect to the Hotel Project and the Agreement in that certain Addendum to the Final Supplemental Environmental Impact Report for the Ontario Plan 2050; Empire Groves Specific Plan (State Clearinghouse No. 2021070364 (the "Addendum").

WHEREAS, the City Council found and determined that the Addendum was prepared in accordance with the requirements of CEQA and adequately describes the impacts of the Hotel Project described in the Addendum, which included consideration of this Agreement; and

WHEREAS, CITY is currently engaged in the Ontario Convention Center Expansion & Renovation Project (as further defined in Section 4.6.1 as the "Convention Center Project"), which is slated to significantly expand and remodel the existing convention center. To support the Convention Center Project and other possible improvements that CITY is considering making, as discussed further in this Agreement, CITY and OWNER desire that OWNER develop, construct and operate a full service convention hotel ("Hotel") on the Property, which can support and enhance the Convention Center Project. For purposes of this Agreement, a full service convention hotel means a hotel that offers a range of onsite amenities, including a restaurant, pool, gym, laundry services, business center and meeting space or conference rooms; and

WHEREAS, CITY and OWNER agree that the Convention Center Project and Hotel Project are complementary and that the parties agree to use commercially reasonable efforts to

coordinate the reopening of Convention Center and opening of the Hotel Project. As part of the Convention Center Project, CITY intends to significantly expand the Convention Center and may construct a public parking structure and outdoor plaza as part of the Convention Center Project to provide new parking near the Convention Center and the proposed Hotel Project. To further the success of the Convention Center, CITY is considering the acquisition of some or all of the Surrounding Properties (described in Section 4.7 below), to establish thereon a vibrant high-end, luxury retail, commercial and residential uses that would enhance the economic viability of the Hotel Project and to further improve the tax base of CITY; and

WHEREAS, the Hotel Project will provide substantial public benefits to CITY, including the creation of job opportunities for local residents in hospitality, retail, management, construction and maintenance. The Hotel Project will support local entrepreneurs and small businesses by providing them with platforms to showcase and sell their products or services. The Hotel Project will generate tax revenue for CITY. The Hotel Project will attract visitors, host key events, provide support to the Convention Center and other local businesses, ultimately enhancing the overall cityscape, further benefiting local businesses and the local economy; and

WHEREAS, this Agreement and the Hotel Project are consistent with CITY'S Comprehensive General Plan and any specific plan applicable thereto; and

WHEREAS, all actions taken and approvals given by CITY have been duly taken or approved in accordance with all applicable legal requirements for notice, public hearings, findings, votes, and other procedural matters; and

WHEREAS, development of the Property, as defined in Section 1.1.21 and as more particularly described and depicted in the attached Exhibit "A" – Legal Description of the Property and Exhibit "B" - Map Showing Property and its Location, in accordance with this Agreement will provide substantial benefits to CITY and will further important policies and goals of CITY; and

WHEREAS, this Agreement will eliminate uncertainty in planning and provide for the orderly development of the Property, ensure progressive installation of necessary improvements, provide for public services appropriate to the development of the Hotel Project, and generally serve the purposes for which development agreements under Sections 65864 et seq. of the Government Code are intended; and

WHEREAS, OWNER has incurred and will in the future be incurring substantial costs to facilitate development of the Property in accordance with this Agreement; and

WHEREAS, OWNER has incurred and will in the future incur substantial costs in excess of the generally applicable requirements to assure vesting of legal rights to develop the Property in accordance with this Agreement.

COVENANTS

NOW, THEREFORE, in consideration of the above recitals and of the mutual covenants hereinafter contained and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. DEFINITIONS AND EXHIBITS.

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1.1. Definitions. The following terms when used in this Agreement shall be defined as follows:

1.1.1. "Agreement" means this Development Agreement.

1.1.2. "CITY" means the City of Ontario, California, a California municipal corporation.

1.1.3. "Convention Center Project" is defined in the recitals to this Agreement and supplemented pursuant to Section 4.8.1 below.

1.1.4. "Development" means the improvement of the Property for the purposes of completing the Hotel Project, including the structures, improvements and facilities comprising the Hotel Project including, but not limited to: grading; the construction of public infrastructure and public facilities related to the Hotel Project whether located within or outside the Property; the construction of buildings and structures; and the installation of landscaping. "Development" does not include the maintenance, repair, reconstruction or redevelopment of any building, structure, improvement or facility after the construction and completion thereof.

1.1.5. "Development Approvals" means all permits and other entitlements for use subject to approval or issuance by CITY in connection with development of the Property including, but not limited to:

(a) specific plans and specific plan amendments;

(b) tentative and final subdivision and parcel maps;

(c) development plan review;

(d) conditional use permits, public use permits and plot plans;

(e) zoning;

(f) grading and building permits.

1.1.6. "Development Exaction" means any requirement of CITY in connection with or pursuant to any Land Use Regulation or Development Approval for the dedication of land, the construction of improvements or public facilities, or the payment of fees in order to lessen, offset, mitigate or compensate for the impacts of development on the environment or other public interests.

1.1.7. "Development Impact Fee" means a monetary exaction or other charge, other than a tax or special assessment, whether characterized as a fee or a tax and whether established for a broad class of projects by legislation of general applicability or imposed on a specific project on an ad hoc basis, that is charged by a local agency to the applicant in connection with approval of a development project for the purpose of defraying all or a portion of the cost of public facilities related to the development project, and, for purposes of this Agreement only, includes fees collected under development agreements adopted pursuant to Article 2.5 of the Government Code (commencing with Section 65864) of Chapter 4. For purposes of this Agreement only, "Development Impact Fee" shall not include processing fees and charges imposed by CITY to cover the estimated actual costs to CITY of processing applications for Development Approvals or for monitoring compliance with any Development Approvals granted or issued, including, without limitation, fees for zoning variances; zoning changes; use permits; building inspections; building permits; filing and processing applications

and petitions filed with the local agency formation commission or conducting preliminary proceedings or proceedings under the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000, Division 3 (commencing with Section 56000) of Title 5 of the Government Code; the processing of maps under the provisions of the Subdivision Map Act, Division 2 (commencing with Section 66410) of Title 7 of the Government Code; or planning services under the authority of Chapter 3 (commencing with Section 65100) of Division 1 of Title 7 of the Government Code, fees and charges as described in Sections 51287, 56383, 57004, 65104, 65456, 65863.7, 65909.5, 66013, 66014, and 66451.2 of the Government Code, Sections 17951, 19132.3, and 19852 of the Health and Safety Code, Section 41901 of the Public Resources Code, and Section 21671.5 of the Public Utilities Code, as such codes may be amended or superseded, including by amendment or replacement.

1.1.8. "Development Plan" means the Existing Development Approvals and the Existing Land Use Regulations applicable to development of the Property.

1.1.9. "Effective Date" means the date that the ordinance approving this Agreement goes into effect.

1.1.10. "Existing Development Approvals" means all Development Approvals approved or issued prior to the Effective Date. Existing Development Approvals includes the Approvals incorporated herein as **Exhibit "C"** and all other Approvals which are a matter of public record on the Effective Date.

1.1.11. "Existing Land Use Regulations" means all Land Use Regulations in effect on the Effective Date. Existing Land Use Regulations includes the Regulations incorporated herein as **Exhibit "D"** and all other Land Use Regulations that are in effect and a matter of public record on the Effective Date.

1.1.12. "Final Non-Appealable Date" means the date the Existing Development Approvals are final and non-appealable as set forth in the CITY Development Code and any applicable laws and the applicable statute of limitations has expired under the California Environmental Quality Act (Public Resources Code §21000 *et seq.)* and implementing Guidelines for CEQA (14 Cal. Code Regs. § 15000 *et seq.)* with respect to the Addendum, in each case without the filing of any third party challenge, appeal, or lawsuit or, if filed, such challenge, appeal, or lawsuit has been resolved in a manner satisfactory to OWNER. Promptly after the Final Non-Appealable Date occurs, the parties shall execute a joint memorandum or side letter confirming the final date of the Final Non-Appealable Date and, thereafter, the Final Non-Appealable Date shall be deemed to be the date agreed upon by the parties in such memorandum or side letter.

1.1.13. "Force Majeure" has the meaning set forth in Section 10.11.

1.1.14. "Full Service Convention Hotel" has the meaning as set forth in the Recitals and supplemented pursuant to Section 4.4.3 below.

1.1.15. "General Plan" means The Ontario Plan adopted on August 16, 2022, by Ordinance No.___ , as amended up to the date of the first reading of the ordinance adopting and approving this Agreement.

1.1.16. "Hotel Project" means the development of the Property contemplated by the Development Plan, as such Plan may be further defined, enhanced or modified pursuant to the provisions of this Agreement.

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1.1.17. "Improvement" or "Improvements" means those public improvements required to support the development of the Hotel Project as described in the development conditions for the Hotel Project, as further described in **Exhibit "E"** and depicted in **Exhibit "F"** (together, the "Infrastructure Improvements Exhibit").

1.1.18. "Land Use Regulations" means all ordinances, resolutions, codes, rules, regulations and official policies of CITY governing the development and use of land, including, without limitation, the permitted use of land, the density or intensity of use, subdivision requirements, timing and phasing of development, the maximum height and size of buildings, the provisions for reservation or dedication of land for public purposes, and the design, improvement and construction standards and specifications applicable to the development of the Property. "Land Use Regulations" does not include any CITY ordinance, resolution, code, rule, regulation or official policy, governing:

(a) the conduct of businesses, professions, and occupations;

(b) taxes and assessments;

(c) the control and abatement of nuisances;

(d) the granting of encroachment permits and the conveyance of similar rights and interests that provide for the use of or the entry upon public property;

(e) the exercise of the power of eminent domain.

1.1.19. "Mortgagee" means a mortgagee of a mortgage, a beneficiary under a deed of trust or any other security-device lender, and their successors and assigns.

1.1.20. "OWNER" means the persons and entities listed as OWNER on page 1 of this Agreement and their permitted successors in interest to all or any part of the Property.

1.1.21. "Parking Tax" means the tax imposed by CITY for the renting of a parking space in a parking station in the City of Ontario pursuant to Title 3, Chapter 8 of the Ontario Municipal Code, as may be modified from time to time.

1.1.22. "Property" means the real property described on **Exhibit "A"** and shown on **Exhibit "B"** to this Agreement.

1.1.23. "Reservations of Authority" means the rights and authority excepted from the assurances and rights provided to OWNER under this Agreement and reserved to CITY under Section 3.7 of this Agreement.

1.1.24. "Specific Plan" means that certain specific plan adopted by CITY Council, and entitled, "Empire Groves Specific Plan."

1.1.25. "Subsequent Development Approvals" means all Development Approvals required subsequent to the Effective Date in connection with development of the Property. Subsequent Development Approvals shall be deemed to be subject to the provisions of this Agreement, without any further action needed on the part of either CITY or OWNER.

1.1.26. "Subsequent Land Use Regulations" means any Land Use Regulations adopted and effective after the Effective Date of this Agreement.

1.1.27. "Transient Occupancy Tax" or "TOT" means the tax imposed by CITY on the rent charged to guests for occupancy of hotel rooms within the development, as authorized by

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Title 3, Chapter 6 of the Ontario Municipal Code or otherwise, as may be modified from time to time.

1.1.28. "Total Project Costs" means all costs and expenses incurred by OWNER to acquire, develop and construct the Hotel Project and all portions thereof, and to brand and open the Hotel Project to the public, inclusive of all hotel management and franchise costs, fees and charges.

1.2. Exhibits. The following documents are attached to, and by this reference made a part of, this Agreement:

1.2.1. Exhibit "A" — Legal Description of the Property.

1.2.2. Exhibit "B" — Map showing Property and its location.

1.2.3. Exhibit "C" — Existing Development Approvals.

1.2.4. Exhibit "D" — Existing Land Use Regulations.

1.2.5. Exhibit "E" — Description of Required Infrastructure Improvements.

1.2.6. Exhibit "F" — Depiction of Required Infrastructure Improvements.

1.2.7. Exhibit "H-1"— Surrounding Property.

1.2.8. Exhibit "H-2" — Miller Property.

1.2.9. Exhibit "I" – Conceptual Depiction of the Convention Center Expansion.

2. GENERAL PROVISIONS.

2.1. Binding Effect of Agreement. The Property is hereby made subject to this Agreement. Development of the Property is hereby authorized and shall be carried out in accordance with the terms of this Agreement.

2.2. Ownership of Property. OWNER represents and covenants that it is the owner of the fee simple title to the Property or a portion thereof, or the lessee of the Property or has the right to acquire fee simple title to the Property or a portion thereof from the current owner(s) thereof. To the extent OWNER does not own fee simple title to the Property, OWNER shall obtain written consent from the current fee owner of the Property agreeing to the terms of this Agreement and the recordation thereof.

2.3. Term. The term of this Agreement shall commence on the Effective Date and shall continue for an initial term of thirty (30) years thereafter unless this term is modified or extended pursuant to the provisions of this Agreement.

2.4. Assignment.

2.4.1. Right to Assign. OWNER shall have the right to sell, transfer or assign the Property (inclusive of all improvements thereon) in whole or in part (provided that no such partial transfer shall violate the Subdivision Map Act, Government Code Section 66410, et seq.), to any person, partnership, limited liability company, joint venture, firm or corporation at any time during the term of this Agreement; provided, however, that any such sale, transfer or assignment shall include the assignment and assumption of the rights, duties and obligations arising under or from this Agreement and be made in compliance with the following:

(a) No sale, transfer or assignment of any right or interest under this

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Agreement shall be made unless made together with the sale, transfer or assignment of all or a part of the Property.

(b) Concurrent with any such sale, transfer or assignment, or within fifteen (15) business days thereafter, OWNER shall notify CITY'S City Manager, in writing, of such sale, transfer or assignment and shall provide CITY with: (1) an executed agreement providing therein that the purchaser, transferee or assignee expressly and unconditionally assumes all the duties and obligations of OWNER under this Agreement with respect to the portion of the Property so sold, transferred or assigned arising from and after the date of such sale, transfer or assignment; and (2) the payment of the applicable processing charge to cover CITY'S review and consideration of such sale, transfer or assignment.

(c) Any sale, transfer or assignment not made in compliance with the foregoing conditions shall constitute a default by OWNER under this Agreement. Notwithstanding the failure of any purchaser, transferee or assignee to execute the agreement required by Paragraph (b) of this Subsection 2.4.1, the benefits and burdens of this Agreement shall be binding upon and inure to such purchaser, transferee or assignee, arising from and after the date of such assignment. The City Manager shall have the authority to review, consider and either approve, conditionally approve, or deny any proposed sale, transfer or assignment that is not made in compliance with this Section 2.4.

2.4.2. Release of Transferring Owner. Notwithstanding any sale, transfer or assignment, a transferring OWNER shall continue to be obligated under this Agreement unless OWNER no longer has a legal or equitable interest in all or any part of the portion of the Property sold, transferred or assigned, or such transferring owner is given a release in writing by CITY, which release shall be provided by CITY upon the full satisfaction by such transferring owner of the following conditions:

(a) OWNER no longer has a legal or equitable interest in all or any part of the portion of the Property sold, transferred or assigned.

(b) OWNER is not then in default under this Agreement.

(c) OWNER has provided CITY with the notice and executed agreement required under Paragraph (b) of Subsection 2.4.1 above.

(d) The purchaser, transferee or assignee provides CITY with security equivalent to any security previously provided by OWNER to secure performance of its obligations hereunder.

(e) The provisions of this Section 2.4.2 and Section 2.4.3 below shall not apply to the holder of a mortgage (inclusive of a deed of trust) encumbering the Property as security for the provision of financing towards the improvement of the Property, but shall be governed pursuant to the terms of Section 9 of this Agreement.

2.4.3. Effect of Assignment and Release of Obligations. In the event of a sale, transfer or assignment pursuant to the provisions of Section 2.4.1 above and notwithstanding the release provisions of Section 2.4.2 above:

(a) The assignee shall be liable for the performance of all obligations of OWNER with respect to transferred property, but shall have no obligations with respect to the portions of the Property, if any, not transferred (the "Retained Property").

(b) The owner of the Retained Property shall remain liable for the performance of all obligations of OWNER with respect to Retained Property, but shall have no further obligations with respect to the transferred property.

(c) The assignee's exercise, use and enjoyment of the Property or portion thereof (but not any Retained Property) shall be subject to the terms of this Agreement to the same extent as if the assignee were OWNER from and after the date the assignee took title to the Property or portion thereof.

2.4.4. Subsequent Assignment. Any subsequent sale, transfer or assignment after an initial sale, transfer or assignment shall be made only in accordance with and subject to the terms and conditions of this Section 2.4.

2.4.5. Partial Assignment and Assumption. CITY and OWNER agree OWNER may partially assign its obligations and rights under this Agreement, and all amendments hereto, to a purchaser, transferee or assignee of a lot, which has been subdivided subject to provisions of a partial assignment and assumption agreement in a form reasonably approved by CITY. Any such complete and executed partial assignment and assumption of this Agreement shall be submitted to CITY for approval pursuant to Section 2.4.1 of this Agreement. Within thirty (30) days following such complete submittal, CITY shall review, and if the above conditions are satisfied, shall approve the partial assignment and release and notify the purchaser, transferee or assignee in writing thereof. If CITY shall fail to respond to such request for approval within such sixty (60) day period, CITY shall be deemed to have approved such request. No such release approved pursuant to this Subsection 2.4.5 shall cause, or otherwise affect, a release of OWNER from the duties and obligations under this Agreement that are retained by OWNER and excluded from the transfer or assignment.

2.5. Amendment or Cancellation of Agreement. This Agreement may be amended or cancelled in whole or in part only in the manner provided for in Government Code Section 65868.1. Any amendment of this Agreement, which amendment has been requested by OWNER, shall be considered by CITY only upon the payment of the applicable processing charge. This provision shall not limit any remedy of CITY or OWNER as provided by this Agreement. Either Party or successor in interest, may propose an amendment to or cancellation, in whole or in part, of this Agreement. Any amendment or cancellation shall be by mutual consent of the parties or their successors in interest except as provided otherwise in this Agreement or in Government Code Section 65865.1. For purposes of this section, the term "successor in interest" shall mean any person having a legal or equitable interest in the whole of the Property, or any portion thereof as to which such person wishes to amend or cancel this Agreement. The procedure for proposing and adopting an amendment to, or cancellation of, in whole or in part, this Agreement shall be the same as the procedure for adopting and entering into this Agreement in the first instance. Notwithstanding the foregoing sentence, if CITY initiates the proposed amendment to, or cancellation of, in whole or in part, this Agreement, CITY shall first give notice to OWNER of its intention to initiate such proceedings at least sixty (60) days in advance of the giving the public notice of intention to consider the amendment or cancellation.

2.6. Amendment to Reflect Consistency With Future Amendments to the Development Plan. To the extent any future amendment to the Development Plan (which shall occur only with OWNER prior written approval) provides for modifications to rights or

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obligations that differ from or alter the same or similar rights or obligations contained in this Development Agreement, OWNER reserves the right to request an amendment to this Development Agreement to reflect and address any or all of such modifications.

2.7. Minor Modification. Upon the written application of OWNER, minor modifications and changes to the Development Plan including modifications to building design or footprint (not affecting minimum setbacks), parking layout and design, and landscape area design may be approved by the Director of the Planning Department without the need to amend this Development Agreement. Other changes in the Development Plan shall be processed pursuant to the CITY Zoning Ordinance. It is also contemplated by CITY and OWNER that OWNER may, from time to time, seek amendments to one or more of the Development Approvals. Any such amendments are contemplated by CITY and OWNER as being within the scope of this Agreement as long as they are consistent with the Land Use Regulations and shall, upon approval by CITY, continue to constitute the Development Approvals as referenced herein. The parties agree that any such modifications or amendments shall not constitute an amendment to this Agreement nor require an amendment to this Agreement.

2.8. Termination. This Agreement shall be deemed terminated and of no further effect upon the occurrence of any of the following events:

2.8.1. Expiration of the stated term of this Agreement as set forth in Section 2.3.

2.8.2. Entry of a final judgment setting aside, voiding or annulling the adoption of the ordinance approving this Agreement.

2.8.3. The adoption of a referendum measure overriding or repealing the ordinance approving this Agreement.

2.8.4. Termination of this Agreement based on any uncured default of OWNER and following the termination proceedings requirement by the Development Agreement policies.

Completion of the Hotel Project in accordance with the terms of this Agreement including issuance of all required occupancy permits and acceptance by CITY or applicable public agency of all required dedications, shall not terminate this Agreement or the rights of OWNER or CITY hereunder. Termination of this Agreement shall not constitute termination of any other land use entitlements approved for the Property. Upon the termination of this Agreement, no party shall have any further right or obligation hereunder except with respect to any obligation to have been performed prior to such termination or with respect to any default in the performance of the provisions of this Agreement which has occurred prior to such termination or with respect to any obligations which are specifically set forth as surviving this Agreement. Upon such termination, any public facilities and services mitigation fees paid pursuant to Section 4.2 of this Agreement by OWNER to CITY on which construction has not yet begun shall be refunded to OWNER by CITY within a reasonable period of time.

2.9. Notices.

2.9.1. As used in this Agreement, "notice" includes, but is not limited to, the communication of notice, request, demand, approval, statement, report, acceptance, consent, waiver, appointment or other communication required or permitted hereunder.

2.9.2. All notices shall be in writing and shall be considered given either: (i) when delivered in person, including, without limitation, by courier, to the recipient named

below; or (ii) on the date of delivery shown on the return receipt, after deposit in the United States mail in a sealed envelope as either registered or certified mail with return receipt requested, and postage and postal charges prepaid, and addressed to the recipient named below. All notices shall be addressed as follows. A copy of any notice may be sent via electronic mail to the email addresses as specified below:

If to CITY:

Scott Ochoa, City Manager
City of Ontario
303 East "B" Street
Ontario, CA 91764
Email: SOchoa@ontarioca.gov

If to OWNER:

Jeff Burum and Matt Jordan
Diversified Pacific Development Group LLC
10621 Civic Center Drive
Rancho Cucamonga, CA 91730
Email: JBurum@divpac.com

with a copy to:

Ruben Duran, City Attorney
Best Best & Krieger, LLP
2855 E Guasti Road, Suite 400
Ontario, CA 91761
Email: ruben.duran@bbklaw.com

with a copy to:

Guy Maisnik
Jeffer, Mangels, Butler & Mitchell LLP
1900 Avenue of the Stars, 7th Floor
Los Angeles, CA 90067
Email: mgm@jmbm.com

2.9.3. Either party may, by notice given at any time, require subsequent notices to be given to another person or entity, whether a party or an officer or representative of a party, or to a different address, or both. Notices given before actual receipt of notice of change shall not be invalidated by the change.

3. DEVELOPMENT OF THE PROPERTY.

3.1. Development of the Hotel Project; Rights to Develop.

3.1.1. Development of the Hotel Project. In consideration of the premises, purposes, and intentions set forth in this Agreement, and in consideration of the assurances for development of the Hotel Project pursuant to this Agreement, OWNER agrees to use commercially reasonable efforts to develop the Hotel Project, and development of the Hotel Project shall be in accordance with: (i) the terms and conditions of this Agreement; (ii) the terms and conditions established in the Development Approvals; and (iii) the Existing Land Use Regulations. OWNER further agrees that the use, density and intensity, maximum height and size of structures and provisions for the Property reservation and dedication of land for public purposes related to the Property shall be limited to those uses permitted by the Existing Land Use Regulations. Development of the Hotel Project shall be in accordance with the Development Approvals. Construction of the Hotel Project shall be in compliance with all applicable building codes and standards, as such may be modified from time to time.

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3.1.2. Rights to Develop. Subject to the terms of this Agreement including the Reservations of Authority, OWNER shall have a vested right to develop the Property in accordance with the Existing Land Use Regulations, subject to the terms and conditions of this Agreement and the conditions established in the Development Approvals. The Hotel Project shall remain subject to all Subsequent Development Approvals required to complete the Hotel Project as contemplated by the Development Plan. Except as otherwise provided in this Agreement, the permitted uses of the Property, the density and intensity of use, the maximum height and size of proposed buildings, and provisions for reservation and dedication of land for public purposes shall be those set forth in the Existing Land Use Regulations.

3.2. Effect of Agreement on Land Use Regulations. Except as otherwise provided under the terms of this Agreement including the Reservations of Authority in Section 3.6 herein, the rules, regulations and official policies governing permitted uses of the Property, the density and intensity of use of the Property, the maximum height and size of proposed buildings, and the design, improvement and construction standards and specifications applicable to development of the Property shall be the Existing Land Use Regulations. In connection with any Subsequent Development Approval, CITY shall exercise discretion in accordance with the same manner as it exercises its discretion under its police powers, including the Reservations of Authority set forth herein; provided however, that such discretion shall not prevent development of the Property for the uses and to the density or intensity of development set forth in this Agreement.

3.3. Timing of Development. The parties acknowledge that OWNER cannot at this time predict when or the rate at which phases of the Property will be developed. Such decisions depend upon numerous factors which are not within the control of OWNER, such as market orientation and demand, interest rates, absorption, completion and other similar factors. Since the California Supreme Court held in Pardee Construction Co. v. City of Camarillo (1984) 37 Cal. 3d 465, that the failure of the parties therein to provide for the timing of development resulted in a later adopted initiative restricting the timing of development to prevail over such parties' agreement, it is the parties' intent to cure that deficiency by acknowledging and providing that OWNER shall have the right to develop the Property in such order and at such rate and at such times as OWNER deems appropriate within the exercise of its subjective business judgment, subject to any timing or phasing requirements set forth in the Development Plan or the Phasing Plan; provided, however, that OWNER and CITY acknowledge that it shall not be a default of OWNER under this Agreement or otherwise, if the following milestones dates or any dates set forth in the Development Plan or the Phasing Plan are not achieved:

Milestone Table:

	Event	Date
1.	Submission by OWNER of building plans to CITY for the Hotel Project	On or before three hundred sixty-five (365) days following the Final Non-Appealable Date.
2	Commencement of Construction of the Hotel Project	On or before two (2) years following the Final Non-Appealable Date.

2.	(Continued)	In order to achieve this milestone, CITY agrees to complete its review of (a) OWNER'S initial plan check submission within twenty-one (21) days after receipt of such initial submission by CITY (provided, however, prior to such submission OWNER and CITY shall meet to review the proposed application), and (b) any additional submissions required to obtain the required permits for the Hotel Project within fourteen (14) days following receipt of such additional submissions by CITY. There shall be a day-for-day extension of this Commencement of Construction milestone if CITY fails to timely respond to such submissions within the time periods set forth above (each, a "CITY Response Delay").

Notwithstanding anything to the contrary herein, subject to force majeure, if OWNER has not substantially completed the Hotel by the expiration of four (4) calendar years, with two (2) options to extend each for two (2) years for a total of eight (8) years in the event that both options are exercised, following the Final Non-Appealable Date, CITY shall have the right to terminate this Agreement, provided that the foregoing period shall be extended if OWNER has proceeded in good faith, but has not yet been able to obtain feasible financing on commercially reasonable terms and conditions for the construction of the Hotel Project or on account of a Force Majeure event for the number of days that the inability to obtain feasible financing event or the Force Majeure event was in effect. OWNER shall provide at least sixty (60) days advance written notice to CITY if OWNER exercises an option to extend the completion date of the Hotel Project.

3.4. Requirement for Public Infrastructure Improvements. OWNER shall comply with any conditions of the Development Approvals with respect to providing public infrastructure improvements or facilities, if any, to the extent required in connection with the Hotel Project. Notwithstanding any terms that may expressly identify, or the absence thereof to identify, any certain Public Infrastructure Improvements within the terms of this Agreement, the obligations of OWNER which are imposed by the conditions of the Development Approvals for the Hotel Project shall still be in effect and are not waived. Development of the Property is contingent in part on the phasing of area-wide infrastructure improvements over which OWNER has control and subject to the provisions of this Agreement. The issuance of building permits by CITY for the Development of the Property is, in general, contingent on OWNER'S completion of such needed infrastructure improvements to the extent provided herein and the availability of improvements and services to serve the Property.

3.4.1. Infrastructure Improvement Exhibit. Attached hereto as **Exhibits "E**" and **"F"** are a description and depiction, respectively, of the Improvements needed for the development of the Property. In the event of any discrepancy between **Exhibit "E"** and **Exhibit "F"**, **Exhibit "F"** shall control.

3.4.2. Infrastructure Improvement Plan. Subject to the prior submittal by OWNER and approval by CITY of a plan to provide sufficient public infrastructure for the construction of the Development of the Property. The plan to be submitted by OWNER for CITY approval shall describe the utilities and other infrastructure necessary to provide sufficient fire protection and other public health and safety requirements for the Development and other facilities for the Hotel Project. .

3.5. Phasing Plan. Development of the Property shall be subject to all timing and any phasing requirements established by the Development Plan, provided the same are consistent with the terms of this Agreement.

3.6. Changes and Amendments. The parties acknowledge that refinement and further development of the Hotel Project may require Subsequent Development Approvals and may demonstrate that changes are appropriate and mutually desirable in the Existing Development Approvals. In the event OWNER finds that a change in the Existing Development Approvals is necessary or appropriate, OWNER shall apply for a Subsequent Development Approval to effectuate such change and CITY shall process and act on such application in accordance with the Existing Land Use Regulations, except as otherwise provided by this Agreement including the Reservations of Authority. If approved, any such change in the Existing Development Approvals shall be incorporated herein as an addendum to **Exhibit "C"**, and may be further changed from time to time as provided in this Section. Unless otherwise required by law, as determined in CITY'S reasonable discretion, a change to the Existing Development Approvals shall be deemed "minor" and not require an amendment to this Agreement provided such change does not:

(a) Alter the permitted uses of the Property as a whole; or

(b) Increase the density or intensity of use of the Property as a whole; or

(c) Increase the maximum height and size of permitted buildings; or

(d) Delete a requirement for the reservation or dedication of land for public purposes within the Property as a whole; or

(d) Constitute a project requiring a subsequent or supplemental environmental impact report pursuant to Section 21166 of the Public Resources Code.

3.7. Reservations of Authority.

3.7.1. Limitations, Reservations and Exceptions. Notwithstanding any other provision of this Agreement, CITY shall not be prevented from applying new rules, regulations and policies upon OWNER, nor shall a development agreement prevent CITY from denying or conditionally approving any subsequent development project application on the basis of such new rules, regulations and policies where the new rules, regulations and policies consist of the following:

(a) Processing fees and charges of every kind and nature imposed by CITY to cover the costs of processing applications for Development Approvals or for monitoring

compliance with any Development Approvals

(b) Procedural regulations relating to hearing bodies, petitions, applications, notices, findings, records, hearings, reports, recommendations, appeals and any other matter of procedure;

(c) Regulations, policies and rules governing engineering and construction standards and specifications applicable to public and private improvements, including all uniform codes adopted by CITY and any local amendments to those codes adopted by CITY; provided however that, OWNER shall have a vested right to develop the Property in accordance with, and to the extent of, the standards and specifications that are expressly identified in the Specific Plan;

(d) Regulations that may conflict with this Agreement and the Development Plan but that are reasonably necessary to protect the residents of the project and/or of the immediate community from a condition perilous to their health or safety;

(e) Regulations that do not conflict with those rules, regulations and policies set forth in this Agreement or the Development Plan. Any regulation, whether adopted by initiative or otherwise, limiting the rate or timing of development of the Property shall be deemed to conflict with the Development Plan and shall therefore not be applicable to the development of the Property;

(f) Regulations that may conflict with this Agreement or the Development Plan, but to which OWNER consents in writing.

(g) Regulations imposing Development Exactions; provided, however, that no such subsequently adopted Development Exaction shall be applicable to development of the Property unless such Development Exaction is applied uniformly to development, either throughout the CITY or within a defined area of benefit which includes the Property. No such subsequently adopted Development Exaction shall apply if its application to the Property would physically prevent development of the Property for the uses and to the density or intensity of development set forth in the Development Plan. In the event any such subsequently adopted Development Exaction fulfills the same purposes, in whole or in part, as the fees set forth in Section 4 of this Agreement, CITY shall allow a credit against such subsequently adopted Development Exaction for the fees paid under Section 4 of this Agreement to the extent such fees fulfill the same purposes.

3.7.2. Subsequent Development Approvals. This Agreement shall not prevent CITY, in acting on Subsequent Development Approvals, from applying Subsequent Land Use Regulations that do not conflict with the Development Plan and/or Existing Development Approvals, nor shall this Agreement prevent CITY from denying or conditionally approving any Subsequent Development Approval on the basis of the Existing Land Use Regulations or any Subsequent Land Use Regulation not in conflict with the Development Plan and/or the Existing Development Approvals.

3.7.3. Modification or Suspension by State or Federal Law. In the event that State or Federal laws or regulations, enacted after the Effective Date of this Agreement, prevent or preclude compliance with one or more of the provisions of this Agreement, such provisions of this Agreement shall be modified or suspended as may be necessary to comply with such State or Federal laws or regulations, provided, however, that this Agreement shall remain in full force

and effect to the extent it is not inconsistent with such laws or regulations and to the extent such laws or regulations do not render such remaining provisions impractical to enforce. In the event OWNER alleges that such State or Federal laws or regulations preclude or prevent compliance with one or more provisions of this Agreement, and CITY does not agree, OWNER may, at its sole cost and expense, seek declaratory relief (or other similar non-monetary remedies); provided however, that nothing contained in this Section 3.7.3 shall impose on CITY any monetary liability for contesting such declaratory relief (or other similar non-monetary relief).

3.7.4. Intent. The parties acknowledge and agree that CITY is restricted in its authority to limit its police power by contract and that the foregoing limitations, reservations and exceptions are intended to reserve to CITY all of its police power which cannot be so limited. This Agreement shall be construed, contrary to its stated terms if necessary, to reserve to CITY all such power and authority which cannot be restricted by contract.

3.8. Public Works; Utilities. If OWNER is required by this Agreement or as a condition of the Hotel Project Development Approval to construct any public works facilities which will be dedicated to CITY or any other public agency upon completion, and if required by applicable laws to do so, OWNER shall perform such work in the same manner and subject to the same requirements as would be applicable to CITY or such other public agency should it have undertaken such construction. As a condition of development approval, and subject to the terms of this Agreement, OWNER shall connect the Hotel Project to all utilities necessary to provide adequate water, recycled water, sewer, gas, electric, and other utility service to the Hotel Project, as further described and depicted in the Infrastructure Improvements Exhibit. As a further condition of development approval, OWNER shall contract with CITY for CITY-owned or operated utilities for this purpose, for such price and on such terms as may be available to similarly situated customers in the City of Ontario. Notwithstanding the foregoing, OWNER is not responsible for a future or unreasonable requests to upsize or increase in capacity of any utilities to provide adequate water, recycled water, sewer, gas, electric and other utility service that are not directly related to or to service the Hotel Project. As further condition of development approval, to the extent OWNER does not own the Property in fee simple, OWNER must provide to CITY the written consent from the current fee owner of the Property agreeing to the terms of this Agreement and the recordation thereof, pursuant to Section 2.2.

3.8.1. OWNER agrees that development of the Hotel Project shall require the construction of storm drain improvements as described in **Exhibit "E"** and depicted in **Exhibit "F"**. OWNER shall be responsible for the construction of the necessary extension of storm drain facilities to the extent such storm drain facilities are needed for the Hotel Project.

3.8.2. OWNER agrees that development of the Hotel Project shall require the construction of street improvements as described in **Exhibit "E"** and depicted in **Exhibit "F".**

3.8.3. OWNER agrees that development of the Property shall require the extension of permanent water and recycled water improvements as described in **Exhibit "E"** and depicted in **Exhibit "F"** to serve the Property. OWNER also agrees that recycled water, if available, shall be utilized by OWNER for all construction-related water uses including prior to, and during, any grading of the Property. CITY agrees to work with OWNER to the construction and installation of the non-potable reuse system ("Reuse System"), and OWNER acknowledges that the Reuse System is subject to submittal to and approval by the State Regional Water Quality Control Board.

3.8.4. OWNER agrees that development of the Property shall require the sewer improvements, at OWNER'S sole cost and expense, subject to the terms of this Agreement, as described in **Exhibit "E"** and depicted in **Exhibit "F"**.

3.8.5. If imposed by CITY as a condition of approval for the Hotel Project, prior to the issuance of building permits for the Hotel Project, CITY agrees to enter into an agreement with San Bernardino County Flood Control District ("Flood Control") for fire access by emergency, fire and first responders vehicles and personnel on the east side of the Property boundary using the existing San Bernardino County Flood Control District's Access Road. Any modifications to the entitlement landscape plans to address Flood Control's requirements will be made to the landscape construction documents that will become part of the Development Plan. If the proposed alternative emergency access is determined to be unfeasible by the CITY, OWNER shall be responsible for providing a revised access plan that ensures sufficient access for Fire Department and other emergency vehicles and personnel to service the east tower of the Hotel Project to the satisfaction of the Fire Department and the CITY. CITY agrees to work cooperatively with OWNER to adjust the landscaping plan on the Property to ensure sufficient access for Fire Department and other emergency vehicles and personnel to service the east tower of the Hotel Project to the satisfaction of the Fire Department.

3.9. Acquisition of Offsite Provision of Real Property Interests. In any instance where OWNER is required by any Development Approval or Land Use Regulation and the Development Plan to construct any public improvement on land not owned by OWNER ("Offsite Improvements"), OWNER shall at its sole cost and expense provide or cause to be provided, the real property interests necessary for the construction of such public improvements (the "Offsite Property").

3.9.1. CITY Acquisition of Offsite Property. In the event OWNER is unable, after exercising reasonable and good faith efforts, including, but not limited to, the rights under Sections 1001 and 1002 of the Civil Code, to acquire the Offsite Property necessary for the construction of the Offsite Improvements, and following the written request by OWNER to CITY, CITY agrees to take reasonable and good faith efforts to acquire the Offsite Property from the owner or owners of record by negotiation to the extent permitted by law and consistent with this Agreement. If CITY is unable to acquire the Offsite Property by negotiation within thirty (30) days after OWNER'S written request, CITY shall, in accordance with the procedures established by law, use its power of eminent domain to acquire the required Offsite Property at a public hearing noticed and conducted in accordance with California Code of Civil Procedure Section 1245.235 for the purpose of considering the adoption of a resolution of necessity concerning the Offsite Property, subject to approval by the City Council and the conditions set forth in this Section 3.9.1. CITY and OWNER acknowledge that the timelines set forth in this Section 3.9.1 represent the maximum time periods which CITY and OWNER reasonably believe will be necessary to complete the acquisition of any Offsite Property. CITY agrees to use reasonable efforts to complete the actions described within lesser time periods, to the extent that it is reasonably able to do so, consistent with the legal constraints imposed upon CITY. OWNER shall pay all costs associated with such acquisition or condemnation proceedings for the required real property interests. This Section 3.9.1 is not intended by the parties to impose upon OWNER an enforceable duty to acquire land or construct any public improvements on land not owned by OWNER, except to the extent that OWNER elects to proceed with the development of the Hotel Project, and CITY is prevented by applicable law from acquiring such Offsite Property, and then

only in accordance with valid conditions imposed by CITY upon the development of the Hotel Project under the Subdivision Map Act (California Government Code Section 66410 et seq.), or other legal authority.

3.9.2. Owner's Option to Terminate Proceedings. CITY shall provide written notice to OWNER no later than fifteen (15) days prior to making an offer to the owner of the Offsite Property. At any time within that fifteen (15) day period, OWNER may, at its option, notify CITY that it wants CITY to cease all acquisition proceedings with respect to that Offsite Property, whereupon CITY shall cease such proceedings. CITY shall provide written notice to OWNER no later than fifteen (15) days prior to the date of the hearing on CITY'S intent to consider the adoption of a resolution of necessity as to any Offsite Property. At any time within that fifteen (15) day period, OWNER may, at its option, notify CITY that it wants CITY to cease condemnation proceedings, whereupon CITY shall cease such proceedings. If OWNER does not notify CITY to cease condemnation proceedings within said fifteen (15) day period, then CITY may proceed to consider and act upon the Offsite Property resolution of necessity. If CITY adopts such resolution of necessity, then CITY shall diligently institute condemnation proceedings and file a complaint in condemnation and seek an order of immediate possession with respect to the Offsite Property.

3.10. Regulation by Other Public Agencies. It is acknowledged by the parties that other public agencies not within the control of CITY possess authority to regulate aspects of the development of the Property separately from or jointly with CITY and this Agreement does not limit the authority of such other public agencies. CITY agrees to cooperate fully, at no cost to CITY, with OWNER in obtaining any required permits or compliance with the regulations of other public agencies provided such cooperation is not in conflict with any laws, regulations or policies of CITY.

4. PUBLIC BENEFITS.

4.1. Intent. The parties acknowledge and agree that development of the Property will result in substantial public needs that will not be fully met by the Development Plan and further acknowledge and agree that this Agreement confers substantial private benefits on OWNER that should be balanced by commensurate public benefits. Accordingly, the parties intend to provide consideration to the public to balance the private benefits conferred on OWNER by providing more fully for the satisfaction of the public needs resulting from the Project.

4.2. Development Impact Fees.

4.2.1. Amount and Components of Development Impact Fees. Development Impact Fees ("DIF") shall be paid by OWNER. The Development Impact Fee amounts to be paid by OWNER shall be the amounts that are in effect at the time such amounts are due. Nothing contained in this Agreement shall affect the ability of the CITY to impose new Development Impact Fees or amend the amounts of existing Development Impact Fees. Additionally, nothing contained in this Agreement shall affect the ability of other public agencies that are not controlled by CITY to impose and amend, from time to time, Development Impact Fees established or imposed by such other public agencies, even though such Development Impact Fees may be collected by CITY.

(a) Schools Obligations. OWNER shall satisfy its school obligations with the applicable school district by paying school impact fees. Written evidence of approval by

the applicable school district that OWNER has met its school obligations may be required by CITY as the condition to the issuance by CITY of any building permits for the Hotel Project.

(b) Inland Empire Utilities Agency ("IEUA") Sewer Connection Fees. OWNER shall satisfy the applicable obligations by paying IEUA fees.

4.2.2. Time of Payment. Development Impact Fees shall be paid to CITY prior to the issuance of any building permits for the Hotel Project. Notwithstanding the foregoing, deferral of the payment of any Development Impact Fees that are imposed by CITY may be granted pursuant to a separate agreement approved by CITY in accordance with Section 4.2.3 below and CITY policy. The parties understand and agree that the Development Impact Fees established or imposed by other public agencies that are not controlled by CITY even if such Development Impact Fees may be collected by CITY (including without limitation, if applicable, the Inland Empire Utilities Agency Sewer Connection Fees, Ontario-Montclair School District (K-12) Fees, Cucamonga School District and Chaffey Joint Union High School Fees) (collectively, the "Non-Deferrable Fees") must be paid when and as required in their standard course and schedule and may not be deferred hereunder. The DIF payment obligation shall be a covenant running with the land and shall survive the expiration or early termination of this Agreement indefinitely until the deferred DIFs are paid in full in accordance with this Agreement in the event that any of the above criteria or conditions have not been satisfied by the OWNER or the Deferral DIF Agreement in the event that OWNER elects to defer the CITY imposed DIF.

4.2.3. Election to Defer DIF imposed by CITY.

(a) OWNER shall have the right to elect (but is not obligated) to amortize the payment of up to fifty percent (50%) of the total amount of the Development Impact Fees that are due and payable for the Hotel Project (the amount so elected, the "Deferred DIF") over a period of thirty (30) years commencing from the Deferred DIF Repayment Date at an annual four percent (4%) simple interest rate. As used herein, "Deferred DIF Repayment Date" means the date of the issuance of a temporary or other certificate of occupancy for the Hotel Project and the Effective Date for DIF Deferral Agreement (as described below). For the avoidance of doubt, any of the Non-Deferrable Fees shall not be included in the amount that can be deferred; however, the amount of such Non-Deferrable Fees may be included in the calculation of the total amount of Development Impact Fees due and payable for the Hotel Project only for the purposes of calculating the fifty percent (50%) amount that OWNER may elect to defer as Deferred DIFs. By way of example only, if the amount of the DIFs imposed by the CITY are $2,500,000 and the amount of the Non-Deferrable Fees imposed by other agencies are $3,500,000, then the total amount of Development Impact Fees equal $6,000,000. Even though fifty percent of $6,000,000 is $3,000,000, the OWNER may only elect to defer up to $2,500,000, the amount of the CITY-imposed DIF. The $3,500,000 Non-Deferrable Fees imposed by other agencies are still due and payable as required in their standard course and schedule and may not be deferred hereunder. If OWNER elects to defer the payment of the DIF pursuant to this Section 4.2.3, then OWNER and CITY shall enter into a DIF Deferral Agreement that shall be executed with notarized signatures and recorded against the Property in the Official Records of the County of San Bernardino within five (5) days after full execution by the Parties.

(b) The DIF Deferral Agreement shall contain the following key terms: OWNER agrees that, commencing upon the Deferred DIF Repayment Date, OWNER

shall pay to the CITY, on the 1st day of the next following month and each and every successive month for three hundred sixty (360) consecutive months, an amount equal to the amortized principal and interest of the actual amount of the Deferred DIFs amortized over thirty (30) years at an annual 4 percent (4%) simple interest rate, without demand, notice or offset. The entire unpaid principal balance of the amortized Deferred DIFs and any accrued but unpaid interest shall be immediately due and payable to the CITY upon the occurrence of any of the following events: (1) the termination of this Agreement; (2) any uncured default by OWNER with regard to repayment of the amortized Deferred DIFs to the CITY (if such amounts have not been paid to the CITY within five (5) business days of OWNER'S receipt of written notice from the CITY); or (3) any sale, transfer or assignment of all or substantially all of the OWNER'S leasehold or fee interest (as applicable) in the Property that is not approved by the CITY in advance (which such approval shall not be unreasonably withheld, conditioned or delayed). Any monthly payment or portion thereof not paid to the CITY as and when due under the terms of this Agreement or the DIF Deferral Agreement shall accrue interest from the date on which such payment was due at the rate of ten percent (10%), and if not paid within the five (5) business day cure period described above, CITY may file a lien against the Property for such delinquent amounts including any accrued and unpaid interest. All payments under this Subsection will be applied first to penalties and late fees, then to interest, then to reduce the principal amount owed. The Deferred DIFs and any accrued but unpaid interest may be pre-paid to the CITY at any time without any pre-payment penalty.

(c) The Deferred DIF payment obligation shall be a covenant running with the land and shall survive the expiration or early termination of this Agreement indefinitely until the Deferred DIFs are paid in full in accordance with this Agreement or the DIF Deferral Agreement.

4.3. Responsibility for Construction of Public Improvements.

4.3.1. Timely Construction of Public Infrastructure. The phasing of the area wide infrastructure construction within the vicinity of the Hotel Project must be as approved by CITY. OWNER shall be responsible for the timely construction and completion of all public infrastructure required as a condition of approval for the Hotel Project as shown on the attached **Exhibit "F"** and any and all Hotel Project development conditions included in the Development Approvals. Unless otherwise specified in the Development Plan, all other required Improvements for the Hotel Project, shall be completed and operational for occupancy in accordance with a schedule approved by CITY and OWNER. All Infrastructure and Improvements shall be completed as required by the Development Plan.

4.3.2. Construction of DIF Program Infrastructure. To the extent OWNER is required to construct and completes construction of public improvements that are included in CITY'S Development Impact Fee Program, CITY agrees that CITY shall issue DIF Credit in accordance with the provisions of a separate Fee Credit Agreement between CITY and OWNER. Limitations on the use of DIF Credit issued to OWNER to offset OWNER'S DIF payment obligations shall also be subject to the provisions of a separate Fee Credit Agreement. CITY and OWNER agree that the Fee Credit Agreement between CITY and OWNER shall comply with CITY'S adopted policies applicable to such agreements.

4.4. Hotel Requirements. To balance any private benefit conferred upon OWNER under this Agreement, OWNER agrees to provide the following as consideration for such private

benefits:

4.4.1. For the duration of operating the Hotel that will be constructed as part of the Hotel Project, OWNER will maintain or caused to be maintained a booking policy that allows the Visitor and Convention Bureau to reserve a minimum number of hotel rooms to secure a convention;

4.4.2. OWNER will diligently pursue and demonstrate substantial progress to construct the Hotel to completion within the time periods provided in the Development Plan and this Agreement.

4.4.3. The new Hotel must:

(a) have at least [500] rooms;

(b) be a full-service convention hotel such that it will contain (i) appropriate meeting space for the number of hotel rooms; (ii) a full service bar; and (iii) at least one three meal restaurant on premises;

(c) must be a major brand; no non-brand affiliations, but may be associated with a brand that appears on at least _____ other properties worldwide

(d) be located on the Property, which is in the "Convention Center-Hotel District," which will soon be established and would generally be defined as the area bounded by Corona Avenue to the west, Turner Avenue to the east, I-10 to the north, and the BNSF railroad to the south.

4.5. Taxes. The Hotel Project will provide substantial public benefits from the increase in property taxes, retail sales taxes, transient occupancy taxes and parking taxes. The purpose of this section is to establish the terms and conditions under which CITY will rebate or reimburse a certain volume of gross tax revenue comprised of the Transient Occupancy Taxes and Parking Taxes (collectively referred to as the "Taxes") for a set period of years, provided certain conditions are met by OWNER and pursuant to the terms and conditions in this Section 4.5. The rebate or reimbursement is intended to support the financial feasibility of the Hotel Project and encourage economic growth within the City of Ontario. OWNER would not enter into this Agreement and take the risk of the Hotel Project without the provisions of this Section 4.5. The rebate or reimbursement of Taxes to OWNER provided in Section 4.5.1 shall be considered material consideration by CITY for OWNER to encourage OWNER to incur the significant risk and liability in connection with the Hotel Project and to encourage and facilitate economic growth in the City of Ontario.

4.5.1. Covenant to Rebate/Reimburse. CITY and OWNER agree that OWNER shall be entitled to the rebate and reimbursement of the Taxes on an annual basis commencing upon the date the Hotel opens for business to the public and continuing until the earlier of (a) the twentieth (20^{th}) anniversary of such opening date of the Hotel, or (b) the date that the Taxes rebated and received by OWNER meets the fifty percent (50%) of the Total Project Costs threshold, which rebate and reimbursement period shall be extended on a day for day basis for each day following the date that the Hotel opens for business that the Convention Center Project is not completed; but such rebate and reimbursement period shall not exceed thirty (30) years from the Effective Date. The rebate and reimbursement of Taxes will occur by CITY providing an annual rebate of such tax revenue to OWNER, without offset, deduction or abatement, up to limits provided in this Section 4.5.1.

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4.5.2. Accounting and Audits. OWNER shall provide to CITY with all the necessary documentation to substantiate the amount of TOT and Parking Taxes otherwise collectable each year of the Covenant Period. CITY reserves the right to audit the books and records of OWNER exclusively related to the Total Project Costs and TOT, provided that (a) such audit shall not occur more than once in any twelve month period, (b) such audit shall be performed not later than ninety (90) days following the date OWNER delivers to CITY such documentation and (c) such auditor shall be a national and reputable auditor and not compensated in whole or part on a contingency basis, including any incentive payment based on a percentage of savings or revenues. OWNER shall make such records available to CITY upon reasonable written notice during such audit period.

4.6. Maintenance of Open Space. OWNER shall provide for ongoing maintenance of all parks, common areas, and open space areas within the Hotel Project as may be set forth in the Development Approvals.

4.7. Compliance with Public Benefits Requirements. In the event Owner fails or refuses to comply with any condition referenced in Section 4.1 through 4.6, or challenges (whether administratively or through legal proceedings) the imposition of such conditions, OWNER shall be deemed in default of this Agreement pursuant to Section 7. below, thereby entitling the CITY to any and all remedies permitted under this Agreement, including, without limitation, the right of the CITY to withhold OWNER'S Project-related building permits, certificates of occupancy, or discretionary approvals, without liability.

4.8. City Improvements. Notwithstanding anything to the contrary in this Agreement, it shall be a condition of CITY'S obligations, if such obligation exists in this Agrement, to acquire, design, develop, construct and operate the Convention Center Project that CITY completes all actions and procedures necessary to complete a public project, including without limitation, satisfying the requirements of the California Environmental Quality Act and applicable laws for a public work project and is subject to the availability and sufficiency of funding by the CITY, as determined by CITY in its sole discretion and good faith judgment.

4.8.1. Convention Center Expansion. CITY is currently engaged in the Ontario Convention Center Expansion & Renovation Project ("Convention Center Project"), which is slated to significantly expand the existing convention center and renovate the premises and may include the construction of a public parking structure and outdoor plaza as part of the Convention Center Project to provide new parking near the Convention Center and the Hotel Project as shown in the attached Exhibit "I", Conceptual Depiction of the Convention Center Expansion. CITY is willing to allow OWNER certain permissions to use the parking on a first come first serve basis with no dedicated spaces for such use. CITY and OWNER agree that the Convention Center Project and the Hotel Project are complementary and that the parties agree to use commercially reasonable efforts to coordinate the re-opening of Convention Center Project and the opening of the Hotel Project. OWNER shall have the right to use the CITY'S public parking structure or surface parking on a first come, first serve basis for parking for the benefit of its Hotel guests and other Hotel patrons; provided any parking fees and costs, if due, for such parking shall be borne and paid by the OWNER, the Hotel guests or Hotel patrons using the parking and not at the cost to CITY. Further, in the event that OWNER desires dedicated parking spaces for any particular event or to provide parking validations to the Hotel guests or Hotel patrons, OWNER shall submit a request to CITY and CITY agrees to work cooperatively with OWNER to accommodate OWNER'S request based on availability and events at the

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Convention Center and such parking fees and costs shall be borne and paid by OWNER, the Hotel guests or Hotel patrons using the parking spaces. OWNER shall pay to CITY any such parking fees and costs paid by Hotel guests and patrons to park in the CITY parking structure or surface parking which are collected by OWNER in its Hotel operations.

4.8.2. Pedestrian Bridge. A pedestrian bridge ("Bridge") spanning Holt Boulevard is estimated to cost $6.5M. This cost to design and maintain the Bridge shall be at CITY'S cost and expense. The cost to construct the Bridge, not to exceed such estimated cost, shall be split equally between CITY and OWNER if, and only if, the Bridge is completed and open to the public by December 31, 2026; otherwise, CITY will bear one hundred percent of the cost to construct the Bridge. Notwithstanding the aforementioned agreement to share the cost of to construct the Bridge, CITY retains and shall have all rights and sole discretion to design and construct such improvements on CITY'S timing for and scope of the completion of the bridge improvements that has been determined by CITY.

4.8.3. Guasti Road. CITY agrees to make road improvements Guasti Road adjacent to the Property in accordance with CITY standards for road improvements. CITY retains and shall have all rights and sole discretion to design and construct such improvements on CITY'S scope of the completion of the road improvements on Guasti Road that has been determined by CITY. OWNER shall complete the improvements on the parkway behind the curb and gutter as shown on **Exhibit "B"**.

4.8.4. Holt Boulevard. CITY agrees to make road improvements to Holt Boulevard adjacent to the Property in accordance with CITY standards for road improvements. CITY retains and shall have all rights and sole discretion to design and construct such improvements on CITY'S timing for and scope of the completion of the road improvements on Holt Boulevard that has been determined by CITY. OWNER shall complete the improvements on the parkway behind the curb and gutter as shown on **Exhibit "B"**.

4.8.5. Cucamonga Creek Flood Control Channel. Improvements to the Cucamonga Creek Flood Control Channel is not part of CITY'S Capital Improvement Program. To include any such improvements to CITY'S Capital Improvement Program, CITY shall have the right and sole discretion to design and construct such improvements on CITY'S timing and scope that has been determined by CITY.

4.9. Acquisition Properties. The acquisition of any of the Surrounding Properties or the Miller Property are subject to compliance with all applicable laws and regulations, including but not limited to, laws pertaining to land use approvals, subdivisions of land, budgetary considerations, environmental reviews and the acquisition and disposition of real property by CITY and any subsequent required discretionary approvals by the City Council of the CITY. Nothing contained herein this Section 4.9 of the Agreement shall mean that CITY is set on a certain course or action pertaining to the acquisition of any or all of the Surrounding Properties or the Miller Property.

4.9.1. Surrounding Properties. CITY is exploring and assessing the feasibility of establishing an entertainment and convention district, located generally around the Ontario Convention Center ("Convention Center"), the Ontario International Airport ("Airport") and the Property, which may be comprised of a mix of high density residential housing, entertainment, retail, hospitality and commercial office-oriented uses. This may include the acquisition of several properties in the areas and certain capital improvements and infrastructure as part of the

overall vision of creating key destination areas and high end amenities in this community to promote economic growth and development, whereby a number of properties surrounding the Convention Center have been preliminarily identified as potential sites for public purposes, as depicted in **Exhibit "H-1"** (individually or collectively, as applicable, "Surrounding Property").

In the event that CITY acquires any real property interest in the Surrounding Property located near the Convention Center , CITY conditionally grants OWNER, and OWNER shall have, a conditional first right of refusal to purchase any such Surrounding Property (whether now or later owned by CITY), subject to all applicable laws and regulations that must be complied with, including but not limited to, laws pertaining to land use approvals, subdivisions of land, budgetary considerations, environmental reviews and the acquisition and disposition of real property by CITY and provided the parties enter into a separate agreement or agreements for any Surrounding Property, subject to any subsequent required discretionary approvals by the City Council of the CITY. Notwithstanding the foregoing, the CITY retains all rights and discretion to use any or all of any acquired Surrounding Property for its own uses and purposes. Nothing contained herein this Agreement shall mean that CITY is set on a certain course or action pertaining to the Surrounding Property shown on **Exhibit "H-1"**, nor does it obligate CITY to purchase any of the Surrounding Property shown on **Exhibit "H-1"**, nor does it mean that CITY would be liable to OWNER should CITY not acquire any of the real property interests of said Surrounding Property shown on **Exhibit "H-1"**.

4.9.2. Miller Property. Separate from the Surrounding Property shown on **Exhibit "H-1"**, CITY acknowledges that it is material to OWNER'S development of the Hotel Project that certain real property and improvements thereon shown on **Exhibit "H-2"** (the "Miller Property") be available to OWNER by granting an option to acquire from CITY in the event that CITY may acquire the Miller Property. OWNER acknowledges that CITY desires to acquire the Miller Property for its own uses and public purposes, including but not limited to using it as a multi-modal transit hub or for another public purpose. As of the Effective Date, neither CITY nor OWNER own any portion of or interest in the Miller Property. CITY shall use commercially reasonable efforts to acquire the Miller Property directly from the current Miller Property owners by negotiated purchase; provided, that CITY determines by proper CITY procedures that acquisition of any or all of the Miller Property is necessary for its uses or projects. To the extent that the exact location for the interface between rail, bus, passenger vehicle, and active transportation to the Airport has not been determined by the San Bernardino County Transportation Authority ("SBCTA") and the Ontario International Airport Authority ("OIAA"), CITY shall use commercially reasonable efforts to acquire the entire site. If a portion of the Miller Property acquired is not developed for a public purpose, OWNER shall have the right to exercise an option (the "Option") to acquire within one (1) year of CITY'S acquisition at the price for which it was acquired. Should OWNER not exercise its option with one year, then OWNER shall have a first right of refusal, at the then-market price, for no more than two (2) years from the date of acquisition by CITY.

(a) Reservation of CITY Discretion. If CITY is unable to negotiate the purchase of the Miller Property between itself and the Miller Property owners, CITY may consider initiating eminent domain proceedings to acquire the Miller Property, subject to and in accordance with all applicable laws and procedures. It is expressly acknowledged, understood and agreed by the Parties that CITY undertakes no obligation to adopt any resolution of necessity, and does not prejudge or commit to any person regarding the findings and

determinations to be made by CITY with respect to any resolution of necessity. If CITY does not elect to or is unable to acquire title or the insurable right to possession of the Miller Property through exercise of its power of eminent domain or by negotiated purchase on or before [DATE], the Parties shall meet and confer for ninety (90) days to discuss in good faith alternative deal structures. If no such alternative is approved by the Parties within such ninety (90) day period, the Parties shall have no further obligations or liability to the other Party or to any person relative to the terms of this Section 4.9.2 in this Agreement and neither OWNER nor CITY shall be in Default under this Agreement.

(b) Independent Contract Consideration. Upon the Effective Date of this Agreement, OWNER shall deliver to CITY the sum of one hundred dollars ($100.00) ("Independent Contract Consideration"), which amount has been bargained for and agreed to as adequate consideration for OWNER'S option to purchase the Miller Property, or any portion thereof, during the time periods provided in Section 4.9.2 above and for CITY'S execution, delivery and performance of this Agreement. The Independent Contract Consideration is in addition to and independent of all other consideration provided in this Agreement and is nonrefundable to OWNER in all events.

(c) Exercise of Option. OWNER may exercise the Option, if at all, by delivering notice to CITY of OWNER'S intent to exercise the Option (the "Option Exercise Notice"). Upon CITY'S receipt of the Option Exercise Notice, the parties shall enter into a purchase and sale agreement for the applicable Option Property at the Option Price described below and on other terms and provisions consistent with the terms by which CITY acquired the Miller Property.

4.9.3. Insufficient Funds for Acquisition of Properties. In the event that CITY determines, in CITY'S sole and exclusive discretion, that CITY does not have sufficient funds to purchase any or all of the Surrounding Properties or the Miller Property, CITY shall provide Notice to OWNER of the amount that CITY requires to complete the acquisition of the Surrounding Properties or the Miller Property. OWNER may, but shall not be obligated to, provide the funds necessary to complete the acquisition of the Surrounding Properties or the Miller Property. If CITY determines that it has insufficient funds to acquire the Surrounding Properties or the Miller Property and Developer does not provide the funds necessary for CITY to acquire the Surrounding Properties or the Miller Property, CITY shall not be in default under this Agreement and shall be without liability to OWNER.

4.10. Signage. OWNER shall have the right to install and maintain or cause to be installed and maintained signage throughout the Hotel Project, and on improvements throughout the Hotel Project and other portions of the Specific Plan Area controlled or occupied by OWNER or any affiliate thereof in accordance with the Sign Program set forth in the Specific Plan and as shown on the Development Plan, including the right to engage in advertising and marketing using display messages or images, utilizing a series or grid of lights that may, be changed by electronic means, including without limitation cathode ray, LED display, plasma screen, liquid crystal display (LCD), LED embedded, architectural glass fiber optic, or other electronic media or technology.

5. FINANCING OF PUBLIC IMPROVEMENTS.

5.1. Financing Mechanism(s). If deemed appropriate and acceptable to OWNER in its sole and absolute discretion based on its feasibility for the Hotel Project, CITY and OWNER will

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cooperate in the formation of any special assessment district, community facilities district or alternate financing mechanism to pay for the construction and/or maintenance and operation of public infrastructure facilities or Improvements required as part of the Development Plan. CITY also agrees that, to the extent any such district or other financing entity is formed and sells bonds in order to finance such infrastructure or Improvements, OWNER may be reimbursed to the extent that OWNER spends funds or dedicates land for the establishment of public facilities. Notwithstanding the foregoing, it is acknowledged and agreed by the parties that nothing contained in this Agreement shall be construed as requiring OWNER or CITY to form any such district or to issue and sell bonds.

6. REVIEW FOR COMPLIANCE.

6.1. Periodic and Special Reviews.

6.1.1. Time for and Initiation of Periodic Review. CITY shall review this Agreement every twelve (12) months from the Effective Date in order to ascertain the good faith compliance by OWNER with the terms of this Agreement. The OWNER shall submit an Annual Monitoring Report to CITY, in a form reasonably acceptable to the City Manager, along with any applicable processing charge within ten (10) days after each anniversary date of the Effective Date of this Agreement. Within thirty (30) days after the receipt of the Annual Monitoring Report, CITY shall review the Annual Monitoring Report. Prior to the expiration of the thirty (30) day review period, CITY shall either issue a notice of continuing compliance or a notice of non-compliance and a notice of CITY'S intent to conduct a Special Review pursuant to Sections 6.1.2 through 6.1.6. Issuance of a notice of continuing compliance may be issued by the City Manager or his designee. If CITY does not issue a notice of non-compliance within such thirty (30) day period, CITY shall be deemed to have issued a notice of compliance only for that year of review and shall not apply to any subsequent, future years in which a review and monitoring by be conducted by CITY.

6.1.2. Initiation of Special Review. A special review may be called either by agreement between the parties or by initiation in one or more of the following ways:

(a) Affirmative vote of at least four (4) members of the Planning Commission; or

(b) Affirmative vote of at least three (3) members of the City Council.

6.1.3. Notice of Special Review. The City Manager shall begin the special review proceeding by giving notice that CITY intends to undertake a special review of this Agreement to OWNER. Such notice shall be given at least ten (10) days in advance of the time at which the matter will be considered by the Planning Commission.

6.1.4. Public Hearing. The Planning Commission shall conduct a hearing at which OWNER must demonstrate good faith compliance with the terms of this Agreement. The burden of proof on this issue is upon OWNER.

6.1.5. Findings Upon Public Hearing. The Planning Commission shall determine upon the basis of substantial evidence whether or not OWNER has, for the period under review, complied in good faith with the terms and conditions of this Agreement.

6.1.6. Procedure Upon Findings.

(a) If the Planning Commission finds and determines on the basis of

substantial evidence that OWNER has complied in good faith with the terms and conditions of this Agreement during the period under review, the review for that period is concluded.

(b) If the Planning Commission finds and determines on the basis of substantial evidence that OWNER has not complied in good faith with the terms and conditions of this Agreement during the period under review, the Planning Commission may recommend to the City Council to modify or terminate this Agreement.

(c) The OWNER may appeal a determination pursuant to paragraph (b) to the City Council in accordance with CITY'S rule for consideration of appeals in zoning matters generally.

6.2. Proceedings Upon Modification or Termination. If, upon a finding under Section 6.1.6(b), CITY determines to proceed with modification or termination of this Agreement, CITY shall give notice to the property OWNER of its intention so to do. The notice shall be given at least ten (10) calendar days prior to the scheduled hearing and contain:

6.2.1. The time and place of the hearing;

6.2.2. A statement as to whether or not CITY proposes to terminate or to modify this Agreement; and

6.2.3. Other information that CITY considers necessary to inform OWNER of the nature of the proceeding.

6.3. Hearing on Modification or Termination. At the time and place set for the hearing on modification or termination, OWNER shall be given an opportunity to be heard. The OWNER shall be required to demonstrate good faith compliance with the terms and conditions of this Agreement. The burden of proof on this issue shall be on OWNER. If the City Council finds, based upon substantial evidence in the administrative record, that OWNER has not complied in good faith with the terms and conditions of the agreement, the City Council may terminate or modify this Agreement and impose those conditions to the action it takes as it considers necessary to protect the interests of CITY. The decision of the City Council shall be final, subject only to judicial review pursuant to Section 1094.5 of the Code of Civil Procedure.

6.4. Certificate of Agreement Compliance. If, at the conclusion of a Periodic or Special Review, OWNER is found to be in compliance with this Agreement, CITY shall, upon written request by OWNER, issue a Certificate of Agreement Compliance ("Certificate") to OWNER stating that after the most recent Periodic or Special Review and based upon the information known or made known to the Planning Director and City Council that (1) this Agreement remains in effect and (2) OWNER is not in default. The Certificate shall be in recordable form, shall contain information necessary to communicate constructive record notice of the finding of compliance, shall state whether the Certificate is issued after a Periodic or Special Review and shall state the anticipated date of commencement of the next Periodic Review. OWNER may record the Certificate with the County Recorder. Whether or not the Certificate is relied upon by assignees or other transferees or OWNER, CITY shall not be bound by a Certificate if a default existed at the time of the Periodic or Special Review, but was concealed from or otherwise not known to the Planning Director or City Council.

7. DEFAULT AND REMEDIES.

7.1. Remedies in General. It is acknowledged by the parties that CITY would not have

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entered into this Agreement if it were to be liable in damages under this Agreement, or with respect to this Agreement or the application thereof. Each of the parties hereto may pursue any remedy at law or equity available for the breach of any provision of this Agreement, except that CITY shall not be liable in damages to OWNER, or to any successor in interest of OWNER, or to any other person, and OWNER covenants not to sue for damages or claim any damages.

7.2. Specific Performance. The parties acknowledge that money damages and remedies at law generally are inadequate and specific performance and other non-monetary relief are particularly appropriate remedies for the enforcement of certain rights set forth in this Agreement and should be available for the following reasons:

7.2.1. Money damages are unavailable against CITY as provided in Section 7.1 above.

7.2.2 Due to the size, nature and scope of the Hotel Project, it may not be practical or possible to restore the Property to its natural condition once implementation of this Agreement has begun. After such implementation, OWNER may be foreclosed from other choices it may have had to utilize the Property or portions thereof. OWNER has invested significant time and resources and performed extensive planning and processing of the Hotel Project in agreeing to the terms of this Agreement and will be investing even more significant time and resources in implementing the Hotel Project in reliance upon the terms of this Agreement, and it is not possible to determine the sum of money which would adequately compensate OWNER for such efforts.

7.3. Release. Except for nondamage remedies, including the remedy of specific performance and judicial review as provided for in Sections 7.2 and 6.3, respectively, OWNER, for itself, its successors and assignees, hereby releases CITY, its officers, agents and employees from any and all claims, demands, actions, or suits of any kind or nature arising out of any liability, known or unknown, present or future, including, but not limited to, any claim or liability, based or asserted, pursuant to Article I, Section 19 of the California Constitution, the Fifth Amendment of the United States Constitution, or any other law or ordinance which seeks to impose any other liability or damage, whatsoever, upon CITY because it entered into this Agreement or because of the terms of this Agreement.

7.4. Termination or Modification of Agreement for Default of OWNER. Subject to the provisions contained in Subsection 6.3 herein, CITY may terminate or modify this Agreement for any failure of OWNER to perform any material duty or obligation of OWNER under this Agreement, or to comply in good faith with the terms of this Agreement (hereinafter referred to as "default"); provided, however, CITY may terminate or modify this Agreement pursuant to this Section only after providing written notice to OWNER of default setting forth the nature of the default and the actions, if any, required by OWNER to cure such default and, where the default can be cured, OWNER has failed to take such actions and cure such default within 60 days after the effective date of such notice or, in the event that such default cannot be cured within such 60 day period but can be cured within a longer time, has failed to commence the actions necessary to cure such default within such 60 day period and to diligently proceed to complete such actions and cure such default.

7.5. Termination of Agreement for Default of CITY. OWNER may terminate this Agreement only in the event of a default by CITY in the performance of a material term of this Agreement and only after providing written notice to CITY of default setting forth the nature of

the default and the actions, if any, required by CITY to cure such default and, where the default can be cured, CITY has failed to take such actions and cure such default within 60 days after the effective date of such notice or, in the event that such default cannot be cured within such 60 day period but can be cured within a longer time, has failed to commence the actions necessary to cure such default within such 60 day period and to diligently proceed to complete such actions and cure such default.

8. THIRD PARTY LITIGATION.

8.1. General Plan Litigation. CITY has determined that this Agreement is consistent with its Comprehensive General Plan, as such General Plan exists as of the Effective Date ("General Plan"), and that the General Plan meets all requirements of law. OWNER has reviewed the General Plan and concurs with CITY'S determination. CITY shall have no liability in damages under this Agreement for any failure of CITY to perform under this Agreement or the inability of OWNER to develop the Property as contemplated by the Development Plan of this Agreement as the result of a judicial determination that on the Effective Date, or at any time thereafter, the General Plan, or portions thereof, are invalid or inadequate or not in compliance with law.

8.2. Third Party Litigation Concerning Agreement. OWNER shall defend, at its expense, including reasonable attorneys' fees, indemnify, and hold harmless CITY, its agents, officers and employees from any claim, action or proceeding against CITY, its agents, officers, or employees to attack, set aside, void, or annul the approval of this Agreement or the approval of any permit granted pursuant to this Agreement. CITY shall defend, at its expense, including reasonable attorneys' fees, indemnify, and hold harmless OWNER, its agents, officers and employees from any claim, action or proceeding against OWNER, its agents, officers, or employees to attack, set aside, void, or annul the approval of this Agreement or the approval of any permit granted pursuant to this Agreement. The parties shall promptly notify each other of any such claim, action or proceeding, and shall cooperate in the defense.

8.3. Indemnity. In addition to the provisions of Section 8.2 above, OWNER shall indemnify and hold CITY, its officers, agents, employees and independent contractors free and harmless from any liability whatsoever, resulting from the negligence or willful misconduct of OWNER, its officers, agents, employees, subcontractors and independent contractors, for property damage, bodily injury, or death (OWNER'S employees included) or any other element of damage of any kind or nature, relating to or in any way connected with or arising from the activities contemplated hereunder, including, but not limited to, the study, design, engineering, construction, completion, failure and conveyance of the public improvements, save and except to the extent of any claims for damages arising through the negligence or willful misconduct of CITY or any of its officers, employees, subcontractors and independent contractors. CITY shall cooperate with OWNER in the defense of any third party legal action.

8.4. Environment Assurances. OWNER shall indemnify and hold CITY, its officers, agents, and employees free and harmless from any liability, based or asserted, upon any negligent act or omission of OWNER, its officers, agents, employees, subcontractors, predecessors in interest, successors, assigns and independent contractors for any violation of any federal, state or local law, ordinance or regulation relating to the industrial hygiene or to environmental conditions on, under or about the Property, not complying with applicable law including, but not limited to, soil and groundwater conditions, and OWNER shall defend, at its

expense, including attorneys' fees, CITY, its officers, agents and employees in any action based or asserted upon any such alleged negligent act or omission. CITY shall cooperate with OWNER in the defense of any third party legal action.

8.5. Survival. The provisions of this Sections 8.1 through 8.5, inclusive, shall survive the termination of this Agreement.

9. MORTGAGEE PROTECTION.

The parties hereto agree that this Agreement shall not prevent or limit OWNER, in any manner, at OWNER'S sole discretion, from encumbering the Property or any portion thereof or any improvement thereon by any mortgage, deed of trust or other security device securing financing with respect to the Property. CITY acknowledges that the Mortgagees providing such financing may require certain Agreement interpretations and modifications and agrees upon request, from time to time, to meet with OWNER and representatives of such lenders to negotiate in good faith any such request for interpretation or modification. CITY will not unreasonably withhold its consent to any such requested interpretation or modification provided such interpretation or modification is consistent with the intent and purposes of this Agreement. Any Mortgagee of the Property shall be entitled to the following rights and privileges:

9.1. Neither entering into this Agreement nor a breach of this Agreement shall defeat, render invalid, diminish or impair the lien of any mortgage on the Property made in good faith and for value, unless otherwise required by law.

9.2. The Mortgagee of any mortgage or deed of trust encumbering the Property, or any part thereof, which Mortgagee, has submitted a request in writing to CITY in the manner specified herein for giving notices, shall be entitled to receive written notification from CITY of any default by OWNER in the performance of OWNER'S obligations under this Agreement.

9.3. If CITY timely receives a request from a Mortgagee requesting a copy of any notice of default given to OWNER under the terms of this Agreement, CITY shall provide a copy of that notice to the Mortgagee within ten (10) days of sending the notice of default to OWNER. The Mortgagee shall have the right, but not the obligation, to cure the default during the remaining cure period allowed such party under this Agreement.

9.4. Any Mortgagee who comes into possession of the Property, or any part thereof, pursuant to foreclosure of the mortgage or deed of trust, or deed in lieu of such foreclosure, shall take the Property, or part thereof, subject to the terms of this Agreement. Notwithstanding any other provision of this Agreement to the contrary, no Mortgagee shall have an obligation or duty under this Agreement to perform any of OWNER'S obligations or other affirmative covenants of OWNER hereunder, or to guarantee such performance; provided, however, that to the extent that any covenant to be performed by OWNER is a condition precedent to the performance of a covenant by CITY, the performance thereof shall continue to be a condition precedent to CITY'S performance hereunder, and further provided that any sale, transfer or assignment by any Mortgagee in possession shall be subject to the provisions of Section 2.4 of this Agreement.

9.5. Notwithstanding anything to the contrary in this Agreement, it shall be a condition of OWNER'S obligations to develop, construct and operate the Hotel Project that OWNER obtains construction financing from a Mortgage on commercially reasonable terms and provisions that make the Hotel Project feasible as determined by OWNER in its good faith judgment.

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10. MISCELLANEOUS PROVISIONS.

10.1. Recordation of Agreement. This Agreement and any amendment or cancellation thereof shall be recorded with the San Bernardino County Recorder by the City Clerk within the ten (10) days after CITY executes this Agreement, as required by Section 65868.5 of the Government Code. If the parties to this Agreement or their successors in interest amend or cancel this Agreement as provided for herein and in Government Code Section 65868, or if CITY terminates or modifies the agreement as provided for herein and in Government Code Section 65865.1 for failure of the applicant to comply in good faith with the terms or conditions of this Agreement, the City Clerk shall have notice of such action recorded with the San Bernardino County Recorder.

10.2. Entire Agreement. This Agreement sets forth and contains the entire understanding and agreement of the parties with respect to the matters addressed in this Agreement, and there are no oral or written representations, understandings or ancillary covenants, undertakings or agreements which are not contained or expressly referred to herein. No testimony or evidence of any such representations, understandings or covenants shall be admissible in any proceeding of any kind or nature to interpret or determine the terms or conditions of this Agreement.

10.3. Severability. If any term, provision, covenant or condition of this Agreement shall be determined invalid, void or unenforceable, the remainder of this Agreement shall not be affected thereby to the extent such remaining provisions are not rendered impractical to perform taking into consideration the purposes of this Agreement. Notwithstanding the foregoing, the provision of the Public Benefits set forth in Section 4 of this Agreement, including the payment of the fees set forth therein, are essential elements of this Agreement and CITY would not have entered into this Agreement but for such provisions, and therefore in the event such provisions are determined to be invalid, void or unenforceable, this entire Agreement shall be null and void and of no force and effect whatsoever.

10.4. Interpretation and Governing Law. This Agreement and any dispute arising hereunder shall be governed and interpreted in accordance with the laws of the State of California. This Agreement shall be construed as a whole according to its fair language and common meaning to achieve the objectives and purposes of the parties hereto, and the rule of construction to the effect that ambiguities are to be resolved against the drafting party shall not be employed in interpreting this Agreement, all parties having been represented by counsel in the negotiation and preparation hereof.

10.5. Section Headings. All section headings and subheadings are inserted for convenience only and shall not affect any construction or interpretation of this Agreement.

10.6. Singular and Plural. As used herein, the singular of any word includes the plural.

10.7. Joint and Several Obligations. Subject to Section 2.4, if at any time during the term of this Agreement the Property is owned, in whole or in part, by more than one owner, all obligations of such owners under this Agreement shall be joint and several, and the default of any such owner shall be the default of all such owners. Notwithstanding the foregoing, no owner of a single lot which has been finally subdivided and sold to such owner as a member of the public or otherwise as an ultimate user shall have any obligation under this Agreement except as provided under Section 4 hereof.

10.8. Time of Essence. Time is of the essence in the performance of the provisions of this Agreement as to which time is an element.

10.9. Waiver. Failure by a party to insist upon the strict performance of any of the provisions of this Agreement by the other party, or the failure by a party to exercise its rights upon the default of the other party, shall not constitute a waiver of such party's right to insist and demand strict compliance by the other party with the terms of this Agreement thereafter.

10.10. No Third Party Beneficiaries. This Agreement is made and entered into for the sole protection and benefit of the parties and their successors and assigns. No other person shall have any right of action based upon any provision of this Agreement.

10.11. Force Majeure. Neither party shall be deemed to be in default where failure or delay in performance of any of its obligations under this Agreement is caused by floods, earthquakes, other Acts of God, fires, wars, riots or similar hostilities, pandemics, strikes and other labor difficulties beyond the party's control, (including the party's employment force), government regulations, court actions (such as restraining orders or injunctions), means the (i) the unavailability of labor or supplies; a governmental moratorium or similar prohibition on construction; or a major disruption to the national, regional or international economies, capital markets and/or real estate markets or other causes beyond the party's control. If any such events shall occur, the term of this Agreement and the time for performance by either party of any of its obligations hereunder shall be extended by the for the period of time that such events prevented such performance, provided that the term of this Agreement shall not be extended under any circumstances for more than five (5) years**.**

10.12. Mutual Covenants. The covenants contained herein are mutual covenants and also constitute conditions to the concurrent or subsequent performance by the party benefited thereby of the covenants to be performed hereunder by such benefited party.

10.13. Successors in Interest. The burdens of this Agreement shall be binding upon, and the benefits of this Agreement shall inure to, all successors in interest to the parties to this Agreement. All provisions of this Agreement shall be enforceable as equitable servitudes and constitute covenants running with the land. Each covenant to do or refrain from doing some act hereunder with regard to development of the Property: (a) is for the benefit of and is a burden upon every portion of the Property; (b) runs with the Property and each portion thereof; and, (c) is binding upon each party and each successor in interest during ownership of the Property or any portion thereof.

10.14. Counterparts. This Agreement may be executed by the parties in counterparts, which counterparts shall be construed together and have the same effect as if all of the parties had executed the same instrument.

10.15. Jurisdiction and Venue. Any action at law or in equity arising under this Agreement or brought by a party hereto for the purpose of enforcing, construing or determining the validity of any provision of this Agreement shall be filed and tried in the Superior Court of the County of San Bernardino, State of California, and the parties hereto waive all provisions of law providing for the filing, removal or change of venue to any other court.

10.16. Hotel Project as a Private Undertaking. It is specifically understood and agreed by and between the parties hereto that the development of the Hotel Project is a private development, that neither party is acting as the agent of the other in any respect hereunder, and

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that each party is an independent contracting entity with respect to the terms, covenants and conditions contained in this Agreement. No partnership, joint venture or other association of any kind is formed by this Agreement. The only relationship between CITY and OWNER is that of a government entity regulating the development of private property and the owner of such property.

10.17. Further Actions and Instruments. Each of the parties shall cooperate with and provide reasonable assistance to the other to the extent contemplated hereunder in the performance of all obligations under this Agreement and the satisfaction of the conditions of this Agreement. Upon the request of either party at any time, the other party shall promptly execute, with acknowledgment or affidavit if reasonably required, and file or record such required instruments and writings and take any actions as may be reasonably necessary under the terms of this Agreement to carry out the intent and to fulfill the provisions of this Agreement or to evidence or consummate the transactions contemplated by this Agreement. The City Manager may delegate his powers and duties under this Agreement to an Assistant City Manager or other management level employee of CITY.

10.18. Eminent Domain. No provision of this Agreement shall be construed to limit or restrict the exercise by CITY of its power of eminent domain.

10.19. Agent for Service of Process. In the event OWNER is not a resident of the State of California or it is an association, partnership or joint venture without a member, partner or joint venturer resident of the State of California, or it is a foreign corporation, then in any such event, OWNER shall file with the Planning Director, upon its execution of this Agreement, a designation of a natural person residing in the State of California, giving his or her name, residence and business addresses, as its agent for the purpose of service of process in any court action arising out of or based upon this Agreement, and the delivery to such agent of a copy of any process in any such action shall constitute valid service upon OWNER. If for any reason service of such process upon such agent is not feasible, then in such event OWNER may be personally served with such process out of this County and such service shall constitute valid service upon OWNER. OWNER is amenable to the process so served, submits to the jurisdiction of the Court so obtained and waives any and all objections and protests thereto. OWNER for itself, assigns and successors hereby waives the provisions of the Hague Convention (Convention on the Service Abroad of Judicial and Extra Judicial Documents in Civil or Commercial Matters, 20 U.S.T. 361, T.I.A.S. No. 6638).

10.20. Estoppel Certificate. Within thirty (30) business days following a written request by any of the parties, the other party shall execute and deliver to the requesting party a statement certifying that (i) either this Agreement is unmodified and in full force and effect or there have been specified (date and nature) modifications to the Agreement, but it remains in full force and effect as modified; and (ii) either there are no known current uncured defaults under this Agreement or that the responding party alleges that specified (date and nature) defaults exist. The statement shall also provide any other reasonable information requested. The failure to timely deliver this statement shall constitute a conclusive presumption that this Agreement is in full force and effect without modification except as may be represented by the requesting party and that there are no uncured defaults in the performance of the requesting party, except as may be represented by the requesting party. OWNER shall pay to CITY all costs not to exceed $5,000, incurred by CITY in connection with the issuance of estoppel certificates under this Section 10.20 prior to CITY'S issuance of such certificates.

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10.21 Authority to Execute. The person or persons executing this Agreement on behalf of OWNER warrants and represents that he or she/they have the authority to execute this Agreement on behalf of his or her/their corporation, partnership or business entity and warrants and represents that he or she/they has/have the authority to bind OWNER to the performance of its obligations hereunder.

10.22 Prevailing Wage. OWNER, for itself, and shall pass such obligation down to its successor and assigns, agrees, covenants and warrants that the development of the Property, if any, shall comply with all applicable federal and state labor laws (including, without limitation, the requirement under California law to pay prevailing wages and hire apprentices, applicable state prevailing wage requirements pursuant to Labor Code Sections 1720 et seq. and 1770 et seq., and the regulations pursuant thereto, ("Prevailing Wage Laws")), and all obligations as set forth herein with respect to any work performed on the Property and for the Hotel Project. CITY makes no representations concerning prevailing wages in compliance with California Labor Code Section 1770 et seq. OWNER acknowledges and agrees that it shall be responsible for reviewing the applicable laws and regulations with respect to the payment of prevailing wages and complying therewith. OWNER shall be solely responsible for determining and effectuating compliance with such laws. OWNER shall bear all risks of payment or non-payment of prevailing wages under California law and/or the implementation of Labor Code Section 1781, as the same may be amended from time to time, and/or any other similar law, with respect to the construction of improvements on the Property and the Hotel Project. OWNER shall indemnify, hold harmless and defends CITY, its officials, officers, employees, agents, from any and all claims, liabilities, penalties, damages, judgments, costs, expenses, and fees arising from, or out of, the acts or omissions of OWNER or any failure to comply with all applicable laws, rules or regulations pertaining to the Prevailing Wage Laws. The foregoing indemnity shall survive termination of this Agreement and shall continue after completion of the construction and development of the Hotel Project on the Property.

[SIGNATURES CONTAINED ON FOLLOWING PAGE]

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SIGNATURE PAGE

TO DEVELOPMENT AGREEMENT NO. PDA _____

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day and year set forth below.

"CITY"

CITY OF ONTARIO, a California municipal corporation

By:_____

Scott Ochoa

City Manager

Date: _____

ATTEST:

_____

City Clerk, Ontario

APPROVED AS TO FORM:

BEST BEST & KRIEGER, LLP

_____

City Attorney

"OWNER"

DIVERSIFIED PACIFIC DEVELOPMENT GROUP, LLC

A California limited liability company

By: _____

Name:

Its: _____

Date: _____

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ACKNOWLEDGEMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA)

COUNTY OF_____)

On _____, 20_____, before me,_____,

Date *Insert Name and Title of the Officer*

personally appeared _____

Name(s) of Signer(s)

_____, who proved to me on the basis of satisfactory evidence to be the person whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity, and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature_____

Signature of Notary Public

Place Notary Seal Above

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ACKNOWLEDGEMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA)

COUNTY OF_____)

On _____, 20_____, before me_____,

Date *Insert Name and Title of the Officer*

personally appeared _____

Name(s) of Signer(s)

_____, who proved to me on the basis of satisfactory evidence to be the person whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity, and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature_____

Signature of Notary Public

Place Notary Seal Above

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EXHIBIT "A"
TO DEVELOPMENT AGREEMENT

LEGAL DESCRIPTION OF THE PROPERTY

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EXHIBIT "B"
TO DEVELOPMENT AGREEMENT

MAP SHOWING PROPERTY AND ITS LOCATION

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EXHIBIT "C"

TO DEVELOPMENT AGREEMENT

EXISTING DEVELOPMENT APPROVALS

On _____, the Planning Commission:

a) Issued Resolution No. _____ recommending City Council adopt and certify the _____Specific Plan Environmental Impact Report (SCH #_____).

b) Issued Resolution No. _____ recommending City Council approval of the _____ Specific Plan (PSP_____).

On _____, the City Council:

a) Issued Resolution No. _____ certifying the _____ Specific Plan Environmental Impact Report.

On _____, the City Council:

a) Issued Ordinance No. _____ approving the _____Specific Plan (PSP_____).

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EXHIBIT "D"
TO DEVELOPMENT AGREEMENT

EXISTING LAND USE REGULATIONS

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EXHIBIT "E"

TO DEVELOPMENT AGREEMENT

DESCRIPTION OF REQUIRED IMPROVEMENTS

OWNER shall design, construct, and complete all improvements including but not limited to sewer, water, recycled water, storm drain, fiber, and street improvements necessary to serve the Property, prior to the request of any _____.

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EXHIBIT "F"
TO DEVELOPMENT AGREEMENT

DEPICTION OF REQUIRED IMPROVEMENTS

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EXHIBIT "H-1"

DEPICTION OF SURROUNDING PROPERTY

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EXHIBIT "H-2"

DEPICTION OF MILLER PROPERTY

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EXHIBIT "I"

CONCEPTUAL DEPICTION OF CONVENTION CENTER EXPANSION

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ORDINANCE NO. _____

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING FILE NO. PSP23-001, A SPECIFIC PLAN (EMPIRE GROVES) TO ESTABLISH THE LAND USE DISTRICT, DEVELOPMENT STANDARDS, GUIDELINES, AND INFRASTRUCTURE IMPROVEMENTS FOR THE DEVELOPMENT OF UP TO 600,000 SQUARE FEET OF HOSPITALITY AND COMMERCIAL LAND USES ON 10.43-ACRES OF LAND LOCATED ON THE SOUTHEAST CORNER OF GUASTI ROAD AND HOLT BOULEVARD AND MAKING FINDINGS IN SUPPORT THEREOF—APN: 110-322-33

WHEREAS, DIVERSIFIED PACIFIC DEVELOPMENT GROUP, LLC ("Applicant") has filed an Application for the approval of a Specific Plan, File No. PSP23-001, as described in the title of this Ordinance (hereinafter referred to as "Application" or "Project"); and

WHEREAS, the Application applies to 10.43 acres of land generally located on southeast corner of Guasti Road and Holt Boulevard, within the proposed Empire Groves Specific Plan; and

WHEREAS, the properties to the north of the Project site are within the CCS (Convention Center Support Commercial) zoning district and are developed with offices and hotel. The property to the east is within the UC (Utilities Corridor) zoning district and is developed with a flood control channel. The property to the south and west is within the CCS (Convention Center Support Commercial) zoning district, and is developed with hotel; and

WHEREAS, the Empire Groves Specific Plan serves to implement the City's Policy Plan for the project site and provides zoning regulations for development of the Project site by establishing permitted land uses, development standards, infrastructure requirements, and implementation requirements for the development of 10.43 acres within the Specific Plan boundaries. The Empire Groves Specific Plan proposes a land use plan that includes one Planning Area for the Project site, the Hospitality Mixed Use (PA1); and

WHEREAS, the Hospitality Mixed-Use combines hotel uses, ancillary services and amenities with local-serving commercial uses on a single property. At buildout, the total development allowed for the project site will be 600,000 square feet; and

WHEREAS, the Hotel use is the primary component of Hospitality Mixed-Use and will occupy the majority of the FAR of the development (553,124 square feet). The hotel use includes 600 guest rooms, office space for hotel administration, and may also include ancillary uses such as restaurants, bars, lounges, day spas, gyms, ballrooms and meeting rooms; and

WHEREAS, the local-serving retail uses (46,876 square feet) will be stand-alone uses not affiliated with the hotel and these businesses may include a combination of coffee shops, restaurants and retail that complement the hotel and convention center; and

WHEREAS, in conjunction with the Project, the Applicant also filed an application for a Development Agreement (File No. PDA23-005) between the City of Ontario and Diversified Pacific Development Group, LLC to establish the terms and conditions for the associated Development Plan (File No. PDEV23-039); and

WHEREAS, on February 25, 2025, the Planning Commission conducted a public hearing and approved Resolution No. PC25-006, recommending the City Council approve a Resolution adopting an Addendum to the Ontario Plan 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364), certified by the City Council on August 16, 2022, in conjunction with File No. PGPA20-002. The Addendum finds that the proposed project introduces no new significant environmental impacts. Furthermore, all mitigation measures previously adopted with the Certified Environmental Impact Report are incorporated into the Project by reference; and

WHEREAS, the City's "Local Guidelines for the Implementation of the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed; and

WHEREAS, the Application is a project pursuant to the California Environmental Quality Act (Public Resources Code Section 21000 et seq.) ("CEQA") and an initial study has been prepared to determine possible environmental impacts; and

WHEREAS, Ontario Development Code Table 2.02-1 (Review Matrix) grants the City Council the responsibility and authority to review and act on the subject Application; and

WHEREAS, the Project is located within the Airport Influence Area of Ontario International Airport ("ONT"), which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and is subject to, and must be consistent with, the policies and criteria set forth in the Ontario International Airport Land Use Compatibility Plan (ALUCP), which applies only to jurisdictions within San Bernardino County, and addresses the noise, safety, airspace protection, and overflight impacts of current and future airport activity; and

WHEREAS, City of Ontario Development Code Division 2.03 (Public Hearings) prescribes the manner in which public notification shall be provided and hearing procedures to be followed, and all such notifications and procedures have been completed; and

WHEREAS, on February 25, 2025, the Planning Commission of the City of Ontario conducted a hearing to consider the SEIR Addendum and the Project, and concluded said hearing on that date, voting to issue Resolution No. PC25-006, recommending the

City Council adopt the SEIR Addendum, and voting to issue Resolution No. PC25-008, recommending the City Council approve the Application; and

WHEREAS, as the first action on the Project, on March 18, 2025, the City Council approved a Resolution adopting an Addendum to a previous Certified EIR prepared pursuant to CEQA, the State CEQA Guidelines and the City of Ontario Local CEQA Guidelines, which indicated that all potential environmental impacts from the Project were less than significant or could be mitigated to a level of significance; and

WHEREAS, on March 18, 2025, the City Council of the City of Ontario conducted a hearing to consider the Project, and concluded said hearing on that date; and

WHEREAS, all legal prerequisites to the adoption of this Ordinance have occurred.

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED, AND ORDAINED by the City Council of the City of Ontario, as follows:

SECTION 1: ***Environmental Determination and Findings.*** As the decision-making body for the Project, the City Council has reviewed and considered the information contained in the previous Certified EIR and supporting documentation. Based upon the facts and information contained in the previous Certified EIR and supporting documentation, the City Council finds as follows:

(1) The environmental impacts of this project were reviewed in conjunction with an Addendum to TOP 2050 Supplemental Environmental Impact Report, certified by the City of Ontario City Council on August 16, 2022, in conjunction with File No. PGPA20-002.

(2) The Addendum and administrative record have been completed in compliance with CEQA, the State CEQA Guidelines, and the City of Ontario Local CEQA Guidelines; and

(3) The City's "Guidelines for the Implementation of the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed. This Application introduces no new significant environmental impacts; and

(4) The Addendum contains a complete and accurate reporting of the environmental impacts associated with the Project, and reflects the independent judgment of the City Council; and

(5) There is no substantial evidence in the administrative record supporting a fair argument that the project may result in significant environmental impacts; and

(6) The proposed project will introduce no new significant environmental impacts beyond those previously analyzed in the Certified EIR, and all

mitigation measures previously adopted by the Certified EIR, are incorporated herein by this reference.

SECTION 2: ***Additional Environmental Review Not Required.*** Based on the Addendum, all related information presented to the City Council, and the specific findings set forth in Section 1, above, the City Council finds that the preparation of a subsequent or supplemental Certified EIR is not required for the Project, as the Project:

(1) Does not constitute substantial changes to the Certified EIR that will require major revisions to the Certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and

(2) Does not constitute substantial changes with respect to the circumstances under which the Certified EIR was prepared, that will require major revisions to the Certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of the previously identified significant effects; and

(3) Does not contain new information of substantial importance that was not known and could not have been known with the exercise of reasonable diligence at the time the Certified EIR was certified/adopted, that shows any of the following:

(a) The project will have one or more significant effects not discussed in the Certified EIR; or

(b) Significant effects previously examined will be substantially more severe than shown in the Certified EIR; or

(c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the City declined to adopt such measures; or

(d) Mitigation measures or alternatives considerably different from those analyzed in the Certified EIR would substantially reduce one or more significant effects on the environment, but which the City declined to adopt.

SECTION 3: ***Airport Land Use Compatibility Plan ("ALUCP") Compliance.*** The California State Aeronautics Act (Public Utilities Code Section 21670 et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

(1) On April 19, 2011, the City Council of the City of Ontario approved and adopted the Ontario International Airport Land use Compatibility Plan, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the decision-making body for the Project, the City Council has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the City Council, therefore, finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the ONT ALUCP; and

SECTION 4: ***Concluding Facts and Reasons.*** Based upon the substantial evidence presented to the City Council during the above-referenced hearing, and upon the specific findings set forth in Section 1 through 3, above, the City Council hereby concludes as follows:

(1) ***The proposed Specific Plan, or amendment thereto, is consistent with the goals, policies, plans and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan 2050.*** The 10.43 Empire Groves Specific Plan is suitable for a hotel/commercial mixed-use development and is consistent with the goals and policies, plans and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of TOP 2050.

(2) ***The proposed Specific Plan, or amendment thereto, would not be detrimental to the public interest, health, safety, convenience, or general welfare of the City.*** The proposed Empire Groves Specific Plan is in conformance with the Land Use Policies and Goals of the Policy Plan and will provide standards and guidelines for the harmonious development of the Project site, in a manner consistent with the Policy Plan. The Specific Plan is proposing hotel/commercial mixed-use development for the 10.43 acre site, which is what is mandated by the land use plan of the Policy Plan; therefore, the proposed land uses will not be detrimental to the public interest, health, safety, convenience, or general welfare of the City because it will provide land uses that are consistent with the existing and future development of the surrounding area.

(3) ***In the case of an application affecting specific property(ies), the proposed Specific Plan, or amendment thereto, will not adversely affect the harmonious relationship with adjacent properties and land***

uses. The proposed Specific Plan will establish a hotel/commercial land use, which aligns with the Project site and surrounding land uses planned in TOP 2050.

(4) ***In the case of an application affecting specific property(ies), the subject site is physically suitable, including, but not limited to, parcel size, shape, access, and availability of utilities, for the request and anticipated development.*** Specific Plan will allow for hotel/commercial mixed-use on the subject site. When in conformance with the Specific Plan, the project site is suitable in size and shape, allows for sufficient access and availability of utilities to accommodate the anticipated development.

SECTION 5: ***City Council Action.*** Based upon the findings and conclusions set forth in Sections 1 through 4, above, the City Council hereby APPROVES the herein described Specific Plan, attached hereto as "Attachment A," and incorporated herein by this reference.

SECTION 6: ***Indemnification.*** The Applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void, or annul this approval. The City of Ontario shall promptly notify the applicant of any such claim, action, or proceeding, and the City of Ontario shall cooperate fully in the defense.

SECTION 7: ***Custodian of Records.*** The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East "B" Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario.

SECTION 8: ***Severability.*** If any section, sentence, clause or phrase of this Ordinance or the application thereof to any entity, person or circumstance is held for any reason to be invalid or unconstitutional, such invalidity or unconstitutionality shall not affect other provisions or applications of this Ordinance which can be given effect without the invalid provision or application, and to this end the provisions of this Ordinance are severable. The People of the City of Ontario hereby declare that they would have adopted this Ordinance and each section, sentence, clause or phrase thereof, irrespective of the fact that any one or more section, subsections, sentences, clauses or phrases be declared invalid or unconstitutional.

SECTION 9: ***Effective Date.*** This Ordinance shall become effective 30 days following its adoption.

SECTION 10: ***Publication and Posting.*** The Mayor shall sign this Ordinance and the City Clerk shall certify as to the adoption and shall cause a summary thereof to be published at least once, in a newspaper of general circulation in the City of Ontario, California within 15 days following the adoption. The City Clerk shall post a certified copy of this ordinance, including the vote for and against the same, in the Office of the City Clerk, in accordance with Government Code Section 36933.

PASSED, APPROVED, AND ADOPTED this _____ day of _____ 2025.

_____
PAUL S. LEON, MAYOR

ATTEST:

_____
SHEILA MAUTZ, CITY CLERK

APPROVED AS TO FORM:

_____
BEST BEST & KRIEGER LLP
CITY ATTORNEY

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO)
CITY OF ONTARIO)

I, SHEILA MAUTZ, City Clerk of the City of Ontario, DO HEREBY CERTIFY that foregoing Ordinance No. _____ was duly introduced at a regular meeting of the City Council of the City of Ontario held _____ and adopted at the regular meeting held _____, 2025 by the following roll call vote, to wit:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

I hereby certify that the foregoing is the original of Ordinance No. _____ duly passed and adopted by the Ontario City Council at their regular meeting held _____ and that Summaries of the Ordinance were published on _____ and _____, in the Inland Valley Daily Bulletin newspaper.

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

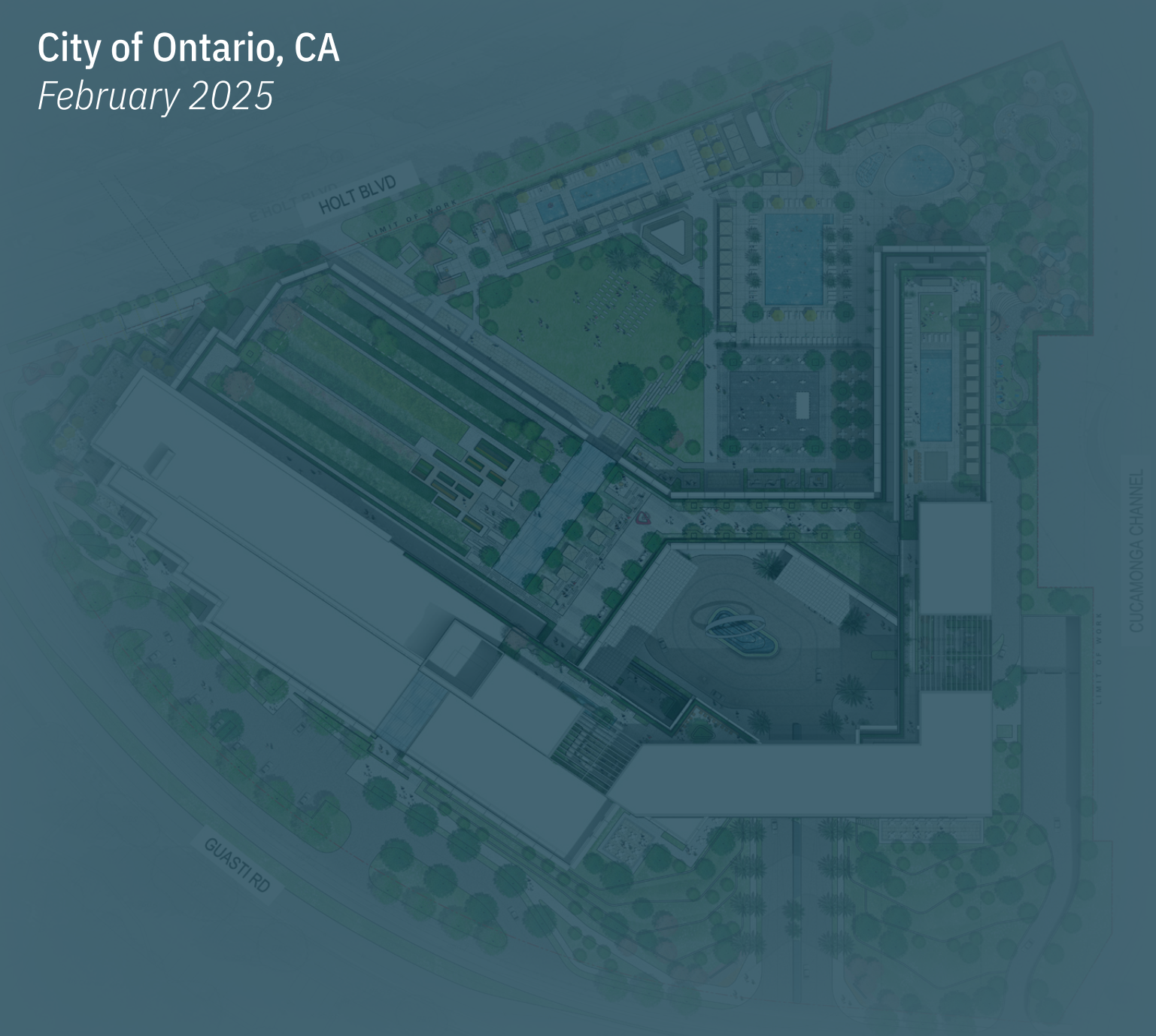
ATTACHMENT A:

File No. PSP23-001
Empire Groves Specific Plan

(Document follows this page)

Empire Groves
SPECIFIC PLAN

City of Ontario, CA
February 2025



DIVERSIFIED Pacific®

6910

City Council

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Mayor Pro Tem Alan D. Wapner
Council Member Debra Porada
Council Member Jim W. Bowman
Council Member Daisy Macias

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01 | Introduction

1.1 Project Location

The Empire Groves Specific Plan (project) site is situated in the southeastern quadrant of the intersection of East Holt Boulevard and East Guasti Road in the City of Ontario. The Specific Plan Area is a triangular plot of land spanning 10.43 acres.

To the north, it is bounded by Holt Boulevard, while East Guasti Road runs along its southern and southwestern edges. The eastern boundary is defined by an existing flood channel and the Cucamonga Creek Trail. To the south of the site lies the Ontario International Airport, which is separated by East Guasti Road, Airport Drive, and a set of railroad tracks. The Specific Plan Area has direct access from Interstate 10 (I-10), situated to the north of the site.

Directly north of the Specific Plan Area, across East Holt Boulevard, is the Frontier Center office building and the Holiday Inn. To the northwest is the Ontario Convention Center, and to the west is the Ontario Gateway Hotel.

The regional project location is shown in **Figure 1**, while **Figure 2** provides the local context. There are several hotels, office buildings, and car dealerships within a 1-mile radius of the Specific Plan Area as seen in **Figure 3.** The Specific Plan Area assessor's parcel number is 11032233.

Figure 1: Regional Project Location

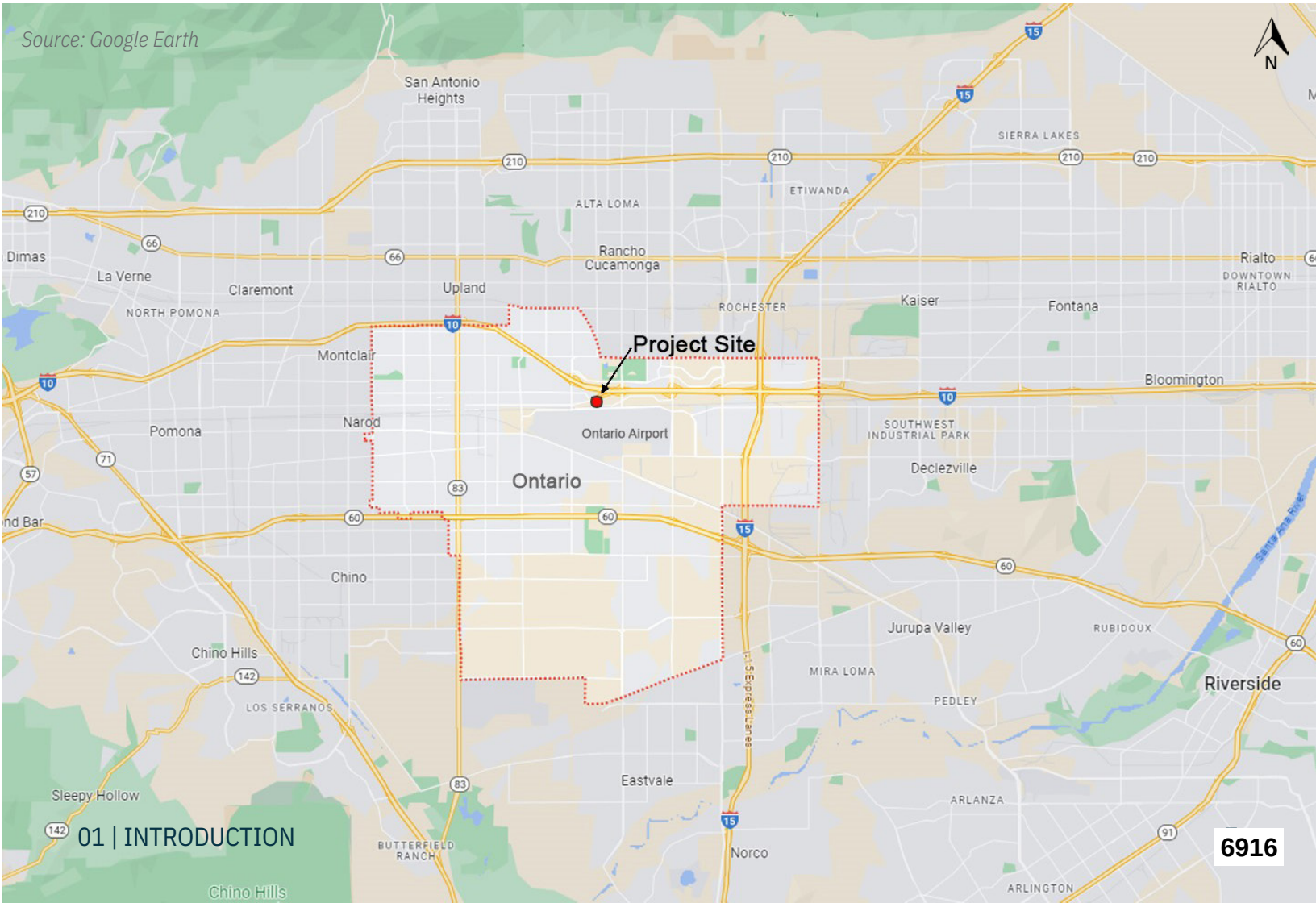
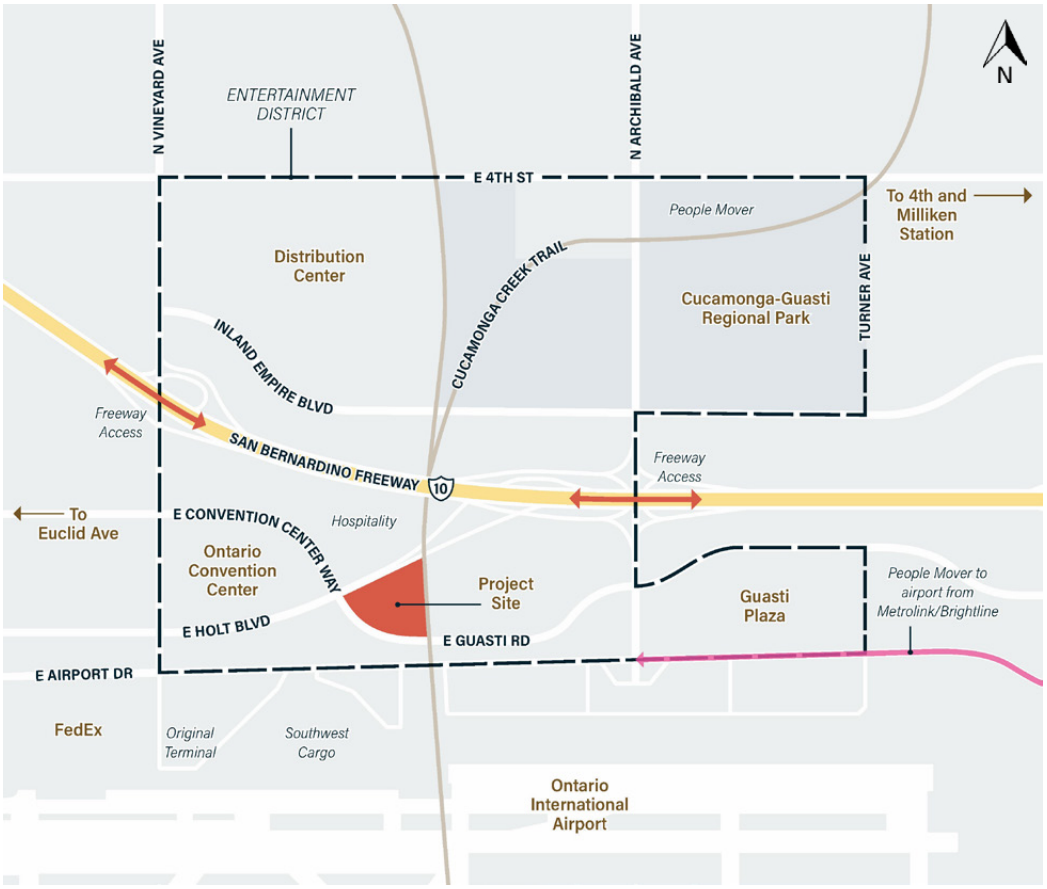


Figure 2: Project Location - Local Context



Source: City of Ontario

Figure 3: Vicinity Map



Source: Google Earth

1.2 The Vision

The vision of the project is as follows:

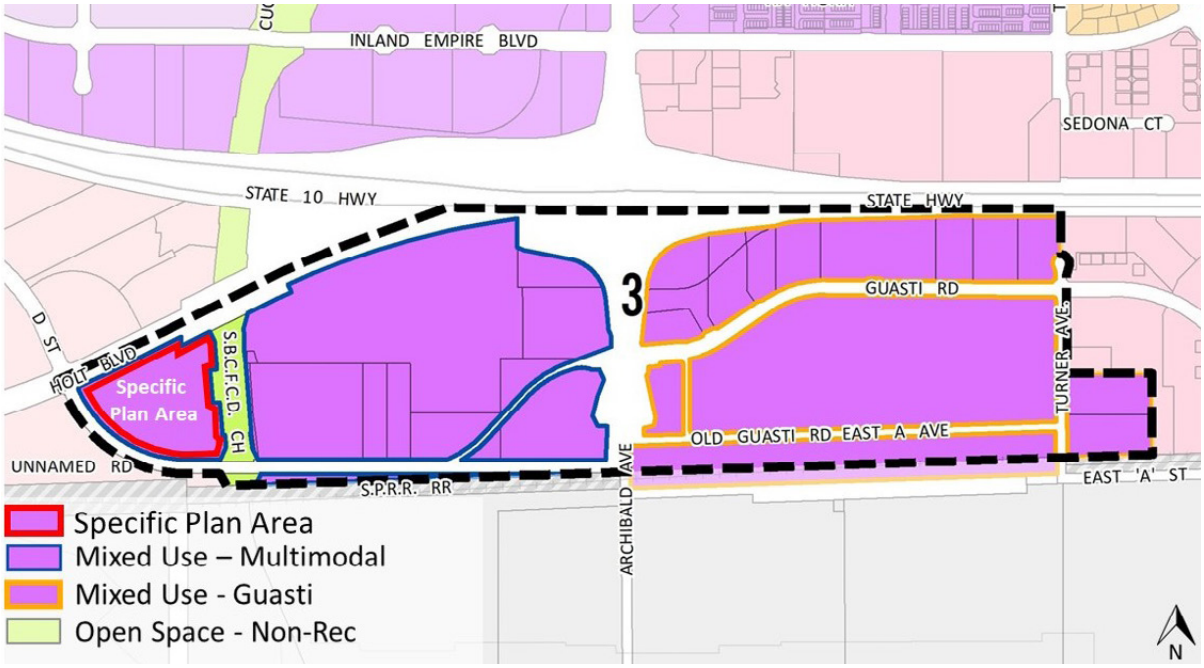
> ***"Establish a world-class hotel development that serves as a central hub, offering exceptional amenities, exclusive experiences, and a renowned brand. This hotel project will serve as a catalyst for the advancement of neighboring areas, fostering meaningful connections by promoting the revitalization of roadways and trails surrounding the Specific Plan Area."***

The Specific Plan Area is part of the Guasti District, according to the Community Design Element (CD-05 Guasti District Place Type) of the General Plan (also called The Ontario Plan). The district is envisioned to preserve and enhance the historic buildings as the focal point of a vibrant mixed-use area. The district will include intense office, commercial, and lodging uses along the I-10 corridor, and appropriately scaled residential, office, commercial, and lodging near the Guasti Village historic district core. The multimodal mixed-use area within the Guasti District is intended to leverage proximity to the future multimodal transportation center and link the Ontario Convention Center, Guasti compound , and Ontario International Airport through strong physical and visual design.

Further, the Guasti District is adjacent to the Entertainment District to the east, which is envisioned as a large-scale regional entertainment hub, leveraging attractions such as the Toyota Arena and Ontario Mills, and supported by a variety of retail and dining options alongside high-intensity office and residential development. This area will evolve into a walkable urban center through the addition of mixed-use infill development, a pedestrian-oriented road and trail network, key public realm improvements, and multiple transit options.

The critical infrastructure surrounding the Specific Plan Area provides connectivity between these districts and other parts of the City and includes easy access to I-10, major arterial streets, Ontario station, planned airport loop, existing BRT lines, Metrolink lines, and the airport. The development in the Specific Plan Area could spur future growth in the area and encourage further infrastructure investments and connectivity. Some ideas for infrastructure projects include the following:

Figure 4: Guasti District Extents - Community Design Element



Source: City of Ontario

- As a direct connection to the Convention Center and freeway, this high-traffic area could transform into a place to be enjoyed either by car or on foot, with interpretive/ kinetic art and grand gestures of innovative placemaking.

- Holt Boulevard could transform with the addition of tree-lined sidewalks, a landscaped median, outdoor seating areas, and kiosks. To enhance the area's appeal, digital beacons and adaptable signage within the median could create a distinct gateway effect.

- Guasti Road could be transformed into a multimodal roadway with sidewalks, and bike lanes. This road can also be used as an occasional pedestrian-only zone for pop-up events, markets, and street takeovers.

- A portion of the flood control channel could be re-imagined as a multimodal greenway that promotes outdoor activity. The greenway's potential is vast, with eight miles of northbound trail that end at the Rancho Cucamonga Creek trailhead.

Given the multitude of critical infrastructure components that could be implemented in the region, along with the visionary City planning efforts already in progress, this area is well-positioned for development projects that will optimize the region's potential for future growth.

1.3 Specific Plan Purpose

The Empire Groves Specific Plan establishes land use regulations, development standards, and design guidelines tailored to the unique goals of the hotel and retail development envisioned at this particular location. The Specific Plan defines the uses that are permitted and their locations, as well as design guidelines for buildings and related on-site improvements. The Specific Plan ensures that the area develops in a coordinated manner with adequate consideration of infrastructure, services, public safety, and project financing. The purpose of the Specific Plan is to:

- Provide a planning framework that responds to the physical and market-driven aspects of future development opportunities.

- Reclaim the site and transform it into a visually attractive living, working, and shopping environment.

- Determine the appropriate location, maximum intensity, and mix of uses through new development parameters.

- Encourage compatible land uses and interfaces with adjacent properties.

- Conform to state laws and local ordinances and policies for the preparation of specific plans.

1.4 Community Benefits

There are several community benefits to building a hotel complex with a retail component in the City of Ontario.

- Construction and operation of the hotel complex will create job opportunities for local residents, including positions in hospitality, retail, management, and maintenance.

- The inclusion of retail spaces can support local entrepreneurs and small businesses by providing them with platforms to showcase and sell their products or services.

- The development will generate tax revenue for the City, contributing to public funds for essential services like education, infrastructure, and public safety.

- A well-located and easily accessible hotel complex such as this will attract visitors and is a great candidate for hosting events and conferences, further benefiting local businesses and the economy.

The development of a hotel complex can also attract additional investment in the area, spurring further development and leading to improvements in local infrastructure, including road upgrades, sidewalks, and public transportation facilities, ultimately enhancing the overall cityscape as discussed in the Vision.

Public spaces within the complex can serve as gathering spots for residents and visitors, contributing to a sense of community. The presence of a well-maintained hotel complex can positively impact property values in the surrounding area.

1.5 California Environmental Quality Act Compliance

A CEQA analysis was conducted according to the City's Environmental Review Update Checklist Form for Projects with Previously Approved Environmental Documents to evaluate potential impacts resulting from the implementation of this Specific Plan. It was determined that the certified Final Environmental Impact Report (EIR) previously prepared to evaluate the General Plan update adequately covers this Specific Plan's potential impacts. Therefore, an Addendum to the Final EIR was determined to be the appropriate CEQA document to analyze this Specific Plan. The Addendum concluded that, since the General Plan update EIR was certified, there are no changes in the project, changes in circumstances under which the project is undertaken, and/or "new information of substantial importance" that would cause one or more significant effects.

1.6 Project Objectives

The Empire Groves Specific Plan reflects the City of Ontario's long-term objectives, which include the expansion of the City's economic base consistent with maintaining and enhancing the high quality of life for all residents. The following objectives, achieved through the implementation of the Specific Plan, have been identified as applicable to the project:

High-Quality Development: Implement high-quality development through the adoption of this Specific Plan that will provide a world-class hotel and local retail in this area.

Flexible Standards: Provide flexible standards that permit limited modifications between retail, restaurant, and hotel spaces that align with the ever-changing market conditions and allow for long-term financial stability.

Placemaking: Create a series of attractive, interconnected gathering spaces, including rooftop gardens, outdoor dining spaces, gardens, meadows, courtyards, pools, lounges, and other outdoor facilities to meet the recreational and social needs of visitors and guests.

Adequate Parking: Provide flexible parking standards to encourage parking facilities that sufficiently meet the parking demand for all uses at all times.

Reduce Per-Capita VMT: Design and locate new development adjacent to existing transportation infrastructure and services to reduce the need for vehicle trips and to minimize the distance of vehicle trips typically made by automobile.

1.7 Specific Plan Authority and Requirements

1.7.1 Authority

The California Government Code establishes the authority for a legislative body to adopt an ordinance or resolution requiring that a specific plan be prepared. As with general plans, the Planning Commission must hold a public hearing before the planning agency can recommend the adoption of a specific plan. The City Council may then adopt a specific plan by ordinance or resolution.

The Empire Groves Specific Plan is regulatory in nature and serves as zoning for the properties involved. Development plans, site plans, and tentative tract and parcel maps must be consistent with both the Empire Groves Specific Plan and the City of Ontario's General Plan, as amended.

The Empire Groves Specific Plan is prepared and established through the authority granted to the City of Ontario by the California Government Code, Title 7, Division 1, Chapter 3, Article 8, Sections 65450 through 65457 (Specific Plans). The City Code does not have any additional specific content requirements beyond that required by the Government Code.

1.7.2 Government Code Requirements

According to Section 65451, "a specific plan shall include a text and a diagram or diagrams which specify all of the following in detail:

- The distribution, location, and extent of the uses of land, including open space, within the area covered by the plan.
- The proposed distribution, location, and extent and intensity of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy, and other essential facilities proposed to be located within the area covered by the plan and needed to support the land uses described in the plan.
- Standards and criteria by which development will proceed, and standards for the conservation, development, and utilization of natural resources, where applicable.
- A program of implementation measures including regulations, public works projects, and financing measures necessary to carry out the project.
- The specific plan shall include a statement of the relationship of the specific plan to the general plan."

1.8 Relationship to Planning Documents

1.8.1 General Plan

In accordance with the California Government Code, the adoption and administration of specific plans are permitted as an implementation tool of a general plan. Specific plans must demonstrate consistency with the policies set forth in the general plan. An analysis of how the Empire Groves Specific Plan is consistent with the policies in the City's General Plan is contained in **Appendix A**. A General Plan Amendment will be requested as part of the project application to change the land use designation from Multimodal Mixed Use to a Specific Plan.

1.8.1.1 General Plan Policy Guidance

The following General Plan policies are useful in providing direction for the project and supporting the project objectives:

1.8.1.1.1 Land Use Element

Policy LU-1.1 Strategic Growth. We concentrate growth in strategic locations that help create place and identity, maximize available and planned infrastructure, foster the development of transit, and support the expansion of the active and multimodal transportation networks throughout the City.

Policy LU-1.6 Complete Community. We incorporate a variety of land uses and building types in our land use planning efforts that result in a complete community where residents at all stages of life, employers, workers, and visitors have a wide spectrum of choices of where they can live, work, shop and recreate within Ontario.

Policy LU-2.11 Context-Aware Transitions and Connections. We require new development projects and land-planning efforts to provide context-aware and appropriate transitions and connections between existing and planned neighborhoods, blocks, sites, and buildings.

1.8.1.1.2 Mobility Element

Policy M-2.1 Active Transportation. We maintain our Active Transportation Master Plan to create

a comprehensive system of on- and off-street bikeways and pedestrian facilities that are safe, comfortable, and accessible and connect residential areas, businesses, schools, parks, and other key destination points.

Policy M-2.3 Pedestrian Walkways. We require streets to include sidewalks and visible crosswalks at major intersections where necessary to promote safe and comfortable mobility between residential areas, businesses, schools, parks, recreation areas, and other key destination points.

Policy M-2.4 Network Opportunities. We use public rights-of-way and easements such as, utility easements, levees, drainage corridors, road rights-of-way, medians, and other potential options to maintain and expand our bicycle and pedestrian network. In urban, mixed-use, and transit-oriented Place Types, we encourage the use of underutilized public and private spaces to expand our public realm and improve pedestrian and bicycle connectivity.

1.8.1.1.3 Housing Element

Policy H-2.3 Ontario Airport Metro Center. We foster a vibrant, urban, intense, and highly amenitized community in the Ontario Airport Metro Center Area through a mix of residential, entertainment, retail, and office-oriented uses.

1.8.1.1.4 Community Economics Element

Policy CE-1.8 Regional Attraction. We encourage the development and programming of regional, cultural, and entertainment destinations in Ontario.

Policy CE-2.1 Development Projects. We require new development and redevelopment to create unique, high-quality places that add value to the community.

1.8.1.1.5 Community Design Element

Goal CD-1 A dynamic, progressive city containing distinct and complete places that foster a positive sense of identity and belonging among residents, visitors, and businesses.

Policy CD-1.1 City Identity. We take actions that are consistent with the City being a leading urban center in Southern California while recognizing, enhancing, and preserving the character of our existing viable neighborhoods.

Goal CD-2 A high level of design quality resulting in neighborhoods, commercial areas, public spaces, parks, and streetscapes that are attractive, safe, functional, human- scale, and distinct.

Policy CD-3.1 Unique Identity. We promote development that heightens the unique character and identity of each Place Type by requiring compatible land uses and land planning, site design, and building design that promotes an active public realm.

Policy CD-3.4 Context-Aware and Appropriate Design. We require appropriate building and site design that complements existing development, respects the intent and identity of the Place Type, and provides appropriate transitions and connections between adjacent uses to ensure compatibility of scale, maintain an appropriate level of privacy for each use, and minimize potential conflicts.

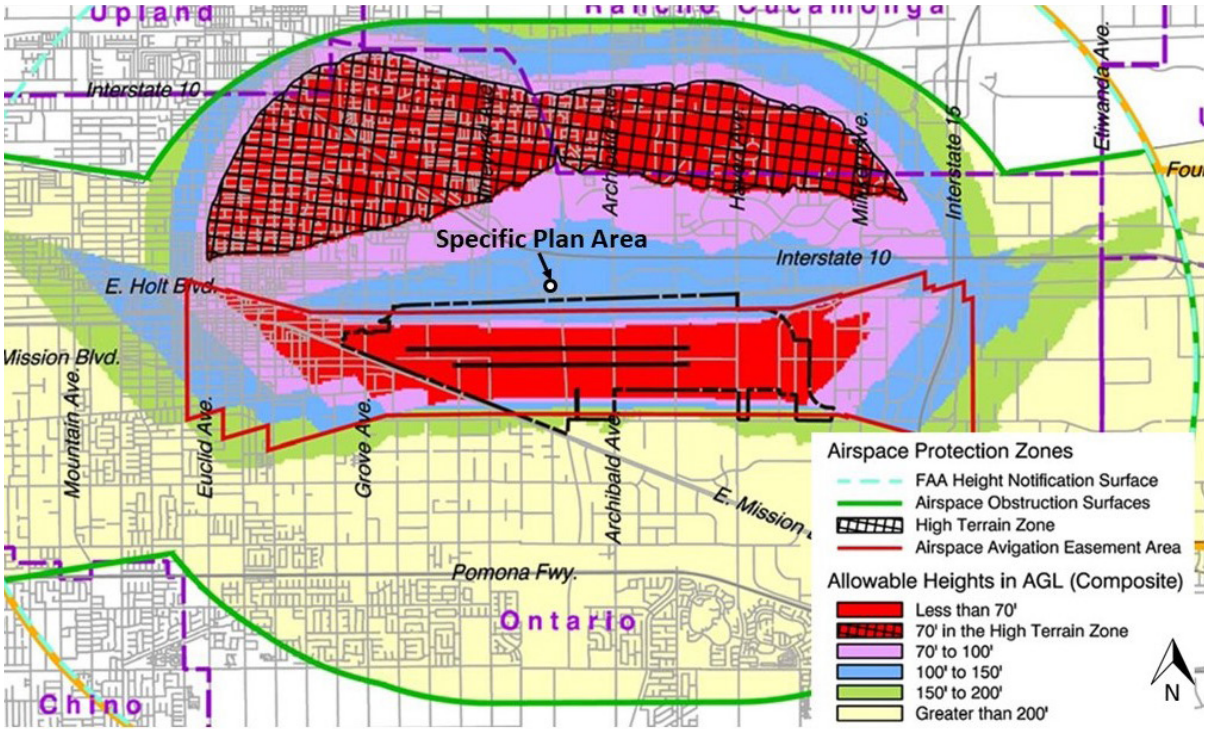
1.8.2 Zoning Code

Per the provisions of state law, the Specific Plan will establish the zoning and regulations for the site. In situations where the Specific Plan is silent, the City of Ontario's Zoning Code will prevail. The site is currently zoned as Specific Plan (SP) and will refer to this document for the development of the site.

1.8.3 Ontario Airport Land Use Compatibility Plan

The Ontario International Airport Land Use Compatibility Plan (ONT ALUCP) was adopted by the Ontario City Council on April 19, 2011. The basic function of the ONT ALUCP is to promote compatibility between ONT and the land uses that surround it. In accordance with state law, the ONT Airport Influence Area encompasses all lands that could be negatively impacted by ONT's present, or future aircraft operations or land uses that could negatively affect ONT's airport operations. The project area is located within the noise impact and airspace protection zones of the ONT ALUCP. All development proposals are required to be consistent with

Figure 5: Compatibility Policy Map - Airport Protection Zones



Source: Ontario International Airport Land Use Compatibility Plan, Policy Map 2-4

the Ontario International Airport Land Use Compatibility Plan policies and criteria.

In addition to safety and noise, the plan evaluates airspace protection compatibility to prevent creation of land use features that can be hazards to aircraft in flight and have the potential for causing an aircraft accident to occur. One such hazard is building height. To determine the allowable heights of future objects, the underlying ground elevation is compared with the elevation of the controlling portions of the Federal Aviation Regulations Part 77, Terminal Instrument Procedures, and One-Engine Inoperative surfaces. These are depicted as color bands in **Figure 5**. Each color band represents a range of distance, measured in vertical feet, between the ground and overlying surface.

The Specific Plan Area falls in an allowable height range of 100 to 150 feet. Based on the plan policies, the project proponent shall submit notification of the proposal to the Federal Aviation Administration, as required by the provisions of Federal Aviation Regulations Part 77, Subpart B, and by the California Public Utilities Code, Sections 21658 and 21659.

1.9 Specific Plan Organization

This Specific Plan is organized into the following six chapters.

Chapter 1 | Introduction

This chapter explains the role and function of specific plans. It articulates the vision and a synopsis of the community advantages that may accrue through the execution of this project. This chapter also delineates the Specific Plan's extent and authority, its adherence to the California Environmental Quality Act (CEQA), and its alignment with the City's General Plan and Zoning Ordinance, as well as the overarching guidance provided by General Plan policies. Moreover, this chapter establishes the groundwork for the subsequent chapters by elucidating the purpose and objectives of this Specific Plan.

Chapter 2| Existing Conditions

This chapter includes an analysis of the current conditions, encompassing the surrounding environment, land use, zoning, topography, geology, flooding, and noise levels.

Chapter 3| Development Plan

This chapter outlines the comprehensive land use framework, encompassing a summary of the project, and infrastructure plans, covering circulation, water supply, sewage, recycled water, and dry utilities.

Chapter 4| Development Standards

This chapter serves as the authoritative document that delineates the specific land use designations and regulatory guidelines for this Specific Plan. Upon the formal adoption of this Specific Plan, the provisions related to land use and development standards outlined in this chapter will assume the status of official zoning regulations for the designated area.

Chapter 5| Design Guidelines

This chapter outlines the fundamental guiding principles that underpin the architectural and urban design aspects of the Specific Plan. These guidelines are intended to provide a comprehensive framework for the aesthetic and functional aspects of the project, ensuring a harmonious and purposeful development that aligns with the overarching vision of the Specific Plan.

Chapter 6 | Implementation

This chapter outlines the guidelines for overseeing and administering the Specific Plan's development, encompassing procedures for amendments, the equivalency program, and the prioritization of implementation.

02

Existing Conditions

2.1 Existing Land Use

The Specific Plan Area is currently vacant land with no temporary or permanent structures. There is, however, some vegetation and trees on the site. **Figure 6** shows images of the existing site.

2.2 Existing General Plan Land Use

According to the City's General Plan Land Use Element, the Specific Plan Area has a Mixed Use–Multimodal land use (refer to **Figure 7**). The Specific Plan Area also falls in the Ontario Airport Metro Center Overlay (refer to **Figure 8**).

2.2.1 Multimodal Mixed-Use

The future multimodal transit station is under consideration within the Mixed-Use Area, which will link rail, regional, local, and airport transit. Intensive office, retail, and residential uses are envisioned to be integrated with the transit station. The transit center is envisioned as an iconic, convenient, and intuitively designed multimodal transportation center that will serve the City of Ontario and the region at large.

According to the General Plan full buildout summary, the total acreage under the Multimodal Mixed-Use Area (west of Archibald Avenue and south of I-10) is 72.56 acres, of which 10.43 acres fall in the Specific Plan Area. It is estimated that the entire Multimodal Mixed-Use area will absorb a total of 2,449,727 square feet of nonresidential development and will create 5,993 jobs. Of this, 553,124 square feet is allocated to lodging and the rest to retail and office development. The area will have an allowable density of 20.0 to 80.0 dwelling units per acre.

Figure 6: Existing Site Aerial and Context Photos

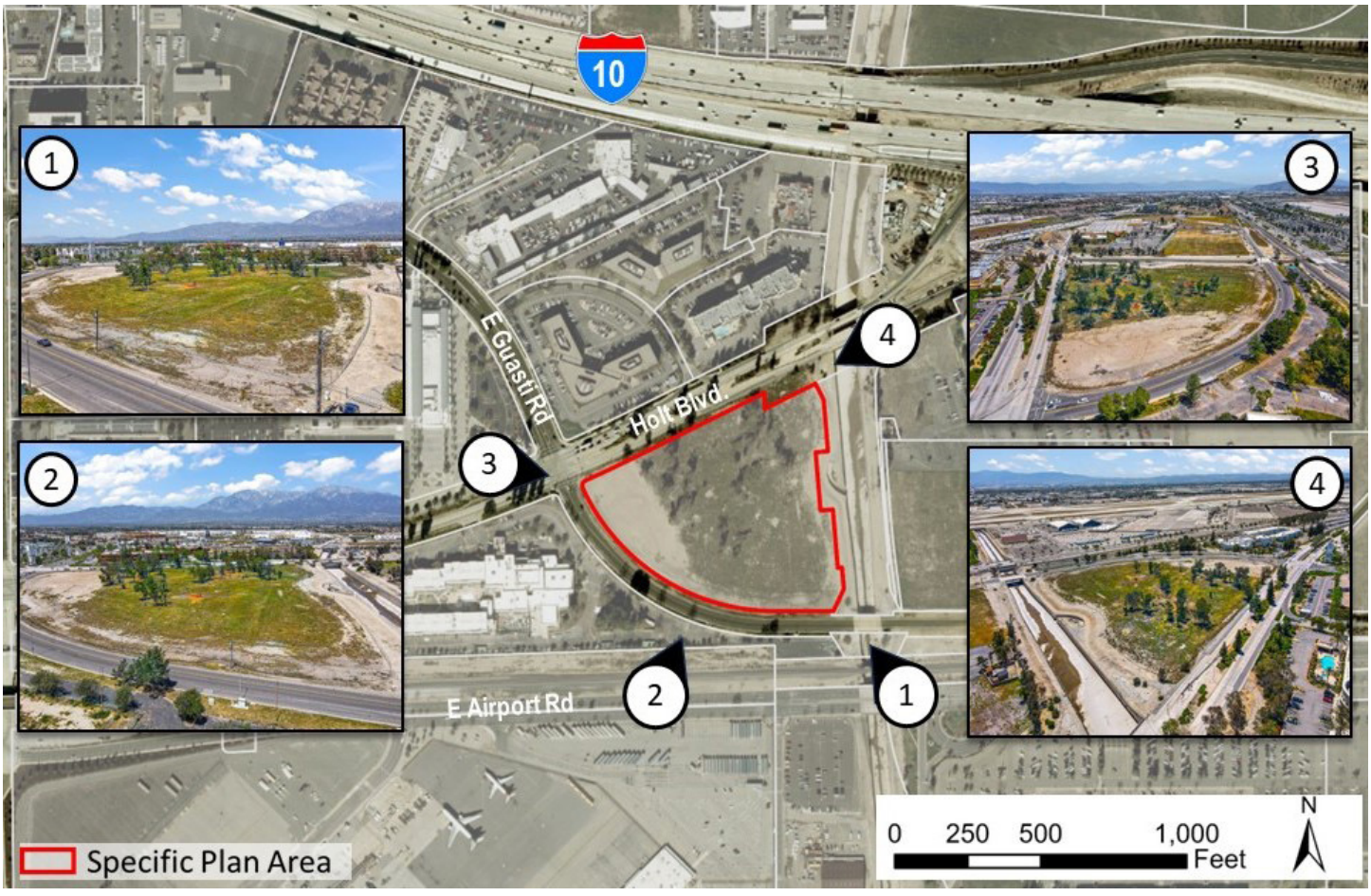
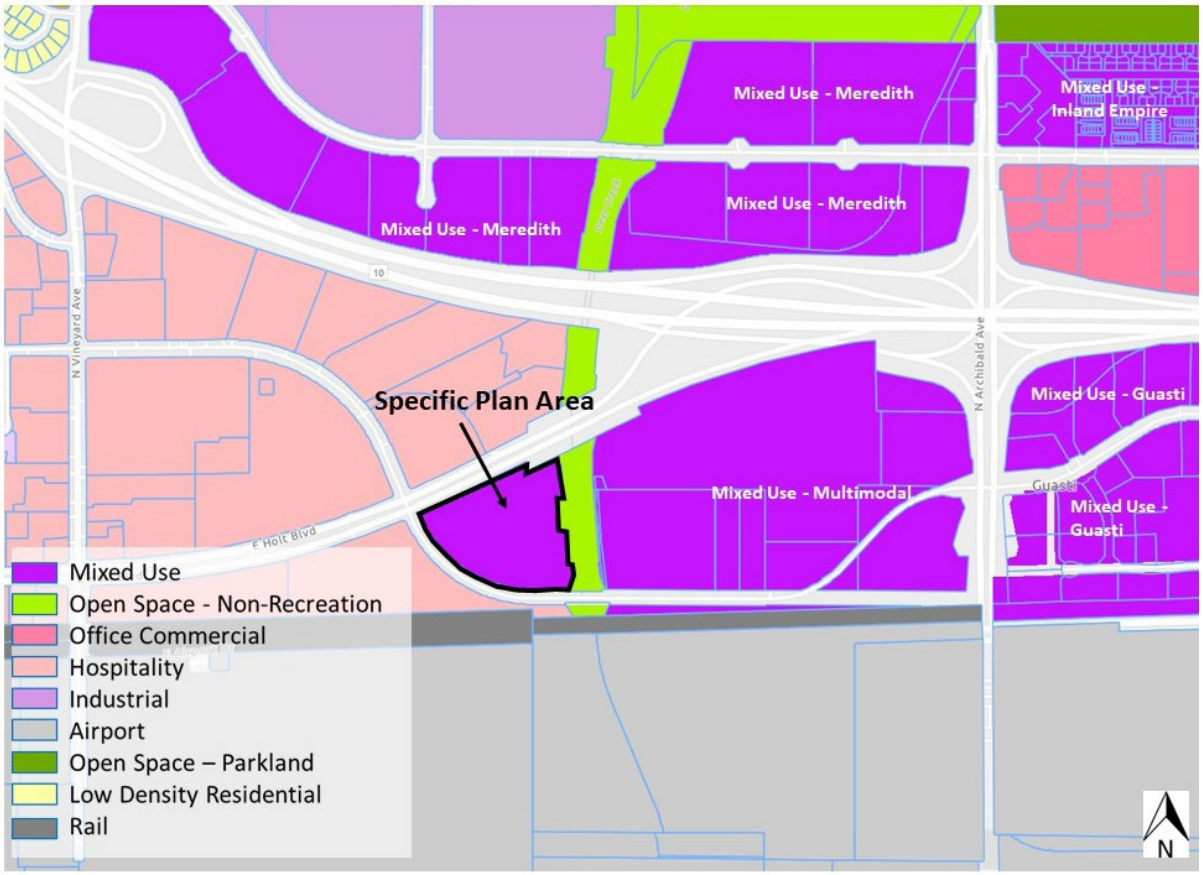
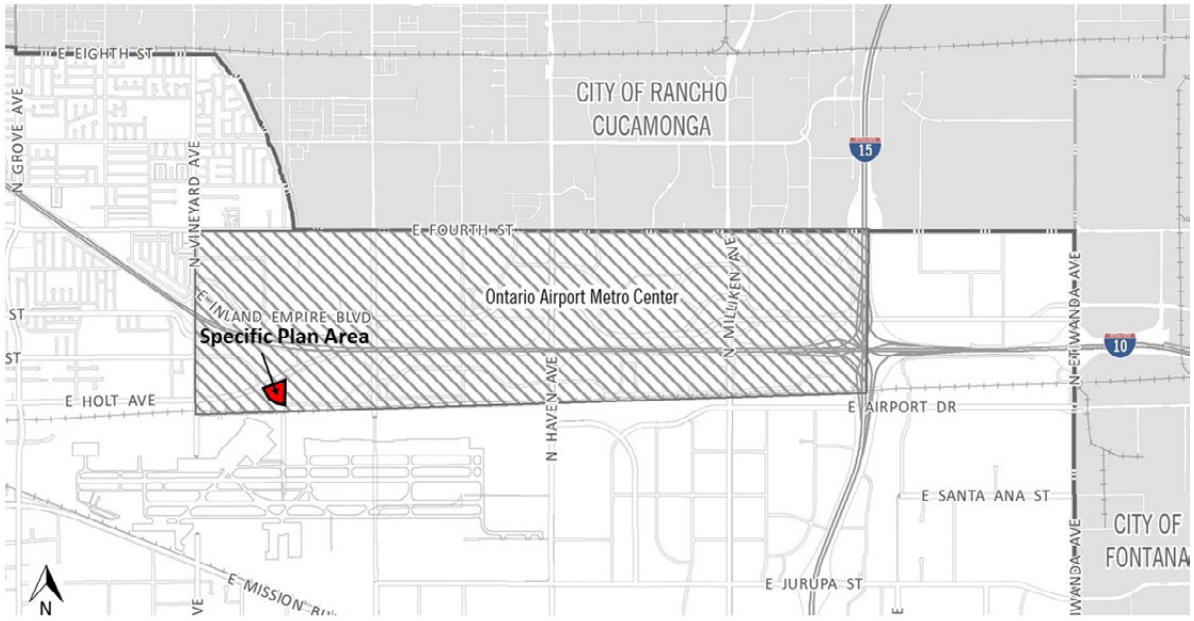


Figure 7: Existing General Plan Land Use



Source: City of Ontario

Figure 8: Existing Ontario Airport Metro Center Overlay



Source: City of Ontario

2.2.2 Ontario Airport Metro Center Overlay

The Ontario Airport Metro Center Overlay is envisioned as the most intensive area in the County with a vertical and horizontal mixture of regional-serving retail, office, restaurant, entertainment, cultural, and residential uses in low- to mid-rise buildings (i.e., 3-10 stories).

2.2.3 Surrounding Land Uses

The surrounding land uses include Hospitality (HOS) on the west with a floor area ratio (FAR) of 1:00; Mixed Use–Multimodal (MU-Multimodal) on the east of Specific Plan Area with a density of 20.0 to 80.0 dwelling units per acre and FAR of 1.0; Mixed Use - Meredith (MU-Meredith) in the north with a density of 14.0 to 125.0 dwelling units per acre and FAR of 3; and Airport (ARPT) in the south (refer to **Figure 7**).

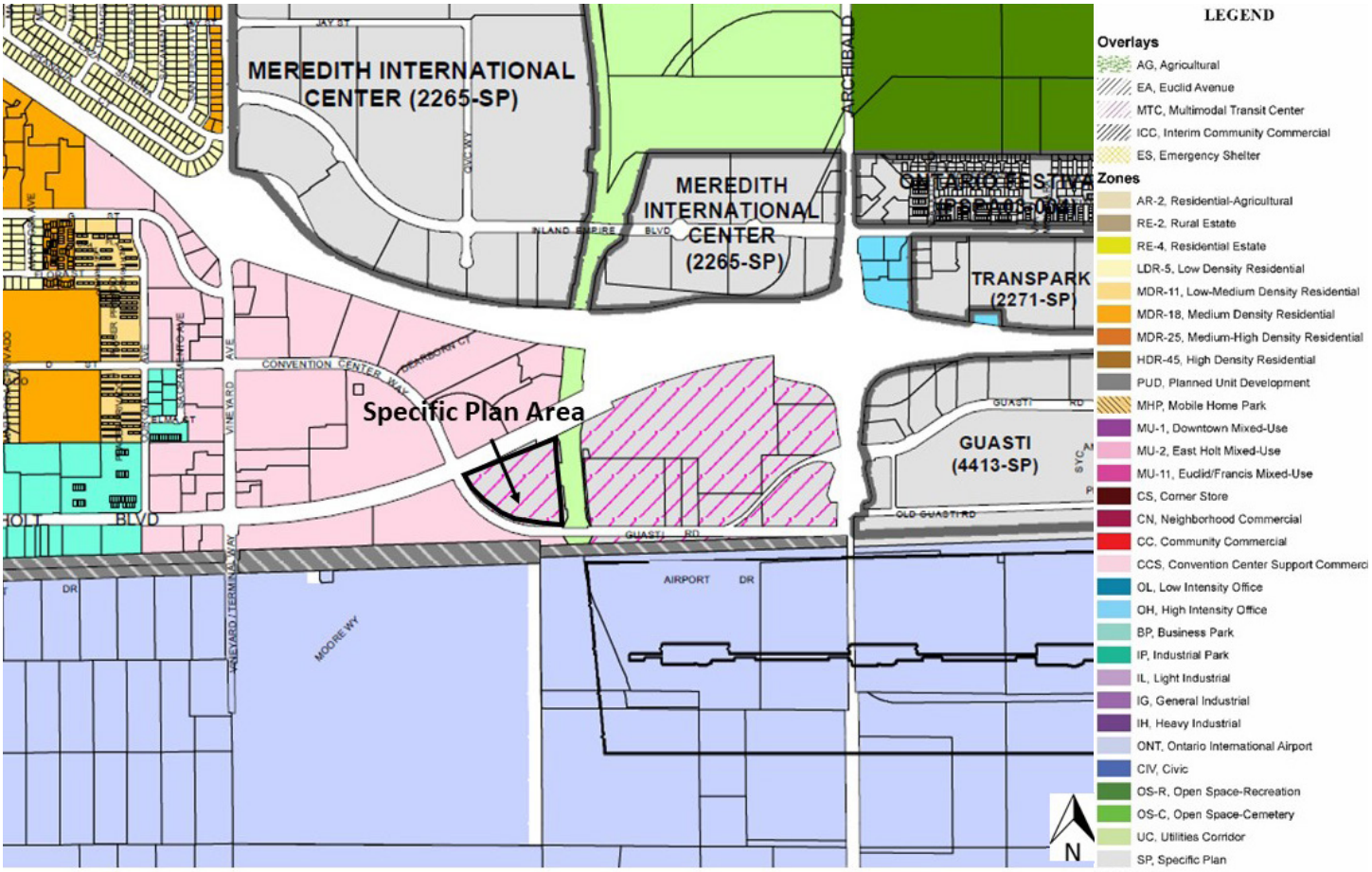
2.3 Existing Zoning

According to the City's Zoning Map, the existing zoning for the Specific Plan Area is a Specific Plan Zone with a Multimodal Transit Center overlay zone. Below are the descriptions of these zones.

2.3.1 SP (Special Plan) Zoning District

The SP zoning district is established to accommodate the adoption of specific plans pursuant to Exhibit LU-05 Overlay Areas (Additional Plans Map) of the Policy Plan component of The Ontario Plan. All land uses, activities, and facilities within the SP zoning district shall only be allowed pursuant to the applicable Specific Plan document.

Figure 9: Existing Zoning



Source: City of Ontario, The Ontario Plan 2050

2.3.2 MTC (Multimodal Transit Center) Overlay District

The Mhe MTC Overlay District was established to allow for the interim use of existing buildings located within the overlay district boundary (established pursuant to Paragraph 5.01.010.F.4 [MTC Overlay District] of the Development Code), while at the same time preserving the City's vision for development of a multimodal transit center and supporting mixed-use development. To this end, the below-listed land uses are permitted within existing buildings in the MTC Overlay District:

- General warehousing, storage, and distribution trades.
- Wholesale trades.
- Retail trades limited to 15 percent of the building's gross floor area or 8,000 square feet, whichever is less.
- Office administrative and business support services.
- Other uses approved by the Planning Director or his/her designee that are similar in nature to those uses listed above, provided all activities are wholly contained within the building and do not have the potential to negatively impact properties in the vicinity, or are inconsistent with the Vision and Policy Plan components of The Ontario Plan.

The Specific Plan Area is surrounded by parcels designated as a Specific Plan Zone with MTC overlay in the east and a CCS (Convention Center Support) Commercial Zone to the north, west, and south. Properties farther south are zoned RC (Railway Corridor) and Airport.

2.4 Topography

The Specific Plan Area is relatively flat with an approximately 1.25 percent slope from the north to the south (refer to **Figure 10**). The site elevation ranges from approximately 968 feet to 957 feet above mean sea level.

2.5 Geology and Soils

2.5.1 Fault Zones

The Specific Plan Area is not located within the boundaries of an earthquake fault zone for fault rupture hazards as defined by the Alquist-Priolo Earthquake Fault Zoning Act or identified in The Ontario Plan. The Alquist-Priolo Earthquake Fault Zoning Act is a California state law designed to reduce the risk of damage to building structures on or near active earthquake fault zones. The California Department of Conservation, in cooperation with local governments, is responsible for mapping the location of active earthquake fault zones. The act prohibits the construction of critical facilities (e.g., schools, and hospitals) and limits the construction of residential buildings within the mapped zones. The nearest earthquake fault zone is the Sierra Madre fault zone, which is more than 6 miles north of the Specific Plan Area. No other faults have been mapped in the City of Ontario, according to the City's General Plan.

2.5.2 Land Subsidence

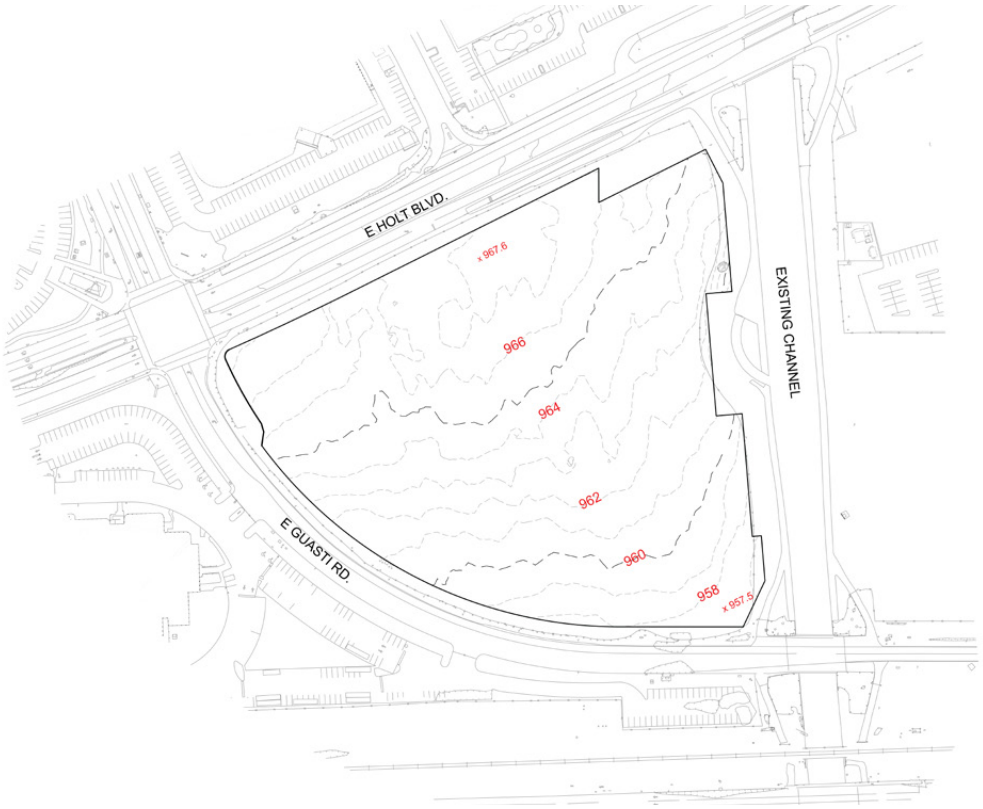
Land subsidence due to groundwater pumping is a gradual sinking or settling of the earth's surface caused by the excessive extraction of groundwater from underground aquifers. When groundwater is pumped from these aquifers at a rate faster than it can naturally be replenished, it creates a void or space underground.

Land subsidence due to groundwater pumping has been a long-standing issue in various parts of California, including Ontario. California's San Gabriel Valley, where Ontario is located, has experienced land subsidence as a result of excessive groundwater extraction for several decades. The entirety of the Specific Plan Area, similar to the majority of Ontario, is susceptible to land subsidence due to groundwater pumping.

2.5.3 Soils

The Specific Plan Area is underlain by Pleistocene/Holocene-aged Tujunga soils that typically develop from alluvial deposits, which are sediments carried and deposited by water,

Figure 10: Topography



often in areas near rivers, streams, or floodplains. The Tujunga soil series generally features a loamy texture, which means it has a balanced mixture of sand, silt, and clay. This texture is often suitable for agriculture and gardening. They usually have good to moderate drainage properties, making them suitable for a variety of land uses.

2.6 Flooding

2.6.1 FEMA Floodplain

The majority of the Specific Plan Area, as shown in **Figure 11**, is in a Federal Emergency Management Agency (FEMA) designated 500-year floodplain. The FEMA 500-year floodplain is a designated area that represents the land area at risk of flooding during a severe flood event with a 0.2 percent annual probability of occurrence, which is roughly equivalent to a 1-in-500 chance of occurring in any given year. This means that, on average, it has a low annual probability (0.2 percent) of occurring; such a flood might be expected to happen once every 500 years.

2.6.2 Dam Inundation

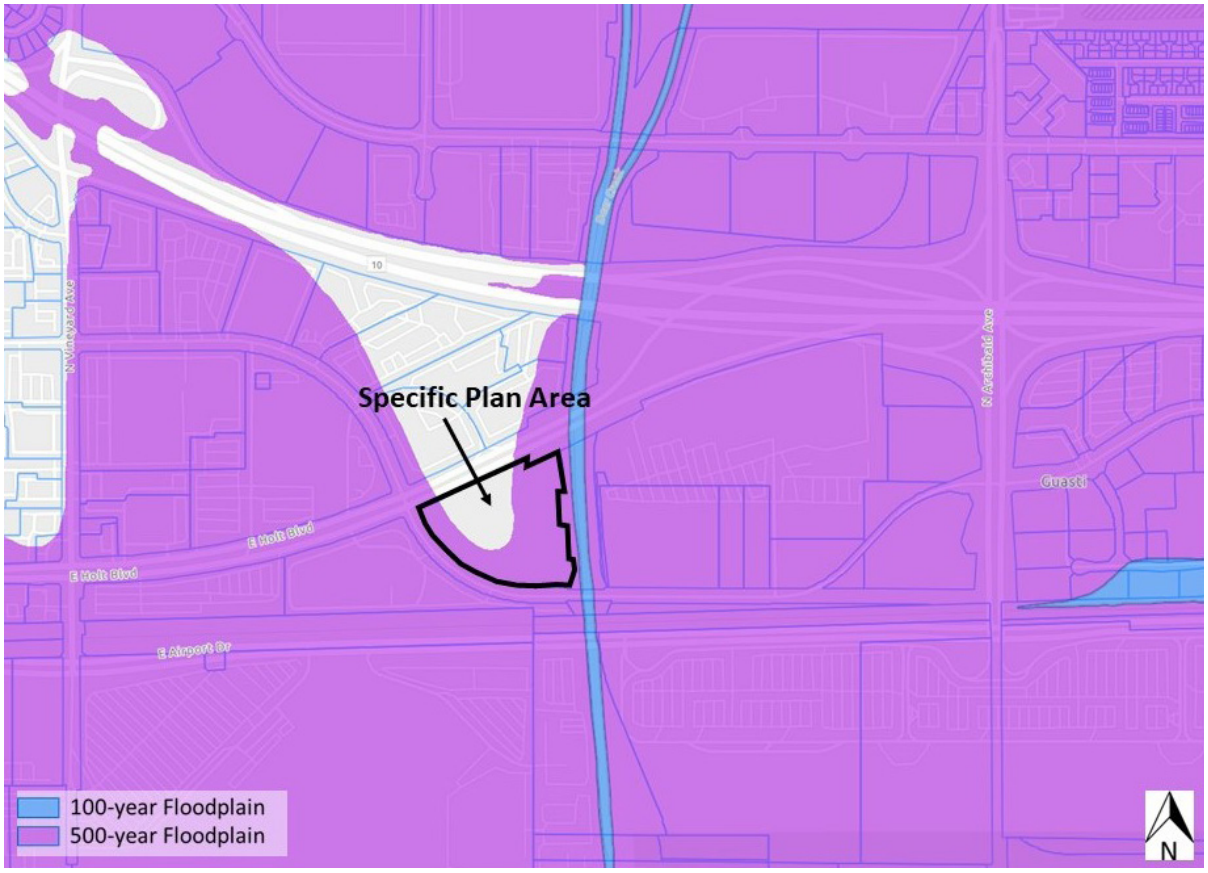
San Antonio Dam is an embankment flood control and debris dam on San Antonio Creek in San Bernardino County, California, about 5 miles (8.0 kilometers) north of Ontario. A potential breach of this dam could inundate most of the City, including the Specific Plan Area (refer to **Figure 12**). The reservoir behind the dam is usually dry but can fill up after large flooding events. The dam is owned by the US Army Corps of Engineers, Los Angeles District. The City periodically coordinates with the dam owners to monitor the condition of the dam.

2.6.3 Existing Storm Water and Drainage

The site is located immediately west of the Cucamonga Creek Channel. This fully improved facility provides regional flood control and storm conveyance to the surrounding area.

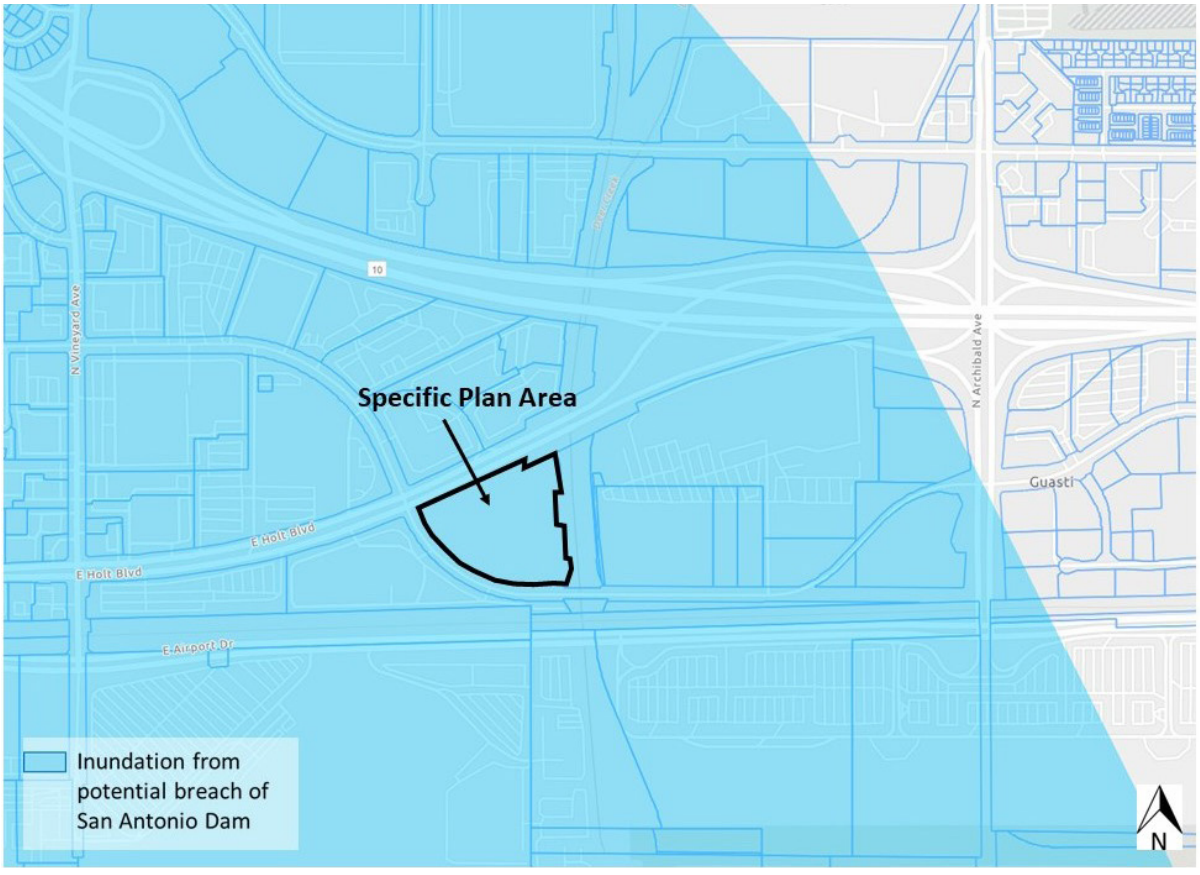
A 108" diameter storm drain extends westerly from the Cucamonga Creek Channel just south of Guasti Road. This facility provides storm conveyance for the adjacent property.

Figure 11: Floodplain



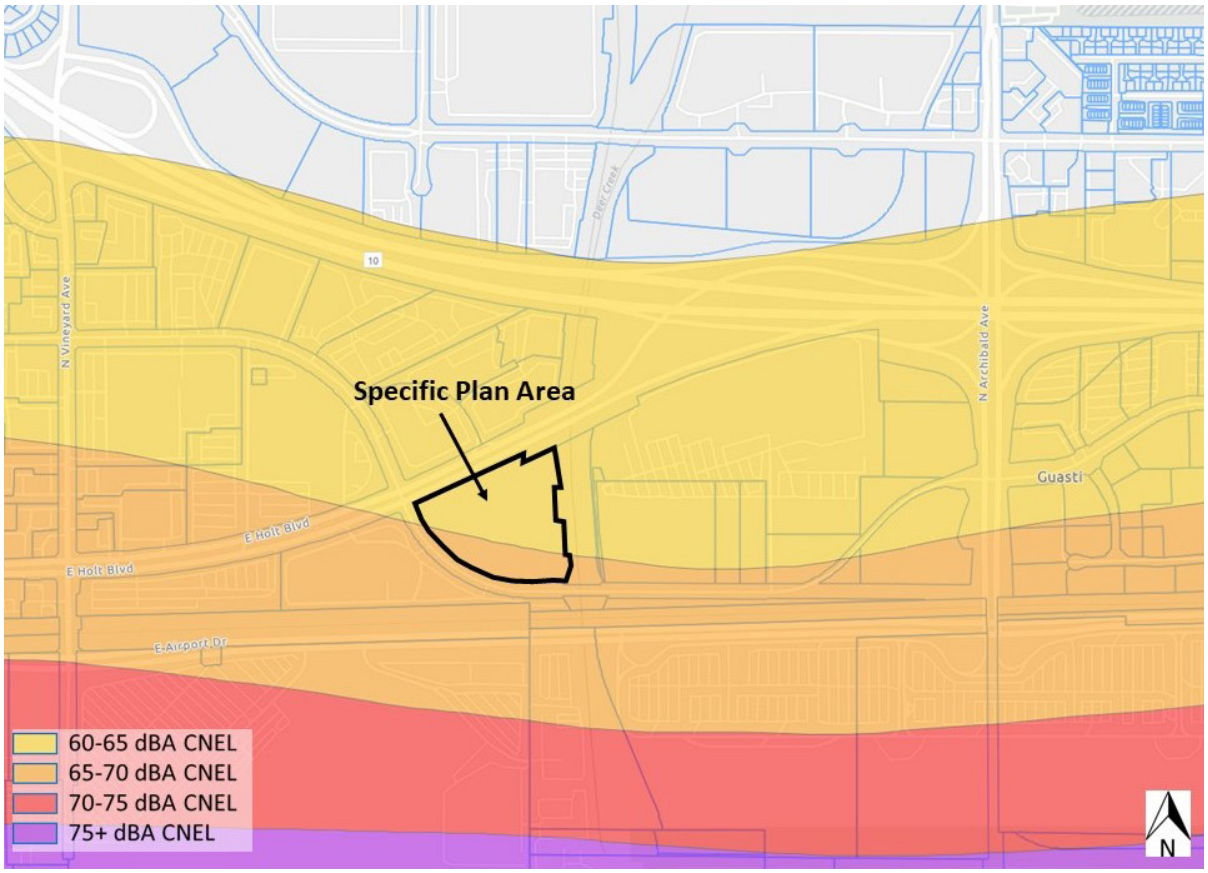
Source: City of Ontario, The Ontario Plan 2050, Safety Element

Figure 12: Dam Inundation



Source: City of Ontario, The Ontario Plan 2050, Safety Element

Figure 13: Noise Levels from Ontario Airport



Source: City of Ontario, The Ontario Plan 2050, Safety Element

The City of Ontario Master Plan of Drainage indicates a future 60" Storm Drain will be constructed within Holt Boulevard along the project frontage.

2.6.4 Existing NPDES Compliance

The project site is currently vacant / undeveloped and not subject to NPDES compliance.

2.7 Noise Levels

The City's Zoning Code provides exterior noise standards for the allowed equivalent noise levels for lodging facilities to be up to 70 dbA. The equivalent noise level is a measure used to represent a constant noise level over a specified period, usually one hour. It is a way of expressing a varying noise environment as a single, constant level for ease of comparison. The General Plan update also provides the existing noise level contours from traffic, railroad, and airport, all of which are within acceptable ranges. Noise from Ontario Airport is shown in **Figure 13**.

03

Development Plan

3.1 Introduction

The Development Plan provides for the development of vibrant communities that allow for a variety of lodging, commercial, entertainment, and open space opportunities that expand the Guasti area and strengthen the City of Ontario's economy. To achieve this, this Specific Plan encourages a variety of complementary land uses and community-accessible amenities and services to establish the Specific Plan Area as a key activity node.

This chapter provides the framework to guide the development in the Specific Plan Area and identifies the land uses, circulation, and infrastructure that implement the vision of the Empire Groves Specific Plan. It is important to note that even though the discussion and exhibits in this chapter are intended to guide development within the Specific Plan Area, the exhibits provided herein are conceptual in nature and may change, subject to the requirements in this Specific Plan.

3.2 Land Use Plan

The Specific Plan consists of one planning area (PA1)–Hospitality Mixed Use (refer to **Figure 14**).

3.2.1 Hospitality Mixed-Use

Hospitality Mixed-Use refers to a development that combines hotel uses, ancillary services and amenities with local-serving commercial uses within a single property. The allowable uses are listed in **Table 3**.

Integrating hotel uses with local-serving retail offers several benefits including, increased foot traffic, enhances guest experiences, and stronger community engagement. Additionally, it can lead to economic benefits and greater sustainability and efficiency. Hotels focus on providing hospitality and amenities for guests, while local-serving retail emphasizes practicality and convenience for both visitors and local residents. Combined, these uses create a dynamic, mutually beneficial environment that enhances the appeal and functionality of both. The area allotted to each use can be found in **Table 1.**

3.2.1.1 Hotel Uses (553,124 SF)

Hotel use is the primary component of Hospitality Mixed-Use and should occupy the majority of the FAR of the development. This includes guest rooms, office space

Figure 14: Land Use Map



Table 1: Buildout of Empire Groves Specific Plan

AREAS	TOTAL SQUARE FEET	NOTES
Hotel Use	553,124	See chapter 3.2.1.1 and Table 3 for details.
Local-Serving Retail	46,876	See chapter 3.2.1.2 and Table 3 for details.
Total Square Feet	600,000	
Note: The project FAR is based on gross project acreage of 10.43. Covered outdoor areas are calculated towards FAR but not towards parking calculation. Utility areas and parking are not calculated towards FAR and include all areas below grade, including parking, central plant, transformer yard, bicycle parking, main electrical/emergency/generator rooms, loading docks, trash rooms, vertical shafts, and stairs as well as spaces above grade including mechanical rooms, vertical shafts, and parking.		

Figure 15: Street Plan



Source: City of Ontario, The Ontario Plan 2050, Mobility Element

for hotel administration, (MAX SF-basic lodging 553,124SF) and may also include restaurant(minimal SF), bars, lounges, day spas, gyms, ballrooms, meeting rooms, and more (see **Table 3**).

At buildout, the total development for the project area will be approximately 600,000 square feet. **Table 1** provides the maximum buildout for each use.

3.2.1.2 Local-Serving Retail Uses (46,876 SF)

Local-serving retail, on the other hand, caters to the daily needs of the local community as well as the hotel use. These businesses may include coffee shops, restaurants, retail, print shops, laundry or tailoring services and similar types of uses (see Table 3). These types of uses can benefit shoppers visiting the surrounding area as well as nearby residents who can access these services by foot.

3.3 Circulation and Access

3.3.1 Vehicular Circulation in the Vicinity

The Circulation Plan complements the Land Use Plan by linking the hotel and retail uses to adjacent land uses and is designed to enhance connectivity and facilitate the movement of various transportation modes. Located south of the San Bernardino Freeway (I-10), the Specific Plan Area is generally bounded by Holt Boulevard to the north, East Guasti Road to the south and southwest, and hotel and light industrial uses to the west and east, respectively.

Holt Boulevard and East Guasti Road provide connections to I-10, which would be the primary regional access point to the Specific Plan Area. These thoroughfares also provide connectivity to Archibald Avenue and North Vineyard Avenue, located a block away to the east and west of the Specific Plan Area, respectively, and permit easy access to the airport to the south of the Specific Plan Area.

3.3.1.1 Potential Roadway Improvements in the Vicinity

While not a part of the Specific Plan, potential roadway improvements in the vicinity could enhance and stimulate future development of the area and improve connectivity between the Guasti District and Airport Metro/Entertainment District in the east as well as with the airport. **Figure 15**, Street Plan of the Mobility Element from The Ontario Plan 2050, reflects the city's vision for developing a comprehensive, multimodal transportation network. This network is designed to meet the mobility needs of residents, visitors, and businesses while maintaining a high quality of life.

Holt Boulevard: Holt Boulevard is a major connector and can be envisioned as a gateway to the Guasti District, as reflected in **Figure 17**. It currently has three lanes on the north side and two lanes on the south side of the roadway. A lane drops from each side as one travels east past the Holt Boulevard and Guasti Road intersection. The roadway has wide medians. It may be improved to make it visually appealing by adding attractive landscaping and shaded trees within the median and on the edges of the roadway. The existing sidewalks could be widened and enhanced, and gaps could be filled with new sidewalks for easier and continuous pedestrian access. Holt Boulevard along the project frontage is an on-ramp entrance for Interstate 10. Required roadway improvements associated with this development will need to be coordinated with the California Department of Transportation (Caltrans). Proposed final roadway design will be subject to City review and approval.

East Guasti Road: East Guasti Road provides ample right-of-way for improvements, as reflected in **Figure 16.** Proposed improvements from Holt Avenue to the east side of the bridge over the Cucamonga Creek include a four-lane roadway, a landscaped median, and a new sidewalk on the northeast side. Final roadway design and limits will be subject to the City's review and approval. There is an existing sidewalk on the southwest side that

covers roughly half of the total frontage, and the entire southwest side of the roadway is existing, while the northeast side is proposed. Additional roadway improvements could include a bike lane and sidewalk with shaded trees, complementing the future development of the area and connecting the Guasti District with the Airport Metro/Entertainment District.

Airport Drive: The Guasti District has many hotels and lodging facilities. A major part of the clientele comes from the airport, south of the Specific Plan Area. The district acts as the gateway to the City from the airport. Hence, investing in Airport Drive improvements and establishing better connectivity with the area north of the airport will both enhance the travel experience for visitors and help with future investments in the area. Airport Drive currently has three lanes in each direction with a median and a sidewalk on the south side of the roadway. The north side is bordered by railroad

Figure 16: Street Section: East Guasti Road

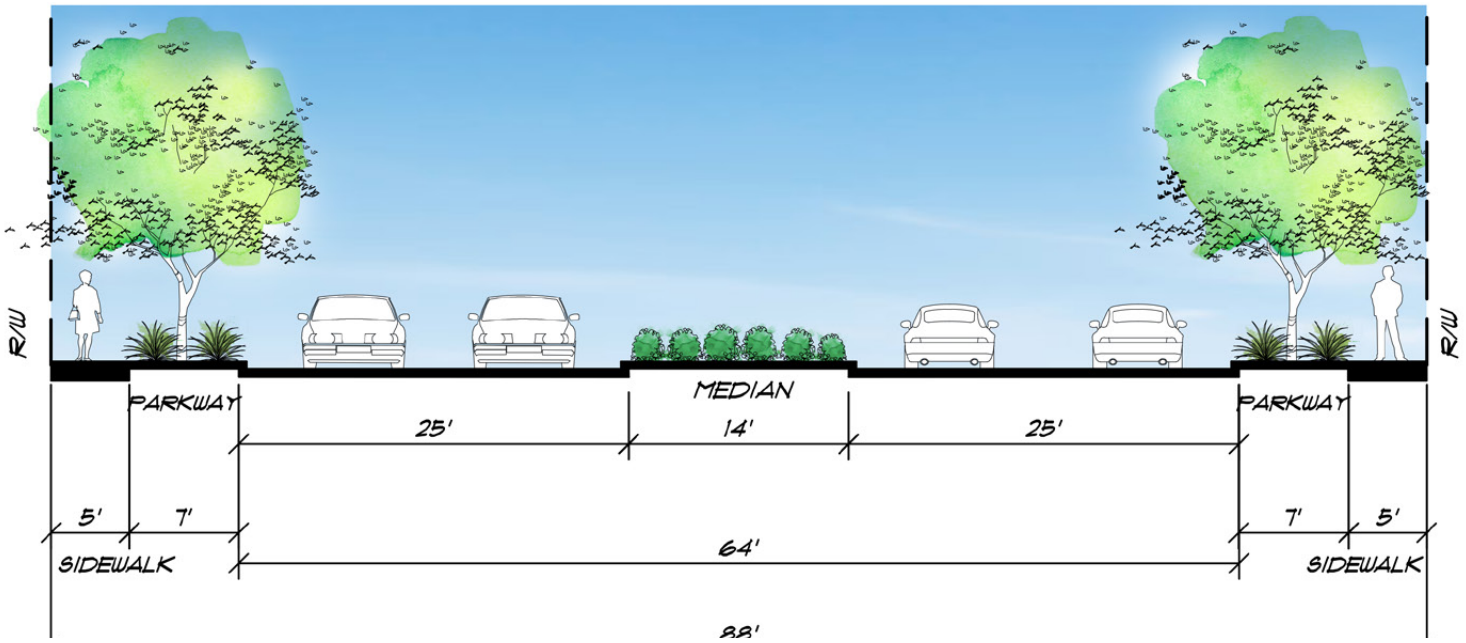
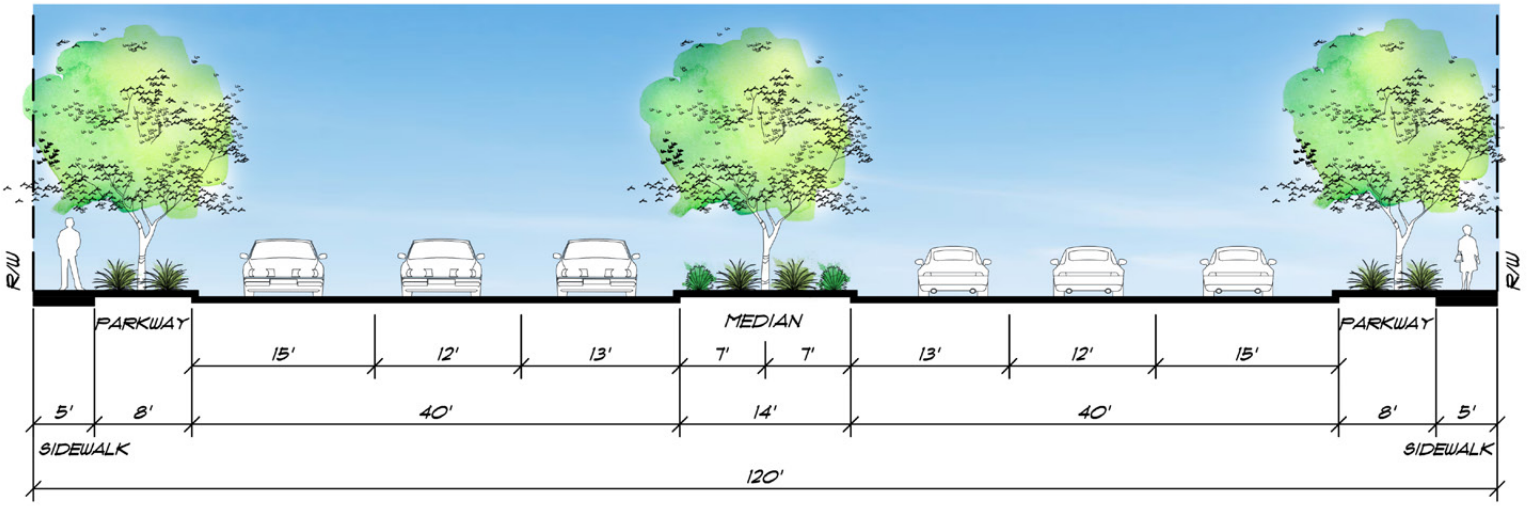


Figure 17: Street Section: Holt Boulevard and Bridge



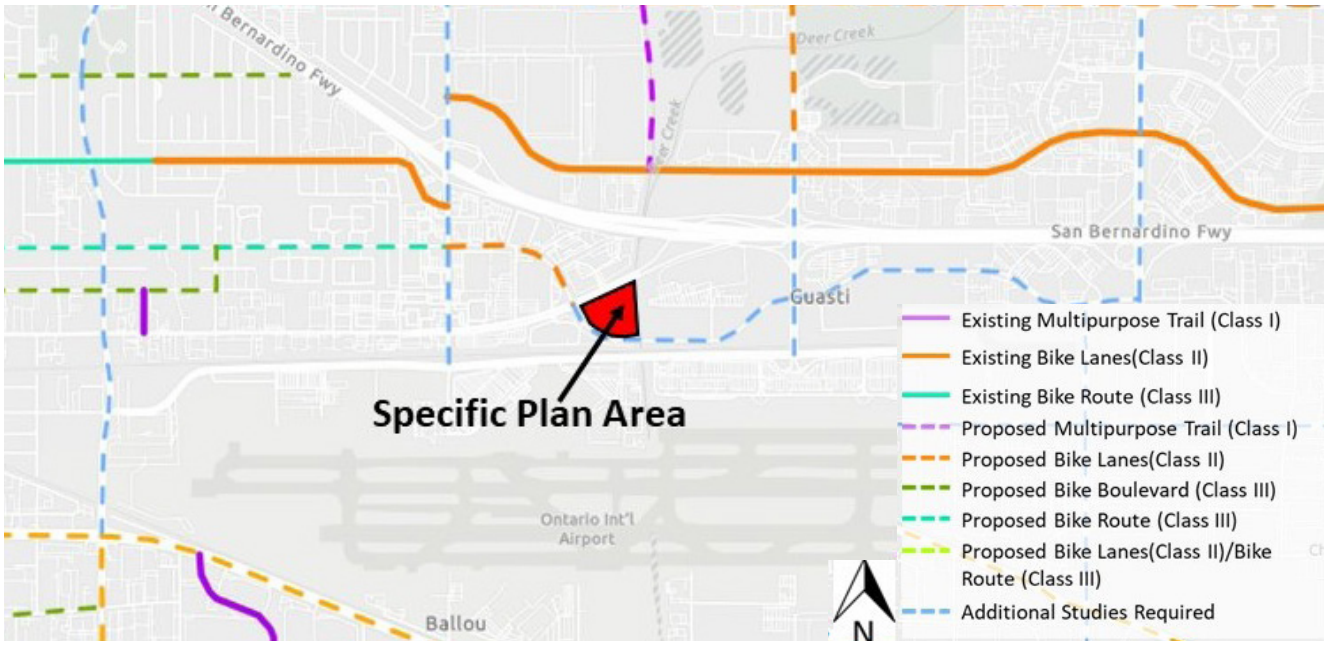
tracks. Enhancements could include adding landscaping to the median and sidewalks and filling any gaps in the sidewalks. Adding landscaping as a buffer between the railroad tracks and the roadway will add to the visual appeal of the roadway. In addition, pedestrian bridges could be added to connect the airport to the Guasti District.

3.3.2 Non-motorized Circulation in the Vicinity

The City is in the process of drafting its Active Transportation Master Plan. However, the City's General Plan Mobility Element provides insights into the current and proposed bike facilities in the City, as shown in **Figure 18.** There are several existing bike facilities north of the Specific Plan Area. These include bike lanes along the Ontario Mills Parkway and Del Norte Avenue. There are several proposed facilities in the vicinity of the Specific Plan Area, including along Guasti Road, Archibald Avenue, and Vineyard Avenue. A proposed multipurpose trail is contemplated along Cucamonga Creek that will eventually connect to the regional trail system. However, the trail currently terminates at the Ontario Mills Parkway. If extended to Guasti Road, this trail can become an important non-motorized link between the Guasti District and the rest of the City.

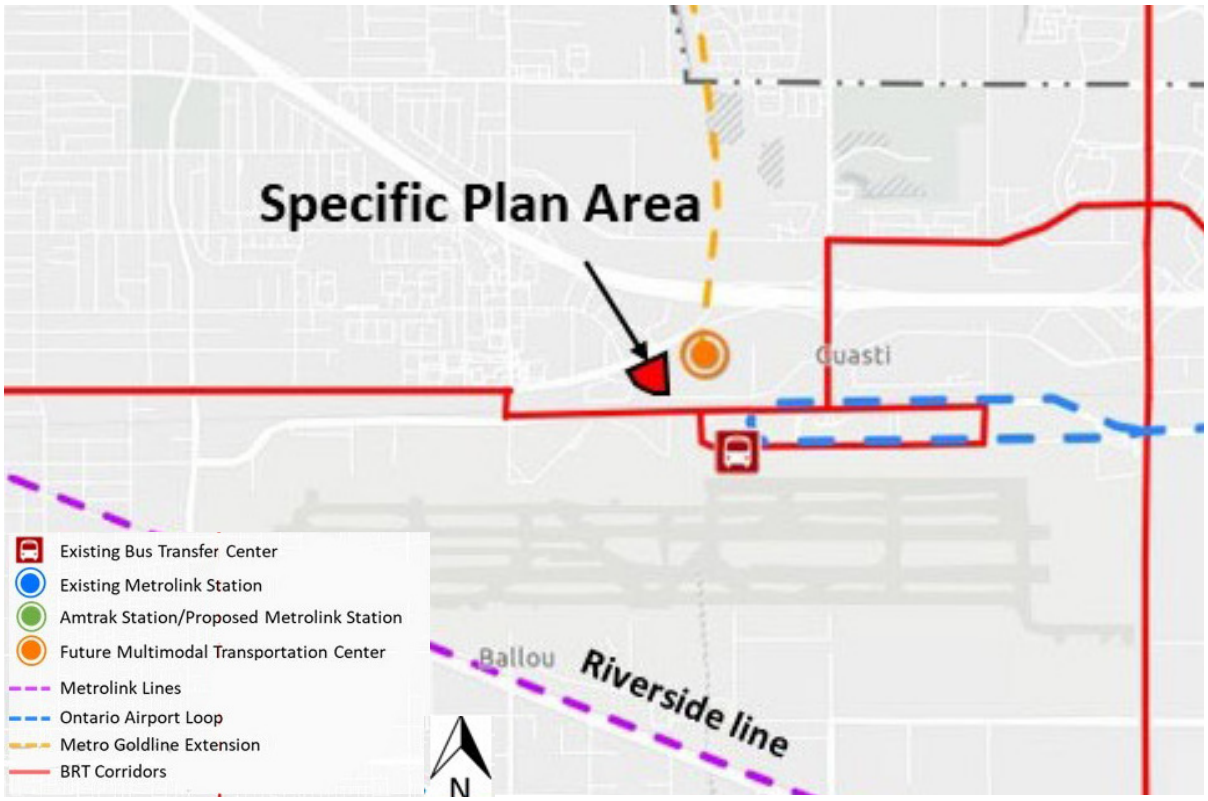
The pedestrian circulation around the Specific Plan Area is provided by sidewalks that currently have gaps at certain locations. The development of the Specific Plan Area will include sidewalks around the site and development of a plaza at the intersection of Holt Boulevard and Guasti Road. However, to enhance pedestrian connectivity, it is essential to envision the roadways in the vicinity with wider, shaded sidewalks, as described above in *Potential Roadway Improvements in the Vicinity* and reflected in **Figures 16 and 17**.

Figure 18: Multipurpose Trails and Bikeways



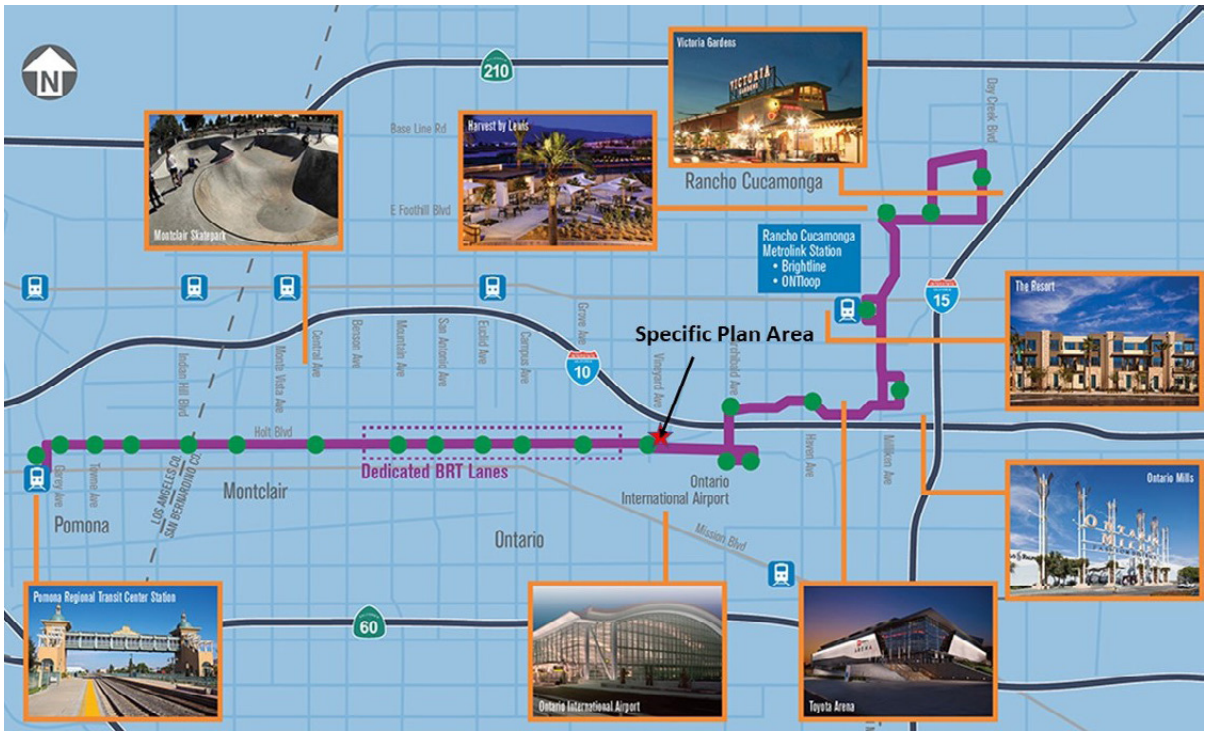
Source: City of Ontario, The Ontario Plan 2050, Mobility Element

Figure 19: Transit Access



Source: City of Ontario, The Ontario Plan 2050, Mobility Element

Figure 20: BRT Route



Source: Guida Geospatial Solutions; San Bernardino County Transportation Authority (SBCTA), West Valley Connector Project, Phase 1.

3.3.3 Transit Access

The Specific Plan Area enjoys ample access to a variety of transit facilities (see **Figure 19**).

Metrolink and Amtrak Stations: Two Metrolink lines serve the Specific Plan Area. South of the site is the Riverside Line, which provides east–west service between downtown Los Angeles and Riverside. North of the site is the San Bernardino Line, which provides east–west commuter rail service between downtown Los Angeles and San Bernardino.

The East Ontario Metrolink Station provides access to the Riverside Line and is the nearest Metrolink station to the Specific Plan Area, approximately 11 minutes by car. This station is on East Francis Street and can be reached via South Haven Avenue. The Ontario Station, an Amtrak station, is approximately 8 minutes away by car from the Specific Plan Area. It is also a proposed Metrolink station for the Riverside Line. This station is on East Emporia Street and can be conveniently reached by taking Euclid Avenue via East Transit Street.

Several stations are located north of the Specific Plan Area along the San Bernardino Line. The closest ones are the Rancho Cucamonga and Upland Stations.

BRT Routes: The West Valley Connector Bus Rapid Transit (BRT), which is under construction, is managed by the San Bernardino County Transit Authority. Phase I of the project is 19 miles and will upgrade a portion of existing Route 61, which runs along Holt Boulevard, adding approximately 3.5 miles as center-running, dedicated bus-only lanes (see **Figure 20**). There will be 21 stations in Phase I that will provide an improved transit connection to ONT and help build transit connectivity by linking ONT, two Metrolink lines (San Bernardino and Riverside), and multiple major activity centers along the route, including Ontario Mills and Victoria Gardens. Headways will be 10 minutes in the peak commute period and 15 minutes off-peak, providing a high level of service to the community.

It will traverse Airport Drive with its nearest station to the Specific Plan Area situated at the junction of Vineyard Avenue and Holt Boulevard. Although there are stations along Airport Drive, they are presently inaccessible due to a railroad between the Specific Plan Area and Airport Drive. A potential pedestrian bridge linking Guasti Road to Airport Drive would establish a direct and convenient route from Airport Drive to the Specific Plan Area.

Ontario Airport Loop: The Ontario Airport Loop project is a proposed tunnel to ONT that will feature a bi-directional system where passengers traveling to and from ONT will be transported in autonomous, zero-emission vehicles on an "on-demand" basis between the Cucamonga Metrolink Station and airport terminals. The project is considering the possibility of utilizing an elevated loop system to traverse Airport Drive, with potential stops along this route.

Metro Gold Line Extension: The current Metro Gold Line extension will reach San Bernardino County with new stations in the cities of Glendora, San Dimas, La Verne, Pomona, Claremont, and Montclair. The current terminus planned for Montclair, however, is just 6 miles short of ONT—a critical airport and economic driver for San Bernardino, Riverside, and parts of Los Angeles Counties. Metro Rail from Glendora to Pomona is currently under construction and is expected to be completed by 2025. Extension of the rail service further east from Pomona to Montclair is expected to be completed by 2028.

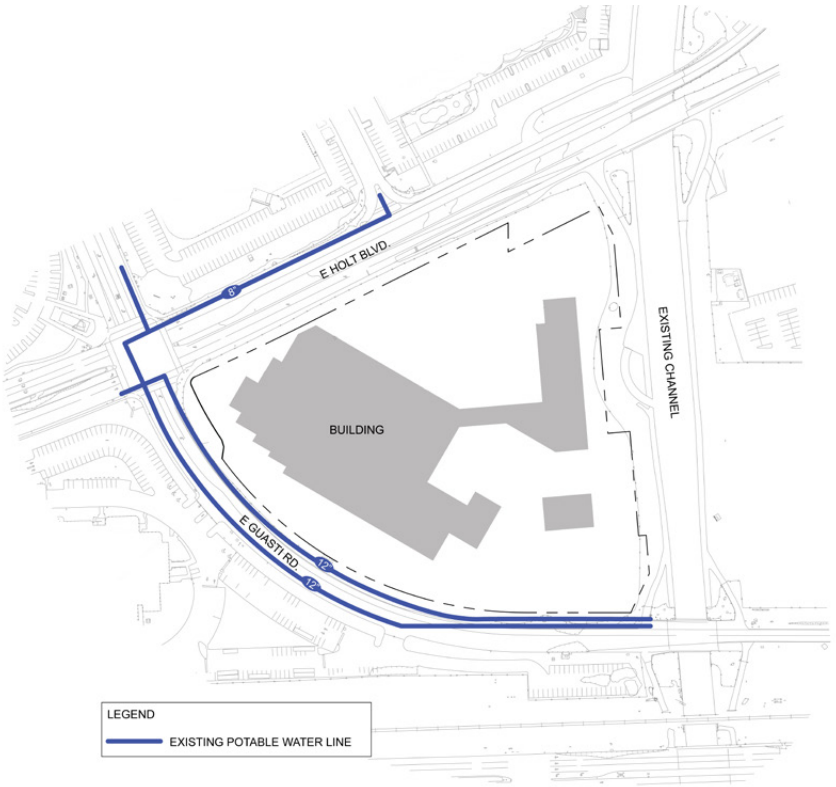
3.4 Infrastructure Plan

3.4.1 Potable Water

The City's ultimate potable water system will consist of five pressure zones. The Specific Plan Area is located within the 1212 Pressure Zone.

Water service to the Specific Plan Area will be provided by the City. Currently, there are water mains in the vicinity of the Specific Plan Area. There is an existing 12-inch water main in Guasti Road along the project frontage, and an existing 8-inch water main in Holt Boulevard along the project frontage, both available for connection. The future potable water system to serve the City is shown in **Figure 21**. Sizing and alignment of the potable water lines will be consistent with the City of Ontario Potable Water System Master Plan and/or a City-approved hydraulic analysis.

Figure 21: Specific Plan Area Potable Water Plan



3.4.2 Sewer

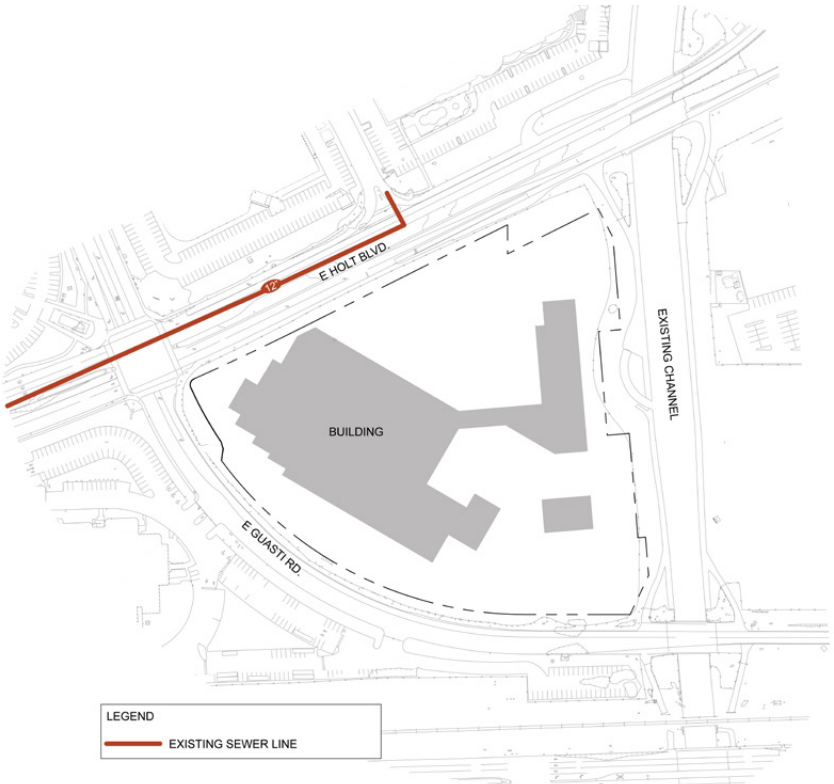
The project will connect to existing sewer mains. Sewer mains are maintained by the City of Ontario and wastewater is treated at the Inland Empire Utilities Agency (IEUA) Treatment Plant. Several regional trunk sewers collect sewage generated in the city and transport it to IEUA's Regional Plant No. 1 and Regional Plant No. 5 for treatment. The City of Ontario is divided into eight major sewersheds. The Specific Plan Area is in Sewershed 3. Sewage is collected by the City's system and generally flows from north to south towards the IEUA Upland Interceptor. The City's Sewer Master Plan is currently being updated.

All required sewer infrastructure will be consistent with the approved master plan. There is an existing sewer main located in Holt Boulevard available for connection. The sizing and alignment of existing and proposed sewer lines are shown in **Figure 22.** Sizing and alignment of the sewer lines will be consistent with the City of Ontario Sewer Master Plan and/or a City-approved hydraulic analysis.

3.4.3 Recycled Water Plan

Currently, there are recycled water mains in the vicinity of the Specific Plan Area, with a point of connection located at the intersection of Guasti Road and Holt Boulevard. Recycled water is provided to the City by the IEUA from its four wastewater reclamation plants. The entire

Figure 22: Specific Plan Area Sewer Plan



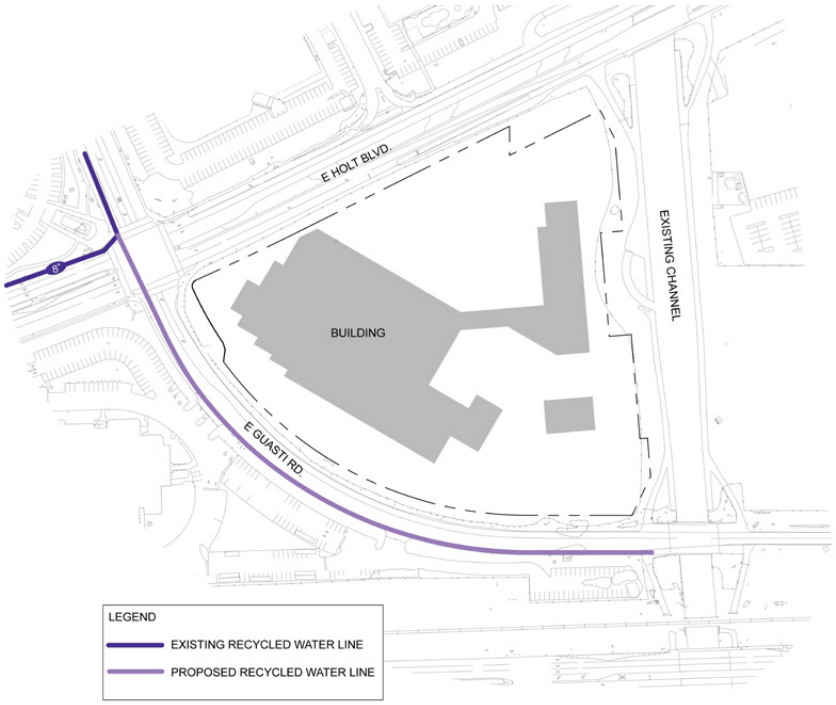
Specific Plan Area is within the City's master-planned 1299 Pressure Zone.

Recycled water infrastructure improvements for the Specific Plan Area require the planning, design, and construction of a 1299 Pressure Zone Recycled Water Master Plan main, which includes installing an 8-inch recycled water main in Guasti Road that connects to the 8-inch recycled water main in Convention Center Way, north of Holt Boulevard, and extends south in Guasti Road, ending east of the Cucamonga Creek Channel. The sizing and alignment of existing and proposed recycled water lines are shown in **Figure 23.** Sizing and alignment of the recycled water lines will be consistent with the City of Ontario Recycled Water System Master Plan and/or a City-approved hydraulic analysis.

3.4.4 Stormwater/Drainage NPDES Compliance

Drainage within the project area will be conveyed via a system of on-site drains to the southeast corner of the site where it will enter a series of underground detention / infiltration chambers. These chambers will provide attenuation of peak flows as well as detaining stormwater for infiltration/treatment as required by the most current San Bernardino County Area-Wide MS4 permit. Flows exceeding the required treatment volume will be conveyed southeasterly across Guasti Road to the existing 108" storm drain pipe, which in-turn conveys flows to Cucamonga Creek.

Figure 23: Specific Plan Area Recycled Water Plan



All Priority Land Use (PLU) areas within the Specific Plan Area shall comply with the statewide Trash Provisions adopted by the State Water Resources Control Board (SWRCB) and trash requirements in the most current San Bernardino County Area-Wide MS4 Permit.

Activities resulting in one acre or more land disturbances are required to obtain coverage under the Construction General Permit (CGP). The owner is the legally responsible person (LRP) of the site and shall have a Stormwater Pollution Prevention Plan (SWPPP) developed and submitted through the SMARTS website at https://smarts.waterboards.ca.gove/smarts/faces/SwSmartslogin.xhtml.

3.4.5 Dry Utilities

Electricity: Southern California Edison provides electricity to the Specific Plan Area and maintains aboveground power lines within the area. During construction, electrical lines will be placed underground. Utilities and maintenance facilities for the hotel will be installed on the first level of below-grade parking at the northern portion of the site.

Natural Gas: The Southern California Gas Company provides natural gas to the Specific Plan Area. As required, additional points of connection to existing gas lines will be provided.

Telephone: Telephone service is offered regionally by telecommunications providers, such as AT&T and Verizon. Infrastructure supporting telephone services will be provided and installed along with other utilities.

Cable: Cable television services are provided to the Specific Plan Area by local area cable providers, such as Time Warner Cable. Infrastructure supporting cable television services will be provided and installed along with other utilities.

Solid Waste Collection: Solid waste collection service will be contracted by the applicant with the City of Ontario Integrated Waste Division. All solid waste collected on-site will be required to comply with federal, state, and local regulations.

Fiber Optic: Fiber Optic broadband communication service will be offered to the Specific Plan area by Ontario Fiber. Infrastructure supporting fiber optic service will be installed.

3.5 Community Services

3.5.1 Fire Protection Services

The Specific Plan Area is served by the Ontario Fire Department. The nearest fire stations to the site are Fire Station No. 8 and Fire Station No. 10. Both fire stations are located within 5 miles from the Specific Plan Area, and each house an engine company and paramedic.

The applicant will work with the Ontario Fire Department, the Ontario Police Department, Public Works, and other City departments to provide appropriate access to the Specific Plan Area in a satisfactory manner that is feasible.

3.5.2 Police Services

The Ontario Police Department provides police protection services in the City of Ontario and will serve the Specific Plan Area. The main police station is located at 2500 S. Archibald Avenue, approximately 5.3 miles south of the Specific Plan Area.

04

Development Standards

4.1 Introduction

Development standards provide the zoning regulations for the Specific Plan Area, while the design guidelines provide design guidance. It is important to make a clear distinction between the two. Development standards are mandatory and are generally quantitative, objective, and measurable in nature, and use the word "shall." Design guidelines are suggestions and are generally qualitative and subjective in nature. They generally use the words "should" or "may."

4.2 Development Standards

4.2.1 Site Development

4.2.1.1 Setbacks

Building setbacks for the Specific Plan Area are shown in **Table 2**.

Projections and Elements into Setbacks:

- Architectural projections and overhangs may encroach into a setback up to a maximum of 3 feet. However, any such overhang or projection that is permanent in nature should have a minimum overhead clearance of 12 feet. With the exception of balconies which shall be allowed to encroach up to 5'. However, architectural projections shall not encroach into the public right- of-way.

- Landscape and hardscape design elements and features such as trees, benches, trellises, fountains, planter boxes, shade structures, fountains, movable/fixed seating, seating walls and steps, boundary walls, and fences are allowed in setback areas. However, at least 6 feet of clear space must be maintained for pedestrian movement.

- Outdoor eating areas are allowed within the setback areas. (Note: the setbacks are from ROW, there is pedestrian movement in the ROW already contemplated)

4.2.1.2 Height

The maximum building height will be regulated by Federal Aviation Administration and the Ontario International Airport Land Use Compatibility Plan, (ONT ALUCP). The allowable building heights for the Specific Plan boundary range from 110 to 140 feet in height. Any structure that is over 90 feet in height will be required to file an FAA Form 7460-1, Notice of Proposed Construction or Alteration and receive a determination of "No Hazard" consistent with the policies and criteria of the ONT ALUCP.

4.2.1.3 Floor Area Ratio

The Multimodal Mixed-use Area, which encompasses the Specific Plan Area, allows for approximately 553,000 square feet of lodging and 1.9 million square feet of office/retail (refer to **2.2.1, Multimodal Mixed-Use** section). The Specific Plan Area plans to use a portion of this allocated square footage for the development of Hospitality Mixed-Use in the project area (refer to **Table 1**).

The total FAR of the entire Multimodal Mixed-Use District shall not exceed 1.0.

- FAR is the ratio of a building's total floor area to the size of the piece of land upon which it is built.

- The FAR excludes soft and hard landscaped areas, subterranean parking, mechanical equipment areas, vertical shafts, and utility areas.

- The FAR includes covered outdoor areas.

4.2.1.4 Lot Coverage

The total lot coverage should not exceed 40 percent of the land area.

Table 2: Building Setbacks

SETBACKS TO PROPERTY BOUNDARY	MINIMUM SETBACK
Guasti Road	Building - 10 feet; Parking - 5 feet
Holt Boulevard	Building - 5 feet; Parking - 5 feet
Cucamonga Channel-Interior Setback	Building 10 feet; Parking - 5 feet
Note: Balconies that are considered private open space, (see section 4.2.4.2 Private Open Spaces below) shall be allowed to encroach up to 5'. Landscaping and water features for passive and active recreational activities are allowed in the setback areas. Temporary structures such as gazebos and other shade structures are also allowed in setback areas.	

4.2.2 Land Use Matrix

Table 3 lists allowable uses for Hotel and Local-Serving Retail, indicating which uses are permitted (P), and conditional review (C) within the Hospitality Mixed Use of the Specific Plan.

- Permitted Use (P) can be established as primary or secondary use without requiring discretionary approval. This includes ancillary or accessory uses that are typically incidental to the main use on the premises.
- Conditionally Permitted Use (C) is permitted upon the approval of a Conditional Use Permit by the Zoning Administrator.
- A land use not listed in Table 3 shall be considered a prohibited land use. For land uses similar to those listed in Table 3, but not expressly stated in this Specific Plan, the Planning Director or his/her designee shall be granted the authority to make a determination of the applicability of similar land uses.

4.2.3 Utilities

4.2.3.1 Mechanical Equipment

- Rooftop mechanical equipment shall be securely fastened to the roof and fully screened with architectural elements consistent with the overall design of the development.

4.2.4 Open Spaces

4.2.4.1 Public Open Spaces

Public open spaces include any sidewalk, landscaping, plaza areas, patios, decks, water features, or other passive recreational areas open to public.

- Public gathering spaces shall be accessible to adjacent uses and from public sidewalks.

4.2.4.2 Private Open Spaces

Private open spaces include any sidewalk, walkways, landscaped areas, plaza areas, water features, balconies, patios, decks and other active or passive recreational areas open only to the users of the development.

Legend: Permitted Use (P), Conditional Use Permit (C)

Table 3: Allowable Land Uses

HOSPITALITY MIXED-USES	ALLOWABLE USES	NOTES
Hotel Uses		
ATM	P	
Automobile Rental and Leasing Services	C	▪ No on-site vehicle storage allowed.
Banquet Halls and Conference Facilities	P	
Business Center	P	
Cafés and Restaurants (Alcohol sales not permitted)	P	▪ Includes Bakeries and Coffee Shops.
Cafés and Restaurants (Alcohol sales permitted)	C	▪ Includes Bakeries and Coffee Shops.
Child Day Care facilities	C	
Convenience Stores (Alcohol sales not permitted)	P	▪ Includes Sundry Shops. ▪ Catered towards guests.
Convenience Stores (Alcohol sales permitted)	C	▪ Includes Sundry Shops. ▪ Catered towards guests.
Day Spa and Massage studio	C	
Fitness Center and Gym	P	
Florist and Gift Shop	P	
Guest Services	P	▪ Includes Concierge, Baggage, and Valet Services.
Hotel Administrative Offices	P	
Hotel Lodging	P	
Live Entertainment	C	▪ Includes Night Clubs, Dancing, VIP Rooms, and Similar Uses.
Lounges and Bars	C	▪ Includes Lounges, Bars, or Rooftop Bars.
Outdoor Dining Areas (Alcohol sales not permitted)	P	
Outdoor Dining Areas (Alcohol sales permitted)	C	
Wireless Telecommunications Facilities	C	▪ Includes integrated building design. ▪ Must be Roof-Mounted. ▪ See Chapter 5.03.420 for Development Code.

Legend: Permitted Use (P), Conditional Use Permit (C)

HOSPITALITY MIXED-USES	ALLOWABLE USES	NOTES
Local-Serving Retail (Typical with Hospitality Mixed-Use)		
Antique Stores	P	
Art Gallery	P	▪ Includes Art Galleries or Art Supply Stores.
Banking/ATM	P	
Automobile Rental and Leasing Services	C	▪ No on-site vehicle storage allowed.
Beauty Services	P	▪ Includes Barber Shops, Beauty Salons, Nail Salons, Tanning Salons, and other similar uses.
Beauty Supply Store	P	
Bicycle/Segway Rentals	P	▪ Includes e-Bicycle and e-scooter Rentals or similar personal recreation devices.
Boutique or Specialty Wines and Liquor Stores	C	
Brew Pub and Micro-brewery	C	
Business Center	P	▪ Includes Mail/Shipping services, e.g. Fed Ex, UPS, and Amazon Locker.
Cafés and Restaurants (Alcohol sales not permitted)	P	▪ Includes Bakeries and Coffee Shops.
Cafés and Restaurants (Alcohol sales permitted)	C	▪ Includes Bakeries and Coffee Shops.
Clothing and Accessory Stores	P	
Convenience Stores (Alcohol sales not permitted)	P	▪ Includes Sundry Shops. ▪ Catered towards guests.
Convenience Stores (Alcohol sales permitted)	C	▪ Includes Sundry Shops. ▪ Catered towards guests.
Fast-Food Restaurants	P	▪ Drive-throughs not allowed.
Fitness Studio	C	
Food Kiosk	P	▪ Includes two or more food or beverage concession stands that operate together as a commercial establishment. ▪ Alcohol sales not permitted.
General Office	P	▪ Includes office spaces related to Administrative and Support Services, Retail, Finance and Insurance Offices, Management of Companies and Enterprises, Travel agency/arrangements, and Professional Services.

- Private open spaces can be located on upper floors and rooftop.

- Balconies, if provided, shall have a minimum area of 30 square feet and a minimum dimension of 5 feet length and width.

- As noted above in Table 2: Building Setbacks, balconies shall be allowed to encroach a maximum 5 feet into a required front, side, or rear yard setback.

4.2.4.3 Applicable to Both Public and Private Open Spaces

- Pedestrian zones designed to enhance access to outdoor public amenities must be identifiable by using robust, easy-to-maintain surface materials, such as decorative pavers or other comparable architectural enhancements.

- Pedestrian areas should be compliant with the Americans with Disabilities Act.

- Alternative sidewalk materials within public right-of-way and for sidewalks used for public access shall be subject to City review and approval.

4.2.5 Parking

4.2.5.1 Off-Street Parking

- 1.5 parking spaces per every 1,000 square feet of Hospitality Mixed-Use development shall be provided. Utility areas, parking, and covered outdoor areas shall be excluded from parking calculations.

- Up to 100 percent of parking can be provided as valet parking by a hospitality mixed use project.

- Off-street parking design standards and parking lot lighting shall comply with Sections 6.03.045 and 6.03.050 of the Ontario Development Code, respectively.

- Parking spaces specifically designated and conveniently located for fuel-efficient vehicles shall be provided in conjunction with development projects pursuant to current regulations contained in CALGreen (California Code of Regulations Title 24, Part 11).

- A parking analysis shall be provided with the entitlement package.

- Spillover parking may be provided off-site no more than one-half mile away from the development's main entrance. Parking analysis and an agreement with locations shall be provided.

- All parking facilities must have clearly designated markings for individual parking stalls, drive aisles, approach lanes, and maneuvering areas to facilitate efficient traffic flow.

- Digital parking guidance signs shall be installed for hotel parking to indicate the location of available parking spaces by level and assist in directing vehicles to available parking spaces.

4.2.5.2 Bike Parking

- Bicycle parking facilities, including bicycle racks, lockers, and other secure facilities, shall be provided in conjunction with development projects pursuant to current regulations contained in CALGreen (California Code of Regulations Title 24, Part 11).

- All bicycle parking facilities shall have lighting that provides high visibility. Lighting shall be maintained in operational condition at all times.

4.2.5.3 Loading

- Off-street loading standards shall comply with Section 6.03.055 of the Ontario Development Code.

- Each off-street loading space and its access shall be designed to avoid undue interference with the public use of streets and private drives and shall not be part of the off-street parking area required for each particular use.

- Loading areas shall be screened, enclosed, and/or located appropriately to minimize potential nuisances, such as odor and noise.

- Loading areas shall be clearly marked as being distinct from required parking spaces and aisles.

05

Design Guidelines

5.1 Introduction

These guidelines establish a clear set of qualitative guiding principles that form a basis for the City of Ontario to review the Specific Plan project. The guidelines serve two primary purposes:

1. To establish high-quality design for new development.

2. To facilitate the design review and planning approval process relative to building configuration and architecture that is appropriate for this development.

The guidelines are not intended as a literal requirement; instead, they serve as a framework for the design review process and cover key elements including building mass, entrances, façade design and composition, roof forms, materials, and colors. The City shall use the guidelines as part of the formal design review process, and qualitative findings shall be made by the decision-making body demonstrating such compliance.

5.2 Design Guidelines

5.2.1 Massing and Elevation Treatment

- Building facades should avoid a continuous single plane and break monotony by using at least two planes.

- The bottom levels and the top two levels may be treated differently in architectural style compared to other floors to break the monotony of elevation. See example in **Figure 24**.

- Vertical elements should be used to provide rhythm and continuity between the floors. See example in **Figure 25**.

Figure 24: Elevation Treatment



Figure 25: Vertical Elements Providing Continuity and Rhythm



- To achieve good building articulation, beyond the building facade and diversity of planes, there should be at least one additional color and one additional material across an elevation.

- To minimize heat gain, shading devices should be provided for glazed surfaces, particularly on the east, south, and west sides of the building. Shading can take the form of recessed windows using colonnade-type structure or devices fixed to the exterior wall that are harmonious with the building materials or color.

- Building massing shall consist of a mix of building heights and incorporate vertical plane breaks, changes in building/ridge height, or other accent roof forms to create visual interest.

- Free-standing architectural treatment may be used in front of the building walls to create layering.

- When used, parapet walls shall incorporate side/rear elevation returns to preclude an unfinished, "false front" appearance.

- Exposed downspouts and overflow holes on building front facades are prohibited.

- All rooftop mounted equipment shall be screened from public view using materials complementary to those used on the main structure (see Subsection 6.C.1.f, Functional Elements).

5.2.2 Elevation Material

- The elevation materials should be durable and require low maintenance.

- As far as possible, materials should be selected that can be reused or recycled easily at the end of their lives using existing recycling systems.

- Efficient and right-sized building design

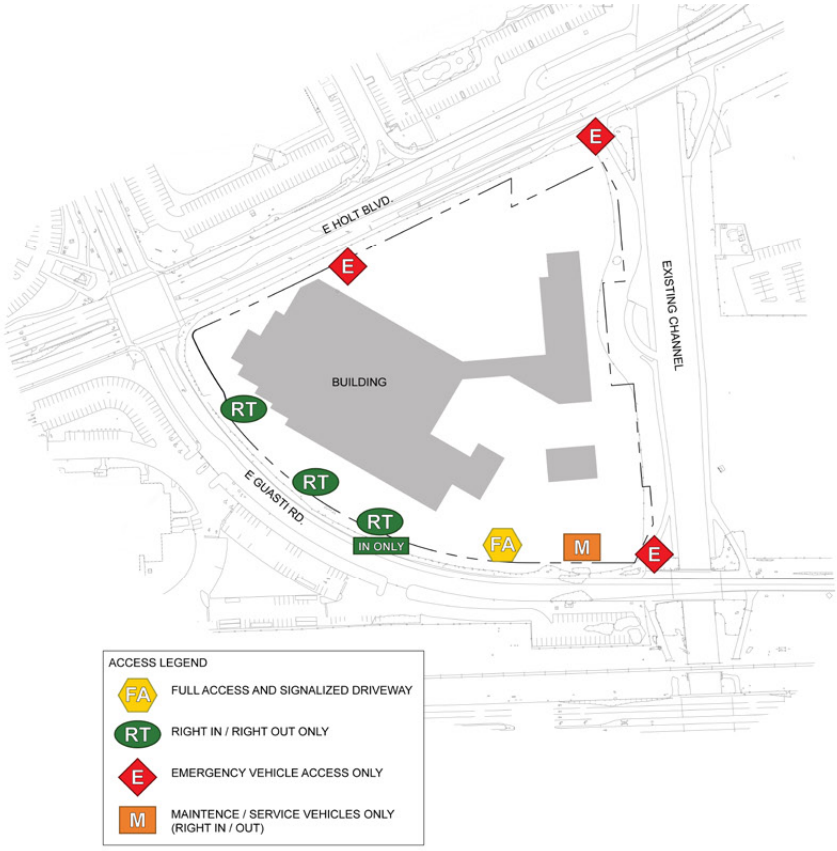
should be used to minimize wastage of materials.

5.2.3 Site Planning and Circulation

The following site planning and circulation design guidelines for hospitality mixed use promote aesthetic quality, efficient land use, and public safety. See **Figure 26** for an example illustrating safe ingress and egress options, including designated entrances for emergency vehicle and separate delivery access. The final improvement plans reflecting the location and details of these improvements will be reviewed and approved by the City Engineer.

- Service and delivery/loading zones should be separated from visitor, guest and customer parking, and pedestrian walkways where feasible. This helps reduce the risk of accidents by keeping heavy vehicles and delivery activities away from areas where pedestrians and regular vehicles are present.
- Ensure that all areas are accessible to emergency vehicles and personnel, with clearly marked routes and entrances.
- The main access to the hotel as well as to the hotel parking (basement levels 1 and 2) is from Guasti Road. The main access to the hotel will be full access with a traffic signal.
- Additional right-of-way may be required to accommodate an additional left turn and right turn lanes at intersection based on required queue lengths per the Traffic Impact Analysis/Specific Plan EIR.
- Additional traffic signals may be required based on locations of future access points and as identified in the Traffic Impact Analysis/Specific Plan EIR.

Figure 26: Site Access



5.2.4 Landscape Guidelines

The landscape will play an important role at many levels, primarily to soften transitions from the ground plane to the vertical plane; offer screening from the adjacent neighborhood; and add color and texture to the development. Examples of landscaping can be seen in **Figure 27** and **Figure 28.**

Below are general landscape guidelines.

- Standards for the provision and maintenance of landscaping within the Specific Plan Area shall comply with Section 6.05.010: *Landscape Design Principles*, Section 6.05.045: *Landscape Development Standards*, and Section 6.05.050: *Landscape Maintenance* of the Ontario Development Code.
- Trees and plant material should either be native to Southern California or adaptive and from regions with similar climates.
- Invasive plant species should be prohibited.
- All plants should be water-conserving, drought-tolerant plants to the maximum extent practical
- Trees, shrubs, hedges, and deciduous vines should be used to minimize solar heat gain during the summer and maximize heat gain during the winter.
- Tree branches should be pruned to at least 7 feet from the ground for street trees.
- Landscaping should not obstruct pedestrian movements and should be designed in a way so as not to block visibility of businesses and signage.
- Landscaping should not obstruct the sightlines of motorist or pedestrians.

5.2.4.1 Paving Materials

Paving materials contribute significantly to the overall outdoor experience. The style of landscape, maintenance requirements, and the specific purpose of the paved area should be considered when selecting paving materials.

- Paving materials should complement the architectural style as well as elevation materials of the building.
- Paving materials should serve both functionality and aesthetics. For example, slip-resistant concrete, decorative pavers, decomposed granite, or natural stone may work well in walkways and garden paths while bluestone, brick, or colored concrete may be more welcoming for a patio.
- Materials should be chosen that withstand weather conditions, foot traffic, and other wear.
- A combination of paving materials should be used to identify and define pedestrian paths and to provide variety. Changes in paving materials should be employed to demarcate areas, for example, to separate pedestrian walkways from other gathering spaces.

Examples of paving materials are shown in **Figure 29**.

5.2.3.2 Planting Materials

- Landscaping in the project area shall be done in accordance with Section 6.05—Landscaping, of the Ontario Development Code.
- All landscaping in the Specific Plan Area must be drought tolerant and California friendly.
- **Figure 30**, **Figure 31**, and **Figure 32** show examples of appropriate planting materials that may be used for landscape improvements within the Specific Plan Area.

5.2.5 Lighting

Effective site lighting is crucial for ensuring safety, enhancing visibility, and promoting energy efficiency in various environments. The following guidelines outline best practices for implementing a comprehensive lighting strategy that addresses these goals. Adherence to these principles helps create well-lit, secure, and aesthetically pleasing spaces that meet the needs of all users.

Figure 27: Specific Plan Area Landscaping Examples



Figure 28: Rooftop Landscaping Elements

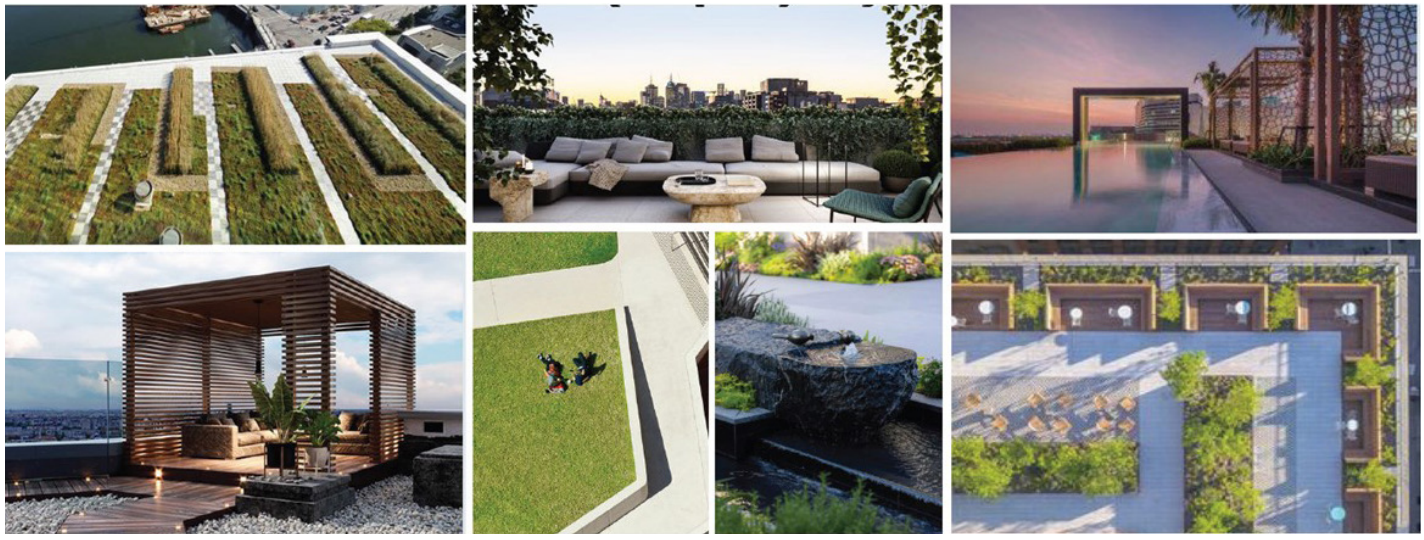


Figure 29: Examples of Paving Materials



Granite Paver
Large format dimensional
Color: Beige, Light Gray, Dark Gray Black
Finish: Flamed



Granite Cobblestone
Size: 4" x 4"
Pedestrian & vehicular thickness
Color: Dark Gray, Gray, Brown
Tumbled finish



Cast in Place Concrete
Fine aggregate
Color: Beige, Warm Gray,Light Gray, Gray,Medium Gray
Finish: Flamed
Finish: topcast #3



Sandstone Pavers
Large format dimensional Natural stone
Color: Light Cream, Light Gray
Finish: Sandblasted



Limestone Pavers
Large format dimensional
Natural stone
Color: "Desert White"
Finish: Sandblasted



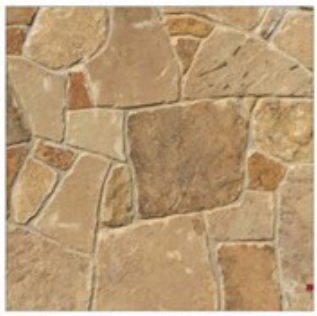
Asphalt



Travertine Pavers
Large format dimensional
Natural stone
Finish: Flamed



Limestone Pavers
Large format dimensional Natural stone
Color: Light Gray, Gray
Finish: Antique surface finish



Sandstone Flagstone
Natural stone
Color: Buff



Decomposed Granite
Stabilized
"Palm Springs Gold"



Large Aggregate Cast In Place Concrete
Color: Gray
Finish: Exposed Aggregate



Wood Decking
Modified Ash or Pine wood
Locally sourced



Encaustic Concrete
Pattern: Diagonal
Color: Gray, Light Gray



Crushed Stone
"Apache Sunset"

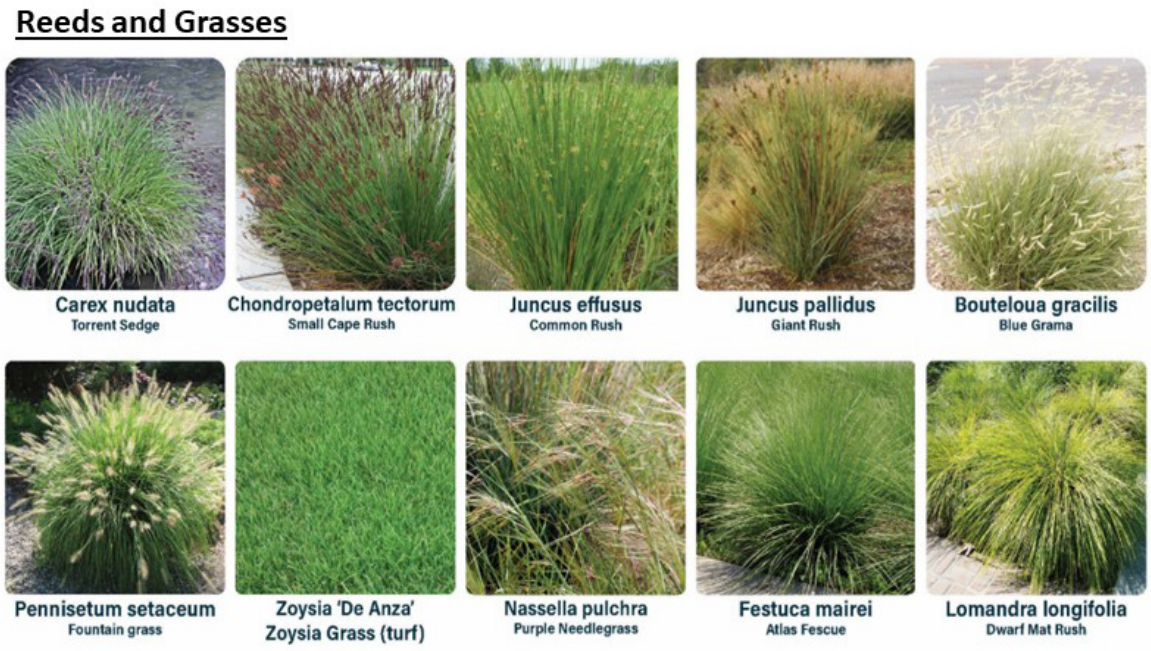
Figure 30: Shrubs and Ground Cover Palette



Figure 31: Evergreen, Deciduous, Flowering, and Palm Tree Palette



Figure 32: Reeds and Grasses Palette



The design, technology, and required photometrics will be determined during the final design stage. The fixture style, color and material should be decided in conjunction with other elements, such as benches and waste receptacles, to create a coordinated look and feel within the development. Below are some guidelines for selection and placement of lighting fixtures.

- Uniform lighting distribution should be employed to reduce dark spots and improve overall visibility.
- Adequate lighting should be provided along pathways, walkways, and pedestrian areas to ensure safe navigation. Use of low, bollard-type lighting and/or landscape accent lighting is encouraged, especially in pedestrian areas.
- Lighting should be provided in all parking, vehicular, and pedestrian circulation areas, and loading and storage areas.
- Site lighting should not be directed off-site. Light spill to the neighboring areas should be minimized where feasible.
- Shielded fixtures that minimize sky glow, glare, and light trespass should be used. While up-lighting may be allowed to accentuate certain architectural features and landscaping, care should be taken to make sure that such features minimize sky glow.
- Lighting fixtures should complement the façade and be of a style that suits the architectural style of the building.
- The use of energy-efficient light-emitting diode (LED) lighting fixtures should be considered to reduce energy consumption and maintenance costs.
- Motion sensors should be installed where appropriate to activate lighting only when needed, promoting energy conservation.
- Lighting provision during project construction should be in accordance with Ontario Municipal Code, Title 4, Chapter 11, Section 4-11.11, *Construction site security provisions.*

5.2.6 Sign Program

Informational signs may be installed throughout the Specific Plan Area to provide information about the businesses, such as development name, logo, conference center, and retail uses as well as for general advertising or marketing purposes. Other directional and wayfinding signage may be provided in addition to informational signs. Below are the signage guidelines to assist with the review and approval of proposed project signage. An exhibit detailing the locations and types of signs will be required as part of the review and approval process for the project's sign program which shall comply with Chapter 8 of the City of Ontario's Development Code, as further outlined in Chapter 5.2.6.2 Sign Program Approval Process, herein.

Digital Advertising Signs are allowed integrated into the design of the building. The Digital Advertising Signs may display products, brands, and businesses associated with the commercial uses in the development as well as offsite advertisements, City sponsored events, and public service announcements. An approved Development Agreement or Master Sign Program and user agreement shall be required in accordance with the Ontario Development Code to establish development standards for design, approved content, sign area, location and use.

5.2.6.1 Signage Guidelines

- Signage may display messages or images utilizing a series or grid of lights that may be changed by electronic means, including cathode ray, LED display, plasma screen, liquid crystal display (LCD), LED embedded, architectural glass fiber optic, or other electronic media or technology.
- Signs may be illuminated by external and/or internal light sources.
- Use of exposed neon lighting and fiber optics shall be prohibited.
- Signage colors, materials, and finishes shall complement those used on the architecture on-site.
- No sign shall be installed, relocated, or maintained so as to prevent entry or exit out of any door.
- No sign installation shall create a safety hazard by obstructing views of pedestrian and vehicular traffic.
- Any sign installation in a pedestrian pathway shall leave a clear 5-foot space for pedestrian movement.
- No signs shall be located within a required easement unless an encroachment permit has been authorized by the affected utility.
- No sign shall obstruct access to fire hydrants, fire department connection, or fire department access roads.
- Signs that audibly advertise, identify, or provide direction to a use or activity are prohibited.
- Signs exhibiting or displaying content of an obscene, indecent, or immoral nature or unlawful activity are prohibited.
- Entry monument signage may be used to identify each development in the Specific Plan Area. Entry monuments shall be designed in accordance with City of Ontario Traffic and Transportation Guidelines for monument placement.
- Signage shall be employed to identify a center and tenants within a center, direct vehicular traffic, and provide on-site wayfinding for pedestrians.
- Each business is permitted one wall sign on each side that is visible from the street, size and placement of these signs will be reviewed as part of the sign program approval process.

5.2.6.2 Sign Program Approval Process

The developer will submit a sign program for projects in the Specific Plan Area in accordance with City requirements. The discretionary approval of a sign program will be in accordance with the of the City of Ontario Development Code.

Deviations from the sign program may be allowed to accommodate the design guidelines in Section 5.2.5 Signage Guidelines of this document.

The developer will provide the following to the City:

1. Completed sign program application and filing fee.

2. Three copies of the sign program. The sign program shall be prepared in 8½" X 11" or 11" X 17" format, and shall include the following:

   a. A master plan, drawn to scale, delineating the site proposed to be included in the sign program and the general location of all signs.

   b. Drawings indicating the exterior surface details of all buildings within the site upon which wall signs, directory signs, or projecting signs are proposed to be located.

   c. Proposed color schemes of the signs.

5.2.7 Privacy and Security Screening

Privacy screening or fencing is designed to shield a property from external view, preventing onlookers from seeing into private spaces of the development. They are intended to safeguard a property by preventing unauthorized entry, trespassing, or intrusion.

- Peripheral walls and fences shall comply with Section 6.02.025 of the Ontario Development Code.

- Landscape screening, walls, or fencing shall be a minimum of 6 feet and a maximum of 8 feet high.

- Walls should use brick, slump stone, tile, textured concrete, stucco on masonry, or steel framing that is complementary to the building materials used in the façade of the building. Plain concrete block walls (i.e., precision block) or chain-link fencing with inserts are not permitted.

- Landscape hedges should be at least 2 feet wide.

- Wall, wrought iron, tubular steel fencing, or other transparent type of fencing or walls should use decorative columns, pilasters, or other architectural elements to provide relief and break the monotony.

- All non-transparent perimeter walls and/or fences should be treated with anti-graffiti paint or vines on the roadside and should incorporate landscaping whenever possible.

06 | Implementation

6.1 Applicability

The provisions and regulations contained in this Specific Plan provide the standards for land uses and development located within the Specific Plan Area. The Specific Plan supersedes otherwise applicable City of Ontario development standards and regulations unless stated otherwise in this document. Whenever the provisions and development standards contained in the Specific Plan conflict with those contained in the City of Ontario Zoning Code, the provisions of the Specific Plan shall take precedence. Where the Specific Plan does not address such provisions, the City of Ontario Zoning Code shall apply.

6.2 Severability

In the event that any provision of this Specific Plan or its application to any person or circumstance is held to be invalid or unconstitutional by any court of competent jurisdiction, such portions shall be deemed separate, distinct, and independent, and shall not affect the validity of the remaining provisions of this Specific Plan or applications thereof, which can be implemented without the invalid provision or application.

6.3 Interpretation

The Planning Director or his/her designee is authorized by the City of Ontario to interpret, administer, and enforce the provisions of the Empire Groves Specific Plan. The provisions of this Specific Plan shall be interpreted in a manner consistent with the goals, policies, purpose, and intent established in the Empire Groves Specific Plan.

6.4 Development Review

The procedures and regulatory provisions necessary to administer the development review procedures for applicable properties, structures, and uses located within the Empire Groves Specific Plan Area shall be subject to the requirements as set forth herein and in accordance with Chapter 6.0: Development and Subdivision Regulations of the City of Ontario Development Code.

The Specific Plan is reviewed by the Planning Director or his/her designee and Development Advisory Board. Any suggested revisions will be discussed and made as appropriate. It will then be reviewed by the City of Ontario Planning Commission and approved and adopted by the City Council. Once adopted, the Empire Groves Specific Plan forms the legal framework for the evaluation of development applications.

6.5 Financing

All on-site improvements will be undertaken and financed by the developer. The costs for related off-site improvements shall be the responsibility of either the developer or the City as defined further in the conditions of approval and Development Agreement.

6.6 Maintenance Responsibilities

Maintenance of all improvements within the Specific Plan Area, including private/quasi-public open space and recreation facilities; private driveways; circulation; landscape; and WQMP, BMPs, and private drainage infrastructure (underground infiltration chambers and CDS Units) will be the responsibility of the applicant. Maintenance of the public ROW including sidewalk areas in the immediate vicinity of the Specific Plan Area will also be the responsibility of the City.

6.7 Specific Plan Amendments

Amendments to the Empire Groves Specific Plan may be requested by the applicant or by the City at any time pursuant to Section

65453(a) of the California Government Code. Amendments shall be processed pursuant to the provisions of the Government Code for specific plan amendments. In the event the proposed amendment requires supplemental environmental analysis pursuant to CEQA, the applicant will be responsible for preparation of the necessary CEQA documentation. Below are the processes of minor and major amendments to this Specific Plan.

6.7.1 Minor Amendments

Minor amendments to the development standards and design guidelines of a Specific Plan are permitted under City of Ontario Municipal Code Sec. 4.02.080. These amendments require a discretionary review process, which can be initiated by either the developer or the City of Ontario. Approval may be granted by the Planning Director or their designee, as specified in the Ontario Development Code, Division 2.02, Table 2.02.1, (Section B, item 12). Any modifications must align with the intent of the originally approved Specific Plan, be in substantial conformance with it, and not be detrimental to public health, safety, and welfare. No further approval will be necessary.

Some examples of minor amendments are listed below.

- Changes to Specific Plan boundary, provided the total acreage of the affected area does not increase or decrease the total acreage by more than 15 percent.
- Additions, deletions, or modifications to Table 3, Allowable Uses, which lists the permitted and conditionally permitted uses in the Specific Plan Area, provided the Planning Director determines the changes to be consistent with the objectives and intent of the Specific Plan and therefore minor.
- Minor adjustments to design guidelines including conceptual architecture, landscape, signage, and lighting.
- Minor adjustments to landscape materials, wall materials, wall alignment, entry design and streetscape design that are consistent with the conceptual design set forth in the specific plan's development standards and design guidelines.
- Revisions to infrastructure facility sizing and precise location for dry utilities, water, sewer, and storm drainage improvements subject to approval of the City Engineer.
- Revisions to roadway alignments when the change results in a centerline shift of less than 250 feet.
- Other adjustments or revisions of similar nature to those listed above that do not substantially change the intent or character of the Specific Plan and are deemed minor by the Planning Director.

6.7.2 Major Amendments

Specific amendments that are more substantial in nature than minor adjustments and include changing any regulation, general provision, procedure, or other provision will be considered a major adjustment to the Specific Plan and shall be subject to a formal Specific Plan Amendment application process pursuant to Section 4.01.035 of the Ontario Development Code and California Government Code Section 65450, et seq.

If the proposed amendment requires supplemental environmental analysis pursuant to CEQA, the applicant shall adhere to the City's adopted procedures and CEQA Guidelines.

6.8 CEQA Review

City of Ontario is defined as the lead agency under CEQA based on its authority to approve the Empire Groves Specific Plan. Prior to an approval of a project within the Specific Plan Area, the City Council will be required to certify the associated environmental document.

California Public Resources Code Section 21081.6 also requires public agencies to adopt a Mitigation Monitoring and Reporting Program to ensure that mitigation measures are implemented. Prior to a Certification of Occupancy for any building located within the Specific Plan Area, the Planning Director or his/her designee, as appropriate, shall confirm that applicable mitigation measures have been implemented in accordance with the approved plans.

APPENDIX

A

Consistency with General Plan Update

Appendix A: General Plan Consistency Analysis

Land Use Element		
GOAL LU-1	**A community that has a spectrum of housing types and price ranges that match the jobs in the City and that make it possible for people to live and work in Ontario and maintain a quality of life.**	
Policies		
LU-1.1	Strategic Growth. We concentrate growth in strategic locations that help create place and identity, maximize available and planned infrastructure, foster the development of transit, and support the expansion of the active and multimodal transportation networks throughout the City. (Link to Mobility Element Policies M2-M-2.1, M3-M-3.3; Community Design Element Image and Identity Section; Community Design Policies CD-3.1, CD-3.3, CD-3.6)	Consistent: The Specific Plan is in a planned growth area (Guasti District) per the General Plan.
LU-1.2	Sustainable Community Strategy. We integrate state, regional, and local Sustainable Community/Smart Growth principles into the development and entitlement process.	Consistent: The Specific Plan integrates many sustainable and smart growth strategies. It supports multimodal transportation in the area.
LU-1.3	Adequate Capacity. We require adequate infrastructure and services for all development.	Consistent: Adequate existing infrastructure is available for the Specific Plan.
LU-1.4	Multimodal Mobility. We require development and urban design, where appropriate, that reduces reliance on the automobile and capitalizes on active transportation, transit, electric vehicles, and multimodal transportation opportunities (Link to Mobility Element Policies M-2.1, M-3.3; Community Design Element Policy CD-2.6, CD-3.1, CD-3.3, CD3.6).	Consistent: The Specific Plan is a mixed-use plan. It supports multimodal transportation planning projects in the area. It includes provisions for bicycle parking, electric vehicle charging stations, and other amenities.
LU-1.5	Jobs-Housing Balance. We coordinate land use, infrastructure, and transportation planning and analysis with regional, county, and other local agencies to further regional and subregional goals for jobs-housing balance. (Link to Community Economics Element Policy CE-1.1; Mobility Element Policy M-1.6)	Consistent: The Specific Plan is a mixed-use plan with Hotel and Local Serving Retail uses and will contribute to a substantial number of jobs in the area which leads to jobs-housing balance.
LU-1.6	Complete Community. We incorporate a variety of land uses and building types in our land use planning efforts that result in a complete community where residents at all stages of life, employers, workers, and visitors have a wide spectrum of choices of where they can live, work, shop and recreate within Ontario. (Link to Community Economics Element Complete Community Section; Community Design Element Urban, Mixed Use, and Transit-oriented Place Types Section)	Consistent: The Specific Plan is primarily commercial and does not include housing. However, it is designed to create job opportunities for residents within the City. This approach contributes to the development of complete communities by fostering local employment and supporting the overall economic growth of the area.

LU-1.7	Revenues and Costs. We require future amendments to our Land Use Plan to be accompanied by analyses of fiscal impacts. (Link to Community Economics Policy CE-3.2)	Consistent: The Specific Plan will be financed by the developer.
GOAL LU-2	**Compatibility between a wide range of uses and resultant urban patterns and forms.**	
Policies		
LU-2.1	Land Use Decisions. We minimize adverse impacts on adjacent properties when considering land use and zoning requests.	Consistent: The Specific Plan will not have any adverse impacts on the adjacent properties. It will contribute positively as the adjacent properties include a conference center, airport, and other hotel properties that are complementary to this development.
LU-2.2	Buffers. We require new uses to provide mitigation or buffers between existing uses where potential adverse impacts could occur. Additional mitigation is required when new uses could negatively impact environmental justice areas. (Link to Community Design Element)	Consistent: Although this area is classified as an environmental justice area according to Cal Enviroscreen 4.0, it is not residential. The high pollution burden, largely due to the nearby airport, contributes to its high score. The Specific Plan incorporates sustainable strategies and is a mixed-use plan. It supports multimodal transportation projects in the area and includes provisions for bicycle parking, electric vehicle charging stations, and other amenities.
LU-2.3	Hazardous Uses. We regulate the development of industrial and similar uses that use, store, produce, or transport toxic substances, air emissions, other pollutants, or hazardous materials. (Link to Safety Element Hazardous Materials & Waste Section, including Policies S-6.4 and S-6.5)	Consistent: There are no hazardous materials stored, produced, or transported to the site. Standard cleaning and laundry services for the hotel are provided.
LU-2.4	Regulation of Nuisances. We regulate the location, concentration, and operation of potential nuisances.	N/A
LU-2.5	Regulation of Uses. We regulate the location, concentration, and operation of uses that have impacts on surrounding land uses.	N/A
LU-2.6	Infrastructure Compatibility. We require infrastructure to be aesthetically pleasing and in context with the community character.	Consistent: The Specific Plan will add new sidewalks and landscaping along Holt Boulevard and Guasti Road, a corner plaza at the intersection and the entrance court with heavy landscaping, all of which will contribute to the aesthetically pleasing surroundings.
LU-2.7	Inter-jurisdictional Coordination. We maintain an ongoing liaison with ONT, Caltrans, Public Utilities Commission, the railroads, and other agencies to help minimize impacts and improve the operations and aesthetics of their facilities.	N/A
LU-2.8	Transitional Areas. We require development in transitional areas to protect the quality of life of current residents.	N/A
LU-2.9	Methane Gas Sites. We require sensitive land uses and new uses on former dairy farms or other methane-producing sites be designed to minimize health risks.	N/A

LU-2.10	Sensitive Uses. We monitor and share information with the community about stationary and non-stationary emission sources. We encourage siting and design of facilities to minimize health and safety risks on existing and proposed sensitive uses, especially in environmental justice areas.	N/A
LU-2.11	Context-Aware Transitions and Connections. We require new development projects and land-planning efforts to provide context-aware and appropriate transitions and connections between existing and planned neighborhoods, blocks, sites, and buildings. (Link to Community Design Element Policies CD-1.1, CD-1.3, CD-3.4)	Consistent: The Specific Plan complements the adjacent properties, including a conference center, airport, and other hotel properties. Therefore, the proposed development is context-aware with appropriate transitions and connections.
GOAL LU-3	**Staff, regulations and processes that support and allow flexible response to conditions and circumstances in order to achieve the Vision.**	
Policies		
LU-3.1	Development Standards. We maintain clear development standards which allow flexibility to achieve our Vision and provide objective standards that ensure predictability and deliver the intended physical outcomes. (Link to Community Design Element Design Quality and Urban, Mixed Use, and Transit-oriented Place Types Sections)	Consistent: The development standards chapter provides mandatory provisions that are intended to achieve the vision of the Specific Plan and provide for objective standards that are measurable. The design guidelines however are not mandatory and provide flexibility.
LU-3.2	Design Incentives. We offer design incentives to help projects achieve the Vision. (Link to Community Design Element)	N/A
LU-3.3	Land Use Flexibility. We consider uses not typically permitted within a land use category if doing so improves livability, reduces vehicular trips, creates community gathering places and activity nodes, and helps create identity.	Consistent: The Specific Plan development standards include bicycle facilities and includes bike rentals as a permitted use that may aid in the reduction of vehicular trips. The Specific Plan is a mixed-use development and provides for local serving retail and restaurants that will also help reduce trips. The Local Serving Retail area has a public plaza and outdoor seating which contributes to community gathering places. The hotel features gathering areas and landscaping both within and around the property, enhancing the overall appeal of the area.
GOAL LU-4	**Development that provides short-term value only when the opportunity to achieve our Vision can be preserved.**	
Policies		
LU-4.1	Commitment to Vision. We are committed to achieving our Vision but realize that it may take time and several interim steps to get there.	Consistent: The plan is consistent with Guasti District's vision within the Ontario Plan.

LU-4.2	Interim Development. We allow development in urban, mixed use, and transit-oriented Place Types that is not immediately reflective of our ultimate Vision for the Place Type, provided it can be modified or replaced when circumstances are right to support development aligned with the Place Type Vision. We will not allow development that impedes, precludes, or compromises our ability to achieve our Vision. (Link to Community Economics Element Policy CE-2.3; Community Design Element Policy CD-1.2; Community Design Element Urban, Mixed Use, and Transit-oriented Place Types section).	Consistent: The Specific Plan is a mixed-use plan with Hotel and Local Serving Retail uses and transit- supportive use.
LU-4.3	Infrastructure Timing. We require that the necessary infrastructure and services be in place prior to or concurrently with development.	Consistent: The necessary infrastructure and services either exist or will be in place to support development within the Specific Plan.
LU-4.4	Shared Infrastructure. We encourage and facilitate the use of shared infrastructure (including shared or managed parking) in urban, mixed use, and transit-oriented Place Types. (Link to Community Design Element Policy CD-3.6)	Consistent: The Specific Plan is a mixed-use plan with Hotel and Local Serving Retail uses and transit- supportive use. The parking areas are shared. The ULI shared parking analysis has provided on-site parking for the entire development. The plaza area at the intersection of Holt Boulevard and Guasti Road is a public plaza.
GOAL LU-5	**Integrated airport systems and facilities that minimize negative impacts to the community and maximize economic benefits.**	
Policies		
LU-5.1	Coordination with Airport Authorities. We collaborate with FAA, Caltrans Division of Aeronautics, airport owners, neighboring jurisdictions, and other shareholders in the preparation, update, and maintenance of airport-related plans.	Consistent The Specific Plan is consistent with the policies and criteria set forth within an Airport Land Use Compatibility Plan. The Specific Plan includes uses compatible with surrounding land uses and adjacent properties.
LU-5.2	Airport Planning Consistency. We coordinate with airport authorities to ensure The Ontario Plan is consistent with state law, federal regulations, and/or adopted master plans, and airport land use compatibility plans for ONT and Chino Airport.	Consistent: The Specific Plan is consistent with the policies and criteria set forth within an Airport Land Use Compatibility Plan. The Specific Plan includes uses compatible with surrounding land uses and adjacent properties.
LU-5.3	Airport Impacts. We work with agencies to maximize resources to mitigate the impacts and hazards related to airport operations – their homes.	Consistent: The Specific Plan is consistent with the policies and criteria set forth within an Airport Land Use Compatibility Plan. The Specific Plan includes uses compatible with surrounding land uses and adjacent properties.
LU-5.4	ONT Growth Forecast. We support and promote an ONT that accommodates 30 million annual passengers and 1.6 million tons of cargo per year, as long as the impacts associated with that level of operations are planned for and mitigated.	N/A
LU-5.5	Airport Compatibility Planning for ONT. We create and maintain the Airport Land Use Compatibility Plan for ONT.	Consistent: The Specific Plan is consistent with the policies and criteria set forth within an Airport Land Use Compatibility Plan.

LU-5.6	Alternative Process. We fulfill our responsibilities and comply with state law with regard to the Alternative Process for proper airport land use compatibility planning.	Consistent: The Specific Plan is consistent with the policies and criteria set forth within an Airport Land Use Compatibility Plan.
LU-5.7	ALUCP Consistency with Land Use Regulations. We comply with state law that requires general plans, specific plans, and all new development to be consistent with the policies and criteria set forth within an Airport Land Use Compatibility Plan for any public-use airport.	Consistent: The Specific Plan is consistent with the policies and criteria set forth within an Airport Land Use Compatibility Plan. The allowable height is within the range (100' to 150') as prescribed by Airport Land Use Compatibility Plan.
LU-5.8	Chino Airport. We will support the creation and implementation of the Airport Land Use Compatibility Plan for Chino Airport.	N/A
Housing Element		
GOAL H-1	**Stable neighborhoods of quality housing, ample community services and public facilities, well-maintained infrastructure, and public safety that foster a positive sense of identity.**	
Policies		
H-1.1	Housing Rehabilitation. We support the rehabilitation, maintenance, and improvement of single-family, multiple-family, and mobile homes through code compliance, removal of blight where necessary, and provision of rehabilitation assistance where feasible.	N/A: The Specific Plan is a mixed-use plan with Hotel and Local Serving Retail uses. It does not include housing.
H-1.2	Neighborhood Conditions. We direct efforts to improve the long-term sustainability of neighborhoods through comprehensive planning, provision of neighborhood amenities, rehabilitation and maintenance of housing, and community building efforts.	Consistent: The Specific Plan has a Local Serving Retail component with a public plaza that will contribute to neighborhood amenities. Development within the Specific Plan will contribute to a substantial number of jobs in the area and lead to jobs-housing balance and community building efforts.
H-1.3	Community Amenities. We shall provide adequate public services, infrastructure, open space, parking and traffic management, pedestrian, bicycle, and equestrian routes and public safety for neighborhoods consistent with City master plans and neighborhood plans.	Consistent: The Specific Plan has a Local Serving Retail component with a public plaza that will contribute to neighborhood amenities. The Specific Plan will create a pedestrian realm with wide, buffered, and landscaped sidewalks that will contribute to pedestrian safety.
H-1.4	Historical Preservation. We support the preservation and enhancement of residential structures, properties, street designs, lot configurations, and other reminders of Ontario's past that are considered to be local historical or cultural resources.	N/A: There are no local historical or cultural resources within the Specific Plan.
H-1.5	Neighborhood Identity. We strengthen neighborhood identity through creating parks and recreational outlets, sponsoring neighborhood events, and encouraging resident participation in the planning and improvement of their neighborhoods.	Consistent: The hotel is envisioned to be a world-class hotel with high aesthetic value creating identity for the neighborhood. Additionally, it will provide paid event space in the form of banquet halls as well as restaurants. Additionally, it includes a public plaza in the Local Serving Retail portion of the Specific Plan.

GOAL H-2	**Diversity of types of quality housing that are affordable to a range of household income levels, accommodate changing demographics, and support and reinforce the economic sustainability of Ontario.**	
Policies		
H-2.1	Corridor Housing. We revitalize transportation corridors by encouraging the production of higher density residential and mixed-uses that are architecturally, functionally, and aesthetically suited to corridors.	N/A: The Specific Plan is a commercial mixed-use plan with Hotel and Local Serving Retail uses. It does not include a residential component. However, development within the Specific Plan will contribute to a substantial number of jobs in the area and lead to jobs-housing balance.
H-2.2	Historic Downtown. We foster a vibrant historic downtown through facilitating a wide range of housing types and affordability levels for households of all ages, housing preferences, and income levels.	N/A: The Specific Plan is a commercial mixed-use plan with Hotel and Local Serving Retail uses. It does not include a residential component.
H-2.3	Ontario Airport Metro Center. We foster a vibrant, urban, intense, and highly amenitized community in the Ontario Airport Metro Center Area through a mix of residential, entertainment, retail, and office-oriented uses.	The Specific Plan is within the Ontario Airport Metro Center and provides for a commercial mixed-use development with Hotel and Local Serving Retail.
H-2.4	Ontario Ranch. We support a premier lifestyle community in the Ontario Ranch, distinguished by diverse housing, highest design quality, and cohesive and highly amenitized neighborhoods.	N/A: The Specific Plan is a commercial mixed-use plan with Hotel and Local Serving Retail uses. It does not include a residential component.
H-2.5	Housing Design. We require architectural excellence through adherence to City design guidelines, thoughtful site planning, environmentally sustainable practices, and other best practices.	N/A: The Specific Plan is a commercial mixed-use plan with Hotel and Local Serving Retail uses It does not include a residential component.
H-2.6	Infill Development. We support the revitalization of neighborhoods through the construction of higher-density residential developments on underutilized residential and commercial sites.	N/A: The Specific Plan is a commercial mixed-use plan with Hotel and Local Serving Retail uses It does not include a residential component.
GOAL H-3	**A City regulatory environment that balances the need for creativity and excellence in residential design, flexibility and predictability in the project approval process, and the provision of an adequate supply and prices of housing.**	
Policies		
H-3.1	Incentives. We maintain incentive programs that can be offered to projects that provide benefits to the community such as exceptional design quality, economic advantages, environmental sustainability, or other benefits that would otherwise be unrealized.	N/A
H-3.2	Flexible Standards. We allow flexibility in the application of residential and mixed-use development standards in order to gain benefits such as exceptional design quality, economic advantages, sustainability, or other benefits that would otherwise be unrealized.	Consistent: The development standards for mixed-use development are flexible and provide for high quality development.
H-3.3	Development Review. We maintain a residential development review process that provides certainty and transparency for project stakeholders and the public, yet allows for the appropriate review to facilitate quality housing development.	N/A

H-3.4	Financial Incentives. We consider financial incentives to facilitate and encourage the production, rehabilitation or improvement of housing, or provision of services where such activity furthers housing and community-wide goals.	N/A
GOAL H-4	**Increased opportunities for low- and moderate-income households and families to afford and maintain quality ownership and rental housing opportunities, including move-up opportunities. Inclusive communities, racial equity, fair housing choice, and access to opportunity.**	
Policies		
H-4.1	Preservation of Affordable Apartments. We strive to facilitate the preservation of the affordability of publicly assisted apartments for lower-income households through financial assistance, technical assistance, rehabilitation, and collaborative partnerships.	N/A
H-4.2	Homeownership Opportunities. We increase and expand homeownership rates for lower- and moderate-income households by offering financial assistance, low-interest loans, and educational resources, and by working in collaboration with partnerships.	N/A
H-4.3	Rental Assistance. We support the provision of rental assistance for individuals and families earning extremely low, very low, and low income with funding from the state and federal government.	N/A
H-4.4	Mixed-income Housing. We encourage the integration of affordable housing in the Ontario Ranch, Ontario Airport Metro Center Area, and existing neighborhoods.	N/A
H-4.5	Collaborative Partnerships. We support collaborative partnerships of nonprofit organizations, affordable housing developers, major employers, and for-profit developers to produce affordable housing.	N/A
H-4.6	Fair Housing. We further fair housing by prohibiting discrimination in the housing market, lifting barriers that restrict access to housing, and providing education, support, and enforcement services to address discriminatory practices.	N/A
GOAL H-5	**A full range of housing types and community services that meet the special housing needs for all individuals and families in Ontario, regardless of income level, age, or other status.**	
Policies		
H-5.1	Senior Housing. We support the development of accessible and affordable senior housing and provide financial assistance for seniors to maintain and improve their homes.	N/A
H-5.2	Family Housing. We support the development of larger rental apartments that are appropriate for families with children, including, as feasible, the provision of services, recreation, and other amenities.	N/A

H-5.3	Disabled People. We increase the supply of permanent, affordable, and accessible housing for people with disabilities, and provide assistance to allow them to maintain and improve their homes.	N/A
H-5.4	Homeless People. We partner with nonprofit partners to provide emergency shelters, transitional housing, permanent supportive housing, and supportive services for people who are homeless.	N/A
H-5.5	Supportive Services. We financially support organizations, as feasible, that provide support services that meet the needs of those with special needs and further the greatest level of independence.	N/A
H-5.6	Partnerships. We collaborate with nonprofit organizations, private developers, employers, government agencies, and other interested parties to develop affordable housing and provide support services.	N/A
Parks and Recreation Element		
GOAL PR-1	**A system of safe and accessible parks that meets the needs of the community.**	
Policies		
PR-1.1	Access to Parks. In all new residential development areas, we strive to provide a park and/or recreational facility within walking distance (¼ mile) of every residence and prioritize the establishment of parks in environmental justice areas that do not have adequate access to parks.	N/A: The Specific Plan is a commercial mixed-use plan with Hotel and Local Serving Retail uses. Although this area is classified as an environmental justice area according to Cal Enviroscreen 4.0, it is not residential and does not include a residential component. However, the plan encourages the improvement of and connection to Cucamonga Creek Trail and improvements of Holt Boulevard and Guasti Road which will contribute to the safe and comfortable mobility between the Specific Plan and surrounding uses.
PR-1.2	Adjacency to Schools. We examine locating parks adjacent to school sites to promote joint-use opportunities.	N/A: The Specific Plan does not include a residential component so there is no impact on the location of schools.
PR-1.3	Funding. We shall seek outside, one-time sources of funding for capital improvements and reserve ongoing City funds primarily for operations and maintenance.	N/A
PR-1.4	Joint-use Opportunities. In areas where there is a need but no City recreational facility, we explore joint-use opportunities. (e.g., school sites).	N/A
PR-1.5	Acreage Standard. We strive to provide 5 acres of parkland (public and private) per 1,000 residents.	Consistent. The Specific Plan contributes to both public and private open space. Please see below for the Public/Private landscape area breakdown: - Level 1: Public landscape (not including driveways):28,621 sq ft; Private - landscape:205,335 sq ft - Level 3: Private landscape: 57,365 sq ft - Level 9: Private landscape: 32,119 sq ft

PR-1.6	Private Parks. We expect development to provide a minimum of 2 acres of developed private park space per 1,000 residents.	Consistent. The Specific Plan contributes to both public and private open space. Please see below for the Public/Private landscape area breakdown: - Level 1: Public landscape (not including driveways):28,621 sq ft; Private - landscape:205,335 sq ft - Level 3: Private landscape: 57,365 sq ft - Level 9: Private landscape: 32,119 sq ft
PR-1.7	Special Needs/Universal Design. We attempt to provide recreational opportunities at parks for people of all ages and abilities.	Consistent. The Specific Plan aims to design all public realm and open space facilities with Universal Design standards.
PR-1.8	Renovation. We examine renovating existing facilities prior to building replacement facilities.	N/A: This is a new development Specific Plan.
PR-1.9	Phased Development. We require parks be built in new communities before a significant proportion of residents move in.	N/A: The Specific Plan does not have a residential component
PR-1.10	Master Plans for Individual Park Facilities. We require an individual park master plan for parks in excess of 10 acres.	N/A
PR-1.11	Environmental Function of Parks. We require new parks to meet environmental management objectives.	N/A: The development is not a parks project.
PR-1.12	Trails. We promote connections between parks and local trails including those managed by other public agencies.	N/A: The development is not a parks project, but the Specific Plan is supportive of connections to the Cucamonga Creek Trail.
PR-1.13	Equestrian Trails. We require the design, construction, and maintenance of equestrian trails in Rural Residential designated areas.	N/A
PR-1.14	Multi-family Residential Developments. We require that new multi-family residential developments of five or more units provide recreational facilities or open space, in addition to paying adopted impact fees.	N/A: The development is not a residential project.
PR-1.15	Trail Connectivity. We strengthen and improve equestrian, bike, and multipurpose trail connections within the City and work to improve trail connections into adjacent jurisdictions.	Consistent: The development is supportive of connections to the Cucamonga Creek Trail.
PR-1.16	Equestrian Master Plan. We use Homer Briggs Park as the primary focal point for the development of a Master Plan of Equestrian Trails in the Rural Residential area.	N/A
GOAL PR-5	**A range of recreational programs provided by public, private, and nonprofit organizations that meet the needs of the community's varied interests, age groups, and abilities.**	
Policies		
PR-2.1	Participation. We program park facilities to maximize utilization and participation, while considering park size, location, and population served.	N/A: The development is not a parks project.

PR-2.2	Needs Assessment. We track the needs and priorities for recreational programming and look for ways to meet demand.	N/A: The development is not a parks project.
PR-2.3	Community Involvement. We involve the local community in planning programs for neighborhood and community park facilities.	N/A: The development is not a parks project.
PR-2.4	Access to Programs. We provide a range of recreational and physical exercise programs that are accessible to residents of all income levels throughout the community and prioritize establishing and maintaining equitable access for residents in environmental justice areas.	N/A: Although this area is classified as an environmental justice area according to Cal Enviroscreen 4.0, it does not include residential and is not a parks project. However, the Specific Plan incorporates sustainable strategies and public open space. The plan also encourages the improvement of and connection to Cucamonga Creek Trail. Additionally, public realm improvements of the sidewalk areas and edge friction elements such as curbs, street trees, lighting, etc. along Holt Boulevard and Guasti Road contribute to walkability and connectivity to surrounding areas.
PR-2.5	Partnerships. We partner with local and regional agencies, nonprofit organizations, and the private sector to provide a comprehensive range of recreational programs.	N/A
PR-2.6	Crime Deterrents. We promote and participate in recreational programming as part of our crime prevention effort.	N/A
Environmental Resources Element		
GOAL ER-1	**A reliable and cost-effective system that permits the City to manage its diverse water resources and needs.**	
Policies		
ER-1.1	Local Water Supply. We increase local water supplies to reduce our dependence on imported water. New and redevelopment projects are aligned with our available water supply and/or to enhance our available water supply.	Consistent: Development within the Specific Plan is consistent with General Plan and will not impose water demand beyond that analyzed in the General Plan.
ER-1.2	Matching Supply to Use. We match water supply and quality to the appropriate use.	N/A
ER-1.3	Conservation and Sustainable Water Supply. We work with regional water providers and users to conserve water and ensure sustainable local water supplies as more frequent droughts reduce long term local and regional water availability	N/A
ER-1.4	Supply-Demand Balance. We require that available water supply and demands be balanced.	Consistent: Development within the Specific Plan is consistent with General Plan and will not impose water demand beyond that analyzed in the General Plan.
ER-1.5	Water Resource Management. Environmental justice areas are prioritized as we coordinate with local agencies to protect water quality, prevent pollution, address existing contamination, and remediate contaminated surface water and groundwater.	N/A

ER-1.6	Urban Run-off Quantity. We encourage the use of low impact development strategies, including green infrastructure, to intercept run-off, slow the discharge rate, increase infiltration, and ultimately reduce discharge volumes to traditional storm drain systems.	Consistent: Development within the Specific Plan will use native or drought-tolerant landscaping techniques and will incorporate LID where feasible.
ER-1.7	Urban Run-off Quality. We require the control and management of urban run-off, consistent with Regional Water Quality Control Board regulations.	Consistent: Development within the Specific Plan will use native or drought-tolerant landscaping techniques and will incorporate LID where feasible.
ER-1.8	Wastewater Management. We require the management of wastewater discharge and collection consistent with waste discharge requirements adopted by the Regional Water Quality Control Board.	Consistent: Development within the Specific Plan will be consistent waste discharge requirements adopted by the Regional Water Quality Control Board.
GOAL ER-2	**A cost effective, integrated waste management system that meets or exceeds state and federal recycling and waste diversion mandates.**	
Policies		
ER-2.1	Waste Diversion. We shall meet or exceed AB 939 requirements.	Consistent: Development within the Specific Plan will comply with state requirements.
ER-2.2	Hazardous and Electronic Wastes. We prohibit the disposal of hazardous and electronic waste into the municipal waste stream pursuant to state law.	Consistent: Development within the Specific Plan will comply with state requirements.
ER-2.3	Purchase Products Made from Recycled Materials. We purchase recycled-content products where it is cost effective.	Consistent: Development within the Specific Plan will purchase products made from recycled materials where feasible ensuring competitiveness in the market or adherence to industry standards.
GOAL ER-3	**Cost-effective and reliable energy system sustained through a combination of low impact buildings, site and neighborhood energy conservation, and diverse sources of energy generation that collectively helps to minimize the region's carbon footprint.**	
Policies		
ER-3.1	Conservation Strategy. We require conservation as the first strategy to be employed to meet applicable energy-saving standards.	Consistent: Development within the Specific Plan will aim to conserve energy to the extent feasible based on market competitiveness and industry standards.
ER-3.2	Green Development– Communities. We encourage the use of the LEED Neighborhood Development rating system, or similar mechanism, to guide the planning and development of all new communities.	Consistent: Development within the Specific Plan will use many sustainable practices such as shared parking, drought-tolerant landscaping, transit-supportive design, mixed-use development, pedestrian support, electric charging stations, bike parking facilities, provision of open spaces, heat island reduction, light pollution reduction, enhanced indoor air quality strategies, low-emitting materials, daylighting, and other techniques that are consistent with the LEED Neighborhood Development rating system.

ER-3.3	Building and Site Design. We require new construction to incorporate energy efficient building and site design strategies, which could include appropriate solar orientation, maximum use of natural daylight, passive solar, and natural ventilation.	Consistent: The building maximizes the site's potential for appropriate solar orientation, maximum use of natural daylight, passive solar, and natural ventilation. The main façade of the building is on the south which receives maximum sunlight. Being a hotel with a double-loaded corridor, the rooms are also oriented toward the north. Vertical architectural fin walls are used for solar control as well as architectural element.
ER-3.4	Green Development– Public Buildings. We require all new and substantially renovated City buildings in excess of 10,000 square feet achieve a LEED Silver Certification standard, as determined by the U.S. Green Building Council.	N/A: The Specific Plan is not a City building.
ER-3.5	Fuel-Efficient and Alternative Energy Vehicles and Equipment. We require purchase and use vehicles and equipment that are fuel efficient and meet or surpass state emissions requirements and/or use renewable sources of energy.	Consistent: Any new vehicles owned for the use of the hotel will meet or surpass state emissions requirements and/or use renewable sources of energy.
ER-3.6	Generation- Renewable Sources. We promote the use of renewable energy sources (e.g., solar, wind, biomass) in public and private sector development.	Consistent: Development within the Specific Plan will consider using renewable energy sources.
GOAL ER-4	**Improved indoor and outdoor air quality and reduced locally generated pollutant emissions.**	
Policies		
ER-4.1	Land Use. We reduce GHG and other local pollutant emissions through compact, mixed use, and transit-oriented development and development that improves the regional jobs-housing balance.	Consistent: The Specific Plan is a mixed-use development with a hotel and retail area and will contribute to a substantial number of jobs in the area and lead to a jobs-housing balance.
ER-4.2	Sensitive Land Uses. We prohibit the future siting of sensitive land uses within the distances defined by the California Air Resources Board for specific source categories, without sufficient mitigation.	N/A
ER-4.3	Greenhouse Gases (GHG) Emissions Reductions. We will reduce GHG emissions in accordance with regional, state, and federal regulations.	Consistent: The Specific Plan is a mixed-use development with a hotel and retail area. It is transit supportive as it is located in the vicinity of Metrolink and Amtrak Stations and BRT route. It encourages active transportation by providing an enhanced public realm and bike facilities. The plan encourages the improvement of and connection to Cucamonga Creek Trail. The land uses allow for bike rental and repair facilities in the Local Serving Retail area. It also has an electric charging station in the parking areas. All of the above contribute to the lowering of GHG.

ER-4.4	Indoor Air Quality. We will comply with State Green Building Codes relative to indoor air quality. We seek funding to improve indoor air quality for households with poor indoor air quality, with priority for lower income households in environmental justice areas.	Consistent: The indoor building materials will comply with State Green Building Codes.
ER-4.5	Transportation. We promote mass transit and non-motorized mobility options (walking, biking) to reduce air pollutant emissions.	Consistent: The Specific Plan is a mixed-use plan with hotel and retail uses. It is transit-supportive as it is located in the vicinity of Metrolink and Amtrak Stations and BRT route. It encourages active transportation by providing an enhanced public realm and bike facilities. The plan encourages the improvement of and connection to Cucamonga Creek Trail. The land uses allow for bike rental in the Local Serving Retail area. It also has an electric charging station in the parking areas. All of the above contribute to reducing air pollutant emissions.
ER-4.6	Particulate Matter. We support efforts to reduce particulate matter to meet State and Federal Clean Air Standards.	Consistent: The development will comply with State and Federal Clean Air Standards.
ER-4.7	Other Agency Collaboration. We collaborate with other agencies within the South Coast Air Basin to improve regional air quality at the emission source, with a particular focus on sources that affect environmental justice areas in Ontario.	N/A
ER-4.8	Tree Planting. We protect healthy trees within the City and plant new trees to increase carbon sequestration and help the regional/local air quality. We expand the tree canopy in environmental justice areas to enhance air quality and reduce the “heat island” effect.	Consistent: The Specific Plan includes a number of new trees (See landscaping concepts) that will contribute to enhancing air quality and reducing the “heat island” effect.

ER-4.9	New Localized Air Pollution Sources Near Existing Sensitive Receptors. We require new developments to conduct a Health Risk Assessment for land uses that generate more than 100 trucks per day or 40 trucks per day by trucks operating transportation refrigeration units (TRU's) within 1,000 feet from sensitive land uses (California Health and Safety Code § 42705.5(a)(5)). If the health risk assessment determines the new development poses health hazards that increase the incremental cancer risk above the threshold established by the South Coast Air Quality Management District (AQMD), we will only approve permits upon the condition that adequate mitigation measures are proposed and implemented for potential impacts on the sensitive uses around the site and along the route within Ontario taken by the trucks to and from freeways. We require new developments that must perform a health risk assessment to conduct additional public outreach by sending notifications in multiple languages to all residents living within 500 feet and encourage hosting a public meeting.	N/A
GOAL ER-5	**Protected high value habitat and farming and mineral resource extraction activities that are compatible with adjacent development.**	
Policies		
ER-5.1	Habitat Conservation Areas. We support the protection of biological resources through the establishment, restoration, and conservation of high-quality habitat areas.	N/A: There are no biological resources within the Specific Plan.
ER-5.2	Entitlement and Permitting Process. We comply with state and federal regulations regarding protected species.	N/A: There are no protected species within the Specific Plan.
ER-5.3	Right to Farm. We support the right of existing farms to continue their operations within the Ontario Ranch.	N/A
ER-5.4	Transition of Farms. We protect both existing farms and sensitive uses around them as agricultural areas transition to urban uses.	N/A
ER-5.5	Mining Operations. We prohibit future mining operations where the resource extraction activities are incompatible with existing or proposed adjacent land uses.	N/A

Community Economics Element		
GOAL CE-1	**A complete community that provides for all incomes and stages of life.**	
Policies		
CE-1.1	Jobs-Housing Balance. We pursue improvement to the Inland Empire's balance between jobs and housing by promoting job growth that reduces the regional economy's reliance on out-commuting.	Consistent: The Specific Plan includes hotel and retail uses that will contribute to a substantial number of jobs in the area and lead to jobs-housing balance.
CE-1.2	Jobs and Workforce Skills. We use our economic development resources to: 1. attract jobs suited for the skills and education of current and future City residents; 2. work with regional partners to provide opportunities for the labor force to improve its skills and education; and 3. attract businesses that increase Ontario's stake and participation in growing sectors of the regional and global economy. (Link to Social Resources Policy SR-2.2)	Consistent: The Specific Plan includes hotel, and retail uses that will contribute to a substantial number of jobs in the area for residents and attract businesses in the Local Serving Retail as well as within the hotel.
CE-1.3	Regional Approach to Workforce Development. We work with our partners to provide workforce training and development services throughout the region, recognizing that Ontario employers rely on workers living outside of the City.	N/A
CE-1.4	Business Retention and Expansion. We continuously improve two-way communication with the Ontario business community and emphasize customer service to existing businesses as part of our competitive advantage.	Consistent: The development owners and operators will be open to two-way communication with the City.
CE-1.5	Business Attraction. We proactively attract new and expanding businesses to Ontario in order to increase the City's share of growing sectors of the regional and global economy.	Consistent: The Specific Plan is a hotel and retail plan that will attract businesses in the Local Serving Retail as well as within the hotel.
CE-1.6	Diversity of Housing. We collaborate with residents, housing providers, and the development community to provide housing opportunities for every stage of life; we plan for a variety of housing types and price points to encourage the development of housing supportive of our efforts to attract business in growing sectors of the community while being respectful of existing viable uses.	N/A: The Specific Plan does not include a residential component.
CE-1.7	Retail Goods and Services. We seek to ensure a mix of retail businesses that provide the full continuum of goods and services for the community.	Consistent: The Specific Plan is a mixed-use development with a hotel and retail component.

CE-1.8	Regional Attraction. We encourage the development and programming of regional, cultural, and entertainment destinations in Ontario.	N/A
CE-1.9	Regional Leadership. We provide leadership for public, quasi-public, and private-sector partners that help Ontario and its residents and businesses realize our goals and achieve our Vision.	N/A
CE-1.10	Life-Long Education. We work with our partners who provide life-long learning to ensure that our residents and workforce have access to education at all stages of life.	N/A
CE-1.11	Socioeconomic Trends. We continuously monitor, plan for, and respond to changing socioeconomic trends.	N/A
CE-1.12	Circulation. We continuously plan and improve public transit and non-vehicular circulation for the mobility of all, including those with limited or no access to private automobiles. (Link to Mobility Element Public Transit Section)	Consistent: The Specific Plan is transit-supportive and located in the vicinity of Metrolink and Amtrack stations as well as along the future BRT route.
CE-1.13	Safety and Security. We invest in public safety and communicate our successes because the perception and reality of safety and security are necessary prerequisites for private investment and economic growth.	Consistent: The Specific Plan will incorporate industry-standard safety and security measures.
GOAL CE-2	**A City of distinctive neighborhoods, districts, corridors, and centers where people choose to be.**	
Policies		
CE-2.1	Development Projects. We require new development and redevelopment to create unique, high-quality places that add value to the community. (Link to Community Design Element)	Consistent: The design guidelines for mixed-use development aim to provide for high-quality development that is aesthetically pleasing and creates a unique identity.
CE-2.2	Development Review. We require those proposing new development and redevelopment to demonstrate how their projects will create appropriately unique, functional, and sustainable places that will compete well with their competition within the region.	Consistent: The design guidelines for mixed-use development aim to provide for high-quality development that is aesthetically pleasing and creates a unique identity. The standards and concept plans also provide sustainable strategies and functional spaces.
CE-2.3	Interim Development. We require interim development that does not reflect the long-term Vision, be limited in scale of development so that the investment can be sufficiently amortized to make Vision-compatible redevelopment financially feasible.	N/A
CE-2.4	Protection of Investment. We require that new development and redevelopment protect existing investment by providing architecture and urban design of equal or greater quality.	Consistent: The design guidelines for mixed-use development aim to provide for high-quality development that is aesthetically pleasing and creates a unique identity.

CE-2.5	Private Maintenance. We require adequate maintenance, upkeep, and investment in private property because proper maintenance on private property protects property values. (Link to Community Design Element Policy CD-5.1)	Consistent: Development of private property within the Specific Plan will be privately maintained.
CE-2.6	Public Maintenance. We require the establishment and operation of maintenance districts or other vehicles to fund the long-term operation and maintenance of the public realm whether on private land, in rights-of-way, or on publicly-owned property. (Link to Community Design Element Policy CD-5.1)	N/A
GOAL CE-3	**Decision-making deliberations that incorporate the full short-term and long-term economic and fiscal implications of proposed City Council actions.**	
Policies		
CE-3.1	Fiscal Impact Disclosure. We require requests for City Council action to disclose the full fiscal impacts, including direct and indirect costs.	N/A
CE-3.2	General Plan Amendments. We require those proposing General Plan amendments to disclose reasonably foreseeable impacts through a fiscal analysis.	Consistent: There are no foreseen fiscal impacts on the City. All on-site improvements will be undertaken and financed by the developer. The costs for related off-site improvements shall be the responsibility of either the Developer or the City as defined further in the conditions of the approval and Development Agreement.
CE-3.3	Long-Term Funding Disclosure. We require those requesting City support or funding for projects or programs to disclose if and how they can be continued without further City support.	Consistent: There are no foreseen fiscal impacts on the City. All on-site improvements will be undertaken and financed by the developer. The costs for related off-site improvements shall be the responsibility of either the Developer or the City as defined further in the conditions of the approval and Development Agreement.
CE-3.4	Improving Fiscal Decision-Making. We periodically assess the accuracy of projections for staff time and City resources and use the assessment results to improve our fiscal decision-making process.	N/A
CE-3.5	Sustainable Development. We recognize impacts to municipal finances as an element of sustainability, and we require claims of sustainability to assess fiscal impacts.	N/A
CE-3.6	Fully Funded Liability. We require long-term liabilities, such as retiree medical benefits, employee accrued leave balances, and self-insured liability claims to be fully funded to ensure sound, long-term fiscal health.	Consistent. All long-term liabilities will be in accordance with industry standard.
CE-3.7	Programmatically Balanced Budget. We require that the annual budget include appropriations allocated in a manner to meet the goal of the programmatically balanced budget.	N/A

CE-3.8	Budget Margins. We require that the adopted budget for revenue and expenditures reflect sufficient budget margins to minimize negative impacts to City services due to economic uncertainties.	N/A
CE-3.9	Complete Comparative Context. We require that our annual budget process provide the complete comparative context for proposed new and increased funding so decision makers can fully understand the trade-offs among budget choices.	N/A
Safety Element		
GOAL S-1	**Minimized risk of injury, loss of life, property damage, and economic and social disruption caused by earthquake-induced and other geologic hazards.**	
Policies		
S-1.1	Implementation of Regulations and Standards. We require that all new habitable structures be designed in accordance with the most recent California Building Code adopted by the City, including provisions regarding lateral forces and grading.	Consistent: Development within the Specific Plan will comply with California Building Code adopted by the City, including provisions regarding lateral forces and grading.
S-1.2	Entitlement and Permitting Process. We follow state guidelines and the California Building Code to determine when development proposals must conduct geotechnical and geological investigations.	Consistent: Development within the Specific Plan will comply with California Building Code adopted by the City, including provisions regarding lateral forces and grading.
S-1.3	Continual Update of Technical Information. We maintain up-to-date California Geological Survey seismic hazard maps.	N/A
S-1.4	Seismically Vulnerable Structures. We conform to state law regarding unreinforced masonry structures and coordinate with not-for-profits to facilitate seismic retrofits in environmental justice areas and for low-income households.	N/A
GOAL S-2	**Minimized risk of injury, loss of life, property damage and economic and social disruption caused by flooding and inundation hazards.**	
Policies		
S-2.1	Entitlement and Permitting Process. We require hydrological studies prepared by a state-certified engineer when new development is located in a 100-year or 500-year floodplain to assess the impact that the new development will have on the flooding potential of existing development down-gradient.	TBD
S-2.2	Floodplain Mapping. We require any new development partially or entirely in 100-year flood zones to provide detailed floodplain mapping for 100- and 200-year storm events as part of the development approval process.	N/A: The Specific Plan is not in the 100-year flood zones.

S-2.3	Facilities that Use Hazardous Materials. We comply with state and federal law and do not permit facilities using, storing, or otherwise involved with substantial quantities of onsite hazardous materials to be located in the 100-year flood zone or 500-year flood zone unless all standards of elevation, floodproofing, and storage have been implemented to the satisfaction of the Building Department.	N/A: There are no hazardous materials stored, produced, or transported to the site.
S-2.4	Prohibited Land Uses. We prohibit the development of new essential and critical facilities in the 100-year floodplain and discourage the development of new essential and critical facilities in the 500-year floodplain unless all standards of elevation and flood proofing demonstrate that a facility can be safe and operational during a flood event, implemented to the satisfaction of the Building Department.	N/A
S-2.5	Stormwater Management. We maintain the storm drain system to convey a 100-year storm, when feasible, and encourage environmental site design practices to minimize flooding and increase groundwater recharge, including natural drainage, green infrastructure, and permeable ground surfaces. (Link to Environmental Resources Element)	N/A: The Specific Plan is not in the 100-year flood zones.
S-2.6	Use of Flood Control Facilities. We encourage joint use of flood control facilities as open space or other types of recreational facilities.	Consistent: The Specific plan is located immediately west of the Cucamonga Creek Channel. This fully improved facility provides regional flood control and storm conveyance to the surrounding area. A portion of the flood control channel could be re-imagined as a multimodal greenway that promotes outdoor activity.
S-2.7	Collaboration Between Agencies. Collaborate with the San Bernardino County Flood Control District and other state and federal agencies to maintain flood-control infrastructure to minimize flood damage.	N/A
GOAL S-3	**Reduced risk of death, injury, property damage and economic loss due to fires, accidents and normal everyday occurrences through prompt and capable emergency response.**	
Policies		
S-3.1	Prevention Services. We proactively mitigate or reduce the negative effects of fire, hazardous materials release, and structural collapse by implementing the regularly adopted California Fire Code and California Building Code.	Consistent: Development within the Specific Plan will comply with California Fire Code and California Building Code adopted by the City.
S-3.2	Community Outreach. We provide education to local schools and community groups to promote personal and public safety.	N/A

S-3.3	Fire and Emergency Medical Services. We maintain sufficient fire stations, equipment and staffing to respond effectively to emergencies and meet the needs of the community and state requirements.	N/A

S-3.4	Special Team Services. We maintain effective special rescue services.	N/A
S-3.5	Emergency Notifications. We maintain a public alert notification system that efficiently conveys information about imminent, developing, ongoing, and concluding emergency events to residents and visitors, working with network providers that translate information into other languages.	N/A
S-3.6	Interagency Cooperation. In order to back up and supplement our capabilities to respond to emergencies, we participate in the California Fire Rescue and Mutual Aid Plan.	N/A
S-3.7	Water Supply and System Redundancy. We monitor our water system to manage and ensure adequate firefighting water supplies.	N/A
S-3.8	Fire Prevention through Environmental Design. We require new development to incorporate fire prevention consideration in the design of streetscapes, sites, open spaces, and buildings. (Link to Community Design Element)	Consistent: Development within the Specific Plan will incorporate fire prevention considerations in the design of streetscapes, sites, open spaces, and buildings. See landscape plan concepts.
S-3.9	Resource Allocation. We analyze fire data to evaluate the effectiveness of our fire prevention and reduction strategies and allocate resources accordingly.	N/A
GOAL S-4	**An environment where noise does not adversely affect the public's health, safety, and welfare.**	
Policies		
S-4.1	Noise Mitigation. We utilize the City's Noise Ordinance, building codes, and subdivision and development codes to mitigate noise impacts.	Consistent: Development within the Specific Plan is allowed equivalent noise levels within 70 dbA per the City's Zoning Code for exterior noise standards for lodging facilities.
S-4.2	Coordination with Transportation Authorities. We collaborate with airport owners, FAA, Caltrans, SBCTA, SCAG, neighboring jurisdictions, and other transportation providers in the preparation and maintenance of, and updates to transportation-related plans to minimize noise impacts and provide appropriate mitigation measures.	N/A
S-4.3	Airport Noise Mitigation. We aggressively pursue funding and utilize programs to reduce effects of aircraft noise in impacted areas of our community.	N/A
S-4.4	Truck Traffic. We manage truck traffic to minimize noise impacts on sensitive land uses.	N/A
S-4.5	Roadway Design. We design streets and highways to minimize noise impacts.	N/A

S-4.6	Airport Noise Compatibility. We utilize information from Airport Land Use Compatibility Plans to prevent the construction of new noise-sensitive land uses within airport noise impact zones.	N/A
S-4.7	Rail Noise Mitigation. We require residential and mixed use development of vibration-sensitive uses in areas within 200 feet of rail to evaluate for indoor vibration levels and mitigate any exceedances of the Federal Transit Administration vibration-annoyance criteria.	N/A
GOAL S-5	**Minimize the risk of injury, property damage, and economic loss resulting from windstorms and wind-related hazards.**	
Policies		
S-5.1	Dust Control Measures. We require the implementation of Best Management Practices for dust control at all excavation and grading projects.	Consistent: Development within the Specific Plan requires little to no grading. However, Best Management Practices will be implemented for dust control.
S-5.2	Grading in High Winds. We prohibit excavation and grading during strong wind conditions, as defined by the Building Code.	Consistent: Development within the Specific Plan requires little to no grading. Grading during strong wind conditions will be prohibited, as defined by the Building Code.
S-5.3	Public Safety Power Shutoffs. We coordinate with utility companies to minimize service interruptions, such as Public Safety Power Shutoffs, before, during, and after windstorms and wind-related hazards.	N/A
GOAL S-6	**Reduced potential for hazardous materials exposure and contamination.**	
Policies		
S-6.1	Disclosure and Notification. We enforce disclosure laws that require all users, producers, and transporters of hazardous materials and wastes to clearly identify the materials that they store, use, or transport.	N/A
S-6.2	Response to Hazardous Materials Releases. We respond to hazardous materials incidents and coordinate these services with other jurisdictions.	N/A
S-6.3	Safer Alternatives. We minimize our use of pesticides and other hazardous materials by choosing non-toxic alternatives that do not pose a threat to the environment, especially when it could affect public park facilities and open spaces.	Consistent: Safer non-toxic alternatives will be used for the maintenance of landscaped areas within the Specific Plan.
S-6.4	Safe Storage and Maintenance Practices. We require that the users of hazardous materials be adequately prepared to prevent and mitigate hazardous materials releases.	N/A

S-6.5	Location of Hazardous Material Facilities. We regulate facilities that will be involved in the production, use, storage, or disposal of hazardous materials, pursuant to federal, state, county, and local regulations, so that impacts to the environment and sensitive land uses are mitigated. We prohibit new hazardous waste facilities in close proximity to sensitive land uses and environmental justice areas.	N/A
S-6.6	Location of Sensitive Land Uses. We prohibit new sensitive land uses from locating within airport safety zones and near existing sites that use, store, or generate large quantities of hazardous materials. (Link to Land Use Element)	N/A
S-6.7	Household Hazardous Waste. We support the proper disposal of household hazardous substances.	N/A
S-6.8	Mitigation and Remediation of Groundwater Contamination. We actively participate in local and regional efforts directed at both mitigating environmental exposure to contaminated groundwater and taking action to clean up contaminated groundwater once exposure occurs.	N/A
S-6.9	Remediation of Methane. We require development to assess and mitigate the presence of methane, per regulatory standards and guidelines.	N/A
GOAL S-7	**Residential neighborhoods, commercial areas, and industrial districts that are kept safe through a multi-faceted approach of prevention, suppression, and community involvement in public safety.**	
Policies		
S-7.1	Police Unit Response. We respond to calls for service in a timely manner.	N/A
S-7.2	Community Oriented Problem Solving (C.O.P.S.). We support and maintain the mission of COPS to identify and resolve community problems.	N/A
S-7.3	Prevention Services. We provide crime prevention programs targeted to youth, parents, seniors, businesses, and neighborhoods.	N/A

S-7.4	Crime Prevention through Environmental Design (CPTED). We require new development to incorporate CPTED in the design of streetscapes, sites, open spaces, and buildings.	Consistent: CPTED techniques are implemented in the Specific Plan. These include but not limited to the following: - Design public spaces, such as lobbies, and entrances, to maximize visibility. - Use landscaping and lighting strategically to eliminate hiding spots and create clear sightlines. - Limit access points to the hotel and use controlled entry systems. - Use fencing, gates, and other barriers to control access to the property. - Use design elements, such as changes in paving materials or landscaping, to delineate different areas. -Provide well-lit pathways and amenities that encourage guests to use outdoor spaces. -Use clear and informative signage to guide guests and staff around the property.
S-7.5	Interdepartmental Coordination. We utilize all City departments to help reduce crime and promote public safety.	N/A
S-7.6	Partnerships. We partner with other local, state, and federal law enforcement agencies and private security providers to enhance public safety services in Ontario.	N/A
S-7.7	Resource Allocation. We analyze crime data to evaluate the effectiveness of crime prevention and reduction strategies and allocate resources accordingly.	N/A
S-7.8	Social Services. We support behavioral health and social services as part of the public safety solution.	N/A
GOAL S-8	**Disaster resilient, prepared community through effective emergency/disaster preparedness, response, mitigation, and recovery.**	
Policies		
S-8.1	State and Federal Mandates. We maintain emergency management programs that meet the requirements of the State of California Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS).	N/A
S-8.2	Emergency Management Plans. We maintain, update, and adopt the Emergency Operations Plan (EOP) and incorporate, by reference the City's Hazard Mitigation Plan (HMP).	N/A
S-8.3	Emergency/Disaster Training Exercises. We conduct training and exercises to prepare for and evaluate emergency/disaster response and recovery procedures.	N/A

S-8.4	Interagency Collaboration. We maintain partnerships, including automatic aid agreements, with fire protection, police and sheriff departments, and emergency management agencies in San Bernardino and Riverside County to strengthen emergency response.	N/A
S-8.5	Interdepartmental Coordination. We utilize all City departments to help support emergency/disaster preparedness, response, mitigation, and recovery.	N/A
S-8.6	Community Outreach. We provide education to the community to promote personal, family, and community emergency preparedness to both natural and human-generated hazards.	N/A
S-8.7	Extreme Heat and Air Quality. We work to ensure that all community members are informed about and have access to community cooling centers and clean air centers during extreme heat events or wildfires, with a focus on serving environmental justice communities. We support the development of extreme heat emergency response policies and practices to address these critical health risks in the community.	N/A
S-8.8	Regional Partnerships for Climate Adaptation. We partner with local governments in San Bernardino County, Riverside County, and Inland Southern California Climate Collaborative to develop regional climate change adaptation strategies and programs.	N/A
S-8.9	Backup Power in Critical Facilities. We require backup power be maintained in critical facilities. We encourage backup power solutions that include renewable energy components.	N/A
GOAL S-9	**Incorporate energy efficient practices and renewable energy systems to improve air quality, comfort, and energy reliability during temporary power outages.**	
Policies		
S-9.1	Solar Energy. We support and may incentivize the installation of residential and commercial solar panels and battery storage systems that can provide electricity during power outages.	N/A
S-9.2	Renewable Energy. Renovate existing city-owned facilities and plan future facilities to include renewable energy generation capacity and battery storage as part of an effort to make public facilities and services greener and more resilient to power outages.	N/A
S-9.3	Energy Efficiency Retrofits. We support and may incentivize retrofits to residential and commercial buildings that improve energy efficiency and insulation from extreme temperatures, giving priority towards low-income applicants.	N/A

Mobility Element		
M-1	**A system of roadways that meets the mobility needs of a dynamic and prosperous Ontario.**	
	Policies	
M-1.1	Roadway Design and Maintenance. We require our roadways to: 1. Comply with federal, state, and local design and safety standards; 2. Meet the needs of multiple transportation modes and users; 3. Handle the capacity envisioned in the City of Ontario Master Plan of Streets and Highways; 4. Be maintained in accordance with best practices; 5. Be compatible with the streetscape and surrounding land uses; and 6. Promote the efficient flow of all modes of traffic through the implementation of intelligent transportation systems and travel demand management strategies. (Link to Community Design Element Policies CD-2.5, CD-2.6, CD-2.16, CD-3.3)	N/A: There are no roadways proposed within the Specific Plan other than the entranceway and access to the basement. These are designed with best practices in mind that promote the efficient flow of traffic.
M-1.2	Mitigation of Impacts. We require development to mitigate its traffic impacts.	Consistent: Traffic impacts will be mitigated based on a development agreement with the City.
M-1.3	Agency Coordination on Roadway Improvements. We work with Caltrans, SBCTA, and others to identify, fund, and implement needed improvements to roadways when necessary. We work with neighboring jurisdictions to promote regional connectivity, access, and meet operational level of service standards at the City limits.	N/A
M-1.4	Complete Streets. We work to provide a complete, balanced, context-aware, multimodal transportation network that meets the needs of all users of streets, roads, and highways, including motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation. We prioritize implementation of complete streets improvements in environmental justice areas to facilitate opportunities for residents to use active transportation systems.	N/A: There are no roadways proposed within the Specific Plan other than the entranceway and access to the basement. These are designed with best practices in mind that promote efficient traffic flow and allow for pedestrian movement. The Specific Plan also improves the pedestrian realm along Holt Boulevard and Guasti Road which will contribute to complete street.

M-1.5	Level of Service. Maintain a peak hour Level of Service (LOS) E or better at all intersections. Maintain Level of Service D or better on arterial streets in the City. Develop and maintain a list of locations where LOS E or LOS F are considered acceptable and would be exempt from this level of service policy. Considerations for LOS exemption include being restricted by environmental constraints, lacking available right-of-way, deterring an increase in VMT, or degrading other modes of travel (such as bicycle or pedestrian infrastructure).	Consistent: Traffic impacts will be mitigated based on a development agreement with the City.
M-1.6	Reduce Vehicle Miles Traveled. We will strive to reduce VMT through a combination of land use, transportation projects, travel demand management strategies, and other trip reduction measures in coordination with development projects and public capital improvement projects.	Consistent: The Specific Plan is a mixed-use development with a hotel and retail area. It is transit supportive as it is located in the vicinity of Metrolink and Amtrak Stations and BRT route. It encourages active transportation by providing an enhanced public realm and bike facilities. The plan encourages the improvement of and connection to Cucamonga Creek Trail. The Local Serving Retail allows for bike rentals . The Specific Plan Development Standards call for electric charging stations in the parking areas. All of the above contribute to the lowering of VMT.
M-2	**A system of trails and corridors that facilitate and encourage active modes of transportation.**	
Policies		
M-2.1	Active Transportation. We maintain our Active Transportation Master Plan to create a comprehensive system of on- and off-street bikeways and pedestrian facilities that are safe, comfortable, and accessible and connect residential areas, businesses, schools, parks, and other key destination points.	Consistent: The plan encourages active transportation by providing an enhanced public realm and bike facilities. The plan encourages the improvement of and connection to Cucamonga Creek Trail.
M-2.2	Bicycle System. We provide off-street multipurpose trails and Class II bikeways as our preferred paths of travel and use the Class III for connectivity in constrained circumstances. When truck routes and bicycle facilities share a right-of-way, we prefer Class I or Class IV bicycle facilities. We require new development to include bicycle facilities, such as bicycle parking and secure storage areas.	Consistent: The plan encourages active transportation by providing an enhanced public realm and bike facilities. The plan encourages the improvement of and connection to Cucamonga Creek Trail.
M-2.3	Pedestrian Walkways. We require streets to include sidewalks and visible crosswalks at major intersections where necessary to promote safe and comfortable mobility between residential areas, businesses, schools, parks, recreation areas, and other key destination points. (Link to Community Design Policy CD-3.3)	Consistent: There are no roadways proposed within the Specific Plan other than the entranceway and access to the basement. These are designed with best practices and features that allow for pedestrian movement. The Specific Plan also improves the pedestrian realm along Holt Boulevard and Guasti Road which will contribute to the safe and comfortable mobility between the Specific Plan and surrounding uses.

M-2.4	Network Opportunities. We use public rights-of-way and easements such as, utility easements, levees, drainage corridors, road rights-of-way, medians, and other potential options to maintain and expand our bicycle and pedestrian network. In urban, mixed- use, and transit-oriented Place Types, we encourage the use of underutilized public and private spaces to expand our public realm and improve pedestrian and bicycle connectivity. (Link to Community Design Element Urban, Mixed Use, and Transit-oriented Place Types Section)	Consistent: The Specific Plan is transit-supportive and located in the vicinity of Metrolink and Amtrack stations as well as along the future BRT route.
M-3	**A public transit system that is a viable alternative to automobile travel and meets basic transportation needs of the transit-dependent.**	
	Policies	
M-3.1	Transit Partners. We maintain a proactive working partnership with transit providers to ensure that adequate public transit service is available, cost-efficient, and convenient, particularly for residents in environmental justice areas.	N/A
M-3.2	Alternative Transit Facilities at New Development. We require new development adjacent to an existing or planned transit stop to contribute to the creation of transit facilities, such as bus shelters, transit bays and turnouts, and bicycle facilities, such as secure storage areas.	N/A: While the Specific Plan is in the vicinity of the Metrolink and Amtrack stations, it is not adjacent to these facilities. The same goes with the BRT route. The plan does provide for bike parking.
M-3.3	Transit-Oriented Development. We may provide additional development-related incentives to those inherent in the Land Use Plan for projects that promote transit use and reduce vehicle miles traveled.	Consistent: The Specific Plan is a mixed-use development with a hotel and retail area. The future multimodal transit station is under consideration within the Mixed-Use Area, which will link rail, regional, local, and airport transit. The Specific Plan is transit-supportive and contributes to the lowering of VMT.
M-3.4	Bus Rapid Transit (BRT) Corridors. We work with regional transit agencies to implement BRT service and reduce vehicle miles traveled by targeting destinations and corridors with the highest number of potential riders.	N/A
M-3.5	Light Rail. We support extension of the Metro Rail Gold Line to Ontario, and will work to secure station locations at the proposed multimodal transit center.	N/A
M-3.6	Metrolink Expansion. We advocate expansion of Metrolink service to include the Downtown and the multimodal transit center.	N/A
M-3.7	High Speed Rail. We encourage the development of high-speed rail systems that would enhance regional mobility in Southern California and serve the City of Ontario.	N/A

M-3.8	Feeder Systems. We work with regional transit agencies to secure convenient feeder service from the Metrolink station and the proposed multimodal transit center to employment centers in Ontario.	N/A
M-3.9	Ontario Airport Metro Center Circulator. We will explore development of a convenient mobility system, including but not limited to shuttle service, people mover, and shared car system, for the Ontario Airport Metro Center.	N/A
M-3.10	Multimodal Transportation Center. We intend to ensure the development of a multimodal transportation center near ONT airport to serve as a transit hub with amenities for transit riders, pedestrians, and bicyclists transitioning to local buses, BRT, the Gold Line, high-speed rail, the proposed Ontario Airport Metro Center Circulator, and other future transit modes. We support locations for the multimodal transportation center that are north of ONT airport, between Vineyard Avenue and Interstate 15.	N/A
M-3.11	Transit and Community Facilities. We require the future development of community-wide serving facilities to be sited in transit-ready areas that can be served and made accessible by public transit. Conversely, we plan (and coordinate with other transit agencies to plan) future transit routes to serve existing community facilities.	N/A
M-4	**An efficient flow of goods through the City that maximizes economic benefits and minimizes negative impacts.**	
	Policies	
M-4.1	Truck Routes. We designate and maintain a network of City truck routes that provide for the safe and efficient transport of goods while minimizing negative impacts on local circulation and noise-sensitive land uses, as shown on Exhibit M-04, Truck Routes. We will minimize conflicts on truck routes through the design and implementation of buffers between travel lanes and pedestrian and bicycle facilities on designated truck routes.	N/A
M-4.2	Regional Participation. We work with regional and subregional transportation agencies and adjacent cities to plan and implement goods movement strategies, including regional truck routes, plans and projects that improve mobility, support the efficient movement of goods, and minimize negative environmental impacts. (Link to Environmental Resources Policy ER-4.3)	N/A
M-4.3	Railroad Grade Separations. We eliminate at-grade rail crossings identified on Exhibit M-01, Roadway Classifications.	N/A

M-4.4	Environmental Considerations. We support both local and regional efforts to reduce/eliminate the negative environmental impacts of goods movement through the planning and implementation of truck routing and the development of a plan to evaluate the future needs of clean fueling/recharging and electrified truck parking.	N/A
M-4.5	Air Cargo. We support and promote a ONT airport that accommodates 1.6 million tons of cargo per year, as long as the impacts associated with that level of operations are planned for and mitigated.	N/A
GOAL M-5	**A proactive leadership role in helping identify and facilitate implementation of strategies that address regional transportation challenges.**	
Policies		
M-5.1	Regional Leadership. We maintain a leadership role to help identify and implement potential solutions to long-term regional transportation problems.	N/A
M-5.2	Land Use Compatibility with Regional Transportation Facilities. We work with ONT, railroads, Caltrans, SBCTA, and other transportation agencies to minimize impacts.	N/A
Community Design Element		
GOAL CD-1	**A dynamic, progressive city containing distinct and complete places that foster a positive sense of identity and belonging among residents, visitors, and businesses.**	
Policies		
CD-1.1	City Identity. We take actions that are consistent with the City being a leading urban center in Southern California while recognizing, enhancing, and preserving the character of our existing viable neighborhoods.	Consistent: The Specific Plan is a mixed-use development with hotel and Local Serving Retail uses. The design standards within the Specific Plan aim to provide for high-quality development that is aesthetically pleasing and contributes to City identity.
CD-1.2	Place Types. We establish Place Types in urban, mixed use, and transit-oriented areas to foster the City's identity as a premier community and require new development within each Place Type to incorporate prescribed urban patterns, forms, and placemaking priorities. (Link to Community Design Element Urban, Mixed Use, and Transit-oriented Place Types Section)	Consistent: The Specific Plan is a mixed-use development with hotel and Local Serving Retail uses. The design standards within the Specific Plan aim to provide for high-quality development that is aesthetically pleasing and contributes to City identity. The concept plans and elevations are contemporary and aesthetically pleasing. The public plaza and public realm along Holt Boulevard and Guasti Road contribute to public placemaking whereas the private open space and recreational areas contribute to placemaking elements within the development. The signage, lighting, landscaping, and paving standards aim to contribute to placemaking.

CD-1.3	Existing Neighborhoods. We require the existing character of viable residential and non-residential neighborhoods be preserved, protected, and enhanced.	N/A
CD-1.4	Transportation Corridors. We will enhance our major transportation corridors within the City through landscape, hardscape, signage and lighting. The extent of enhancement should be appropriate to the use, type, and context of each corridor.	Consistent: The Specific Plan includes a public plaza and public realm along Holt Boulevard and Guasti Road which contribute to public placemaking and enhancement of these corridors.
CD-1.5	View Corridors. We require all major north-south streets be designed and redeveloped to feature views of the San Gabriel Mountains, which are part of the City's visual identity and a key to geographic orientation. Such views should be free of visual clutter, including billboards and may be enhanced by framing with trees.	N/A
GOAL CD-2	**A high level of design quality resulting in neighborhoods, commercial areas, public spaces, parks, and streetscapes that are attractive, safe, functional, human- scale, and distinct.**	
Policies		
CD-2.1	Quality Building Design and Architecture. We encourage all development projects to convey visual interest and character through: 1. Building volume, massing, and height to provide context-appropriate scale and proportion; 2. A true architectural style which is carried out in plan, section, and elevation through all aspects of the building and site design and appropriate for its setting; and 3. Exterior building materials that are articulated, high quality, durable, and appropriate for the architectural style.	Consistent: The development standards and design guidelines chapters in the Specific Plan document discuss massing, architecture, materials, and related topics. The elevation rendering shows a high-quality design with contemporary architecture and high-quality materials (refer to the material palette in the design guidelines). Digital illumination is also used to provide a cutting edge to the architecture of the building. There is a regularity in architecture through the use of architectural fins that create vertical elements, and they are intercepted by horizontal elements forming a grid-like pattern.

CD-2.2	Neighborhood Design. We create distinct residential neighborhoods that promote a sense of community and identity by emphasizing access, connectivity, livability, and social interaction through such elements as: 1. A pattern of smaller, walkable blocks that promote activity, safety, and access to nearby amenities and services; 2. Varied parcel sizes and lot configurations to accommodate a diversity of housing types; 3. Traffic calming measures to slow traffic and promote walkability while maintaining acceptable traffic flows and emergency evacuation access; 4. Floor plans that encourage views onto the street and de-emphasize the visual and physical dominance of garages (introducing the front porch as the "outdoor living room"), as appropriate; and 5. Landscaped parkways, with sidewalks separated from the curb and designed to maximize safety, comfort, and aesthetics for all users.	Consistent: The Specific Plan includes a public plaza and public realm improvements of the sidewalk areas and edge friction elements such as curbs, street trees, lighting, etc. along Holt Boulevard and Guasti Road contributing to walkability and traffic calming. These also maximize safety, comfort, and aesthetics for all users. The hotels have windows looking onto Guasti Road and Holt Boulevard that provide views of the street. Parking is provided underground.
CD-2.3	Commercial Areas. We desire commercial areas and centers to be distinctive, pedestrian friendly, functional, and vibrant with a range of businesses, places to gather, and connectivity to the neighborhoods they serve.	Consistent: The Specific Plan includes a public plaza and public realm improvements of the sidewalk areas and edge friction elements such as curbs, street trees, lighting, etc. along Holt Boulevard and Guasti Road which contribute to walkability and traffic calming. These also maximize safety, comfort, and aesthetics for all users.
CD-2.4	Urban, Mixed Use, and Transit-oriented Areas. We establish Place Types to require mixed use, urban, and transit-oriented areas to be designed and developed as pedestrian oriented areas that are integrated with adjacent neighborhoods and promote a vibrant, comfortable, and functional environment, as defined for each Place Type. (Link to Community Design Element Urban, Mixed Use, and Transit-oriented Place Types Section)	Consistent: The Specific Plan includes a public plaza and public realm improvements of the sidewalk areas and edge friction elements such as curbs, street trees, lighting, etc. along Holt Boulevard and Guasti Road which contribute to walkability and traffic calming. These also maximize safety, comfort, and aesthetics for all users.
CD-2.5	Streetscapes. We design new and, when necessary, retrofit existing streets to improve walkability, bicycling and transit integration, strengthen connectivity, and enhance community identity through improvements to the public right-of-way such as sidewalks, street trees, parkways, curbs, street lighting and street furniture.	Consistent: The Specific Plan includes a public plaza and public realm improvements of the sidewalk areas and edge friction elements such as curbs, street trees, lighting, etc. along Holt Boulevard and Guasti Road which addresses this policy.

CD-2.6	Connectivity. We promote development of local street patterns, multimodal networks, and connected public spaces that create and unify neighborhoods, rather than divide them, and create cohesive and continuous corridors, rather than independent "islands" through the following means: 1. Local street networks that provide access both between subdivisions and within neighborhoods and discourage through traffic; 2. A local street system that is logical and understandable for the user. A grid system is preferred to avoid circuitous and confusing travel paths between internal neighborhood areas and adjacent arterials and to provide adequate emergency and evacuation access; and 3. Pedestrian and bicycle networks that provide convenient access to neighborhoods and nearby destinations, such as schools, parks, other public spaces, commercial areas, and transit stops.	Consistent: The Circulation Plan complements the Land Use Plan by linking the hotel and retail uses to adjacent land uses and is designed to enhance connectivity and facilitate the movement of various transportation modes. Additionally, the development of the Specific Plan Area will include sidewalks around the site and development of a plaza at the intersection of Holt Boulevard and Guasti Road.
CD-2.7	Sustainability. We collaborate with the development community to design and build neighborhoods, streetscapes, sites, outdoor spaces, landscaping, and buildings to reduce energy demand through solar orientation, maximum use of natural daylight, passive solar and natural ventilation, building form, mechanical and structural systems, building materials, and construction techniques.	Consistent: The Development Standards and Design Guidelines within the Specific plan include many sustainable practices such as shared parking, drought-tolerant landscaping, transit-supportive design, mixed-use development, pedestrian support, electric charging stations, bike parking facilities, provision of open spaces, heat island reduction, light pollution reduction, enhanced indoor air quality strategies, low-emitting materials, daylighting, and so on that are consistent with Sustainable design.
CD-2.8	Safe Design. We incorporate defensible space design into new and existing developments to ensure the maximum safe travel and visibility on pathways, corridors, and open space and at building entrances and parking areas by avoiding physically and visually isolated spaces, maintaining visibility and accessibility, and using lighting.	Consistent: All outdoor spaces, including entrances and parking areas, are designed to ensure maximum visibility and adequate lighting. This includes both public and private areas. Review the parking and lighting standards and guidelines within the Specific Plan.
CD-2.9	Landscape Design. We encourage durable, sustainable, and drought-tolerant landscaping materials and designs that enhance the aesthetics of structures, create and define public and private spaces, and provide shade and environmental benefits.	Consistent: The Specific Plan includes many sustainable practices to the extent possible including drought-tolerant landscaping, low-emitting materials, paving materials, reduced heat island effect, daylighting, and other techniques. A variety of paving materials are used as shown in the paving palette in design guidelines to delineate and define spaces both public and private.

CD-2.10	Parking Areas. We require all development, including single-family residential, to minimize the visual impact of surface, structured, and garage parking areas visible from the public realm in an aesthetically pleasing, safe and environmentally sensitive manner. Examples include: 1. Surface parking: Shade trees, pervious surfaces, urban run-off capture and infiltration, and pedestrian paths to guide users through the parking field. 2. Structured parking: facade articulation, screening, appropriate lighting, and landscaping. 3. Garage parking: providing access to single-family residential garages through alley access, recessing garages from the frontage to emphasize front doors or active living spaces.	N/A: The Specific Plan does not include residential. The parking is provided underground.
CD-2.11	Entry Statements. We encourage the inclusion of amenities, signage, and landscaping at the entry to neighborhoods, commercial centers, mixed use areas, industrial developments, and public places that reinforce them as uniquely identifiable places.	Consistent: The Specific Plan entrance is designed with attractive landscaping that features terraced planting, an entry canal water feature, an attractive entranceway, an arrival court with sculpture, and outdoor dining spaces. The local retail area includes a plaza, an attractive landscaping buffer, and outdoor dining spaces.
CD-2.12	Site and Building Signage. We encourage the use of sign programs that utilize complementary materials, colors, and themes. Project signage should be designed to effectively communicate and direct users to various aspects of the development and complement the character of the structures.	Consistent: The Specific Plan sign program is well-defined in in the development standards and provides for the size, location, and themes of the signage. The signage will be made of durable materials and will be complementary to the building design.
CD-2.13	Entitlement Process. We work collaboratively with all stakeholders to ensure a high degree of certainty in the efficient review and timely processing of all development plans and permits.	N/A
CD-2.14	Availability of Information. We provide easy access to information for developers, builders and the public about design quality, construction quality, and sustainable building practices.	N/A
CD-2.15	Leverage Professional and Trade Organizations. We support excellence in design and construction quality through collaboration with trade and professional organizations that provide expertise, resources and programs for developers, builders, and the public.	N/A
CD-2.16	Transit Stops. We require transit stops be conveniently located, well lit, safe, and clearly accessible to pedestrians, bicyclists, and people of all abilities.	N/A

GOAL CD-3	Vibrant urban environments that are organized around intense buildings, pedestrian and transit areas, public plazas, and linkages between and within developments that are conveniently located, visually appealing and safe during all hours.	
	Policies	
CD-3.1	Unique Identity. We promote development that heightens the unique character and identity of each Place Type by requiring compatible land uses and land planning, site design, and building design that promotes an active public realm.	Consistent: The design guidelines for mixed-use development aim to provide for high-quality development that is aesthetically pleasing and contributes to the City's identity. The concept plans and elevations are contemporary and aesthetically pleasing. The public plaza and public realm along Holt Boulevard and Guasti Road contribute to public placemaking whereas the private open space and recreational areas contribute to placemaking elements within the development. The signage, lighting, landscaping, and paving standards aim to contribute to placemaking.
CD-3.2	Comfortable, Human-Scale Public Realm. We require that public spaces, including streets, parks, and plazas on both public and private property be designed to maximize safety, comfort and aesthetics and connect to the citywide pedestrian, vehicular, and bicycle networks.	Consistent: The Specific Plan includes a public plaza and public realm improvements of the sidewalk areas and edge friction elements such as curbs, street trees, lighting, etc. along Holt Boulevard and Guasti Road contribute to walkability and traffic calming. These also maximize safety, comfort, and aesthetics for all users.
CD-3.3	Complete and Connected Network. We require that pedestrian, vehicular, and bicycle circulation on both public and private property be coordinated to provide connections internally and externally to adjacent neighborhoods and properties (existing and planned) through a system of local roads and trails that promote walking and biking to nearby destinations (including existing and planned parks, commercial areas, and transit stops) and are designed to maximize safety, comfort, and aesthetics.	Consistent: The Specific Plan encourages active transportation by providing an enhanced public realm and bike facilities, including bike rentals as an allowable use in the Local Serving Retail area. The plan encourages the improvement of and connection to Cucamonga Creek Trail. The Specific Plan also improves the pedestrian realm along Holt Boulevard and Guasti Road. The public plaza and public realm improvements of the sidewalk areas and edge friction elements such as curbs, street trees, lighting, etc. along Holt Boulevard and Guasti Road contribute to walkability. All of the above encourage physical activity.
CD-3.4	Context-Aware and Appropriate Design. We require appropriate building and site design that complements existing development, respects the intent and identity of the Place Type, and provides appropriate transitions and connections between adjacent uses to ensure compatibility of scale, maintain an appropriate level of privacy for each use, and minimize potential conflicts.	Consistent: The Specific Plan is consistent with General Plan Update- The Ontario Plan's "Guasti District".
CD-3.5	Active Frontages. We create lively pedestrian streetscapes by requiring primary building, business, and residential entrances, outdoor dining, and storefronts be located on ground floors adjacent to sidewalks or public spaces and designed to maximize safety, comfort, aesthetics, and the intended functionality (as defined by the Place Type).	Consistent: The Specific Plan includes a public plaza and public realm improvements of the sidewalk areas encourage active use. There are outdoor dining areas both for the restaurants within the Hotel overlooking Guasti road and for restaurants within the Local Serving Retail areas.

CD-3.6	Managed Infrastructure. We collaborate with developers and property owners to facilitate development that realizes the envisioned character and functionality of the Place Type through the use of green and shared infrastructure within each Place Type.	Consistent: The Specific Plan encourages the improvement of and connection to Cucamonga Creek Trail. The Specific Plan also improves the pedestrian realm along Holt Boulevard and Guasti Road. The public plaza and public realm improvements of the sidewalk areas and edge friction elements such as curbs, street trees, lighting, etc. along Holt Boulevard and Guasti Road contribute to walkability.
GOAL CD-4	**Historic buildings, streets, landscapes, and neighborhoods, as well as the story of Ontario's people, businesses, and social and community organizations, have been preserved and serve as a focal point for civic pride and identity.**	
Policies		
CD-4.1	Cultural Resource Management. We update and maintain an inventory of historic sites and buildings, professional collections, artifacts, manuscripts, photographs, documents, maps, and other archives.	N/A
CD-4.2	Collaboration with Property Owners and Developers. We educate and collaborate with property owners and developers to implement strategies and best practices that preserve the character of our historic buildings, streetscapes, and unique neighborhoods.	N/A
CD-4.3	Collaboration with Outside Agencies. We pursue opportunities to team with other agencies, local organizations, and nonprofits in order to preserve and promote Ontario's heritage.	N/A
CD-4.4	Incentives. We use the Mills Act and other federal, state, regional and local programs to assist property owners with the preservation of select properties and structures.	N/A
CD-4.5	Adaptive Reuse. We actively promote and support the adaptive reuse of historic sites and buildings to preserve and maintain their viability.	N/A
CD-4.6	Promotion of Public Involvement in Preservation. We engage in programs to publicize and promote the City's and the public's involvement in preservation efforts.	N/A
CD-4.7	Public Outreach. We provide opportunities for our residents to research and learn about the history of Ontario through the Planning Department, the Ontario Museum of History and Art, and the Robert E. Ellingwood Model Colony History Room.	N/A
GOAL CD-5	**A sustained level of maintenance and improvement of properties, buildings, and infrastructure that protects the property values and encourages additional public and private investments.**	
Policies		

CD-5.1	Maintenance of Buildings and Property. We require all public and privately-owned buildings and property (including trails and easements) to be properly and consistently maintained.	Consistent: Maintenance of all improvements within the Specific Plan site, including private/quasi-public open space and recreation facilities, private driveways, circulation, and landscape, will be the responsibility of the applicant. Maintenance of the sidewalk areas in the immediate vicinity of the Specific Plan site will also be the responsibility of the applicant.
CD-5.2	Maintenance of Infrastructure. We require the continual maintenance of infrastructure.	Consistent: Maintenance of all improvements within the Specific Plan, including private/quasi-public open space and recreation facilities, private driveways, circulation, and landscape, will be the responsibility of the applicant. Maintenance of the sidewalk areas in the immediate vicinity of the Specific Plan will also be the responsibility of the applicant.
CD-5.3	Improvements to Property & Infrastructure. We provide programs to improve property and infrastructure.	Consistent: Maintenance of all improvements within the Specific Plan, including private/quasi-public open space and recreation facilities, private driveways, circulation, and landscape, will be the responsibility of the applicant. Maintenance of the sidewalk areas in the immediate vicinity of the Specific Plan will also be the responsibility of the applicant.
CD-5.4	Neighborhood Involvement. We encourage active community involvement to implement programs aimed at the beautification and improvement of neighborhoods.	N/A
Social Resources Element		
GOAL SR-1	**Residents have access to information, services and goods that improve their health and wellbeing.**	
Policies		
SR-1.1	Partnering for Healthcare. We work with healthcare providers, and local, regional, state, and federal agencies to attract and retain a diversity of affordable, quality healthcare and facilities for the entire community.	N/A
SR-1.2	Nutrition Choices. We support the promotion of equitable access to affordable healthy food choices in the community, including community gardens, farmers markets, and cooking classes.	N/A
SR-1.3	Health Education. We promote equitable access to health education, including disease prevention, mental health, nutrition, and physical fitness.	N/A

SR-1.4	Physical Activity. We encourage activities and community design that improve the physical fitness of our community members, with an emphasis on the provision of activities and facilities in environmental justice areas.	Consistent: The Specific Plan is a mixed-use development with a hotel and retail area and encourages active transportation by providing an enhanced public realm and bike facilities. The plan encourages the improvement of and connection to Cucamonga Creek Trail. The Local Serving Retail allows for bike rentals The Specific Plan also improves the pedestrian realm along Holt Boulevard and Guasti Road. All of the above encourage physical activity.
GOAL SR-2	**A range of educational and training opportunities for residents and workers of all ages and abilities that improves their life choices and provides a skilled workforce for our businesses.**	
Policies		
SR-2.1	Educational Partners. We partner with educational institutions throughout the region in order to expand the range and quality of educational offerings available to the community.	N/A
SR-2.2	Workforce Training. We will work with industrial organizations, businesses, and educational institutions to create opportunities for workforce training.	N/A
SR-2.3	Joint Use of Facilities. We partner with public and private educational institutions to jointly use facilities for both City and educational purposes.	N/A
SR-2.4	Access to Schools. We work with local and regional partners to improve the safety in and around schools and to improve access for citizens of all ages and abilities to schools and community services, such as after school and other programs.	N/A
SR-2.5	School Facilities. We plan and coordinate with school districts for designing and locating school facilities to meet the City's goals, such as for health, walkability, and safety and to minimize impacts to existing neighborhoods.	N/A
SR-2.6	Language. We promote broad outreach in languages used by the community for proposed projects that could negatively affect environmental justice areas.	N/A
SR-2.7	Community Engagement. We promote targeted outreach and education to historically underrepresented groups to encourage meaningful participation in decision-making process for projects whose outcomes will affect land use in environmental justice areas.	N/A
GOAL SR-3	**A range of community and leisure programs and activities provided by public, private, and nonprofit organizations that meet the needs of the community's varied interests, age groups and abilities.**	
Policies		

SR-3.1	Partnerships. We partner with local and regional agencies, nonprofit organizations, and the private sector to provide a comprehensive range of community activities and events to citizens.	N/A
SR-3.2	Needs Assessment. We track the needs and priorities for community services and look for ways to meet demands and avoid duplication of offerings.	N/A
SR-3.3	Program Outreach. We promote information about leisure activities, classes, special events, and other services and activities to our community.	N/A
SR-3.4	Community Events. We plan and actively participate in regularly scheduled community events and seasonal or yearly citywide events.	N/A
SR-3.5	Community Activities as Crime Deterrents. We promote and participate in community activities as part of our crime prevention efforts. (Link to Safety Element Policy S-7.3)	N/A
GOAL SR-4	**City libraries that connect community members of all ages and abilities to a broad range of programs, communication, and informational resources.**	
Policies		
SR-4.1	Community Needs. We identify and monitor community needs for library services, technology, and facilities, and tailor them to effectively meet those needs.	N/A
SR-4.2	Interagency Coordination. We leverage relationships with outside agencies, educational institutions, and neighboring jurisdictions to share library resources to the benefit of Ontario residents.	N/A
SR-4.3	Library Outreach. We outreach to the community to increase the patronage of the library.	N/A
SR-4.4	Coordination with Other Community Services. We coordinate library programs with other recreational and community programs and facilities.	N/A
SR-4.5	Focal Points of the Community. We design and program Ontario's libraries as focal points of community engagement, including public outreach and community events.	N/A
SR-4.6	Robert E. Ellingwood Model Colony History Room. We work with the Ontario Museum of History and Art in order to collect, preserve, and display artifacts and images from Ontario's heritage and connect the City's past to the present through the History Room.	N/A
GOAL SR-5	**Local heritage, entertainment, and cultural experiences that enrich the lives of Ontario's residents, workers, and visitors and serve to attract residents and businesses to the City.**	
Policies		

SR-5.1	Provision of Entertainment and Culture. We support equitable access to a range of entertainment and cultural experiences such as public art, exhibitions, and performances.	N/A
SR-5.2	Local Heritage Education. We partner with educational providers to promote culture and heritage. (Link to Community Design Element, Historic Preservation Section).	N/A
SR-5.3	Public Art. We encourage public art in buildings, parks, open spaces, and other public and private spaces.	N/A
SR-5.4	Private-Public Sector Events. We partner with private and nonprofit sectors to provide and promote participation in cultural activities including fairs, festivals, and other events geared to neighborhoods, the City as a whole, and the region.	N/A
SR-5.5	Promotion of Ontario Artists and Musicians. We promote awareness of entertainment and culture produced in Ontario.	N/A

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING FILE NO. PDEV23-039, A DEVELOPMENT PLAN TO CONSTRUCT A 600,000 SQUARE FOOT HOTEL AND COMMERCIAL BUILDING CONSISTING OF 600 ROOMS ON 10.43-ACRES OF LAND LOCATED ON THE SOUTHEAST CORNER OF GUASTI ROAD AND HOLT BOULEVARD WITHIN THE PROPOSED PA1 (HOSPITALITY MIXED-USE) DISTRICT OF THE EMPIRE GROVES SPECIFIC PLAN, AND MAKING FINDINGS IN SUPPORT THEREOF—APN: 110-322-33.

WHEREAS, DIVERSIFIED PACIFIC DEVELOPMENT GROUP, LLC (hereinafter referred to as "Applicant") has filed an Application for the approval of a Development Plan, File No. PDEV23-039, as described in the title of this Resolution (hereinafter referred to as "Application" or "Project"); and

WHEREAS, the Application applies to 10.43 acres of land generally located on southeast corner of Guasti Road and Holt Boulevard, within the proposed Empire Groves Specific Plan; and

WHEREAS, the properties to the north of the Project site are within the CCS (Convention Center Support Commercial) zoning district, and are developed with offices and hotel. The property to the east is within the UC (Utilities Corridor) zoning district and is developed with a flood control channel. The property to the south and west is within the CCS (Convention Center Support Commercial) zoning district, and is developed with hotel; and

WHEREAS, the proposed 600,000 square foot luxury hotel and commercial building consists of 600 rooms and will provide destination dining, luxury retail, banquet halls, spa, fitness center, public gathering spaces and additional guest amenities; and

WHEREAS, the proposed project is associated with the proposed Empire Groves Specific Plan (concurrently under review), and approval of the hotel development is contingent upon approval of the Empire Groves Specific Plan; and

WHEREAS, a shared parking analysis was completed by Translutions (Dated: November 2023) to evaluate the shared parking demand of the 600-room/suite full-service hotel with amenities (a pool/spa, fitness areas, meeting/conference rooms) and retail/restaurant areas. The methodology used for the shared parking analyses includes base parking demand ratios derived from the Urban Land Institute's (ULI) Shared Parking (3rd Edition, 2020). The parking analyses identified the highest parking demand is for 925 spaces on weekdays and 745 parking spaces on weekends. The Project is proposing a total of 932 parking spaces to meet the parking needs of the project; and

WHEREAS, in conjunction with the Project, the Applicant also filed an application for a Specific Plan (Empire Groves), File No. PSP23-001 and Development Agreement, File No. PDA23-005, which both require City Council approval; and

WHEREAS, the Ontario Plan 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364) was certified on August 16, 2022 (hereinafter referred to as "Certified EIR"), in which development and use of the Project site was discussed; and

WHEREAS, the Planning Director of the City of Ontario prepared and approved for attachment to the certified Environmental Impact Report, an Addendum to the Certified EIR (hereinafter referred to as "EIR Addendum") in accordance with the requirements of the California Environmental Quality Act of 1970, together with State and local guidelines implementing said Act, all as amended to date (collectively referred to as "CEQA"); and

WHEREAS, the environmental impacts of this project were thoroughly analyzed in the EIR Addendum, which concluded that implementation of the Project could result in a number of significant effects on the environment that were previously analyzed in the Certified EIR, and that the Certified EIR identified mitigation measures that would reduce each of those significant effects to a less-than-significant level; and

WHEREAS, the City's "Local Guidelines for the Implementation of the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed; and

WHEREAS, the Application is a project pursuant to the California Environmental Quality Act — Public Resources Code Section 21000 et seq. — (hereinafter referred to as "CEQA") and an EIR Addendum has been prepared to determine possible environmental impacts; and

WHEREAS, Ontario Development Code Table 2.02-1 (Review Matrix) grants the City Council the responsibility and authority to review and act on the subject Application; and

WHEREAS, the Project has been reviewed for consistency with the Housing Element of the Policy Plan component of The Ontario Plan, as State Housing Element law (as prescribed in Government Code Sections 65580 through 65589.8) requires that development projects must be consistent with the Housing Element, if upon consideration of all its aspects, it is found to further the purposes, principals, goals, and policies of the Housing Element; and

WHEREAS, the Project is located within the Airport Influence Area of Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and is subject to, and must be consistent with, the policies and criteria set forth in the Ontario International Airport Land Use Compatibility Plan (hereinafter referred to as "ALUCP"), which applies only to jurisdictions within San

Bernardino County, and addresses the noise, safety, airspace protection, and overflight impacts of current and future airport activity; and

WHEREAS, City of Ontario Development Code Division 2.03 (Public Hearings) prescribes the manner in which public notification shall be provided and hearing procedures to be followed, and all such notifications and procedures have been completed; and

WHEREAS, on February 19, 2025, the Development Advisory Board of the City of Ontario conducted a hearing to consider the Project, and concluded said hearing on that date, voting to issue Decision No. DAB25-004, respectively, recommending that the Planning Commission recommend the City Council approve the Application; and

WHEREAS, on February 25, 2025, the Planning Commission of the City of Ontario conducted a hearing to consider the EIR Addendum and the Project, and concluded said hearing on that date, voting to issue Resolution No. PC25-006, recommending the City Council adopt the EIR Addendum, and voting to issue Resolution No. PC25-009, recommending the City Council approve the Application; and

WHEREAS, as the first action on the Project, on March 18, 2025, the City Council issued a Resolution adopting the EIR Addendum, finding that the proposed Project introduces no new significant environmental impacts and applying all previously adopted mitigation measures to the Project, which were incorporated by reference; and

WHEREAS, on March 18, 2025, the City Council of the City of Ontario conducted a hearing to consider the Project, and concluded said hearing on that date; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED, AND RESOLVED by the City Council of the City of Ontario, as follows:

SECTION 1: ***Housing Element Compliance.*** Pursuant to the requirements of California Government Code Chapter 3, Article 10.6, commencing with Section 65580, as the decision-making body for the Project, the City Council finds that based upon the facts and information contained in the Application and supporting documentation, at the time of Project implementation, the project is consistent with the Housing Element of the Policy Plan (General Plan) component of The Ontario Plan, as the project site is not one of the properties in the Housing Element Sites Inventory contained in Tables B-1 and B-2 of the Housing Element Technical Report.

SECTION 2: ***Airport Land Use Compatibility Plan ("ALUCP") Compliance.*** The California State Aeronautics Act (Public Utilities Code Section 21670 et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

(1) On April 19, 2011, the City Council of the City of Ontario approved and adopted the Ontario International Airport Land use Compatibility Plan, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the decision-making body for the Project, the City Council has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the City Council, therefore, finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the ONT ALUCP; and

SECTION 3: ***Concluding Facts and Reasons.*** Based upon the substantial evidence presented to the City Council during the above-referenced hearing, and upon the specific findings set forth in Sections 1 and 2, above, the City Council hereby concludes as follows:

(1) ***The proposed development at the proposed location is consistent with the goals, policies, plans and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan.*** The proposed Project is located within the Mixed Use - Multimodal (MU-Multimodal land use district of the Policy Plan Land Use Map, and the proposed - PA1 (Hospitality Mixed-Use) of the Empire Groves Specific Plan. The development standards and conditions under which the proposed Project will be constructed and maintained is consistent with the goals, policies, plans, and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan.

(2) ***The proposed development is compatible with those on adjoining sites in relation to location of buildings, with particular attention to privacy, views, any physical constraint identified on the site and the characteristics of the area in which the site is located.*** The Project has been designed consistent with the requirements of the City of Ontario Development Code and the proposed - PA1 (Hospitality Mixed-Use) of the Empire Groves Specific Plan, including standards relative to the particular land use proposed (hotel/commercial), as-well-as building intensity, building and parking setbacks, building height, number of off-street parking and loading spaces, on-site and off-site landscaping, and fences, walls and obstructions.

(3) ***The proposed development will complement and/or improve upon the quality of existing development in the vicinity of the project and the minimum safeguards necessary to protect the public health, safety and general welfare have been required of the proposed project.*** The City Council has required certain safeguards, and imposed certain conditions of approval, which have been established to ensure that: [i] the purposes of the proposed Empire Groves Specific Plan are maintained; [ii] the project will not endanger the public health, safety or general welfare; [iii] the project will not result in any significant environmental impacts; [iv] the project will be in harmony with the area in which it is located; and [v] the project will be in full conformity with the Vision, City Council Priorities and Policy Plan components of The Ontario Plan, and the proposed Empire Groves Specific Plan.

(4) ***The proposed development is consistent with the development standards and design guidelines set forth in the Development Code, or applicable specific plan or planned unit development*****.** The proposed Project has been reviewed for consistency with the general development standards and guidelines of the proposed Empire Groves Specific Plan that are applicable to the proposed Project, including building intensity, building and parking setbacks, building height, amount of off-street parking and loading spaces, parking lot dimensions, design and landscaping, bicycle parking, on-site landscaping, and fences and walls, as-well-as those development standards and guidelines specifically related to the particular land use being proposed (hotel/commercial). As a result of this review, the City Council has determined that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the development standards and guidelines described in the proposed Empire Groves Specific Plan.

SECTION 4: ***City Council Action.*** Based upon the findings and conclusions set forth in Sections 1 through 3, above, the City Council hereby APPROVES the herein described Development Plan and Conditions of Approval, attached hereto as "Attachment A," and incorporated herein by this reference.

SECTION 5: ***Indemnification.*** The Applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void, or annul this approval. The City of Ontario shall promptly notify the applicant of any such claim, action, or proceeding, and the City of Ontario shall cooperate fully in the defense.

SECTION 6: ***Custodian of Records.*** The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East "B" Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario.

The City Clerk of the City of Ontario shall certify as to the adoption of this Resolution.

PASSED, APPROVED, AND ADOPTED this 18th day of March, 2025.

_____
PAUL S. LEON, MAYOR

ATTEST:

_____
SHEILA MAUTZ, CITY CLERK

APPROVED AS TO FORM:

_____
BEST BEST & KRIEGER LLP
CITY ATTORNEY

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO)
CITY OF ONTARIO)

I, SHEILA MAUTZ, City Clerk of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. 2025- was duly passed and adopted by the City Council of the City of Ontario at their regular meeting held March 18, 2025 by the following roll call vote, to wit:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

The foregoing is the original of Resolution No. 2025- duly passed and adopted by the Ontario City Council at their regular meeting held March 18, 2025.

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

ATTACHMENT A:

File No. PDEV23-039;
Conditions of Approval

(Document follows this page)

LAND DEVELOPMENT DIVISION CONDITIONS OF APPROVAL

CITY OF ONTARIO PLANNING DEPARTMENT
303 East B Street, Ontario, California 91764 Phone: 909.395.2036 / Fax: 909.395.2420

Date Prepared: 2/19/2025

File No: PDEV23-039

Related Files: PSP23-001 & PDA23-005

Project Description: A Development Plan to construct a 600,000 square foot hotel and commercial building consisting of 600 rooms on 10.43 acres of land located on the southeast corner of Guasti Road and Holt Boulevard within the proposed PA1 (Hospitality Mixed-Use) district of the Empire Groves Specific Plan; (APN: 110-322-33) **submitted by Diversified Pacific Development Group, LLC ;**

Prepared By: Lorena Mejia, Senior Planner
Phone: 909.395.2276 (direct)
Email: lmejia@ontarioca.gov

The Planning Department, Land Development Section, conditions of approval applicable to the above-described Project, are listed below. The Project shall comply with each condition of approval listed below:

1.0 Standard Conditions of Approval. The project shall comply with the *Standard Conditions for New Development*, adopted by City Council Resolution No. 2017-027 on April 18, 2017. A copy of the *Standard Conditions for New Development* may be obtained from the Planning Department or City Clerk/Records Management Department. The Development Agreement and Empire Groves Specific Plan shall govern the project site where conflicts occur with the Standard Conditions of approval.

2.0 Special Conditions of Approval. In addition to the *Standard Conditions for New Development* identified in condition no. 1.0, above, the project shall comply with the following special conditions of approval:

(a) One CD containing a complete electronic website version of the final Specific Plan document, including all required revisions.

2.2 Time Limits.

(a) Development Plan approval shall become null and void as outlined in the Development Agreement, File No. PDA23-005.

2.3 General Requirements. The Project shall comply with the following general requirements:

(a) All construction documentation shall be coordinated for consistency, including, but not limited to, architectural, structural, mechanical, electrical, plumbing, landscape

and irrigation, grading, utility and street improvement plans. All such plans shall be consistent with the approved entitlement plans on file with the Planning Department.

(b) The project site shall be developed in conformance with the approved plans on file with the City. Any variation from the approved plans must be reviewed and approved by the Planning Department prior to building permit issuance.

(c) The herein-listed conditions of approval from all City departments shall be included in the construction plan set for the project, which shall be maintained on site during project construction.

2.4 Landscaping.

(a) The Project shall provide and continuously maintain landscaping and irrigation systems in compliance with the provisions of Ontario Development Code Division 6.05 (Landscaping).

(b) Comply with the conditions of approval of the Planning Department, Landscape Planning Division.

(c) Landscaping shall not be installed until the Landscape and Irrigation Construction Documentation Plans required by Ontario Development Code Division 6.05 (Landscaping) have been approved by the Landscape Planning Division.

(d) Changes to approved Landscape and Irrigation Construction Documentation Plans, which affect the character or quantity of the plant material or irrigation system design, shall be resubmitted for approval of the revision by the Landscape Planning Division, prior to the commencement of the changes.

2.5 Walls and Fences. All Project walls and fences shall comply with the requirements of Ontario Development Code Division 6.02 (Walls, Fences and Obstructions).

2.6 Parking, Circulation and Access.

(a) The Project shall comply with the applicable off-street parking, loading and lighting requirements of City of Ontario Development Code Division 6.03 (Off-Street Parking and Loading).

(b) Areas provided to meet the City's parking requirements, including off-street parking and loading spaces, access drives, and maneuvering areas, shall not be used for the outdoor storage of materials and equipment, nor shall it be used for any other purpose than parking.

(c) The required number of off-street parking spaces and/or loading spaces shall be provided at the time of site and/or building occupancy. All parking and loading spaces shall be maintained in good condition for the duration of the building or use.

(d) Parking spaces specifically designated and conveniently located for use by the physically disabled shall be provided pursuant to current accessibility regulations contained in State law (CCR Title 24, Part 2, Chapters 2B71, and CVC Section 22507.8).

(e) Bicycle parking facilities, including bicycle racks, lockers, and other secure facilities, shall be provided in conjunction with development projects pursuant to current regulations contained in CALGreen (CAC Title 24, Part 11). The final design and placement of bicycle parking facilities shall be subject to Planning Department review and approval.

2.7 Outdoor Loading and Storage Areas.

(a) Loading facilities shall be designed and constructed pursuant to Development Code Division 6.03 (Off-Street Parking and Loading).

(b) Areas designated for off-street parking, loading, and vehicular circulation and maneuvering, shall not be used for the outdoor storage of materials or equipment.

2.8 Site Lighting.

(a) All off-street parking facilities shall be provided with nighttime security lighting pursuant to Ontario Municipal Code Section 4-11.08 (Special Residential Building Provisions) and Section 4-11.09 (Special Commercial/Industrial Building Provisions), designed to confine emitted light to the parking areas. Parking facilities shall be lit from sunset until sunrise, daily, and shall be operated by a photocell switch.

(b) Unless intended as part of a master lighting program, no operation, activity, or lighting fixture shall create illumination on any adjacent property.

2.9 Mechanical and Rooftop Equipment.

(a) All exterior roof-mounted mechanical, heating and air conditioning equipment, and all appurtenances thereto, shall be completely screened from public view by parapet walls or roof screens that are architecturally treated so as to be consistent with the building architecture.

(b) All ground-mounted utility equipment and structures, such as tanks, transformers, HVAC equipment, and backflow prevention devices, shall be located out of view from a public street, or adequately screened through the use of landscaping and/or decorative low garden walls.

2.10 Security Standards. The Project shall comply with all applicable requirements of Ontario Municipal Code Title 4 (Public Safety), Chapter 11 (Security Standards for Buildings).

2.11 Signs.

(a) All Project signage shall comply with the requirements of Ontario Development Code Division 8.1 (Sign Regulations).

(b) On-site posting of public noticing shall be provided pursuant to Code Section 2.03.010.C.4, which consists of one or more large, 6-foot-tall, freestanding public notification signs. The sign face shall measure 4 feet tall by 8 feet wide, in a format approved by the Planning Director. The sign shall be posted no later than ten calendar days prior to the Planning Commission hearing date and removed no later than fourteen calendar days following the City

Council hearing date, unless otherwise required by the Planning Director. The format is available on the City's website.

2.12 Sound Attenuation. The Project shall be constructed and operated in a manner so as not to exceed the maximum interior and exterior noise levels set forth in Ontario Municipal Code Title 5 (Public Welfare, Morals, and Conduct), Chapter 29 (Noise).

2.13 Disclosure Statements.

(a) A copy of the Public Report from the Department of Real Estate, prepared for the subdivision pursuant to Business and Professions Code Section 11000 et seq., shall be provided to each prospective buyer of the residential units and shall include a statement to the effect that:

(i) This tract is subject to noise from the Ontario International Airport and may be more severely impacted in the future.

(ii) Some of the property adjacent to this tract is zoned for agricultural uses and there could be fly, odor, or related problems due to the proximity of animals.

(iii) The area south of Riverside Drive lies within the San Bernardino County Agricultural Preserve. Dairies currently existing in that area are likely to remain for the foreseeable future.

(iv) This tract is part of a Landscape Maintenance District. The homeowner(s) will be assessed through their property taxes for the continuing maintenance of the district.

2.14 Environmental Requirements.

(a) If human remains are found during project grading/excavation/construction activities, the area shall not be disturbed until any required investigation is completed by the County Coroner and Native American consultation has been completed (if deemed applicable).

(b) If any archeological or paleontological resources are found during project grading/excavation/construction, the area shall not be disturbed until the significance of the resource is determined. If determined to be significant, the resource shall be recovered by a qualified archeologist or paleontologist consistent with current standards and guidelines, or other appropriate measures implemented.

2.15 Indemnification. The applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void or annul any approval of the City of Ontario, whether by its City Council, Planning Commission or other authorized board or officer. The City of Ontario shall promptly notify the applicant of any such claim, action or proceeding, and the City of Ontario shall cooperate fully in the defense.

2.16 Additional Fees.

(a) Within 5 days following final application approval, the Notice of Determination ("NOD") filing fee shall be provided to the Planning Department. The fee shall be paid by check, made payable to the "Clerk of the Board of Supervisors", which shall be forwarded

to the San Bernardino County Clerk of the Board of Supervisors, along with all applicable environmental forms/notices, pursuant to the requirements of the California Environmental Quality Act ("CEQA"). Failure to provide said fee within the time specified will result in the extension of the statute of limitations for the filing of a CEQA lawsuit from 30 days to 180 days.

(b) After the Project's entitlement approval, and prior to issuance of final building permits, the Planning Department's Plan Check and Inspection fees shall be paid at the rate established by resolution of the City Council.

2.17 Related Applications. Development Plan approval shall not be final and complete until such time as File Nos. PDA23-005 and PSP23-001 have been approved by the City Council.

2.18 Final Occupancy. The Project Architect of record will certify that construction of each building site and the exterior elevations of each structure shall be completed in compliance with the approved plans. Any deviation to approved plans shall require a resubmittal to the Planning Department for review and approval prior to construction. The Occupancy Release Request Form/Architect Certificate of Compliance shall be provided prior to final occupancy. After the receipt of this Certification, the Planning Department will conduct a final site and exterior elevations inspection. The Owner's Representative and Contractor shall be present.

2.19 Tribal - Yuhaaviatam of San Manuel Nation.

(a) In the event that cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted, as detailed within TCR-1, regarding any pre-contact finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment.

(b) If significant pre-contact cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to YSMN for review and comment, as detailed within TCR-1. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.

(c) If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.

(d) The Yuhaaviatam of San Manuel Nation Cultural Resources Management Department (YSMN) shall be contacted, as detailed in CUL-1, of any pre-contact cultural resources discovered during project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a Cultural Resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with YSMN, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present

that represents YSMN for the remainder of the project, should YSMN elect to place a monitor on-site.

(e) Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to YSMN. The Lead Agency and/or applicant shall, in good faith, consult with YSMN throughout the life of the project

2.20 Tribal - Gabrieleno Band of Mission Indians – Kizh Nation.

(a) The project applicant or lead agency shall retain a Native American Tribal Monitor from the Gabrieleno Band of Mission Indians – Kizh Nation to ensure proper oversight of Tribal Cultural Resources (TCR). The Tribal Cultural Resources monitoring plan shall address the details, timing, and responsibilities for cultural resource activities occurring on the project site. The plan shall include:

(i) Project-related ground disturbance (including, but not limited to, brush clearing, grading, trenching, etc.) and development scheduling.

(ii) Full-time presence of a designated Native American Tribal Monitor from the Gabrieleno Band of Mission Indians – Kizh Nation during all grading, excavation, and ground-disturbing activities on the site. The monitor shall coordinate with the developer to ensure safety requirements, duties, and scope of work are adhered to. The Tribal Monitor shall also have the authority to stop and redirect grading activities if tribal cultural resources are identified.

(iii) Protocols and stipulations to address inadvertent discoveries of Tribal Cultural Resources, including immediate evaluation by the Kizh Nation. At least 30 days prior to application for a grading permit and before any brush clearance, grading, excavation, and/or ground disturbing activities on the site, the developer shall retain a Tribal Cultural Monitor from the Gabrieleno Band of Mission Indians – Kizh Nation to monitor all such activities. A Tribal Monitor shall be present during all initial grading activities. If tribal resources are identified during grubbing activities, the Tribal Monitor shall continue to be present during subsequent grading activities.

(b) Treatment and Disposition of Cultural Resources. In the event that Tribal Cultural Resources are inadvertently discovered during the course of any ground-disturbing activities, including but not limited to brush clearance, grading, trenching, etc., the following procedures shall be followed to ensure proper and disposition of the discoveries:

(i) Temporary Curation and Storage: During construction, all discovered resources shall be temporarily curated in a secure on-site location under the oversight of the Tribal Monitor from the Gabrieleno Band of Mission Indians – Kizh Nation.

(ii) Treatment and Final Disposition All discovered cultural resources, including sacred items, burial goods, and archaeological artifacts, shall remain under the custodianship of the Gabrieleno Band of Mission Indians – Kizh Nation. Final disposition shall occur through the following process of On-site Reburial. Discovered items shall be reburied on-site in coordination with the Gabrieleno Band of Mission Indians – Kizh Nation. Measures shall be taken to ensure the future reburial area is protected from any potential future impacts. Reburial shall only occur after cataloging, basic analysis, recordation, and any other necessary documentation have been completed in consultation with the Kizh Nation.

(c) Phase IV Monitoring Report: Upon completion of grading, excavation, and ground-disturbing activities, a Phase IV Monitoring Report shall be submitted to the City of Ontario within 60 days. This report shall document:

(i) All monitoring activities conducted by the Tribal Monitors from the Gabrieleno Band of Mission Indians – Kizh Nation.

(ii) The impacts to known resources on the property.

(iii) A summary of how each mitigation measure was fulfilled.

(iv) The type and disposition of cultural resources recovered.

(v) Evidence of cultural sensitivity training provided to construction staff prior to project commencement.

(vi) A confidential appendix including daily/weekly monitoring notes prepared by the monitors. All reports produced shall be submitted to the City of Ontario, the Gabrieleno Band of Mission Indians – Kizh Nation, and any other relevant agencies

2.21 Additional Requirements.

(a) The Applicant/Owner and the City shall continue to refine and finalize the associated Development Agreement (PDA23-005) as needed between the City and the Owner, including all attached exhibits, prior to review and consideration by the City Council as the final decision-making body.

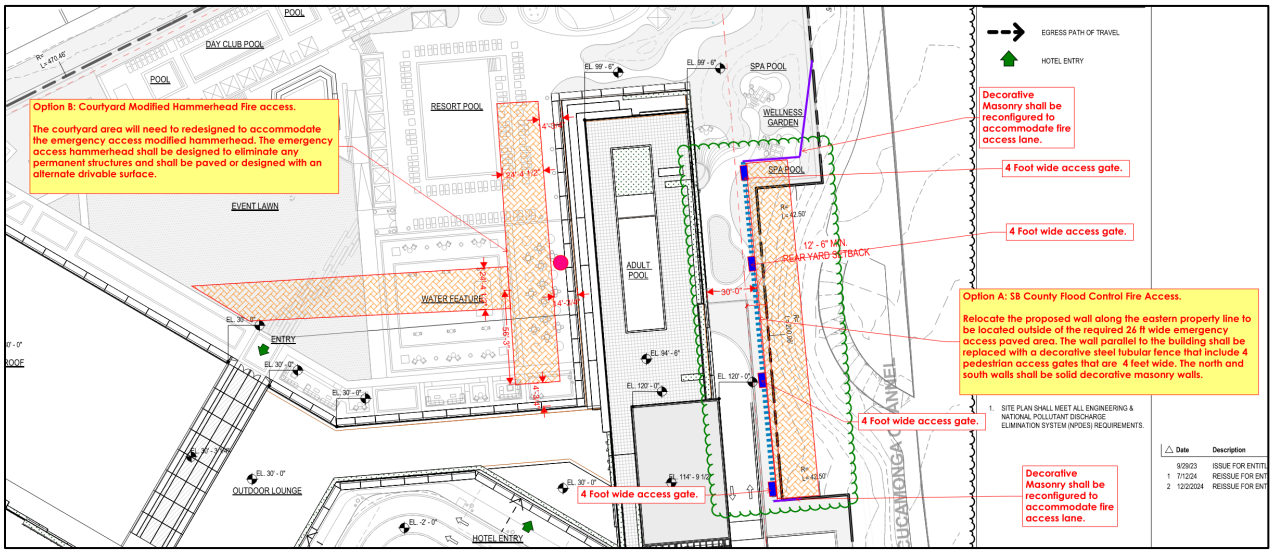
(b) The final size and locations of the proposed Digital Advertising Signs integrated into the design of the building shall require separate approval. An approved Master Sign Program and user agreement shall be required in accordance with the Ontario Development Code to establish development standards for design, approved content, sign area, location, and use.

(c) The Fire Department has conditioned the project to provide a secondary point off fire access for the proposed project. The Fire conditions allow for two fire access scenarios (see the following exhibit) that include the following:

(i) Option A: SB County flood control – In Option A fire access shall be taken from the San Bernardino County Flood Control Channel located along the eastern property line. This option contingent upon approval from San Bernardino County. If approved by the County the wall and landscape areas along the eastern property line will need to be redesigned and reconfigured to accommodate the required 26-foot-wide emergency access road shown in the following exhibit. The final design shall require fire and planning approval.

(ii) Option B: Courtyard Modified Hammerhead – If Option A is not approved then Option B will be implemented. Option B is the design of a modified hammerhead located within the north courtyard area with access from Holt Boulevard. The north courtyard will need to be redesigned to accommodate adequate fire access as illustrated in the following exhibit. The emergency access hammerhead shall eliminate any permanent structures and shall

be paved or designed with an alternate drivable surface. The courtyard modified hammerhead design or an alternate design shall require fire and planning approval.



7024

ENGINEERING DEPARTMENT
CONDITIONS OF APPROVAL

(Land Development Division, Environmental Section, Traffic & Transportation Division, Ontario Municipal Utilities Company, Broadband Department, and Financial Services Agency Conditions incorporated)

☒ **DEVELOPMENT PLAN** ☐ OTHER	☐ PARCEL MAP ☐ TRACT MAP ☐ FOR CONDOMINIUM PURPOSES
PROJECT FILE NO. PDEV23-039 **RELATED FILE NO(S). PSP23-001; PDA23-005**	
☒ **ORIGINAL** ☒ REVISED: 2/18/25	

CITY PROJECT ENGINEER & PHONE NO:	**Jeffrey Tang, P.E.**	**(909) 395-2128**
CITY PROJECT PLANNER & PHONE NO:	**Lorena Mejia**	**(909) 395-2276**
DAB MEETING DATE:	**February 19, 2025**	
PROJECT NAME / DESCRIPTION:	**A Development Plan to construct a 9-story hotel consisting of approximately 596,450 square feet to include 600 rooms, ancillary retail and various amenities on 10.43 acres of land, within the SP (Specific Plan) zoning district and the MTC (Multimodal Transit Center overlay. APN: 0110-322-33**	
LOCATION:	**2236 East Holt Boulevard**	
APPLICANT:	**Diversified Pacific**	
REVIEWED BY:	Raymond Lee 2/13/25 **Raymond Lee, P.E.** **Date** **Assistant City Engineer**	
APPROVED BY:	2-13-25 **Khoi Do, P.E.** **Date** **City Engineer**	

THIS PROJECT SHALL COMPLY WITH THE REQUIREMENTS SET FORTH IN THE GENERAL STANDARD CONDITIONS OF APPROVAL ADOPTED BY THE CITY COUNCIL (RESOLUTION NO. 2017-027) AND THE PROJECT SPECIFIC CONDITIONS OF APPROVAL SPECIFIED HEREIN. ONLY APPLICABLE CONDITIONS OF APPROVAL ARE CHECKED. THE APPLICANT SHALL BE RESPONSIBLE FOR THE COMPLETION OF ALL APPLICABLE CONDITIONS OF APPROVAL PRIOR TO FINAL MAP OR PARCEL MAP APPROVAL, ISSUANCE OF PERMITS AND/OR OCCUPANCY CLEARANCE, AS SPECIFIED IN THIS REPORT.

1. PRIOR TO FINAL MAP OR PARCEL MAP APPROVAL, APPLICANT SHALL:

			Check When Complete
☐	1.01	Dedicate to the City of Ontario, the right-of-way, described below to achieve: _____ feet on _____ Property line corner 'cut-back' required at the intersection of _____ and _____.	☐
☐	1.02	Dedicate to the City of Ontario, the following easement(s): _____ _____	☐
☐	1.03	Restrict vehicular access to the site as follows: _____	☐
☐	1.04	Vacate the following street(s) and/or easement(s): A. All interfering on-site easements shall be quitclaimed, vacated, and/or submit non-interference letter from affected owner/utility company.	☐
☐	1.05	Submit a copy of a recorded private reciprocal use agreement or easement. The agreement or easement shall ensure, at a minimum, common ingress and egress and joint maintenance of all common access areas and drive aisles.	☐
☐	1.06	Provide (original document) Covenants, Conditions and Restrictions (CC&Rs) as applicable to the project and as approved by the City Attorney and the Engineering and Planning Departments, ready for recordation with the County of San Bernardino. The CC&Rs shall provide for, but not be limited to, common ingress and egress, joint maintenance responsibility for all common access improvements, common facilities, parking areas, utilities, median and landscaping improvements and drive approaches, in addition to maintenance requirements established in the Water Quality Management Plan (WQMP), as applicable to the project. The CC&Rs shall also address the maintenance and repair responsibility for public improvements/utilities (sewer, water, storm drain, recycled water, etc.) located within open space/easements. In the event of any maintenance or repair of these facilities, the City shall only restore disturbed areas to current City Standards.	☐
☐	1.07	For all development occurring south of the Pomona Freeway (60-Freeway) and within the specified boundary limits (per Boundary Map found at *http://tceplumecleanup.com/*), the property developer/owner is made aware of the South Archibald Trichloroethylene (TCE) Plume "Disclosure Letter". Property owner may wish to provide this Letter as part of the Real Estate Transfer Disclosure requirements under California Civil Code Section 1102 et seq. This may include notifications in the Covenants, Conditions and Restrictions (CC&Rs) or other documents related to property transfer and disclosures. Additional information on the plume is available from the Santa Ana Regional Water Quality Control Board at *http://geotracker.waterboards.ca.gov/profile_report?global_id=T10000004658*.	☐
☐	1.08	File an application for Reapportionment of Assessment, together with payment of a reapportionment processing fee, for each existing assessment district listed below. Contact the Financial Services Department at (909) 395-2124 regarding this requirement. (1) _____ (2) _____	☐
☐	1.09	Prepare a fully executed Subdivision Agreement (on City approved format and forms) with accompanying security as required, or complete all public improvements.	☐

☐ 1.10 Provide a monument bond (i.e. cash deposit) in an amount calculated by the City's approved cost estimate spreadsheet (available for download on the City's website: www.ontarioca.gov) or as specified in writing by the applicant's Registered Engineer or Licensed Land Surveyor of Record and approved by the City Engineer, whichever is greater. ☐

☐ 1.11 Provide a preliminary title report current to within 30 days. ☐

☐ 1.12 File an application, together with an initial deposit (if required), to establish a Community Facilities District (CFD) pursuant to the Mello-Roos Community Facilities District Act of 1982. The application and fee shall be submitted a minimum of four (4) months prior to final subdivision map approval, and the CFD shall be established prior to final subdivision map approval or issuance of building permits, whichever occurs first. The CFD shall be established upon the subject property to provide funding for various City services. An annual special tax shall be levied upon each parcel or lot in an amount to be determined. The special tax will be collected along with annual property taxes. The City shall be the sole lead agency in the formation of any CFD. Contact Financial Services Agency at (909) 395-2015 or email CFD@ontarioca.gov to initiate the CFD application process. ☐

☐ 1.13 Ontario Ranch Developments: ☐

☐ 1) Provide evidence of final cancellation of Williamson Act contracts associated with this tract, prior to approval of any final subdivision map. Cancellation of contracts shall have been approved by the City Council.

☐ 2) Provide evidence of sufficient storm water capacity availability equivalents (Certificate of Storm Water Treatment Equivalents).

☐ 3) Provide evidence of sufficient water availability equivalents (Certificate of Net MDD Availability).

☐ 1.14 Other conditions: _____ ☐

2. PRIOR TO ISSUANCE OF ANY PERMITS, APPLICANT SHALL:

A. GENERAL
(Permits includes Grading, Building, Demolition and Encroachment)

☐ 2.01 Record Parcel Map/Tract Map No. _____ pursuant to the Subdivision Map Act and in accordance with the City of Ontario Municipal Code. ☐

☐ 2.02 Submit a PDF of the recorded map to the City Engineer's office. ☐

☒ **2.03 Note that the subject parcel is a recognized parcel in the City of Ontario per Parcel Map 5660.** ☐

☐ 2.04 Note that the subject parcel is an 'unrecognized' parcel in the City of Ontario and shall require a Certificate of Compliance to be processed unless a deed is provided confirming the existence of the parcel prior to the date of March 4, 1972. ☐

☐ 2.05 Apply for a: ☐

☐ Certificate of Compliance with a Record of Survey;

☐ Lot Line Adjustment (Record a Conforming Deed with the County of San Bernardino within six months of the recordation of the Lot Line Adjustment to conform the new LLA legal description. Submit a copy of the recorded Conforming Deed to the Engineering Department.);

☐ Make a Dedication of Easement.

☐ 2.06 Provide (original document) Covenants, Conditions and Restrictions (CC&R's), as applicable to the project, and as approved by the City Attorney and the Engineering and Planning Departments, ready for recordation with the County of San Bernardino. The CC&R's shall provide for, but not be limited to, common ingress and egress, joint maintenance of all common access improvements, common facilities, parking areas, utilities and drive approaches in addition to maintenance requirements established in the Water Quality Management Plan (WQMP), as applicable to the project. ☐

☐ 2.07 For all development occurring south of the Pomona Freeway (60-Freeway) and within the specified boundary limits (per Boundary Map found at *http://tceplumecleanup.com/*), the property developer/owner is made aware of the South Archibald Trichloroethylene (TCE) Plume "Disclosure Letter". Property owner may wish to provide this Letter as part of the Real Estate Transfer Disclosure requirements under California Civil Code Section 1102 et seq. This may include notifications in the Covenants, Conditions and Restrictions (CC&Rs) or other documents related to property transfer and disclosures. Additional information on the plume is available from the Santa Ana Regional Water Quality Control Board at *http://geotracker.waterboards.ca.gov/profile_report?global_id=T10000004658*. ☐

☒ **2.08 Submit a soils/geology report.** ☐

☒ **2.09 Other Agency Permit/Approval: Submit a copy of the approved permit and/or other form of approval of the project from the following agency or agencies:** ☐

- ☒ **State of California Department of Transportation (Caltrans) for street and utility improvements along Holt Blvd**
- ☐ San Bernardino County Road Department (SBCRD)
- ☒ **San Bernardino County Flood Control District (SBCFCD) for proposed Fire Access Lane through SBCFCD property along Cucamonga Channel**
- ☐ Federal Emergency Management Agency (FEMA)
- ☐ Cucamonga Valley Water District (CVWD) for sewer/water service
- ☐ United States Army Corps of Engineers (USACE)
- ☐ California Department of Fish & Game
- ☐ Inland Empire Utilities Agency (IEUA)
- ☐ Other: _____

☒ **2.10 Dedicate to the City of Ontario the right-of-way described below:** ☐

- **20 feet on Guasti Road along the proposed right turn pocket to Holt Blvd, see Transportation Section Condition 1 and 2 for more detail.**
- **Property line corner 'cut-back' required at the intersection of Guasti Road and Holt Blvd**

☒ **2.11 Dedicate to the City of Ontario the following easement(s):** ☐

- **An easement for emergency vehicle access to the City of Ontario along approved Fire Access Lane from Holt Blvd through hotel courtyard**
- **An easement for emergency vehicle access to the City of Ontario along approved Fire Access Lane from Holt Blvd to Guasti Rd through SBCFCD property along the Cucamonga Channel**
- **An easement for pedestrian public access to the City of Ontario for the onsite sidewalk along Guasti Road, see Condition 2.18.3 for more detail.**

☒ **2.12 Vacate the following street(s) and/or easement(s):** ☐

A. All interfering on-site easements shall be quitclaimed, vacated, and/or submit non-interference letter from affected owner/utility company.

☐ 2.13 Ontario Ranch Developments: ☐

☐ 1) Submit a copy of the permit from the San Bernardino County Health Department to the Engineering Department and the Ontario Municipal Utilities Company (OMUC) for the destruction/abandonment of the on-site water well. The well shall be destroyed/abandoned in accordance with the San Bernardino County Health Department guidelines.

☐ 2) Make a formal request to the City of Ontario Engineering Department for the proposed temporary use of an existing agricultural water well for purposes other than agriculture, such as grading, dust control, etc. Upon approval, the Applicant shall enter into an agreement with the City of Ontario and pay any applicable fees as set forth by said agreement.

☐ 3) Design proposed retaining walls to retain up to a maximum of three (3) feet of earth. In no case shall a wall exceed an overall height of nine (9) feet (i.e. maximum 6-foot high wall on top of a maximum 3-foot high retaining wall.

☒ **2.14** **Submit a security deposit to the Engineering Department to guarantee construction of the public improvements required herein valued at 100% of the approved construction cost estimate. Security deposit shall be in accordance with the City of Ontario Municipal Code. Security deposit will be eligible for release, in accordance with City procedure, upon completion and acceptance of said public improvements.** ☐

☒ **2.15** **The applicant/developer shall submit all necessary survey documents prepared by a Licensed Surveyor registered in the State of California detailing all existing survey monuments in and around the project site. These documents are to be reviewed and approved by the City Survey Office.** ☐

☒ **2.16** **Pay all Development Impact Fees (DIF) to the Building Department. Storm Drain Development Impact Fee shall be paid to the Building Department. Final fee shall be determined based on the approved site plan and the DIF rate at the time of payment.** ☐

☒ **2.17** **Other conditions:** ☐

- **This Development Plan shall comply with the approved Specific Plan (PSP23-001) and the approved Development Agreement (PDA23-005).**
- **The applicant/developer shall establish, on behalf of the City, a maintenance, access, and use agreement with SBCFCD for the proposed Fire Access Lane along the Cucamonga Channel from Holt Blvd. to Guasti Rd. within SBCFCD property.**

B. PUBLIC IMPROVEMENTS
(See attached Exhibit 'A' for plan check submittal requirements.)

☒ 2.18 **Design and construct full public improvements in accordance with the City of Ontario Municipal Code, current City standards and specifications, master plans and the adopted specific plan for the area, if any. These public improvements shall include, but not be limited to, the following (checked boxes):**

Improvement	Guasti Rd	Holt Blvd	-	-
Curb and Gutter	☒ **New; 32 ft. from C/L** ☐ Replace damaged ☐ Remove and replace	☒ **New; 30 ft. from C/L** ☐ Replace damaged ☐ Remove and replace	☐ New; ___ ft. from C/L ☐ Replace damaged ☐ Remove and replace	☐ New; ___ ft. from C/L ☐ Replace damaged ☐ Remove and replace
AC Pavement	☒ **Replacement[1]** ☒ **Widen 13 additional feet along frontage, including pavm't transitions**	☐ Replacement ☐ Widen ____ additional feet along frontage, including pavm't transitions	☐ Replacement ☐ Widen ____ additional feet along frontage, including pavm't transitions	☐ Replacement ☐ Widen ____ additional feet along frontage, including pavm't transitions
PCC Pavement (Truck Route Only)	☐ New ☐ Modify existing	☒ **Widen 10 additional feet along frontage, including pavm't transitions** ☒ **Replace Existing[2]**	☐ New ☐ Modify existing	☐ New ☐ Modify existing
Drive Approach	☒ **New** ☐ Remove and replace	☒ **New** ☐ Remove and replace	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace
Sidewalk	☒ **New[3]** ☐ Remove and replace	☒ **New** ☐ Remove and replace	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace
ADA Access Ramp	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace
Parkway	☒ **Trees** ☒ **Landscaping (w/irrigation)**	☒ **Trees** ☒ **Landscaping (w/irrigation)**	☐ Trees ☐ Landscaping (w/irrigation)	☐ Trees ☐ Landscaping (w/irrigation)
Raised Landscaped Median	☒ **New** ☐ Remove and replace	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace
Fire Hydrant	☒ **New / Upgrade** ☐ Relocation	☐ New / Upgrade ☐ Relocation	☐ New / Upgrade ☐ Relocation	☐ New / Upgrade ☐ Relocation

Sewer (see Sec. 2.C)	☐ Main ☐ Lateral	☐ Main ☒ **Lateral**	☐ Main ☐ Lateral	☐ Main ☐ Lateral
Water (see Sec. 2.D)	☐ Main ☒ **Service**	☐ Main ☐ Service	☐ Main ☐ Service	☐ Main ☐ Service
Recycled Water (see Sec. 2.E)	☒ **Main** ☒ **Service**	☐ Main ☐ Service	☐ Main ☐ Service	☐ Main ☐ Service
Traffic Signal System (see Sec. 2.F)	☒ **New** ☐ Modify existing	☐ New ☒ **Modify existing**	☐ New ☐ Modify existing	☐ New ☐ Modify existing
Traffic Signing and Striping (see Sec. 2.F)	☒ **New** ☐ Modify existing	☒ **New** ☐ Modify existing	☐ New ☐ Modify existing	☐ New ☐ Modify existing
Street Light (see Sec. 2.F)	☒ **New / Upgrade** ☐ Relocation	☒ **New / Upgrade** ☐ Relocation	☐ New / Upgrade ☐ Relocation	☐ New / Upgrade ☐ Relocation
Bus Stop Pad or Turn-out (see Sec. 2.F)	☐ New ☐ Modify existing	☐ New ☐ Modify existing	☐ New ☐ Modify existing	☐ New ☐ Modify existing
Storm Drain (see Sec. 2G)	☐ Main ☒ **Lateral**	☐ Main ☐ Lateral	☐ Main ☐ Lateral	☐ Main ☐ Lateral
Fiber Optics (see Sec. 2K)	☒ **Conduit / Appurtenances**	☒ **Conduit / Appurtenances**	☐ Conduit / Appurtenances	☐ Conduit / Appurtenances
Overhead Utilities	☐ Underground ☐ Relocate	☐ Underground ☐ Relocate	☐ Underground ☐ Relocate	☐ Underground ☐ Relocate
Removal of Improvements	_____ _____ _____	_____ _____ _____	_____ _____ _____	_____ _____ _____
Other Improvements	☒ Bridge Widening, (see **2.24)**	_____ _____ _____	_____ _____ _____	_____ _____ _____

Specific notes for improvements listed in item no. 2.18, above:

1. **Replace existing AC pavement along north side of Guasti Road from proposed median to proposed widening along project frontage per City of Ontario Standard Drawing number 1011.**
2. **Southernmost row of existing PCC pavement panels along Holt Blvd shall be removed and replaced in conjunction with the proposed frontage improvements.**
3. **Onsite sidewalk along Guasti Road shall have a continuous ADA accessible path of travel from each connection to public sidewalk.**

☒ **2.19 Construct a 2" asphalt concrete (AC) grind and overlay on the existing section of the following street(s):** ☐

- **South side of Guasti Rd, edge of gutter to proposed median curb, from Holt Blvd to Cucamonga Channel bridge**

☐ 2.20 Reconstruction of the full pavement structural section, per City of Ontario Standard Drawing number 1011, may be required based on the existing pavement condition and final street design. Minimum limits of reconstruction shall be along property frontage, from street centerline to curb/gutter. ☐

☒ **2.21 Depending on site conditions and number of utility service cuts at time of construction, additional pavement restoration may be required.** ☐

☐ 2.22 Make arrangements with the Cucamonga Valley Water District (CVWD) to provide ☐ water service ☐ sewer service to the site. This property is within the area served by the CVWD and Applicant shall provide documentation to the City verifying that all required CVWD fees have been paid. ☐

☐ 2.23 Overhead utilities shall be under-grounded, in accordance with Title 7 of the City's Municipal Code (Ordinance No. 2804 and 2892). Developer may pay in-lieu fee, approximately _____, for undergrounding of utilities in accordance with Section 7-7.302.e of the City's Municipal Code. ☐

☒ **2.24 Other conditions:** ☐

- **The applicant/developer shall design and construct a widening of Guasti Road bridge over the Cucamonga Channel to accommodate 2 lanes of vehicular traffic in each direction and pedestrian travel and transitions. Additional right-of-way to be dedicated as needed per final design. Improvements to be coordinated, reviewed, and approved by City and SBCFCD. The Development Agreement shall determine responsible party for funding and or construction of this improvement. See Transportation Section Condition 3 for more detail.**

C. SEWER

☒ **2.25 A 12 inch sewer main is available for connection by this project in Holt Blvd (Ref: Sewer Drawing Number: S13859)** ☐

☐ 2.26 Design and construct a sewer main extension. A sewer main is not available for direct connection. The closest main is approximately _____ feet away. ☐

☐ 2.27 Submit documentation that shows expected peak loading values for modeling the impact of the subject project to the existing sewer system. The project site is within a deficient public sewer system area. Applicant shall be responsible for all costs associated with the preparation of the model. Based on the results of the analysis, Applicant may be required to mitigate the project impact to the deficient public sewer system, including, but not limited to, upgrading of existing sewer main(s), construction of new sewer main(s) or diversion of sewer discharge to another sewer. ☐

☒ **2.28 Other conditions: See Exhibit B for Utilities Engineering Conditions of Approval** ☐

D. WATER

☒ **2.29 A 12 inch water main is available for connection by this project in Guasti Rd (Ref: Water Drawing Number: W11988)** ☐

☐ 2.30 Design and construct a water main extension. A water main is not available for direct connection. The closest main is approximately _____ feet away. ☐

☒ **2.31 Other conditions: See Exhibit B for Utilities Engineering Conditions of Approval** ☐

E. RECYCLED WATER

☐ 2.32 A _____inch recycled water main is available for connection by this project in _____. (Ref: Recycled Water Drawing Number:_____) ☐

☒ **2.33 Design and construct an on-site recycled water system for this project. A recycled water main does exist in the vicinity of this project.** ☐

☐ 2.34 Design and construct an on-site recycled water ready system for this project. A recycled water main does not currently exist in the vicinity of this project but is planned for the near future. If Applicant would like to connect to this recycled water main when it becomes available, the cost for the connection shall be borne solely by the Applicant. ☐

☒ **2.35 Submit one (1) electronic copy, in PDF format, of the Supplemental Engineering Report (ER), for the use of recycled water to OMUC's Water Quality Programs at OMUCWQPlanCheck@ontarioca.gov for review and subsequent submittal to the California State Water Board (Division of Drinking Water) for final approval.** ☐

Note: The Division of Drinking Water review and approval process may take up to four (4) months. Contact the OMUC's Water Quality Programs at (909) 395-2678 or email OMUCWQPlanCheck@ontarioca.gov regarding this requirement. *Failure to obtain an approval letter from the Division of Drinking Water authorizing the use of recycled water will delay meter installation and if applicable, occupancy release for new developments.*

☒ **2.36 Submit one (1) electronic copy, in PDF format, of the Landscape Plans (on-site & off-site) to OMUC's Water Quality Programs at OMUCWQPlanCheck@ontarioca.gov for review and approval.**

☒ **2.37 Other conditions: See Exhibit B for Utilities Engineering Conditions of Approval** ☐

F. TRAFFIC / TRANSPORTATION

☐ 2.38 Submit a focused traffic impact study, prepared and signed by a Traffic/Civil Engineer registered in the State of California. The study shall address, but not be limited to, the following issues as required by the City Engineer: ☐

1. On-site and off-site circulation
2. Traffic level of service (LOS) at 'build-out' and future years
3. Impact at specific intersections as selected by the City Engineer

☒ **2.39 New traffic signal installations shall be added to Southern California Edison (SCE) customer account number # 2-20-044-3877.** ☐

☒ **2.40 Other conditions: See Exhibit A for Transportation Section Conditions of Approval** ☐

G. DRAINAGE / HYDROLOGY

☒ **2.41 A 108 inch storm drain main is available to accept flows from this project in Guasti Rd. (Ref: Storm Drain Drawing Number: D10795)** ☐

☒ **2.42 Submit a hydrology study and drainage analysis, prepared and signed by a Civil Engineer registered in the State of California. The study shall be prepared in accordance with the San Bernardino County Hydrology Manual and City of Ontario standards and guidelines. Additional drainage facilities, including, but not limited to, improvements beyond the project frontage, may be required to be designed and constructed, by Applicant, as a result of the findings of this study.** ☐

☐ 2.43 An adequate drainage facility to accept additional runoff from the site does not currently exist downstream of the project. Design and construct a storm water detention facility on the project site. 100-year post-development peak flow shall be attenuated such that it does not exceed 80% of pre-development peak flows, in accordance with the approved hydrology study and improvement plans. ☐

☐ 2.44 Submit a copy of a recorded private drainage easement or drainage acceptance agreement to the Engineering Department for the acceptance of any increase to volume and/or concentration of historical drainage flows onto adjacent property, prior to approval of the grading plan for the project. ☐

☐ 2.45 Comply with the City of Ontario Flood Damage Prevention Ordinance (Ordinance No. 2409). The project site or a portion of the project site is within the Special Flood Hazard Area (SFHA) as indicated on the Flood Insurance Rate Map (FIRM) and is subject to flooding during a 100-year frequency storm. The site plan shall be subject to the provisions of the National Flood Insurance Program. ☐

☐ 2.46 Other conditions: _____ ☐

H. STORM WATER QUALITY / NATIONAL POLLUTANT DISCHARGE AND ELIMINATION SYSTEM (NPDES)

☐ 2.47 401 Water Quality Certification/404 Permit – Submit a copy of any applicable 401 Certification or 404 Permit for the subject project to the City project engineer. Development that will affect any body of surface water (i.e. lake, creek, open drainage channel, etc.) may require a 401 Water Quality Certification from the California Regional Water Quality Control Board, Santa Ana Region (RWQCB) and a 404 Permit from the United States Army Corps of Engineers (USACE). The groups of water bodies classified in these requirements are perennial (flow year round) and ephemeral (flow during rain conditions, only) and include, but are not limited to, direct connections into San Bernardino County Flood Control District (SBCFCD) channels. ☐
If a 401 Certification and/or a 404 Permit are not required, a letter confirming this from Applicant's engineer shall be submitted.
Contact information: USACE (Los Angeles District) (213) 452-3414; RWQCB (951) 782-4130.

☒ **2.48 Submit a Water Quality Management Plan (WQMP). This plan shall be approved by the Engineering Department prior to approval of any grading plan. The WQMP shall be submitted, utilizing the current San Bernardino County Stormwater Program template, available at: http://www.sbcounty.gov/dpw/land/npdes.asp.** ☐

☒ **2.49 Design and construct a Connector Pipe Trash Screen or equivalent Trash Treatment Control Device, per catch basin located within or accepting flows tributary of a Priority Land Use (PLU) area that meets the Full Capture System definition and specifications, and is on the Certified List of the State Water Resources Control Board. The device shall be adequately sized per catch basin and include a deflector screen with vector control access for abatement application, vertical support bars, and removable component to facilitate maintenance and cleaning.** ☐

☒ **2.50 Other conditions:** ☐
Activities resulting in one acre or more land disturbance are required to obtain coverage under the Construction General Permit (CGP). The owner is the legally responsible person (LRP) of the site and shall have a Stormwater Pollution Prevention Plan (SWPPP) developed and submitted through the SMARTS website at https://smarts.waterboards.ca.gov/smarts/faces/SwSmartsLogin.xhtml.

J. SPECIAL DISTRICTS

☐ 2.51 File an application, together with an initial deposit (if required), to establish a Community Facilities District (CFD) pursuant to the Mello-Roos Community Facilities District Act of 1982. The application and fee shall be submitted a minimum of four (4) months prior to final subdivision map approval, and the CFD shall be established prior to final subdivision map approval or issuance of building permits, whichever occurs first. The CFD shall be established upon the subject property to provide funding for various City services. An annual special tax shall be levied upon each parcel or lot in an amount to be determined. The special tax will be collected along with annual property taxes. The City shall be the sole lead agency in the formation of any CFD. Contact Financial Services Agency at (909) 395-2015 or email CFD@ontarioca.gov to initiate the CFD application process. ☐

☐ 2.52 Other conditions: _____ ☐

K. FIBER OPTIC

☒ **2.53 A fiber optic line is available for connection by this project in Holt Blvd. (Ref: Fiber Optic Drawing Number: 22936)** ☐

☒ **2.54 Design and construct fiber optic system to provide access to the City's conduit and fiber optic system per the City's Fiber Optic Master Plan. Building entrance conduits shall start from the closest OntarioNet hand hole constructed along the project frontage in the ROW and shall terminate in the main telecommunications room for each building. Conduit infrastructure shall interconnect with the primary and/or secondary backbone fiber optic conduit system at the nearest OntarioNet hand hole. Generally located at the northwest corner of Holt Blvd and Guasti Rd** ☐

☐ 2.55 Refer to the City's Fiber Optic Master Plan for design and layout guidelines. Contact the Broadband Operations Department at (909) 395-2000, regarding this requirement. ☐

☒ **2.56 Other conditions: See Exhibit C for Broadband Operations Section Conditions of Approval** ☐

3. PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY, APPLICANT SHALL:

☒ **3.01 Set new monuments in place of any monuments that have been damaged or destroyed as a result of construction of the subject project. Monuments shall be set in accordance with City of Ontario standards and to the satisfaction of the City Engineer.** ☐

☒ **3.02 Complete all requirements for recycled water usage.** ☐

☒ **1) Procure from OMUC a copy of the letter of confirmation from the California State Water Board (Division of Drinking Water) that the Engineering Report (ER) has been reviewed and the subject site is approved for the use of recycled water.**

☒ **2) Obtain clearance from the OMUC confirming completion of recycled water improvements and passing of shutdown tests and cross connection inspection, upon availability/usage of recycled water.**

☒ **3) Complete Site Supervisor training of on-site personnel in the use of recycled water, in accordance with the ER, upon availability/usage of recycled water.**

☒ **3.03 The applicant/developer shall submit all final survey documents prepared by a Licensed Surveyor registered in the State of California detailing all survey monuments that have been preserved, revised, adjusted or set along with any maps, corner records or Records of Survey needed to comply with these Conditions of Approvals and the latest edition of the California Professional Land Survey Act. These documents are to be reviewed and approved by the City Survey Office.** ☐

☐ 3.04 Ontario Ranch Projects: For developments located at an intersection of any two collector or arterial streets, the applicant/developer shall set a monument if one does not already exist at that intersection. Contact the City Survey office for information on reference benchmarks, acceptable methodology and required submittals. ☐

☒ **3.05 Confirm payment of all Development Impact Fees (DIF) to the Building Department.** ☐

☒ **3.06 Submit electronic copies (PDF and Auto CAD format) of all approved improvement plans, studies and reports (i.e. hydrology, traffic, WQMP, etc.).** ☐

4. PRIOR TO FINAL ACCEPTANCE, APPLICANT SHALL:

☒ **4.01 Complete all Conditions of Approval listed under Sections 1-3 above.** ☐

☒ **4.02 Pay all outstanding fees pursuant to the City of Ontario Municipal Code, including but not limited to, plan check fees, inspection fees and Development Impact Fees.** ☐

☒ **4.03 The applicant/developer shall submit a written request for the City's final acceptance of the project addressed to the City Project Engineer. The request shall include a completed Acceptance and Bond Release Checklist, state that all Conditions of Approval have been completed and shall be signed by the applicant/developer. Upon receipt of the request, review of the request shall be a minimum of 10 business days. Conditions of Approval that are deemed incomplete by the City will cause delays in the acceptance process.** ☐

☒ **4.04 Submit record drawings (PDF) for all public improvements identified within Section 2 of these Conditions of Approval.** ☐

EXHIBIT 'A'

ENGINEERING DEPARTMENT
First Plan Check Submittal Checklist

Project Number: PDEV23-039, PSP23-001, PDA23-005

All plan check submittals are to be done digitally through the City Of Ontario Citizen Portal Access. The following items are to be included with the first plan check submittal:

1. ☒ **A copy of this check list**
2. ☒ **Payment of fee for Plan Checking**
3. ☒ **Engineering Cost Estimate (on City form) with engineer's wet signature and stamp.**
4. ☒ **Project Conditions of Approval**
5. ☒ **Potable and Recycled Water demand calculations (include water demand calculations showing low, average and peak water demand in GPM for the proposed development and proposed water meter size).**
6. ☒ **Public Street improvement plan with street cross-sections**
7. ☒ **Public Water improvement plan (include water demand calculations showing low, average and peak water demand in GPM for the proposed development and proposed water meter size)**
8. ☒ **Recycled Water improvement plan (include recycled water demand calculations showing low, average and peak water demand in GPM for the proposed development and proposed water meter size and an exhibit showing the limits of areas being irrigated by each recycled water meter)**
9. ☒ **Public Sewer improvement plan**
10. ☒ **Public Storm Drain improvement plan**
11. ☒ **Public Street Light improvement plan**
12. ☒ **Signing and Striping improvement plan**
13. ☒ **Fiber Optic plan (include Auto CAD electronic submittal)**
14. ☒ **HOA Landscape improvement plans. Show corner sight line distance per engineering standard drawing 1309.**
15. ☐ CFD Landscape improvement plans. Show corner sight line distance per engineering standard drawing 1309.
16. ☒ **Dry Utility plans within public right-of-way (at a minimum the plans must show existing and ultimate right-of-way, curb and gutter, proposed utility location including centerline dimensions, wall to wall clearances between proposed utility and adjacent public line, street work repaired per Standard Drawing No. 1306. Include Auto CAD electronic submittal)**
17. ☒ **Traffic Signal improvement plan and One (1) copy of Traffic Signal Specifications with modified Special Provisions. Please contact the Traffic Division at (909) 395-2154 to obtain Traffic Signal Specifications.**
18. ☒ **Water Quality Management Plan (WQMP), including one (1) copy of the approved Preliminary WQMP (PWQMP).**
19. ☒ **Hydrology/Drainage study**

20. ☒ **Soils/Geology report**
21. ☐ Payment for Final Map/Parcel Map processing fee
22. ☐ Final Map/Parcel Map
23. ☐ Approved Tentative Map
24. ☒ **Preliminary Title Report (current within 30 days)**
25. ☐ Traverse Closure Calculations
26. ☒ **Set of supporting documents and maps (legible copies): referenced improvement plans (full size), referenced record final maps/parcel maps (full size, 18"x26"), Assessor's Parcel map (full size, 11"x17"), recorded documents such as deeds, lot line adjustments, easements, etc.**
27. ☒ **Supplemental Engineering Report, in electronic format (PDF format), for recycled water use only. Must be reviewed and submitted to the Division of Drinking Water by OMUC Water Quality Programs before clearing plan check workflows (includes grading and landscape plan reviews). *Approval letter issued by the Division of Drinking Water must be obtained before meter installation and if applicable, occupancy release.***
28. ☒ **Other: Precise Grading Plan coordinated with the offsite improvement plans to include, but not be limited to, utility tie-in points of connection between public and private facilities, driveway and sidewalk connections, and perimeter wall/fence heights and locations.**

CITY OF ONTARIO
MEMORANDUM

Development Plan Review
Engineering Department:
Transportation Section

Project: PDEV23-039
(600 Room Hotel)

Date: February 11, 2025

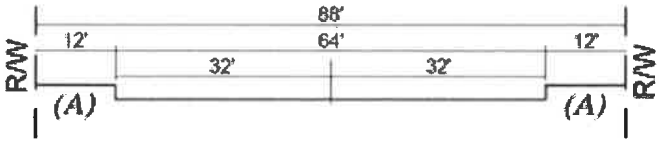
Location: 2236 East Holt Boulevard

By: Jaime Maciel-Carrera
Diego Tapia

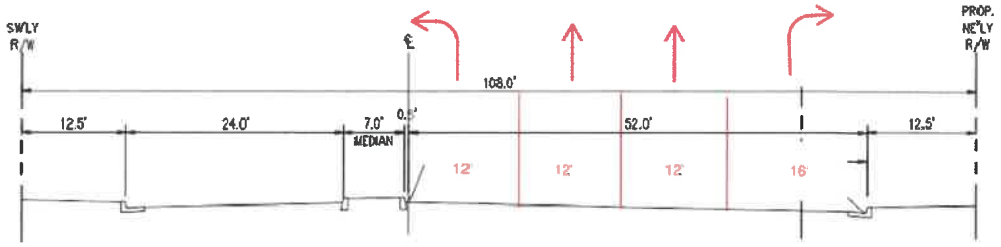
The Transportation Division recommends the following to be incorporated into the Project's Conditions-of-Approval:

Conditions:

1. The required street section for Guasti Road along the project frontage will generally be 64-feet (curb to curb) with an 88-foot ROW section. However, as Guasti Road approaches Holt Blvd/Convention Center Way, additional ROW will be required to accommodate additional left or right turn lanes as determined by the traffic analysis being prepared for the project. See street section below:



2. The Applicant/Developer shall be responsible for installing the required lane configuration, on Guasti Road approaching the signalized intersection at Holt Boulevard. This includes a right turn lane pocket length of 135-feet. See the lane configuration below:



3. The Applicant/Developer shall be responsible to widen the existing bridge on Guasti Road at the easterly property line over the Cucamonga Creek Channel in order to accommodate 4

travel lanes and sidewalk (north and southside) per the City of Ontario General Plan, the Master Plan of Streets and Highways, and to the satisfaction of the City Engineer. The Development Agreement shall determine responsible party for funding and or construction of this improvement.

4. The Applicant/Developer shall be responsible to design and construct raised median along project frontage on Guasti Road from Holt Boulevard to the easterly property line. Raised median shall have a break at the proposed signalized main entrance in order to accommodate full access.

5. The Applicant/Developer shall be responsible to design and construct modifications to the existing traffic signal on Guasti Road and Holt Boulevard as necessary to accommodate the roadway widening of Guasti Road. The traffic signal modification shall address relocation or upgrade of any affected equipment including poles, video detection, interconnect/fiber optic communication equipment, cable and conduit, CCTV cameras, emergency vehicle preemption systems, and bicycle detection to the satisfaction of the City Engineer. All new signal equipment shall be installed at its ultimate location, unless precluded by right-of-way limitations. The Development Agreement shall determine responsible party for funding and or construction of this improvement

6. The Applicant/Developer shall be responsible to design and construct a traffic signal on Guasti Road at the main entrance (approximately 980-feet East of Holt Boulevard and Convention Center Way). The new traffic signal shall include poles, video detection, CCTV, fiber optic communication equipment, cable and conduit, emergency vehicle preemption systems, and bicycle detection to the satisfaction of the City Engineer. All new signal equipment shall be installed at its ultimate location, unless precluded by right-of-way limitations.

7. The Applicant/Developer shall install all-way stop at the intersection of Cardena's driveway and Guasti Road.

8. The Applicant/Developer shall be responsible to design and construct in-fill public street lights and a potential new service as needed along Guasti Road and Holt Boulevard (between Guasti/Convention Center Way and I-10 On-Ramp). Street lighting shall be LED-type and in accordance with City's Approved Material List LED Luminaires. The Applicant/Developer shall also install smart nodes on all new street light fixtures.

9. The Applicant/Developer shall be responsible to design and construct the necessary pavement and striping transitions from existing roadway conditions to the widened roadway portions along Guasti Road. Striping and paving improvements shall include the removal existing interim signing and striping beyond the project frontage limits and the installation of ultimate signing and striping, and additional pavement necessary to accommodate fully widened street improvements and raised median, to east of the Cucamonga Channel bridge to the satisfaction of the City Engineer and in accordance with the Development Agreement.

10. Guasti Road and Holt Boulevard (between Convention Center Way/Guasti Road and I-10 On-Ramp) shall be signed "No Stopping Anytime" along the property frontage.

11. Design and construct proposed driveways in accordance with City of Ontario Standard Drawing No. 1204 for Commercial Driveway.

12. All project driveways onto Guasti Road from Holt Boulevard/Convention Center Way to the easterly property line, except the signalized main entrance, shall be restricted to right-in/right-out access due to the proposed raised median.

13. All landscaping, block walls, and other obstructions shall be compatible with the stopping sight distance requirements per City of Ontario Standard Drawing No. 1309.

14. The Applicant/Developer's engineer-of-record shall meet with City Engineering staff prior to designing and submitting for plan check the signing/striping, street lighting and traffic signal design plans to define limits of improvements.

jmc,dt;

EXHIBIT B

CITY OF ONTARIO
MEMORANDUM

ONTARIO MUNICIPAL UTILITIES COMPANY

DATE: February 05, 2025
TO: Jeff Tang, Engineering Department
CC: Lorena Mejia, Planning Department
FROM: Eric Woosley, Utilities Engineering (QC:CS/DM)
SUBJECT: DPR #3 - Utilties Engineering Condtions of Approval
PROJECT NO.: PDEV23-039

BRIEF DESCRIPTION

A Development Plan to construct one 9-story hotel consisting of approximately 596,450 square feet, including 600 rooms, ancillary retail and various amenities on 10.43 acres of land located at 2236 East Holt Boulevard, within the SP (Specific Plan) zoning district and the MTC (Multimodal Transit Center) overlay. (APNs: 0110-322-33) Related Files: PSP-23-001; PDA-23-005.

UTILITIES ENGINEERING CONDITIONS OF APPROVAL

CONDITIONS OF APPROVAL: *The Ontario Municipal Utilities Company (OMUC) recommends this application for approval subject to the conditions outlined below and compliance with the City's Design Development Guidelines, Specifications Design Criteria, and City Standards.*

1. Standard Conditions of Approval: Project shall comply with the requirements as set forth in the Amendment to the Standard Conditions of Approval for New Development Projects adopted by the City Council (Resolution No. 2017-027) on April 18, 2017; as well as project-specific conditions/requirements as outlined below.

Prior to Issuance of Any Permits (Grading, Building, Demolition and Encroachment), unless other timeline milestones are specified by individual conditions below, the Applicant Shall:

General Conditions (Section 2.A, Other conditions): The Applicant shall comply with the following:

2. Final Utilities Systems Map (USM): Submit a Final Utilities Systems Map (USM) as part of the precise grading plan submittal that meets all the City's USM requirements. These requirements include showing and labeling all existing and proposed utilities (including all appurtenances such as backflow devices, DCDAs, etc.), sizes, points of connection, and any easements. The final utility design shall comply with all Division of Drinking Water (CCR §64572) Separation Requirements. See the *Utility Systems Map (USM) Requirements document* for details.
    a. The proposed utilities, utility alignments, and Public Rights-of-Way (ROW)/Public Utility Easements (PUE) shown on the Conceptual Utilities Systems Map (CUSM) and other Entitlement documents are not considered final and shall be revised during Final Design to meet all City Design Guidelines, Standards, City Requirements, and all the Conditions of Approval contained in this document.
3. Note the following definitions and concepts for Public Utility Improvements and Private Utility Improvements: Public Improvements shall be designed per City Public Design Guidelines and City Standards and constructed through a City Encroachment Permit; and Private Onsite Improvements shall be designed per Building Code and Plumbing Code and constructed through a City Building Permit.
    a. Public Utility Improvements include the following: water main pipelines and sewer main pipelines; sewer laterals connecting to a Public Sewer Main up to the Cleanout (or Manhole) at PL/ROW; water services and connected appurtenances (Meters/Meter Boxes, Fire Hydrants, Airvacs, Blowoffs, etc.) connecting to a Public Water Main per City Standards; and Fire Services connecting to a Public Water Main from the Main up to the DCDA. Public Water Improvements and Public Sewer Improvements are required to be designed and constructed through Public Improvement Plans with Plan View and Profile View per City Standards, Guidelines, and Requirements.
    b. Private Utility Improvements include the following: onsite water plumbing lines after a Public Meter, or after the Fire DCDA and including the DCDA; Backflow Devices and other Cross-Connection Prevention; onsite sewer upstream of the Public Sewer Lateral, including the Cleanout (or Manhole) at PL/ROW/PUE Edge;

Monitoring Manholes and other Wastewater Pretreatment Facilities. Private Onsite Utility Improvements are required to be designed and constructed per Building and Plumbing Plans with: the Backflows, DCDAs, Cleanout (or Manhole) at PL/ROW/PUE Edge, and Monitoring Manholes being designed and constructed through a Precise Grading Plan; and, the other Pretreatment Devices (Grease Interceptor, Sand, Oil Interceptors, etc.) and the connections to the buildings and structures through a building Plumbing Plan.

4. Public Utilities and Public Right-of-Way including Public Utility Easements (PUE): All City of Ontario Public Utilities shall be installed within a Public Right-of-Way (ROW), or within a Public Utility Easements (PUE), or within a combination of ROW and PUE. In this case, Public Utilities is referring to the mains and connected appurtenances of the following City of Ontario/OMUC Utilities: Public Potable Water; Public Recycled Water; and Public Sanitary Sewer. Public Utilities shall be subject to the Minimum ROW/PUE Area Requirements and PUE Restrictions:
    a. Minimum ROW Area Requirements: Public Utilities shall be installed within in existing ROW/PUE in alignments/locations that meet the following minimum ROW/PUE areas surrounding the Public Utilities, and/or additional ROW/PUE shall be dedicated/granted to the City to provide the following minimum ROW/PUE areas surrounding the Public Utilities:
        i. For each main, the ROW/PUE Area shall be a minimum of 20 feet wide, centered on the utility main with a minimum of 10 feet of ROW/PUE on each side of the main and this minimum area shall extend a minimum for 10 feet past the end of a main;
        ii. For each Service/Lateral, the ROW/PUE Area shall be a minimum of 10 feet wide, centered on the service/lateral with a minimum of 5 feet of ROW on each side of each service/lateral;
        iii. For each water meter box, the ROW/PUE Area shall be a minimum of 5 feet behind and 5 feet on each side of a water meter box;
        iv. For each water appurtenances (fire hydrants, blowoffs, airvacs, etc.), the ROW/PUE Area shall be a minimum of 5 feet on each side surrounding the water appurtenances (fire hydrants, blowoffs, airvacs, etc.);
        v. The ROW/PUE minimum areas for separate Public Utilities may overlap, provided that all minimum separations and PUE Restrictions are met.
    b. PUE Restrictions: The Minimum PUE Area required surrounding Public Utilities shall be subject to the following restrictions:
        i. The Minimum PUE Area required surrounding Public Utilities shall not contain:
            A. Any storm water quality improvements (infiltration, detention, retention, bioswale, etc.);
            B. Landscaping with thick or intrusive root structures,
            C. Any trees;
            D. Any private utilities, plumbing lines, private fire system, or irrigation lines; or,
            E. Any permanent structures or overhangs of permanent structures.
        ii. The PUE surface shall be designed to allow vehicle access over and along the full length of the utility main by any City maintenance vehicle.
        iii. Minimum Separations: Within a PUE, all Department of Drinking Water (DDW) Water Main Separations per California Code of Regulations (CCR) §64572 shall be met for all Public Potable Water Mains and Services between: all Public City Utilities; Non-City Utilities; and Private Utilities. Additionally, the following Minimum Separations shall be met:
            A. At minimum there shall be a 4 feet horizontal separation between each utility as measured between the outside walls of the utility pipelines, or in the case of a Joint Utility Trench, between the outside edge of the Joint Utility Trench and the outside wall of the Utility Pipeline.
            B. Public Utility mains shall not be located behind curb or under curb and gutter and shall be located a minimum of 5 feet from curbface.

Sewer Conditions (Section 2.C): The Applicant shall comply with the following:

5. Public Sewer Improvements: Design and construct the following required public sewer mains in accordance with City of Ontario Standards and Design Guidelines and Specifications: N/A
    a. There is an existing sewer main (S13859) available for connection by this project in Holt Boulevard.
6. Sewer Lateral: Per City of Ontario Standard Drawing No. 2003:
    a. Install a sewer lateral connected to the existing 12-inch public sewer main (S13859) in Holt Boulevard.
    b. No storm water quality improvements (infiltration, detention, retention, bioswale, etc.) shall be installed above or within 5 feet of any Public Sewer Lateral.

7. Private Onsite Sewer System and Plumbing: The Onsite Sewer System shall be privately maintained by the property owner and shall be designed as follows:
    a. Design and construct a manhole per city standard upstream of the proposed on-site lateral manhole, to facilitate the transition of the proposed on-site private force sewer system to a gravity sewer system. The transition manhole shall be located a minimum of 10 feet upstream of the on-site lateral manhole.
    b. The Onsite sewer system and building plumbing shall be designed in such a way that the sanitary domestic wastewater flows leave the building separately from non-sanitary wastewater flows (industrial, process, or kitchen, etc.) and the line for non-sanitary wastewater flows can be upgraded in the future to have pretreatment equipment and devices on it, as required by a Wastewater Discharge Permit.
    c. Each private system shall have an onsite monitoring manhole prior to the point of connection with the Public Sewer System.
    d. No storm water quality improvements (infiltration, detention, retention, bioswale, etc.) shall be installed above or within 5 feet of any Private Onsite Sewer pipes.
8. Monitoring Manhole: Per City of Ontario Standard Drawing Nos. 2201 and 2203:
    a. Each sewer system (sanitary and non-sanitary flows) shall have a monitoring manhole on-site as part of the privately owned and maintained sewer system(s), upstream of the sewer lateral.
        i. Each monitoring manhole shall be in a location directly accessible by field staff.
9. Wastewater Discharge Permit: The Occupant/Applicant shall apply for a Wastewater Discharge Permit for their Establishment, and shall comply will all the requirements of the Wastewater Discharge Permit found at: (http://www.ontarioca.gov/municipal-utilities-company/utilities/industrial-wastewater-discharge-permit). Requirements of the Wastewater Discharge Permit may include but not limited to: Installation of wastewater pretreatment equipment, such as clarifiers. For wastewater permit application questions, please contact: omucenvironmental@ontarioca.gov

Potable Water Conditions (Section 2.D): The Applicant shall comply with the following:

10. Public Water Improvements: Design and construct the following required public water mains in accordance with City of Ontario Standards and Design Guidelines and Specifications: N/A
    a. There is an existing 12-inch potable water main (W11988) available for connection by this project in Guasti Road.
    b. There is an existing 12-inch potable water main stub (W11987) in Holt Boulevard. If the Fire Department requires public fire hydrants along the frontage of Holt Boulevard, or if the fire flow along Holt Boulevard is determined to be inadequate through the hydraulic analysis during final design; extension of the 12-inch along the frontage of Holt Boulevard shall be required.
11. Existing Appurtenance: Abandon the existing 2-inch air release and vacuum relief (airvac) (W11987) located at the SEC of Holt Boulevard and Guasti Road and install a new 2-inch airvac per City of Ontario Standard Drawing No. 4102.
12. Existing Fire Hydrants: The existing fire hydrant located in the location of the proposed drive approach shall be abandoned to the main connection.
13. Fire Hydrants: Per City of Ontario Standard Drawing No. 4101:
    a. Install fire hydrants along the project frontages connected to the potable water main per City of Ontario Standards. Fire hydrants connected to potable water mains shall be spaced a maximum of 300 feet apart or per Fire Department Standards/Requirements.
14. Fire Service with Fire System Double Check Detector Assembly (DCDA): Per City of Ontario Standard Drawing No. 4208:
    a. If an onsite private fire system is required, then a separate Fire Service equipped with a DCDA connected to the Public Potable Water System is required, to serve the onsite private fire system. The onsite fire system shall be separate from the onsite domestic water plumbing system and the onsite landscape irrigation system.

15. Water Service with a Meter and Backflow Prevention Assembly Reduced Pressure Device:

    a. Install a water service and meter connected to the existing potable water main in Guasti Road per City of Ontario Standards. The water service shall be equipped with a backflow prevention device. The water meter shall be located within the ROW.

16. Existing Water Services:

    a. All existing unused water services shall be abandoned to the main water connection.

Recycled Water Conditions (Section 2.E): The Applicant shall comply with the following:

17. Public Recycled Water Improvements: Design and construct the following required public recycled water mains in accordance with City of Ontario Standards and Design Guidelines and Specifications:

    a. An 8-inch recycled water main (1299 PZ) in Guasti Road between Holt Boulevard and the Cucamonga Creek Channel.

        i. The point of connection for the recycled water main is located in Convention Center Way north of the intersection of Holt Boulevard and Guasti Road/Convention Center Way (P11059). The connection shall be made with a tee, connecting the recycled water mains in both Convention center Way and Holt Boulevard, and extending south in Guasti Road to the Cucamonga Creek Channel bridge. Any portions of the existing recycled water main, including, but not limited to the diagonal section of the recycled water main and existing bends located in said intersection no longer connected and active, resulting from the modifications required to facilitate the connection, shall be abandoned.

18. City Ordinance 2689: This development shall comply with City Ordinance 2689 and make use of recycled water for all approved uses, including but not limited to landscape irrigation.

19. Irrigation Recycled Water Service with Meter:

    a. Install a water service and meter for irrigation purposes connected to the new recycled water main in Guasti Road per City of Ontario Standards. The irrigation recycled water meter shall be located within the ROW.

20. Recycled Water Program Requirements: In order to receive recycled water service, the applicant shall comply with each of the following:

    a. Prior to Precise Grading Plan Approval and Building Permits Issuance:

        i. Submit one (1) electronic copy, in PDF format, of the Landscape Plans (on-site & off-site) to OMUC's Water Quality Programs at OMUCWQPlanCheck@ontarioca.gov for review and approval.

        ii. Submit one (1) electronic copy, in PDF format, of the Supplemental Engineering Report (ER), for the use of recycled water to OMUC's Water Quality Programs at OMUCWQPlanCheck@ontarioca.gov for review and subsequent submittal to the California State Water Board (Division of Drinking Water) for final approval.

        Note: The Division of Drinking Water review and approval process may take up to four (4) months. Contact the OMUC's Water Quality Programs at (909) 395-2678 or email OMUCWQPlanCheck@ontarioca.gov regarding this requirement. Failure to obtain an approval letter from the Division of Drinking Water authorizing the use of recycled water will delay meter installation and if applicable, occupancy release for new developments.

    b. Prior to Occupancy Release/Finalizing:

        i. Procure from OMUC a copy of the letter of confirmation from the California State Water Board (Division of Drinking Water) that the Engineering Report (ER) has been reviewed and the subject site is approved for the use of recycled water.

        ii. Obtain clearance from the OMUC confirming completion of recycled water improvements and passing of shutdown tests and cross connection inspection, upon availability/usage of recycled water.

        iii. Complete Site Supervisor training of on-site personnel in the use of recycled water, in accordance with the ER, upon availability/usage of recycled water.

UTILITIES SYSTEMS MAP (USM) REQUIREMENTS:

The USM shall meet, at a minimum, the following requirements:

1. USM Content and Format: The Utilities Systems Maps shall show all existing and proposed Utilities (Potable Water, Recycled Water, Sewer, Storm Drain, and other utilities) including each of the City's public utilities' points of connection to the existing systems. This plan should include::

    a. Format: The Utilities Systems plan at a minimum 1:100 scale (or large engineering scale as appropriate to show needed details) that clearly shows each existing and proposed utility and its relative location. This includes property lines, right-of-way, public utility easements, but should not include underlying existing topography, just proposed general grades. Use appropriate colors for each Utility type: blue for Potable Water; purple for Recycled Water; green for Sanitary Sewer; yellow-brown for storm Drain.

    b. Services and Laterals: All Proposed Utility Service laterals for each parcel (potable water domestic, recycled water irrigation, potable/recycled water for process water, and sewer) and any associated appurtenances.

        i. Meter and Backflow Device Locations: Show all proposed meters and required backflow devices located per City Standards (Water Services and Meters; Backflow Devices). Meters should be located in public rights-of-way or PUEs; either at the R/W (or PUE) line for curb adjacent sidewalks or at back of curb for all other cases. All water connections that serve more than one residential unit are required to have a backflow device installed behind the meter.

    c. Cross Sections **(if applicable, for project construction new public mains)**: Scaled cross sections showing the utility layout on the Utility Systems Map (Utility Plan) for each public street, private street and Public Utility Easement (PUE). The cross sections shall show the location and size of each utility and annotate the property/ROW lines, the type of finished surface material, the distance of each utility from centerline, the depth from finished surface to top of pipe, and the distance between utilities (outside wall to outside wall).

    d. Points of Connections: The locations of the points of connections to the existing utility systems, which can include breaks between the map area and the connection points with descriptions of the pipe size, type, use (pressure zone for water), and distance. An inset map can be used in addition to this to help provide clarity.

    e. Water Demand Table **(if applicable, for projects within Ontario Ranch/NMC)**: Add a Water Demand Table to the Utility Systems Map (Utility Plan) that calculates the project's domestic water use based on land use category (residential, commercial, and OS-R/Parks) and the number of units. The table shall state demand in terms of Average Daily Demand (ADD from Table 4-8 of the Water Master Plan) and Water Demand Equivalents (WDE / Net MDD from Exhibit C-2R of the NMC Construction Agreement; WDEs only if NMC). It should also identify the quantity of units in each category and the specific lots that are included in that category. Please Note that master planned lines are designed using gross acreage densities for all projected water use from residential categories.

        i. See Attached Sheet for WDT Example.

    f. Phasing Plan (***if applicable***): As separate exhibits, provide a proposed phasing plan showing the phasing of the infrastructure and the number and type (TOP land use category) of units in each phase.

        i. All phases must have: a connection to public sewer; a two separate looped connections to the potable water system, where no one closing of a main segment results in any part of any of any phase being without potable water.

ii. For public water mains in all phases, dead-end water lines (temporary or permanent) are limited to serving 28 dwelling units or a maximum of 600 linear feet, whichever comes first. Otherwise a looped water system with at least two (2) points of connection to the primary public system is required.

g. Private Onsite Systems versus Public Systems within PUEs for Residential Tract Map Project(***if applicable***): the following requirements apply when to delineating between Private and Public Systems:

i. Current Standard Drawing No. 1304 remains applicable and minimum health separation must be met.

ii. Public water mains will be accepted in longer alleys when it serves more than 6 meters.

iii. Public sewer mains will be accepted in alleys where the water is public.

iv. Public dead-end water mains will require a blow-off at the end and the alley should be designed to accommodate runoff from required water main flushing operations.

v. Public sewer mains in alleys will require a manhole at both ends of the main.

vi. Public meters serving more than one single family residential unit are considered as multifamily service with master meter and require: a backflow device after the meter, private HOA sub-metering for each unit, and a separate Fire Service with DCDA to provide private onsite fire service.

EXHIBIT C

CITY OF ONTARIO
MEMORANDUM

DEVELOPMENT PLAN REVIEW CONDITIONS OF APPROVAL
Broadband Operations Section

DATE: 08-25-24

PROJECT: PDEV23-039

LOCATION: Holt and Guasti

PROJECT ENGINEER: Jeff

BROADBAND PLAN CHECKER: Cameron Chadwick - CChadwick@ontarioca.gov

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The following Conditions of Approval requirements must be incorporated prior to the Development Advisory Board and/or Zoning Administrator Hearing.

1. Project shall be designed and constructed to provide access to the City's conduit and fiber optic system per the City's Fiber Optic Master Plan. Building entrance conduits shall start from the closest OntarioNet hand hole in the Right-of-Way (ROW) and shall terminate in the main telecommunications room for each building. Conduit infrastructure shall interconnect with the primary and/or secondary backbone fiber optic conduit system at the nearest OntarioNet hand hole.
2. Contractor is responsible for locating and connecting conduit to existing OntarioNet hand holes on adjacent properties within a reasonable distance. There should be no "Gaps" in conduit between the contractor's development and the adjacent property. OntarioNet hand holes are typically located in the ROW at the extreme edge of a property.
3. Where a joint telecom or street light street crossing is required, include (2) 2" HDPE SDR-11 conduits or (1) 4" schedule 80 conduit sleeve. Terminate the street crossing conduit(s) in a new HH-3/22 OntarioNet hand hole in the right of way
4. The City requires a public utility easement for fiber optics on all private aisles/alley ways.
5. Hand holes - Design and install OntarioNet fiber optic hand hole HH-FP (10x00x10), HH-1 (13x24x18), HH-2 (17x30x24), HH-2A (24x36x30), HH-3 (30x48x36) and/or HH-4 (36x60x36) as needed. Respectively, Newbasis Part # PLA100010T-00002, PCA132418-00006, PCA-173024-90116, PCA-243630-90064, PCA-304836-90244 and PCA-366036-90146 or equivalent as specified per City Standard 1316. Conduits sweeping into hand holes shall enter in flush with the cut-out mouse holes aligned parallel to the bottom of the box and come in perpendicular to the wall of the box. Conduits shall not enter at any angle other than parallel. Provide 5-foot minimum clearance from existing/proposed utilities. All hand holes will have ¼-inch galvanized wire between the hand holes and the gravel it is placed on.
6. ROW Conduit – Design and install fiber optic conduit at a minimum depth of 36-inch. Trenching shall be per City Standard 1306. Install (1) 2-inch HDPE SDR-11 (Smoothwall) roll pipe (Orange) duct and (1) 2-inch HDPE SDR-11 (Smoothwall) roll pipe (Orange with Black Stripe) duct. Conduit(s) between ROW hand holes and hand holes on private property shall be 2-inch HDPE SDR-11 (Smoothwall) roll pipe (Orange) duct.
7. Building Entrance (Single Family) – Design and install 0.75-inch HDPE SDR-11 (Smoothwall) roll pipe (Orange) duct from hand holes on property or hand holes in the ROW. Consult City's Fiber Team for design assistance.
8. Building Entrance (Multi-family and Commercial) - From the nearest handhole to the building entrance, design and install fiber optic conduit at a minimum depth of 36-inches. Trenching shall be per City Standard for Commercial Buildings. (1) 2-inch HDPE SDR-11 (Smoothwall) roll pipe (Orange) duct. Install

locate/tracer wires minimum 12AWG within conduit bank and fiber warning tape 18-inch above the uppermost duct

9. Multi-family and commercial properties shall terminate conduit in an electrical room adjacent to the wall no less than five inches above the finished floor. A 20" width X length 36" space shall be reserved on the plywood wall for OntarioNet equipment. This space shall be labeled "OntarioNet Only". Ontario Conduit shall be labeled "OntarioNet"
10. A minimum 13/16 millimeter microduct joint use telecommunications conduit with pull-rope from the single-family, multi-family or commercial building communal telecom/electrical room/closet to each multi-family or commercial building unit shall be installed. See Structured Wiring Checklist on City's website for additional details.
11. Warning Tape - Contractor shall supply and install an approved non-detectable warning tape 18-inch above the uppermost conduit when backfilling trenches, pits or excavations greater than 10' in length. Warning Tape shall be non-detectable, Orange in color, 4-inch minimum width, 4 mil, 500% minimum elongation, with bold printed black letters "CAUTION - BURIED FIBER OPTIC CABLE BELOW" printed in bold black lettering no less than 2-inch high.
12. All hand holes, conduits, conduit banks, materials and installations are per the City's Fiber Optic Master Plan and City Fiber Optic Cable and Duct Standards. All hand holes, conduits and ducts shall be placed in the public right of way.
13. All unused conduits/ducts/microducts shall be protected with duct plugs that provide a positive seal. Ducts that are occupied shall be protected with industry accepted duct seal compound.
14. Locate/Tracer Wire - Conduit bank requires (1) 12AWG high strength (minimum break load 452#) copper-clad steel with 30mil HDPE orange insulation for locate/tracer wire. Contact City's Fiber Team for tracer wire specifications and see note 8.
15. Multi-family dwellings are considered commercial property.
16. Refer to the In-tract Fiber Network Design guideline on the City's website for additional in-tract conduit guidelines.

AIRPORT LAND USE COMPATIBILITY PLANNING
CONSISTENCY DETERMINATION REPORT

ONTARIO AIRPORT PLANNING

Project File No.: PSP23-001, PDEV23-039, PDA23-005

Address: southeast corner of Guasti Road and Holt Boulevard

APN: 110-322-33

Existing Land Use: Vacant lot

Proposed Land Use: Specific Plan, Development Plan to construct a 600,000 square foot hotel and commercial building

Site Acreage: 10.43 Proposed Structure Height: 120 FT

ONT-IAC Project Review: n/a

Airport Influence Area: ONT

Reviewed By: Lorena Mejia

Contact Info: 909-395-2276

Project Planner: Lorena Mejia

Date: 2/12/2025

CD No.: 2023-024

PALU No.: 24-002

The project is impacted by the following ONT ALUCP Compatibility Zones:

Safety	Noise Impact	Airspace Protection	Overflight Notification
☐ Zone 1	☐ 75+ dB CNEL	☐ High Terrain Zone	☑ Avigation Easement Dedication
☐ Zone 1A	☐ 70 - 75 dB CNEL	☑ FAA Notification Surfaces	☑ Recorded Overflight Notification
☐ Zone 2	☑ 65 - 70 dB CNEL	☑ Airspace Obstruction Surfaces	☐ Real Estate Transaction Disclosure
☐ Zone 3	☑ 60 - 65 dB CNEL	☐ Airspace Avigation Easement Area	
☐ Zone 4		Allowable Height: 120 -140 FT	
☐ Zone 5			

The project is impacted by the following Chino ALUCP Safety Zones:

☐ Zone 1 ☐ Zone 2 ☐ Zone 3 ☐ Zone 4 ☐ Zone 5 ☐ Zone 6

Allowable Height: _____

CONSISTENCY DETERMINATION

This proposed Project is: ○ Exempt from the ALUCP ○ Consistent ◉ Consistent with Conditions ○ Inconsistent

The proposed project is located within the Airport Influence Area of Ontario International Airport (ONT) and was evaluated and found to be consistent with the policies and criteria of the Airport Land Use Compatibility Plan (ALUCP) for ONT.

See Attached conditions.

Airport Planner Signature: Lorena Mejia

Project Conditions

1. The project site is located within an area where 120-140 foot building heights are allowed. The applicant will be required to file for an FAA Obstruction Evaluation/Airport Airspace Analysis (FAA Form 7460-1) and receive a Determination of No Hazard prior to building permit issuance.

2. The project site is located within an area where 120-140 foot building heights are allowed. The applicant will be required to file for an FAA Obstruction Evaluation/Airport Airspace Analysis (FAA Form 7460-1) for any temporary construction equipment such as cranes and receive a Determination of No Hazard for any temporary structures/objects that are over 100 feet in height.

CITY OF ONTARIO
MEMORANDUM

TO: **Lorena Mejia, Senior Planner**
Planning Department

FROM: **Robert Johnson, Deputy Fire Chief**
Fire Department

DATE: **February 12, 2025**

SUBJECT: **PDEV23-039 - A Development Plan to construct a 9-story hotel consisting of approximately 596.450 square feet to include 600 rooms, ancillary retail and various amenities on 10.43 acres of land located at 2236 East Holt Boulevard, within the SP (Specific Plan) zoning district and the MTC (Multimodal Transit Center) overlay (APN(s): 0110-322-33). Related File(s): PSP-23-001; PDA-23-005.**

☒ The plan **does** adequately address Fire Department requirements at this time

☒ Standard Conditions of Approval apply, as stated below.

See attached access exhibit

SITE AND BUILDING FEATURES:

A. 2022 CBC Type of Construction: Not listed, assumed I-A

B. Type of Roof Materials: N/A

C. Ground Floor Area(s): N/A

D. Number of Stories: 9

E. Total Square Footage: 598,441 Sq. Ft.

F. 2022 CBC Occupancy Classification(s): R-1

CONDITIONS OF APPROVAL:

1.0 GENERAL

☒ 1.1 The following are the Ontario Fire Department ("Fire Department") requirements for this development project, based on the current edition of the California Fire Code (CFC), and the current versions of the Fire Prevention Standards ("Standards.") It is recommended that the applicant or developer transmit a copy of these requirements to the on-site contractor(s) and that all questions or concerns be directed to the Bureau of Fire Prevention, at (909) 395-2029. For copies of Ontario Fire Department Standards please access the City of Ontario web site at www.ontarioca.gov/Fire/Prevention.

☒ 1.2 These Fire Department conditions of approval are to be included on any and all construction drawings.

2.0 FIRE DEPARTMENT ACCESS

☒ 2.1 Fire Department vehicle access roadways shall be provided to within one hundred and fifty feet (150') of all portions of the exterior walls of the first story of any building, unless specifically approved. Roadways shall be paved with an all-weather surface and shall be a minimum of twenty-four (24) ft. wide. See Standard #B-004.

☒ 2.2 In order to allow for adequate turning radius for emergency fire apparatus, all turns shall be designed to meet the minimum twenty-five feet (25') inside and forty-five feet (45') outside turning radius per Standard #B-005.

☒ 2.3 Fire Department access roadways that exceed one hundred and fifty feet (150') in length shall have an approved turn-around per Standard #B-002.

☒ 2.4 Access drive aisles which cross property lines shall be provided with CC&Rs, access easements, or reciprocating agreements, and shall be recorded on the titles of affected properties, and copies of same shall be provided at the time of building plan check.

☒ 2.5 "No Parking-Fire Lane" signs and /or red painted curbs with lettering are required to be installed in interior access roadways, in locations where vehicle parking would obstruct the minimum clear width requirement. Installation shall be per Standard #B-001.

☒ 2.6 Security gates or other barriers on fire access roadways shall be provided with a Knox brand key switch or padlock to allow Fire Department access. See Standards #B-003, B-004 and H-001.

☒ 2.7 Any time PRIOR to on-site combustible construction and/or storage, a minimum twenty-four feet (24') wide circulating all weather access roads shall be provided to within one hundred and fifty feet (150') of all portions of the exterior walls of the first story of any building, unless specifically approved by fire department and other emergency services.

3.0 WATER SUPPLY

☒ 3.1 The required fire flow per Fire Department standards, based on the 2022 California Fire Code, Appendix B, is 3000 gallons per minute (g.p.m.) for 4 hours at a minimum of 20 pounds per square inch (p.s.i.) residual operating pressure.

☒ 3.2 Off-site (public) fire hydrants are required to be installed on all frontage streets, at a maximum spacing of three hundred feet (300') apart, on alternating sides of the street. Streets with a center median shall require public hydrants spaced five hundred feet (500') apart, on the same side of the street.

☒ 3.3 Buildings that exceed 100,000 square feet in floor area shall provide an onsite looped fire protection water line around the building(s.) The loops shall be required to have two or more points of connection from a public circulating water main.

☒ 3.4 The water supply, including water mains and fire hydrants, shall be tested and approved by the Engineering Department and Fire Department prior to combustible construction to assure availability and reliability for firefighting purposes.

4.0 FIRE PROTECTION SYSTEMS

☒ 4.1 On-site private fire hydrants are required per Standard #D-005, and identified in accordance with Standard #D-002. Installation and locations(s) are subject to the approval of the Fire Department. An application with detailed plans shall be submitted, and a construction permit shall be issued by the Fire Department, prior to any work being done.

☒ 4.2 Underground fire mains which cross property lines shall be provided with CC & R, easements, or reciprocating agreements, and shall be recorded on the titles of affected properties, and copies of same shall be provided at the time of fire department plan check. The shared use of private fire mains or fire pumps is allowable only between immediately adjacent properties and shall not cross any public street.

☒ 4.3 An automatic fire sprinkler system is required. The system design shall be in accordance with National Fire Protection Association (NFPA) Standard 13. All new fire sprinkler systems, except those in single family dwellings, which contain twenty (20) sprinkler heads or more shall be monitored by an approved listed supervising station. An application along with detailed plans shall be submitted, and a construction permit shall be issued by the Fire Department, prior to any work being done.

☒ 4.4 Wood frame buildings that are to be sprinkled shall have these systems in service (but not necessarily finaled) before the building is enclosed.

☒ 4.5 Fire Department Connections (FDC) shall be located on the address side of the building within one hundred fifty feet (150') of a public fire hydrant on the same side of the street. Provide identification for all fire sprinkler control valves and fire department connections per Standard #D-007. Raised curbs adjacent to Fire Department connection(s) shall be painted red, five feet either side, per City standards.

☒ 4.6 A fire alarm system is required. The system design shall be in accordance with National Fire Protection Association (NFPA) Standard 72. An application along with detailed plans shall be submitted, and a construction permit shall be issued by the Fire Department, prior to any work being done.

☒ 4.7 Portable fire extinguishers are required to be installed prior to occupancy per Standard #C-001. Please contact the Fire Prevention Bureau to determine the exact number, type and placement required.

☒ 4.8 A fixed fire extinguishing system is required for the protection of hood, duct, plenum and cooking surfaces. This system must comply with National Fire Protection Association (NFPA) Standards 17A and 96. An application with detailed plans shall be submitted, and a construction permit shall be issued by the Fire Department, prior to any work being done.

☒ 4.9 Provide a Fire Command Center in accordance with the Fire Code Section 508.1 in all buildings classified as high-rise buildings by the California Building Code and Group I-2 occupancies having occupied floors located more than 75 feet (23 m) above the lowest level of fire department vehicle access and in all F-1 and S-1 occupancies with a building footprint greater than 500,000 square feet

5.0 BUILDING CONSTRUCTION FEATURES

☒ 5.1 The developer/general contractor is to be responsible for reasonable periodic cleanup of the development during construction to avoid hazardous accumulations of combustible trash and debris both on and off the site.

☒ 5.2 Approved numbers or addresses shall be placed on all new and existing buildings in such a position as to be plainly visible and legible from the street or road fronting the property. Multi-tenant or building projects shall have addresses and/or suite numbers provided on the rear of the building. Address numbers shall contrast with their background. See Section 9-1 6.06 of the Ontario Municipal Code and Standards #H-003 and #H-002.

☒ 5.6 Knox ® brand key-box(es) shall be installed in location(s) acceptable to the Fire Department. All Knox boxes shall be monitored for tamper by the building fire alarm system. See Standard #H-001 for specific requirements.

6.0 OTHER SPECIAL USES

☒ 6.1 The storage, use, dispensing, or handling of any hazardous materials shall be approved by the Fire Department, and adequate fire protection features shall be required. If hazardous materials are proposed, a Fire Department Hazardous Materials Information Packet, including Disclosure Form and Information Worksheet, shall be completed and submitted with Material Safety Data Sheets to the Fire Department along with building construction plans.

☒ 6.3 Underground fuel tanks, their associated piping and dispensers shall be reviewed, approved, and permitted by Ontario Building Department, Ontario Fire Department, and San Bernardino County Fire Department Hazardous Materials Division. In fueling facilities, an exterior emergency pump shut-off switch shall be provided.

GENERAL NOTES

1. "NO PARKING-FIRE LANE" SIGNS AND /OR RED PAINTED CURBS WITH LETTERING ARE REQUIRED TO BE INSTALLED IN INTERIOR ACCESS ROADWAYS. IN LOCATIONS WHERE VEHICLE PARKING WOULD OBSTRUCT THE MINIMUM CLEAR WIDTH REQUIREMENT. INSTALLATION SHALL BE PER STANDARD #B-001.

PROVIDE KNOX BRAND KEY SWITCH OR PADLOCK AT THE SLIDING SECURITY GATE TO ALLOW FIRE DEPARTMENT ACCESS. REFER TO LANDSCAPE DRAWINGS FOR THE GATE INFORMATION.

Proposed Fire Hydrant Locations

Rooftop Stair Access

Option B: Modified Hammerhead design within courtyard area. Provide minimum 26 ft wide paved or alternate driveable surface drive aisle parallel to the west wing of the building and is setback 15 ft from building as shown.

Option A: SB County Flood Control Fire Access. Provide a minimum 26 ft wide paved area, setback 30 ft from building between the proposed southern wall to the north rooftop stair access as shown. This Option requires San Bernardino County approval.

Rooftop Stair Access

Rooftop Stair Access

Rooftop Stair Access

Rooftop Stair Access

Rooftop Stair Access

E HOLT BLVD

E GUASTI RD

CUCAMONGA CHANNEL

30 FT Bldg. Height

92-100 FT Bldg. Height

21 FT Bldg. Height

114-120 FT Bldg. Height

KNOX BOX TO BE MOUNTED TO THE WALL. BOTTOM OF THE BOX TO BE 5' FROM THE FINISH GRADE.

STOP SIGN

1 FIRE ACCESS SITE PLAN
SCALE: 1/32" = 1'-0"

THE EMPIRE GROVES HOTEL

Ontario CA 91730

Gensler

500 South Figueroa Street
Los Angeles, California 90071
United States

Tel 213.327.3600
Fax 213.327.3601

△	Date	Description
	9/29/23	ISSUE FOR ENTITLEMENT
1	7/12/24	REISSUE FOR ENTITLEMENT
2	12/2/2024	REISSUE FOR ENTITLEMENT

Seal / Signature

NOT FOR CONSTRUCTION

Project Name

Diversified Pacific Communities

Project Number

05.4382.000

Description

FIRE ACCESS PLAN

Scale

As indicated

Ref North

AS.002

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CITY OF ONTARIO
LANDSCAPE PLANNING DIVISION
303 East "B" Street, Ontario, CA 91764

CONDITIONS OF APPROVAL

Sign Off

Jamie Richardson, Sr. Landscape Architect	01/28/2025 Date

Reviewer's Name: **Jamie Richardson, Sr. Landscape Architect**	Phone: **(909) 395-2615**

D.A.B. File No.: PDEV23-039, PDA-23-005, PSP-23-001	Case Planner: Lorena Mejia

Project Name and Location:

9-Story, 600 Room Hotel
2236 East Holt Blvd

Applicant/Representative:

Diversified Pacific Development Group, LLC Nolan Leggio nleggio@divpac.com
10621 Civic Center Drive
Rancho Cucamonga, CA 91730

☒	**Preliminary Plans (dated 12/12/2024) meet the Standard Conditions for New Development and have been approved considering that the following conditions below be met upon submittal of the landscape construction documents.**
☐	**Preliminary Plans (dated) have not been approved. Corrections noted below are required before Preliminary Landscape Plan approval.**

A RESPONSE SHEET IS REQUIRED WITH RESUBMITTAL OR PLANS WILL BE RETURNED AS INCOMPLETE.
DIGITAL SUBMITTALS MUST BE 10MB OR LESS.

Civil/ Site Plans

1. Mitigation for removed trees shall equal the trunk diameter of heritage trees removed per the Development Code Tree Preservation Policy and Protection Measures, section 6.05.020. A total of 795.5 inches of trunk replacement is required; see below for mitigation options.
2. Show on demo plans and landscape construction plans trees to be preserved, removed or mitigation measures for trees removed, such as:
   a. New 15 gallon trees min 1" diameter trunk, in addition to trees required.
   b. New 24" box trees min 1.5" diameter trunk, in addition to trees required.
   c. Upsizing trees on the plan one size larger such as 15 gallon to 24" box, or 24" to 36" box size.
   d. Monetary value of the trees removed as identified in the "Guide for Plant Appraisal," approved certified arborist plant appraiser, may be equal to the value of the installation cost of planting, fertilizing, staking, and irrigating 15-gallon trees (100$ each) to the City of Ontario Historic Preservation Fund for city tree planting or city approved combination of the above items.
3. Include improvements to the Cucamonga Flood Control Channel.
4. Before permit issuance, stormwater infiltration devices located in landscape areas shall be reviewed and plans approved by the Landscape Planning Division. Any stormwater devices in parkway areas shall not displace street trees.
5. Stormwater chamber systems shall be designed and configured to allow for required tree locations.
6. Show transformers set back 5' from paving all sides. Coordinate with landscape plans. Note that if SCE requires bollards (less than 5' setback from vehicular paving), permanent, decorative bollards will be required; submit cut shets to the Planning Department.

7. Show all backflow devices set back 4’ from paving on all sides. Locate on level grade
8. Locate utilities including light standards, fire hydrants, water, drain, and sewer lines to not conflict with required tree locations—coordinate civil plans with landscape plans.
9. Provide a utility clear space 8’ wide in parkways and 30’ apart for street trees. Move water meters, drain lines, and light standards to the utility minimum spacing and show utility lines at the edges of the parkway, toward the driveway apron, to allow space for street trees.

Landscape Plans

10. Shrub and Ground Cover Palette: Replace Dendromecon and Mimulus are easily overwatered, Isomeris (large and rangy, OK with ample planter areas), Ericameria (invasive), Lavandula (short-lived), Pennisetum/Nassella (invasive) and limit the use of non-invasive ornamental grasses to accent areas (difficult and costly to maintain in masses and poor winter appearance).
11. Show backflow devices with 36” high strappy leaf shrub screening and trash enclosures and transformers, a 4’-5’ high evergreen hedge screening. Do not encircle utility; show as masses and duplicate masses in other locations at regular intervals.
12. Locate light standards, fire hydrants, water, and sewer lines to not conflict with required tree locations. Coordinate civil plans with landscape plans
13. Show all utilities on the landscape plans. Coordinate so utilities are clear of tree locations.
14. Landscape construction plans shall meet the requirements of the Landscape Development Guidelines. See http://www.ontarioca.gov/landscape-planning/standards
15. After a project’s entitlement approval, the applicant shall pay all applicable fees for landscape plan check and inspections at a rate established by resolution of the City Council.

Specific Plan Comments

16. Shrub and Ground Cover Palette: Replace Dendromecon and Mimulus are easily overwatered, Isomeris (large and rangy, OK with ample planter areas), Ericameria (invasive), Lavandula (short-lived), Pennisetum/Nassella (invasive) and limit the use of non-invasive ornamental grasses to accent areas (difficult and costly to maintain in masses and poor winter appearance).

PROJECT REVIEW BOARD COMMENTS
* * * BUILDING DEPARTMENT * * *

Planning Case File No(s): PDEV23-039

Case Planner: Lorena Mejia

Applicant: Ontario Project LLC – Gabriel Guerreo

Location: 2236 Holt

A Development Plan to construct a 9-story hotel consisting of approximately 596.450 square feet to include 600 rooms, ancillary retail and various amenities on 10.43 acres of land located at 2236 East Holt Boulevard, within the SP (Specific Plan) zoning district and the MTC (Multimodal Transit Center) overlay (APN(s): 0110-322-33). Related File(s): PSP-23-001; PDA-23-005.

Project:

APN(s): 0110-322-33

Reviewed By: Klaus De Guzman Date: 1/13/2025

Following Standard Building Department Conditions of Approval
Are Applicable to This Project:

See checked boxes below

Specific Conditions:

A)

Specific Comments (NOTE: THESE COMMENTS ARE NOT CONDITIONS!):

A)

(NOTE: Standard Conditions of Approval are attached.)

BUILDING DEPARTMENT

GENERAL CONDITIONS

☒ 1. Shall comply with the latest adopted edition of the following codes as applicable:

A. California Building Code
B. California Residential Code
C. California Existing Building Code
D. California Electrical Code
E. California Mechanical Code
F. California Plumbing Code
G. California Energy Code.
H. California Fire Code
I. California Green Building Standards Code.

☐ 2. The property owner/business operator shall comply with all applicable City of Ontario Municipal Codes and Ordinances.

☒ 3. The requirements of the Department of Environmental Health Services and the Air Quality Management District shall be satisfied prior to the issuance of any permit if hazardous materials are stored and/or used.

☒ 4. Pursuant to the California Business and Professions Code Section 6737, most projects are required to be designed by a California Licensed Architect or Engineer. The project owner or developer should review the section of the California Codes and comply with the regulation

☐ 5. All perimeter / boundary walls shall be designed and constructed so that the outer/exterior face of the wall is as close as possible to the lot line. In any case, the outer/exterior face of the wall shall be within two (2) inches of the lot line. Distances greater than two (2) inches may be approved prior to construction by the Building Official on a case-by-case basis for extenuating circumstances.

☐ 6. All lot lines, easement lines, etc. shall be located and/or relocated in such a manner as to not cause any existing structure to become non-conforming with the requirements of the latest adopted edition of the Building Code, or any other applicable law, ordinance, or code.

☒ 7. The Developer/Owner is responsible for the coordination of the final occupancy. The Developer/Owner shall obtain clearances from each department and division prior to requesting a final building inspection from the Building Department. Each department shall sign the Building Department Job Card

☒ 8. All signs shall be Underwriters Laboratories, or equal, approved.

☐ 9. Permits are required prior to the removal and/or demolition of structures.

☐ 10. In addition to approval from Building Department, approval is required from the County of San Bernardino, Department of Public Health and the California Regional Water Quality Control Board, Santa Ana Region for the Private Sewage Disposal System.

☐ 11. The existing private sewage system will have to be modified as required to accommodate the new use. Plans and/or supporting data will have to be submitted to, and approved by, the Building Department regarding the new use and necessary modifications. Additionally, approval from the Regional Water Quality Control Board, Santa Ana Region, is required for the new use.

☐ 12. The coach shall bear a State of California, Department of Housing and Community Development (HCD) insignia indicating the occupancy group and design loads that the coach conforms to, and other relevant information regarding exiting, fire safety, electrical, plumbing and mechanical. The foundation system, porch and awning shall comply with plans that bear the HCD "Standard Plan Approval" stamp. The coach, foundation system, porch and awning shall comply with the City of Ontario's design loads and site-specific conditions.

☐ 13. The conversion of the existing single-family dwelling(s) into a commercial use changes the occupancy group classification, and therefore the existing buildings must be made to comply with the requirements of all applicable codes for the new occupancy classification. Complete plans, calculations and other specifications shall be submitted to the Building Department for review, approval and subsequent permit issuance. The plans, calculations and other specifications shall be prepared by an Architect or Registered Civil/Structural Engineer licensed by the State of California who is qualified to perform said work.

☐ 14. The site, or a portion of the site, is in a flood hazard area. Justification that the proposed development does not adversely affect the location or carrying capacity of the floodway, nor does it adversely affect upstream or downstream sites shall be provided to Building Department. Additionally, all provisions must be taken to protect the site from flood damage.

☐ 15. All exterior lighting shall be orientated, directed, and/or shielded as much as possible so that direct illumination does not infringe onto adjoining properties.

☒ 16. Site facilities such as parking open or covered, recreation facilities, and trash dumpster areas, and common use areas shall be accessible per the CBC, Chapter 11.

☒ 17. Trash Enclosure shall be covered, and the interior clearances shall be designed to accommodate the following:

- 4' min. side access entrance

- 3’ min. wide clear pathway along rear of enclosure between trash bins and back wall.
- Trash bins must be oriented sideways to allow access from the narrow dimension.
- Use of curbs or wheel stops shall be provided within the enclosure to maintain access clearances and bin orientations.

☒ 18. The applicant/developer shall include the conditions of approval of this resolution on the construction plans.

☒ 19. Site development and grading shall be designed to provide access to all entrances and exterior ground floors exits and access to normal paths of travel, and where necessary to provide access. Paths of travel shall incorporate (but not limited to) exterior stairs, landings, walks and sidewalks, pedestrian ramps, curb ramps, warning curbs, detectable warning, signage, gates, lifts and walking surface materials. The accessible route(s) of travel shall be the most practical direct route between accessible building entrances, site facilities, accessible parking, public sidewalks, and the accessible entrance(s) to the site, California Building Code, (CBC) Chapter 11, Sec, 11A and 11B.

☐ 20. Commercial/Industrial gated site must have at least one pedestrian emergency gate, 3’-0’ x 6’-8” min. gate size, equipped with panel hardware on the inside, and gate must swing out. Pedestrian emergency gates can be installed integrated with vehicular gates.

☐ 21. New residential single-family dwelling (SFD’s):

- The side yard gate must swing out toward the street.
- The gas meter shall not obstruct side yard access gates.
- Air Conditioning unit located at side yard shall maintain 3’ min. clearance from property line wall to AC unit.
- Provide a continuous concrete walk between garage side door to driveway or sidewalk.

☐ 22. New development projects located in the Ontario Ranch specific plan are required to submit a **methane assessment report**. This report shall be submitted to the Building Department for review and approval at grading plan submittal.

☐ 23. If hazardous substances are used and/or stored, a technical opinion and report, identifying and developing methods of protection from the hazards presented by the hazardous materials may be required. This report shall be prepared by a qualified person, firm, or corporation and submitted to Building Department. This report shall also explain the proposed facility's intended methods of operation and list all of the proposed materials, their quantities, classifications, and the effects of any chemical (material) intermixing in the event of an accident or spill.

☒ 24. The property owner/business operator shall provide a grease interceptor at a location where it shall be easily accessible for inspection, cleaning, and removal of accumulated grease. The sizing and installation shall conform to the current California Plumbing Code. The grease interceptor shall be constructed in accordance with plans approved by the Director of Public

Works and the Building Official. The property owner/business operator shall contract with a maintenance company for maintenance and cleaning of the grease interceptor.

SITE CONSTRUCTION REQUIRMENTS

☒ 25. All construction sites must be protected by a security fence and screening. The fencing and screening shall always maintained to protect pedestrians

☒ 26. Temporary toilet facilities shall be provided for construction workers. The toilet facilities shall be maintained in a sanitary condition. Construction toilet facilities of the non-sewer type shall conform to ANSI ZA.3

☒ 27. Construction projects which require temporary electrical power shall obtain an Electrical Permit from Building Department. No temporary electrical power will be granted to a project unless one of the following items is in place and approved by Building Department and the Planning Department.
(A) Installation of a construction trailer, or
(B) Security fenced area where the electrical power will be located

☒ 28. Installation of construction/sales trailers must be located on private property. No trailers can be in the public street right of way

☒ 29. Any temporary building, trailer, commercial coach, etc. installed and/or used in connection with a construction project shall comply with City Code.

☐ 30. Prior to issuance of a Building Permit all of the following must be in place: portable toilet with hand wash station, all BMP's, fencing and signage on each adjacent street saying "If there is any dust or debris coming from this site please contact (superintendent number here) or the AQMD if the problem is not being resolved" or something similar to this.

PRIOR TO ISSUANCE OF BUILDING/CONSTRUCTION PERMITS

☒ 31. The following grading items shall be completed and/or submitted – as applicable – prior to the issuance of building permits for this project:

A. Precise grading plans shall be approved
B. Rough grading completed
C. Compaction certification completed
D. Pad elevation certification completed
E. Rough grade inspection signed off by a City's Building Inspector

☒ 32. Prior to the issuance of a Building Permit, the applicant shall pay all Development

Improvement Fees to the City. Copies of receipts shall be provided to the Building Department prior to permit issuance.

☒ 33. The Tract or Parcel map shall record prior to the issuance of any permits.

☐ 34. The existing parcels shall be combined into a single parcel, or a lot line adjustment shall be done so that the proposed structure(s) does not cross any lot line and complies with all requirements of the California Building Code, prior to any building permits being issued.

☐ 35. Fire sprinklers, fire alarm systems and fire hydrant plans shall be submitted for plan review concurrently with building plans and shall be approved prior to permit issuance

☒ 36. Prior to issuance of Building Permits, school fees need to be paid to school district where project is located

PROJECT REVIEW BOARD COMMENTS
* * * BUILDING DEPARTMENT * * *

Planning Case File No(s): PDEV23-039

Case Planner: Lorena Mejia

Applicant: Ontario Project LLC – Gabriel Guerreo

Location: 2236 Holt

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Project:

APN(s): 0110-322-33

Reviewed By: Klaus De Guzman Date: 1/13/2025

Following Standard Building Department Conditions of Approval
Are Applicable to This Project:

See checked boxes below

Specific Conditions:

A)

Specific Comments (NOTE: THESE COMMENTS ARE NOT CONDITIONS!):

A)

(NOTE: Standard Conditions of Approval are attached.)

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☒ 4. Pursuant to the California Business and Professions Code Section 6737, most projects are required to be designed by a California Licensed Architect or Engineer. The project owner or developer should review the section of the California Codes and comply with the regulation

☐ 5. All perimeter / boundary walls shall be designed and constructed so that the outer/exterior face of the wall is as close as possible to the lot line. In any case, the outer/exterior face of the wall shall be within two (2) inches of the lot line. Distances greater than two (2) inches may be approved prior to construction by the Building Official on a case-by-case basis for extenuating circumstances.

☐ 6. All lot lines, easement lines, etc. shall be located and/or relocated in such a manner as to not cause any existing structure to become non-conforming with the requirements of the latest adopted edition of the Building Code, or any other applicable law, ordinance, or code.

☒ 7. The Developer/Owner is responsible for the coordination of the final occupancy. The Developer/Owner shall obtain clearances from each department and division prior to requesting a final building inspection from the Building Department. Each department shall sign the Building Department Job Card

☒ 8. All signs shall be Underwriters Laboratories, or equal, approved.

☐ 9. Permits are required prior to the removal and/or demolition of structures.

☐ 10. In addition to approval from Building Department, approval is required from the County of San Bernardino, Department of Public Health and the California Regional Water Quality Control Board, Santa Ana Region for the Private Sewage Disposal System.

☐ 11. The existing private sewage system will have to be modified as required to accommodate the new use. Plans and/or supporting data will have to be submitted to, and approved by, the Building Department regarding the new use and necessary modifications. Additionally, approval from the Regional Water Quality Control Board, Santa Ana Region, is required for the new use.

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☒ 17. Trash Enclosure shall be covered, and the interior clearances shall be designed to accommodate the following:

- 4' min. side access entrance

- 3’ min. wide clear pathway along rear of enclosure between trash bins and back wall.
- Trash bins must be oriented sideways to allow access from the narrow dimension.
- Use of curbs or wheel stops shall be provided within the enclosure to maintain access clearances and bin orientations.

☒ 18. The applicant/developer shall include the conditions of approval of this resolution on the construction plans.

☒ 19. Site development and grading shall be designed to provide access to all entrances and exterior ground floors exits and access to normal paths of travel, and where necessary to provide access. Paths of travel shall incorporate (but not limited to) exterior stairs, landings, walks and sidewalks, pedestrian ramps, curb ramps, warning curbs, detectable warning, signage, gates, lifts and walking surface materials. The accessible route(s) of travel shall be the most practical direct route between accessible building entrances, site facilities, accessible parking, public sidewalks, and the accessible entrance(s) to the site, California Building Code, (CBC) Chapter 11, Sec, 11A and 11B.

☐ 20. Commercial/Industrial gated site must have at least one pedestrian emergency gate, 3’-0’ x 6’-8” min. gate size, equipped with panel hardware on the inside, and gate must swing out. Pedestrian emergency gates can be installed integrated with vehicular gates.

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- Provide a continuous concrete walk between garage side door to driveway or sidewalk.

☐ 22. New development projects located in the Ontario Ranch specific plan are required to submit a **methane assessment report**. This report shall be submitted to the Building Department for review and approval at grading plan submittal.

☐ 23. If hazardous substances are used and/or stored, a technical opinion and report, identifying and developing methods of protection from the hazards presented by the hazardous materials may be required. This report shall be prepared by a qualified person, firm, or corporation and submitted to Building Department. This report shall also explain the proposed facility's intended methods of operation and list all of the proposed materials, their quantities, classifications, and the effects of any chemical (material) intermixing in the event of an accident or spill.

☒ 24. The property owner/business operator shall provide a grease interceptor at a location where it shall be easily accessible for inspection, cleaning, and removal of accumulated grease. The sizing and installation shall conform to the current California Plumbing Code. The grease interceptor shall be constructed in accordance with plans approved by the Director of Public

Works and the Building Official. The property owner/business operator shall contract with a maintenance company for maintenance and cleaning of the grease interceptor.

SITE CONSTRUCTION REQUIRMENTS

☒ 25. All construction sites must be protected by a security fence and screening. The fencing and screening shall always maintained to protect pedestrians

☒ 26. Temporary toilet facilities shall be provided for construction workers. The toilet facilities shall be maintained in a sanitary condition. Construction toilet facilities of the non-sewer type shall conform to ANSI ZA.3

☒ 27. Construction projects which require temporary electrical power shall obtain an Electrical Permit from Building Department. No temporary electrical power will be granted to a project unless one of the following items is in place and approved by Building Department and the Planning Department.
(A) Installation of a construction trailer, or
(B) Security fenced area where the electrical power will be located

☒ 28. Installation of construction/sales trailers must be located on private property. No trailers can be in the public street right of way

☒ 29. Any temporary building, trailer, commercial coach, etc. installed and/or used in connection with a construction project shall comply with City Code.

☐ 30. Prior to issuance of a Building Permit all of the following must be in place: portable toilet with hand wash station, all BMP's, fencing and signage on each adjacent street saying "If there is any dust or debris coming from this site please contact (superintendent number here) or the AQMD if the problem is not being resolved" or something similar to this.

PRIOR TO ISSUANCE OF BUILDING/CONSTRUCTION PERMITS

☒ 31. The following grading items shall be completed and/or submitted – as applicable – prior to the issuance of building permits for this project:

A. Precise grading plans shall be approved
B. Rough grading completed
C. Compaction certification completed
D. Pad elevation certification completed
E. Rough grade inspection signed off by a City's Building Inspector

☒ 32. Prior to the issuance of a Building Permit, the applicant shall pay all Development

Improvement Fees to the City. Copies of receipts shall be provided to the Building Department prior to permit issuance.

☒ 33. The Tract or Parcel map shall record prior to the issuance of any permits.

☐ 34. The existing parcels shall be combined into a single parcel, or a lot line adjustment shall be done so that the proposed structure(s) does not cross any lot line and complies with all requirements of the California Building Code, prior to any building permits being issued.

☐ 35. Fire sprinklers, fire alarm systems and fire hydrant plans shall be submitted for plan review concurrently with building plans and shall be approved prior to permit issuance

☒ 36. Prior to issuance of Building Permits, school fees need to be paid to school district where project is located

CITY OF ONTARIO *Agenda Report* **March 18, 2025**	**SECTION:** **PUBLIC HEARINGS**
Department: Financial Services Prepared By: Matthew Hernandez Department: Prepared By: Matthew Hernandez Staff Member Presenting: Armen Harkalyan, Executive Director of Finance Reviewed By: Claudia Hernandez Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 22

SUBJECT: **A CONSOLIDATED PUBLIC HEARING TO CONSIDER ADOPTION OF A RESOLUTION APPROVING THE DIF NEXUS REPORT UPDATE AND MODIFY DEVELOPMENT IMPACT FEES**

RECOMMENDATION: That the City Council consider and adopt a Resolution to approve the City's Development Impact Fees (DIF) 2024 Nexus Report Update and modify the DIF fees.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Invest in the Growth and Evolution of the City's Economy
Operate in a Businesslike Manner
Focus Resources in Ontario's Commercial and Residential Neighborhoods
Ensure the Development of a Well Planned, Balanced, and Self-Sustaining Community in Ontario Ranch

FISCAL IMPACT: The recommended update of the Development Impact Fees ("DIF") continues to reflect the City Council's direction that new development pays its fair share of the costs for infrastructure and those costs of new development taking place in the City do not impact existing residents. There is no General Fund impact from adopting the DIF update. The update of the DIF Program is conducted periodically to reflect modifications to specific DIF projects based on changes in projected infrastructure needs, actual costs, revised engineering estimates and updated cost estimates. DIF, assessed on per unit or per square foot basis, is intended to cover the cost of infrastructure improvements needed to support new development. With adoption of the fees as proposed, the City's DIF Program is estimated to generate sufficient revenue for infrastructure construction/installation over the buildout of the City.

BACKGROUND & ANALYSIS: On July 1, 2003, the City Council adopted Ordinance Nos. 2779 and 2780 to approve Development Impact Fees (DIF) for the City. The DIF has been updated periodically since 2005. Since its inception, the DIF Program has had separate DIF amounts and funds for what has historically been termed the "New Model Colony" (known as Ontario Ranch) and the "Old Model Colony" (known as General City) areas.

The development impact fees were last updated on August 16, 2022, and the Master Facility Plan was last updated on May 16, 2023. In the DIF updates since its inception, there have been only minimal changes in the scopes and estimated costs of DIF Program projects. The most recent update to the DIF Program's methodology was adopted in August 2022.

In support of the revised DIF amounts, Revenue & Cost Specialists, LLC ("Consultant") prepared comprehensive updates to the Development Impact Fee Calculation and Nexus Update Report (the "DIF Nexus Report"). The completed DIF Nexus Report is on file in the Records Management Department. The report includes the cost details of the changes reflected in the update and schedules used in the calculation of the updated DIF amounts. The proposed DIF Nexus Report includes adjustments to the land use database reflected within The Ontario Plan 2050 ("TOP 2050") update. TOP 2050 incorporates changes in land use types and densities which necessitates material revisions to the City's infrastructure (Streets, Storm Drains, Water and Sewer) Master Plans and DIF Program.

The major changes incorporated in the 2024 update include the following:

- The cost per acre for land acquisition has been increased from $700,000 to $1,000,000.
- The individual 2024 project cost amounts in numerous infrastructure categories have been escalated by application of the change in an applicable cost index.
- In the Police, Fire, Streets, Storm Drain, Water, Sewer, and Fiber Optic categories, numerous individual project cost estimates have been adjusted to reflect updated engineering estimates and/or actual costs.
- In the Police and Fire categories, Staff is recommending an increase of fees because of the actual cost increase associated with the equipment in these respective categories.
- The City continued its practice established in 2022 by applying outstanding (available) developer held "DIF Credits" in each infrastructure category were added as continued costs for projects that have not necessarily been constructed and/or paid for by the City. Numerous DIF projects were financed or constructed by individual developers, and they will ultimately expect repayment for that over-build via the DIF Credits that have been issued by the City. Pursuant to the City's DIF Program Policies, DIF Credits are available for use at permit issuance to offset (reduce) the fee in the respective infrastructure category for which the DIF Credit was issued. The availability of credits decreases the amount of DIF revenue that the City will ultimately collect. Therefore, any outstanding DIF Credit amount that has been included in this Report's calculations within the DIF calculation methodology, was done to establish the appropriate DIF fee schedule necessary to finance both the remaining infrastructure costs and total developer's DIF Credits at General Plan build-out.
- In 2024 the City expanded on this practice by factoring outstanding "DIF Credits" in the calculation of the Local / Regional percentage split across applicable infrastructure categories. The incorporation of outstanding DIF credits assists the City in recuperating additional DIF in order to eliminate any City subsidy for the long-term development of the Ontario Ranch Area.
- Assembly Bill 602 ("AB 602") became effective January 1, 2022. Per AB 602, if a local jurisdiction adopts a calculation and nexus study report after July 1, 2022, it must calculate its DIF imposed on a housing development project proportionately to the square footage of proposed units of the development, unless it makes the following findings: A) an explanation

as to why square footage is not an appropriate metric to calculate fees imposed on housing development projects; B) an explanation that an alternative basis of calculating the fee bears a reasonable relationship between the fee charged and the burden posed by the development; and C) that other policies in the fee structure support smaller developments, or otherwise ensure that smaller developments are not charged disproportionate fees. The proposed DIF Nexus Report attached to this agenda report, and incorporated herein by reference, details supportive justifications for the City to continue to impose residential development impact fees in the same manner that additional development service demands are calculated - that is, on a per unit basis (see DIF Nexus Report - Appendix F). The City will not impose development impact fees for residential development projects based on the square footage of proposed units for completing the City's General Plan. The current and proposed set of fees fosters greater accuracy in planning and provides the City with the required level of certainty in impact fee collection.

- The City also added an additional section to the 2024 document identifying an estimated completion date for each DIF Project identified in the Update.

The City is maintaining the methodology established in the 2022 Nexus Study; however, updating the cost of the projects related to the actual costs reported by Developers and the City within the 2024 study. The attached "Exhibit A" of the proposed Resolution specifies the updated DIF amounts for the General City and Ontario Ranch areas as of July 1st, 2025. The attached "Exhibit B" of the proposed Resolution specifies the updated DIF amounts for the General City and Ontario Ranch areas as of July 1st, 2026. The City is practicing a phased approach to its DIF Update No changes are proposed to the DIF Program implementation policies or land use categories definitions as part of this DIF Program update.

Staff notified and worked with the Building Industry Association ("BIA") and NMC Builders, LLC ("NMC") on this recommended update to the DIF and provided both entities with a copy of the proposed fees and the back-up materials. Several meetings were held with representatives of NMC Builders to provide and exchange cost information related to the proposed modifications to the DIF Program. NMC Builders have communicated that they have no further comments on the proposed revisions to the DIF Program and have provided notice to the City indicating that they do not object to adoption of the fees as proposed. Under State law, fee increases cannot become effective any sooner than 60 days after adoption by the legislative body.

Staff recommends the City Council adopt the attached Resolution approving the proposed DIF Nexus Report and increased Development Impact Fees.

February 10, 2025

Honorable Mayor and City Council
Via Mr. Scott Ochoa, City Manager
City of Ontario
303 East "B" Street
Ontario, CA 91764

RE: February 2025 Update to the 2022 Development Impact Fee (DIF) Calculation

Honorable Mayor, Council and City Manager Ochoa:

Please find enclosed copies of the amended Development Impact Fee schedules (DIFs) updated from the 2022 *Development Impact Fee Calculation and Nexus Report* and the amended individual project detail pages from the April 2022 *Master Facilities Plan*. The City's Development Impact Fees (DIF) have been reviewed periodically since they were comprehensively calculated in May 2003 in order to maintain continued viability of the DIF capital financing system, and they have been amended as necessary to allow for changes to project scopes, cost estimates and allocability. This February 2025 update includes numerous adjustments, as discussed below.

The format of this amendment of the existing Development Impact Fees consists of:

1. This letter identifying the alterations made by infrastructure or Chapter.

2. A section containing the updated *Master Facilities Plan* pages identifying any combined changes in the specific project costs, descriptions and/or source responsibilities.

3. A section containing the amended Development Impact Fee summary schedules which identify the proposed fees, total estimated collections, total infrastructure costs and the collection differences and the twelve separate amended infrastructure Development Impact Fee calculation schedules indicating the distribution of costs with the appropriate infrastructure nexus.

4. A section identifying the City's Distribution of collected impact fee receipts over Regional/Local demands to insure that both regional and local

needs are met over the same period of time. RCS does not participate in the calculation of these percentages but are included in this document based upon City staff calculations.

There has been no attempt to amend the text contained within the 2022 *Development Impact Fee Calculation and Nexus Report* as the nexus and logic within the Report does not change text beyond some minor modifications to Appendix F. The text revision is undertaken on the four year cycle of the complete recalculation of the DIFs which would be begun in 2026. However, certain amounts contained within the text, and tables included in the individual chapters have been updated to present the current amounts. All 393 Master Facility Plan Projects have been reviewed and adjusted (primarily increased with some reductions) as necessary to reflect the on-going and continuing diminution in the purchasing power of the dollar. While some projects were recalculated or restructured, most of the modifications were driven by one of three major cost increase indices. The standard modifications and/or types of modifications included in the 2024 update were adjusted as follows:

Projects that are structure construction-based such as libraries, fire stations and public use facilities were increased 113.20% based upon the Engineering News Record – Building Cost Index increase from January 2022 to May 2024. Use of this index may be henceforth identified as the ENR-BCI.

Building Cost Index - May 2024	8331.36
Building Cost Index - January 2022	7359.09
ENR-BCI Percent Increase	**113.20%**

Projects that are below ground or below based facilities (circulation-based improvements, water, sewer and storm drainage collection pipes, etc) were increased based upon the Engineering News Record – Construction Cost Index increase of 107.90% from January 2022 to May 2024. Use of this index amy be henceforth identified as the ENR-CCI.

Construction Cost Index - May 2024	13536.09
Construction Cost Index - January 2022	12555.55
ENR-CCI Percent Increase	**107.90%**

Projects that are deliverable products (vehicles, equipment, one-time supplies and electronics) were increased based upon the Consumer Price Index increase of 111.70% from January 2022 to June 2024. Use of this index may be henceforth identified as the CPI.

Consumer Price Index – June 2024	314.175
Consumer Price Index - January 2022	281.148
CPI Percent Increase	**111.70%**

Specific cost changes to each infrastructure are as follows:

Law Enforcement Facilities, Vehicles and Equipment

Purchase of and Improvements to the Police Station were not increased.
Police Response Vehicles, Officer Assigned Equipment and the Helicopter costs were increased by specific amounts based upon recent Police Department acquisitions.
The City Yard improvement costs were increase by the Engineering News Record – Building Cost Index of 113.20%.

Fire Suppression/Medic Facilities, Vehicles and Equipment

Fire stations and ancillary Facilities were increased by the ENR-BCI
Fire response vehicles were increased by the CPI
The City Yard improvement costs were increase by the Engineering News Record – Building Cost Index of 113.20%.

Circulation (Streets, Signals and Bridges) System Facilities

Projects ST-004, 011, 012, 013, 015, 022, 023, and ST-024 were increased by recalculating the project specifications and/or design changes.
ST-103 (vehicles) and ST-112 (equipment) were increased by the Consumer Price Index increase of 111.70%.
The City Yard improvement costs were increase by the Engineering News Record – Building Cost Index of 113.20%.
All other projects were increased by the Engineering News Index Construction Cost increase of 107.90%

Storm Drainage Collection Facilities

Projects ST-001, 002, 005, 006, 007, 022, 041, and SD-050 were increased by recalculating the project specifications and/or design changes.
SD-069 (vehicles) was increased by the Consumer Price Index increase of 111.70%.
All other projects were increased by 138.00% based upon an agreement with the New Model Colony Builders Group (henceforth *NMC Builders*) that reduces a significant disparity between the City's estimated MFP costs with actual construction costs.
The City Yard improvement costs were increase by the Engineering News Record – Building Cost Index of 113.20%.

Water Source, Storage and Distribution System

Project costs were altered (increased/decreased) by Utilities Engineering staff based upon recalculations.
The City Yard improvement costs were increase by the Engineering News Record – Building Cost Index of 113.20%.

Sewer Collection System

Project costs were altered (increased/decreased) by Utilities Engineering staff based upon recalculations.
The City Yard improvement costs were increase by the Engineering News Record – Building Cost Index of 113.20%.

Refuse Collection Facilities and Equipment

Refuse equipment costs increases were based upon recent purchases of similar equipment.
The City Yard improvement costs were increase by the Engineering News Record – Building Cost Index of 113.20%.

General Government Facilities, Vehicles and Equipment

GF-001 was not increased as the project is completed and the costs are set.
GF-002 and GF-003 were increased by the Consumer Price Index.
GF-004 was discontinued two or three update cycles ago.
The City Yard improvement costs were increase by the Engineering News Record – Building Cost Index of 113.20%.

Library Facilities and Collection System

Library construction costs were increased by The Engineering News Record – Building Cost Index increase of 113.20%
Library collection items were increased by the Consumer Price index increase of 111.70%

Public Use Facilities

Public Use Facilities construction costs were increased by The Engineering News Record – Building Cost Index increase of 113.20%.

Aquatics Center Facilities

Aquatics Facilities construction costs were increased by The Engineering News Record – Building Cost Index increase of 113.20%.

Park Land Acquisition and Park Improvements

Park land acquisition costs were increased to $1,000,000 per acre based upon recent land acquisition and appraisal costs.

Park facilities construction costs were increased by The Engineering News Record – Construction Cost Index increase of 107.90%.
The City Yard improvement costs were increase by the Engineering News Record – Building Cost Index of 113.20%.

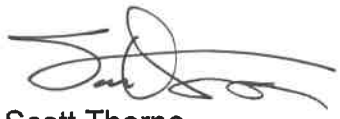
Fiber Optics System Improvements

Projects FO-001, 002, 005 and FO-006 were adjusted by the ENR-CCI increase of 107.90%.
FO-007 and FO-008 were adjusted by the CPI increase of 111.70%.
FO-004 was increased by a specific recalculated amount which resulted in a 113.70% increase.

Please refer to the Exhibits to this letter for the specifics of the detailed adjustments made to every project in the 2025 update that includes an adjustment from the 2022 Report.

Revenue & Cost Specialists, L.L.C staff are ready to assist the City in any way that may be beneficial to the adoption of the new fees necessary to insure that the City can accommodate the private development of its many vacant acres at no cost to the existing community, either in actual costs-out-of-pocket or in the diminution of existing levels of service.

Sincerely,



Scott Thorpe
Senior Vice President.

City of Ontario

Master Facilities Plan and

Development Impact Fee Calculation Update

from 2021-22 to 2023-24 Financial Data

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LE-001	Police Station Purchase and Roof Improvements Prior to Occupancy	$10,363,962
LE-002	Complete Remaining Interior Improvements @ 55% of Building Space	$29,656,550
LE-003	Additional Patrol/Detective/Specialty/Staff Vehicles	$25,589,022
LE-004	Additional Officer Assigned Equipment	$6,146,112
LE-005	Additional Specialty Equipment	$3,761,341
LE-006	Building Appurtenances Equipment	$1,075,537
LE-007	Communications Equipment	$911,472
LE-008	Advanced Technology Hardware and Software	$2,360,712
LE-009	Additional Helicopter Capacity	$6,252,341
LE-010	Share of Specific/Common City Yard Improvements	$2,677,619
FS-001	Project Completed or No Longer Needed	$0
FS-002	Project Completed or No Longer Needed	$0
FS-003	Fire Station #11 Land Acquisition And Construction	$15,121,350
FS-004	Fire Station #11 Response Engine and Aerial	$3,466,645
FS-005	Fire Station #12 Land Acquisition And Construction	$15,121,350
FS-006	Fire Station #12 Response Engines	$1,138,815
FS-007	Fire Station #13 Land Acquisition And Construction	$15,121,350
FS-008	Fire Station #13 Response Engine	$1,138,815
FS-009	Fire Station #14 Land Acquisition And Construction	$15,121,350
FS-010	Fire Station #14 Response Engine	$1,138,815
FS-011	Reserve Response Engines	$2,277,630
FS-012	Ontario Ranch Vehicle Storage Bays - Stations 11,12,13,14	$7,453,520
FS-013	Battalion Chief Response Vehicle	$201,060
FS-014	Fire Fighter Assigned Equipment	$1,700,758
FS-015	Fire Administration Headquarters Relocation	$35,737,360
FS-016	Emergency Training Center Expansion	$11,068,063
FS-017	City Emergency Operations Center	$4,504,416
FS-018	Special Operations Support Vehicle	$153,588
FS-019	Mobile Air And Lighting Support Vehicle	$641,996
FS-020	Emergency Services Communication System	$3,624,419
FS-021	Share of Specific/Common City Yard Improvements	$1,590,285
FS-022	Project Completed or No Longer Needed	$0
FS-023	Fire Station Operations #1 Relocation	$17,829,860
FS-024	Expand Station #3 (East Francis)	$6,984,050
FS-025	Project Completed or No Longer Needed	$0
ST-001	Archibald Avenue From Riverside to Edison (P)	$298,857
ST-002	Archibald Avenue From Edison To South City Limit (P)	$347,275

Project Number	Project Title	Project Estimate
ST-003	Bellegrave Avenue From Archibald To Milliken (P)	$1,107,724
ST-004	Campus Avenue From Riverside To Merrill	$7,895,318
ST-005	Chino Avenue From Euclid To Milliken	$8,584,063
ST-006	Mill Creek Avenue From Riverside To Bellegrave (P)	$3,155,693
ST-007	Edison Avenue From Euclid To Walker	$12,208,887
ST-008	Edison Avenue From Walker To Vineyard	$3,599,929
ST-009	Edison Avenue From Vineyard To Mill Creek	$8,084,370
ST-010	Edison Avenue From Mill Creek to Milliken (P)	$873,741
ST-011	Eucalyptus Avenue From Euclid To Milliken	$17,993,932
ST-012	Euclid Avenue From Riverside To Merrill	$22,228,219
ST-013	Grove Avenue From Riverside To Merrill	$13,484,813
ST-014	Haven Avenue From Riverside To Bellegrave (P)	$5,720,522
ST-015	Merrill Avenue From Euclid To Archibald	$26,158,070
ST-016	Milliken Avenue From Riverside To Edison	$5,075,143
ST-017	Milliken Avenue From Edison To Bellegrave	$2,596,127
ST-018	Hellman Avenue From Riverside To Merrill	$4,225,427
ST-019	Riverside Drive From Euclid To Milliken (P)	$4,928,847
ST-020	Schaefer Avenue From Euclid To Haven	$6,981,473
ST-021	Turner Avenue From Riverside To Schaefer	$339,083
ST-022	Vineyard Avenue From Riverside To Merrill	$14,370,409
ST-023	Walker Avenue From Riverside To Merrill	$5,712,152
ST-024	Ontario Ranch Traffic Control System (P)	$31,665,628
ST-025	Non-Dev. ROW, Frontage Imps. & SCE Pole Relocations	$55,426,506
ST-026	Additional SCE Pole Relocations	$716,456
ST-027	Project Completed or No Longer Needed	$0
ST-028	Project Completed or No Longer Needed	$0
ST-029	OR Offsite Cantu Galleano Widening I-15 To Milliken	$2,528,234
ST-030	OR Offsite Euclid Avenue Improvements, Merrill To US-71	$7,000,228
ST-031	OR Offsite Archibald Avenue Bridge Over Santa Ana River	$286,540
ST-032	OR Offsite Hamner Avenue Bridge Over The Santa Ana River	$662,849
ST-033	General City Street Lights (P)	$3,721,811
ST-034	General City Traffic Signals	$17,898,081
ST-035	Benson Avenue From Mission To Philadelphia	$969,658
ST-036	Mountain Avenue From Sixth To Holt (P)	$2,837,942
ST-037	San Antonio Avenue From Park To Phillips	$0
ST-038	Bon View Avenue From Holt to Mission	$1,265,406
ST-039	Bon View Avenue From Mission To Belmont	$711,606

Project Number	Project Title	Project Estimate
ST-040	Project Completed or No Longer Needed	$0
ST-041	Project Completed or No Longer Needed	$0
ST-042	Grove Avenue From Fourth Street to Airport Drive	$40,887,212
ST-043	Turner Avenue, From Inland Empire Boulevard To Fourth	$799,447
ST-044	Archibald Avenue from Fourth To Guasti Park Entrance	$2,150,917
ST-045	Milliken Avenue From SR-60 To Riverside	$426,482
ST-046	Project Completed or No Longer Needed	$0
ST-047	Etiwanda Avenue At Airport Drive	$9,422,751
ST-048	Eight Street From West Cucamonga Creek To Grove	$174,406
ST-049	Project Completed or No Longer Needed	$0
ST-050	Fourth Street From Palmetto To San Antonio	$1,321,491
ST-051	Fourth Street From Campus To Cucamonga	$1,095,555
ST-052	Fourth Street From Vineyard To Archibald	$706,718
ST-053	Holt Boulevard From Benson To Vineyard	$54,918,606
ST-054	Guasti Road From Holt To Archibald	$1,043,147
ST-055	State Street From Benson To Grove	$5,174,545
ST-056	Airport Drive Under The I-15 Freeway	$3,241,898
ST-057	Project Completed or No Longer Needed	$0
ST-058	Mission Boulevard From Cypress To Grove	$5,926,750
ST-059	Mission Boulevard From Grove To Milliken (P)	$11,683,652
ST-060	Phillips Street From Benson To Mountain	$600,353
ST-061	Project Completed or No Longer Needed	$0
ST-062	Acacia Street From Baker To Vineyard	$78,402
ST-063	Francis Street From Benson To Campus	$4,852,184
ST-064	Jurupa Street From Archibald To East Of Turner	$822,350
ST-065	Philadelphia Street From Campus To Grove	$914,623
ST-066	Philadelphia From E/O Vineyard to Cucamonga Creek	$564,682
ST-067	Project Completed or No Longer Needed	$0
ST-068	Project Completed or No Longer Needed	$0
ST-069	Grove Avenue Bridge Over West Cucamonga Creek	$1,015,271
ST-070	Project Completed or No Longer Needed	$0
ST-071	Holt Boulevard Bridge Over West Cucamonga Creek	$269,681
ST-072	Mission Boulevard Bridge Over West Cucamonga Creek	$755,107
ST-073	Project Completed or No Longer Needed	$0
ST-074	Francis Street Bridge Over West Cucamonga Creek	$242,712
ST-075	Eighth Street Bridge Over Cucamonga Creek	$2,076,546
ST-076	Sixth Street Bridge Over Cucamonga Creek	$1,657,746

Project Number	Project Title	Project Estimate
ST-077	Fourth Street Bridge Over Cucamonga Creek	$852,669
ST-078	Project Completed or No Longer Needed	$0
ST-079	Holt Boulevard Bridge Over Cucamonga Creek	$3,014,084
ST-080	Project Completed or No Longer Needed	$0
ST-081	Mission Boulevard Bridge Over Cucamonga Creek	$2,211,387
ST-082	Francis Street Bridge Over Cucamonga Creek	$2,022,609
ST-083	Philadelphia Street Bridge Over Cucamonga Creek	$240,577
ST-084	Riverside Drive Bridge Over Cucamonga Creek	$1,180,030
ST-085	Archibald Avenue Bridge Over Upper Deer Creek	$1,356,338
ST-086	Archibald Avenue Bridge Over Upper Deer Creek Spillway	$1,898,874
ST-087	Inland Empire Boulevard Bridge Over Upper Deer Creek	$0
ST-088	Project Completed or No Longer Needed	$0
ST-089	Archibald Avenue Bridge Over Lower Deer Creek	$401,349
ST-090	Project Completed or No Longer Needed	$0
ST-091	Grove Avenue Grade Separation Under UPRR/Alhambra	$11,905,814
ST-092	Milliken (N) Grade Separation Under UPRR/Alhambra	$28,847,930
ST-093	Vineyard (N) Grade Separation Under UPRR/Alhambra	$0
ST-094	Milliken (S) Grade Separation Over UPRR/Alhambra	$0
ST-095	Archibald (S) Grade Separation Over UPRR/LA	$64,232,000
ST-096	San Antonio (S) Grade Separation Under UPRR/Alhambra	$26,872,279
ST-097	Campus (S) Grade Separation Under UPRR/Alhambra	$26,872,279
ST-098	Project Completed or No Longer Needed	$0
ST-099	Vine (S) Grade Separation Under UPRR/LA Line	$23,513,244
ST-100	Sultana (S) Grade Separation Under UPRR/LA Line	$23,513,244
ST-101	Bon View (S) Grade Separation Under UPRR/LA Line	$23,513,244
ST-102	Pavement Management System Rehabilitation Program	$30,065,192
ST-103	Circulation System Maintenance Vehicles	$4,016,256
ST-104	Great Park Bridge Over Archibald Avenue	$5,586,893
ST-105	SR-60 At Vineyard Interchange Reconstruction/Expansion	$56,890,854
ST-106	SR-60 At Archibald Interchange Reconstruction/Expansion	$14,016,704
ST-107	SR-60 At Euclid Interchange Reconstruction/Expansion (P)	$6,383,022
ST-108	SR-60 At Grove Interchange Reconstruction/Expansion	$56,578,160
ST-109	SR-60 At Mountain Interchange Reconstruction/Expansion	$16,795,175
ST-110	Project Completed or No Longer Needed	$0
ST-111	I-10 Freeway at Grove/Fourth	$196,966,310
ST-112	Traffic Signal System Control and Operations Center (P)	$2,548,783
ST-113	General City Backbone Signal Interconnect	$2,911,164

Project Number	Project Title	Project Estimate
ST-114	I-10 At Euclid Avenue Eastbound On Ramp (P)	$9,973,579
ST-115	Project Completed or No Longer Needed	$0
ST-116	I-10 At Vineyard Interchange Reconstruction/Expansion (P)	$2,954,813
ST-117	Ontario Ranch Road/Trail Separation	$2,511,966
ST-118	Hellman Avenue Bridge Over Cucamonga Creek	$2,355,745
ST-119	Riverside Drive Bridge Over Cucamonga Creek	$0
ST-120	Chino Avenue Bridge Over Cucamonga Creek	$0
ST-121	Schaefer Avenue Bridge Over Cucamonga Creek	$7,495,552
ST-122	Schaefer Avenue Over Cucamonga Creek Spillway	$13,325,426
ST-123	Edison Avenue Bridge Over Cucamonga Creek	$19,417,050
ST-124	Eucalyptus Avenue Bridge Over Cucamonga Creek	$11,000,000
ST-125	Merrill Avenue Bridge Over Cucamonga Creek	$11,000,000
ST-126	Share of Specific/Common City Yard Improvements	$2,168,432
ST-127	Ontario Ranch Bus Stop Shelters	$3,332,841
ST-128	Ontario Ranch Street Design Studies	$1,074,109
ST-129	Fourth Street Under The I-10 Freeway	$22,397,514
ST-130	Guasti Road Extension From 1,530' E/O Of Haven Easterly 310'	$655,358
ST-131	Ontario Ranch Traffic Study	$94,815
SD-001	Euclid Avenue, Riverside To Merrill	$13,925,804
SD-002	Grove Avenue, Grove Basin To Merrill	$21,576,871
SD-003	Project Completed or No Longer Needed	$0
SD-004	County Line Channel In Bellegrave Avenue	$0
SD-005	Merrill Avenue, Euclid To Bon View	$12,896,053
SD-006	Campus Avenue, 920' N/O Eucalyptus To Merrill	$2,852,243
SD-007	Bon View, 1,320' N/O Chino To Merrill	$13,683,520
SD-008	Euclid Avenue Laterals	$9,190,530
SD-009	Project Completed or No Longer Needed	$0
SD-010	Project Completed or No Longer Needed	$0
SD-011	Project Completed or No Longer Needed	$0
SD-012	Project Completed or No Longer Needed	$0
SD-013	Walker Avenue, Merrill To Chino	$9,833,255
SD-014	Merrill Avenue, Vineyard to 1420' W/O Walker	$9,818,672
SD-015	Ontario Ranch Road, Walker to 880' E/O Walker	$1,629,636
SD-016	Schaefer Avenue, Walker To 1,950' E/O Walker	$1,646,666
SD-017	Project Completed or No Longer Needed	$0
SD-018	Project Completed or No Longer Needed	$0
SD-019	Project Completed or No Longer Needed	$0

Project Number	Project Title	Project Estimate
SD-020	Hellman Avenue, Chino Avenue To 1,500' N/O Chino	$796,341
SD-021	Archibald Avenue, Schaefer To County Line Channel	$0
SD-022	Eucalyptus Avenue, Archibald To 1,300' E/O Archibald (P)	$1,394,665
SD-023	Ontario Ranch Road, Archibald to 2,500' E/O Archibald	$0
SD-024	Project Completed or No Longer Needed	$0
SD-025	Turner Avenue, Riverside To County Line Channel (P)	$2,257,508
SD-026	Turner Avenue Laterals	$1,743,609
SD-027	Haven Avenue, Riverside To County Line Channel (P)	$3,848,761
SD-028	Ontario Ranch Road, Between Haven And Mill Creek (P)	$458,254
SD-029	Haven Avenue Laterals E/O Haven And N/O Schaefer	$3,009,105
SD-030	Haven Avenue Laterals	$468,095
SD-031	Project Completed or No Longer Needed	$0
SD-032	Mill Creek, Chino To County Line Channel (P)	$13,187,938
SD-033	Eucalyptus Avenue Between Mill Creek And Milliken	$536,207
SD-034	Eucalyptus Avenue Between Haven And Mill Creek	$956,841
SD-035	Mill Creek Avenue Laterals On Ontario Ranch Road	$0
SD-036	Schaefer Avenue Between Mill Creek And Milliken	$2,510,214
SD-037	Hellman Avenue, Schaefer To Ontario Ranch Road And Laterals	$6,880,851
SD-038	Project Completed or No Longer Needed	$0
SD-039	Ontario Ranch-Hellman/Vineyard, Hellman-OR/Merrill To C. Creek	$6,748,068
SD-040	Eucalyptus Avenue, Hellman To Cucamonga Channel	$1,701,014
SD-041	Merrill Avenue, Cucamonga Channel To Walker	$25,541,804
SD-042	Project Completed or No Longer Needed	$0
SD-043	Project Completed or No Longer Needed	$0
SD-044	Project Completed or No Longer Needed	$0
SD-045	Eucalyptus Avenue, Cucamonga Channel To W/O Archibald	$724,868
SD-046	Ontario Ranch Road Laterals E/O Cucamonga Channel	$1,580,002
SD-047	Project Completed or No Longer Needed	$0
SD-048	Chino Avenue, Cucamonga Channel To N/O Chino	$821,878
SD-049	Milliken Avenue, Riverside To County Line Channel (P)	$3,473,812
SD-050	Offsite Euclid Avenue Storm Drain	$27,948,129
SD-051	Project Completed or No Longer Needed	$0
SD-052	Project Completed or No Longer Needed	$0
SD-053	Francis Avenue, Campus To West Cucamonga Creek Channel (P)	$0
SD-054	Fifth Street, Beryln To West Cucamonga Creek	$0
SD-055	Parco Avenue, 60 Freeway To Riverside And Lateral	$0
SD-056	Sixth Street, Glenn To Cucamonga Channel	$10,736,541

Project Number	Project Title	Project Estimate
SD-057	G Street, Berlyn to West Cucamonga Channel & Various Streets	$9,290,397
SD-058	Grove Avenue, 60 Freeway To Riverside Drive	$3,044,087
SD-059	Campus Avenue, Cedar To Riverside	$5,080,502
SD-060	D and I Streets, Grove To West Cucamonga Channel	$1,976,473
SD-061	Inland Empire Blvd., Vineyard To Cucamonga Channel	$972,501
SD-062	Sultana Avenue, Phillips To Philadelphia	$5,992,676
SD-063	Fourth Street, El Dorado To Cucamonga Creek	$3,435,856
SD-064	Baker, Vineyard, Carlos, Hellman - Acacia to Philadelphia	$3,768,510
SD-065	Bon View Avenue, 60 Freeway To Riverside (P)	$3,549,437
SD-066	Cucamonga Avenue, 60 Freeway To Riverside	$3,426,362
SD-067	Bon View Avenue, Mission To Francis	$5,076,667
SD-068	Cucamonga Avenue, Phillips To Francis	$3,138,022
SD-069	Storm Drainage Maintenance Vehicles	$646,228
SD-070	Boulder Avenue, I Street To State	$17,856,111
SD-071	Benson Avenue, State To I Street	$5,644,396
SD-072	Mountain Avenue, Philadelphia To Phillips	$10,752,264
SD-073	San Antonio Avenue, Francis To Cypress Channel	$14,476,494
SD-074	San Sevaine Channel	$2,588,258
SD-075	Storm Drain Master Plan (P)	$667,920
SD-076	Project Completed or No Longer Needed	$0
SD-077	Campus Avenue, State to Francis (Phase 2 Of SD-053)	$5,922,178
SD-078	Parco Avenue, Philadelphia to 60 Freeway (Phase 2 Of SD-055)	$1,272,292
SD-079	Grove Avenue, Francis to 60 Freeway (Phase 2 Of SD-058)	$1,964,685
SD-080	Sultana Avenue, State to Phillips (Phase 2 Of SD-062)	$4,741,833
SD-081	Bon View Avenue, 60 Freeway To Francis (Phase 2 Of SD-065)	$2,227,268
SD-082	Cucamonga Avenue, Francis to 60 FWY (Phase 2 Of SD-066)	$1,764,126
SD-083	Mountain & Boulder, I-10 to I Street (Phase 2 Of SD-070)	$8,141,160
SD-084	Benson Avenue Laterals (Phase 2 Of SD-071)	$6,081,592
SD-085	Mountain Avenue, State to Phillips (Phase 2 Of SD-072)	$3,078,222
SD-086	San Antonio & Phillips, Euclid to Francis (Phase 2, SD-073)	$7,951,632
SD-087	Oakland Avenue, State to Phillips (Phase 2 Of SD-074)	$9,955,439
SD-088	Walker Avenue, 60 Freeway To Riverside And Lateral	$2,667,873
SD-089	Baker Avenue And Riverside Drive, S/O 60 Freeway	$3,769,150
SD-090	G Street, Corona To Del Norte	$3,939,123
SD-091	Del Norte and Imperial Avenues From I Street To G Street	$1,738,463
SD-092	Vine Avenue, G Street To State	$5,189,444
SD-093	Vine Avenue, Sixth To G Street	$5,453,637

Project Number	Project Title	Project Estimate
SD-094	Sultana Avenue, Fifth To Holt	$9,322,899
SD-095	Benson Avenue And Laterals	$3,130,163
SD-096	Benson Avenue, Francis To Philadelphia	$4,155,117
SD-097	Mission, Benson, Phillips & Oaks, W/O Magnolia	$6,671,340
SD-098	Holt Boulevard, Convention Center To Cucamonga Channel	$1,546,900
SD-099	Mission Boulevard, Proforma To Turner	$1,434,122
SD-100	6th Street, West Cucamonga Creek To Grove	$754,134
SD-101	Archibald Avenue, Inland Empire To Airport Drive	$3,105,258
SD-102	Fifth Street, Balboa To Cucamonga Channel	$1,966,057
SD-103	Share of Specific/Common City Yard Improvements	$1,969,069
SD-104	Project Completed or No Longer Needed	$0
SD-105	Ontario Ranch Storm Drain Study	$1,053,500
WT-001	Phillips Street 1010' Zone Well	$764,470
WT-002	Eighth Street 1212' Zone Wells	$19,894,178
WT-003	Project Completed or No Longer Needed	$0
WT-004	Eighth Street 1212' Zone Transmission Lines	$64,862,681
WT-005	Eighth Street 1212' Zone Reservoir Site Purchase	$4,800,000
WT-006	Eighth Street 1212' Zone Reservoir Construction	$70,683,383
WT-007	Francis Street 925' Zone Wells	$80,452,117
WT-008	Phillips Street 1010' Zone Wells	$8,262,695
WT-009	Phillips Street 1010' Zone Extension Mains Extension	$35,359,172
WT-010	Francis Street 925' Zone Transmission Lines	$44,535,715
WT-011	Francis Street 925' Zone Distribution Mains	$81,226,165
WT-012	Francis Street 925' Zone Well Collection System	$17,141,659
WT-013	Pressure Reducing Station, Potable Water System (1010' - 925')	$3,066,273
WT-014	Francis Street 925' Zone Reservoirs	$124,188,360
WT-015	Phillips Street 1010' Zone Reservoirs	$9,327,338
WT-016	Recycled Water System	$137,612,533
WT-017	Back-Up Power Supply	$3,966,702
WT-018	Reservoir 1010' (2B) Landscaping	$242,730
WT-019	Project Completed or No Longer Needed	$0
WT-020	Project Completed or No Longer Needed	$0
WT-021	Distribution System Pressure, Size And Age Improvements	$326,228,894
WT-022	Miscellaneous Up-Sized Facilities	$11,968,032
WT-023	Abandon Existing General City Wells	$593,938
WT-024	Project Completed or No Longer Needed	$0
WT-025	Decommission Galvin Treatment Plant/Abandon 1212-3 Reservoir	$2,798,932

Project Number	Project Title	Project Estimate
WT-026	Seismic Upgrades And Replacements	$14,474,099
WT-027	Water Master Plan Updates	$1,596,376
WT-028	Water System Maintenance Vehicle/Equipment Fleet	$1,297,912
WT-029	Project Completed or No Longer Needed	$0
WT-030	CDA Facility Modifications (Booster Station & Pipeline)	$0
WT-031	JCSD/Ontario Reservoir (Phillips Street 1010" Zone)	$1,078,186
WT-032	Water Treatment	$58,997,347
WT-033	Project Completed or No Longer Needed	$0
WT-034	Water Source Supply	$62,549,323
WT-035	General System Reliability Improvements	$2,108,479
WT-036	Fourth Street 1074' Zone Transmission Improvements	$4,356,603
WT-037	Share of Specific/Common City Yard Improvements	$10,723,390
WT-038	Project Completed or No Longer Needed	$0
SW-001	Eastern Trunk Sewer	$23,769,604
SW-002	Western Trunk Sewer	$44,269,343
SW-003	Eucalyptus East Trunk Sewer	$816,116
SW-004	Project Completed or No Longer Needed	$0
SW-005	Haven Trunk Sewer	$1,752,403
SW-006	Mill Creek Trunk Sewer	$12,945,246
SW-007	Project Completed or No Longer Needed	$0
SW-008	Walker Trunk Sewer	$3,125,194
SW-009	Grove Trunk Sewer	$11,358,530
SW-010	Bon View Trunk Sewer	$8,592,839
SW-011	Euclid Trunk Sewer	$8,484,996
SW-012	Project Completed or No Longer Needed	$0
SW-013	Project Completed or No Longer Needed	$0
SW-014	Project Completed or No Longer Needed	$0
SW-015	Plaza Serena Street, Granda Court To Vineyard Avenue	$33,618
SW-016	Philadelphia Between Parco And Vineyard	$7,191,153
SW-017	Holt Boulevard, West Of Imperial Avenue	$476,855
SW-018	Project Completed or No Longer Needed	$0
SW-019	Project Completed or No Longer Needed	$0
SW-020	Cherry Avenue, North Of G Street	$20,407
SW-021	Project Completed or No Longer Needed	$0
SW-022	Vineyard Avenue, South Of Cedar Et. Al.	$16,319,011
SW-023	Easement East Of Haven Street	$1,417,046
SW-024	Project Completed or No Longer Needed	$0

Project Number	Project Title	Project Estimate
SW-025	Project Completed or No Longer Needed	$0
SW-026	Sewer Utility Maintenance Vehicles	$1,057,911
SW-027	Sewer Utility Master Plan	$870,349
SW-028	Project Completed or No Longer Needed	$0
SW-029	Carpenter Trunk Sewer	$6,391,873
SW-030	Project Completed Or No longer needed	$0
SW-031	Project Completed Or No longer needed	$0
SW-032	Project Completed Or No longer needed	$0
SW-033	Project Completed Or No longer needed	$0
SW-034	Project Completed Or No longer needed	$0
SW-035	Virginia Avenue Between D Street and Nocta Street	$65,056
SW-036	Deer Creek Loop And Laurel Tree Drive	$947,106
SW-037	Hollowell, Boulder and Holt Avenue	$279,389
SW-038	Easement N/O Holt Blvd, E/O Allyn Avenue	$108,406
SW-039	Riverside Drive Between Sultana And Campus Avenues	$207,064
SW-040	Vineyard S/O Airport And Easement	$7,633,432
SW-041	Mills Circle N/O Mall Drive	$154,733
SW-042	Holt Boulevard E/O Vineyard Avenue	$491,554
SW-043	Bon View Avenue N/O Francis	$220,867
SW-044	Acacia, Easement, Locust And Parco	$2,031,658
SW-045	Turner Avenue, N/O Cedar Street	$154,733
SW-046	Holt Sewer Phase A	$1,072,819
SW-047	Holt Sewer Phase B	$41,823
SW-048	Share Of Common City Yard Improvements	$4,494,050
SW-049	Project Completed or No Longer Needed	$0
SW-050	Airport Drive Main, E/O Grove	$691,443
SW-051	Project Completed or No Longer Needed	$0
SW-052	Piedmonte Specific Densification Mitigation in Various Streets	$6,081,763
SW-053	Vineyard Trunk	$5,718,532
SW-054	Sultana Trunk	$5,106,446
SW-055	Campus trunk	$5,106,446
RS-001	Side Loader Collection Barrels	$2,283,032
RS-002	Side Loader Collection Vehicles	$4,591,480
RS-003	Front Loader Collection Bins	$23,097,158
RS-004	Front Loader Collection Vehicles	$10,871,297
RS-005	Roll-off Collection Bins	$2,826,948
RS-006	Roll-off Collection Vehicles	$1,490,566

Project Number	Project Title	Project Estimate
RS-007	Share of Specific/Common City Yard Improvements	$20,337,135
RS-008	Existing Fund Balance Purchases	$4,530,466
GF-001	City Hall And Annex Reconfiguration	$11,636,848
GF-002	Expansion Of Administrative Pool Car Fleet	$654,283
GF-003	Electronic Specialty Equipment/Computer Hardware/Software	$13,512,260
GF-004	City Animal Holding Facility, No Specific Plans/Policy Decision for Fac	$0
GF-005	Share of Specific/Common City Yard Improvements	$1,792,887
LB-001	Library Facilities Space Expansion	$85,469,702
LB-002	Library Collection Expansion	$18,519,394
PF-001	Public Use Facilities Space Expansion	$145,832,140
AQ-001	Aquatics Facilities - Pool Expansion	$11,135,311
PK-001	Park Land Acquisition And Park Facilities Development	$1,292,799,009
PK-002	Park Maintenance Vehicles	$3,369,177.00
PK-003	Share of Specific/Common City Yard Improvements	$4,581,512.00
LS-001	Habitat and Open Space Mitigation	$0
FO-001	Head End Facilities (Points Of Presence System)	$10,389,076
FO-002	Core Network - Planning/Installation - Equipment/Facilities	$18,403,388
FO-003	Project Completed or No Longer Needed	$0
FO-004	Distribution Network - Major Streets Conduit System	$16,914,691
FO-005	System Distribution Network - Fiber System	$4,532,471
FO-006	Cabling System - Residential/Non-Residential	$38,823,270
FO-007	Fiber Equipment Within Residential Units	$40,093,323
FO-008	Fiber Equipment Within Non-Residential Buildings	$11,969,845
	Master Facilities Plan Capital Projects Total	**$5,071,219,837**

City of Ontario
Law Enforcement Facilities,
Vehicles and Equipment

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan - All Plan Areas

Law Enforcement Facilities, Vehicles And Equipment

MFP 2024-2025 Update

		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build	Project Build Out Total
LE -001	Police Station Purchase/Roof Improvements Prior To Occupancy	$0	$0	$0	$0	$10,363,962	$10,363,962
LE -002	Complete Remaining Interior Improvements @ 55% Of Bldg Space	$0	$0	$0	$0	$29,656,550	$29,656,550
LE -003	Additional Patrol/Detective/Specialty/Staff Vehicles	$0	$0	$0	$0	$25,589,022	$25,589,022
LE -004	Additional Officer Assigned Equipment	$0	$0	$0	$0	$6,146,112	$6,146,112
LE -005	Additional Specialty Equipment	$0	$0	$0	$0	$3,761,341	$3,761,341
LE -006	Building Appurtancnes Equipment	$0	$0	$0	$0	$1,075,537	$1,075,537
LE -007	Communication Equipment	$0	$0	$0	$0	$911,472	$911,472
LE -008	Advanced Technology Software And Equipment	$0	$0	$0	$0	$2,360,712	$2,360,712
LE -009	Additional Helicopter Capacity	$0	$0	$0	$0	$6,252,341	$6,252,341
LE -010	Share Of Common City Yard Improvements	$0	$0	$0	$0	$2,677,619	$2,677,619
	TOTALS	$0	$0	$0	$0	$88,794,668	$88,794,668

Notes:
1) If project timing is not a component of this effort, then all projects default to their "Thru Build Out" amount.

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Law Enforcement Facilities, Vehicles And Equipment

Project Title / Ref#: Police Station Purchase/Roof Improvements Prior To Occupancy **LE -001**

Submitting Departments: Police Department

Project Description:

The existing Police Station is the result of the purchase of a 175,000 square foot vacated commercial building. The facility was purchased and the roof was replaced prior to any interior improvements (see (LE-002). It was anticipated that the station would be final station for the City at General Plan build-out.

Justification / Consequences of Avoidance:

The City General Plan indicates the potential addition of 80,179 additional residences, 546 commercial lodging units and 103,169,117 square feet of business square feet are added to the City. This will result in a doubling of the population and a significant increase in the number of square feet of high demand business uses. As the residential and business community continues to expand (through development), the Police Department will receive a statistically based number of additional calls-for-service, As these additional calls-for-service are realized the Department will need to increase the number of sworn officers in order to accommodate these additional calls-for-service. However, if the number of sworn officers remains static, the existing level of service (LOS), by definition, will decrease. The additional officers will require 350 of space per sworn officer to maintain the City's space per officer standard.

Relationship to General Plan Development:

Roughly 45% of the facilities square feet are necessary to meet the needs of the existing staff of the existing 225 sworn officers. The remaining 55% represents space for 272 additional officers (of 497 total required officers) the demands from future development.

Allocation To General Plan Buildout: 54.72%

Reference Document:

None, all police projects are based upon development-generated additional demand.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. There will be no cost increases to this project until the City's Land Use Database is altered.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$10,363,962	$10,363,962
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$10,363,962	$10,363,962

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Law Enforcement Facilities, Vehicles And Equipment

Project Title / Ref#: Complete Remaining Interior Improvements @ 55% Of Bldg Space **LE -002**

Submitting Departments: Police Department

Project Description:

The existing Police facility can meet the needs of 497 sworn officers at an adequate and sufficient standard of 350 square feet per officer. Future demand at General Plan build-out indicates the need for 272 sworn officers (to maintain the existing level of service), to join the existing 225 sworn officers for a General Plan build-out of or 497 total officers.

Justification / Consequences of Avoidance:

As the residential and business community continues to expand (through development), the Police Department will receive a statistically based number of additional calls-for-service, As these additional calls-for-service are realized the Department will need to increase the number of sworn officers in order to accommodate these additional calls-for-service. However, if the number of sworn officers remains static, the existing level of service (LOS), by definition, will decrease. The additional officers will require 350 square feet of space per sworn officer to maintain the existing standard.

Relationship to General Plan Development:

All Police Department projects are based upon the incremental needs (based upon existing LOS standards) created by new development and thus are 100% related to General Plan development and are based upon the proportional increase in demand as evidenced by calls-for-service data.

Allocation To General Plan Buildout: 100.00%

Reference Document:

None, all police projects are based upon development-generated additional demand.

Project Timing:

As development occurs and creates the additional demand and DIF receipts are collected. There will be no increases to this project until the City's Land Use Database is altered. There will be no cost increases to this project until the City's Land Use Database is altered.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$3,868,246	$3,868,246
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$23,443,913	$23,443,913
4. Contingency	$0	$0	$0	$0	$2,344,391	$2,344,391
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$29,656,550	$29,656,550

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Law Enforcement Facilities, Vehicles And Equipment

Project Title / Ref#: Additional Patrol/Detective/Specialty/Staff Vehicles **LE -003**

Submitting Departments: Police Department

Project Description:

The project consists of acquiring 284 additional law enforcement response vehicles including patrol, unmarked and specialty vehicles at an average of $69,850 per vehicle. The addition of 272 officers will require the acquisition of roughly 284 assorted law enforcement vehicles at an average of $69,850. This will maintain the existing standard of 1.04 vehicles (235) per sworn officer (225). The vehicles would consist of a variety of staff, patrol, specialty and under-cover vehicles.

Justification / Consequences of Avoidance:

As the residential and business community continues to expand (through development), the Police Department will receive a statistically based number of additional calls-for-service, As these additional calls-for-service are realized the Department will need to increase the number of sworn officers in order to accommodate these additional calls-for-service. However, if the number of sworn officers remains static, the existing level of service (LOS), by definition, will decrease. The city has 235 vehicles for 225 officers for a standard of 1.04 vehicles per officer. The additional 272 officers will need 272 additional vehicles to maintain the existing 1.04 vehicle per sworn officer standard.

Relationship to General Plan Development:

All Police Department projects are based upon the needs created by new development and thus are 100% related to General Plan development and are based upon the proportional increase in demand as evidenced by calls-for-service data.

Allocation To General Plan Buildout: 100.00%

Reference Document:

None, all police projects are based upon development-generated additional demand.

Project Timing:

As development occurs and creates the additional demand and DIF receipts are collected. The estimated cost increase of 29% is based upon current City cost to acquire and outfit patrol units.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$25,589,022	$25,589,022
TOTAL COST:	$0	$0	$0	$0	$25,589,022	$25,589,022

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Law Enforcement Facilities, Vehicles And Equipment

Project Title / Ref#: Additional Officer Assigned Equipment **LE -004**

Submitting Departments: Police Department

Project Description:

Acquire additional equipment assigned to officers necessary to function in the field. The list includes (but is not limited to): protective vest, handgun, baton, and a compliment of leathers, handcuffs, uniforms, helmet, raincoat and a heavy duty flashlight. The costs include a nominal amount for a back-ground check, medical physical check, polygraph and psychological exam for the successful candidates. The costs are based upon the $18,246 per officer for the 272 additional officers required.

Justification / Consequences of Avoidance:

As the residential and business community continues to expand (through development), the Police Department will receive a statistically based number of additional calls-for-service, As these additional calls-for-service are realized the Department will need to increase the number of sworn officers in order to accommodate these additional calls-for-service. However, if the number of sworn officers remains static, the existing level of service (LOS), by definition, will decrease.

Relationship to General Plan Development:

All Police Department projects are based upon the needs created by new development and thus are 100% related to General Plan development and are based upon the proportional increase in demand as evidenced by calls-for-service data.

Allocation To General Plan Buildout: 100.00%

Reference Document:

None, all police projects are based upon development-generated additional demand.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. The estimated cost increase of 24% is based upon current City cost to acquire and issue assigned equipment.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$6,146,112	$6,146,112
TOTAL COST:	$0	$0	$0	$0	$6,146,112	$6,146,112

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Law Enforcement Facilities, Vehicles And Equipment

Project Title / Ref#: Additional Specialty Equipment **LE -005**

Submitting Departments: Police Department

Project Description:

Acquire additional specialty equipment such as computer systems consisting of computers, servers, consoles, printers, specialty nationwide and international database access stations. This project also includes special weapons and tactics equipment, bicycles, and other specialty equipment.

Justification / Consequences of Avoidance:

As the residential and business community continues to expand (through development), the Police Department will receive a statistically based number of additional calls-for-service, As these additional calls-for-service are realized the Department will need to increase the number of sworn officers in order to accommodate these additional calls-for-service. However, if the number of sworn officers remains static, the existing level of service (LOS), by definition, will decrease.

Relationship to General Plan Development:

All Police Department projects are based upon the needs created by new development and thus are 100% related to General Plan development and are based upon the proportional increase in demand as evidenced by calls-for-service data.

Allocation To General Plan Buildout: 100.00%

Reference Document:

None, all police projects are based upon development-generated additional demand.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs for these items have been increased by the Consumer Price Index Over January of 2022.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$3,761,341	$3,761,341
TOTAL COST:	$0	$0	$0	$0	$3,761,341	$3,761,341

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Law Enforcement Facilities, Vehicles And Equipment

Project Title / Ref#: Building Appurtancnes Equipment **LE -006**

Submitting Departments: Police Department

Project Description:

This expense is included for improvements that are attached to the building and would consist of large scale building security improvements or enhancements.

Justification / Consequences of Avoidance:

As the residential and business community continues to expand (through development), the Police Department will receive a statistically based number of additional calls-for-service, As these additional calls-for-service are realized the Department will need to increase the number of sworn officers in order to accommodate these additional calls-for-service. However, if the number of sworn officers remains static, the existing level of service (LOS), by definition, will decrease.

Relationship to General Plan Development:

All Police Department projects are based upon the needs created by new development and thus are 100% related to General Plan development and are based upon the proportional increase in demand as evidenced by calls-for-service data.

Allocation To General Plan Buildout: 100.00%

Reference Document:

None, all police projects are based upon development-generated additional demand.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs for these items have been increased by the Consumer Price Index Over January of 2022.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$1,075,537	$1,075,537
TOTAL COST:	$0	$0	$0	$0	$1,075,537	$1,075,537

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Law Enforcement Facilities, Vehicles And Equipment

Project Title / Ref#: Communication Equipment **LE -007**

Submitting Departments: Police Department

Project Description:

Acquire communications equipment including radios, cell phones, batteries etc. as needed to maintain pace with the number of officers in the Department.

Justification / Consequences of Avoidance:

As the residential and business community continues to expand (through development), the Police Department will receive a statistically based number of additional calls-for-service, As these additional calls-for-service are realized the Department will need to increase the number of sworn officers in order to accommodate these additional calls-for-service. However, if the number of sworn officers remains static, the existing level of service (LOS), by definition, will decrease.

Relationship to General Plan Development:

All Police Department projects are based upon the needs created by new development and thus are 100% related to General Plan development and are based upon the proportional increase in demand as evidenced by calls-for-service data.

Allocation To General Plan Buildout: 100.00%

Reference Document:

None, all police projects are based upon development-generated additional demand.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs for these items have been increased by the Consumer Price Index Over January of 2022.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$911,472	$911,472
TOTAL COST:	$0	$0	$0	$0	$911,472	$911,472

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Law Enforcement Facilities, Vehicles And Equipment

Project Title / Ref#: Advanced Technology Software And Equipment **LE -008**

Submitting Departments: Police Department

Project Description:

The addition of 80,149 additional residences, 546 commercial lodging units and about 103,169,177 square feet of business square feet will generate the need to approach police in different ways. The department will need to acquire advanced technology for dealing with a significantly sized agency.

Justification / Consequences of Avoidance:

As the residential and business community continues to expand (through development), the Police Department will receive a statistically based number of additional calls-for-service, As these additional calls-for-service are realized the Department will need to increase the number of sworn officers in order to accommodate these additional calls-for-service. However, if the number of sworn officers remains static, the existing level of service (LOS), by definition, will decrease.

Relationship to General Plan Development:

All Police Department projects are based upon the needs created by new development and thus are 100% related to General Plan development and are based upon the proportional increase in demand as evidenced by calls-for-service data.

Allocation To General Plan Buildout: 100.00%

Reference Document:

None, all police projects are based upon development-generated additional demand.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs for these items have been increased by the Consumer Price Index Over January of 2022.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$2,360,712	$2,360,712
TOTAL COST:	$0	$0	$0	$0	$2,360,712	$2,360,712

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Law Enforcement Facilities, Vehicles And Equipment

Project Title / Ref#: Additional Helicopter Capacity **LE -009**

Submitting Departments: Police Department

Project Description:

The addition of over 80,149 additional residences, 546 commercial lodging units and 104,169,177 square feet of business square feet will generate the demand for an additional helicopter. The capacity of the existing helicopter hours will be overwhelmed with a more than doubling 121% increase) of Police calls-for-service.

Justification / Consequences of Avoidance:

As the residential and business community continues to expand (through development), the Police Department will receive a statistically based number of additional calls-for-service, As these additional calls-for-service are realized the Department will need to increase the number of sworn officers in order to accommodate these additional calls-for-service. However, if the number of sworn officers remains static, the existing level of service (LOS), by definition, will decrease.

Relationship to General Plan Development:

All Police Department projects are based upon the needs created by new development and thus are 100% related to General Plan development and are based upon the proportional increase in demand as evidenced by calls-for-service data.

Allocation To General Plan Buildout: 100.00%

Reference Document:

None, all police projects are based upon development-generated additional demand.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. The estimated cost increase of 29% is based upon current City cost to acquire and outfit a turbine-based helicopter.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$6,252,341	$6,252,341
TOTAL COST:	$0	$0	$0	$0	$6,252,341	$6,252,341

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Law Enforcement Facilities, Vehicles And Equipment

Project Title / Ref#: Share Of Common City Yard Improvements **LE -010**

Submitting Departments: Police Department

Project Description:

Construct the following improvements: 1) Reconfigure some 60,000 square feet of a recently acquired warehouse and office space. 2) Pave approximately ten acres of currently dirt parking lot, primarily for the refuse operation refueling area. 3) Construct additional fleet maintenance operations bays. 4) Construct a new welding shop. 5) Increase security through additional fencing and lighting. 6) Construct additional CNG fueling stations and 7) reconfigure a recently acquired 24,000 square foot building into covered parking to maximize fleet lifetime. The combined improvements have a total projected cost of $38.2 million and are spread between all City operations that make use of the City yard.

Justification / Consequences of Avoidance:

This amount represents the proportional amount of a total estimated $38.2 million in structural improvements to the City maintenance yard necessary to meet the increasing demands for additional law enforcement vehicles maintenance capacity. The City has acquired adequate land and has existing structural capacity for the various maintenance yard demands. This demand for additional structural capacity results from the doubling of all public infrastructures from the Ontario Ranch area as well as the remaining portions of the General City area.

Relationship to General Plan Development:

All Police Department projects are based upon the needs created by new development and thus are 100% related to General Plan development and are based upon the proportional increase in demand as evidenced by calls-for-service data.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Based upon an analysis of demands on City yard capacity and expansion needs.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. City Yard improvements cost increase is based upon the Engineering News Record - Building Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$317,504	$317,504
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$2,116,696	$2,116,696
4. Contingency	$0	$0	$0	$0	$243,419	$243,419
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$2,677,619	$2,677,619

City of Ontario
Fire Suppression Facilities,
Vehicles and Equipment

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan - All Plan Areas

Fire Suppression Facilities, Vehicles And Equipment

MFP 2024-2025 Update

		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build	Project Build Out Total
FS -001	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
FS -002	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
FS -003	Fire Station #11 Land Acquisition And Construction	$0	$0	$0	$0	$15,121,350	$15,121,350
FS -004	Fire Station #11 Response Engine And Aerial Apparatus	$0	$0	$0	$0	$3,466,645	$3,466,645
FS -005	Fire Station #12 Land Acquisition And Construction	$0	$0	$0	$0	$15,121,350	$15,121,350
FS -006	Fire Station #12 Response Engine	$0	$0	$0	$0	$1,138,815	$1,138,815
FS -007	Fire Station #13 Land Acquisition And Construction	$0	$0	$0	$0	$15,121,350	$15,121,350
FS -008	Fire Station #13 Response Engine	$0	$0	$0	$0	$1,138,815	$1,138,815
FS -009	Fire Station #14 Land Acquisition And Construction	$0	$0	$0	$0	$15,121,350	$15,121,350
FS -010	Fire Station #14 Response Engine	$0	$0	$0	$0	$1,138,815	$1,138,815
FS -011	Reserve Response Engines	$0	$0	$0	$0	$2,277,630	$2,277,630
FS -012	Ontario Ranch Vehicle Storage Bays - Stations 11, 12, 13, 14	$0	$0	$0	$0	$7,453,520	$7,453,520
FS -013	Battalion Chief Response Vehicle	$0	$0	$0	$0	$201,060	$201,060
FS -014	Fire Fighter Assigned Equipment	$0	$0	$0	$0	$1,700,758	$1,700,758
FS -015	Fire Administrative Headquarters Relocation	$0	$0	$0	$0	$35,737,360	$35,737,360
FS -016	Training Center Expansion	$0	$0	$0	$0	$11,068,063	$11,068,063
FS -017	City Emergency Operations Center	$0	$0	$0	$0	$4,504,416	$4,504,416
FS -018	Special Operations Support Vehicle	$0	$0	$0	$0	$153,588	$153,588
FS -019	Mobile Air And Lighting Support Vehicle	$0	$0	$0	$0	$641,996	$641,996
FS -020	Emergency Service Communications System	$0	$0	$0	$0	$3,624,419	$3,624,419

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan - All Plan Areas

Fire Suppression Facilities, Vehicles And Equipment

MFP 2024-2025 Update

		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build	Project Build Out Total
FS -021	Share Of Common City Yard Improvements	$0	$0	$0	$0	$1,590,285	$1,590,285
FS -022	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
FS -023	Fire Station Operations #1 Relocation	$0	$0	$0	$0	$17,829,860	$17,829,860
FS -024	Expand Station #3 (East Francis)	$0	$0	$0	$0	$6,984,050	$6,984,050
FS -025	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
	TOTALS	$0	$0	$0	$0	$161,135,495	$161,135,495

Notes:
1) If project timing is not a component of this effort, then all projects default to their "Thru Build Out" amount.

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Fire Suppression Facilities, Vehicles And Equipment

Project Title / Ref#: Project Completed Or No Longer Needed **FS -001**

Submitting Departments: Fire Department

Project Description:

Fire Station #9 land acquisition and construction project has been completed.

Justification / Consequences of Avoidance:

As the residential and business community development in occurs in the Ontario Ranch area the Fire Department will receive a statistically based number of additional calls-for-service, A minimum of five stations will be required to accommodate these statistically-based calls-for-service that will be generated by the development of the Ontario Ranch area.

Relationship to General Plan Development:

The five proposed stations are necessary to provide first-in capabilities to the Ontario Ranch area. These stations may on occasion support calls-for-service in other areas of the City, but will also receive support from other stations in return. As such the related costs are fully allocated to that planning area.

Allocation To General Plan Buildout: 0.00%

Reference Document:

The project is no longer needed, but has been included to act as a project number placeholder.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. All costs are at nominal, or current dollar value.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design/Engineering/Administration	$0	$0	$0	$0	$0	$0
2. Land Acquisition/Right-Of-Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
Equipment/Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Fire Suppression Facilities, Vehicles And Equipment

Project Title / Ref#: Project Completed Or No Longer Needed **FS -002**

Submitting Departments: Fire Department

Project Description:

Fire Station #9 Fire response engine has been acquired.

Justification / Consequences of Avoidance:

Each station requires a front-line engine for normal responses. Additional vehicles, beyond the five engines for the five stations will be assigned to the various stations as needed.

Relationship to General Plan Development:

The proposed five stations are necessary to provide first-in capabilities to the Ontario Ranch area. These stations may on occasion support calls-for-service in other areas of the City, but will also receive support from other stations in return. As such the related costs are fully allocated to that planning area. Each station requires a front-line engine for normal responses.

Allocation To General Plan Buildout: 0.00%

Reference Document:

The project is no longer needed, but has been included to act as a project number placeholder.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. All costs are at nominal, or current dollar value.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Fire Suppression Facilities, Vehicles And Equipment

Project Title / Ref#: Fire Station #11 Land Acquisition And Construction **FS -003**

Submitting Departments: Fire Department

Project Description:

Construct an 11,200 square foot, three-bay wide by two vehicle deep fire station in the Ontario Ranch area. The station would consist of three 1,400 square foot bays, each capable of housing two medium sized vehicles or one long aerial vehicle. The station would have 350 square feet of entry/office space for public access, 1,625 square feet of mechanical and workroom space, 4,345 square feet of living space for up to eight fire-fighters, (double that if emergency measures were needed) and 680 square feet of training room. This station serves the basic model for all future stations to be built in the City. The three bays wide feature will allow for the shifting of resources throughout the day as needed to maximize service capability without incurring on-going greater staffing costs. A fourth bay is included in FS-012 for City-wide reserves vehicle storage. See FS-012, Ontario Ranch Vehicle Storage Bays, Stations 11, 12, 13, 14.

Justification / Consequences of Avoidance:

As the residential and business community development in occurs in the Ontario Ranch area the Fire Department will receive a statistically based number of additional calls-for-service, A minimum of five stations will be required to accommodate these statistically-based calls-for-service that will be generated by the development of the Ontario Ranch area.

Relationship to General Plan Development:

The four remaining OR proposed stations are necessary to provide first-in capabilities to the Ontario Ranch area. These stations may on occasion support calls-for-service in other areas of the City, but will also receive support from other stations in return. As such the related costs are fully allocated to that planning area.

Allocation To General Plan Buildout: 86.88%

Reference Document:

None, projections are based upon a staff application of General Plan based response times.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. The 2022 station cost estimates were increased to 2024 costs by the ENR - Building Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,234,760	$1,234,760
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$875,640	$875,640
3. Construction	$0	$0	$0	$0	$11,251,100	$11,251,100
4. Contingency	$0	$0	$0	$0	$663,370	$663,370
5. Equipment / Other	$0	$0	$0	$0	$1,096,480	$1,096,480
TOTAL COST:	$0	$0	$0	$0	$15,121,350	$15,121,350

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Fire Suppression Facilities, Vehicles And Equipment

Project Title / Ref#: Fire Station #11 Response Engine And Aerial Apparatus **FS -004**

Submitting Departments: Fire Department

Project Description:
The station would require a standard, fully equipped, front-line response engine.

Justification / Consequences of Avoidance:
Each station requires a front-line engine for normal responses along with an aerial apparatus. Additional vehicles, beyond the five engines for the five stations will be assigned to the various stations as needed (see FS-012)

Relationship to General Plan Development:
The four proposed remaining OR stations are necessary to provide first-in capabilities to the Ontario Ranch area. These stations may on occasion support calls-for-service in other areas of the City, but will also receive support from other stations in return. As such the related costs are fully allocated to that planning area. Each station requires a front-line engine for normal responses.

Allocation To General Plan Buildout: 86.88%

Reference Document:
None, projections are based upon a staff application of General Plan based response times.

Project Timing:
The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. The 2022 response fleet cost estimates were increased to 2024 by the Consumer Price Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$3,446,645	$3,446,645
TOTAL COST:	$0	$0	$0	$0	$3,446,645	$3,446,645

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Fire Suppression Facilities, Vehicles And Equipment

Project Title / Ref#: Fire Station #12 Land Acquisition And Construction **FS -005**

Submitting Departments: Fire Department

Project Description:

Construct an 11,200 square foot, three-bay wide by two vehicle deep fire station in the Ontario Ranch area. The station would consist of three 1,400 square foot bays, each capable of housing two medium sized vehicles or one long aerial vehicle. The station would have 350 square feet of entry/office space for public access, 1,625 square feet of mechanical and workroom space, 4,345 square feet of living space for up to eight fire-fighters, (double that if emergency measures were needed) and 680 square feet of training room. This station serves the basic model for all future stations to be built in the City. The three bays wide feature will allow for the shifting of resources throughout the day as needed to maximize service capability without incurring on-going greater staffing costs. A fourth bay is included in FS-012 for City-wide reserves vehicle storage. See FS-012, Ontario Ranch Vehicle Storage Bays, Stations 11, 12, 13, 14.

Justification / Consequences of Avoidance:

As the residential and business community development in occurs in the Ontario Ranch area the Fire Department will receive a statistically based number of additional calls-for-service, A minimum of five stations will be required to accommodate these statistically-based calls-for-service that will be generated by the development of the Ontario Ranch area.

Relationship to General Plan Development:

The four remaining proposed OR stations are necessary to provide first-in capabilities to the Ontario Ranch area. These stations may on occasion support calls-for-service in other areas of the City, but will also receive support from other stations in return. As such the related costs are fully allocated to that planning area.

Allocation To General Plan Buildout: 86.88%

Reference Document:

None, projections are based upon a staff application of General Plan based response times.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. The 2022 station cost estimates were increased to 2024 costs by the ENR - Building Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,234,760	$1,234,760
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$875,640	$875,640
3. Construction	$0	$0	$0	$0	$11,251,100	$11,251,100
4. Contingency	$0	$0	$0	$0	$663,370	$663,370
5. Equipment / Other	$0	$0	$0	$0	$1,096,480	$1,096,480
TOTAL COST:	$0	$0	$0	$0	$15,121,350	$15,121,350

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Fire Suppression Facilities, Vehicles And Equipment

Project Title / Ref#: Fire Station #12 Response Engine **FS -006**

Submitting Departments: Fire Department

Project Description:

The station would require a standard, fully equipped, front-line response engine.

Justification / Consequences of Avoidance:

Each station requires a front-line engine for normal responses. Additional vehicles, beyond the five engines for the five stations will be assigned to the various stations as needed

Relationship to General Plan Development:

The proposed remaining four OR stations are necessary to provide first-in capabilities to the Ontario Ranch area. These stations may on occasion support calls-for-service in other areas of the City, but will also receive support from other stations in return. As such the related costs are fully allocated to that planning area. Each station requires a front-line engine for normal responses.

Allocation To General Plan Buildout: 86.66%

Reference Document:

None, projections are based upon a staff application of General Plan based response times.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column.The 2022 response fleet cost estimates were increased to 2024 by the Consumer Price Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$1,138,815	$1,138,815
TOTAL COST:	$0	$0	$0	$0	$1,138,815	$1,138,815

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Fire Suppression Facilities, Vehicles And Equipment

Project Title / Ref#: Fire Station #13 Land Acquisition And Construction **FS -007**

Submitting Departments: Fire Department

Project Description:

Construct an 11,200 square foot, three-bay wide by two vehicle deep fire station in the Ontario Ranch area. The station would consist of three 1,400 square foot bays, each capable of housing two medium sized vehicles or one long aerial vehicle. The station would have 350 square feet of entry/office space for public access, 1,625 square feet of mechanical and workroom space, 4,345 square feet of living space for up to eight fire-fighters, (double that if emergency measures were needed) and 680 square feet of training room. This station serves the basic model for all future stations to be built in the City. The three bays wide feature will allow for the shifting of resources throughout the day as needed to maximize service capability without incurring on-going greater staffing costs. A fourth bay is included in FS-012 for City-wide reserves vehicle storage. See FS-012, Ontario Ranch Vehicle Storage Bays, Stations 11, 12, 13, 14.

Justification / Consequences of Avoidance:

As the residential and business community development in occurs in the Ontario Ranch area the Fire Department will receive a statistically based number of additional calls-for-service, A minimum of five stations will be required to accommodate these statistically-based calls-for-service that will be generated by the development of Ontario Ranch area.

Relationship to General Plan Development:

The four remaining OR proposed stations are necessary to provide first-in capabilities to the Ontario Ranch area. These stations may on occasion support calls-for-service in other areas of the City, but will also receive support from other stations in return. As such the related costs are fully allocated to that planning area.

Allocation To General Plan Buildout: 86.88%

Reference Document:

None, projections are based upon a staff application of General Plan based response times.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. The 2022 station cost estimates were increased to 2024 costs by the ENR - Building Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,234,760	$1,234,760
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$875,640	$875,640
3. Construction	$0	$0	$0	$0	$11,251,100	$11,251,100
4. Contingency	$0	$0	$0	$0	$663,370	$663,370
5. Equipment / Other	$0	$0	$0	$0	$1,096,480	$1,096,480
TOTAL COST:	$0	$0	$0	$0	$15,121,350	$15,121,350

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Fire Suppression Facilities, Vehicles And Equipment

Project Title / Ref#: Fire Station #13 Response Engine **FS -008**

Submitting Departments: Fire Department

Project Description:
The station would require a standard, fully equipped, front-line response engine.

Justification / Consequences of Avoidance:
Each station requires a front-line engine for normal responses. Additional vehicles, beyond the five engines for the five stations will be assigned to the various stations as needed.

Relationship to General Plan Development:
The remaining proposed four OR stations are necessary to provide first-in capabilities to the Ontario Ranch Area. These stations may on occasion support calls-for-service in other areas of the City, but will also receive support from other stations in return. As such the related costs are fully allocated to that planning area. Each station requires a front-line engine for normal responses.

Allocation To General Plan Buildout: 86.88%

Reference Document:
None, projections are based upon a staff application of General Plan based response times.

Project Timing:
The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column.The 2022 response fleet cost estimates were increased to 2024 by the Consumer Price Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$1,138,815	$1,138,815
TOTAL COST:	$0	$0	$0	$0	$1,138,815	$1,138,815

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Fire Suppression Facilities, Vehicles And Equipment

Project Title / Ref#: Fire Station #14 Land Acquisition And Construction **FS -009**

Submitting Departments: Fire Department

Project Description:

Construct an 11,200 square foot, three-bay wide by two vehicle deep fire station in the Ontario Ranch area. The station would consist of three 1,400 square foot bays, each capable of housing two medium sized vehicles or one long aerial vehicle. The station would have 350 square feet of entry/office space for public access, 1,625 square feet of mechanical and workroom space, 4,345 square feet of living space for up to eight fire-fighters, (double that if emergency measures were needed) and 680 square feet of training room. This station serves the basic model for all future stations to be built in the City. The three bays wide feature will allow for the shifting of resources throughout the day as needed to maximize service capability without incurring on-going greater staffing costs. A fourth bay is included in FS-012 for City-wide reserves vehicle storage. See FS-012, Ontario Ranch Vehicle Storage Bays, Stations 11, 12, 13, 14.

Justification / Consequences of Avoidance:

As the residential and business community development in occurs in the Ontario Ranch area the Fire Department will receive a statistically based number of additional calls-for-service, A minimum of five stations will be required to accommodate these statistically-based calls-for-service that will be generated by the development of Ontario Ranch area.

Relationship to General Plan Development:

The four remaining OR proposed stations are necessary to provide first-in capabilities to the Ontario Ranch area. These stations may on occasion support calls-for-service in other areas of the City, but will also receive support from other stations in return. As such the related costs are fully allocated to that planning area.

Allocation To General Plan Buildout: 86.88%

Reference Document:

None, projections are based upon a staff application of General Plan based response times.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column.The 2022 station cost estimates were increased to 2024 costs by the ENR - Building Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,234,760	$1,234,760
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$875,640	$875,640
3. Construction	$0	$0	$0	$0	$11,251,100	$11,251,100
4. Contingency	$0	$0	$0	$0	$663,370	$663,370
5. Equipment / Other	$0	$0	$0	$0	$1,096,480	$1,096,480
TOTAL COST:	$0	$0	$0	$0	$15,121,350	$15,121,350

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Fire Suppression Facilities, Vehicles And Equipment

Project Title / Ref#: Fire Station #14 Response Engine **FS -010**

Submitting Departments: Fire Department

Project Description:

The station would require a standard, fully equipped, front-line response engine.

Justification / Consequences of Avoidance:

Each station requires a front-line engine for normal responses. Additional vehicles, beyond the five engines for the five stations will be assigned to the various stations as needed.

Relationship to General Plan Development:

The four remaining proposed OR stations are necessary to provide first-in capabilities to the Ontario Ranch area. These stations may on occasion support calls-for-service in other areas of the City, but will also receive support from other stations in return. As such the related costs are fully allocated to that planning area. Each station requires a front-line engine for normal responses.

Allocation To General Plan Buildout: 86.88%

Reference Document:

None, projections are based upon a staff application of General Plan based response times.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column.The 2022 response fleet cost estimates were increased to 2024 by the Consumer Price Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design/Engineering/Administration	$0	$0	$0	$0	$0	$0
2. Land Acquisition/Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment/Other	$0	$0	$0	$0	$1,138,815	$1,138,815
TOTAL COST:	$0	$0	$0	$0	$1,138,815	$1,138,815

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Fire Suppression Facilities, Vehicles And Equipment

Project Title / Ref#: Reserve Response Engines **FS -011**

Submitting Departments: Fire Department

Project Description:
Acquire two additional response engines in order to maintain the Department's one-to-three ratio of reserve engines to front-line engines.

Justification / Consequences of Avoidance:
The Department maintains a ratio of one reserve vehicle for every three front-line engines. The back-up is required for downtime for routine and extraordinary maintenance.

Relationship to General Plan Development:
The four proposed remaining OR stations are necessary to provide first-in capabilities to the Ontario Ranch area. These stations may on occasion support calls-for-service in other areas of the City, but will also receive support from other stations in return. As such the related costs are fully allocated to that planning area.

Allocation To General Plan Buildout: 86.88%

Reference Document:
None, projections are based upon a staff application of General Plan based response times.

Project Timing:
The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column.The 2022 response fleet cost estimates were increased to 2024 by the Consumer Price Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design/Engineering/Administration	$0	$0	$0	$0	$0	$0
2. Land Acquisition/Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment/Other	$0	$0	$0	$0	$2,277,630	$2,277,630
TOTAL COST:	$0	$0	$0	$0	$2,277,630	$2,277,630

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Fire Suppression Facilities, Vehicles And Equipment

Project Title / Ref#: Ontario Ranch Vehicle Storage Bays - Stations 11, 12, 13, 14 **FS -012**

Submitting Departments: Fire Department

Project Description:

Construct an additional 1,400 square foot bays at each of stations, 11, 12, 13, and 14 for storage of city-wide fire response vehicles. These have been set up as a separate project because these bays demonstrate city-wide benefit and need to be financed by all new development within the City as well as the existing community.

Justification / Consequences of Avoidance:

The City can expect the construction of 80,149 dwelling nuts, 546 commercial lodging units and over 100 million square feet of business uses and this development will generate a larger number of reserve vehicles. The lifetime of these vehicles will be increased significantly if these vehicles are housed.

Relationship to General Plan Development:

These bays will be utilized to house existing and future City-wide reserve response vehicles and the costs have distributed as such.

Allocation To General Plan Buildout: 56.04%

Reference Document:

None, projections are based upon a staff application of General Plan based response times.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column.The 2022 station cost estimates were increased to 2024 costs by the ENR - Building Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design/Engineering/Administration	$0	$0	$0	$0	$608,680	$608,680
2. Land Acquisition/Right Of Way	$0	$0	$0	$0	$437,840	$437,840
3. Construction	$0	$0	$0	$0	$5,557,640	$5,557,640
4. Contingency	$0	$0	$0	$0	$320,160	$320,160
5. Equipment/Other	$0	$0	$0	$0	$529,200	$529,200
TOTAL COST:	$0	$0	$0	$0	$7,453,520	$7,453,520

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Fire Suppression Facilities, Vehicles And Equipment

Project Title / Ref#: Battalion Chief Response Vehicle **FS -013**

Submitting Departments: Fire Department

Project Description:
Acquire a Battalion Chief response vehicle.

Justification / Consequences of Avoidance:
The additional calls-for-service that will be generated by new development within Ontario Ranch will generate the need for a third Battalion Chief and thus a vehicle.

Relationship to General Plan Development:
The proposed five stations are necessary to provide first-in capabilities to the Ontario Ranch area. These stations may on occasion support calls-for-service in other areas of the City, but will also receive support from other stations in return. As such the related costs are fully allocated to that planning area. This vehicle would be assigned to the Ontario Ranch area.

Allocation To General Plan Buildout: 86.88%

Reference Document:
None, projections are based upon a staff application of General Plan based response times.

Project Timing:
The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column.The 2022 response fleet cost estimates were increased to 2024 by the Consumer Price Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design/Engineering/Administration	$0	$0	$0	$0	$0	$0
2. Land Acquisition/Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment/Other	$0	$0	$0	$0	$201,060	$201,060
TOTAL COST:	$0	$0	$0	$0	$201,060	$201,060

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Fire Suppression Facilities, Vehicles And Equipment

Project Title / Ref#: Fire Fighter Assigned Equipment **FS -014**

Submitting Departments: Fire Department

Project Description:

.Acquire fire fighter assigned equipment. It cost the City some $17,108 to outfit each firefighter. There will be a need for remaining 89 additional firefighters to staff the five proposed Ontario Ranch area stations.

Justification / Consequences of Avoidance:

The firefighters require personally-assigned equipment and cannot perform their duties without it.

Relationship to General Plan Development:

The proposed five stations are necessary to provide first-in capabilities to the Ontario Ranch area. These stations may on occasion support calls-for-service in other areas of the City, but will also receive support from other stations in return. As such the related costs are fully allocated to that planning area. This equipment is necessary for staffing in these five stations.

Allocation To General Plan Buildout: 86.88%

Reference Document:

None, projections are based upon a staff application of General Plan based response times.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column.The 2022 fire fighter assigned equipment cost estimates were increased to 2024 by the Consumer Price Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$1,700,758	$1,700,758
TOTAL COST:	$0	$0	$0	$0	$1,700,758	$1,700,758

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Fire Suppression Facilities, Vehicles And Equipment

Project Title / Ref#: Fire Administrative Headquarters Relocation **FS -015**

Submitting Departments: Fire Department

Project Description:

The project consists of relocating the Fire Administration service from its existing location in the City Hall Annex to a site generally located on West C Street between Laurel Avenue and Palm Avenue. Phase I would consist of acquiring the land located at 1408 East Francis Street. Phase II would consist of the design and construction of a new facility that would house Fire Administration, Fire Prevention and Education, Fire Dispatch and the City Emergency Operations Center (see FS-017). This facility would be approximately 30,000 square feet and occupy two floors.

Justification / Consequences of Avoidance:

Fire Administration was originally collocated with Fire Station #1 until Station #1 relocated to the City Hall Annex in 2013. The ultimate plan is to combine the Fire Station #1 0perations and Fire Administration operations into the same building on the west side of Euclid.

Relationship to General Plan Development:

The costs are pro-rated between existing and new development because it contains both expansion and rehabilitation components.

Allocation To General Plan Buildout: 56.04%

Reference Document:

None, projections are based upon a staff application of General Plan based response times.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. The 2022 station cost estimates were increased to 2024 costs by the ENR - Building Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$2,993,300	$2,993,300
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$1,166,670	$1,166,670
3. Construction	$0	$0	$0	$0	$27,215,000	$27,215,000
4. Contingency	$0	$0	$0	$0	$1,644,390	$1,644,390
5. Equipment / Other	$0	$0	$0	$0	$2,718,000	$2,718,000
TOTAL COST:	$0	$0	$0	$0	$35,737,360	$35,737,360

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Fire Suppression Facilities, Vehicles And Equipment

Project Title / Ref#: Training Center Expansion **FS -016**

Submitting Departments: Fire Department

Project Description:

The project consists of the construction of a combination of 10,400 S.F. training tower and training classroom space, office space and restrooms. There would also be a drafting pit constructed and additional practice facilities and apparatus.

Justification / Consequences of Avoidance:

New development will cause an appreciable increase in new fire-fighters and thus training activity at the City's training center. New development will generate an increase in full time staffing. This increased training activity will put considerable strain on the finite capabilities of the training facilities, particularly the training tower, creating competing demands for the limited classroom, space and physical training opportunities. The previously described facilities will allow the department to meet the on-going required training of new fire-fighters and the continuing education needs of long-term firefighters.

Relationship to General Plan Development:

The costs are pro-rated between new development in Ontario Ranch and the General City areas because the facility is at capacity now.

Allocation To General Plan Buildout: 100.00%

Reference Document:

No specific document, based upon proportional inventory expansion.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. The 2022 station cost estimates were increased to 2024 costs by the ENR - Building Cost Index

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,312,419	$1,312,419
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$8,749,457	$8,749,457
4. Contingency	$0	$0	$0	$0	$1,006,187	$1,006,187
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$11,068,063	$11,068,063

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Fire Suppression Facilities, Vehicles And Equipment

Project Title / Ref#: City Emergency Operations Center **FS -017**

Submitting Departments: Fire Department

Project Description:

Acquire and install multi-purpose audio, video, telecommunications and operational equipment in the Emergency Operations Center. The project consists of 6,500 square feet of interior improvements at about $700 per square foot and the installation of $500,000 in electronic equipment.

Justification / Consequences of Avoidance:

Given the recent relocation of the facility to the basement of the City Hall Annex facility, the project will provide the facility with the necessary audio/visual, telecommunications and operational equipment with which to manage any potential city emergencies. The facility will also be a back-up dispatch center and training venue.

Relationship to General Plan Development:

The costs are pro-rated between existing and new development because it is an expanded capacity.

Allocation To General Plan Buildout: 56.04%

Reference Document:

None, projections are based upon a staff application of General Plan based response times.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column.The 2022 station cost estimates were increased to 2024 costs by the ENR - Building Cost Index

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$534,120	$534,120
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$3,560,803	$3,560,803
4. Contingency	$0	$0	$0	$0	$409,493	$409,493
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$4,504,416	$4,504,416

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Fire Suppression Facilities, Vehicles And Equipment

Project Title / Ref#: Special Operations Support Vehicle **FS -018**

Submitting Departments: Fire Department

Project Description:

Acquire a special operations support vehicle. The vehicle would be, in effect, a rolling warehouse and canteen. The vehicle would be dispatched to unusually large or long term incidents that would require provision of fluids/food, supplies, change of emergency equipment and other comfort capabilities.

Justification / Consequences of Avoidance:

The vehicle would be necessary for long term emergency incidents.

Relationship to General Plan Development:

The costs are pro-rated between existing and new development because it is a new and additional capacity.

Allocation To General Plan Buildout: 56.04%

Reference Document:

None, projections are based upon a staff application of General Plan based response times.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column.The 2022 response fleet cost estimates were increased to 2024 by the Consumer Price Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$153,588	$153,588
TOTAL COST:	$0	$0	$0	$0	$153,588	$153,588

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Fire Suppression Facilities, Vehicles And Equipment

Project Title / Ref#: Mobile Air And Lighting Support Vehicle **FS -019**

Submitting Departments: Fire Department

Project Description:

Acquire a mobile air and lighting support vehicle. The truck (or cab/trailer) would consist of amiable lights for increasing visibility of any involved structure (during anytime of the day). In addition, the vehicle would have air bottle re-filling capacity.

Justification / Consequences of Avoidance:

The vehicle would provide increased visibility of involved structures, via external lighting, and would provide firefighters with an additional tool or on-site capability. Additionally, an on-site air bottle filling capability will be necessary for over-height and/or over-wide facilities requiring longer structural interior attacks. Acquisition would result in increased fire suppression response capacities by improving the firefighting conditions.

Relationship to General Plan Development:

The costs are pro-rated between existing and new development because it is a new and additional capacity.

Allocation To General Plan Buildout: 56.04%

Reference Document:

None, projections are based upon a staff application of General Plan based response times.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column.The 2022 response fleet cost estimates were increased to 2024 by the Consumer Price Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$641,996	$641,996
TOTAL COST:	$0	$0	$0	$0	$641,996	$641,996

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Fire Suppression Facilities, Vehicles And Equipment

Project Title / Ref#: Emergency Service Communications System **FS -020**

Submitting Departments: Fire Department

Project Description:
Acquire a cloud-based Computer Aided Dispatch (CAD) System that would provide interoperability for the Ontario Ranch area.

Justification / Consequences of Avoidance:
The equipment is required to provide adequate and sufficient dispatching capabilities to the entire Ontario Ranch area.

Relationship to General Plan Development:
The project exclusively benefits new development within the Ontario Ranch area.

Allocation To General Plan Buildout: 86.88%

Reference Document:
None, projections are based upon a staff application of General Plan based response times.

Project Timing:
The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column.The 2022 cost estimate for this project were increased to 2024 by the Consumer Price Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$3,624,419	$3,624,419
TOTAL COST:	$0	$0	$0	$0	$3,624,419	$3,624,419

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Fire Suppression Facilities, Vehicles And Equipment

Project Title / Ref#: Share Of Common City Yard Improvements **FS -021**

Submitting Departments: Fire Department

Project Description:

Construct the following improvements: 1) Reconfigure some 60,000 square feet of a recently acquired warehouse and office space. 2) Pave approximately ten acres of currently dirt parking lot, primarily for the refuse operation refueling area. 3) Construct additional fleet maintenance operations bays. 4) Construct a new welding shop. 5) Increase security through additional fencing and lighting. and 6) Construct additional CNG fueling stations. The combined improvements have a total projected cost of $44.5 million and are spread between all City operations that make use of the City yard.

Justification / Consequences of Avoidance:

This amount represents the proportional amount of a total estimated $44.4 million in structural improvements to the City maintenance yard necessary to meet the increasing demands for greater fire suppression system vehicle maintenance capacity. The City has acquired adequate land and has existing structural capacity for the various maintenance demands. This demand for additional structural capacity results from the doubling of demand on all public infrastructures resulting from the development of the Ontario Ranch area and remaining portions of the General City.

Relationship to General Plan Development:

The project fully benefits new development in the General City and Ontario Ranch areas.

Allocation To General Plan Buildout: 100.00%

Reference Document:

None, projections are based upon a staff application of General Plan based response times.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$188,571	$188,571
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$1,257,142	$1,257,142
4. Contingency	$0	$0	$0	$0	$144,572	$144,572
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$1,590,285	$1,590,285

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Fire Suppression Facilities, Vehicles And Equipment

Project Title / Ref#: Project Completed Or No Longer Needed **FS -022**

Submitting Departments: Fire Department

Project Description:
The Station #7 land acquisition and construction project has been completed

Justification / Consequences of Avoidance:
No longer necessary.

Relationship to General Plan Development:
N/A.

Allocation To General Plan Buildout: 0.00%

Reference Document:
The project is no longer needed, but has been included to act as a project number placeholder.

Project Timing:
The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction (Final Cost)	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Fire Suppression Facilities, Vehicles And Equipment

Project Title / Ref#: Fire Station Operations #1 Relocation **FS -023**

Submitting Departments: Fire Department

Project Description:

This project consists of relocating Station #1 from its current location at 425 East B Street. The station would consist of five1,400 square foot bays and living quarters for eight on-duty fire fighters, a fire investigator and a battalion chief. The desired location for relocation would be parcels at the corner of D Street and Sultana Avenue.

Justification / Consequences of Avoidance:

The current Fire Station #1 is over 60 years old and is in need of major and repeating repairs; additionally the station is not adequately sized to safely house the current personnel, equipment and apparatus needed at this very central location. The current parcel is undersized at 0.55 acres. The proposed location will allow for more rapid responses to emergency incidents in and around the downtown area as well as providing a more efficient and effective working environment for the response fire personnel.

Relationship to General Plan Development:

The facility relocation is needed to accommodate full General Plan development in the General City area without adding significant staffing costs.

Allocation To General Plan Buildout: 35.00%

Reference Document:

None, projections are based upon a staff application of General Plan based response times.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column.The 2022 station cost estimates were increased to 2024 costs by the ENR - Building Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,341,860	$1,341,860
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$2,333,330	$2,333,330
3. Construction (Final Cost)	$0	$0	$0	$0	$12,201,880	$12,201,880
4. Contingency	$0	$0	$0	$0	$736,100	$736,100
5. Equipment / Other	$0	$0	$0	$0	$1,216,690	$1,216,690
TOTAL COST:	$0	$0	$0	$0	$17,829,860	$17,829,860

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Fire Suppression Facilities, Vehicles And Equipment

Project Title / Ref#: Expand Station #3 (East Francis) **FS -024**

Submitting Departments: Fire Department

Project Description:

Expand Station #3 to accommodate a second company. The existing station, the City's smallest, is located at 1408 East Francis adjacent to the fire and emergency training center. The expansion would consist of two bays at a total of 2,800 square feet, 745 square feet of mechanical and storage space and 2,070 square feet of additional dorm/shower/living space.

Justification / Consequences of Avoidance:

Full development in the General City area will more than double the annual medic/fire/emergency calls-for-service requiring the addition of an additional company. This station is centrally located and can respond to a great many of these additional calls-for-service.

Relationship to General Plan Development:

The facility expansion will be required to accommodate the additional calls-for-service resulting from full development within the General City area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

None, projections are based upon a staff application of General Plan based response times.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column.The 2022 station cost estimates were increased to 2024 costs by the ENR - Building Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$604,680	$604,680
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$5,497,090	$5,497,090
4. Contingency	$0	$0	$0	$0	$332,570	$332,570
5. Equipment / Other	$0	$0	$0	$0	$549,710	$549,710
TOTAL COST:	$0	$0	$0	$0	$6,984,050	$6,984,050

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Fire Suppression Facilities, Vehicles And Equipment

Project Title / Ref#: Project Completed Or No Longer Needed **FS -025**

Submitting Departments: Fire Department

Project Description:
Project was completed.

Justification / Consequences of Avoidance:
N/A

Relationship to General Plan Development:
N/A

Allocation To General Plan Buildout: 0.00%

Reference Document:
The project is no longer needed, but has been included to act as a project number placeholder.

Project Timing:
The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

City of Ontario
Circulation System
(Streets, Signals and Bridges)

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan - All Plan Areas

Local Circulation (Streets, Bridges & Signals) System

MFP 2024-2025 Update

		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build	Project Build Out Total
ST -001	Archibald Avenue From Riverside To Edison (P)	$0	$0	$0	$0	$298,857	$298,857
ST -002	Archibald Avenue From Edison To South City Limit	$0	$0	$0	$0	$347,275	$347,275
ST -003	Bellegrave Avenue From Archibald To Milliken	$0	$0	$0	$0	$1,107,724	$1,107,724
ST -004	Campus Avenue From Riverside To Merrill	$0	$0	$0	$0	$7,895,318	$7,895,318
ST -005	Chino Avenue From Euclid To Milliken	$0	$0	$0	$0	$8,584,063	$8,584,063
ST -006	Mill Creek Avenue From Riverside To Bellegrave	$0	$0	$0	$0	$3,155,693	$3,155,693
ST -007	Edison Avenue From Euclid To Walker	$0	$0	$0	$0	$12,208,887	$12,208,887
ST -008	Edison Avenue From Walker To Vineyard	$0	$0	$0	$0	$3,599,929	$3,599,929
ST -009	Edison Avenue From Vineyard To Mill Creek	$0	$0	$0	$0	$8,084,370	$8,084,370
ST -010	Edison Avenue From Mill Creek To Milliken	$0	$0	$0	$0	$873,741	$873,741
ST -011	Eucalyptus Avenue From Euclid To Milliken	$0	$0	$0	$0	$17,993,932	$17,993,932
ST -012	Euclid Avenue From Riverside To Merrill	$0	$0	$0	$0	$22,228,219	$22,228,219
ST -013	Grove Avenue From Riverside To Merrill	$0	$0	$0	$0	$13,484,813	$13,484,813
ST -014	Haven Avenue From Riverside To Bellegrave	$0	$0	$0	$0	$5,720,522	$5,720,522
ST -015	Merrill Avenue From Euclid To Archibald	$0	$0	$0	$0	$26,158,070	$26,158,070
ST -016	Milliken Avenue From Riverside To Edison	$0	$0	$0	$0	$5,075,143	$5,075,143
ST -017	Milliken Avenue From Edison To Bellegrave	$0	$0	$0	$0	$2,596,127	$2,596,127
ST -018	Hellman Avenue From Riverside To Merrill	$0	$0	$0	$0	$4,225,427	$4,225,427
ST -019	Riverside Drive From Euclid To Milliken	$0	$0	$0	$0	$4,928,847	$4,928,847
ST -020	Schaefer Avenue From Euclid To Haven	$0	$0	$0	$0	$6,981,473	$6,981,473

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan - All Plan Areas

Local Circulation (Streets, Bridges & Signals) System

MFP 2024-2025 Update

		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build	Project Build Out Total
ST -021	Turner Avenue From Riverside To Schaefer	$0	$0	$0	$0	$339,083	$339,083
ST -022	Vineyard Avenue From Riverside To Merrill	$0	$0	$0	$0	$14,370,409	$14,370,409
ST -023	Walker Avenue From Riverside To Merrill	$0	$0	$0	$0	$5,712,152	$5,712,152
ST -024	Ontario Ranch Traffic Control System	$0	$0	$0	$0	$31,665,628	$31,665,628
ST -025	Non-Dev. ROW, Frontage Imps. & SCE Pole Relocations	$0	$0	$0	$0	$55,426,506	$55,426,506
ST -026	Additional SCE Pole Relocation	$0	$0	$0	$0	$716,456	$716,456
ST -027	Project No Longer Needed	$0	$0	$0	$0	$0	$0
ST -028	Project No Longer Needed	$0	$0	$0	$0	$0	$0
ST -029	OR Offsite Cantu Galleano Widening, I-15 To Milliken	$0	$0	$0	$0	$2,528,234	$2,528,234
ST -030	OR Offsite Euclid Avenue Improvements, Merrill To US-71	$0	$0	$0	$0	$7,000,228	$7,000,228
ST -031	OR Offsite Archibald Avenue Bridge Over The Santa Ana River	$0	$0	$0	$0	$286,540	$286,540
ST -032	OR Offsite Hamner Avenue Bridge Over The Santa Ana River	$0	$0	$0	$0	$662,849	$662,849
ST -033	General City Street Lights	$0	$0	$0	$0	$3,721,811	$3,721,811
ST -034	General City Traffic Signals	$0	$0	$0	$0	$17,898,081	$17,898,081
ST -035	Benson Avenue From Mission To Philadelphia	$0	$0	$0	$0	$969,658	$969,658
ST -036	Mountain Avenue From Sixth To Holt	$0	$0	$0	$0	$2,837,942	$2,837,942
ST -037	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
ST -038	Bon View Avanue From Holt To Mission	$0	$0	$0	$0	$1,265,406	$1,265,406
ST -039	Bon View Avenue From Mission To Belmont	$0	$0	$0	$0	$711,606	$711,606
ST -040	Project No Longer Needed	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan - All Plan Areas

Local Circulation (Streets, Bridges & Signals) System

MFP 2024-2025 Update

		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build	Project Build Out Total
ST -041	Project No Longer Needed	$0	$0	$0	$0	$0	$0
ST -042	Grove Avenue From I-10 Freeway To Holt	$0	$0	$0	$0	$40,887,212	$40,887,212
ST -043	Turner Avenue From Inland Empire Boulevard To Fourth	$0	$0	$0	$0	$799,447	$799,447
ST -044	Archibald Avenue From Fourth To Guasti Park Entrance	$0	$0	$0	$0	$2,150,917	$2,150,917
ST -045	Milliken Avenue From SR-60 To Riverside	$0	$0	$0	$0	$426,482	$426,482
ST -046	Project Is No Longer Needed	$0	$0	$0	$0	$0	$0
ST -047	Etiwanda Avenue At Airport Drive	$0	$0	$0	$0	$9,422,751	$9,422,751
ST -048	Eighth Street From West Cucamonga Creek To Grove	$0	$0	$0	$0	$174,406	$174,406
ST -049	Project No Longer Needed	$0	$0	$0	$0	$0	$0
ST -050	Fourth Street From Palmetto To San Antonio	$0	$0	$0	$0	$1,321,491	$1,321,491
ST -051	Fourth Street From Campus To Cucamonga	$0	$0	$0	$0	$1,095,555	$1,095,555
ST -052	Fourth Street From Vineyard To Archibald	$0	$0	$0	$0	$706,718	$706,718
ST -053	Holt Boulevard From Benson To Vineyard	$0	$0	$0	$0	$54,918,606	$54,918,606
ST -054	Guasti Road From Holt To Archibald	$0	$0	$0	$0	$1,043,147	$1,043,147
ST -055	State Street From Benson To Grove	$0	$0	$0	$0	$5,174,545	$5,174,545
ST -056	Airport Drive Under The I-15 Freeway	$0	$0	$0	$0	$3,241,898	$3,241,898
ST -057	Project No Longer Needed	$0	$0	$0	$0	$0	$0
ST -058	Mission Boulevard From Cypress To Grove	$0	$0	$0	$0	$5,926,750	$5,926,750
ST -059	Mission Boulevard From Grove To Milliken	$0	$0	$0	$0	$11,683,652	$11,683,652
ST -060	Phillips Street From Benson To Mountain	$0	$0	$0	$0	$600,353	$600,353

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan - All Plan Areas

Local Circulation (Streets, Bridges & Signals) System

MFP 2024-2025 Update

		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build	Project Build Out Total
ST -061	Project No Longer Needed	$0	$0	$0	$0	$0	$0
ST -062	Acacia Street From Baker To Vineyard	$0	$0	$0	$0	$78,402	$78,402
ST -063	Francis Street From Benson To Campus	$0	$0	$0	$0	$4,852,184	$4,852,184
ST -064	Jurupa Street From Archibald To East Of Turner	$0	$0	$0	$0	$822,350	$822,350
ST -065	Philadelphia Street From Campus To Grove	$0	$0	$0	$0	$914,623	$914,623
ST -066	Philadelphia From E/O Vineyard To Cucamonga Creek	$0	$0	$0	$0	$564,682	$564,682
ST -067	Project No Longer Needed	$0	$0	$0	$0	$0	$0
ST -068	Project No Longer Needed	$0	$0	$0	$0	$0	$0
ST -069	Grove Avenue Bridge Over West Cucamonga Creek	$0	$0	$0	$0	$1,015,271	$1,015,271
ST -070	Project No Longer Needed	$0	$0	$0	$0	$0	$0
ST -071	Holt Boulevard Bridge Over West Cucamonga Creek	$0	$0	$0	$0	$269,681	$269,681
ST -072	Mission Boulevard Bridge Over West Cucamonga Creek	$0	$0	$0	$0	$755,107	$755,107
ST -073	Project No Longer Needed	$0	$0	$0	$0	$0	$0
ST -074	Francis Street Bridge Over West Cucamonga Creek	$0	$0	$0	$0	$242,712	$242,712
ST -075	Eighth Street Bridge Over Cucamonga Creek	$0	$0	$0	$0	$2,076,546	$2,076,546
ST -076	Sixth Street Bridge Over Cucamonga Creek	$0	$0	$0	$0	$1,657,746	$1,657,746
ST -077	Fourth Street Bridge Over Cucamonga Creek	$0	$0	$0	$0	$852,669	$852,669
ST -078	Project No Longer Needed	$0	$0	$0	$0	$0	$0
ST -079	Holt Boulevard Bridge Over Cucamonga Creek	$0	$0	$0	$0	$3,014,084	$3,014,084
ST -080	Project No Longer Needed	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan - All Plan Areas

Local Circulation (Streets, Bridges & Signals) System

MFP 2024-2025 Update

		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build	Project Build Out Total
ST -081	Mission Boulevard Bridge Over Cucmonga Creek	$0	$0	$0	$0	$2,211,387	$2,211,387
ST -082	Francis Street Bridge Over Cucamonga Creek	$0	$0	$0	$0	$2,022,609	$2,022,609
ST -083	Philadelphia Street Bridge Over Cucamonga Creek	$0	$0	$0	$0	$240,577	$240,577
ST -084	Riverside Drive Bridge Over Cucamonga Creek	$0	$0	$0	$0	$1,180,030	$1,180,030
ST -085	Archibald Avenue Bridge Over Upper Deer Creek	$0	$0	$0	$0	$1,356,338	$1,356,338
ST -086	Archibald Avenue Bridge Over Upper Deer Creek Spillway	$0	$0	$0	$0	$1,898,874	$1,898,874
ST -087	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
ST -088	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
ST -089	Archibald Avenue Bridge Over Lower Deer Creek	$0	$0	$0	$0	$401,349	$401,349
ST -090	Project No Longer Needed	$0	$0	$0	$0	$0	$0
ST -091	Grove Avenue Grade Separation Under UPRR/Alhambra Line	$0	$0	$0	$0	$11,905,814	$11,905,814
ST -092	Milliken (N) Grade Separation Under UPRR/Alhambra	$0	$0	$0	$0	$28,847,930	$28,847,930
ST -093	Project Has Been Completed	$0	$0	$0	$0	$0	$0
ST -094	Project Has Been Completed	$0	$0	$0	$0	$0	$0
ST -095	Archibald (S) Line Grade Separation Over UPRR/LA	$0	$0	$0	$0	$64,232,000	$64,232,000
ST -096	San Antonio (S) Line Grade Separation Under UPRR/Alhambra	$0	$0	$0	$0	$26,872,279	$26,872,279
ST -097	Campus (S) Line Grade Separation Under UPRR/Alhambra	$0	$0	$0	$0	$26,872,279	$26,872,279
ST -098	Project No Longer Needed	$0	$0	$0	$0	$0	$0
ST -099	Vine (S) Line Grade Separation Under UPRR/LA Line	$0	$0	$0	$0	$23,513,244	$23,513,244
ST -100	Sultana (S) Line Grade Separation Under UPRR/LA Line	$0	$0	$0	$0	$23,513,244	$23,513,244

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan - All Plan Areas

Local Circulation (Streets, Bridges & Signals) System

MFP 2024-2025 Update

		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build	Project Build Out Total
ST -101	Bon View (S) Grade Separation Under UPRR/LA Line	$0	$0	$0	$0	$23,513,244	$23,513,244
ST -102	Pavement Management System Rehabilitation Program	$0	$0	$0	$0	$30,065,192	$30,065,192
ST -103	Circulation System Maintenance Vehicles	$0	$0	$0	$0	$4,016,256	$4,016,256
ST -104	Great Park Bridge Over Archibald Avenue	$0	$0	$0	$0	$5,586,893	$5,586,893
ST -105	SR-60 At Vineyard Interchange Reconstruction/Expansion	$0	$0	$0	$0	$56,890,854	$56,890,854
ST -106	SR-60 At Archibald Interchange Reconstruction/Expansion	$0	$0	$0	$0	$14,016,704	$14,016,704
ST -107	SR-60 At Euclid Interchange Reconstruction/Expansion	$0	$0	$0	$0	$6,383,022	$6,383,022
ST -108	SR-60 At Grove Interchange Reconstruction/Expansion	$0	$0	$0	$0	$56,578,160	$56,578,160
ST -109	SR-60 At Mountain Interchange Reconstruction/Expansion	$0	$0	$0	$0	$16,795,175	$16,795,175
ST -110	Project No Longer Needed.	$0	$0	$0	$0	$0	$0
ST -111	I-10 Freeway At Grove/Fourth	$0	$0	$0	$0	$196966,310	$196966,310
ST -112	Traffic Signal System Control And Operations Center	$0	$0	$0	$0	$2,548,783	$2,548,783
ST -113	General City Backbone Signal Interconnect	$0	$0	$0	$0	$2,911,164	$2,911,164
ST -114	I-10 At Euclid Avenue Eastbound On Ramp	$0	$0	$0	$0	$9,973,579	$9,973,579
ST -115	Project No Longer Needed	$0	$0	$0	$0	$0	$0
ST -116	I-10 At Vineyard Interchange Reconstruction/Expansion	$0	$0	$0	$0	$2,954,813	$2,954,813
ST -117	Ontario Ranch Street/Trails Separation	$0	$0	$0	$0	$2,511,966	$2,511,966
ST -118	Hellman Avenue Bridge Over Cucamonga Creek	$0	$0	$0	$0	$2,355,745	$2,355,745
ST -119	Project Completed Or No Longer Necessary	$0	$0	$0	$0	$0	$0
ST -120	Project Has Been Completed Or No Longer Necessary	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan - All Plan Areas

Local Circulation (Streets, Bridges & Signals) System

MFP 2024-2025 Update

		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build	Project Build Out Total
ST -121	Schaefer Avenue Bridge Over Cucamonga Creek	$0	$0	$0	$0	$7,495,552	$7,495,552
ST -122	Schaefer Avenue Bridge Over Cucamonga Creek Spillway	$0	$0	$0	$0	$13,325,426	$13,325,426
ST -123	Edison Avenue Bridge Over Cucamonga Creek	$0	$0	$0	$0	$19,417,050	$19,417,050
ST -124	Eucalyptus Avenue Bridge Over Cucamonga Creek	$0	$0	$0	$0	$11,000,000	$11,000,000
ST -125	Merrill Avenue Bridge Over Cucamonga Creek	$0	$0	$0	$0	$11,000,000	$11,000,000
ST -126	Share Of Common City Yard Improvements	$0	$0	$0	$0	$2,168,432	$2,168,432
ST -127	Ontario Ranch Bus Stop Shelters	$0	$0	$0	$0	$3,332,841	$3,332,841
ST -128	Ontario Ranch Design Studies	$0	$0	$0	$0	$1,074,109	$1,074,109
ST -129	Fourth Street Under The I-10 Freeway	$0	$0	$0	$0	$22,397,514	$22,397,514
ST -130	Guasti Road Extension From 1,530' E/O Haven Easterly 310'	$0	$0	$0	$0	$655,358	$655,358
ST -131	Ontario Traffic Study	$0	$0	$0	$0	$94,815	$94,815
	TOTALS	$0	$0	$0	$0	$199,447,917	$199,447,917

Notes:
1) If project timing is not a component of this effort, then all projects default to their "Thru Build Out" amount.

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Archibald Avenue From Riverside To Edison (P) **ST -001**

Submitting Departments: Engineering Department

Project Description:

Construct the additional lanes beyond the curb adjacent lane in each direction on Archibald Avenue from Riverside Drive to Edison Avenue (about 7,800 linear feet). The project segment, which may include one or more traffic signals included on ST-024, will be one of the key arterials/collectors servicing the Ontario Ranch area. Project costs include the raised landscape median and all lanes except the curb adjacent lane. The construction of the curb adjacent lane and frontage improvements will be constructed as a condition of approval. Contingency is included at 10% of the estimated construction cost. Project administration, consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the Ontario Ranch development as identified in the Ontario Ranch land use database.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$38,981	$38,981
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$236,251	$236,251
4. Contingency (In Construction Costs	$0	$0	$0	$0	$23,625	$23,625
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$298,857	$298,857

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Archibald Avenue From Edison To South City Limit **ST -002**

Submitting Departments: Engineering Department

Project Description:

Construct the additional lanes beyond the curb adjacent lane in each direction on Archibald Avenue from Edison Avenue to South City Limit (about 7,200 linear feet). The project segment, which may include one or more traffic signals included on ST-024, will be one of the key arterials/collectors servicing the Ontario Ranch area. Project costs include the raised landscape median and all lanes except the curb adjacent lane. The construction of the curb adjacent lane and frontage improvements will be constructed as a condition of approval. Contingency is included at 10% of the estimated construction cost. Project administration, consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the Ontario Ranch development as identified in the Ontario Ranch land use database.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$45,297	$45,297
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$274,526	$274,526
4. Contingency	$0	$0	$0	$0	$27,452	$27,452
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$347,275	$347,275

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Bellegrave Avenue From Archibald To Milliken **ST -003**

Submitting Departments: Engineering Department

Project Description:

Construction of the additional lanes beyond the curb adjacent lane in each direction on Bellegrave Avenue from Archibald Avenue to Haven Avenue and only on the north side from Haven Avenue to Milliken Avenue (about 10,900 linear feet). The project segment, which may include one or more traffic signals included on ST-024, will be one of the key arterials/collectors servicing the Ontario Ranch area. Project costs include the raised landscape median and all lanes except the curb adjacent lane. The construction of the curb adjacent lane and frontage improvements will be constructed as a condition of approval. The project has been completed but remains in the calculation until the City's Land Use Database is amended at a later time.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F. The project has been left in as a place holder to maintain the original numbering system.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the Ontario Ranch development as identified in the Ontario Ranch land use database.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The project has been completed in April of 2023.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$1,107,724	$1,107,724
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$1,107,724	$1,107,724

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Campus Avenue From Riverside To Merrill **ST -004**

Submitting Departments: Engineering Department

Project Description:

Construct the additional lanes beyond the curb adjacent lane in each direction on Campus Avenue from Riverside to Merrill (13,200 linear feet). The project segment, which may include one or more traffic signals included on ST-024, will be one of the key arterials/collectors servicing the Ontario Ranch area. Project costs include the raised landscape median and all lanes except the curb adjacent lane. The construction of the curb adjacent lane and frontage improvements will be constructed as a condition of approval except for a portion from Schaefer to approximately 1271' south of Schaefer. The last lane improvements include neighborhood edge and fiber optic for this portion are included in the project costs. Contingency is included at 10% of the estimated construction cost. Project administration, consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the Ontario Ranch development as identified in the Ontario Ranch land use database.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased by 154.0% based upon a recalculation of this project.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,029,825	$1,029,825
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$6,241,358	$6,241,358
4. Contingency	$0	$0	$0	$0	$624,135	$624,135
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$7,895,318	$7,895,318

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Chino Avenue From Euclid To Milliken **ST -005**

Submitting Departments: Engineering Department

Project Description:

Construct the additional lanes beyond the curb adjacent lane in each direction on Chino Avenue from Euclid Avenue to Milliken Avenue (about 27,700 linear feet). The project segment, which may include one or more traffic signals included on ST-024, will be one of the key arterials/collectors servicing the Ontario Ranch area. Project costs include the raised landscape median and all lanes except the curb adjacent lane. The construction of the curb adjacent lane and frontage improvements will be constructed as a condition of approval. Contingency is included at 10% of the estimated construction cost. Project administration, consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the Ontario Ranch development as identified in the Ontario Ranch land use database.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,119,660	$1,119,660
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$6,785,821	$6,785,821
4. Contingency	$0	$0	$0	$0	$678,582	$678,582
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$8,584,063	$8,584,063

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Mill Creek Avenue From Riverside To Bellegrave **ST -006**

Submitting Departments: Engineering Department

Project Description:

Construct the additional lanes beyond the curb adjacent lane in each direction on Mill Creek Avenue from Riverside Drive to Bellegrave Avenue (about 11,900 linear feet). The project segment, which may include one or more traffic signals included on ST-024, will be one of the key arterials/collectors servicing the Ontario Ranch area. Project costs include the raised landscape median and all lanes except the curb adjacent lane. The construction of the curb adjacent lane and frontage improvements will be constructed as a condition of approval. Contingency is included at 10% of the estimated construction cost. Project administration, consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the Ontario Ranch development as identified in the Ontario Ranch land use database.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$411,612	$411,612
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$2,494,619	$2,494,619
4. Contingency	$0	$0	$0	$0	$249,462	$249,462
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$3,155,693	$3,155,693

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Edison Avenue From Euclid To Walker **ST -007**

Submitting Departments: Engineering Department

Project Description:

Construct the additional lanes beyond the curb adjacent lane in each direction on Edison Avenue from Euclid Avenue to Walker Avenue (about 9,200 linear feet). The project segment, which may include one or more traffic signals included on ST-024, will be one of the key arterials/collectors servicing the Ontario Ranch area. Project costs include the raised landscape median and all lanes except the curb adjacent lane. The construction of the curb adjacent lane and frontage improvements will be constructed as a condition of approval. Contingency is included at 10% of the estimated construction cost. Project administration, consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the Ontario Ranch development as identified in the Ontario Ranch land use database.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,592,464	$1,592,464
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$9,651,294	$9,651,294
4. Contingency (In Construction Costs	$0	$0	$0	$0	$965,129	$965,129
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$12,208,887	$12,208,887

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Edison Avenue From Walker To Vineyard **ST -008**

Submitting Departments: Engineering Department

Project Description:

Construct the additional lanes beyond the curb adjacent lane in each direction on Edison Avenue from Walker Avenue to Vineyard Avenue (about 2,600 linear feet). The project segment, which may include one or more traffic signals included on ST-024, will be one of the key arterials/collectors servicing the Ontario Ranch area. Project costs include the raised landscape median and all lanes except the curb adjacent lane. The construction of the curb adjacent lane and frontage improvements will be constructed as a condition of approval. Contingency is included at 10% of the estimated construction cost. Project administration, consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the Ontario Ranch development as identified in the Ontario Ranch land use database.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$469,557	$469,557
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$2,845,794	$2,845,794
4. Contingency	$0	$0	$0	$0	$284,578	$284,578
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$3,599,929	$3,599,929

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Edison Avenue From Vineyard To Mill Creek **ST -009**

Submitting Departments: Engineering Department

Project Description:

Construct the additional lanes beyond the curb adjacent lane in each direction on Edison Avenue from Vineyard Avenue to Mill Creek Avenue (about 13,200 linear feet). The project segment, which may include one or more traffic signals included on ST-024, will be one of the key arterials/collectors servicing the Ontario Ranch area. Project costs include the raised landscape median and all lanes except the curb adjacent lane. The construction of the curb adjacent lane and frontage improvements will be constructed as a condition of approval. Contingency is included at 10% of the estimated construction cost. Project administration, consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the Ontario Ranch development as identified in the Ontario Ranch land use database.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,054,483	$1,054,483
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$6,390,806	$6,390,806
4. Contingency	$0	$0	$0	$0	$639,081	$639,081
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$8,084,370	$8,084,370

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Edison Avenue From Mill Creek To Milliken **ST -010**

Submitting Departments: Engineering Department

Project Description:

Construct the additional lanes beyond the curb adjacent lane in each direction on Edison Avenue from Mill Creek Avenue to Milliken Avenue (about 2,600 linear feet). The project segment, which may include one or more traffic signals included on ST-024, will be one of the key arterials/collectors servicing the Ontario Ranch area. Project costs include the raised landscape median and all lanes except the curb adjacent lane. The construction of the curb adjacent lane and frontage improvements will be constructed as a condition of approval. Contingency is included at 10% of the estimated construction cost. Project administration, consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the Ontario Ranch development as identified in the Ontario Ranch land use database.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$113,967	$113,967
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$690,704	$690,704
4. Contingency	$0	$0	$0	$0	$69,070	$69,070
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$873,741	$873,741

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Eucalyptus Avenue From Euclid To Milliken **ST -011**

Submitting Departments: Engineering Department

Project Description:

Construct the additional lanes beyond the curb adjacent lane in each direction on Eucalyptus Avenue from Euclid Avenue to Milliken Avenue (about 27,700 linear feet). The project segment, which may include one or more traffic signals included on ST-024, will be one of the key arterials/collectors servicing the Ontario Ranch area. Project costs include the raised landscape median and all lanes except the curb adjacent lane. The construction of the curb adjacent lane and frontage improvements will be constructed as a condition of approval. Contingency is included at 10% of the estimated construction cost. Project administration, consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the Ontario Ranch development as identified in the Ontario Ranch land use database.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased by 205.3% based upon a recalculation of the project costs.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$2,347,035	$2,347,035
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$14,224,452	$14,224,452
4. Contingency	$0	$0	$0	$0	$1,422,445	$1,422,445
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$17,993,932	$17,993,932

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Euclid Avenue From Riverside To Merrill **ST -012**

Submitting Departments: Engineering Department

Project Description:

Construct the additional lanes beyond the curb adjacent lane on the east half of Euclid Avenue from Riverside to Merrill (about 13,200 linear feet). The project segment, which may include one or more traffic signals included on ST-024, will be one of the key arterials/collectors servicing the Ontario Ranch area. Project costs include the raised landscape median and all lanes except the curb adjacent lane. The construction of the curb adjacent lane and frontage improvements will be constructed as a condition of approval. Contingency is included at 10% of the estimated construction cost. Project administration, consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the Ontario Ranch development as identified in the Ontario Ranch land use database.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased by 186.6% based upon a recalculation of the project costs.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$2,899,334	$2,899,334
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$17,571,714	$17,571,714
4. Contingency	$0	$0	$0	$0	$1,757,171	$1,757,171
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$22,228,219	$22,228,219

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Grove Avenue From Riverside To Merrill **ST -013**

Submitting Departments: Engineering Department

Project Description:

Construct the additional lanes beyond the curb adjacent lane in each direction on Grove Avenue from Riverside Drive to Merrill Avenue (about 13,200 linear feet). The project segment, which may include one or more traffic signals included on ST-024, will be one of the key arterials/collectors servicing the Ontario Ranch area. Project costs include the raised landscape median and all lanes except the curb adjacent lane. The construction of the curb adjacent lane and frontage improvements will be constructed as a condition of approval. Contingency is included at 10% of the estimated construction cost. Project administration, consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the Ontario Ranch development as identified in the Ontario Ranch land use database.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased by 162.6% based upon a recalculation of the project costs.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,758,889	$1,758,889
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$10,659,932	$10,659,932
4. Contingency	$0	$0	$0	$0	$1,065,992	$1,065,992
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$13,484,813	$13,484,813

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Haven Avenue From Riverside To Bellegrave **ST -014**

Submitting Departments: Engineering Department

Project Description:

Construct the additional lanes beyond the curb adjacent lane in each direction on Haven Avenue from Riverside Drive to Bellegrave Avenue (about 13,200 linear feet). The project segment, which may include one or more traffic signals included on ST-024, will be one of the key arterials/collectors servicing the Ontario Ranch area. Project costs include the raised landscape median and all lanes except the curb adjacent lane. The construction of the curb adjacent lane and frontage improvements will be constructed as a condition of approval. Contingency is included at 10% of the estimated construction cost. Project administration, consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the Ontario Ranch development as identified in the Ontario Ranch land use database.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$746,155	$746,155
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$4,522,152	$4,522,152
4. Contingency	$0	$0	$0	$0	$452,215	$452,215
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$5,720,522	$5,720,522

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Merrill Avenue From Euclid To Archibald **ST -015**

Submitting Departments: Engineering Department

Project Description:

Construct the additional lanes beyond the curb adjacent lane on north side of Merrill Avenue from Euclid Avenue to Carpenter Avenue and in each direction from Carpenter Avenue to Archibald Avenue (about 17,300 linear feet). The project segment, which may include one or more traffic signals included on ST-024, will be one of the key arterials/collectors servicing the Ontario Ranch area. Project costs include the raised landscape median and all lanes except the curb adjacent lane. The construction of the curb adjacent lane and frontage improvements will be constructed as a condition of approval. Contingency is included at 10% of the estimated construction cost. Project Cost will also include utility relocation on a portion of Carpenter Avenue to align with the intersection of Merrill Avenue. Project administration, consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the Ontario Ranch development as identified in the Ontario Ranch land use database.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased by 454.7% based upon a recalculation of the project costs.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$3,411,922	$3,411,922
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$20,678,316	$20,678,316
4. Contingency	$0	$0	$0	$0	$2,067,832	$2,067,832
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$26,158,070	$26,158,070

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Milliken Avenue From Riverside To Edison **ST -016**

Submitting Departments: Engineering Department

Project Description:

Construct the additional lanes beyond the curb adjacent lane on the west half of Milliken Avenue from Riverside Drive to Edison Avenue (about 6,500 linear feet). The project segment, which may include one or more traffic signals included on ST-024, will be one of the key arterials/collectors servicing the Ontario Ranch area. Project costs include the raised landscape median and all lanes except the curb adjacent lane. The construction of the curb adjacent lane and frontage improvements will be constructed as a condition of approval. Contingency is included at 10% of the estimated construction cost. Project administration, consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the Ontario Ranch development as identified in the Ontario Ranch land use database.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$661,975	$661,975
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$4,011,971	$4,011,971
4. Contingency	$0	$0	$0	$0	$401,197	$401,197
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$5,075,143	$5,075,143

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Milliken Avenue From Edison To Bellegrave **ST -017**

Submitting Departments: Engineering Department

Project Description:

Construct the additional lanes beyond the curb adjacent lane on the west half of Milliken Avenue from Edison Avenue to Bellegrave Avenue (about 4,500 linear feet). The project segment, which may include one or more traffic signals included on ST-024, will be one of the key arterials/collectors servicing the Ontario Ranch area. Project costs include the raised landscape median and all lanes except the curb adjacent lane. The construction of the curb adjacent lane and frontage improvements will be constructed as a condition of approval. Contingency is included at 10% of the estimated construction cost. Project administration, consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the Ontario Ranch development as identified in the Ontario Ranch land use database.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$338,625	$338,625
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$2,052,274	$2,052,274
4. Contingency	$0	$0	$0	$0	$205,228	$205,228
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$2,596,127	$2,596,127

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Hellman Avenue From Riverside To Merrill **ST -018**

Submitting Departments: Engineering Department

Project Description:

Construct the additional lanes beyond the curb adjacent lane in each direction on Hellman Avenue from Riverside Drive to Merrill Avenue (about 13,200 linear feet). The project segment, which may include one or more traffic signals included on ST-024, will be one of the key arterials/collectors servicing the Ontario Ranch area. Project costs include the raised landscape median and all lanes except the curb adjacent lane. The construction of the curb adjacent lane and frontage improvements will be constructed as a condition of approval. Contingency is included at 10% of the estimated construction cost. Project administration, consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the Ontario Ranch development as identified in the Ontario Ranch land use database.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$551,144	$551,144
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$3,340,257	$3,340,257
4. Contingency	$0	$0	$0	$0	$334,026	$334,026
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$4,225,427	$4,225,427

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Riverside Drive From Euclid To Milliken **ST -019**

Submitting Departments: Engineering Department

Project Description:

Construct the additional lanes beyond the curb adjacent lane in each direction on Riverside Drive from Euclid Avenue to Milliken Avenue (about 27,800 linear feet). The project segment, which may include one or more traffic signals included on ST-024, will be one of the key arterials/collectors servicing the Ontario Ranch area. Project costs include the raised landscape median and all lanes except the curb adjacent lane. The construction of the curb adjacent lane and frontage improvements will be constructed as a condition of approval. Contingency is included at 10% of the estimated construction cost. Project administration, consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the Ontario Ranch development as identified in the Ontario Ranch land use database.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$642,893	$642,893
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$3,896,322	$3,896,322
4. Contingency	$0	$0	$0	$0	$389,632	$389,632
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$4,928,847	$4,928,847

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Schaefer Avenue From Euclid To Haven **ST -020**

Submitting Departments: Engineering Department

Project Description:

Construct the additional lanes beyond the curb adjacent lane in each direction on Schaefer Avenue from Euclid tto Haven (22,400 linear feet). The project segment, which may include one or more traffic signals included on ST-024, will be one of the key arterials/collectors servicing the Ontario Ranch area. Project costs include the raised landscape median and all lanes except the curb adjacent lane. The construction of the curb adjacent lane and frontage improvements will be constructed as a condition of approval with the exception from Campus Drive to 426' east of Campus Avenue. Contingency is included at 10% of the estimated construction cost. Project administration, consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs. (Amended 09/14, text and cost).

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the Ontario Ranch development as identified in the Ontario Ranch land use database.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$910,627	$910,627
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$5,518,951	$5,518,951
4. Contingency	$0	$0	$0	$0	$551,895	$551,895
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$6,981,473	$6,981,473

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Turner Avenue From Riverside To Schaefer **ST -021**

Submitting Departments: Engineering Department

Project Description:

Construct the additional lanes beyond the curb adjacent lane in each direction on Turner Avenue from Riverside Drive to Schaefer Avenue (about 1,100 linear feet). The project segment, which may include one or more traffic signals included on ST-024, will be one of the key arterials/collectors servicing the Ontario Ranch area. Project costs include the raised landscape median and all lanes except the curb adjacent lane. The construction of the curb adjacent lane and frontage improvements will be constructed as a condition of approval. Contingency is included at 10% of the estimated construction cost. Project administration, consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the Ontario Ranch development as identified in the Ontario Ranch land use database.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$44,228	$44,228
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$268,050	$268,050
4. Contingency	$0	$0	$0	$0	$26,805	$26,805
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$339,083	$339,083

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Vineyard Avenue From Riverside To Merrill **ST -022**

Submitting Departments: Engineering Department

Project Description:

Construct the additional lanes beyond the curb adjacent lane in each direction on Vineyard Avenue from Riverside Drive to Merrill Avenue (about 13,200 linear feet). The project segment, which may include one or more traffic signals included on ST-024, will be one of the key arterials/collectors servicing the Ontario Ranch area. Project costs include the raised landscape median and all lanes except the curb adjacent lane. The construction of the curb adjacent lane and frontage improvements will be constructed as a condition of approval. Contingency is included at 10% of the estimated construction cost. Project administration, consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the Ontario Ranch development as identified in the Ontario Ranch land use database.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased by 124.9% based upon a recalculation of the project costs.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,874,401	$1,874,401
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$11,360,007	$11,360,007
4. Contingency	$0	$0	$0	$0	$1,136,001	$1,136,001
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$14,370,409	$14,370,409

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Walker Avenue From Riverside To Merrill **ST -023**

Submitting Departments: Engineering Department

Project Description:

Construct the additional lanes beyond the curb adjacent lane in each direction on Walker Avenue from Riverside Drive to Merrill Avenue (about 13,200 linear feet). The project segment, which may include one or more traffic signals included on ST-024, will be one of the key arterials/collectors servicing the Ontario Ranch area. Project costs include the raised landscape median and all lanes except the curb adjacent lane. The construction of the curb adjacent lane and frontage improvements will be constructed as a condition of approval. Contingency is included at 10% of the estimated construction cost. Project administration, consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the Ontario Ranch development as identified in the Ontario Ranch land use database.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased by 145.9% based upon a recalculation of the project costs.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$745,063	$745,063
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$4,515,536	$4,515,536
4. Contingency	$0	$0	$0	$0	$451,553	$451,553
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$5,712,152	$5,712,152

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Ontario Ranch Traffic Control System **ST -024**

Submitting Departments: Engineering Department

Project Description:

Construct the Ontario Traffic Signal and Interconnect Control System. The improvements include the 1/2 mile backbone signals (consisting of 46 new signals and sixteen signal modifications, signal interconnect and intelligent transportation system costs) and key 1/4 mile signals (consisting of 56 new signals). Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs. (Amended 09/14, text and costs).

Justification / Consequences of Avoidance:

The project will allow for reliable and redundant communication to traffic signals within the Ontario Ranch area. Failure to implement these improvements will result in significant delays to manage traffic incidents as the City's traffic demands reach build out.

Relationship to General Plan Development:

The project is consistent with the General Plan's Mobility Element in that it supplements the design and maintenance of the City's roadway network within the Ontario Ranch area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

New Model Colony Transportation Program Implimentation Plan, Februrary 2001.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased by 122.7% based upon a recalculation of the project costs.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$4,130,299	$4,130,299
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$25,032,117	$25,032,117
4. Contingency	$0	$0	$0	$0	$2,503,212	$2,503,212
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$31,665,628	$31,665,628

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Non-Dev. ROW, Frontage Imps. & SCE Pole Relocations **ST -025**

Submitting Departments: Engineering Department

Project Description:

The project consists of four components: 1) ROW acquisition/construction of last lane improvements, including curb adjacent lane pavement and frontage improvements for non-developer (SCE, SOCALF, SBCFCD) properties fronting arterial/collector roadways (1.2 million SF at $6/SF), 2) Relocation 405 existing SCE transmission poles (at $53,000/pole) which impact the future construction of the ultimate width collector and arterial roadways, 3) Construction of the last lane improvements, including curb adjacent lane pavement and full frontage improvements of any arterial/collector street contiguous to the Great Park (17,500 LF at $250/LF)and 4), Construction of the full width improvements including curb adjacent lane improvements and full frontage improvements of Grand Park Street along the 1,600 LF of future high school frontage.

Justification / Consequences of Avoidance:

Construction of improvements along non-developer frontage is required to provide uniform street cross-section and continuous path of travel for pedestrian, bicycle and vehicle traffic to ensure that an acceptable level of services is maintained.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the Ontario Ranch development as identified in the Ontario Ranch land use database.

Allocation To General Plan Buildout: 100.00%

Reference Document:

2012 Street Development Impact Fee (DIF) Program Memo, May 8, 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$5,962,892	$5,962,892
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$9,711,000	$9,711,000
3. Construction	$0	$0	$0	$0	$36,138,740	$36,138,740
4. Contingency	$0	$0	$0	$0	$3,613,874	$3,613,874
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$55,426,506	$55,426,506

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Additional SCE Pole Relocation **ST -026**

Submitting Departments: Engineering Department

Project Description:

The project consist of the relocation of Southern California Edison transmission poles at the northeast corner of Archibald Avenue and Ontario Ranch Road. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs

Justification / Consequences of Avoidance:

Construction of improvements along non-developer frontage is required to provide a uniform street cross section and continuous path of travel for pedestrians, bicycle and vehicle traffic, to ensure that an acceptable level of service (LOS) is maintained.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from Ontario Ranch development as identified in the Ontario Ranch land-use database.

Allocation To General Plan Buildout: 100.00%

Reference Document:

2012 Street Development Impact Fee (DIF) Program Memo, May 8, 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$93,451	$93,451
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$566,368	$566,368
4. Contingency	$0	$0	$0	$0	$56,637	$56,637
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$716,456	$716,456

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Project No Longer Needed **ST -027**

Submitting Departments: Engineering Department

Project Description:
Project no longer needed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Project no longer needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
Project no longer needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Project No Longer Needed **ST -028**

Submitting Departments: Engineering Department

Project Description:
Project no longer needed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Project no longer needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
Project no longer needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: OR Offsite Cantu Galleano Widening, I-15 To Milliken **ST -029**

Submitting Departments: Engineering Department

Project Description:

The project consists of financial contribution towards the cost of constructing I-15 and Cantu Galleano street widening in Riverside County. The project is limited to a calculated financial contribution and results in no overhead or contingency being added to the total cost.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the Ontario Ranch development as identified in the Ontario Ranch land use database.

Allocation To General Plan Buildout: 100.00%

Reference Document:

New Model Colony Transportation Program Implimentation Plan, Februrary 2001.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$2,528,234	$2,528,234
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$2,528,234	$2,528,234

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: OR Offsite Euclid Avenue Improvements, Merrill To US-71 **ST -030**

Submitting Departments: Engineering Department

Project Description:

The project consists of financial contribution towards the construction cost of the expansion of Euclid Avenue (SR-83) from Merrill Avenue to SR-71. Approximately 24% of the additional traffic will be generated by new development within the Ontario Ranch area as identified in the NMC Transportation Program Implementation Plan, February 2001. The project is limited to a calculated financial contribution and results in no overhead or contingency being added to the total cost.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the Ontario Ranch development as identified in the Ontario Ranch land use database.

Allocation To General Plan Buildout: 100.00%

Reference Document:

New Model Colony Transportation Program Implimentation Plan, Februrary 2001.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$7,000,228	$7,000,228
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$7,000,228	$7,000,228

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: OR Offsite Archibald Avenue Bridge Over The Santa Ana River **ST -031**

Submitting Departments: Engineering Department

Project Description:

The project consists of financial contribution towards the cost of the Archibald Avenue Bridge over the Santa Ana River. The estimate represents 5.4% of the total construction cost as identified in the NMC Transportation Program Implementation Plan, February 2001. The project is limited to a calculated financial contribution and results in no overhead or contingency being added to the total cost.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the Ontario Ranch development as identified in the Ontario Ranch land use database.

Allocation To General Plan Buildout: 100.00%

Reference Document:

New Model Colony Transportation Program Implimentation Plan, Februrary 2001.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$286,540	$286,540
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$286,540	$286,540

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: OR Offsite Hamner Avenue Bridge Over The Santa Ana River **ST -032**

Submitting Departments: Engineering Department

Project Description:

The project consists of financial contribution towards the construction cost of the Hamner Avenue Bridge over the Santa Ana River. The project is not within city control. The estimate represents 12.5% of the total construction cost as identified in the NMC Transportation Program Implementation Plan, February 2001. The project is limited to a calculated financial contribution and results in no overhead or contingency being added to the total cost.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the Ontario Ranch development as identified in the Ontario Ranch land use database.

Allocation To General Plan Buildout: 100.00%

Reference Document:

New Model Colony Transportation Program Implimentation Plan, Februrary 2001.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$662,849	$662,849
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$662,849	$662,849

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: General City Street Lights **ST -033**

Submitting Departments: Engineering Department

Project Description:

The project consists of the construction of approximately 600 street lights in various locations in the General City lacking adequate street lighting at roughly $6,200 per light pole to complete the system of 11,500 existing street lights. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario has identified these improvements as necessary to illuminate remaining sections of streets. Failure to implement these improvements would result in unsatisfactory illumination levels in areas of new development. The city conforms to guidelines recommended by the Illuminating Engineering Society (IES).

Relationship to General Plan Development:

The General Plan's Roadway System Section requires roadways to comply with industry standard design and safety practices.

Allocation To General Plan Buildout: 100.00%

Reference Document:

2012 Street Development Impact Fee (DIF) Program Memo, May 8, 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$485,453	$485,453
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$2,942,144	$2,942,144
4. Contingency	$0	$0	$0	$0	$294,214	$294,214
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$3,721,811	$3,721,811

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: General City Traffic Signals **ST -034**

Submitting Departments: Engineering Department

Project Description:

Construct twenty-four (24) new and modify seven (7) existing traffic signals, including emergency vehicle pre-emption and battery backup system modifications within the General City. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs

Justification / Consequences of Avoidance:

The project will allow for reliable and redundant communication to traffic signals within the General City. Failure to implement these improvements will result in significant delays to manage traffic incidents as the City's traffic demands reach build out

Relationship to General Plan Development:

The project is consistent with the General Plan's Mobility Element in that it supplements the design and maintenance of the city's roadway network.

Allocation To General Plan Buildout: 100.00%

Reference Document:

2012 Street Development Impact Fee (DIF) Program Memo, May 8, 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$2,334,532	$2,334,532
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$14,148,681	$14,148,681
4. Contingency	$0	$0	$0	$0	$1,414,868	$1,414,868
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$17,898,081	$17,898,081

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Benson Avenue From Mission To Philadelphia **ST -035**

Submitting Departments: Engineering Department

Project Description:

Widen the east side of Benson Avenue to reflect current Master Plan of Streets and Highways from Mission Boulevard to Philadelphia Avenue (about 3,400 linear feet). Project cost includes reconstruction and relocation of existing curb & gutter, landscape parkway, sidewalk, streetlights and transmission poles to their ultimate location. Right of way acquisition is included at 20% of the estimated construction cost. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction, ROW and contingency costs. (Amended 09/14, Measure I percent change).

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the General City development as identified in the General City area land use database.

Allocation To General Plan Buildout: 44.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$111,366	$111,366
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$115,854	$115,854
3. Construction	$0	$0	$0	$0	$674,944	$674,944
4. Contingency	$0	$0	$0	$0	$67,494	$67,494
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$969,658	$969,658

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Mountain Avenue From Sixth To Holt **ST -036**

Submitting Departments: Engineering Department

Project Description:

Widen Mountain Avenue to reflect current Master Plan of Streets and Highways from Sixth Street to Holt Boulevard (about 7,800 linear feet). Project cost includes reconstruction and relocation of existing curb & gutter, parkway, sidewalk, streetlights, raised landscaped median and modification of traffic signals to their ultimate location. Right of way acquisition is included at 20% of the estimated construction cost. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction, ROW and contingency costs. (Amended 09/14, cost and percent change).

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the General City development as identified in the General City area land use database.

Allocation To General Plan Buildout: 44.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$254,895	$254,895
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$883,753	$883,753
3. Construction	$0	$0	$0	$0	$1,544,813	$1,544,813
4. Contingency	$0	$0	$0	$0	$154,481	$154,481
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$2,837,942	$2,837,942

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Project Completed Or No Longer Needed **ST -037**

Submitting Departments: Engineering Department

Project Description:
Project completed or no longer needed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Project no longer needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Master Plan of Streets and Highways (September, 2011).

Project Timing:
Project no longer needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Bon View Avanue From Holt To Mission **ST -038**

Submitting Departments: Engineering Department

Project Description:

Widen Bon View Avenue to reflect current Master Plan of Streets and Highways from Holt Boulevard to Mission Boulevard (about 3,000 linear feet). Project cost includes reconstruction and relocation of existing curb & gutter, landscape parkway, sidewalk, streetlights, modification of traffic signals and transmission poles to their ultimate location. Right of way acquisition is included at 20% of the estimated construction cost. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction, ROW and contingency costs. (Amended 09/14, text change only).

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the General City development as identified in the General City area land use database.

Allocation To General Plan Buildout: 44.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$145,334	$145,334
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$151,190	$151,190
3. Construction	$0	$0	$0	$0	$880,803	$880,803
4. Contingency	$0	$0	$0	$0	$88,079	$88,079
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$1,265,406	$1,265,406

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Bon View Avenue From Mission To Belmont **ST -039**

Submitting Departments: Engineering Department

Project Description:

Widen Bon view Avenue to reflect current Master Plan of Streets and Highways from Mission Boulevard to Belmont Street (about 900 linear feet). Project cost includes reconstruction and relocation of existing curb & gutter, landscape parkway, sidewalk, streetlights and modification of traffic signals to their ultimate location. Right of way acquisition is included at 20% of the estimated construction cost. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction, ROW and contingency costs. (Amended 09/14, Measure I percent change).

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the General City development as identified in the General City area land use database.

Allocation To General Plan Buildout: 44.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$81,728	$81,728
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$85,023	$85,023
3. Construction	$0	$0	$0	$0	$495,323	$495,323
4. Contingency	$0	$0	$0	$0	$49,532	$49,532
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$711,606	$711,606

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Project No Longer Needed **ST -040**

Submitting Departments: Engineering Department

Project Description:
Project deleted. Project title had been "Cucamonga Avenue from Mission to Belmont".

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Project no longer needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
None.

Project Timing:
Project no longer needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Project No Longer Needed **ST -041**

Submitting Departments: Engineering Department

Project Description:
Project deleted.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Project no longer needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
None.

Project Timing:
Project no longer needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Grove Avenue From I-10 Freeway To Holt **ST -042**

Submitting Departments: Engineering Department

Project Description:

Widen Grove Avenue to reflect current Master Plan of Streets and Highways from I-10 Freeway to Holt Boulevard (about 3,400 linear feet). Project cost includes reconstruction and relocation of existing curb & gutter, landscape parkway, sidewalk, streetlights and raised landscape median to their ultimate location. The estimated cost is based on the 2010 Grove/I-10 PSR. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the General City development as identified in the General City area land use database.

Allocation To General Plan Buildout: 44.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$3,594,941	$3,594,941
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$13,326,000	$13,326,000
3. Construction	$0	$0	$0	$0	$21,787,519	$21,787,519
4. Contingency	$0	$0	$0	$0	$2,178,752	$2,178,752
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$40,887,212	$40,887,212

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Turner Avenue From Inland Empire Boulevard To Fourth **ST -043**

Submitting Departments: Engineering Department

Project Description:

Widen Turner Avenue to reflect current Master Plan of Streets and Highways from Inland Empire Boulevard to Fourth Street (about 2,200 linear feet). Project cost includes construction of curb & gutter, landscape parkway, sidewalk, streetlights and modification of traffic signals to their ultimate location. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs. (Amended 09/14, Measure I percent change).

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the General City development as identified in the General City area land use database.

Allocation To General Plan Buildout: 44.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$104,277	$104,277
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$631,973	$631,973
4. Contingency	$0	$0	$0	$0	$63,197	$63,197
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$799,447	$799,447

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Archibald Avenue From Fourth To Guasti Park Entrance **ST -044**

Submitting Departments: Engineering Department

Project Description:

Widen Archibald Avenue to reflect current Master Plan of Streets and Highways from Fourth Street to Guasti Park entrance (about 1,900 linear feet). Project cost includes reconstruction and relocation of existing curb & gutter, landscape parkway, sidewalk, streetlights, raised landscape median and modification of traffic signals to their ultimate location. Right of way acquisition is included at 20% of the estimated construction cost. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction, ROW and contingency costs. (Amended 09/14, Measure I percent change).

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the General City development as identified in the General City area land use database.

Allocation To General Plan Buildout: 44.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$244,551	$244,551
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$276,027	$276,027
3. Construction	$0	$0	$0	$0	$1,482,126	$1,482,126
4. Contingency	$0	$0	$0	$0	$148,213	$148,213
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$2,150,917	$2,150,917

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Milliken Avenue From SR-60 To Riverside **ST -045**

Submitting Departments: Engineering Department

Project Description:

Widen the west side of Milliken Avenue to reflect current Master Plan of Streets and Highways from SR-60 to Riverside Drive (about 1,700 linear feet). Project cost includes the median and all lanes except the curb adjacent lane. The construction of the curb adjacent lane and frontage improvements are the responsibility of the developer. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs. (Amended 09/14, Measure I percent change).

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the General City development as identified in the General City area land use database.

Allocation To General Plan Buildout: 44.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$55,628	$55,628
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$337,140	$337,140
4. Contingency	$0	$0	$0	$0	$33,714	$33,714
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$426,482	$426,482

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Project Is No Longer Needed **ST -046**

Submitting Departments: Engineering Department

Project Description:
The project is completed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Project is completed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
S:\engineering\LAND DEVELOPMENT\DIF\2011 DIF Update\Bridges\Bridge DIF 11NOV09.

Project Timing:
Project is completed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Etiwanda Avenue At Airport Drive **ST -047**

Submitting Departments: Engineering Department

Project Description:

Widen the west side of Etiwanda Avenue at Airport Drive to reflect current Master Plan of Streets and Highways. Project cost includes reconstruction and relocation of existing curb & gutter, landscape parkway, sidewalk, streetlights and modification of traffic signals to their ultimate location. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs. (Amended 09/14, Measure I percent change).

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the General City development as identified in the General City area land use database.

Allocation To General Plan Buildout: 17.73%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,202,967	$1,202,967
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$200,000	$200,000
3. Construction	$0	$0	$0	$0	$7,290,712	$7,290,712
4. Contingency	$0	$0	$0	$0	$729,072	$729,072
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$9,422,751	$9,422,751

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Eighth Street From West Cucamonga Creek To Grove **ST -048**

Submitting Departments: Engineering Department

Project Description:

Widen Eighth Street to reflect current Master Plan of Streets and Highways from West Cucamonga Creek to Grove Avenue (about 1,400 linear feet). Project cost includes construction of curb & gutter, landscape parkway, sidewalk, streetlights and modification of traffic signals to their ultimate location. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs. (Amended 09/14, Measure I percent change).

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the General City development as identified in the General City area land use database.

Allocation To General Plan Buildout: 44.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$22,749	$22,749
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$137,870	$137,870
4. Contingency	$0	$0	$0	$0	$13,787	$13,787
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$174,406	$174,406

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Project No Longer Needed **ST -049**

Submitting Departments: Engineering Department

Project Description:
The project has been completed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
The project is completed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
The project is completed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Fourth Street From Palmetto To San Antonio **ST -050**

Submitting Departments: Engineering Department

Project Description:

Widen Fourth Street to reflect current Master Plan of Streets and Highways from Palmetto Avenue to San Antonio Avenue (about 2,100 linear feet). Project cost includes reconstruction and relocation of existing curb & gutter, landscape parkway, sidewalk and streetlights to their ultimate location. Right of way acquisition is included at 20% of the estimated construction cost. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction, ROW and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the General City development as identified in the General City area land use database.

Allocation To General Plan Buildout: 44.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$151,774	$151,774
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$157,891	$157,891
3. Construction	$0	$0	$0	$0	$919,842	$919,842
4. Contingency	$0	$0	$0	$0	$91,984	$91,984
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$1,321,491	$1,321,491

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Fourth Street From Campus To Cucamonga **ST -051**

Submitting Departments: Engineering Department

Project Description:

Widen Fourth Street to reflect current Master Plan of Streets and Highways from Campus Avenue to Cucamonga Avenue (about 2,500 linear feet). Project cost includes reconstruction and relocation of existing curb & gutter, landscape parkway, sidewalk and streetlights to their ultimate location. Right of way acquisition is included at 20% of the estimated construction cost. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction, ROW and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to maintain existing traffic flow along this segment and provide additional capacity for anticipated additional GC traffic demands.

Allocation To General Plan Buildout: 44.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$125,826	$125,826
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$130,897	$130,897
3. Construction	$0	$0	$0	$0	$762,575	$762,575
4. Contingency	$0	$0	$0	$0	$76,257	$76,257
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$1,095,555	$1,095,555

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Fourth Street From Vineyard To Archibald **ST -052**

Submitting Departments: Engineering Department

Project Description:

Widen Fourth Street to reflect current Master Plan of Streets and Highways from Vineyard Avenue to Archibald Avenue (about 5,300 linear feet). Project cost includes construction of curb & gutter, landscape parkway, sidewalk, streetlights, raised landscape median and traffic signal modification to their ultimate location. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the General City development as identified in the General City area land use database.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$92,181	$92,181
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$558,670	$558,670
4. Contingency	$0	$0	$0	$0	$55,867	$55,867
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$706,718	$706,718

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Holt Boulevard From Benson To Vineyard **ST -053**

Submitting Departments: Engineering Department

Project Description:

Widen Holt Boulevard to reflect current Master Plan of Streets and Highways from Benson Avenue to Vineyard Avenue (about 23,100 linear feet). Project cost includes reconstruction and relocation of existing curb & gutter, landscape parkway, sidewalk, streetlights, raised landscape median and modification of traffic signals to their ultimate location. Right of way acquisition is included at 20% of the estimated construction cost. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction, ROW and contingency costs. (Amended 09/14, cost change).

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the General City development as identified in the General City area land use database.

Allocation To General Plan Buildout: 44.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$3,189,680	$3,189,680
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$30,464,400	$30,464,400
3. Construction	$0	$0	$0	$0	$19,331,388	$19,331,388
4. Contingency	$0	$0	$0	$0	$1,933,138	$1,933,138
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$54,918,606	$54,918,606

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Guasti Road From Holt To Archibald **ST -054**

Submitting Departments: Engineering Department

Project Description:

Widen Guasti Road to reflect current Master Plan of Streets and Highways from Holt Boulevard to Archibald Avenue (about 3,700 linear feet). Project cost includes construction of curb & gutter, landscape parkway, sidewalk, streetlights and modification of traffic signals to their ultimate location. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs. (Amended 09/14, Measure I percent change).

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the General City development as identified in the General City area land use database.

Allocation To General Plan Buildout: 44.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$136,063	$136,063
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$824,622	$824,622
4. Contingency	$0	$0	$0	$0	$82,462	$82,462
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$1,043,147	$1,043,147

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: State Street From Benson To Grove **ST -055**

Submitting Departments: Engineering Department

Project Description:

Widen State Street to reflect current Master Plan of Streets and Highways from Benson Avenue to Grove Avenue (about 15,800 linear feet). Project cost includes reconstruction and relocation of existing curb & gutter, landscape parkway, sidewalk, streetlights and modification of traffic signals to their ultimate location. Right of way acquisition is included at 20% of the estimated construction cost. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction, ROW and contingency costs. (Amended 09/14, cost and percent change).

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the General City development as identified in the General City area land use database.

Allocation To General Plan Buildout: 44.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$576,313	$576,313
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$756,143	$756,143
3. Construction	$0	$0	$0	$0	$3,492,808	$3,492,808
4. Contingency	$0	$0	$0	$0	$349,281	$349,281
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$5,174,545	$5,174,545

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Airport Drive Under The I-15 Freeway **ST -056**

Submitting Departments: Engineering Department

Project Description:

Widen Airport Drive under I-15 Freeway (about 600 linear feet) to reflect current Master Plan of Streets and Highways. Project cost includes widening and retaining wall project. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the General City development as identified in the General City area land use database.

Allocation To General Plan Buildout: 44.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$422,856	$422,856
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$2,562,765	$2,562,765
4. Contingency	$0	$0	$0	$0	$256,277	$256,277
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$3,241,898	$3,241,898

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Project No Longer Needed **ST -057**

Submitting Departments: Engineering Department

Project Description:
The project has been removed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Project no longer needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
Project no longer needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Mission Boulevard From Cypress To Grove **ST -058**

Submitting Departments: Engineering Department

Project Description:

Widen Mission Boulevard to reflect current Master Plan of Streets and Highways from Cypress Avenue to Grove Avenue (about 10,500 linear feet). Project cost includes construction of curb & gutter, streetlights and modification of traffic signals to their ultimate location. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the General City development as identified in the General City area land use database.

Allocation To General Plan Buildout: 44.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$773,054	$773,054
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$4,685,178	$4,685,178
4. Contingency	$0	$0	$0	$0	$468,518	$468,518
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$5,926,750	$5,926,750

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Mission Boulevard From Grove To Milliken **ST -059**

Submitting Departments: Engineering Department

Project Description:

Widen Mission Boulevard to reflect current Master Plan of Streets and Highways from Grove Avenue to Milliken Avenue (about 22,800 linear feet). Project cost includes construction of streetlights, raised landscape median and modification of traffic signals to their ultimate location. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the General City development as identified in the General City area land use database.

Allocation To General Plan Buildout: 44.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,523,953	$1,523,953
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$9,236,089	$9,236,089
4. Contingency	$0	$0	$0	$0	$923,610	$923,610
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$11,683,652	$11,683,652

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Phillips Street From Benson To Mountain **ST -060**

Submitting Departments: Engineering Department

Project Description:

Widen Phillips Street to reflect current Master Plan of Streets and Highways from Benson Avenue to Mountain Avenue (about 500 linear feet). Project cost includes construction of curb & gutter, landscape parkway, sidewalk, streetlights and modification of traffic signals to ultimate location. Right of way acquisition is included at 20% of the estimated construction cost. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction, ROW and contingency costs. (Amended 09/14, Measure I percent change).

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the General City development as identified in the General City area land use database.

Allocation To General Plan Buildout: 44.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$68,727	$68,727
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$73,435	$73,435
3. Construction	$0	$0	$0	$0	$416,537	$416,537
4. Contingency	$0	$0	$0	$0	$41,654	$41,654
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$600,353	$600,353

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Project No Longer Needed **ST -061**

Submitting Departments: Engineering Department

Project Description:
The project has been completed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
The project is completed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
The project is completed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Acacia Street From Baker To Vineyard **ST -062**

Submitting Departments: Engineering Department

Project Description:

Widen Acacia Street to reflect current Master Plan of Streets and Highways from Baker Avenue to Vineyard Avenue. Project cost includes construction of missing curb & gutter, landscape parkway, sidewalk and streetlights to their ultimate location. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs. (Amended 09/14, Measure I percent change).

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the General City development as identified in the General City area land use database.

Allocation To General Plan Buildout: 44.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$10,226	$10,226
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$61,979	$61,979
4. Contingency	$0	$0	$0	$0	$6,197	$6,197
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$78,402	$78,402

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Francis Street From Benson To Campus **ST -063**

Submitting Departments: Engineering Department

Project Description:

Widen Francis Street to reflect current Master Plan of Streets and Highways from Benson Avenue to Campus Avenue (about 8,100 linear feet). Project cost includes reconstruction and relocation of existing curb & gutter, landscape parkway, sidewalk, streetlights and modification of traffic signals to their ultimate location. Right of way acquisition is included at 20% of the estimated construction cost. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction, ROW and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the General City development as identified in the General City area land use database.

Allocation To General Plan Buildout: 44.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$576,614	$576,614
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$431,485	$431,485
3. Construction	$0	$0	$0	$0	$3,494,623	$3,494,623
4. Contingency	$0	$0	$0	$0	$349,462	$349,462
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$4,852,184	$4,852,184

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Jurupa Street From Archibald To East Of Turner **ST -064**

Submitting Departments: Engineering Department

Project Description:

Widen Jurupa Street to reflect current Master Plan of Streets and Highways from Archibald Avenue to east of Turner Avenue (about 3,000 linear feet). Project cost includes construction of curb & gutter, sidewalk, streetlights and modification of traffic signals to their ultimate location. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the General City development as identified in the General City area land use database.

Allocation To General Plan Buildout: 44.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$107,264	$107,264
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$650,079	$650,079
4. Contingency	$0	$0	$0	$0	$65,007	$65,007
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$822,350	$822,350

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Philadelphia Street From Campus To Grove **ST -065**

Submitting Departments: Engineering Department

Project Description:

Widen Philadelphia Street to reflect current Master Plan of Streets and Highways from Campus Avenue to Grove Avenue (about 1,500 linear feet). Project cost includes reconstruction and relocation of existing curb & gutter, landscape parkway, sidewalk and streetlights to their ultimate location. Right of way acquisition is included at 20% of the estimated construction cost. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction, ROW and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the General City development as identified in the General City area land use database.

Allocation To General Plan Buildout: 44.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index. All costs are at nominal, or current dollar value.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$105,044	$105,044
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$109,279	$109,279
3. Construction	$0	$0	$0	$0	$636,636	$636,636
4. Contingency	$0	$0	$0	$0	$63,664	$63,664
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$914,623	$914,623

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Philadelphia From E/O Vineyard To Cucamonga Creek **ST -066**

Submitting Departments: Engineering Department

Project Description:

Widen Philadelphia Street to reflect current Master Plan of Streets and Highways from East of Vineyard Avenue to Cucamonga Creek (about 2,200 linear feet). Project cost includes construction of curb & gutter, landscape parkway, sidewalk and streetlights to their ultimate location. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the General City development as identified in the General City area land use database.

Allocation To General Plan Buildout: 44.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$73,654	$73,654
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$446,389	$446,389
4. Contingency	$0	$0	$0	$0	$44,639	$44,639
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$564,682	$564,682

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Project No Longer Needed **ST -067**

Submitting Departments: Engineering Department

Project Description:
The project has been completed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
The project is completed

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
The project is completed

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Project No Longer Needed **ST -068**

Submitting Departments: Engineering Department

Project Description:
The project has been completed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
The project is completed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
The project is completed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Grove Avenue Bridge Over West Cucamonga Creek **ST -069**

Submitting Departments: Engineering Department

Project Description:

Widen the Grove Avenue Bridge over the West Cucamonga Creek. Contingency is included at 25% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the General City development as identified in the General City area land use database.

Allocation To General Plan Buildout: 44.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$132,427	$132,427
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$706,275	$706,275
4. Contingency	$0	$0	$0	$0	$176,569	$176,569
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$1,015,271	$1,015,271

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Project No Longer Needed **ST -070**

Submitting Departments: Engineering Department

Project Description:
The project has been completed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
The project is completed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
The project is completed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Holt Boulevard Bridge Over West Cucamonga Creek **ST -071**

Submitting Departments: Engineering Department

Project Description:

Widen the Holt Boulevard Bridge over the West Cucamonga Creek. Contingency is included at 25% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The Project is required to maintain existing traffic flow along this segment and provide additional capacity for anticipated additional traffic demands

Allocation To General Plan Buildout: 44.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$35,176	$35,176
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$187,604	$187,604
4. Contingency	$0	$0	$0	$0	$46,901	$46,901
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$269,681	$269,681

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Mission Boulevard Bridge Over West Cucamonga Creek **ST -072**

Submitting Departments: Engineering Department

Project Description:

Widen the Mission Boulevard Bridge over the West Cucamonga Creek. Contingency is included at 25% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The Project is required to maintain existing traffic flow along this segment and provide additional capacity for anticipated additional traffic demands.

Allocation To General Plan Buildout: 44.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$98,492	$98,492
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$525,292	$525,292
4. Contingency	$0	$0	$0	$0	$131,323	$131,323
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$755,107	$755,107

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Project No Longer Needed **ST -073**

Submitting Departments: Engineering Department

Project Description:
The project has been completed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
The project is completed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
The project is completed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Francis Street Bridge Over West Cucamonga Creek **ST -074**

Submitting Departments: Engineering Department

Project Description:

Widen the Francis Street Bridge over the West Cucamonga Creek. Contingency is included at 25% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The Project is required to maintain existing traffic flow along this segment and provide additional capacity for anticipated additional traffic demands.

Allocation To General Plan Buildout: 44.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$31,658	$31,658
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$168,843	$168,843
4. Contingency	$0	$0	$0	$0	$42,211	$42,211
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$242,712	$242,712

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Eighth Street Bridge Over Cucamonga Creek **ST -075**

Submitting Departments: Engineering Department

Project Description:

Widen the south side of the Eighth Street Bridge over the Cucamonga Creek. Contingency is included at 25% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F

Relationship to General Plan Development:

The Project is required to maintain existing traffic flow along this segment and provide additional capacity for anticipated additional traffic demands.

Allocation To General Plan Buildout: 44.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$270,853	$270,853
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$1,444,554	$1,444,554
4. Contingency	$0	$0	$0	$0	$361,139	$361,139
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$2,076,546	$2,076,546

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Sixth Street Bridge Over Cucamonga Creek **ST -076**

Submitting Departments: Engineering Department

Project Description:

Widen the Sixth Street Bridge over the Cucamonga Creek. Contingency is included at 25% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The Project is required to maintain existing traffic flow along this segment and provide additional capacity for anticipated additional traffic demands

Allocation To General Plan Buildout: 44.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$216,227	$216,227
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$1,153,215	$1,153,215
4. Contingency	$0	$0	$0	$0	$288,304	$288,304
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$1,657,746	$1,657,746

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Fourth Street Bridge Over Cucamonga Creek **ST -077**

Submitting Departments: Engineering Department

Project Description:

Widen the south side of the Fourth Street Bridge over the Cucamonga Creek. Contingency is included at 25% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The Project is required to maintain existing traffic flow along this segment and provide additional capacity for anticipated additional traffic demands.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$111,218	$111,218
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$593,161	$593,161
4. Contingency	$0	$0	$0	$0	$148,290	$148,290
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$852,669	$852,669

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Project No Longer Needed **ST -078**

Submitting Departments: Engineering Department

Project Description:
The project has been completed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Project is completed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
Project is completed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Holt Boulevard Bridge Over Cucamonga Creek **ST -079**

Submitting Departments: Engineering Department

Project Description:

Widen the North and South Holt Boulevard Bridges over the Cucamonga Creek. Contingency is included at 25% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The Project is required to maintain existing traffic flow along this segment and provide additional capacity for anticipated additional traffic demands.

Allocation To General Plan Buildout: 44.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$393,141	$393,141
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$2,096,754	$2,096,754
4. Contingency	$0	$0	$0	$0	$524,189	$524,189
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$3,014,084	$3,014,084

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Project No Longer Needed **ST -080**

Submitting Departments: Engineering Department

Project Description:
The project has been completed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
The project is completed

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
The project is completed

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Mission Boulevard Bridge Over Cucmonga Creek **ST -081**

Submitting Departments: Engineering Department

Project Description:

Widen the North and South Mission Boulevard Bridges over the Cucamonga Creek. Contingency is included at 25% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The Project is required to maintain existing traffic flow along this segment and provide additional capacity for anticipated additional traffic demands.

Allocation To General Plan Buildout: 44.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$288,442	$288,442
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$1,538,356	$1,538,356
4. Contingency	$0	$0	$0	$0	$384,589	$384,589
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$2,211,387	$2,211,387

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Francis Street Bridge Over Cucamonga Creek **ST -082**

Submitting Departments: Engineering Department

Project Description:

Widen the Francis Street Bridge over the Cucamonga Creek. Contingency is included at 25% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The Project is required to maintain existing traffic flow along this segment and provide additional capacity for anticipated additional traffic demands.

Allocation To General Plan Buildout: 44.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$263,819	$263,819
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$1,407,032	$1,407,032
4. Contingency	$0	$0	$0	$0	$351,758	$351,758
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$2,022,609	$2,022,609

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Philadelphia Street Bridge Over Cucamonga Creek **ST -083**

Submitting Departments: Engineering Department

Project Description:

Widen the Philadelphia Street Bridge over the Cucamonga Creek. Contingency is included at 25% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The Project is required to maintain existing traffic flow along this segment and provide additional capacity for anticipated additional traffic demands.

Allocation To General Plan Buildout: 44.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$31,379	$31,379
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$167,358	$167,358
4. Contingency	$0	$0	$0	$0	$41,840	$41,840
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$240,577	$240,577

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Riverside Drive Bridge Over Cucamonga Creek **ST -084**

Submitting Departments: Engineering Department

Project Description:

Widen the north side of the Riverside Drive Bridge over the Cucamonga Creek. Contingency is included at 25% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The Project is required to maintain existing traffic flow along this segment and provide additional capacity for anticipated additional traffic demands.

Allocation To General Plan Buildout: 44.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$153,917	$153,917
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$820,890	$820,890
4. Contingency	$0	$0	$0	$0	$205,223	$205,223
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$1,180,030	$1,180,030

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Archibald Avenue Bridge Over Upper Deer Creek **ST -085**

Submitting Departments: Engineering Department

Project Description:

Widen the Archibald Avenue Bridge over the Upper Deer Creek. Contingency is included at 25% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The Project is required to maintain existing traffic flow along this segment and provide additional capacity for anticipated additional traffic demands.

Allocation To General Plan Buildout: 44.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$176,914	$176,914
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$943,539	$943,539
4. Contingency	$0	$0	$0	$0	$235,885	$235,885
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$1,356,338	$1,356,338

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Archibald Avenue Bridge Over Upper Deer Creek Spillway **ST -086**

Submitting Departments: Engineering Department

Project Description:

Widen the Archibald Avenue Bridge over the Upper Deer Creek Spillway. Contingency is included at 25% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The Project is required to maintain existing traffic flow along this segment and provide additional capacity for anticipated additional traffic demands.

Allocation To General Plan Buildout: 44.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$247,679	$247,679
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$1,320,956	$1,320,956
4. Contingency	$0	$0	$0	$0	$330,239	$330,239
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$1,898,874	$1,898,874

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Project Completed Or No Longer Needed **ST -087**

Submitting Departments: Engineering Department

Project Description:
Project has been completed or is no longer needed

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Project is completed or no longer necessary.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Master Plan of Streets and Highways (September, 2011).

Project Timing:
Project is completed or no longer necessary.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Project Completed Or No Longer Needed **ST -088**

Submitting Departments: Engineering Department

Project Description:
The project, previously referred to as "Walnut Street Bridge over lower Deer Creek Reconstruction" is no longer needed and has been removed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
The project is no longer needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
The project is no longer needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Archibald Avenue Bridge Over Lower Deer Creek **ST -089**

Submitting Departments: Engineering Department

Project Description:

Widen the Archibald Avenue Bridge over the Lower Deer Creek. Contingency is included at 25% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The Project is required to maintain existing traffic flow along this segment and provide additional capacity for anticipated additional traffic demands.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$52,350	$52,350
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$279,199	$279,199
4. Contingency	$0	$0	$0	$0	$69,800	$69,800
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$401,349	$401,349

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Project No Longer Needed **ST -090**

Submitting Departments: Engineering Department

Project Description:
The project has been completed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
The project is completed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
The project is completed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Grove Avenue Grade Separation Under UPRR/Alhambra Line **ST -091**

Submitting Departments: Engineering Department

Project Description:

Widen the north Grove Avenue grade separation under the Union Pacific Railroad Alhambra Line. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The General Plan identifies this segment of Grove Avenue as six lanes. This project will widen the existing roadway underpass from four to six lanes. Failure to implement these improvements will result in unsatisfactory roadway capacity.

Relationship to General Plan Development:

The General Plan's Roadway Section identifies this segment of Grove Avenue as six lanes.

Allocation To General Plan Buildout: 44.00%

Reference Document:

2012 Street Development Impact Fee (DIF) Program Memo, May 8, 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,552,932	$1,552,932
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$9,411,711	$9,411,711
4. Contingency	$0	$0	$0	$0	$941,171	$941,171
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$11,905,814	$11,905,814

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Milliken (N) Grade Separation Under UPRR/Alhambra **ST -092**

Submitting Departments: Engineering Department

Project Description:
Construct the north Milliken Avenue grade separation under the Union Pacific Railroad Alhambra Line.

Justification / Consequences of Avoidance:
The project will eliminate conflicts and delays associated with at-grade roadway/rail road crossings. Failure to implement these improvements will result in increased delays as both vehicle and rail traffic is expected to increase.

Relationship to General Plan Development:
The General Plan's Goods Movement Section identifies the elimination of the at-grade rail crossing at this location.

Allocation To General Plan Buildout: 0.72%

Reference Document:
2012 Street Development Impact Fee (DIF) Program Memo, May 8, 2012.

Project Timing:
The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$28,847,930	$28,847,930
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$28,847,930	$28,847,930

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Project Has Been Completed **ST -093**

Submitting Departments: Engineering Department

Project Description:
The project has been completed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Project has been completed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
2012 Street Development Impact Fee (DIF) Program Memo, May 8, 2012.

Project Timing:
Project has been completed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Project Has Been Completed **ST -094**

Submitting Departments: Engineering Department

Project Description:
Project has been completed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Project has been completed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
2012 Street Development Impact Fee (DIF) Program Memo, May 8, 2012.

Project Timing:
Project has been completed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Archibald (S) Line Grade Separation Over UPRR/LA **ST -095**

Submitting Departments: Engineering Department

Project Description:

Construct the south Archibald Avenue grade separation over the Union Pacific Railroad Los Angeles Line. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The project will eliminate conflicts and delays associated with at-grade roadway/rail road crossings. Failure to implement these improvements will result in increased delays as both vehicle and rail traffic is expected to increase.

Relationship to General Plan Development:

The General Plan's Goods Movement Section identifies the elimination of the at-grade rail crossing at this location.

Allocation To General Plan Buildout: 25.20%

Reference Document:

2012 Street Development Impact Fee (DIF) Program Memo, May 8, 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$8,378,086	$8,378,086
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$50,776,285	$50,776,285
4. Contingency	$0	$0	$0	$0	$5,077,629	$5,077,629
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$64,232,000	$64,232,000

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: San Antonio (S) Line Grade Separation Under UPRR/Alhambra **ST -096**

Submitting Departments: Engineering Department

Project Description:

Construct the San Antonio Avenue grade separation under the Union Pacific Railroad Los Angeles and Alhambra Lines. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs. (Amended 09/14, percent change).

Justification / Consequences of Avoidance:

The project will eliminate conflicts and delays associated with at-grade roadway/rail road crossings. Failure to implement these improvements will result in increased delays as both vehicle and rail traffic is expected to increase.

Relationship to General Plan Development:

The General Plan's Goods Movement Section identifies the elimination of the at-grade rail crossing at this location.

Allocation To General Plan Buildout: 44.00%

Reference Document:

2012 Street Development Impact Fee (DIF) Program Memo, May 8, 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$3,505,081	$3,505,081
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$21,242,908	$21,242,908
4. Contingency	$0	$0	$0	$0	$2,124,290	$2,124,290
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$26,872,279	$26,872,279

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Campus (S) Line Grade Separation Under UPRR/Alhambra **ST -097**

Submitting Departments: Engineering Department

Project Description:

Construct the Campus Avenue grade separation under the Union Pacific Railroad Los Angeles and Alhambra Lines. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs. (Amended 09/14, percent change).

Justification / Consequences of Avoidance:

The project will eliminate conflicts and delays associated with at-grade roadway/rail road crossings. Failure to implement these improvements will result in increased delays as both vehicle and rail traffic is expected to increase

Relationship to General Plan Development:

The General Plan's Goods Movement Section identifies the elimination of the at-grade rail crossing at this location.

Allocation To General Plan Buildout: 44.00%

Reference Document:

2012 Street Development Impact Fee (DIF) Program Memo, May 8, 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$3,505,081	$3,505,081
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$21,242,908	$21,242,908
4. Contingency	$0	$0	$0	$0	$2,124,290	$2,124,290
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$26,872,279	$26,872,279

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Project No Longer Needed **ST -098**

Submitting Departments: Engineering Department

Project Description:
The project no longer needed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
The project is no longer needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
The project is no longer needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Vine (S) Line Grade Separation Under UPRR/LA Line **ST -099**

Submitting Departments: Engineering Department

Project Description:

Construct the south Vine Avenue grade separation under the Union Pacific Railroad Los Angeles Line. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The project will eliminate conflicts and delays associated with at-grade roadway/rail road crossings. Failure to implement these improvements will result in increased delays as both vehicle and rail traffic is expected to increase.

Relationship to General Plan Development:

The General Plan's Goods Movement Section identifies the elimination of the at-grade rail crossing at this location.

Allocation To General Plan Buildout: 0.00%

Reference Document:

2012 Street Development Impact Fee (DIF) Program Memo, May 8, 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$3,066,944	$3,066,944
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$18,587,545	$18,587,545
4. Contingency	$0	$0	$0	$0	$1,858,755	$1,858,755
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$23,513,244	$23,513,244

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Sultana (S) Line Grade Separation Under UPRR/LA Line **ST -100**

Submitting Departments: Engineering Department

Project Description:

Construct the south Sultana Avenue grade separation under the Union Pacific Railroad Los Angeles Line. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The project will eliminate conflicts and delays associated with at-grade roadway/rail road crossings. Failure to implement these improvements will result in increased delays as both vehicle and rail traffic is expected to increase.

Relationship to General Plan Development:

The General Plan's Goods Movement Section identifies the elimination of the at-grade rail crossing at this location.

Allocation To General Plan Buildout: 20.00%

Reference Document:

2012 Street Development Impact Fee (DIF) Program Memo, May 8, 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$3,066,944	$3,066,944
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$18,587,545	$18,587,545
4. Contingency	$0	$0	$0	$0	$1,858,755	$1,858,755
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$23,513,244	$23,513,244

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Bon View (S) Grade Separation Under UPRR/LA Line **ST -101**

Submitting Departments: Engineering Department

Project Description:

Construct the south Bon View Avenue grade separation under the Union Pacific Railroad Los Angeles Line. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The project will eliminate conflicts and delays associated with at-grade roadway/rail road crossings. Failure to implement these improvements will result in increased delays as both vehicle and rail traffic is expected to increase.

Relationship to General Plan Development:

The General Plan's Goods Movement Section identifies the elimination of the at-grade rail crossing at this location.

Allocation To General Plan Buildout: 0.00%

Reference Document:

2012 Street Development Impact Fee (DIF) Program Memo, May 8, 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$3,066,944	$3,066,944
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$18,587,545	$18,587,545
4. Contingency	$0	$0	$0	$0	$1,858,755	$1,858,755
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$23,513,244	$23,513,244

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Pavement Management System Rehabilitation Program **ST -102**

Submitting Departments: Engineering Department

Project Description:

Reconstruct street segments as identified by the Pavement Management Program. These street segments represent ordinary wear and tear on existing streets and existing business demands. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs

Justification / Consequences of Avoidance:

The City of Ontario has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is required to merely maintain and maximize existing traffic flow along all existing City street segments.

Allocation To General Plan Buildout: 0.00%

Reference Document:

The street segments within this project are generated by the City's Pavement Management Program.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$3,921,547	$3,921,547
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$23,766,950	$23,766,950
4. Contingency	$0	$0	$0	$0	$2,376,695	$2,376,695
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$30,065,192	$30,065,192

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Circulation System Maintenance Vehicles **ST -103**

Submitting Departments: Engineering Department

Project Description:

Acquire additional circulation system maintenance vehicles proportional to the increase in both lane miles constructed and trip-ends generated new development in both the Ontario Ranch and General City areas.

Justification / Consequences of Avoidance:

The existing inventory of circulation system maintenance vehicles would be incapable of maintaining the near doubling of street lane-miles, bridges and traffic signals.

Relationship to General Plan Development:

The project is required merely to maintain the City's capacity to maintain all roads that are accepted upon dedication to the City after construction.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Based upon proportional analysis of existing fleet and equipment and future additional infrastructure.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Vehicle cost estimates from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Consumer Price Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$4,016,256	$4,016,256
TOTAL COST:	$0	$0	$0	$0	$4,016,256	$4,016,256

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Great Park Bridge Over Archibald Avenue **ST -104**

Submitting Departments: Engineering Department

Project Description:

Construct a decorative bridge including end monuments over Archibald Avenue along the proposed Great Park greenbelt to allow for safe pedestrian/cyclist access from the east and west side of the park.

Justification / Consequences of Avoidance:

The project is necessary to maximize the use of the full park without obstructing traffic on Archibald Avenue.

Relationship to General Plan Development:

The project is required to accommodate the traffic generated from the Ontario Ranch areadevelopment as identified in the Ontario ranch area land use database.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Project estimate dated September 9, 2002.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$728,725	$728,725
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$4,416,516	$4,416,516
4. Contingency	$0	$0	$0	$0	$441,652	$441,652
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$5,586,893	$5,586,893

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: SR-60 At Vineyard Interchange Reconstruction/Expansion **ST -105**

Submitting Departments: Engineering Department

Project Description:

The project consists of improvements and capacity expansion of the SR-60 at Vineyard Avenue Interchange. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs

Justification / Consequences of Avoidance:

These improvements are necessary to increase the interchange's capacity to accommodate anticipated growth in the Ontario Ranch area. Failure to implement these improvements will result in unsatisfactory interchange capacity.

Relationship to General Plan Development:

The General Plan's Mobility Element promotes local and regional transportation solutions. The project will relieve congestion by distributing demand in conformance with the General Plan.

Allocation To General Plan Buildout: 56.30%

Reference Document:

SANBAG Nexus Study.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$7,420,546	$7,420,546
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$44,973,007	$44,973,007
4. Contingency	$0	$0	$0	$0	$4,497,301	$4,497,301
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$56,890,854	$56,890,854

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: SR-60 At Archibald Interchange Reconstruction/Expansion **ST -106**

Submitting Departments: Engineering Department

Project Description:

The project consists of improvements and capacity expansion of the SR-60 at Archibald Avenue Interchange.

Justification / Consequences of Avoidance:

These improvements are necessary to increase the interchange's capacity to accommodate anticipated growth in the Ontario Ranch area. Failure to implement these improvements will result in unsatisfactory interchange capacity.

Relationship to General Plan Development:

The General Plan's Mobility Element promotes local and regional transportation solutions. The project will relieve congestion by distributing demand in conformance with the General Plan.

Allocation To General Plan Buildout: 35.94%

Reference Document:

SANBAG Nexus Study, Table 5.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,613,048	$1,613,048
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$1,650,000	$1,650,000
3. Construction	$0	$0	$0	$0	$9,776,051	$9,776,051
4. Contingency	$0	$0	$0	$0	$977,605	$977,605
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$14,016,704	$14,016,704

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: SR-60 At Euclid Interchange Reconstruction/Expansion **ST -107**

Submitting Departments: Engineering Department

Project Description:

The project consists of improvements and capacity expansion of the SR-60 at Euclid Avenue Interchange. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

These improvements are necessary to increase the interchange's capacity to accommodate anticipated growth in the Ontario Ranch area. Failure to implement these improvements will result in unsatisfactory interchange capacity.

Relationship to General Plan Development:

The General Plan's Mobility Element promotes local and regional transportation solutions. The project will relieve congestion by distributing demand in conformance with the General Plan.

Allocation To General Plan Buildout: 25.40%

Reference Document:

SANBAG Nexus Study.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$832,568	$832,568
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$5,045,867	$5,045,867
4. Contingency	$0	$0	$0	$0	$504,587	$504,587
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$6,383,022	$6,383,022

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: SR-60 At Grove Interchange Reconstruction/Expansion **ST -108**

Submitting Departments: Engineering Department

Project Description:

The project consists of improvements and capacity expansion of the SR-60 at Grove Avenue Interchange. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

These improvements are necessary to increase the interchange's capacity to accommodate anticipated growth in the Ontario Ranch area. Failure to implement these improvements will result in unsatisfactory interchange capacity.

Relationship to General Plan Development:

The General Plan's Mobility Element promotes local and regional transportation solutions. The project will relieve congestion by distributing demand in conformance with the General Plan.

Allocation To General Plan Buildout: 47.70%

Reference Document:

SANBAG Nexus Study.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$7,379,760	$7,379,760
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$44,725,818	$44,725,818
4. Contingency	$0	$0	$0	$0	$4,472,582	$4,472,582
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$56,578,160	$56,578,160

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: SR-60 At Mountain Interchange Reconstruction/Expansion **ST -109**

Submitting Departments: Engineering Department

Project Description:

The project consists of improvements and capacity expansion of the SR-60 at Mountain Avenue Interchange. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

These improvements are necessary to increase the interchange's capacity to accommodate anticipated growth in the Ontario Ranch area. Failure to implement these improvements will result in unsatisfactory interchange capacity

Relationship to General Plan Development:

The General Plan's Mobility Element promotes local and regional transportation solutions. The project will relieve congestion by distributing demand in conformance with the General Plan.

Allocation To General Plan Buildout: 23.30%

Reference Document:

SANBAG Nexus Study.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$2,190,675	$2,190,675
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$13,276,818	$13,276,818
4. Contingency	$0	$0	$0	$0	$1,327,682	$1,327,682
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$16,795,175	$16,795,175

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Project No Longer Needed. **ST -110**

Submitting Departments: Engineering Department

Project Description:
.tHE project is no longer needed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
The project is no longer needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
The project is no longer needed

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: I-10 Freeway At Grove/Fourth **ST -111**

Submitting Departments: Engineering Department

Project Description:

The project consists of improvements and capacity expansion of the I-10 at Grove/Fourth Interchange. Project administration consisting of engineering, construction management and contract administration is included at 10% of the construction costs and contingency at 10% of construction costs.

Justification / Consequences of Avoidance:

The interchange improvements are intended to provide operational, safety and capacity improvements to the interchange system and provide a better and more uniform access for freeway traffic to local destinations (and vice versa); including to and from the Ontario International Airport. Failure to implement these improvements will result in critical deficiencies that will be further exacerbated by future growth.

Relationship to General Plan Development:

The General Plan's Mobility Element promotes local and regional transportation solutions. The project will relieve congestion by distributing demand in conformance with the General Plan.

Allocation To General Plan Buildout: 10.90%

Reference Document:

DRAFT PSR estimate.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$17,153,206	$17,153,206
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$65,458,400	$65,458,400
3. Construction	$0	$0	$0	$0	$103,958,822	$103,958,822
4. Contingency	$0	$0	$0	$0	$10,395,882	$10,395,882
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$196,966,310	$196,966,310

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Traffic Signal System Control And Operations Center **ST -112**

Submitting Departments: Engineering Department

Project Description:

Construct improvements to the Traffic Signal System Control and Operations Center. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The project will create a traffic management facility where signal timing plans and traffic management plans can be quickly and efficiently implemented in order to reduce congestion, handle varying traffic conditions and improve road safety. Failure to implement the improvements will result in significant delays to manage traffic incidents as the city's traffic demands reach build out.

Relationship to General Plan Development:

The project is consistent with the General Plan's Mobility Element in that it supplements the design and maintenance of the City's roadway network.

Allocation To General Plan Buildout: 100.00%

Reference Document:

2012 Street Development Impact Fee (DIF) Program Memo, May 8, 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs for this project from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Consumer Price Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$332,450	$332,450
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$2,014,848	$2,014,848
4. Contingency	$0	$0	$0	$0	$201,485	$201,485
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$2,548,783	$2,548,783

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: General City Backbone Signal Interconnect **ST -113**

Submitting Departments: Engineering Department

Project Description:

Construct improvements to the General City area Backbone Signal Interconnect system. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The project will allow for reliable and redundant communication to traffic signals within the General City. Failure to implement these improvements will result in significant delays to manage traffic incidents as the City's traffic demands reach build out.

Relationship to General Plan Development:

The project is consistent with the General Plan's Mobility Element in that it supplements the design and maintenance of the City's roadway network.

Allocation To General Plan Buildout: 20.00%

Reference Document:

2012 Street Development Impact Fee (DIF) Program Memo, May 8, 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$379,717	$379,717
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$2,301,315	$2,301,315
4. Contingency	$0	$0	$0	$0	$230,132	$230,132
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$2,911,164	$2,911,164

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: I-10 At Euclid Avenue Eastbound On Ramp **ST -114**

Submitting Departments: Engineering Department

Project Description:

The project consists of improvements and capacity expansion of the I-10 at Euclid Avenue eastbound on ramp. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

These improvements are necessary to increase the interchange's capacity to accommodate anticipated growth in the General City area. Failure to implement these improvements will result in unsatisfactory interchange capacity.

Relationship to General Plan Development:

The General Plan's Mobility Element promotes local and regional transportation solutions. The project will relieve congestion by distributing demand in conformance with the General Plan.

Allocation To General Plan Buildout: 7.00%

Reference Document:

SANBAG Nexus Study.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,300,902	$1,300,902
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$7,884,252	$7,884,252
4. Contingency	$0	$0	$0	$0	$788,425	$788,425
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$9,973,579	$9,973,579

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Project No Longer Needed **ST -115**

Submitting Departments: Engineering Department

Project Description:
The project has been completed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
The project is completed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
The project is completed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: I-10 At Vineyard Interchange Reconstruction/Expansion **ST -116**

Submitting Departments: Engineering Department

Project Description:

The project consists of intersection and landscaping improvements of the I-10 at Vineyard Avenue interchange. The I-10 Corridor project will be reconstructing the interchange as a project cost.

Justification / Consequences of Avoidance:

These improvements are necessary to increase the interchange's capacity to accommodate anticipated growth in the General City area. Failure to implement these improvements will result in unsatisfactory interchange capacity.

Relationship to General Plan Development:

The General Plan's Mobility Element promotes local and regional transportation solutions. The project will relieve congestion by distributing demand in conformance with the General Plan.

Allocation To General Plan Buildout: 40.00%

Reference Document:

09/08/16 Letter to City from SANBAG.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$349,279	$349,279
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$277,000	$277,000
3. Construction	$0	$0	$0	$0	$2,116,849	$2,116,849
4. Contingency	$0	$0	$0	$0	$211,685	$211,685
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$2,954,813	$2,954,813

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Ontario Ranch Street/Trails Separation **ST -117**

Submitting Departments: Engineering Department

Project Description:

The project consists of grade separation of trails from streets in the Ontario Ranch area wherever practical or needed. Contingency is included at 10% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs

Justification / Consequences of Avoidance:

The project will eliminate conflicts and delays associated with at-grade roadway and trail crossings.

Relationship to General Plan Development:

The project benefits future development within the Ontario Ranch area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

The reference used for this project consists of a memo from Public Works - Engineering staff.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$327,649	$327,649
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$1,985,744	$1,985,744
4. Contingency	$0	$0	$0	$0	$198,573	$198,573
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$2,511,966	$2,511,966

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Hellman Avenue Bridge Over Cucamonga Creek **ST -118**

Submitting Departments: Engineering Department

Project Description:

Widen the Hellman Avenue Bridge over the Cucamonga Creek. Contingency is included at 25% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The Project is required to maintain existing traffic flow along this segment and provide additional capacity for anticipated additional traffic demands.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. All costs are at nominal, or current dollar value.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$307,271	$307,271
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$1,638,779	$1,638,779
4. Contingency	$0	$0	$0	$0	$409,695	$409,695
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$2,355,745	$2,355,745

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Project Completed Or No Longer Necessary **ST -119**

Submitting Departments: Engineering Department

Project Description:
Project has been completed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Project has been completed.

Allocation To General Plan Buildout: 100.00%

Reference Document:
Master Plan of Streets and Highways (September, 2011).

Project Timing:
Project has been completed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Project Has Been Completed Or No Longer Necessary **ST -120**

Submitting Departments: Engineering Department

Project Description:
The project has been completed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
The project has been completed.

Allocation To General Plan Buildout: 100.00%

Reference Document:
Master Plan of Streets and Highways (September, 2011).

Project Timing:
The timing of the capital construction or acquisition described herein, was not included in the he project has been completed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Schaefer Avenue Bridge Over Cucamonga Creek **ST -121**

Submitting Departments: Engineering Department

Project Description:

Construct the Schaefer Avenue Bridge over the Cucamonga Creek. Contingency is included at 25% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The Project is required to maintain existing traffic flow along this segment and provide additional capacity for anticipated additional traffic demands.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$977,681	$977,681
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$5,214,297	$5,214,297
4. Contingency	$0	$0	$0	$0	$1,303,574	$1,303,574
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$7,495,552	$7,495,552

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Schaefer Avenue Bridge Over Cucamonga Creek Spillway **ST -122**

Submitting Departments: Engineering Department

Project Description:

Construct the Schaefer Avenue Bridge over the Cucamonga Creek Spillway. Contingency is included at 25% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The Project is required to maintain existing traffic flow along this segment and provide additional capacity for anticipated additional traffic demands.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,738,098	$1,738,098
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$9,269,862	$9,269,862
4. Contingency	$0	$0	$0	$0	$2,317,466	$2,317,466
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$13,325,426	$13,325,426

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Eucalyptus Avenue Bridge Over Cucamonga Creek **ST -124**

Submitting Departments: Engineering Department

Project Description:

Construct the Eucalyptus Avenue Bridge over the Cucamonga Creek. The project has been completed but remains in the calculation until the City's Land Use Database is amended at a later time.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F. The project has been left in as a place holder to maintain the original numbering system.

Relationship to General Plan Development:

The Project is required to maintain existing traffic flow along this segment and provide additional capacity for anticipated additional traffic demands.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The project was completed in August of 2023.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$2,200,000	$2,200,000
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$7,652,174	$7,652,174
4. Contingency	$0	$0	$0	$0	$1,147,826	$1,147,826
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$11,000,000	$11,000,000

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Merrill Avenue Bridge Over Cucamonga Creek **ST -125**

Submitting Departments: Engineering Department

Project Description:

Construct the Merrill Avenue Bridge over the Cucamonga Creek. The project has been completed but remains in the calculation until the City's Land Use Database is amended at a later time.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F. The project has been left in as a place holder to maintain the original numbering system.

Relationship to General Plan Development:

The Project is required to maintain existing traffic flow along this segment and provide additional capacity for anticipated additional traffic demands.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The project was completed in August of 2023..

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$2,200,000	$2,200,000
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$7,652,174	$7,652,174
4. Contingency	$0	$0	$0	$0	$1,147,826	$1,147,826
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$11,000,000	$11,000,000

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Edison Avenue Bridge Over Cucamonga Creek **ST -123**

Submitting Departments: Engineering Department

Project Description:

Construct the Edison Avenue Bridge over the Cucamonga Creek. Contingency is included at 25% of the estimated construction cost. Project administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS). Failure to make the General Plan's recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The Project is required to maintain existing traffic flow along this segment and provide additional capacity for anticipated additional traffic demands.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Streets and Highways (September, 2011).

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$2,532,659	$2,532,659
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$13,507,513	$13,507,513
4. Contingency	$0	$0	$0	$0	$3,376,878	$3,376,878
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$19,417,050	$19,417,050

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Share Of Common City Yard Improvements **ST -126**

Submitting Departments: Engineering Department

Project Description:

Construct the following improvements: 1) Reconfigure some 60,000 square feet of a recently acquired warehouse and office space. 2) Pave approximately ten acres of currently dirt parking lot, primarily for the refuse operation refueling area. 3) Construct additional fleet maintenance operations bays. 4) Construct a new welding shop. 5) Increase security through additional fencing and lighting. 6) Construct additional CNG fueling stations and 7) reconfigure a recently acquired 24,000 square foot building into covered parking to maximize fleet lifetime. The combined improvements have a total projected cost of $38.2 million and are spread between all City operations that make use of the City yard.

Justification / Consequences of Avoidance:

This amount represents the proportional amount of a total estimated $38.2 million in structural improvements to the City maintenance yard necessary to meet the increasing demands for greater circulation system maintenance capacity. The City has acquired adequate land and has existing structural capacity for the various maintenance demands. This demand for additional structural capacity results from the doubling of all public infrastructures from the Ontario Ranch area and remaining portions of the General City area.

Relationship to General Plan Development:

The project benefits both existing and future development within the General City and Ontario Ranch areas.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Based upon an analysis of demands on City yard capacity and expansion needs.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs were static in 2022 thus there is no cost index increase applied,

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$257,125	$257,125
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$1,714,175	$1,714,175
4. Contingency	$0	$0	$0	$0	$197,132	$197,132
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$2,168,432	$2,168,432

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Ontario Ranch Bus Stop Shelters **ST -127**

Submitting Departments: Engineering Department

Project Description:

Construct the Ontario Ranch bus stop shelters. The improvements include 218 bus stops throughout the Ontario Ranch area. Labor for the installation is included at 10% of the materials cost and contingency is included at 10% of total construction and labor costs. (Added 09/14, project added).

Justification / Consequences of Avoidance:

The project will allow for future bus shelter installations at currently identified locations which will be furnished with a bus pad or bus turnout.

Relationship to General Plan Development:

The project is consistent with the General Plan's Mobility Element in that it supplies a reliable alternative transportation system and provides a viable alternative to the automobile.

Allocation To General Plan Buildout: 100.00%

Reference Document:

New Model Colony Bus Facility Justification Study, August 2007 and memo RE: ST-128.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column.Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$434,719	$434,719
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$2,634,657	$2,634,657
4. Contingency	$0	$0	$0	$0	$263,465	$263,465
5. Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$3,332,841	$3,332,841

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Ontario Ranch Design Studies **ST -128**

Submitting Departments: Engineering Department

Project Description:

Recovery of costs incurred by the Ontario Ranch Construction group expended on behalf of all other developments. The Master Plan studies include: 1. Master Plan of Infrastructure Alignments, 2. GIS System Integration Traffic Studies, Rights-of-way Studies, Streetscape Master Plan and the Pavement design document. (Added 09/14, study reimbursement costs).

Justification / Consequences of Avoidance:

The studies were necessary to develop infrastructure requirements that define and benefit all development in the Ontario Ranch area.

Relationship to General Plan Development:

The project is consistent with the General Plan's Mobility Element in that it supplements the design and maintenance of the City's Roadway Network.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Ontario Ranch (formerly NMC) Construction Agreement.

Project Timing:

As needed and as available. Costs were static in 2022 thus there is no cost index increase applied,

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction Labor	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Studies	$0	$0	$0	$0	$1,074,109	$1,074,109
TOTAL COST:	$0	$0	$0	$0	$1,074,109	$1,074,109

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Fourth Street Under The I-10 Freeway **ST -129**

Submitting Departments: Engineering Department

Project Description:

The project consists of the widening of Fourth Street under the I-10 Freeway. The I-10 Corridor Project costs will incude the reconstructing the bridge. The cost of improvements will be shared with SANBAG at 53.68% share and the City at 46.32% share per cooperative agreement 17-1001713.

Justification / Consequences of Avoidance:

These improvements are necessary to increase the interchanges capacity to accommodate anticipated growth in the General City area. The

Relationship to General Plan Development:

The project is consistent with the General Plan's Mobility Element in that it supplements the design and maintenance of the City's Roadway Network

Allocation To General Plan Buildout: 46.23%

Reference Document:

None, staff projections.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column.Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$2,635,684	$2,635,684
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$2,190,600	$2,190,600
3. Construction	$0	$0	$0	$0	$15,973,845	$15,973,845
4. Contingency	$0	$0	$0	$0	$1,597,385	$1,597,385
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$22,397,514	$22,397,514

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Guasti Road Extension From 1,530' E/O Haven Easterly 310' **ST -130**

Submitting Departments: Engineering Department

Project Description:

Extend Guasti Road to reflect current Master Plan of Streets and Highways from 1,530 feet east of Haven (about 310 feet). Project costs include street, curb, gutter, landscaped parkway, sidewalk, street lights, truck filter and abandoning/constructing a water meter and fire double detector check.

Justification / Consequences of Avoidance:

The City of Ontario's General Plan has identified these improvements as necessary to maintain an acceptable level of service (LOS) in light of additional lane mile demands created by new development. Failure to make these General Plan recommended improvements would result in an unacceptable LOS F.

Relationship to General Plan Development:

The project is consistent with the General Plan's Mobility Element in that it supplements the design and maintenance of the City's Roadway Network

Allocation To General Plan Buildout: 100.00%

Reference Document:

None, staff projections.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs from the 2022 DIF Calculation Report have been increased to July 2024 cost estimates by the Engineering News Record Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$85,481	$85,481
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$518,069	$518,069
4. Contingency	$0	$0	$0	$0	$51,808	$51,808
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$655,358	$655,358

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Local Circulation (Streets, Bridges & Signals) System

Project Title / Ref#: Ontario Traffic Study **ST -131**

Submitting Departments: Engineering Department

Project Description:
The project consists of the recollection for the costs of this study from all beneficiaries with the Ontario Ranch area.

Justification / Consequences of Avoidance:
To recoved the costs of this traffic study fro the ultimate beneficiaries.

Relationship to General Plan Development:
Related to the costs of developing the Ontario Ranch Area, thus recoverable from impact fees.

Allocation To General Plan Buildout: 100.00%

Reference Document:
None, staff projections.

Project Timing:
The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs were static in 2022 thus there is no cost index increase applied,

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$94,815	$94,815
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$94,815	$94,815

City of Ontario
Storm Drainage Collection
System Facilities

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan - All Plan Areas

Storm Drainage Collection System Facilities

MFP 2024-2025 Update

		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build	Project Build Out Total
SD -001	Euclid Avenue, Riverside To Merrill	$0	$0	$0	$0	$13,925,804	$13,925,804
SD -002	Grove Avenue, Grove Basin To Merrill	$0	$0	$0	$0	$21,576,871	$21,576,871
SD -003	Project Is Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
SD -004	Project Is Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
SD -005	Merrill Avenue, Euclid To Bon View	$0	$0	$0	$0	$12,896,053	$12,896,053
SD -006	Campus Avenue, 920' N/O Eucalyptus To Merrill	$0	$0	$0	$0	$2,852,243	$2,852,243
SD -007	Bon View, 1,320' N/O Chino To Merrill	$0	$0	$0	$0	$13,683,520	$13,683,520
SD -008	Euclid Avenue Laterals	$0	$0	$0	$0	$9,190,530	$9,190,530
SD -009	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
SD -010	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
SD -011	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
SD -012	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
SD -013	Walker Avenue, Merrill To Chino	$0	$0	$0	$0	$9,833,255	$9,833,255
SD -014	Merrill Avenue, Vineyard To 1420' W/O Walker	$0	$0	$0	$0	$9,818,672	$9,818,672
SD -015	Ontario Ranch Road, Walker To 880' E/O Walker	$0	$0	$0	$0	$1,629,636	$1,629,636
SD -016	Schaefer Avenue, Walker To 1,950' E/O Walker	$0	$0	$0	$0	$1,646,666	$1,646,666
SD -017	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
SD -018	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
SD -019	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
SD -020	Hellman Avenue, Chino Avenue To 1,500' N/O Chino	$0	$0	$0	$0	$796,341	$796,341

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan - All Plan Areas

Storm Drainage Collection System Facilities

MFP 2024-2025 Update

		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build	Project Build Out Total
SD -021	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
SD -022	Eucalyptus Avenue, Archibald To 1,300' E/O Archibald	$0	$0	$0	$0	$1,394,665	$1,394,665
SD -023	Project Completed Or No Longer Necessary	$0	$0	$0	$0	$0	$0
SD -024	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
SD -025	Turner Avenue, Riverside To County Line Channel	$0	$0	$0	$0	$2,257,508	$2,257,508
SD -026	Turner Avenue Laterals	$0	$0	$0	$0	$1,743,609	$1,743,609
SD -027	Haven Avenue, Riverside To County Line Channel	$0	$0	$0	$0	$3,848,761	$3,848,761
SD -028	Ontario Ranch Road Between Haven And Mill Creek	$0	$0	$0	$0	$458,254	$458,254
SD -029	Haven Avenue Laterals E/O Haven And N/O Schaefer	$0	$0	$0	$0	$3,009,105	$3,009,105
SD -030	Haven Avenue Laterals	$0	$0	$0	$0	$468,095	$468,095
SD -031	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
SD -032	Mill Creek, Riverside To County Line Channel	$0	$0	$0	$0	$13,187,938	$13,187,938
SD -033	Eucalyptus Avenue Between Mill Creek And Milliken	$0	$0	$0	$0	$536,207	$536,207
SD -034	Eucalyptus Avenue Between Haven And Mill Creek	$0	$0	$0	$0	$956,841	$956,841
SD -035	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
SD -036	Schaefer Avenue Between Mill Creek And Milliken	$0	$0	$0	$0	$2,510,214	$2,510,214
SD -037	Hellman Avenue, Schaefer To Ontaro Ranch Road And Laterals	$0	$0	$0	$0	$6,880,851	$6,880,851
SD -038	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
SD -039	Edison-Hellman/Vineyard, Hellman-ER/Merrill To C. Creek	$0	$0	$0	$0	$6,748,068	$6,748,068
SD -040	Eucalyptus Avenue, Hellman To Cucamonga Channel	$0	$0	$0	$0	$1,701,014	$1,701,014

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan - All Plan Areas

Storm Drainage Collection System Facilities

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		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build	Project Build Out Total
SD -041	Merrill Avenue, Cucamonga Channel To Walker	$0	$0	$0	$0	$25,541,804	$25,541,804
SD -042	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
SD -043	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
SD -044	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
SD -045	Eucalyptus Avenue, Cucamonga Channel To W/O Archibald	$0	$0	$0	$0	$724,868	$724,868
SD -046	Edison Avenue Laterals E/O Cucamonga Channel	$0	$0	$0	$0	$1,580,002	$1,580,002
SD -047	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
SD -048	Chino Avenue, Cucamonga Channel To N/O Chino	$0	$0	$0	$0	$821,878	$821,878
SD -049	Milliken Avenue, Riverside To County Line Channel	$0	$0	$0	$0	$3,473,812	$3,473,812
SD -050	Offsite Euclid Avenue Storm Drain	$0	$0	$0	$0	$27,948,129	$27,948,129
SD -051	Project Is Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
SD -052	Project Is Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
SD -053	Project Is Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
SD -054	Project Is Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
SD -055	Project Is Completed Or No Longer Necessary	$0	$0	$0	$0	$0	$0
SD -056	Sixth Street, Glenn To Cucamonga Channel	$0	$0	$0	$0	$10,736,541	$10,736,541
SD -057	G Street, Berlyn To West Cucamonga Channel & Various Streets	$0	$0	$0	$0	$9,290,397	$9,290,397
SD -058	Grove Avenue, 60 Freeway To Riverside Drive	$0	$0	$0	$0	$3,044,087	$3,044,087
SD -059	Campus Avenue, Cedar To Riverside	$0	$0	$0	$0	$5,080,502	$5,080,502
SD -060	D And I Streets, Grove To West Cucamonga Channel	$0	$0	$0	$0	$1,976,473	$1,976,473

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Storm Drainage Collection System Facilities

MFP 2024-2025 Update

		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build	Project Build Out Total
SD -061	Inland Empire Blvd., Vineyard To Cucamonga Channel	$0	$0	$0	$0	$972,501	$972,501
SD -062	Sultana Avenue, Phillips To Philadelphia	$0	$0	$0	$0	$5,992,676	$5,992,676
SD -063	Fourth Street, El Dorado To Cucamonga Channel	$0	$0	$0	$0	$3,435,856	$3,435,856
SD -064	Baker, Vineyard, Carlos, Hellman - Acacia To Philadelphia	$0	$0	$0	$0	$3,768,510	$3,768,510
SD -065	Bon View Avenue, 60 Freeway To Riverside	$0	$0	$0	$0	$3,549,437	$3,549,437
SD -066	Cucamonga Avenue, 60 Freeway To Riverside	$0	$0	$0	$0	$3,426,362	$3,426,362
SD -067	Bon View Avenue, Misison To Francis	$0	$0	$0	$0	$5,076,667	$5,076,667
SD -068	Cucamonga Avenue, Phillips To Francis	$0	$0	$0	$0	$3,138,022	$3,138,022
SD -069	Storm Drainage Maintenance Vehicles	$0	$0	$0	$0	$646,228	$646,228
SD -070	Boulder Avenue, I To State	$0	$0	$0	$0	$17,856,111	$17,856,111
SD -071	Benson Avenue, State To I Street	$0	$0	$0	$0	$5,644,396	$5,644,396
SD -072	Mountain Avenue, Philadelphia To Phillips	$0	$0	$0	$0	$10,752,264	$10,752,264
SD -073	San Antonio Avenue, Francis To Cypress Channel	$0	$0	$0	$0	$14,476,494	$14,476,494
SD -074	San Sevaine Channel	$0	$0	$0	$0	$2,588,258	$2,588,258
SD -075	Storm Drain Master Plan	$0	$0	$0	$0	$667,920	$667,920
SD -076	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
SD -077	Campus Avenue, State To Francis (Phase 2 Of SD-053)	$0	$0	$0	$0	$5,922,178	$5,922,178
SD -078	Parco Avenue, Philadelphia To 60 Freeway (Phase 2 Of SD-055)	$0	$0	$0	$0	$1,272,292	$1,272,292
SD -079	Grove Avenue, Francis To 60 Freeway (Phase 2 Of SD-058)	$0	$0	$0	$0	$1,964,685	$1,964,685
SD -080	Sultana Avenue, State To Phillips (Phase 2 Of SD-062)	$0	$0	$0	$0	$4,741,833	$4,741,833

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan - All Plan Areas

Storm Drainage Collection System Facilities

MFP 2024-2025 Update

		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build	Project Build Out Total
SD -081	Bon View Avenue, 60 Freeway To Francis (Phase 2 Of SD-065)	$0	$0	$0	$0	$2,227,268	$2,227,268
SD -082	Cucamonga Avenue, Francis To 60 Freeway (Phase 2 Of SD-066)	$0	$0	$0	$0	$1,764,126	$1,764,126
SD -083	Mountain & Boulder, I-10 To I Street (Phase 2 Of SD-070)	$0	$0	$0	$0	$8,141,160	$8,141,160
SD -084	Benson Avenue Laterals (Phase 2 Of SD-071)	$0	$0	$0	$0	$6,081,592	$6,081,592
SD -085	Mountain Avenue, State To Phillips (Phase 2 Of SD-072)	$0	$0	$0	$0	$3,078,222	$3,078,222
SD -086	San Antonio & Phillips, Euclid To Francis (Phase2, SD-073)	$0	$0	$0	$0	$7,951,632	$7,951,632
SD -087	Oakland Avenue, State To Phillips (Phase 2 Of SD-074)	$0	$0	$0	$0	$9,955,439	$9,955,439
SD -088	Walker Avenue, 60 Freeway To Riverside And Lateral	$0	$0	$0	$0	$2,667,873	$2,667,873
SD -089	Baker Avenue And Riverside Drive, S/O 60 Freeway	$0	$0	$0	$0	$3,769,150	$3,769,150
SD -090	G Street, Corona To Del Norte	$0	$0	$0	$0	$3,939,123	$3,939,123
SD -091	Del Norte And Imperial Avenues From I Street To G Street	$0	$0	$0	$0	$1,738,463	$1,738,463
SD -092	Vine Avenue, G Street To State	$0	$0	$0	$0	$5,189,444	$5,189,444
SD -093	Vine Avenue, Sixth To G Street	$0	$0	$0	$0	$5,453,637	$5,453,637
SD -094	Sultana Avenue, Fifth To Holt	$0	$0	$0	$0	$9,322,899	$9,322,899
SD -095	Benson Avenue And Laterals	$0	$0	$0	$0	$3,130,163	$3,130,163
SD -096	Benson Avenue, Francis To Phildelphia	$0	$0	$0	$0	$4,155,117	$4,155,117
SD -097	Mission, Benson, Phillips & Oaks, W/O Magnolia	$0	$0	$0	$0	$6,671,340	$6,671,340
SD -098	Holt Boulevard, Convention Center To Cucamonga Channel	$0	$0	$0	$0	$1,546,900	$1,546,900
SD -099	Mission Boulevard, Proforma To Turner	$0	$0	$0	$0	$1,434,122	$1,434,122
SD -100	6th Street, West Cucamonga Channel To Grove	$0	$0	$0	$0	$754,134	$754,134

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan - All Plan Areas

Storm Drainage Collection System Facilities

MFP 2024-2025 Update

		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build	Project Build Out Total
SD -101	Archibald Avenue, Inland Empire To Airport Drive	$0	$0	$0	$0	$3,105,258	$3,105,258
SD -102	Fifth Street, Balboa To Cucamonga Channel	$0	$0	$0	$0	$1,966,057	$1,966,057
SD -103	Share Of Common City Yard Improvements	$0	$0	$0	$0	$1,969,069	$1,969,069
SD -104	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
SD -105	Ontario Ranch Storm Drain Design Studies	$0	$0	$0	$0	$1,053,500	$1,053,500
	TOTALS	$0	$0	$0	$0	$426,727,592	$426,727,592

Notes:
1) If project timing is not a component of this effort, then all projects default to their "Thru Build Out" amount.

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Euclid Avenue, Riverside To Merrill **SD -001**

Submitting Departments: Engineering Department

Project Description:

Construct 13,200 linear feet of storm drain system along Euclid Avenue from Riverside Drive to Merrill Avenue, identified as EULD-XIV-1 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 10% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from the Ontario Ranch (OR) area and is likely totally within that area. The amount of any project costs not fully attributed to the OR area (if any) represents the percentage of storm water collected or moved by that segment of pipe was not generated by rainfall within the OR area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, OR projects will be constructed as needed and as DIF receipts are collected. Storm Drainage project cost estimates were increased by by 144.6% based upon a recalculation of the project costs. Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,816,409	$1,816,409
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$11,008,541	$11,008,541
4. Contingency	$0	$0	$0	$0	$1,100,854	$1,100,854
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$13,925,804	$13,925,804

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Grove Avenue, Grove Basin To Merrill **SD -002**

Submitting Departments: Engineering Department

Project Description:

Construct 11,900 linear feet of storm drain system along Grove Avenue from Grove Basin (located south of Riverside Drive) to Merrill Avenue, identified as GROV-XIII-1 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 10% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from the Ontario Ranch (OR) area and is likely totally within that area. The amount of any project costs not fully attributed to the OR area (if any) represents the percentage of storm water collected or moved by that segment of pipe was not generated by rainfall within the OR area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, OR projects will be constructed as needed and as DIF receipts are collected. Storm Drainage project cost estimates were increased by by 176.4% based upon a recalculation of the project costs.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$2,814,374	$2,814,374
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$17,056,815	$17,056,815
4. Contingency	$0	$0	$0	$0	$1,705,682	$1,705,682
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$21,576,871	$21,576,871

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities
Project Title / Ref#: Project Is Completed Or No Longer Needed **SD -003**
Submitting Departments: Engineering Department

Project Description:
This project is no longer needed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Separate project is not needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
Separate project is not needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities
Project Title / Ref#: Project Is Completed Or No Longer Needed **SD -004**
Submitting Departments: Engineering Department

Project Description:
The project is no longer needed.

Justification / Consequences of Avoidance:
No longer needed.

Relationship to General Plan Development:
The project is no longer needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
This project has been completed, no longer needed or has been merged into a differnt project segment.

Project Timing:
The project is no longer needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Merrill Avenue, Euclid To Bon View **SD -005**

Submitting Departments: Engineering Department

Project Description:

Construct 4,300 linear feet of storm drain system along Merrill Avenue from Euclid Avenue to Bon View Avenue, identified as MERL-XIV-1 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 10% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from the Ontario Ranch (OR) area and is likely totally within that area. The amount of any project costs not fully attributed to OR area (if any) represents the percentage of storm water collected or moved by that segment of pipe was not generated by rainfall within the OR area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, OR projects will be constructed as needed and as DIF receipts are collected. Storm Drainage project cost estimates were increased by 183.0% based upon a recalculation of the project costs.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,682,094	$1,682,094
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$10,194,508	$10,194,508
4. Contingency	$0	$0	$0	$0	$1,019,451	$1,019,451
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$12,896,053	$12,896,053

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Campus Avenue, 920' N/O Eucalyptus To Merrill **SD -006**

Submitting Departments: Engineering Department

Project Description:

Construct 3,500 linear feet of storm drain system along Campus Avenue from 920 feet north of Eucalyptus Avenue to Merrill Avenue, identified as MERL-XIV-2 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 10% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from the Ontario Ranch (OR) area and is likely totally within that area. The amount of any project costs not fully attributed to OR area (if any) represents the percentage of storm water collected or moved by that segment of pipe was not generated by rainfall within the OR area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, OR projects will be constructed as needed and as DIF receipts are collected. This project was increased based upon a recent specific staff cost estimate recalculation.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$372,031	$372,031
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$2,254,738	$2,254,738
4. Contingency	$0	$0	$0	$0	$225,474	$225,474
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$2,852,243	$2,852,243

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Bon View, 1,320' N/O Chino To Merrill **SD -007**

Submitting Departments: Engineering Department

Project Description:

Construct 11,800 linear feet of storm drain system along Bon View Avenue from 1300 feet south of Riverside Drive to Merrill Avenue, identified as BNVW-XIV-1 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 10% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from the Ontario Ranch area and is likely totally within that area. The amount of any project costs not fully attributed to OR area (if any) represents the percentage of storm water collected or moved by that segment of pipe was not generated by rainfall within the OR area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, OR projects will be constructed as needed and as DIF receipts are collected. Storm Drainage project cost estimates were increased by 160.8% based upon a recalculation of the project costs.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,784,807	$1,784,807
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$10,817,012	$10,817,012
4. Contingency	$0	$0	$0	$0	$1,081,701	$1,081,701
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$13,683,520	$13,683,520

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Euclid Avenue Laterals **SD -008**

Submitting Departments: Engineering Department

Project Description:

Construct 10,400 linear feet of storm drain system along Chino Avenue from Euclid Avenue to Campus Avenue, Schaefer Avenue from Euclid Avenue to Campus Avenue, Edison Avenue from Euclid Avenue to Campus Avenue and Eucalyptus Avenue from Euclid Avenue to 1,100 feet east of Euclid Avenue, identified as EULD-XIV-2, EULD-XIV-3, EULD-XIV-4 and EULD-XIV-5 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 10% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from the Ontario Ranch (OR) area and is likely totally within that area. The amount of any project costs not fully attributed to OR area (if any) represents the percentage of storm water collected or moved by that segment of pipe was not generated by rainfall within the OR area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, OR projects will be constructed as needed and as DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,198,765	$1,198,765
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$7,265,241	$7,265,241
4. Contingency	$0	$0	$0	$0	$726,524	$726,524
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$9,190,530	$9,190,530

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Project Completed Or No Longer Needed **SD -009**

Submitting Departments: Engineering Department

Project Description:
The project is no longer needed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Separate project is not needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
Separate project is not needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Project Completed Or No Longer Needed **SD -010**

Submitting Departments: Engineering Department

Project Description:
The project is no longer needed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Project is not needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
Project is not needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities
Project Title / Ref#: Project Completed Or No Longer Needed **SD -011**
Submitting Departments: Engineering Department

Project Description:
The project is no longer needed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Separate project is not needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
Separate project is not needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities
Project Title / Ref#: Project Completed Or No Longer Needed **SD -012**
Submitting Departments: Engineering Department

Project Description:
This project is no longer needed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Separate project is not needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
Separate project is not needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Walker Avenue, Merrill To Chino **SD -013**

Submitting Departments: Engineering Department

Project Description:

Construct 9,300 linear feet of storm drain system along Walker Avenue from Eucalyptus Avenue to Chino Avenue, identified as WLKR-XII-1 in the City of Ontario Master Plan of Drainage (March 2012, amended 2017). Contingency is included at 10% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from the Ontario Ranch (OR) area and is likely totally within that area. The amount of any project costs not fully attributed to OR area (if any) represents the percentage of storm water collected or moved by that segment of pipe was not generated by rainfall within the OR area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, OR projects will be constructed as needed and as DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,282,599	$1,282,599
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$7,773,324	$7,773,324
4. Contingency	$0	$0	$0	$0	$777,332	$777,332
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$9,833,255	$9,833,255

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Merrill Avenue, Vineyard To 1420' W/O Walker **SD -014**

Submitting Departments: Engineering Department

Project Description:

Construct 3,970 linear feet of storm drain system along Merrill Avenue from Vineyard Avenue to 1420' west of Walker Avenue, identified as WLKR-XII-1 and WLKR XII-2 in the City of Ontario Master Plan of Drainage (March 2012, amended 2017). Contingency is included at 10% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from the Ontario Ranch (OR) area and is likely totally within that area. The amount of any project costs not fully attributed to OR area (if any) represents the percentage of storm water collected or moved by that segment of pipe was not generated by rainfall within the OR area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, OR projects will be constructed as needed and as DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,280,697	$1,280,697
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$7,761,796	$7,761,796
4. Contingency	$0	$0	$0	$0	$776,179	$776,179
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$9,818,672	$9,818,672

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Ontario Ranch Road, Walker To 880' E/O Walker **SD -015**

Submitting Departments: Engineering Department

Project Description:

Construct 1,900 linear feet of storm drain system along Ontario Ranch Road (Edison) from Walker Avenue to 1,900 feet east of Walker Avenue, identified as WLKR-XII-3 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 10% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from the Ontario Ranch (OR) area and is likely totally within that area. The amount of any project costs not fully attributed to OR area (if any) represents the percentage of storm water collected or moved by that segment of pipe was not generated by rainfall within the OR area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, OR projects will be constructed as needed and as DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$212,560	$212,560
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$1,288,250	$1,288,250
4. Contingency	$0	$0	$0	$0	$128,826	$128,826
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$1,629,636	$1,629,636

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Schaefer Avenue, Walker To 1,950' E/O Walker **SD -016**

Submitting Departments: Engineering Department

Project Description:

Construct 2,000 linear feet of storm drain system along Schaefer Avenue from Walker Avenue to 2,000 feet east of Walker Avenue, identified as WLKR-XII-4 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 10% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from the Ontario Ranch (OR) area and is likely totally within that area. The amount of any project costs not fully attributed to OR area (if any) represents the percentage of storm water collected or moved by that segment of pipe was not generated by rainfall within the OR area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, OR projects will be constructed as needed and as DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design/Engineering/Administration	$0	$0	$0	$0	$214,783	$214,783
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$1,301,712	$1,301,712
4. Contingency	$0	$0	$0	$0	$130,171	$130,171
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$1,646,666	$1,646,666

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Project Completed Or No Longer Needed **SD -017**

Submitting Departments: Engineering Department

Project Description:
.Project no longer needed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Separate project is not needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
Separate project is not needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities
Project Title / Ref#: Project Completed Or No Longer Needed **SD -018**
Submitting Departments: Engineering Department

Project Description:
.Project completed or no longer needed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Separate project is not needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
Separate project is no needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Project Completed Or No Longer Needed **SD -019**

Submitting Departments: Engineering Department

Project Description:

.This project is completed or no longer needed.

Justification / Consequences of Avoidance:

The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:

Project is not needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:

Not applicable.

Project Timing:

Project is not needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Hellman Avenue, Chino Avenue To 1,500' N/O Chino **SD -020**

Submitting Departments: Engineering Department

Project Description:

Construct 1,500 linear feet of storm drain system along Hellman Avenue from Chino Avenue to 1,500 feet north of Chino Avenue, identified as CHIN-XI-2 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 10% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from the Ontario Ranch (OR) area and is likely totally within that area. The amount of any project costs not fully attributed to OR area (if any) represents the percentage of storm water collected or moved by that segment of pipe was not generated by rainfall within the OR area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$103,870	$103,870
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$629,519	$629,519
4. Contingency	$0	$0	$0	$0	$62,952	$62,952
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$796,341	$796,341

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Project Completed Or No Longer Needed **SD -021**

Submitting Departments: Engineering Department

Project Description:

.Project completed or no longer needed.

Justification / Consequences of Avoidance:

The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:

Project completed or no longer needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:

This project has been completed, no longer needed or has been merged into a differnt project segment.

Project Timing:

Project completed or no longer needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Eucalyptus Avenue, Archibald To 1,300' E/O Archibald **SD -022**

Submitting Departments: Engineering Department

Project Description:

Construct 2,200 linear feet of storm drain system along Eucalyptus Avenue from Archibald Avenue to 1,300 feet east of Archibald Avenue, identified as ARCH-X-2 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 10% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from the Ontario Ranch (OR) area and is likely totally within that area. The amount of any project costs not fully attributed to OR area (if any) represents the percentage of storm water collected or moved by that segment of pipe was not generated by rainfall within the OR area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, OR projects will be constructed as needed and as DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$181,913	$181,913
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$1,102,502	$1,102,502
4. Contingency	$0	$0	$0	$0	$110,250	$110,250
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$1,394,665	$1,394,665

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities
Project Title / Ref#: Project Completed Or No Longer Necessary **SD -023**
Submitting Departments: Engineering Department

Project Description:
Project completed or no longer needed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Project completed or no longer needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
This project has been completed, no longer needed or has been merged into a differnt project segment.

Project Timing:
Project completed or no longer needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities
Project Title / Ref#: Project Completed Or No Longer Needed **SD -024**
Submitting Departments: Engineering Department

Project Description:
Project no longer needed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Separate project is not needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
Separate project is not needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Turner Avenue, Riverside To County Line Channel **SD -025**

Submitting Departments: Engineering Department

Project Description:

Construct 14,720 linear feet of storm drain system along Turner Avenue from Riverside Drive to the County Line Channel (located along Bellegrave Avenue), identified as TRNR-X-1 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 10% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from the Ontario Ranch (OR) area and is likely totally within that area. The amount of any project costs not fully attributed to OR area (if any) represents the percentage of storm water collected or moved by that segment of pipe was not generated by rainfall within the OR area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, OR projects will be constructed as needed and as DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$294,458	$294,458
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$1,784,591	$1,784,591
4. Contingency	$0	$0	$0	$0	$178,459	$178,459
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$2,257,508	$2,257,508

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Turner Avenue Laterals **SD -026**

Submitting Departments: Engineering Department

Project Description:

Construct 5,740 linear feet of storm drain system east of Turner Avenue between Schaefer Avenue and Bellegrave Avenue, identified as TRNR-X-2, TRNR-X-3 and TRNR-X-4 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 10% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from the Ontario Ranch (OR) area and is likely totally within that area. The amount of any project costs not fully attributed to OR area (if any) represents the percentage of storm water collected or moved by that segment of pipe was not generated by rainfall within the OR area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, OR projects will be constructed as needed and as DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$227,427	$227,427
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$1,378,347	$1,378,347
4. Contingency	$0	$0	$0	$0	$137,835	$137,835
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$1,743,609	$1,743,609

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Haven Avenue, Riverside To County Line Channel **SD -027**

Submitting Departments: Engineering Department

Project Description:

Construct 12,230 linear feet of storm drain system along Haven Avenue from Riverside Drive to the County Line Channel (located along Bellegrave Avenue), identified as HAVN-X-1 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 10% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from the Ontario Ranch (OR) area and is likely totally within that area. The amount of any project costs not fully attributed to OR area (if any) represents the percentage of storm water collected or moved by that segment of pipe was not generated by rainfall within the OR area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, OR projects will be constructed as needed and as DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$502,013	$502,013
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$3,042,499	$3,042,499
4. Contingency	$0	$0	$0	$0	$304,249	$304,249
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$3,848,761	$3,848,761

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Ontario Ranch Road Between Haven And Mill Creek **SD -028**

Submitting Departments: Engineering Department

Project Description:

Construct 1,000 linear feet of storm drain system along Ontairo Ranch Road (Edison) from Haven Avenue to 1,000 feet east of Haven Avenue, identified as HAVN-X-2 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 10% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from the Ontario Ranch (OR) area and is likely totally within that area. The amount of any project costs not fully attributed to OR area (if any) represents the percentage of storm water collected or moved by that segment of pipe was not generated by rainfall within the OR area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement; thus all project costs default to the "Build-out" column. In general, OR projects will be constructed as needed and as DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$59,772	$59,772
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$362,256	$362,256
4. Contingency	$0	$0	$0	$0	$36,226	$36,226
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$458,254	$458,254

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Haven Avenue Laterals E/O Haven And N/O Schaefer **SD -029**

Submitting Departments: Engineering Department

Project Description:

Construct 4,300 linear feet of storm drain system north of Schaefer Avenue and east of Haven Avenue, identified as HAVN-X-3 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 10% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from the Ontario Ranch (OR) area and is likely totally within that area. The amount of any project costs not fully attributed to OR area (if any) represents the percentage of storm water collected or moved by that segment of pipe was not generated by rainfall within the OR area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, OR projects will be constructed as needed and as DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$392,492	$392,492
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$2,378,739	$2,378,739
4. Contingency	$0	$0	$0	$0	$237,874	$237,874
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$3,009,105	$3,009,105

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Haven Avenue Laterals **SD -030**

Submitting Departments: Engineering Department

Project Description:

Construct 720 linear feet of storm drain system along Chino Avenue from Haven Avenue to 720 feet east of Haven Avenue, identified as HAVN-X-4 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 10% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from the Ontario Ranch (OR) area and is likely totally within that area. The amount of any project costs not fully attributed to OR area (if any) represents the percentage of storm water collected or moved by that segment of pipe was not generated by rainfall within the OR area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, OR projects will be constructed as needed and as DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$61,056	$61,056
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$370,036	$370,036
4. Contingency	$0	$0	$0	$0	$37,003	$37,003
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$468,095	$468,095

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities
Project Title / Ref#: Project Completed Or No Longer Needed **SD -031**
Submitting Departments: Engineering Department

Project Description:
Project completed or no longer needed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Separate project is not needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
Separate project is not needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Mill Creek, Riverside To County Line Channel **SD -032**

Submitting Departments: Engineering Department

Project Description:

Construct 12,255 linear feet of storm drain system along Mill Creek Avenue from Riverside Drive to the County Line Channel (located along Bellegrave Avenue), identified as MLCR-X-1 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 10% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from the Ontario Ranch (OR) area and is likely totally within that area. The amount of any project costs not fully attributed to OR area (if any) represents the percentage of storm water collected or moved by that segment of pipe was not generated by rainfall within the OR area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, OR projects will be constructed as needed and as DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,720,166	$1,720,166
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$10,425,247	$10,425,247
4. Contingency	$0	$0	$0	$0	$1,042,525	$1,042,525
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$13,187,938	$13,187,938

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Eucalyptus Avenue Between Mill Creek And Milliken **SD -033**

Submitting Departments: Engineering Department

Project Description:

Construct 2,300 linear feet of storm drain system along Eucalyptus Avenue from Mill Creek Avenue to 2,300 feet east of Mill Creek Avenue, identified as MLCR-X-2 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 10% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from the Ontario Ranch (OR) area and is likely totally within that area. The amount of any project costs not fully attributed to OR area (if any) represents the percentage of storm water collected or moved by that segment of pipe was not generated by rainfall within the OR area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, OR projects will be constructed as needed and as DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$69,940	$69,940
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$423,879	$423,879
4. Contingency	$0	$0	$0	$0	$42,388	$42,388
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$536,207	$536,207

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Eucalyptus Avenue Between Haven And Mill Creek **SD -034**

Submitting Departments: Engineering Department

Project Description:

Construct 1,360 linear feet of storm drain system along Eucalyptus Avenue from 1,360 feet west of Mill Creek Avenue to Mill Creek Avenue, identified as MLCR-X-3 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 10% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from the Ontario Ranch (OR) area and is likely totally within that area. The amount of any project costs not fully attributed to OR area (if any) represents the percentage of storm water collected or moved by that segment of pipe was not generated by rainfall within the OR area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, OR projects will be constructed as needed and as DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$124,805	$124,805
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$756,396	$756,396
4. Contingency	$0	$0	$0	$0	$75,640	$75,640
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$956,841	$956,841

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities
Project Title / Ref#: Project Completed Or No Longer Needed **SD -035**
Submitting Departments: Engineering Department

Project Description:
Project completed or no longer needed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Project completed or no longe needed

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
Project completed or no longer needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Schaefer Avenue Between Mill Creek And Milliken **SD -036**

Submitting Departments: Engineering Department

Project Description:

Construct 1,600 linear feet of storm drain system along Schaefer Avenue from Mill Creek Avenue to 1,600 feet east of Mill Creek, identified as MLCR-X-6 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 10% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from the Ontario Ranch (OR) area and is likely totally within that area. The amount of any project costs not fully attributed to OR area (if any) represents the percentage of storm water collected or moved by that segment of pipe was not generated by rainfall within the OR area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" columStorm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$327,419	$327,419
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$1,984,359	$1,984,359
4. Contingency	$0	$0	$0	$0	$198,436	$198,436
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$2,510,214	$2,510,214

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Hellman Avenue, Schaefer To Ontaro Ranch Road And Laterals **SD -037**

Submitting Departments: Engineering Department

Project Description:

Construct 8,700 linear feet of storm drain system along Hellman Avenue from Schaefer Avenue to Ontario Ranch Road (Edison), Schaefer Avenue from Vineyard Avenue to Hellman Avenue and Carpenter Avenue from 1,400 feet north of Schaefer Avenue to Schaefer Avenue, identified as HLMN-XI-2b, HLMN-XI-4 and HLMN-XI-5 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 10% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from the Ontario Ranch (OR) area and is likely totally within that area. The amount of any project costs not fully attributed to OR area (if any) represents the percentage of storm water collected or moved by that segment of pipe was not generated by rainfall within the OR area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, OR projects will be constructed as needed and as DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$897,502	$897,502
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$5,439,408	$5,439,408
4. Contingency	$0	$0	$0	$0	$543,941	$543,941
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$6,880,851	$6,880,851

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities
Project Title / Ref#: Project Completed Or No Longer Needed **SD -038**
Submitting Departments: Engineering Department

Project Description:
Project completed or no longer needed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Separate project is not needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
Separate project is not needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Edison-Hellman/Vineyard, Hellman-ER/Merrill To C. Creek **SD -039**

Submitting Departments: Engineering Department

Project Description:

Construct 7,100 linear feet of storm drain system along Hellman Avenue from Ontario Ranch Road (Edison) to Eucalyptus Avenue, Ontario Ranch Road from Vineyard Avenue to Hellman Avenue and Vineyard Avenue from 1,220 feet north of Ontario Ranch Road to Ontario Ranch Road, identified as Facilities HLMN-XI-2a and HLMN-XI-3 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 10% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from the Ontario Ranch (OR) area and is likely totally within that area. The amount of any project costs not fully attributed to OR area (if any) represents the percentage of storm water collected or moved by that segment of pipe was not generated by rainfall within the OR area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, OR projects will be constructed as needed and as DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$880,183	$880,183
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$5,334,441	$5,334,441
4. Contingency	$0	$0	$0	$0	$533,444	$533,444
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$6,748,068	$6,748,068

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Eucalyptus Avenue, Hellman To Cucamonga Channel **SD -040**

Submitting Departments: Engineering Department

Project Description:

Construct 1,600 linear feet of storm drain system along Eucalyptus Avenue from 720 feet west of Hellman Avenue to Cucamonga Channel, identified as HLMN-XI-1 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 10% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from the Ontario Ranch (OR) area and is likely totally within that area. The amount of any project costs not fully attributed to OR area (if any) represents the percentage of storm water collected or moved by that segment of pipe was not generated by rainfall within the OR area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, OR projects will be constructed as needed and as DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$221,871	$221,871
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$1,344,675	$1,344,675
4. Contingency	$0	$0	$0	$0	$134,468	$134,468
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$1,701,014	$1,701,014

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Merrill Avenue, Cucamonga Channel To Walker **SD -041**

Submitting Departments: Engineering Department

Project Description:

Construct 8,636 linear feet of storm drain system along Merrill Avenue from Walker Avenue to Cucamonga Channel and Vineyard Avenue from Eucalyptus Avenue to Merrill Avenue and Eucalyptus Avenue from Walker Avenue to Vineyard Avenue, identified as MERL-XI-1 in the City of Ontario Master Plan of Drainage (March 2012, amended 2017). Contingency is included at 10% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from the Ontario Ranch (OR) area and is likely totally within that area. The amount of any project costs not fully attributed to OR area (if any) represents the percentage of storm water collected or moved by that segment of pipe was not generated by rainfall within the OR area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, OR projects will be constructed as needed and as DIF receipts are collected. Storm Drainage project cost estimates were increased by 175.5% based upon a recalculation of the project costs.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$3,331,540	$3,331,540
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$20,191,149	$20,191,149
4. Contingency	$0	$0	$0	$0	$2,019,115	$2,019,115
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$25,541,804	$25,541,804

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities
Project Title / Ref#: Project Completed Or No Longer Needed **SD -042**
Submitting Departments: Engineering Department

Project Description:
Project no longer needed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Separate project is not needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
Separate project is not needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities
Project Title / Ref#: Project Completed Or No Longer Needed **SD -043**
Submitting Departments: Engineering Department

Project Description:
Project no longer needed..

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Project is not needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:
Project is not needed

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities
Project Title / Ref#: Project Completed Or No Longer Needed **SD -044**
Submitting Departments: Engineering Department

Project Description:
Project no longer needed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Project is not needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
Project is not needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Eucalyptus Avenue, Cucamonga Channel To W/O Archibald **SD -045**

Submitting Departments: Engineering Department

Project Description:

Construct 1,300 linear feet of storm drain system along Eucalyptus Avenue from Cucamonga Channel to north of Eucalyptus Avenue west of Archibald, identified as ECLP-XI-1 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 10% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from the Ontario Ranch (OR) area and is likely totally within that area. The amount of any project costs not fully attributed to OR area (if any) represents the percentage of storm water collected or moved by that segment of pipe was not generated by rainfall within the OR area. The Project has been completed.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, OR projects will be constructed as needed and as DIF receipts are collected. The project has been completed and will be removed when the Cits updates its Land Use Database in 2026-27.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$724,868	$724,868
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$724,868	$724,868

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Edison Avenue Laterals E/O Cucamonga Channel **SD -046**

Submitting Departments: Engineering Department

Project Description:

Construct 2,900 linear feet of storm drain system along Edison Avenue north of Edison Avenue east of Cucamonga Channel and from Cucamonga Channel to 800 feet east of Cucamonga Channel, identified as EDSN-XI-1 and EDSN-XI-2 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 10% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from the Ontario Ranch (OR) area and is likely totally within that area. The amount of any project costs not fully attributed to OR area (if any) represents the percentage of storm water collected or moved by that segment of pipe was not generated by rainfall within the OR area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, OR projects will be constructed as needed and as DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$206,087	$206,087
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$1,249,013	$1,249,013
4. Contingency	$0	$0	$0	$0	$124,902	$124,902
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$1,580,002	$1,580,002

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Project Completed Or No Longer Needed **SD -047**

Submitting Departments: Engineering Department

Project Description:
Project has been completed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Project is not needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
Project is not needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Chino Avenue, Cucamonga Channel To N/O Chino **SD -048**

Submitting Departments: Engineering Department

Project Description:

Construct 2,800 linear feet of storm drain system along Chino Avenue from Cucamonga Channel to north of Chino Avenue, identified as CHIN-XI-1 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 10% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from the Ontario Ranch (OR) area and is likely totally within that area. The amount of any project costs not fully attributed to OR area (if any) represents the percentage of storm water collected or moved by that segment of pipe was not generated by rainfall within the OR area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, OR projects will be constructed as needed and as DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$107,201	$107,201
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$649,706	$649,706
4. Contingency	$0	$0	$0	$0	$64,971	$64,971
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$821,878	$821,878

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Milliken Avenue, Riverside To County Line Channel **SD -049**

Submitting Departments: Engineering Department

Project Description:

Construct 11,010 linear feet of storm drain system along Milliken Avenue from Riverside Drive to the County Line Channel (located along Bellegrave Avenue), identified as MLKN-X-1 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 10% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from the Ontario Ranch (OR) area and is likely totally within that area. The amount of any project costs not fully attributed to OR area (if any) represents the percentage of storm water collected or moved by that segment of pipe was not generated by rainfall within the OR area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, OR projects will be constructed as needed and as DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$453,106	$453,106
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$2,746,096	$2,746,096
4. Contingency	$0	$0	$0	$0	$274,610	$274,610
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$3,473,812	$3,473,812

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Offsite Euclid Avenue Storm Drain **SD -050**

Submitting Departments: Engineering Department

Project Description:

Contribute to the construction of a storm drainage system along Euclid Avenue from Merrill Avenue to the Prado Flood Control Basin located south of Pine Avenue in the City of Chino. The project costs will be distributed between the San Bernardino County Flood Control District, City of Chino and City of Ontario. This amount represents the City of Ontario's contribution towards the roughly $80.5 million project. The SBCFD will contribute an additional $25.5 million while the City of Chino will contribute $30,121,262.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from the Ontario Ranch (OR) area and is likely totally within that area. The amount of any project costs not fully attributed to OR area (if any) represents the percentage of storm water collected or moved by that segment of pipe was not generated by rainfall within the OR area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, OR projects will be constructed as needed and as DIF receipts are collected. The City of Chino conducted the cost estimate as part of MPD Storm Drain Line I (Dbl10' X 8), dated 03/08/24.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$27,948,129	$27,948,129
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$27,948,129	$27,948,129

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities
Project Title / Ref#: Project Is Completed Or No Longer Needed **SD -051**
Submitting Departments: Engineering Department

Project Description:
Project is completed or no longer needed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Project is completed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
Project data no longer needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities
Project Title / Ref#: Project Is Completed Or No Longer Needed
Submitting Departments: Engineering Department

SD -052

Project Description:
Project is completed or no longer needed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Project is completed or no longer needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
Project is completed or no longer needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities
Project Title / Ref#: Project Is Completed Or No Longer Needed **SD -053**
Submitting Departments: Engineering Department

Project Description:
This project has been completed or is no longer needed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Project is complete or no longer needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
Project is completed or no longer needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities
Project Title / Ref#: Project Is Completed Or No Longer Needed **SD -054**
Submitting Departments: Engineering Department

Project Description:
Project is completed or no longer necessary.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Project is completed or no longer needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
Project is completed or no longer needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Project Is Completed Or No Longer Necessary **SD -055**

Submitting Departments: Engineering Department

Project Description:
Project is completed or no longer necessary.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Project is completed ro no longer necessary.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
Project is completed or no longer necessary

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Sixth Street, Glenn To Cucamonga Channel **SD -056**

Submitting Departments: Engineering Department

Project Description:

Construct 9,000 linear feet of storm drain system along Sixth Street from Glenn Avenue to Cucamonga Channel, Vineyard from Seventh Street to Sixth Street and Baker Avenue from 400 feet north of Sixth Street to Sixth Street, identified as 6TH-IV-1 through 6TH-IV-4 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, General City area projects will be constructed as needed and as local DIF receipts are collected.Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,400,419	$1,400,419
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$8,118,367	$8,118,367
4. Contingency	$0	$0	$0	$0	$1,217,755	$1,217,755
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$10,736,541	$10,736,541

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: G Street, Berlyn To West Cucamonga Channel & Various Streets **SD -057**

Submitting Departments: Engineering Department

Project Description:

Construct 10,600 linear feet of storm drain system along G Street from Allyn Avenue to West Cucamonga Creek Channel, Allyn Avenue from G Street to Fourth Street, Fourth Street from Allyn Avenue to Berlyn Avenue, Berlyn Avenue from Fourth Street to Fifth Street and laterals in various locations, identified as G ST-V-1 through G ST-V-6 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City (GC) area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within GC area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,211,791	$1,211,791
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$7,024,875	$7,024,875
4. Contingency	$0	$0	$0	$0	$1,053,731	$1,053,731
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$9,290,397	$9,290,397

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Grove Avenue, 60 Freeway To Riverside Drive **SD -058**

Submitting Departments: Engineering Department

Project Description:

Construct 3,400 linear feet of storm drain system along Grove Avenue from the 60 FWY to Riverside Drive and connect to Grove Avenue Basin as identified as GROV-VIII-1a in various locations, identified as G ST-V-1 through G ST-V-6 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City (GC) area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within GC area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$397,056	$397,056
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$2,301,767	$2,301,767
4. Contingency	$0	$0	$0	$0	$345,264	$345,264
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$3,044,087	$3,044,087

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: D And I Streets, Grove To West Cucamonga Channel **SD -060**

Submitting Departments: Engineering Department

Project Description:

Construct 2,700 linear feet of storm drain system along D Street from Grove to West Cucamonga Creek Channel and I Street from La Paloma to West Cucamonga Creek Channel, identified as D ST-V-1 and I ST-V-1 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City (GC) area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within GC area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 0.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected.Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$257,800	$257,800
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$1,494,498	$1,494,498
4. Contingency	$0	$0	$0	$0	$224,175	$224,175
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$1,976,473	$1,976,473

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Campus Avenue, Cedar To Riverside **SD -059**

Submitting Departments: Engineering Department

Project Description:

Construct 7,200 linear feet of storm drain system along Campus Avenue from Cedar Street to Riverside Drive and Riverside Drive from 800 feet west of Campus Avenue to Campus Avenue, identified as CAMP-VIII-1 and CAMP-VIII-2 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City (GC) area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within GC area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$662,675	$662,675
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$3,841,589	$3,841,589
4. Contingency	$0	$0	$0	$0	$576,238	$576,238
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$5,080,502	$5,080,502

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Inland Empire Blvd., Vineyard To Cucamonga Channel **SD -061**

Submitting Departments: Engineering Department

Project Description:

Construct 4,800 linear feet of storm drain system along inland Empire Boulevard from Orange Avenue to Cucamonga Channel, identified as G ST-IV-1 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City (GC) area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within GC area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$126,848	$126,848
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$735,350	$735,350
4. Contingency	$0	$0	$0	$0	$110,303	$110,303
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$972,501	$972,501

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Sultana Avenue, Phillips To Philadelphia **SD -062**

Submitting Departments: Engineering Department

Project Description:

Construct 5,600 linear feet of storm drain along Sultana Avenue from Phillips Street and Philadelphia Street, identified as SULT-VII-1a in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City (GC) area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within GC area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected.Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$781,653	$781,653
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$4,531,324	$4,531,324
4. Contingency	$0	$0	$0	$0	$679,699	$679,699
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$5,992,676	$5,992,676

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Fourth Street, El Dorado To Cucamonga Channel **SD -063**

Submitting Departments: Engineering Department

Project Description:

Construct 8,500 linear feet of storm drain system along Fourth Street from Corona Avenue to Cucamonga Channel, Corona Avenue from Princeton Street to Fourth Street, Princeton Street from Baker Avenue to Corona Avenue, Baker Avenue from Fifth Street to Fourth Street, Fifth Street from El Dorado Avenue to Baker Avenue, identified as 4TH-IV-1 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City (GC) area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within GC area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$448,154	$448,154
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$2,598,001	$2,598,001
4. Contingency	$0	$0	$0	$0	$389,701	$389,701
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$3,435,856	$3,435,856

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Baker, Vineyard, Carlos, Hellman - Acacia To Philadelphia **SD -064**

Submitting Departments: Engineering Department

Project Description:

Construct 6,100 linear feet of storm drain system along Baker Avenue from Acacia Street to Francis Street, Vineyard Avenue from Locust Street to Francis Street, Carlos Avenue from Elm Street to Locust Street and Hellman Avenue from Spruce Street to Philadelphia Street, identified as BAKR-V-1, VNYD-V-1, CRLS-V-1 and HLMN-IV-1 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 0.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$491,545	$491,545
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$2,849,535	$2,849,535
4. Contingency	$0	$0	$0	$0	$427,430	$427,430
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$3,768,510	$3,768,510

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Bon View Avenue, 60 Freeway To Riverside **SD -065**

Submitting Departments: Engineering Department

Project Description:

Construct a total of 4,800 linear feet of storm drain systems along Bon View Avenue from the 60 FWY to Riverside Drive and Walnut Street from 1,200 feet west of Bon View Avenue to Bon View Avenue, identified as BNVW-VIII-1a and BNVW-VIII-2 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$462,970	$462,970
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$2,683,884	$2,683,884
4. Contingency	$0	$0	$0	$0	$402,583	$402,583
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$3,549,437	$3,549,437

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Cucamonga Avenue, 60 Freeway To Riverside **SD -066**

Submitting Departments: Engineering Department

Project Description:

Construct 4,100 linear feet of storm drain system along Cucamonga Avenue from the 60 FWY to Riverside Drive and Walnut Street from 1,060 feet west of Cucamonga Avenue to Cucamonga Avenue, identified as CUCA-VIII-1a and CUCA-VIII-2 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$446,916	$446,916
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$2,590,822	$2,590,822
4. Contingency	$0	$0	$0	$0	$388,624	$388,624
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$3,426,362	$3,426,362

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Bon View Avenue, Misison To Francis **SD -067**

Submitting Departments: Engineering Department

Project Description:

Construct 6,500 linear feet of storm drain system along Bon View Avenue from Mission Avenue to Francis Street and Mission from Caldwell Avenue to Greenwood Avenue, identified as FRNS-V-3 and FRNS-V-4 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 0.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$662,173	$662,173
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$3,838,690	$3,838,690
4. Contingency	$0	$0	$0	$0	$575,804	$575,804
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$5,076,667	$5,076,667

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Cucamonga Avenue, Phillips To Francis **SD -068**

Submitting Departments: Engineering Department

Project Description:

Construct 3,600 linear feet of storm drain system along Cucamonga Avenue from Phillips Street to Francis Street, identified as FRNS-V-2 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 0.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$409,307	$409,307
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$2,372,795	$2,372,795
4. Contingency	$0	$0	$0	$0	$355,920	$355,920
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$3,138,022	$3,138,022

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Storm Drainage Maintenance Vehicles **SD -069**

Submitting Departments: Engineering Department

Project Description:

Expand the fleet of maintenance vehicles necessary to maintain the proportionally expanded amount of storm drainage line capacity, as represented by the construction projects within this chapter.

Justification / Consequences of Avoidance:

As the storm drainage system is expanded there will be an increased demand upon the existing vehicles dedicated to the maintenance of the storm drainage collection system. The additional vehicles will be necessary to avoid any decrease in the existing capability to maintain the existing system

Relationship to General Plan Development:

The proposed vehicles are fully related to additional demands created by new development thus are fully attributed to new development.

Allocation To General Plan Buildout: 100.00%

Reference Document:

No specific document, based upon proportional inventory expansion.

Project Timing:

As development Impact Fees are collected and the existing fleet is incapable of meeting all maintenance demands. Fleet costs have been increased by the Consumer Price Index over the 2022 estimates.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$646,228	$646,228
TOTAL COST:	$0	$0	$0	$0	$646,228	$646,228

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Boulder Avenue, I To State **SD -070**

Submitting Departments: Engineering Department

Project Description:

Construct 10,000 linear feet of storm drain system along I Street from Mountain Avenue to Boulder Avenue, Boulder Avenue from I Street to Holt Boulevard, Holt Boulevard from Boulder Avenue to Mountain Avenue, Mountain Avenue from Holt Boulevard to State Street, D Street from Boulder Avenue to 700 feet east of Boulder Avenue and in Vesta Avenue from Boulder Avenue to 700 feet east of Boulder Avenue, identified as BLDR-VI-1a, BLDR-VI-2a, BLDR-VI-3 and BLDR-VI-4 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost. The project is designed to accept storm water flows from the City of Upland (Refer to Project Number SD-083 for the second phase of this project for the upstream conditions).

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 0.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$2,329,058	$2,329,058
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$13,501,785	$13,501,785
4. Contingency	$0	$0	$0	$0	$2,025,268	$2,025,268
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$17,856,111	$17,856,111

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Benson Avenue, State To I Street **SD -071**

Submitting Departments: Engineering Department

Project Description:

Construct 5,400 linear feet of storm drain system along Benson Avenue from State Street to I Street, identified as BNSN-VI-1 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 0.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$736,226	$736,226
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$4,267,974	$4,267,974
4. Contingency	$0	$0	$0	$0	$640,196	$640,196
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$5,644,396	$5,644,396

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Mountain Avenue, Philadelphia To Phillips **SD -072**

Submitting Departments: Engineering Department

Project Description:

Construct 9,600 linear feet of storm drain system along Mountain Avenue from Phillips Street to Philadelphia Street, Phillips Street from Magnolia Avenue to Palmetto Avenue, Francis Street from west of Magnolia Avenue to Palmetto Avenue and Philadelphia Street from Mountain Avenue to Palmetto, identified as MNTN-VII-1a, MNTN-VII-2, MNTN-VII-3, MNTN-VII-4, MNTN-VII-5 and MNTN-VII-7 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,402,469	$1,402,469
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$8,130,256	$8,130,256
4. Contingency	$0	$0	$0	$0	$1,219,539	$1,219,539
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$10,752,264	$10,752,264

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: San Antonio Avenue, Francis To Cypress Channel **SD -073**

Submitting Departments: Engineering Department

Project Description:

Construct 11,500 linear feet of storm drain system along San Antonio Avenue from Francis Street to the Cypress Channel (including the portion in the City of Chino), Philadelphia Street from Cypress Avenue to Fern Avenue, Francis Street from Cypress Avenue to San Antonio Avenue, identified as SNAN-VII-1a, SNAN-VII-2a, SNAN-VII-3 and SNAN-VII-4 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,888,239	$1,888,239
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$10,946,309	$10,946,309
4. Contingency	$0	$0	$0	$0	$1,641,946	$1,641,946
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$14,476,494	$14,476,494

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: San Sevaine Channel **SD -074**

Submitting Departments: Engineering Department

Project Description:

The DIF amount represents the City's fair share cost of the County of San Bernardino San Sevaine Channel construction project (located east of and outside of City limits).

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$2,588,258	$2,588,258
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$2,588,258	$2,588,258

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities
Project Title / Ref#: Storm Drain Master Plan **SD -075**
Submitting Departments: Engineering Department

Project Description:
Update the City's Storm Drain Master Plan to reflect changes to the City's General Plan and development standards.

Justification / Consequences of Avoidance:
The project is required for proper storm drainage collection planning.

Relationship to General Plan Development:
Direct to new development in both the General City and Ontario Ranch portions of the City.

Allocation To General Plan Buildout: 100.00%

Reference Document:
None, staff projections.

Project Timing:
As needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$667,920	$667,920
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$667,920	$667,920

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Completed on 1/13/2012

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Project Completed Or No Longer Needed **SD -076**

Submitting Departments: Engineering Department

Project Description:
The project, has been completed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Project is not needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
Project is not needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Campus Avenue, State To Francis (Phase 2 Of SD-053) **SD -077**

Submitting Departments: Engineering Department

Project Description:

Construct 9,500 linear feet of storm drain system along Campus Avenue from State Street to Francis Street, Monterey Avenue from Park Street to Maitland Street, Maitland Street to Campus Avenue, in Phillips Street from Campus Avenue to 700 feet west of Campus Avenue and Mission Boulevard from Cucamonga Avenue to Grove Avenue, identified as FRNS-V-1b, FRNS-V-5 through FRNS-V-7 and MISN-V-1 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost. This project is the second phase of the Storm Drainage project number SD-053.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$772,458	$772,458
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$4,478,017	$4,478,017
4. Contingency	$0	$0	$0	$0	$671,703	$671,703
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$5,922,178	$5,922,178

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Parco Avenue, Philadelphia To 60 Freeway (Phase 2 Of SD-055) **SD -078**

Submitting Departments: Engineering Department

Project Description:

Construct 1,400 linear feet of storm drain system along Parco Avenue from Philadelphia Street to the 60 FWY, identified as PACO-VIII-1b in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost. This project is the second phase of the Storm Drainage project number SD-055.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 0.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$165,951	$165,951
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$962,036	$962,036
4. Contingency	$0	$0	$0	$0	$144,305	$144,305
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$1,272,292	$1,272,292

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Grove Avenue, Francis To 60 Freeway (Phase 2 Of SD-058) **SD -079**

Submitting Departments: Engineering Department

Project Description:

Construct 2,800 linear feet of storm drain system along Grove Avenue from Francis Street to the 60 FWY, identified as GROV-VIII-1b in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost. This project is the second phase of the Storm Drainage project number SD-058.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 0.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$256,263	$256,263
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$1,485,584	$1,485,584
4. Contingency	$0	$0	$0	$0	$222,838	$222,838
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$1,964,685	$1,964,685

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Sultana Avenue, State To Phillips (Phase 2 Of SD-062) **SD -080**

Submitting Departments: Engineering Department

Project Description:

Construct 7,100 linear feet of storm drain system along Sultana Avenue from State Street to Phillips Street and Mission Boulevard from Lemon Avenue to Sultana Avenue (this is the second phase of the project number SD-062), Walnut Street from 600 feet west of Sultana Avenue to Sultana Avenue, Euclid Avenue from 60 FWY to Walnut Street, Fern Avenue from 60 FWY to Walnut Street, identified as SULT-VII-1b, SULT-VII-2, WLNT-VII-1, EULD-VII-1 and FERN-VII-1 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 0.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$618,500	$618,500
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$3,585,507	$3,585,507
4. Contingency	$0	$0	$0	$0	$537,826	$537,826
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$4,741,833	$4,741,833

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Bon View Avenue, 60 Freeway To Francis (Phase 2 Of SD-065) **SD -081**

Submitting Departments: Engineering Department

Project Description:

Construct 3,200 linear foot of storm drain systems along Bon View Avenue from Francis Street to the 60 FWY, identified as BNVW-VIII-1b in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost. This project is the second phase of the Storm Drainage project number SD-065.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 0.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$290,512	$290,512
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$1,684,135	$1,684,135
4. Contingency	$0	$0	$0	$0	$252,621	$252,621
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$2,227,268	$2,227,268

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Cucamonga Avenue, Francis To 60 Freeway (Phase 2 Of SD-066) **SD -082**

Submitting Departments: Engineering Department

Project Description:

Construct 2,500 linear feet of storm drain system along Cucamonga Avenue from Francis Street to the 60 FWY, identified as CUCA-VIII-1b in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost. This project is the second phase of the Storm Drainage project number SD-066.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 0.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$230,103	$230,103
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$1,333,933	$1,333,933
4. Contingency	$0	$0	$0	$0	$200,090	$200,090
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$1,764,126	$1,764,126

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Mountain & Boulder, I-10 To I Street (Phase 2 Of SD-070) **SD -083**

Submitting Departments: Engineering Department

Project Description:

Construct 8,400 linear feet of storm drain system along Mountain Avenue from the I-10 FWY to I Street and Boulder Avenue from Fifth Street to I Street (these are the second phase of project number Project SD-070), and G Street from Mountain Avenue to 1,010 feet east of Mountain Avenue, identified as BLDR-VI-1b, BLDR-VI-2b and G ST-VI-1 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost. This project is the second phase of the Storm Drainage project number SD-066. This project is designed to accept storm water flow from the City of Upland.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 0.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,061,890	$1,061,890
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$6,155,887	$6,155,887
4. Contingency	$0	$0	$0	$0	$923,383	$923,383
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$8,141,160	$8,141,160

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Benson Avenue Laterals (Phase 2 Of SD-071) **SD -084**

Submitting Departments: Engineering Department

Project Description:

Construct 10,000 linear feet of storm drain system along I Street from Elderberry Avenue to Benson Avenue, G Street from Benson Avenue to 1,710 feet east of Benson Avenue, D Street from Benson Avenue to Oaks Avenue, Stoneridge Court from Benson Avenue to Elderberry Avenue and Brooks Avenue from Benson Avenue to Oaks Avenue, identified as BNSN-VI-2 through BNSN-VI-6 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost. This project is the second phase of the Storm Drainage project number SD-071.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 0.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$793,251	$793,251
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$4,598,557	$4,598,557
4. Contingency	$0	$0	$0	$0	$689,784	$689,784
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$6,081,592	$6,081,592

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Mountain Avenue, State To Phillips (Phase 2 Of SD-072) **SD -085**

Submitting Departments: Engineering Department

Project Description:

Construct 4,300 linear feet of storm drain system along Mountain Avenue from State Street to Phillips Street (and connect to Project SD-072) and Mission Boulevard from Magnolia Avenue to Palmetto Avenue, identified as MNTN-VII-1b and MNTN-VII-6 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost. This project is the second phase of the Storm Drainage project number SD-072.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 0.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$401,507	$401,507
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$2,327,578	$2,327,578
4. Contingency	$0	$0	$0	$0	$349,137	$349,137
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$3,078,222	$3,078,222

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: San Antonio & Phillips, Euclid To Francis (Phase2, SD-073) **SD -086**

Submitting Departments: Engineering Department

Project Description:

Construct 6,700 linear feet of storm drain system along San Antonio Avenue from Philips Street to Francis Street (and connect to Project SD-073) and Phillips Street from San Antonio to Euclid Avenue, identified as SNAN-VII-1b in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost. This project is the second phase of the Storm Drainage project number SD-073.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,037,170	$1,037,170
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$6,012,576	$6,012,576
4. Contingency	$0	$0	$0	$0	$901,886	$901,886
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$7,951,632	$7,951,632

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Oakland Avenue, State To Phillips (Phase 2 Of SD-074) **SD -087**

Submitting Departments: Engineering Department

Project Description:

Construct 13,900 linear feet of storm drain system along Oakland Avenue from State Street to Phillips Street (and connect to SD-074), State Street from San Antonio Avenue to Vine Avenue, San Antonio Street from Holt Boulevard to State Street, Mission Boulevard from Cypress Avenue to Vine Avenue, Fern Avenue from Mission Boulevard to Phillips Street, identified as SNAN-VII-2b and SNAN-VII-5 through SNAN-VII-9 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost. This is a new project based on the Master Plan of Drainage update in March of 2012.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 0.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,298,536	$1,298,536
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$7,527,742	$7,527,742
4. Contingency	$0	$0	$0	$0	$1,129,161	$1,129,161
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$9,955,439	$9,955,439

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Walker Avenue, 60 Freeway To Riverside And Lateral **SD -088**

Submitting Departments: Engineering Department

Project Description:

Construct 4,100 linear feet of storm drain system along Walker Avenue from 60 FWY to Riverside Drive and Walnut Street from 620 feet west of Walker Avenue to Walker Avenue, identified as WLKR-IV-1 and WLKR-IV-2 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost. This is a new project based on the Master Plan of Drainage update in March of 2012.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 0.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$347,984	$347,984
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$2,017,295	$2,017,295
4. Contingency	$0	$0	$0	$0	$302,594	$302,594
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$2,667,873	$2,667,873

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Baker Avenue And Riverside Drive, S/O 60 Freeway **SD -089**

Submitting Departments: Engineering Department

Project Description:

Construct 4,200 linear feet of storm drain system along Baker Avenue from the 60 FWY to Riverside Drive and Riverside Drive from east of Vineyard Avenue to Whispering Lakes Lane, identified as BAKR-IV-1 and RVSD-IV-1 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost. This is a new project based on the Master Plan of Drainage update in March of 2012.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 0.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$491,628	$491,628
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$2,850,019	$2,850,019
4. Contingency (Within Construction C	$0	$0	$0	$0	$427,503	$427,503
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$3,769,150	$3,769,150

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: G Street, Corona To Del Norte **SD -090**

Submitting Departments: Engineering Department

Project Description:

Construct 4,000 linear feet of storm drain system along G Street from Corona Avenue to Del Norte Avenue, identified as G ST-IV-2 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost. This is a new project based on the Master Plan of Drainage update in March of 2012.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 0.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$513,799	$513,799
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$2,978,543	$2,978,543
4. Contingency	$0	$0	$0	$0	$446,781	$446,781
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$3,939,123	$3,939,123

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Del Norte And Imperial Avenues From I Street To G Street **SD -091**

Submitting Departments: Engineering Department

Project Description:

Construct 3,000 linear feet of storm drain system along Del Norte Avenue from I Street to G Street and Imperial Avenue from I Street to G Street, identified as G ST-IV-3 and G ST-IV-4 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost. This is a new project based on the Master Plan of Drainage update in March of 2012.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 0.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$226,756	$226,756
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$1,314,528	$1,314,528
4. Contingency	$0	$0	$0	$0	$197,179	$197,179
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$1,738,463	$1,738,463

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Vine Avenue, G Street To State **SD -092**

Submitting Departments: Engineering Department

Project Description:

Construct 5,000 linear feet of storm drain system along Vine Avenue from G Street to State Street, G Street from Vine Avenue to 350 feet east of Vine Avenue, Flora Street from 450 feet west of Vine Avenue to Vine Avenue, Laurel Avenue from B Street to Holt Boulevard and G Street from Euclid Avenue to Lemon Avenue, identified as VINE-V-1a, VINE-V-2, VINE-V-3, LARL-V-1 and EULC-V-1 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost. This is a new project based on the Master Plan of Drainage update in March of 2012.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 0.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$676,884	$676,884
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$3,923,965	$3,923,965
4. Contingency	$0	$0	$0	$0	$588,595	$588,595
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$5,189,444	$5,189,444

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Vine Avenue, Sixth To G Street **SD -093**

Submitting Departments: Engineering Department

Project Description:

Construct 6,600 linear feet of storm drain system along Vine Avenue from Sixth Street to G Street and J Street from San Antonio Avenue to Vine Avenue, identified as VINE-V-1b and VINE-V-4 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost. This is a new project based on the Master Plan of Drainage update in March of 2012

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 0.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$711,344	$711,344
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$4,123,734	$4,123,734
4. Contingency	$0	$0	$0	$0	$618,559	$618,559
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$5,453,637	$5,453,637

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Sultana Avenue, Fifth To Holt **SD -094**

Submitting Departments: Engineering Department

Project Description:

Construct 10,300 linear feet of storm drain system along Sultana Avenue from Fifth Street to Holt Boulevard, J Street from Euclid Avenue to Sultana Avenue and Melrose Avenue from Holt Boulevard to Emporia Street, identified as SULT-V-1, SULT-V-2 and MTRY-V-1 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost. This is a new project based on the Master Plan of Drainage update in March of 2012.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 0.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,216,030	$1,216,030
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$7,049,451	$7,049,451
4. Contingency	$0	$0	$0	$0	$1,057,418	$1,057,418
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$9,322,899	$9,322,899

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Benson Avenue And Laterals **SD -095**

Submitting Departments: Engineering Department

Project Description:

Construct 5,300 linear feet of storm drain system along Benson Avenue from I-10 FWY to Sixth Street, Sixth Street from Benson Avenue to Fuchsia Avenue, Fifth Street from Benson Avenue to Helen Avenue and Fourth Street from Benson Avenue to Oaks Avenue, identified as 4 TH-VI-1 through 4 TH-VI-4 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost. This is a new project based on the Master Plan of Drainage update in March of 2012.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 0.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$408,282	$408,282
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$2,366,853	$2,366,853
4. Contingency	$0	$0	$0	$0	$355,028	$355,028
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$3,130,163	$3,130,163

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Benson Avenue, Francis To Phildelphia **SD -096**

Submitting Departments: Engineering Department

Project Description:

Construct 5,100 linear feet of storm drain system along Benson Avenue from Francis Street to Philadelphia Street, Francis Street from Benson Avenue to Oaks Avenue and Oaks Avenue from Philadelphia to 60 FWY, identified as Facilities BNSN-IX-1 and OAKS-IX-1 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost. This is a new project based on the Master Plan of Drainage update in March of 2012.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 0.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$541,972	$541,972
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$3,141,865	$3,141,865
4. Contingency	$0	$0	$0	$0	$471,280	$471,280
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$4,155,117	$4,155,117

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Mission, Benson, Phillips & Oaks, W/O Magnolia **SD -097**

Submitting Departments: Engineering Department

Project Description:

Construct 8,200 linear feet of storm drain system along Mission Boulevard from Magnolia Avenue to Benson Avenue, Benson Avenue from Mission Boulevard to Phillips Street, Phillips Street from Oaks Avenue to Benson Avenue and Oaks Avenue from Clair Street to Phillips Street, identified as FLPS-IX-1 and FLPS-IX-2 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost. This is a new project based on the Master Plan of Drainage update in March of 2012.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 0.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$870,175	$870,175
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$5,044,491	$5,044,491
4. Contingency (Within Construction C	$0	$0	$0	$0	$756,674	$756,674
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$6,671,340	$6,671,340

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Holt Boulevard, Convention Center To Cucamonga Channel **SD -098**

Submitting Departments: Engineering Department

Project Description:

Construct 2,000 linear feet of storm drain system along Holt Boulevard from Convention Center Way to Cucamonga Channel and Convention Center Way from Dearborn Court to Holt Boulevard, identified as HOLT-IV-1 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost. This is a new project based on the Master Plan of Drainage update in March of 2012.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 0.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$201,769	$201,769
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$1,169,679	$1,169,679
4. Contingency	$0	$0	$0	$0	$175,452	$175,452
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$1,546,900	$1,546,900

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Mission Boulevard, Proforma To Turner **SD -099**

Submitting Departments: Engineering Department

Project Description:

Construct 1,400 linear feet of storm drain system along Mission Boulevard from Proforma Avenue to Turner Avenue, identified as MISN-III-1 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost. This is a new project based on the Master Plan of Drainage update in March of 2012.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 0.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$187,060	$187,060
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$1,084,402	$1,084,402
4. Contingency	$0	$0	$0	$0	$162,660	$162,660
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$1,434,122	$1,434,122

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: 6th Street, West Cucamonga Channel To Grove **SD -100**

Submitting Departments: Engineering Department

Project Description:

Construct 1,100 linear feet of storm drain system along Sixth Street from West Cucamonga Creek Channel to Grove Avenue, identified as 6 TH-V-1 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost. This is a new project based on the Master Plan of Drainage update in March of 2012.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 0.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$98,365	$98,365
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$570,234	$570,234
4. Contingency	$0	$0	$0	$0	$85,535	$85,535
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$754,134	$754,134

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Archibald Avenue, Inland Empire To Airport Drive **SD -101**

Submitting Departments: Engineering Department

Project Description:

Construct 3,100 linear feet of storm drain system inland Empire Boulevard from 440 feet west of Archibald Avenue to Archibald Avenue, in private property from Inland Empire Boulevard to I-10 FWY, in private property from I-10 FWY to south of Airport Drive, identified as ARCH-IV-1 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost. This is a new project based on the Master Plan of Drainage update in March of 2012.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$405,034	$405,034
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$2,348,021	$2,348,021
4. Contingency	$0	$0	$0	$0	$352,203	$352,203
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$3,105,258	$3,105,258

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Fifth Street, Balboa To Cucamonga Channel **SD -102**

Submitting Departments: Engineering Department

Project Description:

Construct 2,400 linear foot of storm drain system along Fifth Street from Balboa Way to Cucamonga Channel, identified as 5 TH-IV-1 in the City of Ontario Master Plan of Drainage (March 2012). Contingency is included at 15% of the estimated construction cost. Project Administration consisting of engineering, construction management and contract administration is included at 15% of the combined construction/contingency cost. This is a new project based on the Master Plan of Drainage update in March of 2012.

Justification / Consequences of Avoidance:

These drainage improvements are needed to provide efficient and timely storm water removal. Storm water will increase in amounts proportional to the percentage of development on an acre due to the decrease in the amount of pervious (i.e. dirt/turf) surface available for infiltration. The cumulative amount of development will create significant amounts of storm water run-off that must be dealt with safely and quickly. Potential flooding of major and secondary arterials including most residential and business areas may occur as development continues to increase the City's overall percentage of impervious surface (i.e. buildings, parking lots, streets, etc.). Additionally, emergency vehicle response maybe impacted due to unmitigated flooding conditions.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from within the General City area and is likely to be totally within that area. The amount of any project costs not fully attributed to new development within General City area (if any) represents the percentage of proposed storm water collection lines currently needed (or a portion thereof) thus that percentage is recognized as a current deficiency and will need to be financed by sources other than DIFs.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, GC projects will be constructed as needed and as local DIF receipts are collected. Storm Drainage project cost estimates were increased by 38% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$256,442	$256,442
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$1,486,622	$1,486,622
4. Contingency	$0	$0	$0	$0	$222,993	$222,993
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$1,966,057	$1,966,057

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Share Of Common City Yard Improvements **SD -103**

Submitting Departments: Engineering Department

Project Description:

Construct the following improvements: 1) Reconfigure some 60,000 square feet of a recently acquired warehouse and office space. 2) Pave approximately ten acres of currently dirt parking lot, primarily for the refuse operation refueling area. 3) Construct additional fleet maintenance operations bays. 4) Construct a new welding shop. 5) Increase security through additional fencing and lighting. 6) Construct additional CNG fueling stations and 7) reconfigure a recently acquired 24,000 square foot building into covered parking to maximize fleet lifetime. The combined improvements have a total projected cost of $38.2 million and are spread between all City operations that make use of the City yard.

Justification / Consequences of Avoidance:

This amount represents the proportional amount of a total estimated $38.2 million in structural improvements to the City maintenance yard necessary to meet the increasing demands for greater storm drainage collection system maintenance capacity. The City has acquired adequate land and has existing structural capacity for the various maintenance demands. This demand for additional structural capacity results from the doubling of all public infrastructures from the Ontario Ranch area and remaining portions of General City area.

Relationship to General Plan Development:

The project benefits both existing and future development within the General City and Ontario Ranch areas.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Master Plan of Storm Drainage, March 2012, as amended by the change in the ENR Construction Cost Index since 03/2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. City Yard improvement cost estimates have been increased by the Engineering News Record - Building Cost Index over the 2022-23 cost estimates.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$256,835	$256,835
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$1,556,576	$1,556,576
4. Contingency (Within Construction C	$0	$0	$0	$0	$155,658	$155,658
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$1,969,069	$1,969,069

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Ontario Ranch Storm Drain Design Studies **SD -105**

Submitting Departments: Engineering Department

Project Description:

Recovery of costs incurred by the New Model Colony Construction group expended on behalf of all other developments. The Master Plan studies include: 1. Cucamonga Creek Drain Concept Development Studies and 2. Storm water Quality Management Guidance Plan. (Added 09/14, report reimbursements).

Justification / Consequences of Avoidance:

The studies were necessary to develop infrastructure requirements that define and benefit all development in the Ontario Ranch area.

Relationship to General Plan Development:

The project is related to the collection and removal of storm water from the Ontario Ranch area and is likely benefits all parcels within that area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Ontario Ranch (formerly NMC) Construction Agreement.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Studies	$0	$0	$0	$0	$1,053,500	$1,053,500
TOTAL COST:	$0	$0	$0	$0	$1,053,500	$1,053,500

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Storm Drainage Collection System Facilities

Project Title / Ref#: Project Completed Or No Longer Needed **SD -104**

Submitting Departments:

Project Description:
Project is compeletes or no longer needed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Project is compeletes or no longer needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
Project is compeletes or no longer needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

City of Ontario
Water Source, Storage and Distribution Facilities

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan - All Plan Areas

Water Source, Storage And Distribution System

MFP 2024-2025 Update

		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build	Project Build Out Total
WT-001	Phillips Street 1010' Zone Well	$0	$0	$0	$0	$764,470	$764,470
WT-002	Eighth Street 1212' Zone Wells	$0	$0	$0	$0	$19,894,178	$19,894,178
WT-003	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
WT-004	Eighth Street 1212' Zone Transmission Lines	$0	$0	$0	$0	$64,862,681	$64,862,681
WT-005	Eighth Street 1212' Zone Reservoir Site Purchase	$0	$0	$0	$0	$4,800,000	$4,800,000
WT-006	Eighth Street 1212' Zone Reservoir Construction	$0	$0	$0	$0	$70,683,383	$70,683,383
WT-007	Francis Street 925' Wells	$0	$0	$0	$0	$80,452,117	$80,452,117
WT-008	Phillips Street 1010' Zone Wells	$0	$0	$0	$0	$8,262,695	$8,262,695
WT-009	Phillips Street 1010' Zone Mains Extension	$0	$0	$0	$0	$35,359,172	$35,359,172
WT-010	Francis Street 925' Zone Transmission Mains	$0	$0	$0	$0	$44,535,715	$44,535,715
WT-011	Francis Street 925' Zone Distribution Mains	$0	$0	$0	$0	$81,226,165	$81,226,165
WT-012	Francis Street 925' Zone Well Collection System	$0	$0	$0	$0	$17,141,659	$17,141,659
WT-013	Pressure Reducing Station, Potable Water System (1010'-925')	$0	$0	$0	$0	$3,066,273	$3,066,273
WT-014	Francis Street 925' Zone Reservoirs	$0	$0	$0	$0	$124188,360	$124188,360
WT-015	Phillips Street 1010' Zone Reservoirs	$0	$0	$0	$0	$9,327,338	$9,327,338
WT-016	Recycled Water System	$0	$0	$0	$0	$137612,533	$137612,533
WT-017	Back-Up Power Supply	$0	$0	$0	$0	$3,966,702	$3,966,702
WT-018	Reservoir 1010' (2B) Landscaping	$0	$0	$0	$0	$242,730	$242,730
WT-019	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
WT-020	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan - All Plan Areas

Water Source, Storage And Distribution System

MFP 2024-2025 Update

		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build	Project Build Out Total
WT-021	Distribribution System Pressure, Size & Age Improvements	$0	$0	$0	$0	$326228,894	$326228,894
WT-022	Miscellaneous Up-Sized Facilities	$0	$0	$0	$0	$11,968,032	$11,968,032
WT-023	Abandon Existing General City Wells	$0	$0	$0	$0	$593,938	$593,938
WT-024	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
WT-025	Decomission Galvin Treatment Plan/Abandon 1212-3 Reservoir	$0	$0	$0	$0	$2,798,932	$2,798,932
WT-026	Seismic Upgrades And Replacements	$0	$0	$0	$0	$14,474,099	$14,474,099
WT-027	Water Master Plan Updates	$0	$0	$0	$0	$1,596,376	$1,596,376
WT-028	Water System Maintenance Vehicle/Equipment Fleet	$0	$0	$0	$0	$1,297,912	$1,297,912
WT-029	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
WT-030	Project Completed Or No Longer Necessary	$0	$0	$0	$0	$0	$0
WT-031	JCSD/Ontario Reservoir (Phillips Street 1010' Zone)	$0	$0	$0	$0	$1,078,186	$1,078,186
WT-032	Water Treatment	$0	$0	$0	$0	$58,997,347	$58,997,347
WT-033	Project Completed Or No Longer Necessary	$0	$0	$0	$0	$0	$0
WT-034	Water Source Supply	$0	$0	$0	$0	$62,549,323	$62,549,323
WT-035	General System Reliabilty Improvements	$0	$0	$0	$0	$2,108,479	$2,108,479
WT-036	Fourth Street 1074' Zone Transmission Improvements	$0	$0	$0	$0	$4,356,603	$4,356,603
WT-037	Share Of Common City Yard Improvements	$0	$0	$0	$0	$10,723,390	$10,723,390
WT-038	Project Completed Or No Longer Necessary	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan - All Plan Areas

Water Source, Storage And Distribution System

MFP 2024-2025 Update

	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build	Project Build Out Total
TOTALS	$0	$0	$0	$0	$1,205,157,682	$1,205,157,682

Notes:
1) If project timing is not a component of this effort, then all projects default to their "Thru Build Out" amount.

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: Phillips Street 1010' Zone Well **WT -001**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:
Construction of Well #39 and appurtenant piping for the Phillips Street Pressure zone.

Justification / Consequences of Avoidance:
The project is required to provide adequate well pumping capacity for future additional residents and businesses.

Relationship to General Plan Development:
The project 100% benefits new development in the General City area.

Allocation To General Plan Buildout: 100.00%

Reference Document:
Water Master Plan, August 2000

Project Timing:
While the project is 100.00% development related, the project's construction has been expedited by using Non-DIF receipts. The projects costs remain in the DIF calculation in order to reimburse those loans from other Fund's. There was no 2024 change in this cost estimate.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$764,470	$764,470
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$764,470	$764,470

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: Eighth Street 1212' Zone Wells **WT -002**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Construction of wells #40, #42 and #43 to produce 2,500 GPM each and appurtenant piping for the Eighth Street Pressure zone. Contingency costs are included at 10% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost

Justification / Consequences of Avoidance:

The project is required to provide adequate well pumping capacity for future additional residents and businesses.

Relationship to General Plan Development:

The project benefits new development in Ontario Ranch (42.09%) and the General City area (57.91%).

Allocation To General Plan Buildout: 100.00%

Reference Document:

Water Master Plan, April 2012.

Project Timing:

Well #40 was constructed in 2004; preliminary work and drilling of well #43 had been completed. remainder of project timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Water project cost increases have been reviewed with the NMC Builders Group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$2,594,893	$2,594,893
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$15,726,623	$15,726,623
4. Contingency	$0	$0	$0	$0	$1,572,662	$1,572,662
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$19,894,178	$19,894,178

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: Project Completed Or No Longer Needed **WT -003**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:
Project has been completed or no longer necessary.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
The project is no longer needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
The project is no longer needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: Eighth Street 1212' Zone Transmission Lines **WT -004**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Construct 73,900 linear feet of 18-inch to 30-inch transmission main from the Eighth Street Pressure Zone Reservoir. Contingency costs are included at 10% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

The project is required to provide adequate and timely water transmission for future additional residents and businesses.

Relationship to General Plan Development:

The project benefits new development in the General City 75% and existing water users (25%).

Allocation To General Plan Buildout: 75.00%

Reference Document:

Water Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Water project cost increases have been reviewed with the NMC Builders Group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$8,460,349	$8,460,349
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$51,274,847	$51,274,847
4. Contingency	$0	$0	$0	$0	$5,127,485	$5,127,485
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$64,862,681	$64,862,681

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: Eighth Street 1212' Zone Reservoir Site Purchase **WT -005**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:
Purchase land near the intersection of Rochester Avenue and Foothill Boulevard in the City of Rancho Cucamonga.

Justification / Consequences of Avoidance:
The project is required to provide adequate and timely water storage for future additional residents and businesses.

Relationship to General Plan Development:
The project benefits new development in the General City 75% and existing water users (25%).

Allocation To General Plan Buildout: 75.00%

Reference Document:
Water Master Plan, April 2012.

Project Timing:
The parcel has been purchased but remains because it was purchased with utility receipts not from the Water Impact fee receipts (a loan), thus must remain until those loans are paid back.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$4,800,000	$4,800,000
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$4,800,000	$4,800,000

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: Eighth Street 1212' Zone Reservoir Construction **WT -006**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Construct Reservoirs 1212-4A and 1212-4B (16.0 MG total) near the intersection of Rochester Avenue and Foothill Boulevard in the City of Rancho Cucamonga. Contingency costs are included at 10% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

The project is required to provide adequate and timely water storage for future additional residents and businesses.

Relationship to General Plan Development:

The project benefits new development in the General City 75% and existing water users (25%).

Allocation To General Plan Buildout: 75.00%

Reference Document:

Water Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Water project cost increases have been reviewed with the NMC Builders Group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$9,219,572	$9,219,572
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$55,876,192	$55,876,192
4. Contingency	$0	$0	$0	$0	$5,587,619	$5,587,619
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$70,683,383	$70,683,383

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: Francis Street 925' Wells **WT -007**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Construct seven new wells (to be combined with existing well (#49) and appurtenant piping for the Francis Street Pressure zone. Contingency costs are included at 10% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

The project is required to provide adequate well pumping capacity for future additional residents and businesses.

Relationship to General Plan Development:

The project benefits new development in the Ontario Ranch (100.00%).

Allocation To General Plan Buildout: 100.00%

Reference Document:

Water Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Water project cost increases have been reviewed with the NMC Builders Group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$10,493,754	$10,493,754
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$63,598,511	$63,598,511
4. Contingency	$0	$0	$0	$0	$6,359,852	$6,359,852
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$80,452,117	$80,452,117

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: Phillips Street 1010' Zone Wells **WT -008**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

This project includes the actual cost of a single well (#50) and appurtenant piping of the Phillips Street Pressure zone and also includes the cost for construction of a proposed treatment alternative and distribution pipelines to address water quality issues.

Justification / Consequences of Avoidance:

The project is required to provide adequate well pumping capacity for future additional residents and businesses.

Relationship to General Plan Development:

The project benefits new development in the Ontario Ranch 100.00%.The treatment facility component has not been constructed.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Water Master Plan, April 2012.

Project Timing:

While the project is 100.00% development related, the project's construction has been expedited by using Non-DIF receipts. The projects costs remain in the DIF calculation in order to reimburse those loans from other Fund's and complete the project.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,077,743	$1,077,743
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$6,531,775	$6,531,775
4. Contingency	$0	$0	$0	$0	$653,177	$653,177
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$8,262,695	$8,262,695

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: Phillips Street 1010' Zone Mains Extension **WT -009**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Construct 67,000 linear feet of transmission and distribution mains from the reservoir at Milliken Avenue and I-10 to the Phillips Street Zone in Ontario Ranch. The project will consist of 8" to 24" water mains within the original and expanded 1010' Zone. Contingency costs are included at 10% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

The project is required to provide adequate and timely water transmission for future additional residents and businesses.

Relationship to General Plan Development:

The project benefits new development and future water users in the Ontario Ranch area (83.56%), General City 6.79% and existing water users (9.65%).

Allocation To General Plan Buildout: 90.35%

Reference Document:

Water Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. The significant water project cost increases have been reviewed with the NMC Builders Group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$4,612,065	$4,612,065
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$27,951,915	$27,951,915
4. Contingency	$0	$0	$0	$0	$2,795,192	$2,795,192
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$35,359,172	$35,359,172

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: Francis Street 925' Zone Transmission Mains **WT -010**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Construct 61,000 linear feet of 24-inch to 42-inch transmission mains of the Ontario Ranch backbone transmission mains of the 925' Zone. Contingency costs are included at 10% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

The project is required to provide adequate and timely water transmission for future additional residents and businesses within the 925' Zone of the Ontario Ranch area.

Relationship to General Plan Development:

The project fully benefits new development and future water users in the Ontario Ranch area (100%).

Allocation To General Plan Buildout: 100.00%

Reference Document:

Water Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. The significant water project cost increases have been reviewed with the NMC Builders Group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$5,809,006	$5,809,006
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$35,206,099	$35,206,099
4. Contingency	$0	$0	$0	$0	$3,520,610	$3,520,610
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$44,535,715	$44,535,715

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: Francis Street 925' Zone Distribution Mains **WT -011**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Construct 211,000 linear feet of 12-inch to 21-inch distribution mains of the Ontario Ranch back-bone distribution mains of the 925' Zone. Contingency costs are included at 10% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

The project had been identified as "Well Collection System to Jurupa Reservoir" but is no longer needed and the project number has been

Justification / Consequences of Avoidance:

The project is required to provide adequate and timely water transmission for future additional residents and businesses within the 925' Zone of the Ontario Ranch area.

Relationship to General Plan Development:

The project fully benefits new development and future water users in the Ontario Ranch arrea(100%).

Allocation To General Plan Buildout: 100.00%

Reference Document:

Water Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. The significant water project cost increases have been reviewed with the NMC Builders Group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$10,594,717	$10,594,717
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$64,210,407	$64,210,407
4. Contingency	$0	$0	$0	$0	$6,421,041	$6,421,041
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$81,226,165	$81,226,165

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: Francis Street 925' Zone Well Collection System **WT -012**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

The project consists of 22,150 linear feet of 18-inch to 30-inch well collection mains. Contingency costs are included at 10% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

The project is required to provide adequate and timely water transmission for future additional residents and businesses within the Ontario Ranch area.

Relationship to General Plan Development:

The project fully benefits new development and future water users in the Ontario Ranch area (100%).

Allocation To General Plan Buildout: 100.00%

Reference Document:

Water Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column.The significant water project cost increases have been reviewed with the NMC Builders Group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$2,235,869	$2,235,869
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$13,550,719	$13,550,719
4. Contingency	$0	$0	$0	$0	$1,355,071	$1,355,071
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$17,141,659	$17,141,659

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: Pressure Reducing Station, Potable Water System (1010'-925') **WT -013**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Construct three (3) pressure reducing stations in the Phillips Street Zone to the Francis Street Zone. Contingency costs are included at 10% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

The project is required to provide adequate and timely water transmission for future additional residents and businesses within the Ontario Ranch area.

Relationship to General Plan Development:

The project fully benefits new development and future water users in Ontario Ranch (100%).

Allocation To General Plan Buildout: 100.00%

Reference Document:

Water Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. The significant water project cost increases have been reviewed with the NMC Builders Group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$399,948	$399,948
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$2,423,931	$2,423,931
4. Contingency	$0	$0	$0	$0	$242,394	$242,394
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$3,066,273	$3,066,273

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: Francis Street 925' Zone Reservoirs **WT -014**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Construct two 9MG reservoirs (925-1A and 925-1B) and two 6 MG reservoirs 925-2A and 925-2B). Reservoir 925-2A (6MG is constructed and included at actual final cost.

Justification / Consequences of Avoidance:

The project is required to provide adequate and timely water storage for future additional residents and businesses.

Relationship to General Plan Development:

The project fully benefits new development in the Ontario Ranch area (100%).

Allocation To General Plan Buildout: 100.00%

Reference Document:

Water Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. The significant water project cost increases have been reviewed with the NMC Builders Group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$16,198,481	$16,198,481
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$98,172,617	$98,172,617
4. Contingency	$0	$0	$0	$0	$9,817,262	$9,817,262
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$124,188,360	$124,188,360

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: Phillips Street 1010' Zone Reservoirs **WT -015**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:
The project represents the remaining costs of the 1010-2B at 9MG reservoir.

Justification / Consequences of Avoidance:
The project is required to provide adequate and timely water transmission for future additional residents and businesses.

Relationship to General Plan Development:
The project fully benefits new development and future water users in the Ontario Ranch area (100%).

Allocation To General Plan Buildout: 100.00%

Reference Document:
Water Master Plan, April 2012.

Project Timing:
The project has been largely constructed. The significant water project cost increases have been reviewed with the NMC Builders Group. Though the project is largely completed, costs remain for the completion of the project and for repayment to other no-DIF fund for advancing the construction schedule.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,216,609	$1,216,609
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$7,373,390	$7,373,390
4. Contingency	$0	$0	$0	$0	$737,339	$737,339
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$9,327,338	$9,327,338

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: Recycled Water System **WT -016**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Construct a recycled water system consisting of constructing 29,000 linear feet of 8-inch to 12-inch mains in the General City and 266,000 linear feet of 8-inch to 12-inch mains and one booster station and four pressure reducing stations in Ontario Ranch to distribute recycled water primarily for landscaping and irrigation purposes. Contingency costs are included at 10% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

The project is required to provide adequate and timely recycled water transmission and distribution for future additional residents and businesses and would increase the availability of potable water sources for domestic purposes.

Relationship to General Plan Development:

The project benefits new development and future water users in the Ontario Ranch area (85.13%) and the General City area (14.87%).

Allocation To General Plan Buildout: 100.00%

Reference Document:

Recycled Water Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. The significant water project cost increases have been reviewed with the NMC Builders Group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$17,949,461	$17,949,461
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$108,784,611	$108,784,611
4. Contingency	$0	$0	$0	$0	$10,878,461	$10,878,461
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$137,612,533	$137,612,533

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: Back-Up Power Supply **WT -017**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Acquire and install back-up engine generator units to insure a continuous flow of water well pumping in case of a commercial power shortage. Plans include converting twenty wells to allow for back-up power and for eight portable generators. The cost of the two wells already converted has been included at identified costs. Contingency costs are included at 10% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

The project is required to provide adequate and timely water transmission for future additional residents and businesses.

Relationship to General Plan Development:

The project benefits new development and future water users in the Ontario Ranch area (27.88%) and the General City area (7.21%) and existing water users (64.91%).

Allocation To General Plan Buildout: 35.09%

Reference Document:

Water Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. The significant water project cost increases have been reviewed with the NMC Builders Group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$517,397	$517,397
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$3,135,733	$3,135,733
4. Contingency	$0	$0	$0	$0	$313,572	$313,572
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$3,966,702	$3,966,702

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: Reservoir 1010' (2B) Landscaping **WT -018**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:
Landscape the 2B reservoir.

Justification / Consequences of Avoidance:
The project is a component of WT-015.

Relationship to General Plan Development:
The project fully benefits new development in the General City area (100.00%).

Allocation To General Plan Buildout: 100.00%

Reference Document:
Water and Recycled Water Master Plan, May 2006.

Project Timing:
While the project is 100.00% development related, the project's construction has been expedited by using Non-DIF receipts. The projects costs remain in the DIF calculation in order to reimburse those loans from other Fund's.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$242,730	$242,730
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$242,730	$242,730

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: Project Completed Or No Longer Needed **WT -019**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:
The project has previously been included in the DIF Report as Additional Recycled Water Service, but is now included in WT-016.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
The project is no longer needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
The project is not needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: Project Completed Or No Longer Needed **WT -020**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:
The project has previously been included in the DIF Report as Engine Generator Units (6) but is now included in WT-017.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
The project is no longer needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
The project is not needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: Distribribution System Pressure, Size & Age Improvements **WT -021**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Replace all 2-inch and 4-inch and other deficient distribution and transmission lines with minimum standard 8-inch transmission lines primarily for maintaining fire flow requirements. The project consists of 651,000 linear feet of 8-inch to 36-inch line. Contingency costs are included at 10% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

The project is required to provide adequate and timely water transmission for future additional residents and businesses.

Relationship to General Plan Development:

The project is included in the City's Capital Improvement Program funded from existing utility user receipts and is not financed with development impact fees.

Allocation To General Plan Buildout: 0.00%

Reference Document:

Water Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. The significant water project cost increases have been reviewed with the NMC Builders Group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$42,551,595	$42,551,595
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$257,888,454	$257,888,454
4. Contingency	$0	$0	$0	$0	$25,788,845	$25,788,845
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$326,228,894	$326,228,894

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: Miscellaneous Up-Sized Facilities **WT -022**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:
This project is included for the upsizing of 8,500 LF of existing water infrastructure.

Justification / Consequences of Avoidance:
In-fill development in the General City area necessitates the upsizing of existing facilities.

Relationship to General Plan Development:
These costs are related to the General City.

Allocation To General Plan Buildout: 100.00%

Reference Document:
None, staff projections.

Project Timing:
The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. All costs are at nominal, or current dollar value.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,561,048	$1,561,048
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$9,460,895	$9,460,895
4. Contingency	$0	$0	$0	$0	$946,089	$946,089
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$11,968,032	$11,968,032

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: Abandon Existing General City Wells **WT -023**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Abandon four (4) water wells in the General City area. Contingency costs are included at 10% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

The project is required for eliminating maintenance costs and liabilities for obsolete facilities.

Relationship to General Plan Development:

The project is included in the City's Capital Improvement Program funded from existing utility user receipts and is not financed with development impact fees.

Allocation To General Plan Buildout: 0.00%

Reference Document:

Water Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Water staff have updated the costs based upon recent construction cost experience.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$77,470	$77,470
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$469,516	$469,516
4. Contingency	$0	$0	$0	$0	$46,952	$46,952
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$593,938	$593,938

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: Project Completed Or No Longer Needed **WT -024**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:
.Project has been completed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
The project is no longer needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
The project is not needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: Decomission Galvin Treatment Plan/Abandon 1212-3 Reservoir **WT -025**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Eliminate the unnecessary Galvin Treatment Plan and abandon the 1212-3 reservoir. Contingency costs are included at 10% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost. For additional detail see Master Plan Projects 21 (S-12) and 43 (S-6).

Justification / Consequences of Avoidance:

The project is required for eliminating maintenance costs and liabilities for obsolete facilities.

Relationship to General Plan Development:

The project fully benefits existing water users.

Allocation To General Plan Buildout: 0.00%

Reference Document:

Water Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Water staff have updated the costs based upon recent construction cost experience.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$365,079	$365,079
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$2,212,594	$2,212,594
4. Contingency	$0	$0	$0	$0	$221,259	$221,259
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$2,798,932	$2,798,932

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: Seismic Upgrades And Replacements **WT -026**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Replace and seismically retrofit as needed and identified, various older segments of the General City water system. Contingency costs are included at 10% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

The project is required to maintain reliability and to provide timely water transmission and distribution for current residents and businesses.

Relationship to General Plan Development:

The project fully benefits existing water users.

Allocation To General Plan Buildout: 0.00%

Reference Document:

Water Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Water staff have updated the costs based upon recent construction cost experience.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,887,926	$1,887,926
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$11,441,975	$11,441,975
4. Contingency	$0	$0	$0	$0	$1,144,198	$1,144,198
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$14,474,099	$14,474,099

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: Water Master Plan Updates **WT -027**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Update the City's Water Master Plan. An updated Master Plan is required to evaluate the changing conditions and the water sources and infrastructure needed to provide a potable and consistent amount of water to private and public property.

Justification / Consequences of Avoidance:

The project is required to maintain water system reliability and to provide timely water transmission for existing and future additional residents and businesses.

Relationship to General Plan Development:

The project is directly related to new development in both General City and Ontario Ranch areas based upon relative new water demands.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Water Master Plan, August 2000

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,596,376	$1,596,376
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$1,596,376	$1,596,376

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: Water System Maintenance Vehicle/Equipment Fleet **WT -028**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:
This project is the cost for the purchase of additional utility system maintenance vehicles and equipment.

Justification / Consequences of Avoidance:
The addition of tens of thousands of linear feet of water distribution lines, pumps and reservoirs will increase the demand upon the existing maintenance vehicle feet. Additional utility maintenance vehicles will be required.

Relationship to General Plan Development:
The additional vehicles are directly related to new development in both General City and Ontario Ranch areas based upon relative new water demands.

Allocation To General Plan Buildout: 100.00%

Reference Document:
Based upon proportional analysis of existing fleet and equipment and future additional infrastructure.

Project Timing:
The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$1,297,912	$1,297,912
TOTAL COST:	$0	$0	$0	$0	$1,297,912	$1,297,912

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: Project Completed Or No Longer Needed **WT -029**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:
Project is completed or no longer necessary.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Project has been completed.

Allocation To General Plan Buildout: 100.00%

Reference Document:
Water and Recycled Water Master Plan, May 2006.

Project Timing:
The project has been completed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: Project Completed Or No Longer Necessary **WT -030**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:
Project has been completed or no longer necessary.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Project has been completed or is no longer necessary.

Allocation To General Plan Buildout: 100.00%

Reference Document:
Water and Recycled Water Master Plan, May 2006.

Project Timing:
The project has been completed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: JCSD/Ontario Reservoir (Phillips Street 1010' Zone) **WT -031**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

The project consists of a contribution towards the construction of reservoirs improvements in order to provide storage for secondary water supply to the City water system. The project construction cost is the actual cost.

Justification / Consequences of Avoidance:

The project is required to provide adequate and timely water transmission for future additional residents and businesses.

Relationship to General Plan Development:

The project benefits new development in the Ontario Ranch area (50%) and new development the General City area (10%) and existing water users (40%).

Allocation To General Plan Buildout: 60.00%

Reference Document:

Water and Recycled Water Master Plan, May 2006.

Project Timing:

While the project is 100.00% development related, the project's construction has been expedited by using Non-DIF receipts. The projects costs remain in the DIF calculation in order to reimburse those loans from other Fund's and complete the project.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$76,646	$76,646
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$510,979	$510,979
4. Contingency	$0	$0	$0	$0	$58,763	$58,763
5. Equipment / Other	$0	$0	$0	$0	$431,798	$431,798
TOTAL COST:	$0	$0	$0	$0	$1,078,186	$1,078,186

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: Water Treatment **WT -032**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

The project consists of the construction of water treatment facilities. Contingency costs are included at 10% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

The project is required to provide adequate and timely water transmission for future additional residents and businesses.

Relationship to General Plan Development:

The project benefits future water users in the Ontario Ranch area and existing water users.

Allocation To General Plan Buildout: 53.01%

Reference Document:

Water Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Water staff have updated the costs based upon recent construction cost experience. Water project cost increases have been reviewed with the NMC Builders Group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$7,695,306	$7,695,306
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$46,638,219	$46,638,219
4. Contingency	$0	$0	$0	$0	$4,663,822	$4,663,822
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$58,997,347	$58,997,347

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: Project Completed Or No Longer Necessary **WT -033**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:
Project has been completed or is no longer necessary.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Project is completed.

Allocation To General Plan Buildout: 100.00%

Reference Document:
Water and Recycled Water Master Plan, May 2006.

Project Timing:
Project is completed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: Water Source Supply **WT -034**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

The project consists of costs for securing additional water supply sources to meet the projected water demands anticipated at the build-out of the City's General Plan. Additional water supply sources include Chino Basin Desalter Authority (CDA), Recycled Water, Chino Basin Non-Agricultural Pool Rights (Non-Ag), and other sources to be determined which may include Chino Basin Safe Yield rights. Additional Ontario Ranch supplies include: 3,533 AFY from CDA Expansion ($28,405,706); 11,486 AFY of Recycled Water (incl. in WT-016); 2,306 AFY of previously acquired Non-Ag rights ($17,834,593); and 3,056 AFY of other water rights/supplies to be acquired ($12,374,672). (continued under "Justification".

Justification / Consequences of Avoidance:

Additional OMC supplies include: 765 AFY of previously acquired San Antonio Water Co. shares ($549,400); 512 AFY from the existing CDA ($3,385,294); and 6,899 AFY of Recycled Water (incl. in WT-016).

The project is required to ensure sufficient water supplies are available to meet future demands.

Relationship to General Plan Development:

The combined project fully benefits new development within both the Ontario Ranch (93.71%) and General City areas (6.29%).

Allocation To General Plan Buildout: 100.00%

Reference Document:

Urban Water Management Plan, 2010, the Ontario Plan Environmental Impact Report.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$62,549,323	$62,549,323
TOTAL COST:	$0	$0	$0	$0	$62,549,323	$62,549,323

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: General System Reliabilty Improvements **WT -035**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

The project includes perimeter metering for the airport and construction of additional inter-agency connections with surrounding agencies. Contingency costs are included at 10% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

The project is required to provide adequate and timely water transmission for existing residents and businesses.

Relationship to General Plan Development:

The project benefits existing water users.

Allocation To General Plan Buildout: 0.00%

Reference Document:

Water Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. All costs are at nominal, or current dollar value.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$275,019	$275,019
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$1,666,782	$1,666,782
4. Contingency	$0	$0	$0	$0	$166,678	$166,678
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$2,108,479	$2,108,479

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: Fourth Street 1074' Zone Transmission Improvements **WT -036**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

The project includes the construction of 4,400 linear feet of 12-inch transmission main and two pressure reducing stations to improvement pressures in the 1074' Zone. Contingency costs are included at 10% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

The project is required to provide adequate and timely water transmission for existing additional residents and businesses.

Relationship to General Plan Development:

The project benefits existing General City water users.

Allocation To General Plan Buildout: 0.00%

Reference Document:

Water Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Water staff have updated the costs based upon recent construction cost experience. Water project cost increases have been reviewed with the NMC Builders Group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$568,252	$568,252
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$3,443,955	$3,443,955
4. Contingency	$0	$0	$0	$0	$344,396	$344,396
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$4,356,603	$4,356,603

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: Share Of Common City Yard Improvements **WT -037**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Construct the following improvements: 1) Reconfigure some 60,000 square feet of a recently acquired warehouse and office space. 2) Pave approximately ten acres of currently dirt parking lot, primarily for the refuse operation refueling area. 3) Construct additional fleet maintenance operations bays. 4) Construct a new welding shop. 5) Increase security through additional fencing and lighting. 6) Construct additional CNG fueling stations and 7) reconfigure a recently acquired 24,000 square foot building into covered parking to maximize fleet lifetime. The combined improvements have a total projected cost of $38.2 million and are spread between all City operations that make use of the City yard.

Justification / Consequences of Avoidance:

This project represents the proportional amount of a total estimated $38.2 million in structural improvements to the City maintenance yard necessary to meet the increasing demands for greater water system maintenance capacity. The City has acquired adequate land and has existing structural capacity for the various existing maintenance demands. This demand for additional structural capacity results from the doubling of all public infrastructure from the Ontario Ranch and remaining portions underbuilt portions of the General City.

Relationship to General Plan Development:

The project fully benefits future water users in the General City and Ontario Ranch areas.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Based upon an analysis of demands on City yard capacity and expansion needs.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,271,547	$1,271,547
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$8,476,988	$8,476,988
4. Contingency	$0	$0	$0	$0	$974,855	$974,855
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$10,723,390	$10,723,390

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Water Source, Storage And Distribution System

Project Title / Ref#: Project Completed Or No Longer Necessary **WT -038**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:
.Project is completed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
Project is completed.

Allocation To General Plan Buildout: 100.00%

Reference Document:
Ontario Ranch (formerly NMC) Construction Agreement.

Project Timing:
Project is completed

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Studies	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

City of Ontario
Sewer Collection
Facilities

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan - All Plan Areas

Sewer Collection Facilities

MFP 2024-2025 Update

		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build	Project Build Out Total
SW-001	Eastern Trunk Sewer	$0	$0	$0	$0	$23,769,604	$23,769,604
SW-002	Western Trunk Sewer	$0	$0	$0	$0	$44,269,343	$44,269,343
SW-003	Eucalyptus East Trunk Sewer	$0	$0	$0	$0	$816,116	$816,116
SW-004	Project Completed Or No Longer Necessary	$0	$0	$0	$0	$0	$0
SW-005	Haven Trunk Sewer	$0	$0	$0	$0	$1,752,403	$1,752,403
SW-006	Mill Creek Trunk Sewer	$0	$0	$0	$0	$12,945,246	$12,945,246
SW-007	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
SW-008	Walker Trunk Sewer	$0	$0	$0	$0	$3,125,194	$3,125,194
SW-009	Grove Trunk Sewer	$0	$0	$0	$0	$11,358,530	$11,358,530
SW-010	Bon View Trunk Sewer	$0	$0	$0	$0	$8,592,839	$8,592,839
SW-011	Euclid Trunk Sewer	$0	$0	$0	$0	$8,484,996	$8,484,996
SW-012	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
SW-013	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
SW-014	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
SW-015	Plaza Serena Street, Granada Court To Vineyard Avenue	$0	$0	$0	$0	$33,618	$33,618
SW-016	Philadelphia Between Parco And Vineyard	$0	$0	$0	$0	$7,191,153	$7,191,153
SW-017	Holt Boulevard, West Of Imperial Avenue	$0	$0	$0	$0	$476,855	$476,855
SW-018	Project Completed Or No Longer Necessary	$0	$0	$0	$0	$0	$0
SW-019	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
SW-020	Cherry Avenue, North Of G Street	$0	$0	$0	$0	$20,407	$20,407

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan - All Plan Areas

Sewer Collection Facilities

MFP 2024-2025 Update

		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build	Project Build Out Total
SW-021	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
SW-022	Vineyard Avenue, South Of Cedar Et. Al.	$0	$0	$0	$0	$16,319,011	$16,319,011
SW-023	Easement East Of Haven	$0	$0	$0	$0	$1,417,046	$1,417,046
SW-024	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
SW-025	Project Completed No Longer Needed	$0	$0	$0	$0	$0	$0
SW-026	Sewer Utility Maintenance Vehicles	$0	$0	$0	$0	$1,057,911	$1,057,911
SW-027	Sewer Utility Master Plan	$0	$0	$0	$0	$870,349	$870,349
SW-028	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
SW-029	Carpenter Trunk Sewer	$0	$0	$0	$0	$6,391,873	$6,391,873
SW-030	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
SW-031	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
SW-032	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
SW-033	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
SW-034	Project Completed Or No Longer Necessary	$0	$0	$0	$0	$0	$0
SW-035	Virginia Avenue Between D Street And Nocta Street	$0	$0	$0	$0	$65,056	$65,056
SW-036	Deer Creek Loop And Laurel Tree Drive	$0	$0	$0	$0	$947,106	$947,106
SW-037	Hollowell, Boulder And Holt Avenue	$0	$0	$0	$0	$279,389	$279,389
SW-038	Easement N/O Holt Blvd, E/O Allyn Avenue	$0	$0	$0	$0	$108,406	$108,406
SW-039	Riverside Drive Between Sultana And Campus Avenues	$0	$0	$0	$0	$207,064	$207,064
SW-040	Vineyard S/O Airport And Easement	$0	$0	$0	$0	$7,633,432	$7,633,432

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan - All Plan Areas

Sewer Collection Facilities

MFP 2024-2025 Update

		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build	Project Build Out Total
SW-041	Mills Circle N/O Mall Drive	$0	$0	$0	$0	$154,733	$154,733
SW-042	Holt Boulevard E/O Vineyard Avenue	$0	$0	$0	$0	$491,554	$491,554
SW-043	Bon View Avenue N/O Francis	$0	$0	$0	$0	$220,867	$220,867
SW-044	Acacia, Easement, Locust And Parco	$0	$0	$0	$0	$2,031,658	$2,031,658
SW-045	Turner Avenue, N/O Cedar Street	$0	$0	$0	$0	$154,733	$154,733
SW-046	Holt Avenue Phase A	$0	$0	$0	$0	$1,072,819	$1,072,819
SW-047	Holt Avenue Phase B	$0	$0	$0	$0	$41,823	$41,823
SW-048	Share Of Common City Yard Improvements	$0	$0	$0	$0	$4,494,050	$4,494,050
SW-049	Project Completed Or No Longer Necessary	$0	$0	$0	$0	$0	$0
SW-050	Airport Drive Main, E/O Grove	$0	$0	$0	$0	$691,443	$691,443
SW-051	Project Completed Or No Longer Necessary	$0	$0	$0	$0	$0	$0
SW-052	Piedmonte Specific Densification Mitigation In Var. Streets	$0	$0	$0	$0	$6,081,763	$6,081,763
SW-053	Vineyard Trunk	$0	$0	$0	$0	$5,718,532	$5,718,532
SW-054	Sultana Trunk	$0	$0	$0	$0	$5,106,446	$5,106,446
SW-055	Campus Trunk	$0	$0	$0	$0	$5,106,446	$5,106,446
	TOTALS	$0	$0	$0	$0	$189,499,814	$189,499,814

Notes:
1) If project timing is not a component of this effort, then all projects default to their "Thru Build Out" amount.

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Eastern Trunk Sewer **SW -001**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

The Eastern Trunk Sewer line consists of approximately 25,940 linear feet of sewer pipe ranging in size from 12" to 42" pipe. The line generally begins at the Turner Pump station and Riverside drive and travels west to Archibald Avenue where it turns south to Merrill Avenue. At Merrill Avenue, the line turns west to baker Avenue where it turns south to connect with the IEUA Kimball interceptor. The segment along Merrill Avenue requires that the line go under Cucamonga Creek. The project has been completed.

Justification / Consequences of Avoidance:

This project is necessary to be able to meet the sewage collection capacity demand that has been calculated as necessary resulting from proposed development in the General City and Ontario Ranch areas and existing sewage flows.

Relationship to General Plan Development:

The project is mostly (84.28%) related to existing flows and will be financed with utility rate receipts with the remaining 15.72% related to development within to the General City and Ontario Ranch areas.

Allocation To General Plan Buildout: 15.72%

Reference Document:

Old Model Colony and New Model Colony Sewer Master Plan, April 2012.

Project Timing:

While the project is 100.00% development related, the project's construction has been expedited by using Non-DIF receipts. The projects costs remain in the DIF calculation in order to reimburse those loans from other Fund's.Project costs were increased by the CPI recognizing that these expedited costs will need to be paid back to the Sewer Operations fund with simple interest applied.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$23,769,604	$23,769,604
TOTAL COST:	$0	$0	$0	$0	$23,769,604	$23,769,604

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Western Trunk Sewer **SW -002**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

The project consists of approximately 32,800 linear feet of 18-inch to 36-inch" diameter sewer pipe. The Western Trunk Sewer is a gravity sewer that will extend from the intersection of Riverside drive and Carpenter Avenue4 to IEUA's Kimball interceptor. The general alignment of this trunk sewer begins at the intersection of Riverside drive and Carpenter Avenue; travels south in carpenter Avenue to Schafer Avenue; west to Walker Avenue; south to Merrill Avenue; west to Euclid Avenue; and south to the connection with IEUA's Kimball Interceptor at Kimball Avenue. Contingency costs are included at 10% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

This project is necessary to be able to meet the sewage collection capacity demand that has been calculated as necessary resulting from proposed development in General City and Ontario Ranch areas and existing sewage flows.

Relationship to General Plan Development:

The project is related to existing flows and will be financed with utility rate receipts with the remaining related to development within Ontario Ranch.

Allocation To General Plan Buildout: 50.88%

Reference Document:

Old Model Colony and New Model Colony Sewer Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Sewer Collection Facilities project cost estimates were increased by 223.8% based upon a recalculation of the project costs.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$5,774,262	$5,774,262
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$34,995,528	$34,995,528
4. Contingency	$0	$0	$0	$0	$3,499,553	$3,499,553
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$44,269,343	$44,269,343

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Eucalyptus East Trunk Sewer **SW -003**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

The Eucalyptus East Trunk Sewer consists of approximately 4,500 linear feet of 15-inch diameter pipe in Eucalyptus Avenue, east of Archibald Avenue. This project will tie into the eastern Trunk Sewer at Archibald Avenue. Contingency costs are included at 10% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

This project is necessary to be able to meet the sewage collection capacity demand that has been calculated as necessary resulting from proposed development in the Ontario Ranch area.

Relationship to General Plan Development:

The project is fully related to development within Ontario Ranch.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Old Model Colony and New Model Colony Sewer Master Plan, April 2012.

Project Timing:

Sewer Collection Facilities project cost estimates were increased by 17% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$106,450	$106,450
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$645,151	$645,151
4. Contingency	$0	$0	$0	$0	$64,515	$64,515
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$816,116	$816,116

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Project Completed Or No Longer Necessary **SW -004**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:
Project is completed or no longer necessary.

Justification / Consequences of Avoidance:
The project number is left in as a place holder to maintain the previous project numbering system

Relationship to General Plan Development:
Project is completed or no longer necessary.

Allocation To General Plan Buildout: 100.00%

Reference Document:
Old Model Colony and New Model Colony Sewer Master Plan, April 2012.

Project Timing:
Project is completed or no longer necessary.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Haven Trunk Sewer **SW -005**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

The Haven Trunk Sewer consists of approximately 12,950 linear feet of 18-inch to 21-inch diameter sewer pipe in Haven Avenue from the Haven Pump Station to the Eastern Trunk Sewer at Edison Avenue. Contingency costs are included at 10% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

This project is necessary to be able to meet the sewage collection capacity demand that has been calculated as necessary resulting from proposed development in General City and Ontario Ranch areas and existing sewage flows.

Relationship to General Plan Development:

The project is largely related to existing flows and will be financed with utility rate receipts with the remaining amount related to development within Ontario Ranch.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Old Model Colony and New Model Colony Sewer Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Sewer Collection Facilities project cost estimates were increased by 17% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$228,574	$228,574
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$1,385,299	$1,385,299
4. Contingency	$0	$0	$0	$0	$138,530	$138,530
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$1,752,403	$1,752,403

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Mill Creek Trunk Sewer **SW -006**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

The Cleveland, Bellgrave, Merrill Avenue Trunk Sewer consists of 24,935 feet of 12-inch to 24-inch diameter pipe. This project will outlet into the Eastern Trunk Sewer at the intersection of Merrill Avenue and Archibald Avenue. Contingency costs are included at 10% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

This project is necessary to be able to meet the sewage collection capacity demand that has been calculated as necessary resulting from proposed development in Ontario Ranch.

Relationship to General Plan Development:

The project is fully related to development within Ontario Ranch.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Old Model Colony and New Model Colony Sewer Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Sewer Collection Facilities project cost estimates were increased by 17% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,688,510	$1,688,510
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$10,233,396	$10,233,396
4. Contingency	$0	$0	$0	$0	$1,023,340	$1,023,340
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$12,945,246	$12,945,246

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Cancelled on 11/20/2006

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Project Completed Or No Longer Needed **SW -007**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:
The project is completed or no longer needed.

Justification / Consequences of Avoidance:
The project has been left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
The project is no longer needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
The project is not needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Walker Trunk Sewer **SW -008**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

The Walker Avenue Trunk Sewer consists of 2,700 feet of 21-inch diameter pipe in Walker Avenue, north of Schaefer Avenue. This project will tie into the Western Trunk Sewer at Schaefer Avenue. Contingency costs are included at 10% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

This project is necessary to be able to meet the sewage collection capacity demand that has been calculated as necessary resulting from proposed development in Ontario Ranch.

Relationship to General Plan Development:

The project is fully related to development within Ontario Ranch.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Old Model Colony and New Model Colony Sewer Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Sewer Collection Facilities project cost estimates were increased by 316.7% based upon a recalculation of the project costs.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$407,634	$407,634
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$2,470,509	$2,470,509
4. Contingency	$0	$0	$0	$0	$247,051	$247,051
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$3,125,194	$3,125,194

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Grove Trunk Sewer **SW -009**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

The Grove Avenue Trunk Sewer consists of 10,800 feet of 21 inch diameter pipe in Grove Avenue, from Chino Avenue to Merrill Avenue. This project will tie into the Western Trunk Sewer at Merrill Avenue. Contingency costs are included at 10% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

This project is necessary to be able to meet the sewage collection capacity demand that has been calculated as necessary resulting from proposed development in Ontario Ranch.

Relationship to General Plan Development:

The project is fully related to development within the Ontario Ranch area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Old Model Colony and New Model Colony Sewer Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Sewer Collection Facilities project cost estimates were increased by 231.6% based upon a recalculation of the project costs.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,481,547	$1,481,547
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$8,979,075	$8,979,075
4. Contingency	$0	$0	$0	$0	$897,908	$897,908
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$11,358,530	$11,358,530

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Bon View Trunk Sewer **SW -010**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

The Bon View Avenue Trunk Sewer consists of 10,800 feet of 18-inch diameter pipe in Bon View Avenue, from Chino Avenue to Merrill Avenue. This project will tie into the Western Trunk Sewer at Merrill Avenue. Contingency costs are included at 10% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

This project is necessary to be able to meet the sewage collection capacity demand that has been calculated as necessary resulting from proposed development in Ontario Ranch.

Relationship to General Plan Development:

The project is fully related to development within Ontario Ranch.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Old Model Colony and New Model Colony Sewer Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Sewer Collection Facilities project cost estimates were increased by 175.2% based upon a recalculation of the project costs.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,120,805	$1,120,805
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$6,792,758	$6,792,758
4. Contingency	$0	$0	$0	$0	$679,276	$679,276
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$8,592,839	$8,592,839

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Euclid Trunk Sewer **SW -011**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

The Euclid Avenue Trunk Sewer consists of 10,800 feet of 20-inch diameter pipe in Euclid Avenue, from Chino Avenue to Merrill Avenue. This project will tie into the Western Trunk Sewer at Merrill Avenue. Contingency costs are included at 10% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

This project is necessary to be able to meet the sewage collection capacity demand that has been calculated as necessary resulting from proposed development in Ontario Ranch

Relationship to General Plan Development:

The project is fully related to development within Ontario Ranch.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Old Model Colony and New Model Colony Sewer Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Sewer Collection Facilities project cost estimates were increased by 173.0% based upon a recalculation of the project costs.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,106,738	$1,106,738
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$6,707,507	$6,707,507
4. Contingency	$0	$0	$0	$0	$670,751	$670,751
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$8,484,996	$8,484,996

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Project Completed Or No Longer Needed **SW -012**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:
Project has been completed or no longer necessary.

Justification / Consequences of Avoidance:
The project number is left in as a place holder to maintain the previous project numbering system

Relationship to General Plan Development:
The project is no longer needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
The project is not needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Project Completed Or No Longer Needed **SW -013**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:
Project is completed or no longer necessary.

Justification / Consequences of Avoidance:
The project number is left in as a place holder to maintain the previous project numbering system

Relationship to General Plan Development:
The project is no longer needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
The project is not needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Project Completed Or No Longer Needed **SW -014**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:
Project completed or no longer necessary.

Justification / Consequences of Avoidance:
The project number is left in as a place holder to maintain the previous project numbering system

Relationship to General Plan Development:
The project is no longer needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
The project is not needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Plaza Serena Street, Granada Court To Vineyard Avenue **SW -015**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Construct the sewer line starting from Plaza Serena, Granada Court to Vineyard Avenue (OS-12). Contingency costs are included at 15% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

This project is necessary to be able to meet the sewage collection capacity demand that has been calculated as necessary resulting from proposed development in the General City area and existing sewage flows.

Relationship to General Plan Development:

The project is mostly largely related to existing flows and will be financed with utility rate receipts with the remaining new demand related to development within to the General City area.

Allocation To General Plan Buildout: 29.80%

Reference Document:

Old Model Colony and New Model Colony Sewer Master Plan, April 2012.

Project Timing:

While the project is 29.50% development related, some of the project's construction has been expedited by using Non-DIF receipts. The projects costs remain in the DIF calculation in order to reimburse those loans from other Fund's. Project costs were increased by the CPI recognizing that these expedited costs will need to be paid back to the Sewer Operations fund with simple interest applied.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$33,618	$33,618
TOTAL COST:	$0	$0	$0	$0	$33,618	$33,618

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Philadelphia Between Parco And Vineyard **SW -016**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Construct 3,900 linear feet of sewer line starting from Philadelphia Avenue between Parco and Vineyard Avenues (OS-13). Contingency costs are included at 15% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

This project is necessary to be able to meet the sewage collection capacity demand that has been calculated as necessary resulting from proposed development in the General City area and existing sewage flows.

Relationship to General Plan Development:

The project is largely related to existing flows and that portion will be financed with utility rate receipts with the remaining amount related to additional development demands from within the General City area.

Allocation To General Plan Buildout: 15.29%

Reference Document:

Old Model Colony and New Model Colony Sewer Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Sewer Collection Facilities project cost estimates were increased by 17% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$937,976	$937,976
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$5,684,706	$5,684,706
4. Contingency	$0	$0	$0	$0	$568,471	$568,471
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$7,191,153	$7,191,153

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Holt Boulevard, West Of Imperial Avenue **SW -017**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Construct 650 linear feet of sewer line starting from Holt Boulevard to just west of Imperial Avenue (OS-14). Contingency costs are included at 15% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

This project is necessary to be able to meet the sewage collection capacity demand that has been calculated as necessary resulting from proposed development in the General City area and existing sewage flows.

Relationship to General Plan Development:

The project is largely related to existing flows and that portion will be financed with utility rate receipts with the remaining amount related to additional development demands from within the General City area.

Allocation To General Plan Buildout: 38.70%

Reference Document:

Old Model Colony and New Model Colony Sewer Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Sewer Collection Facilities project cost estimates were increased by 17% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$62,199	$62,199
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$376,960	$376,960
4. Contingency	$0	$0	$0	$0	$37,696	$37,696
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$476,855	$476,855

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Project Completed Or No Longer Necessary **SW -018**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:
Project completed or no longer necessary.

Justification / Consequences of Avoidance:
The project number is left in as a place holder to maintain the previous project numbering system

Relationship to General Plan Development:
Project completed or nolonger necessary.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Old Model Colony and New Model Colony Sewer Master Plan, April 2012.

Project Timing:
Project completed or no longer necessary/.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Project Completed Or No Longer Needed **SW -019**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:
Project is completed or no longer needed.

Justification / Consequences of Avoidance:
The project number is left in as a place holder to maintain the previous project numbering system

Relationship to General Plan Development:
The project is no longer needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
The project is not needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Cherry Avenue, North Of G Street **SW -020**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Construct the sewer line starting on Cherry Avenue, North of G Street (OS-02). Contingency costs are included at 15% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

This project is necessary to be able to meet the sewage collection capacity demand that has been calculated as necessary resulting from existing sewage flows in the General City area.

Relationship to General Plan Development:

The project is fully related to existing flows and will be financed with utility rate receipts.

Allocation To General Plan Buildout: 0.00%

Reference Document:

Old Model Colony and New Model Colony Sewer Master Plan, April 2012.

Project Timing:

The project is completed and was fully attributed to the existing sewer collection system users and has no impact on the Sewer Collection Development Impact Fee for either the General City or Ontario Ranch impact fee areas.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$2,662	$2,662
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$16,132	$16,132
4. Contingency	$0	$0	$0	$0	$1,613	$1,613
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$20,407	$20,407

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Project Completed Or No Longer Needed **SW -021**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:
Project is completed or no longer necssary.

Justification / Consequences of Avoidance:
The project number is left in as a place holder to maintain the previous project numbering system

Relationship to General Plan Development:
The project is no longer needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
The project is not needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Vineyard Avenue, South Of Cedar Et. Al. **SW -022**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Construct numerous sewer lines including: Vineyard Avenue, south of Cedar Street (OS-21), Archibald, through the Airport (OS-25), Philadelphia and Hellman (OS-26), Inland empire Boulevard west of Archibald Avenue; and easement between Inland Empire Boulevard and Guasti Road (OS-22), Easement south of Guasti Road (OS-23) and Old Guasti Road west of Turner Avenue (OS-24). Contingency costs are included at 15% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

This project is necessary to be able to meet the sewage collection capacity demand that has been calculated as necessary resulting from existing sewage flows in the General City Area.

Relationship to General Plan Development:

The project is largely related to development within the General City area with the minor amount remaining related to existing flows with that prortion financed with utility rate receipts.

Allocation To General Plan Buildout: 88.79%

Reference Document:

Old Model Colony and New Model Colony Sewer Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Sewer Collection Facilities project cost estimates were increased by 17% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$2,128,567	$2,128,567
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$12,900,404	$12,900,404
4. Contingency	$0	$0	$0	$0	$1,290,040	$1,290,040
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$16,319,011	$16,319,011

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Easement East Of Haven **SW -023**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Construct 2,700 linear feet of sewer line along an easement, just east of Haven Avenue.t (OS-16). Contingency costs are included at 15% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

This project is necessary to be able to meet the sewage collection capacity demand that has been calculated as necessary resulting from existing sewage flows in the General City area.

Relationship to General Plan Development:

The project is mostly related to development within the General City area with the remaining amount benefitting existing flows within General City which would be financed with utility rate receipts.

Allocation To General Plan Buildout: 73.41%

Reference Document:

Old Model Colony and New Model Colony Sewer Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Sewer Collection Facilities project cost estimates were increased by 17% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$184,833	$184,833
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$1,120,194	$1,120,194
4. Contingency	$0	$0	$0	$0	$112,019	$112,019
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$1,417,046	$1,417,046

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Project Completed Or No Longer Needed **SW -024**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:
This project is no longer needed.

Justification / Consequences of Avoidance:
The project number is left in as a place holder to maintain the previous project numbering system

Relationship to General Plan Development:
The project is no longer needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
The project is not needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Project Completed No Longer Needed

SW -025

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:
This project is no longer needed.

Justification / Consequences of Avoidance:
The project number is left in as a place holder to maintain the previous project numbering system

Relationship to General Plan Development:
The project is no longer needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
The project is not needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Sewer Utility Maintenance Vehicles **SW -026**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

This project is the cost for the purchase of additional utility system maintenance vehicles and equipment.

Justification / Consequences of Avoidance:

The addition of tens of thousands of linear feet of sewer collection lines will increase the demand upon the existing utility system maintenance vehicle feet. Additional vactors and utility maintenance vehicles will be required.

Relationship to General Plan Development:

The additional vehicles are directly related to new development in both the General City and Ontario Ranch areas based upon the relative addition of new sewer demands.

Allocation To General Plan Buildout: 100.00%

Reference Document:

No specific document, based upon proportional inventory expansion.

Project Timing:

The timing of the capital acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. 2022-23 Vehicle costs were increased by the Consumer Price Index to 2024-25.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$1,057,911	$1,057,911
TOTAL COST:	$0	$0	$0	$0	$1,057,911	$1,057,911

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Sewer Utility Master Plan **SW -027**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Update the New Model Colony (now Ontario Ranch) Sewer Master Plan. An updated master Plan is required to evaluate the changing conditions and the sewer demands and infrastructure needed to provide adequate removal of sewage from private and public development.

Justification / Consequences of Avoidance:

Failure to maintain a Master Plan will limit the City's ability to properly plan for, prioritize and define all future sewer projects.

Relationship to General Plan Development:

The Master Plan is required to be able to continue to accommodate the additions of new development thus is attributed to new development.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Old Model Colony and New Model Colony Sewer Master Plan, April 2012.

Project Timing:

The timing of the Master Plan described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. The Sewer Master Plan cost from 2022-23 was increased by the Consumer Price Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$870,349	$870,349
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$870,349	$870,349

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Project Completed Or No Longer Needed **SW -028**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:
This project is no longer needed.

Justification / Consequences of Avoidance:
The project number is left in as a place holder to maintain the previous project numbering system

Relationship to General Plan Development:
The project is no longer needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
The project is not needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Carpenter Trunk Sewer **SW -029**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

The Carpenter Avenue Trunk Sewer consists of 15,350 feet of 12-inch to 21-inch diameter pipe in Carpenter Avenue, from Chino Avenue to the Eastern Trunk Sewer. Contingency costs are included at 10% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

This project is necessary to be able to meet the sewage collection capacity demand that has been calculated as necessary resulting from projected sewage flows in the Ontario Ranch area.

Relationship to General Plan Development:

The project is 100% related to development within Ontario Ranch.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Old Model Colony and New Model Colony Sewer Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Sewer Collection Facilities project cost estimates were increased by 17% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$833,723	$833,723
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$5,052,864	$5,052,864
4. Contingency	$0	$0	$0	$0	$505,286	$505,286
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$6,391,873	$6,391,873

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Project Completed Or No Longer Needed **SW -030**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:
This project is no longer needed.

Justification / Consequences of Avoidance:
The project number is left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
The project is no longer needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Not applicable.

Project Timing:
The project is not needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Project Completed Or No Longer Needed **SW -031**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:
This project is no longer needed.

Justification / Consequences of Avoidance:
The project number is left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
This project is no longer needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
The project is no longer needed, but has been included to act as a project number placeholder.

Project Timing:
This project is no longer needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Project Completed Or No Longer Needed **SW -032**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:
This project is no longer needed.

Justification / Consequences of Avoidance:
The project number is left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
The project is completed and was fully attributed to the existing sewer collection system users and has no impact on the Sewer Collection Development Impact Fee for either the General City or Ontario Ranch impact fee areas.

Allocation To General Plan Buildout: 0.00%

Reference Document:
The project is no longer needed, but has been included to act as a project number placeholder.

Project Timing:
This project is no longer needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Project Completed Or No Longer Needed **SW -033**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:
The project is is no longer needed.

Justification / Consequences of Avoidance:
The project number is left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
The project is is no longer needed.ipts.

Allocation To General Plan Buildout: 0.00%

Reference Document:
The project is no longer needed, but has been included to act as a project number placeholder.

Project Timing:
The project is is no longer needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Project Completed Or No Longer Necessary **SW -034**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:
The project is is no longer needed.

Justification / Consequences of Avoidance:
The project number is left in as a place holder to maintain the previous project numbering system.

Relationship to General Plan Development:
The project is is no longer needed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
The project is no longer needed, but has been included to act as a project number placeholder.

Project Timing:
The project is is no longer needed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Virginia Avenue Between D Street And Nocta Street **SW -035**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Construct a sewer line along Virginia Avenue between D Street and Nocta Street ((OS-07). Contingency costs are included at 15% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

This project is necessary to be able to meet the sewage collection capacity demand that has been calculated as necessary resulting from proposed development in the General City and existing sewage flows.

Relationship to General Plan Development:

The project is largely related to existing flows and will be financed with utility rate receipts with the remaining amont related to development within the General City area.

Allocation To General Plan Buildout: 19.60%

Reference Document:

Old Model Colony and New Model Colony Sewer Master Plan, April 2012.

Project Timing:

While the project is 19.60% development related, some of the project's construction has been expedited by using Non-DIF receipts. The projects costs remain in the DIF calculation in order to reimburse those loans from other Fund's. Project costs were increased by the CPI recognizing that these expedited costs will need to be paid back to the Sewer Operations fund with simple interest applied.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$65,056	$65,056
TOTAL COST:	$0	$0	$0	$0	$65,056	$65,056

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Deer Creek Loop And Laurel Tree Drive **SW -036**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Construct 1,250 linear foot of sewer collection line in the Deer Creek loop and Laurel tree drive (OS-08). Contingency costs are included at 15% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

This project is necessary to be able to meet the sewage collection capacity demand that has been calculated as necessary resulting largely from existing sewage flows in the General City area.

Relationship to General Plan Development:

The project is largely related to existing General City existing flows and will be financed with utility rate receipts. The remaining minor amount is attributed to development in the General City.

Allocation To General Plan Buildout: 0.31%

Reference Document:

Old Model Colony and New Model Colony Sewer Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Sewer Collection Facilities project cost estimates were increased by 17% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$123,536	$123,536
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$748,700	$748,700
4. Contingency	$0	$0	$0	$0	$74,870	$74,870
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$947,106	$947,106

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Hollowell, Boulder And Holt Avenue **SW -037**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Construct a sewer line along Hollowell, Boulder and Holt Boulevard (OS-09). Contingency costs are included at 15% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

This project is necessary to be able to meet the sewage collection capacity demand that has been calculated as necessary resulting from proposed development in the General City area and existing sewage flows.

Relationship to General Plan Development:

The project is largely related to existing General City flows and will be financed with utility rate receipts with the remaining demand and costs related to development within the General City.

Allocation To General Plan Buildout: 30.48%

Reference Document:

Old Model Colony and New Model Colony Sewer Master Plan, April 2012.

Project Timing:

While the project is 30.48% development related, some of the project's construction has been expedited by using Non-DIF receipts. The projects costs remain in the DIF calculation in order to reimburse those loans from other Fund's. Project costs were increased by the CPI recognizing that these expedited costs will need to be paid back to the Sewer Operations fund with simple interest applied.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$279,389	$279,389
TOTAL COST:	$0	$0	$0	$0	$279,389	$279,389

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Easement N/O Holt Blvd, E/O Allyn Avenue **SW -038**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Construct a sewer line along an easement north of Holt Boulevard and east of Allyn Avenue (OS-10). Contingency costs are included at 15% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

This project is necessary to be able to meet the sewage collection capacity demand that has been calculated as necessary resulting from proposed development in the General City area and existing sewage flows.

Relationship to General Plan Development:

The project is largely related to existing flows and will be financed with utility rate receipts with the remaining demand and costs related to development within the General City.

Allocation To General Plan Buildout: 11.19%

Reference Document:

Old Model Colony and New Model Colony Sewer Master Plan, April 2012.

Project Timing:

While the project is 11.19% development related, some of the project's construction has been expedited by using Non-DIF receipts. The projects costs remain in the DIF calculation in order to reimburse those loans from other Fund's. Project costs were increased by the CPI recognizing that these expedited costs will need to be paid back to the Sewer Operations fund with simple interest applied.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$108,406	$108,406
TOTAL COST:	$0	$0	$0	$0	$108,406	$108,406

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Riverside Drive Between Sultana And Campus Avenues **SW -039**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Construct a sewer line along Riverside Drive between Sultana Avenue and Campus Avenue (OS-11). Contingency costs are included at 15% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

This project is necessary to be able to meet the sewage collection capacity demand that has been calculated as necessary resulting from proposed development in the General City area and existing sewage flows.

Relationship to General Plan Development:

The project is largelyrelated to existing flows and will be financed with utility rate receipts with the remaining demand and costs related to development within to the General City area.

Allocation To General Plan Buildout: 17.54%

Reference Document:

Old Model Colony and New Model Colony Sewer Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Sewer Collection Facilities project cost estimates were increased by 17% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$27,008	$27,008
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$163,687	$163,687
4. Contingency	$0	$0	$0	$0	$16,369	$16,369
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$207,064	$207,064

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Vineyard S/O Airport And Easement **SW -040**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Construct a sewer line along Vineyard south of the airport and the easement (OS-15). Contingency costs are included at 15% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

This project is necessary to be able to meet the sewage collection capacity demand that has been calculated as necessary resulting from proposed development in the General City area and existing sewage flows.

Relationship to General Plan Development:

The project is largely related to existing flows and will be financed with utility rate receipts with the remaining demand and costs related to development within to the General City area.

Allocation To General Plan Buildout: 30.81%

Reference Document:

Old Model Colony and New Model Colony Sewer Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Sewer Collection Facilities project cost estimates were increased by 17% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$995,665	$995,665
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$6,034,334	$6,034,334
4. Contingency	$0	$0	$0	$0	$603,433	$603,433
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$7,633,432	$7,633,432

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Mills Circle N/O Mall Drive **SW -041**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Construct a sewer line along Mills Circle north of Mall Drive (OS-17). Contingency costs are included at 15% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

This project is necessary to be able to meet the sewage collection capacity demand that has been calculated as necessary resulting from proposed development in the General City area and existing sewage flows.

Relationship to General Plan Development:

The project is largely related to existing flows and will be financed with utility rate receipts with the remaining demand and costs related to development within the General City area.

Allocation To General Plan Buildout: 33.65%

Reference Document:

Old Model Colony and New Model Colony Sewer Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Sewer Collection Facilities project cost estimates were increased by 17% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$20,182	$20,182
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$122,319	$122,319
4. Contingency	$0	$0	$0	$0	$12,232	$12,232
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$154,733	$154,733

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Holt Boulevard E/O Vineyard Avenue **SW -042**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Construct a sewer line along Holt Boulevard east of Vineyard Avenue (OS-18). Contingency costs are included at 15% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

This project is necessary to be able to meet the sewage collection capacity demand that has been calculated as necessary resulting from proposed development in General City area and existing sewage flows.

Relationship to General Plan Development:

The project is mostly related to existing flows and will be financed with utility rate receipts with the remaining demand and costs related to development within the General City area.

Allocation To General Plan Buildout: 47.93%

Reference Document:

Old Model Colony and New Model Colony Sewer Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Sewer Collection Facilities project cost estimates were increased by 17% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$64,116	$64,116
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$388,580	$388,580
4. Contingency	$0	$0	$0	$0	$38,858	$38,858
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$491,554	$491,554

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Bon View Avenue N/O Francis **SW -043**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Construct a sewer line along Bon view Avenue north of Francis Avenue (OS-19). Contingency costs are included at 15% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

This project is necessary to be able to meet the sewage collection capthe General City area demand that has been calculated as necessary resulting from proposed development in the General City area and existing sewage flows.

Relationship to General Plan Development:

The project is largely related to development within the General City area with the remainder related to existing flows in the General City area to be financed with utility rate receipts.

Allocation To General Plan Buildout: 61.82%

Reference Document:

Old Model Colony and New Model Colony Sewer Master Plan, April 2012.

Project Timing:

While the project is 61.82% development related, some of the project's construction has been expedited by using Non-DIF receipts. The projects costs remain in the DIF calculation in order to reimburse those loans from other Fund's. Project costs were increased by the CPI recognizing that these expedited costs will need to be paid back to the Sewer Operations fund with simple interest applied.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$220,867	$220,867
TOTAL COST:	$0	$0	$0	$0	$220,867	$220,867

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Acacia, Easement, Locust And Parco **SW -044**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Construct a sewer line along Acacia, an easement, Locust and Parco (OS-20). Contingency costs are included at 15% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

This project is necessary to be able to meet the sewage collection capacity demand that has been calculated as necessary resulting from proposed development in the General City area and existing sewage flows.

Relationship to General Plan Development:

The project is largely related to development within the General City area with the remainder related to existing flows in the General City area to be financed with utility rate receipts.

Allocation To General Plan Buildout: 81.28%

Reference Document:

Old Model Colony and New Model Colony Sewer Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Sewer Collection Facilities project cost estimates were increased by 17% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$264,999	$264,999
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$1,606,054	$1,606,054
4. Contingency	$0	$0	$0	$0	$160,605	$160,605
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$2,031,658	$2,031,658

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Turner Avenue, N/O Cedar Street **SW -045**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Construct a sewer line along Turner Avenue north of Cedar Street (OS-27). Contingency costs are included at 15% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

This project is necessary to be able to meet the sewage collection capacity demand that has been calculated as necessary resulting from proposed development in the General City area and existing sewage flows.

Relationship to General Plan Development:

The project is largely related to development within the General City area with the remainder related to existing flows inthe General City area to be financed with utility rate receipts.

Allocation To General Plan Buildout: 81.10%

Reference Document:

Old Model Colony and New Model Colony Sewer Master Plan, April 2012.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Sewer Collection Facilities project cost estimates were increased by 17% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$20,182	$20,182
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$122,319	$122,319
4. Contingency	$0	$0	$0	$0	$12,232	$12,232
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$154,733	$154,733

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Holt Avenue Phase A **SW -046**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Construction of sewer collection improvements near Holt Avenue. This is the remaining cost of the completed project.

Justification / Consequences of Avoidance:

This project is necessary to be able to meet the sewage collection capacity demand that has been calculated as necessary resulting from proposed development in the General City area and existing GC sewage flows. However, the project is largely needed to meet existing demand.

Relationship to General Plan Development:

The project is largely related to existing flows and will be financed with utility rate receipts with the remaining amount related to development within to the General City area.

Allocation To General Plan Buildout: 16.55%

Reference Document:

Old Model Colony and New Model Colony Sewer Master Plan, April 2012.

Project Timing:

While the project is 16.55% development related, some of the project's construction has been expedited by using Non-DIF receipts. The projects costs remain in the DIF calculation in order to reimburse those loans from other Fund's. Project costs were increased by the CPI recognizing that these expedited costs will need to be paid back to the Sewer Operations fund with simple interest applied.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$1,072,819	$1,072,819
TOTAL COST:	$0	$0	$0	$0	$1,072,819	$1,072,819

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Holt Avenue Phase B **SW -047**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Construct Phase B sewer collection improvements near Holt Avenue. This is the remaining cost of the completed project.

Justification / Consequences of Avoidance:

This project is necessary to be able to meet the sewage collection capacity demand that has been calculated as necessary resulting from proposed development in the General City area and existing sewage flows.

Relationship to General Plan Development:

The project is largely related to existing GC flows and will be financed with utility rate receipts with the remaining small percent related to development within to the General City area.

Allocation To General Plan Buildout: 0.94%

Reference Document:

Old Model Colony and New Model Colony Sewer Master Plan, April 2012.

Project Timing:

While the project is 0.94% development related, some of the project's construction has been expedited by using Non-DIF receipts. The projects costs remain in the DIF calculation in order to reimburse those loans from other Fund's. Project costs were increased by the CPI recognizing that these expedited costs will need to be paid back to the Sewer Operations fund with simple interest applied.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$41,823	$41,823
TOTAL COST:	$0	$0	$0	$0	$41,823	$41,823

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Share Of Common City Yard Improvements **SW -048**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Construct the following improvements: 1) Reconfigure some 60,000 square feet of a recently acquired warehouse and office space. 2) Pave approximately ten acres of currently dirt parking lot, primarily for the refuse operation refueling area. 3) Construct additional fleet maintenance operations bays. 4) Construct a new welding shop. 5) Increase security through additional fencing and lighting. 6) Construct additional CNG fueling stations and 7) reconfigure a recently acquired 24,000 square foot building into covered parking to maximize fleet lifetime. The combined improvements have a total projected cost of $38.2 million and are spread between all City operations that make use of the City yard.

Justification / Consequences of Avoidance:

This amount represents the proportional amount of a total estimated $38.2 million in structural improvements to the City maintenance yard necessary to meet the increasing demands for greater sewer collection system maintenance capacity. The City has acquired adequate land and has existing structural capacity for the various maintenance demands. This demand for additional structural capacity results from the doubling of all public infrastructures from the Ontario Ranch area and remaining portions of the General City area.

Relationship to General Plan Development:

The City yard improvements are directly related to new development.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Based upon an analysis of demands on City yard capacity and expansion needs.

Project Timing:

The timing of the capital acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. The 2022-23 City Yard cost estimates have been increased by the Engineering News Record - Building Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$586,180	$586,180
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$3,552,609	$3,552,609
4. Contingency	$0	$0	$0	$0	$355,261	$355,261
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$4,494,050	$4,494,050

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Project Completed Or No Longer Necessary **SW -049**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:
.Project has been completed.

Justification / Consequences of Avoidance:
The project number is left in as a place holder to maintain the previous project numbering system

Relationship to General Plan Development:
Project has been completed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Ontario Ranch (formerly NMC) Construction Agreement.

Project Timing:
Projetc has been completed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Studies	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Airport Drive Main, E/O Grove **SW -050**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:
Install 580 linear feet of 8" sewer line in Airport Drive. The scope of work includes manhole modifications, pavement removal and replacement and traffic control.

Justification / Consequences of Avoidance:
This project is necessary to provide sewer service to underserved developments along Airport Drive.

Relationship to General Plan Development:
This project will be designed and constructed as a Conditional Approval for a specific development proposal. A share of the construction cost will be reimbursed from the City of Ontario to the Developer via a reimbursement agreement.

Allocation To General Plan Buildout: 100.00%

Reference Document:
None, staff projections.

Project Timing:
The timing of the capital acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Sewer Collection Facilities project cost estimates were increased by 17% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$90,188	$90,188
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$546,595	$546,595
4. Contingency	$0	$0	$0	$0	$54,660	$54,660
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$691,443	$691,443

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Project Completed Or No Longer Necessary **SW -051**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:
.Project has been completed.

Justification / Consequences of Avoidance:
The project number is left in as a place holder to maintain the previous project numbering system

Relationship to General Plan Development:
Project has been completed.

Allocation To General Plan Buildout: 0.00%

Reference Document:
Ontario Ranch (formerly NMC) Construction Agreement.

Project Timing:
Projetc has been completed.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Studies	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Piedmonte Specific Densification Mitigation In Var. Streets **SW -052**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

Phase 1 will consist of construction of 1,000 linear feet of 12" sewer line on Mercedes Street from Concours Street to Inland Empire Boulevard. Phase 2 will consist of the construction of a 1,000 linear feet of a 10" sewer main on Ferrari Lane from Concours Street to Inland Empire Boulevard and 500 linear feet of 12" sewer main on Concours Street from Duesenberg Drive to Mercedes Lane.

Justification / Consequences of Avoidance:

The project is needed to accommodate development of the Piedmont Overlay Area.

Relationship to General Plan Development:

The project is fully attributed to additional development demands.

Allocation To General Plan Buildout: 100.00%

Reference Document:

None, staff projections.

Project Timing:

The timing of the capital acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Sewer Collection Facilities project cost estimates were increased by 17% based upon an average of all conduit size pipe cost increases as presented by the NMC Builders group.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$793,273	$793,273
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$4,807,718	$4,807,718
4. Contingency	$0	$0	$0	$0	$480,772	$480,772
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$6,081,763	$6,081,763

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Vineyard Trunk **SW -053**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

The Sultana Trunk Sewer consists of 11,950 feet of 12 inch to 21 inch diameter pipe in Vineyard Avenue from Riverside Drive to Eucalyptus Avenue and on Eucalyptus Avenue from Vineyard Avenue to Carpenter Avenue. This project will tie into the Carpenter Trunk Sewer at Carpenter Avenue. Contingency Costs are included at 10% of the estimated construction cost. Administrative, engineering, and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

This project is necessary to be able to meet the sewage collection capacity demand that has been calculated as necessary resulting from proposed development in Ontario Ranch.

Relationship to General Plan Development:

The project is fully related to development within the Ontario Ranch Area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Project added by OMUC in 2024.

Project Timing:

Not available.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$745,896	$745,896
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$4,520,578	$4,520,578
4. Contingency	$0	$0	$0	$0	$452,058	$452,058
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$5,718,532	$5,718,532

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Sultana Trunk **SW -054**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

The Sultana Trunk Sewer consists of 10,800 feet of 12 inch to 18 inch diameter pipe in Sultana Avenue from Chino Avenue to Merril Avenue. This project will tie into the Western Trunk Sewer at Merrill Avenue. Contingency Costs are included at 10% of the estimated construction cost. Administrative, engineering, and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

This project is necessary to be able to meet the sewage collection capacity demand that has been calculated as necessary resulting from proposed development in Ontario Ranch.

Relationship to General Plan Development:

The project is fully related to development within the Ontario Ranch Area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Project added by OMUC in 2024.

Project Timing:

Not available.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$666,058	$666,058
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$4,036,716	$4,036,716
4. Contingency	$0	$0	$0	$0	$403,672	$403,672
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$5,106,446	$5,106,446

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Sewer Collection Facilities

Project Title / Ref#: Campus Trunk **SW -055**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

The Campus Trunk Sewer consists of 10,800 feet of 12 inch to 18 inch diameter pipe in Campus Avenue from Chino Avenue to Merril Avenue. This project will tie into the Western Trunk Sewer at Merrill Avenue. Contingency Costs are included at 10% of the estimated construction cost. Administrative, engineering, and construction management are included at 15% of the combined construction/contingency cost.

Justification / Consequences of Avoidance:

This project is necessary to be able to meet the sewage collection capacity demand that has been calculated as necessary resulting from proposed development in Ontario Ranch.

Relationship to General Plan Development:

The project is fully related to development within the Ontario Ranch Area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Project added by OMUC in 2024.

Project Timing:

Not available.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$666,058	$666,058
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$4,036,716	$4,036,716
4. Contingency	$0	$0	$0	$0	$403,672	$403,672
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$5,106,446	$5,106,446

City of Ontario

Refuse Collection

Facilities and Vehicles

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan - All Plan Areas

Refuse Collection Vehicles, Containers And Facilities

MFP 2024-2025 Update

		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build	Project Build Out Total
RC-001	Side Loader Collection Carts	$0	$0	$0	$0	$2,283,032	$2,283,032
RC-002	Side Loader Collection Vehicles	$0	$0	$0	$0	$4,591,480	$4,591,480
RC-003	Front Loader Collection Bins	$0	$0	$0	$0	$23,097,158	$23,097,158
RC-004	Front Loader Collection Vehicles	$0	$0	$0	$0	$10,871,297	$10,871,297
RC-005	Roll-Off Collection Boxes	$0	$0	$0	$0	$2,826,948	$2,826,948
RC-006	Roll-Off Collection Vehicles	$0	$0	$0	$0	$1,490,566	$1,490,566
RC-007	Share Of Common City Yard Improvements	$0	$0	$0	$0	$20,337,135	$20,337,135
RC-008	Existing Fund Balance Purchases	$0	$0	$0	$0	$4,530,466	$4,530,466
	TOTALS	$0	$0	$0	$0	$70,028,082	$70,028,082

Notes:
1) If project timing is not a component of this effort, then all projects default to their "Thru Build Out" amount.

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

Infrastructure: Refuse Collection Vehicles, Containers And Facilities

Project Title / Ref#: Side Loader Collection Carts **RC -001**

Submitting Departments: Public Works Agency

Project Description:

The project consists of acquiring 39,308 side loader collection barrels (of all types, trash, organic waste and recyclables). The additional barrels are required to meet the additional side loader refuse collection demands resulting from new residential detached dwelling development.

Justification / Consequences of Avoidance:

Refuse needs to be collected in a timely and efficient manner. Additions to the rolling stock and inventory of collection containers will be necessary as the net 80,149 additional residences, 546 commercial lodging units and 103,169,177 square feet of business square feet are added to the City.

Relationship to General Plan Development:

The vehicles, containers and additional facilities will be needed to meet the needs of new development. The existing inventory only meets the needs of the existing community.

Allocation To General Plan Buildout: 100.00%

Reference Document:

No specific document, based upon proportional inventory expansion.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column.

PROPOSED EXPENDITURES	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015-2020	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$2,283,032	$2,283,032
TOTAL COST:	$0	$0	$0	$0	$2,283,032	$2,283,032

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

Infrastructure: Refuse Collection Vehicles, Containers And Facilities

Project Title / Ref#: Side Loader Collection Vehicles **RC -002**

Submitting Departments: Public Works Agency

Project Description:

The project consists of acquiring 11.23 additional side loader collection vehicles (traditional fuel, alternative fuel or electric). The additional side loader collection vehicles are required to meet the refuse collection demands resulting from new residential detached dwelling development.

Justification / Consequences of Avoidance:

Refuse needs to be collected in a timely and efficient manner. Additions to the fleet of collection vehicles will be necessary as the net 80,149 additional residences, 546 commercial lodging units and 103,169,177 square feet of business square feet are added to the City.

Relationship to General Plan Development:

The vehicles, containers and additional facilities will be needed to meet the needs of new development. The existing inventory only meets the needs of the existing community.

Allocation To General Plan Buildout: 100.00%

Reference Document:

No specific document, based upon proportional inventory expansion.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. All costs are at nominal, or current dollar value.

PROPOSED EXPENDITURES	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015-2020	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$4,591,480	$4,591,480
TOTAL COST:	$0	$0	$0	$0	$4,591,480	$4,591,480

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

Infrastructure: Refuse Collection Vehicles, Containers And Facilities

Project Title / Ref#: Front Loader Collection Bins **RC -003**

Submitting Departments: Public Works Agency

Project Description:

The project consists of acquiring 19,377- four cubic yard bins. The additional four cubic yard collection bins are required to meet the additional refuse collection demands resulting from new high density dwelling unit residential, commercial lodging units and business use development.

Justification / Consequences of Avoidance:

Refuse needs to be collected in a timely and efficient manner. Additions to the rolling stock and inventory of collection containers will be necessary as the net 80,149 additional residences, 546 commercial lodging units and 103,169,177 square feet of business square feet are added to the City.

Relationship to General Plan Development:

The vehicles, containers and additional facilities will be needed to meet the needs of new development. The existing inventory only meets the needs of the existing community.

Allocation To General Plan Buildout: 100.00%

Reference Document:

No specific document, based upon proportional inventory expansion.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column.

PROPOSED EXPENDITURES	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015-2020	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$23,097,158	$23,097,158
TOTAL COST:	$0	$0	$0	$0	$23,097,158	$23,097,158

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

Infrastructure: Refuse Collection Vehicles, Containers And Facilities

Project Title / Ref#: Front Loader Collection Vehicles **RC -004**

Submitting Departments: Public Works Agency

Project Description:

The project consists of acquiring 26.77 additional new front loader collection vehicles ((traditional fuel, alternative fuel or electrics). The additional collection vehicles are required to meet the needs of new residential high density dwelling unit, commercial lodging and business use demands of new development.

Justification / Consequences of Avoidance:

.Refuse needs to be collected in a timely and efficient manner. Additions to the fleet of collection vehicles will be necessary as the net 80,149 additional residences, 546 commercial lodging units and 103,169,177 square feet of business square feet are added to the City.

Relationship to General Plan Development:

The vehicles, containers and additional facilities will be needed to meet the needs of new development. The existing inventory only meets the needs of the existing community.

Allocation To General Plan Buildout: 100.00%

Reference Document:

No specific document, based upon proportional inventory expansion.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column.

PROPOSED EXPENDITURES	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015-2020	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$10,871,297	$10,871,297
TOTAL COST:	$0	$0	$0	$0	$10,871,297	$10,871,297

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

Infrastructure: Refuse Collection Vehicles, Containers And Facilities

Project Title / Ref#: Roll-Off Collection Boxes **RC -005**

Submitting Departments: Public Works Agency

Project Description:

The project consists of acquiring approximately 222 new forty cubic yard roll-off boxes. The additional 40 cubic yard roll-off bins are required to meet of additional collection needs of construction and demolition waste resulting from new development.

Justification / Consequences of Avoidance:

Refuse needs to be collected in a timely and efficient manner. Additions to the rolling stock and inventory of collection containers will be necessary as the net 80,149 additional residences, 546 commercial lodging units and 103,169,177 square feet of business square feet are added to the City.

Relationship to General Plan Development:

The vehicles, containers and additional facilities will be needed to meet the needs of new development. The existing inventory meets the needs of the existing community.

Allocation To General Plan Buildout: 100.00%

Reference Document:

No specific document, based upon proportional inventory expansion.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column.

PROPOSED EXPENDITURES	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015-2020	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$2,826,948	$2,826,948
TOTAL COST:	$0	$0	$0	$0	$2,826,948	$2,826,948

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

Infrastructure: Refuse Collection Vehicles, Containers And Facilities

Project Title / Ref#: Roll-Off Collection Vehicles **RC -006**

Submitting Departments: City Of Ontario Municipal Utilities Company

Project Description:

The project consists of acquiring approximately 4.44 new forty cubic yard roll-off collection vehicles (traditional fuel, alternative fuel or electric). The additional collection vehicles are required to meet of additional collection needs of construction and demolition waste resulting from new development.

Justification / Consequences of Avoidance:

Refuse needs to be collected in a timely and efficient manner. Additions to the fleet of collection vehicles will be necessary as the net 80,149 additional residences, 546 commercial lodging units and 103,169,177 square feet of business square feet are added to the City.

Relationship to General Plan Development:

The vehicles, containers and additional facilities will be needed to meet the needs of new development. The existing inventory only meets the needs of the existing community.

Allocation To General Plan Buildout: 100.00%

Reference Document:

No specific document, based upon proportional inventory expansion.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. All costs are at nominal, or current dollar value.

PROPOSED EXPENDITURES	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015-2020	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$1,490,566	$1,490,566
TOTAL COST:	$0	$0	$0	$0	$1,490,566	$1,490,566

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

Infrastructure: Refuse Collection Vehicles, Containers And Facilities

Project Title / Ref#: Share Of Common City Yard Improvements **RC -007**

Submitting Departments: Public Works Agency

Project Description:

Construct the following improvements: 1) Reconfigure some 60,000 square feet of a recently acquired warehouse and office space. 2) Pave approximately ten acres of currently dirt parking lot, primarily for the refuse operation refueling area. 3) Construct additional fleet maintenance operations bays. 4) Construct a new welding shop. 5) Increase security through additional fencing and lighting. 6) Construct additional CNG fueling stations. 7) Reconfigure a recently acquired 24,000 square foot building into covered parking to maximize fleet lifetime. 8) Procure equipment for electric vehicles charging infrastructure to support the City's increasing electric fleet, and 9) Plan and prepare a transfer station to be potential built at the current City Yard. The combined improvements have a total projected cost of $44.5 million and are spread between all City operations that make use of the City yard.

Justification / Consequences of Avoidance:

This amount represents the proportional amount of a total estimated $44.5 million in structural improvements to the City maintenance yard necessary to meet the increasing demands for greater refuse collection system maintenance capacity. The City has acquired adequate land and has existing structural capacity for the various maintenance demands. This demand for additional structural capacity results from the doubling of all public infrastructures from both the Ontario Ranch area and the remaining portions of the General City area.

Relationship to General Plan Development:

The vehicles, containers and additional facilities will be needed to meet the needs of new development. The existing inventory meets the needs of the existing community.

Allocation To General Plan Buildout: 100.00%

Reference Document:

No specific document, based upon proportional inventory expansion.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. Costs were increased from the 2022 Report by the Engineering News Record Building Cost Index.

PROPOSED EXPENDITURES	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015-2020	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$2,411,517	$2,411,517
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$16,076,786	$16,076,786
4. Contingency	$0	$0	$0	$0	$1,848,832	$1,848,832
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$20,337,135	$20,337,135

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

Infrastructure: Refuse Collection Vehicles, Containers And Facilities

Project Title / Ref#: Existing Fund Balance Purchases **RC -008**

Submitting Departments: Public Works Agency

Project Description:

This impact fee fund has $4,530,466 in existing fund balance waiting to be spent on any combination of additional containers and collection vehicles (traditional and alternative fuel) electric vehicles infrastructure and more importantly, improvements to the City maintenance yard. The bulk of this fund balance will be dedicated to the required City yard improvements.

Justification / Consequences of Avoidance:

The City Yard will fail to meet the needs of additional collection vehicles storage and repair capabilities/capacity.

Relationship to General Plan Development:

The vehicles, containers and additional facilities will be needed to meet the needs of new development. The existing inventory only meets the needs of the existing community.

Allocation To General Plan Buildout: 100.00%

Reference Document:

No specific document, based upon proportional inventory expansion.

Project Timing:

The timing of the capital construction or acquisition described herein, was not included in the scope of the engagement, thus all project costs default to the "build-out" column. All costs are at nominal, or current dollar value.

PROPOSED EXPENDITURES	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015-2020	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$4,530,466	$4,530,466
TOTAL COST:	$0	$0	$0	$0	$4,530,466	$4,530,466

City of Ontario
General Facilities, Vehicles
And Equipment

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan - All Plan Areas

General Facilities, Vehicles And Equipment

MFP 2024-2025 Update

		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build	Project Build Out Total
GF -001	City Hall And Annex Reconfiguration	$0	$0	$0	$0	$11,636,848	$11,636,848
GF -002	Expansion Of Administrative Pool Car Fleet	$0	$0	$0	$0	$654,283	$654,283
GF -003	Electronic Specialty Equipment/Computer Hardware/Software	$0	$0	$0	$0	$13,512,260	$13,512,260
GF -004	City Animal Holding Facility	$0	$0	$0	$0	$0	$0
GF -005	Share Of Common City Yard Improvements	$0	$0	$0	$0	$1,792,887	$1,792,887
	TOTALS	$0	$0	$0	$0	$27,596,278	$27,596,278

Notes:
1) If project timing is not a component of this effort, then all projects default to their "Thru Build Out" amount.

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: General Facilities, Vehicles And Equipment

Project Title / Ref#: City Hall And Annex Reconfiguration **GF -001**

Submitting Departments: Central Management

Project Description:

This project represents the cost (to date) of reconfiguring the City Hall and the City Hall Annex (former Police Station) into general office space. It also includes the future cost of completing the remaining reconfiguration of the Annex as it is not yet been completed. Some of the DIF proceeds will be used to complete the Emergency Operation Center.

Justification / Consequences of Avoidance:

As the City doubles in size, (population, businesses, residences, infrastructure, etc.) there will be a need for additional office space. The demand created by future development will benefit from the City having a building become available such as the former police facility but will need to contribute by constructing the reconfiguration. The reconfiguration provides a very inexpensive alternative to constructing additional office square footage.

Relationship to General Plan Development:

The additional space will be required over time as the City expands. The existing facilities are sufficient for the existing community. A small amount has been attributed to the existing community, but most of it, 80%, is required for accommodating the demands of new development.

Allocation To General Plan Buildout: 80.00%

Reference Document:

None.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. Project is completed and cost does not change.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,517,850	$1,517,850
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$9,199,089	$9,199,089
4. Contingency	$0	$0	$0	$0	$919,909	$919,909
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$11,636,848	$11,636,848

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: General Facilities, Vehicles And Equipment

Project Title / Ref#: Expansion Of Administrative Pool Car Fleet **GF -002**

Submitting Departments: Central Management

Project Description:
Expand the City Hall pool vehicle fleet. Vehicles would consist of standard sedans, small trucks and some four wheel drive vehicles.

Justification / Consequences of Avoidance:
The City will require additional unassigned pool cars as the City experiences additional demands for code enforcement, mail and supply, planning and engineering staff on-site inspections, and other required services.

Relationship to General Plan Development:
The vehicles would be additions to the existing fleet and thus is fully attributed to new development.

Allocation To General Plan Buildout: 100.00%

Reference Document:
None.

Project Timing:
The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. 2022 cost estimates have been increased by the Consumer Price Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$654,283	$654,283
TOTAL COST:	$0	$0	$0	$0	$654,283	$654,283

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: General Facilities, Vehicles And Equipment

Project Title / Ref#: Electronic Specialty Equipment/Computer Hardware/Software **GF -003**

Submitting Departments: Central Management

Project Description:

Expand the City's electronic software, storage and processing capacity. The cost estimate is the same as in the 2010 Development Impact Fee Calculation and Nexus Report update.

Justification / Consequences of Avoidance:

Additional general electronic capacity would need to be acquired over General Plan build-out to accommodate additional data demands required as a result of additional citizens and businesses.

Relationship to General Plan Development:

The equipment would be additions to the existing capacity and thus fully attributed to new development.

Allocation To General Plan Buildout: 100.00%

Reference Document:

No specific document, based upon proportional inventory expansion.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. 2022 cost estimates have been increased by the Consumer Price Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$13,512,260	$13,512,260
TOTAL COST:	$0	$0	$0	$0	$13,512,260	$13,512,260

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: General Facilities, Vehicles And Equipment

Project Title / Ref#: City Animal Holding Facility **GF -004**

Submitting Departments: Central Management

Project Description:

The City has not indicated any plans for construction of an animal control facilty. This project remains as a placeholder should the City determine tha one should be built.

Justification / Consequences of Avoidance:

Animal management services are a municipal responsibility. The City currently contracts for services from the Inland Valley Humane Society. The City shares a shelter provided under the contract.

Relationship to General Plan Development:

The costs are split proportionally between the existing community and the future community based upon existing and additional residential units.

Allocation To General Plan Buildout: 0.00%

Reference Document:

None, staff projections.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: General Facilities, Vehicles And Equipment

Project Title / Ref#: Share Of Common City Yard Improvements **GF -005**

Submitting Departments: Central Management

Project Description:

Construct the following improvements: 1) Reconfigure some 60,000 square feet of a recently acquired warehouse and office space. 2) Pave approximately ten acres of currently dirt parking lot, primarily for the refuse operation refueling area. 3) Construct additional fleet maintenance operations bays. 4) Construct a new welding shop. 5) Increase security through additional fencing and lighting. 6) Construct additional CNG fueling stations and 7) reconfigure a recently acquired 24,000 square foot building into covered parking to maximize fleet lifetime. The combined improvements have a total projected cost of $44.5 million and are spread between all City operations that make use of the City yard.

Justification / Consequences of Avoidance:

This amount represents the proportional amount of a total estimated $44.5 million in structural improvements to the City maintenance yard necessary to meet the increasing demands for greater general facilities maintenance capacity (vehicles and structures). The City has acquired adequate land and has existing structural capacity for the various maintenance demands. This demand for additional structural capacity results from the doubling of all public infrastructures from the Ontario Ranch and remaining portions of the General City area.

Relationship to General Plan Development:

The existing yard meets the City's needs quite well. The existing land holdings are adequate and sufficient, but some of the more recently acquired parcels and buildings will need some reconfiguring to be sufficient and adequate for future development-generated demands.

Allocation To General Plan Buildout: 100.00%

Reference Document:

No specific document, based upon proportional inventory expansion.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. City Yard 2022 costs have been increased by the ENR - Building Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$212,594	$212,594
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$1,417,302	$1,417,302
4. Contingency	$0	$0	$0	$0	$162,991	$162,991
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$1,792,887	$1,792,887

City of Ontario
Library Collection and
Collection Items (expanded)

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan - All Plan Areas

Library Facilities And Collection

MFP 2024-2025 Update

		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build	Project Build Out Total
LB -001	Library Facilities Space Expansion	$0	$0	$0	$0	$85,469,702	$85,469,702
LB -002	Library Collection Expansion	$0	$0	$0	$0	$18,519,394	$18,519,394
	TOTALS	$0	$0	$0	$0	$103,989,096	$103,989,096

Notes:
1) If project timing is not a component of this effort, then all projects default to their "Thru Build Out" amount.

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Library Facilities And Collection

Project Title / Ref#: Library Facilities Space Expansion **LB -001**

Submitting Departments: Community & Public Services Agency

Project Description:

The project consists of the acquisition of land and construction of a total of 115,599 square feet of library space in one or more locations in order to maintain pace with new development-generated residential population growth. The expansion needs roughly relate to 33,063 square feet to new General City residents and some 82,356 square feet to service the anticipated Ontario Ranch new residents. Contingency costs are included as a normal part of the construction estimate at 10%. Project administration, consisting of engineering, construction management and contract administration is included at 15% of the combined construction and contingency costs.

Justification / Consequences of Avoidance:

The proposed expansion will provide the square footage necessary to maintain the current ratio of floor space to residential patrons as is offered at this point in time. The current level of service standard is 0.460 square feet of space per City resident. Were no additional library space be added to the City, the standard would drop to 0.193 square feet per person at general Plan build-out.

Relationship to General Plan Development:

The Library Land Acquisition and Construction development impact fee schedule is necessary to accommodate new development and are intended to prevent the diminishment of library facilities availability to the existing community.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Based upon the City's Aesthetic, Cultural, Open Space and Recreation Resources GP Element.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, General City and Ontario Ranch projects will be constructed as needed and as DIF receipts are collected.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$10,307,182	$10,307,182
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$6,447,772	$6,447,772
3. Construction	$0	$0	$0	$0	$62,467,971	$62,467,971
4. Contingency	$0	$0	$0	$0	$6,246,777	$6,246,777
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$85,469,702	$85,469,702

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Library Facilities And Collection

Project Title / Ref#: Library Collection Expansion **LB -002**

Submitting Departments: Community & Public Services Agency

Project Description:

This project consists of acquisition and processing of approximately 486,521 additional library collection items to increase the public library's collection in order to maintain pace with new residential home construction and occupancy. Collection items consist of books, audio books on CD, films on DVD, E-books and audiobook licenses, laptops, Hot spots and hot spot data plans, software licenses, learning equipment, makerspace equipment and varied household equipment (such as tool sets, small appliances, electronics, sporting goods and much more). The City enjoys a standard of approximately 1.936 "collection" items per resident. The General City area will require approximately 139,152 collection items and Ontario Ranch area will require 347,369 collection items to maintain the current standard.

Justification / Consequences of Avoidance:

The proposed expansion will provide the collection additions necessary to maintain the current ratio of collection items to residential patrons as is offered at this point in time. The current level of service standard is 1.936 collection items per resident. Should the current collection not be expanded, the number of collection items per president would drop to about 0.813 collection items per resident at General Plan build-out. The 486,521 additional collection items represents the amount necessary to maintain the current standard.

Relationship to General Plan Development:

The library collection item development impact fees are necessary to accommodate new development and are intended to prevent the diminishment of the library collection availability to the existing community.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Based upon the City's Aesthetic, Cultural, Open Space and Recreation Resources GP Element.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, General City and Ontario Ranch projects will be constructed as needed and as DIF receipts are collected.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$18,519,394	$18,519,394
TOTAL COST:	$0	$0	$0	$0	$18,519,394	$18,519,394

City of Ontario

Public Use

(community center) Facilities

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan - All Plan Areas

Public Use (Community Centers) Facilities

MFP 2024-2025 Update

		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build	Project Build Out Total
PF -001	Public Use Community Center Space Expansion	$0	$0	$0	$0	$145832,140	$145832,140
	TOTALS	$0	$0	$0	$0	$145,832,140	$145,832,140

Notes:
1) If project timing is not a component of this effort, then all projects default to their "Thru Build Out" amount.

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Public Use (Community Centers) Facilities

Project Title / Ref#: Public Use Community Center Space Expansion **PF -001**

Submitting Departments: Community & Public Services Agency

Project Description:

Acquire land for and construct approximately 201,042 square feet community center for a broad range of public uses. The facilities would contain various rooms for classes, meetings, and sports activities. They may also have a "serving kitchen" and banquet facilities.

Justification / Consequences of Avoidance:

The City has a public use facilities community center standard of 0.800 square feet per resident based upon the existing 145,570 square feet of existing public use facilities divided by the 2021 State of California Department of Finance population estimate of 182,004. Failure to maintain that standard would force the City to continually reduce the level of services to its citizens. Should the City not construct any additional public use facilities, the standard of square foot space per resident would plummet to 0.336 square feet per resident. The Community & Services Agency would not be able to meet requests for space by instructors, groups and individual citizens.

Relationship to General Plan Development:

The Community Center land acquisition and development impact fees are necessary to accommodate new development and are intended to prevent the diminishment of public use facilities availability to the existing community.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Based upon the City's Aesthetic, Cultural, Open Space and Recreation Resources GP Element.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, General City and Ontario Ranch projects will be constructed as needed and as DIF receipts are collected. All costs are at nominal, or current dollar value.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$17,587,356	$17,587,356
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$10,995,743	$10,995,743
3. Construction	$0	$0	$0	$0	$106,590,037	$106,590,037
4. Contingency	$0	$0	$0	$0	$10,659,004	$10,659,004
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$145,832,140	$145,832,140

City of Ontario

Aquatics Facilities

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan - All Plan Areas

Aquatics Facilities

MFP 2024-2025 Update

		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build	Project Build Out Total
AQ-001	Aquatics Centers - Pool Expansion	$0	$0	$0	$0	$11,135,311	$11,135,311
	TOTALS	$0	$0	$0	$0	$11,135,311	$11,135,311

Notes:
1) If project timing is not a component of this effort, then all projects default to their "Thru Build Out" amount.

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Aquatics Facilities

Project Title / Ref#: Aquatics Centers - Pool Expansion **AQ -001**

Submitting Departments: Community & Public Services Agency

Project Description:

One of the park amenities planned for inclusion within the Great Park is a public Aquatics Center. This amenity is to be located within the active sports area of the Great Park and serve the Ontario Ranch neighborhoods and the General City areas with a combo community center/aquatic center building programmed with full recreational activities. The aquatic center will serve as the local community plunge offering an Olympic sized pool to provide community aquatic opportunities for swim lessons, swim competition, recreational family swim and recreational exercise swimming. The current standards are 0.414 square feet of pool surface per resident and 0.026 square feet of support building per resident. The City would likely need to add non-impact fee to construct the size aquatics complex desired. The $8.2 million represents the amount that can be financed with impact fee receipts.

Justification / Consequences of Avoidance:

The construction of additional pool surface square feet based upon the collection of impact fee receipts would merely maintain the existing standard of square foot of surface per resident. The existing pools would prove inadequate to meet the aquatics needs of the City's future residents, in particular, the Ontario Ranch area where there are no aquatics facilities.

Relationship to General Plan Development:

The aquatics DIFs are necessary to accommodate new development and are intended to prevent the diminishment of the availability to the existing community of the City's existing pool complexes.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Based upon the City's Aesthetic, Cultural, Open Space and Recreation Resources GP Element.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. In general, Ontario Ranch projects will be constructed as needed and as DIF receipts are collected. All costs are at nominal, or current dollar value. Project costs were increased by the ENR - CCI over 2022 costs. Project costs below include a fund balance of approximately $754,867.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,320,393	$1,320,393
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$8,802,617	$8,802,617
4. Contingency	$0	$0	$0	$0	$1,012,301	$1,012,301
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$11,135,311	$11,135,311

City of Ontario

Park Land Acquisition

And Park Infrastructure Development

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan - All Plan Areas

Park Land Acquisition And Park Infrastructure Development

MFP 2024-2025 Update

		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build	Project Build Out Total
PK -001	Park Land Acquisition And Park Facilities Development	$0	$0	$0	$0	$292799,009	$292799,009
PK -002	Park Maintenance Vehicles	$0	$0	$0	$0	$3,369,177	$3,369,177
PK -003	Share Of Common City Yard Improvements	$0	$0	$0	$0	$4,581,512	$4,581,512
	TOTALS	$0	$0	$0	$0	$300,749,698	$300,749,698

Notes:
1) If project timing is not a component of this effort, then all projects default to their "Thru Build Out" amount.

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Park Land Acquisition And Park Infrastructure Development

Project Title / Ref#: Park Land Acquisition And Park Facilities Development **PK -001**

Submitting Departments: Community & Public Services Agency

Project Description:

Acquire land for and develop approximately 753.9 acres of a combination of community/sports park acres designed to meet the community's youth/adult needs for both passive/programmed sports/activity uses. Improvements would include grading, irrigation, turf, sports infrastructure, playground climbing apparatus, drinking fountains, restrooms, group picnicking facilities, BBQs, benches, metered walking and bike paths and passive open green space. Contingency costs are included at 10% of the estimated construction cost. Administration, engineering and construction management are included at 15% of the combined construction/contingency cost. Neighborhood, or local, parks are added as a condition of approval consistent with the size of the proposed residential development.

Justification / Consequences of Avoidance:

The City currently enjoys a park standard of 2.59 acres per 1,000 residents based upon a 471.52 park acres and a 2021 California State Department of Finance population of 182,004. The Quimby Act allows the City to adopt a standard of 3.0 acres per 1,000 if the City is below that figure. In order for the City to maintain the 3.0 acres per 1,000 resident's standard, while potential adding the residents from some 80,149 additional residential dwellings, the City would need to add a combination of 754 acres of community and sports parks. There are no such specific plans for any particular combination of for the 754 acres of parks, beyond the conceptual Great Park plans, that could be financed from the DIF receipts.

Relationship to General Plan Development:

The park land acquisition and park facilities Development Impact Fees are necessary to accommodate new development and are intended to prevent the diminishment of park availability to the existing community.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Based upon the City's Aesthetic, Cultural, Open Space and Recreation Resources GP Element.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. All costs are at nominal, or current dollar value. Cost have been increased over 2022 estimates based upon a combination the ENR BCI, ENR CCI and the CPI.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$60,589,311	$60,589,311
2. Land Acquisition/Right Of Way	$0	$0	$0	$0	$828,280,963	$828,280,963
3. Construction	$0	$0	$0	$0	$367,207,941	$367,207,941
4. Contingency	$0	$0	$0	$0	$36,720,794	$36,720,794
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$1,292,799,009	$1,292,799,009

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Park Land Acquisition And Park Infrastructure Development

Project Title / Ref#: Park Maintenance Vehicles **PK -002**

Submitting Departments: Community & Public Services Agency

Project Description:

Acquire the park maintenance vehicles necessary and sufficient to maintain the approximately 754 additional acres of a combination of community and sports park acres designed to meet the community's youth and adult needs for both passive and programmed sports and activity use.

Justification / Consequences of Avoidance:

The City's existing park maintenance fleet would become overwhelmed by the addition of 754 acres of park.

Relationship to General Plan Development:

The park land acquisition and Development Impact Fees are necessary to accommodate new development and are intended to prevent the diminishment of park availability to the existing community.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Based upon the City's Aesthetic, Cultural, Open Space and Recreation Resources GP Element.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. All costs are at nominal, or current dollar value. 2022 project costs have been increased by the Consumer Price Index for all consumers.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$3,369,177	$3,369,177
TOTAL COST:	$0	$0	$0	$0	$3,369,177	$3,369,177

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: Park Land Acquisition And Park Infrastructure Development

Project Title / Ref#: Share Of Common City Yard Improvements **PK -003**

Submitting Departments: Community & Public Services Agency

Project Description:

Construct the following improvements: 1) Reconfigure some 60,000 square feet of a recently acquired warehouse and office space. 2) Pave approximately ten acres of currently dirt parking lot, primarily for the refuse operation refueling area. 3) Construct additional fleet maintenance operations bays. 4) Construct a new welding shop. 5) Increase security through additional fencing and lighting. 6) Construct additional CNG fueling stations and 7) reconfigure a recently acquired 24,000 square foot building into covered parking to maximize fleet lifetime. The combined improvements have a total projected cost of $44.4 million and are spread between all City operations that make use of the City yard.

Justification / Consequences of Avoidance:

This amount represents the proportional amount of a total estimated $44.5 million in structural improvements to the City maintenance yard necessary to meet the increasing demands for greater park system maintenance capacity. The City has acquired adequate land and has existing structural capacity for the various maintenance demands. This demand for additional structural capacity results from the doubling of all public infrastructure from the Ontario ranch area and remaining portions of the General City area.

Relationship to General Plan Development:

The project benefits future development within both the General City and Ontario Ranch areas.

Allocation To General Plan Buildout: 100.00%

Reference Document:

Based upon the City's Aesthetic, Cultural, Open Space and Recreation Resources GP Element.

Project Timing:

The timing of the capital construction or acquisition herein, is not included in the scope of this engagement, thus all project costs default to the "Build-out" column. All costs are at nominal, or current dollar value. 2022 costs have been increased by the Engineering News Record Building Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$543,261	$543,261
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$3,621,749	$3,621,749
4. Contingency	$0	$0	$0	$0	$416,502	$416,502
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$4,581,512	$4,581,512

City of Ontario

Fiber Optics Communication System

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan - All Plan Areas

FiberOptics System

MFP 2024-2025 Update

		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build	Project Build Out Total
FO -001	HEAD END Facilities (Points Of Presence System)	$0	$0	$0	$0	$10,389,075	$10,389,075
FO -002	Core Network - Planning/Installation - Equipment/Facilities	$0	$0	$0	$0	$18,403,388	$18,403,388
FO -003	Project Completed Or No Longer Needed	$0	$0	$0	$0	$0	$0
FO -004	Distribution Network - Major Streets Conduit System	$0	$0	$0	$0	$16,914,692	$16,914,692
FO -005	System Distribution Network - Fiber System	$0	$0	$0	$0	$4,532,471	$4,532,471
FO -006	Cabling System - Residential/Non-Residential	$0	$0	$0	$0	$38,823,270	$38,823,270
FO -007	Fiber Equipment Within Residential Units	$0	$0	$0	$0	$40,093,323	$40,093,323
FO -008	Fiber Equipment Within Non-Residential Areas	$0	$0	$0	$0	$11,969,845	$11,969,845
FO -009	Share Of Specific/Common City Yard Improvements	$0	$0	$0	$0	$0	$0
	TOTALS	$0	$0	$0	$0	$141,126,064	$141,126,064

Notes:
1) If project timing is not a component of this effort, then all projects default to their "Thru Build Out" amount.

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: FiberOptics System

Project Title / Ref#: HEAD END Facilities (Points Of Presence System) **FO -001**

Submitting Departments: Information Technology

Project Description:

This project consists of the construction and installation of Point-of-Presence (POP) facilities and equipment that are categorized as Head End Facilities. The HEAD END facilities are a critical part of the Fiber Communications system. The Head End facilities will be located in several strategic locations, including City Hall, City Arena, and two separate locations within the Ontario Ranch area. These Head end facilities will provide the primary services hub for the delivery of services to the end-user. The Head End Facilities will provide a reliable FTTH System, through diversity and by leveraging a ring design, with redundant connections throughout System and multiple content feeds. This Project includes the installation of equipment in existing City facilities, including specialized power systems, fire suppression systems, back-up power systems and fiber optic distribution equipment. This Project also includes site development costs and pre-fabricated structure

Justification / Consequences of Avoidance:

The Project is a requirement for the provision of a Fiber Optics Communication system to serve the Ontario Ranch area. Multiple locations are required to provide redundancy and avoid service outages. 2021-22 Update: Project costs were recalculated based upon greater costing experience over previous estimates. An increase to the Ontario Ranch land use database also increased the project costs.

Relationship to General Plan Development:

The Project will primarily provide services to the new development in the Ontario Ranch area. A portion of the Project located within existing City facilities may also provide the potential to provide Fiber optic communications services to a limited area of the General City at some point in the future. All potential project costs related to future services to the General City have been removed from the estimated Project costs. The estimated Project costs are fully related to new development in the Ontario Ranch area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

None, staff projections.

Project Timing:

A Major portion of the project will need to be constructed and completed to enable the initiation of services to the Ontario Ranch area. The remainder of the Project may be constructed as the system expands and DIF receipts are collected. 2022 cost estimates were increased by the ENR - Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,355,096	$1,355,096
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$8,212,708	$8,212,708
4. Contingency	$0	$0	$0	$0	$821,271	$821,271
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$10,389,075	$10,389,075

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: FiberOptics System

Project Title / Ref#: Core Network - Planning/Installation - Equipment/Facilities **FO -002**

Submitting Departments: Information Technology

Project Description:

This Project includes the planning services and pre-development services required for the design of an effective FTTH, including pre-design work with legal and specialized consulting services, preliminary review of available FTTH system alternatives. This Project also includes development of system standards and coordinating standards for conduit design within residential developments. In addition to the planning and pre-development services, this Project includes the acquisition and installation of the Core Network system. This includes the acquisition and installation of fiber optic cabling and fiber optic distribution systems between the Points-of-Presence locations in the existing City facilities and Ontario Ranch locations. The resulting Core Network system will distribute fiber optic services in a manner that will provide redundancy and service reliability.

Justification / Consequences of Avoidance:

The Project is needed to provide Fiber Optic system services to the Ontario Ranch area. 2021-22 Update: Project costs were recalculated based upon greater costing experience over previous estimates. An increase to the Ontario Ranch land use database also increased the project costs.

Relationship to General Plan Development:

The Project will primarily provide services to the new development in the Ontario Ranch area. A portion of the Project located within existing City facilities may also provide the potential to provide Fiber optic communications services to a limited area of the General City at some point in the future. All potential project costs related to future services to the General City have been removed from the estimated Project costs. The estimated Project costs are fully related to new development in the Ontario Ranch area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

None, staff projections.

Project Timing:

A major portion of the project will need to be constructed and completed to enable the initiation of fiber optic services to the Ontario Ranch area. The remainder of the Project may be constructed as the system expands and DIF receipts are collected. 2022 cost estimates were increased by the ENR - Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$2,400,442	$2,400,442
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$14,548,133	$14,548,133
4. Contingency	$0	$0	$0	$0	$1,454,813	$1,454,813
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$18,403,388	$18,403,388

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: FiberOptics System

Project Title / Ref#: Project Completed Or No Longer Needed **FO -003**

Submitting Departments: Information Technology

Project Description:
The Implementation project has been completed.

Justification / Consequences of Avoidance:

Relationship to General Plan Development:

Allocation To General Plan Buildout: 0.00%

Reference Document:
None, staff projections.

Project Timing:

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$0	$0
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$0	$0
4. Contingency	$0	$0	$0	$0	$0	$0
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$0	$0

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: FiberOptics System

Project Title / Ref#: Distribution Network - Major Streets Conduit System **FO -004**

Submitting Departments: Information Technology

Project Description:

This Project consists of the construction of the Fiber Optic Distribution Network in the major streets in the Ontario Ranch area and to connect the Fiber Optic system in the Ontario Ranch area to the locations in the existing City facilities. The Project will include the construction of approximately 359,400 linear feet of conduit to be constructed within the rights-of-way of the major streets in the Ontario Ranch area. Construction of this conduit will allow for the additional installation of fiber cabling to provide the Primary Ring, Secondary Ring, and Lateral portions of the Ontario Ranch Fiber Optics system. This conduit will also allow for the installation of the fiber cabling to provide the connections between the various Points-of-Presence facilities in the existing City facilities and the Ontario Ranch facility locations.

Justification / Consequences of Avoidance:

The Project is a requirement for the provision of a Fiber Optics Communication system to serve the Ontario Ranch area. The installation of conduit is required in all major streets to provide minimum system capabilities, including traffic signal timing coordination and other City utility functions in the Ontario Ranch area. 2021-22 Update: Project costs were recalculated based upon greater costing experience over previous estimates. An increase to the Ontario Ranch land use database also increased the project costs.

Relationship to General Plan Development:

The Project will provide services to the new development in the Ontario Ranch area only. The estimated Project costs are fully related to new development in the Ontario Ranch area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

None, staff projections.

Project Timing:

An initial portion of the project will be constructed to enable the initiation of services to the Ontario Ranch area. The remainder of the Project is anticipated to be constructed at the time the major streets are constructed and the system expands.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$2,005,695	$2,005,695
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$13,371,298	$13,371,298
4. Contingency	$0	$0	$0	$0	$1,537,699	$1,537,699
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$16,914,692	$16,914,692

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: FiberOptics System

Project Title / Ref#: System Distribution Network - Fiber System **FO -005**

Submitting Departments: Information Technology

Project Description:

This Project consists of the design and construction of the fiber cabling and related distribution cabinets and equipment for the Fiber Optic Distribution Network in the major streets in the Ontario Ranch area and to connect the Fiber Optic system in the Ontario Ranch area to the locations in the existing City facilities. The Project will include the design and construction of the fiber cabling to be installed the conduit within the rights-of-way of the major streets in the Ontario Ranch area. Design and construction of this fiber cabling system will provide the Primary Ring, Secondary Ring, and Lateral portions of the Ontario Ranch Fiber Optics system. This construction of this fiber cabling will also provide the connections between the various Points-of-Presence facilities in the existing City facilities and the Ontario Ranch facility locations.

Justification / Consequences of Avoidance:

The Project is a requirement for the provision of a Fiber Optics Communication system to serve the Ontario Ranch area. The installation of fiber cabling, cabinets and equipment is required in all major streets to provide a Fiber Optics system in the Ontario Ranch area. 2021-22 Update: Project costs were recalculated based upon greater costing experience over previous estimates. An increase to the Ontario Ranch land use database also increased the project costs.

Relationship to General Plan Development:

The Project will provide services to the new development in the Ontario Ranch area only. The estimated Project costs are fully related to new development in the Ontario Ranch area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

None, staff projections.

Project Timing:

An initial portion of the project will be constructed to enable the initiation of services to the Ontario Ranch area. The remainder of the Project is anticipated to be constructed at the time the major streets are constructed and the system expands. 2022 cost estimates were increased by the ENR - Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$591,192	$591,192
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$3,582,981	$3,582,981
4. Contingency	$0	$0	$0	$0	$358,298	$358,298
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$4,532,471	$4,532,471

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: FiberOptics System

Project Title / Ref#: Cabling System - Residential/Non-Residential **FO -006**

Submitting Departments: Information Technology

Project Description:

This Project consists of the design and construction of the fiber cabling and related distribution cabinets and equipment for the Fiber Optic System within neighborhood (in-tract) streets in the Ontario Ranch area. This in-tract fiber cabling will connect the Fiber Optic system to the facilities located within the major streets within the Ontario Ranch area. The Project will include the design and construction of the fiber cabling to be installed in the conduit installed by the individual developers within the rights-of-way of the neighborhood streets in the Ontario Ranch area. This Project will provide a Fiber Optics system in both residential neighborhoods and non-residential areas in the Ontario Ranch area.

Justification / Consequences of Avoidance:

The Project is a requirement for the provision of a Fiber Optics Communication system to serve the Ontario Ranch area. The installation of fiber cabling, cabinets and equipment is required in the in-tract streets to provide a Fiber Optics system in the Ontario Ranch area. 2021-22 Update: Project costs were recalculated based upon greater costing experience over previous estimates. An increase to the Ontario Ranch land use database also increased the project costs.

Relationship to General Plan Development:

The Project will provide services to the new development in the Ontario Ranch area only. The estimated Project costs are fully related to new development in the Ontario Ranch area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

None, staff projections.

Project Timing:

The project is anticipated to be constructed within individual development projects at time that local in-tract streets are constructed. It is anticipated that the individual developers will continue to be required to install conduit and related underground system needs and this Project will provide the related construction of the in-tract fiber systems. 2022 cost estimates were increased by the ENR - Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$5,063,905	$5,063,905
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$30,690,332	$30,690,332
4. Contingency	$0	$0	$0	$0	$3,069,033	$3,069,033
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$38,823,270	$38,823,270

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: FiberOptics System

Project Title / Ref#: Fiber Equipment Within Residential Units **FO -007**

Submitting Departments: Information Technology

Project Description:

This Project will include the acquisition and installation of Fiber Optic System equipment for each residential unit in the Ontario Ranch area. This includes attached, detached residential units and commercial lodging units. The Network Interface Device (NID) equipment will be acquired and installed in approximately 45,900 residential units within the Ontario Ranch area. This Project will provide for the installation of a NID at each residential unit within the Ontario Ranch area. The Project will also provide for all required design for the placement of the NID equipment within various types of single and multi-family residential units.

Justification / Consequences of Avoidance:

The Project is a requirement for the provision of a Fiber Optics Communication system to serve residential units within the Ontario Ranch area. The installation of fiber equipment in each residential unit is required to provide a Fiber Optics system in the Ontario Ranch area. 2021-22 Update: Project costs were recalculated based upon greater costing experience over previous estimates. An increase to the Ontario Ranch land use database also increased the project costs.

Relationship to General Plan Development:

The Project is a requirement for the provision of a Fiber Optics Communication system to serve residential units within the Ontario Ranch Area. The installation of fiber cabling and equipment is required for each residential unit in the Ontario Ranch area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

None, staff projections.

Project Timing:

The project is anticipated to be constructed within individual development projects at time that non-residential buildings are constructed. 2022 cost estimates were increased by a combination of the ENR - Construction Cost Index and the consumer Price Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$4,260,230	$4,260,230
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$14,717,156	$14,717,156
4. Contingency	$0	$0	$0	$0	$1,936,468	$1,936,468
5. Equipment / Other	$0	$0	$0	$0	$19,179,469	$19,179,469
TOTAL COST:	$0	$0	$0	$0	$40,093,323	$40,093,323

CITY OF ONTARIO, CALIFORNIA

Master Facilities Plan Project Detail

MFP 2024-2025 Update

Infrastructure: FiberOptics System

Project Title / Ref#: Fiber Equipment Within Non-Residential Areas **FO -008**

Submitting Departments: Information Technology

Project Description:

This Project will include the acquisition and installation of Fiber Optic System equipment for each non-residential building in the Ontario Ranch area. The Project will provide the design and installation of network interface equipment in all non-residential units within the Ontario Ranch area. The Project includes the estimated acquisition and installation costs for the projected number of non-residential buildings in the Ontario Ranch area and the General Plan designated land-uses for those non-residential buildings.

Justification / Consequences of Avoidance:

The Project is a requirement for the provision of a Fiber Optics Communication system to serve non-residential buildings within the Ontario Ranch Aaea. The installation of fiber equipment in each non-residential building is required to provide a Fiber Optics system in the Ontario Ranch area. 2021-22 Update: Project costs were recalculated based upon greater costing experience over previous estimates. An increase to the Ontario Ranch land use database also increased the project costs.

Relationship to General Plan Development:

The Project is a requirement for the provision of a Fiber Optics Communication system to serve non-residential buildings within the Ontario Ranch area. The installation of fiber cabling and equipment is required for each non-residential building in the Ontario Ranch area.

Allocation To General Plan Buildout: 100.00%

Reference Document:

None, staff projections.

Project Timing:

The project is anticipated to be constructed within an individual development project time frame.
2022 cost estimates were increased by the ENR - Construction Cost Index.

PROPOSED EXPENDITURES	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	G.P. Build-Out	Total all Years
1. Design / Engineering / Administratic	$0	$0	$0	$0	$1,561,284	$1,561,284
2. Land Acquistion / Right Of Way	$0	$0	$0	$0	$0	$0
3. Construction	$0	$0	$0	$0	$9,462,328	$9,462,328
4. Contingency	$0	$0	$0	$0	$946,233	$946,233
5. Equipment / Other	$0	$0	$0	$0	$0	$0
TOTAL COST:	$0	$0	$0	$0	$11,969,845	$11,969,845

City of Ontario
Development Impact Fee
Schedules

Schedule 2.1

City of Ontario, General City, at General Plan Maintenance Costs, Reflecting 2024-25 Amendments
Summary of Development Impact Fees By Type of Fee (continued on next page)
(Costs/Fees per Residential Type Dwelling Unit, or Business Type Square Foot)

Land-use Category	Law Enforcement Facilities	Fire Protection Facilities	Streets, Signals and Bridges	Storm Drainage Facilities	Water Distribution Facilities	Sewer Collection Facilities	Refuse Collection Equipment	General Government Facilities
	Schedule 3.2	Schedule 4.2	Schedule 5.2	Schedule 6.3	Schedule 7.2	Schedule 8.2	Schedule 9.1	Schedule 10.2
Calculated Development Impact Costs								
Detached Dwellings	$705	$787	$2,397	$3,503	$5,439	$689	$773	$330
Attached Dwellings	$738	$749	$1,600	$1,129	$3,722	$604	$657	$116
High Density Dwellings	$738	$749	$990	$946	$2,511	$517	$329	$74
Mobile Home Dwellings	$686	$883	$1,250	$2,040	$3,720	$603	$657	$369
Commercial Lodging Units	$653	$499	$1,264	$581	$1,501	$402	$213	$55
Retail/Service Uses	$0.995	$0.560	$4.843	$0.611	$2.675	$0.314	$0.518	$0.229
Office Uses	$0.321	$0.345	$2.768	$0.734	$1.338	$0.339	$0.196	$0.100
Business Park Uses	$0.050	$0.039	$2.880	$1.773	$1.077	$0.169	$0.258	$0.114
Industrial Uses	$0.050	$0.039	$1.484	$1.547	$0.288	$0.066	$0.143	$0.058
Private Institutional Use	$0.345	$0.123	$3.163	$4.500	$1.011	$0.196	$0.226	$0.115
Potential Collection with Recommended Impact Fee Schedule								
Detached Dwellings	$797,355	$890,097	$2,711,007	$3,961,893	$6,151,509	$779,259	$874,263	$373,230
Attached Dwellings	$1,983,744	$2,013,312	$4,300,800	$3,034,752	$10,004,736	$1,623,552	$1,766,016	$311,808
High Density Dwellings	$16,093,566	$16,333,443	$21,588,930	$20,629,422	$54,757,377	$11,274,219	$7,174,503	$1,613,718
Mobile Home Dwellings	$65,170	$83,885	$118,750	$193,800	$353,400	$57,285	$62,415	$35,055
Commercial Lodging Units	$97,950	$74,850	$189,600	$87,150	$225,150	$60,300	$31,950	$8,250
Retail/Service Uses	$8,123,593	$4,572,072	$39,540,262	$4,988,458	$21,839,810	$2,563,626	$4,229,167	$1,869,651
Office Uses	$6,707,534	$7,209,032	$57,839,425	$15,337,478	$27,958,508	$7,083,658	$4,095,566	$2,089,575
Business Park Uses	$348,481	$271,815	$20,072,523	$12,357,147	$7,506,287	$1,177,867	$1,798,164	$794,537
Industrial Uses	$1,532,506	$1,195,355	$45,484,786	$47,415,743	$8,827,236	$2,022,908	$4,382,968	$1,777,707
Private Institutional Use	$15,028	$5,358	$137,780	$196,020	$44,039	$8,538	$9,845	$5,009
Total	$35,764,927	$32,649,219	$191,983,863	$108,201,863	$137,668,052	$26,651,212	$24,424,857	$8,878,540

Schedule 2.1

City of Ontario, General City, at General Plan Maintenance Costs, Reflecting 2024-25 Amendments
Summary of Development Impact Fees By Type of Fee
(Costs/Fees per Residential Type Dwelling Unit, or Business Type Square Foot)

Land-use Category	Library Expansion Facilities Schedule 11.1	Public Meeting Facilities Schedule 12.1	Aquatics Center Facilities Schedule 13.1	Parkland Facilities Development Schedule 14.1	Open Space Agreement (Non-DIF) Schedule 15.1	Fiber Optic System (1) Schedule 16.1	Development Impact Fee Total Per Unit or Square Feet
Calculated Development Impact Costs							
Detached Dwellings	$1,449	$2,073	$122	$19,328	Not Applicable	Not Applicable	$37,595 per Unit
Attached Dwellings	$1,285	$1,837	$108	$17,129	Not Applicable	Not Applicable	$29,674 per Unit
High Density Dwellings	$1,017	$1,454	$86	$13,554	Not Applicable	Not Applicable	$22,965 per Unit
Mobile Home Dwellings	$1,210	$1,730	$102	$16,123	Not Applicable	Not Applicable	$29,373 per Unit
Commercial Lodging Units	No Fee	No Fee	No Fee	No Fee	Not Applicable	Not Applicable	$5,168 per Unit
Retail/Service Uses	No Fee	No Fee	No Fee	No Fee	Not Applicable	Not Applicable	$10.745 per S.F.
Office Uses	No Fee	No Fee	No Fee	No Fee	Not Applicable	Not Applicable	$6.141 per S.F.
Business Park Uses	No Fee	No Fee	No Fee	No Fee	Not Applicable	Not Applicable	$6.360 per S.F.
Industrial Uses	No Fee	No Fee	No Fee	No Fee	Not Applicable	Not Applicable	$3.675 per S.F.
Private Institutional Use	No Fee	No Fee	No Fee	No Fee	Not Applicable	Not Applicable	$9.679 per S.F.
Potential Collection with Recommended Impact Fee Schedule							
Detached Dwellings	$1,638,819	$2,344,563	$137,982	$21,859,968	Not Applicable	Not Applicable	$42,519,945
Attached Dwellings	$3,454,080	$4,937,856	$290,304	$46,042,752	Not Applicable	Not Applicable	$79,763,712
High Density Dwellings	$22,177,719	$31,707,378	$1,875,402	$295,572,078	Not Applicable	Not Applicable	$500,797,755
Mobile Home Dwellings	$114,950	$164,350	$9,690	$1,531,685	Not Applicable	Not Applicable	$2,790,435
Commercial Lodging Units	No Fee	No Fee	No Fee	No Fee	Not Applicable	Not Applicable	$775,200
Retail/Service Uses	No Fee	No Fee	No Fee	No Fee	Not Applicable	Not Applicable	$87,726,639
Office Uses	No Fee	No Fee	No Fee	No Fee	Not Applicable	Not Applicable	$128,320,776
Business Park Uses	No Fee	No Fee	No Fee	No Fee	Not Applicable	Not Applicable	$44,326,821
Industrial Uses	No Fee	No Fee	No Fee	No Fee	Not Applicable	Not Applicable	$112,639,209
Private Institutional Use	No Fee	No Fee	No Fee	No Fee	Not Applicable	Not Applicable	$421,617
Total	$27,385,568	$39,154,147	$2,313,378	$365,006,483	$0	$0	$1,000,082,109

Schedule 2.2

City of Ontario, Ontario Ranch, at General Plan Maintenance Costs, Reflecting 2024-25 Amendments
Summary of Development Impact Fees By Type of Fee (continued on next page)
(Costs/Fees per Residential Type Dwelling Unit, or Business Type Square Foot)

Land-use Category	Law Enforcement Facilities	Fire Protection Facilities	Streets, Signals and Bridges	Storm Drainage Facilities	Water Distribution Facilities	Sewer Collection Facilities	Refuse Collection Equipment	General Government Facilities
	Schedule 3.2	Schedule 4.4	Schedule 5.4	Schedule 6.5	Schedule 7.4	Schedule 8.4	Schedule 9.1	Schedule 10.2
Calculated Development Impact Costs/Fees								
Detached Dwellings	$705	$1,578	$6,003	$5,336	$16,115	$2,524	$773	$330
Attached Dwellings	$738	$1,500	$4,008	$2,026	$8,847	$1,915	$657	$116
High Density Dwellings	$738	$1,500	$2,480	$1,704	$4,694	$1,157	$329	$74
Commercial Lodging Units	$653	$1,000	$3,166	$1,154	$6,771	$1,473	$213	$55
Retail/Service Uses	$0.995	$1.122	$12.129	$2.463	$5.290	$0.459	$0.518	$0.229
Office Uses	$0.321	$0.690	$6.932	$2.168	$4.782	$1.347	$0.196	$0.100
Business Park Uses	$0.050	$0.078	$7.212	$2.123	$4.120	$0.543	$0.258	$0.114
Industrial Uses	$0.050	$0.078	$3.717	$2.112	$4.263	$0.663	$0.143	$0.058
Private Institutional Use	$0.345	$0.248	$7.920	$2.461	$3.881	$0.725	$0.226	$0.115
Potential Collection with Recommended Impact Fee Schedule								
Detached Dwellings	$8,221,710	$18,402,636	$70,006,986	$62,228,432	$187,933,130	$29,434,888	$9,014,726	$3,848,460
Attached Dwellings	$21,906,792	$44,526,000	$118,973,472	$60,139,784	$262,614,348	$56,844,860	$19,502,388	$3,443,344
High Density Dwellings	$9,654,516	$19,623,000	$32,443,360	$22,291,728	$61,406,908	$15,135,874	$4,303,978	$968,068
Mobile Home Dwellings	$0	$0	$0	$0	$0	$0	$0	$0
Commercial Lodging Units	$258,588	$396,000	$1,253,736	$456,984	$2,681,316	$583,308	$84,348	$21,780
Retail/Service Uses	$5,722,837	$6,453,290	$69,761,096	$14,166,178	$30,425,938	$2,639,982	$2,979,326	$1,317,115
Office Uses	$857,130	$1,842,430	$18,509,743	$5,788,968	$12,768,839	$3,596,743	$523,357	$267,019
Business Park Uses	$497,662	$776,353	$71,782,789	$21,130,735	$41,007,361	$5,404,611	$2,567,937	$1,134,670
Industrial Uses	$849,084	$1,324,571	$63,120,901	$35,865,306	$72,392,898	$11,258,853	$2,428,380	$984,937
Private Institutional Use	$375,705	$270,072	$8,624,880	$2,680,029	$4,226,409	$789,525	$246,114	$125,235
Total	$48,344,024	$93,614,352	$454,476,963	$224,748,144	$675,457,147	$125,688,644	$41,650,554	$12,110,628

Schedule 2.2

City of Ontario, Ontario Ranch, at General Plan Maintenance Costs, Reflecting 2024-25 Amendments
Summary of Development Impact Fees By Type of Fee
(Costs/Fees per Residential Type Dwelling Unit, or Business Type Square Foot)

Land-use Category	Library Expansion Facilities	Public Meeting Facilities	Aquatics Center Facilities	Parkland Facilities Development	Open Space Agreement (Non-DIF)	Fiber Optic System	Development Impact Cost Per Dwelling Unit or Business Square Feet
	Schedule 11.1	Schedule 12.1	Schedule 13.1	Schedule 14.1	Schedule 15.1	Schedule 16.2	
Calculated Development Impact Costs/Fees							
Detached Dwellings	$1,449	$2,073	$122	$19,328	$527	$2,239	$59,102 per Unit
Attached Dwellings	$1,285	$1,837	$108	$17,129	$192	$2,239	$42,597 per Unit
High Density Dwellings	$1,017	$1,454	$86	$13,554	$145	$2,239	$31,171 per Unit
Commercial Lodging Units	No Fee	No Fee	No Fee	No Fee	$98	$1,979	$16,562 per Unit
Retail/Service Uses	No Fee	No Fee	No Fee	No Fee	$0.210	$1.567	$24.982 per S.F.
Office Uses	No Fee	No Fee	No Fee	No Fee	$0.184	$2.612	$19.332 per S.F.
Business Park Uses	No Fee	No Fee	No Fee	No Fee	$0.186	$1.207	$15.891 per S.F.
Industrial Uses	No Fee	No Fee	No Fee	No Fee	$0.170	$0.783	$12.037 per S.F.
Private Institutional Use	No Fee	No Fee	No Fee	No Fee	$0.198	$2.609	$18.728 per S.F.
Potential Collection with Recommended Impact Fee Schedule							
Detached Dwellings	$16,898,238	$24,175,326	$1,422,764	$225,403,136	$6,145,874	$26,111,218	$689,247,524
Attached Dwellings	$38,143,940	$54,529,508	$3,205,872	$508,457,236	$5,699,328	$66,462,476	$1,264,449,348
High Density Dwellings	$13,304,394	$19,021,228	$1,125,052	$177,313,428	$1,896,890	$29,290,598	$407,779,022
Mobile Home Dwellings	No Fee	No Fee	No Fee	No Fee	$0	$0	$0
Commercial Lodging Units	No Fee	No Fee	No Fee	No Fee	$38,808	$783,684	$6,558,552
Retail/Service Uses	No Fee	No Fee	No Fee	No Fee	$1,207,835	$9,012,749	$143,686,346
Office Uses	No Fee	No Fee	No Fee	No Fee	$491,315	$6,974,531	$51,620,075
Business Park Uses	No Fee	No Fee	No Fee	No Fee	$1,851,303	$12,013,564	$158,166,985
Industrial Uses	No Fee	No Fee	No Fee	No Fee	$2,886,885	$13,296,655	$204,408,470
Private Institutional Use	$0	$0	$0	$0	$215,622	$2,841,201	$20,394,792
Total	$68,346,572	$97,726,062	$5,753,688	$911,173,800	$20,433,860	$166,786,676	$2,946,311,114

Total - Land-use Database General City & Ontario Ranch	Existing Development		Potential Development		Total General Plan Build-out	
	Acres	# of Units	Acres	# of Units	Acres	# of Units
Detached Dwellings	6,328	31,997	1,685	12,793	8,013	44,790
Attached Dwellings	722	13,097	1,499	32,372	2,221	45,469
High Density Dwellings	193	4,812	1,037	34,889	1,230	39,701
Mobile Home Dwellings	204	2,097	14	95	218	2,192
Commercial Lodging Units	143	5,810	12	546	155	6,356
Retail/Service Uses	487	18,522,286	1,271	13,916,010	1,758	32,438,296
Office Uses	310	9,959,192	936	23,565,934	1,246	33,525,126
Business Park Uses	777	10,271,628	769	16,922,869	1,546	27,194,497
Industrial Uses	6,890	112,134,057	1,110	47,631,804	8,000	159,765,861
Private Institutional Use	419	2,318,711	52	1,132,560	471	3,451,271
Total - City Limits	**16,473**		**8,385**		**24,858**	
Private Residences	**7,447**	**52,003**	**4,235**	**80,149**	**11,682**	**132,152**
Commercial Lodging Rooms	**143**	**5,810**	**12**	**546**	**155**	**6,356**
Business Square Feet	**8,883**	**153,205,874**	**4,138**	**103,169,177**	**13,021**	**256,375,051**

Land-use Database within City's General City Area - Net	Existing Development		Potential Development		Total General Plan Build-out	
	Acres	# of Units	Acres	# of Units	Acres	# of Units
Detached Dwellings	4,733	27,449	262	1,131	4,995	28,580
Attached Dwellings	641	12,050	183	2,688	824	14,738
High Density Dwellings	193	4,812	598	21,807	791	26,619
Mobile Home Dwellings	204	2,097	14	95	218	2,192
Commercial Lodging Units	143	5,810	3	150	146	5,960
Retail/Service Uses	477	18,418,611	992	8,164,415	1,469	26,583,026
Office Uses	310	9,959,192	822	20,895,746	1,132	30,854,938
Business Park Uses	741	9,587,138	341	6,969,626	1,082	16,556,764
Industrial Uses	6,610	106,400,598	441	30,650,125	7,051	137,050,723
Private Institutional Use	419	2,318,711	2	43,560	421	2,362,271
Sub-total - General City	**14,471**		**3,658**		**18,129**	

Land-use Database within City's Ontario Ranch Area	Existing Development		Potential Development		Total General Plan Build-out	
	Acres	# of Units	Acres	# of Units	Acres	# of Units
Detached Dwellings	1,595	4,548	1,423	11,662	3,018	16,210
Attached Dwellings	81	1,047	1,316	29,684	1,397	30,731
High Density Dwellings	-	0	439	13,082	439	13,082
Mobile Home Dwellings	-	0	-	0	-	0
Commercial Lodging Units	-	0	9	396	9	396
Retail/Service Uses	10	103,675	279	5,751,595	289	5,855,270
Office Uses	-	0	114	2,670,188	114	2,670,188
Business Park Uses	36	684,490	428	9,953,243	464	10,637,733
Industrial Uses	280	5,733,459	669	16,981,679	949	22,715,138
Private Institutional Use	-	0	50	1,089,000	50	1,089,000
Sub-total - Ontario Ranch	**2,002**		**4,727**		**6,729**	

Schedule 3.1

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
Allocation of Project Cost Estimates
Law Enforcement Facilities, Vehicles and Equipment

Line #	Project Title	Estimated Cost	Construction Needs Supported by Other Resources: Percent Need	Construction Needs Supported by Other Resources: Apportioned Dollar Cost	Construction Needs Generated by New Development in GC/OR: Percent Need	Construction Needs Generated by New Development in GC/OR: Apportioned Dollar Cost
LE-001	Police Station Purchase and Roof Improvements Prior to Occupancy	$10,363,962	45.28%	$4,692,855	54.72%	$5,671,107
LE-002	Complete Remaining Interior Improvements @ 55% of Building Space	$29,656,550	0.00%	$0	100.00%	$29,656,550
LE-003	Additional Patrol/Detective/Specialty/Staff Vehicles	$25,589,022	0.00%	$0	100.00%	$25,589,022
LE-004	Additional Officer Assigned Equipment	$6,146,112	0.00%	$0	100.00%	$6,146,112
LE-005	Additional Specialty Equipment	$3,761,341	0.00%	$0	100.00%	$3,761,341
LE-006	Building Appurtenances Equipment	$1,075,537	0.00%	$0	100.00%	$1,075,537
LE-007	Communications Equipment	$911,472	0.00%	$0	100.00%	$911,472
LE-008	Advanced Technology Hardware and Software	$2,360,712	0.00%	$0	100.00%	$2,360,712
LE-009	Additional Helicopter Capacity	$6,252,341	0.00%	$0	100.00%	$6,252,341
LE-010	Share of Specific/Common City Yard Improvements	$2,677,619	0.00%	$0	100.00%	$2,677,619
	Sub-Total General Plan Total New Project Costs	$88,794,668	5.29%	$4,692,855	94.71%	$84,101,813
	FINANCIAL ADJUSTMENTS:					
	Total Fund Balance/Outstanding Credits	($1,441,855)	100.00%	($1,441,855)	0.00%	$0
	Total General Plan Total New Project Costs	$87,352,813	3.72%	$3,251,000	96.28%	$84,101,813
						Forward to Schedule 3.2

NOTES:

(1). All developer-held "credits" under FINANCIAL ADJUSTMENTS will appear as a positive indicating an additional Infrastructure Fund obligation that will be redeemed (in lieu of a DIF payment) at some point in the future.

(2). A negative figure under FINANCIAL ADJUSTMENTS indicates a positive Fund Balance mitigating the project total. A positive figure indicates an amount that needs to be recovered by DIFs.

(3). Costs distributed based upon recent actual twelve month Police Department "Calls-for-Service" statistics.

Schedule 3.2

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
Entire City - Minimal Needs-based Impact Costs
Law Enforcement Facilities, Vehicles and Equipment

DIF Land-use Type	Undeveloped Acres	Undeveloped Units	Call Generation Rate	Expected New Calls for Service	Percentage of Additional Service Calls	Allocation of Expansion Costs	Cost Distribution Per Acre	Average Units or Square Feet/Acre	Development Impact Fee per Unit or Square Foot
Detached Dwellings	1,685	12,793	0.973	12,454	10.72%	$9,018,849	$5,352	7.59	***$705*** ***per Unit***
Attached Dwellings	1,499	32,372	1.019	32,973	28.39%	$23,878,151	$15,929	21.60	***$738*** ***per Unit***
High Density Dwellings	1,037	34,889	1.019	35,536	30.60%	$25,734,206	$24,816	33.64	***$738*** ***per Unit***
Mobile Home Dwellings	14	95	0.946	90	0.08%	$65,176	$4,655	6.79	***$686*** ***per Unit***
Commercial Lodging Units	12	546	0.901	492	0.42%	$356,293	$29,691	45.50	***$653*** ***per Unit***
Retail/Service Uses	1,271	13,916,010	1.374	19,125	16.47%	$13,849,806	$10,897	10,949	***$0.995*** ***per S.F.***
Office Uses	936	23,565,934	0.443	10,430	8.98%	$7,553,123	$8,070	25,177	***$0.321*** ***per S.F.***
Business Park Uses	769	16,922,869	0.070	1,178	1.01%	$853,076	$1,109	22,006	***$0.050*** ***per S.F.***
Industrial Uses	1,110	47,631,804	0.070	3,317	2.86%	$2,402,081	$2,164	42,912	***$0.050*** ***per S.F.***
Private Institutional Use	52	1,132,560	0.477	540	0.46%	$391,053	$7,520	21,780	***$0.345*** ***per S.F.***
TOTAL	**8,385**	--	--	**116,135**	**100.00%**	**$84,101,813 in Total Equity in Current Law Enforcement Assets**			

Schedule 3.3

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
Existing Community Financial Commitment Comparison
Law Enforcement Facilities, Vehicles and Equipment

DIF Land-use Type	Developed Acres	Developed Units	Call Generation Rate	Existing Calls for Service	Percentage of Existing Service Calls	Allocation of Infrastructure "Equity"	Distribution of "Equity" per Acre	Average Units or Square Feet/Acre	Current Financial Commitment per Unit or Square Foot
Detached Dwellings	6,328	31,997	0.973	31,149	32.41%	$20,655,531	$3,264	5.06	*$646 per Unit*
Attached Dwellings	722	13,097	1.019	13,340	13.88%	$8,846,023	$12,252	18.14	*$675 per Unit*
High Density Dwellings	193	4,812	1.019	4,901	5.10%	$3,249,952	$16,839	24.93	*$675 per Unit*
Mobile Home Dwellings	204	2,097	0.946	1,983	2.06%	$1,314,967	$6,446	10.28	*$627 per Unit*
Commercial Lodging Units	143	5,810	0.901	5,236	5.45%	$3,472,097	$24,280	40.63	*$598 per Unit*
Retail/Service Uses	487	18,522,286	1.374	25,456	26.49%	$16,880,388	$34,662	38,033	*$0.911 per S.F.*
Office Uses	310	9,959,192	0.443	4,408	4.59%	$2,923,034	$9,429	32,126	*$0.294 per S.F.*
Business Park Uses	777	10,271,628	0.070	715	0.74%	$474,131	$610	13,220	*$0.046 per S.F.*
Industrial Uses	6,890	112,134,057	0.070	7,808	8.12%	$5,177,642	$751	16,275	*$0.046 per S.F.*
Private Institutional Use	419	2,318,711	0.477	1,106	1.15%	$733,411	$1,750	5,534	*$0.316 per S.F.*
TOTAL	16,473	--	--	96,102	100.00%	$63,727,177	Total Law Enforcement System Capital Assets		

$35,437,500	in Law Enforcement Facility Assets
$4,105,350	in Law Enforcement Officer Equipment Assets
$16,415,145	in Law Enforcement Vehicles Assets
$2,785,632	in Specialty Equipment
$675,075	in Personal Communications Equipment Assets
$796,075	in Building Support Equipment
$1,747,445	in Advanced technology
$3,206,810	in Helicopter Program Equipment/Assets.
($1,441,855)	in Existing Law Enforcement DIF Fund Balance

Similar Land Use	Total Square Feet	Percent of Total SF	Percent of Calls-for-Service
Business Park Uses	10,271,628	8.39%	715
Industrial Uses	112,134,057	91.61%	7,808
	122,405,685	100.00%	8,523

Similar Land Use	Total Square Feet	Percent of Total SF	Percent of Calls-for-Service
Attached Dwellings	13,097	73.13%	13,340
High Density Dwellings	4,812	26.87%	4,901
	17,909	100.00%	18,241

Schedule 4.1

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
Allocation of Project Cost Estimates
Fire Suppression Facilities, Vehicles and Equipment

Line #	Project Title	Estimated Cost	Construction Needs Supported by Other Resources: Percent Need	Construction Needs Supported by Other Resources: Apportioned Dollar Cost	Construction Needs Generated by New Development in OR: Percent Need	Construction Needs Generated by New Development in OR: Apportioned Dollar Cost	Construction Needs Generated by New Development in G'nl City: Percent Need	Construction Needs Generated by New Development in G'nl City: Apportioned Dollar Cost
FS-001	Project Completed or No Longer Needed	$0	0.00%	$0	100.00%	$0	0.00%	$0
FS-002	Project Completed or No Longer Needed	$0	0.00%	$0	100.00%	$0	0.00%	$0
FS-003	Fire Station #11 Land Acquisition And Construction	$15,121,350	13.12%	$1,983,921	80.00%	$12,097,080	6.88%	$1,040,349
FS-004	Fire Station #11 Response Engine and Aerial	$3,466,645	13.12%	$454,824	80.00%	$2,773,316	6.88%	$238,505
FS-005	Fire Station #12 Land Acquisition And Construction	$15,121,350	13.12%	$1,983,921	80.00%	$12,097,080	6.88%	$1,040,349
FS-006	Fire Station #12 Response Engines	$1,138,815	13.12%	$149,413	80.00%	$911,052	6.88%	$78,350
FS-007	Fire Station #13 Land Acquisition And Construction	$15,121,350	13.12%	$1,983,921	80.00%	$12,097,080	6.88%	$1,040,349
FS-008	Fire Station #13 Response Engine	$1,138,815	13.12%	$149,413	80.00%	$911,052	6.88%	$78,350
FS-009	Fire Station #14 Land Acquisition And Construction	$15,121,350	13.12%	$1,983,921	80.00%	$12,097,080	6.88%	$1,040,349
FS-010	Fire Station #14 Response Engine	$1,138,815	13.12%	$149,413	80.00%	$911,052	6.88%	$78,350
FS-011	Reserve Response Engines	$2,277,630	13.12%	$298,825	80.00%	$1,822,104	6.88%	$156,701
FS-012	Ontario Ranch Vehicle Storage Bays - Stations 11,12,13,14	$7,453,520	0.00%	$0	0.00%	$0	0.00%	$0
FS-013	Battalion Chief Response Vehicle	$201,060	13.12%	$26,379	80.00%	$160,848	6.88%	$13,833
FS-014	Fire Fighter Assigned Equipment	$1,700,758	13.12%	$223,139	80.00%	$1,360,606	6.88%	$117,012
FS-015	Fire Administration Headquarters Relocation	$35,737,360	43.96%	$15,710,143	33.00%	$11,793,329	23.04%	$8,233,888
FS-016	Emergency Training Center Expansion	$11,068,063	0.00%	$0	58.88%	$6,517,336	41.12%	$4,550,727
FS-017	City Emergency Operations Center	$4,504,416	43.96%	$1,980,141	33.00%	$1,486,457	23.04%	$1,037,817
FS-018	Special Operations Support Vehicle	$153,588	43.96%	$67,517	33.00%	$50,684	23.04%	$35,387
FS-019	Mobile Air And Lighting Support Vehicle	$641,996	43.96%	$282,221	33.00%	$211,859	23.04%	$147,916
FS-020	Emergency Services Communication System	$3,624,419	13.12%	$475,524	80.00%	$2,899,535	6.88%	$249,360
FS-021	Share of Specific/Common City Yard Improvements	$1,590,285	0.00%	$0	58.88%	$936,426	41.12%	$653,859
FS-022	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
FS-023	Fire Station Operations #1 Relocation	$17,829,860	65.00%	$11,589,409	8.00%	$1,426,389	27.00%	$4,814,062
FS-024	Expand Station #3 (East Francis)	$6,984,050	0.00%	$0	20.00%	$1,396,810	80.00%	$5,587,240
FS-025	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
	Sub-Total General Plan Total Remaining Project Costs	$161,135,495	24.51%	$39,492,046	52.10%	$83,957,176	18.76%	$30,232,754
	FINANCIAL ADJUSTMENTS:							
	Ontario Ranch - Fire Suppression et. al. Outstanding Credits	$4,721,216	0.00%	$0	100.00%	$4,721,216	0.00%	$0
	Ontario Ranch - Development Impact Fee Fund Balance	$8,455,912	0.00%	$0	100.00%	$8,455,912	0.00%	$0
	Internal Fund Balance Transfer – Fund 119	($3,536,588)	0.00%	$0	100.00%	($3,536,588)	0.00%	$0
	General City - Development Impact Fee Fund Balance	$2,412,140	0.00%	$0	0.00%	$0	100.00%	$2,412,140
	Total Fund Balance/Outstanding Credits	$12,052,680	100.00%	$0	0.00%	$9,640,540	0.00%	$2,412,140
	Total General Plan Total New Project Costs	$173,188,175	22.80%	$39,492,046	54.04%	$93,597,716	18.85%	$32,644,894
					Forward to Schedule 4.4		**Forward to Schedule 4.2**	

(1). All developer-held "credits" under FINANCIAL ADJUSTMENTS will appear as a positive indicating an additional Infrastructure Fund obligation that will be redeemed (in lieu of a DIF payment) at some point in the future.
(2). A negative figure under FINANCIAL ADJUSTMENTS indicates a positive Fund Balance mitigating the project total. A positive figure indicates an amount that needs to be recovered by DIFs.
(3). Costs distributed based upon recent actual twelve month Police Department "Calls-for-Service" statistics.

Schedule 4.2

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
General City (GC) - Minimum Capital Needs-based Impact Costs
Fire Suppression Facilities, Vehicles and Equipment

Proposed Land Use	Undeveloped Acres	Undeveloped Units	Call Generation Rate	Anticipated New Calls for Service	Percentage of Additional Service Calls	Allocation of Expansion Costs	Cost Distribution Per Acre	Average Units or Square Feet/Acre	Development Impact Fee per Unit or Square Foot
Detached Dwellings	262	1,131	0.263	297	2.73%	$889,924	$3,397	4.32	***$787 per Unit***
Attached Dwellings	183	2,688	0.250	672	6.17%	$2,013,566	$11,003	14.69	***$749 per Unit***
High Density Dwellings	598	21,807	0.250	5,452	50.04%	$16,336,251	$27,318	36.47	***$749 per Unit***
Mobile Home Dwellings	14	95	0.291	28	0.26%	$83,899	$5,993	6.79	***$883 per Unit***
Commercial Lodging Units	3	150	0.167	25	0.23%	$74,909	$24,970	50.00	***$499 per Unit***
Retail/Service Uses	992	8,164,415	0.187	1,527	14.02%	$4,575,469	$4,612	8,230	***$0.560 per S.F.***
Office Uses	822	20,895,746	0.115	2,403	22.06%	$7,200,296	$8,759	25,421	***$0.345 per S.F.***
Business Park Uses	341	6,969,626	0.013	91	0.84%	$272,670	$800	20,439	***$0.039 per S.F.***
Industrial Uses	441	30,650,125	0.013	398	3.65%	$1,192,558	$2,704	69,501	***$0.039 per S.F.***
Private Institutional Use	2	43,560	0.041	2	0.02%	$5,351	$2,676	21,780	***$0.123 per S.F.***
TOTAL	**3,658**	**--**	**--**	**10,895**	**100.00%**	**$32,644,894**	**in Total Equity in General City Area Capital Needs**		

Schedule 4.3

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
Existing Community Financial Commitment Comparison
(Limited to Old Model Colony Assets)
Fire Suppression Facilities, Vehicles and Equipment

Proposed Land Use	Developed Acres	Developed Units	Call Generation Rate	Existing Calls for Service	Percentage of Existing Service Calls	Allocation of Infrastructure "Equity"	Distribution of "Equity" per Acre	Average Units or Square Feet/Acre	Current Financial Commitment per Unit or Square Foot
Detached Dwellings	4,733	27,449	0.263	7,211	37.51%	$65,704,702	$13,882	5.80	*$2,394 per Unit*
Attached Dwellings	641	12,050	0.250	3,011	15.66%	$27,435,426	$42,801	18.80	*$2,276 per Unit*
High Density Dwellings	193	4,812	0.250	1,202	6.25%	$10,952,302	$56,748	24.93	*$2,276 per Unit*
Mobile Home Dwellings	204	2,097	0.291	611	3.18%	$5,567,268	$27,291	10.28	*$2,655 per Unit*
Commercial Lodging Units	143	5,810	0.167	970	5.05%	$8,838,380	$61,807	40.63	*$1,521 per Unit*
Retail/Service Uses	477	18,418,611	0.187	3,438	17.88%	$31,326,136	$65,673	38,613	*$1.701 per S.F.*
Office Uses	310	9,959,192	0.115	1,141	5.94%	$10,396,487	$33,537	32,126	*$1.044 per S.F.*
Business Park Uses	741	9,587,138	0.013	128	0.67%	$1,166,302	$1,574	12,938	*$0.122 per S.F.*
Industrial Uses	6,610	106,400,598	0.013	1,417	7.37%	$12,911,325	$1,953	16,097	*$0.121 per S.F.*
Private Institutional Use	419	2,318,711	0.041	95	0.49%	$865,615	$2,066	5,534	*$0.373 per S.F.*
TOTAL	14,471	--	--	19,224	100.00%	$175,163,942	Total Existing Fire Suppression System Assets		
						$137,321,300	in Fire Suppression Facilities Assets		
						$34,027,260	in Fire Suppression Vehicles Assets		
						$3,182,022	in Fire Fighter Assigned Equipment Assets		
						$3,045,500	Fire Specialty Equipment Assets		
						($2,412,140)	in Fire Suppression GC DIF Fund Balance		

Land Use	Units or Acres	Percent of Total	Annual Calls Per Unit
Attached Dwellings	12,050	71.5%	3,011.0
High Density Dwellings	4,812	28.5%	1,202.0
Average Calls-for-Service	16,862	100.0%	4,213.0

Land Use	Units or Acres	Calls for Service	Annual Calls Per Unit
Business Park Uses	9,587,138	8.3%	128.0
Industrial Uses	106,400,598	91.7%	1,417.0
Average Calls-for-Service	115,987,736	100.0%	1,545.0

Schedule 4.4

2021-22 Development Impact Cost Calculation (Rev 07/24)
Allocation of Project Cost Estimates
Ontario Ranch (OR) - Minimum Capital Needs-based Impact Costs
Fire Suppression Facilities, Vehicles and Equipment

Proposed Land Use	*Undeveloped*		*Call Generation Rate*	*Anticipated New Calls for Service*	*Percentage of Additional Service Calls*	*Allocation of Expansion Costs*	*Cost Distribution Per Acre*	*Average Units or Square Feet/Acre*	*Development Impact Fee per Unit or Square Foot*
	Acres	*Units*							
Detached Dwellings	1,423	11,662	0.263	3,067	19.66%	$18,398,013	$12,929	8.20	***$1,578 per Unit***
Attached Dwellings	1,316	29,684	0.250	7,421	47.56%	$44,516,353	$33,827	22.56	***$1,500 per Unit***
High Density Dwellings	439	13,082	0.250	3,271	20.96%	$19,621,748	$44,696	29.80	***$1,500 per Unit***
Commercial Lodging Units	9	396	0.167	66	0.42%	$395,914	$43,990	44.00	***$1,000 per Unit***
Retail/Service Uses	279	5,751,595	0.187	1,076	6.90%	$6,454,601	$23,135	20,615	***$1.122 per S.F.***
Office Uses	114	2,670,188	0.115	307	1.97%	$1,841,601	$16,154	23,423	***$0.690 per S.F.***
Business Park Uses	428	9,953,243	0.013	129	0.83%	$773,832	$1,808	23,255	***$0.078 per S.F.***
Industrial Uses	669	16,981,679	0.013	221	1.42%	$1,325,713	$1,982	25,384	***$0.078 per S.F.***
Private Institutional Use	50	1,089,000	0.041	45	0.29%	$269,941	$5,399	21,780	***$0.248 per S.F.***
TOTAL	**4,727**	--	--	**15,603**	**100.00%**	**$93,597,716**	**in Total Equity in Ontario Ranch Area Capital Needs**		

Schedule 5.1

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
Allocation of Project Cost Estimates
Circulation (Streets, Signals and Bridges) System

Line #	Project Title	Estimated Cost	Construction Needs Supported by Other Resources		Construction Needs Generated by New Development in OR		Construction Needs Generated by New Development in GC	
			Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost
ST-001	Archibald Avenue From Riverside to Edison (P)	$298,857	0.00%	$0	100.00%	$298,857	0.00%	$0
ST-002	Archibald Avenue From Edison To South City Limit (P)	$347,275	0.00%	$0	100.00%	$347,275	0.00%	$0
ST-003	Bellegrave Avenue From Archibald To Milliken (P)	$1,107,724	0.00%	$0	100.00%	$1,107,724	0.00%	$0
ST-004	Campus Avenue From Riverside To Merrill	$7,895,318	0.00%	$0	100.00%	$7,895,318	0.00%	$0
ST-005	Chino Avenue From Euclid To Milliken	$8,584,063	0.00%	$0	100.00%	$8,584,063	0.00%	$0
ST-006	Mill Creek Avenue From Riverside To Bellegrave (P)	$3,155,693	0.00%	$0	100.00%	$3,155,693	0.00%	$0
ST-007	Edison Avenue From Euclid To Walker	$12,208,887	0.00%	$0	100.00%	$12,208,887	0.00%	$0
ST-008	Edison Avenue From Walker To Vineyard	$3,599,929	0.00%	$0	100.00%	$3,599,929	0.00%	$0
ST-009	Edison Avenue From Vineyard To Mill Creek	$8,084,370	0.00%	$0	100.00%	$8,084,370	0.00%	$0
ST-010	Edison Avenue From Mill Creek to Milliken (P)	$873,741	0.00%	$0	100.00%	$873,741	0.00%	$0
ST-011	Eucalyptus Avenue From Euclid To Milliken	$17,993,932	0.00%	$0	100.00%	$17,993,932	0.00%	$0
ST-012	Euclid Avenue From Riverside To Merrill	$22,228,219	0.00%	$0	100.00%	$22,228,219	0.00%	$0
ST-013	Grove Avenue From Riverside To Merrill	$13,484,813	0.00%	$0	100.00%	$13,484,813	0.00%	$0
ST-014	Haven Avenue From Riverside To Bellegrave (P)	$5,720,522	0.00%	$0	100.00%	$5,720,522	0.00%	$0
ST-015	Merrill Avenue From Euclid To Archibald	$26,158,070	0.00%	$0	100.00%	$26,158,070	0.00%	$0
ST-016	Milliken Avenue From Riverside To Edison	$5,075,143	0.00%	$0	100.00%	$5,075,143	0.00%	$0
ST-017	Milliken Avenue From Edison To Bellegrave	$2,596,127	0.00%	$0	100.00%	$2,596,127	0.00%	$0
ST-018	Hellman Avenue From Riverside To Merrill	$4,225,427	0.00%	$0	100.00%	$4,225,427	0.00%	$0
ST-019	Riverside Drive From Euclid To Milliken (P)	$4,928,847	0.00%	$0	100.00%	$4,928,847	0.00%	$0
ST-020	Schaefer Avenue From Euclid To Haven	$6,981,473	0.00%	$0	100.00%	$6,981,473	0.00%	$0
ST-021	Turner Avenue From Riverside To Schaefer	$339,083	0.00%	$0	100.00%	$339,083	0.00%	$0
ST-022	Vineyard Avenue From Riverside To Merrill	$14,370,409	0.00%	$0	100.00%	$14,370,409	0.00%	$0
ST-023	Walker Avenue From Riverside To Merrill	$5,712,152	0.00%	$0	100.00%	$5,712,152	0.00%	$0
ST-024	Ontario Ranch Traffic Control System (P)	$31,665,628	0.00%	$0	100.00%	$31,665,628	0.00%	$0
ST-025	Non-Dev. ROW, Frontage Imps. & SCE Pole Relocations	$55,426,506	0.00%	$0	100.00%	$55,426,506	0.00%	$0
ST-026	Additional SCE Pole Relocations	$716,456	0.00%	$0	100.00%	$716,456	0.00%	$0
ST-027	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-028	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-029	OR Offsite Cantu Galleano Widening I-15 To Milliken	$2,528,234	0.00%	$0	100.00%	$2,528,234	0.00%	$0
ST-030	OR Offsite Euclid Avenue Improvements, Merrill To US-71	$7,000,228	0.00%	$0	100.00%	$7,000,228	0.00%	$0
ST-031	OR Offsite Archibald Avenue Bridge Over Santa Ana River	$286,540	0.00%	$0	100.00%	$286,540	0.00%	$0

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ST-032	OR Offsite Hamner Avenue Bridge Over The Santa Ana River	$662,849	0.00%	$0	100.00%	$662,849	0.00%	$0
ST-033	General City Street Lights (P)	$3,721,811	0.00%	$0	0.00%	$0	100.00%	$3,721,811
ST-034	General City Traffic Signals	$17,898,081	0.00%	$0	0.00%	$0	100.00%	$17,898,081
ST-035	Benson Avenue From Mission To Philadelphia	$969,658	56.00%	$543,008	0.00%	$0	44.00%	$426,650
ST-036	Mountain Avenue From Sixth To Holt (P)	$2,837,942	56.00%	$1,589,248	0.00%	$0	44.00%	$1,248,694
ST-037	San Antonio Avenue From Park To Phillips	$0	56.00%	$0	0.00%	$0	44.00%	$0
ST-038	Bon View Avenue From Holt to Mission	$1,265,406	56.00%	$708,627	0.00%	$0	44.00%	$556,779
ST-039	Bon View Avenue From Mission To Belmont	$711,606	56.00%	$398,499	0.00%	$0	44.00%	$313,107
ST-040	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-041	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-042	Grove Avenue From Fourth Street to Airport Drive	$40,887,212	56.00%	$22,896,839	0.00%	$0	44.00%	$17,990,373
ST-043	Turner Avenue, From Inland Empire Boulevard To Fourth	$799,447	56.00%	$447,690	0.00%	$0	44.00%	$351,757
ST-044	Archibald Avenue from Fourth To Guasti Park Entrance	$2,150,917	56.00%	$1,204,514	0.00%	$0	44.00%	$946,403
ST-045	Milliken Avenue From SR-60 To Riverside	$426,482	56.00%	$238,830	0.00%	$0	44.00%	$187,652
ST-046	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-047	Etiwanda Avenue At Airport Drive	$9,422,751	82.27%	$7,751,902	0.00%	$0	17.73%	$1,670,849
ST-048	Eight Street From West Cucamonga Creek To Grove	$174,406	56.00%	$97,667	0.00%	$0	44.00%	$76,739
ST-049	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-050	Fourth Street From Palmetto To San Antonio	$1,321,491	56.00%	$740,035	0.00%	$0	44.00%	$581,456
ST-051	Fourth Street From Campus To Cucamonga	$1,095,555	56.00%	$613,511	0.00%	$0	44.00%	$482,044
ST-052	Fourth Street From Vineyard To Archibald	$706,718	0.00%	$0	0.00%	$0	100.00%	$706,718
ST-053	Holt Boulevard From Benson To Vineyard	$54,918,606	56.00%	$30,754,419	0.00%	$0	44.00%	$24,164,187
ST-054	Guasti Road From Holt To Archibald	$1,043,147	56.00%	$584,162	0.00%	$0	44.00%	$458,985
ST-055	State Street From Benson To Grove	$5,174,545	56.00%	$2,897,745	0.00%	$0	44.00%	$2,276,800
ST-056	Airport Drive Under The I-15 Freeway	$3,241,898	56.00%	$1,815,463	0.00%	$0	44.00%	$1,426,435
ST-057	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-058	Mission Boulevard From Cypress To Grove	$5,926,750	56.00%	$3,318,980	0.00%	$0	44.00%	$2,607,770
ST-059	Mission Boulevard From Grove To Milliken (P)	$11,683,652	56.00%	$6,542,845	0.00%	$0	44.00%	$5,140,807
ST-060	Phillips Street From Benson To Mountain	$600,353	56.00%	$336,198	0.00%	$0	44.00%	$264,155
ST-061	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-062	Acacia Street From Baker To Vineyard	$78,402	56.00%	$43,905	0.00%	$0	44.00%	$34,497

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ST-063	Francis Street From Benson To Campus	$4,852,184	56.00%	$2,717,223	0.00%	$0	44.00%	$2,134,961
ST-064	Jurupa Street From Archibald To East Of Turner	$822,350	56.00%	$460,516	0.00%	$0	44.00%	$361,834
ST-065	Philadelphia Street From Campus To Grove	$914,623	56.00%	$512,189	0.00%	$0	44.00%	$402,434
ST-066	Philadelphia From E/O Vineyard to Cucamonga Creek	$564,682	56.00%	$316,222	0.00%	$0	44.00%	$248,460
ST-067	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-068	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-069	Grove Avenue Bridge Over West Cucamonga Creek	$1,015,271	56.00%	$568,552	0.00%	$0	44.00%	$446,719
ST-070	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-071	Holt Boulevard Bridge Over West Cucamonga Creek	$269,681	56.00%	$151,021	0.00%	$0	44.00%	$118,660
ST-072	Mission Boulevard Bridge Over West Cucamonga Creek	$755,107	56.00%	$422,860	0.00%	$0	44.00%	$332,247
ST-073	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-074	Francis Street Bridge Over West Cucamonga Creek	$242,712	56.00%	$135,919	0.00%	$0	44.00%	$106,793
ST-075	Eighth Street Bridge Over Cucamonga Creek	$2,076,546	56.00%	$1,162,866	0.00%	$0	44.00%	$913,680
ST-076	Sixth Street Bridge Over Cucamonga Creek	$1,657,746	56.00%	$928,338	0.00%	$0	44.00%	$729,408
ST-077	Fourth Street Bridge Over Cucamonga Creek	$852,669	0.00%	$0	0.00%	$0	100.00%	$852,669
ST-078	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-079	Holt Boulevard Bridge Over Cucamonga Creek	$3,014,084	56.00%	$1,687,887	0.00%	$0	44.00%	$1,326,197
ST-080	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-081	Mission Boulevard Bridge Over Cucamonga Creek	$2,211,387	56.00%	$1,238,377	0.00%	$0	44.00%	$973,010
ST-082	Francis Street Bridge Over Cucamonga Creek	$2,022,609	56.00%	$1,132,661	0.00%	$0	44.00%	$889,948
ST-083	Philadelphia Street Bridge Over Cucamonga Creek	$240,577	56.00%	$134,723	0.00%	$0	44.00%	$105,854
ST-084	Riverside Drive Bridge Over Cucamonga Creek	$1,180,030	56.00%	$660,817	0.00%	$0	44.00%	$519,213
ST-085	Archibald Avenue Bridge Over Upper Deer Creek	$1,356,338	56.00%	$759,549	0.00%	$0	44.00%	$596,789
ST-086	Archibald Avenue Bridge Over Upper Deer Creek Spillway	$1,898,874	56.00%	$1,063,369	0.00%	$0	44.00%	$835,505
ST-087	Inland Empire Boulevard Bridge Over Upper Deer Creek	$0	0.00%	$0	0.00%	$0	100.00%	$0
ST-088	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-089	Archibald Avenue Bridge Over Lower Deer Creek	$401,349	0.00%	$0	100.00%	$401,349	0.00%	$0
ST-090	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-091	Grove Avenue Grade Separation Under UPRR/Alhambra	$11,905,814	56.00%	$6,667,256	0.00%	$0	44.00%	$5,238,558
ST-092	Milliken (N) Grade Separation Under UPRR/Alhambra	$28,847,930	99.28%	$28,638,954	0.00%	$0	0.72%	$208,976
ST-093	Vineyard (N) Grade Separation Under UPRR/Alhambra	$0	100.00%	$0	0.00%	$0	0.00%	$0

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ST-094	Milliken (S) Grade Separation Over UPRR/Alhambra	$0	66.89%	$0	4.54%	$0	28.57%	$0
ST-095	Archibald (S) Grade Separation Over UPRR/LA	$64,232,000	74.80%	$48,047,963	0.00%	$0	25.20%	$16,184,037
ST-096	San Antonio (S) Grade Separation Under UPRR/Alhambra	$26,872,279	56.00%	$15,048,476	0.00%	$0	44.00%	$11,823,803
ST-097	Campus (S) Grade Separation Under UPRR/Alhambra	$26,872,279	56.00%	$15,048,476	0.00%	$0	44.00%	$11,823,803
ST-098	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-099	Vine (S) Grade Separation Under UPRR/LA Line	$23,513,244	100.00%	$23,513,244	0.00%	$0	0.00%	$0
ST-100	Sultana (S) Grade Separation Under UPRR/LA Line	$23,513,244	80.00%	$18,810,595	0.00%	$0	20.00%	$4,702,649
ST-101	Bon View (S) Grade Separation Under UPRR/LA Line	$23,513,244	100.00%	$23,513,244	0.00%	$0	0.00%	$0
ST-102	Pavement Management System Rehabilitation Program	$30,065,192	100.00%	$30,065,192	0.00%	$0	0.00%	$0
ST-103	Circulation System Maintenance Vehicles	$4,016,256	0.00%	$0	48.59%	$1,951,545	51.41%	$2,064,711
ST-104	Great Park Bridge Over Archibald Avenue	$5,586,893	0.00%	$0	100.00%	$5,586,893	0.00%	$0
ST-105	SR-60 At Vineyard Interchange Reconstruction/Expansion	$56,890,854	43.70%	$24,861,303	56.30%	$32,029,551	0.00%	$0
ST-106	SR-60 At Archibald Interchange Reconstruction/Expansion	$14,016,704	64.06%	$8,979,605	35.94%	$5,037,099	0.00%	$0
ST-107	SR-60 At Euclid Interchange Reconstruction/Expansion (P)	$6,383,022	74.60%	$4,761,734	25.40%	$1,621,288	0.00%	$0
ST-108	SR-60 At Grove Interchange Reconstruction/Expansion	$56,578,160	52.30%	$29,590,378	47.70%	$26,987,782	0.00%	$0
ST-109	SR-60 At Mountain Interchange Reconstruction/Expansion	$16,795,175	76.70%	$12,881,899	23.30%	$3,913,276	0.00%	$0
ST-110	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-111	I-10 Freeway at Grove/Fourth	$196,966,310	89.10%	$175,496,982	0.00%	$0	10.90%	$21,469,328
ST-112	Traffic Signal System Control and Operations Center (P)	$2,548,783	0.00%	$0	50.00%	$1,274,392	50.00%	$1,274,392
ST-113	General City Backbone Signal Interconnect	$2,911,164	80.00%	$2,328,931	0.00%	$0	20.00%	$582,233
ST-114	I-10 At Euclid Avenue Eastbound On Ramp (P)	$9,973,579	93.00%	$9,275,428	0.00%	$0	7.00%	$698,151
ST-115	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-116	I-10 At Vineyard Interchange Reconstruction/Expansion (P)	$2,954,813	60.00%	$1,772,888	0.00%	$0	40.00%	$1,181,925
ST-117	Ontario Ranch Road/Trail Separation	$2,511,966	0.00%	$0	100.00%	$2,511,966	0.00%	$0
ST-118	Hellman Avenue Bridge Over Cucamonga Creek	$2,355,745	0.00%	$0	0.00%	$0	100.00%	$2,355,745
ST-119	Riverside Drive Bridge Over Cucamonga Creek	$0	0.00%	$0	100.00%	$0	0.00%	$0
ST-120	Chino Avenue Bridge Over Cucamonga Creek	$0	0.00%	$0	100.00%	$0	0.00%	$0
ST-121	Schaefer Avenue Bridge Over Cucamonga Creek	$7,495,552	0.00%	$0	100.00%	$7,495,552	0.00%	$0
ST-122	Schaefer Avenue Over Cucamonga Creek Spillway	$13,325,426	0.00%	$0	100.00%	$13,325,426	0.00%	$0
ST-123	Edison Avenue Bridge Over Cucamonga Creek	$19,417,050	0.00%	$0	100.00%	$19,417,050	0.00%	$0
ST-124	Eucalyptus Avenue Bridge Over Cucamonga Creek	$11,000,000	0.00%	$0	100.00%	$11,000,000	0.00%	$0

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			Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost
ST-125	Merrill Avenue Bridge Over Cucamonga Creek	$11,000,000	0.00%	$0	100.00%	$11,000,000	0.00%	$0
ST-126	Share of Specific/Common City Yard Improvements	$2,168,432	0.00%	$0	48.59%	$1,053,666	51.41%	$1,114,766
ST-127	Ontario Ranch Bus Stop Shelters	$3,332,841	0.00%	$0	100.00%	$3,332,841	0.00%	$0
ST-128	Ontario Ranch Street Design Studies	$1,074,109	0.00%	$0	100.00%	$1,074,109	0.00%	$0
ST-129	Fourth Street Under The I-10 Freeway	$22,397,514	53.68%	$12,023,906	0.00%	$0	46.32%	$10,373,608
ST-130	Guasti Road Extension From 1,530' E/O Of Haven Easterly 310'	$655,358	0.00%	$0	0.00%	$0	100.00%	$655,358
ST-131	Ontario Ranch Traffic Study	$94,815	0.00%	$0	100.00%	$94,815	0.00%	$0
	Sub-Total General Plan Total New Projects	$1,199,447,917	49.10%	$588,903,630	35.30%	$423,365,115	15.61%	$187,179,173
	FINANCIAL ADJUSTMENTS:							
	Ontario Ranch - Local Streets Outstanding Credits	$25,950,213	0.00%	$0	100.00%	$25,950,213	0.00%	$0
	Ontario Ranch - Regional Streets Outstanding Credits	$3,898,143	0.00%	$0	100.00%	$3,898,143	0.00%	$0
	Ontario Ranch - Development Impact Fee Fund Balance	$1,280,799	0.00%	$0	100.00%	$1,280,799	0.00%	$0
	General City - Development Impact Fee Fund Balance	$4,818,232	0.00%	$0	0.00%	$0	100.00%	$4,818,232
	Total Fund Balance/Outstanding Credits	$35,947,387	0.00%	$0	86.60%	$31,129,155	13.40%	$4,818,232
	Total Net General Plan Project Costs	$1,235,395,304	47.67%	$588,903,630	36.79%	$454,494,270	15.54%	$191,997,405
					Forward to Schedule 5.4		**Forward to Schedule 5.2**	

Schedule 5.2

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
General City (GC) - Minimum Capital Needs-based Impact Costs
Circulation (Streets, Signals and Bridges) System

Proposed Land Use	*Undeveloped* *Acres*	*Units*	*Trip-end and Length Factor*	*Total GC Additional Trip-miles*	*Percentage of Additional Trip-miles*	*Allocation of Expansion Costs*	*Cost Distribution Per Acre*	*Average Units or Square Feet/Acre*	*Development Impact Fee per Unit or Square Foot*
Detached Dwellings	262	1,131	34.588	39,119	1.41%	$2,710,877	$10,347	4.32	*$2,397 per Unit*
Attached Dwellings	183	2,688	23.095	62,080	2.24%	$4,302,033	$23,508	14.69	*$1,600 per Unit*
High Density Dwellings	598	21,807	14.288	311,586	11.25%	$21,592,351	$36,108	36.47	*$990 per Unit*
Mobile Home Dwellings	14	95	18.035	1,713	0.06%	$118,708	$8,479	6.79	*$1,250 per Unit*
Commercial Lodging Units	3	150	18.239	2,736	0.10%	$189,600	$63,200	50.00	*$1,264 per Unit*
Retail/Service Uses	992	8,164,415	69.888	570,594	20.59%	$39,541,141	$39,860	8,230	*$4.843 per S.F.*
Office Uses	822	20,895,746	39.944	834,659	30.13%	$57,840,372	$70,365	25,421	*$2.768 per S.F.*
Business Park Uses	341	6,969,626	41.557	289,639	10.45%	$20,071,463	$58,861	20,439	*$2.880 per S.F.*
Industrial Uses	441	30,650,125	21.419	656,483	23.69%	$45,493,095	$103,159	69,501	*$1.484 per S.F.*
Private Institutional Use	2	43,560	45.634	1,988	0.07%	$137,765	$68,882	21,780	*$3.163 per S.F.*
TOTAL	**3,658**	--	--	**2,770,597**	**100.00%**	**$191,997,405**	**in Total GC Circulation General Plan Projects**		
ALTERNATIVE FEE METHODOLOGY				*2,770,597*		*$191,997,405*	***$69.30 per Daily Trip-mile***		

Trip-ends Adjustment Calculation Land Use Title	Daily Total Trip-ends	Percent of Diverted Trips	Diverted Trip-end % Adjustment	Diverted Trip-end Percent	Percent of Pass-by Trips	Combined Diverted and Pass-by	Remaining Trip % as Adjustment %	Adjusted Trip Rate, Adjustment % X Total trips	*Average Trip Length*	*Trip-ends X Length X 50%*
Detached Dwellings	9.57	11	0.50	5.5	3.0	**8.5**	**91.5%**	8.76	***7.9***	***34.6***
Attached Dwellings	6.39	11	0.50	5.5	3.0	**8.5**	**91.5%**	5.85	***7.9***	***23.1***
High Density Dwellings	3.95	11	0.50	5.5	3.0	**8.5**	**91.5%**	3.62	***7.9***	***14.3***
Mobile Home Dwellings	4.99	11	0.50	5.5	3.0	**8.5**	**91.5%**	4.57	***7.9***	***18.0***
Commercial Lodging Units	6.23	38	0.50	19.0	4.0	**23.0**	**77.0%**	4.80	***7.6***	***18.2***
Retail/Service Uses	50.01	40	0.50	20.0	15.0	**35.0**	**65.0%**	32.51	***4.3***	***69.9***
Office Uses	10.50	19	0.50	9.5	4.0	**13.5**	**86.5%**	9.08	***8.8***	***39.9***
Business Park Uses	10.44	19	0.50	9.5	2.0	**11.5**	**88.5%**	9.23	***9.0***	***41.6***
Industrial Uses	5.38	19	0.50	9.5	2.0	**11.5**	**88.5%**	4.76	***9.0***	***21.4***
Private Institutional Use	11.99	19	0.50	9.5	4.0	**13.5**	**86.5%**	10.37	***8.8***	***45.6***

Schedule 5.3

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
Existing Community Financial Commitment Comparison
Circulation (Streets, Signals and Bridges) System

Proposed Land Use	Undeveloped Acres	Undeveloped Units	Trip-end and Length Factor	Existing GC Trip-miles	Percentage of Additional Trip-miles	Allocation of Expansion Costs	Cost Distribution Per Acre	Average Units or Square Feet/Acre	Development Impact Fee per Unit or Square Foot
Detached Dwellings	4,733.0	27,449	34.588	949,416	16.07%	$146,284,782	$30,907	5.80	*$5,329 per Unit*
Attached Dwellings	641.0	12,050	23.095	278,295	4.71%	$42,879,331	$66,894	18.80	*$3,558 per Unit*
High Density Dwellings	193.0	4,812	14.288	68,755	1.16%	$10,593,681	$54,890	24.93	*$2,202 per Unit*
Mobile Home Dwellings	204.0	2,097	18.035	37,820	0.64%	$5,827,256	$28,565	10.28	*$2,779 per Unit*
Commercial Lodging Units	143.0	5,810	18.239	105,967	1.79%	$16,327,257	$114,177	40.63	*$2,810 per Unit*
Retail/Service Uses	477.0	18,418,611	69.888	1,287,238	21.79%	$198,335,956	$415,799	38,613	*$10.768 per S.F.*
Office Uses	310.0	9,959,192	39.944	397,810	6.73%	$61,294,047	$197,723	32,126	*$6.155 per S.F.*
Business Park Uses	741.0	9,587,138	41.557	398,416	6.74%	$61,387,419	$82,844	12,938	*$6.403 per S.F.*
Industrial Uses	6,610.0	106,400,598	21.419	2,278,953	38.57%	$351,138,113	$53,122	16,097	*$3.300 per S.F.*
Private Institutional Use	419.0	2,318,711	45.634	105,812	1.79%	$16,303,375	$38,910	5,534	*$7.031 per S.F.*
TOTAL	**14,471.0**	--	--	5,908,482	100.00%	**$910,371,218**	**Total Circulation System Capital Assets**		
						$497,485,472	**in General Plan Major Streets Assets (full width)**		
						$218,103,708	**in General Plan Streets Rights of Way Assets**		
						$63,790,000	**in General Plan Bridges Assets**		
						$26,500,000	**in General Plan Grade Separation Assets**		
						$66,141,600	**in General Plan Signal/Intersection Assets**		
						$2,801,570	**in Street Maintenance Vehicle Assets**		
						$40,367,100	**in Street Light Assets**		
						($4,818,232)	**in Circulation System DIF Fund Balance**		

Schedule 5.4

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
Ontario Ranch (OR) - Minimum Capital Needs-based Impact Costs
Circulation (Streets, Signals and Bridges) System

Proposed Land Use	Undeveloped Acres	Undeveloped Units	Trip-end and Length Factor	Total OR Additional Trip-miles	*Percentage of Additional Trip-miles*	Allocation of Expansion Costs	Cost Distribution Per Acre	Average Units or Square Feet/Acre	*Development Impact Fee per Unit or Square Foot*
Detached Dwellings	1,423	11,662	34.588	403,370	15.40%	$70,006,650	$49,197	8.20	*$6,003 per Unit*
Attached Dwellings	1,316	29,684	23.095	685,554	26.18%	$118,980,932	$90,411	22.56	*$4,008 per Unit*
High Density Dwellings	439	13,082	14.288	186,920	7.14%	$32,440,794	$73,897	29.80	*$2,480 per Unit*
Commercial Lodging Units	9	396	18.239	7,223	0.28%	$1,253,584	$139,287	44.00	*$3,166 per Unit*
Retail/Service Uses	279	5,751,595	69.888	401,967	15.35%	$69,763,153	$250,047	20,615	*$12.129 per S.F.*
Office Uses	114	2,670,188	39.944	106,658	4.07%	$18,510,968	$162,377	23,423	*$6.932 per S.F.*
Business Park Uses	428	9,953,243	41.557	413,631	15.80%	$71,787,492	$167,728	23,255	*$7.212 per S.F.*
Industrial Uses	669	16,981,679	21.419	363,724	13.89%	$63,125,911	$94,359	25,384	*$3.717 per S.F.*
Private Institutional Use	50	1,089,000	45.634	49,695	1.90%	$8,624,787	$172,496	21,780	*$7.920 per S.F.*
TOTAL	4,727	--	--	2,618,742	100.00%	$454,494,270	in Total OR Circulation General Plan Projects		
ALTERNATIVE FEE METHODOLOGY				*2,618,742*		*$454,494,270*	*$173.55 per Daily Trip-mile*		

Schedule 6.1

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
Allocation of Project Cost Estimates
Storm Drainage Collection System Facilities

Line #	Project Title	Estimated Cost	Construction Needs Supported by Other Resources		Construction Needs Generated by New Development in OR		Construction Needs Generated by New Development in GC	
			Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost
SD-001	Euclid Avenue, Riverside To Merrill	$13,925,804	0.00%	$0	100.00%	$13,925,804	0.00%	$0
SD-002	Grove Avenue, Grove Basin To Merrill	$21,576,871	0.00%	$0	100.00%	$21,576,871	0.00%	$0
SD-003	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SD-004	County Line Channel In Bellegrave Avenue	$0	0.00%	$0	100.00%	$0	0.00%	$0
SD-005	Merrill Avenue, Euclid To Bon View	$12,896,053	0.00%	$0	100.00%	$12,896,053	0.00%	$0
SD-006	Campus Avenue, 920' N/O Eucalyptus To Merrill	$2,852,243	0.00%	$0	100.00%	$2,852,243	0.00%	$0
SD-007	Bon View, 1,320' N/O Chino To Merrill	$13,683,520	0.00%	$0	100.00%	$13,683,520	0.00%	$0
SD-008	Euclid Avenue Laterals	$9,190,530	0.00%	$0	100.00%	$9,190,530	0.00%	$0
SD-009	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SD-010	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SD-011	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SD-012	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SD-013	Walker Avenue, Merrill To Chino	$9,833,255	0.00%	$0	100.00%	$9,833,255	0.00%	$0
SD-014	Merrill Avenue, Vineyard to 1420' W/O Walker	$9,818,672	0.00%	$0	100.00%	$9,818,672	0.00%	$0
SD-015	Ontario Ranch Road, Walker to 880' E/O Walker	$1,629,636	0.00%	$0	100.00%	$1,629,636	0.00%	$0
SD-016	Schaefer Avenue, Walker To 1,950' E/O Walker	$1,646,666	0.00%	$0	100.00%	$1,646,666	0.00%	$0
SD-017	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SD-018	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SD-019	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SD-020	Hellman Avenue, Chino Avenue To 1,500' N/O Chino	$796,341	0.00%	$0	100.00%	$796,341	0.00%	$0
SD-021	Archibald Avenue, Schaefer To County Line Channel	$0	0.00%	$0	100.00%	$0	0.00%	$0
SD-022	Eucalyptus Avenue, Archibald To 1,300' E/O Archibald (P)	$1,394,665	0.00%	$0	100.00%	$1,394,665	0.00%	$0
SD-023	Ontario Ranch Road, Archibald to 2,500' E/O Archibald	$0	0.00%	$0	100.00%	$0	0.00%	$0
SD-024	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SD-025	Turner Avenue, Riverside To County Line Channel (P)	$2,257,508	0.00%	$0	100.00%	$2,257,508	0.00%	$0
SD-026	Turner Avenue Laterals	$1,743,609	0.00%	$0	100.00%	$1,743,609	0.00%	$0
SD-027	Haven Avenue, Riverside To County Line Channel (P)	$3,848,761	0.00%	$0	100.00%	$3,848,761	0.00%	$0
SD-028	Ontario Ranch Road, Between Haven And Mill Creek (P)	$458,254	0.00%	$0	100.00%	$458,254	0.00%	$0
SD-029	Haven Avenue Laterals E/O Haven And N/O Schaefer	$3,009,105	0.00%	$0	100.00%	$3,009,105	0.00%	$0
SD-030	Haven Avenue Laterals	$468,095	0.00%	$0	100.00%	$468,095	0.00%	$0
SD-031	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0

Schedule 6.1

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
Allocation of Project Cost Estimates
Storm Drainage Collection System Facilities

Line #	Project Title	Estimated Cost	Construction Needs Supported by Other Resources		Construction Needs Generated by New Development in OR		Construction Needs Generated by New Development in GC	
			Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost
SD-032	Mill Creek, Chino To County Line Channel (P)	$13,187,938	0.00%	$0	94.00%	$12,396,662	6.00%	$791,276
SD-033	Eucalyptus Avenue Between Mill Creek And Milliken	$536,207	0.00%	$0	100.00%	$536,207	0.00%	$0
SD-034	Eucalyptus Avenue Between Haven And Mill Creek	$956,841	0.00%	$0	100.00%	$956,841	0.00%	$0
SD-035	Mill Creek Avenue Laterals On Ontario Ranch Road	$0	0.00%	$0	100.00%	$0	0.00%	$0
SD-036	Schaefer Avenue Between Mill Creek And Milliken	$2,510,214	0.00%	$0	100.00%	$2,510,214	0.00%	$0
SD-037	Hellman Avenue, Schaefer To Ontario Ranch Road And Laterals	$6,880,851	0.00%	$0	100.00%	$6,880,851	0.00%	$0
SD-038	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SD-039	Ontario Ranch-Hellman/Vineyard, Hellman-OR/Merrill To C. Creek	$6,748,068	0.00%	$0	100.00%	$6,748,068	0.00%	$0
SD-040	Eucalyptus Avenue, Hellman To Cucamonga Channel	$1,701,014	0.00%	$0	100.00%	$1,701,014	0.00%	$0
SD-041	Merrill Avenue, Cucamonga Channel To Walker	$25,541,804	0.00%	$0	100.00%	$25,541,804	0.00%	$0
SD-042	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SD-043	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SD-044	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SD-045	Eucalyptus Avenue, Cucamonga Channel To W/O Archibald	$724,868	0.00%	$0	100.00%	$724,868	0.00%	$0
SD-046	Ontario Ranch Road Laterals E/O Cucamonga Channel	$1,580,002	0.00%	$0	100.00%	$1,580,002	0.00%	$0
SD-047	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SD-048	Chino Avenue, Cucamonga Channel To N/O Chino	$821,878	0.00%	$0	100.00%	$821,878	0.00%	$0
SD-049	Milliken Avenue, Riverside To County Line Channel (P)	$3,473,812	0.00%	$0	100.00%	$3,473,812	0.00%	$0
SD-050	Offsite Euclid Avenue Storm Drain	$27,948,129	0.00%	$0	100.00%	$27,948,129	0.00%	$0
SD-051	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SD-052	Project Completed or No Longer Needed	$0	100.00%	$0	0.00%	$0	0.00%	$0
SD-053	Francis Avenue, Campus To West Cucamonga Creek Channel (P)	$0	0.00%	$0	0.00%	$0	100.00%	$0
SD-054	Fifth Street, Beryln To West Cucamonga Creek	$0	0.00%	$0	0.00%	$0	100.00%	$0
SD-055	Parco Avenue, 60 Freeway To Riverside And Lateral	$0	0.00%	$0	0.00%	$0	100.00%	$0
SD-056	Sixth Street, Glenn To Cucamonga Channel	$10,736,541	0.00%	$0	0.00%	$0	100.00%	$10,736,541
SD-057	G Street, Berlyn to West Cucamonga Channel & Various Streets	$9,290,397	0.00%	$0	0.00%	$0	100.00%	$9,290,397
SD-058	Grove Avenue, 60 Freeway To Riverside Drive	$3,044,087	0.00%	$0	0.00%	$0	100.00%	$3,044,087
SD-059	Campus Avenue, Cedar To Riverside	$5,080,502	0.00%	$0	0.00%	$0	100.00%	$5,080,502
SD-060	D and I Streets, Grove To West Cucamonga Channel	$1,976,473	100.00%	$1,976,473	0.00%	$0	0.00%	$0
SD-061	Inland Empire Blvd., Vineyard To Cucamonga Channel	$972,501	0.00%	$0	0.00%	$0	100.00%	$972,501
SD-062	Sultana Avenue, Phillips To Philadelphia	$5,992,676	0.00%	$0	0.00%	$0	100.00%	$5,992,676

Schedule 6.1

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
Allocation of Project Cost Estimates
Storm Drainage Collection System Facilities

Line #	Project Title	Estimated Cost	Construction Needs Supported by Other Resources		Construction Needs Generated by New Development in OR		Construction Needs Generated by New Development in GC	
			Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost
SD-063	Fourth Street, El Dorado To Cucamonga Creek	$3,435,856	0.00%	$0	0.00%	$0	100.00%	$3,435,856
SD-064	Baker, Vineyard, Carlos, Hellman - Acacia to Philadelphia	$3,768,510	100.00%	$3,768,510	0.00%	$0	0.00%	$0
SD-065	Bon View Avenue, 60 Freeway To Riverside (P)	$3,549,437	0.00%	$0	0.00%	$0	100.00%	$3,549,437
SD-066	Cucamonga Avenue, 60 Freeway To Riverside	$3,426,362	0.00%	$0	0.00%	$0	100.00%	$3,426,362
SD-067	Bon View Avenue, Mission To Francis	$5,076,667	100.00%	$5,076,667	0.00%	$0	0.00%	$0
SD-068	Cucamonga Avenue, Phillips To Francis	$3,138,022	100.00%	$3,138,022	0.00%	$0	0.00%	$0
SD-069	Storm Drainage Maintenance Vehicles	$646,228	0.00%	$0	55.03%	$355,612	44.97%	$290,616
SD-070	Boulder Avenue, I Street To State	$17,856,111	100.00%	$17,856,111	0.00%	$0	0.00%	$0
SD-071	Benson Avenue, State To I Street	$5,644,396	100.00%	$5,644,396	0.00%	$0	0.00%	$0
SD-072	Mountain Avenue, Philadelphia To Phillips	$10,752,264	0.00%	$0	0.00%	$0	100.00%	$10,752,264
SD-073	San Antonio Avenue, Francis To Cypress Channel	$14,476,494	0.00%	$0	0.00%	$0	100.00%	$14,476,494
SD-074	San Sevaine Channel	$2,588,258	0.00%	$0	0.00%	$0	100.00%	$2,588,258
SD-075	Storm Drain Master Plan (P)	$667,920	0.00%	$0	55.03%	$367,549	44.97%	$300,371
SD-076	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SD-077	Campus Avenue, State to Francis (Phase 2 Of SD-053)	$5,922,178	0.00%	$0	0.00%	$0	100.00%	$5,922,178
SD-078	Parco Avenue, Philadelphia to 60 Freeway (Phase 2 Of SD-055)	$1,272,292	100.00%	$1,272,292	0.00%	$0	0.00%	$0
SD-079	Grove Avenue, Francis to 60 Freeway (Phase 2 Of SD-058)	$1,964,685	100.00%	$1,964,685	0.00%	$0	0.00%	$0
SD-080	Sultana Avenue, State to Phillips (Phase 2 Of SD-062)	$4,741,833	100.00%	$4,741,833	0.00%	$0	0.00%	$0
SD-081	Bon View Avenue, 60 Freeway To Francis (Phase 2 Of SD-065)	$2,227,268	100.00%	$2,227,268	0.00%	$0	0.00%	$0
SD-082	Cucamonga Avenue, Francis to 60 FWY (Phase 2 Of SD-066)	$1,764,126	100.00%	$1,764,126	0.00%	$0	0.00%	$0
SD-083	Mountain & Boulder, I-10 to I Street (Phase 2 Of SD-070)	$8,141,160	100.00%	$8,141,160	0.00%	$0	0.00%	$0
SD-084	Benson Avenue Laterals (Phase 2 Of SD-071)	$6,081,592	100.00%	$6,081,592	0.00%	$0	0.00%	$0
SD-085	Mountain Avenue, State to Phillips (Phase 2 Of SD-072)	$3,078,222	100.00%	$3,078,222	0.00%	$0	0.00%	$0
SD-086	San Antonio & Phillips, Euclid to Francis (Phase 2, SD-073)	$7,951,632	0.00%	$0	0.00%	$0	100.00%	$7,951,632
SD-087	Oakland Avenue, State to Phillips (Phase 2 Of SD-074)	$9,955,439	100.00%	$9,955,439	0.00%	$0	0.00%	$0
SD-088	Walker Avenue, 60 Freeway To Riverside And Lateral	$2,667,873	100.00%	$2,667,873	0.00%	$0	0.00%	$0
SD-089	Baker Avenue And Riverside Drive, S/O 60 Freeway	$3,769,150	100.00%	$3,769,150	0.00%	$0	0.00%	$0
SD-090	G Street, Corona To Del Norte	$3,939,123	100.00%	$3,939,123	0.00%	$0	0.00%	$0
SD-091	Del Norte and Imperial Avenues From I Street To G Street	$1,738,463	100.00%	$1,738,463	0.00%	$0	0.00%	$0
SD-092	Vine Avenue, G Street To State	$5,189,444	100.00%	$5,189,444	0.00%	$0	0.00%	$0
SD-093	Vine Avenue, Sixth To G Street	$5,453,637	100.00%	$5,453,637	0.00%	$0	0.00%	$0

Schedule 6.1

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
Allocation of Project Cost Estimates
Storm Drainage Collection System Facilities

Line #	Project Title	Estimated Cost	Construction Needs Supported by Other Resources		Construction Needs Generated by New Development in OR		Construction Needs Generated by New Development in GC	
			Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost
SD-094	Sultana Avenue, Fifth To Holt	$9,322,899	100.00%	$9,322,899	0.00%	$0	0.00%	$0
SD-095	Benson Avenue And Laterals	$3,130,163	100.00%	$3,130,163	0.00%	$0	0.00%	$0
SD-096	Benson Avenue, Francis To Philadelphia	$4,155,117	100.00%	$4,155,117	0.00%	$0	0.00%	$0
SD-097	Mission, Benson, Phillips & Oaks, W/O Magnolia	$6,671,340	100.00%	$6,671,340	0.00%	$0	0.00%	$0
SD-098	Holt Boulevard, Convention Center To Cucamonga Channel	$1,546,900	100.00%	$1,546,900	0.00%	$0	0.00%	$0
SD-099	Mission Boulevard, Proforma To Turner	$1,434,122	100.00%	$1,434,122	0.00%	$0	0.00%	$0
SD-100	6th Street, West Cucamonga Creek To Grove	$754,134	100.00%	$754,134	0.00%	$0	0.00%	$0
SD-101	Archibald Avenue, Inland Empire To Airport Drive	$3,105,258	0.00%	$0	0.00%	$0	100.00%	$3,105,258
SD-102	Fifth Street, Balboa To Cucamonga Channel	$1,966,057	0.00%	$0	0.00%	$0	100.00%	$1,966,057
SD-103	Share of Specific/Common City Yard Improvements	$1,969,069	0.00%	$0	55.03%	$1,083,557	44.97%	$885,512
SD-104	Project Completed or No Longer Needed	$0	0.00%	$0	100.00%	$0	0.00%	$0
SD-105	Ontario Ranch Storm Drain Study	$1,053,500	0.00%	$0	100.00%	$1,053,500	0.00%	$0
	Sub-Total General Plan Total New Projects	$426,727,592	29.63%	$126,459,161	48.21%	$205,710,156	22.16%	$94,558,275
	FINANCIAL ADJUSTMENTS:							
	Ontario Ranch - Local Storm Drainage Outstanding Credits	$10,219,358	0.00%	$0	100.00%	$10,219,358	0.00%	$0
	Ontario Ranch - Regional Storm Drainage Outstanding Credits	$19,429,696	0.00%	$0	100.00%	$19,429,696	0.00%	$0
	Ontario Ranch - Development Impact Fee Fund Balance	($10,614,169)	0.00%	$0	100.00%	($10,614,169)	0.00%	$0
	General City - Storm Drainage Outstanding Credits	$2,694,792	0.00%	$0	0.00%	$0	100.00%	$2,694,792
	General City - Development Impact Fee Fund Balance	($9,726,169)	0.00%	$0	0.00%	$0	100.00%	($9,726,169)
	Total Fund Balance/Outstanding Credits	$12,003,508	0.00%	$0	158.58%	$19,034,885	-58.58%	($7,031,377)
	Total Net General Plan Project Costs	$438,731,100	28.82%	$126,459,161	51.23%	$224,745,041	19.95%	$87,526,898
					Forward to Schedule 6.4		Forward to Schedule 6.2	

NOTES:

(1). All developer-held "credits" under FINANCIAL ADJUSTMENTS will appear as a positive indicating an additional Infrastructure Fund obligation that will be redeemed (in lieu of a DIF payment) at some point in the future.

(2). A negative figure under FINANCIAL ADJUSTMENTS indicates a positive Fund Balance mitigating the project total. A positive figure indicates an amount that needs to be recovered by DIFs.

(3). Costs distribution based upon Coefficient of Drainage statistics.

Schedule 6.2

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
General City (GC) - Minimum Capital Needs-based Impact Costs
Storm Drainage Collection System Facilities

Proposed Land Use	Undeveloped Acres	Undeveloped Units	Run-off Coefficient Index Rate	Total Added Impervious Acres	Run-off Coefficient Percentage	Allocation of Expansion Costs	Cost Distribution Per Acre	Average Units or Square Feet/Acre	Development Impact Fee per Unit or Square Foot
Detached Dwellings	262	1,131	0.775	203.05	6.24%	$5,459,667	$20,838	4.32	*$4,827 per Unit*
Attached Dwellings	183	2,688	0.810	148.23	4.55%	$3,985,651	$21,780	14.69	*$1,483 per Unit*
High Density Dwellings	598	21,807	0.900	538.20	16.53%	$14,471,278	$24,199	36.47	*$664 per Unit*
Mobile Home Dwellings	14	95	0.800	11.20	0.34%	$301,149	$21,511	6.79	*$3,170 per Unit*
Commercial Lodging Units	3	150	0.900	2.70	0.08%	$72,598	$24,199	50.00	*$484 per Unit*
Retail/Service Uses	992	8,164,415	0.900	892.80	27.43%	$24,005,866	$24,199	8,230	*$2.940 per S.F.*
Office Uses	822	20,895,746	0.900	739.80	22.73%	$19,891,957	$24,199	25,421	*$0.952 per S.F.*
Business Park Uses	341	6,969,626	0.875	298.38	9.17%	$8,022,794	$23,527	20,439	*$1.151 per S.F.*
Industrial Uses	441	30,650,125	0.950	418.95	12.87%	$11,264,849	$25,544	69,501	*$0.368 per S.F.*
Private Institutional Use	2	43,560	0.950	1.90	0.06%	$51,088	$25,544	21,780	*$1.173 per S.F.*
TOTAL	**3,658**	--	--	**3,255.21**	**100.00%**	**$87,526,898**	**in Total GC Storm Drainage General Plan Projects**		

Schedule 6.3

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
Existing Community Financial Commitment Comparison
Storm Drainage Collection System Facilities

Proposed Land Use	Developed Acres	Developed Units	Run-off Coefficient Index Rate	Total Existing Impervious Acres	Run-off Coefficient Percentage	Allocation of Expansion Costs	Cost Distribution Per Acre	Average Units or Square Feet/Acre	Development Impact Fee per Unit or Square Foot
Detached Dwellings	4,733.0	27,449	0.775	3,668.08	28.91%	$96,149,259	$20,315	5.80	*$3,503 per Unit*
Attached Dwellings	641.0	12,050	0.810	519.21	4.09%	$13,609,770	$21,232	18.80	*$1,129 per Unit*
High Density Dwellings	193.0	4,812	0.900	173.70	1.37%	$4,553,104	$23,591	24.93	*$946 per Unit*
Mobile Home Dwellings	204.0	2,097	0.800	163.20	1.29%	$4,277,873	$20,970	10.28	*$2,040 per Unit*
Commercial Lodging Units	143.0	5,810	0.900	128.70	1.01%	$3,373,543	$23,591	40.63	*$581 per Unit*
Retail/Service Uses	477.0	18,418,611	0.900	429.30	3.38%	$11,253,008	$23,591	38,613	*$0.611 per S.F.*
Office Uses	310.0	9,959,192	0.900	279.00	2.20%	$7,313,276	$23,591	32,126	*$0.734 per S.F.*
Business Park Uses	741.0	9,587,138	0.875	648.38	5.11%	$16,995,502	$22,936	12,938	*$1.773 per S.F.*
Industrial Uses	6,610.0	106,400,598	0.950	6,279.50	49.50%	$164,601,126	$24,902	16,097	*$1.547 per S.F.*
Private Institutional Use	419.0	2,318,711	0.950	398.05	3.14%	$10,433,869	$24,902	5,534	*$4.500 per S.F.*
TOTAL	**14,471.0**	--	--	**12,687.11**	**100.00%**	**$332,560,329**	**Total Storm Drainage Existing Assets**		
						$325,528,952	**in General Plan Storm Drainage System Pipe Assets**		
						$0	**in Storm Drainage Maintenance Vehicle Assets**		
						$9,726,169	**in GC Storm Drainage System DIF Fund Balance**		
						($2,694,792)	**in GC Storm Drainage System Developer Credits**		

Schedule 6.4

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
Ontario Ranch (OR) - Minimum Capital Needs-based Impact Costs
Storm Drainage Collection System Facilities

Proposed Land Use	*Undeveloped*		*Run-off Coefficient Index Rate*	*Total Added Impervious Acres*	*Run-off Coefficient Percentage*	*Allocation of Expansion Costs*	*Cost Distribution Per Acre*	*Average Units or Square Feet/Acre*	*Development Impact Fee per Unit or Square Foot*
	Acres	*Units*							
Detached Dwellings	1,423	11,662	0.775	1,102.83	27.69%	$62,224,411	$43,728	8.20	*$5,336 per Unit*
Attached Dwellings	1,316	29,684	0.810	1,065.96	26.76%	$60,144,386	$45,702	22.56	*$2,026 per Unit*
High Density Dwellings	439	13,082	0.900	395.10	9.92%	$22,292,625	$50,780	29.80	*$1,704 per Unit*
Commercial Lodging	9	396	0.900	8.10	0.20%	$457,024	$50,780	44.00	*$1,154 per Unit*
Retail/Service Uses	279	5,751,595	0.900	251.10	6.30%	$14,167,751	$50,780	20,615	*$2.463 per S.F.*
Office Uses	114	2,670,188	0.900	102.60	2.58%	$5,788,973	$50,780	23,423	*$2.168 per S.F.*
Business Park Uses	428	9,953,243	0.875	374.50	9.40%	$21,130,317	$49,370	23,255	*$2.123 per S.F.*
Industrial Uses	669	16,981,679	0.950	635.55	15.96%	$35,859,474	$53,602	25,384	*$2.112 per S.F.*
Institutional Use	50	1,089,000	0.950	47.50	1.19%	$2,680,080	$53,602	21,780	*$2.461 per S.F.*
TOTAL	4,727	--	--	3,983.24	100.00%	$224,745,041	**in Total OR Storm Drainage General Plan Projects**		

Schedule 7.1

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
Allocation of Project Cost Estimates
Water Source, Storage and Distribution Facilities

Line #	Project Title	Remaining Project Cost Estimate	Construction Needs Supported by Other Resources		Construction Needs Generated by New Development in OR		Construction Needs Generated by New Development in GC	
			Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost
WT-001	Phillips Street 1010' Zone Well	$764,470	0.00%	$0	0.00%	$0	100.00%	$764,470
WT-002	Eighth Street 1212' Zone Wells	$19,894,178	0.00%	$0	42.09%	$8,373,460	57.91%	$11,520,718
WT-003	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
WT-004	Eighth Street 1212' Zone Transmission Lines	$64,862,681	25.00%	$16,215,670	0.00%	$0	75.00%	$48,647,011
WT-005	Eighth Street 1212' Zone Reservoir Site Purchase	$4,800,000	25.00%	$1,200,000	0.00%	$0	75.00%	$3,600,000
WT-006	Eighth Street 1212' Zone Reservoir Construction	$70,683,383	25.00%	$17,670,846	0.00%	$0	75.00%	$53,012,537
WT-007	Francis Street 925' Zone Wells	$80,452,117	0.00%	$0	100.00%	$80,452,117	0.00%	$0
WT-008	Phillips Street 1010' Zone Wells	$8,262,695	0.00%	$0	100.00%	$8,262,695	0.00%	$0
WT-009	Phillips Street 1010' Zone Extension Mains Extension	$35,359,172	9.65%	$3,412,160	83.56%	$29,546,124	6.79%	$2,400,888
WT-010	Francis Street 925' Zone Transmission Lines	$44,535,715	0.00%	$0	100.00%	$44,535,715	0.00%	$0
WT-011	Francis Street 925' Zone Distribution Mains	$81,226,165	0.00%	$0	100.00%	$81,226,165	0.00%	$0
WT-012	Francis Street 925' Zone Well Collection System	$17,141,659	0.00%	$0	100.00%	$17,141,659	0.00%	$0
WT-013	Pressure Reducing Station, Potable Water System (1010' - 925')	$3,066,273	0.00%	$0	100.00%	$3,066,273	0.00%	$0
WT-014	Francis Street 925' Zone Reservoirs	$124,188,360	0.00%	$0	100.00%	$124,188,360	0.00%	$0
WT-015	Phillips Street 1010' Zone Reservoirs	$9,327,338	0.00%	$0	100.00%	$9,327,338	0.00%	$0
WT-016	Recycled Water System	$137,612,533	0.00%	$0	86.35%	$118,828,422	13.65%	$18,784,111
WT-017	Back-Up Power Supply	$3,966,702	65.23%	$2,587,480	27.52%	$1,091,636	7.25%	$287,586
WT-018	Reservoir 1010' (2B) Landscaping	$242,730	0.00%	$0	0.00%	$0	100.00%	$242,730
WT-019	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
WT-020	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
WT-021	Distribution System Pressure, Size And Age Improvements	$326,228,894	100.00%	$326,228,894	0.00%	$0	0.00%	$0
WT-022	Miscellaneous Up-Sized Facilities	$11,968,032	0.00%	$0	0.00%	$0	100.00%	$11,968,032
WT-023	Abandon Existing General City Wells	$593,938	100.00%	$593,938	0.00%	$0	0.00%	$0
WT-024	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
WT-025	Decommission Galvin Treatment Plant/Abandon 1212-3 Reservoir	$2,798,932	100.00%	$2,798,932	0.00%	$0	0.00%	$0
WT-026	Seismic Upgrades And Replacements	$14,474,099	100.00%	$14,474,099	0.00%	$0	0.00%	$0
WT-027	Water Master Plan Updates	$1,596,376	0.00%	$0	82.87%	$1,322,917	17.13%	$273,459
WT-028	Water System Maintenance Vehicle/Equipment Fleet	$1,297,912	0.00%	$0	82.87%	$1,075,580	17.13%	$222,332
WT-029	Project Completed or No Longer Needed	$0	0.00%	$0	100.00%	$0	0.00%	$0
WT-030	CDA Facility Modifications (Booster Station & Pipeline)	$0	0.00%	$0	100.00%	$0	0.00%	$0
WT-031	JCSD/Ontario Reservoir (Phillips Street 1010" Zone)	$1,078,186	40.00%	$431,274	50.00%	$539,093	10.00%	$107,819
WT-032	Water Treatment	$58,997,347	47.46%	$28,000,141	52.54%	$30,997,206	0.00%	$0
WT-033	Project Completed or No Longer Needed	$0	100.00%	$0	0.00%	$0	0.00%	$0
WT-034	Water Source Supply	$62,549,323	0.00%	$0	93.71%	$58,614,971	6.29%	$3,934,352

Schedule 7.1

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
Allocation of Project Cost Estimates
Water Source, Storage and Distribution Facilities

Line #	Project Title	Remaining Project Cost Estimate	Construction Needs Supported by Other Resources: Percent Need	Construction Needs Supported by Other Resources: Apportioned Dollar Cost	Construction Needs Generated by New Development in OR: Percent Need	Construction Needs Generated by New Development in OR: Apportioned Dollar Cost	Construction Needs Generated by New Development in GC: Percent Need	Construction Needs Generated by New Development in GC: Apportioned Dollar Cost
WT-035	General System Reliability Improvements	$2,108,479	100.00%	$2,108,479	0.00%	$0	0.00%	$0
WT-036	Fourth Street 1074' Zone Transmission Improvements	$4,356,603	100.00%	$4,356,603	0.00%	$0	0.00%	$0
WT-037	Share of Specific/Common City Yard Improvements	$10,723,390	0.00%	$0	82.87%	$8,886,473	17.13%	$1,836,917
WT-038	Project Completed or No Longer Needed	$0	100.00%	$0	0.00%	$0	0.00%	$0
	Sub-Total General Plan Total New Projects	$1,205,157,682	34.86%	$420,078,516	52.07%	$627,476,204	13.08%	$157,602,962
	OR Reimbursement for Water System	$4,375,000	0.00%	$0	100.00%	$4,375,000	0.00%	$0
	Less: OR Reimbursement for Previous GC Expenses	-$4,375,000	100%	$ (4,375,000)	0.00%	0.00%	0.00%	$0
	FINANCIAL ADJUSTMENTS:							
	Ontario Ranch - Local Water Outstanding Credits	$8,026,039	0.00%	$0	100.00%	$8,026,039	0.00%	$0
	Ontario Ranch - Regional Water Outstanding Credits	$37,934,838	0.00%	$0	100.00%	$37,934,838	0.00%	$0
	Ontario Ranch - Development Impact Fee Fund Balance	($2,334,443)	0.00%	$0	100.00%	-$2,334,443	0.00%	$0
	General City Development Impact Fee Fund Balance	($19,923,578)	0.00%	$0	0.00%	$0	100.00%	-$19,923,578
	Total Fund Balance/OutstandingCredits	$23,702,856	0.00%	$0	184.06%	$43,626,434	-84.06%	-$19,923,578
	Total Net General Plan Project Costs	$1,228,860,538	33.83%	$415,703,516	54.97%	$675,477,638	11.20%	$137,679,384
					Forward to Schedule 7.4		**Forward to Schedule 7.2**	

NOTES:

(1). All developer-held "credits" under FINANCIAL ADJUSTMENTS will appear as a positive indicating an additional Infrastructure Fund obligation that will be redeemed (in lieu of a DIF payment) at some point in the future.

(2). A negative figure under FINANCIAL ADJUSTMENTS indicates a positive Fund Balance mitigating the project total. A positive figure indicates an amount that needs to be recovered by DIFs.

(3). Costs distribution based upon the water allocation factors from the Water Master Plan.

Schedule 7.2

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
General City (GC) - Minimum Capital Needs-based Impact Costs
Water Source, Storage and Distribution Facilities

Proposed Land Use	Undeveloped Acres	Undeveloped Units	GC Water Allocation Rate GPD (1)	Cumulative New Water Allocation	Percentage of Added Water Allocation	Allocation of Expansion Costs	Cost Distribution Per Acre	Average Units or Square Feet/Acre	Development Impact Fee per Unit or Square Foot
Detached Dwellings	262	1,131	544	615,264	4.47%	$6,156,012	$23,496	4.32	*$5,439 per Unit*
Attached Dwellings	183	2,688	372	999,936	7.27%	$10,004,840	$54,671	14.69	*$3,722 per Unit*
High Density Dwellings	598	21,807	251	5,473,557	39.78%	$54,765,568	$91,581	36.47	*$2,511 per Unit*
Mobile Home Dwellings	14	95	372	35,340	0.26%	$353,594	$25,257	6.79	*$3,720 per Unit*
Commercial Lodging Units	3	150	150	22,500	0.16%	$225,123	$75,041	50.00	*$1,501 per Unit*
Retail/Service Uses	992	8,164,415	2,200	2,182,400	15.86%	$21,835,961	$22,012	8,230	*$2.675 per S.F.*
Office Uses	822	20,895,746	3,400	2,794,800	20.31%	$27,963,317	$34,019	25,421	*$1.338 per S.F.*
Business Park Uses	341	6,969,626	2,200	750,200	5.45%	$7,506,111	$22,012	20,439	*$1.077 per S.F.*
Industrial Uses	441	30,650,125	2,000	882,000	6.41%	$8,824,834	$20,011	69,501	*$0.288 per S.F.*
Private Institutional Use	2	43,560	2,200	4,400	0.03%	$44,024	$22,012	21,780	*$1.011 per S.F.*
TOTAL	**3,658**	--	--	**13,760,397**	**100.00%**	**$137,679,384**	**in Total GC Water System General Plan Projects**		
ALTERNATE FEE METHODOLOGY				**13,760,397**		**$137,679,384**	**$10.005 Per Gallon Demand**		

(1). Allocation rates are based upon Potable water demand rates from the 2012 Water Master Plan and exclude potential recycled water demands. Recycled water usage in the GC area is limited to specific areas and does not include "regional" recycled water usage areas as in the OR.

Schedule 7.3

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
Existing Community Financial Commitment Comparison
Water Source, Storage and Distribution Facilities

Proposed Land Use	Undeveloped Acres	Undeveloped Units	GC Water Allocation Rate GPD (1)	Cumulative Existing Water Allocation	Percentage of Existing Water Allocation	Allocation of ExistingSystem Costs	Cost Distribution Per Acre	Average Units or Square Feet/Acre	Development Impact Fee per Unit or Square Foot
Detached Dwellings	4,733	27,449	544	14,932,256	37.19%	$293,563,762	$62,025	5.80	***$10,694 per Unit***
Attached Dwellings	641	12,050	372	4,482,600	11.16%	$88,126,598	$137,483	18.80	***$7,313 per Unit***
High Density Dwellings	193	4,812	251	1,207,812	3.01%	$23,745,229	$123,032	24.93	***$4,935 per Unit***
Mobile Home Dwellings	204	2,097	372	780,084	1.94%	$15,336,222	$75,178	10.28	***$7,313 per Unit***
Commercial Lodging Units	143	5,810	150	871,500	2.17%	$17,133,434	$119,814	40.63	***$2,949 per Unit***
Retail/Service Uses	477	18,418,611	2,200	1,049,400	2.61%	$20,630,895	$43,251	38,613	***$1.120 per S.F.***
Office Uses	310	9,959,192	3,400	1,054,000	2.63%	$20,721,330	$66,843	32,126	***$2.081 per S.F.***
Business Park Uses	741	9,587,138	2,200	1,630,200	4.06%	$32,049,253	$43,251	12,938	***$3.343 per S.F.***
Industrial Uses	6,610	106,400,598	2,000	13,220,000	32.93%	$259,901,312	$39,319	16,097	***$2.443 per S.F.***
Private Institutional Use	419	2,318,711	2,200	921,800	2.30%	$18,122,317	$43,251	5,534	***$7.816 per S.F.***
TOTAL	**14,471**	--	--	**40,149,652**	**100.00%**	**$789,330,351**	**Total Existing Water System Inventory**		
						$496,870,839	**in Water Distribution System Assets**		
						$100,315,860	**in Water Storage Reservoir Assets**		
						$115,078,345	**in Water Well Assets**		
						$19,172,187	**in Water Shares Assets**		
						$9,403,160	**in Pressure Reducing Stations (PRVs) Assets**		
						$8,159,250	**in Booster Station Assets**		
						$17,103,834	**in Treatment Facilities Assets**		
						$2,678,630	**in Water Maintenance Vehicles/Equipment Assets**		
						$624,668	**in Altitude Valve Assets**		
						$19,923,578	**in Water System DIF Fund Balance**		

Schedule 7.4

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
Ontario Ranch (OR) - Minimum Capital Needs-based Impact Costs
Water Source, Storage and Distribution Facilities

Proposed Land Use	Undeveloped Acres	Undeveloped Units	*OR Water Allocation Rate (1)*	*Cumulative New Water Allocation*	*Percentage of Added Water Allocation*	*Allocation of Expansion Costs*	*Cost Distribution Per Acre*	*Average Units or Square Feet/Acre*	*Development Impact Fee per Unit or Square Foot*
Detached Dwellings	1,423	11,662	714	8,326,668	27.82%	$187,930,333	$132,066	8.20	*$16,115 per Unit*
Attached Dwellings	1,316	29,684	392	11,636,128	38.88%	$262,623,826	$199,562	22.56	*$8,847 per Unit*
High Density Dwellings	439	13,082	208	2,721,056	9.09%	$61,413,396	$139,894	29.80	*$4,694 per Unit*
Commercial Lodging	9	396	300	118,800	0.40%	$2,681,279	$297,920	44.00	*$6,771 per Unit*
Retail/Service Uses	279	5,751,595	4,832	1,348,128	4.50%	$30,426,834	$109,057	20,615	*$5.290 per S.F.*
Office Uses	114	2,670,188	4,963	565,782	1.89%	$12,769,526	$112,013	23,423	*$4.782 per S.F.*
Business Park Uses	428	9,953,243	4,245	1,816,860	6.07%	$41,005,971	$95,808	23,255	*$4.120 per S.F.*
Industrial Uses	669	16,981,679	4,795	3,207,855	10.72%	$72,400,300	$108,222	25,384	*$4.263 per S.F.*
Institutional Use	50	1,089,000	3,745	187,250	0.63%	$4,226,175	$84,524	21,780	*$3.881 per S.F.*
TOTAL	4,727	--	--	29,928,527	100.00%	$675,477,638	**in Total OR Water System General Plan Projects**		
ALTERNATE FEE METHODOLOGY				**29,928,527**		**$675,477,638**	**$22.570 Per Gallon Demand**		

(1) Ontario Ranch allocation rates are based upon Potable water and recycled Water demands from the 2012 water and recycled Water Master Plans. Recycled water demands include the landscaped medians, neighborhood edges and parkways and other landscaped areas.

Schedule 8.1

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
Allocation of Project Cost Estimates
Sewer Collection Facilities

Line #	Project Title	Estimated Remaining Cost	Construction Needs Supported by Other Resources		Construction Needs Generated by New Development in OR		Construction Needs Generated by New Development in GC	
			Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost
SW-001	Eastern Trunk Sewer	$23,769,604	85.66%	$20,361,043	13.18%	$3,132,834	1.16%	$275,727
SW-002	Western Trunk Sewer	$44,269,343	0.00%	$0	100.00%	$44,269,343	0.00%	$0
SW-003	Eucalyptus East Trunk Sewer	$816,116	0.00%	$0	100.00%	$816,116	0.00%	$0
SW-004	Project Completed or No Longer Needed	$0	0.00%	$0	100.00%	$0	0.00%	$0
SW-005	Haven Trunk Sewer	$1,752,403	0.00%	$0	100.00%	$1,752,403	0.00%	$0
SW-006	Mill Creek Trunk Sewer	$12,945,246	0.00%	$0	100.00%	$12,945,246	0.00%	$0
SW-007	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SW-008	Walker Trunk Sewer	$3,125,194	0.00%	$0	100.00%	$3,125,194	0.00%	$0
SW-009	Grove Trunk Sewer	$11,358,530	0.00%	$0	100.00%	$11,358,530	0.00%	$0
SW-010	Bon View Trunk Sewer	$8,592,839	0.00%	$0	100.00%	$8,592,839	0.00%	$0
SW-011	Euclid Trunk Sewer	$8,484,996	0.00%	$0	100.00%	$8,484,996	0.00%	$0
SW-012	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SW-013	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SW-014	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SW-015	Plaza Serena Street, Granda Court To Vineyard Avenue	$33,618	0.00%	$0	0.00%	$0	100.00%	$33,618
SW-016	Philadelphia Between Parco And Vineyard	$7,191,153	85.00%	$6,112,480	0.00%	$0	15.00%	$1,078,673
SW-017	Holt Boulevard, West Of Imperial Avenue	$476,855	61.00%	$290,882	0.00%	$0	39.00%	$185,973
SW-018	Project Completed or No Longer Needed	$0	100.00%	$0	0.00%	$0	0.00%	$0
SW-019	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SW-020	Cherry Avenue, North Of G Street	$20,407	100.00%	$20,407	0.00%	$0	0.00%	$0
SW-021	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SW-022	Vineyard Avenue, South Of Cedar Et. Al.	$16,319,011	13.00%	$2,121,471	0.00%	$0	87.00%	$14,197,540
SW-023	Easement East Of Haven Street	$1,417,046	27.00%	$382,602	0.00%	$0	73.00%	$1,034,444
SW-024	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SW-025	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SW-026	Sewer Utility Maintenance Vehicles	$1,057,911	0.00%	$0	72.00%	$761,696	28.00%	$296,215
SW-027	Sewer Utility Master Plan	$870,349	0.00%	$0	72.00%	$626,651	28.00%	$243,698
SW-028	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SW-029	Carpenter Trunk Sewer	$6,391,873	0.00%	$0	100.00%	$6,391,873	0.00%	$0
SW-030	Project Completed Or No longer needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SW-031	Project Completed Or No longer needed	$0	100.00%	$0	0.00%	$0	0.00%	$0
SW-032	Project Completed Or No longer needed	$0	100.00%	$0	0.00%	$0	0.00%	$0
SW-033	Project Completed Or No longer needed	$0	100.00%	$0	0.00%	$0	0.00%	$0
SW-034	Project Completed Or No longer needed	$0	100.00%	$0	0.00%	$0	0.00%	$0
SW-035	Virginia Avenue Between D Street and Nocta Street	$65,056	26.00%	$16,915	0.00%	$0	74.00%	$48,141
SW-036	Deer Creek Loop And Laurel Tree Drive	$947,106	99.00%	$937,635	0.00%	$0	1.00%	$9,471
SW-037	Hollowell, Boulder and Holt Avenue	$279,389	0.00%	$0	0.00%	$0	100.00%	$279,389

Schedule 8.1

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
Allocation of Project Cost Estimates
Sewer Collection Facilities

Line #	Project Title	Estimated Remaining Cost	Construction Needs Supported by Other Resources		Construction Needs Generated by New Development in OR		Construction Needs Generated by New Development in GC	
			Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost
SW-038	Easement N/O Holt Blvd, E/O Allyn Avenue	$108,406	59.00%	$63,960	0.00%	$0	41.00%	$44,446
SW-039	Riverside Drive Between Sultana And Campus Avenues	$207,064	33.00%	$68,331	0.00%	$0	67.00%	$138,733
SW-040	Vineyard S/O Airport And Easement	$7,633,432	69.00%	$5,267,068	0.00%	$0	31.00%	$2,366,364
SW-041	Mills Circle N/O Mall Drive	$154,733	66.00%	$102,124	0.00%	$0	34.00%	$52,609
SW-042	Holt Boulevard E/O Vineyard Avenue	$491,554	52.00%	$255,608	0.00%	$0	48.00%	$235,946
SW-043	Bon View Avenue N/O Francis	$220,867	0.00%	$0	0.00%	$0	100.00%	$220,867
SW-044	Acacia, Easement, Locust And Parco	$2,031,658	19.00%	$386,015	0.00%	$0	81.00%	$1,645,643
SW-045	Turner Avenue, N/O Cedar Street	$154,733	19.00%	$29,399	0.00%	$0	81.00%	$125,334
SW-046	Holt Sewer Phase A	$1,072,819	83.00%	$890,440	0.00%	$0	17.00%	$182,379
SW-047	Holt Sewer Phase B	$41,823	99.00%	$41,405	0.00%	$0	1.00%	$418
SW-048	Share Of Common City Yard Improvements	$4,494,050	0.00%	$0	72.00%	$3,235,716	28.00%	$1,258,334
SW-049	Project Completed or No Longer Needed	$0	0.00%	$0	100.00%	$0	0.00%	$0
SW-050	Airport Drive Main, E/O Grove	$691,443	0.00%	$0	0.00%	$0	100.00%	$691,443
SW-051	Project Completed or No Longer Needed	$0	54.00%	$0	0.00%	$0	46.00%	$0
SW-052	Piedmonte Specific Densification Mitigation in Various Streets	$6,081,763	0.00%	$0	0.00%	$0	100.00%	$6,081,763
SW-053	Vineyard Trunk	$5,718,532	0.00%	$0	100.00%	$5,718,532	0.00%	$0
SW-054	Sultana Trunk	$5,106,446	0.00%	$0	100.00%	$5,106,446	0.00%	$0
SW-055	Campus trunk	$5,106,446	0.00%	$0	100.00%	$5,106,446	0.00%	$0
	Sub-Total General Plan Total New Projects	$189,499,814	19.71%	$37,347,785	64.08%	$121,424,861	16.21%	$30,727,168
	FINANCIAL ADJUSTMENTS:			$34,566,208		$78,789,386		$27,736,071
	Ontario Ranch - Local Sewer Outstanding Credits	$5,421,619	0.00%	$0	100.00%	$5,421,619	0.00%	$0
	Ontario Ranch - Regional Sewer Outstanding Credits	$1,216	0.00%	$0	100.00%	$1,216	0.00%	$0
	Ontario Ranch - Development Impact Fee Fund Balance	($1,131,559)	0.00%	$0	100.00%	($1,131,559)	0.00%	$0
	General City - Development Impact Fee Fund Balance	($4,052,853)	0.00%	$0	0.00%	$0	100.00%	($4,052,853)
	Tota Fund Balance/Outstanding Credits	$238,423	0.00%	$0		$4,291,276		($4,052,853)
	Total Net General Plan Project Costs	$189,738,237	19.68%	$37,347,785	66.26%	$125,716,137	14.06%	$26,674,315
					Forward to Schedule 8.4		**Forward to Schedule 8.2**	

NOTES:

(1). All developer-held "credits" under FINANCIAL ADJUSTMENTS will appear as a positive indicating an additional Infrastructure Fund obligation that will be redeemed (in lieu of a DIF payment) at some point in the future.

(2). A negative figure under FINANCIAL ADJUSTMENTS indicates a positive Fund Balance mitigating the project total. A positive figure indicates an amount that needs to be recovered by DIFs.

(3). Costs distribution based upon the Sewer allocation factors from the Sewer Master Plan.

Schedule 8.2

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
General City (GC) - Minimum Capital Needs-based Impact Costs
Sewer Collection Facilities

Proposed Land Use	Undeveloped Acres	Undeveloped Units	Gallons per Day Sewer Demand Rate	Cumulative New Sewer Demand	Percentage of Additional Sewer Demand	Allocation of Expansion Costs	Cost Distribution Per Acre	Average Units or Square Feet/Acre	Development Impact Fee per Unit or Square Foot
Detached Dwellings	262	1,131	240	271,440	2.93%	$780,224	$2,978	4.32	*$689 per Unit*
Attached Dwellings	183	2,688	210	564,480	6.08%	$1,622,865	$8,868	14.69	*$604 per Unit*
High Density Dwellings	598	21,807	180	3,925,260	42.30%	$11,284,302	$18,870	36.47	*$517 per Unit*
Mobile Home Dwellings	14	95	210	19,950	0.22%	$57,350	$4,096	6.79	*$603 per Unit*
Commercial Lodging Units	3	150	140	21,000	0.23%	$60,284	$20,095	50.00	*$402 per Unit*
Retail/Service Uses	992	8,164,415	900	892,800	9.62%	$2,566,603	$2,587	8,230	*$0.314 per S.F.*
Office Uses	822	20,895,746	3,000	2,466,000	26.58%	$7,089,233	$8,624	25,421	*$0.339 per S.F.*
Business Park Uses	341	6,969,626	1,200	409,200	4.41%	$1,176,337	$3,450	20,439	*$0.169 per S.F.*
Industrial Uses	441	30,650,125	1,600	705,600	7.60%	$2,028,315	$4,599	69,501	*$0.066 per S.F.*
Private Institutional Use	2	43,560	1,500	3,000	0.03%	$8,536	$4,268	21,780	*$0.196 per S.F.*
TOTAL	**3,658**	--	--	**9,278,730.00**	**100.00%**	**$26,674,315**	**in Total GC Sewer General Plan Projects**		

The demand characteristics have been taken from Table 3 from the June, 2011 Technical Memorandum from AKM Consulting Engineers.

Schedule 8.3

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
Existing Community Financial Commitment Comparison
Sewer Collection Facilities

Proposed Land Use	Undeveloped Acres	Undeveloped Units	Gallons per Day Sewer Demand Rate	Cumulative Existing Sewer Demand	Percentage of Existing Sewer Demand	Allocation of Expansion Costs	Cost Distribution Per Acre	Average Units or Square Feet/Acre	Development Impact Fee per Unit or Square Foot
Detached Dwellings	4,733.0	27,449	240	6,587,760	26.68%	$92,067,786	$19,452	5.80	***$3,354 per Unit***
Attached Dwellings	641.0	12,050	210	2,530,500	10.25%	$35,366,093	$55,173	18.80	***$2,935 per Unit***
High Density Dwellings	193.0	4,812	180	866,160	3.51%	$12,105,011	$62,720	24.93	***$2,516 per Unit***
Mobile Home Dwellings	204.0	2,097	210	440,370	1.78%	$6,156,026	$30,177	10.28	***$2,936 per Unit***
Commercial Lodging Units	143.0	5,810	140	813,400	3.29%	$11,366,564	$79,486	40.63	***$1,956 per Unit***
Retail/Service Uses	477.0	18,418,611	900	429,300	1.74%	$6,000,745	$12,580	38,613	***$0.326 per S.F.***
Office Uses	310.0	9,959,192	3,000	930,000	3.77%	$12,998,739	$41,931	32,126	***$1.305 per S.F.***
Business Park Uses	741.0	9,587,138	1,200	889,200	3.60%	$12,425,925	$16,769	12,938	***$1.296 per S.F.***
Industrial Uses	6,610.0	106,400,598	1,600	10,576,000	42.83%	$147,803,286	$22,361	16,097	***$1.389 per S.F.***
Private Institutional Use	419.0	2,318,711	1,500	628,500	2.55%	$8,781,999	$20,959	5,534	***$3.787 per S.F.***
TOTAL	**14,471.0**	--	--	**24,691,190**	**100.00%**	**$345,068,723**	**Total Sewer Capital Needs to Finish System**		

$346,761,523	**in Sewer Collection System Assets**
$750,000	**in Sewer Collection Pump Station Assets**
$1,610,053	**in Sewer Maintenance Vehicle Assets**
-$4,052,853	**in Sewer System DIF Fund Balance**

The demand characteristics have been taken from Table 3 from the June, 2011 Technical Memorandum from AKM Consulting Engineers.

Schedule 8.4

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
Ontario Ranch (OR) - Minimum Capital Needs-based Impact Costs
Sewer Collection Facilities

Proposed Land Use	Undeveloped Acres	Undeveloped Units	*Gallons per Day Sewer Demand Rate*	*Cumulative New Sewer Demand*	*Percentage of Additional Sewer Demand*	Allocation of Expansion Costs	Cost Distribution Per Acre	Average Units or Square Feet/Acre	*Development Impact Fee per Unit or Square Foot*
Detached Dwellings	1,423	11,662	240	2,798,880	23.43%	$29,450,262	$20,696	8.20	*$2,524 per Unit*
Attached Dwellings	1,316	29,684	182	5,402,488	45.22%	$56,845,066	$43,195	22.56	*$1,915 per Unit*
High Density Dwellings	439	13,082	110	1,439,020	12.04%	$15,141,252	$34,490	29.80	*$1,157 per Unit*
Commercial Lodging	9	396	140	55,440	0.46%	$583,323	$64,814	44.00	*$1,473 per Unit*
Retail/Service Uses	279	5,751,595	900	251,100	2.10%	$2,642,553	$9,472	20,615	*$0.459 per S.F.*
Office Uses	114	2,670,188	3,000	342,000	2.86%	$3,597,996	$31,561	23,423	*$1.347 per S.F.*
Business Park Uses	428	9,953,243	1,200	513,600	4.30%	$5,404,537	$12,627	23,255	*$0.543 per S.F.*
Industrial Uses	669	16,981,679	1,600	1,070,400	8.96%	$11,262,909	$16,835	25,384	*$0.663 per S.F.*
Institutional Use	50	1,089,000	1,500	75,000	0.63%	$789,497	$15,790	21,780	*$0.725 per S.F.*
TOTAL	4,727	--	--	11,947,928	100.00%	$125,716,137 in Total OR Sewer General Plan Projects			

The demand characteristics have been taken from Table 3 from the June, 2011 Technical Memorandum from AKM Consulting Engineers.

Schedule 9.1
2021-22 Development Impact Cost Calculation (Rev 07/24)
City of Ontario
Refuse Collection Facilities and Vehicles

A. RESIDENTIAL SIDE-LOADER COLLECTION FOR DETACHED DWELLINGS

Daily Stops per Single Route	700	Barrel Stops per Day
Number of Days of Collection	5	Ten-hour Days per Week
Pick-up Capability of One Truck	3,500	Barrels per Week

Cost per Sideloader Collection Vehicle	$408,757	per Side-Loader Truck
Pick-up Capability of One Vehicle	3,500	Barrels per Week
Cost per Barrel per Pick-up Stop	$116.79	per Barrel per Stop

	Truck Cost	Barrel Cost	Total Cost per Home
Refuse/Trash Sideloader Collection Bin 96G	$116.79	$58.08	$174.87
Green Waste Sideloader Collection Bin 96G	$116.79	$58.08	$174.87
Recycle Sideloader Collection Bin 96G	$116.79	$58.08	$174.87
Average 2nd Bin (5% of Homes)	$5.84	$2.90	$8.74
Total (rounded)	$356.21	$177.14	$533.00

B. COMMERCIAL COLLECTION FOR ATTACHED UNITS

Cost per Front-loader Collection vehicle	$406,100	per Front-loader Truck
Collection Capability of one Truck	800	Bins per Week
Cost per Bin Collection	$507.63	per Bin per Stop

	Truck Cost	Bin Cost	Total Cost
Four Cubic Yard Bib (Trash)	$507.63	$1,192.00	$1,699.63
Four Cubic Yard Bib (Trash)	$507.63	$1,192.00	$1,699.63
Four Cubic Yard Bin (Recycle)	$507.63	$1,192.00	$1,699.63
Four Cubic Yard Bin (Recycle)	$507.63	$1,192.00	$1,699.63
Total Cost per Standard Attached Acre			$6,798.52
Average Number of Attached Residential Units/Acre			15
Total Truck Cost per Attached Unit (rounded)			$453.00

Total Cost per High Density Attached Acre	$6,798.52
Average Number of High Density Residential Units/Acre	30
Total Truck Cost per High Density Unit (rounded)	$227.00

C. COLLECTION FOR RETAIL/SERVICE AND BUSINESS PARK UNITS

	Truck Cost	Bin Cost	Total Cost
Refuse Bin (1.5 Collections/Week, 4CY Bin)	$761.45	$1,192.00	$1,953.45
Recycle Bin (1.5 Collections/Week, 4CY Bin)	$761.45	$1,192.00	$1,953.45
Total Cost per Average General Retail/Service Acre			$3,906.89

Average Square Feet of Retail/Service Pad per Acre	10,949
Cost per Square Foot for Average Retail/Service Uses	$0.357
Average Square Feet of Business Park Pad per Acre	22,006
Cost per Square Foot for Average Business Park Uses	$0.178

Schedule 9.1
2021-22 Development Impact Cost Calculation (Rev 07/24)
City of Ontario
Refuse Collection Facilities and Vehicles

D. COMMERCIAL COLLECTION FOR RESTAURANTS
(Five day/week mandatory collection and two day/week recycling collection)

	Truck Cost	Bin Cost	Total Cost
Restaurant Waste, Five/Week	$2,538.15	$1,192.00	$3,730.15
Restaurant Recycle, Two/Week	$1,015.26	$1,192.00	$2,207.26
Total Cost per Average Restaurant Commercial Acre			$5,937.41
Average Square Feet of Restaurant Pad/Acre			11,979
Square Foot Cost per Five Days a Week Collection			$0.496

E. HOTEL/MOTEL UNITS COLLECTION (assumes thrice weekly)

	Truck Cost	**Bin Cost**	**Total Cost**
Commercial - General (Three/week)	$1,522.89	$1,192.00	$2,714.89
Commercial - Recycle (One/week)	$507.63	$1,192.00	$1,699.63
Total Cost per Average Hotel/Motel Acre			$4,414.52
Average Hotel/Motel Units per Acre			30
Cost per Hotel/Motel Unit (rounded)			$147.00

F. OFFICE AND INSTITUTIONAL USES

Office and Institutional Refuse Vehicle/Bin	$507.63	$1,192.00	$1,699.63
Office and Institutional Recycle Vehicle/Bin	$507.63	$1,192.00	$1,699.63
Total Cost per Average Retail, Office and Institutional Acre			$3,399.26
Average Square Feet of Office Pad/Acre			25,177
Cost per Square Foot			$0.135
Average Square Feet of Institutional Pad/Acre			21,780
Cost per Square Foot			$0.156

G. INDUSTRIAL ROLL-OFF COLLECTION FOR MISCELLANEOUS UNITS

Cost of Roll-off Box Collection Truck	$335,713
Units per Week	50
Collection Cost per Weekly Roll-off Stop	$6,714.26
Cost of a 40 Cubic Yard Roll-off Collection Box	$12,734.00
Cost of Once/Week Front Loader Pick-up	$507.63
Cost of Four Cubic Yard Recycle Bin and Once/Week Pick-up	$1,192.00
Total Cost of Industrial Pick-up for Five Acres	$21,147.89
Square Feet of Pad In Five Acre Parcel	214,560
Cost per square Foot of Industrial/Manufacturing Pad per Acre	$0.099

Schedule 9.1
2021-22 Development Impact Cost Calculation (Rev 07/24)
City of Ontario
Refuse Collection Facilities and Vehicles

A. RESIDENTIAL SIDE-LOADER COLLECTION FOR DETACHED DWELLINGS				
	Detached Dwellings per Unit	$533.00	145.03%	$773
B. COMMERCIAL COLLECTION FOR ATTACHED UNITS				
	Attached Dwellings per Unit	$453.00	145.03%	$657
	High Density Dwellings per Unit	$227.00	145.03%	$329
C. COLLECTION FOR RETAIL/SERVICE AND BUSINESS PARK UNITS				
	Retail Uses, per Square Foot	$0.357	145.03%	$0.518
	Business Park Uses, per Square Foot	$0.178	145.03%	$0.258
D. COMMERCIAL COLLECTION FOR RESTAURANTS				
	Commercial Restaurants	$0.496	145.03%	$0.719
E. HOTEL/MOTEL UNITS COLLECTION (assumes thrice weekly)				
	Hotel Units, per Keyed Unit	$147.00	145.03%	$213
F. OFFICE AND INSTITUTIONAL USES				
	Office Uses, per Square Foot	$0.135	145.03%	$0.196
	Institutional Uses, per Square Foot	$0.156	145.03%	$0.226
G. INDUSTRIAL ROLL-OFF COLLECTION FOR MISCELLANEOUS UNITS				
	Industrial Roll-off Users per Square Foot	$0.099	145.03%	$0.143

H. ORGANIC FOOD WASTE COLLECTION PROGRAM (New in 2019)		
Cost per Front-loader Collection vehicle	$406,100	per Front-loader Truck
Collection Capability of one Truck	700	Bins per Week
Cost per Bin Collection	$580.14	per Bin per Stop

32 Gallon Food Waste Bin	$40
64 Gallon Food Waste Bin	$49
1.5 CY Bin Food Waste Bin	$751
3.0 CY Bin Food Waste Bin	$982

Schedule 10.1

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
Allocation of Project Cost Estimates
General Facilities, Vehicles and Equipment

Line #	Project Title	Estimated Cost	Construction Needs Supported by Other Resources: Percent Need	Construction Needs Supported by Other Resources: Apportioned Dollar Cost	Construction Needs Generated by New Development - GC/OR: Percent Need	Construction Needs Generated by New Development - GC/OR: Apportioned Dollar Cost
GF-001	City Hall And Annex Reconfiguration	$11,636,848	20.00%	$2,327,370	80.00%	$9,309,478
GF-002	Expansion Of Administrative Pool Car Fleet	$654,283	0.00%	$0	100.00%	$654,283
GF-003	Electronic Specialty Equipment/Computer Hardware/Software	$13,512,260	0.00%	$0	100.00%	$13,512,260
GF-004	City Animal Holding Facility, No Specific Plans/Policy Decision for Facility	$0	0.00%	$0	100.00%	$0
GF-005	Share of Specific/Common City Yard Improvements	$1,792,887	0.00%	$0	100.00%	$1,792,887
	Sub-Total General Plan Total New Project Costs	$27,596,278	8.43%	$2,327,370	91.57%	$25,268,908
	FINANCIAL ADJUSTMENTS:					
	Development Impact Fee Fund Balance	-$4,255,805	0.00%	$0	100.00%	-$4,255,805
	Total General Plan Total New Project Costs	$23,340,473	9.97%	$2,327,370	90.03%	$21,013,103
						Forward to Schedule 10.2

NOTES:

(1). All developer-held "credits" under FINANCIAL ADJUSTMENTS will appear as a positive indicating an additional Infrastructure Fund obligation that will be redeemed (in lieu of a DIF payment) at some point in the future.

(2). A negative figure under FINANCIAL ADJUSTMENTS indicates a positive Fund Balance mitigating the project total. A positive figure indicates an amount that needs to be recovered by DIFs.

Schedule 10.2

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
Entire City - Minimal Needs-based Impact Costs
General Facilities, Vehicles and Equipment

Proposed Land Use	Undeveloped Acres	Undeveloped Units	Acre Distribution Factor	Acre Demand Factor	Percentage of Additional Demand	Allocation of Expansion Costs	Cost Distribution Per Acre	Average Units or Square Feet/Acre	Development Impact Fee per Unit or Square Foot
Detached Dwellings	1,685	12,793	1.000	1,685.00	20.10%	$4,222,669	$2,506	7.59	***$330 per Unit***
Attached Dwellings	1,499	32,372	1.000	1,499.00	17.88%	$3,756,546	$2,506	21.60	***$116 per Unit***
High Density Dwellings	1,037	34,889	1.000	1,037.00	12.37%	$2,598,758	$2,506	33.64	***$74 per Unit***
Mobile Home Dwellings	14	95	1.000	14.00	0.17%	$35,084	$2,506	6.79	***$369 per Unit***
Commercial Lodging Units	12	546	1.000	12.00	0.14%	$30,072	$2,506	45.50	***$55 per Unit***
Retail/Service Uses	1,271	13,916,010	1.000	1,271.00	15.16%	$3,185,170	$2,506	10,949	***$0.229 per S.F.***
Office Uses	936	23,565,934	1.000	936.00	11.16%	$2,345,649	$2,506	25,177	***$0.100 per S.F.***
Business Park Uses	769	16,922,869	1.000	769.00	9.17%	$1,927,141	$2,506	22,006	***$0.114 per S.F.***
Industrial Uses	1,110	47,631,804	1.000	1,110.00	13.24%	$2,781,699	$2,506	42,912	***$0.058 per S.F.***
Private Institutional Use	52	1,132,560	1.000	52.00	0.62%	$130,314	$2,506	21,780	***$0.115 per S.F.***
TOTAL	**8,385**	--	--	**8,385.00**	**100.00%**	**$21,013,103**	**in Total Equity in General Facilities Capital Needs**		

Schedule 10.3

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
Existing Community Financial Commitment Comparison
General Facilities, Vehicles and Equipment

Proposed Land Use	Developed Acres	Developed Units	Acre Distribution Factor	Acre Demand Service	Percentage of Existing Service Calls	Allocation of Infrastructure "Equity"	Distribution of "Equity" per Acre	Average Units or Square Feet/Acre	Current Financial Commitment per Unit or Square Foot
Detached Dwellings	6,328	31,997	1.000	6,328.00	38.41%	$36,229,442	$5,725	5.06	***$1,132*** ***per Unit***
Attached Dwellings	722	13,097	1.000	722.00	4.38%	$4,133,637	$5,725	18.14	***$316*** ***per Unit***
High Density Dwellings	193	4,812	1.000	193.00	1.17%	$1,104,975	$5,725	24.93	***$230*** ***per Unit***
Mobile Home Dwellings	204	2,097	1.000	204.00	1.24%	$1,167,953	$5,725	10.28	***$557*** ***per Unit***
Commercial Lodging Units	143	5,810	1.000	143.00	0.87%	$818,712	$5,725	40.63	***$141*** ***per Unit***
Retail/Service Uses	487	18,522,286	1.000	487.00	2.96%	$2,788,201	$5,725	38,033	***$0.151*** ***per S.F.***
Office Uses	310	9,959,192	1.000	310.00	1.88%	$1,774,830	$5,725	32,126	***$0.178*** ***per S.F.***
Business Park Uses	777	10,271,628	1.000	777.00	4.72%	$4,448,527	$5,725	13,220	***$0.433*** ***per S.F.***
Industrial Uses	6,890	112,134,057	1.000	6,890.00	41.83%	$39,447,038	$5,725	16,275	***$0.352*** ***per S.F.***
Private Institutional Use	419	2,318,711	1.000	419.00	2.54%	$2,398,884	$5,725	5,534	***$1.035*** ***per S.F.***
TOTAL	16,473	--	--	16,473.00	100.00%	$94,312,200	in Total Existing General Facilities Capital Assets		

$17,063,563	in City Hall Land/Facilities
$16,374,744	in City Hall Annex land/Facilities
$19,358,148	in City Yard Facilities (General Fund Portion)
$33,109,140	in Equity in Existing Computer/Electronic Equipment
$4,150,800	in General Fund Vehicles
$4,255,805	in Existing General Facilities Impact Fee Fund Balance.

Schedule 11.1

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
Library Facilities and Collection Items

	Library Space	Collection Items	Total Resources
Ovitt Main Library	58,000	235,243	
Lewis Family Library	14,800	70,856	
Library Facilities Represented by Existing Fund Balance	9,745	40,976	
Existing Library Square Feet	82,545		
Existing Number of Collection Items		347,075	
Existing Standards:			
Current Population	182,004	182,004	
Square Foot of Library Space per Resident	0.454		
Collection Items per Resident		1.907	
Library Construction per Square Foot	$620.22		
Hardscape Improvements, @ 0.333 FAR	$17.30		
Land/Grading Cost @ 0.333 Floor Area Ratio	$52.02		
Land Acquisition and Construction per Square Foot	$689.54		
Accessions Cost per Collection Item		$35.60	
Cost per Facility Square Foot or Collection Item	$689.54	$35.60	
Existing Library Facilities and Collection Item Standard	0.454	1.907	
Library Facility Construction Cost per Resident	$313.05		
Collection Item Cost per Resident		$67.89	

Cost per Land Use Residential Dwelling Unit	Density per Dwelling Unit	Library Space	Collection Items	Total Resources
Detached Dwelling Unit	3.806	$1,191	$258	$1,449
Attached Dwelling Unit	3.373	$1,056	$229	$1,285
High Density Dwelling Unit	2.669	$836	$181	$1,017
Mobile Home Dwelling Unit	3.175	$994	$216	$1,210

FAR = Floor Area ratio

Schedule 12.1

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
Public Use (Community Center) Facilities

	Land and Building	Total Cost
Armstrong Center	13,500	
Dorothy A. Quesada Center	10,000	
Civic Center Senior Center	13,964	
Anthony Munoz Community Center	24,000	
De Anza Community Center	23,683	
City of Ontario Museum	19,478	
Westwind Community Center and Gymnasium	26,260	
Facilities Represented in Existing DIF Fund Balance	12,982	
Existing City-owned Public Use Facilities Square Feet	143,867	
Current Population	182,004	
Square Foot per Resident Standard	0.790	
Average Public Use Facility Construction Cost/Square Foot	$620.22	
Hardscape Improvements, @ 0.333 FAR	$17.30	
Land/Grading Cost @ 0.333 Floor Area Ratio	$52.02	
Total Cost for a Single Square Foot of Public Use Space	$689.54	
Total Cost for One Square Foot of Public Use Space	$689.54	
Square Foot per Resident Standard	0.790	
Cost per New Resident	$544.74	

Cost per Land Use Residential Dwelling Unit	Density per Dwelling Unit	Total Public Use Resources	Total Cost
Detached Dwelling Unit	3.806	$2,073	$2,073
Attached Dwelling Unit	3.373	$1,837	$1,837
High Density Dwelling Unit	2.669	$1,454	$1,454
Mobile Home Dwelling Unit	3.175	$1,730	$1,730

Schedule 13.1

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
Aquatics Facilities

	Pool Capacity in Surface Square Feet	Support Facilities in Square Feet
Anthony Munoz Park Aquatics Center	1,225	424
Dorothy A. Quesada Aquatics Center at Bon View Park	1,369	412
Vineyard Park Aquatics Center	1,296	450
Westwind Park Aquatics Center	2,580	2,880
Facilities Represented in Existing DIF Fund Balance	960	618
Current Pool Size (Surface Square Feet):	7,430	
Current Aquatics Building (Square Feet):		4,784
Current Population (1)	182,004	182,004
Existing Standards:		
Square Feet of Surface/Resident	0.0408	
Square Foot of Locker Building/Person		0.0263
Construction Costs		
Pool Cost per Surface Square Foot	$391.36	
Facilities Construction/Square Foot		$613.32
Existing Standards per Resident	0.0408	0.0263
Adjusted Pool Cost per Resident	$15.98	
Adjusted Facilities Cost per Resident		$16.12

Cost per Land Use Residential Dwelling Unit	Density per Dwelling Unit	Pool Surface	Support Facilities	Total Cost
Total Cost per Added Resident		$15.98	$16.12	$32.10
Detached Dwelling Unit	3.806	$61	$61	**$122**
Attached Dwelling Unit	3.373	$54	$54	**$108**
High Density Dwelling Unit	2.669	$43	$43	**$86**
Mobile Home Dwelling Unit	3.175	$51	$51	**$102**

Schedule 14.1

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
Park Land Acquisition and Park Infrastructure Development
(Quimby and Mitigation Act Calculation)

Park Name	Acres Owned or LT Lease	Developed/ Constructed Acres	Park Maintenance Requirements	Total Park Expansion Costs
Anthony Munoz Hall of Fame Park	15.80	15.80		
Armstrong Community Center Park	1.14	1.14		
Bon View Park	10.30	10.30		
Celebration Park - North/South	10.50	10.50		
Centennial Park	4.60	4.60		
Civic Center Community Conservation Park	1.00	1.00		
Creekside Park	6.90	6.90		
Cypress Park	4.70	4.70		
De Anza Park	19.20	19.20		
Del Rancho Park	4.80	4.80		
Euclid Median Park	13.40	13.40		
George Gibbs Park	2.70	2.70		
Grove Memorial Park	3.10	3.10		
Homer Briggs Park	14.40	14.40		
James F. Bryant Park (LTL)	4.50	4.50		
James Galanis Park	4.80	4.80		
Jay Littleton Ballpark	9.70	9.70		
John Galvin Park	25.60	25.60		
Kimball Park	7.10	7.10		
Nugent's Park	0.20	0.20		
Ontario Motor Speedway Park	6.20	6.20		
Ontario Soccer Park	23.40	23.40		
Ontario Town Square	1.90	1.90		
Ranch Park	1.80	1.80		
Sam Alba Park	1.00	1.00		
South Bon View Park	4.80	4.80		
Veteran's Memorial Park	7.50	7.50		
Vineyard Park	9.00	9.00		
West Cucamonga Creek Trail	34.00	34.00		
Westwind Park	23.00	23.00		
Whispering Lakes Golf Course	175.90	175.90		
Park Equivalent in Fund Balance	14.60	14.60		

Schedule 14.1

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
Park Land Acquisition and Park Infrastructure Development
(Quimby and Mitigation Act Calculation)

Park Name	Acres Owned or LT Lease	Developed/ Constructed Acres	Park Maintenance Requirements	Total Park Expansion Costs
Total Acres (Owned/Developed)	467.54	467.54		
Current Population	182,004	182,004		
Population/1,000	182.00	182.00		
Current Standard	2.57	2.57		
Minimum Acres/1,000 Population Standard	3.000	3.000	3.000	

Construction Cost per Acre		$604,456		
Land Acquisition Cost per Acre	$1,000,000			
Rough Grading/Site Preparation	$77,750			
City Yard Improvements per Acre (1)			$6,077	
Additional Maintenance Fleet per Acre (2)			$4,449	
Total Cost per Acre	$1,077,750	$604,456	$10,526	
Minimum Acres/1,000 Population Standard	3.000	3.000	3.000	
Cost X 3.0 Acre/1,000 Residents Standard	$3,233,250	$1,813,368	$31,578	
Population Served by Standard	1,000.00	1,000.00	1,000.00	
Acquisition/Construction Cost per Resident	$3,233.25	$1,813.37	$31.58	

	Occupants/ Dwelling	Land Acquisition	Park Construction	Maintenance Requirements	Total Park Costs
Cost per Additional Resident		$3,233.25	$1,813.37	$31.58	$5,078.20
Detached Dwelling Unit	3.806	$12,306	$6,902	$120	$19,328
Attached Dwelling Unit	3.373	$10,906	$6,116	$107	$17,129
High Density Dwelling Unit	2.669	$8,630	$4,840	$84	$13,554
Mobile Home Dwelling Unit	3.175	$10,266	$5,757	$100	$16,123

Schedule 16.1

City of Ontario - Ontario Ranch
2021-22 Development Impact Cost Calculation (Rev 07/24)
Allocation of Project Cost Estimates
Fiber Optics Communication System (OR)

			Residential Common System Construction Costs		Non- Residential Common System Construction Costs	
Line #	Description	Estimated Cost	Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost
FO-001	Head End Facilities (Points Of Presence System)	$10,389,076	78.00%	$8,103,479	22.00%	$2,285,597
FO-002	Core Network - Planning/Installation - Equipment/Facilities	$18,403,388	78.00%	$14,354,643	22.00%	$4,048,745
FO-003	Project Completed or No Longer Needed	$0	78.00%	$0	22.00%	$0
FO-004	Distribution Network - Major Streets Conduit System	$16,914,691	78.00%	$13,193,459	22.00%	$3,721,232
FO-005	System Distribution Network - Fiber System	$4,532,471	78.00%	$3,535,327	22.00%	$997,144
FO-006	Cabling System - Residential/Non-Residential	$38,823,270	78.00%	$30,282,151	22.00%	$8,541,119
FO-007	Fiber Equipment Within Residential Units	$40,093,323	100.00%	$40,093,323	22.00%	$8,820,531
FO-008	Fiber Equipment Within Non-Residential Buildings	$11,969,845	0.00%	$0	100.00%	$11,969,845
FO-009	Share of Specific/Common City Yard Improvements	$0	78.00%	$0	22.00%	$0
	Sub-total Fiber Optic Information System	$141,126,064	77.63%	$109,562,382	28.62%	$40,384,213
	FINANCIAL ADJUSTMENTS:					
	Ontario Ranch - Regional Fiber Outstanding Credits	$1,767,574	77.63%	$1,372,246	28.62%	$505,804
	Ontario Ranch - Development Impact Fee Fund Balance	$14,101,895	77.63%	$10,947,922	28.62%	$4,035,356
	Sub-total - Financial Adjustments	$15,869,469	77.63%	$12,320,168	28.62%	$4,541,160
	Total	$156,995,533	77.63%	$121,882,550	28.62%	$44,925,373
			Forward to Schedule 16.2		Forward to Schedule 16.2	

NOTES:

(1). All developer-held "credits" under FINANCIAL ADJUSTMENTS will appear as a positive indicating an additional Infrastructure Fund obligation that will be redeemed (in lieu of a DIF payment) at some point in the future

(2). A negative figure under FINANCIAL ADJUSTMENTS indicates a positive Fund Balance mitigating the project total. A positive figure indicates an amount that needs to be recovered by DIFs.

Schedule 16.2

City of Ontario - Ontario Ranch
2020-21 Development Impact Cost Calculation Update - Amended
Allocation of Project Cost Estimates
Allocation of Distribution System Cost

Proposed Residential Land Uses	Undeveloped Acres	Undeveloped Units	Equivalent Residential Unit (RU)	Equivalent Residential Units (RU's)	Percentage of ERU's	Allocation of Total System Cost	System Cost Distribution per Acre	Average Units or Square Feet/Acre	Ontario Ranch Impact Cost per Unit or Square Foot
Detached Dwellings	1,423.0	11,662	1.00	11,662	21.43%	$26,119,430	$18,355	8.20	*$2,239 per Unit*
Attached Dwellings	1,316.0	29,684	1.00	29,684	54.54%	$66,474,743	$50,513	22.56	*$2,239 per Unit*
High Density Dwellings	439.0	13,082	1.00	13,082	24.03%	$29,288,377	$66,716	29.80	*$2,239 per Unit*
TOTAL - Residential	3,178	54,428	--	54,428	100.00%	*$121,882,550*	*OR Fiber-optic System G.P. Build-out Cost*		

Proposed Non-residential Land Uses	Undeveloped Acres	Undeveloped Units	Equivalent Residential Unit (RU)	Equivalent Residential Units (RU's)	Percentage of ERU's	Allocation of Total System Cost	System Cost Distribution per Acre	Average Units or Square Feet/Acre	Ontario Ranch Impact Cost per Unit or Square Foot
Commercial Lodging Units	9.0	396	0.10	40	1.74%	$783,696	$87,077	44.00	*$1,979 per Unit*
Retail/Service Uses	279.0	5,751,595	1.65	460	20.06%	$9,012,504	$32,303	20,615	*$1.567 per S.F.*
Office Uses	114.0	2,670,188	3.12	356	15.53%	$6,974,894	$61,183	23,423	*$2.612 per S.F.*
Business Park Uses	428.0	9,953,243	1.43	613	26.73%	$12,010,141	$28,061	23,255	*$1.207 per S.F.*
Industrial Uses	669.0	16,981,679	1.02	679	29.61%	$13,303,240	$19,885	25,384	*$0.783 per S.F.*
Private Institutional Use	50.0	1,089,000	2.90	145	6.32%	$2,840,898	$56,818	21,780	*$2.609 per S.F.*
TOTAL - Non-residential	1,549	--	--	2,293	100.00%	*$44,925,373*	*OR Fiber-optic System G.P. Build-out Cost*		

	Business Acres	Business Square Feet	Square Feet per Acre	Square Feet of "Unit"	"Units" per Acre	Residential Unit Equivalent	RU's per Acre
Retail/Service Uses	**279.0**	**5,751,595**	**20,615**	**2,500**	**8.246**	**20.00%**	**1.65**
Office Uses	**114.0**	**2,670,188**	**23,423**	**3,000**	**7.808**	**40.00%**	**3.12**
Business Park Uses	**428.0**	**9,953,243**	**23,255**	**6,500**	**3.578**	**40.00%**	**1.43**
Industrial Uses	**669.0**	**16,981,679**	**25,384**	**10,000**	**2.538**	**40.00%**	**1.02**
Private Institutional Use	**50.0**	**1,089,000**	**21,780**	**3,000**	**7.260**	**40.00%**	**2.90**

Residential RU Demand	54,428	96.0%
Non-residential RU Demand	2,293	4.0%
Total RU Demand	56,721	100.0%

City of Ontario

Appendix D

Regional/Local Adjacent Distribution

Appendix D

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
GC - Regional/Local Adjacent Distribution
Circulation (Streets, Signals and Bridges) System

Proposed Land-use	*Proposed Development Impact Fee*	*Regional DIF* Rounded to *55%*	*Local/Adjacent DIF* Rounded to *45%*
Detached Dwellings	$2,397	$1,318	$1,079
Attached Dwellings	$1,600	$880	$720
High Density Dwellings	$990	$545	$446
Mobile Home Dwellings	$1,250	$688	$563
Commercial Lodging Units	$1,264	$695	$569
Retail/Service Uses	$4.843	$2.664	$2.179
Office Uses	$2.768	$1.522	$1.246
Business Park Uses	$2.880	$1.584	$1.296
Industrial Uses	$1.484	$0.816	$0.668
Private Institutional Use	$3.163	$1.740	$1.423

Appendix D

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
GC - Regional/Local Adjacent Distribution
Storm Drainage Collection System Facilities

Proposed Land-use	*Proposed Development Impact Fee*	*Regional DIF* Rounded to *10%*	*Local/Adjacent DIF* Rounded to *90%*
Detached Dwellings	$3,503	$1,051	$2,452
Attached Dwellings	$1,129	$339	$790
High Density Dwellings	$946	$284	$662
Mobile Home Dwellings	$2,040	$612	$1,428
Commercial Lodging Units	$581	$174	$407
Retail/Service Uses	$0.611	$0.183	$0.428
Office Uses	$0.734	$0.220	$0.514
Business Park Uses	$1.773	$0.532	$1.241
Industrial Uses	$1.547	$0.464	$1.083
Private Institutional Use	$4.500	$1.350	$3.150

Appendix D

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
GC - Regional/Local Adjacent Distribution
Water Source, Storage and Distribution Facilities

Proposed Land-use	*Proposed Development Impact Fee*	*Regional DIF* Rounded to *80%*	*Local/Adjacent DIF* Rounded to *20%*
Detached Dwellings	$5,439	$4,351	$1,088
Attached Dwellings	$3,722	$2,978	$744
High Density Dwellings	$2,511	$2,009	$502
Mobile Home Dwellings	$3,720	$2,976	$744
Commercial Lodging Units	$1,501	$1,201	$300
Retail/Service Uses	$2.675	$2.140	$0.535
Office Uses	$1.338	$1.070	$0.268
Business Park Uses	$1.077	$0.862	$0.215
Industrial Uses	$0.288	$0.230	$0.058
Private Institutional Use	$1.011	$0.809	$0.202

Appendix D

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
GC - Regional/Local Adjacent Distribution
Sewer Collection Facilities

Proposed Land-use	*Proposed Development Impact Fee*	*Regional DIF* Rounded to *10%*	*Local/Adjacent DIF* Rounded to *90%*
Detached Dwellings	$689	$69	$620
Attached Dwellings	$604	$60	$544
High Density Dwellings	$517	$52	$465
Mobile Home Dwellings	$603	$60	$543
Commercial Lodging Units	$402	$40	$362
Retail/Service Uses	$0.314	$0.031	$0.283
Office Uses	$0.339	$0.034	$0.305
Business Park Uses	$0.169	$0.017	$0.152
Industrial Uses	$0.066	$0.007	$0.059
Private Institutional Use	$0.196	$0.020	$0.176

Appendix D

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
OR - Regional/Local Adjacent Distribution
Circulation (Streets, Signals and Bridges) System

Proposed Land-use	*Proposed Development Impact Fee*	*Regional DIF* Rounded to *55%*	*Local/Adjacent DIF* Rounded to *45%*
Detached Dwellings	$6,003	$3,302	$2,701
Attached Dwellings	$4,008	$2,204	$1,804
High Density Dwellings	$2,480	$1,364	$1,116
Commercial Lodging Units	$3,166	$1,741	$1,425
Retail/Service Uses	$12.129	$6.671	$5.458
Office Uses	$6.932	$3.813	$3.119
Business Park Uses	$7.212	$3.967	$3.245
Industrial Uses	$3.717	$2.044	$1.673
Private Institutional Use	$7.920	$4.356	$3.564

Appendix D

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
OR - Regional/Local Adjacent Distribution
Storm Drainage Collection System Facilities

Proposed Land-use	*Proposed Development Impact Fee*	*Regional DIF* Rounded to *30%*	*Local/Adjacent DIF* Rounded to *70%*
Detached Dwellings	$5,336	$1,601	$3,735
Attached Dwellings	$2,026	$608	$1,418
High Density Dwellings	$1,704	$511	$1,193
Commercial Lodging	$1,154	$346	$808
Retail/Service Uses	$2.463	$0.739	$1.724
Office Uses	$2.168	$0.650	$1.518
Business Park Uses	$2.123	$0.637	$1.486
Industrial Uses	$2.112	$0.634	$1.478
Institutional Use	$2.461	$0.738	$1.723

Appendix D

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
OR - Regional/Local Adjacent Distribution
Water Source, Storage and Distribution Facilities

Proposed Land-use	*Proposed Development Impact Fee*	*Regional DIF* Rounded to *70%*	*Local/Adjacent DIF* Rounded to *30%*
Detached Dwellings	$16,115	$11,281	$4,835
Attached Dwellings	$8,847	$6,193	$2,654
High Density Dwellings	$4,694	$3,286	$1,408
Commercial Lodging	$6,771	$4,740	$2,031
Retail/Service Uses	$5.290	$3.703	$1.587
Office Uses	$4.782	$3.347	$1.435
Business Park Uses	$4.120	$2.884	$1.236
Industrial Uses	$4.263	$2.984	$1.279
Institutional Use	$3.881	$2.717	$1.164

Appendix D

City of Ontario
2021-22 Development Impact Cost Calculation (Rev 07/24)
OR - Regional/Local Adjacent Distribution
Sewer Collection Facilities

Proposed Land-use	*Proposed Development Impact Fee*	*Regional DIF* Rounded to *40%*	*Local/Adjacent DIF* Rounded to *60%*
Detached Dwellings	$2,524	$252	$2,272
Attached Dwellings	$1,915	$192	$1,724
High Density Dwellings	$1,157	$116	$1,041
Commercial Lodging	$1,473	$147	$1,326
Retail/Service Uses	$0.459	$0.046	$0.413
Office Uses	$1.347	$0.135	$1.212
Business Park Uses	$0.543	$0.054	$0.489
Industrial Uses	$0.663	$0.066	$0.597
Institutional Use	$0.725	$0.073	$0.653

Appendix D

City of Ontario - Ontario Ranch
2020-21 Development Impact Cost Calculation Update - Amended
OR - Regional/Local Adjacent Distribution
Fiber Optics Communication System (OR)

Proposed Land-use	*Proposed Development Impact Fee*	*Regional DIF* Rounded to *35%*	*Local/Adjacent DIF* Rounded to *65%*
Detached Dwellings	$2,239	$784	$1,455
Attached Dwellings	$2,239	$784	$1,455
High Density Dwellings	$2,239	$784	$1,455

Proposed Land-use	*Proposed Development Impact Fee*	*Regional DIF* Rounded to *35%*	*Local/Adjacent DIF* Rounded to *65%*
Commercial Lodging Units	$1,979	$693	$1,286
Retail/Service Uses	$1.567	$0.548	$1.019
Office Uses	$2.612	$0.914	$1.698
Business Park Uses	$1.207	$0.422	$0.785
Industrial Uses	$0.783	$0.274	$0.509
Private Institutional Use	$2.609	$0.913	$1.696

City of Ontario

Estimated Project Completion Timelines

Project #	Project Title	Estimated Completion Date
LE-001	Police Station Purchase and Roof Improvements Prior to Occupancy	2038
LE-002	Complete Remaining Interior Improvements@ 55% of Building Space	2038
LE-003	Additional Patrol/Detective/Specialty/Staff Vehicles	2048
LE-004	Additional Officer Assigned Equipment	2048
LE-005	Additional Specialty Equipment	2048
LE-006	Building Appurtenances Equipment	2040
LE-007	Communications Equipment	2040
LE-008	Advanced Technology Hardware and Software	2040
LE-009	Additional Helicopter Capacity	2040
LE-010	Share of Specific/Common City Yard Improvements	2045

FS-003	Fire Station #11 Land Acquisition And Construction	2028
FS-003A	Fire Station #11 Vehicle Storage Bay	2028
FS-004	Fire Station #11 Response Engine and Aerial	2027
FS-005	Fire Station #12 Land Acquisition And Construction	2033
FS-005A	Fire Station #12 Vehicle Storage Bay	2033
FS-006	Fire Station #12 Response Engines	2032
FS-007	Fire Station #13 Land Acquisition And Construction	2038
FS-007A	Fire Station #13 Vehicle Storage Bay	2038
FS-008	Fire Station #13 Response Engine	2037
FS-009	Fire Station #14 Land Acquisition And Construction	2043
FS-009A	Fire Station #14 Vehicle Storage Bay	2043
FS-010	Fire Station #14 Response Engine	2042
FS-011	Reserve Response Engines	2033
FS-013	Battalion Chief Response Vehicle	2038
FS-014	Fire Fighter Assigned Equipment	2043
FS-015	Fire Administration Headquarters Relocation	2027
FS-016	Emergency Training Center Expansion	2040
FS-017	City Emergency Operations Center	2027
FS-018	Special Operations Support Vehicle	2030
FS-019	Mobile Air And Lighting Support Vehicle	2040
FS-020	Emergency Services Communication Svstem	2035
FS-021	Share of Specific/Common City Yard Improvements	2045
FS-023	Fire Station Operations #1 Relocation	2026
FS-024	Expand Station #3 (East Francis)	2040

ST-001	Archibald Avenue From Riverside to Edison (P)	Phased through 2050 (Conditioned through Development)
ST-002	Archibald Avenue From Edison To South City Limit (P)	Phased through 2050 (Conditioned through Development)
ST-003	Bellegrave Avenue From Archibald To Milliken (P)	Phased through 2050 (Conditioned through Development)
ST-004	Campus Avenue From Riverside To Merrill	Phased through 2050 (Conditioned through Development)
ST-005	Chino Avenue From Euclid To Milliken	Phased through 2050 (Conditioned through Development)
ST-006	Mill Creek Avenue From Riverside To Bellearave (P)	Phased through 2050 (Conditioned through Development)
ST-007	Edison Avenue From Euclid To Walker	Phased through 2050 (Conditioned through Development)
ST-008	Edison Avenue From Walker To Vineyard	Phased through 2050 (Conditioned through Development)
ST-009	Edison Avenue From Vinevard To Mill Creek	Phased through 2050 (Conditioned through Development)
ST-010	Edison Avenue From Mill Creek to Milliken (P)	Phased through 2050 (Conditioned through Development)
ST-011	Eucalyptus Avenue From Euclid To Milliken	Phased through 2050 (Conditioned through Development)
ST-012	Euclid Avenue From Riverside To Merrill	Phased through 2050 (Conditioned through Development)
ST-013	Grove Avenue From Riverside To Merrill	Phased through 2050 (Conditioned through Development)
ST-014	Haven Avenue From Riverside To Belleqrave (P)	Phased through 2050 (Conditioned through Development)
ST-015	Merrill Avenue From Euclid To Archibald	Phased through 2050 (Conditioned through Development)
ST-016	Milliken Avenue From Riverside To Edison	Phased through 2050 (Conditioned through Development)
ST-017	Milliken Avenue From Edison To Belleqrave	Phased through 2050 (Conditioned through Development)
ST-018	Hellman Avenue From Riverside To Merrill	Phased through 2050 (Conditioned through Development)
ST-019	Riverside Drive From Euclid To Milliken (P)	Phased through 2050 (Conditioned through Development)
ST-020	Schaefer Avenue From Euclid To Haven	Phased through 2050 (Conditioned through Development)
ST-021	Turner Avenue From Riverside To Schaefer	2026
ST-022	Vineyard Avenue From Riverside To Merrill	Phased through 2050 (Conditioned through Development)

Project #	Project Title	Estimated Completion Date
ST-023	Walker Avenue From Riverside To Merrill	Phased through 2050 (Conditioned through Development)
ST-024	Ontario Ranch Traffic Control Svstem (P)	Phased through 2050 (Conditioned through Development)
ST-025	Non-Dev. ROW, Frontaae lmos. & SCE Pole Relocations	Phased through 2050 (Conditioned through Development)
ST-026	Additional SCE Pole Relocations	2030
ST-029	OR Offsite Cantu Galleano Widenina 1-15 To Milliken	2026
ST-030	OR Offsite Euclid Avenue Improvements, Merrill To US-71	Phased through 2050
ST-031	OR Offsite Archibald Avenue Bridge Over Santa Ana River	Phased through 2050
ST-032	OR Offsite Hamner Avenue Bridge Over The Santa Ana River	Phased through 2050
ST-033	General City Street Lights (P)	Phased through 2050
ST-034	General City Traffic Signals	Phased through 2050
ST-035	Benson Avenue From Mission To Philadelphia	Phased through 2050 (Conditioned through Development)
ST-036	Mountain Avenue From Sixth To Holt (P)	Phased through 2050
ST-038	Bon View Avenue From Holt to Mission	Phased through 2050 (Conditioned through Development)
ST-039	Bon View Avenue From Mission To Belmont	2026
ST-042	Grove Avenue From Fourth Street to Airport Drive	Phased through 2050
ST-043	Turner Avenue, From Inland Empire Boulevard To Fourth	Phased through 2050 (Conditioned through Development)
ST-044	Archibald Avenue from Fourth To Guasti Park Entrance	Phased through 2050 (Conditioned through Development)
ST-045	Milliken Avenue From SR-60 To Riverside	Phased through 2050 (Conditioned through Development)
ST-047	Etiwanda Avenue At Airport Drive	2026
ST-048	Eight Street From West Cucamonga Creek To Grove	2026
ST-050	Fourth Street From Palmetto To San Antonio	2026
ST-051	Fourth Street From Campus To Cucamonga	Phased through 2050
ST-052	Fourth Street From Vineyard To Archibald	2026
ST-053	Holt Boulevard From Benson To Vineyard	2026
ST-054	Guasti Road From Holt To Archibald	Phased through 2050 (Conditioned through Development)
ST-055	State Street From Benson To Grove	Phased through 2050 (Conditioned through Development)
ST-056	Airport Drive Under The 1-15 Freeway	Phased through 2050
ST-058	Mission Boulevard From Cypress To Grove	Phased through 2050
ST-059	Mission Boulevard From Grove To Milliken (P)	Phased through 2050
ST-060	Phillips Street From Benson To Mountain	2026
ST-062	Acacia Street From Baker To Vineyard	Phased through 2050
ST-063	Francis Street From Benson To Campus	2026
ST-064	Jurupa Street From Archibald To East Of Turner	Phased through 2050 (Conditioned through Development)
ST-065	Philadelphia Street From Campus To Grove	Phased through 2050
ST-066	Philadelphia From E/O Vineyard to Cucamonqa Creek	Phased through 2050
ST-069	Grove Avenue Bridqe Over West Cucamonga Creek	2050
ST-071	Holt Boulevard Bridqe Over West Cucamonqa Creek	2026
ST-072	Mission Boulevard Bridqe Over West Cucamonqa Creek	2050
ST-074	Francis Street Bridqe Over West Cucamonqa Creek	2026
ST-075	Eiqhth Street Bridqe Over Cucamonga Creek	Phased through 2050
ST-076	Sixth Street Bridqe Over Cucamonqa Creek	Phased through 2050
ST-077	Fourth Street Bridqe Over Cucamonga Creek	Phased through 2050
ST-079	Holt Boulevard Bridge Over Cucamonga Creek	Phased through 2050
ST-081	Mission Boulevard Bridge Over Cucamonga Creek	Phased through 2050
ST-082	Francis Street Bridge Over Cucamonga Creek	Phased through 2050
ST-083	Philadelphia Street Bridqe Over Cucamonga Creek	Phased through 2050
ST-084	Riverside Drive Bridge Over Cucamonga Creek	Phased through 2050 (Conditioned through Development)
ST-085	Archibald Avenue Bridge Over Upper Deer Creek	Phased through 2050
ST-086	Archibald Avenue Bridge Over Upper Deer Creek Spillway	Phased through 2050
ST-089	Archibald Avenue Bridge Over Lower Deer Creek	2026
ST-091	Grove Avenue Grade Separation Under UPRR/Alhambra	Phased through 2050
ST-092	Milliken (N) Grade Separation Under UPRR/Alhambra	2026
ST-095	Archibald (S) Grade Separation Over UPRR/LA	Phased through 2050
ST-096	San Antonio (S) Grade Separation Under UPRR/Alhambra	Phased through 2050
ST-097	Campus (S) Grade Separation Under UPRR/Alhambra	Phased through 2050
ST-099	Vine (S) Grade Separation Under UPRR/LA Line	Phased through 2050
ST-100	Sultana (S) Grade Separation Under UPRR/LA Line	Phased through 2050
ST-101	Bon View (S) Grade Separation Under UPRR/LA Line	Phased through 2050

Project #	Project Title	Estimated Completion Date
ST-102	Pavement Management System Rehabilitation Program	Phased through 2050
ST-103	Circulation System Maintenance Vehicles	Phased through 2050
ST-104	Great Park Bridge Over Archibald Avenue	Phased through 2050 (Conditioned through Development)
ST-105	SR-60 At Vineyard Interchange Reconstruction/Expansion	Phased through 2050
ST-106	SR-60 At Archibald Interchange Reconstruction/Expansion	2025
ST-107	SR-60 At Euclid Interchange Reconstruction/Expansion (P)	Phased through 2050
ST-108	SR-60 At Grove Interchange Reconstruction/Expansion	Phased through 2050
ST-109	SR-60 At Mountain Interchange Reconstruction/Expansion	Phased through 2050
ST-111	1-10 Freeway at Grove/Fourth	Phased through 2050
ST-112	Traffic Signal System Control and Operations Center (P)	Phased through 2050
ST-113	General City Backbone Signal Interconnect	Phased through 2050
ST-114	1-10 At Euclid Avenue Eastbound On Ramp (P)	2025
ST-116	1-10 At Vineyard Interchange Reconstruction/Expansion (P)	2025
ST-117	Ontario Ranch Road/Trail Separation	Phased through 2050 (Conditioned through Development)
ST-118	Hellman Avenue Bridge Over Cucamonga Creek	Phased through 2050
ST-121	Schaefer Avenue Bridge Over Cucamonga Creek	2026
ST-122	Schaefer Avenue Over Cucamonga Creek Spillway	2026
ST-123	Edison Avenue Bridge Over Cucamonga Creek	Phased through 2050 (Conditioned through Development)
ST-124	Eucalyptus Avenue Bridge Over Cucamonga Creek	2026
ST-125	Merrill Avenue Bridqe Over Cucamonqa Creek	2026
ST-126	Share of Specific/Common City Yard Improvements	2045
ST-127	Ontario Ranch Bus Stop Shelters	Phased through 2050 (Conditioned through Development)
ST-128	Ontario Ranch Street Design Studies	2026
ST-129	Fourth Street Under The 1-10 F reewav	2025
ST-130	Guasti Road Extension From 1,530' E/0 Of Haven Easterlv 310'	Phased through 2050
ST-131	Ontario Ranch Traffic Study	Phased through 2050
SD-001	Euclid Avenue, Riverside To Merrill	Phased through 2050 (Conditioned through Development)
SD-002	Grove Avenue, Grove Basin To Merrill	Phased through 2050 (Conditioned through Development)
SD-005	Merrill Avenue, Euclid To Bon View	Phased through 2050 (Conditioned through Development)
SD-006	Campus Avenue, 920' N/0 Eucalyptus To Merrill	Phased through 2050 (Conditioned through Development)
SD-007	Bon View, 1,320' N/0 Chino To Merrill	Phased through 2050 (Conditioned through Development)
SD-008	Euclid Avenue Laterals	Phased through 2050 (Conditioned through Development)
SD-013	Walker Avenue, Merrill To Chino	Phased through 2050 (Conditioned through Development)
SD-014	Merrill Avenue, Vineyard to 1420' W/0 Walker	2034
SD-015	Ontario Ranch Road, Walker to 880' E/0 Walker	Phased through 2050 (Conditioned through Development)
SD-016	Schaefer Avenue, Walker To 1,950' E/0 Walker	Phased through 2050 (Conditioned through Development)
SD-020	Hellman Avenue, Chino Avenue To 1,500' N/0 Chino	Phased through 2050 (Conditioned through Development)
SD-022	Eucalyptus Avenue, Archibald To 1,300' E/0 Archibald (P)	Phased through 2050 (Conditioned through Development)
SD-025	Turner Avenue, Riverside To County Line Channel (P)	Phased through 2050 (Conditioned through Development)
SD-026	Turner Avenue Laterals	Phased through 2050 (Conditioned through Development)
SD-027	Haven Avenue, Riverside To County Line Channel (P)	Phased through 2050 (Conditioned through Development)
SD-028	Ontario Ranch Road, Between Haven And Mill Creek (P)	Phased through 2050 (Conditioned through Development)
SD-029	Haven Avenue Laterals E/0 Haven And N/0 Schaefer	Phased through 2050 (Conditioned through Development)
SD-030	Haven Avenue Laterals	Phased through 2050 (Conditioned through Development)
SD-032	Mill Creek, Chino To County Line Channel (P)	Phased through 2050 (Conditioned through Development)
SD-033	Eucalyptus Avenue Between Mill Creek And Milliken	Phased through 2050 (Conditioned through Development)
SD-034	Eucalyptus Avenue Between Haven And Mill Creek	Phased through 2050 (Conditioned through Development)
SD-036	Schaefer Avenue Between Mill Creek And Milliken	Phased through 2050 (Conditioned through Development)
SD-037	Hellman Avenue, Schaefer To Ontario Ranch Road And Laterals	Phased through 2050 (Conditioned through Development)
SD-039	Ontario Ranch-HellmanNineyard, Hellman-OR/Merrill To C. Creek	Phased through 2050 (Conditioned through Development)
SD-040	Eucalyptus Avenue, Hellman To Cucamonga Channel	Phased through 2050 (Conditioned through Development)
SD-041	Merrill Avenue, Cucamonga Channel To Walker	2034
SD-045	Eucalyptus Avenue, Cucamonga Channel To W/O Archibald	Phased through 2050 (Conditioned through Development)
SD-046	Ontario Ranch Road Laterals E/O Cucamonga Channel	Phased through 2050 (Conditioned through Development)
SD-048	Chino Avenue, Cucamonga Channel To N/O Chino	Phased through 2050 (Conditioned through Development)
SD-049	Milliken Avenue, Riverside To County Line Channel (P)	2036
SD-050	Offsite Euclid Avenue Storm Drain	Phased through 2050 (Joint Project with City of Chino)

Project #	Project Title	Estimated Completion Date
SD-056	Sixth Street, Glenn To Cucamonga Channel	2026
SD-057	G Street, Berlyn to West Cucamonga Channel & Various Streets	2050
SD-058	Grove Avenue, 60 Freeway To Riverside Drive	2040
SD-059	Campus Avenue, Cedar To Riverside	2039
SD-060	D and I Streets, Grove To West Cucamonga Channel	2050
SD-061	Inland Empire Blvd., Vineyard To Cucamonga Channel	2050
SD-062	Sultana Avenue, Phillips To Philadelphia	2050
SD-063	Fourth Street, El Dorado To Cucamonga Creek	2035
SD-064	Baker, Vineyard, Carlos, Hellman - Acacia to Philadelphia	2050
SD-065	Bon View Avenue, 60 Freeway To Riverside (P)	2026
SD-066	Cucamonga Avenue, 60 Freeway To Riverside	2040
SD-067	Bon View Avenue, Mission To Francis	2050
SD-068	Cucamonga Avenue, Phillips To Francis	2050
SD-069	Storm Drainage Maintenance Vehicles	2050
SD-070	Boulder Avenue, I Street To State	2050
SD-071	Benson Avenue, State To I Street	2050
SD-072	Mountain Avenue, Philadelphia To Phillips	2050
SD-073	San Antonio Avenue, Francis To Cypress Channel	2035
SD-074	San Sevaine Channel	2050
SD-075	Storm Drain Master Plan (P)	2050
SD-077	Campus Avenue, State to Francis (Phase 2 Of SD-053)	2050
SD-078	Parco Avenue, Philadelphia to 60 Freeway (Phase 2 Of SD-055)	2050
SD-079	Grove Avenue, Francis to 60 Freeway (Phase 2 Of SD-058)	2050
SD-080	Sultana Avenue, State to Phillips (Phase 2 Of SD-062)	2050
SD-081	Bon View Avenue, 60 Freeway To Francis (Phase 2 Of SD-065)	2050
SD-082	Cucamonga Avenue, Francis to 60 FWY (Phase 2 Of SD-066)	2050
SD-083	Mountain & Boulder, 1-10 to I Street (Phase 2 Of SD-070)	2050
SD-084	Benson Avenue Laterals (Phase 2 Of SD-071)	2050
SD-085	Mountain Avenue, State to Phillips (Phase 2 Of SD-072)	2050
SD-086	San Antonio & Phillips, Euclid to Francis (Phase 2, SD-073)	2050
SD-087	Oakland Avenue, State to Phillips (Phase 2 Of SD-074)	2050
SD-088	Walker Avenue, 60 Freeway To Riverside And Lateral	2050
SD-089	Baker Avenue And Riverside Drive, S/0 60 Freeway	2050
SD-090	G Street, Corona To Del Norte	2050
SD-091	Del Norte and Imperial Avenues From I Street To G Street	2050
SD-092	Vine Avenue, G Street To State	2050
SD-093	Vine Avenue, Sixth To G Street	2050
SD-094	Sultana Avenue, Fifth to Holt	2028
SD-095	Benson Avenue and Laterals	2050
SD-096	Benson Avenue, Francis to Philadelphia	2050
SD-097	Mission, Benson, Phillips and Oaks W/O Magnolia	2050
SD-098	Holt Boulevard, Convention Center to Cucamonga Channel	2050
SD-099	Mission Boulevard, Proforms to Turner	2050
SD-100	6th Street, West Cucamonga Creek to Grove	2050
SD-101	Archibald Avenue, Inland Empire to Airport Drive	2050
SD-102	Fifth Street, Balboa to Cucamonga Drive	2050
SD-103	Share of Specific/Common City Yard Improvements	2045
SD-105	Ontario Ranch Storm Drain Study	2050

WT-001	Phillips Street 1010' Zone Well	2026
WT-002	Eighth Street 1212' Zone Wells	2030
WT-004	Eighth Street 1212' Zone Transmission Lines 50% complete	2035
WT-004	Eighth Street 1212' Zone Transmission Lines 75% complete	2045
WT-004	Eighth Street 1212' Zone Transmission Lines 100% complete	2050
WT-005	Eighth Street 1212' Zone Reservoir Site Purchase	2026
WT-006	Eighth Street 1212' Zone Reservoir Construction	2035
WT-007	Francis Street 925' Zone Wells 50% Complete	2035
WT-007	Francis Street 925' Zone Wells 75% Complete	2045

Project #	Project Title	Estimated Completion Date
WT-007	Francis Street 925' Zone Wells 100% Complete	2050
WT-008	Phillips Street 1010' Zone Wells	2030
WT-009	Phillips Street 1010' Zone Extension Mains Extension 50% Complete	2035
WT-009	Phillips Street 1010' Zone Extension Mains Extension 75% Complete	2042
WT-009	Phillips Street 1010' Zone Extension Mains Extension 100% Complete	2050
WT-010	Francis Street 925' Zone Transmission Lines 50% Complete	2035
WT-010	Francis Street 925' Zone Transmission Lines 75% Complete	2042
WT-010	Francis Street 925' Zone Transmission Lines 100% Complete	2050
WT-011	Francis Street 925' Zone Distribution Mains 50% Complete	2035
WT-011	Francis Street 925' Zone Distribution Mains 75% Complete	2042
WT-011	Francis Street 925' Zone Distribution Mains 100% Complete	2050
WT-012	Francis Street 925' Zone Well Collection System 50% Complete	2035
WT-012	Francis Street 925' Zone Well Collection System 75% Complete	2042
WT-012	Francis Street 925' Zone Well Collection System 100% Complete	2050
WT-013	Pressure Reducing Station, Potable Water System (101O' - 925')	2040
WT-014	Francis Street 925' Zone Reservoirs 50% Complete	2035
WT-014	Francis Street 925' Zone Reservoirs 75% Complete	2042
WT-014	Francis Street 925' Zone Reservoirs 100% Complete	2050
WT-015	Phillips Street 1010' Zone Reservoirs	2026
WT-016	Recycled Water System 50% Complete	2030
WT-016	Recycled Water System 75% Complete	2040
WT-016	Recycled Water System 100% Complete	2050
WT-017	Back-Up Power Supply	2040
WT-018	Reservoir 1010' (2B) Landscaping	2026
WT-021	Distribution System Pressure, Size And Age Improvements 50% Complete	2030
WT-021	Distribution System Pressure, Size And Age Improvements 75% Complete	2040
WT-021	Distribution System Pressure, Size And Age Improvements 100% Complete	2050
WT-022	Miscellaneous Up-Sized Facilities	2050
WT-023	Abandon Existing General City Wells	2035
WT-025	Decommission Galvin Treatment PlanUAbandon 1212-3 Reservoir	2035
WT-026	Seismic Upgrades And Replacements	2040
WT-027	Water Master Plan Updates	2050
WT-028	Water System Maintenance Vehicle/Equipment Fleet	2045
WT-031	JCSD/Ontario Reservoir (Phillips Street 1010" Zone)	2026
WT-032	Water Treatment	2035
WT-034	Water Source Supply	2040
WT-035	General System Reliability Improvements	2045
WT-036	Fourth Street 1074' Zone Transmission Improvements	2040
WT-037	Share of Specific/Common City Yard Improvements	2045

SW-001	Eastern Trunk Sewer	2007
SW-002	Western Trunk Sewer	2025
SW-003	Eucalyptus East Trunk Sewer	2021
SW-005	Haven Trunk Sewer	2035
SW-006	Mill Creek Trunk Sewer	2035
SW-008	Walker Trunk Sewer	2040
SW-009	Grove Trunk Sewer	2045
SW-010	Bon View Trunk Sewer	2040
SW-011	Euclid Trunk Sewer	2040
SW-015	Plaza Serena Street, Granda Court To Vineyard Avenue	2026
SW-016	Philadelphia Between Parco And Vineyard	2030
SW-020	Cherry Avenue, North Of G Street	2026
SW-022	Vineyard Avenue, South Of Cedar Et. Al.	2035
SW-023	Easement East Of Haven Avenue	2030
SW-026	Sewer Utility Maintenance Vehicles	2045
SW-027	Sewer Utility Master Plan	2050
SW-029	Carpenter Trunk Sewer	2040
SW-035	Virginia Avenue Between D Street and Nocta Street	2026

Project #	Project Title	Estimated Completion Date
SW-036	Deer Creek Loop And Laurel Tree Drive	2035
SW-037	Hollowell, Boulder and Holt Avenue	2026
SW-038	Easement N/O Holt Blvd, E/0 Allvn Avenue	2026
SW-039	Riverside Drive Between Sultana And Campus Avenues	2026
SW-040	Vineyard S/O Airport And Easement	2035
SW-041	Mills Circle N/O Mall Drive	2040
SW-042	Holt Boulevard E/O Vineyard Avenue	2030
SW-043	Bon View Avenue N/O Francis	2026
SW-044	Acacia, Easement, Locust And Parco	2050
SW-045	Turner Avenue, N/O Cedar Street	2045
SW-046	Holt Sewer Phase A	2026
SW-047	Holt Sewer Phase B	2026
SW-048	Share Of Common City Yard Improvements	2045
SW-050	Airport Drive Main, E/O Grove	2050
SW-052	Piedmonte Specific Densification Mitigation in Various Streets	2045
SW-053	Vineyard Trunk Sewer	2026
SW-054	Sultana Trunk Sewer	2035
SW-055	Campus Trunk Sewer	2035
RS-001	Side Loader Collection Barrels	2040
RS-002	Side Loader Collection Vehicles	2035
RS-003	Front Loader Collection Bins	2040
RS-004	Front Loader Collection Vehicles	2035
RS-005	Roll-Off Collection Bins	2040
RS-006	Roll-Off Collection Vehicles	2035
RS-007	Share of Specific/Common City Yard Improvements	2045
RS-008	Fund Balance Refuse Acquisition	
GF-001	City Hall And Annex Reconfiguration	2035
GF-002	Expansion Of Administrative Pool Car Fleet	2040
GF-003	Electronic Specialty Equipment/Computer Hardware/Software	2045
GF-004	City Animal Holding Facility, No Specific Plans/Policy Decision for Facility	2045
GF-005	Share of Specific/Common City Yard Improvements	2045
LB-001	Library Facilities Space Expansion	2040
LB-002	Library Collection Expansion	2040
PF-001	Public Use Facilities Space Expansion	2040
AQ-001	Acquaticsa Facility Pool Expansion	2040
PK-001	Park Land Acquisition and Park Facilities Development	2040
PK-002	Park Maintenance Vehicles	2040
PK-003	Share of Specific/Common City Yard Improvements	2045
FO-001	Head End Facilities (Point of Prescence System	Phased through 2030 (Conditioned through Development)
FO-002	Core Network - Planning/Installation - Equipment an/Facilities	Phased through 2030 (Conditioned through Development)
FO-004	Distribution Network - Major Streets Conduit System	Phased through 2055 (Conditioned through Development)
FO-005	System Distribution Network - Fiber System	Phased through 2055 (Conditioned through Development)
FO-006	Cabling System - Residential/Non-Residential	Phased through 2055 (Conditioned through Development)
FO-007	Fiber Equipment within Residential Units	Phased through 2055 (Conditioned through Development)
FO-008	Fiber Equipment within Non-Residential Buildings	Phased through 2055 (Conditioned through Development)
FO-009	Share of Specific/Common City Yard Improvements	2045

Appendix F

Findings in Support of Continuation of City Policy to Impose Residential Dwelling Unit Development Impact Fee on a per Unit Basis

AB-602 (Gov't Code. sections 66016.5(a)(5)(A) and (B)) states that if the City adopts a calculation and nexus study after July 1, 2022, it must *either* "calculate a fee imposed on a housing development project proportionately to the square footage of proposed units of the development" *or* make the following findings:

(i) An explanation as to why square footage is not an appropriate metric to calculate fees imposed on housing development projects.

(ii) An explanation that an alternative basis of calculating the fee bears a reasonable relationship between the fee charged and the burden posed by the development.

(iii) That other policies in the fee structure support smaller developments, or otherwise ensure that smaller developments are not charged disproportionate fees.

There is no requirement for the City to have a financial element in the City's General Plan document. Thus, a properly calculated *Development Impact Fee Calculation and Nexus Report* functions as the de-facto financial plan in support of the City's General Zoning Plan. It identifies the anticipated service demands by infrastructure based upon averages and lays out a fair and reasonable method with which to finance the required capital projects and acquisitions necessary to accommodate those anticipated new service demands.

The City of Ontario has expressed that it will continue to impose residential development impact fees based upon the same manner that additional development service demands are calculated – that is, by type of average unit. The City will not impose development impact fees based on residential development projects proportionate to the square footage of proposed units for completing the City's General Plan. The current set of fees fosters greater accuracy in planning and provides the City with the required level of certainty in needed impact fee collection.

The California Mitigation Fee Act (Government Code §66000, et.seq.), which was first established in 1987, specifies that every public agency that adopts development impact fees must provide the essential calculation and nexus report with fees calculated upon data that is as empirical as possible. AB-602's *Proportionate to Square Footage,* is based upon a *presumption*[1] that a smaller detached dwelling creates less local government service demands than a larger detached dwelling. AB-602 does not offer any peer reviewed, third party empirical data that substantiates that a small square footage detached dwelling unit creates less municipal service impacts than a larger square foot detached dwelling. As such, the City has determined that the best practices for both managing development and obtaining the adequate impact fee financing for the development-generated infrastructure is as identified in the many infrastructure chapters in this Report.

The City's zoning code allows for identification of the use of privately held land and in some cases, primarily business uses, provides for a maximum Floor Area Ratio (FAR) that limits the amount of square feet that can be constructed on an acre of business space. No such limitation is placed upon the construction square foot of a detached dwelling unit (AKA "single family residence"). The size of the proposed detached dwellings is determined as marketable by the developer.

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[1] (noun: **presumption**; plural noun: **presumptions** – an idea that is taken to be true, and often used as the basis for other ideas, although it is not known for certain.

This Report indicates that the City (using recent GIS data) has 1,685 acres zoned for detached dwellings. At approximately 7.6 detached dwelling units per acre, this equates to an additional 12,793 detached dwellings to be constructed by General Plan build-out of the City. The City does not, however, have any information as to how many square feet any of these 12,793 detached dwelling units will be, that is, within applicable zoning, determined by the developers of the various parcels.

This Report employs the most defensible empirical sources, appropriate to the demands of that particular infrastructure to determine the *average* demands of an *average* detached dwelling. These sources determine demand by an average detached dwelling but does produce this demand data for various sized detached dwellings. Such data is simply not available.

The amount of and complexity of any City's infrastructure defines (in all or part) the Level of Service (LOS) of that infrastructure, not just currently but in perpetuity. This makes the one-time DIF financing of any City's infrastructure that much more important. It takes balance to accommodate development with the police responses within the desired standard. It will take a combination of additional law enforcement station space, response and support vehicles and specialty equipment to support the required officers (non-impact supported). The importance of having a properly calculated and documented DIF schedule in order to accommodate development-related demands cannot be over-stated. The same concept holds true for the two labor-intensive public safety services and the infrastructure intensive services such as circulation, storm drainage collection, potable and recycled water distribution and sewer collection.

The collection of an impact fee to raise capital revenue for development-based demands is one time but represents the municipal service needs of that dwelling unit as long as that structure exists. Thus the argument that any new detached dwelling will generate less municipal service demand based on its smaller square footage is divorced from the reality that any particular residential dwelling may have different occupants over 50 years (e.g. a home for a family of four to a single resident).

Government Code §66000 charges local governments to determine the most fair method of distributing the costs of infrastructure required to support services to new development. The following paragraphs identify the logic behind using a per unit impact fee schedule over per square foot impact fee schedule by infrastructure. To summarize, each uses best practices information from empirical data, all of which is based upon per unit demand data. To divert to a per square foot fee schedule, any agency would have to divide the more accurate per unit fee schedule by an average square foot figure for detached dwellings, attached dwellings and mobile home dwellings. Since there is no known source for average residential dwellings size particular to the City of Ontario, the resulting figure would be no more than a guess. As a result, the per square foot impact fee schedule would yield a less accurate result than the City's existing per unit methodology.

Police and Fire Calls-for-Service (CFS) - For the calculation of Police and Fire demand data, RCS used Ontario-sourced GIS-based calls-for-service matched up with the City's Land-Use GIS database. As an example, in 2020 there were 12,454 calls-for-service logged into the dispatch data to the 12,793 existing detached dwellings for an average of 0.973 calls-for-service to a single detached dwelling. Again, the City does not know what size of any of the City's detached dwellings are so the City could not possibly determine the total square feet of 12,793 detached dwellings or the individual square footage of each of those 12,793 dwellings, and accordingly determine whether square footage is the best metric to calculate proportional impact fees. Without such data, the City cannot make an accurate demonstrated link between the square foot space of a detached dwelling with that dwelling's infrastructures service demand rates. A fee imposed per unit, on the other hand, accomplishes greater accuracy that. The City's GIS data does not include the size of each residential dwelling in the City.

Circulation Needs - According to the volume of empirical data collected by the highly respected *Institute of Traffic Engineering* (ITE), an average detached dwelling generates approximately 9.5 trip-ends per day, but the ITE does not offer any distinction between small and large homes, because such data does not exist in their database. There is no demonstrated link or nexus between the detached dwelling's S.F. with its demand rate. GIS data does not include the size of each residential dwelling in the City. Per unit fees, on the other hand, accomplishes that desired greater accuracy.

Storm Drainage - The storm runoff from a 1,800 square foot single-floor residence is the same as the storm runoff from a 3,600 square foot two-story building. Both require a 1,800 square foot pad, so a 50% fee for the 1,800 square foot home compared to the 3,600 square foot home would be inequitable and unsupported by data. This Report utilizes rainfall runoff data from the *San Bernardino Hydrology Manual* (1986). Williamson and Schmidt, Irvine, CA, Figure C-4. The document indicates that the coefficient of drainage for a development of homes close to seven units per acre is 0.775. No such data is available for large versus small homes, nor can "large" or "small" be defined.

Quality of Life Infrastructure (parks, aquatic facilities, libraries and community centers) - Quality of Life standards are based upon current population numbers. As an example, there are 145,570 square feet of public use facilities (i.e. community centers). Given an existing population of 182,004 residents, that creates an existing standard of 0.800 square feet of public use facilities per resident. A fee for a new square foot of public use facility is determined and then multiplied by the empirically-based average number of persons per type of residential dwelling. These impact fees are generally based upon census data that identifies an *average* number of persons per type of dwelling unit. In Ontario, those figures are 3.806 persons per detached dwelling, 3.373 per attached dwelling unit and 3.175 per mobile home (see Table 2-4). The Census data does not determine household density by the size of the dwelling unit but they do represent the most empirically driven *average* density per dwelling unit data. Within the City of Ontario there are likely 1,300 square foot dwellings that have five or more residents just as there are likely 3,600 square foot residential dwellings with two or less residents. However wither of these dwelling can be sold and the number of residents in each could change. That is the point of an *average*, it represents an empirical figure based upon a larger pool of information. Therefore an average based on type of dwelling is far more empirical than dividing the average cost by some unsubstantiated average dwelling size. By doing so, larger residential dwellings could be treated unfairly if they end up being assessed a greater amount in order to balance or subsidize the smaller detached dwelling units based upon the presumption (non-empirical data) that these smaller detached dwelling units somehow create lesser dwelling densities than would a larger unit.

Importance of a Static or Average per Unit based Development Impact Fee Schedule. The City must be able to depend on the collection of sufficient impact fee revenues with which to finance development-generated projects necessary to accommodate new development with adequate and sufficient service levels without decreasing the existing levels of service. This assurance will be greatly diminished should the City choose an arbitrarily determined per residential square foot impact fee schedule. As an example, the City has identified that a 6,200 square foot basic 2 X 2 fire station (two bays wide by two vehicles deep) is required to service an area with about 3,000 average detached dwellings. However, if a greater proportion of the 3,000 homes are far smaller than the City had anticipated, the City will not have adequate DIF revenue to construct that station. With a per unit determined fee representing an average demand per unit, the City can have significantly greater confidence in receiving the DIF revenue necessary to construct that station and thus respond to those 3,000 detached dwellings, regardless of the size of the detached dwellings, while also ensuring that such units do not pay more than their proportional impact. The City's development practices neither favors nor penalizes any one land-use over another. Nor are the City's policies unfair within any one land-use based upon available empirical data. For residential units based upon best practices empirically-based averages, all are assessed the same fee; no developer is charged disproportionately, which is calculated on a per unit basis based on the best data and evidence available to the City. The type of dwelling unit drives the fee, not the square footage. Since the City does not impose per square foot-based impact fees, it also does not apply such fees on any room in addition to a residential dwelling.

DIFs for non-residential uses (i.e. the variety of businesses) have always been calculated and imposed on a per square foot basis as empirical data is available for those uses. Additionally, each of those business uses (see Table 2-1) has differing maximum allowable floor area ratio (FAR).

The City is mindful that the state is encouraging construction of smaller detached dwellings and is assuming that these types of residential dwellings create lesser demand merely because they are smaller. However, given the lack of any empirical data supporting such an assumption, the City feels obligated to adopt residential impact fees that are fair to all developers of residential dwellings, regardless of size. In the end, the City has determined to err on the side of fair treatment of all residential development.

In conclusion, given the empirically-based and significant effort spent on identifying the number and capacity of increasing infrastructure projects needed to accommodate the planned-for and anticipated new development and the fair means demonstrated in the calculation and Report, the City has determined that the empirically-driven per Unit residential fee is the most appropriate metric with which to calculate and fairly impose the City's impact fee schedule.

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, ADOPTING THE DEVELOPMENT IMPACT FEE CALCULATION AND NEXUS UPDATE REPORT AND ADOPTING AN UPDATED AND MODIFIED DEVELOPMENT IMPACT FEE SCHEDULE.

WHEREAS, on July 1, 2003, the City Council of the City of Ontario (the "City Council") adopted Ordinance Nos. 2779 and 2780 to implement new and modified Development Impact Fees in recognition of the need to finance adequate infrastructure and other public improvements and facilities made necessary by new development in the City of Ontario ("City"); and

WHEREAS, the City Council previously adopted Resolution No. 2003-039 to establish policies for the implementation of the new and modified Development Impact Fees; Resolution No. 2003-070 to establish additional definitions and policies for the application of Development Impact Fees; and Resolution Nos. 2005-005, 2005-099, 2007-023, 2007-150, 2011-011, 2012-092, 2015-008, 2017-102, 2019-135, and 2022-133 to update and modify Development Impact Fee amounts; and

WHEREAS, the City previously retained Revenue and Costs Specialists LLC to develop development impact fees, supported by nexus findings in the Development Impact Fee Calculation Nexus Report for the City of Ontario, California, dated July 15, 2022 (“2022 Study”); and

WHEREAS, City staff and Revenue and Costs Specialists LLC, have reviewed the Development Impact Fee (“DIF”) program and the infrastructure Master Plans and determined that the findings in the 2022 Study still support the City’s DIF program, but that the 2022 Study requires certain updates to reflect current costs, projections, and plans; and

WHEREAS, accordingly, City staff and Revenue and Cost Specialists LLC produced an update to the DIF program documents, titled “Development Impact Fee Calculation and Nexus Update Report” (the “DIF Update Report”) for the City of Ontario, dated March 18, 2025, on file with the City Clerk and incorporated by this reference, which includes recommendations and support for updated Development Impact Fee amounts; and

WHEREAS, the City has previously adopted an updated DIF Master Facilities Plan on March 16, 2023 via Resolution No. 2023-036 pursuant to section 66016.5(a)(6) of the Act, and such DIF Master Facilities Plan is on file with the Office of the City Clerk and incorporated herein by this reference; and

WHEREAS, the DIF Update Report, together with the DIF Master Facilities Plan, and the 2022 Study, comprise the “DIF Nexus Report” supporting the DIFs; and

WHEREAS, the DIF Nexus Report, referenced above, complies with the Mitigation Fee Act (Government Code, section 66000 et seq.) (the "Act"), specifically, section 66001(a) by establishing the basis for the imposition of fees, and the fee amounts for new development. In particular, the DIF Nexus Report:

1. Identifies the purpose of each development fee;

2. Identifies the use to which the fee will be put;

3. Shows a reasonable relationship between the fee's use and the type of development project upon which the fee is imposed;

4. Shows a reasonable relationship between the need for the public facility and the type of development project upon which the fee is imposed;

5. Shows a reasonable relationship between the amount of the fee and the costs of the public facility or portion of the public facility that is attributed to the development upon which the fee is imposed; and

WHEREAS, Assembly Bill 602 ("AB 602") became effective January 1, 2022. Per AB 602, if a local jurisdiction adopts a calculation and nexus study report after July 1, 2022, it must calculate its fees imposed on housing development projects proportionately to the square footage of proposed units of each development, unless it makes the following findings:

1. An explanation as to why square footage is not an appropriate metric to calculate fees imposed on housing development projects;

2. An explanation that an alternative basis of calculating the fee bears a reasonable relationship between the fee charged and the burden posed by the development; and

3. That other policies in the fee structure support smaller developments, or otherwise ensure that smaller developments are not charged disproportionate fees; and

WHEREAS, the proposed DIF Nexus Report details supportive justifications for the City to continue to impose residential development impact fees in the same manner that additional development service demands are calculated – that is, on a per unit basis; and

WHEREAS, prior to adopting the changes to the rates for the City's DIFs, the City Council must adopt the DIF Nexus Report supporting the increases to the Development Impact Fee amounts and taking other actions to ensure compliance with the Act, including holding a noticed public hearing for the adoption of the DIF Nexus Report; and

WHEREAS, in accordance with the Act and Assembly Bill 602, a copy of the above referenced DIF Nexus Report has been made available for inspection by the public at Ontario City Hall for thirty (30) calendar days prior to the adoption of this Resolution; and

WHEREAS, notice of a consolidated public hearing to consider the adoption of the DIF Nexus Report and the increases to the Development Impact Fees was published in the newspaper and mailed to all interested parties that have submitted written requests for such written notice, as applicable, in compliance with the Act; and

WHEREAS, on March 18, 2025, the City Council held a noticed consolidated public hearing at which it heard and considered any and all verbal and/or written testimony from the public, reviewed and considered the information including the DIF Nexus Report, the increases to the Development Impact Fees, all supporting data, and information provided at the public hearing by staff, and has now determined to adopt the DIF Nexus Report and increases to the Development Impact Fees; and

WHEREAS, the previously-adopted Ordinance No. 2779 stated that "The Fee Schedule may be amended from time to time by resolution of the City Council, in compliance with the Mitigation Fee Act, Government Code Section 66000, et seq."

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF ONTARIO:

SECTION 1. The above recitals are true and correct and are incorporated herein by this reference.

SECTION 2. The City Council has been presented with and has reviewed the information related to the DIF Nexus Report, including all supporting data and after being so informed hereby adopts the DIF Nexus Report and supporting data.

SECTION 3. Pursuant to Government Code § 66016.5(a)(5)(B) and in satisfaction of AB 602, the City Council hereby adopts the findings and conclusions set forth in Appendix "F" of the DIF Nexus Report and incorporates them herein by reference.

SECTION 4. The DIF amounts contained in "Exhibit A" and "Exhibit B" are hereby adopted. This Resolution, and the DIF amounts adopted herein, shall supersede any other action of the City Council only to the extent of any conflict.

SECTION 5. This Resolution, including the updated fee amounts contained in "Exhibit A" and "Exhibit B" attached hereto and incorporated herein, shall be effective for all new development projects occurring in the City, when applicable, sixty (60) days following its adoption.

SECTION 6. If any provision of this Resolution or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other

provisions or applications, and to this end the provisions of this Resolution are declared to be severable.

The City Clerk of the City of Ontario shall certify as to the adoption of this Resolution.

PASSED, APPROVED, AND ADOPTED this 18th day of March, 2025.

_____
PAUL S. LEON, MAYOR

ATTEST:

_____
SHEILA MAUTZ, CITY CLERK

APPROVED AS TO FORM:

_____
BEST BEST & KRIEGER LLP
CITY ATTORNEY

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO)
CITY OF ONTARIO)

I, SHEILA MAUTZ, City Clerk of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. 2025- was duly passed and adopted by the City Council of the City of Ontario at their regular meeting held March 18, 2025 by the following roll call vote, to wit:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

The foregoing is the original of Resolution No. 2025- duly passed and adopted by the Ontario City Council at their regular meeting held March 18, 2025.

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

"EXHIBIT A"

City of Ontario Development Impact Fee Schedule 07.01.25 – 06.30.26

General City – Maximum Law Enforcement
Development Impact Fees by Land Use

Proposed Land Use	Impact Fee Per Unit or S.F.
Detached Dwellings	$ 705/Unit
Attached Dwellings	$ 738/Unit
High Density Dwellings	$ 738/Unit
Mobile Home Dwellings	$ 686/Unit
Commercial Lodging Units	$ 653/Unit
Retail/Services Uses	$0.995/S.F.
Office Uses	$0.321/S.F.
Business Park Uses	$0 050/S.F.
Industrial Uses	$0.050/S.F.
Institutional Uses	$0.345/S.F.

General City – Maximum Fire Suppression Facilities,
Vehicles and Equipment Development Impact Fees by Land Use

Proposed Land Use	Impact Fee per Unit or S.F.
Detached Dwellings	$ 787/Unit
Attached Dwellings	$ 749/Unit
High Density Dwellings	$ 749/Unit
Mobile Home Dwellings	$ 883/Unit
Commercial Lodging Units	$ 499/Unit
Retail/Services Uses	$0.560/S.F.
Office Uses	$0.345/S.F.
Business Park Uses	$0.039/S.F.
Industrial Uses	$0.039/S.F.
Institutional Uses	$0.123/S.F.

General City – Maximum Regional Streets, Signals and Bridges
Development Impact Fees by Land Use

Proposed Land Use	Impact Fee per Unit or S.F.
Detached Dwellings	$1,318/Unit
Attached Dwellings	$ 880/Unit
High Density Dwellings	$ 545/Unit
Mobile Home Dwellings	$ 688/Unit
Commercial Lodging Units	$ 695/Unit
Retail/Services Uses	$2.664/S.F.
Office Uses	$1.522/S.F.
Business Park Uses	$1.584/S.F.
Industrial Uses	$0.816/S.F.
Institutional Uses	$1.740/S.F.

General City – Maximum Local Adjacent Streets, Signals and Bridges
Development Impact Fees by Land Use

Proposed Land Use	Impact Fee per Unit or S.F.
Detached Dwellings	$1,079/Unit
Attached Dwellings	$ 720/Unit
High Density Dwellings	$ 446/Unit
Mobile Home Dwellings	$ 563/Unit
Commercial Lodging Units	$ 569/Unit
Retail/Services Uses	$2.179/S.F.
Office Uses	$1.246/S.F.
Business Park Uses	$1.296/S.F.
Industrial Uses	$0.668/S.F.
Institutional Uses	$1.423/S.F.

General City – Maximum Regional Storm Drainage Facilities
Development Impact Fees by Land Use

Proposed Land Use	Fee Per Unit or S.F.	Fee Per Acre (NOTE)
Detached Dwellings	$ 303/Unit	-
Attached Dwellings	$ 98/Unit	-
High Density Dwellings	$ 82/Unit	-
Mobile Home Dwellings	$ 177/Unit	-
Commercial Lodging Units	$ 50/Unit	-
Retail/Services Uses	$0.053/S.F.	$2,043/Acre
Office Uses	$0.064/S.F.	$2,043/Acre
Business Park Uses	$0.154/S.F.	$1,986/Acre
Industrial Uses	$0.134/S.F.	$2,156/Acre
Institutional Uses	$0.390/S.F.	$2,156/Acre

NOTE: The Storm Drain Fee amount for Retail/Service, Restaurant/Commercial, Office, Business Park, Industrial, and Institutional uses, shall be based on the either the square feet amount or the per acre amount, whichever total fee amount is greater.

General City – Maximum Local Adjacent Storm Drainage Facilities
Development Impact Fees by Land Use

Proposed Land Use	Fee Per Unit or S.F.	Fee Per Acre (NOTE)
Detached Dwellings	$2,730/Unit	-
Attached Dwellings	$ 880/Unit	-
High Density Dwellings	$ 737/Unit	-
Mobile Home Dwellings	$1,589/Unit	-
Commercial Lodging Units	$ 453/Unit	-
Retail/Services Uses	$0.476/S.F.	$18,383/Acre
Office Uses	$0.572/S.F.	$18,383/Acre
Business Park Uses	$1.382/S.F.	$17,872/Acre
Industrial Uses	$1.206/S.F.	$19,404/Acre
Institutional Uses	$3.506/S.F.	$19,404/Acre

NOTE: The Storm Drain Fee amount for Retail/Service, Restaurant/Commercial, Office, Business Park, Industrial, and Institutional uses, shall be based on the either the square feet amount or the per acre amount, whichever total fee amount is greater.

General City – Maximum Regional Water Distribution
Development Impact Fees by Land Use

Proposed Land Use	Impact Fee per Unit or S.F.
Detached Dwellings	$3,421/Unit
Attached Dwellings	$2,341/Unit
High Density Dwellings	$1,579/Unit
Mobile Home Dwellings	$2,340/Unit
Commercial Lodging Units	$ 944/Unit
Retail/Services Uses	$1.682/S.F.
Office Uses	$0.842/S.F.
Business Park Uses	$0.678/S.F.
Industrial Uses	$0.181/S.F.
Institutional Uses	$0.636/S.F.

General City – Maximum Local Adjacent Water Distribution
Development Impact Fees by Land Use

Proposed Land Use	Impact Fee per Unit or S.F.
Detached Dwellings	$ 855/Unit
Attached Dwellings	$ 585/Unit
High Density Dwellings	$ 395/Unit
Mobile Home Dwellings	$ 585/Unit
Commercial Lodging Units	$ 236/Unit
Retail/Services Uses	$0.421/S.F.
Office Uses	$0.210/S.F.
Business Park Uses	$0.169/S.F.
Industrial Uses	$0.045/S.F.
Institutional Uses	$0.159/S.F.

General City – Maximum Regional Sewer Collection
Development Impact Fees by Land Use

Proposed Land Use	Impact Fee per Unit or S.F.
Detached Dwellings	$ 63/Unit
Attached Dwellings	$ 55/Unit
High Density Dwellings	$ 48/Unit
Mobile Home Dwellings	$ 55/Unit
Commercial Lodging Units	$ 37/Unit
Retail/Services Uses	$0.029/S.F.
Office Uses	$0.031/S.F.
Business Park Uses	$0.016/S.F.
Industrial Uses	$0.006/S.F.
Institutional Uses	$0.018/S.F.

General City - Maximum Local Adjacent Sewer Collection
Development Impact Fees by Land Use

Proposed Land Use	Impact Fee per Unit or S.F.
Detached Dwellings	$570/Unit
Attached Dwellings	$499/Unit
High Density Dwellings	$428/Unit
Mobile Home Dwellings	$499/Unit
Commercial Lodging Units	$332/Unit
Retail/Services Uses	$0.260/S.F.
Office Uses	$0.280/S.F.
Business Park Uses	$0.140/S.F.
Industrial Uses	$0.054/S.F.
Institutional Uses	$0.162/S.F.

General City - Maximum Solid Waste Collection
Development Impact Fees by Land Use

Proposed Land Use	Impact Fee per Unit or S.F.
Detached Dwellings	$ 773/Unit
Attached Dwellings	$ 657/Unit
High Density Dwellings	$ 329/Unit
Mobile Home Dwellings	$ 657/Unit
Commercial Lodging Units	$ 213/Unit
Retail/Services Uses	$0.518/S.F.
Office Uses	$0.196/S.F.
Commercial/Restaurants	$0.719/S.F.
Business Park Uses	$0.258/S.F.
Industrial Uses	$0.143/S.F.
Institutional Uses	$0.226/S.F.

General City - Maximum General Facilities, Vehicles and Equipment
Development Impact Fees by Land Use

Proposed Land Use	Impact Fee Per Unit or S.F.
Detached Dwellings	$ 330/Unit
Attached Dwellings	$ 116/Unit
High Density Dwellings	$ 74/Unit
Mobile Home Dwellings	$ 369/Unit
Commercial Lodging Units	$ 55/Unit
Retail/Services Uses	$0.229/S.F.
Office Uses	$0.100/S.F.
Business Park Uses	$0.114/S.F.
Industrial Uses	$0.058/S.F.
Institutional Uses	$0.115/S.F.

General City - Maximum Library Facilities and Collection
Development Impact Fees by Land Use

Proposed Residential Land Use	Impact Fee Per Unit
Detached Dwellings	$1,449/Unit
Attached Dwellings	$1,285/Unit
High Density Dwellings	$1,017/Unit
Mobile Home Dwellings	$1,210/Unit

General City - Maximum Public Meeting Facilities
Development Impact Fees by Land Use

Proposed Residential Land Use	Impact Fee Per Unit
Detached Dwellings	$2,073/Unit
Attached Dwellings	$1,837/Unit
High Density Dwellings	$1,454/Unit
Mobile Home Dwellings	$1,730/Unit

General City - Maximum Aquatics Facilities
Development Impact Fees by Land Use

Proposed Residential Land Use	Impact Fee Per Unit
Detached Dwellings	$122/Unit
Attached Dwellings	$108/Unit
High Density Dwellings	$86/Unit
Mobile Home Dwellings	$102/Unit

General City - Maximum Park
Development Impact Fees by Land Use

Residential Land Use	Impact Fee Per Unit
Detached Dwellings	$17,263/Unit
Attached Dwellings	$15,300/Unit
High Density Dwellings	$12,106/Unit
Mobile Home Dwellings	$14,401/Unit

Ontario Ranch - Law Enforcement
Development Impact Fees by Land Use

Land Use	Impact Fee Per Unit or S.F.
Detached Dwellings	$ 705/Unit
Attached Dwellings	$ 738/Unit
High Density Dwellings	$ 738/Unit
Commercial Lodging Units	$ 653/Unit
Retail/Services Uses	$0.995/S.F.
Office Uses	$0.321/S.F.
Business Park Uses	$0.050/S.F.
Industrial Uses	$0.050/S.F.
Institutional Uses	$0.345/S.F.

Ontario Ranch - Fire Suppression Facilities, Vehicles and Equipment
Development Impact Fees by Land Use

Proposed Land Use	Impact Fee per Unit or S.F.
Detached Dwellings	$1,578/Unit
Attached Dwellings	$1,500/Unit
High Density Dwellings	$1,500/Unit
Commercial Lodging Units	$1,000/Unit
Retail/Services Uses	$1.122/S.F.
Office Uses	$0.690/S.F.
Business Park Uses	$0.078/S.F.
Industrial Uses	$0.078/S.F.
Institutional Uses	$0.248/S.F.

Ontario Ranch – Regional Streets, Signals and Bridges
Development Impact Fees by Land Use

Proposed Land Use	Impact Fee per Unit or S.F.
Detached Dwellings	$3,022/Unit
Attached Dwellings	$2,018/Unit
High Density Dwellings	$1,249/Unit
Commercial Lodging Units	$1,594/Unit
Retail/Services Uses	$6.106/S.F.
Office Uses	$3.490/S.F.
Business Park Uses	$3.631/S.F.
Industrial Uses	$1.871/S.F.
Institutional Uses	$3.987/S.F.

Ontario Ranch – Local Adjacent Streets, Signals and Bridges
Development Impact Fees by Land Use

Proposed Land Use	Impact Fee per Unit or S.F.
Detached Dwellings	$2,473/Unit
Attached Dwellings	$1,651/Unit
High Density Dwellings	$1,022/Unit
Commercial Lodging Units	$1,304/Unit
Retail/Services Uses	$4.996/S.F.
Office Uses	$2.855/S.F.
Business Park Uses	$2.971/S.F.
Industrial Uses	$1.531/S.F.
Institutional Uses	$3.262/S.F.

Ontario Ranch – Regional Storm Drainage
Development Impact Fees by Land Use

Proposed Land Use	Fee Per Unit or S.F.	Fee Per Acre (NOTE)
Detached Dwellings	$1,362/Unit	-
Attached Dwellings	$ 517/Unit	-
High Density Dwellings	$ 435/Unit	-
Commercial Lodging Units	$ 295/Unit	-
Retail/Services Uses	$0.629/S.F.	$12,962/Acre
Office Uses	$0.553/S.F.	$12,962/Acre
Business Park Uses	$0.542/S.F.	$12,602/Acre
Industrial Uses	$0.539/S.F.	$13,682/Acre
Institutional Uses	$0.628/S.F.	$13,682/Acre

NOTE: The Storm Drain Fee amount for Retail/Service, Restaurant/Commercial, Office, Business Park, Industrial, and Institutional uses, shall be based on the either the square feet amount or the per acre amount, whichever total fee amount is greater.

Ontario Ranch – Local Adjacent Storm Drainage
Development Impact Fees by Land Use

Proposed Land Use	Fee Per Unit or S.F.	Fee Per Acre (NOTE)
Detached Dwellings	$3,178/Unit	-
Attached Dwellings	$1,207/Unit	-
High Density Dwellings	$1,015/Unit	-
Commercial Lodging Units	$ 687/Unit	-
Retail/Services Uses	$1.467/S.F.	$30,244/Acre
Office Uses	$1.291/S.F.	$30,244/Acre
Business Park Uses	$1.265/S.F.	$29,405/Acre
Industrial Uses	$1.258/S.F.	$31,925/Acre
Institutional Uses	$1.466/S.F.	$31,925/Acre

NOTE: The Storm Drain Fee amount for Retail/Service, Restaurant/Commercial, Office, Business Park, Industrial, and Institutional uses, shall be based on the either the square feet amount or the per acre amount, whichever total fee amount is greater.

Ontario Ranch – Regional Water Distribution
Development Impact Fees by Land Use

Proposed Land Use	Impact Fee per Unit or S.F.
Detached Dwellings	$9,039/Unit
Attached Dwellings	$4,963/Unit
High Density Dwellings	$2,633/Unit
Commercial Lodging Units	$3,798/Unit
Retail/Services Uses	$2.967/S.F.
Office Uses	$2.682/S.F.
Business Park Uses	$2.311/S.F.
Industrial Uses	$2.391/S.F.
Institutional Uses	$2.177/S.F.

Ontario Ranch – Local Adjacent Water Distribution
Development Impact Fees by Land Use

Proposed Land Use	Impact Fee per Unit or S.F.
Detached Dwellings	$3,874/Unit
Attached Dwellings	$2,127/Unit
High Density Dwellings	$1,128/Unit
Commercial Lodging Units	$1,628/Unit
Retail/Services Uses	$1.272/S.F.
Office Uses	$1.150/S.F.
Business Park Uses	$0.990/S.F.
Industrial Uses	$1.025/S.F.
Institutional Uses	$0.933/S.F.

Ontario Ranch – Regional Sewer Collection
Development Impact Fees by Land Use

Proposed Land Use	Impact Fee per Unit or S.F.
Detached Dwellings	$ 833/Unit
Attached Dwellings	$ 632/Unit
High Density Dwellings	$ 382/Unit
Commercial Lodging Units	$ 486/Unit
Retail/Services Uses	$0.152/S.F.
Office Uses	$0.445/S.F.
Business Park Uses	$0.179/S.F.
Industrial Uses	$0.219/S.F.
Institutional Uses	$0.239/S.F.

Ontario Ranch – Local Adjacent Sewer Collection
Development Impact Fees by Land Use

Proposed Land Use	Impact Fee per Unit or S.F.
Detached Dwellings	$1,250/Unit
Attached Dwellings	$ 948/Unit
High Density Dwellings	$ 573/Unit
Commercial Lodging Units	$ 729/Unit
Retail/Services Uses	$0.227/S.F.
Office Uses	$0.667/S.F.
Business Park Uses	$0.269/S.F.
Industrial Uses	$0.328/S.F.
Institutional Uses	$0.359/S.F.

Ontario Ranch - Solid Waste Collection
Development Impact Fees by Land Use

Proposed Land Use	Impact Fee per Unit or S.F.
Detached Dwellings	$ 773/Unit
Attached Dwellings	$ 657/Unit
High Density Dwellings	$ 329/Unit
Commercial Lodging Units	$ 213/Unit
Retail/Services Uses	$0.518/S.F.
Office Uses	$0.196/S.F.
Commercial/Restaurants	$0.719/S.F.
Business Park Uses	$0.258/S.F.
Industrial Uses	$0.143/S.F.
Institutional Uses	$0.226/S.F.

Ontario Ranch - General Facilities, Vehicles and Equipment
Development Impact Fees by Land Use

Proposed Land Use	Impact Fee Per Unit or S.F.
Detached Dwellings	$ 330/Unit
Attached Dwellings	$ 116/Unit
High Density Dwellings	$ 74/Unit
Commercial Lodging Units	$ 55/Unit
Retail/Services Uses	$0.229/S.F.
Office Uses	$0.100/S.F.
Business Park Uses	$0.114/S.F.
Industrial Uses	$0.058/S.F.
Institutional Uses	$0.115/S.F.

Ontario Ranch - Library Facilities and Collection
Development Impact Fees by Land Use

Residential Land Use	Impact Fee Per Unit
Detached Dwellings	$1,449/Unit
Attached Dwellings	$1,285/Unit
High Density Dwellings	$1,017/Unit

Ontario Ranch - Public Meeting Facilities
Development Impact Fees by Land Use

Residential Land Use	Impact Fee Per Unit
Detached Dwellings	$2,073/Unit
Attached Dwellings	$1,837/Unit
High Density Dwellings	$1,454/Unit

Ontario Ranch - Development Impact Fees Aquatics Facilities
Development Impact Fees by Land Use

Residential Land Use	Impact Fee Per Unit
Detached Dwellings	$122/Unit
Attached Dwellings	$108/Unit
High Density Dwellings	$86/Unit

Ontario Ranch – Park
Development Impact Fees by Land Use

Residential Land Use	Impact Fee Per Unit
Detached Dwellings	$17,263/Unit
Attached Dwellings	$15,300/Unit
High Density Dwellings	$12,106/Unit

Ontario Ranch Only – Species, Habitat Conservation and Open Space Mitigation Development Impact Fees, per Acre
(TO BE PAID BY DEVELOPER AS A CONDITION OF ISSUANCE OF GRADING PERMIT)

Proposed Land Use	Mitigation Impact Fee per Acre
Detached Dwellings	$4,320/Acre
Attached Dwellings	$4,320/Acre
High Density Dwellings	$4,320/Acre
Commercial Lodging Units	$4,320/Acre
Retail/Services Uses	$4,320/Acre
Office Uses	$4,320/Acre
Business Park Uses	$4,320/Acre
Industrial Uses	$4,320/Acre
Institutional Uses	$4,320/Acre

Ontario Ranch Only – Regional Fiber Optic Communication System Development Impact Fees

Proposed Land Use	Impact Fee per Unit or S.F.
Detached Dwellings	$ 752/Unit
Attached Dwellings	$ 752/Unit
High Density Dwellings	$ 752/Unit
Commercial Lodging Units	$ 663/Unit
Retail/Services Uses	$0.525/S.F.
Office Uses	$0.876/S.F.
Business Park Uses	$0.404/S.F.
Industrial Uses	$0.263/S.F.
Institutional Uses	$0.874/S.F.

Ontario Ranch Only – Local Adjacent Fiber Optic Communication System Development Impact Fees

Proposed Land Use	Impact Fee per Unit or S.F.
Detached Dwellings	$1,396/Unit
Attached Dwellings	$1,396/Unit
High Density Dwellings	$1,396/Unit
Commercial Lodging Units	$1,232/Unit
Retail/Services Uses	$0.975/S.F.
Office Uses	$1.626/S.F.
Business Park Uses	$0.751/S.F.
Industrial Uses	$0.488/S.F.
Institutional Uses	$1.624/S.F.

"EXHIBIT B"

City of Ontario Development Impact Fee Schedule 07.01.26

General City – Maximum Law Enforcement
Development Impact Fees by Land Use

Proposed Land Use	Impact Fee Per Unit or S.F.
Detached Dwellings	$ 705/Unit
Attached Dwellings	$ 738/Unit
High Density Dwellings	$ 738/Unit
Mobile Home Dwellings	$ 686/Unit
Commercial Lodging Units	$ 653/Unit
Retail/Services Uses	$0.995/S.F.
Office Uses	$0.321/S.F.
Business Park Uses	$0 050/S.F.
Industrial Uses	$0.050/S.F.
Institutional Uses	$0.345/S.F.

General City – Maximum Fire Suppression Facilities,
Vehicles and Equipment Development Impact Fees by Land Use

Proposed Land Use	Impact Fee per Unit or S.F.
Detached Dwellings	$ 787/Unit
Attached Dwellings	$ 749/Unit
High Density Dwellings	$ 749/Unit
Mobile Home Dwellings	$ 883/Unit
Commercial Lodging Units	$ 499/Unit
Retail/Services Uses	$0.560/S.F.
Office Uses	$0.345/S.F.
Business Park Uses	$0.039/S.F.
Industrial Uses	$0.039/S.F.
Institutional Uses	$0.123/S.F.

General City – Maximum Regional Streets, Signals and Bridges
Development Impact Fees by Land Use

Proposed Land Use	Impact Fee per Unit or S.F.
Detached Dwellings	$1,318/Unit
Attached Dwellings	$ 880/Unit
High Density Dwellings	$ 545/Unit
Mobile Home Dwellings	$ 688/Unit
Commercial Lodging Units	$ 695/Unit
Retail/Services Uses	$2.664/S.F.
Office Uses	$1.522/S.F.
Business Park Uses	$1.584/S.F.
Industrial Uses	$0.816/S.F.
Institutional Uses	$1.740/S.F.

General City – Maximum Local Adjacent Streets, Signals and Bridges
Development Impact Fees by Land Use

Proposed Land Use	Impact Fee per Unit or S.F.
Detached Dwellings	$1,079/Unit
Attached Dwellings	$ 720/Unit
High Density Dwellings	$ 446/Unit
Mobile Home Dwellings	$ 563/Unit
Commercial Lodging Units	$ 569/Unit
Retail/Services Uses	$2.179/S.F.
Office Uses	$1.246/S.F.
Business Park Uses	$1.296/S.F.
Industrial Uses	$0.668/S.F.
Institutional Uses	$1.423/S.F.

General City – Maximum Regional Storm Drainage Facilities
Development Impact Fees by Land Use

Proposed Land Use	Fee Per Unit or S.F.	Fee Per Acre (NOTE)
Detached Dwellings	$ 350/Unit	-
Attached Dwellings	$ 113/Unit	-
High Density Dwellings	$ 95/Unit	-
Mobile Home Dwellings	$ 204/Unit	-
Commercial Lodging Units	$ 58/Unit	-
Retail/Services Uses	$0.061/S.F.	$3,262/Acre
Office Uses	$0.073/S.F.	$2,362/Acre
Business Park Uses	$0.177/S.F.	$2,296/Acre
Industrial Uses	$0.155/S.F.	$2,493/Acre
Institutional Uses	$0.450/S.F.	$2,493/Acre

NOTE: The Storm Drain Fee amount for Retail/Service, Restaurant/Commercial, Office, Business Park, Industrial, and Institutional uses, shall be based on the either the square feet amount or the per acre amount, whichever total fee amount is greater.

General City – Maximum Local Adjacent Storm Drainage Facilities Development Impact Fees by Land Use

Proposed Land Use	Fee Per Unit or S.F.	Fee Per Acre (NOTE)
Detached Dwellings	$3,153/Unit	-
Attached Dwellings	$1,016/Unit	-
High Density Dwellings	$ 851/Unit	-
Mobile Home Dwellings	$1,836/Unit	-
Commercial Lodging Units	$ 523/Unit	-
Retail/Services Uses	$0.550/S.F.	$21,255/Acre
Office Uses	$0.661/S.F.	$21,255/Acre
Business Park Uses	$1.596/S.F.	$20,665/Acre
Industrial Uses	$1.392/S.F.	$22,436/Acre
Institutional Uses	$4.050/S.F.	$22,436/Acre

NOTE: The Storm Drain Fee amount for Retail/Service, Restaurant/Commercial, Office, Business Park, Industrial, and Institutional uses, shall be based on the either the square feet amount or the per acre amount, whichever total fee amount is greater.

General City – Maximum Regional Water Distribution Development Impact Fees by Land Use

Proposed Land Use	Impact Fee per Unit or S.F.
Detached Dwellings	$4,351/Unit
Attached Dwellings	$2,978/Unit
High Density Dwellings	$2,009/Unit
Mobile Home Dwellings	$2,976/Unit
Commercial Lodging Units	$1,201/Unit
Retail/Services Uses	$2.140/S.F.
Office Uses	$1.070/S.F.
Business Park Uses	$0.862/S.F.
Industrial Uses	$0.230/S.F.
Institutional Uses	$0.809/S.F.

General City – Maximum Local Adjacent Water Distribution
Development Impact Fees by Land Use

Proposed Land Use	Impact Fee per Unit or S.F.
Detached Dwellings	$1,088/Unit
Attached Dwellings	$ 774/Unit
High Density Dwellings	$ 502/Unit
Mobile Home Dwellings	$ 744/Unit
Commercial Lodging Units	$ 300/Unit
Retail/Services Uses	$0.535/S.F.
Office Uses	$0.268/S.F.
Business Park Uses	$0.215/S.F.
Industrial Uses	$0.058/S.F.
Institutional Uses	$0.202/S.F.

General City – Maximum Regional Sewer Collection
Development Impact Fees by Land Use

Proposed Land Use	Impact Fee per Unit or S.F.
Detached Dwellings	$ 69/Unit
Attached Dwellings	$ 60/Unit
High Density Dwellings	$ 52/Unit
Mobile Home Dwellings	$ 60/Unit
Commercial Lodging Units	$ 40/Unit
Retail/Services Uses	$0.031/S.F.
Office Uses	$0.034/S.F.
Business Park Uses	$0.017/S.F.
Industrial Uses	$0.007/S.F.
Institutional Uses	$0.020/S.F.

General City - Maximum Local Adjacent Sewer Collection
Development Impact Fees by Land Use

Proposed Land Use	Impact Fee per Unit or S.F.
Detached Dwellings	$620/Unit
Attached Dwellings	$544/Unit
High Density Dwellings	$465/Unit
Mobile Home Dwellings	$543/Unit
Commercial Lodging Units	$362/Unit
Retail/Services Uses	$0.283/S.F.
Office Uses	$0.305/S.F.
Business Park Uses	$0.152/S.F.
Industrial Uses	$0.059/S.F.
Institutional Uses	$0.176/S.F.

General City - Maximum Solid Waste Collection
Development Impact Fees by Land Use

Proposed Land Use	Impact Fee per Unit or S.F.
Detached Dwellings	$ 773/Unit
Attached Dwellings	$ 657/Unit
High Density Dwellings	$ 329/Unit
Mobile Home Dwellings	$ 657/Unit
Commercial Lodging Units	$ 213/Unit
Retail/Services Uses	$0.518/S.F.
Office Uses	$0.196/S.F.
Commercial/Restaurants	$0.719/S.F.
Business Park Uses	$0.258/S.F.
Industrial Uses	$0.143/S.F.
Institutional Uses	$0.226/S.F.

General City - Maximum General Facilities, Vehicles and Equipment
Development Impact Fees by Land Use

Proposed Land Use	Impact Fee Per Unit or S.F.
Detached Dwellings	$ 330/Unit
Attached Dwellings	$ 116/Unit
High Density Dwellings	$ 74/Unit
Mobile Home Dwellings	$ 369/Unit
Commercial Lodging Units	$ 55/Unit
Retail/Services Uses	$0.229/S.F.
Office Uses	$0.100/S.F.
Business Park Uses	$0.114/S.F.
Industrial Uses	$0.058/S.F.
Institutional Uses	$0.115/S.F.

General City - Maximum Library Facilities and Collection
Development Impact Fees by Land Use

Proposed Residential Land Use	Impact Fee Per Unit
Detached Dwellings	$1,449/Unit
Attached Dwellings	$1,285/Unit
High Density Dwellings	$1,017/Unit
Mobile Home Dwellings	$1,210/Unit

General City - Maximum Public Meeting Facilities
Development Impact Fees by Land Use

Proposed Residential Land Use	Impact Fee Per Unit
Detached Dwellings	$2,073/Unit
Attached Dwellings	$1,837/Unit
High Density Dwellings	$1,454/Unit
Mobile Home Dwellings	$1,730/Unit

General City - Maximum Aquatics Facilities
Development Impact Fees by Land Use

Proposed Residential Land Use	Impact Fee Per Unit
Detached Dwellings	$122/Unit
Attached Dwellings	$108/Unit
High Density Dwellings	$86/Unit
Mobile Home Dwellings	$102/Unit

General City - Maximum Park
Development Impact Fees by Land Use

Residential Land Use	Impact Fee Per Unit
Detached Dwellings	$19,328/Unit
Attached Dwellings	$17,129/Unit
High Density Dwellings	$13,554/Unit
Mobile Home Dwellings	$16,123/Unit

Ontario Ranch - Law Enforcement
Development Impact Fees by Land Use

Land Use	Impact Fee Per Unit or S.F.
Detached Dwellings	$ 705/Unit
Attached Dwellings	$ 738/Unit
High Density Dwellings	$ 738/Unit
Commercial Lodging Units	$ 653/Unit
Retail/Services Uses	$0.995/S.F.
Office Uses	$0.321/S.F.
Business Park Uses	$0.050/S.F.
Industrial Uses	$0.050/S.F.
Institutional Uses	$0.345/S.F.

Ontario Ranch - Fire Suppression Facilities, Vehicles and Equipment
Development Impact Fees by Land Use

Proposed Land Use	Impact Fee per Unit or S.F.
Detached Dwellings	$1,578/Unit
Attached Dwellings	$1,500/Unit
High Density Dwellings	$1,500/Unit
Commercial Lodging Units	$1,000/Unit
Retail/Services Uses	$1.122/S.F.
Office Uses	$0.690/S.F.
Business Park Uses	$0.078/S.F.
Industrial Uses	$0.078/S.F.
Institutional Uses	$0.248/S.F.

Ontario Ranch – Regional Streets, Signals and Bridges
Development Impact Fees by Land Use

Proposed Land Use	Impact Fee per Unit or S.F.
Detached Dwellings	$3,302/Unit
Attached Dwellings	$2,204/Unit
High Density Dwellings	$1,364/Unit
Commercial Lodging Units	$1,741/Unit
Retail/Services Uses	$6.671/S.F.
Office Uses	$3.813/S.F.
Business Park Uses	$3.967/S.F.
Industrial Uses	$2.044/S.F.
Institutional Uses	$4.356/S.F.

Ontario Ranch – Local Adjacent Streets, Signals and Bridges
Development Impact Fees by Land Use

Proposed Land Use	Impact Fee per Unit or S.F.
Detached Dwellings	$2,701/Unit
Attached Dwellings	$1,804/Unit
High Density Dwellings	$1,116/Unit
Commercial Lodging Units	$1,425/Unit
Retail/Services Uses	$5.458/S.F.
Office Uses	$3.119/S.F.
Business Park Uses	$3.245/S.F.
Industrial Uses	$1.673/S.F.
Institutional Uses	$3.564/S.F.

Ontario Ranch – Regional Storm Drainage
Development Impact Fees by Land Use

Proposed Land Use	Fee Per Unit or S.F.	Fee Per Acre (NOTE)
Detached Dwellings	$1,601/Unit	-
Attached Dwellings	$ 608/Unit	-
High Density Dwellings	$ 511/Unit	-
Commercial Lodging Units	$ 346/Unit	-
Retail/Services Uses	$0.739/S.F.	$15,234/Acre
Office Uses	$0.650/S.F.	$15,234/Acre
Business Park Uses	$0.637/S.F.	$14,811/Acre
Industrial Uses	$0.634/S.F.	$16,081/Acre
Institutional Uses	$0.738/S.F.	$16,081/Acre

NOTE: The Storm Drain Fee amount for Retail/Service, Restaurant/Commercial, Office, Business Park, Industrial, and Institutional uses, shall be based on the either the square feet amount or the per acre amount, whichever total fee amount is greater.

Ontario Ranch – Local Adjacent Storm Drainage
Development Impact Fees by Land Use

Proposed Land Use	Fee Per Unit or S.F.	Fee Per Acre (NOTE)
Detached Dwellings	$3,735/Unit	-
Attached Dwellings	$1,438/Unit	-
High Density Dwellings	$1,193/Unit	-
Commercial Lodging Units	$ 808/Unit	-
Retail/Services Uses	$1.724/S.F.	$35,546/Acre
Office Uses	$1.518/S.F.	$35,546/Acre
Business Park Uses	$1.486/S.F.	$34,559/Acre
Industrial Uses	$1.478/S.F.	$37,521/Acre
Institutional Uses	$1.723/S.F.	$37,521/Acre

NOTE: The Storm Drain Fee amount for Retail/Service, Restaurant/Commercial, Office, Business Park, Industrial, and Institutional uses, shall be based on the either the square feet amount or the per acre amount, whichever total fee amount is greater.

Ontario Ranch – Regional Water Distribution
Development Impact Fees by Land Use

Proposed Land Use	Impact Fee per Unit or S.F.
Detached Dwellings	$11,281/Unit
Attached Dwellings	$6,193/Unit
High Density Dwellings	$3,286/Unit
Commercial Lodging Units	$4,470/Unit
Retail/Services Uses	$3.703/S.F.
Office Uses	$3.347/S.F.
Business Park Uses	$2.884/S.F.
Industrial Uses	$2.984/S.F.
Institutional Uses	$2.717/S.F.

Ontario Ranch – Local Adjacent Water Distribution
Development Impact Fees by Land Use

Proposed Land Use	Impact Fee per Unit or S.F.
Detached Dwellings	$4,835/Unit
Attached Dwellings	$2,654/Unit
High Density Dwellings	$1,408/Unit
Commercial Lodging Units	$2,031/Unit
Retail/Services Uses	$1.587/S.F.
Office Uses	$1.435/S.F.
Business Park Uses	$1.236/S.F.
Industrial Uses	$1.279/S.F.
Institutional Uses	$1.164/S.F.

Ontario Ranch – Regional Sewer Collection
Development Impact Fees by Land Use

Proposed Land Use	Impact Fee per Unit or S.F.
Detached Dwellings	$1,010/Unit
Attached Dwellings	$ 766/Unit
High Density Dwellings	$ 463/Unit
Commercial Lodging Units	$ 589/Unit
Retail/Services Uses	$0.184/S.F.
Office Uses	$0.539/S.F.
Business Park Uses	$0.217/S.F.
Industrial Uses	$0.265/S.F.
Institutional Uses	$0.290/S.F.

Ontario Ranch – Local Adjacent Sewer Collection
Development Impact Fees by Land Use

Proposed Land Use	Impact Fee per Unit or S.F.
Detached Dwellings	$1,514/Unit
Attached Dwellings	$1,149/Unit
High Density Dwellings	$ 694/Unit
Commercial Lodging Units	$ 884/Unit
Retail/Services Uses	$0.275/S.F.
Office Uses	$0.808/S.F.
Business Park Uses	$0.326/S.F.
Industrial Uses	$0.398/S.F.
Institutional Uses	$0.435/S.F.

Ontario Ranch - Solid Waste Collection
Development Impact Fees by Land Use

Proposed Land Use	Impact Fee per Unit or S.F.
Detached Dwellings	$ 773/Unit
Attached Dwellings	$ 657/Unit
High Density Dwellings	$ 329/Unit
Commercial Lodging Units	$ 213/Unit
Retail/Services Uses	$0.518/S.F.
Office Uses	$0.196/S.F.
Commercial/Restaurants	$0.719/S.F.
Business Park Uses	$0.258/S.F.
Industrial Uses	$0.143/S.F.
Institutional Uses	$0.226/S.F.

Ontario Ranch - General Facilities, Vehicles and Equipment
Development Impact Fees by Land Use

Proposed Land Use	Impact Fee Per Unit or S.F.
Detached Dwellings	$ 330/Unit
Attached Dwellings	$ 116/Unit
High Density Dwellings	$ 74/Unit
Commercial Lodging Units	$ 55/Unit
Retail/Services Uses	$0.229/S.F.
Office Uses	$0.100/S.F.
Business Park Uses	$0.114/S.F.
Industrial Uses	$0.058/S.F.
Institutional Uses	$0.115/S.F.

Ontario Ranch - Library Facilities and Collection
Development Impact Fees by Land Use

Residential Land Use	Impact Fee Per Unit
Detached Dwellings	$1,449/Unit
Attached Dwellings	$1,285/Unit
High Density Dwellings	$1,017/Unit

Ontario Ranch - Public Meeting Facilities
Development Impact Fees by Land Use

Residential Land Use	Impact Fee Per Unit
Detached Dwellings	$2,073/Unit
Attached Dwellings	$1,837/Unit
High Density Dwellings	$1,454/Unit

Ontario Ranch - Development Impact Fees Aquatics Facilities
Development Impact Fees by Land Use

Residential Land Use	Impact Fee Per Unit
Detached Dwellings	$122/Unit
Attached Dwellings	$108/Unit
High Density Dwellings	$86/Unit

Ontario Ranch – Park
Development Impact Fees by Land Use

Residential Land Use	Impact Fee Per Unit
Detached Dwellings	$19,328/Unit
Attached Dwellings	$17,129/Unit
High Density Dwellings	$13,554/Unit

Ontario Ranch Only – Species, Habitat Conservation and Open Space Mitigation Development Impact Fees, per Acre
(TO BE PAID BY DEVELOPER AS A CONDITION OF ISSUANCE OF GRADING PERMIT)

Proposed Land Use	Mitigation Impact Fee per Acre
Detached Dwellings	$4,320/Acre
Attached Dwellings	$4,320/Acre
High Density Dwellings	$4,320/Acre
Commercial Lodging Units	$4,320/Acre
Retail/Services Uses	$4,320/Acre
Office Uses	$4,320/Acre
Business Park Uses	$4,320/Acre
Industrial Uses	$4,320/Acre
Institutional Uses	$4,320/Acre

Ontario Ranch Only – Regional Fiber Optic Communication System Development Impact Fees

Proposed Land Use	Impact Fee per Unit or S.F.
Detached Dwellings	$ 784/Unit
Attached Dwellings	$ 784/Unit
High Density Dwellings	$ 784/Unit
Commercial Lodging Units	$ 693/Unit
Retail/Services Uses	$0.548/S.F.
Office Uses	$0.914/S.F.
Business Park Uses	$0.422/S.F.
Industrial Uses	$0.274/S.F.
Institutional Uses	$0.913/S.F.

Ontario Ranch Only – Local Adjacent Fiber Optic Communication System Development Impact Fees

Proposed Land Use	Impact Fee per Unit or S.F.
Detached Dwellings	$1,455/Unit
Attached Dwellings	$1,455/Unit
High Density Dwellings	$1,455/Unit
Commercial Lodging Units	$1,286/Unit
Retail/Services Uses	$1.019/S.F.
Office Uses	$1.698/S.F.
Business Park Uses	$0.785/S.F.
Industrial Uses	$0.509/S.F.
Institutional Uses	$1.696/S.F.

GENERAL CITY (GC) DEVELOPMENT IMPACT FEES EFFECTIVE 07/01/2025

COLLECTED AT BUILDING PERMIT ($)

Land Use Category	Police	Fire	55% Regional Streets	45% Local Streets	10% Regional Storm Drainage		90% Local Storm Drainage		80% Regional Water	20% Local Water	10% Regional Sewer	90% Local Sewer	Solid Waste	General Facilities	Library	Public Meetings	Aquatics	Parks		TOTAL
Per Unit:																				
Detached Dwellings	705	787	1,318	1,079	303	-	2,730	-	3,421	855	63	570	773	330	1,449	2,073	122	17,263	$	**33,841**
Attached Dwellings	738	749	880	720	98	-	880	-	2,341	585	55	499	657	116	1,285	1,837	108	15,300	$	**26,848**
High Density Dwellings	738	749	545	446	82	-	737	-	1,579	395	48	428	329	74	1,017	1,454	86	12,106	$	**20,811**
Mobile Home Dwellings	686	883	688	563	177	-	1,589	-	2,340	585	55	499	657	369	1,210	1,730	102	14,401	$	**26,532**
Commercial Lodging	653	499	695	569	50	-	453	-	944	236	37	332	213	55	-	-	-	-	$	**4,736**
Per Sq. Ft.:						Per Acre*		Per Acre*												
Retail/Service Uses	0.995	0.560	2.664	2.179	0.053	2,043	0.476	18,383	1.682	0.421	0.029	0.260	0.518	0.229	-	-	-	-	$	**10.066**
Restaurants	0.995	0.560	2.664	2.179	0.053	2,043	0.476	18,383	1.682	0.421	0.029	0.260	0.719	0.229	-	-	-	-	$	**10.267**
Office Uses	0.321	0.345	1.522	1.246	0.064	2,043	0.572	18,383	0.842	0.210	0.031	0.280	0.196	0.100	-	-	-	-	$	**5.729**
Business Park Uses	0.050	0.039	1.584	1.296	0.154	1,986	1.382	17,872	0.678	0.169	0.016	0.140	0.258	0.114	-	-	-	-	$	**5.878**
Industrial Uses	0.050	0.039	0.816	0.668	0.134	2,156	1.206	19,404	0.181	0.045	0.006	0.054	0.143	0.058	-	-	-	-	$	**3.401**
Institutional Uses	0.345	0.123	1.740	1.423	0.390	2,156	3.506	19,404	0.636	0.159	0.018	0.162	0.226	0.115	-	-	-	-	$	**8.843**

* Per Acre amounts are not included in the TOTAL column amounts. The fee amount to be used for non-residential uses, shall be either the square feet amount or the per acre amount, whichever is greater.

GENERAL CITY (GC) DEVELOPMENT IMPACT FEES EFFECTIVE 07/01/2026

COLLECTED AT BUILDING PERMIT ($)

			55%	45%	10%		90%		80%	20%	10%	90%								
Land Use Category	Police	Fire	Regional Streets	Local Streets	Regional Storm Drainage		Local Storm Drainage		Regional Water	Local Water	Regional Sewer	Local Sewer	Solid Waste	General Facilities	Library	Public Meetings	Aquatics	Parks		TOTAL
Per Unit:																				
Detached Dwellings	705	787	1,318	1,079	350	-	3,153	-	4,351	1,088	69	620	773	330	1,449	2,073	122	19,328	$	**37,595**
Attached Dwellings	738	749	880	720	113	-	1,016	-	2,978	744	60	544	657	116	1,285	1,837	108	17,129	$	**29,674**
High Density Dwellings	738	749	545	446	95	-	851	-	2,009	502	52	465	329	74	1,017	1,454	86	13,554	$	**22,965**
Mobile Home Dwellings	686	883	688	563	204	-	1,836	-	2,976	744	60	543	657	369	1,210	1,730	102	16,123	$	**29,373**
Commercial Lodging	653	499	695	569	58	-	523	-	1,201	300	40	362	213	55	-	-	-	-	$	**5,168**
Per Sq. Ft.:						Per Acre*		Per Acre*												
Retail/Service Uses	0.995	0.560	2.664	2.179	0.061	3,262	0.550	21,255	2.140	0.535	0.031	0.283	0.518	0.229	-	-	-	-	$	**10.745**
Restaurants	0.995	0.560	2.664	2.179	0.061	3,262	0.550	21,255	2.140	0.535	0.031	0.283	0.719	0.229	-	-	-	-	$	**10.946**
Office Uses	0.321	0.345	1.522	1.246	0.073	2,362	0.661	21,255	1.070	0.268	0.034	0.305	0.196	0.100	-	-	-	-	$	**6.141**
Business Park Uses	0.050	0.039	1.584	1.296	0.177	2,296	1.596	20,665	0.862	0.215	0.017	0.152	0.258	0.114	-	-	-	-	$	**6.360**
Industrial Uses	0.050	0.039	0.816	0.668	0.155	2,493	1.392	22,436	0.230	0.058	0.007	0.059	0.143	0.058	-	-	-	-	$	**3.675**
Institutional Uses	0.345	0.123	1.740	1.423	0.450	2,493	4.050	22,436	0.809	0.202	0.020	0.176	0.226	0.115	-	-	-	-	$	**9.679**

* Per Acre amounts are not included in the TOTAL column amounts. The fee amount to be used for non-residential uses, shall be either the square feet amount or the per acre amount, whichever is greater.

ONTARIO RANCH (OR) DEVELOPMENT IMPACT FEES EFFECTIVE 07/01/2025

	COLLECTED AT BUILDING PERMIT ($)																				COLLECTED AT GRADING PERMIT (PER ACRE)	
			55%	45%	30%		70%		70%	30%	40%	60%						35%	65%			
Land Use Category	Police	Fire	Regional Streets	Local Streets	Regional Drainage	Storm Drainage	Local	Storm Drainage	Regional Water	Local Water	Regional Sewer	Local Sewer	Solid Waste	General Facilities	Library	Public Meetings	Aquatics	Parks	Regional Fiber Optics	Local Fiber Optics	TOTAL	Habitat Mitigation	TOTAL
Per Unit:																							
Detached Dwellings	705	1,578	3,022	2,473	1,362	-	3,178	-	9,039	3,874	833	1,250	773	330	1,449	2,073	122	17,263	752	1,396	**$ 51,472**	$ 4,320	**$ 4,320**
Attached Dwellings	738	1,500	2,018	1,651	517	-	1,207	-	4,963	2,127	632	948	657	116	1,285	1,837	108	15,300	752	1,396	**$ 37,751**	$ 4,320	**$ 4,320**
High Density Dwellings	738	1,500	1,249	1,022	435	-	1,015	-	2,633	1,128	382	573	329	74	1,017	1,454	86	12,106	752	1,396	**$ 27,889**	$ 4,320	**$ 4,320**
Commercial Lodging	653	1,000	1,594	1,304	295	-	687	-	3,798	1,628	486	729	213	55	-	-	-	-	663	1,232	**$ 14,337**	$ 4,320	**$ 4,320**
Per Sq. Ft.:						**Per Acre***		**Per Acre***															
Retail/Service Uses	0.995	1.122	6.106	4.996	0.629	12,962	1.467	30,244	2.967	1.272	0.152	0.227	0.518	0.229	-	-	-	-	0.525	0.975	**$ 22.180**	$ 4,320	**$ 4,320**
Restaurants	0.995	1.122	6.106	4.996	0.629	12,962	1.467	30,244	2.967	1.272	0.152	0.227	0.719	0.229	-	-	-	-	0.525	0.975	**$ 22.381**	$ 4,320	**$ 4,320**
Office Uses	0.321	0.690	3.490	2.855	0.553	12,962	1.291	30,244	2.682	1.150	0.445	0.667	0.196	0.100	-	-	-	-	0.876	1.626	**$ 16.942**	$ 4,320	**$ 4,320**
Business Park Uses	0.050	0.078	3.631	2.971	0.542	12,602	1.265	29,405	2.311	0.990	0.179	0.269	0.258	0.114	-	-	-	-	0.404	0.751	**$ 13.813**	$ 4,320	**$ 4,320**
Industrial Uses	0.050	0.078	1.871	1.531	0.539	13,682	1.258	31,925	2.391	1.025	0.219	0.328	0.143	0.058	-	-	-	-	0.263	0.488	**$ 10.242**	$ 4,320	**$ 4,320**
Institutional Uses	0.345	0.248	3.987	3.262	0.628	13,682	1.466	31,925	2.177	0.933	0.239	0.359	0.226	0.115	-	-	-	-	0.874	1.624	**$ 16.485**	$ 4,320	**$ 4,320**

* Per Acre amounts are not included in the TOTAL column amounts. The fee amount to be used for non-residential uses, shall be either the square feet amount or the per acre amount, whichever is greater.

Ontario Ranch In-Lieu Fees			
Public Service Funding	$1,298.94	per unit	(effective January 1, 2024)
Affordability In-Lieu	$3.37	per sq. ft.	(effective July 1, 2024)

ONTARIO RANCH (OR) DEVELOPMENT IMPACT FEES EFFECTIVE 07/01/2026

	COLLECTED AT BUILDING PERMIT ($)																				COLLECTED AT GRADING PERMIT (PER ACRE)	
			55%	45%	30%		70%		70%	30%	40%	60%						35%	65%			
Land Use Category	Police	Fire	Regional Streets	Local Streets	Regional Drainage	Storm Drainage	Local	Storm Drainage	Regional Water	Local Water	Regional Sewer	Local Sewer	Solid Waste	General Facilities	Library	Public Meetings	Aquatics	Parks	Regional Fiber Optics	Local Fiber Optics	TOTAL	Habitat Mitigation	TOTAL
Per Unit:																							
Detached Dwellings	705	1,578	3,302	2,701	1,601	-	3,735	-	11,281	4,835	1,010	1,514	773	330	1,449	2,073	122	19,328	784	1,455	**$ 58,575**	$ 4,320	**$ 4,320**
Attached Dwellings	738	1,500	2,204	1,804	608	-	1,418	-	6,193	2,654	766	1,149	657	116	1,285	1,837	108	17,129	784	1,455	**$ 42,405**	$ 4,320	**$ 4,320**
High Density Dwellings	738	1,500	1,364	1,116	511	-	1,193	-	3,286	1,408	463	694	329	74	1,017	1,454	86	13,554	784	1,455	**$ 31,026**	$ 4,320	**$ 4,320**
Commercial Lodging	653	1,000	1,741	1,425	346	-	808	-	4,740	2,031	589	884	213	55	-	-	-	-	693	1,286	**$ 16,464**	$ 4,320	**$ 4,320**
Per Sq. Ft.:						**Per Acre***		**Per Acre***															
Retail/Service Uses	0.995	1.122	6.671	5.458	0.739	15,234	1.724	35,546	3.703	1.587	0.184	0.275	0.518	0.229	-	-	-	-	0.548	1.019	**$ 24.772**	$ 4,320	**$ 4,320**
Restaurants	0.995	1.122	6.671	5.458	0.739	15,234	1.724	35,546	3.703	1.587	0.184	0.275	0.719	0.229	-	-	-	-	0.548	1.019	**$ 24.973**	$ 4,320	**$ 4,320**
Office Uses	0.321	0.690	3.813	3.119	0.650	15,234	1.518	35,546	3.347	1.435	0.539	0.808	0.196	0.100	-	-	-	-	0.914	1.698	**$ 19.148**	$ 4,320	**$ 4,320**
Business Park Uses	0.050	0.078	3.967	3.245	0.637	14,811	1.486	34,559	2.884	1.236	0.217	0.326	0.258	0.114	-	-	-	-	0.422	0.785	**$ 15.705**	$ 4,320	**$ 4,320**
Industrial Uses	0.050	0.078	2.044	1.673	0.634	16,081	1.478	37,521	2.984	1.279	0.265	0.398	0.143	0.058	-	-	-	-	0.274	0.509	**$ 11.867**	$ 4,320	**$ 4,320**
Institutional Uses	0.345	0.248	4.356	3.564	0.738	16,081	1.723	37,521	2.717	1.164	0.290	0.435	0.226	0.115	-	-	-	-	0.913	1.696	**$ 18.530**	$ 4,320	**$ 4,320**

* Per Acre amounts are not included in the TOTAL column amounts. The fee amount to be used for non-residential uses, shall be either the square feet amount or the per acre amount, whichever is greater.

Ontario Ranch In-Lieu Fees			
Public Service Funding	$1,245.39	per unit	(effective January 1, 2023)
Affordability In-Lieu	$3.37	per sq. ft.	(effective July 1, 2024)

Development Impact Fee Calculation Nexus Report

For the

City of Ontario, California

July 15, 2022



Revenue & Cost Specialists

Serving Local Governments Since 1980

July 15, 2022

Honorable Mayor and City Council
Via Scott Ochoa, City Manager
City of Ontario
303 East "B" Street
Ontario, CA 91764

RE: Recalculation to the City's Development Impact Fee (DIF) Calculation and Nexus Report

Honorable Mayor, Council Members, and City Manager Ochoa:

The City's Development Impact Fee (DIF) Schedule, originally calculated in 2003, has been updated ten times over the 18-year period, nearly every two years since its first adoption. Those necessary updates were generally limited to changes in project costs based upon an appropriate cost index to keep the impact fees financially relevant. Most of the projects were updated by an appropriate cost inflation index but a number of projects were changed in complexity and/or fully recalculated. The land-use database originally used in 2012 Report was pursuant to The Ontario Plan (TOP) 2010 Update, and has not been updated since the adoption of the 2012 Report. Subsequently, this update differs in that the land-use database was updated to reflect the changes in potential development from vacant or underutilized to developed parcels based on the TOP 2050 Update. The City is to be congratulated for this commitment and the efforts of the many it took to do so.

Generally, this Report is a complete update of the City's previous update iterations of the City's "*Development Impact Fee Calculation and Nexus Report*". The nexus and logic within the Report has not changed however, every aspect of the original Report and subsequent updates has been updated. The Report indicates that the City has completed roughly 20% of the projects identified in original Report. That is not to say that the quality of data has not been improved. State-of-the-art and more sophisticated GIS data gathering abilities have increased the quality of data. The major modifications and/or types of modifications included in the 2021-22 update are as follows:

- The Land-use Database was fully recalculated using the City's existing advanced GIS data. This data has not been updated since the 2012 Report which was based upon the then "shape files" available at the time of preparation of the 2012 Report.

- Given the recalculation of the land-use database, this action necessitated an update to the City's Police and Fire/Rescue calls-for-service, also using the GIS based dispatch calls-for-service data. This data is not only more current but given the link between the City's Land-Use Parcel GIS data and the address-based calls-for-service, the resulting data is far more precise than the effort performed in 2012.

- Changes were made to the Fire Suppression/Rescue facility needs by adding a fourth bay to the four remaining stations to be constructed in the Ontario Ranch area. However, these fourth bays are intended for storage of all secondary, or reserve vehicles used in emergency operations throughout Ontario, thus the cost is spread over the entire City, including existing calls-for-service.

- In numerous infrastructure categories, the individual project cost amounts have been escalated by application of the change in an applicable cost index;

- In the Fire category, as well as the hard infrastructure categories (Circulation, Storm Drainage, Water and Sewer Utilities), numerous individual project cost estimates have been adjusted to reflect updated engineering estimates and/or actual costs;

- The per square foot construction cost of Quality of Life structures (pool buildings, community centers and libraries) were changed from estimates to the actual cost per square foot based upon the final costs for the construction of the Anthony Munoz Community Center.

- The cost per acre for Parks construction has been increased from $500,000 to $560,200;

- The cost per acre for land acquisition has been increased from $585,000 to $700,000;

- Outstanding credits (available) developer held "DIF Credits" in each infrastructure category were added as continued costs for projects that have not necessarily been constructed and/or paid for by the City. To assist in the creation of much needed infrastructure in the Ontario Ranch area, individual developers, many of whom constructed or acquired infrastructure capacity-increasing improvements, are eligible to receive DIF Credits (or payment) against future impact fees for any portion of the infrastructure that was above and beyond what would have been

their maximum calculated impact fee obligation. In short, numerous projects were financed or constructed by individual developers and they will ultimately expect repayment for that over-build via the DIF Credits that have been issued by the City. Pursuant to the City's DIF Program Policies, DIF Credits are available for use at permit issuance to off-set (reduce) the fee in the respective infrastructure category for which the DIF Credit was issued. The availability of credits decreases the amount of DIF revenue that the City will ultimately collect. Therefore, any outstanding DIF Credit amount that has been included in this Report's calculations within the DIF calculation methodology, was done so to establish the appropriate DIF fee schedule necessary to finance both the remaining infrastructure costs and total developer's DIF Credits at General Plan build-out. The incorporation of the outstanding DIF credits assists the City in recuperating additional DIF revenues in order to eliminate any City subsidy from the General Fund (or utility operating fund) for the long-term development of the Ontario Ranch area.

Revenue & Cost Specialists, L.L.C staff are ready to assist the City in any way that may be beneficial to the adoption of the new fees necessary to insure that the City can accommodate the private development of its many vacant acres at no cost to the existing community, either in actual costs-out-of-pocket or in the diminution of existing levels of service.

Sincerely,



Scott Thorpe
Senior Vice President

CITY OF ONTARIO
DEVELOPMENT IMPACT FEE CALCULATION AND NEXUS REPORT

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Chapter 1
Background and Introduction

In 2000 the City of Ontario retained Revenue & Cost Specialists to undertake a comprehensive cost calculation of the City's development impact costs for two areas of the City. The two areas consisted of the more developed *General City (GC)* area and the largely undeveloped former dairy farm area referred to as *Ontario Ranch (OR)*. *Ontario Ranch* had been referred to as *New Model Colony* in previous reports but it was amended to *Ontario Ranch* in this 2017 update at the request of the Ontario Ranch Builders.

The development impact cost calculations are intended to identify the cost of accommodating continued development in both areas in such a fashion as to not decrease the levels of service currently enjoyed by the City's existing residents and businesses. The development impact cost calculations were then formalized as a set of Development Impact Fees (henceforth referred to as DIF) schedules by City Council. A periodic review and adjustment of the City's DIFs is appropriate and warranted in order to continue to ensure that the City collects sufficient monies to construct the additional infrastructure needed to accommodate the anticipated growth of new residents and businesses expected to be developed in the City. The resulting DIF schedules have been reviewed and amended periodically as estimated costs and capital needs have changed. As a result of this diligence, the DIF schedules have served the City well for many years. However, after twelve years of cumulative changes, the most significant being a General Plan amendment has resulting in greater OR densities, requires a full update of all development assumptions, estimated demands and capital project costs was prudent. For this and other reasons, the City has entered into the exhaustive effort to recalculate the amount of the existing and new DIFs.

This *Development Impact Fee Calculation and Nexus Report* effort remains consistent with the original 2002-03 Report's intent to include a significant amount of detail such as a complete list of all remaining 316 projects to be financed by the DIF schedules, by infrastructure. Each project has a corresponding detail page in the supporting *Master Facilities Plan,* which in turn tells the reader where additional information can be found regarding that project. Just over 59% of the projects identified in the City's *Master Facilities Plan* are supported by an infrastructure Master Plan (i.e. Water Master Plan). The remaining 41% of the *Master Facilities Plan* projects are either broader (i.e. total acres of parks to be constructed) or are based upon in-house studies or calculations by the City's infrastructure staff experts (i.e. fire station sizes/locations).

The *Master Facilities Plan* is a separate document which includes an expanded amount of information about each project for anyone wishing it, while allowing the *Development Impact Fee Calculation and Nexus Report* to remain more focused on the allocation and distribution of capital costs to the remaining new development. A *Master Facilities Plan* with this level of detail is generally not offered by other DIF consultants and the City is to be commended for recognizing the importance of this information to the reader and committed the effort in generating it. The combined *Development Impact Fee Calculation and Nexus Report* and the *Master Facilities Plan* offer greater information for the Council to make policy decisions, greater understanding by the development community, and an easier tracking (and updating) system for the staff.

The *Master Facilities Plan* also serves to inform the users that collected DIFs are committed per §66000 of the Government Code. The DIF receipts that are collected over five years (and kept in fund balances during that period) may not necessarily reach the level necessary to construct a needed project per the *Master Facilities Plan.* This does not mean the projects are no longer needed. The inclusion of those projects in the *Master Facilities Plan* indicates the continued importance of that project over time, certainly over a five year period.

The Importance of Capital Infrastructure. The Levels of Service (LOS) of any one City infrastructure is based (or limited) upon the capacity of that infrastructure to support the users, residents or businesses. The design of any municipal project has a finite capacity, such as a four lane road, a 30" storm drainage pipe or a 10,000 square foot library. Each is designed to meet the needs of a defined number of users. A street segment can only handle so many vehicles per hour, especially at a speed that makes it worth using for driving over longer distances. A storm drainage pipe that is 30" cannot handle storm flows twice its capacity. A library can hold just so many collection items and serve only so many residents, all the librarians in the world cannot make up for limited library space. A municipality with 0.40 square feet per resident of library space will be able to serve more residents than a municipality with only a 0.10 square feet standard per resident of library space. The following is a more precise example using law enforcement.

Consider the labor intensive service of law enforcement, regardless of the quality and capabilities of the City's sworn police officers, the Department remains highly dependent upon its infrastructure capacity. A police station of 7,500 square feet will have capacity to support roughly thirty sworn police officers at about 250 square feet per officer. If the station size remains the same at 7,500 square feet but the sworn compliment doubles to sixty police officers, the station will become exceedingly dysfunctional. The same holds true for police response vehicles and law enforcement specialty equipment. If a City adds thirty additional officers but cannot add station space, vehicles and specialty equipment, the City has dealt with only half of the service equation. They have achieved little.

Further, if you add 30 police officers:

- But do not add police response vehicles, the calls-for-services responses will be very poor.
- But no additional station space, the calls-for-services responses will be dysfunctional, and unpredictable.
- But do not provide the sworn officers with the required personal and specialty equipment; the calls-for-services responses will be dangerous, certainly for the police officer.

On the opposite side, if you add all of the above capital needs, but do not add additional sworn officers, the result would probably be limited to a minor improvement in response times.

Good municipal service takes a balance of staff and infrastructure. Of course, the DIFs can only be used for the capital acquisitions, the ongoing labor staffing costs will need to come from other sources.

PROPORTIONAL ANALYSIS

A helpful component of this Report is the proportional analysis of the infrastructure needs required to accommodate continued development of the City as compared to the existing infrastructure that has been generated through years of taxes and other contributions and currently serves the existing community. This proportional analysis is intended to recognize and reconcile the difference between the City's desired level of service required of new development, per statements in the various General Plan elements, with that of the *de-facto* or actual level of service provided to the existing community. The inclusion of the proportional analysis will assist the City Council in adopting a DIF structure that recognizes inter-generational equity and assists the Council in making the difficult policy decisions regarding the required capital additions needed to accommodate new development by increasing the lay-person's understanding of *fairness.*

The proportional analysis is important, if for no other reason, than for community inter-generational equity, i.e., fairness in the infrastructure investment that has been made by existing residents and businesses with those of new residents and businesses that wish to use the existing infrastructure. As an example, new development will be required to expand the number of arterial and collector lane miles in the City but new development also benefits from the immediate use of Euclid Avenue constructed so many years ago just as an existing citizen can use a newly constructed arterial street segment. In short, previous generations of businesses and residents have contributed to the development of the City infrastructure and this fact should be recognized by future residents and businesses by contributing a similar amount of capacity towards completing the various infrastructure systems.

It is one thing to identify the many public improvement projects needed through build-out. It is an entirely different thing to assume that all of the identified improvements are required to meet the demands of the new development. Clearly, some projects will be *replacements* of the existing infrastructure while others will be *capacity increasing* projects. Within the category of the latter, they may also be further classified into two categories;

1. Projects dealing with existing deficiencies, i.e., projects required regardless of whether there is additional development or not. An example would be a traffic intersection currently controlled by stop signs that currently meets traffic warrants for a traffic signal.

2. Projects required as a result of the need to accommodate future development. An example of this would be a signal that is currently controlled quite adequately by stop signs, but because of development in the near and *downstream* areas will ultimately need to be signalized.

This Report provides the documentation of the City's costs which serve as the basis for calculating DIFs. The updated DIF Schedules and related information can be found in Chapters 3 through 16 and Appendices A, B, C, D, E and F of this Report.

RCS staff has worked with Administrative Services, Police, Fire, I.T., Community Services, Development Services, Community and Public Services and the Utilities Department staff to

generate and review the supporting data which forms the calculation of Development Impact Fee schedules. The results of this review can be found on the schedules located at the end of each Chapter.

Development Impact Fee Structure. The General Plan provides a range of potential densities for residential development, as such, the DIFs for residential uses need to be calculated on a per dwelling unit basis to reflect more accurately the impacts from a specific development. For example, a property zoned as detached dwelling residential development may contain from three to six units per acre. If fees are calculated on an acreage basis, the developer proposing three units per acre will pay the same amount as a developer constructing six units per acre. Similarly, fees are calculated on a square footage basis for business (retail/service, office and industrial, etc.) parcels to reflect the impacts of different building intensities for these types of development. Some of the infrastructures have optional fee structure recommended for unusual developments, such as a parking structure, which in itself does not create demand beyond additional storm drainage run-off, where the structure required the additional parking does.

A second reason for the proposed DIF fee structure recommended in this Report involves the issue of building expansion or intensification of retail, office and industrial areas. For example, if a property owner of commercial or industrial property proposes an expansion to his building, the question exists about how to charge this proposed expansion for its impact on the City's streets, storm drainage system, and other infrastructures. A fee calculated on a building square footage basis simplifies this calculation.

CALCULATION OF DEVELOPMENT IMPACT FEES

In California, State legislation sets certain legal and procedural parameters for the charging of these fees. This legislation was passed as AB1600 by the California Legislature and is now codified as California Government Code Sections 66000 through 66009. This State law went into effect on January 1, 1989.

Government Code §66000 requires documentation of projects to be financed by Development Impact Fees prior to their levy and collection, and that the monies collected actually be committed within five years to a project of direct benefit to the development which paid the fees. Many states have such controlling statutes. Specifically, Government Code §66000 requires the following process:

1. Delineation of the **PURPOSE** of the fee.

2. Determination of the **USE** of the fee.

3. Determination of the **RELATIONSHIP** between the use of the fee and the type of development paying the fee.

4. Determination of the relationship between the **NEED** for the facility and the type of development project. **NOTE: Numbers 2 & 4 will be reversed throughout the**

chapters in this Report because it is apparent that *need* should be identified before *use*.

5. Determination of the relationship between the **AMOUNT** of the fee and the **COST** of the portion of the facility attributed to the specific development project.

This Report, with some additions, utilizes the basic methodology consistent with the above requirements of Government Code §66000. Briefly, the following steps were undertaken in the calculation of DIFs for the City:

1. Define the level of service desired within the General Plan area for each project or acquisition identified as necessary. In some areas, certain statistical measures are commonly used to measure or define an acceptable level of service for a category of infrastructure. Street intersections, for instance, are commonly rated based on a Level of Service scale of "A" to "F" developed by transportation engineers. Most agencies adopt a LOS of "C".

2. Review the Land use map and determine the existing mix of land uses and amount of undeveloped and developed land. The magnitude of growth and its impacts can thus be determined by considering this land use data when planning needed infrastructure. This inventory can be found in Table 2-1 in Chapter 2 and Appendix B.

3. Identify all additions to the capital facilities or equipment inventory necessary to maintain the identified levels of service in the area. Then, determine the cost of those additions. An infrastructure *Master Plan* is the highest form of data.

4. Identify a level of responsibility, identifying, as termed in this Report, the relative need (or as referred to in the accompanying schedules as "PERCENT NEED") for the facility or equipment necessary to accommodate "growth" as defined, and as opposed to current needs.

5. Distribute the costs identified as a result of development growth on a basis of land use. Costs are distributed between each land use based on their relative use, or *nexus,* of the capital system. For example, future street costs were distributed to each land use based on their trip generation characteristics.

OTHER ASSUMPTIONS OF THE REPORT

In addition to the land use assumptions contained in the next Chapter of this Report, other important assumptions of this study include the following:

"Normal" Subdivision Improvements Omitted. "Local" public improvements generally associated with and identified as being the sole responsibility of the developer through the subdivision or development review process are not included in either of the project lists or consequent calculations. This type of "on site" and immediately adjacent improvement would include all such capital construction within the boundaries of any development, such as street lights, curb, gutter, sidewalks, neighborhood streets and all local utility pipes. These improvements would continue to be the direct responsibility of the developer, with or without the addition of DIFs.

Land Acquisition Costs. Land acquisition cost estimates have been developed after discussions with City officials over recent acquisitions or current negotiations. Arguments for higher or lower costs can be made; however, the herein contained per acre amounts appear to be the most appropriate current figure for the purposes of this study. Land costs for parks, the largest land acquisition effort in this report, have not been altered from the last (2010) update. However, City finance staff has indicated that land acquisition costs will be reviewed annually to adjust for the marked swings that can occur to land acquisition costs, as opposed to the more historically predictable construction costs.

Exclusion/Rejection of Any Type of "Credit" for Undeveloped Land. It has been argued by some that a credit for capital-related revenues, such as gas taxes, should be made against the DIFs calculated or imposed by a city. Using the state gas tax as an example, proponents of a DIF credit argue that a city will receive increased annual gas taxes because of the additional population generated by future residential development. It is therefore argued that a developer should receive a credit for any associated gas tax revenues collected as a result of the residents or businesses that occupy the new dwellings against any Circulation DIF imposed by the City based on either of two separate arguments.

The first argument for a gas tax credit supposes that the additional gas taxes created by residential development are used to pay for the maintenance of existing streets, which is the responsibility of existing development. Since the new streets constructed via DIFs will not require rehabilitation or reconstruction for another 10 to 20 years, the gas tax generated by new development is therefore a windfall to the City and should be credited against the DIF. What this argument fails to consider is that any new resident or business to the City will begin to contribute immediately to the use and deterioration of all City streets. A cursory review of City finances will reveal that the portion of the State gas tax received by cities falls far short of meeting the City's needed street improvements and repairs in any given year. The gas taxes *generated* by new development simply cannot meet the maintenance costs of either the new streets associated with the development or the existing streets which the new resident uses on a daily basis.

The second argument proposes that the developer pays his full share of constructing new roads when he pays the City's Circulation System Development Impact Fee and that the gas taxes generated by the additional residents in a development are unfairly used to make improvements to the existing street system. It is most cities experience that gas taxes are barely adequate to meet streets-related operational costs, and if they are sufficient to meet these costs, the remainder is used for capital-related maintenance projects.

For these reasons, credits of existing operational revenues are not considered for Circulation System DIFs in this Report. A similar discussion can be made for the other fees considered herein, and therefore no credits against any such fees are included in this calculation of development impact costs.

Appropriate Expansion. Debt service is a reasonable cost of construction of many, but not necessarily all, public facilities and infrastructure. The following example illustrates this. DIFs are collected in incremental amounts, but facilities are not expanded in those same incremental amounts. As an example, a community center fee, based upon a standard of 1.2 square feet per detached dwelling residence, may be collected for each residential dwelling in the City, but after collecting the fee for a 100-unit subdivision, it would be impractical to expand the community center 120 square feet. Fees are collected, placed in a separate fund, generating interest until such a time that a 2,000 to 3,000 square foot expansion is possible. During that build-up time, the community center will experience some temporary overcrowding as the standard drops from 1.2 S.F./dwelling to about 0.9 S.F./dwelling. This "temporary overcapacity" clearly may be an inconvenience, bringing about some crowding and an increased unavailability for rental or reservation until enough DIFs have been collected for a practical expansion to bring the community center facility back up to the original standard. In short, a development of 120 residences may be brought "on-line" (occupancy permit) and bring about a temporary reduction in community center facility standards without endangering the citizen's health and safety.

However, such a *temporary overcapacity* in storm water collection is not possible without the potential for damage to both private and public property. Capacity for the collection/removal of storm water must be available prior to the construction that increases the impervious surface (and thus storm water run-off) of the parcel. If the local storm collection line is currently at capacity (peak or otherwise), no additional units may be brought on line until additional collection capacity can be created. Again, there is a practical size of an addition to construct and it is not likely practical for developers to wait until there is enough added demand (and fees) to pay for the facility addition. As a result, financing through some type of debt instrument may be the only alternative. Circumstances vary from city to city as to what facility expansions are critical and which can absorb temporary overcapacity for limited periods of time.

Financing Costs. Since financing costs reflect an actual, and generally significant, outlay of funds for an agency, they would be included in the project costs where debt financing was required due to the immediacy of the need for the facility or infrastructure to show the full costs of such facility or infrastructure and insure that new development also pays its "fair share" of these costs. These costs, if any, would be referenced in the *Master Facilities Plan* project detail page. Financing should only be included for facilities where, based upon staff's estimate, the immediacy of need for the facility requires debt financing. Or in the alternative, should financing be entered into on a facility, the impact fees should be recalculated to reflect those actual costs. In such cases, the debt service payments would be discounted to today's cost to account for the diminishing value of the dollar and would be in keeping with the cost methodology used in this study to show projects in current costs. To consider the face value of bond payments when determining costs, on the other hand, would be inaccurate as it would treat the value of a dollar today the same as the value of a dollar twenty years from now. Such an approach would tend

to overvalue the costs of debt service requirements and therefore cause an agency to overcharge on its DIFs. However, no project within this DIF Report contains debt service.

OTHER ISSUES

There are those who claim that the addition of DIFs unfairly creates an inflated resale price for existing residences. The argument is that if the public agency adopts a $20,000 to $25,000 development impact fee per detached dwelling, then the price for an existing dwelling is *artificially* increased by the same amount. We will use the example of a detached dwelling detached unit that cost the developer $200,000 to construct and complete to a point that the occupancy permit is approved.

Full Cost of a Residential Dwelling. The $200,000 represents only the above ground costs. The true and actual cost of a new dwelling is the cost of acquiring the parcel, necessary government approvals and permits, construction supplies, labor, debt service on the above, on-site [1] public improvements, and the cost of extending public services to that dwelling.

These public service extension costs include (but are not limited to:

- The addition of law enforcement personnel requiring the expansion of the police station, response vehicles and specialty equipment.
- Additional fire stations, response vehicles and specialty rescue equipment.
- Widening of road segment of traffic arterials, collectors, bridge and additional signals.
- Additional capacity in downstream storm drainage collection pipes and the treatment of storm water.
- Additions to water delivery capability, including source, treatment, storage and delivery.
- Additions to the sewage capability, including collection, treatment and disposal.
- Additions to the maintenance capabilities (i.e., municipal corporation yard and maintenance vehicles) necessary to maintain the above added infrastructure.
- Additional library, aquatics center, public meeting and developed park space for recreational/social purposes.

Thus while the cost of constructing the above ground portion of a detached dwelling unit may be $200,000, the previously identified "downstream" costs may be in the area of $20,000 to $25,000 per detached dwelling unit or in the area of 10% to 12% of the above ground cost.

[1] On-site improvements include local streets and medians, curbs and gutters, sewer lines, water lines, street lights, storm gutter or drainage pipes, electrical power lines and all of the other requirements of the City's development code on privately-held developments, hence the reference of "On-site".

If this argument is not clear, picture a 2,800 square foot detached dwelling, costing $200,000 to construct the above ground structure, located in the middle of an empty square mile, no roads, no utility service, no public safety response, no flood control and no recreational facilities. What is the market value of this detached dwelling? Probably not even the $200,000 that it cost to construct the structure. All of a sudden, the $20,000 impact fee for the infrastructure needed to support that one residential unit and this seems like a bargain. In short, new development needs an existing system of municipal infrastructure to hook up to.

Thus, the true and complete *cost* of a new detached dwelling unit is the cost of constructing the structure and the cost of extending the municipal services to the dwelling regardless of who pays for the actual costs of extending those services. To some degree these service-related infrastructure costs have been recognized, the only question remaining is who should for pay them, existing or new residents?

Effect on Market Price. Again, let us assume that a cumulative $20,000 to $25,000 impact fee imposed upon *new* detached dwelling construction increases the market price of an *existing* detached dwelling unit. Wouldn't this just be the recognition that the existing detached dwelling already has those physical links to the municipal services? A slightly different way of looking at this argument is that the existing family residences each have a "share" in a municipal corporation[2] and the share is valued at the cost of the connection to the various municipal utilities, transportation system, flood protection and public safety. It is a logical step then to require any newly constructed detached dwelling to purchase a "share" at an equal cost.

CHAPTER ORGANIZATION

Within each "hard infrastructure" Chapter (Chapters Three through Eight and Ten) there will be a minimum of three and a maximum of four cost/fee tables. They will be:

The first schedule, the ***Allocation of Project Cost Estimates*** identifies the projects, their costs and the relationship, in an allocation percentage, to future development. These schedules will begin with the number x.1 as in 3.1, 4.1, 5.1 etc.).

GC – Minimum Needs-based Impact Fee - This schedule will calculate the DIF schedule that would need to be adopted to meet the minimal capital needs identified in the Report (on the second schedule at the end of the Chapter, i.e., 3.2, 4.2, 5.2 etc.) for that infrastructure but limited to the General City needs. Strictly speaking this schedule is a calculation of the development impact **costs**, suitable to be adopted as development impact **fees**, by the legislative body, in this case the Ontario City Council

With adoption of this level of DIFs, one could claim that new development is occurring without any additional cost to the existing residents and businesses. You could not, however, necessarily claim that new development is paying its fair share.

2 Not unlike a private corporation.

Existing Community Financial Commitment Comparison This schedule, while not an impact fee calculation, identifies the cost (in current nominal dollar value) of the existing infrastructure, including land, physical improvements and capital equipment. The distribution of this replacement value equity total over the existing developed community is the average amount that has been invested by the current community of residents and businesses and is a good indication, or comparison, with what could be imposed upon new development. This financial commitment will be expressed in terms of the cost to construct or acquire the assets at current replacement costs. Significant differences between this schedule and the GC Minimum Needs-based DIF rate schedule would certainly be worth additional analysis. These Schedules would be numbered 3.3, 4.3, 5.3, etc.

If the average equity (for a detached dwelling for example) on this *Existing Commitment Financial Commitment Comparison* Table is greater than the average cost on the previous *Minimum Needs-based* Table, then that infrastructure system is front-ended with more of the system, say 80% of it has been constructed while only at 50% of General Plan build-out and it likely has excess capacity at that point in time. The excess capacity is the result of earlier residents and businesses of the community having put more of the system into place than will be necessary by the remaining un-built portions of the community. The existing community has advanced money to build capacity into the infrastructure system to meet the needs of residents and businesses not yet there. This table is intended to be instructive rather than legal.

OR Minimum Needs-based Impact Fee - This schedule will identify the DIFs that would need to be adopted to meet the basic capital needs identified in the Report for that infrastructure but limited to the Ontario Ranch needs. Given the nearly complete vacancy of the existing parcels in the area and that new private development will install or pay for all required public improvements, one could claim that new development is indeed paying its *fair share.*

Distribution of Existing Impact Fee Fund Balance. The existing City-wide DIFs have a combined Fund Balance of $76.3 million (reserved separately by infrastructure and by the GC/OR areas) and each was created to finance various infrastructure needed as new residents and businesses locate in newly created residential dwellings and buildings. Some of the DIF funds have a positive balance and some a negative balance. There are no specific restrictions on the monies, beyond the restriction that they be used on improvements within the Fund title and committed within a five-year time frame. The *Master Facilities Plan,* when adopted, suffices for that commitment.

Use of Textual Acronyms. *Development Impact Fees* will henceforth often be referred to as **DIFs.** *General City* will often be referred to as **GC** and *Ontario Ranch* will often be referred to as **OR.** The *Master Facilities Plan* will often be referred to as the **MFP**.

END OF CHAPTER TEXT

Chapter 2
Demographics and Findings

This Chapter represents the beginning and end of the DIF calculation process. It begins with an inventory of fully developed, undeveloped and under-developed units and acreage within the City and concludes with a summary of recommended DIF schedules with detailed infrastructure explanations in the following chapters of this Report. This 2021-22 update includes a significant GIS-based recalculation of the Land Use Database (Table 2-1) on page 14. This had not been undertaken in over 10 years and has had an effect on the anticipated demands and project costs.

LAND USE ASSUMPTIONS

This Report contains an inventory of fully developed, undeveloped and underdeveloped land within the City limits of Ontario and is based upon the City's most recent General Plan update. The *Undeveloped* and the *Underdeveloped* delta land inventory, identified as *Potential Development,* combine to form the base for the distribution of the estimated costs of the service-expanding capital projects necessary to accommodate that same anticipated development. Without the expansion projects, the City would be unable to accommodate that new development, effectively halting it. The *developed* land inventory forms the base for distributing the replacement cost of the existing infrastructure. This action provides the basis for comparison with the proposed DIF schedules and for the *de facto* identification of the many existing Levels of Service (LOS) currently provided by the City's existing infrastructure which is conservatively valued at between $2.0 and $3.0 billion.

In January 2010, the City Council adopted The Ontario Plan (TOP), a General Plan update setting forth a new vision for the City over the next 30 years. The vision included the densification and intensification of existing land uses in key growth areas of the City, focusing in the I-10 corridor and the Ontario Ranch. The vision incorporated modifications that effect the Development Impact Fee formulation including, but not limited to, the following:

1. Several land use categories were combined into one category and/or were eliminated (Airport Industrial, East Holt Study Area, Planned Commercial, Planned Industrial, etc.);

2. New land use categories were introduced with TOP adoption, including High Density Residential and Business Park;

3. Residential densities were increased in the growth areas. Previously, the highest density allowed was up to 25 units per acre for the majority of areas, with a few small areas achieving 60 units per acre (downtown apartments). TOP provides a new density range for High Density Residential up to 45 dwelling units per acre and, in the Mixed Use designation, densities up to 125 dwelling units per acre; and

4. Floor Area Ratios (FAR) were increased in commercial, office and industrial categories.

Table 2-1, is the resulting inventory of all private land uses contained within the current City limits split by what are referred to as General City and Ontario Ranch (essentially the area of the City that is south of Riverside Drive) and are based on the General Plan's land use inventory, a staff analysis of privately held parcels in both of the General City area and the Ontario Ranch area.

Table 2-1 consists of three horizontal blocks of information from the top to the bottom, they are:

Total - Land-use Database – General City and Ontario Ranch - This block of information identifies the amount of developed and undeveloped land in terms of acres and units for the City's entire City limits and is the sum of the two areas identified following.

Land-use Database within the City's General City Area - Net This block of information identifies the existing development and development opportunities within the General City area of the City in terms of acres and appropriate units. The information in the *Existing Development* column will be used to identify the current investment to compare the proportionality of the proposed DIFs as previously described in Chapter One. The *Potential Development* column will be used to distribute the cost of infrastructure improvements needed to accommodate development in the General City area to those generating the need for those same improvements. The area is the sum of three General City Sub-areas (detailed in Appendix B). The three sub areas include, *GC-Existing Vacant*, *GC–Demolition* and *GC–Redeveloped* with the final two representing the demolition of existing private structure and the rebuilding of new private structure with a net increased amount of units or square feet.

40% Redevelopment. Extensive development has taken place in the GC over the past *30* years. Based on the previously adopted general plans, development was capped at a lower intensity/density than envisioned by TOP. As a result, many properties are considered underutilized by today's standards. In order to achieve ultimate build-out identified in TOP, many of the industrial sites would have to be razed and re-built to current FAR levels. Given the building life cycles, financing, and investments made to date, that level of recycling is not practical for the foreseeable future. As a result, staff has reviewed the information and considered 40% redevelopment as a reasonable factor for the planning period.

Land-use Database within the City's Ontario Ranch Area - The Undeveloped column will be used to distribute the cost of infrastructure improvements needed to accommodate development in the Ontario Ranch area of the City to those generating the need for (and benefitting from) those same improvements. There will be no proportionality analysis for Ontario Ranch area due to the special circumstance based upon its annexation in November 1999 to the City for purposes of accommodating development of this eight to nine square mile area.

Since it is a matter of merely accommodating the private development of vacant land, the City has little if any reason to create any additional deficiencies in its GC infrastructure by expending already limited City revenue resources on new infrastructure. Additionally, there

may be some higher LOS standards applied to the Ontario Ranch area than the existing General City area, due to more current technologies, and only the Ontario Ranch development community will accrue the benefit of those higher standards. An example would be the recycled water efforts.

OR Expanded Units. As mentioned previously, the adoption of The Ontario Plan introduced the densification and intensification of land uses in the OR. Previously, the General Plan estimated 54,428 residential units with an average maximum density of 17.1 dwelling units per acre. TOP approval increased the density up to 23 dwelling units per acre in the Medium Density Residential category and provided densities up to 30 dwelling units per acre in the High Density /Mixed Use categories. The Ontario Ranch area will generate approximately 71.4% (or 179,426) of the anticipated 251,302 additional residents at General Plan Build-out.

A greater level of land use database detail is available in Appendix B – Expanded Land-use Database.

[This space required to place the entire Table 2-1 on one page]

Table 2-1
Detailed Land Use Inventory

Total - Land-use Database General City & Ontario Ranch	Existing Development		Potential Development		Total General Plan Build-out	
	Acres	# of Units	Acres	# of Units	Acres	# of Units
Detached Dwellings	6,328	31,997	1,685	12,793	8,013	44,790
Attached Dwellings	722	13,097	1,499	32,372	2,221	45,469
High Density Dwellings	193	4,812	1,037	34,889	1,230	39,701
Mobile Home Dwellings	204	2,097	14	95	218	2,192
Commercial Lodging Units	143	5,810	12	546	155	6,356
Retail/Service Uses	487	18,522,286	1,271	13,916,010	1,758	32,438,296
Office Uses	310	9,959,192	936	23,565,934	1,246	33,525,126
Business Park Uses	777	10,271,628	769	16,922,869	1,546	27,194,497
Industrial Uses	6,890	112,134,057	1,110	47,631,804	8,000	159,765,861
Private Institutional Use	419	2,318,711	52	1,132,560	471	3,451,271
Total - City Limits	**16,473**		**8,385**		**24,858**	
Private Residences	**7,447**	**52,003**	**4,235**	**80,149**	**11,682**	**132,152**
Commercial Lodging Rooms	**143**	**5,810**	**12**	**546**	**155**	**6,356**
Business Square Feet	**8,883**	**153,205,874**	**4,138**	**103,169,177**	**13,021**	**256,375,051**

Land-use Database within City's General City Area - Net	Existing Development		Potential Development		Total General Plan Build-out	
	Acres	# of Units	Acres	# of Units	Acres	# of Units
Detached Dwellings	4,733	27,449	262	1,131	4,995	28,580
Attached Dwellings	641	12,050	183	2,688	824	14,738
High Density Dwellings	193	4,812	598	21,807	791	26,619
Mobile Home Dwellings	204	2,097	14	95	218	2,192
Commercial Lodging Units	143	5,810	3	150	146	5,960
Retail/Service Uses	477	18,418,611	992	8,164,415	1,469	26,583,026
Office Uses	310	9,959,192	822	20,895,746	1,132	30,854,938
Business Park Uses	741	9,587,138	341	6,969,626	1,082	16,556,764
Industrial Uses	6,610	106,400,598	441	30,650,125	7,051	137,050,723
Private Institutional Use	419	2,318,711	2	43,560	421	2,362,271
Sub-total - General City	**14,471**		**3,658**		**18,129**	

Land-use Database within City's Ontario Ranch Area	Existing Development		Potential Development		Total General Plan Build-out	
	Acres	# of Units	Acres	# of Units	Acres	# of Units
Detached Dwellings	1,595	4,548	1,423	11,662	3,018	16,210
Attached Dwellings	81	1,047	1,316	29,684	1,397	30,731
High Density Dwellings	-	0	439	13,082	439	13,082
Mobile Home Dwellings	-	0	-	0	-	0
Commercial Lodging Units	-	0	9	396	9	396
Retail/Service Uses	10	103,675	279	5,751,595	289	5,855,270
Office Uses	-	0	114	2,670,188	114	2,670,188
Business Park Uses	36	684,490	428	9,953,243	464	10,637,733
Industrial Uses	280	5,733,459	669	16,981,679	949	22,715,138
Private Institutional Use	-	0	50	1,089,000	50	1,089,000
Sub-total - Ontario Ranch	**2,002**		**4,727**		**6,729**	

DIF Land-use Types Definitions. This Report classifies private development into one of four residential *DIF Land-use Types* or one of six different business-based *DIF Land-use Types.* For purposes of the Report, the term *DIF Land-use Type* will refer to one of the ten broad types under which the City's specifically defined zoning code *land-uses* will fall into. These *DIF Land-use Types* are defined following:

Residential Land Uses:

- **Detached Dwelling Units** - This DIF Land-use Type is generally defined as a detached unit and corresponds to an allowable use within the City's land-use designation of ***Rural Residential (RR), Low Density Residential (LDR)*** and limited amounts of ***Low/Medium Density Residential (LMDR)***. This category would include the construction of the unusual detached condominium or detached townhome and a manufactured unit on an individual lot.

- **Attached Dwelling Units** – This larger category consists of apartments, townhomes, condominiums or any other living unit that is attached to any other unit. It generally corresponds to an allowable land-use designation of ***Low-Medium Density Residential (LMDR)*** and ***Medium Density Residential (MDR)***. Some of the residential units proposed within ***Mixed Use (MU)*** development could be expected in this DIF Land-use Type.

- **High Density Residential Units** - Corresponds to the City's land-use designations of ***High Density Residential (HDR)***. This is a new DIF Land-use Type from the 2001 Report and was included due to rising increase in construction of such units typically around 25 to 30 units per acre. Some of the residential units proposed within ***Mixed Use (MU)*** development could be expected in this DIF Land-use Type.

- **Mobile Home Dwelling Residential Units** - This DIF Land-use Type encompasses portions of ***Medium Density Residential*** land-use designation in the Zoning Code. No applications for this type is anticipated, but given the number of existing mobile home parks, the calculation was included for purposes of the proportional analysis.

  It is important to note that the removal of one existing manufactured unit (or existing mobile home dwelling) and the replacement with a similar dwelling does not constitute a DIF imposition event, it is merely a replacement of existing demand. The construction of the mobile unit pad is the DIF imposition event. No such units are expected in the City's OR area so no such category was calculated.

Business/Commerce Land Uses:

- **Commercial Lodging** (keyed) **Units** - This *DIF Land-use Type* corresponds to a limited portion (as an allowable use) generally within some business use

designations such as ***Mixed Use (MU)***, ***General Commercial (GC)***, ***Office Commercial (OC)*** and completely within the ***Hospitality (HOS)*** designation.

- **Retail/Service Uses** - As utilized in this Report, Commercial uses include the general type of retail services and thus includes outlets ranging from restaurants to auto repair shops to shopping centers. This category includes the ***Neighborhood Commercial (NC)***, ***General Commercial (GC)*** and the ***Office Commercial (OC)*** zones and in some cases the ***Hospitality (HOS)*** designation.

- **Office Uses** - As utilized in this Report, Office uses would include the general category of professional and medical office. This category includes the ***General Commercial (GC)***, ***Office Commercial (OC)*** and ***Business Park (BP)*** zone.

- **Business Park Uses** - This *DIF Land-use Type* is largely limited to the single ***Business Park (BP)*** land-use zone.

- **Industrial/Manufacturing Uses** - This *DIF Land-use Type* contains all businesses engaged in heavy manufacturing or industrial development in the single ***Industrial (IND)*** zone.

- **Institutional Uses** - This *DIF Land-use Type*, based upon the specific use, may be approved in just about any of the City's previously mentioned zones. It consists of private schools, private meeting places, places of worship and similar private facilities

Definitions of DIF Application Categories Status. For each of the DIF land-use categories detailed above and on Table 2-2, acreage is categorized as either *Existing Development* or *Potential Development*. Definitions regarding the status of each land use are as follows:

Existing Development Acres/Units – This column title reference identifies land in the City which is developed or land which has received a building permit but may not yet be constructed. Acreage in this category may include non-conforming use areas of the City which contain extensive development prior to an annexation or before changes to the General Plan were made.

Development Opportunities Acres/Units - Refers to all non-public vacant acreage located within the City. This category also includes any vacant parcel and 40% of those anticipated to be redeveloped and upsized in the long-term future or any large parcels with some development on it with subdivision opportunities. Table 2-2, following, is a summary of Appendix B.

Table 2-2 provides a summary of the detailed land use inventory, limited to privately held property, provided on Table 2-1. Staff's land use inventory reveals that there are presently 16,473 acres of privately-held developed land within the City's current City boundaries. Conversely, there remain 8,385 acres of vacant or substantially undeveloped land in the City, with most of it, some 4,727 acres, in Ontario Ranch. Acreage designated for Detached Dwelling development constitutes the greatest amount (17.0%) of vacant acreage of all the land uses.

Table 2-2
City of Ontario's General City and Ontario Ranch Areas
Summary of Developed and Potential Development Acreage

DIF Land-use Type	Existing Developed Parcels	% of Total Private Acres	Development Opportunity Parcels	% of Total Private Acres	Total Private Acres
Detached Dwelling Units	6,328	25.5%	1,685	6.7%	8,013
Attached Dwelling Units	722	2.9%	1,499	6.0%	2,221
High Density Dwelling Units	193	0.8%	1,037	4.2%	1,230
Mobile Home Dwelling Units	204	0.8%	14	0.1%	218
Commercial Lodging Units	143	0.6%	12	0.0%	155
Retail/Service Uses	487	2.0%	1,271	5.1%	1,758
Office Uses	310	1.2%	936	3.8%	1,246
Business Park Uses	777	3.1%	769	3.1%	1,546
Industrial Uses	6,890	27.7%	1,110	4.5%	8,000
Institutional Uses	419	1.7%	52	0.2%	471
Total Acres	16,473	66.3%	8,385	33.7%	24,858

POPULATION PROJECTIONS

A second component in determining the magnitude of impact of future development and the necessary facilities needed to mitigate that impact is a realistic assessment of the build-out population of the City. Many of the facilities contained in this Report are sized according to either the estimated population at theoretical "build-out" or upon service levels which are based in part upon an estimation of the population to be served. Library facilities, parks and recreation facilities and community center facilities and equipment are examples of cost areas which rely heavily on population projections to determine space and facility needs. Park standards are usually stated in terms of the number of acres of park land per 1,000 persons, for instance.

There are at least two generally accepted methods for projecting future population levels in a City: (A) past growth trends projected forward and (B) population holding capacity based on the General Plan land-use element. Each of these methods can be useful even though both possess certain limitations.

There are several serious flaws in projecting the build-out population of a community using the past growth trends methodology. While this method is relatively simple and therefore easy for the general public to understand, it does not give consideration to when an area is actually built out. Eventually there comes a point in time where the amount of available land to build on is negligible. This technique does not help explain when that point is reached.

Also, the past growth trends approach is not sensitive to policy changes made by Council or land use issues contained in the City's General Plan. For these reasons, this technique is more

useful in projecting short-term population levels and should not be used to forecast the built-out population of an area.

This Report relies on the methodology of ***holding-capacity*** (described in the following section) to project future service levels and facility requirements.

Holding Capacity Analysis. The methodology used in this Report to forecast the built-out population of Ontario is the current holding capacity approach. This method calculates the sum of existing development and potential development allowable under current land use regulations, using average densities found in the City.

The first step in projecting the City's population using the holding capacity approach is to inventory the remaining undeveloped acres within the City limits, which was previously accomplished in Tables 2-1 and 2-2 of this Chapter. The next step is to estimate the potential dwelling units allowed per acre and then multiply the potential number of units by the average number of residents per unit.

The number of persons per unit for new residential units is based on the 2000 U.S. Census and ranges from 3.806 and 3.373 persons for detached dwellings and attached dwelling respectively High density dwelling units have 2.669 persons per unit and there are 3.175 persons in each mobile home dwelling unit. The 2000 Census data was selected over the recently released 2010 Census due to a change in reporting the data, eliminating the same calculation and some conflicting data. Additionally, the results of the 2010 census were impacted by the economic factors of the time which appears to have increased dwelling density data temporarily higher.

Based on these 2000 Census dwelling density data, future residential development can be expected to generate somewhere from 240,519 to 251,302 additional residents (3) to the City of Ontario, joining the 182,004 citizens already living in City, resulting in a total estimated population at build-out (based upon the inclusion of existing City limits) of approximately 427,915 residents. The higher number is based upon full occupancy of all new dwelling units and the lower figure is based upon the historical occupancy levels at the time of the census count. The 427,915 is the average of the two.

Table 2-4 following uses the additional housing projected in the Land-use Database and estimates the additional potential population for the City of Ontario through build-out for both Old and Ontario Ranch. The number of potential new dwelling units was calculated by multiplying the amount of vacant acreage for each land use zone by the average densities (i.e., number of units allowed per acre) indicated in the City's General Plan.

The estimated General Plan build-out population of 427,915 (average between high and low) or more residents using this holding capacity approach is typically lower than the population forecasts based on the mathematical models described previously. This implies that either the City's period of residential build-out will actually take 25 to 30 years or that the City's growth rate will increase from recent historical levels. Given that the Ontario Ranch area has some 4,727 net acres to develop, this latter scenario is probably more likely to occur. As the residentially

[3] Depending upon the vacancy factor based upon the average of 96.4% for all residences.

zoned land remaining to be developed continues to be built on during the next thirty years, the City is likely to see the number of new dwelling units developed decrease each year.

[This space left vacant to place the following table on a single page].

Table 2-3
City of Ontario
Average Dwelling Occupancy, by Type
(2000 United States Census Data)

Existing Residential	Total Units	Vacant Units	Occupied Units	Total Number of Occupants	Average Occupancy	Percentage Occupied
Detached Dwelling Units						
Detached Dwellings	26,739	617	26,122	99,423	3.806	97.69%
Attached Dwelling Units						
Attached Dwelling Units	3,628	260	3,368	12,382	3.676	92.83%
Duplex to Quadplex Units	3,955	123	3,832	14,038	3.663	96.89%
Five to Forty-nine Units	5,904	429	5,475	16,338	2.984	92.73%
Average	13,487	812	12,675	42,758	3.373	93.98%
High Density Dwelling Units						
Fifty or More Units	3,104	102	3,002	8,012	2.669	96.71%
Mobile Home Dwelling Units						
Mobile Home/Trailer	1,989	125	1,864	5,918	3.175	93.72%
Other Dwelling Units						
Other Dwelling Units	75	15	60	110	1.833	80.00%
Existing - State Department of Finance 01/01/21 Population, (2022 not available)						182,004

G.P. Build-out Population At Historic Occupancy Rates	*Anticipated Units*	*Occupancy Rate*	*Probable Occupancy*	*Dwelling Density*	*Anticipated Population*	
Potential Detached Dwellings	12,793	97.69%	12,497	3.806	47,564	
Potential Attached Dwellings	32,372	93.98%	30,423	3.373	102,617	
Potential High Density Dwellings	34,889	96.71%	33,741	2.669	90,055	
Potential Mobile Home Dwellings	95	93.72%	89	3.175	283	
Population to be Added Via Development at Historic Occupancy Rates					240,519	240,519
Current State of California Department of Finance Population						182,004
Potential "Build-out" Population, at Historic Vacancy Rates.						422,523

G.P. Build-out Population At 100% Occupancy Rate	*Anticipated Units*	*Occupancy Rate*	*Probable Occupancy*	*Dwelling Density*	*Anticipated Population*	
Potential Detached Dwellings	12,793	100.00%	12,793	3.806	48,690	
Potential Attached Dwellings	32,372	100.00%	32,372	3.373	109,191	
Potential High Density Dwellings	34,889	100.00%	34,889	2.669	93,119	
Potential Mobile Home Dwellings	95	100.00%	95	3.175	302	
Population to be Added Via Development at 100% Occupancy					251,302	251,302
Existing - State Department of Finance 01/01/21 Population, (2022 not available)						182,004
Potential Maximum "Build-out" Population.						433,306

Population at General Plan Build-out @ Low per Dwelling Resident Densities	422,523
Population at General Plan Build-out @ High per Dwelling Resident Densities	433,306
Average Population at General Plan Build-out	427,915

SUMMARY OF FINDINGS

City staff and RCS have identified over $3.91 billion in needed and master planned capital improvement projects required through the City's General Plan build-out of both GC and OR, including both projects related to existing deficiencies and those needed solely to support future growth. Roughly 76.1% or about $2.97 billion of the total project list is required as the result of accommodating development. Due to a significant amount of outstanding developers credits and negative fund balance, less than 1% of the identified development-generated capital projects can be funded by an existing balance in the various existing DIF receipts (or fund balance). Table 2-4 indicates the capital project costs by area.

Table 2-4
Total City-wide General Plan Build-out
Capital Requirements
(rounded)

Infrastructure Type	General City	Ontario Ranch	Total - All Projects
Law Enforcement	$31,084,134	$42,020,603	$73,104,737
Fire Suppression	$27,776,396	$76,845,342	$104,621,738
Circulation System	$173,321,022	$346,386,801	$519,707,823
Storm Drainage	$68,710,652	$138,667,242	$207,377,894
Water System	$98,736,620	$359,056,789	$457,793,409
Sewer System	$26,364,639	$77,500,028	$103,864,567
Refuse Collection	$24,033,932	$40,922,641	$64,956,573
General Government	$9,972,635	$13,603,355	$23,575,970
Library Expansion	$26,049,081	$67,278,476	$94,227,557
Public Meeting Space	$37,614,782	$93,905,435	$131,520,217
Aquatics Facilities	$2,342,353	$5,847,691	$8,190,044
Park Land Development	$294,033,194	$734,054,897	$1,028,088,091
Land Use Settlement	$0	$27,225,956	$24,124,064
Fiber Optic System	$0	$128,350,091	$128,350,091
Sub-total DIF Related	$820,939,340	$2,151,665,327	$2,972,604,667
Non-DIF Related Projects			$935,161,545
Total - Projects (rounded)			$3,907,766,212

The adoption of the recommended DIF schedule amounts supported by the calculations in this Report (Schedule 2.1) would finance a great deal of this areas development-generated capital facilities by raising upwards to $2.9 billion in new DIF revenues (to be combined with the existing DIF fund balance/Outstanding Credits of $38.5 million) available to fund growth-related capital projects or not place an unnecessary draw on other City revenues such as utility rate receipts.

DIFs for the City's General City Area. Based on these costs and the schedules found at the end of each of the remaining chapters of this Report, costs attributable to future development were derived on a per unit basis for residential land uses and on a per square foot of pad basis for business land uses. Schedule 2.1, found at the end of this Chapter, provides a summary of the recommended GC DIF schedules for each type of infrastructure and land use category. The total recommended maximum DIFs for each of the ten DIF Land Use Types within General City are summarized following.

Table 2-5
Summary of Proposed Development Impact Fees
for the City's General City Area

DIF Land Use Type	Recommended Development Impact Fees
Detached Dwelling Unit	$29,293/Unit
Attached Dwelling Unit	$23,365/Unit
High Density Dwelling Unit	$18,140/Unit
Mobile Home Dwelling Unit	$23,053/Unit
Commercial Lodging Keyed Unit	$4,069/Unit
Retail/Service Uses Square Foot	$8.806/S.F.
Office Uses Square Foot	$5.026/S.F.
Business Park Uses Square Foot	$5.150/S.F.
Industrial Uses square Foot	$2.994/S.F.
Institutional Use Square Foot	$7.698/S.F.

Specific DIF schedule rates for each land use can be found at the end of each chapter relating to each infrastructure. Schedule 2.1 at the end of this Chapter also identifies the probable development impact fee revenue, the estimated capital cost total and the difference, by individual infrastructure type (e.g. fire).

DIFs for the City's Ontario Ranch Area. Based on these costs and the schedules found at the end of each of the remaining chapters of this Report, costs attributable to future development were derived on a per unit basis for residential land uses and on a per square foot of pad basis for business land uses. Schedule 2.2, found at the end of this Chapter, provides a summary of the recommended OR DIF schedules for each type of infrastructure and land use category. The total recommended maximum DIFs for each of the nine DIF Land Use Types within Ontario Ranch are summarized following.

Table 2-6
Summary of Proposed Development Impact Fees
for the City's Ontario Ranch Area

DIF Land Use Type	Recommended Development Impact Fees
Detached Dwelling Units	$44,213/Unit
Attached Dwelling Units	$32,690/Unit
High Density Dwelling Units	$24,392/Unit
Commercial Lodging Units	$12,124/Unit
Retail/Service Uses	$19,524/Unit
Office Uses	$14.802/S.F.
Business Park Uses	$12.066/S.F.
Industrial Uses	$8.758/S.F.
Institutional Uses	$14.547/S.F.

Specific DIF schedule rates for each land use can be found at the end of each chapter relating to each infrastructure. Schedule 2.2 at the end of this Chapter also identifies the probable impact fee revenue, the capital cost total and the difference, by individual infrastructure type (e.g. fire).

Schedules 2.1 and 2.2 each require two pages to summarize the many infrastructures, identify the individual Infrastructure DIFs and combined DIFs by DIF Land-use Type and provide a calculation of the potential collection through build-out at the proposed *Minimum-Needs*-based *DIF* schedules and the cost of the total infrastructure needs.

FORMAT OF THIS REPORT

The following chapters of this Report contain the detailed information relative to the calculation of DIFs recommended by RCS for the entire City. Appropriate textual explanations are contained in each chapter with a chapter devoted to each of the fourteen sets of cost schedules, (twelve sets for General City) listed following, and four appendices, one of which contains a summary of DIF recommendations.

CHAPTER 3 - Law Enforcement Facilities, Vehicles, and Equipment
CHAPTER 4 - Fire Suppression Facilities, Vehicles, and Equipment
CHAPTER 5 - Circulation (Streets, Signals and Bridges) System
CHAPTER 6 - Storm Drainage Collection System Facilities
CHAPTER 7 - Water Source, Storage and Distribution System

CHAPTER 8 - Sewer Collection System
CHAPTER 9 - Refuse Collection Facilities and Fleet
CHAPTER 10 - General Facilities, Vehicles and Equipment
CHAPTER 11 - Library Facilities and Collection Items
CHAPTER 12 - Public Use (Community Center) Facilities
CHAPTER 13 - Aquatics Facilities
CHAPTER 14 - Park Land Acquisition and Park Facilities Development
CHAPTER 15 - Ontario Ranch Open Space Land Acquisition
CHAPTER 16 - Fiber Optics Communication System

APPENDIX A - Summary of Recommendations.
APPENDIX B - Expanded Land-use Database.
APPENDIX C - Distribution of Common City Yard Improvement Costs and City Yard Reserve Transfer Percentages.
APPENDIX D - New and General City Development Impact Fee Policies
APPENDIX E - Major Four Hard Infrastructure Costing Adjustments
APPENDIX F - AB-602 Considerations

NOTE REGARDING TEXTUAL MATHEMATICS: It is important to note that the use of a computer provides for calculations to a large number of decimal points. Such data, when included in text and supporting textual tables, has often been rounded to usually no more than two or three decimals for clarity and thus may not be replicated to the necessary degree of accuracy as the spreadsheet schedules at the end of each chapter. If questions arise between the tables and schedules, the schedules at the end of the chapter will prevail as the more accurate. The schedules at the end of the Chapter are instructive as to recommendations. The tables within the chapter texts are summaries of the schedule at the end of the chapter and are illustrative.

END OF CHAPTER TEXT

Schedule 2.1

City of Ontario, General City, at General Plan Maintenance Costs, Reflecting 2021-22 Amendments
Summary of Development Impact Fees By Type of Fee (continued on next page)
(Costs/Fees per Residential Type Dwelling Unit, or Business Type Square Foot)

Land-use Category	Law Enforcement Facilities	Fire Protection Facilities	Streets, Signals and Bridges	Storm Drainage Facilities	Water Distribution Facilities	Sewer Collection Facilities	Refuse Collection Equipment	General Government Facilities
	Schedule 3.2	Schedule 4.2	Schedule 5.2	Schedule 6.3	Schedule 7.2	Schedule 8.2	Schedule 9.1	Schedule 10.2
Calculated Development Impact Costs								
Detached Dwellings	$613	$728	$2,224	$2,563	$3,113	$577	$704	$303
Attached Dwellings	$641	$693	$1,485	$826	$2,130	$505	$609	$107
High Density Dwellings	$641	$693	$919	$692	$1,437	$433	$305	$68
Mobile Home Dwellings	$596	$817	$1,159	$1,492	$2,129	$505	$609	$340
Commercial Lodging Units	$567	$462	$1,173	$425	$859	$336	$196	$51
Retail/Service Uses	$0.865	$0.518	$4.494	$0.447	$1.531	$0.263	$0.478	$0.210
Office Uses	$0.279	$0.319	$2.568	$0.537	$0.766	$0.284	$0.181	$0.092
Business Park Uses	$0.044	$0.036	$2.672	$1.297	$0.617	$0.141	$0.238	$0.105
Industrial Uses	$0.044	$0.036	$1.377	$1.132	$0.165	$0.055	$0.131	$0.054
Private Institutional Use	$0.300	$0.114	$2.934	$3.292	$0.579	$0.164	$0.209	$0.106
Potential Collection with Recommended Impact Fee Schedule								
Detached Dwellings	$693,303	$823,368	$2,515,344	$2,898,753	$3,520,803	$652,587	$796,224	$342,693
Attached Dwellings	$1,723,008	$1,862,784	$3,991,680	$2,220,288	$5,725,440	$1,357,440	$1,636,992	$287,616
High Density Dwellings	$13,978,287	$15,112,251	$20,040,633	$15,090,444	$31,336,659	$9,442,431	$6,651,135	$1,482,876
Mobile Home Dwellings	$56,620	$77,615	$110,105	$141,740	$202,255	$47,975	$57,855	$32,300
Commercial Lodging Units	$85,050	$69,300	$175,950	$63,750	$128,850	$50,400	$29,400	$7,650
Retail/Service Uses	$7,062,219	$4,229,167	$36,690,881	$3,649,494	$12,499,719	$2,147,241	$3,902,590	$1,714,527
Office Uses	$5,829,913	$6,665,743	$53,660,276	$11,221,016	$16,006,141	$5,934,392	$3,782,130	$1,922,409
Business Park Uses	$306,664	$250,907	$18,622,841	$9,039,605	$4,300,259	$982,717	$1,658,771	$731,811
Industrial Uses	$1,348,606	$1,103,405	$42,205,222	$34,695,942	$5,057,271	$1,685,757	$4,015,166	$1,655,107
Private Institutional Use	$13,068	$4,966	$127,805	$143,400	$25,221	$7,144	$9,104	$4,617
Total	$31,096,738	$30,199,506	$178,140,737	$79,164,432	$78,802,618	$22,308,084	$22,539,367	$8,181,606
Potential GC DIF Receipts	$31,096,738	$30,199,506	$178,140,737	$79,164,432	$78,802,618	$22,308,084	$22,539,367	$8,181,606
Fund Balance and Credits (+/-)	$1,441,855	($12,052,680)	($35,947,387)	($12,003,508)	($23,702,856)	($238,423)	$4,530,466	$4,255,805
Potential OR DIF Receipts (2.2)	$42,018,293	$86,496,785	$377,510,870	$157,718,003	$407,068,001	$81,773,471	$38,408,869	$11,150,574
Required Capital Total	$77,797,592	$143,431,375	$1,065,494,324	$299,014,967	$676,417,676	$137,148,406	$64,956,573	$25,903,340
Over/(Under) Collection or Unfunded	-$3,240,706	-$38,787,764	-$545,790,104	-$74,136,040	-$214,249,913	-$33,305,274	$522,129	-$2,315,355

Schedule 2.1

City of Ontario, General City, at General Plan Maintenance Costs, Reflecting 2021-22 Amendments
Summary of Development Impact Fees By Type of Fee
(Costs/Fees per Residential Type Dwelling Unit, or Business Type Square Foot)

Land-use Category	Library Expansion Facilities Schedule 11.1	Public Meeting Facilities Schedule 12.1	Aquatics Center Facilities Schedule 13.1	Parkland Facilities Development Schedule 14.1	Open Space Agreement (Non-DIF) Schedule 15.1	Fiber Optic System (1) Schedule 16.1	Development Impact Fee Total Per Unit or Square Feet
Calculated Development Impact Costs							
Detached Dwellings	$1,302	$1,856	$112	$15,198	Not Applicable	Not Applicable	$29,293 per Unit
Attached Dwellings	$1,154	$1,645	$100	$13,470	Not Applicable	Not Applicable	$23,365 per Unit
High Density Dwellings	$913	$1,302	$79	$10,658	Not Applicable	Not Applicable	$18,140 per Unit
Mobile Home Dwellings	$1,086	$1,548	$94	$12,678	Not Applicable	Not Applicable	$23,053 per Unit
Commercial Lodging Units	No Fee	No Fee	No Fee	No Fee	Not Applicable	Not Applicable	$4,069 per Unit
Retail/Service Uses	No Fee	No Fee	No Fee	No Fee	Not Applicable	Not Applicable	$8.806 per S.F.
Office Uses	No Fee	No Fee	No Fee	No Fee	Not Applicable	Not Applicable	$5.026 per S.F.
Business Park Uses	No Fee	No Fee	No Fee	No Fee	Not Applicable	Not Applicable	$5.150 per S.F.
Industrial Uses	No Fee	No Fee	No Fee	No Fee	Not Applicable	Not Applicable	$2.994 per S.F.
Private Institutional Use	No Fee	No Fee	No Fee	No Fee	Not Applicable	Not Applicable	$7.698 per S.F.
Potential Collection with Recommended Impact Fee Schedule							
Detached Dwellings	$1,472,562	$2,099,136	$126,672	$17,188,938	Not Applicable	Not Applicable	$33,130,383
Attached Dwellings	$3,101,952	$4,421,760	$268,800	$36,207,360	Not Applicable	Not Applicable	$62,805,120
High Density Dwellings	$19,909,791	$28,392,714	$1,722,753	$232,419,006	Not Applicable	Not Applicable	$395,578,980
Mobile Home Dwellings	$103,170	$147,060	$8,930	$1,204,410	Not Applicable	Not Applicable	$2,190,035
Commercial Lodging Units	No Fee	No Fee	No Fee	No Fee	Not Applicable	Not Applicable	$610,350
Retail/Service Uses	No Fee	No Fee	No Fee	No Fee	Not Applicable	Not Applicable	$71,895,838
Office Uses	No Fee	No Fee	No Fee	No Fee	Not Applicable	Not Applicable	$105,022,020
Business Park Uses	No Fee	No Fee	No Fee	No Fee	Not Applicable	Not Applicable	$35,893,575
Industrial Uses	No Fee	No Fee	No Fee	No Fee	Not Applicable	Not Applicable	$91,766,476
Private Institutional Use	No Fee	No Fee	No Fee	No Fee	Not Applicable	Not Applicable	$335,325
Total	$24,587,475	$35,060,670	$2,127,155	$287,019,714	$0	$0	$799,228,102
Probable GC DIF Receipts	$24,587,475	$35,060,670	$2,127,155	$287,019,714	$0	$0	$799,228,102
Fund Balance/Other Revenues	$8,256,956	$8,951,931	$754,867	$24,564,313	$6,805,316	($14,101,895)	-$38,485,240
Potential OR DIF Receipts (2.2)	$61,383,126	$87,507,616	$5,308,022	$716,510,512	$20,433,860	$153,072,535	$2,246,360,537
Required Capital Total	$94,227,557	$131,520,217	$8,190,044	$1,028,088,091	$27,225,956	$128,350,091	$3,907,766,209
Over or (Under) Collection	$0	$0	$0	$6,448	$13,220	$10,620,549	-$900,662,810

Schedule 2.2

City of Ontario, Ontario Ranch, at General Plan Maintenance Costs, Reflecting 2021-22 Amendments
Summary of Development Impact Fees By Type of Fee (continued on next page)
(Costs/Fees per Residential Type Dwelling Unit, or Business Type Square Foot)

Land-use Category	Law Enforcement Facilities	Fire Protection Facilities	Streets, Signals and Bridges	Storm Drainage Facilities	Water Distribution Facilities	Sewer Collection Facilities	Refuse Collection Equipment	General Government Facilities
	Schedule 3.2	Schedule 4.4	Schedule 5.4	Schedule 6.5	Schedule 7.4	Schedule 8.4	Schedule 9.1	Schedule 10.2
Calculated Development Impact Costs/Fees								
Detached Dwellings	$613	$1,458	$4,986	$3,744	$9,711	$1,642	$704	$303
Attached Dwellings	$641	$1,386	$3,329	$1,422	$5,332	$1,246	$609	$107
High Density Dwellings	$641	$1,386	$2,060	$1,196	$2,829	$753	$305	$68
Commercial Lodging Units	$567	$924	$2,629	$810	$4,080	$958	$196	$51
Retail/Service Uses	$0.865	$1.037	$10.075	$1.728	$3.188	$0.299	$0.478	$0.210
Office Uses	$0.279	$0.637	$5.758	$1.521	$2.882	$0.877	$0.181	$0.092
Business Park Uses	$0.044	$0.072	$5.991	$1.490	$2.483	$0.353	$0.238	$0.105
Industrial Uses	$0.044	$0.072	$3.088	$1.482	$2.569	$0.431	$0.131	$0.054
Private Institutional Use	$0.300	$0.229	$6.579	$1.727	$2.339	$0.472	$0.209	$0.106
Potential Collection with Recommended Impact Fee Schedule								
Detached Dwellings	$7,148,806	$17,003,196	$58,146,732	$43,662,528	$113,249,682	$19,149,004	$8,210,048	$3,533,586
Attached Dwellings	$19,027,444	$41,142,024	$98,818,036	$42,210,648	$158,275,088	$36,986,264	$18,077,556	$3,176,188
High Density Dwellings	$8,385,562	$18,131,652	$26,948,920	$15,646,072	$37,008,978	$9,850,746	$3,990,010	$889,576
Mobile Home Dwellings	$0	$0	$0	$0	$0	$0	$0	$0
Commercial Lodging Units	$224,532	$365,904	$1,041,084	$320,760	$1,615,680	$379,368	$77,616	$20,196
Retail/Service Uses	$4,975,130	$5,964,404	$57,947,320	$9,938,756	$18,336,085	$1,719,727	$2,749,262	$1,207,835
Office Uses	$744,982	$1,700,910	$15,374,943	$4,061,356	$7,695,482	$2,341,755	$483,304	$245,657
Business Park Uses	$437,943	$716,633	$59,629,879	$14,830,332	$24,713,902	$3,513,495	$2,368,872	$1,045,091
Industrial Uses	$747,194	$1,222,681	$52,439,425	$25,166,848	$43,625,933	$7,319,104	$2,224,600	$917,011
Private Institutional Use	$326,700	$249,381	$7,164,531	$1,880,703	$2,547,171	$514,008	$227,601	$115,434
Total	$42,018,293	$86,496,785	$377,510,870	$157,718,003	$407,068,001	$81,773,471	$38,408,869	$11,150,574
Potential OR DIF Collection	$42,018,293	$86,496,785	$377,510,870	$157,718,003	$407,068,001	$81,773,471	$38,408,869	$11,150,574
Existing Fund Balance/Other	$1,441,855	($12,052,680)	($35,947,387)	($12,003,508)	($23,702,856)	($238,423)	$4,530,466	$4,255,805
Potential GC DIF Collection (2.1)	$31,096,738	$30,199,506	$178,140,737	$79,164,432	$78,802,618	$22,308,084	$22,539,367	$8,181,606
Required Capital Total	$77,797,592	$143,431,375	$1,065,494,324	$299,014,967	$676,417,676	$137,148,406	$64,956,573	$25,903,340
Over/(Under) Collection or Unfunded	-$3,240,706	-$38,787,764	-$545,790,104	-$74,136,040	-$214,249,913	-$33,305,274	$522,129	-$2,315,355

Schedule 2.2

City of Ontario, Ontario Ranch, at General Plan Maintenance Costs, Reflecting 2021-22 Amendments
Summary of Development Impact Fees By Type of Fee
(Costs/Fees per Residential Type Dwelling Unit, or Business Type Square Foot)

Land-use Category	Library Expansion Facilities Schedule 11.1	Public Meeting Facilities Schedule 12.1	Aquatics Center Facilities Schedule 13.1	Parkland Facilities Development Schedule 14.1	Open Space Agreement (Non-DIF) Schedule 15.1	Fiber Optic System Schedule 16.2	Development Impact Cost Per Dwelling Unit or Business Square Feet
Calculated Development Impact Costs/Fees							
Detached Dwellings	$1,302	$1,856	$112	$15,198	$527	$2,057	$44,213 per Unit
Attached Dwellings	$1,154	$1,645	$100	$13,470	$192	$2,057	$32,690 per Unit
High Density Dwellings	$913	$1,302	$79	$10,658	$145	$2,057	$24,392 per Unit
Commercial Lodging Units	No Fee	No Fee	No Fee	No Fee	$98	$1,811	$12,124 per Unit
Retail/Service Uses	No Fee	No Fee	No Fee	No Fee	$0.210	$1.434	$19.524 per S.F.
Office Uses	No Fee	No Fee	No Fee	No Fee	$0.184	$2.391	$14.802 per S.F.
Business Park Uses	No Fee	No Fee	No Fee	No Fee	$0.186	$1.104	$12.066 per S.F.
Industrial Uses	No Fee	No Fee	No Fee	No Fee	$0.170	$0.717	$8.758 per S.F.
Private Institutional Use	No Fee	No Fee	No Fee	No Fee	$0.198	$2.388	$14.547 per S.F.
Potential Collection with Recommended Impact Fee Schedule							
Detached Dwellings	$15,183,924	$21,644,672	$1,306,144	$177,239,076	$6,145,874	$23,988,734	$515,612,006
Attached Dwellings	$34,255,336	$48,830,180	$2,968,400	$399,843,480	$5,699,328	$61,059,988	$970,369,960
High Density Dwellings	$11,943,866	$17,032,764	$1,033,478	$139,427,956	$1,896,890	$26,909,674	$319,096,144
Mobile Home Dwellings	No Fee	No Fee	No Fee	No Fee	$0	$0	$0
Commercial Lodging Units	No Fee	No Fee	No Fee	No Fee	$38,808	$717,156	$4,801,104
Retail/Service Uses	No Fee	No Fee	No Fee	No Fee	$1,207,835	$8,247,787	$112,294,141
Office Uses	No Fee	No Fee	No Fee	No Fee	$491,315	$6,384,420	$39,524,124
Business Park Uses	No Fee	No Fee	No Fee	No Fee	$1,851,303	$10,988,380	$120,095,830
Industrial Uses	No Fee	No Fee	No Fee	No Fee	$2,886,885	$12,175,864	$148,725,545
Private Institutional Use	$0	$0	$0	$0	$215,622	$2,600,532	$15,841,683
Total	$61,383,126	$87,507,616	$5,308,022	$716,510,512	$20,433,860	$153,072,535	$2,246,360,537
Potential OR DIF Collection	$61,383,126	$87,507,616	$5,308,022	$716,510,512	$20,433,860	$153,072,535	$2,246,360,537
Existing Fund Balance/Other	$8,256,956	$8,951,931	$754,867	$24,564,313	$6,805,316	($14,101,895)	-$38,485,240
Potential GC DIF Collection (2.1)	$24,587,475	$35,060,670	$2,127,155	$287,019,714	$0	$0	$799,228,102
Required Capital Total	$94,227,557	$131,520,217	$8,190,044	$1,028,088,091	$27,225,956	$128,350,091	$3,907,766,209
Over or (Under) Collection	$0	$0	$0	$6,448	$13,220	$10,620,549	-$900,662,810

Chapter 3
Law Enforcement Facilities, Vehicles, and Equipment

The Existing System of Law Enforcement Assets or infrastructure. The Ontario Police Department currently operates out of a largely unfinished 175,000 square foot facility on roughly 20 acres at 2500 South Archibald Avenue. The building was specifically purchased due to its excess space capacity and, with appropriate interior improvements, its ability to absorb many additional sworn officers as significant development occurs. The interior of the facility is roughly 45% improved leaving 55% to be improved over time as the City approaches General Plan build-out.

The Department also has a significant inventory of:

- Vehicles (official and undercover) some with various added extra equipment;
- Assigned officer equipment such as various leathers, armament, clothing, and safety apparel;
- Communications equipment;
- Specialty and computer equipment; and,
- Helicopter program and related equipment.

Demand Upon Infrastructure Created by the Development of Underdeveloped or Vacant Parcels. Residents and businesses benefit from law enforcement services in three ways: directly, indirectly and through standby availability. Direct services are those where a resident or business owner requires a direct response, usually as a result of being the victim of a crime. Direct service results in the form of a law enforcement officer contacting the victim. Indirect benefits, such as crime prevention programs, free patrol time and other law enforcement services that serve all businesses, citizens and visitors, are impossible to calculate for a specific beneficiary. An example of indirect benefit would be the apprehension of a burglar in your neighbor's residence yesterday. Had that burglar not been arrested he/she may have broken into your residence or business tomorrow. Most residents and businesses may go for many years before ever requiring a call-for-service. However, these fortunate residents and businesses still benefit from law enforcement services, if in no other way than that a law enforcement officer is available, through adequate planned stand-by, to respond if required.

The addition of new residential units and new businesses will increase the demand upon the law enforcement service level by creating more direct calls-for-service, more areas requiring preventive patrol, and in general, more opportunities for crimes to be committed.

The continuous development of vacant or underutilized parcels into residential or business units will also generate more calls. The residents and business owners occupying those residences and businesses will create the increase in law enforcement calls-for-service. More residences and businesses will mean more responses to the burglaries, domestic disputes, noise complaints, shoplifting and miscellaneous incidents that will occur in the new residences and businesses. If the law enforcement force capabilities (the base) are not expanded, then the increasing number of calls-for-service (the rate) will reduce the amount of "free" hours available for preventative patrol. This inability to expand the capabilities would ultimately drive the Department into a reactionary mode. The additional calls-for-service would limit the amount of time for training, planning, pro-active crime prevention and other non-direct services.

The **Purpose** of the Fee. Additional law enforcement calls-for-service are expected, and the cost of adding sworn officers necessary to respond to those calls can be determined. Those new costs can be translated to a fee, or an amount, necessary to be collected to offset the added costs of the required additional staffing. These costs include equipping and housing the additional officers. Providing that the fee is adopted and imposed, new development will finance its proportional capital costs of expansion of the Law Enforcement facility. The continued costs of the annual salary and benefits for those additional officers will need to come from increases in general taxes (primarily property and sales taxes) generated by the new residences and businesses and their occupants.

The **Use** of the Fee. The revenues raised from a properly calculated and legally-supported Law Enforcement Impact Fee would be limited to capital costs related to that growth. The fees would be used to complete the interior improvements within the law enforcement station, increase the number of response and investigator's vehicles, and properly equip additional officers. Conversely, the Law Enforcement DIF receipts cannot be used to replace existing vehicles, or replace normal vacancies. Rehabilitation of the former large retail building created additional space at a cost less than the new construction of space. Other projects and capital acquisitions include:

LE-001, Police Station Purchase and Interior Improvements Prior to Occupancy – The project consists of the acquisition costs and full completion of the 175,000 square foot facility on Archibald Avenue just south of the SR-60. The facility was selected and acquired in order to serve the existing community and also house the additional officers needed to serve future development with law enforcement services. The full cost of $10.3 million is split proportionally between the existing calls-for-service (45.28%) and the calls-for-service generated by new development at General Plan build-out (54.72%). The facility space demands are based upon a minimum standard of 350 square feet per officer.

LE-002, Remaining Interior Improvements @ 55% of Police Station. Complete the interior improvements to roughly 96,250 square feet of the under-utilized portion of the Police Station. The building improvements are progressing with the interior improvements in a manner consistent with the addition of police calls-for-service and sworn officers (see LW-001 previous).

LE-003, Additional Patrol/Detectives/Specialty/Staff Vehicles – This project is the acquisition of 284 assorted law enforcement vehicles in order to maintain the existing 1.04 vehicles per officer standard.

LE-004, Additional Police Officer Assigned Equipment – Officers in the field will require personally assigned equipment of leathers, handgun, helmet, and assorted protection. The costs include the recruitment cost of a medical exam, polygraph, fingerprinting, psychological exam and back-ground check for successful candidates. The costs are included at $18,246 per officer the anticipated 272 additionally required officers.

LE-005, Additional Specialty Equipment – This project is the acquisition of specialty equipment such as laptop computers, servers, specialty printers. It also includes special weapons and tactics equipment, bicycles, body cameras and other specialty equipment.

LE-006, Building Appurtenances Equipment – This project represents items that support use of the building such as phone systems, alarms, security systems and the like.

LE-007, Communications Equipment – This project includes any type of communications device and mostly consists of hand-held radios and batteries, battery chargers cells phones.

LE-008, Advanced Technology Software and Equipment – This project is the acquisition of specialty equipment such as linked database systems and other cooperative law enforcement sharing systems.

LE-009, Additional Helicopter Capacity – The City's helicopter program capacity will be overwhelmed with the proposed addition of 80,149 dwelling units, over 500 hotel/motel keyed-rooms and 103.2 million square feet of business use space. The capacity of an additional helicopter will be required to maintain the existing level of service.

LE-010, Share of Common City Yard Improvements – The City maintenance yard is the front line for maintenance and repair of all of the City's capital acquisitions and infrastructure. The existing facility has adequate space but will need additional facility improvements in order to maintain the additional law enforcement vehicles and the police station itself. The $2,365,388 is law enforcement's portion of the $44.5 million in improvements required at the maintenance yard (see Chapter 10 for greater detail).

The Relationship Between the Need for *The Fee* and *The Type* of Development Project. Department records were used to demonstrate that differing land uses generate differing numbers of calls. Police staff provided extremely accurate calls-for-service data by over-laying the Department's computerized response records with the City's zoning map thus allowing 100% of the calls-for-service to be categorized. Table 3-1, following, summarizes an analysis of the calls-for-service received by the Police Department over a recent twelve month period. The breakdown of calls into the land uses that generated them, divided by the number of developed units (during the same period) generated a *calls-for-service* ratio, factor or nexus.

Newly Calculated Calls-for-Service data. This impact fee update includes a recalculation of law enforcement calls-for-service by land-use. The previous calls-for-service data was based upon data that was over 12 years old and was calculated with the then state-of-art "shape files", the best data available at the time. This update is based upon a more GIS-based data set of all law enforcement calls-for-service coupled with the City's GIS-based land-use database. This provide for a more accurate data driven calculation

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Table 3-1
Law Enforcement Calls-for-Service Generated by DIF Land-use Type
(Over a 12 Month Period)

DIF Land-use Type	Developed Dwellings or Square Feet	Actual Calls For Service Over 12 Months	Total Calls per Dwelling or 1,000 SF (KSF)
Detached Dwelling Units	31,997	31,149	0.973/Unit
Attached Dwelling Units	13,097	13,340	1.019/Unit
High Density Dwellings	4,812	4,901	1.019/Unit
Mobile Home Dwelling Units	2,097	1,983	0.946/Unit
Commercial Lodging Units	5,810	5,236	0.901/Unit
Retail/Service Uses	18,552,286	25,456	1.374/KSF
Office Uses	9,959,192	4,408	0.443/KSF
Business Park Uses	10,271,628	715	0.070/KSF
Industrial Uses	112,134,057	7,808	0.070/KSF
Institutional Uses	2,318,711	1,106	0.477/KSF

As an example, there were approximately 31,149 calls-for-service that generated a response to one of the 31,997 detached dwelling units in the City. The result indicates that, on average, each dwelling will generate just over 0.973 calls per year. The same analysis was undertaken for the other land uses, with the limited exception that attached dwelling units and high density dwelling units were combined. Since these calls-for-service by land use are an empirical average, they were then used to project the number of additional future calls that could be expected at TOP build-out by multiplying the calls per residential unit or business acre by the number of anticipated number of new residential dwellings or business acres. To determine the number of additional officers necessary to meet this increase from future developments, the number of increased calls resulting from new development was then divided by the average number of calls that an existing officer currently responds to.

These calls-for-service rates are then applied to (multiplied by) the undeveloped land-use database anticipated units to determine the number of calls-for-service in the future. The additional calls-for-service, in this case 116,135, were then divided by the number of calls-for-service that a single officer currently absorbs.

The existing complement of 225 sworn officers currently absorbs the 96,102 annual calls by responding to just over 427 calls-for-service each to privately-owned and developed parcels annually. Based upon the addition of 116,135 calls-for-service, the City will need to successfully recruit 272 additional officers to maintain the same response capabilities that are currently provided by the existing 225 officers now. This is not to imply that the existing level of services or the ratio of officers to calls-for-service is the *desired* level of service, it merely is the *current or existing* level of service. To adequately mobilize the 272 new sworn officers, the City will need to add 284 response vehicles at a total cost of $19,837,400 to maintain the existing ratio of 1.04

vehicles per sworn officer (284 vehicles divided by 272 officers) and for the personnel recruitment and equipment at a combined cost of $4,962,912 (272 officers X $18,246 in assigned equipment costs).

The Relationship Between the *Use of the Fee* and the *Type of Development* Paying the Fee. Again, *use of the fee* is a similar argument to the *need for the fee.* As the development occurs, the impact is generated and the impact fee would be collected as the development occurs. The collected DIF receipts would be put to use to acquire equipment for additional officers, vehicles and additional building space necessary to respond to those additional calls, *without reducing the capability of responding to calls from the existing community.*

The Relationship Between the *Amount of the Fee* and the *Cost of the Portion* of the Facility Attributed to the Development Project. The building size at 175,000 square will meet the needs for operations space (and location) through General Plan build-out. The build-out complement of 497 sworn officers, (225 current and 272 projected) will maintain an adequate and sufficient 350 square foot per officer current average.

Basic Needs-based Fees. Table 3-2, following, summarizes the resulting DIFs (from Schedule 3.2) for development to contribute $73,104,737 towards the expansion of the Law Enforcement capabilities of the City in order to allow the City to extend the same level of service to the City's newest citizens and businesses.

Table 3-2
Minimum Needs-based Law Enforcement Facilities, Vehicles and Equipment Development Impact Costs by DIF Land-use Type

DIF land-use Type	Allocation of Development Costs	Development Impact Cost Per Unit or Square Foot
Detached Dwelling Units	$7,839,552	$613/Unit
Attached Dwelling Units	$20,755,866	$641/Unit
High Density Dwelling Units	$22,369,225	$641/Unit
Mobile Home Units	$56,653	$596/Unit
Commercial Lodging Units	$309,704	$567/Unit
Retail/Service Uses	$12,038,818	$0.865/S.F.
Office Uses	$6,565,483	$0.279/S.F.
Business Park Uses	$741,528	$0.044/S.F.
Industrial Uses	$2,087,987	$0.044/S.F.
Institutional Uses	$339,920	$0.300/S.F.

Existing Financial Commitment Comparison Costs. The City invested about $24.9 million in the outright purchase and the remodeling to date, (about 45% of the floor space) of the new facility, a large former retail building on Archibald Avenue. One of the reasons the facility was selected

was that it could meet development need and its long range capacity for additional calls-for-service resulting from new development. The Department staff uses 235 assorted vehicles with various added extra equipment costing a total of $16,415,145 for an average cost of about $69,850 per vehicle. The inventory of 235 vehicles consists of standard response vehicles and staff/specialty vehicles. The existing 225 sworn officers each have assigned equipment such as various leathers, armament, clothing and safety apparel costing some $18,246 per sworn officer or a combined $4,105,350. Specialty equipment amounts to a cumulative $2,785,632. Existing hand-held communications equipment has a replacement cost of approximately $675,075. The helicopter program has assets with a replacement cost of approximately $3,206,810. Lastly, there is $1,747,445 invested in land-based communications equipment, specialty equipment and computer workstations. Combined, the City has invested, at current dollars, some $63,727,177 into the law enforcement services including the negative $1,441,855 existing Law Enforcement Impact Fee Fund balance.

When this combined replacement financial commitment cost figure is distributed over the entire current community (via Table 3-3 following and Schedule 3.3), we find that the existing financial commitment is quite large (at 105%) to that of the calculated Law Enforcement Basic DIFs (or cost), indicating that the existing community has invested more than would have been required from future development.

Table 3-3
Existing Law Enforcement Community
Financial Commitment Comparison Data

DIF Land-use Type	Allocation of Development Costs	Development Impact Cost Per Unit or Square Foot
Detached Dwelling Units	$20,655,531	$646/Unit
Attached Dwelling Units	$8,846,023	$675/Unit
High Density Dwelling Units	$3,249,952	$675/Unit
Mobile Home Dwelling Units	$1,314,967	$627/Unit
Commercial Lodging Units	$3,472,097	$598/Unit
Retail/Service Uses	$16,880,388	$0.911/S.F.
Office Uses	$2,923,034	$0.294/S.F.
Business Park Uses	$474,131	$0.046/S.F.
Industrial Uses	$5,177,642	$0.046/S.F.
Institutional Uses	$733,411	$0.316/S.F.

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RECOMMENDED DEVELOPMENT IMPACT FEES

Since the *Minimum Needs-based Impact Costs (*necessary for expansion indicating the City's investment in Police capabilities) are less than the *Existing Community Financial Commitment Comparison*, the Minimum *Needs-based Development Impact Fee* schedule identified in Table 3-2 and Schedule 3.2 would be the most equitable DIF schedule to adopt. The DIF schedule would be the same for both of the City's Ontario Ranch area and the undeveloped parcels of General City area.

RECAP OF RECOMMENDED LAW ENFORCEMENT DEVELOPMENT IMPACT FEES

- **General City** - Adopt Schedule 3.2.
- **Ontario Ranch** - Adopt (same) Schedule 3.2.

END OF CHAPTER TEXT

Schedule 3.1

City of Ontario
2021-22 Development Impact Cost Calculation Update
Allocation of Project Cost Estimates
Law Enforcement Facilities, Vehicles and Equipment

Line #	Project Title	Estimated Cost	Construction Needs Supported by Other Resources: Percent Need	Construction Needs Supported by Other Resources: Apportioned Dollar Cost	Construction Needs Generated by New Development in GC/OR: Percent Need	Construction Needs Generated by New Development in GC/OR: Apportioned Dollar Cost
LE-001	Police Station Purchase and Roof Improvements Prior to Occupancy	$10,363,962	45.28%	$4,692,855	54.72%	$5,671,107
LE-002	Complete Remaining Interior Improvements @ 55% of Building Space	$29,656,550	0.00%	$0	100.00%	$29,656,550
LE-003	Additional Patrol/Detective/Specialty/Staff Vehicles	$19,837,400	0.00%	$0	100.00%	$19,837,400
LE-004	Additional Officer Assigned Equipment	$4,962,912	0.00%	$0	100.00%	$4,962,912
LE-005	Additional Specialty Equipment	$3,367,360	0.00%	$0	100.00%	$3,367,360
LE-006	Building Appurtenances Equipment	$962,880	0.00%	$0	100.00%	$962,880
LE-007	Communications Equipment	$816,000	0.00%	$0	100.00%	$816,000
LE-008	Advanced Technology Hardware and Software	$2,113,440	0.00%	$0	100.00%	$2,113,440
LE-009	Additional Helicopter Capacity	$3,351,700	0.00%	$0	100.00%	$3,351,700
LE-010	Share of Specific/Common City Yard Improvements	$2,365,388	0.00%	$0	100.00%	$2,365,388
	Sub-Total General Plan Total New Project Costs	$77,797,592	6.03%	$4,692,855	93.97%	$73,104,737
	FINANCIAL ADJUSTMENTS:					
	Total Fund Balance/Outstanding Credits	($1,441,855)	100.00%	($1,441,855)	0.00%	$0
	Total General Plan Total New Project Costs	$76,355,737	4.26%	$3,251,000	95.74%	$73,104,737
						Forward to Schedule 3.2

NOTES:

(1). All developer-held "credits" under FINANCIAL ADJUSTMENTS will appear as a positive indicating an additional Infrastructure Fund obligation that will be redeemed (in lieu of a DIF payment) at some point in the future.

(2). A negative figure under FINANCIAL ADJUSTMENTS indicates a positive Fund Balance mitigating the project total. A positive figure indicates an amount that needs to be recovered by DIFs.

(3). Costs distributed based upon recent actual twelve month Police Department "Calls-for-Service" statistics.

Schedule 3.2

City of Ontario
2021-22 Development Impact Cost Calculation Update
Entire City - Minimal Needs-based Impact Costs
Law Enforcement Facilities, Vehicles and Equipment

DIF Land-use Type	*Undeveloped*		*Call Generation Rate*	*Expected New Calls for Service*	*Percentage of Additional Service Calls*	*Allocation of Expansion Costs*	*Cost Distribution Per Acre*	*Average Units or Square Feet/Acre*	*Development Impact Fee per Unit or Square Foot*
	Acres	*Units*							
Detached Dwellings	1,685	12,793	0.973	12,454	10.72%	$7,839,552	$4,653	7.59	***$613 per Unit***
Attached Dwellings	1,499	32,372	1.019	32,973	28.39%	$20,755,866	$13,846	21.60	***$641 per Unit***
High Density Dwellings	1,037	34,889	1.019	35,536	30.60%	$22,369,225	$21,571	33.64	***$641 per Unit***
Mobile Home Dwellings	14	95	0.946	90	0.08%	$56,653	$4,047	6.79	***$596 per Unit***
Commercial Lodging Units	12	546	0.901	492	0.42%	$309,704	$25,809	45.50	***$567 per Unit***
Retail/Service Uses	1,271	13,916,010	1.374	19,125	16.47%	$12,038,818	$9,472	10,949	***$0.865 per S.F.***
Office Uses	936	23,565,934	0.443	10,430	8.98%	$6,565,483	$7,014	25,177	***$0.279 per S.F.***
Business Park Uses	769	16,922,869	0.070	1,178	1.01%	$741,528	$964	22,006	***$0.044 per S.F.***
Industrial Uses	1,110	47,631,804	0.070	3,317	2.86%	$2,087,987	$1,881	42,912	***$0.044 per S.F.***
Private Institutional Use	52	1,132,560	0.477	540	0.46%	$339,920	$6,537	21,780	***$0.300 per S.F.***
TOTAL	**8,385**	**--**	**--**	**116,135**	**100.00%**	**$73,104,737 in Total Equity in Current Law Enforcement Assets**			

Schedule 3.3

City of Ontario
2021-22 Development Impact Cost Calculation Update
Existing Community Financial Commitment Comparison
Law Enforcement Facilities, Vehicles and Equipment

DIF Land-use Type	Developed Acres	Developed Units	Call Generation Rate	Existing Calls for Service	Percentage of Existing Service Calls	Allocation of Infrastructure "Equity"	Distribution of "Equity" per Acre	Average Units or Square Feet/Acre	Current Financial Commitment per Unit or Square Foot
Detached Dwellings	6,328	31,997	0.973	31,149	32.41%	$20,655,531	$3,264	5.06	*$646 per Unit*
Attached Dwellings	722	13,097	1.019	13,340	13.88%	$8,846,023	$12,252	18.14	*$675 per Unit*
High Density Dwellings	193	4,812	1.019	4,901	5.10%	$3,249,952	$16,839	24.93	*$675 per Unit*
Mobile Home Dwellings	204	2,097	0.946	1,983	2.06%	$1,314,967	$6,446	10.28	*$627 per Unit*
Commercial Lodging Units	143	5,810	0.901	5,236	5.45%	$3,472,097	$24,280	40.63	*$598 per Unit*
Retail/Service Uses	487	18,522,286	1.374	25,456	26.49%	$16,880,388	$34,662	38,033	*$0.911 per S.F.*
Office Uses	310	9,959,192	0.443	4,408	4.59%	$2,923,034	$9,429	32,126	*$0.294 per S.F.*
Business Park Uses	777	10,271,628	0.070	715	0.74%	$474,131	$610	13,220	*$0.046 per S.F.*
Industrial Uses	6,890	112,134,057	0.070	7,808	8.12%	$5,177,642	$751	16,275	*$0.046 per S.F.*
Private Institutional Use	419	2,318,711	0.477	1,106	1.15%	$733,411	$1,750	5,534	*$0.316 per S.F.*
TOTAL	16,473	--	--	96,102	100.00%	$63,727,177	Total Law Enforcement System Capital Assets		

$35,437,500	in Law Enforcement Facility Assets
$4,105,350	in Law Enforcement Officer Equipment Assets
$16,415,145	in Law Enforcement Vehicles Assets
$2,785,632	in Specialty Equipment
$675,075	in Personal Communications Equipment Assets
$796,075	in Building Support Equipment
$1,747,445	in Advanced technology
$3,206,810	in Helicopter Program Equipment/Assets.
($1,441,855)	in Existing Law Enforcement DIF Fund Balance

Similar Land Use	Total Square Feet	Percent of Total SF	Percent of Calls-for-Service
Business Park Uses	10,271,628	8.39%	715
Industrial Uses	112,134,057	91.61%	7,808
	122,405,685	100.00%	8,523

Similar Land Use	Total Square Feet	Percent of Total SF	Percent of Calls-for-Service
Attached Dwellings	13,097	73.13%	13,340
High Density Dwellings	4,812	26.87%	4,901
	17,909	100.00%	18,241

Chapter 4
Fire Suppression Facilities, Vehicles, and Equipment

Separate DIF Application Areas. Because of distinctly differing capital needs there will be a separate DIF schedule for the Ontario Ranch area of the City. This action is necessary to ensure that new development in the General City area of the City is not required to subsidize the significant development costs of the Ontario Ranch area, with its significant public construction demands. This process will also be applied to the next four infrastructure Chapters consisting of Circulation System, Storm Drainage Collection, Water Distribution and Sewer Collection. General City DIF calculations and explanations will be at the beginning of the chapter with Ontario Ranch calculations and textual explanations following towards the end of the Chapter.

The Existing System. The City has invested in an extensive system of fire facilities, response vehicles and specialty equipment. The Fire Department responds to calls-for-service from ten (10) existing stations (includes the specialty station at the airport) and trains at a facility consisting of classrooms, offices and support areas with specialty situation training mock-up implements. Three of the fire facilities are designated for special operations. The fire facilities are detailed as follows:

Fire Station #1/Headquarters is 42,951 square feet and is located on a 39,900 square foot parcel at 425 East B Street (and portions of the Annex facility). This station houses the Bomb Squad unit and specialty trailer. This station also houses the mobile command unit. The water tender, brush engine and various reserve apparatus are distributed throughout the ten stations and are subject to reallocation depending upon operational needs and vehicle maintenance.

The Fire Station #1 specific facilities consist of:

Administrative Offices - 20,172 square feet,
Emergency Operations Center - 8,179 square feet,
Storage Bays - 2,400; and,
Station Living Quarters and Bays - 12,200 square feet.

Fire Station #2 is a 4,000 square foot residential style on a 30,000 square foot parcel at 544 West Francis Street.

Fire Station #3 is a 5,600 square foot facility located on a 20,000 square foot parcel located at 1408 East Francis Street.

Fire Station #4 is a 5,200 square foot facility located on a 20,000 square foot facility located at 1005 North Mountain Avenue.

Fire Station #5 is a 5,200 square foot facility on a 35,000 square foot parcel located at 1530 East 4th Street.

Fire Station #6 is an 11,125 square foot facility located on a 41,000 square foot parcel located at 2931 East Philadelphia Street. Stations #6, #7 and #8 are based upon a similar floor plan.

Fire Station #7, is an 11,125 square foot facility located on a 41,000 square foot parcel located at 4901 E. Vanderbilt Avenue.

Fire Station #8 is an 11,125 square foot station on a 42,000 square foot parcel located at 3429 East Shelby Street. Station #8 houses the Technical Rescue Team and its response unit.

Station #9 was recently constructed at 2661 East Grand Park and consists of a 10,476 square foot facility constructed on a roughly 60,000+ square foot parcel. This station will be the primarily response facility to calls-for-service in the Ontario Ranch area. Station #9 houses the HazMat Team and response unit.

Station #10 is located at 1230 Tower Way on Ontario Airport property and is owned by the Ontario Airport Authority as opposed to the City and thus has been excluded from any calculations in this Report.

The **Training Center** is located at 1408 East Francis adjacent to Station #3 on a 154,240 square foot parcel and consists of a combined 10,400 square feet of classrooms, offices and apparatus/storage bays and numerous training exercise implements and props.

The land and replacement construction costs of the existing stations and training facilities is approximately $137.3 million. Not surprisingly, the City also has a sizable fleet of equipped City-owned response and prevention units consisting of:

- Four tractor drawn, tiller assisted aerial apparatus;
- Fifteen fire engines, one brush engine and one water tender;
- Eleven SUV type staff vehicles;
- Ten sedan type staff vehicles;
- Seven utility or flatbed trucks;
- One Bomb Squad, one Hazmat Squad, one Technical Rescue Squad, and one Mobile Command Post; and,
- Two Bomb Investigation trailers, one EOD truck, and one Fire Safety House trailer.

General City Replacement Assets. The total investment in the vehicle compliment in the is about $34.0 million. State or County vehicles and equipment are not included in the financial commitment figure. The City's fire-fighter assigned equipment and successful psychological and back-ground checks, at $17,108 per fire-fighter, is approximately $3.2 million investment total for the existing staff of one hundred and eighty-six fire fighters (figure excludes non-hires). There is also $3,045,500 in specialty equipment (typically in the station but not part of vehicle inventory). Lastly, the Fire Suppression Facility, Vehicle and Equipment Impact Fee has a negative fund balance of $2,412,140 creating a net investment of $175.2 million.

The current financial commitment or investment, in fire stations, training facilities, response fleet with specialty equipment and fund balance is a sizable $175,163,942. This figure represents what it would cost to establish the existing Department response capability to the General City at current vehicle, equipment, land acquisition and construction costs. The relevance of this figure will be established later in this Chapter.

Demand Upon Infrastructure Created by the Development of Underdeveloped or Vacant Parcels. While it can be said that numerous factors are considered when determining the number and location of fire stations in any city, it can be stated without fear of contradiction that all new private development in the City will have an effect on the City's current ability to respond to fire, rescue and emergency calls-for-service. The affect, simplified but not trivialized, is twofold. Initially, each new residential and business development will create, on average, more calls-for-service increasing the likelihood of simultaneous (and thus competing) calls-for-service. Additionally, as development spreads further from any existing station or stations, as large-scale development is often likely to do, the distances (and thus response times) will increase, taking the existing fire companies out-of-service for greater periods of time.

The capacity of any fire station is finite and will reach practical limits (through call *frequency* and *total time*). When that capacity is exceeded, the level of service afforded to existing development will be greatly reduced. Or stated in another way, if development continues without the addition of fire stations, the existing stations could be overwhelmed in terms of calls-for-service, making a timely response for emergency service a virtual coin flip. That is, will the existing fire companies be available to respond to your needs or will they most likely be out-of-service on a call in a different part of the community?

The **Purpose** of the Fee. In order to continue to be able to respond to an ever-increasing number of expected calls, the City staff has determined the need for the addition of four stations and the relocation of two existing stations to maximize coverage. Having the right type, size and number of fire stations in the right locations will enable policy makers, the Chief and City Council to house fire fighters, apparatus, and equipment in a rational way for maximum use of capital resources at the lowest annual operations cost. Conversely, the penalties are high and extremely visible for poor fire station location or a lack of one. Adverse effects are felt by the City staff, the council, and possibly by the existing taxpayers. With poor location or no additional locations, response times via great distance or out-of-service due to a previous call can become excessive, and if a tragedy occurs, the incident would be well publicized.

Often, response time is mistakenly referred to for only the first-in unit, and this can be a grave error. Instead, response time must consider *all* the forces necessary to place the incident under control. If the first unit arrives within five minutes but cannot provide the necessary water flow, or perform the needed functions due to a lack of staffing, the five minute response becomes insignificant and irrelevant. Thus an increase in the number and type of response vehicles is also necessary to match and equip the needed additional staff. The following sections identify the manner in which the City plans to meet the demands of additional calls-for-service.

The **Use** of the Fee. The revenues generated from a properly calculated and legally-supported Fire Suppression Facilities and Equipment Impact Fee would be limited to capital costs related to that growth. The fees would be used to construct new stations or expand existing stations (to increase the response capacity of that station) and increase the number of emergency response vehicles. Conversely, the Fire Suppression Facilities DIF receipts would not be used to repair any existing fire stations or replace any existing emergency response vehicles. Additional facilities are planned to come on-line, as needed, as development creates additional demands beyond the capability (volume or calls and distance) of the existing stations. The capital expansions include:

FS-001 and FS-002, Projects Completed or No Longer Needed.

FS-003, FS-005, FS-007 and FS-009 - Land acquisition and construction of four new 11,200 square foot stations, each of which would be located in the Ontario Ranch area of the City where approximately 54,428 detached, attached and high density dwelling units and 39.6 million square feet of retail/service, office and business park, industrial and institutional uses and 396 commercial lodging rooms are expected to be constructed. The four stations would be three bays wide by two bays deep at approximately 11,200 square feet each (see next group of projects). These stations are largely needed to serve the Ontario Ranch area. Each has an estimated land acquisition/construction cost of approximately $13.5 million.

FS-003A, FS-005A, FS-007A and FS-009A - Land acquisition and construction of four additional storage bays at 1,400 square foot, all four of which would be located in the Ontario Ranch area at the corresponding station listed previously. This would increase the capacity of each of those four stations described above to a four bay wide by two vehicles deep facility (4X2). However, these additional "4th bay" facilities are intended to store City-wide equipment such as back-up engines, tillers and other specialty fleet and thus the cost of these facilities are spread over the entire community including the existing community.

FS-004, FS-006, FS-008, FS-010 - Each of the previously referenced stations would need a fully-equipped basic response engine at $1,019,530. FS-004 also includes a fully-equipped aerial apparatus at $3,103,352.

FS-011 consists of the **Two Reserve Response Engines** needed to maintain the Department's one reserve engine per three active engines standard.

FS-012, Project Completed or No Longer Needed.

FS-013, Battalion Chief Response Vehicle - The Ontario Ranch's five stations will generate the need for a second battalion Chief who will need a fully equipped response vehicle.

FS-014, Fire Fighter Assigned Equipment - The additional 89 fire-fighters will be needed for the Ontario Ranch area and will require personally assigned equipment.

FS-015, Fire Administrative Headquarters Relocation - The project consists of constructing a $31.6 million, 30,000 square foot facility west of Euclid and north of Holt Avenue. The existing 17,000 Headquarters station has become inadequate in terms of space required for meetings, training and vehicles.

FS-016, Training Center Expansion - The current training facility will no longer be able to serve the anticipated additional staff and will need to be enlarged at approximately $9.8 million.

FS-017, City Emergency Operation Center - This $4.0 million project is the completion of the extremely important EOC facilities, the center for management for all large scale emergencies in the City.

FS-018, Special Operations Support Vehicle - The project consist of the addition of a support vehicle that is a rolling warehouse and canteen for long term incidents.

FS-019, Mobile Air and Support Vehicle - The support vehicle provides air-filling capability and has amiable bright lights for night-time fire and rescue incidents.

FS-020, Emergency Service Communications System - This is the companion project to LE-007 in the Law Enforcement infrastructure category.

FS-021, Share of Common City Yard Improvements - The City maintenance yard is the front line for maintenance/repair of all of the City's capital acquisitions and infrastructure. The existing facility has adequate space but will need additional facility improvements to be able to maintain the additional fire suppression vehicles and the new fire stations. The $1,404,845 is the fire suppression/rescue portion of the $44.5 million in improvements required at the maintenance yard.

FS-022, Project Completed or No Longer Necessary.

FS-023, Fire Station #1 Operations Relocation – Relocate the fire operation component of existing Station #1 along with the relocation of the Headquarters operation (see FS-015).

FS-024, Expand Station #3 (East Francis) – This is the smallest station in the City's inventory and will need to be expanded to accommodate a second company.

FS-025 has been completed.

The proposed projects and costs are identified on Schedule 4.1 and are detailed in the MFP. The total cost of completing the fire infrastructure system is a net $143,341,375. However there are outstanding credits for developer contributions in Ontario Ranch of $4,721,216. There are also negative fund balances in both the General City area ($2,412,140) and Ontario Ranch ($8,455,912). There is a planned one-time transfer of $3.5 million from the special Fund 119. The cumulative $112,052,680 acts to add to the financial obligations of the Fire Suppression Facilities, Vehicles and Equipment Impact Fee Fund moving the total cost to be recovered from impact fees from $143.3 million to $155.5 million.

The Relationship Between the Need for The Fee and The Type of Development Project. Fire service response standards extended to new development should be consistent with the fire response currently enjoyed by the City's existing citizens and business community by constructing new facilities, or else the result will be in the deterioration of the level of service (LOS) provided both to the existing residents and future citizens and businesses within the City of Ontario. It follows that it is appropriate to assess future development to contribute additional fire facilities.

To project the impact of future development on fire services, it was first necessary to quantify the current impact on services from each of the City's land uses. Then, a determination of the costs of future capital facilities necessary to meet this increased demand was made. The following section illustrates the relative impact from each land use on fire services and facilities. While the majority of these requests for service were made by Ontario citizens from their residences, a large percentage of requests were generated from new commercial and industrial uses within the City. A survey of each land use and its existing effect on requests for calls-for-

service was conducted to project the impact of future development on fire services. The calls-for-service survey was updated with current calls-forr-service data in a similar manner and concurrently with the process used to determine law enforcement demand (specifically described in Chapter 3, Law Enforcement et al.). Only requests for fire and rescue services to privately held property were counted. Requests for service to public property, such as City parks and public right-of-way or intersections, were excluded thus distributing these calls pro-rata through the requests for service from privately held property. This is based upon the argument that all public land serves privately held land in some manner.

Table 4-1, following, identifies the number of calls-for-service received by the Fire Department during the past calendar year by the previously identified DIF categories. The number of requests for service received by the Department during the year was then divided by either the developed (1,000) square feet, the existing number of dwelling units to determine the number of requests generated per business square foot, per dwelling unit or commercial lodging unit.

Table 4-1
Fire Suppression Existing Calls-for-Service Generated by Land Use
(Over a 12 Month Period Responses to the General City Area)

DIF Land-use Type	Developed Dwellings or Square Feet	Actual Calls For Service Over 12 Months	Total Calls per Dwelling or 1,000 SF (KSF)
Detached Dwelling Units	27,449	7,211	0.263/Unit
Attached Dwelling Units	12,050	3,011	0.250/Unit
High Density Dwelling Units	4,812	1,202	0.250/Unit
Mobile Home Dwelling Units	2,097	611	0.291/Unit
Commercial Lodging Units	5,810	970	0.167/Unit
Retail/Service Uses	18,418,611	3,438	0.187/KSF
Office Uses	9,595,912	1,141	0.115/KSF
Business Park Uses	9,587,138	128	0.013/KSF
Industrial Uses	106,400,598	1,417	0.013/KSF
Institutional Uses	2,318,711	95	0.041/KSF

Of residential land uses, a detached dwelling unit is just slightly more likely to require an emergency fire service response at 0.263 annual responses per unit than an attached dwelling unit at 0.250 annual responses per unit. Retail/Service use development is shown to generate the highest business use demand at 0.187 responses per 1,000 square foot of building space, while industrial development generates the least demand of 0.013 calls per 1,000 square feet. The lower demand by industrial uses should be expected given the greater density of employees and patrons in an office use establishment when compared to an industrial business of similar square feet. However, it should be noted that while there are fewer calls for industrial properties, significant training is required to be prepared for industrial responses, (i.e., trenching response and hazardous materials training).

Based upon these calls-for-service and the anticipated development, future demands in General City will increase from the 19,224 annual calls-for-service to private development by 10,895 to 30,119 calls-for-service per year. Continued development will benefit from the existence of the current eight stations and the fact that they have some existing capacity.

Resulting General City Area DIF Schedule. The collection of the resulting DIFs through build-out would allow the City to acquire or construct almost all of the proposed General City expansions and required equipment. This generally indicates that the City's expansion of the Fire capital has maintained pace with the increases in calls-for-service from new development and that there are very few if any deficiencies in the infrastructure dedicated to fire suppression/medic services. Table 4-2, on the following page, indicates the impact fee necessary to finance the cost to the additional stations, response equipment and fire-fighter equipment.

Table 4-2
City of Ontario's General City Area
Basic Needs-based Fire Suppression Facilities, Vehicles and Equipment Development Impact Costs by DIF Land-use Type

DIF Land-use Type	Allocation of Development Costs	Development Impact Cost Per Unit or Square Foot
Detached Dwelling Units (1)	$822,962	$728/Unit
Attached Dwelling Units	$1,862,055	$693/Unit
High Density Dwelling Units	$15,107,034	$693/Unit
Mobile Home Units	$77,586	$817/Unit
Commercial Lodging Units	$69,273	$462/Unit
Retail/Service Uses	$4,231,189	$0.518/S.F.
Office Uses	$6,658,511	$0.319/S.F.
Business Park Uses	$252,153	$0.036/S.F.
Industrial Uses	$1,102,825	$0.036/S.F.
Institutional Uses	$4,949	$0.014/S.F.

The Relationship Between the Use of the Fee and the Type of Development Paying the Fee. The *use of the fee* is equivalent to the *need for the fee*. The DIF would be collected as the development occurs (generally at building permit or some predetermined point in the process). As the development occurs, the impact is generated. The collected DIF receipts would be put to use to acquire additional fire-fighters assigned and specialty equipment, emergency response vehicles and an additional fire station necessary to respond to those additional calls-for-service, without reducing the capability of responding to calls from the existing community.

The Relationship Between the Amount of the Fee and the Cost of the Portion of the Facility Attributed to the Development Project. The new land, facilities, vehicles and equipment for the Ontario Ranch area are fully attributed to new development in that area. Station completion and relocations in the General City are also fully attributed to the General City area development. For projects that benefit both areas, the calls-for-service data was used to distribute responsibility. As an example, projects FS-015, FS-017, FS-018 and FS-019 will benefit both existing and all future residents and businesses, thus calls-for-service for the existing community (43.96%), OR (33.00%) and GC (23.04%), or the percentage that each represents of the total General Plan build-out calls-for-service. Detail regarding the full acquisition cost of the existing project is outlined in the *Master Facilities Project* detail page. The relationship for each project is identified on the individual detail project pages in the *MFP*.

The current community's commitment has been to establish the existing eight-station and training facility capability paid for via past General Fund receipts. To allow future residents to benefit by use of all of the capital needs without contributing additional assets, would be clearly unfair to the existing residents and would reduce their current level of service. Table 4-3, following, summarizes the distribution of the $175,163,942 in replacement costs to the existing residents and business owners (Schedule 4.3 details this distribution).

The replacement value of the existing fire infrastructure (stations, response fleet and related safety equipment) of $175,163,942 represents the current equity investment or *financial commitment* towards fire suppression capability by the existing community. When this figure is distributed over the existing community in the same manner as the future costs, by the land use demands, an investment, or financial "commitment" (or equity for that matter) per unit can be determined. As an example, each attached dwelling unit has invested about $2,394 into fire suppression capital while the proposed DIF is nearly one third as much at $728 per attached dwelling.

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Table 4-3
Existing Fire Suppression Community
Financial Commitment Comparison Data

DIF Land-use Type	Allocation of Development Costs	Asset/Equity Investment Per Unit or Square Foot
Detached Dwelling Units	$65,704,702	$2,394/Unit
Attached Dwelling Units	$27,435,426	$2,276/Unit
High Density Dwelling Units	$10,952,302	$2,276/Unit
Mobile Home Dwelling Units	$5,567,268	$2,655/Unit
Commercial Lodging Units	$8,838,380	$1,521/Unit
Retail/Service Uses	$31,326,136	$1.701/S.F.
Office Uses	$10,396,487	$1.044/S.F.
Business Park Uses	$1,166,302	$0.122/S.F.
Industrial Uses	$12,911,325	$0.121/S.F.
Institutional Uses	$865,615	$0.373/S.F.

Resulting Ontario Ranch Area Development Impact Fee Schedule. The Ontario Ranch area will need to acquire five parcels and construct five stations to serve the 54,428 residential dwellings, 396 commercial lodging units and 36.4 million square feet of business use space which will generate nearly 15,603 annual calls-for-service to privately-held property in that area. In addition, the department will need to acquire additional response equipment, additional training capacity and maintenance capacity. This will cost $76,845,342 to complete the Ontario Ranch footprint fire capital needs. Negative fund balances and outstanding developer credits amount to an additional $13,177,128 in this impact fee fund obligations. This amount is mitigated by a one-time transfer of $3,536,588 from Fund 119 creating a net total amount to be supported by future impact fees to $86,485,882.

When these costs are distributed over the OR land-use database using the calls-for-service nexus rates, the proposed fees are as follows in Table 4-4 (as summarized from Schedule 4.2)

[This space left vacant in order to place the following table on a single page].

Table 4-4
The City's Ontario Ranch Area
Basic Needs-based Fire Suppression Facilities,
Vehicles and Equipment Development Impact Costs
by DIF Land-use Type

DIF Land-use Type	Allocation of Development Costs	Development Impact Cost Per Unit or Square Foot
Detached Dwelling Units	$17,000,077	$1,458/Unit
Attached Dwelling Units	$41,133,867	$1,386/Unit
High Density Dwelling Units	$18,130,829	$1,386/Unit
Commercial Lodging Units	$365,831	$924/Unit
Retail/Service Uses	$5,964,161	$1.037/S.F.
Office Uses	$1,701,671	$0.637/S.F.
Business Park Uses	$715,034	$0.072/S.F.
Industrial Uses	$1,224,981	$0.072/S.F.
Institutional Uses	$249,431	$0.229/S.F.

RECOMMENDED IMPACT FEES

The Existing Community Financial Commitment Comparison (Schedule 4.3) is far greater than the GC Minimum Needs-based Impact Costs (Schedule 4.2), which are necessary and sufficient to maintain the established fire suppressions system in that area. The OR Minimum Needs-based Impact Costs (Schedule 4.4) are necessary and sufficient to establish a fire suppressions system in that area. Schedules 4.2 and 4.4 would be the most equitable fee schedules to adopt for the GC and OR areas respectively.

OTHER NOTES AND ISSUES

1. Newly constructed industrial developments, initially charged the lower industrial use impact fee, often end up being retail/service uses and generate greater demands those of the industrial land uses. If this trend is left unrecognized, the Department, as well as other City services, will be faced with the greater demand from commercial uses, but will be left only with the collection of the lower industrial impact fee rates. To avoid this under-collection, the City should impose an impact fee representing the difference between the retail/service DIF and the previously paid industrial land-use impact fee when a CUP is approved and tenant improvement plans are submitted indicating a commercial use in an industrial zone.

RECAP OF RECOMMENDED FIRE SUPPRESSION IMPACT FEES

- **General City Area**- Adopt Schedule 4.2.
- **Ontario Ranch Area** - Adopt Schedule 4.4.

END OF CHAPTER TEXT

Schedule 4.1

City of Ontario
2021-22 Development Impact Cost Calculation Update
Allocation of Project Cost Estimates
Fire Suppression Facilities, Vehicles and Equipment

Line #	Project Title	Estimated Cost	Construction Needs Supported by Other Resources: Percent Need	Construction Needs Supported by Other Resources: Apportioned Dollar Cost	Construction Needs Generated by New Development in OR: Percent Need	Construction Needs Generated by New Development in OR: Apportioned Dollar Cost	Construction Needs Generated by New Development in G'nl City: Percent Need	Construction Needs Generated by New Development in G'nl City: Apportioned Dollar Cost
FS-001	Project Completed or No Longer Needed	$0	0.00%	$0	100.00%	$0	0.00%	$0
FS-002	Project Completed or No Longer Needed	$0	0.00%	$0	100.00%	$0	0.00%	$0
FS-003	Fire Station #11 Land Acquisition And Construction	$13,494,050	13.12%	$1,770,419	80.00%	$10,795,240	6.88%	$928,391
FS-003A	Fire Station #11 Vehicle Storage Bay	$1,667,090	43.96%	$732,853	33.00%	$550,140	23.04%	$384,098
FS-004	Fire Station #11 Response Engine and Aerial	$3,103,532	13.12%	$407,183	80.00%	$2,482,826	6.88%	$213,523
FS-005	Fire Station #12 Land Acquisition And Construction	$13,494,050	13.12%	$1,770,419	80.00%	$10,795,240	6.88%	$928,391
FS-005A	Fire Station #12 Vehicle Storage Bay	$1,667,090	43.96%	$732,853	33.00%	$550,140	23.04%	$384,098
FS-006	Fire Station #12 Response Engines	$1,019,530	13.12%	$133,762	80.00%	$815,624	6.88%	$70,144
FS-007	Fire Station #13 Land Acquisition And Construction	$13,494,050	13.12%	$1,770,419	80.00%	$10,795,240	6.88%	$928,391
FS-007A	Fire Station #13 Vehicle Storage Bay	$1,667,090	43.96%	$732,853	33.00%	$550,140	23.04%	$384,098
FS-008	Fire Station #13 Response Engine	$1,019,530	13.12%	$133,762	80.00%	$815,624	6.88%	$70,144
FS-009	Fire Station #14 Land Acquisition And Construction	$13,494,050	13.12%	$1,770,419	80.00%	$10,795,240	6.88%	$928,391
FS-009A	Fire Station #14 Vehicle Storage Bay	$1,667,090	43.96%	$732,853	33.00%	$550,140	23.04%	$384,098
FS-010	Fire Station #14 Response Engine	$1,019,530	13.12%	$133,762	80.00%	$815,624	6.88%	$70,144
FS-011	Reserve Response Engines	$2,039,060	13.12%	$267,525	80.00%	$1,631,248	6.88%	$140,287
FS-012	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
FS-013	Battalion Chief Response Vehicle	$180,000	13.12%	$23,616	80.00%	$144,000	6.88%	$12,384
FS-014	Fire Fighter Assigned Equipment	$1,522,612	13.12%	$199,767	80.00%	$1,218,090	6.88%	$104,756
FS-015	Fire Administration Headquarters Relocation	$31,618,000	43.96%	$13,899,273	33.00%	$10,433,940	23.04%	$7,284,787
FS-016	Emergency Training Center Expansion	$9,777,441	0.00%	$0	58.88%	$5,757,364	41.12%	$4,020,077
FS-017	City Emergency Operations Center	$3,979,166	43.96%	$1,749,241	33.00%	$1,313,125	23.04%	$916,800
FS-018	Special Operations Support Vehicle	$137,500	43.96%	$60,445	33.00%	$45,375	23.04%	$31,680
FS-019	Mobile Air And Lighting Support Vehicle	$574,750	43.96%	$252,660	33.00%	$189,668	23.04%	$132,422
FS-020	Emergency Services Communication System	$3,244,780	13.12%	$425,715	80.00%	$2,595,824	6.88%	$223,241
FS-021	Share of Specific/Common City Yard Improvements	$1,404,845	0.00%	$0	58.88%	$827,231	41.12%	$577,614
FS-022	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
FS-023	Fire Station Operations #1 Relocation	$17,092,056	65.00%	$11,109,836	8.00%	$1,367,364	27.00%	$4,614,855
FS-024	Expand Station #3 (East Francis)	$5,054,483	0.00%	$0	20.00%	$1,010,897	80.00%	$4,043,586
FS-025	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
	Sub-Total General Plan Total Remaining Project Costs	$143,431,375	27.06%	$38,809,637	53.58%	$76,845,342	19.37%	$27,776,396
	FINANCIAL ADJUSTMENTS:							
	Ontario Ranch - Fire Suppression et. al. Outstanding Credits	$4,721,216	0.00%	$0	100.00%	$4,721,216	0.00%	$0
	Ontario Ranch - Development Impact Fee Fund Balance	$8,455,912	0.00%	$0	100.00%	$8,455,912	0.00%	$0
	Internal Fund Balance Transfer – Fund 119	($3,536,588)	0.00%	$0	100.00%	($3,536,588)	0.00%	$0
	General City - Development Impact Fee Fund Balance	$2,412,140	0.00%	$0	0.00%	$0	100.00%	$2,412,140
	Total Fund Balance/Outstanding Credits	$12,052,680	100.00%	$0	0.00%	$9,640,540	0.00%	$2,412,140
	Total General Plan Total New Project Costs	$155,484,055	24.96%	$38,809,637	55.62%	$86,485,882	19.42%	$30,188,536
					Forward to Schedule 4.4		**Forward to Schedule 4.2**	

1). All developer-held "credits" under FINANCIAL ADJUSTMENTS will appear as a positive indicating an additional Infrastructure Fund obligation that will be redeemed (in lieu of a DIF payment) at some point in the future.
2). A negative figure under FINANCIAL ADJUSTMENTS indicates a positive Fund Balance mitigating the project total. A positive figure indicates an amount that needs to be recovered by DIFs.
3). Costs distributed based upon recent actual twelve month Police Department "Calls-for-Service" statistics.

Schedule 4.2

City of Ontario
2021-22 Development Impact Cost Calculation Update
General City (GC) - Minimum Capital Needs-based Impact Costs
Fire Suppression Facilities, Vehicles and Equipment

Proposed Land Use	Undeveloped Acres	Undeveloped Units	Call Generation Rate	Anticipated New Calls for Service	Percentage of Additional Service Calls	Allocation of Expansion Costs	Cost Distribution Per Acre	Average Units or Square Feet/Acre	Development Impact Fee per Unit or Square Foot
Detached Dwellings	262	1,131	0.263	297	2.73%	$822,962	$3,141	4.32	***$728*** *per Unit*
Attached Dwellings	183	2,688	0.250	672	6.17%	$1,862,055	$10,175	14.69	***$693*** *per Unit*
High Density Dwellings	598	21,807	0.250	5,452	50.04%	$15,107,034	$25,263	36.47	***$693*** *per Unit*
Mobile Home Dwellings	14	95	0.291	28	0.26%	$77,586	$5,542	6.79	***$817*** *per Unit*
Commercial Lodging Units	3	150	0.167	25	0.23%	$69,273	$23,091	50.00	***$462*** *per Unit*
Retail/Service Uses	992	8,164,415	0.187	1,527	14.02%	$4,231,189	$4,265	8,230	***$0.518*** *per S.F.*
Office Uses	822	20,895,746	0.115	2,403	22.06%	$6,658,511	$8,100	25,421	***$0.319*** *per S.F.*
Business Park Uses	341	6,969,626	0.013	91	0.84%	$252,153	$739	20,439	***$0.036*** *per S.F.*
Industrial Uses	441	30,650,125	0.013	398	3.65%	$1,102,825	$2,501	69,501	***$0.036*** *per S.F.*
Private Institutional Use	2	43,560	0.041	2	0.02%	$4,949	$2,474	21,780	***$0.114*** *per S.F.*
TOTAL	**3,658**	--	--	**10,895**	**100.00%**	**$30,188,536**	**in Total Equity in General City Area Capital Needs**		

Schedule 4.3

City of Ontario
2021-22 Development Impact Cost Calculation Update
Existing Community Financial Commitment Comparison
(Limited to Old Model Colony Assets)
Fire Suppression Facilities, Vehicles and Equipment

Proposed Land Use	Developed Acres	Developed Units	Call Generation Rate	Existing Calls for Service	Percentage of Existing Service Calls	Allocation of Infrastructure "Equity"	Distribution of "Equity" per Acre	Average Units or Square Feet/Acre	Current Financial Commitment per Unit or Square Foot
Detached Dwellings	4,733	27,449	0.263	7,211	37.51%	$65,704,702	$13,882	5.80	*$2,394 per Unit*
Attached Dwellings	641	12,050	0.250	3,011	15.66%	$27,435,426	$42,801	18.80	*$2,276 per Unit*
High Density Dwellings	193	4,812	0.250	1,202	6.25%	$10,952,302	$56,748	24.93	*$2,276 per Unit*
Mobile Home Dwellings	204	2,097	0.291	611	3.18%	$5,567,268	$27,291	10.28	*$2,655 per Unit*
Commercial Lodging Units	143	5,810	0.167	970	5.05%	$8,838,380	$61,807	40.63	*$1,521 per Unit*
Retail/Service Uses	477	18,418,611	0.187	3,438	17.88%	$31,326,136	$65,673	38,613	*$1.701 per S.F.*
Office Uses	310	9,959,192	0.115	1,141	5.94%	$10,396,487	$33,537	32,126	*$1.044 per S.F.*
Business Park Uses	741	9,587,138	0.013	128	0.67%	$1,166,302	$1,574	12,938	*$0.122 per S.F.*
Industrial Uses	6,610	106,400,598	0.013	1,417	7.37%	$12,911,325	$1,953	16,097	*$0.121 per S.F.*
Private Institutional Use	419	2,318,711	0.041	95	0.49%	$865,615	$2,066	5,534	*$0.373 per S.F.*
TOTAL	**14,471**	--	--	**19,224**	**100.00%**				

$175,163,942	**Total Existing Fire Suppression System Assets**
$137,321,300	**in Fire Suppression Facilities Assets**
$34,027,260	**in Fire Suppression Vehicles Assets**
$3,182,022	**in Fire Fighter Assigned Equipment Assets**
$3,045,500	**Fire Specialty Equipment Assets**
($2,412,140)	**in Fire Suppression GC DIF Fund Balance**

Land Use	Units or Acres	Percent of Total	Annual Calls Per Unit
Attached Dwellings	12,050	71.5%	3,011.0
High Density Dwellings	4,812	28.5%	1,202.0
Average Calls-for-Service	16,862	100.0%	4,213.0

Land Use	Units or Acres	Calls for Service	Annual Calls Per Unit
Business Park Uses	9,587,138	8.3%	128.0
Industrial Uses	106,400,598	91.7%	1,417.0
Average Calls-for-Service	115,987,736	100.0%	1,545.0

Schedule 4.4

2021-22 Development Impact Cost Calculation Update
Allocation of Project Cost Estimates
Ontario Ranch (OR) - Minimum Capital Needs-based Impact Costs
Fire Suppression Facilities, Vehicles and Equipment

Proposed Land Use	*Undeveloped*		*Call Generation Rate*	*Anticipated New Calls for Service*	*Percentage of Additional Service Calls*	*Allocation of Expansion Costs*	*Cost Distribution Per Acre*	*Average Units or Square Feet/Acre*	*Development Impact Fee per Unit or Square Foot*
	Acres	*Units*							
Detached Dwellings	1,423	11,662	0.263	3,067	19.66%	$17,000,077	$11,947	8.20	***$1,458*** *per Unit*
Attached Dwellings	1,316	29,684	0.250	7,421	47.56%	$41,133,867	$31,257	22.56	***$1,386*** *per Unit*
High Density Dwellings	439	13,082	0.250	3,271	20.96%	$18,130,829	$41,300	29.80	***$1,386*** *per Unit*
Commercial Lodging Units	9	396	0.167	66	0.42%	$365,831	$40,648	44.00	***$924*** *per Unit*
Retail/Service Uses	279	5,751,595	0.187	1,076	6.90%	$5,964,161	$21,377	20,615	***$1.037*** *per S.F.*
Office Uses	114	2,670,188	0.115	307	1.97%	$1,701,671	$14,927	23,423	***$0.637*** *per S.F.*
Business Park Uses	428	9,953,243	0.013	129	0.83%	$715,034	$1,671	23,255	***$0.072*** *per S.F.*
Industrial Uses	669	16,981,679	0.013	221	1.42%	$1,224,981	$1,831	25,384	***$0.072*** *per S.F.*
Private Institutional Use	50	1,089,000	0.041	45	0.29%	$249,431	$4,989	21,780	***$0.229*** *per S.F.*
TOTAL	**4,727**	--	--	**15,603**	**100.00%**	**$86,485,882**	**in Total Equity in Ontario Ranch Area Capital Needs**		

Chapter 5
Circulation (Streets, Signals and Bridges) System

The following Chapter will discuss the Circulation System capital improvements consisting of major street segments, traffic signals and bridges required for the City through build-out of the existing City General Plan as identified in the Land-use Database Table in Chapter 2. Initially, RCS recommends continuation of the calculation of a comprehensive DIF schedule covering all components of the circulation system within the GC (General City) and OR (Ontario Ranch) areas, those three components consisting of major street segments, signals and bridge improvements. The reasons are practical in that combining this infrastructure will provide greater flexibility in establishing priorities in what is essentially a singular transportation issue with a common nexus, a combination of trip-end [4] generation and average trip distance. It is not uncommon that a single circulation capital project involves both a street segment improvement and traffic signal improvement.

The Existing System. The City currently has and maintains an extensive system of roadways available for transportation of goods and services, as well as for educational, recreational, and social purposes. Streets that fall under the jurisdiction of the City of Ontario are classified as one of four types of roadways for the purposes of this Report. The types of roadways are defined in The Ontario Plan Mobility Element.

Other Principal Arterial – This type of roadway typically has a 14' to 36' raised median that separates anywhere from four to eight lanes of traffic. This type of roadway may also have multi-purpose trails. The Other *Principal Arterial* contains the greatest portion of through-travel use and includes all higher-volume streets except those serving short trips.

Minor Arterial – Unlike the Other *Principal Arterial*, a *Minor Arterial* usually does not have a raised landscaped median. This type of roadway can accommodate four to six lanes of traffic and usually serves local and long distance trips with moderate mobility and considerable land access and connects less concentrated traffic generating areas such as schools, neighborhoods, and shopping centers.

Collector Street – A *collector street* does not have a raised landscaped median and can accommodate two to four lanes of traffic. This type of roadway serves mixed trips and provides service to abutting land and collects traffic from local streets.

Local Street – *Local streets* service residential areas and provide little long distance mobility. They are typically not striped but accommodate one lane of traffic in each direction. The curb-to-curb roadway width ranges from 36' to 48'. In general,

4 A *trip* is defined as a series of one or more trip-ends. A trip-end is a single stop in a trip. As an example, a drive from home to work is a trip. Each individual stop along the way along the way to drop children off at a school, buy gas, get a lunch, drop off laundry and the ultimate arrival at work or home is a trip-end. The term *trip* has no effect on the calculation and only means *a drive*.

construction of these streets is the responsibility of the developer, who then dedicates the completed street to the City. The City will accept the street improvements and the responsibility to maintain them if they meet City's requirements. For these reasons, the cost of all "local" streets has not been included in the Circulation System financial commitment calculation or the proportionality test.

GENERAL CITY DEVELOPMENT IMPACT FEES

Demand Upon Infrastructure Created by the Development of Undeveloped Parcels. Undeveloped parcels create few trip-ends beyond an occasional visit to the site for weed abatement purposes, planning purposes or to consider a sale or development of the vacant parcel. None of these trip-ends are not on a routine basis. However, a developed parcel will generate a statistically predictable amount of trip-ends and trip-miles, depending upon the specific land use of the development. Thus it can be stated that a vacant parcel, when developed into a specific use, i.e., residential or business, will generate more traffic than it did when it was vacant. Similarly, a change in the use of the property may increase or decrease the number of trip-ends, i.e., the demolition of a low trip-generating insurance office into reconstruction as a new a high trip generating fast-food restaurant.

All new development contributes to cumulative traffic impacts, which are difficult to measure and mitigate on a project-by-project basis but which have significant and widespread cumulative impacts on the City's existing road system. Factors that will increase the competition for existing major street segment lane miles existing in General City area include the following:

- The construction of 66.7 million square feet of private business uses on the net 2,598 under or undeveloped acres will generate 2.36 million additional daily trip-miles or about 84.9% of the total new trip-miles expected at GC General Plan build-out. This figure could vary significantly depending upon the type of commercial uses constructed and possible zoning changes or conditional use permits issued.

- An increase in the City's GC full-time population through the construction of about 25,721 additional dwelling units contributing approximately 414,498 new (net) daily trip-miles or just over 15.0% of the newly expected daily trip-miles.

- The addition of about 150 commercial lodging units will generate about 2,736 trip-miles, or about three tenths of one percent of the total new trip-miles.

When all (or most) of the available vacant land in the General City is developed, the City can expect an additional 2,770,597 daily trip-miles. For perspective, the City currently experiences an estimated 5,908,482 daily trip-miles from/to the existing residences and businesses. The roughly 2,770,597 newly anticipated trip-miles represent about a 46.9% increase over the current 5,908,482 daily trip-miles.

The **Purpose** of the Fee. In General City, most of the planned arterials and collectors exist in some form, perhaps not yet fully widened to allow for the full number of lanes. Stated another way, there are few if any opportunities to construct any completely new arterial/collectors. Thus

the collection of Circulation System DIFs become very imperative as a revenue source to finish off these existing, but, limited or incomplete, or not yet maximized roads. The same can be said for bridges, a number of them are included on the list to be completed to their maximum planned width, again maximizing the carrying capacity. Additionally, the fees would be used to complete the system of signals that insures the smooth movement of vehicles through intersections. Efficient signalization (i.e. turn pockets and fully actuated left-turn signals) are also important to keep vehicular traffic moving at the optimum efficiency through major intersections.

Included are transportation projects needed to alter existing arterials, connectors or collectors that currently exist, but due to additional trip-ends are becoming ineffective at moving vehicles.

Again, given the magnitude of growth projected in this Report, numerous intersection improvements and construction of new traffic signals will also be needed to avoid congestion and gridlock in the future. Traffic planners have long known that the most critical constraint in a typical roadway network would be the intersections. While the street capacity may be theoretically adequate to carry traffic volumes at build-out, motorists may experience congestion and even gridlock at the intersections of the street. While the City will certainly undertake numerous major street widening projects, an equally important component of traffic circulation is the installation of traffic signals and lane reconfiguration at critical intersections in the City.

The importance of traffic signals is two-fold. First, the City can build only so many major collector/arterial streets and there are limits as to how many extra lanes they will have. Second, north-south collectors will, by definition, intersect with east-west collectors assuring that *someone* will have to stop, either at a stop sign or a traffic signal. The traffic carrying capacity of each collector can only be maximized by assuring orderly flow of traffic by signalizing those intersecting collectors.

The collection of Circulation System DIFs is not intended to eliminate the time-honored practice of the developer constructing the full width roadway and being reimbursed for the portion greater than would otherwise be required of the developer. This impact fee calculation and resulting fee collection would simply improve the reimbursement capability.

The City's total MFP Circulation System infrastructure section identifies 106 remaining circulation-related projects covering both the General City and Ontario Ranch areas of the City. They have an estimated cost of $1,065,494,324. Approximately 16.27% of this amount or $173,321,022 has been identified as the responsibility of GC development as these projects will increase the capacity of the GC circulation system. Approximately 32.51% or $346,386,801 of the total project amount has been identified as the responsibility of OR Development. The remainder, 51.22% or $545,786,503 are projects that are not development-generated and will require non-DIF revenue sources. Most of this latter amount, about $212.5 million, is necessary for the remaining six planned but very costly grade separations under or over the Alhambra and Los Angeles rail-lines and $185.3 million for two remaining I-10 interchange improvements. The eight grade separations will not be fully financed by DIFs. An additional $27.9 million that is necessary for the pavement rehabilitation system projects will also not be financed from DIFs since they represent maintenance. The individual projects and costs are identified on Schedule 5.1 at the end of the Chapter and detailed in the MFP.

The **Use** of the Fee. The collection of Circulation System DIF schedule receipts would be used to construct the projects (or portions of projects) identified in Schedule 5.1 at the conclusion of this Chapter's text. The collected fees will be used to create additional lane miles, bridge lanes and signals with which to accommodate the additional 2,770,597 daily trip-miles expected from further development of General City.

The Relationship Between the Need for the Fee and The Type of Development Project. Schedule 5.1 identifies the additional traffic to be generated by new development, by type of development. The technical volume, *Trip Generation (Manual)* 7th Edition, produced by the Institute of Traffic Engineers, has been used to identify the *nexus*, or relationship between the type of development and the projected number of trips that development will generate.

A 900-unit detached dwelling specific plan would generate about 31,130 daily trip-miles and a twenty-acre retail/service development would generate 111,504 daily trip-miles. Each would pay its proportionate share of the total 2,770,597 newly created General City trip-miles expected at General Plan build-out. In the case of the detached dwelling residential development, the daily trip-miles generated by the 900 new residences represents about 1.2% of the total 2,770,597 new trip-miles anticipated at build-out, thus they would be required to pay or construct projects on the list to an amount equal to 1.2% of the total development-related project costs. The 20 acre retail/service development would finance 4.0% of the capital project list.

Circulation System Cost Distribution by Average Land-use Trip Frequency/Distance

New Trip Adjustment for *Pass-by* or *Diverted* Trips. Schedule 5.2 contains a sub-schedule that identifies adjustments to new total ***trip-ends***. As an example, an acre of general retail/service use would be expected, on average, to generate about 412 trip-ends daily. However, approximately 15% of those trip-ends, or about 62 trip-ends per day, are ***pass-by trip-ends.*** The ***trip-end*** is not truly an ***end*** but is actually one in a series of stops, i.e. at various commercial establishments, with a different location such as a residence as the final ***trip-end*** or destination of the series of ***trip-ends***. In order to be considered a pass-by trip, the location of the stop must be contiguous to the ***generator*** route [5], i.e. the route that would have been used even if the temporary stop had not been made. The Institute of Transportation Engineers (ITE) indicates that:

> Thus when forecasted trips based upon the trip generation rates are distributed to the adjacent streets, some reduction is made to account for those trips already there that will be attracted to the proposed development. [6]

Pass-by trip-ends are fully adjusted (reduced at 100%) from the average trip-ends (per day) generated by the eight land uses identified in Schedules 5.2 and 5.3.

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5 An example of a diverted trip-end would be a single trip-end where along the way from work, a motorists evening drive deviates from the normal route taken home at perhaps a preferred grocery store, mail drop, or to pick up a child from a piano lesson before continuing home. Each of these three stops would be considered *diverted* trip-ends.

6 Trip generation, Institute of Transportation Engineers, 1099 14th Street, Suite 300 West, Washington D.C. 20005-3438. Definition of terms, page 147.

A *diverted* trip is similar to a *pass-by* trip-end in that it is an extra stop between, as an example, a motorists' work site and his or her residence. The *diverted* trip differs slightly from the *pass-by* trip in that it requires a minor deviation from the normal ***generator*** route and the temporary stop. In short, a *diverted* trip creates a separate side trip using additional (and different) lane miles from that of the normal route from the motorist's place of employment and his or her residence[6]. These trips increase the traffic volume from the generator route, but only for brief distances. The ITE states that diverted trips:

> are produced from traffic volume on roadways within the vicinity of the generator (route) and require a diversion from that roadway to another roadway with access to the site. These roadways could include streets or freeways adjacent to the generator but without access to the generator [(7)].

These *diverted* trips will be adjusted (reduced at 50%) from the full trip count for each of the land uses identified in Chapter 2. In this case the diverted trip ends result in a further reduction of 82 trip-ends daily of the full impact. Thus the original 412 daily trip miles resulting from the one acre of commercial use nets to a lower 268 additional trip ends per day.

Again, the sub-schedule at the bottom of Schedule 5.2 indicates the total trip-ends and the reduction due to the number pass-by trips (at 100%) and diverted trips (at 50%). The trip pass-by and diversion percentages were generated and are supported by a study conducted by the San Diego Association of Governments (SANDAG) in conjunction with various U.S. and California government agencies [(8)].

Additionally, the same SANDAG data schedule referenced above provides information for a trip distance factor component to the nexus. Based upon that data, a trip to an industrial work-site has the greatest distance at 9.0 miles. A trip to an office averages 8.8 miles, residential trips average 7.9 miles, a trip from a hotel or motel (once in residence) averages 7.6 miles, and an average trip to a retail/service site is the shortest at 4.3 miles. This indicates that drivers generally appear willing travel further distances to work and for treatment at medical offices than they are to shop. Both frequency (trip-ends) and distance (average miles per trip) have been combined into the nexus by multiplying average trip frequency by average trip distance. Tri-mile rates have been calculated for the ten DIF land-use categories. They are demonstrated at the bottom of schedule 5.2 at the end of the Chapter.

The Relationship Between the Use of the Fee and the Type of Development Paying the Fee. There is very little difference between this and the above category. The fee collected will be based on the projected number of trip-ends the proposed development will generate in relationship to the total 2,770,597 additional projected trip-miles at build-out. Any amount imposed as a Circulation System DIF will be placed in a separate fund (collecting interest), and is to be used only on the projects identified on Schedule 5.1 as development-related.

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7 Institute of Transportation Engineers, 1099 14th Street NW, Suite 300 west, Washington D.C. 2005-3438, Definition of Terms, page 146.

8 *Traffic Generators*, San Diego Association of Governments, 401 B Street, Suite 800, San Diego, CA 92101. Brief Guide to Traffic Generators Rates. Compiled in conjunction with the U.S. Department of Housing and Urban Development. U.S. Department of Transportation, The California Department of Transportation and the U.S. Environmental Protection Agency, July 1995.

From time to time the City may require an applicant for a private project to construct a street or signal improvement (or portion thereof) that is on the list of required improvements at the end of this Chapter. This method is often undertaken to expedite the project at the request of the applicant/developer. The developer should receive a credit for any monies expended on this required improvement against their Circulation System DIF.

The Relationship Between the Amount of the Fee and the Cost of the Portion of the Facility Attributed to the Development Project. The calculation of the Circulation System DIFs is based upon the recognition that differing types of developments generate differing amounts of trip-miles. The fee is based upon the projected number of trips generated by the proposed private development project. Circulation DIF receipts will be accumulated until they reach the amount that could construct a meaningful project to alleviate or mitigate the demands of those new developments. Table 5-1 (summarized from Schedule 5.2) on the following page identifies the Minimal Needs-based Circulation System DIF schedule for General City.

Table 5-1
City of Ontario's General City Area
Basic Needs-based Circulation System
Development Impact Costs
by DIF Land-use Type

DIF Land-use Type	Allocation of Development Costs	Development Impact Cost Per Unit or Square Foot
Detached Dwelling Units (1)	$2,515,209	$2,224/Unit
Attached Dwelling Units	$3,991,517	$1,485/Unit
High Density Dwelling Units	$20,033,840	$919/Unit
Mobile Home Units	$110,140	$1,159/Unit
Commercial Lodging Units	$175,915	$1,173/Unit
Retail/Service Uses	$36,687,107	$4.494/S.F.
Office Uses	$53,665,521	$2.568/S.F.
Business Park Uses	$18,622,728	$2.672/S.F.
Industrial Uses	$42,209,456	$1.377/S.F.
Institutional Uses	$127,821	$2.934/S.F.

(1). Detached Dwelling Units indicates a negative due a reduction in those units in GC

This set of proposed fees would generate the Minimum needs amount of revenue necessary to construct the needed street, signal and bridge construction projects. These figures then need to be compared to the financial commitment demonstrated by the existing community.

Alternative Cost Methodology. A more precise calculation of costs for specific types of land uses (i.e., banks, hospitals, convalescent residences, etc.) can be determined by multiplying the average cost per trip of $64.30 by the applicable daily trip-mile rate. An example of this calculation can be found at the bottom of Schedule 5.2 and applied to Table 5-2, following.

These tables list trip rates and costs for various residential, resort, industrial and commercial developments. A fee system based on a lengthy schedule of trip rates theoretically provides more accuracy and therefore financial commitment in determining specific uses' impact on the City's circulation system, but at the same time may increase the City's costs to administer the fee. A more extensive listing of traffic generators by land use is available in *Trip Generation* as published by the Institute of Transportation Engineers, New York, NY.

[This space left vacant to place the following table on a single page].

Table 5-2
Detail of Circulation System Basic Needs-based Development (rounded) Impact Fees for Specific General City Area Commercial/Office Uses

Land Use Category	Adjusted Trip-ends	Average Distance	Trip-end to Trip	Additional Trip-miles	Cost per Trip-mile	Cost per 1,000 Square Feet or Dwelling Unit
RESIDENTIAL LAND USES (per Unit):						
Detached Dwelling Unit	8.76	7.9	0.5	34.60	$64.30	$2,224 /Unit
Apartment	5.85	7.9	0.5	23.1	$64.30	$1,484 /Unit
Condominium/Townhome	5.36	7.9	0.5	21.2	$64.30	$1,363 /Unit
High Density Dwelling	3.61	7.9	0.5	14.3	$64.30	$918 /Unit
Mobile Home Dwelling	4.57	7.9	0.5	18.1	$64.30	$1,185 /Unit
RESORT/TOURIST (per Unit or Entry Door):						
Hotel (multi-story)	6.29	7.6	0.5	23.9	$64.30	$1,537 /Room
All Suites Hotel	3.77	7.6	0.5	14.3	$64.30	$919 /Room
Motel	4.34	7.6	0.5	16.5	$64.30	$1,061 /Room
INDUSTRIAL (per 1,000 SF):						
General Light Industrial	6.17	9.0	0.5	27.8	$64.30	$1,788 /KSF
Heavy Industrial	5.97	9.0	0.5	26.9	$64.30	$1,730 /KSF
Manufacturing	2.73	9.0	0.5	12.3	$64.30	$791 /KSF
Warehousing	4.39	9.0	0.5	19.8	$64.30	$1,273 /KSF
MISCELLANEOUS BUSINESS USES (per 1,000 SF):						
Office Park	9.08	8.8	0.5	40.0	$64.30	$2,572 /KSF
Research Park	7.18	8.8	0.5	31.6	$64.30	$2,032 /KSF
Business Park (Specific)	11.29	8.8	0.5	49.7	$64.30	$3,196 /KSF
RETAIL/SERVICE USES (per 1,000 SF):						
Building Material Store	29.35	4.3	0.5	63.1	$64.30	$4,057 /KSF
Garden Center	23.45	4.3	0.5	50.4	$64.30	$3,241 /KSF
Movie Theater	2.47	4.3	0.5	5.3	$64.30	$341 /KSF
Church	5.92	4.3	0.5	12.7	$64.30	$817 /KSF
Medical-Dental Office	22.21	8.8	0.5	97.7	$64.30	$6,282 /KSF
General Office Building	7.16	8.8	0.5	31.5	$64.30	$2,025 /KSF
Shopping Center	30.20	4.3	0.5	64.9	$64.30	$4,173 /KSF
Hospital	11.42	4.3	0.5	24.6	$64.30	$1,582 /KSF
Discount Center	62.93	4.3	0.5	135.3	$64.30	$8,700 /KSF
High-Turnover Restaurant	8.90	4.3	0.5	19.1	$64.30	$1,228 /KSF
Convenience Market	43.57	4.3	0.5	93.7	$64.30	$6,025 /KSF
Walk-in Bank	13.97	4.3	0.5	30.0	$64.30	$1,929 /KSF
Other: (not available "per KSF")						
Cemetary (per acre)	3.07	4.3	0.5	6.6	$64.30	$424.38 /Acre
Service Station/Market (avg	107.69	4.3	0.5	231.5	$64.30	$14,885.45 /FP/Day
Service Station/Car Wash	99.35	4.3	0.5	213.6	$64.30	$13,734.48 /FP/Day

Table 5-3 following, (and summarized from Schedule 5.3) identifies the assets of the existing system (at current construction and acquisition costs). The $910,371,218 consists of the existing circulation plan arterial and collector lanes (along with curb, gutter and sidewalks) at $497,485,472, major streets rights-of-way at $218,103,708, street lights with a replacement value of $40,367,100 plus signalized intersections valued at $66,141,600. There are numerous existing bridges over creeks/washes with an estimated replacement value of $63,790,000. The existing railroad grade separations have a replacement value of approximately $26,500,000 and a fleet of vehicles costing some $2,801,570. There is also an existing GC negative fund balance of which acts as a negative asset and reduces the total Circulation assets by $4,818,232. When the resulting net $910,371,218 is distributed over the existing community, using the same nexus factor (e.g. trip-miles) used for distribution of future costs, the existing community has contributed the following, on average, by land use:

Table 5-3
Existing Circulation System Community
Financial Commitment Comparison Data

DIF Land-use Category	Allocation of Development Costs	Development Impact Cost Per Unit or Square Foot
Detached Dwelling Units	$146,284,782	$5,329/Unit
Attached Dwelling Units	$42,879,331	$3,558/Unit
High Density Dwelling Units	$10,593,681	$2,202/Unit
Mobile Home Units	$5,827,256	$2,779/Unit
Commercial Lodging Units	$16,327,257	$2,810/Unit
Retail/Service Uses	$198,335,956	$10.768/S.F.
Office Uses	$61,294,047	$6.155/S.F.
Business Park Uses	$61,387,419	$6.403/S.F.
Industrial Uses	$351,138,113	$3.300/S.F.
Institutional Uses	$16,303,375	$7.031/S.F.

It should be noted that the existing community has contributed, on average, much more than would be required of future development to meet the minimum needs for build-out and all users. While there is clearly excess capacity in the existing system, it is usually the result of the existing community absorbing the initial street construction costs including the costly right-of-way acquisition, the later part of the community often finances only the smaller segment length widening's which maximize the street segments capacity.

Recommended GC Circulation System DIF Schedule. The adoption of Schedule 5.2 at the end of the chapter (and as summarized in Table 5-1), as the GC Circulation System DIF Schedule would generate enough capital to construct the facilities needed by the new development. In addition, the City should adopt the application of the *per trip-mile fee* from the bottom of Schedule 5.2 and multiplied by the specific use Table 5-2 or the listing of traffic generation by

land use available in *Trip Generation* as published by the Institute of Transportation Engineers, New York, N.Y.

ONTARIO RANCH AREA CIRCULATION SYSTEM DEVELOPMENT IMPACT FEES

The Ontario Ranch has its own major street segment, signal and bridge needs. The increased standards are due to greater understanding of vehicular movement and state-of-the-art traffic planning. Were the transportation needs of The Ontario Plan to be included in a single Ontario City DIF, the GC area would unfairly have to subsidize the OR area, something that the current residents and businesses in GC would not care to undertake. Indeed, RCS was given the direction that there is every expectation that the OR area would, at a minimum, pay their own way and where appropriate, pay their fair share.

The Use of The Fee. This fee will be primarily used to construct additional or "extra" lane miles. "Extra" lane miles are defined as the outside two lanes of a four-lane road, the outside four lanes on a six lane arterial, or the outside six lanes on an eight lane arterial. This calculation is intended to create greater equity among privately owned parcels with differing contiguous lane configurations. Consider that some private parcels will be contiguous to six lane streets and could be exacted to build one half of the six lanes, while other private parcels may be contiguous to a planned two lane avenue and would only be exacted to construct one half of the two lanes, or two lanes with a reimbursement for one of the lanes when the parcel on the opposite side is developed. The inequity is obvious; those contiguous to the larger capacity-carrying road types quite often pay a greater amount.

Construction Responsibility vs. DIF Payment. This DIF assumes that each developer, contiguous to a planned Major Street would:

- Dedicate the needed right-of-way and would be responsible for last lane of asphalt concrete or PCC and the median area (approximately 40 feet wide);
- Construct the parkway landscaping; and,
- Construct the curb, gutter, sidewalk, striping and street lights.

However, construction of the extra lanes would be financed by the Circulation System DIF, contributed to by all development within the OR area, thereby leveling the playing field between privately held parcels contiguous to a six lane collector as opposed to those privately held parcels contiguous to a two lane minor arterial. A given developer may undertake the actual construction of the *extra* lanes at the same time that they construct the *first* lane, but they would receive a reimbursement for construction of those *extra* lanes.

The City staff, through various documents, studies and agreements with other governmental agencies has identified a net $346,386,801 in necessary streets (in "extra" lane miles), signals bridges and other circulation system projects necessary to accommodate the 2,618,742 additional trip-miles in the OR are of the City. Included in these costs are a number of projects identified by other agencies such as SANBAG and CALTRANS. This figure is increased by $31,129,155 via a combination of owed outstanding developer credits and negative fund

balances to a total of $377,515,956 to be recovered from future DIF collections. This calculates to approximately $144.16 per daily trip-mile.

The DIF Adoption Ordinance should contain the necessary language for identifying the process for calculating the reimbursement amount for the construction of *extra* lanes. Table 5-4, following and summarized from Schedule 5.4, identifies the DIFs necessary to collect in order to foster the construction of the transportation system within the confines of the Ontario Ranch area. These are recommended for adoption.

Table 5-4
City of Ontario's Ontario Ranch Area
Basic Needs-based Circulation System
Development Impact Costs
by DIF Land-use Type

DIF Land Use Type	Allocation of Development Costs	Development Impact Cost per Unit or Square Foot
Detached Dwelling Units	$58,149,528	$4,986/Unit
Attached Dwelling Units	$98,828,970	$3,329/Unit
High Density Dwelling Units	$26,946,252	$2,060/Unit
Commercial Lodging Units	$1,041,262	$2,629/Unit
Retail/Service Uses	$57,947,273	$10.075/S.F.
Office Uses	$15,375,740	$5.758/S.F.
Business Park Uses	$59,268,746	$5.991/S.F.
Industrial Uses	$52,434,189	$3.088/S.F.
Institutional Uses	$7,163,995	$6.579/S.F.

ONTARIO RANCH CIRCULATION SYSTEM DIF SCHEDULE RECOMMENDATION

The DIFs for the nine broad land uses, as identified in Table 5-5 and Schedule 5.4 are recommended as the required set of fees with the option for the staff to apply the *per trip fee* calculated at $144.16 per trip-end from Schedule 5.4 multiplied by the specific use on Table 5-5 or the more extensive listing of traffic generation by land use available in *Trip Generation* as published by the Institute of Transportation Engineers, New York, N.Y.

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Table 5-5
Detail of Circulation System Basic Needs-based DIFs (rounded) for Specific Ontario Ranch Area Business Uses

Land Use Category	Adjusted Trip-ends	Average Distance	Trip-end to Trip	Additional Trip-miles	Cost per Trip-mile	Cost per 1,000 Square Feet or Dwelling Unit
RESIDENTIAL LAND USES (per Unit):						
Detached Dwelling Unit	8.76	7.9	0.5	34.60	$144.16	$4,987 /Unit
Apartment	5.85	7.9	0.5	23.1	$144.16	$3,329 /Unit
Condominium/Townhome	5.36	7.9	0.5	21.2	$144.16	$3,056 /Unit
High Density Dwelling	3.61	7.9	0.5	14.3	$144.16	$2,060 /Unit
Mobile Home Dwelling	4.57	7.9	0.5	18.1	$144.16	$2,630 /Unit
RESORT/TOURIST (per Unit or Entry Door):						
Hotel (multi-story)	6.29	7.6	0.5	23.9	$144.16	$3,445 /Room
All Suites Hotel	3.77	7.6	0.5	14.3	$144.16	$2,061 /Room
Motel	4.34	7.6	0.5	16.5	$144.16	$2,379 /Room
INDUSTRIAL (per 1,000 SF):						
General Light Industrial	6.17	9.0	0.5	27.8	$144.16	$4,008 /KSF
Heavy Industrial	5.97	9.0	0.5	26.9	$144.16	$3,878 /KSF
Manufacturing	2.73	9.0	0.5	12.3	$144.16	$1,773 /KSF
Warehousing	4.39	9.0	0.5	19.8	$144.16	$2,854 /KSF
MISCELLANEOUS BUSINESS USES (per 1,000 SF):						
Office Park	9.08	8.8	0.5	40.0	$144.16	$5,766 /KSF
Research Park	7.18	8.8	0.5	31.6	$144.16	$4,555 /KSF
Business Park (Specific)	11.29	8.8	0.5	49.7	$144.16	$7,165 /KSF
RETAIL/SERVICE USES (per 1,000 SF):						
Building Material Store	29.35	4.3	0.5	63.1	$144.16	$9,096 /KSF
Garden Center	23.45	4.3	0.5	50.4	$144.16	$7,266 /KSF
Movie Theater	2.47	4.3	0.5	5.3	$144.16	$764 /KSF
Church	5.92	4.3	0.5	12.7	$144.16	$1,831 /KSF
Medical-Dental Office	22.21	8.8	0.5	97.7	$144.16	$14,084 /KSF
General Office Building	7.16	8.8	0.5	31.5	$144.16	$4,541 /KSF
Shopping Center	30.20	4.3	0.5	64.9	$144.16	$9,356 /KSF
Hospital	11.42	4.3	0.5	24.6	$144.16	$3,546 /KSF
Discount Center	62.93	4.3	0.5	135.3	$144.16	$19,505 /KSF
High-Turnover Restaurant	8.90	4.3	0.5	19.1	$144.16	$2,753 /KSF
Convenience Market	43.57	4.3	0.5	93.7	$144.16	$13,508 /KSF
Walk-in Bank	13.97	4.3	0.5	30.0	$144.16	$4,325 /KSF
Other: (not available "per KSF")						
Cemetary (per acre)	3.07	4.3	0.5	6.6	$144.16	$951.45 /Acre
Service Station/Market (avg	107.69	4.3	0.5	231.5	$144.16	$33,372.87 /FP/Day
Service Station/Car Wash	99.35	4.3	0.5	213.6	$144.16	$30,792.42 /FP/Day

RECAP OF RECOMMENDED CIRCULATION SYSTEM DEVELOPMENT IMPACT FEES

- **General City Area** - Adopt Schedule 5.2 for most land-uses and the per trip-end rate on Schedule 5.2 to be used in conjunction with the most current edition of ITE manual (and the trip length figures (via SANDAG) at the bottom of Schedule 5.2) for unusual land-uses (e.g. an amusement park).

- **Ontario Ranch Area** - Adopt Schedule 5.4 for most land-uses and the per trip-end rate on Schedule 5.4 to be used in conjunction with the most current edition of ITE manual (and the trip length figures (via SANDAG) at the bottom of Schedule 5.2) for unusual land-uses (e.g. an amusement park).

END OF CHAPTER TEXT

Schedule 5.1

City of Ontario
2021-22 Development Impact Cost Calculation Update
Allocation of Project Cost Estimates
Circulation (Streets, Signals and Bridges) System

Line #	Project Title	Estimated Cost	Construction Needs Supported by Other Resources		Construction Needs Generated by New Development in OR		Construction Needs Generated by New Development in GC	
			Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost
ST-001	Archibald Avenue From Riverside to Edison (P)	$276,976	0.00%	$0	100.00%	$276,976	0.00%	$0
ST-002	Archibald Avenue From Edison To South City Limit (P)	$321,849	0.00%	$0	100.00%	$321,849	0.00%	$0
ST-003	Bellegrave Avenue From Archibald To Milliken (P)	$1,709,677	0.00%	$0	100.00%	$1,709,677	0.00%	$0
ST-004	Campus Avenue From Riverside To Merrill	$5,125,449	0.00%	$0	100.00%	$5,125,449	0.00%	$0
ST-005	Chino Avenue From Euclid To Milliken	$7,955,573	0.00%	$0	100.00%	$7,955,573	0.00%	$0
ST-006	Mill Creek Avenue From Riverside To Bellegrave (P)	$2,924,646	0.00%	$0	100.00%	$2,924,646	0.00%	$0
ST-007	Edison Avenue From Euclid To Walker	$11,315,002	0.00%	$0	100.00%	$11,315,002	0.00%	$0
ST-008	Edison Avenue From Walker To Vineyard	$3,336,357	0.00%	$0	100.00%	$3,336,357	0.00%	$0
ST-009	Edison Avenue From Vineyard To Mill Creek	$7,492,465	0.00%	$0	100.00%	$7,492,465	0.00%	$0
ST-010	Edison Avenue From Mill Creek to Milliken (P)	$809,769	0.00%	$0	100.00%	$809,769	0.00%	$0
ST-011	Eucalyptus Avenue From Euclid To Milliken	$8,764,717	0.00%	$0	100.00%	$8,764,717	0.00%	$0
ST-012	Euclid Avenue From Riverside To Merrill	$11,910,586	0.00%	$0	100.00%	$11,910,586	0.00%	$0
ST-013	Grove Avenue From Riverside To Merrill	$8,293,822	0.00%	$0	100.00%	$8,293,822	0.00%	$0
ST-014	Haven Avenue From Riverside To Bellegrave (P)	$5,301,689	0.00%	$0	100.00%	$5,301,689	0.00%	$0
ST-015	Merrill Avenue From Euclid To Archibald	$5,753,226	0.00%	$0	100.00%	$5,753,226	0.00%	$0
ST-016	Milliken Avenue From Riverside To Edison	$4,703,562	0.00%	$0	100.00%	$4,703,562	0.00%	$0
ST-017	Milliken Avenue From Edison To Bellegrave	$2,406,049	0.00%	$0	100.00%	$2,406,049	0.00%	$0
ST-018	Hellman Avenue From Riverside To Merrill	$3,916,058	0.00%	$0	100.00%	$3,916,058	0.00%	$0
ST-019	Riverside Drive From Euclid To Milliken (P)	$4,567,977	0.00%	$0	100.00%	$4,567,977	0.00%	$0
ST-020	Schaefer Avenue From Euclid To Haven	$6,470,318	0.00%	$0	100.00%	$6,470,318	0.00%	$0
ST-021	Turner Avenue From Riverside To Schaefer	$314,257	0.00%	$0	100.00%	$314,257	0.00%	$0
ST-022	Vineyard Avenue From Riverside To Merrill	$11,505,904	0.00%	$0	100.00%	$11,505,904	0.00%	$0
ST-023	Walker Avenue From Riverside To Merrill	$3,915,292	0.00%	$0	100.00%	$3,915,292	0.00%	$0
ST-024	Ontario Ranch Traffic Control System (P)	$25,812,097	0.00%	$0	100.00%	$25,812,097	0.00%	$0
ST-025	Non-Dev. ROW, Frontage Imps. & SCE Pole Relocations	$51,368,402	0.00%	$0	100.00%	$51,368,402	0.00%	$0
ST-026	Additional SCE Pole Relocations	$664,000	0.00%	$0	100.00%	$664,000	0.00%	$0
ST-027	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-028	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-029	OR Offsite Cantu Galleano Widening I-15 To Milliken	$2,343,127	0.00%	$0	100.00%	$2,343,127	0.00%	$0
ST-030	OR Offsite Euclid Avenue Improvements, Merrill To US-71	$6,487,700	0.00%	$0	100.00%	$6,487,700	0.00%	$0
ST-031	OR Offsite Archibald Avenue Bridge Over Santa Ana River	$265,561	0.00%	$0	100.00%	$265,561	0.00%	$0

Schedule 5.1

City of Ontario
2021-22 Development Impact Cost Calculation Update
Allocation of Project Cost Estimates
Circulation (Streets, Signals and Bridges) System

Line #	Project Title	Estimated Cost	Construction Needs Supported by Other Resources		Construction Needs Generated by New Development in OR		Construction Needs Generated by New Development in GC	
			Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost
ST-032	OR Offsite Hamner Avenue Bridge Over The Santa Ana River	$614,318	0.00%	$0	100.00%	$614,318	0.00%	$0
ST-033	General City Street Lights (P)	$3,449,315	0.00%	$0	0.00%	$0	100.00%	$3,449,315
ST-034	General City Traffic Signals	$16,587,656	0.00%	$0	0.00%	$0	100.00%	$16,587,656
ST-035	Benson Avenue From Mission To Philadelphia	$898,664	56.00%	$503,252	0.00%	$0	44.00%	$395,412
ST-036	Mountain Avenue From Sixth To Holt (P)	$2,630,159	56.00%	$1,472,889	0.00%	$0	44.00%	$1,157,270
ST-037	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-038	Bon View Avenue From Holt to Mission	$1,172,758	56.00%	$656,744	0.00%	$0	44.00%	$516,014
ST-039	Bon View Avenue From Mission To Belmont	$659,505	56.00%	$369,323	0.00%	$0	44.00%	$290,182
ST-040	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-041	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-042	Grove Avenue From Fourth Street to Airport Drive	$37,893,616	56.00%	$21,220,425	0.00%	$0	44.00%	$16,673,191
ST-043	Turner Avenue, From Inland Empire Boulevard To Fourth	$740,915	56.00%	$414,912	0.00%	$0	44.00%	$326,003
ST-044	Archibald Avenue from Fourth To Guasti Park Entrance	$1,993,436	56.00%	$1,116,324	0.00%	$0	44.00%	$877,112
ST-045	Milliken Avenue From SR-60 To Riverside	$395,257	56.00%	$221,344	0.00%	$0	44.00%	$173,913
ST-046	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-047	Etiwanda Avenue At Airport Drive	$8,732,855	82.27%	$7,184,339	0.00%	$0	17.73%	$1,548,516
ST-048	Eight Street From West Cucamonga Creek To Grove	$161,637	56.00%	$90,517	0.00%	$0	44.00%	$71,120
ST-049	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-050	Fourth Street From Palmetto To San Antonio	$1,224,737	56.00%	$685,853	0.00%	$0	44.00%	$538,884
ST-051	Fourth Street From Campus To Cucamonga	$1,015,343	56.00%	$568,592	0.00%	$0	44.00%	$446,751
ST-052	Fourth Street From Vineyard To Archibald	$654,975	0.00%	$0	0.00%	$0	100.00%	$654,975
ST-053	Holt Boulevard From Benson To Vineyard	$50,897,689	56.00%	$28,502,706	0.00%	$0	44.00%	$22,394,983
ST-054	Guasti Road From Holt To Archibald	$966,772	56.00%	$541,392	0.00%	$0	44.00%	$425,380
ST-055	State Street From Benson To Grove	$4,795,686	56.00%	$2,685,584	0.00%	$0	44.00%	$2,110,102
ST-056	Airport Drive Under The I-15 Freeway	$3,004,539	56.00%	$1,682,542	0.00%	$0	44.00%	$1,321,997
ST-057	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-058	Mission Boulevard From Cypress To Grove	$5,492,817	56.00%	$3,075,978	0.00%	$0	44.00%	$2,416,839
ST-059	Mission Boulevard From Grove To Milliken (P)	$10,828,222	56.00%	$6,063,804	0.00%	$0	44.00%	$4,764,418
ST-060	Phillips Street From Benson To Mountain	$556,398	56.00%	$311,583	0.00%	$0	44.00%	$244,815
ST-061	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-062	Acacia Street From Baker To Vineyard	$72,662	56.00%	$40,691	0.00%	$0	44.00%	$31,971

Schedule 5.1

City of Ontario
2021-22 Development Impact Cost Calculation Update
Allocation of Project Cost Estimates
Circulation (Streets, Signals and Bridges) System

Line #	Project Title	Estimated Cost	Construction Needs Supported by Other Resources		Construction Needs Generated by New Development in OR		Construction Needs Generated by New Development in GC	
			Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost
ST-063	Francis Street From Benson To Campus	$4,496,927	56.00%	$2,518,279	0.00%	$0	44.00%	$1,978,648
ST-064	Jurupa Street From Archibald To East Of Turner	$762,141	56.00%	$426,799	0.00%	$0	44.00%	$335,342
ST-065	Philadelphia Street From Campus To Grove	$847,658	56.00%	$474,688	0.00%	$0	44.00%	$372,970
ST-066	Philadelphia From E/O Vineyard to Cucamonga Creek	$523,338	56.00%	$293,069	0.00%	$0	44.00%	$230,269
ST-067	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-068	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-069	Grove Avenue Bridge Over West Cucamonga Creek	$940,937	56.00%	$526,925	0.00%	$0	44.00%	$414,012
ST-070	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-071	Holt Boulevard Bridge Over West Cucamonga Creek	$249,936	56.00%	$139,964	0.00%	$0	44.00%	$109,972
ST-072	Mission Boulevard Bridge Over West Cucamonga Creek	$699,821	56.00%	$391,900	0.00%	$0	44.00%	$307,921
ST-073	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-074	Francis Street Bridge Over West Cucamonga Creek	$224,942	56.00%	$125,968	0.00%	$0	44.00%	$98,974
ST-075	Eighth Street Bridge Over Cucamonga Creek	$1,924,510	56.00%	$1,077,726	0.00%	$0	44.00%	$846,784
ST-076	Sixth Street Bridge Over Cucamonga Creek	$1,536,373	56.00%	$860,369	0.00%	$0	44.00%	$676,004
ST-077	Fourth Street Bridge Over Cucamonga Creek	$790,240	0.00%	$0	0.00%	$0	100.00%	$790,240
ST-078	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-079	Holt Boulevard Bridge Over Cucamonga Creek	$2,793,405	56.00%	$1,564,307	0.00%	$0	44.00%	$1,229,098
ST-080	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-081	Mission Boulevard Bridge Over Cucamonga Creek	$2,049,478	56.00%	$1,147,708	0.00%	$0	44.00%	$901,770
ST-082	Francis Street Bridge Over Cucamonga Creek	$1,874,522	56.00%	$1,049,732	0.00%	$0	44.00%	$824,790
ST-083	Philadelphia Street Bridge Over Cucamonga Creek	$222,963	56.00%	$124,859	0.00%	$0	44.00%	$98,104
ST-084	Riverside Drive Bridge Over Cucamonga Creek	$1,093,633	56.00%	$612,434	0.00%	$0	44.00%	$481,199
ST-085	Archibald Avenue Bridge Over Upper Deer Creek	$1,257,032	56.00%	$703,938	0.00%	$0	44.00%	$553,094
ST-086	Archibald Avenue Bridge Over Upper Deer Creek Spillway	$1,759,846	56.00%	$985,514	0.00%	$0	44.00%	$774,332
ST-087	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	100.00%	$0
ST-088	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-089	Archibald Avenue Bridge Over Lower Deer Creek	$371,964	0.00%	$0	100.00%	$371,964	0.00%	$0
ST-090	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-091	Grove Avenue Grade Separation Under UPRR/Alhambra	$11,034,119	56.00%	$6,179,107	0.00%	$0	44.00%	$4,855,012
ST-092	Milliken (N) Grade Separation Under UPRR/Alhambra	$26,735,802	99.28%	$26,542,127	0.00%	$0	0.72%	$193,675
ST-093	Project Completed or No Longer Needed	$0	100.00%	$0	0.00%	$0	0.00%	$0

Schedule 5.1

City of Ontario
2021-22 Development Impact Cost Calculation Update
Allocation of Project Cost Estimates
Circulation (Streets, Signals and Bridges) System

Line #	Project Title	Estimated Cost	Construction Needs Supported by Other Resources		Construction Needs Generated by New Development in OR		Construction Needs Generated by New Development in GC	
			Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost
ST-094	Project Completed or No Longer Needed	$0	66.89%	$0	4.54%	$0	28.57%	$0
ST-095	Archibald (S) Grade Separation Over UPRR/LA	$59,529,194	74.80%	$44,530,086	0.00%	$0	25.20%	$14,999,108
ST-096	San Antonio (S) Grade Separation Under UPRR/Alhambra	$24,904,800	56.00%	$13,946,688	0.00%	$0	44.00%	$10,958,112
ST-097	Campus (S) Grade Separation Under UPRR/Alhambra	$24,904,800	56.00%	$13,946,688	0.00%	$0	44.00%	$10,958,112
ST-098	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-099	Vine (S) Grade Separation Under UPRR/LA Line	$21,791,700	100.00%	$21,791,700	0.00%	$0	0.00%	$0
ST-100	Sultana (S) Grade Separation Under UPRR/LA Line	$21,791,700	80.00%	$17,433,360	0.00%	$0	20.00%	$4,358,340
ST-101	Bon View (S) Grade Separation Under UPRR/LA Line	$21,791,700	100.00%	$21,791,700	0.00%	$0	0.00%	$0
ST-102	Pavement Management System Rehabilitation Program	$27,863,941	100.00%	$27,863,941	0.00%	$0	0.00%	$0
ST-103	Circulation System Maintenance Vehicles	$3,595,574	0.00%	$0	48.59%	$1,747,131	51.41%	$1,848,443
ST-104	Great Park Bridge Over Archibald Avenue	$5,177,843	0.00%	$0	100.00%	$5,177,843	0.00%	$0
ST-105	SR-60 At Vineyard Interchange Reconstruction/Expansion	$52,725,537	43.70%	$23,041,060	56.30%	$29,684,477	0.00%	$0
ST-106	SR-60 At Archibald Interchange Reconstruction/Expansion	$12,990,458	64.06%	$8,322,155	35.94%	$4,668,303	0.00%	$0
ST-107	SR-60 At Euclid Interchange Reconstruction/Expansion (P)	$5,915,683	74.60%	$4,413,100	25.40%	$1,502,583	0.00%	$0
ST-108	SR-60 At Grove Interchange Reconstruction/Expansion	$52,435,737	52.30%	$27,423,890	47.70%	$25,011,847	0.00%	$0
ST-109	SR-60 At Mountain Interchange Reconstruction/Expansion	$15,565,500	76.70%	$11,938,739	23.30%	$3,626,762	0.00%	$0
ST-110	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-111	I-10 Freeway at Grove/Fourth	$182,545,236	89.10%	$162,647,805	0.00%	$0	10.90%	$19,897,431
ST-112	Traffic Signal System Control and Operations Center (P)	$2,281,811	0.00%	$0	50.00%	$1,140,906	50.00%	$1,140,906
ST-113	General City Backbone Signal Interconnect	$2,698,020	80.00%	$2,158,416	0.00%	$0	20.00%	$539,604
ST-114	I-10 At Euclid Avenue Eastbound On Ramp (P)	$9,243,354	93.00%	$8,596,319	0.00%	$0	7.00%	$647,035
ST-115	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
ST-116	I-10 At Vineyard Interchange Reconstruction/Expansion (P)	$2,738,474	60.00%	$1,643,084	0.00%	$0	40.00%	$1,095,390
ST-117	Ontario Ranch Road/Trail Separation	$2,328,050	0.00%	$0	100.00%	$2,328,050	0.00%	$0
ST-118	Hellman Avenue Bridge Over Cucamonga Creek	$2,183,267	0.00%	$0	0.00%	$0	100.00%	$2,183,267
ST-119	Project Completed or No Longer Needed	$0	0.00%	$0	100.00%	$0	0.00%	$0
ST-120	Project Completed or No Longer Needed	$0	0.00%	$0	100.00%	$0	0.00%	$0
ST-121	Schaefer Avenue Bridge Over Cucamonga Creek	$6,946,758	0.00%	$0	100.00%	$6,946,758	0.00%	$0
ST-122	Schaefer Avenue Over Cucamonga Creek Spillway	$12,349,792	0.00%	$0	100.00%	$12,349,792	0.00%	$0
ST-123	Edison Avenue Bridge Over Cucamonga Creek	$17,995,412	0.00%	$0	100.00%	$17,995,412	0.00%	$0
ST-124	Eucalyptus Avenue Bridge Over Cucamonga Creek	$11,000,000	0.00%	$0	100.00%	$11,000,000	0.00%	$0

Schedule 5.1

City of Ontario
2021-22 Development Impact Cost Calculation Update
Allocation of Project Cost Estimates
Circulation (Streets, Signals and Bridges) System

Line #	Project Title	Estimated Cost	Construction Needs Supported by Other Resources: Percent Need	Construction Needs Supported by Other Resources: Apportioned Dollar Cost	Construction Needs Generated by New Development in OR: Percent Need	Construction Needs Generated by New Development in OR: Apportioned Dollar Cost	Construction Needs Generated by New Development in GC: Percent Need	Construction Needs Generated by New Development in GC: Apportioned Dollar Cost
ST-125	Merrill Avenue Bridge Over Cucamonga Creek	$11,000,000	0.00%	$0	100.00%	$11,000,000	0.00%	$0
ST-126	Share of Specific/Common City Yard Improvements	$1,915,576	0.00%	$0	48.59%	$930,800	51.41%	$984,776
ST-127	Ontario Ranch Bus Stop Shelters	$3,088,824	0.00%	$0	100.00%	$3,088,824	0.00%	$0
ST-128	Ontario Ranch Street Design Studies	$1,074,109	0.00%	$0	100.00%	$1,074,109	0.00%	$0
ST-129	Fourth Street Under The I-10 Freeway	$20,757,659	53.68%	$11,143,565	0.00%	$0	46.32%	$9,614,094
ST-130	Guasti Road Extension From 1,530' E/O Of Haven Easterly 310'	$607,375	0.00%	$0	0.00%	$0	100.00%	$607,375
ST-131	Ontario Ranch Traffic Study	$94,815	0.00%	$0	100.00%	$94,815	0.00%	$0
	Sub-Total General Plan Total New Projects	$1,065,494,324	51.22%	$545,786,503	32.51%	$346,386,801	16.27%	$173,321,022
	FINANCIAL ADJUSTMENTS:							
	Ontario Ranch - Local Streets Outstanding Credits	$25,950,213	0.00%	$0	100.00%	$25,950,213	0.00%	$0
	Ontario Ranch - Regional Streets Outstanding Credits	$3,898,143	0.00%	$0	100.00%	$3,898,143	0.00%	$0
	Ontario Ranch - Development Impact Fee Fund Balance	$1,280,799	0.00%	$0	100.00%	$1,280,799	0.00%	$0
	General City - Development Impact Fee Fund Balance	$4,818,232	0.00%	$0	0.00%	$0	100.00%	$4,818,232
	Total Fund Balance/Outstanding Credits	$35,947,387	0.00%	$0	86.60%	$31,129,155	13.40%	$4,818,232
	Total Net General Plan Project Costs	$1,101,441,711	49.55%	$545,786,503	34.27%	$377,515,956	16.17%	$178,139,254
					Forward to Schedule 5.4		**Forward to Schedule 5.2**	

NOTES:

(1). All developer-held "credits" under FINANCIAL ADJUSTMENTS will appear as a positive indicating an additional Infrastructure Fund obligation that will be redeemed (in lieu of a DIF payment) at some point in the future.

(2). A negative figure under FINANCIAL ADJUSTMENTS indicates a positive Fund Balance mitigating the project total. A positive figure indicates an amount that needs to be recovered by DIFs.

(3). Costs distribution based upon a frequency and distance factor.

Schedule 5.2

City of Ontario
2021-22 Development Impact Cost Calculation Update
General City (GC) - Minimum Capital Needs-based Impact Costs
Circulation (Streets, Signals and Bridges) System

Proposed Land Use	Undeveloped Acres	Undeveloped Units	Trip-end and Length Factor	Total GC Additional Trip-miles	Percentage of Additional Trip-miles	Allocation of Expansion Costs	Cost Distribution Per Acre	Average Units or Square Feet/Acre	Development Impact Fee per Unit or Square Foot
Detached Dwellings	262	1,131	34.588	39,119	1.41%	$2,515,209	$9,600	4.32	*$2,224 per Unit*
Attached Dwellings	183	2,688	23.095	62,080	2.24%	$3,991,517	$21,812	14.69	*$1,485 per Unit*
High Density Dwellings	598	21,807	14.288	311,586	11.25%	$20,033,840	$33,501	36.47	*$919 per Unit*
Mobile Home Dwellings	14	95	18.035	1,713	0.06%	$110,140	$7,867	6.79	*$1,159 per Unit*
Commercial Lodging Units	3	150	18.239	2,736	0.10%	$175,915	$58,638	50.00	*$1,173 per Unit*
Retail/Service Uses	992	8,164,415	69.888	570,594	20.59%	$36,687,107	$36,983	8,230	*$4.494 per S.F.*
Office Uses	822	20,895,746	39.944	834,659	30.13%	$53,665,521	$65,287	25,421	*$2.568 per S.F.*
Business Park Uses	341	6,969,626	41.557	289,639	10.45%	$18,622,728	$54,612	20,439	*$2.672 per S.F.*
Industrial Uses	441	30,650,125	21.419	656,483	23.69%	$42,209,456	$95,713	69,501	*$1.377 per S.F.*
Private Institutional Use	2	43,560	45.634	1,988	0.07%	$127,821	$63,911	21,780	*$2.934 per S.F.*
TOTAL	**3,658**	--	--	**2,770,597**	**100.00%**	**$178,139,254**	**in Total GC Circulation General Plan Projects**		
ALTERNATIVE FEE METHODOLOGY				***2,770,597***		***$178,139,254***	***$64.30 per Daily Trip-mile***		

Trip-ends Adjustment Calculation / Land Use Title	Daily Total Trip-ends	Percent of Diverted Trips	Diverted Trip-end % Adjustment	Diverted Trip-end Percent	Percent of Pass-by Trips	Combined Diverted and Pass-by	Remaining Trip % as Adjustment %	Adjusted Trip Rate, Adjustment % X Total trips	*Average Trip Length*	*Trip-ends X Length X 50%*
Detached Dwellings	9.57	11	0.50	5.5	3.0	**8.5**	**91.5%**	8.76	***7.9***	***34.6***
Attached Dwellings	6.39	11	0.50	5.5	3.0	**8.5**	**91.5%**	5.85	***7.9***	***23.1***
High Density Dwellings	3.95	11	0.50	5.5	3.0	**8.5**	**91.5%**	3.62	***7.9***	***14.3***
Mobile Home Dwellings	4.99	11	0.50	5.5	3.0	**8.5**	**91.5%**	4.57	***7.9***	***18.0***
Commercial Lodging Units	6.23	38	0.50	19.0	4.0	**23.0**	**77.0%**	4.80	***7.6***	***18.2***
Retail/Service Uses	50.01	40	0.50	20.0	15.0	**35.0**	**65.0%**	32.51	***4.3***	***69.9***
Office Uses	10.50	19	0.50	9.5	4.0	**13.5**	**86.5%**	9.08	***8.8***	***39.9***
Business Park Uses	10.44	19	0.50	9.5	2.0	**11.5**	**88.5%**	9.23	***9.0***	***41.6***
Industrial Uses	5.38	19	0.50	9.5	2.0	**11.5**	**88.5%**	4.76	***9.0***	***21.4***
Private Institutional Use	11.99	19	0.50	9.5	4.0	**13.5**	**86.5%**	10.37	***8.8***	***45.6***

Schedule 5.3

City of Ontario
2021-22 Development Impact Cost Calculation Update
Existing Community Financial Commitment Comparison
Circulation (Streets, Signals and Bridges) System

Proposed Land Use	Undeveloped Acres	Undeveloped Units	Trip-end and Length Factor	Existing GC Trip-miles	Percentage of Additional Trip-miles	Allocation of Expansion Costs	Cost Distribution Per Acre	Average Units or Square Feet/Acre	Development Impact Fee per Unit or Square Foot
Detached Dwellings	4,733.0	27,449	34.588	949,416	16.07%	$146,284,782	$30,907	5.80	*$5,329 per Unit*
Attached Dwellings	641.0	12,050	23.095	278,295	4.71%	$42,879,331	$66,894	18.80	*$3,558 per Unit*
High Density Dwellings	193.0	4,812	14.288	68,755	1.16%	$10,593,681	$54,890	24.93	*$2,202 per Unit*
Mobile Home Dwellings	204.0	2,097	18.035	37,820	0.64%	$5,827,256	$28,565	10.28	*$2,779 per Unit*
Commercial Lodging Units	143.0	5,810	18.239	105,967	1.79%	$16,327,257	$114,177	40.63	*$2,810 per Unit*
Retail/Service Uses	477.0	18,418,611	69.888	1,287,238	21.79%	$198,335,956	$415,799	38,613	*$10.768 per S.F.*
Office Uses	310.0	9,959,192	39.944	397,810	6.73%	$61,294,047	$197,723	32,126	*$6.155 per S.F.*
Business Park Uses	741.0	9,587,138	41.557	398,416	6.74%	$61,387,419	$82,844	12,938	*$6.403 per S.F.*
Industrial Uses	6,610.0	106,400,598	21.419	2,278,953	38.57%	$351,138,113	$53,122	16,097	*$3.300 per S.F.*
Private Institutional Use	419.0	2,318,711	45.634	105,812	1.79%	$16,303,375	$38,910	5,534	*$7.031 per S.F.*
TOTAL	**14,471.0**	--	--	**5,908,482**	**100.00%**	**$910,371,218**	**Total Circulation System Capital Assets**		
						$497,485,472	**in General Plan Major Streets Assets (full width)**		
						$218,103,708	**in General Plan Streets Rights of Way Assets**		
						$63,790,000	**in General Plan Bridges Assets**		
						$26,500,000	**in General Plan Grade Separation Assets**		
						$66,141,600	**in General Plan Signal/Intersection Assets**		
						$2,801,570	**in Street Maintenance Vehicle Assets**		
						$40,367,100	**in Street Light Assets**		
						($4,818,232)	**in Circulation System DIF Fund Balance**		

Schedule 5.4

City of Ontario
2021-22 Development Impact Cost Calculation Update
Ontario Ranch (OR) - Minimum Capital Needs-based Impact Costs
Circulation (Streets, Signals and Bridges) System

Proposed Land Use	Undeveloped Acres	Undeveloped Units	Trip-end and Length Factor	Total OR Additional Trip-miles	*Percentage of Additional Trip-miles*	Allocation of Expansion Costs	Cost Distribution Per Acre	Average Units or Square Feet/Acre	*Development Impact Fee per Unit or Square Foot*
Detached Dwellings	1,423	11,662	34.588	403,370	15.40%	$58,149,528	$40,864	8.20	*$4,986 per Unit*
Attached Dwellings	1,316	29,684	23.095	685,554	26.18%	$98,828,970	$75,098	22.56	*$3,329 per Unit*
High Density Dwellings	439	13,082	14.288	186,920	7.14%	$26,946,252	$61,381	29.80	*$2,060 per Unit*
Commercial Lodging Units	9	396	18.239	7,223	0.28%	$1,041,262	$115,696	44.00	*$2,629 per Unit*
Retail/Service Uses	279	5,751,595	69.888	401,967	15.35%	$57,947,273	$207,696	20,615	*$10.075 per S.F.*
Office Uses	114	2,670,188	39.944	106,658	4.07%	$15,375,740	$134,875	23,423	*$5.758 per S.F.*
Business Park Uses	428	9,953,243	41.557	413,631	15.80%	$59,628,746	$139,320	23,255	*$5.991 per S.F.*
Industrial Uses	669	16,981,679	21.419	363,724	13.89%	$52,434,189	$78,377	25,384	*$3.088 per S.F.*
Private Institutional Use	50	1,089,000	45.634	49,695	1.90%	$7,163,995	$143,280	21,780	*$6.579 per S.F.*
TOTAL	4,727	--	--	2,618,742	100.00%	$377,515,956	in Total OR Circulation General Plan Projects		
			ALTERNATIVE FEE METHODOLOGY	*2,618,742*		*$377,515,956*	*$144.16 per Daily Trip-mile*		

Chapter 6
Storm Drainage Collection System Facilities

Storm Drainage collection system is an infrastructure that will also consist of two DIF schedules, one for each of the GC (General City) and OR (Ontario Ranch) areas of the City. Again this is due to significantly differing capital needs of the two areas. The first part of this chapter will be directed at explaining the nexus and the specific GC Storm drainage DIFs. The remainder of the Chapter will address the OR area needs and the resulting OR DIF schedule.

GENERAL CITY STORM DRAINAGE FACILITIES IMPACT FEES

The Existing GC System. The City's existing storm drainage network is composed of street gutter facilities, inlets and a network of storm drain pipe-lines which convey run-off to larger pipelines, washes and creeks located throughout the City ultimately leading into the Santa Ana River. However, as the City continues to develop vacant parcels with rooftops, parking lots and driveways, the existing City-owned storm drainage lines will reach capacity and the ability of the existing drainage lines to collect additional run-off from developing areas will diminish regardless of the availability of a good system of wash channels. Additionally, there are areas in the City, such as near safety facilities such as the Police Station (existing and future) and numerous fire stations that require storm drainage improvements to insure adequate safety response times to a few large vacant areas to be developed.

City records indicate that the existing GC storm drainage system has about 426,568 linear feet of reinforced concrete pipe sized averaging about 50", requiring 1,103 inlet boxes/manholes, 427 junction boxes and 1,706 inlets. The City also has 14,726 linear feet of concrete channel.

Property-based Benefit Reasoning. Initially, the use of separate zones was reconsidered for each drainage basin within the City because each area has its own capital needs for storm-water collection. Storm-water run-off from south of SR-60 may not directly impact the homeowner north of Mission Avenue; similarly, a small debris detention basin near Auto Center Drive required to handle run-off from the businesses in that area may provide little direct benefit to a business in the downtown area of the City. In each case, there can be some distinct property-related areas of benefit for each drainage basin. However, the owners and users of all developed and undeveloped parcels benefit, directly and indirectly, from all City-wide existing and future storm drainage improvements. As the various systems within the greater community of the City of Ontario develop, concurrent with development of private property, the benefits are generally recognized as:

1. Proposed development projects can only be approved by the City when precautions, generally in the form of infrastructure improvements, have been made that assure that developed and undeveloped downstream parcels will not be adversely affected (i.e., inundated, flooded, cut off from access in and out), by storm water from the project being proposed. The avoidance of downstream or down-zone damage from the development of an upstream parcel may not be a major concern to a developer, but the City must concern itself with such issues when approving private development proposals.

2. The private development being assessed a DIF will receive the same storm-water protection from other development projects upstream or up-zone from its own development.

3. Storm water must be adequately controlled and removed to large scale flood control channels or creeks to assure access by public safety vehicles to all parts of the City, regardless of which zone a call-for-service is in. Fire and other rescue calls, as well as law enforcement and public works responses, cannot wait during heavy rainstorms. To the contrary, emergency calls-for-service probably increase during such storm events and the City's public safety and maintenance units must be able to respond, ***to all zones***.

4. The City of Ontario's citizens and business owners/employees must also be able to travel safely (and send/receive goods and services) in heavy rain through one zone to another. An adequate and sufficient storm drainage system will provide such protection.

5. Storm drainage collection pipes protect the integrity of the road bed of the very important arterials and collectors.

RCS recommends continuation the single zone storm drainage fee for GC. Storm water will leave one part of the City and pass through other portions the Santa Ana River riverbed area.

Demand Upon Infrastructure Created by the Development of Underdeveloped or Undeveloped Parcels. The construction of flood control and storm drainage facilities is essential to the preservation of private property, public streets, curbs and other facilities. The county or a regional level of government is generally responsible for *flood control* [9], and cities are generally responsible for *storm drainage*. The building of new residences and businesses on presently undeveloped land will increase the amount of *runoff* and thus accelerate the need for additional storm drainage facilities to handle increased *runoff* from these developing areas. As the vacant land is developed and bare dirt or turf is replaced with impervious rooftop, parking lots, driveways, pools, and sidewalks, greater rainfall amounts *run off* of the developed parcel.

The amount of the run-off varies with differing types of development (i.e. land-use) and the varying amounts are referred to as the *run-off coefficients*. Approximately 0.775 (or 77.5%) of rainfall that falls on a parcel developed with detached dwelling residences, is not absorbed by that parcel and for the most part exits that developed parcel. The rate for an attached dwelling run-off is not much higher than a detached dwelling at 0.810 (81.0%). Most business uses such as lodging, retail/service, office, industrial and institutional have a run-off coefficient in excess of 0.900 or 90.0% with the exception of Business Park at a slightly lesser 0.875 or 87.5%.

Clearly, rainfall run-off increases with development. The cumulative effects of additional run-off must be managed with the appropriate capital facilities. These costs of the new storm drainage

[9] Projects of major importance generally involving the control of large quantities of flood water through numerous cities and unincorporated areas.

(and flood control revenue shortages) will be distributed by the coefficients of drainage, i.e., the percentage of property that will end up with impervious coverage such as asphalt or cement-based concrete drives or parking lots, rooftop, pools and any other hard surface that does not allow any absorption into the soil.

The **Purpose** of the Fee. The costs of extending the same level of storm drainage protection to the newly developing residences and businesses as is provided to the existing community (that has largely paid for the existing system) can be calculated, a fee imposed and collected. The Fee revenues can then be used to expand the storm drainage facilities necessary to extend that same level of services. The City staff has identified a total of $299,014,967 in storm drainage projects required to fully complete the City's network of pipes and small channels. Development within the General City area is responsible for $68,710,652 of that project estimate amount. The existing General City area Storm Drainage DIF Fund balance of $9,726,169 acts to reduce that figure while credits to developers that have constructed some portions of the GC storm drainage system increases the project totals by $2,694,792 netting to a reduced final figure of $61,679,275. That figure has been identified as Category "A" projects in the Master Plan of Drainage, which include mainline storm drain facilities that will relieve flooding in areas within GC without any current storm drain facilities.

Category C projects (Ontario Ranch), consisting of projects to service future development, mostly within the OR, include $138,667,242 in OR Storm Drainage DIF projects. Category C projects have combined outstanding credits (a negative that must be collected) total of $29,649,054 while there is a positive fund balance of $10,614,169 for a net increase to the $138,667,242 of $19,034,885 to $157,702,127. This will be discussed later in the Report.

The Use of the Fee. The construction of flood and storm drainage facilities in the City of Ontario is essential to the preservation of public and private property. The San Bernardino County Flood Control District (SBCFCD) is the agency responsible for planning, construction, operation and maintenance of regional flood control facilities for this region. The SBCFCD will consider taking responsibility for storm drain facilities that convey storm water run-off greater than 750 cfs or from drainage areas that are greater than 640 acres. The City is typically responsible for the collection of local storm water run-off below those thresholds.

The building of new residences and businesses on presently undeveloped land will require the installation of additional storm drains of sufficient capacity with an adequate number of inlets to handle increased rainwater run-off from these areas where development reduces natural absorption opportunities. This Chapter reviews the costs of storm drainage and flood control facilities needed to serve future development.

The revenues raised from a properly calculated and supported Storm Drainage Collection Facilities DIF would be limited to the capitalized costs related to that growth. The fees would be used to construct the additional or parallel storm drainage lines necessary to increase the drainage capacity of the system to accommodate the additional rainwater run-off generated by the continued development. Conversely, the Storm Drainage Collection System DIF receipts would not be used to repair, replace or rehabilitate any existing storm drainage lines. The limited

exceptions would be if the replacement or rehabilitation project creates additional capacity, in which case that proportional amount of additional capacity could be included as a DIF cost.

The Relationship Between the Need for The Fee and The Type of Development Project. Upon the identification of the costs of storm drainage facilities generated by future development, costs must be further distributed for each of the land uses (i.e., business and residential uses) based on their estimated rainwater run-off. Residential detached dwelling development leaves the greatest remaining turf percentage per parcel and thus the greatest percolation, and conversely the least run-off of rainwater. As such, the detached dwelling residential land use should not bear the same cost as the institutional or industrial development, which generally have little or no turf area (or stated another way, a higher percentage of impervious area) and therefore generates a higher amount of rainwater run-off. For this Report, costs were distributed between land uses on established run-off coefficients. A listing of these run-off coefficients is provided in Table 6-1[10] following.

Table 6-1
Storm Drainage Run-off Coefficients
(By Acre)

DIF Land-use Type	Run-off Coefficient
Detached Dwelling Units	0.775
Attached Dwelling Units	0.810
High Density Dwelling Units	0.900
Mobile Home Dwelling Units (GC)	0.800
Commercial Lodging (keyed) Units	0.900
Retail/Service Uses	0.900
Office Uses	0.900
Business Park Uses	0.875
Industrial Uses	0.950
Institutional Uses	0.950

As stated earlier, the General City area requires $61,679,275 in *Category A* storm drainage projects. Table 6-2, following, demonstrates the DIF schedule that would need to be imposed to fully fund the completion of the *Category A* storm drainage system's collection of pipes and channels identified in the Master Plan of Drainage necessary for the GC area of the City. It would not be unreasonable to require development, those generating greater amounts of rainwater run-off, to finance some portion of the identified storm drainage needs providing there is no violation of the proportionality requirement. Table 6-2 indicates the resulting fees required

10 *San Bernardino Hydrology Manual* (1986). Williamson and Schmidt, Irvine, CA , Figure C-4.

to fully fund the *Category A* (General City) projects. Please note that the DIF, by land use, is in terms of *units* such as residential dwellings or business square feet of building pad (adjusted for multiple floors).

Table 6-2
City of Ontario's General City Area
Minimal Needs-based Storm Drainage System
Development Impact Costs
by DIF Land-use Type

DIF Land-use Type	Allocation of Development Costs	Development Impact Cost Per Unit or Square Foot
Detached Dwelling Units	$3,847,370	$3,402/Unit
Attached Dwelling Units	$2,808,646	$1,045/Unit
High Density Dwelling Units	$10,197,756	$468/Unit
Mobile Home Units	$212,216	$2,234/Unit
Commercial Lodging Units	$51,159	$341/Unit
Retail/Service Uses	$16,916,679	$2.072/S.F.
Office Uses	$14,017,651	$0.671/S.F.
Business Park Uses	$5,653,577	$0.811/S.F.
Industrial Uses	$7,938,220	$0.259/S.F.
Institutional Uses	$36,001	$0.856/S.F.

The Relationship Between the Use of the Fee and the Type of Development Paying the Fee. The Storm Drainage DIFs that are imposed and collected will be used to mitigate the storm water run-off generated by the type of development. If the development is a commercial or industrial property generating a significant amount of run-off, the fee collected will be proportionally higher and will be enough to construct the required additions to the storm drainage system downstream from this development.

From time to time the City may require an applicant of a private project to construct an improvement (or portion thereof) that is on the list of required improvements at the end of this Chapter. This is often done to expedite the project for the applicant/developer. The developer should receive a credit for any money expended on this required improvement against their calculated storm drainage impact fee.

The Relationship Between the Amount of the Fee and the Cost of the Portion of the Facility Attributed to the Development Project. Similar to the section above, the relationship is based upon the projected amount of storm water that will need to be collected and safely transported to flood control channels or rivers. The downstream collection lines (lines further down from the proposed project but prior to the outfall into a river/flood control channel) need to be sized to

handle all of the storm-water collected upstream. Storm-water that is collected in one location accumulates feeder lines along the way and thus the downstream system must be built increasingly higher the farther from the water source.

Table 6-3, following, distributes the total equity replacement value of the existing storm drainage system at $245,985,006 over the existing GC developed community. The total consists of the actual existing storm drainage pipe and channel systems at $235,890,545, the existing storm drainage maintenance vehicle allocation of $368,292 and existing GC Storm Drainage Collection System DIF fund balance of $9,726,169. There remains a developer credit of $2,694,792 that acts as a debit to the existing value of the system, in effect it is owed to the developers holding those credits. The combined $243,290,214 development impact cost investment, represents the long term financial commitment contributed by the existing community through dedications (from the developers of these established developments) and tax contributions.

Table 6-3
Existing Storm Drainage Community
Financial Commitment Comparison Data

DIF Land-use Type	Allocation of Development Costs	Development Impact Cost Per Unit or Square Foot
Detached Dwelling Units	$70,339,640	$2,563/Unit
Attached Dwelling Units	$9,956,461	$826/Unit
High Density Dwelling Units	$3,330,901	$692/Unit
Mobile Home Units	$3,129,551	$1,492/Unit
Commercial Lodging Units	$2,467,973	$425/Unit
Retail/Service Uses	$8,232,331	$0.447/S.F.
Office Uses	$5,350,152	$0.537/S.F.
Business Park Uses	$12,433,351	$1.297/S.F.
Industrial Uses	$120,416,777	$1.132/S.F.
Institutional Uses	$7,633,076	$3.292/S.F.

Of note is the fact that in Table 6-3, the investment "equity" of the current community is less than that of the previously exhibited Minimum Needs-based DIFs identified in Table 6-2, indicating that proportionality between the existing community and the future community does not exist. As such, it would not be appropriate to require the undeveloped parcels to finance (via Table 6-3 and Schedule 6.3) the remainder of the Storm Water Collection System needs for the General City area of the City.

Recommended General City Storm Drainage Development Impact Fee Schedule. The adoption of Schedule 6.3 and summarized in Table 6-3 as the Storm Drainage Collection System DIF schedule would generate capital to construct the storm drainage collection facilities needed by the new development in the GC.

ONTARIO RANCH IMPACT FEE CALCULATION

Storm drainage projects related to the construction of private land within Ontario Ranch will be one of the more costly infrastructures necessary for the area at just over a net $157.7 million for the entire system. These projects, identified on Schedule 6.1 listed under the *Construction Needs Generated by New Development in OR* column, are also detailed in the *Master Plan of Drainage.*

Most of the projects fall clearly within the boundaries of the Ontario Ranch area and serve only that area, while others have some shared responsibility with General City. The shared projects include:

- SD-032 - Mill Creek, Chino to County Line Channel,
- SD-069 - Storm Drainage Maintenance Vehicles,
- SD-075 - Storm Drain Master Plan; and,
- SD-103 - Share of Common City Yard Improvements.

Again, as with Circulation System, the City had no desire to annex an area as large as the OR area of Ontario, and then be forced to subsidize the cost of accommodating the storm drainage needs generated by development in that area at the cost of existing residents and businesses. Those that choose to develop vacant parcels in the Ontario Ranch area will need to bear the full costs of the infrastructure required to serve or accommodate that development. Accordingly, all efforts have been made to insure that no projects benefitting new development in the General City have been included in the net $157,702,127 in OR storm drainage capital needs. This cost would be distributed over the 4,727.0 additional acres of impervious surface from OR developments.

Table 6-4, following and summarized from Schedule 6.5, identifies the fee schedule necessary to be applied to the combination of proposed development of the varying land-uses in Ontario Ranch. The costs have been distributed using the same nexus identified earlier in this Chapter as Table 6-1 *Storm Drainage Run-off Coefficients*. The proposed DIFs are as follows:

[This space left vacant in order to place the following table on a singe page].

Table 6-4
Ontario's Ontario Ranch Area Storm Drainage Collection System
Development Impact Fee
by DIF Land Use Type

DIF Land Use Type	Allocation of Development Costs	Development Impact Cost per Unit Or Square Foot
Detached Dwelling Units	$43,662,462	$3,744/Unit
Attached Dwelling Units	$42,202,923	$1,422/Unit
High Density Dwelling Units	$15,642,590	$1,196/Unit
Commercial Lodging Units	$320,691	$810/Unit
Retail/Service Uses	$9,941,418	$1.782/S.F.
Office Uses	$4,062,085	$1.521/S.F.
Business Park Uses	$14,827,005	$1.490/S.F.
Industrial Uses	$25,162,358	$1.482/S.F.
Institutional Uses	$1,880,595	$1.727/S.F.

RECAP OF RECOMMENDED STORM DRAINAGE IMPROVEMENTS DIFS

- **General City** - Adopt Schedule 6.3 for the ten land-uses and the *Cost Distribution per Acre* figure (from the third column from the right side of the Schedule 6.3) for developments that do not involve a building pad, (e.g. additional asphalt parking area).

- **Ontario Ranch** - Adopt Schedule 6.4 for the nine land-uses and the *Cost Distribution per Acre* figure (from the third column from the right side of Schedule 6.4) for developments that do not involve a building pad, (e.g. additional asphalt parking area) or cases where the unit density varies significantly from Schedule 6.4

END OF CHAPTER TEXT

Schedule 6.1

City of Ontario
2021-22 Development Impact Cost Calculation Update
Allocation of Project Cost Estimates
Storm Drainage Collection System Facilities

Line #	Project Title	Estimated Cost	Construction Needs Supported by Other Resources		Construction Needs Generated by New Development in OR		Construction Needs Generated by New Development in GC	
			Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost
SD-001	Euclid Avenue, Riverside To Merrill	$9,631,342	0.00%	$0	100.00%	$9,631,342	0.00%	$0
SD-002	Grove Avenue, Grove Basin To Merrill	$12,233,373	0.00%	$0	100.00%	$12,233,373	0.00%	$0
SD-003	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SD-004	Project Completed or No Longer Needed	$0	0.00%	$0	100.00%	$0	0.00%	$0
SD-005	Merrill Avenue, Euclid To Bon View	$7,046,489	0.00%	$0	100.00%	$7,046,489	0.00%	$0
SD-006	Campus Avenue, 920' N/O Eucalyptus To Merrill	$1,607,718	0.00%	$0	100.00%	$1,607,718	0.00%	$0
SD-007	Bon View, 1,320' N/O Chino To Merrill	$8,511,617	0.00%	$0	100.00%	$8,511,617	0.00%	$0
SD-008	Euclid Avenue Laterals	$6,659,804	0.00%	$0	100.00%	$6,659,804	0.00%	$0
SD-009	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SD-010	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SD-011	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SD-012	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SD-013	Walker Avenue, Merrill To Chino	$7,125,547	0.00%	$0	100.00%	$7,125,547	0.00%	$0
SD-014	Merrill Avenue, Vineyard to 1420' W/O Walker	$7,114,980	0.00%	$0	100.00%	$7,114,980	0.00%	$0
SD-015	Ontario Ranch Road, Walker to 880' E/O Walker	$1,180,896	0.00%	$0	100.00%	$1,180,896	0.00%	$0
SD-016	Schaefer Avenue, Walker To 1,950' E/O Walker	$1,193,236	0.00%	$0	100.00%	$1,193,236	0.00%	$0
SD-017	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SD-018	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SD-019	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SD-020	Hellman Avenue, Chino Avenue To 1,500' N/O Chino	$577,059	0.00%	$0	100.00%	$577,059	0.00%	$0
SD-021	Project Completed or No Longer Needed	$0	0.00%	$0	100.00%	$0	0.00%	$0
SD-022	Eucalyptus Avenue, Archibald To 1,300' E/O Archibald (P)	$1,010,627	0.00%	$0	100.00%	$1,010,627	0.00%	$0
SD-023	Project Completed or No Longer Needed	$0	0.00%	$0	100.00%	$0	0.00%	$0
SD-024	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SD-025	Turner Avenue, Riverside To County Line Channel (P)	$1,635,875	0.00%	$0	100.00%	$1,635,875	0.00%	$0
SD-026	Turner Avenue Laterals	$1,263,485	0.00%	$0	100.00%	$1,263,485	0.00%	$0
SD-027	Haven Avenue, Riverside To County Line Channel (P)	$2,788,957	0.00%	$0	100.00%	$2,788,957	0.00%	$0
SD-028	Ontario Ranch Road, Between Haven And Mill Creek (P)	$332,068	0.00%	$0	100.00%	$332,068	0.00%	$0
SD-029	Haven Avenue Laterals E/O Haven And N/O Schaefer	$2,180,511	0.00%	$0	100.00%	$2,180,511	0.00%	$0
SD-030	Haven Avenue Laterals	$339,199	0.00%	$0	100.00%	$339,199	0.00%	$0
SD-031	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0

Schedule 6.1

City of Ontario
2021-22 Development Impact Cost Calculation Update
Allocation of Project Cost Estimates
Storm Drainage Collection System Facilities

Line #	Project Title	Estimated Cost	Construction Needs Supported by Other Resources		Construction Needs Generated by New Development in OR		Construction Needs Generated by New Development in GC	
			Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost
SD-032	Mill Creek, Chino To County Line Channel (P)	$9,556,477	0.00%	$0	94.00%	$8,983,088	6.00%	$573,389
SD-033	Eucalyptus Avenue Between Mill Creek And Milliken	$388,556	0.00%	$0	100.00%	$388,556	0.00%	$0
SD-034	Eucalyptus Avenue Between Haven And Mill Creek	$693,363	0.00%	$0	100.00%	$693,363	0.00%	$0
SD-035	Project Completed or No Longer Needed	$0	0.00%	$0	100.00%	$0	0.00%	$0
SD-036	Schaefer Avenue Between Mill Creek And Milliken	$1,818,996	0.00%	$0	100.00%	$1,818,996	0.00%	$0
SD-037	Hellman Avenue, Schaefer To Ontario Ranch Road And Laterals	$4,986,124	0.00%	$0	100.00%	$4,986,124	0.00%	$0
SD-038	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SD-039	Ontario Ranch-Hellman/Vineyard, Hellman-OR/Merrill To C. Creek	$4,889,904	0.00%	$0	100.00%	$4,889,904	0.00%	$0
SD-040	Eucalyptus Avenue, Hellman To Cucamonga Channel	$1,232,619	0.00%	$0	100.00%	$1,232,619	0.00%	$0
SD-041	Merrill Avenue, Cucamonga Channel To Walker	$14,553,658	0.00%	$0	100.00%	$14,553,658	0.00%	$0
SD-042	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SD-043	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SD-044	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SD-045	Eucalyptus Avenue, Cucamonga Channel To W/O Archibald	$724,868	0.00%	$0	100.00%	$724,868	0.00%	$0
SD-046	Ontario Ranch Road Laterals E/O Cucamonga Channel	$1,144,929	0.00%	$0	100.00%	$1,144,929	0.00%	$0
SD-047	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SD-048	Chino Avenue, Cucamonga Channel To N/O Chino	$595,564	0.00%	$0	100.00%	$595,564	0.00%	$0
SD-049	Milliken Avenue, Riverside To County Line Channel (P)	$2,517,255	0.00%	$0	100.00%	$2,517,255	0.00%	$0
SD-050	Offsite Euclid Avenue Storm Drain	$21,110,125	0.00%	$0	100.00%	$21,110,125	0.00%	$0
SD-051	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SD-052	Project Completed or No Longer Needed	$0	100.00%	$0	0.00%	$0	0.00%	$0
SD-053	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	100.00%	$0
SD-054	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	100.00%	$0
SD-055	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	100.00%	$0
SD-056	Sixth Street, Glenn To Cucamonga Channel	$7,780,102	0.00%	$0	0.00%	$0	100.00%	$7,780,102
SD-057	G Street, Berlyn to West Cucamonga Channel & Various Streets	$6,732,172	0.00%	$0	0.00%	$0	100.00%	$6,732,172
SD-058	Grove Avenue, 60 Freeway To Riverside Drive	$2,205,860	0.00%	$0	0.00%	$0	100.00%	$2,205,860
SD-059	Campus Avenue, Cedar To Riverside	$3,681,523	0.00%	$0	0.00%	$0	100.00%	$3,681,523
SD-060	D and I Streets, Grove To West Cucamonga Channel	$1,432,227	100.00%	$1,432,227	0.00%	$0	0.00%	$0
SD-061	Inland Empire Blvd., Vineyard To Cucamonga Channel	$704,711	0.00%	$0	0.00%	$0	100.00%	$704,711
SD-062	Sultana Avenue, Phillips To Philadelphia	$4,342,519	0.00%	$0	0.00%	$0	100.00%	$4,342,519

Schedule 6.1

City of Ontario
2021-22 Development Impact Cost Calculation Update
Allocation of Project Cost Estimates
Storm Drainage Collection System Facilities

Line #	Project Title	Estimated Cost	Construction Needs Supported by Other Resources		Construction Needs Generated by New Development in OR		Construction Needs Generated by New Development in GC	
			Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost
SD-063	Fourth Street, El Dorado To Cucamonga Creek	$2,489,751	0.00%	$0	0.00%	$0	100.00%	$2,489,751
SD-064	Baker, Vineyard, Carlos, Hellman - Acacia to Philadelphia	$2,730,804	100.00%	$2,730,804	0.00%	$0	0.00%	$0
SD-065	Bon View Avenue, 60 Freeway To Riverside (P)	$2,572,056	0.00%	$0	0.00%	$0	100.00%	$2,572,056
SD-066	Cucamonga Avenue, 60 Freeway To Riverside	$2,482,871	0.00%	$0	0.00%	$0	100.00%	$2,482,871
SD-067	Bon View Avenue, Mission To Francis	$3,678,744	100.00%	$3,678,744	0.00%	$0	0.00%	$0
SD-068	Cucamonga Avenue, Phillips To Francis	$2,273,929	100.00%	$2,273,929	0.00%	$0	0.00%	$0
SD-069	Storm Drainage Maintenance Vehicles	$578,539	0.00%	$0	55.03%	$318,364	44.97%	$260,175
SD-070	Boulder Avenue, I Street To State	$12,939,211	100.00%	$12,939,211	0.00%	$0	0.00%	$0
SD-071	Benson Avenue, State To I Street	$4,090,142	100.00%	$4,090,142	0.00%	$0	0.00%	$0
SD-072	Mountain Avenue, Philadelphia To Phillips	$7,791,496	0.00%	$0	0.00%	$0	100.00%	$7,791,496
SD-073	San Antonio Avenue, Francis To Cypress Channel	$10,490,213	0.00%	$0	0.00%	$0	100.00%	$10,490,213
SD-074	San Sevaine Channel	$1,875,549	0.00%	$0	0.00%	$0	100.00%	$1,875,549
SD-075	Storm Drain Master Plan (P)	$484,000	0.00%	$0	55.03%	$266,340	44.97%	$217,660
SD-076	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SD-077	Campus Avenue, State to Francis (Phase 2 Of SD-053)	$4,291,433	0.00%	$0	0.00%	$0	100.00%	$4,291,433
SD-078	Parco Avenue, Philadelphia to 60 Freeway (Phase 2 Of SD-055)	$921,951	100.00%	$921,951	0.00%	$0	0.00%	$0
SD-079	Grove Avenue, Francis to 60 Freeway (Phase 2 Of SD-058)	$1,423,685	100.00%	$1,423,685	0.00%	$0	0.00%	$0
SD-080	Sultana Avenue, State to Phillips (Phase 2 Of SD-062)	$3,436,111	100.00%	$3,436,111	0.00%	$0	0.00%	$0
SD-081	Bon View Avenue, 60 Freeway To Francis (Phase 2 Of SD-065)	$1,613,962	100.00%	$1,613,962	0.00%	$0	0.00%	$0
SD-082	Cucamonga Avenue, Francis to 60 FWY (Phase 2 Of SD-066)	$1,278,352	100.00%	$1,278,352	0.00%	$0	0.00%	$0
SD-083	Mountain & Boulder, I-10 to I Street (Phase 2 Of SD-070)	$5,899,391	100.00%	$5,899,391	0.00%	$0	0.00%	$0
SD-084	Benson Avenue Laterals (Phase 2 Of SD-071)	$4,406,951	100.00%	$4,406,951	0.00%	$0	0.00%	$0
SD-085	Mountain Avenue, State to Phillips (Phase 2 Of SD-072)	$2,230,596	100.00%	$2,230,596	0.00%	$0	0.00%	$0
SD-086	San Antonio & Phillips, Euclid to Francis (Phase 2, SD-073)	$5,762,052	0.00%	$0	0.00%	$0	100.00%	$5,762,052
SD-087	Oakland Avenue, State to Phillips (Phase 2 Of SD-074)	$7,214,086	100.00%	$7,214,086	0.00%	$0	0.00%	$0
SD-088	Walker Avenue, 60 Freeway To Riverside And Lateral	$1,933,241	100.00%	$1,933,241	0.00%	$0	0.00%	$0
SD-089	Baker Avenue And Riverside Drive, S/O 60 Freeway	$2,731,268	100.00%	$2,731,268	0.00%	$0	0.00%	$0
SD-090	G Street, Corona To Del Norte	$2,854,437	100.00%	$2,854,437	0.00%	$0	0.00%	$0
SD-091	Del Norte and Imperial Avenues From I Street To G Street	$1,259,756	100.00%	$1,259,756	0.00%	$0	0.00%	$0
SD-092	Vine Avenue, G Street To State	$3,760,467	100.00%	$3,760,467	0.00%	$0	0.00%	$0
SD-093	Vine Avenue, Sixth To G Street	$3,951,911	100.00%	$3,951,911	0.00%	$0	0.00%	$0

Schedule 6.1

City of Ontario
2021-22 Development Impact Cost Calculation Update
Allocation of Project Cost Estimates
Storm Drainage Collection System Facilities

Line #	Project Title	Estimated Cost	Construction Needs Supported by Other Resources: Percent Need	Construction Needs Supported by Other Resources: Apportioned Dollar Cost	Construction Needs Generated by New Development in OR: Percent Need	Construction Needs Generated by New Development in OR: Apportioned Dollar Cost	Construction Needs Generated by New Development in GC: Percent Need	Construction Needs Generated by New Development in GC: Apportioned Dollar Cost
SD-094	Sultana Avenue, Fifth To Holt	$6,755,724	100.00%	$6,755,724	0.00%	$0	0.00%	$0
SD-095	Benson Avenue And Laterals	$2,268,234	100.00%	$2,268,234	0.00%	$0	0.00%	$0
SD-096	Benson Avenue, Francis To Philadelphia	$3,010,954	100.00%	$3,010,954	0.00%	$0	0.00%	$0
SD-097	Mission, Benson, Phillips & Oaks, W/O Magnolia	$4,834,304	100.00%	$4,834,304	0.00%	$0	0.00%	$0
SD-098	Holt Boulevard, Convention Center To Cucamonga Channel	$1,120,942	100.00%	$1,120,942	0.00%	$0	0.00%	$0
SD-099	Mission Boulevard, Proforma To Turner	$1,039,219	100.00%	$1,039,219	0.00%	$0	0.00%	$0
SD-100	6th Street, West Cucamonga Creek To Grove	$546,474	100.00%	$546,474	0.00%	$0	0.00%	$0
SD-101	Archibald Avenue, Inland Empire To Airport Drive	$2,250,187	0.00%	$0	0.00%	$0	100.00%	$2,250,187
SD-102	Fifth Street, Balboa To Cucamonga Channel	$1,424,679	0.00%	$0	0.00%	$0	100.00%	$1,424,679
SD-103	Share of Specific/Common City Yard Improvements	$1,739,460	0.00%	$0	55.03%	$957,206	44.97%	$782,254
SD-104	Project Completed or No Longer Needed	$0	0.00%	$0	100.00%	$0	0.00%	$0
SD-105	Ontario Ranch Storm Drain Study	$1,053,500	0.00%	$0	100.00%	$1,053,500	0.00%	$0
	Sub-Total General Plan Total New Projects	$299,014,967	30.65%	$91,637,073	46.37%	$138,667,242	22.98%	$68,710,652
	FINANCIAL ADJUSTMENTS:							
	Ontario Ranch - Local Storm Drainage Outstanding Credits	$10,219,358	0.00%	$0	100.00%	$10,219,358	0.00%	$0
	Ontario Ranch - Regional Storm Drainage Outstanding Credits	$19,429,696	0.00%	$0	100.00%	$19,429,696	0.00%	$0
	Ontario Ranch - Development Impact Fee Fund Balance	($10,614,169)	0.00%	$0	100.00%	($10,614,169)	0.00%	$0
	General City - Storm Drainage Outstanding Credits	$2,694,792	0.00%	$0	0.00%	$0	100.00%	$2,694,792
	General City - Development Impact Fee Fund Balance	($9,726,169)	0.00%	$0	0.00%	$0	100.00%	($9,726,169)
	Total Fund Balance/Outstanding Credits	$12,003,508	0.00%	$0	158.58%	$19,034,885	-58.58%	($7,031,377)
	Total Net General Plan Project Costs	$311,018,475	29.46%	$91,637,073	50.71%	$157,702,127	19.83%	$61,679,275
					Forward to Schedule 6.4		Forward to Schedule 6.2	

NOTES:
(1). All developer-held "credits" under FINANCIAL ADJUSTMENTS will appear as a positive indicating an additional Infrastructure Fund obligation that will be redeemed (in lieu of a DIF payment) at some point in the future.
(2). A negative figure under FINANCIAL ADJUSTMENTS indicates a positive Fund Balance mitigating the project total. A positive figure indicates an amount that needs to be recovered by DIFs.
(3). Costs distribution based upon Coefficient of Drainage statistics.

Schedule 6.2

City of Ontario
2021-22 Development Impact Cost Calculation Update
General City (GC) - Minimum Capital Needs-based Impact Costs
Storm Drainage Collection System Facilities

Proposed Land Use	Undeveloped Acres	Undeveloped Units	Run-off Coefficient Index Rate	Total Added Impervious Acres	Run-off Coefficient Percentage	Allocation of Expansion Costs	Cost Distribution Per Acre	Average Units or Square Feet/Acre	Development Impact Fee per Unit or Square Foot
Detached Dwellings	262	1,131	0.775	203.05	6.24%	$3,847,370	$14,685	4.32	*$3,402 per Unit*
Attached Dwellings	183	2,688	0.810	148.23	4.55%	$2,808,646	$15,348	14.69	*$1,045 per Unit*
High Density Dwellings	598	21,807	0.900	538.20	16.53%	$10,197,756	$17,053	36.47	*$468 per Unit*
Mobile Home Dwellings	14	95	0.800	11.20	0.34%	$212,216	$15,158	6.79	*$2,234 per Unit*
Commercial Lodging Units	3	150	0.900	2.70	0.08%	$51,159	$17,053	50.00	*$341 per Unit*
Retail/Service Uses	992	8,164,415	0.900	892.80	27.43%	$16,916,679	$17,053	8,230	*$2.072 per S.F.*
Office Uses	822	20,895,746	0.900	739.80	22.73%	$14,017,651	$17,053	25,421	*$0.671 per S.F.*
Business Park Uses	341	6,969,626	0.875	298.38	9.17%	$5,653,577	$16,579	20,439	*$0.811 per S.F.*
Industrial Uses	441	30,650,125	0.950	418.95	12.87%	$7,938,220	$18,000	69,501	*$0.259 per S.F.*
Private Institutional Use	2	43,560	0.950	1.90	0.06%	$36,001	$18,000	21,780	*$0.826 per S.F.*
TOTAL	**3,658**	--	--	**3,255.21**	**100.00%**	**$61,679,275**	**in Total GC Storm Drainage General Plan Projects**		

Schedule 6.3

City of Ontario
2021-22 Development Impact Cost Calculation Update
Existing Community Financial Commitment Comparison
Storm Drainage Collection System Facilities

Proposed Land Use	Developed Acres	Developed Units	Run-off Coefficient Index Rate	Total Existing Impervious Acres	Run-off Coefficient Percentage	Allocation of Expansion Costs	Cost Distribution Per Acre	Average Units or Square Feet/Acre	Development Impact Fee per Unit or Square Foot
Detached Dwellings	4,733.0	27,449	0.775	3,668.08	28.91%	$70,339,640	$14,862	5.80	***$2,563 per Unit***
Attached Dwellings	641.0	12,050	0.810	519.21	4.09%	$9,956,461	$15,533	18.80	***$826 per Unit***
High Density Dwellings	193.0	4,812	0.900	173.70	1.37%	$3,330,901	$17,259	24.93	***$692 per Unit***
Mobile Home Dwellings	204.0	2,097	0.800	163.20	1.29%	$3,129,551	$15,341	10.28	***$1,492 per Unit***
Commercial Lodging Units	143.0	5,810	0.900	128.70	1.01%	$2,467,973	$17,259	40.63	***$425 per Unit***
Retail/Service Uses	477.0	18,418,611	0.900	429.30	3.38%	$8,232,331	$17,259	38,613	***$0.447 per S.F.***
Office Uses	310.0	9,959,192	0.900	279.00	2.20%	$5,350,152	$17,259	32,126	***$0.537 per S.F.***
Business Park Uses	741.0	9,587,138	0.875	648.38	5.11%	$12,433,351	$16,779	12,938	***$1.297 per S.F.***
Industrial Uses	6,610.0	106,400,598	0.950	6,279.50	49.50%	$120,416,777	$18,217	16,097	***$1.132 per S.F.***
Private Institutional Use	419.0	2,318,711	0.950	398.05	3.14%	$7,633,076	$18,217	5,534	***$3.292 per S.F.***
TOTAL	**14,471.0**	--	--	**12,687.11**	**100.00%**	**$243,290,214**	**Total Storm Drainage Existing Assets**		
						$235,890,545	**in General Plan Storm Drainage System Pipe Assets**		
						$368,292	**in Storm Drainage Maintenance Vehicle Assets**		
						$9,726,169	**in GC Storm Drainage System DIF Fund Balance**		
						($2,694,792)	**in GC Storm Drainage System Developer Credits**		

Schedule 6.4

City of Ontario
2021-22 Development Impact Cost Calculation Update
Ontario Ranch (OR) - Minimum Capital Needs-based Impact Costs
Storm Drainage Collection System Facilities

Proposed Land Use	Undeveloped Acres	Undeveloped Units	Run-off Coefficient Index Rate	Total Added Impervious Acres	Run-off Coefficient Percentage	Allocation of Expansion Costs	Cost Distribution Per Acre	Average Units or Square Feet/Acre	Development Impact Fee per Unit or Square Foot
Detached Dwellings	1,423	11,662	0.775	1,102.83	27.69%	$43,662,462	$30,683	8.20	*$3,744 per Unit*
Attached Dwellings	1,316	29,684	0.810	1,065.96	26.76%	$42,202,923	$32,069	22.56	*$1,422 per Unit*
High Density Dwellings	439	13,082	0.900	395.10	9.92%	$15,642,590	$35,632	29.80	*$1,196 per Unit*
Commercial Lodging	9	396	0.900	8.10	0.20%	$320,691	$35,632	44.00	*$810 per Unit*
Retail/Service Uses	279	5,751,595	0.900	251.10	6.30%	$9,941,418	$35,632	20,615	*$1.728 per S.F.*
Office Uses	114	2,670,188	0.900	102.60	2.58%	$4,062,085	$35,632	23,423	*$1.521 per S.F.*
Business Park Uses	428	9,953,243	0.875	374.50	9.40%	$14,827,005	$34,643	23,255	*$1.490 per S.F.*
Industrial Uses	669	16,981,679	0.950	635.55	15.96%	$25,162,358	$37,612	25,384	*$1.482 per S.F.*
Institutional Use	50	1,089,000	0.950	47.50	1.19%	$1,880,595	$37,612	21,780	*$1.727 per S.F.*
TOTAL	4,727	--	--	3,983.24	100.00%	$157,702,127	**in Total OR Storm Drainage General Plan Projects**		

Chapter 7
Water Source, Storage and Distribution Facilities

Assuming that an adequate water supply with appropriate treatment facilities is available, the next critical component needed to accommodate development is an adequate water storage and distribution system. The City's water source, as presently constituted, cannot be expected to completely support the City's existing and future population, especially the near doubling of demand from the Ontario Ranch's over 5,500 acres of private development. In order to meet all future water demands, the City will need to collect sufficient monies for an adequate water supply as well as the construction of new storage reservoirs and distribution lines needed over the short and long term from the development community in order to continue to allow development.

Existing GC System. In addition to the City's distribution system with a replacement value of $496,870,839, the City has well capacities with a replacement value of $115,078,345 and reservoirs at $100,315,860. The City owns Water Facility Authority (WFA) and San Antonio water shares valued at roughly $19,172,187. The system also has PRV stations ($9,403,160), booster stations ($8,159,250), treatment facilities ($17,103,834), altitude valves ($624,668) and a share of the utility maintenance vehicles ($2,678,630). There is also a GC DIF fund balance of $19,923,578. The total assets are $789,330,351. Some of these assets will benefit the Ontario Ranch and the cost will be recovered from development within Ontario Ranch. This recovery will be discussed later.

GC Water Demands, by Land Use. Water use, for residential users was calculated (and planned for) on either a gallon per dwelling unit per day (GPD) basis for residential uses or gallons acre per day (GPAD) basis for business uses in the City's most recent Water Master Plan. Table 7-1 following, indicates the DIF Land-use Type averages that were used as the nexus in the DIF distribution model. Since the City does not have a regional recycled water program in the GC area for the watering of common areas, the capital-needs costs will be distributed over new development based upon potable water demands at the meter and will not include any distributed recycled water demands. The following GC water demands are from the 2012 Water Master Plan.

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Table 7-1
General City Water Demand by DIF Land Use Type
Demand in GPD or GPAD

DIF Land-use Type	Gallons (per Unit) per Day	Gallons per Acre per Day
Detached Dwelling Units	544	
Attached Dwelling Units	372	
High Density Dwelling Units	251	
Mobile Residences Dwelling Units	372	
Commercial Lodging Units	150	
Retail/Service Uses		2,200
Office Uses		3,400
Business Park Uses		2,200
Industrial Uses		2,000
Institutional Uses		2,200

Based upon Table 7-2 and the land-use database, the City's water system currently has the capacity (on average) deliver about 40.1 million gallons/day to GC users. This does not include the water demands from public institutions, other non-private uses and system loss. Obviously this is an annual average and seasonal factors could be expected to affect use. Table 7-2, on the following page, indicates the demand for water (on average) for existing development within the City's GC boundaries.

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Table 7-2
Existing Community GC Water Demand
in Gallons per Day (rounded)

DIF Land-use Type	Existing Residential Units	Potential Business Acres	Water Demand in GPD or GPAD	Projected GPD Water Demand
Detached Dwellings	27,449		544/Unit	14,932,256
Attached Dwellings	12,050		372/Unit	4,482,600
High Density Dwellings	4,812		251/Unit	1,207,812
Mobile Residences Dwellings	2,097		372/Unit	780,084
Commercial Lodging Units	5,810		150/Unit	871,500
Retail/Service Uses		477	2,200/Acre	1,049,400
Office Uses		310	3,400/Acre	1,054,000
Business Park Uses		741	2,200/Acre	1,630,200
Industrial Uses		6,610	2,000/Acre	13,220,000
Institutional Uses		419	2,200/Acre	921,800
Total Gallons per Day	- - -	- - -	- - -	**40,149,652**

Again using the GPD demand data from Table 7-1 and the land-use database, the City will be asked to deliver an additional net 13.8 million gallons per day (average) to new GC users. Table 7-3, following, indicates the demand for water (on average) for future development within the City's GC boundaries. The 13.8 million gallons daily figure results in a slightly lower actual daily total water demand due to the use of Master Plan land-use demand averages applied to the narrower ten DIF Land-use Types as opposed to the actual broad variety of business uses. This will hold true for Tables 7-2, 7-3 and 7-4. Each of these tables **Total Gallons per Day** will be slightly understated when compared to the Master Plan totals.

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Table 7-3
GC Development-generated Additional Water Demand
in Gallons per Day (rounded)

DIF land-use Type	Potential Residential Units	Potential Business Acres	Water Demand in GPD of GPAD	Projected GPD Water Demand
Detached Dwellings	544		544/Unit	615,254
Attached Dwellings	372		372/Unit	999,936
High Density Dwellings	251		251/Unit	5,473,557
Mobile Residences Dwellings	372		372/Unit	35,340
Commercial Lodging Units	150		150/Unit	22,500
Retail/Service Uses		992	2,200/Acre	2,182,400
Office Uses		822	3,400/Acre	2,794,800
Business Park Uses		341	2,200/Acre	750,200
Industrial Uses		441	2,000/Acre	882,000
Institutional Uses		2	2,200/Acre	4,400
Total Gallons per Day	- - -	- - -	- - -	**13,760,397**

The total average daily need (existing and future) water demand is as follows:

Table 7-4
Total General Plan GC Average Day Water Demand at General Plan Build-out (rounded)
in Gallons per Day (rounded)

DIF Land-use Type	Potential Residential Units	Potential Business Acres	Water Demand in GPD or GPAD	Projected GPD Water Demand
Detached Dwellings	28,580		544/Unit	15,547,520
Attached Dwellings	14,378		372/Unit	5,482,536
High Density Dwellings	26,619		251/Unit	6,681,369
Mobile Residences Dwellings	2,192		372/Unit	815,424
Commercial Lodging Units	5,960		150/Unit	894,000
Retail/Service Uses		1,469	2,200/Acre	3,231,800
Office Uses		1,132	3,400/Acre	3,848,800
Business Park Uses		1,082	2,200/Acre	2,380,400
Industrial Uses		7,051	2,000/Acre	14,120,000
Institutional Uses		421	2,200/Acre	926,200
Total Gallons per Day	- - -	- - -	- - -	**53,910,049**

The total projected average daily demand from all GC Ontario privately held acreage at General Plan build-out is about 53.9 million gallons daily. However, build-out of all undeveloped property within the water basin may create water demands a little greater than the existing capacity. The expected increase in average daily demand may require the City to locate additional sources of water beyond the existing annual acre feet capacity or mandate water conservation efforts, including water recycling.

PROJECTS NEEDED FOR PROPER WATER DISTRIBUTION

Utility infrastructure such as water is unique among all City infrastructures. Water demand simply cannot be ignored for long period of times as can be police, fire, streets and park levels of service (LOS). Residents could be asked to allow the number of officers to remain static, or wait a little longer for fire fighters, or even put up with the more congested traffic or more crowded parks. However, a delivered water supply must be in evidence to even *consider* additional growth. Even though Table 7-4 (which does not even consider the significant needs of OR) applies average daily use rates and creates a total demand difficult to imagine, it is apparent that additional water distribution capability is necessary to allow for additional growth. Without adequate water distribution capabilities, development will grind to a stop. It is a prerequisite system.

Since a water distribution system is a prerequisite to development (i.e. there is no development without water), it tends to be a somewhat "front-ended" system, that is, the system develops earlier and the existing community tends to have built more of the system at any point in time than does the remainder of development. That is precisely the case with Ontario's water utility, the GC water system appears to have been front-ended by the existing community.

Schedule 7.1 identifies the water distribution system improvements needed to insure the continued adequate flow of water as needed to proposed development projects. There are 23 remaining water system related capital projects necessary for extending service to new development in GC and OR or maintaining service to existing GC water users with a total of just over $457,793,409 million. Staff has identified fifteen projects (or portions thereof) totaling some $98.7 million for funding by the existing GC water users as either replacements or benefitting only existing users. This figure will not be included in any impact fee calculation.

There is approximately $98.9 million in projects identified as benefitting new development in GC area of the City. This figure is reduced to $78.8 million when the positive fund balance of $19.9 is applied as mitigation factor and was used to calculate the GC DIF schedule.

Approximately $359.1 million in new projects have been identified as benefitting only OR. Added to this OR figure is $4,375,000 in reimbursements for past water system expenses borne by GC water users but benefitting the OR area for a total of $363..5 million. The $4.4 million in reimbursement expenses relate to the proportionate cost borne by the existing water users on the existing system which provides supplemental water supply to the OR under maximum day demand. The water system will have to absorb approximately $46.0 in outstanding developer credits that have been issued when individual developers have constructed projects that were identified on Schedule 7.1. Additionally there is a positive fund balance of $2.3 million in

collection from previous OR DIF payments mitigating the total. The above estimates factors result in a net $407.1 million in projects yet to be completed in the OR area.

CALCULATION OF IMPACT COSTS

This Report identifies two methods of calculating potable and OR recycled water system delivery DIFs and imposing said fees. They are:

- *Standard (Average) DIF Land-use Type DIFs, similar to the other fees in this Report.*
- *An impact fee based upon the meter size needed to serve a development, if needed.*

Standard Use Category DIFs. Table 7-5, following, lists the ten major land uses based upon average water usage statistics, (see Schedule 7.2). Some $485.9 million in new water capital expansion is required in the GC and OR portions of the City. Approximately $78,813,042 of this cost has been identified for GC DIF funding. The $78.8 million is distributed pro-rata over the remaining under-built and totally vacant acreage in the City's General City area as demonstrated in Table 7-5 following.

Table 7-5
City of Ontario's General City Area
Basic Needs-based Water Distribution System
Development Impact Costs
by DIF Land-use Type

DIF Land-use Type	Allocation of Development Costs	Development Impact Cost Per Unit or Square Foot
Detached Dwelling Units	$3,523,941	$3,113/Unit
Attached Dwelling Units	$5,727,160	$2,130/Unit
High Density Dwelling Units	$31,349,944	$1,437/Unit
Mobile Home Dwelling Units	$202,411	$2,129/Unit
Commercial Lodging Units	$128,869	$859/Unit
Retail/Service Uses	$12,499,754	$1.531/S.F.
Office Uses	$16,007,292	$0.766/S.F.
Business Park Uses	$4,296,791	$0.617/S.F.
Industrial Uses	$5,051,679	$0.165/S.F.
Institutional Uses	$25,201	$0.579/S.F.

Cost and Financing of the Existing System. Typically a water system is the oldest service provided by any City. The City's engineering staff has identified the cost of the existing "spine" system, consisting of distribution pipe, wells, valves, reservoirs and shares of water rights to be

$789,330,351. This figure does not include local (tract) lines and connections, estimated conservatively to be in the area of an additional $350.0 million. The system has been constructed from four sources, water user rates (more commonly known as monthly water bills), exactions, DIFs, and requirements of development approval. A portion of that nearly $789.3 million figure is the existing fund balance in the Water System DIF Fund of $19,923,578.

When this nearly $789.3 million in equity is distributed to the existing community based upon the same nexus used to distribute future costs by land use, (see Schedule 7.3) the results indicate that a detached dwelling has contributed, on average, an astounding $10,694 towards the water system. This distributed equity is clearly greater than the distributed *GC – Minimum Needs-based Impact Costs* exemplified in Table 7-5 (and Schedule 7.2) indicating there are no proportionality issues. Table 7-6 following demonstrates the distribution of existing assets.

Table 7-6
City of Ontario's General City Area
Existing Circulation System Community
Financial Commitment Comparison Data
(Not updated in 2017)

DIF Land-use Type	Allocation of Development Costs	Development Impact Cost Per Unit or Square Foot
Detached Dwelling Units	$293,563,762	$10,694/Unit
Attached Dwelling Units	$88,126,598	$7,313/Unit
High Density Dwelling Units	$23,745,229	$4,935/Unit
Mobile Home Units	$15,336,222	$7,313/Unit
Commercial Lodging Units	$17,133,434	$2,949/Unit
Retail/Service Uses	$20,630,895	$1.120/S.F.
Office Uses	$20,721,330	$2.081/S.F.
Business Park Uses	$32,049,253	$3.343/S.F.
Industrial Uses	$259,901,312	$2.443/S.F.
Institutional Uses	$18,122,317	$7.816/S.F.

Necessity of DIF Financing. DIFs are necessary for the construction of the remainder of the water system for one significant reason. Initially, the storage and delivery of water has, for many years, been recognized by most public agencies as a utility. Utilities differ from general tax-supported services in that they are similar to private sector utility businesses. Potable water rates are elastic, within reason, and can be set to meet water delivery costs whereas taxes cannot. Therefore, general taxes must be protected and reserved for services that do not have any such an elastic revenue source such as public safety, park maintenance, storm drainage, and others.

The use of water (consumer benefit) can be measured, unlike many of the City's services. Water rates can, and should be, set to meet the Council's priorities and policies in terms of water use. As a result of the above, the use of general taxes, where no relationship between the rate of taxation and benefit exists, in support of any utility service would be inappropriate.

Recommended GC DIF Schedule. The adoption of Table 7-5, based upon Schedule 7.2 at the end of the chapter, as the water distribution DIFs would generate enough capital to construct the facilities needed by the new development. The DIFs contained on Schedule 7.2 also contain amounts less than the *Existing Community Financial Commitment Comparison* identified in Schedule 7.3 thus do not violate any proportionate requirements.

CREDITS AGAINST DEVELOPMENT IMPACT FEES

The City does not charge *stand-by* water rates. Vacant parcels are not charged water rates and therefore they have not contributed to the capital development of the water system. As a result there can be no credit for previous contributions to capital from vacant parcels, simply because there were none made. Additionally, there have been no General Fund expenditures on water projects.

Credit for Developer Constructed Improvements. Similar to roadway and storm drainage construction, it will likely be advantageous to have the developer construct certain public improvements contiguous to the private development. The adoption of the DIF schedules encourages such agreements. It is recommended that the City continue the process of agreeing to allow developers to construct water system capital improvements, identified within the City's Capital Financing Plan and part of the DIF calculation and then calculating a credit for that project contribution amount. The net DIF would be the amount per the adopted schedules less the credit for the capital constructed by the developer.

ALTERNATIVE GC DEVELOPMENT IMPACT FEE METHODOLOGIES

There are two alternatives to the ten basic GC area DIF categories. They are primarily applicable to the more specific demands by the multitude of differing business uses.

Equivalent EDU Based on Meter Size. The standard detached dwelling residence has a 3/4" meter at 15 gallons per minute normal (minimum-maximum) flow [11] which is defined as the **E**quivalent **D**welling **U**nit, or EDU. Schedule 7.2 indicates that the smallest meter size, 3/4", would cost $3,113 per connection, at the Minimum Needs based DIF schedule rate. The following Table 7-7 indicates the cost for larger meters based upon the normal flow demands, with again, the detached dwelling (detached) residence as the standard. A one inch meter is rated at 25 gallons per minute, which is 1.67 times larger than the 15 gallons per minute than is afforded by a 3/4" meter. Thus the one inch meter fee would be 1.67 times higher ($5,189) than the $3,113 for the 3/4" meter. Other meter sizes are as follows:

11 *Meter Flow Ranges,* based upon *Minimum Maximum Continuous Flow Rates*, American Water Works Association.

Table 7-7
Equivalent Water Meter Size Calculation
Based upon Minimum Needs-based Impact Fees

Water Meter Size	Normal Water Flow (GPM)	Water Demand Factor	Cost per E.D.U (3/4" Meter)	DIF Cost per Meter Size
¾" Meter	15	1.000	$3,113	$3,113
1' Meter	25	1.667	$3,113	$5,189
1 & ½" Meter	50	3.333	$3,113	$10,376
2" Meter	80	5.333	$3,113	$16,602
3" Meter	240	16.000	$3,113	$49,808
4" Meter	420	28.000	$3,113	$87,164
6" Meter	920	61.333	$3,113	$190,930
8" Meter	1,600	106.667	$3,113	$332,054
10" Meter	2,500	166.667	$3,113	$518,834
12" Meter	3,300	220.000	$3,113	$684,860

ONTARIO RANCH WATER SYSTEM IMPACT FEE CALCULATION

Ontario Ranch will need a significant amount of water system improvements in order to accommodate the large scale development planned for the area. Initially, capital requirements consist of $359,056,789 in new wells, reservoirs, transmission mains and other general improvements needed. In addition, there is $4,375,000 in reimbursement to GC water users for system costs previously borne by General City water rate payers for system-wide improvements for which OR users will benefit. There are a total of $45,960,877 in outstanding developer credits to developers for in effect, "overbuilding" beyond their calculated financial responsibility has they simply paid their impact fees. Lastly, there is a small but positive fund balance of $2,344,443. Combined the total of $407,058,223 in costs will be spread over users generating demands of 29,928,527 gallons per day.

OR Water Demands, by Land Use. The 29.9 million gallons per day demand estimate for OR General Plan build-out water use was based upon (and planned for) a gallon per dwelling (GPD) unit per day basis for residential uses or gallons per acre per day (GPAD) basis for business uses per the City's most recent Water Master Plan. Table 7-8 following indicates the DIF Land-use Type averages that were used in the DIF distribution model. The demand rates are based upon the combined potable water required on-site (meter) and the recycled water used for common parkways, parks, neighborhood edges and other suitable uses. It is important to note that while all efforts are being undertaken by the various developers to limit the demand for potable water by residential dwellings and business uses, the amount of recycled water cannot be ignored in the per unit nexus. Those efforts are demonstrated in the "Potable Water Demands" column in Table 7-8 following. However, to meet the potable water needs, the

Master Plan also identified OR projects necessary to maximize that potable use by expanding opportunities to use the recycled water in as many locations as possible. As a result the nexus distribution in Schedule 7.4 is based upon the combined potable and recycled water demand. Table 7-8 follows.

Table 7-8
Ontario Ranch Water Demand by Land Use
Demand in GPD or GPAD

DIF Land-use Type	Potable Water Demands	Recycled Water Demands	Total Gallons per Day (per Unit)	Total Gallons per Acre per Day
Detached Dwelling Units	526	188	714	
Attached Dwelling Units	323	69	392	
High Density Dwelling Units	152	56	208	
Commercial Lodging Units	150	150	300	
Retail/Service Uses	2,200	2,632		4,832
Office Uses	3,400	1,563		4,963
Business Park Uses	2,200	2,045		4,245
Industrial Uses	2,000	2,795		4,795
Institutional Uses	2,200	1,545		3,745

The results are detailed in Schedule 7.4 and (identified in Table 7-9) following and are recommended as the OR Water Source, Storage and Distribution System DIF schedule.

[This space left vacant in order to place the following table on a single page].

Table 7-9
City of Ontario's Ontario Ranch Area
Basic Needs-based Water Distribution System
Development Impact Costs by DIF Land-use Type

DIF Land-use Type	Allocation of Development Costs	Development Impact Cost Per Unit or Square Foot
Detached Dwelling Units	$113,251,103	$9,711/Unit
Attached Dwelling Units	$158,263,104	$5,332/Unit
High Density Dwelling Units	$37,009,112	$2,829/Unit
Commercial Lodging Units	$1,615,800	$4,080/Unit
Retail/Service Uses	$18,335,904	$3.188/S.F.
Office Uses	$7,695,207	$2.882/S.F.
Business Park Uses	$24,711,133	$2.483/S.F.
Industrial Uses	$43,630,071	$2.569/S.F.
Institutional Uses	$2,546,789	$2.339/S.F.

ALTERNATIVE OR DEVELOPMENT IMPACT FEE METHODOLOGIES

There are two alternatives to the nine basic OR area DIF categories. They are primarily applicable to the more specific demands by the multitude of differing business uses.

Equivalent EDU Based on Meter Size. The standard detached dwelling residence has a 3/4" meter at 15 gallons per minute normal (minimum-maximum) flow [12] which is defined as the **E**quivalent **D**welling **U**nit, or EDU. Schedule 7.4 indicates that the smallest meter size, 3/4", would cost $9,711 per connection, at the Minimum Needs based DIFs rate. The following Table 7-10 indicates the cost for larger meters based upon the normal flow demands, with again, the detached dwelling (detached) residence as the standard. A one inch meter is rated at 25 gallons per minute, which is 1.67 times larger than the 15 gallons per minute than is afforded by a 3/4" meter. Thus the one inch meter fee would be 1.67 times higher ($16,188 than the $9,711 for the 3/4" meter. Other meter sizes are as follows in Table 7-10:

[This space left vacant in order to place the following table on a single page].

12 *Meter Flow Ranges* based upon Minimum Maximum Continuous Flow Rates, American Water Works Association.

Table 7-10
Equivalent Water Meter Size Calculation
Based upon Minimum Needs-based Impact Fees

Water Meter Size	Normal Water Flow (GPM)	Water Demand Factor	Cost per E.D.U (3/4" Meter)	DIF Cost per Meter Size
¾" Meter	15	1.000	$9,711	$9,711
1' Meter	25	1.667	$9,711	$16,188
1 & ½" Meter	50	3.333	$9,711	$32,367
2" Meter	80	5.333	$9,711	$51,789
3" Meter	240	16.000	$9,711	$155,376
4" Meter	420	28.000	$9,711	$271,908
6" Meter	920	61.333	$9,711	$595,605
8" Meter	1,600	106.667	$9,711	$1,035,843
10" Meter	2,500	166.667	$9,711	$1,618,503
12" Meter	3,300	220.000	$9,711	$2,136,420

RECAP OF RECOMMENDED WATER SYSTEM IMPROVEMENTS IMPACT FEES

- **General City** – Adopt:
  A. Schedule 7.2 for the ten basic DIF categories,
  B. Table 7-7, Equivalent Water Meter Size Calculation Based upon *Minimum Needs-based Development Impact Fees*, and:

- **Ontario Ranch** – Adopt:
  A. Schedule 7.4 for the nine basic DIF categories,
  B. Table 7-10, Equivalent Water Meter Size Calculation Based upon *Minimum Needs-based Development Impact Fees*, and:

END OF CHAPTER TEXT

Schedule 7.1

City of Ontario
2021-22 Development Impact Cost Calculation Update
Allocation of Project Cost Estimates
Water Source, Storage and Distribution Facilities

Line #	Project Title	Remaining Project Cost Estimate	Construction Needs Supported by Other Resources		Construction Needs Generated by New Development in OR		Construction Needs Generated by New Development in GC	
			Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost
WT-001	Phillips Street 1010' Zone Well	$764,470	0.00%	$0	0.00%	$0	100.00%	$764,470
WT-002	Eighth Street 1212' Zone Wells	$14,638,349	0.00%	$0	42.09%	$6,161,281	57.91%	$8,477,068
WT-003	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
WT-004	Eighth Street 1212' Zone Transmission Lines	$51,199,636	25.00%	$12,799,909	0.00%	$0	75.00%	$38,399,727
WT-005	Eighth Street 1212' Zone Reservoir Site Purchase	$4,800,000	25.00%	$1,200,000	0.00%	$0	75.00%	$3,600,000
WT-006	Eighth Street 1212' Zone Reservoir Construction	$34,239,271	25.00%	$8,559,818	0.00%	$0	75.00%	$25,679,453
WT-007	Francis Street 925' Zone Wells	$54,967,749	0.00%	$0	100.00%	$54,967,749	0.00%	$0
WT-008	Phillips Street 1010' Zone Wells	$5,536,808	0.00%	$0	100.00%	$5,536,808	0.00%	$0
WT-009	Phillips Street 1010' Zone Extension Mains Extension	$10,367,176	9.65%	$1,000,432	83.56%	$8,662,812	6.79%	$703,931
WT-010	Francis Street 925' Zone Transmission Lines	$26,110,371	0.00%	$0	100.00%	$26,110,371	0.00%	$0
WT-011	Francis Street 925' Zone Distribution Mains	$35,243,908	0.00%	$0	100.00%	$35,243,908	0.00%	$0
WT-012	Francis Street 925' Zone Well Collection System	$11,944,714	0.00%	$0	100.00%	$11,944,714	0.00%	$0
WT-013	Pressure Reducing Station, Potable Water System (1010' - 925')	$1,830,000	0.00%	$0	100.00%	$1,830,000	0.00%	$0
WT-014	Francis Street 925' Zone Reservoirs	$49,151,462	0.00%	$0	100.00%	$49,151,462	0.00%	$0
WT-015	Phillips Street 1010' Zone Reservoirs	$3,747,521	0.00%	$0	100.00%	$3,747,521	0.00%	$0
WT-016	Recycled Water System	$67,414,419	0.00%	$0	86.35%	$58,212,351	13.65%	$9,202,068
WT-017	Back-Up Power Supply	$3,475,262	65.23%	$2,266,913	27.52%	$956,392	7.25%	$251,956
WT-018	Reservoir 1010' (2B) Landscaping	$248,268	0.00%	$0	0.00%	$0	100.00%	$248,268
WT-019	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
WT-020	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
WT-021	Distribution System Pressure, Size And Age Improvements	$146,132,182	100.00%	$146,132,182	0.00%	$0	0.00%	$0
WT-022	Miscellaneous Up-Sized Facilities	$5,307,264	0.00%	$0	0.00%	$0	100.00%	$5,307,264
WT-023	Abandon Existing General City Wells	$525,052	100.00%	$525,052	0.00%	$0	0.00%	$0
WT-024	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
WT-025	Decommission Galvin Treatment Plant/Abandon 1212-3 Reservoir	$2,474,310	100.00%	$2,474,310	0.00%	$0	0.00%	$0
WT-026	Seismic Upgrades And Replacements	$13,848,736	100.00%	$13,848,736	0.00%	$0	0.00%	$0
WT-027	Water Master Plan Updates	$1,564,143	0.00%	$0	82.87%	$1,296,205	17.13%	$267,938
WT-028	Water System Maintenance Vehicle/Equipment Fleet	$1,367,350	0.00%	$0	82.87%	$1,133,123	17.13%	$234,227
WT-029	Project Completed or No Longer Needed	$0	0.00%	$0	100.00%	$0	0.00%	$0
WT-030	Project Completed or No Longer Needed	$0	0.00%	$0	100.00%	$0	0.00%	$0
WT-031	JCSD/Ontario Reservoir (Phillips Street 1010" Zone)	$431,798	40.00%	$172,719	50.00%	$215,899	10.00%	$43,180
WT-032	Water Treatment	$52,190,676	47.46%	$24,769,695	52.54%	$27,420,981	0.00%	$0
WT-033	Project Completed or No Longer Needed	$0	100.00%	$0	0.00%	$0	0.00%	$0
WT-034	Water Source Supply	$62,549,323	0.00%	$0	93.71%	$58,614,971	6.29%	$3,934,352
WT-035	General System Reliability Improvements	$1,863,936	100.00%	$1,863,936	0.00%	$0	0.00%	$0

Schedule 7.1

City of Ontario
2021-22 Development Impact Cost Calculation Update
Allocation of Project Cost Estimates
Water Source, Storage and Distribution Facilities

Line #	Project Title	Remaining Project Cost Estimate	Construction Needs Supported by Other Resources: Percent Need	Construction Needs Supported by Other Resources: Apportioned Dollar Cost	Construction Needs Generated by New Development in OR: Percent Need	Construction Needs Generated by New Development in OR: Apportioned Dollar Cost	Construction Needs Generated by New Development in GC: Percent Need	Construction Needs Generated by New Development in GC: Apportioned Dollar Cost
WT-036	Fourth Street 1074' Zone Transmission Improvements	$3,010,563	100.00%	$3,010,563	0.00%	$0	0.00%	$0
WT-037	Share of Specific/Common City Yard Improvements	$9,472,959	0.00%	$0	82.87%	$7,850,241	17.13%	$1,622,718
WT-038	Project Completed or No Longer Needed	$0	100.00%	$0	0.00%	$0	0.00%	$0
	Sub-Total General Plan Total New Projects	$676,417,676	32.32%	$218,624,265	53.08%	$359,056,789	14.60%	$98,736,620
	OR Reimbursement for Water System	$4,375,000	0.00%	$0	100.00%	$4,375,000	0.00%	$0
	Less: OR Reimbursement for Previous GC Expenses	-$4,375,000	100%	$ (4,375,000)	0.00%	0.00%	0.00%	$0
	FINANCIAL ADJUSTMENTS:							
	Ontario Ranch - Local Water Outstanding Credits	$8,026,039	0.00%	$0	100.00%	$8,026,039	0.00%	$0
	Ontario Ranch - Regional Water Outstanding Credits	$37,934,838	0.00%	$0	100.00%	$37,934,838	0.00%	$0
	Ontario Ranch - Development Impact Fee Fund Balance	($2,334,443)	0.00%	$0	100.00%	-$2,334,443	0.00%	$0
	General City Development Impact Fee Fund Balance	($19,923,578)	0.00%	$0	0.00%	$0	100.00%	-$19,923,578
	Total Fund Balance/OutstandingCredits	$23,702,856	0.00%	$0	184.06%	$43,626,434	-84.06%	-$19,923,578
	Total Net General Plan Project Costs	$700,120,532	30.60%	$214,249,265	58.14%	$407,058,223	11.26%	$78,813,042
					Forward to Schedule 7.4		**Forward to Schedule 7.2**	

NOTES:

(1). All developer-held "credits" under FINANCIAL ADJUSTMENTS will appear as a positive indicating an additional Infrastructure Fund obligation that will be redeemed (in lieu of a DIF payment) at some point in the future.

(2). A negative figure under FINANCIAL ADJUSTMENTS indicates a positive Fund Balance mitigating the project total. A positive figure indicates an amount that needs to be recovered by DIFs.

(3). Costs distribution based upon the water allocation factors from the Water Master Plan.

Schedule 7.2

City of Ontario
2021-22 Development Impact Cost Calculation Update
General City (GC) - Minimum Capital Needs-based Impact Costs
Water Source, Storage and Distribution Facilities

Proposed Land Use	*Undeveloped*		*GC Water Allocation Rate GPD (1)*	*Cumulative New Water Allocation*	*Percentage of Added Water Allocation*	*Allocation of Expansion Costs*	*Cost Distribution Per Acre*	*Average Units or Square Feet/Acre*	*Development Impact Fee per Unit or Square Foot*
	Acres	*Units*							
Detached Dwellings	262	1,131	544	615,264	4.47%	$3,523,941	$13,450	4.32	*$3,113 per Unit*
Attached Dwellings	183	2,688	372	999,936	7.27%	$5,727,160	$31,296	14.69	*$2,130 per Unit*
High Density Dwellings	598	21,807	251	5,473,557	39.78%	$31,349,944	$52,425	36.47	*$1,437 per Unit*
Mobile Home Dwellings	14	95	372	35,340	0.26%	$202,411	$14,458	6.79	*$2,129 per Unit*
Commercial Lodging Units	3	150	150	22,500	0.16%	$128,869	$42,956	50.00	*$859 per Unit*
Retail/Service Uses	992	8,164,415	2,200	2,182,400	15.86%	$12,499,754	$12,601	8,230	*$1.531 per S.F.*
Office Uses	822	20,895,746	3,400	2,794,800	20.31%	$16,007,292	$19,474	25,421	*$0.766 per S.F.*
Business Park Uses	341	6,969,626	2,200	750,200	5.45%	$4,296,791	$12,601	20,439	*$0.617 per S.F.*
Industrial Uses	441	30,650,125	2,000	882,000	6.41%	$5,051,679	$11,455	69,501	*$0.165 per S.F.*
Private Institutional Use	2	43,560	2,200	4,400	0.03%	$25,201	$12,601	21,780	*$0.579 per S.F.*
TOTAL	**3,658**	--	--	**13,760,397**	**100.00%**	**$78,813,042**	**in Total GC Water System General Plan Projects**		
ALTERNATE FEE METHODOLOGY				**13,760,397**		**$78,813,042**	**$5.728 Per Gallon Demand**		

Schedule 7.3

City of Ontario
2021-22 Development Impact Cost Calculation Update
Existing Community Financial Commitment Comparison
Water Source, Storage and Distribution Facilities

Proposed Land Use	Undeveloped Acres	Undeveloped Units	GC Water Allocation Rate GPD (1)	Cumulative Existing Water Allocation	Percentage of Existing Water Allocation	Allocation of ExistingSystem Costs	Cost Distribution Per Acre	Average Units or Square Feet/Acre	Development Impact Fee per Unit or Square Foot
Detached Dwellings	4,733	27,449	544	14,932,256	37.19%	$293,563,762	$62,025	5.80	***$10,694 per Unit***
Attached Dwellings	641	12,050	372	4,482,600	11.16%	$88,126,598	$137,483	18.80	***$7,313 per Unit***
High Density Dwellings	193	4,812	251	1,207,812	3.01%	$23,745,229	$123,032	24.93	***$4,935 per Unit***
Mobile Home Dwellings	204	2,097	372	780,084	1.94%	$15,336,222	$75,178	10.28	***$7,313 per Unit***
Commercial Lodging Units	143	5,810	150	871,500	2.17%	$17,133,434	$119,814	40.63	***$2,949 per Unit***
Retail/Service Uses	477	18,418,611	2,200	1,049,400	2.61%	$20,630,895	$43,251	38,613	***$1.120 per S.F.***
Office Uses	310	9,959,192	3,400	1,054,000	2.63%	$20,721,330	$66,843	32,126	***$2.081 per S.F.***
Business Park Uses	741	9,587,138	2,200	1,630,200	4.06%	$32,049,253	$43,251	12,938	***$3.343 per S.F.***
Industrial Uses	6,610	106,400,598	2,000	13,220,000	32.93%	$259,901,312	$39,319	16,097	***$2.443 per S.F.***
Private Institutional Use	419	2,318,711	2,200	921,800	2.30%	$18,122,317	$43,251	5,534	***$7.816 per S.F.***
TOTAL	**14,471**	--	--	**40,149,652**	**100.00%**	**$789,330,351**	**Total Existing Water System Inventory**		
						$496,870,839	**in Water Distribution System Assets**		
						$100,315,860	**in Water Storage Reservoir Assets**		
						$115,078,345	**In Water Well Assets**		
						$19,172,187	**in Water Shares Assets**		
						$9,403,160	**in Pressure Reducing Stations (PRVs) Assets**		
						$8,159,250	**In Booster Station Assets**		
						$17,103,834	**in Treatment Facilities Assets**		
						$2,678,630	**in Water Maintenance Vehicles/Equipment Assets**		
						$624,668	**in Altitude Valve Assets**		
						$19,923,578	**in Water System DIF Fund Balance**		

Schedule 7.4

City of Ontario
2021-22 Development Impact Cost Calculation Update
Ontario Ranch (OR) - Minimum Capital Needs-based Impact Costs
Water Source, Storage and Distribution Facilities

Proposed Land Use	Undeveloped Acres	Undeveloped Units	OR Water Allocation Rate (1)	Cumulative New Water Allocation	Percentage of Added Water Allocation	Allocation of Expansion Costs	Cost Distribution Per Acre	Average Units or Square Feet/Acre	Development Impact Fee per Unit or Square Foot
Detached Dwellings	1,423	11,662	714	8,326,668	27.82%	$113,251,103	$79,586	8.20	*$9,711 per Unit*
Attached Dwellings	1,316	29,684	392	11,636,128	38.88%	$158,263,104	$120,261	22.56	*$5,332 per Unit*
High Density Dwellings	439	13,082	208	2,721,056	9.09%	$37,009,112	$84,303	29.80	*$2,829 per Unit*
Commercial Lodging	9	396	300	118,800	0.40%	$1,615,800	$179,533	44.00	*$4,080 per Unit*
Retail/Service Uses	279	5,751,595	4,832	1,348,128	4.50%	$18,335,904	$65,720	20,615	*$3.188 per S.F.*
Office Uses	114	2,670,188	4,963	565,782	1.89%	$7,695,207	$67,502	23,423	*$2.882 per S.F.*
Business Park Uses	428	9,953,243	4,245	1,816,860	6.07%	$24,711,133	$57,736	23,255	*$2.483 per S.F.*
Industrial Uses	669	16,981,679	4,795	3,207,855	10.72%	$43,630,071	$65,217	25,384	*$2.569 per S.F.*
Institutional Use	50	1,089,000	3,745	187,250	0.63%	$2,546,789	$50,936	21,780	*$2.339 per S.F.*
TOTAL	4,727	--	--	29,928,527	100.00%	$407,058,223	in Total OR Water System General Plan Projects		
ALTERNATE FEE METHODOLOGY				**29,928,527**		**$407,058,223**	**$13.601 Per Gallon Demand**		

Chapter 8
Sewer Collection Facilities

As was mentioned in the prior chapter and will be reiterated here, a city or public agency experiencing dramatic growth may put off the construction of needed parks, roads storm drainage projects and the like and still function, perhaps minimally. However, nothing stops development in its tracks any faster than the lack of a water distribution system and a sewage collection system. These two systems were some of the earliest calculated DIFs, although they were generally called "hook up" fees [13]. In short, a residence or business cannot exist without these important connections.

Growth will continue to impact City services in two ways. The first is development within areas already served by the sewer collection system which, if not properly sized at construction, could overwhelm the existing capacity of the pipe. Such is the case with GC. The second way growth impacts the City is by development proposals in areas where the system improvements do not yet exist as with the OR area. A properly undertaken Master Plan will eliminate the first problem, but it will take money to construct the additionally needed lines. It is a commonly accepted principle in both water and sewer expansion that DIF receipts can finance the expansions as needed and required. If a development wanted to connect and there were no close-by lines, the developer would finance the expansion with perhaps a reimbursement agreement if appropriate.

The principle remains the same with these DIFs. This Chapter will calculate a fee schedule that represents the proportional expense per unit of growth by DIF Land-use Type, i.e., a detached dwelling unit, a commercial lodging unit or 1,000 square feet of business space.

Similar to the circulation, storm drainage and water DIFs, sewer collection infrastructure will require separate DIF schedules for GC and OR in order to insure that existing GC users are not placed in the position of subsidizing OR area development. The GC DIF calculation and general sewer collection discussion will be in the beginning of the Chapter and the OR calculation will follow at the end of the chapter.

EXISTING SEWER GC COLLECTION SYSTEM

The City's major line sewer collection system currently consists of an identified 468,723 linear feet of various sized (10" to 48") reinforced concrete pipe, over 1,875 manholes and various backfill, road base and asphalt. The current cost of duplicating the entire system of laterals, locals and collectors, would be approximately $346,761,523. There are also a number of pump stations with a replacement value $750,000. There is $1,610,053 in specialty equipment and vehicles dedicated to sewer collection system maintenance. There is an existing negative GC DIF fund balance of $4,052,853. These individual assets create sewer collection system investment of $345,068,723.

[13] Not to be confused with a "connection" fee which is a reimbursement for the actual costs of having a city-worker either set the water meter or connect the privately owned sewer pipe from the home to the City's later sewer pipe.

GENERAL CITY SEWER COLLECTION SYSTEM DEVELOPMENT IMPACT FEES

Schedule 8.1 identifies 38 sewer collection capital projects, (after fourteen of the original 52 have been completed and removed from the total), necessary to accommodate the remaining growth in the GC part of the City and also maintain the existing system. GC development will be responsible for some portion of 25 of the remaining 38 projects. OR had some (or all) of the responsibility for 14 of the projects. Twenty-two of the projects have some portion (or all) of the costs related to maintenance of the existing system and thus these portions are not allocated to development. Combined, they will cost an estimated $137,148,405 to design, construct and inspect, or acquire. The combined GC and OR DIF positive fund balances of $5,184,412 and reduce that figure the $5,422,835 in outstanding developer credits slightly increases the total $137,386,829.

The Schedule 8.1 projects were identified by the City's Engineering Staff, and they were based upon the *General City and Ontario Ranch Sewer Master Plan of 2012*.

The project costs related to GC growth needs were then distributed to the development categories within GC by the system design flows, or gallons per day/acre flow rates (GPAD) for business development or gallons per day (GPD) for residential construction. The OR sewer design flow rates are based upon the previously mentioned Sewer Master Plan and are as follows in Table 8-1:

Table 8-1
General City Sewer Flow Rate
Demand by Land Use
Demand in GPD or GPAD

DIF Land-use Type	Gallons (per Unit) per Day	Gallons per Acre per Day
Detached Dwelling Units	240	
Attached Dwelling Units	210	
High Density Dwelling Units	180	
Mobile Residences Dwelling Units	210	
Commercial Lodging Units	140	
Retail/Service Uses		900
Office Uses		3,000
Business Park Uses		1,200
Industrial Uses		1,600
Institutional Uses		1,500

DISTRIBUTION OF CAPTAL COSTS

Table 8-2, following, is extracted from Schedule 8.2 and demonstrates the results of distributing the $26,077,681 in GC sewer system expansion costs over the remaining undeveloped parcels in GC.

Table 8-2
City of Ontario's General City Area
Basic Needs-based Sewer Collection System
Development Impact Costs
by DIF Land-use Type

DIF Land-use Type	Allocation of Development Costs	Development Impact Cost Per Unit or Square Foot
Detached Dwelling Units	$652,617	$577/Unit
Attached Dwelling Units	$1,357,443	$505/Unit
High Density Dwelling Units	$9,438,736	$433/Unit
Mobile Home Units	$47,970	$505/Unit
Commercial Lodging Units	$50,424	$336/Unit
Retail/Service Uses	$2,146,830	$0.263/S.F.
Office Uses	$5,929,777	$0.284/S.F.
Business Park Uses	$983,945	$0.141/S.F.
Industrial Uses	$1,696,581	$0.055/S.F.
Institutional Uses	$7,140	$0.164/S.F.

The results indicate that the varying types of residential dwellings will need to contribute anywhere from a low of $433 for a high density dwelling unit to a high of $577 for a detached dwelling unit in either DIF payments or in contributed capital in the form of off-site sewer lines (to the same amount).

Existing Contribution. Table 8-3, on the following page, distributes the current replacement cost, or long-term investment of the existing system distributed over those who have contributed to the existing sewer system, the current users and rate payers. This has been done in the same manner as the future costs were distributed against the future users, by the same average demand statistics used for modeling master plans. The results indicate that the average high density dwelling unit has contributed $2,516 per unit and a detached dwelling unit has contributed about $3,354 per unit.

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Table 8-3
Existing Sewer Collection System Community
Financial Commitment Comparison Data

DIF Land-use Type	Allocation of Development Costs	Development Impact Cost Per Unit or Square Foot
Detached Dwelling Units	$92,067,786	$3,354/Unit
Attached Dwelling Units	$35,366,093	$2,935/Unit
High Density Dwelling Units	$12,105,011	$2,516/Unit
Mobile Home Units	$6,156,026	$2,936/Unit
Commercial Lodging Units	$11,366,564	$1,956/Unit
Retail/Service Uses	$6,000,745	$0.326/S.F.
Office Uses	$12,998,739	$1.305/S.F.
Business Park Uses	$12,425,925	$1.296/S.F.
Industrial Uses	$147,803,286	$1.389/S.F.
Institutional Uses	$8,781,999	$3.787/S.F.

PROPORTIONATE SHARE ANALYSIS

Necessity for DIFs. DIFs are necessary and appropriate for the construction of the remainder of the sewer collection system for one significant reason. Similar to the distribution of water, the collection and treatment of sewage has long since been recognized by most public agencies as a utility. Utilities differ from general tax-supported services in that they are similar to private sector utility businesses and are financed by utility rates. Sewer collection rates are relatively elastic, within reason, and can be set to meet sewage collection costs whereas taxes for general municipal services cannot. As a result, general taxes must be protected and reserved for services that do not have any such an elastic revenue source such as public safety, park maintenance, storm drainage, and others. Additionally, as long as the existing sewer users have an adequate system for their needs, they would have little interest in having sewer rates rise for any reason other than operating costs as opposed to meeting the cost of adding new users. Clearly, the cost of adding to the system infrastructure to accommodate additional private development demands should be imposed upon that same private development.

The contribution to the sewer collection system (benefit) can be measured, unlike many of the City's services. Sewer rates can, and should be, set to meet the Council's priorities and policies in terms of the sewer system use. The use of general taxes, where no relationship between the rate of taxation and benefit exists, in support of any utility service would be inappropriate.

Recommended GC Area DIF Schedule. The adoption of Schedule 8.2 at the end of the Chapter text (as summarized in table 8-2), as the Sewer Collection Facilities DIF schedule is both reasonable and would generate enough capital to construct the infrastructure facilities needed by the new development. The DIFs contained in Schedules 8.2 also contain amounts lesser than the financial commitment fees identified in Schedule 8.3 thus Schedule 8.2 does not violate any proportionate requirements.

CREDITS AGAINST DEVELOPMENT IMPACT FEES

Like the water utility, there are no *stand-by* sewer collection rates. Vacant parcels are not charged sewer rates and therefore they have not contributed to the capital development of the sewer system. As a result there can be no allowance for previous contributions to capital from vacant parcels, simply because there were none. Additionally, there have been no General Fund expenditures on sewer projects.

Credit for Developer Constructed Improvements Contained Within the City's MFP and Impact Fee Calculation. Similar to other infrastructure construction, it may be advantageous to have the developer construct certain public improvements contiguous to the private development. The adoption of DIFs should not preclude such agreements. Thus it is recommended that the City continue the process of agreeing to allow developers to make sewer system capital improvements that are identified within the City's MFP and that are part of the impact fee calculation, and receive a credit for that constructed amount. The net DIF would be the amount per the adopted schedules less the credit for the capital constructed by the developer.

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ONTARIO RANCH SEWER COLLECTION SYSTEM IMPACT FEE

Ontario Ranch will need a significant amount of sewer collection system improvements in order to accommodate the large scale development planned for the area. There is some $73,398,698 in remaining collection trunk mains and other general improvements. In addition, there is the $681,912 in costs for a proportional expansion of the sewer maintenance fleet and $2,858,406 as the sewer operations share of the City maintenance yard improvements. There is a $561,012 portion of a Master Plan costs. The total of all these project and financial adjustments is $77,500,028. There is a net negative $4,291,276 in a combination of positive developer credits (increases total) and a positive Fund Balance (decreases total) will be spread over users developing on 4,727 vacant acres generating demands of 11,947,928 gallons per day. The project costs related to OR growth needs were then distributed to the development categories within OR by the system design flows, or gallons per day/acre flow rates (GPAD) for business development or gallons per day (GPD) for residential construction. The OR sewer design flow rates are based upon the previously mentioned Sewer Master Plan and also reflect the OR residential water conservation efforts. They are as follows in Table 8-4:

[This space left vacant to place the following table on a single page].

Table 8-4
General City Sewer Flow Rate
Demand by Land Use
Demand in GPD or GPAD

DIF land-use Type	Gallons (per Unit) per Day	Gallons per Acre per Day
Detached Dwelling Units	240	
Attached Dwelling Units	182	
High Density Dwelling Units	110	
Commercial Lodging Units	140	
Retail/Service Uses		900
Office Uses		3,000
Business Park Uses		1,200
Industrial Uses		1,600
Institutional Uses		1,500

These distributed costs are recommended as the OR Sewer Collection System DIF Schedule per Table 8-5 (as summarized from Schedule 8.4), following:

Table 8-5
City of Ontario's Ontario Ranch Area
Basic Needs-based Sewer Collection System
Development Impact Costs
by DIF Land-use Type

DIF Land-use Type	Allocation of Development Costs	Development Impact Cost Per Unit or Square Foot
Detached Dwelling Units	$19,160,431	$1,642/Unit
Attached Dwelling Units	$36,983,574	$1,246/Unit
High Density Dwelling Units	$9,850,945	$753/Unit
Commercial Lodging Units	$379,512	$958/Unit
Retail/Service Uses	$1,719,253	$0.299/S.F.
Office Uses	$2,340,867	$0.877/S.F.
Business Park Uses	$3,516,208	$0.353/S.F.
Industrial Uses	$7,327,683	$0.431/S.F.
Institutional Uses	$513,949	$0.472/S.F.

RECAP OF RECOMMENDED SEWER SYSTEM IMPROVEMENTS IMPACT FEES

- **General City** - Adopt Schedule 8.2 for the ten basic land-uses.
- **Ontario Ranch** - Adopt Schedule 8.4 for the nine basic land-uses.

END OF CHAPTER TEXT

Schedule 8.1

City of Ontario
2021-22 Development Impact Cost Calculation Update
Allocation of Project Cost Estimates
Sewer Collection Facilities

Line #	Project Title	Estimated Remaining Cost	Construction Needs Supported by Other Resources		Construction Needs Generated by New Development in OR		Construction Needs Generated by New Development in GC	
			Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost
SW-001	Eastern Trunk Sewer	$21,279,860	85.66%	$18,228,328	13.18%	$2,804,686	1.16%	$246,846
SW-002	Western Trunk Sewer	$36,174,154	0.00%	$0	100.00%	$36,174,154	0.00%	$0
SW-003	Eucalyptus East Trunk Sewer	$697,535	0.00%	$0	100.00%	$697,535	0.00%	$0
SW-004	Project Completed or No Longer Needed	$0	0.00%	$0	100.00%	$0	0.00%	$0
SW-005	Haven Trunk Sewer	$1,497,780	0.00%	$0	100.00%	$1,497,780	0.00%	$0
SW-006	Mill Creek Trunk Sewer	$11,064,313	0.00%	$0	100.00%	$11,064,313	0.00%	$0
SW-007	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SW-008	Walker Trunk Sewer	$986,909	0.00%	$0	100.00%	$986,909	0.00%	$0
SW-009	Grove Trunk Sewer	$4,903,394	0.00%	$0	100.00%	$4,903,394	0.00%	$0
SW-010	Bon View Trunk Sewer	$4,903,394	0.00%	$0	100.00%	$4,903,394	0.00%	$0
SW-011	Euclid Trunk Sewer	$4,903,394	0.00%	$0	100.00%	$4,903,394	0.00%	$0
SW-012	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SW-013	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SW-014	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SW-015	Plaza Serena Street, Granda Court To Vineyard Avenue	$30,097	0.00%	$0	0.00%	$0	100.00%	$30,097
SW-016	Philadelphia Between Parco And Vineyard	$6,146,285	85.00%	$5,224,342	0.00%	$0	15.00%	$921,943
SW-017	Holt Boulevard, West Of Imperial Avenue	$407,568	61.00%	$248,616	0.00%	$0	39.00%	$158,952
SW-018	Project Completed or No Longer Needed	$0	100.00%	$0	0.00%	$0	0.00%	$0
SW-019	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SW-020	Cherry Avenue, North Of G Street	$17,442	100.00%	$17,442	0.00%	$0	0.00%	$0
SW-021	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SW-022	Vineyard Avenue, South Of Cedar Et. Al.	$13,947,873	13.00%	$1,813,223	0.00%	$0	87.00%	$12,134,650
SW-023	Easement East Of Haven Street	$1,211,150	27.00%	$327,011	0.00%	$0	73.00%	$884,140
SW-024	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SW-025	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SW-026	Sewer Utility Maintenance Vehicles	$947,100	0.00%	$0	72.00%	$681,912	28.00%	$265,188
SW-027	Sewer Utility Master Plan	$779,184	0.00%	$0	72.00%	$561,012	28.00%	$218,172
SW-028	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SW-029	Carpenter Trunk Sewer	$5,463,139	0.00%	$0	100.00%	$5,463,139	0.00%	$0
SW-030	Project Completed or No Longer Needed	$0	0.00%	$0	0.00%	$0	0.00%	$0
SW-031	Easement N/O & S/O Hollowell, E/O Boulder Avenue	$102,306	100.00%	$102,306	0.00%	$0	0.00%	$0
SW-032	D Street Between Corona And Vineyard	$72,566	100.00%	$72,566	0.00%	$0	0.00%	$0
SW-033	Easement W/O Euclid From N/O J St To Easement S/O G St	$187,515	100.00%	$187,515	0.00%	$0	0.00%	$0
SW-034	Benson Avenue Between I Street and G Street	$133,473	100.00%	$133,473	0.00%	$0	0.00%	$0

Schedule 8.1

City of Ontario
2021-22 Development Impact Cost Calculation Update
Allocation of Project Cost Estimates
Sewer Collection Facilities

Line #	Project Title	Estimated Remaining Cost	Construction Needs Supported by Other Resources: Percent Need	Construction Needs Supported by Other Resources: Apportioned Dollar Cost	Construction Needs Generated by New Development in OR: Percent Need	Construction Needs Generated by New Development in OR: Apportioned Dollar Cost	Construction Needs Generated by New Development in GC: Percent Need	Construction Needs Generated by New Development in GC: Apportioned Dollar Cost
SW-035	Virginia Avenue Between D Street and Nocta Street	$58,242	26.00%	$15,143	0.00%	$0	74.00%	$43,099
SW-036	Deer Creek Loop And Laurel Tree Drive	$809,492	99.00%	$801,397	0.00%	$0	1.00%	$8,095
SW-037	Hollowell, Boulder and Holt Avenue	$250,124	0.00%	$0	0.00%	$0	100.00%	$250,124
SW-038	Easement N/O Holt Blvd, E/O Allyn Avenue	$97,051	59.00%	$57,260	0.00%	$0	41.00%	$39,791
SW-039	Riverside Drive Between Sultana And Campus Avenues	$176,978	33.00%	$58,403	0.00%	$0	67.00%	$118,575
SW-040	Vineyard S/O Airport And Easement	$6,524,301	69.00%	$4,501,768	0.00%	$0	31.00%	$2,022,533
SW-041	Mills Circle N/O Mall Drive	$132,250	66.00%	$87,285	0.00%	$0	34.00%	$44,965
SW-042	Holt Boulevard E/O Vineyard Avenue	$420,132	52.00%	$218,469	0.00%	$0	48.00%	$201,663
SW-043	Bon View Avenue N/O Francis	$197,732	0.00%	$0	0.00%	$0	100.00%	$197,732
SW-044	Acacia, Easement, Locust And Parco	$1,736,460	19.00%	$329,927	0.00%	$0	81.00%	$1,406,533
SW-045	Turner Avenue, N/O Cedar Street	$132,250	19.00%	$25,128	0.00%	$0	81.00%	$107,123
SW-046	Holt Sewer Phase A	$960,447	83.00%	$797,171	0.00%	$0	17.00%	$163,276
SW-047	Holt Sewer Phase B	$37,442	99.00%	$37,068	0.00%	$0	1.00%	$374
SW-048	Share Of Common City Yard Improvements	$3,970,009	0.00%	$0	72.00%	$2,858,406	28.00%	$1,111,603
SW-049	Project Completed or No Longer Needed	$0	0.00%	$0	100.00%	$0	0.00%	$0
SW-050	Airport Drive Main, E/O Grove	$590,977	0.00%	$0	0.00%	$0	100.00%	$590,977
SW-051	Project Completed or No Longer Needed	$0	54.00%	$0	0.00%	$0	46.00%	$0
SW-052	Piedmonte Specific Densification Mitigation in Various Streets	$5,198,088	0.00%	$0	0.00%	$0	100.00%	$5,198,088
	Sub-Total General Plan Total New Projects	$137,148,406	24.27%	$33,283,841	56.51%	$77,500,028	19.22%	$26,364,539
	FINANCIAL ADJUSTMENTS:			$34,566,208		$78,789,386		$27,736,071
	Ontario Ranch - Local Sewer Outstanding Credits	$5,421,619	0.00%	$0	100.00%	$5,421,619	0.00%	$0
	Ontario Ranch - Regional Sewer Outstanding Credits	$1,216	0.00%	$0	100.00%	$1,216	0.00%	$0
	Ontario Ranch - Development Impact Fee Fund Balance	($1,131,559)	0.00%	$0	100.00%	($1,131,559)	0.00%	$0
	General City - Development Impact Fee Fund Balance	($4,052,853)	0.00%	$0	0.00%	$0	100.00%	($4,052,853)
	Tota Fund Balance/Outstanding Credits	$238,423	0.00%	$0		$4,291,276		($4,052,853)
	Total Net General Plan Project Costs	$137,386,829	24.23%	$33,283,841	59.53%	$81,791,304	16.24%	$22,311,686
					Forward to Schedule 8.4		**Forward to Schedule 8.2**	

NOTES:

(1). All developer-held "credits" under FINANCIAL ADJUSTMENTS will appear as a positive indicating an additional Infrastructure Fund obligation that will be redeemed (in lieu of a DIF payment) at some point in the future.

(2). A negative figure under FINANCIAL ADJUSTMENTS indicates a positive Fund Balance mitigating the project total. A positive figure indicates an amount that needs to be recovered by DIFs.

(3). Costs distribution based upon the Sewer allocation factors from the Sewer Master Plan.

Schedule 8.2

City of Ontario
2021-22 Development Impact Cost Calculation Update
General City (GC) - Minimum Capital Needs-based Impact Costs
Sewer Collection Facilities

Proposed Land Use	Undeveloped Acres	Undeveloped Units	Gallons per Day Sewer Demand Rate	Cumulative New Sewer Demand	Percentage of Additional Sewer Demand	Allocation of Expansion Costs	Cost Distribution Per Acre	Average Units or Square Feet/Acre	Development Impact Fee per Unit or Square Foot
Detached Dwellings	262	1,131	240	271,440	2.93%	$652,617	$2,491	4.32	*$577 per Unit*
Attached Dwellings	183	2,688	210	564,480	6.08%	$1,357,443	$7,418	14.69	*$505 per Unit*
High Density Dwellings	598	21,807	180	3,925,260	42.30%	$9,438,736	$15,784	36.47	*$433 per Unit*
Mobile Home Dwellings	14	95	210	19,950	0.22%	$47,970	$3,426	6.79	*$505 per Unit*
Commercial Lodging Units	3	150	140	21,000	0.23%	$50,424	$16,808	50.00	*$336 per Unit*
Retail/Service Uses	992	8,164,415	900	892,800	9.62%	$2,146,830	$2,164	8,230	*$0.263 per S.F.*
Office Uses	822	20,895,746	3,000	2,466,000	26.58%	$5,929,777	$7,214	25,421	*$0.284 per S.F.*
Business Park Uses	341	6,969,626	1,200	409,200	4.41%	$983,945	$2,885	20,439	*$0.141 per S.F.*
Industrial Uses	441	30,650,125	1,600	705,600	7.60%	$1,696,581	$3,847	69,501	*$0.055 per S.F.*
Private Institutional Use	2	43,560	1,500	3,000	0.03%	$7,140	$3,570	21,780	*$0.164 per S.F.*
TOTAL	**3,658**	--	--	**9,278,730.00**	**100.00%**	**$22,311,686 in Total GC Sewer General Plan Projects**			

Schedule 8.3

City of Ontario
2021-22 Development Impact Cost Calculation Update
Existing Community Financial Commitment Comparison
Sewer Collection Facilities

Proposed Land Use	*Undeveloped*		*Gallons per Day Sewer Demand Rate*	*Cumulative Existing Sewer Demand*	*Percentage of Existing Sewer Demand*	*Allocation of Expansion Costs*	*Cost Distribution Per Acre*	*Average Units or Square Feet/Acre*	*Development Impact Fee per Unit or Square Foot*
	Acres	*Units*							
Detached Dwellings	4,733.0	27,449	240	6,587,760	26.68%	$92,067,786	$19,452	5.80	***$3,354 per Unit***
Attached Dwellings	641.0	12,050	210	2,530,500	10.25%	$35,366,093	$55,173	18.80	***$2,935 per Unit***
High Density Dwellings	193.0	4,812	180	866,160	3.51%	$12,105,011	$62,720	24.93	***$2,516 per Unit***
Mobile Home Dwellings	204.0	2,097	210	440,370	1.78%	$6,156,026	$30,177	10.28	***$2,936 per Unit***
Commercial Lodging Units	143.0	5,810	140	813,400	3.29%	$11,366,564	$79,486	40.63	***$1,956 per Unit***
Retail/Service Uses	477.0	18,418,611	900	429,300	1.74%	$6,000,745	$12,580	38,613	***$0.326 per S.F.***
Office Uses	310.0	9,959,192	3,000	930,000	3.77%	$12,998,739	$41,931	32,126	***$1.305 per S.F.***
Business Park Uses	741.0	9,587,138	1,200	889,200	3.60%	$12,425,925	$16,769	12,938	***$1.296 per S.F.***
Industrial Uses	6,610.0	106,400,598	1,600	10,576,000	42.83%	$147,803,286	$22,361	16,097	***$1.389 per S.F.***
Private Institutional Use	419.0	2,318,711	1,500	628,500	2.55%	$8,781,999	$20,959	5,534	***$3.787 per S.F.***
TOTAL	**14,471.0**	--	--	**24,691,190**	**100.00%**	**$345,068,723**	**Total Sewer Capital Needs to Finish System**		
						$346,761,523	**in Sewer Collection System Assets**		
						$750,000	**in Sewer Collection Pump Station Assets**		
						$1,610,053	**In Sewer Maintenance Vehicle Assets**		
						-$4,052,853	**in Sewer System DIF Fund Balance**		

Schedule 8.4

City of Ontario
2021-22 Development Impact Cost Calculation Update
Ontario Ranch (OR) - Minimum Capital Needs-based Impact Costs
Sewer Collection Facilities

Proposed Land Use	Undeveloped Acres	Undeveloped Units	*Gallons per Day Sewer Demand Rate*	*Cumulative New Sewer Demand*	*Percentage of Additional Sewer Demand*	Allocation of Expansion Costs	Cost Distribution Per Acre	Average Units or Square Feet/Acre	*Development Impact Fee per Unit or Square Foot*
Detached Dwellings	1,423	11,662	240	2,798,880	23.43%	$19,160,431	$13,465	8.20	*$1,642 per Unit*
Attached Dwellings	1,316	29,684	182	5,402,488	45.22%	$36,983,574	$28,103	22.56	*$1,246 per Unit*
High Density Dwellings	439	13,082	110	1,439,020	12.04%	$9,850,945	$22,440	29.80	*$753 per Unit*
Commercial Lodging	9	396	140	55,440	0.46%	$379,512	$42,168	44.00	*$958 per Unit*
Retail/Service Uses	279	5,751,595	900	251,100	2.10%	$1,719,253	$6,162	20,615	*$0.299 per S.F.*
Office Uses	114	2,670,188	3,000	342,000	2.86%	$2,340,867	$20,534	23,423	*$0.877 per S.F.*
Business Park Uses	428	9,953,243	1,200	513,600	4.30%	$3,516,208	$8,215	23,255	*$0.353 per S.F.*
Industrial Uses	669	16,981,679	1,600	1,070,400	8.96%	$7,327,683	$10,953	25,384	*$0.431 per S.F.*
Institutional Use	50	1,089,000	1,500	75,000	0.63%	$513,649	$10,273	21,780	*$0.472 per S.F.*
TOTAL	**4,727**	--	--	**11,947,928**	**100.00%**	**$81,791,304 in Total OR Sewer General Plan Projects**			

Chapter 9
Refuse Collection Facilities and Equipment

This chapter contains a calculation of the demand from development upon the City's inventory of refuse collection equipment, storage and maintenance facilities. The existing refuse capacity is the result of existing customer rate and fee payments. The inventory is also needed to serve the existing inventory of residential and business space. New refuse customers will impact the City by requiring new refuse vehicles and various types of collection containers which in turn will increase demand upon the refuse collection system facilities and maintenance capacity.

Many cities simply include the cost of capital acquisition within their operating budget. Cities that choose to finance the expansion of their refuse fleet through monthly user charges, rather than DIFs, are in fact forcing the existing refuse customers to subsidize the costs of these new businesses and residences. However, these costs can legitimately be recovered through a DIF schedule in virtually the same manner as a circulation or sewer DIF.

The calculation of refuse collection DIFs depends on the type of service required by a particular development, be it a residential unit or a business. Schedule 9.1, sections A through G demonstrate the varying costs for the three types of refuse collection services offered by the City: side-loader, front-loader and roll-off. Tables 9-1 through 9-7 will identify the cost calculation for the direct capital acquisition costs of the collection vehicles and the collection bins required by each DIF use category.

Table 9-8 will apply the City's indirect costs of the Refuse operations share of common City Yard improvements. These costs are significant given the extraordinary demands upon fleet maintenance facilities, overnight parking and fueling of collection vehicles and bin storage. In addition the vehicles are CNG powered and thus each parking spot will require the slow fill CNG capability.

Detached Dwelling Unit Residential Side-loader service (Schedule 9.1-A) - A side-loader truck can service 700 barrels per day for five days per week for a total of 3,500 total barrels pick-up capacity. The residential side-loader truck costs $375,000 and thus it costs $107.14 to service each collection barrel.

On average, detached dwelling residential dwellings have 3.05 barrels as some (about one in twenty) have a second refuse, green waste or recycle bin. A collection barrel costs $55.31 each. The resulting cost is $495.00 (rounded) per detached dwelling unit for the 3.05 barrel collection weekly.

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Table 9-1
Refuse Collection
Development Impact Fee
for Detached Dwelling Units

	Cost per Item	Items Required	Total Cost
Collection Barrels	$55.31	3.05	$168.70
Portion of Side-loader Vehicle	$107.14	3.05	$326.78
Total (rounded)			**$495.00**

Commercial Front-loader for Attached Dwellings (Schedule 9.1-B) - A single front-loader truck, which serves large attached residential developments, commercial and industrial uses, costs $375,000. This cost is divided by the estimated 800 four cubic yard bins of refuse hauled per truck per week (160 per day for 5 days each) to derive at a cost of $468.75 per four cubic yard bin pick-up.

On average, it takes two - four cubic yard refuse bins and two - four cubic yard recycle bins to serve fifteen attached dwelling units. The bins, at $1,136 each, would cost $4,544. The cost for the truck to collect the four bins would be $1,875 (4 X $312.50). The combined bin and collection cost of $6,419.00, when divided by the fifteen detached units indicates a rounded cost of $428 per dwelling.

The high density units would require the same vehicle/bin combination costs of $6,419 but would serve twice as many (30) units resulting in a rounded cost of $214 per dwelling.

Table 9-2
Refuse Collection Development Impact Fee for
Residential Attached Dwellings
and High Density Dwelling Units

	Cost per Item	Items Required	Total Cost
Front-loader Vehicle Cost/Bin	$468.75	4	$1,875
Four Cubic Yard Bins	$1,136.00	4	$4,544
Total Cost for Vehicle & Bins			$6,419
Number of Units/Acre			15
Cost per Attached Dwelling Unit			**$428.00**
Total Cost for Vehicle & Bins			$6,419
Number of Units/Acre			30
Cost/High Density Dwelling Unit			**$214.00**

Commercial Collection for Retail/Service and Business Park use Developments Schedule 9.1-C) - A typical one acre-based Retail/Service establishment with a building pad size of 10,949 square feet will have two - four cubic yard bins (one for refuse and one for recycling) picked up on average one and a half times a week. This is the same of a Business park use but that development will result in a lower FAR or average square feet per average acre. As with 9.1 - B above, one front-loader truck, which serves Retail/Service uses and Business Park uses, will cost $375,000. This cost is divided by the estimated 800 bins the truck can collect weekly to derive a cost of $703.13 per bin pick-up or $2,272, for the two bins, one and a half pick-ups per week. The bin cost is $2,272 each for a total of $3,678.25.

The total capital acquisition cost for serving the one acre of Retail/Service business is $3,678.25 based upon an average of 11,979 square feet pad yield per acre results in a $0.336/square foot cost. The total capital cost for serving the one acre of Business Park use is the same at $2,199.06 per acre but based upon a lower average of higher 22,206 square feet pad yield per acre generates a $0.167/square foot cost.

Table 9-3 following indicates the fee necessary to serve Retail/Service and Business Park establishments.

Table 9-3
Refuse Collection and Business Park
Development Impact Fee
for Retail/Service Establishments

	Cost per Item	Items Required	Total Cost
Front-loader Vehicle Cost/Bin	$703.13	2	$1,406.26
Four Cubic Yard Bins	$1,136	2	$2,272.00
Total Cost for Vehicle & Bins			$3,678.26
Retail/Service Square Feet/Acre			10,949
Cost per Square Foot			**$0.336**
Total Cost for Vehicle & Bins			$3,678.26
Business Park Square Feet/Acre			22,006
Cost per Square Foot			**$0.167**

Commercial Collection for Restaurants Units (Schedule 9.1 - D) - Restaurants differ from other retail establishments in that they require a higher frequency of collection due to the volume of food wastes and the problems that would be caused with heat over a less frequent pick-up schedule. The typical one acre-based restaurant establishment with a building pad size of 11,979 square feet will also require two - four cubic yard bins (one for refuse and one for recycling) but due to the food wastes restaurant waste bin collection is typically five days a week while the recycle bin collection is limited to twice a week. As with 9.1-B, one front-loader truck, which serves commercial retail uses, costs $375,000. When divided by the estimated 800 bins

the truck can collect weekly, a cost of $468.75 per bin per day pick-up is derived. The two combined bins will require seven bin pick-up days (five for refuse and two for recycle trash) for a capital capacity cost of $3,281.25. The two bins cost $1,136 each for a total of $272.00. The total capital cost for serving the one acre commercial restaurant business is $5,553.25. Based upon the average 11,979 square feet yield of business pad a per acre, an impact fee of $0.464 per square foot is required to acquire the capital capacity to serve that new restaurant without requiring existing customers to subsidize the expansion.

Table 9-4
Refuse Collection
Development Impact Cost
for Commercial Restaurant Establishments

	Cost per Item	Items Required	Total Cost
Front-loader Vehicle Cost/Bin	$468.75	7	$3,281.25
Four Cubic Yard Bins	$1,136.00	2	$2,272.00
Total Cost for Vehicle & Bins			$5,553.25
Restaurant Square Feet/Acre			11,979
Cost per Square Foot			**$0.464**

Commercial Collection for Commercial Lodging (hotel/motel) Units (Schedule 9.1-E) - A typical one acre can support 30 hotel/motel units and will require two - four cubic yard bins, one bin for refuse picked up three times a week and one bin for recycling picked up once a week. As with 9.1-B, one front-loader truck, which serves commercial retail uses, costs $375,000. This cost is divided by the estimated 800 bins the truck can collect weekly to derive a cost of $468.75 per bin pick-up or $1,875.00 for the four bin pick-ups per week. The two bins cost $1,136 each for a total of $2,272.00. The total capital cost required for serving the one acre of hotel/motel units is $4,147.00. There is an average of thirty commercial lodging units per acre resulting in an $138.00 cost per keyed commercial lodging unit. Table 9-5, following, indicates the fee calculation.

Table 9-5
Refuse Collection
Development Impact Fee
for Commercial Lodging Units

	Cost per Item	Number Required	Total Cost
Refuse Collection Vehicle Cost/Pick-up (4)	$468.75	4	$1,875.00
Four Cubic Yard Bin Cost	$1,136	2	$2,272.00
Total Cost for Vehicle(s) & Bin(s)			$4,147.00
Commercial Lodging Units/Acre			30
Cost/Commercial Lodging Unit			$138.00

Commercial Collection for Office and Institutional Units (Schedule 9.1-F) - A typical one acre office establishment with a building pad size of 25,177 square feet [14] and an institutional use acre will, on average, result in 21,780 square feet. Both will require two - four cubic yard bins (one for refuse and one for recycling) picked up on average once a week. As with 9.1-B, one front-loader truck, which serves commercial retail uses, costs $468.75. This cost is divided by the estimated 800 bins the truck can collect weekly to derive a cost of $468.75 per bin pick-up or $937.50 for the two required pick-ups. The two bins cost $1,136 each for a total of $2,272.00. The total capital cost for serving the one acre commercial business is $3,209.50 or $1.27 per square foot for the office use and $0.147 per square foot for institutional uses. Table 9-6, following, indicates the fee calculation:

Table 9-6
Refuse Collection
Development Impact Fee
for Office and Institutional Uses

	Cost per Item	Items Required	Total Cost
Front-loader Vehicle Cost/Bin	$468.75	2	$937.50
Four Cubic Yard Bin	$1,136.00	2	$2,272.00
Total Cost for Vehicle & Bin			$3,209.50
Office Square Feet/Acre			25,177
Cost per Square Foot			**$0.127**
Total Cost for Vehicle & Bins			$3,209.50
Institutional Square Feet/Acre			21,780
Cost per Square Foot			**$0.147**

Industrial Roll-Off Service (Schedule 9.1-G) - This service is very expensive to provide because a truck will have to make one trip to the landfill for every load picked-up, regardless of the size of the roll-off box (10, 20 or 40 cubic yards) being transported. A roll-off truck, costing some $299,724, will collect and transport approximately 50 loads per week, which generates a one-time capital cost of $5,994.48 for each load collected during the week. However, the City primarily uses 40 cubic yard boxes and finds that one 40 cubic yard box picked-up once a week can serve the needs of a five acre industrial business. A 40 cubic yard box has a cost of $12,128.

Recycling is also required of industrial uses and generally requires once a week service for a four cubic yard bin. To determine the total impact cost of a development which uses roll-off service, the cost of the roll-off vehicle is added to the purchase price for a roll-off bin. Thus, the fee for roll-off equipment for serving large industrial/manufacturing uses is calculated as follows:

14 Based upon 26,386,000 square feet on 583.65 acres.

Table 9-7
Roll-Off Refuse Collection
Development Impact Fee
for Industrial/Manufacturing Uses

	Cost per Item	Items Required	Total Cost
Front-loader Vehicle Cost/Bin	$468.75	1	$468.75
Four Cubic Yard Bin	$1,136.00	1	$1,136.00
Forty Cubic Yard Vehicle	$5,994.48	1	$5,994.48
Forty Cubic Yard Bin	$12,128.00	1	$12,128.00
Total Cost for Vehicle(s) & Bin(s)			$19,727.23
Industrial Square Feet Served/Five Acres			214,560
Cost Square Foot of Industrial Businesses			**$0.092**

Share of Common City Yard Improvements. Based upon the Table 2-1, the City refuse collection operation will need to acquire $42.4 million in various collection vehicles and bins of all sizes. This is based upon the General Plan supported Land-use Database. The Refuse Department's portion of the City Yard improvements is $17,965,667, or roughly a 9.1% surcharge on the $44.4 million City Yard capital acquisition cost, or a 42.3% addition to the basic truck, bins and barrels costs. To insure that the City can fully accommodate the refuse demands of new residents and businesses, the City needs to acquire both the direct (vehicles and bins) and indirect improvements (vehicle maintenance, parking and fueling capacity) and should do so without imposing those costs on the existing community. In short, a fleet of collection trucks without the capacity to maintain them will ultimately prove problematical. Table 9-8 following indicates the final DIF costs.

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Table 9-8
Application of Refuse Collection
Share of Common City yard Improvements
as an Overhead to Direct Costs

DIF Land-use Type	Direct Refuse Collection Costs	City Yard Improvements Cost Overhead	Total Development Impact Cost
Detached Dwelling Unit	$495.00	142.31%	$704.00
Attached Dwelling Unit	$428.00	142.31%	$609.00
High Density Dwelling Unit	$214.00	142.31%	$305.00
Retail Uses by S. F.	$0.336	142.31%	$0.478
Business Park Uses by S. F.	$0.167	142.31%	$0.238
Commercial Restaurants by S.F.	$0.464	142.31%	$0.660
Commercial Lodging Unit	$138.00	142.31%	$196.00
Office Uses by S.F.	$0.127	142.31%	$0.181
Institutional Use by S.F.	$0.147	142.31%	$2.009
Industrial Uses by S.F.	$0.092	142.31%	$0.131

RECAP OF RECOMMENDED REFUSE COLLECTION DEVELOPMENT IMPACT FEES

- **General City** - Adopt Schedule 9.1 for the ten basic service collection types.
- **Ontario Ranch** -Adopt Schedule 9.1 for the ten basic service collection types.

However, the final DIF to be imposed on any given private development will be based upon the submitted design drawings. As an example, some attached dwelling units will require common bin service, but others may be better served by individual barrel collection service.

END OF CHAPTER TEXT

Schedule 9.1
2021-22 Development Impact Cost Calculation Update
City of Ontario
Refuse Collection Facilities and Vehicles

A. RESIDENTIAL SIDE-LOADER COLLECTION FOR DETACHED DWELLINGS

Daily Stops per Single Route	700	Barrel Stops per Day
Number of Days of Collection	5	Ten-hour Days per Week
Pick-up Capability of One Truck	3,500	Barrels per Week

Cost per Collection Vehicle	$375,000	per Side-Loader Truck
Pick-up Capability of One Vehicle	3,500	Barrels per Week
Cost per Barrel per Pick-up Stop	$107.14	per Barrel per Stop

	Truck Cost	Barrel Cost	Total Cost per Home
Refuse/Trash Collection Barrel	$107.14	$55.31	$162.45
Green Waste Collection Barrel	$107.14	$55.31	$162.45
Recycle Collection Barrel	$107.14	$55.31	$162.45
Average 2nd Barrel (5% of Homes)	$5.36	$2.77	$8.13
Total (rounded)	$326.78	$168.70	$495.00

B. COMMERCIAL COLLECTION FOR ATTACHED UNITS

Cost per Front-loader Truck	$375,000	per Front-loader Truck
Collection Capability of one Truck	800	Bins per Week
Cost per Bin Collection	$468.75	per Bin per Stop

	Truck Cost	Bin Cost	Total Cost
Four Cubic Yard Trash Bin	$468.75	$1,136.00	$1,604.75
Four Cubic Yard Trash Bin	$468.75	$1,136.00	$1,604.75
Four Cubic Yard Recycle Bin	$468.75	$1,136.00	$1,604.75
Four Cubic Yard Recycle Bin	$468.75	$1,136.00	$1,604.75
Total Cost per Standard Attached Acre			$6,419.00
Average Number of Attached Residential Units/Acre			15
Total Truck Cost per Attached Unit (rounded)			$428.00

Total Cost per High Density Attached Acre	$6,419.00
Average Number of High Density Residential Units/Acre	30
Total Truck Cost per High Density Unit (rounded)	$214.00

C. COLLECTION FOR RETAIL/SERVICE AND BUSINESS PARK UNITS

	Truck Cost	Bin Cost	Total Cost
Refuse Bin (1.5 Collections/Week, 4CY)	$703.13	$1,136.00	$1,839.13
Recycle Bin (1.5 Collections/Week, 4CY)	$703.13	$1,136.00	$1,839.13
Total Cost per Average General Retail/Service Acre			$3,678.25

Average Square Feet of Retail/Service Pad per Acre	10,949
Cost per Square Foot for Average Retail/Service Uses	$0.336

Average Square Feet of Business Park Pad per Acre	22,006
Cost per Square Foot for Average Business Park Uses	$0.167

Schedule 9.1
2021-22 Development Impact Cost Calculation Update
City of Ontario
Refuse Collection Facilities and Vehicles

D. COMMERCIAL COLLECTION FOR RESTAURANTS
(Five day/week mandatory collection and two day/week recycling collection)

	Truck Cost	Bin Cost	Total Cost
Restaurant Waste, Five/Week	$2,343.75	$1,136.00	$3,479.75
Restaurant Recycle, Two/Week	$937.50	$1,136.00	$2,073.50
Total Cost per Average Restaurant Commercial Acre			$5,553.25
Average Square Feet of Restaurant Pad/Acre			11,979
Square Foot Cost per Five Days a Week Collection			$0.464

E. HOTEL/MOTEL UNITS COLLECTION (assumes thrice weekly)

	Truck Cost	**Bin Cost**	**Total Cost**
Commercial - General (Three/week)	$1,406.25	$1,136.00	$2,542.25
Commercial - Recycle (One/week)	$468.75	$1,136.00	$1,604.75
Total Cost per Average Hotel/Motel Acre			$4,147.00
Average Hotel/Motel Units per Acre			30
Cost per Hotel/Motel Unit (rounded)			$138.00

F. OFFICE AND INSTITUTIONAL USES

Office and Institutional Refuse	$468.75	$1,136.00	$1,604.75
Office and Institutional Recycle	$468.75	$1,136.00	$1,604.75
Total Cost per Average Retail, Office and Institutional Acre			$3,209.50
Average Square Feet of Office Pad/Acre			25,177
Cost per Square Foot			$0.127
Average Square Feet of Institutional Pad/Acre			21,780
Cost per Square Foot			$0.147

G. INDUSTRIAL ROLL-OFF COLLECTION FOR MISCELLANEOUS UNITS

Cost of Roll-off Boxes Collection Truck	$299,724
Units per Week	50
Collection Cost per Weekly Roll-off Stop	$5,994.48
Cost of a 40 Cubic Yard Roll-off Box	$12,128.00
Cost of Once/Week Front Loader Pick-up	$468.75
Cost of Four Cubic Yard Recycle Bin and Once/Week Pick-up	$1,136.00
Total Cost of Industrial Pick-up for Five Acres	$19,727.23
Square Feet of Pad In Five Acre Parcel	214,560
Cost per square Foot of Industrial/Manufacturing Pad per Acre	$0.092

Schedule 9.1
2021-22 Development Impact Cost Calculation Update
City of Ontario
Refuse Collection Facilities and Vehicles

A. RESIDENTIAL SIDE-LOADER COLLECTION FOR DETACHED DWELLINGS				
	Detached Dwellings per Unit	$495.00	142.31%	$704
B. COMMERCIAL COLLECTION FOR ATTACHED UNITS				
	Attached Dwellings per Unit	$428.00	142.31%	$609
	High Density Dwellings per Unit	$214.00	142.31%	$305
C. COLLECTION FOR RETAIL/SERVICE AND BUSINESS PARK UNITS				
	Retail Uses, per Square Foot	$0.336	142.31%	$0.478
	Business Park Uses, per Square Foot	$0.167	142.31%	$0.238
D. COMMERCIAL COLLECTION FOR RESTAURANTS				
	Commercial Restaurants	$0.464	142.31%	$0.660
E. HOTEL/MOTEL UNITS COLLECTION (assumes thrice weekly)				
	Hotel Units, per Keyed Unit	$138.00	142.31%	$196
F. OFFICE AND INSTITUTIONAL USES				
	Office Uses, per Square Foot	$0.127	142.31%	$0.181
	Institutional Uses, per Square Foot	$0.147	142.31%	$0.209
G. INDUSTRIAL ROLL-OFF COLLECTION FOR MISCELLANEOUS UNITS				
	Industrial Roll-off Users per Square Foot	$0.092	142.31%	$0.131

H. ORGANIC FOOD WASTE COLLECTION PROGRAM (New in 2019)		
Cost per Front-loader Truck	$375,000	per Front-loader Truck
Collection Capability of one Truck	700	Bins per Week
Cost per Bin Collection	$535.71	per Bin per Stop

32 Gallon Food Waste Bin	$40
64 Gallon Food Waste Bin	$49
1.5 CY Bin Food Waste Bin	$751
3.0 CY Bin Food Waste Bin	$982

Chapter 10
General Facilities, Vehicles and Equipment

The Existing System. General Facilities are generally limited to general office or work buildings and equipment used by City staff to undertake their daily duties. The City possesses (i.e., owns outright) a significant amount of general facilities square footage. The replacement costs are as follows:

City Hall Facilities and Annex	$33,438,307
Computer and Miscellaneous Equipment	$33,109,140
General Fund Portion of City Yard & Garage	$19,358,148
General Fund (pool and some maintenance) Vehicles	$4,150,800
General Facilities Impact Fee Fund balance	$4,255,805

The combined replacement cost of the structures, land, and equipment is $94,312,200. Land costs for numerous other facilities are not included because they are included in the park calculation.

Demand Upon Infrastructure Created by the Development of Underdeveloped or Undeveloped Parcels. As the City increases in both population and additional business ventures, the City Hall will gradually become overcrowded with a growing staff, even if major efforts are made to keep the number of municipal workers to a minimum. As a result the former 38,700 square foot Police station, with some renovation, will be able to absorb the increased City operations that have little contact with the public. The same will hold true for the City Maintenance Yard which can absorb some increased demand over the short term but over the long term near doubling of the City's residents and businesses, capacity will need to be expanded.

City pool vehicles generally made available to general employees assigned with general code enforcement, intra-city mail delivery, planning and engineering field inspection projects and other issues that require on-site review, as well as other travel by employees that do not have assigned City vehicles, will be checked-out on an increasing basis requiring some fleet additions.

Lastly, the City's centralized and personal desktop computer processing capability and storage space will also be impacted with greater amounts of data necessary to manage a larger city.

The **Purpose** of the Fee. The costs of extending the same level of service to the newly developing community as is provided to the existing community that has largely paid for the existing facilities can be calculated, a fee imposed and collected, and the fee used to expand the facilities necessary to extend that same level of services.

The **Use** of the Fee. The revenues that are raised from a properly calculated and supported General Facilities and Equipment Impact Fee would be limited to capital(ized) costs related to that growth. The fees would be used to construct additional general facilities. Conversely, the General Facilities, Vehicles and Equipment DIF receipts would not be used to repair or rehabilitate any existing general building (with the exception of reconfiguring City Hall Annex,

which would be far less expensive than constructing a new building). The improvements necessary to contend with increased demand resulting from additional residents and businesses would include the following:

- City Hall and the Annex reconfiguration.
- Expansion of the administrative pool car and general maintenance fleet.
- Up-sizing of the existing centralized computer system capacity.
- Completion of the City maintenance service center by financing the General Fund portion of the *Share of Common City Yard Improvements.*

Please note that GF-004, the Animal Holding Facility, has no estimate as the City does not have any specific plans in motion to construct such a facility. The project number is now a place-holder until such time as the City defines such a facility.

The *Common City Yard Improvements* project will be discussed further. In the earlier report, the full cost of the City Yard improvements was included in the General Facilities, Vehicles and Equipment infrastructure category. This report recognizes that differing municipal services require differing amounts of improvements. Refuse, for example, will directly need paved parking space and specialty CNG fueling stations for the many new refuse collection vehicles, while the Fire vehicles need additional fleet maintenance space for the temporary times that a fire engine needs either routine or extraordinary repairs.

The existing community has purchased sufficient space thus no land or parcel acquisitions are proposed. However, significant storage and workshop space will be needed to maintain the infrastructure the City will receive through dedication, as evidenced by the nearly $1.5 billion in development-generated infrastructure included in this document alone. Add to this figure an estimated additional $1.0 billion in *local* streets, storm drainage, and water distribution and sewer collection systems improvements included within the footprint of all developments that are not included in this Report.

Public facilities within the footprint of a development specifically benefit only those residences or businesses within that footprint. These improvements are required as a condition of approval and are not distributed to any other developer as part of a DIF distribution. However, all of these improvements are ultimately dedicated, accepted by and maintained in perpetuity by the City. It must be noted that the City's corporation maintenance yard is the first line of defense of maximizing the various infrastructure improvements and without proper sizing, the City would have little ability to maximize the life of the entirety of the City's infrastructure. The City has determined continued use of the city yard improvement costs from the previous DIF calculations until such time as a full City Yard Master Plan can be conducted and estimated.

These four separate costs were distributed to the various users based upon their demands upon the City Yard (see Appendix C for greater detail). The City Yard capacity expansion costs have been distributed as follows:

City Service/infrastructure	Chapter Text	Improvement Allocation
Police Fleet Maintenance	Chapter 3	$2,365,388
Fire Fleet Maintenance	Chapter 4	$1,404,845
Circulation System Maintenance	Chapter 5	$1,915,576
Storm Drainage Maintenance	Chapter 6	$1,739,460
Water System Maintenance	Chapter 7	$9,472,959
Sewer System Maintenance	Chapter 8	$3,970,009
Refuse Collection Maintenance	Chapter 9	$17,965,667
General Facilities – Other	Chapter 10	$1,583,822
Public Use Facilities (in future)	Chapter 12	$0
Park Maintenance	Chapter 14	$4,047,273
FiberOptics System (in future)	Chapter 16	$0
Total Allocated Cost		**$44,464,999**

The Relationship Between the Need for The Fee and The Type of Development Project. The need is based upon the recognition that additional developed parcels in the City will create the need for more building space and specialty equipment, largely within the arena of overhead space, i.e., administrative management, personnel, record keeping, financial accounting, etc. The costs are distributed on an equal acreage basis as the most direct index of demand relating to central management services.

The Relationship Between the use of the fee and the Type of Development paying the Fee. General management, City-wide and General Plan issues transcend type of land use and the use of the fee, as well as the need for the fee. Distribution will be based upon an equal benefit in terms of general management of the City.

Relationship Between the Amount of the Fee and the Cost of the Portion of the Facility Attributed to the Development Project. The fee would be based upon the size of the development. A fee has been determined for individual units, either residential dwelling units or business square feet. A development of twelve residential units would have to pay a fee twelve times larger than a single unit. No developer will be required to construct any portion of any general facility as a condition of development.

Resulting DIF Schedule. Table 10-1 following, summarizes the Minimum Needs-based General Facilities DIFs. The fees identified following represent the fees necessary to construct or acquire the facilities identified on Schedule 10.1.

Table 10-1
City of Ontario's Entire City Area
Basic Needs-based General Facilities, Vehicles and Equipment
Development Impact Costs
by DIF Land-use Type

DIF Land-use Type	Allocation of Development Costs	Development Impact Cost Per Unit or Square Foot
Detached Dwelling Units	$3,882,466	$303/Unit
Attached Dwelling Units	$3,453,897	$107/Unit
High Density Dwelling Units	$2,389,387	$68/Unit
Mobile Home Units	$32,258	$340/Unit
Commercial Lodging Units	$27,650	$51/Unit
Retail/Service Uses	$2,928,555	$0.210/S.F.
Office Uses	$2,156,670	$0.092/S.F.
Business Park Uses	$1,771,879	$0.105/S.F.
Industrial Uses	$2,557,589	$0.054/S.F.
Institutional Uses	$119,815	$0.106/S.F.

It must be restated that the existing community has invested in and established the City Hall, City maintenance service center, General Fund fleet, and electronic equipment at a replacement value of $94,312,200. In short, the current community has created more than adequate staff facilities. As a result, the current community has amassed a significant equity position vis-a-vis future needs. Table 10-2, following, identifies the average "equity" position or ownership per unit or square foot.

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Table 10-2
Existing General Facilities, Vehicles and Equipment
Community Financial Commitment Comparison

DIF Land-use Type	Allocation of Development Costs	Development Impact Cost Per Unit or Square Foot
Detached Dwelling Units	$36,229,442	$1,132/Unit
Attached Dwelling Units	$4,133,637	$316/Unit
High Density Dwelling Units	$1,104,975	$230/Unit
Mobile Home Units	$1,167,953	$557/Unit
Commercial Lodging Units	$818,712	$141/Unit
Retail/Service Uses	$2,788,201	$0.151/S.F.
Office Uses	$1,774,830	$0.178/S.F.
Business Park Uses	$4,448,527	$0.433/S.F.
Industrial Uses	$39,447,038	$0.252/S.F.
Institutional Uses	$2,398,884	$1.035/S.F.

Of importance is the fact that the existing community will have contributed over 75% of the amount City's General Facilities needed at General Plan build-out.

RECOMMENDED IMPACT FEES

The *Minimum Needs-based Impact Costs* should be adopted for the two broad land uses, per Schedule 10.2 and summarized in table 10-3. The *Existing Community Financial Commitment* indicates that the existing community has generated a great deal more infrastructure than will be asked of future development.

RECAP OF RECOMMENDED GENERAL FACILITIES ET. AL. IMPACT FEES

- **General City** - Adopt Schedule 10.3 for the ten basic land-uses.
- **Ontario Ranch** - Adopt Schedule 10.3 for the nine basic land-uses.

END OF CHAPTER TEXT

Schedule 10.1

City of Ontario
2021-22 Development Impact Cost Calculation Update
Allocation of Project Cost Estimates
General Facilities, Vehicles and Equipment

Line #	Project Title	Estimated Cost	Construction Needs Supported by Other Resources		Construction Needs Generated by New Development - GC/OR	
			Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost
GF-001	City Hall And Annex Reconfiguration	$11,636,848	20.00%	$2,327,370	80.00%	$9,309,478
GF-002	Expansion Of Administrative Pool Car Fleet	$585,750	0.00%	$0	100.00%	$585,750
GF-003	Electronic Specialty Equipment/Computer Hardware/Software	$12,096,920	0.00%	$0	100.00%	$12,096,920
GF-004	City Animal Holding Facility, No Specific Plans/Policy Decision for Facility	$0	0.00%	$0	100.00%	$0
GF-005	Share of Specific/Common City Yard Improvements	$1,583,822	0.00%	$0	100.00%	$1,583,822
	Sub-Total General Plan Total New Project Costs	$25,903,340	8.98%	$2,327,370	91.02%	$23,575,970
	FINANCIAL ADJUSTMENTS:					
	Development Impact Fee Fund Balance	-$4,255,805	0.00%	$0	100.00%	-$4,255,805
	Total General Plan Total New Project Costs	$21,647,535	10.75%	$2,327,370	89.25%	$19,320,165
						Forward to Schedule 10.2

NOTES:

(1). All developer-held "credits" under FINANCIAL ADJUSTMENTS will appear as a positive indicating an additional Infrastructure Fund obligation that will be redeemed (in lieu of a DIF payment) at some point in the future.

(2). A negative figure under FINANCIAL ADJUSTMENTS indicates a positive Fund Balance mitigating the project total. A positive figure indicates an amount that needs to be recovered by DIFs.

Schedule 10.2

City of Ontario
2021-22 Development Impact Cost Calculation Update
Entire City - Minimal Needs-based Impact Costs
General Facilities, Vehicles and Equipment

Proposed Land Use	Undeveloped Acres	Undeveloped Units	Acre Distribution Factor	Acre Demand Factor	Percentage of Additional Demand	Allocation of Expansion Costs	Cost Distribution Per Acre	Average Units or Square Feet/Acre	Development Impact Fee per Unit or Square Foot
Detached Dwellings	1,685	12,793	1.000	1,685.00	20.10%	$3,882,466	$2,304	7.59	***$303*** *per Unit*
Attached Dwellings	1,499	32,372	1.000	1,499.00	17.88%	$3,453,897	$2,304	21.60	***$107*** *per Unit*
High Density Dwellings	1,037	34,889	1.000	1,037.00	12.37%	$2,389,387	$2,304	33.64	***$68*** *per Unit*
Mobile Home Dwellings	14	95	1.000	14.00	0.17%	$32,258	$2,304	6.79	***$340*** *per Unit*
Commercial Lodging Units	12	546	1.000	12.00	0.14%	$27,650	$2,304	45.50	***$51*** *per Unit*
Retail/Service Uses	1,271	13,916,010	1.000	1,271.00	15.16%	$2,928,555	$2,304	10,949	***$0.210*** *per S.F.*
Office Uses	936	23,565,934	1.000	936.00	11.16%	$2,156,670	$2,304	25,177	***$0.092*** *per S.F.*
Business Park Uses	769	16,922,869	1.000	769.00	9.17%	$1,771,879	$2,304	22,006	***$0.105*** *per S.F.*
Industrial Uses	1,110	47,631,804	1.000	1,110.00	13.24%	$2,557,589	$2,304	42,912	***$0.054*** *per S.F.*
Private Institutional Use	52	1,132,560	1.000	52.00	0.62%	$119,815	$2,304	21,780	***$0.106*** *per S.F.*
TOTAL	**8,385**	--	--	**8,385.00**	**100.00%**	**$19,320,165**	**in Total Equity in General Facilities Capital Needs**		

Schedule 10.3

City of Ontario
2021-22 Development Impact Cost Calculation Update
Existing Community Financial Commitment Comparison
General Facilities, Vehicles and Equipment

Proposed Land Use	Developed Acres	Developed Units	Acre Distribution Factor	Acre Demand Service	Percentage of Existing Service Calls	Allocation of Infrastructure "Equity"	Distribution of "Equity" per Acre	Average Units or Square Feet/Acre	Current Financial Commitment per Unit or Square Foot
Detached Dwellings	6,328	31,997	1.000	6,328.00	38.41%	$36,229,442	$5,725	5.06	***$1,132 per Unit***
Attached Dwellings	722	13,097	1.000	722.00	4.38%	$4,133,637	$5,725	18.14	***$316 per Unit***
High Density Dwellings	193	4,812	1.000	193.00	1.17%	$1,104,975	$5,725	24.93	***$230 per Unit***
Mobile Home Dwellings	204	2,097	1.000	204.00	1.24%	$1,167,953	$5,725	10.28	***$557 per Unit***
Commercial Lodging Units	143	5,810	1.000	143.00	0.87%	$818,712	$5,725	40.63	***$141 per Unit***
Retail/Service Uses	487	18,522,286	1.000	487.00	2.96%	$2,788,201	$5,725	38,033	***$0.151 per S.F.***
Office Uses	310	9,959,192	1.000	310.00	1.88%	$1,774,830	$5,725	32,126	***$0.178 per S.F.***
Business Park Uses	777	10,271,628	1.000	777.00	4.72%	$4,448,527	$5,725	13,220	***$0.433 per S.F.***
Industrial Uses	6,890	112,134,057	1.000	6,890.00	41.83%	$39,447,038	$5,725	16,275	***$0.352 per S.F.***
Private Institutional Use	419	2,318,711	1.000	419.00	2.54%	$2,398,884	$5,725	5,534	***$1.035 per S.F.***
TOTAL	**16,473**	--	--	**16,473.00**	**100.00%**	**$94,312,200**	**in Total Existing General Facilities Capital Assets**		

$17,063,563	**in City Hall Land/Facilities**
$16,374,744	**in City Hall Annex land/Facilities**
$19,358,148	**in City Yard Facilities (General Fund Portion)**
$33,109,140	**in Equity in Existing Computer/Electronic Equipment**
$4,150,800	**in General Fund Vehicles**
$4,255,805	**in Existing General Facilities Impact Fee Fund Balance.**

Chapter 11
Library Facilities and Collection Items

The Existing System. The City currently owns a 58,000 square foot library facility at the Civic Center and has paid for approximately 14,800 square feet of the Colony High School library which is open to the public during specific hours. The City also has approximately a net of $8,178,651, ($8,256,956 less $78,350 in outstanding redeemable development credits), in Library DIF fund balance which represents about 10,997 square feet of future library space and 46,237 collection items). When the total 83,797 square feet are divided by the current population of 182,004, a city-wide library facilities space standard of 0.460 square feet/person is established (83,797 square feet ÷182,004 residents).

Demand Upon Infrastructure Created by the Development of Underdeveloped or Undeveloped Parcels. Stated simply, the 83,797 square feet of Library space will only be able to accommodate a finite number of collection items and patrons. Additional development will increase the demand on the existing square feet of library pad and the collection.

The **Purpose** of the Fee. The purpose of the fee is to enable the City to construct additional library space and additional collection items when necessary to ensure that the City's citizens have access to and enjoyment of the library space and collection. Table 11-1, following, indicates that the remaining residential development and typical number of persons per type of residential dwelling will generate a need for an additional 115,599 square feet in order to maintain the existing library facility standard of 0.460 square feet per person.

Table 11-1
Square Feet Required to Maintain Existing Standard

Residential DIF land-use Type	Number of Units Anticipated	Persons per Dwelling	Population Generated
Detached Dwelling Units	12,793	3.806	48,690
Attached Dwelling Units	32,372	3.373	109,191
High Density Dwelling Units	34,889	2.669	93,119
Mobile Home Dwelling Units	95	3.175	302
Additional City Residents from Added Dwelling Units			251,302
Square Foot per Person Existing Standard			0.460
Square Feet of Library Space Required to Maintain Standard			**115,599**

The City also has an extensive inventory of books, tapes, subscriptions called a *collection* of volumes. The City currently has 352,336 volumes in its collection (306,099 in service and 46,237 represented in available Fund Balance). Again, divided by the existing population of 182,004, the resulting standard is 1.936 current volumes per person. Table 11-2, following, indicates the

additional number of residents to be served and the number of volumes required to maintain the existing standard. The City will need to acquire 486,521 volumes to maintain the existing 1.936 volumes per person in light of the additional 251,302, persons at General Plan build-out.

Table 11-2
Volumes Required to Maintain Existing Standard

DIF Land-use Type	Number of Units Anticipated	Persons per Dwelling	Population Generated
Detached Dwelling Units	12,793	3.806	48,690
Attached Dwelling Units	32,732	3.373	109,191
High Density Dwelling Units	34,899	2.669	93,119
Mobile Home Units	302	3.175	136
Additional City Residents from Added Dwelling Units			251,302
Collection Items per Person Existing Standard			1.936
Library Collection Items Required to Maintain Standard			**486,521**

The **Use** of the Fee. The fee, if adopted, would be imposed, collected and expended on additional library facility space and on the number of volumes in the City Library's collection.

The Relationship Between the Need for The Fee and The Type of Development Project. The development of any acreage zoned for residential uses, increases the demand on the finite amount of library space and volumes. Thus, those residential land uses that generate higher amounts of residents (i.e., detached dwelling unit) will be charged a proportionally higher amount. There is no information available demonstrating a link or nexus between library use and local businesses.

The Relationship Between the Use of the Fee and the Type of Development Paying the Fee. Additional square feet will be constructed with the fees collected from residential development and additional volumes will be acquired for the collection. The fees cannot be used for any other purpose.

The Relationship Between the Amount of the Fee and the Cost of the Portion of the Facility Attributed to the Development Project. The cost of acquiring land for additional library space and construction is about $609.61 per square foot per Schedule 11.1. The 83,797 square feet of library space, when divided by the 182,004 existing citizens creates a standard of 0.460 square feet of library space per citizen. The standard of 0.460 square foot standard multiplied by the $609.61 per square foot of pad cost of library construction results in a charge of $280.42 per additional City resident.

Table 11-4
Establishment of the Library Facilities Standard
and Cost per Person to Maintain the Standard

City-owned (or generated) Library Square Feet	83,797
Current Population	182,004
Square Feet per Resident	0.460
Construction Cost of Library per Square Foot	$609.61
Space Cost per Additional Resident	**$280.42**

The cost of acquiring additional volumes, called the accession process (15) (per Schedule 11.1) is $31.90 per volume. The accession process cost has decreased greatly over the last 25 years due to contracting out this time intensive process. The 352,336 current volumes, when divided by the 182,004 existing citizens create a standard of 1.936 library collection items per City resident. The standard of 1.936 collection items multiplied by the $31.90 per volume results in a cost of $60.39 per additional City resident, in order to maintain the existing standard. Table 11-5 identifies this;

Table 11-5
Establishment of the Library Collection Standard
and Cost per Person to Maintain the Standard

City-owned (or generated) Collection Items	344,533
Current Population	182,004
Collection Items per Resident	1.936
Accessions Cost per Collection Item	$31.90
Collections Cost per Additional Resident	**$61.76**

Resulting Library Space and Collection Items DIF Schedule. The combined cost per new resident is $342.18 ($280.42 for 0.460 square feet of library space and $61.76 for 1.936 additional collection items). Table 11-6, following indicates the amount required for pro-rata expansion of the library space per Schedule 11.1. If adopted and imposed on the remaining development, it would collect enough to acquire land for and construct an additional 115,599 square feet of library space and an additional 486,521 volumes.

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15 The accession process includes: need research, ordering, receipt, preparation, entering it into the computer and actual placement on the shelves.

Table 11-6
Summary of Library Space and Collection Impact Costs

DIF Land-use Type	Residents Per Dwelling	Cost per Resident	Impact Cost per Dwelling
Detached Dwelling Units	3.806	$342.18	$1,302
Attached Dwelling Units	3.373	$342.18	$1,154
High Density Dwelling Units	2.669	$342.18	$913
Mobile Home Dwelling Units	3.175	$342.18	$1,086

RECAP OF RECOMMENDED LIBRARY AND COLLECTION VOLUMES IMPACT FEES

- **General City** - Adopt Schedule 11.1 for the four basic residential dwelling types.
- **Ontario Ranch** - Adopt Schedule 11.1 for the three basic residential dwelling types in Ontario Ranch (detached, attached and high density dwelling units).

END OF CHAPTER TEXT

Schedule 11.1

City of Ontario
2021-22 Development Impact Cost Calculation Update
Library Facilities and Collection Items

	Library Space	Collection Items	Total Resources
Ovitt Main Library	58,000	235,243	
Lewis Family Library	14,800	70,856	
Library Facilities Represented by Existing Fund Balance	10,997	46,237	
Existing Library Square Feet	83,797		
Existing Number of Collection Items		352,336	
Existing Standards:			
Current Population	182,004	182,004	
Square Foot of Library Space per Resident	0.460		
Collection Items per Resident		1.936	
Library Construction per Square Foot	$547.90		
Hardscape Improvements, @ 0.333 FAR	$13.50		
Land/Grading Cost @ 0.333 Floor Area Ratio	$48.21		
Land Acquisition and Construction per Square Foot	$609.61		
Accessions Cost per Collection Item		$31.90	
Cost per Facility Square Foot or Collection Item	$609.61	$31.90	
Existing Library Facilities and Collection Item Standard	0.460	1.936	
Library Facility Construction Cost per Resident	$280.42		
Collection Item Cost per Resident		$61.76	

Cost per Land Use Residential Dwelling Unit	Density per Dwelling Unit	Library Space	Collection Items	Total Resources
Detached Dwelling Unit	3.806	$1,067	$235	$1,302
Attached Dwelling Unit	3.373	$946	$208	$1,154
High Density Dwelling Unit	2.669	$748	$165	$913
Mobile Home Dwelling Unit	3.175	$890	$196	$1,086

FAR = Floor Area ratio

Chapter 12
Public Use (Community Centers) Facilities

This important component of the City's offerings to its citizens is generally included in the Park Acquisition and Park Improvements DIF Schedule but was split out in the 2000-01 Report as a separate impact fee for three reasons.

First, few parks contain a community public use center.

Secondly, it is difficult to insure that the cost for such a facility is properly included in the average park development cost per acre.

Lastly and perhaps most importantly, it has been the experience of RCS staff, that when the cost for community centers is included as a cost of park development, these facilities simply do not get built. This is because the park impact fee revenues get used on the costly demand for turfed park acres with sports or passive-use park improvements.

The Existing System. The City has a number of facilities currently dedicated for public use facilities. Such facilities are available to community groups for meetings and other civic functions. This category of buildings differs from General Facilities which are those used by the City staff to undertake their municipal service duties (City Hall as an example).

The City owns some facilities dedicated to a specific use, such as the gymnasium, and one available for broader uses, the De Anza Community Center. Table 12-1 shows the City's existing public meeting facilities.

Table 12-1
Inventory of Existing (Owned) Public Meeting Facilities

Public Use Meeting Facility	Square Feet
Armstrong Center	13,500
Dorothy A. Quesada Center	10,000
Civic Center Senior Center	13,964
Anthony Munoz Community Center	24,000
De Anza Community Center	23,683
City of Ontario Museum	19,478
Westwind Community Center & Gymnasium	26,260
Future Facilities S.F. in DIF Fund Balance	14,685
Total Public Use Square Feet	**145,570**

Since the last DIF Update Report update the Anthony Munoz Community Center was expanded from 5,103 square feet to 24,000 square feet. The amount of square feet represented by existing fund balance increased from 1,450 square feet to 14,685 indicating that the City is likely able to construct one or more additional public use facilities in the near future.

The City's Public Use Facilities impact fee fund balance of $8,951,931 (÷ $609.61) represents an additional 14,685 square feet but is dedicated for that purpose and cannot be used for any other purpose. As such it is an un-realized asset, yet to be constructed. The City may be waiting for an additional amount to construct a larger facility or has yet to determine what use the addition public use facility will serve.

Based upon an existing population of 182,004, the 145,570 square feet of public use facilities resources creates a standard of 0.800 square feet per resident. This standard indicates that the City maintains a substantial commitment to providing a community center or recreation space for public groups and individuals. Table 12-2, following, demonstrates the calculation establishing the square foot standard:

Table 12-2
Calculation of Public Use Facilities
Square Foot Standard

Public Meeting Space Square Feet	145,570
Current City Population	182,004
Square Foot per Resident Standard	0.800

Demand Upon Infrastructure Created by the Development of Underdeveloped or Undeveloped Parcels. Simply stated, additional residential dwelling units will increase the population, placing greater demands for use of the existing community centers. The construction of a detached dwelling unit will create, on average, 3.806 potential new community center users. The addition of a new attached dwelling will create on average 2.669 potential new users.

The **Purpose** of the Fee. The purpose of the fee is to determine the cost of expanding the community center and public-use type facilities by some 201,042 square feet to meet the added demands created by the construction of additional residential dwelling units. It should be noted that 201,042 square feet of public use facilities may not fully meet the needs of the build-out community and that square feet may be desired by the community. The reference to the 201,042 square feet indicates that is the amount of additional public use facilities square feet that could be financed by DIFs. Table 12-3, following, demonstrates the calculation of the number of additional square feet required to maintain the existing Public Use facilities standard:

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Table 12-3
Square Feet of Community Center Space
Required to Maintain Existing Standard

Residential DIF land-use Type	Number of Units Anticipated	Persons per Dwelling	Population Generated
Detached Dwelling Units	12,793	3.806	48,690
Attached Dwelling Units	32,372	3.373	109,191
High Density Dwelling Units	34,889	2.669	93,119
Mobile Home Units	95	3.175	302
Additional City Residents from Added Dwelling Units			251,302
Square Foot per Person Existing Standard			0.800
Community Center Space (SF) Required to Maintain Standard			**201,042**

The **Use** of the Fee. The fee, if adopted, would be imposed, collected, and spent on the construction of additional community center space that benefits City of Ontario residents, not rehabilitation of any existing public use facility.

The Relationship Between the Need for The Fee and The Type of Development Project. Different types of residential dwellings generally have differing amounts of people dwelling in them. Census data indicates the following occupancy statistics for the City:

Detached Dwelling Units ..... 3.806 Persons/Unit
Attached Dwelling Units ..... 3.373 Persons/Unit
High Density Dwelling Units ..... 2.669 Persons/Unit
Mobile Home Family Dwelling Units ..... 3.175 Persons/Unit

The Relationship Between the Use of the Fee and the Type of Development Paying the Fee. The fee will be used to expand the amount of community center square feet in proportions consistent with the average persons per dwelling. Community centers would be expanded in the following amounts following, by type of residential dwelling:

Detached Dwelling Unit ..... 3.806 Persons per Unit X 0.800 Square Feet = 3.045 Square Feet
Attached Dwelling Unit ..... 3.373 Persons per Unit X 0.800 Square Feet = 2.698 Square Feet
High Density Dwelling Unit ..... 2.669 Persons per Unit X 0.800 Square Feet = 2.135 Square Feet
Mobile Home Dwelling Unit ..... 3.175 Persons per Unit X 0.800 Square Feet = 2.540 Square Feet

The Relationship Between the Amount of the Fee and the Cost of the Portion of the Facility Attributed to the Development Project. The cost of adding 0.800 square feet of building space per person is roughly $487.69 based upon a $609.61 per square foot ($547.90 for construction, $48.21 for land acquisition (or $16.07 per square foot cost and a floor area ratio of 0.333) and parcel site hardscape improvements of $13.50.

Resulting DIFs. Table 12-4, following, indicates the proposed Public Meeting DIF.

Table 12-4
Summary of Public Meeting Facilities Impact Fee

DIF Land-use Type	Impact Fee Per Unit
Detached Dwelling Unit	$1,856
Attached Dwelling Unit	$1,645
High Density Dwelling Unit	$1,302
Mobile Home Dwelling Unit	$1,548

RECAP OF RECOMMENDED PUBLIC USE FACILITIES IMPACT FEES

- **General City** - Adopt Schedule 12.1 for the four basic residential dwelling categories.
- **Ontario Ranch** - Adopt Schedule 12.1 for the three basic residential dwelling categories in Ontario Ranch (detached, attached and high density dwelling units).

END OF CHAPTER TEXT

Schedule 12.1

City of Ontario
2021-22 Development Impact Cost Calculation Update
Public Use (Community Center) Facilities

	Land and Building	Total Cost
Armstrong Center	13,500	
Dorothy A. Quesada Center	10,000	
Civic Center Senior Center	13,964	
Anthony Munoz Community Center	24,000	
De Anza Community Center	23,683	
City of Ontario Museum	19,478	
Westwind Community Center and Gymnasium	26,260	
Facilities Represented in Existing DIF Fund Balance	14,685	
Existing City-owned Public Use Facilities Square Feet	145,570	
Current Population	182,004	
Square Foot per Resident Standard	0.800	
Average Public Use Facility Construction Cost/Square Foot	$547.90	
Hardscape Improvements, @ 0.333 FAR	$13.50	
Land/Grading Cost @ 0.333 Floor Area Ratio	$48.21	
Total Cost for a Single Square Foot of Public Use Space	$609.61	
Total Cost for One Square Foot of Public Use Space	$609.61	
Square Foot per Resident Standard	0.800	
Cost per New Resident	$487.69	

Cost per Land Use Residential Dwelling Unit	Density per Dwelling Unit	Total Public Use Resources	Total Cost
Detached Dwelling Unit	3.806	$1,856	$1,856
Attached Dwelling Unit	3.373	$1,645	$1,645
High Density Dwelling Unit	2.669	$1,302	$1,302
Mobile Home Dwelling Unit	3.175	$1,548	$1,548

Chapter 13
Aquatics Facilities

This component of City infrastructure is also separated from the Park Land Acquisition and DIF for the same reasons described in the previous Chapter regarding Public Use (community center) Facilities.

The Existing System. The City owns four aquatics facilities consisting of a total of 6,668 square feet of swimming pool surface and 4,294 square feet of combination locker/utilities/office buildings. The De Anza Park Pool, listed in the previous Report, has been dismantled and is no longer included in the calculation of the standard. These remaining facilities are available to individuals and groups represented by the existing 182,004 residents for leisure and general fitness uses. Table 13-1, following, details the aquatics complexes and the current fund balance.

Table 13-1
Existing City Pools/Utility Buildings

Pool Facility	Pool Surface Capacity	Pool Support Facilities
Anthony Munoz Park Aquatics Center	1,225	424
Bon View Park Aquatics Center	1,369	412
Vineyard Park Aquatics Center	1,296	450
Westwind Park Aquatics Center	2,580	2,880
Square Feet Represented by Fund Balance	1,061	683
Total Square Feet	**7,531**	**4,849**

Demand Upon Infrastructure Created by the Development of Underdeveloped or Undeveloped Parcels. Simply stated, additional residential dwelling units will increase the population placing greater demands upon the City's existing aquatics centers. The construction of detached dwelling and attached dwellings will create, on average, 3.806 and 3.373 potential new potential pool users, respectively. A high density dwelling will generate approximately 2.669 residents. The addition of mobile residences in the unlikely event that any mobile home dwelling pads be applied for and approved) will create 3.175 potential new pool users each. Table 12-2 indicates the current *de-facto* standards are 0.0266 square feet of locker/office building per person and 0.0414 square feet of pool surface per person in the City.

Table 13-2
Calculation of Aquatics Facilities - Square Foot Standards

	Pool Surface	Support Space
Space Square Feet	7,531	4,849
Current City Population	182,004	182,004
Square Foot per Resident Standard	0.0414	0.0266

The **Purpose** of the Fee. The purpose of the fee is to generate DIF revenue with which to expand the aquatics centers capacity to meet the added demands created by the construction of additional residential dwelling units. The City has preliminary plans on locating a $12.0 million aquatic facility in the City. The collected DIF revenue will only finance just over 68% of the facility as it is an increase in the existing standard. The remaining 32% will need to come from sources other than impact fees.

The **Use** of the Fee. The fee, if adopted, would be imposed, collected, and spent on the construction of additional aquatics centers that would benefit City of Ontario residents, but would not be spent on rehabilitation of the existing aquatic center.

The Relationship Between the Need for The Fee and The Type of Development Project. Different types of residential dwellings generally have differing numbers of people dwelling in them. United States Census 1990 data (see Table 2-3. page 23) was used to determine the occupancy density statistics for the City. They are summarized following:

Detached Dwelling Units	3.806 Persons/Unit
Attached Dwelling Units	3.373 Persons/Unit
High Density Dwelling Units	2.669 Persons/Unit
Mobile Home Dwelling Units	3.175 Persons/Unit

The Relationship Between the Use of the Fee and the Type of Development Paying the Fee. The fee will be used to expand the pool and aquatics center space in proportions consistent with the average persons per dwelling. The aquatic center pools and locker/utility buildings would be expanded in the amounts on the following page, by type of residential dwelling:

Detached Dwelling Units	0.1575 S.F. of locker space and 0.1014 S.F. of pool surface
Attached Dwelling Units	0.1396 S.F. of locker space and 0.0899 S.F. of pool surface
High Density Dwelling Units	0.1104 S.F. of locker space and 0.0711 S.F. of pool surface
Mobile Home Dwelling Units	0.1314 S.F. of locker space and 0.0846 S.F. of pool surface

The Relationship Between the Amount of the Fee and the Cost of the Portion of the Facility Attributed to the Development Project. Schedule 13.1 indicates the pool and locker building cost calculations. The pool construction costs are also based upon past pool construction costs received from previous agencies.

The two separate square foot costs above total about $29.44 per person for the pool expansion ($362.71/S.F. X 0.0414 = $15.01 per person) about $14.43 per person for the locker/service building expansion ($541.80/S.F. X 0.0266 = $14.43 per person) or $29.44 per person for both construction components. Thus a detached dwelling detached unit would incur impact costs of $112 (3.806 persons X $29.44, rounded). An attached dwelling unit would generate impact costs of about $100, (3.373 persons X $29.44, rounded). A high density dwelling unit requires aquatics facility expansion costs of $79 (2.669 persons X $29.44 rounded).

Resulting DIF Schedule. Schedule 13.1, as summarized by Table 13-2 following, indicates the proposed Aquatics Facilities DIF schedule.

Table 13-3
Summary of Aquatics Facilities Impact Fee

DIF Land-use Type	Impact Fee Per Unit
Detached Dwelling Unit	$112
Attached Dwelling Unit	$100
High Density Dwelling Unit	$79
Mobile Home Dwelling Unit	$94

RECAP OF RECOMMENDED AQUATICS FACILITIES IMPACT FEES

- **General City** - Adopt Schedule 13.1 for the four basic residential land-uses.
- **Ontario Ranch** - Adopt Schedule 13.1 for the three basic residential land-uses in Ontario Ranch (detached, attached and high density dwelling units).

END OF CHAPTER TEXT

Schedule 13.1

City of Ontario
2021-22 Development Impact Cost Calculation Update
Aquatics Facilities

	Pool Capacity in Surface Square Feet	Support Facilities in Square Feet
Anthony Munoz Park Aquatics Center	1,225	424
Dorothy A. Quesada Aquatics Center at Bon View Park	1,369	412
Vineyard Park Aquatics Center	1,296	450
Westwind Park Aquatics Center	2,580	2,880
Facilities Represented in Existing DIF Fund Balance	1,061	683
Current Pool Size (Surface Square Feet):	7,531	
Current Aquatics Building (Square Feet):		4,849
Current Population (1)	182,004	182,004
Existing Standards:		
Square Feet of Surface/Resident	0.0414	
Square Foot of Locker Building/Person		0.0266
Construction Costs		
Pool Cost per Surface Square Foot	$362.71	
Facilities Construction/Square Foot		$541.80
Existing Standards per Resident	0.0414	0.0266
Adjusted Pool Cost per Resident	$15.01	
Adjusted Facilities Cost per Resident		$14.43

Cost per Land Use Residential Dwelling Unit	Density per Dwelling Unit	Pool Surface	Support Facilities	Total Cost
Total Cost per Added Resident		$15.01	$14.43	$29.44
Detached Dwelling Unit	3.806	$57	$55	**$112**
Attached Dwelling Unit	3.373	$51	$49	**$100**
High Density Dwelling Unit	2.669	$40	$39	**$79**
Mobile Home Dwelling Unit	3.175	$48	$46	**$94**

Chapter 14
Park Land Acquisition and Park Infrastructure Development

This Chapter summarizes the City's existing inventory of parks and identifies the ratio of park land per resident allowable under the Quimby Act (§66477 of the Government Code) [16] for residential developments involving the subdivision of land and the Mitigation Fee Act (§66000 of the Government Code) for the construction of residential developments not involving the subdivision of land. The existing per capita standard is then utilized to calculate the park dedication requirement for future residential development.

EXISTING PARKS AND RECREATION SYSTEM

Intensive parks and park recreational facilities constitute one of the City of Ontario's greatest challenges both with respect to facilities for both current residents and future citizens. The provision of a well-planned park system, with a variation in the size and nature of facilities offered, is an important amenity to residents of any city, the City of Ontario included. A mixture of passive and active uses and facilities and programs which appeal to a broad spectrum of potential park users is considered optimal in most urban cities. A city's park system is often a major factor in selection of a place to live. The current acres dedicated to park use will serve well to meet the City's current needs. However if the number of park acres remains static at 452.94 acres, they will not continue to meet recreational demands in light of a potential near doubling of the City's population.

Future residential development, by increasing the City's population, will impact the City's park system by requiring additional baseball fields and adequate space for various athletic activities. Given the magnitude of growth projected in this and other reports, the challenge facing the City will be to provide new facilities and park land to serve the recreational needs of these new residents. Without additional park land acquisition and continued development of currently owned but underutilized park land during the next twenty to thirty years, the City's parks will become overcrowded and overused, with the ultimate result becoming a negative experience for park users.

Existing Parks. Currently, the City owns approximately 452.94 acres of park land, most of it developed. John Galvin, Westwind, DeAnza, Anthony Munoz, Soccer Park and Homer Briggs parks are the largest developed parks. At a total of 121.4 acres, they represent over a quarter of the park system acreage (when only traditional parks are considered) and provide the greatest variety of sports and passive uses. There are an additional 18.58 acres of potential park land represented in Fund Balance for a total of 471.52 acres in existing or potential parks.

Table 14-1, on the following page, is an inventory of the existing park acreage.

16 Adoption of a Quimby Act Fee requires a park "plan".

14-1
Inventory of Owned and Developed Park Land

Park or Space Name	Owned Park Acres	Developed Park Acres
Anthony Munoz Hall of Fame Park	15.80	15.80
Armstrong Community Center Park	1.14	1.14
Bon View Park	10.30	10.30
Celebration Park (North and South)	10.50	10.50
Centennial Park	4.60	4.60
Civic Center Conservation Park	1.00	1.00
Creekside Park	6.90	6.90
Cypress Park	4.70	4.70
De Anza Park	19.20	19.20
Del Rancho Park	4.80	4.80
Euclid Median Park	13.40	13.40
George Gibbs Park	2.70	2.70
Grove Park	3.10	3.10
Homer Briggs Park	14.40	14.40
James F. Bryant Park (L)	4.50	4.50
James Galanis Park	4.80	4.80
Jay Littleton Ballpark	9.70	9.70
John Galvin Park	25.60	25.60
Kimball Park	7.10	7.10
Nugent's Park	0.20	0.20
Ontario Motor Speedway Park	6.20	6.20
Ontario Soccer Park	23.40	23.40
Ontario Town Square Park	1.90	1.90
Ranch Park	1.80	1.80
Sam Alba Park	1.00	1.00
South Bon View Park	4.80	4.80
Veteran's Park	7.50	7.50
Vineyard Park	9.00	9.00
West Cucamonga Creek Trail	34.00	34.00
Westwind Park	23.00	23.00
Whispering Lakes Golf Course	176.30	176.30
Park Equivalent in Fund Balance	18.58	18.58
Total Park Acres	**471.52**	**471.52**

City De Facto Park Standard. Table 14-2, following, is a comparison of the acreage of parks to the City of Ontario's current population and indicates that the City presently possesses a total standard of 2.59 acres of owned park land per 1,000 residents, (471.52 acres ÷ [182,004 residents ÷ 1,000], rounded). Of the 471.52 total acres, 18.58 acres are represented in Park Acquisition and Park Improvements DIF fund balance (yet to be built) and do not require maintenance. This is slightly following the benchmark of 3.0 acres per 1,000 persons contained in Section 66477 of the California Government Code relating to dedication of parks.

Table 14-2
Calculation of Actual City-owned Park Acres Standard

	Owned Acres	Developed Acres
Total Park Acres	471.52	471.52
Current City Population	182,004	182,004
Population Divided by 1,000	182.0	182.0
Park Acres per 1,000 Population	2.59	2.59

However, the Quimby Act, to be discussed later, allows a minimum standard of 3.0 acres per thousand residents even if the City does not reach that standard. However, the *park acres owned* standard for the City of Ontario is 2.59 acres per 1,000 residents and thus the Quimby allowable minimum standard of 3.0 acres per 1,000 new residents will be used for *park land acquisition.*

The Quimby minimum of 3.0 acres per 1,000 residents has not been exceeded by the 2.59 acres per 1,000 residents and thus the Quimby allowable minimum of 3.0 acres per 1,000 will be used in the remainder of the Chapter for park *land acquisition and construction.* Though not relevant to the City of Ontario, the Quimby Act has a cap of 5.0 acres per thousand residents (Government Code §66447 (a) (2).

Planned Park Improvements. In addition to the on-going improvement of the existing 471.52 acres (17), the City will need to acquire 753.9 park acres, per Table 14-3, and develop these new parks to serve the additional 251,302 residents anticipated to live in both the General City and Ontario Ranch areas of the City at General Plan build-out. City staff has not proposed any specific improvements to existing parks or any new park configurations.

[This space left vacant to place the following table on a single page].

Table 14-3

17 The Quimby Act does allow for the use of receipts raised by the adoption of a Quimby Act park Impact Fee to be used for rehabilitation of existing park configurations.

Calculation of Required Park Acres per Allowable Standard

General Plan Anticipated Population Increase	251,302
Additional Population Divided by 1,000	251.3
Allowable Standard in Acres/1,000	3.0
Park Acres required to Maintain Standard	753.9

These general improvements are outlined in the MFP. The 753.9 acres could be constructed in some combination of the following park configurations:

Mini or "Pocket" Parks - This the smallest of the parks designations and though generally not planned due to higher maintenance costs, usually are the result of acquiring an unusual parcel of land sometimes with historical significance. Nugent's Park fits best into this category.

Local or Neighborhood Parks - These parks are generally five to ten acres and serve local (1/4 mile walk-in distance) users. Not surprisingly, the City has a number of these parks. Centennial Park, James Galanis and South Bon View Park are good examples of this category.

Community or Sport Parks - These parks are most functional when they are twenty acres or larger and are designed to meet the needs of the entire community. Often, ten to twenty acre parks are forced to act as community or sports parks. These needs include youth and adult sports organizations, clubs or associations and large scale community events such as 4th of July celebrations or festivals. Anthony Munoz Hall of Fame Park, the Ontario Soccer Park or De Anza Park are good an example of sports parks and John Galvin Park best depicts a broad-based use community park.

The park and recreation improvements that could be contained within the almost 754 needed acres and the existing standard (Table 14-1) are both consistent with the City's Park and Recreation Element of the General Plan. The City's 2.59 acres per 1,000 population standard comes close but falls short of three acre per 1,000 population standard that is a common but frequently unmet minimum target of municipalities and recreation and park special districts throughout Southern California.

CALCULATION OF PARK DEDICATION STANDARD

Unlike the other facilities discussed in this Report, the California Government Code contains enabling legislation for the acquisition and development of community and neighborhood parks by a City. This legislation, codified as Section 66477 of the Government Code and known commonly as the "Quimby Act", establishes criteria for charging new development for park facilities based on specific park standards. This Report will recommend the adoption of Quimby-style park fees over an AB 1600-style DIF for developments requiring the subdivision of land and an AB 1600 fee for non-subdivided land.

Allowable Park Standard As stated earlier, under §66477 of the Government Code, the City

may charge new residential development based on a standard of 3.0 acres per 1,000 residents even if the City does not presently possess a ratio of 3.0 acres per 1,000 for the existing population. The Government Code also enables a city to charge development based on a standard higher than 3.0 acres (to a maximum of 5.0 acres) if the City currently exceeds the minimum benchmark ratio of 3.0 acres per 1,000 residents.

The law states that "if the amount of existing neighborhood and community park area ... exceeds the [3 acres of park area per 1,000 person] limit ... the legislative body may adopt the calculated amount as a higher standard not to exceed 5 acres per 1,000 persons" [18]. Park fees may be required by the City provided that the City meets certain conditions including:

- The amount and location of land to be dedicated or the fees to be paid shall bear a reasonable relationship to the use of the park by the future inhabitants of the subdivision.
- The legislative body has adopted a general plan containing a recreational element, and the park and recreational facilities are in accordance with definite principles and standards contained therein.
- The city ... shall develop a schedule specifying how, when, and where it will use the land or fees, or both, to develop park or recreational facilities ... Any fees collected under the ordinance shall be committed within five years after the payment of such fees.

Determination of a Park Standard. The City desires to have a standard of 5.0 acres/1,000 persons park standard within the Ontario Ranch area [19]. As previously identified, the City currently has 2.59 acres of owned and developed park acres/1,000 residents. The Quimby Act allows the City to adopt a standard of 3.0 acres per thousand as the low-end threshold. However, the 3.0 acres per 1,000 residents standard is the highest standard that can be adopted under the Quimby Act, without actually maintaining a standard higher than 3.0 acres/1,000. The adoption of the 5.0 acres/1,000 standard in the Ontario Ranch General Plan Amendment is not sufficient for adoption of an impact fee that is based upon the costs of acquiring and developing five acres/1,000 new residents, the City must currently meet that 5.0 per 1,000 standard. A specific plan identifying the need for the five acre requirement may be sufficient and adequate for the higher standard. The fact remains then, that the City will need to find an alternative to acquire the remaining 2.0 acres/1,000 residents.

CALCULATION OF IMPACT COSTS

Once a per capita standard for parks is determined, the cost of residential development's impact on the City's park system can then be computed as follows.

Park Land Acquisition Costs. Land costs will vary significantly from one park to another. The

18 California Government Code, Title 7, Division 2, Section 66447 (b).
19 Policy 12.1.1 page 5-13, City of Ontario Ontario Ranch General Plan Amendment.

park land to be acquired must be suitable for park construction and is conservatively estimated at approximately $761,490 per acre ($700,000/acre for the park land purchase and $61,490/acre for rough grading) which is used in the Park DIF calculation. This is consistent with the cost of some land suitable for residential dwelling development in Ontario Ranch.

Park Improvements Construction Costs. Park improvement construction costs are largely based upon the recent construction of the Ontario Soccer Park, the City's most recently constructed park. The park improvement construction cost of $560,200 per acre has been amended to recognize increases in park construction costs since that soccer facility was constructed. The City does not have any more recent park construction history. Community centers and aquatic centers were not included in the cost calculation (see Chapters 12 and 13).

Additional Park Infrastructure Impact Costs. The addition of park acres will increase maintenance costs, both in terms of demand upon the existing vehicles and then the maintenance of those vehicles and storage of park maintenance supplies. The City currently has $1,782,800 in existing park maintenance vehicles and equipment that deemed as adequate and sufficient for maintaining the existing amount of park acres. Based upon the 471.52 existing or potential park acres, the City has $3,983 in required maintenance vehicles per acre of developed park. Table 14-4 following demonstrates this.

Table 14-4
Calculation of Park Maintenance
Vehicles & Equipment Component

Existing Maintenance Vehicles Cost	$1,878,120
Total Existing Park Acres	471.52
Maintenance Vehicle Cost per Acre Maintained	$3,983
Acres/1,000 Park Acres/Resident Standard	3.0
Existing Vehicle Cost per Three Park Acres	$11,949
Divided by 1,000 New Residents	1,000
Maintenance Vehicle Cost per Additional Resident	$11.95

Additionally, the Parks operation has been allocated $4,047,273 as its share of the $44.5 million in the common City Yard improvements required to provide the City Yard with capacity to maintain the ever-growing inventory of infrastructure. Based upon the 753.9 acres to be built, each acre of additional park will require $5,638 towards the Park maintenance operations $4,047,273 of the total $68.7 million required in City Yard improvements. Table 14-5 following demonstrates this.

[This space left vacant to place the following table on a single page].

Table 14-5
Calculation of Park Maintenance
Share of Common City Yard improvements Component

City Yard Improvement Share	$4,047,273
Total New Park Acres Anticipated	753.9
Yard Improvement Cost per New Park Acre	$5,368
Park Acres Standard Acres/1,000 Residents	3.0
Yard Cost per Three Park Acres	$16,104
Yard Improvement Cost Divided by 1,000 Residents	1,000
Maintenance Yard Cost per Additional Resident	$16.10

Average Park Acquisition, Development and Maintenance Vehicles and Facilities Cost per Capita. The combined park land acquisition, park improvements development and support facilities cost is $1,331,041 per acre ($761,490/acre for land acquisition, $560,200 per acre for park improvements and $9,531 for the required maintenance vehicles and facilities). If the City were to charge development for the maximum allowable amount of park acreage as allowed in the Quimby Act and as recommended here, then the City would need to acquire 3.00 acres of new park land for every potential 1,000 new residents to the City. The 3.00 acres of land acquisition and development per 1,000 persons would be $3,993,122 or about $3,993.12 per new resident. Schedule 14.1 calculates the cost to develop 3.00 acres, which again represents the required park land cost for 1,000 persons.

Average Cost per Dwelling Unit. Schedule 14.1 further calculates the cost per dwelling unit based on the per person park land acquisition, development and maintenance vehicles cost of $3,993.12 (Schedule 14.1) and the average number of persons per unit for each category of housing. Detached dwelling residential housing has the highest number of persons per dwelling unit (@ 3.806 per unit) and consequently carries the highest impact fee, $15,198 per unit ($3,993.12 X 3.806 persons per unit, rounded). Attached dwelling units have an average of 3.373 persons per unit and would need to be assessed $13,470 ($3,993.12 X 3.373, rounded). Table 14-6, following, summarizes the calculated and recommended fees for each of these three residential categories. Schedule 14.1 provides greater park calculation detail and a complete schedule of Park Land Acquisition and Park Improvements DIFs for each of the four dwelling unit types.

[This space left vacant to place the following table on a single page].

Table 14-6
Summary of Park Development Fees for
Residential Dwelling Construction

DIF Land-use Type	Development Impact Cost
Detached Dwelling Unit	$15,198/Unit
Attached Dwelling Unit	$13,470/Unit
High Density Dwelling Unit	$10,658/Unit
Mobile Home Dwelling Unit	$12,678/Unit

The DIFs for detached dwelling residential development involving the subdivision of land, as identified in Table 14-6, should be adopted under the auspices of the Quimby Act. The Residential dwelling units not requiring the sub-division of a privately-owned parcel will need to be adopted as a Government Code § 66000 supported DIF [20].

RECAP OF RECOMMENDED PARK LAND ACQUISITION AND PARK INFRASTRUCTURE DEVELOPMENT IMPACT FEES

- **General City** - Adopt Schedule 14.1 for the four basic residential land-uses.
- **Ontario Ranch** - Adopt Schedule 14.1 for the three basic residential land-uses in Ontario Ranch (detached, attached and high density dwelling units).

END OF CHAPTER TEXT

20 This is required because the Quimby Act is referenced in the State Subdivision Code

Schedule 14.1

City of Ontario
2021-22 Development Impact Cost Calculation Update
Park Land Acquisition and Park Infrastructure Development
(Quimby and Mitigation Act Calculation)

Park Name	Acres Owned or LT Lease	Developed/ Constructed Acres	Park Maintenance Requirements	Total Park Expansion Costs
Anthony Munoz Hall of Fame Park	15.80	15.80		
Armstrong Community Center Park	1.14	1.14		
Bon View Park	10.30	10.30		
Celebration Park - North/South	10.50	10.50		
Centennial Park	4.60	4.60		
Civic Center Community Conservation Park	1.00	1.00		
Creekside Park	6.90	6.90		
Cypress Park	4.70	4.70		
De Anza Park	19.20	19.20		
Del Rancho Park	4.80	4.80		
Euclid Median Park	13.40	13.40		
George Gibbs Park	2.70	2.70		
Grove Memorial Park	3.10	3.10		
Homer Briggs Park	14.40	14.40		
James F. Bryant Park (LTL)	4.50	4.50		
James Galanis Park	4.80	4.80		
Jay Littleton Ballpark	9.70	9.70		
John Galvin Park	25.60	25.60		
Kimball Park	7.10	7.10		
Nugent's Park	0.20	0.20		
Ontario Motor Speedway Park	6.20	6.20		
Ontario Soccer Park	23.40	23.40		
Ontario Town Square	1.90	1.90		
Ranch Park	1.80	1.80		
Sam Alba Park	1.00	1.00		
South Bon View Park	4.80	4.80		
Veteran's Memorial Park	7.50	7.50		
Vineyard Park	9.00	9.00		
West Cucamonga Creek Trail	34.00	34.00		
Westwind Park	23.00	23.00		
Whispering Lakes Golf Course	175.90	175.90		
Park Equivalent in Fund Balance	18.58	18.58		
Total Acres (Owned/Developed)	471.52	471.52		
Current Population	182,004	182,004		
Population/1,000	182.00	182.00		
Current Standard	2.59	2.59		
Minimum Acres/1,000 Population Standard	3.000	3.000	3.000	
Construction Cost per Acre		$560,200		
Land Acquisition Cost per Acre	$700,000			
Rough Grading/Site Preparation	$61,490			
City Yard Improvements per Acre (1)			$5,368	
Additional Maintenance Fleet per Acre (2)			$3,983	
Total Cost per Acre	$761,490	$560,200	$9,351	

Schedule 14.1

City of Ontario
2021-22 Development Impact Cost Calculation Update
Park Land Acquisition and Park Infrastructure Development
(Quimby and Mitigation Act Calculation)

Park Name	Acres Owned or LT Lease	Developed/ Constructed Acres	Park Maintenance Requirements	Total Park Expansion Costs
Minimum Acres/1,000 Population Standard	3.000	3.000	3.000	
Cost X 3.0 Acre/1,000 Residents Standard	$2,284,469	$1,680,600	$28,053	
Population Served by Standard	1,000.00	1,000.00	1,000.00	
Acquisition/Construction Cost per Resident	$2,284.47	$1,680.60	$28.05	

	Occupants/ Dwelling	Land Acquisition	Park Construction	Maintenance Requirements	Total Park Costs
Cost per Additional Resident		$2,284.47	$1,680.60	$28.05	$3,993.12
Detached Dwelling Unit	3.806	$8,695	$6,396	$107	$15,198
Attached Dwelling Unit	3.373	$7,706	$5,669	$95	$13,470
High Density Dwelling Unit	2.669	$6,097	$4,486	$75	$10,658
Mobile Home Dwelling Unit	3.175	$7,253	$5,336	$89	$12,678

Chapter 15
Ontario Ranch Species, Habitat Conservation and Open Space Mitigation
(Chapter is static and will never change)

This chapter is intended to establish the legal and policy basis for the establishment and imposition of DIFs on new development in the City of Ontario's Ontario Ranch ("OR"). The purpose of the fees is to finance the purchase of land and conservation easements to mitigate the loss of open space, to protect endangered and threatened species and their habitat, to promote open space conservation and its inherent benefits, and to mitigate some of the more generalized adverse impacts to the environment associated with development of the OR.

EXISTING ENVIRONMENTAL AND BIOLOGICAL SETTING

Environmental Setting. The OR is currently used primarily for agricultural, dairy farm and related uses. Of the roughly 8,200 acres in the OR, approximately 5,537 acres are considered developable acres. While some land in the OR is presently devoted to residential development, it generally exists to provide living areas for dairy owners and their employees. The agricultural, dairy and related uses in the OR have provided valuable habitat areas for a variety of wildlife and plant species, some of which are endangered or threatened. At the same time, the open space areas necessarily left vacant by agricultural and related activities provide other benefits to the region in general and to the citizens of the City of Ontario in particular. These benefits include, but are not limited to: (1) species migration corridors; (2) unobstructed view corridors and aesthetics; (3) passive recreational opportunities; and (4) open space preservation.

The decreased viability of dairy and agricultural industries in this area, coupled with the demand for housing in the region, has placed tremendous development pressures on land in the OR. With the adoption of the Sphere of Influence ("SOI") General Plan Amendment ("GPA"), certification of the Environmental Impact Report ("EIR") in 1998, the City planned for the orderly transition of the OR from an area primarily devoted to agricultural and dairy operations to one that is predominantly residential, with supporting office, commercial, industrial, recreational and open space uses. In 1999 the City secured the annexation of the OR into its corporate limits.

Biological Setting. The existing agricultural and dairy operations in the OR support a variety of wildlife. As set forth in the SOI GPA and EIR, the area supports a diversity of wildlife, especially birds. The topography of the area and the existing passive open space uses provide for the accumulation of standing water used by migratory and resident birdlife, including varieties of cormorants, herons, egrets, ibises, kites, harriers, hawks, merlins, plovers, curlews, gulls, burrowing owls, shrikes, and blackbirds, all of which have been observed in field observations of the area. Many of these are a species of special concern, a candidate species, a threatened species or an endangered species under federal or state law. Dozens of other species of birds protected under the Migratory Bird Treaty Act are also present in the OR. The state-endangered western yellowbilled cuckoo and federally listed California gnatcatcher may also be present, or have historically inhabited the area.

The current agricultural operations in the area provide a compatible land use for sensitive species since fields under cultivation and fallow areas collect surface run-off and flood waters. In addition, drainage patterns also influence the number and size of such ponds. In fact, there are numerous flood control channels, detention basins and creeks in the area. Wildlife, and particularly birds, relies upon these wetlands-watery areas as habitat and foraging areas.

Wildlife also inhabits the windrows, or tall vegetation, areas located in the OR. Of particular importance are the numerous species of raptors found in these trees, including red-tailed hawks and American kestrels. Wildlife also inhabits agricultural open fields. These fields are important to bird species. Fields act as an intermediate area between windrows and wet areas. Birds forage for rodents and other prey living in the fields. Indeed, fields are the most suitable habitat for mice and ground squirrels. The ferruginous hawk, a sensitive species, often roosts on the ground in these portions of the OR. Other birds perch on trees. Dairy operations and buildings also attract and provide nesting areas and other habitat for bird species and wildlife in the OR. Sparrows, rock doves, finches, egrets and blackbirds are more tolerant of human activity associated with such sites.

According to the United States Fish and Wildlife Service, portions of the OR could support one of the few remaining populations of the Delhi Sands Flower-Loving Fly ("DSF"), a federally listed endangered species in the Ontario Recovery Unit. The Ontario Recovery Unit is one of only three areas identified in the Federal Endangered Species Act ("FESA) recovery plan for the DSF. That plan states that preservation of occupied habitat and restoration of unoccupied habitat for the DSF in the Ontario Recovery Unit is to be accomplished through fee acquisition, conservation easements, voluntary management plans and habitat conservation plans.

Moreover, at least seven mammal species listed as species of special concern or candidate species also occupy the OR. These include numerous species of rare bats. There are also San Diego black-tailed hares, pocket mice and kangaroo rats, desert wood rats, raccoons, foxes and bobcats. Numerous amphibian and reptile species are also present. Residential, commercial and industrial development in the OR will directly, indirectly and cumulatively eliminate the habitat relied upon by the above species. Standing water needed by a large percentage of the species, particularly fowl will be largely eliminated due to the construction of infrastructure projects and the paving over of large areas in the OR area. Development will also eliminate potential habitat for the DSF and for small mammals, which are used as a food sources by raptors and other imperiled species in the area. Traffic, noise, pollution and other effects associated with development and its related infrastructure will also drive away species by eliminating perching areas, nesting sites and other components of habitat.

DEVELOPMENT FEE APPROACH

The City has exhaustively considered all potentially feasible mitigation that could be provided to offset impacts to species and open space in the OR. As a result of a CEQA lawsuit brought on the City by the Endangered Habitats League and the Sierra Club, extensive discussions with environmental groups and other stakeholders have occurred since the adoption of the GPA and EIR in 1998 and input has been received and utilized from the stakeholders. These discussions

have focused on ensuring that concrete steps to protect species, habitat and open space are taken, while allowing for flexibility in the process to allow funding to be used where it can provide maximum benefit. Memorialized in a settlement agreement between the City and Endangered Habitats League and Sierra Club, the City and the stakeholders have determined that raising funds sufficient to offset impacts to species and ensuring that these funds be put to the best and highest use are a priority. The City and the stakeholders have also determined that a third party with special expertise in species/habitat acquisition and management issues would be the most suitable entity to spearhead the conservation effort.

These funds will allow for the acquisition of mitigation property in the Chino/El Prado Basin area to offset impacts in the OR because lands in the greater Chino Basin have been shown to be used by species now resident in the OR. Moreover, Chino Basin lands are of higher biological value and can be purchased in larger blocks than can be purchased in the OR.

The settlement agreement (1) specifically allows for the acquisition of all OR habitat/open space mitigation property "offsite" so that larger, more biologically beneficial blocks of habitat can be purchased; (2) allow for the hiring or establishment of a land trust to spearhead the habitat/open space acquisition process; (3) give the land trust maximum flexibility to determine the type and amounts of land that should be purchased; (4) provide that DIFs be collected in amounts sufficient to offset the biological impacts to species now existing in the OR and loss of open space; (5) ensure, given the conclusions in the EIR and the underlying biological studies, that raptors, waterfowl and other bird species will bear a substantial burden and be unduly displaced by development of the OR, that the bulk of collected mitigation fees be used to offset impacts to such species; (6) provide that up to $500 per acre of mitigation fees may be used by the City to benefit DSF; and (7) provide that $22.7 million is the appropriate and justifiable amount that will be raised through DIFs to offset these impacts.

Justification for the amount and need for DIFs to be established and imposed in the OR by the City of Ontario can be divided into three categories. These include (1) compliance with the adopted policies and mitigation measures of the general plan amendments and their associated CEQA documents for the protection of species and their habitat; (2) mitigation for the loss of open space and its attendant benefits; and (3) mitigation for the direct, indirect and cumulative impacts on species from development and development-related infrastructure.

1. Compliance with the General Plan, Its Amendments and CEQA

To offset negative impacts to species, their habitat and open space, the SOI GPA and EIR require that suitable replacement habitat and natural open space lands be acquired in areas in and around the Chino/El Prado Basin. Birds and other species which currently inhabit the OR, whether seasonally or full time, range throughout the Chino/El Prado Basin and into surrounding areas. Lands to the south and southwest of the OR retain substantial standing water and thus serve as potential, viable habitat for many of these, particularly birds. Thus, the collection of DIFs to fund the purchase of land and conservation easements provides the most direct and beneficial method of mitigating the impacts to open space resources and habitat land. Moreover, the purchase of properties in areas outside the boundaries of the OR, but within the

Chino Basin, not only promotes the goals of the general plan amendments and related CEQA documents, but also provides a unique and biologically acceptable method for retaining open space for the benefit of species in a cost-effective manner.

Mitigation Fee Act (California Government Code, Section 66000 et seq.)

A set forth in Chapter 1, DIFs are imposed on development as a means to mitigate the impacts and infrastructure demands created by development activity. In accordance with the requirements of California Government Code, Section 66000 et seq., this section intends to:

1. Identify the purpose of the habitat and open space DIFs at issue;

2. Identify the uses to which these DIFs will be used;

3. Determine how there is a reasonable relationship between these DIFs and the types of development projects upon which the DIFs are imposed; and

5. Determine how there is a reasonable relationship between the need for the public facilities, in this case habitat land and open space, and the type of development projects upon which these DIFs are imposed.

In addition, this section will, in accordance with Government Code, Section 66001(b), generally discuss how there is a reasonable relationship between the amount of the proposed fees and the cost of the public facility or portion of the public facility attributable to the development on which the fee is imposed. The following analysis provides the justification required by the Mitigation Fee Act:

1. The Purpose of the Fee. The primary purpose of the fee is to acquire and restore mitigation lands to offset impacts to species now living in the OR and impacts to existing open space. The mitigation fee will be used to advance the goals, objectives and policies set forth in the SOI GPA adopted in 1998. .According to the GPA, "the City shall be reimbursed for mitigation land purchase and habitat creation costs with DIFs to be paid by each developer within the NMC" (now referred to as OR). Accordingly, one of the components of the habitat and open space mitigation fee, and indeed the largest one, is to be used to purchase the lands within the Chino/El Prado Basin required by the EIR.

The habitat mitigation and open space fee is also to provide funding to offset direct, indirect and cumulative impacts to DSF in the OR. Thus, a separate component of the habitat and open space DIF may be utilized to acquire and restore lands to partially offset direct and cumulative impacts to DSF. However, it should be noted that the fee is not intended to cover any DSF mitigation required by the Service or under CEQA on a project-by-project basis.

In sum, habitat mitigation and open space fees will be used to protect open space, sensitive habitat areas, wetlands, aesthetics and historic view sheds; and to provide habitat area for endangered and sensitive species and other wildlife. Collection of fees will allow the City to

satisfy its CEQA obligations and to purchase larger parcels of property which are more biologically suitable for species that might not be able to be obtained if habitat impacts to raptors and waterfowl were mitigated for on a project-by-project basis. Portions of the fee will also be used to benefit DSF and to offset generalized impacts to species and the environment.

2. The Use to which the Fee is to Be Put. Habitat and open space mitigation fees collected will be used to meet the requirements of the EIR to purchase, and where necessary enhance or restore, open space and habitat conservation areas near the OR to benefit raptors, mammals, burrowing owls, DSF and other species which currently occupy the area. In order to assure that land purchased with DIFs is appropriate for species, the City will hire or establish a land trust that is familiar with the biological and other needs of the species inhabiting the OR. With oversight by and subject to conditions imposed by the City, the land trust will purchase mitigation land to maintain natural conditions and assure the continued viability and use of acquired lands for habitat conservation and open space purposes.

Acquired lands will also benefit the public by providing natural open space which will be lost as a result of development of the OR. Thus, the fees will defray the cost of specific community amenities, including protecting historic view sheds and providing passive recreational opportunities for present and future residents of the OR. In addition to purchasing habitat and open space areas in fee, conservation easements, rights of way, management agreements and other legal entitlements or mechanisms which will ensure the long-term sustenance of habitat and open space may also be acquired. The lands to be purchased will be located in or adjacent to the greater Chino/El Prado Basin area. Acquiring mitigation lands in these areas will be more cost effective than purchasing lands in the more expensive OR.

3. The relationship between the fee's use and the type of development project upon which the fee is imposed. (Benefit Relationship). As the OR is developed, all types of development (i.e., residential, industrial and commercial) will use up more and more available open space/habitat areas. No single type of development will have a greater impact than another because it is the depletion of land in its natural state that severely impacts retention of species and open space amenities in the OR. Indeed, such development activity and related public infrastructure improvements necessarily deplete, both directly and cumulatively, open space and habitat area that would otherwise remain available to support the goals of the general plan and specific plan policies (i.e., protection of sensitive species, view sheds, flood protection, aesthetics, wetlands, development of property with sensitivity toward the environment). Of particular importance are the cumulative impacts associated with the development, all of which are to be taken into account when determining the benefit relationship.

As set forth above, there is a reasonable relationship between the purchase of open space/habitat and all developments in the OR. This impact is equalized among all types of development because it is the conversion of land from its natural state that creates the impact upon species and open space opportunities.

4. The relationship between the need for the public facility (open space) and the type of development project upon which the fee is imposed. (Impact Relationship). As set forth above, it would be infeasible and impractical for each development in the OR to provide sufficient open

space and quality habitat areas to meet the mitigation goals for waterfowl, raptors and other species set forth in the GPA and the related CEQA documents (i.e., to ensure long-term viability of sensitive species). Each development in the OR equally impacts (on an acre-by-acre basis) the supply of available land for open space and habitat areas. Thus, the imposition of fees is the most practical way of permitting development to proceed in an environmentally responsible manner.

The SOI GPA, EIR and related biological studies indicate that species currently range across all portions of the OR. All development, whether residential, commercial, industrial or otherwise, will lead to the urbanization of the area and the elimination of precious natural open space and habitat area. Moreover, all new development leads to the need for, or the size of, the construction of additional roadways and other public improvements which, in turn, have negative effects on species and the environment.

5. The relationship between the amount of the fee and the cost of the public facility (open space/habitat) attributable to the development upon which the fee is imposed. ("Rough Proportionality" Relationship). As set forth above, each development in the OR equally impacts the supply of available land for open space and habitat areas. Moreover, each individual development project and its related necessary infrastructure improvements, when examined along with the cumulative impacts of all development in the OR, will have an adverse effect on the availability of open space and species, as well as any remaining open space in the vicinity of development in the OR. Thus, imposition of DIFs to purchase replacement open space and habitat areas (and to protect them from infrastructure encroachments) is the most efficient, practical and equitable method of permitting development to proceed in an environmentally responsible manner and in a manner that complies with the adopted plans and mitigation measures for the OR.

CEQA Mitigation. The SOI GPA and their associated CEQA documents and biological studies require that 305 acres of land be acquired, restored and/or retained in its natural state to provide substantive beneficial opportunities for species protection and open space conservation. Under the terms of the Settlement Agreement between the City and Endangered Habitats League and Sierra Club, a mitigation fee of $2,000 per developable acre is to be assessed. Additionally, the cost of the off-site habitat/open space mitigation (305 acres) is to be funded at a rate of $40,000 per acre. Combined, these two factors equate to approximately $22.7 million.

The City and the stakeholders believe that providing maximum flexibility in the land acquisition and restoration process will be of the greatest benefit to species. Such flexibility will allow for the acquisition of larger parcels of land, corridors and other areas of high biological and open space value as such lands become available. At the same time, the City and the stakeholders wish to ensure that sufficient funds are raised through the DIF process to satisfy the requirements of the GPA and CEQA processes.

In determining the total amount needed to be collected to meet these needs, the City examined seven separate scenarios. These scenarios are set forth below. Under each scenario, the land trust acquires a combination of lands in fee and conservation easements in the Chino Basin for

the benefit of waterfowl and raptors. In some cases, DSF mitigation lands are acquired, where feasible. The restoration/enhancement of some of these lands is also assumed.

Scenario 1:

Purchase Price for Lands in Chino Basin in Fee:	200 acres x $85,000/acre = $17,000,000
Purchase Price for Conservation Easements in Chino Basin:	105 acres x $45,000/acre = $4,725,000
Restoration/Enhancement:	50 acres x $20,000/acre = $1,000,000
	Total = $22,725,000

Scenario 2

Purchase Price for Lands in Chino Basin in Fee:	175 acres x $85,000/acre = $14,875,000
Purchase Price for conservation Easements in Chino Basin:	100 acres x $45,000/acre = $4,500,000
Restoration/Enhancement:	40 acres x $20,000/acre = $800,000
Purchase Price for DSF habitat in Recovery Area:	25 acres x $100,000/acre = $2,500,000
DSF and Restoration Costs:	15 acres x $3,500/acre = $52:500
	Total = $22,727,500

Scenario 3:

Purchase Price for Lands in Chino Basin in Fee:	220 acres x $85,000/acre = $18,700,000
Purchase Price for conservation Easements in Chino Basin:	10 acres x $45,000/acre = $450,000
Restoration/Enhancement:	100 acres x $20,000/acre = $2,000,000
Purchase Price for DSF habitat in Recovery Area:	15 acres x $100,000/acre = $1,500,000
DSF Land Restoration Costs:	15 acres x $3,500/acre = $52,500
	Total = $22,702,500

Scenario 4:

Purchase Price for Lands in Chino Basin in Fee:	240 acres x $85,000/acre = $20,400,000
Purchase Price for Conservation Easements in Chino Basin:	25 acres x $45,000/acre = $1,125,000
Restoration/Enhancement:	10 acres x $20,000/acre = $200,000
Purchase Price for DSF habitat in Recovery Area:	10 acres x $1 00,000/acre = $1,000,000
DSF Land Restoration Costs:	5 acres x $3,500/acre = $17,500
	Total = $22,742,500

Scenario 5:

Purchase Price for Lands in Chino Basin in Fee:	125 acres x $85,000/acre = $10,625,000
Purchase Price for Conservation Easements in Chino Basin:	200 acres x $45,000/acre = $9,000,000
Restoration/Enhancement:	50 acres x $20,000/acre = $1,000,000
Purchase Price for DSF habitat in Recovery Area:	20 acres x $1 00,000/acre = $2,000,000
DSF and Restoration Costs:	20 acres x $3,500/acre = $70,000
	Total = $22,695,000

Scenario 6

Purchase Price for Lands in Chino Basin in Fee:	100 acres x $85,000/acre = $8,500,000
Purchase Price for conservation Easements in Chino Basin:	250 acres x $45,000/acre = $11,250,000
Restoration/Enhancement:	100 acres x $20,000/acre = $2,000,000
Purchase Price for DSF habitat in Recovery Area:	10 acres x $100,000/acre = $1,000,000
DSF Land Restoration Costs:	10 acres x $3,500/acre = $35,000

Scenario 7:

Purchase Price for Lands in Chino Basin in Fee:	150 acres x $85,000/acre = $12,750,000
Purchase Price for Conservation Easements in Chino Basin:	125 acres x $45,000/acre = $5,625,000
Restoration/Enhancement:	90 acres x $20,000/acre = $1,800,000
Purchase Price for DSF habitat in Recovery Area:	25 acres x $100,000/acre = $2,500,000
DSF and Restoration Costs:	15 acres x $3,500/acre = $52,500
	Total = $22,727,500

The habitat and open space mitigation fees adopted by the City will provide an effective way to establish a comprehensive program that can benefit multiple species due to the potential for acquiring larger expanses of open space areas and regional connection to other open space areas. In addition, the program raises public awareness of biological resource issues through the passive interface of active park areas with natural open space areas. Implementation of such a program allows appropriate economic and infrastructure projects in the OR to move forward compatibly with the protection/enhancement of biological resources.

Table 15-1, following, identifies the Mitigation DIFs on a per net developable acre and per unit. NOTE: The *per unit* figures are merely for presentation purposes only, these (non-development impact) fees will be imposed on a *per acre* ($4,320 per acre specifically) basis only.

Table 15-1
Species, Habitat Conservation and Open Space Mitigation
Impact Fee, per Acre (for adoption) and per Unit (for presentation)

DIF Category	Mitigation Impact Fee per Acre	Average Units per Acre	Open Space Cost per Unit
Detached Dwelling Units	$4,320	6.12	$706
Attached Dwelling Units	$4,320	28.19	$153
High Density Dwelling Units	$4,320	38.40	$113
Commercial Lodging Units	$4,320	44.00	$98
Retail/Service Uses (in SF)	$4,320	17,474	$0.247
Office Uses (in SF)	$4,320	33,287	$0.130
Business Park Uses (in SF)	$4,320	20,094	$0.215
Industrial Uses (in SF)	$4,320	27,608	$0.156
Institutional Use (in SF)	$4,320	21,780	$0.198

RECAP OF RECOMMENDED SPECIES, HABITAT CONSERVATION AND OPEN SPACE LAND MITIGATION IMPACT FEE

- General City - These fees do not apply to General City development.
- Ontario Ranch - Adopt the ***Mitigation Impact Fee per Acre*** column on Table 15-1 as the Mitigation Fees to be applied to all private development within Ontario Ranch and applied on the net acres of the development.

Per Net Acre Fee. Based upon the above scenarios and calculations, it has been conservatively estimated that the City must raise a net $22,718,000 to fund the acquisition of the WRCA and the other habitat and open space acreage required by the GPA and EIR. As there are 5,259 developable acres (5,537 less land required for pocket parks, community parks, and schools not previously removed from the land use table) in the OR, the recommended DIF for the acquisition of open space and habitat land is $4,320 per net acre (rounded).

Of the $4,320 amount, the City may utilize up to $500 per acre to carry out the provisions of the GPA and EIR related to DSF. As set forth above, the GPA requires the City "to cooperate with the Service to mitigate impacts to the DSF, establish standards for buffers for protecting DSF restoration areas, and work to create DSF habitat, where possible." The DSF Recovery Plan calls for the establishment of 150 acres of DSF preserve areas in or adjacent to the OR. To the extent feasible, there will be an attempt to acquire properties which benefit both DSF and raptors/waterfowl. The City may thus use the $500 per acre retained portion of the $4,320 fee to carry out requirements set by the Service. However, it should be noted that CEQA specific plan documents, or the Service or other regulatory agencies, may require mitigation for impacts to DSF on a project by project basis, if applicable. The $500 per acre retained portion of the habitat and open space DIF is not intended to cover or be used to purchase mitigation land associated with any such individual development project.

Other Costs. In addition, to the above costs, the City of Ontario could also elect to impose DIFs to offset the more general adverse impacts to species and the environment associated with development of area. However, in light of the per acre costs associated with the GPA and EIR mitigation, it is recommended that the City absorb these more generalized costs.

Conclusion

With the commercial, residential and industrial development anticipated for the OR, many of the existing species habitat and open space attributes will be compromised or eliminated as construction proceeds. To offset these negative impacts to species, open space, and the environment more generally, the City has adopted habitat conservation and open space mitigation fees to provide for the acquisition and restoration of lands within or adjacent to the Chino/El Prado Basin area suitable for habitat and open space. These fees will implement the goals and objectives of the GPA, the EIR, and the settlement agreement; enhance the long-term viability of imperiled species; provide a mechanism to facilitate more efficient and species-sensitive development; provide a mechanism to partially offset impacts associates with City

infrastructure improvements; and provide a substantial benefit to the City, its residents and its businesses.

RECAP OF RECOMMENDED SPECIES, HABITAT CONSERVATION AND OPEN SPACE LAND MITIGATION IMPACT FEE

- **General City** - These fees do not apply to General City development.
- **Ontario Ranch** - Adopt the ***Mitigation Impact Fee per Acre*** column on Schedule 15.2 and Table 15-1 as the Acre Mitigation Fees to be applied to all private development within Ontario Ranch and applied on the net acres of the development.

END OF CHAPTER TEXT

Schedule 15.1

City of Ontario - Ontario Ranch
2021-22 Development Impact Cost Calculation Update
Open Space Legal Agreement (OR)
(This fee is static, and is not subject to change.)

Line #	Description	Estimated Cost	Cost Distribution for Components I & II: Percent Need	Cost Distribution for Components I & II: Apportioned Dollar Cost	Cost Distribution for Component III: Percent Need	Cost Distribution for Component III: Apportioned Dollar Cost
LS-001	Habitat and Open Space Mitigation	$20,420,640	100.00%	$20,420,640	0.00%	$0
	ESTIMATED GENERAL PLAN SETTLEMENT COSTS	$20,420,640	100.00%	$20,420,640	0.00%	$0
	Existing Fund Balance (Does not reduce mitgation)	$6,805,316	100.00%	$6,805,316	0.00%	$0
	Total Lawsuit Contribution	$27,225,956	100.00%	$27,225,956	0.00%	$0

NOTE: Since this is not a project but a contribution by developers the "Existing Fund Balace" is dedicated to the estimated settlement costs, and does not reduce it.

Schedule 15.2

City of Ontario
2021-22 Development Impact Cost Calculation Update
Ontario Ranch Development Lawsuit Settlement Distribution (Not an Impact Fee)
Components I & II

Proposed Land Use	Undeveloped Acres	Undeveloped Units	Lawsuit Distribution Acre Factor	Total Acres Benefitting from Settlement	Percentage of Total Acres Benefitting	Allocation of Settlement Costs	Distribution of Settlement Costs per Acre	Average Units or Square Feet/Acre	Components I/II Settlement Cost per Unit or Square Foot
Detached Dwellings	1,423.0	11,662	1.0	1,423.00	30.10%	$6,147,360	$4,320	8.20	$527 per Unit
Attached Dwellings	1,316.0	29,684	1.0	1,316.00	27.84%	$5,685,120	$4,320	22.56	$192 per Unit
High Density Dwellings	439.0	13,082	1.0	439.00	9.29%	$1,896,480	$4,320	29.80	$145 per Unit
Mobile Home Dwellings	9.0	396	1.0	9.00	0.19%	$38,880	$4,320	44.00	$98 per Unit
Commercial Lodging Units	279.0	5,751,595	1.0	279.00	5.90%	$1,205,280	$4,320	20,615	$0.210 per S.F.
Retail/Service Uses	114.0	2,670,188	1.0	114.00	2.41%	$492,480	$4,320	23,423	$0.184 per S.F.
Office Uses	428.0	9,953,243	1.0	428.00	9.05%	$1,848,960	$4,320	23,255	$0.186 per S.F.
Business Park Uses	669.0	16,981,679	1.0	669.00	14.15%	$2,890,080	$4,320	25,384	$0.170 per S.F.
Industrial Uses	50.0	1,089,000	1.0	50.00	1.06%	$216,000	$4,320	21,780	$0.198 per S.F.
TOTAL	**4,727.00**			**4,727.00**	**100.00%**	**$20,420,640**	**in I & II Development Lawsuit Settlement Costs.**		

1. This is not a Development Impact Fee, it is a settlement applied to development within the Ontario Ranch. It has been included to provide an average per unit cost.

Chapter 16
Ontario Ranch
Fiber Optic Communications System

Fiber Optic Communications Equipment and Facilities is an infrastructure that will only be imposed upon development in the Ontario Ranch. General City already has communications lines imbedded within the right-of-way and thus could not benefit from the timing of the construction of the system described herein.

The City of Ontario is proposing a fiber optic telecommunication infrastructure to meet several goals including the following:

1. The telecommunication industry, specifically service providers, is in a period of rapid change. The Telecommunications Act of 1996 reaffirmed the principles of an open marketplace. Many new service providers are entering the market for voice, video and data services. All this is happening while the technology used in the "last mile" to residences and businesses has stabilized. In order for the City to protect its rights-of-way within the Ontario Ranch the City will install a *state of the art* telecommunications infrastructure which can accommodate a large number of competitive service providers. This will eliminate the need for future disruptions within developed right of ways in the Ontario Ranch by allowing service providers the use of the City's infrastructure to provide service. This infrastructure will also provide a platform for continued expansion of new technologies community benefits, and unlimited capacities as the need for access continues to grow.

2. Incumbent service providers lack of interest and resources limits their ability to install "state of the art" telecommunication infrastructure in the OR. Incumbents typically have a limited amount of funds, with large geographical, which leads to cherry-picking in high density markets and large cities through-out the United States. While they may install some fiber optics in the main delivery system, the systems they are likely to install to the dwelling will be based on a much more restricted technology. This limited infrastructure will quickly become outdated, forcing more disruptions in the rights-of-way and existing street infrastructure within OR.

3. The installation of a fiber optic telecommunications infrastructure will provide an enhanced amenity for the OR allowing residents and businesses a high level of access to technology. Examples include everything from interactive/high definition television, dwelling to medical screening, video conferencing, and access to high-speed business networks. This will enhance the attractiveness of the community to professionals, skilled technicians and technological businesses and improve the economic development potential of the OR.

4. The fiber optic telecommunications infrastructure will assist telecommuters by providing high-speed data access and video conferencing directly from the dwelling over secure virtual private networks. Within the OR location, the head end of one of the busiest commutes into Orange and Los Angeles Counties, the anticipated level of telecommuter

participation will be higher when compared to the national average. This fiber infrastructure will mitigate traffic congestion and significantly improve the quality of life for the residents of the OR.

5. The schools within the OR, from elementary through the College levels, will benefit from this fiber optic infrastructure inasmuch as it will allow improved curriculum based on distance learning and use of remote resources to support the educational process. Schools will be able to establish on-site broadcast capabilities in addition to downloading a variety of professionally developed curriculum from throughout the world.

6. The City will be able to use the fiber optic network to improve operations by enabling low cost, high speed connections between City facilities as well as by allowing the City to provide automated reading of meters and the use of video to assist with control of traffic flow in the OR.

7. Finally, the fiber optic telecommunications infrastructure will lower the overall costs when compared to the installation of multiple traditional telecommunications systems. The bandwidth capacity is significantly large enough to accommodate all services over this single fiber infrastructure. This will lower costs, dramatically improve telecommunications capability and spur open competition in the marketplace.

The **Purpose** of the Fee. The impact fee for telecommunication will allow the local government to control the telecommunications infrastructure in a manner designed to maximize the public benefit. This will be accomplished by lowering service cost as the result of competition between telecommunication service providers, significantly reducing right-of-way costs to the taxpayer, and improving security and quality of life issues in general. The impact fee will allow the infrastructure to be completed while self-sustaining income from the service providers will pay for the maintenance of the system. This model is similar to the construction of any other infrastructure including streets, water distribution facilities and sewer collection facilities.

The **Use** of the Fee. The fee will be used to construct the fiber optic communications system, consisting of the *head-end* equipment, the *core network*, *the last mile* and miscellaneous equipment necessary to extend voice, video and data services to the Ontario Ranch. According to the OntarioNet, A Master Plan for the Deployment of an Advanced Fiber Optic Telecommunications Network in the Ontario Ranch. The following costs were recalculated in 2021-22 with current costs and new operational requirements.

The *head-end* network (FO-001), typically housed in an environmentally controlled concrete enclosure, and is the central access point for the service providers and network support services. In simpler terms, it is the place where outside vendors (such as video broadcast) would connect to the system. This portion of the system is estimated to cost $9,628,430.

The *core network* (FO-002) is simply the largest part of the fiber optic cabling. The Master Plan consists of trenching, hand holes and fiber splices. This portion of the program is estimated to cost $17,055,967.

The implementation model (FO-003), has been completed.

The heart of the network is the Distribution Network – Major Streets Conduit System (FO-004) includes construction, installation, splicing, testing of backbone distribution infrastructure, including cabinets, pull boxes, conduit, miscellaneous equipment, uninterruptable power supply (UPS), remote equipment, and fiber and splicing connections has been re-estimated to be just over $14.8 million.

The System Distribution Network – Fiber System (FO-005) of equipment is a logical grouping of some 300 to 382 subscribers as a single node of service, depending upon the configuration of detached dwelling, detached and commercial, office or industrial business uses. This portion of the project will cost approximately $4,200,622.

The Cabling System Project (FO-006) is an additional project is to provide for the design and construction of the fiber cabling and related distribution cabinets and equipment for the Fiber Optic System within neighborhood (in-tract) streets in the Ontario Ranch area. This in-tract fiber cabling will connect the Fiber Optic system to the facilities located within the major streets within the Ontario Ranch area. The Project will include the design and construction of the fiber cabling to be installed in the conduit installed by the individual developers within the rights-of-way of the neighborhood streets in the Ontario Ranch area. This Project will provide a Fiber Optics system in both residential neighborhoods and non-residential areas in the Ontario Ranch area. The projected costs of this project are $35,980,788.

The Fiber Equipment for Residential Units (FO-007) Project includes the acquisition and installation of Fiber Optic System equipment for each residential unit in the Ontario Ranch Area. This includes attached, detached residential units and commercial lodging units. The Network Interface Device (NID) equipment will be acquired and installed in approximately 45,900 residential units within the Ontario Ranch area. The projected costs of this project are $35,893,754.

The Fiber Equipment for Non-Residential Units (FO-008) Project includes the acquisition and installation of Fiber Optic System equipment for each non-residential building in the Ontario Ranch Area. The Project will provide the design and installation of network interface equipment in all non-residential units within the Ontario Ranch area. The projected costs of this project are $10,716,065.

Share Of Common City Yard Improvements (FO-009) is defined as improvement and the use of facilities that provide storage, assembly, and execution for the Fiber Optic System. These facilities will be needed in the future to provide adequate space to support the expansion of the Fiber Optic System throughout the City. However, the estimated costs will need to be identified by a Master Planned City Yard Improvement Program and are not included in this update. Thus there is no estimate at this time.

Most of these individual projects are distributed by the future number of connections to the system.

The Relationship Between the Need for The Fee and The Type of Development Project. The distribution of the system construction costs will be based upon an equivalent Residential Unit (or bandwidth) methodology. A detached dwelling will be the equivalent dwelling unit base at a

minimum of 300 megabits per second (henceforth Mbps) of data capacity in order for the network to provide voice, data and video services with acceptable quality and delivery. Based upon network parameters, the cost (to be identified later in the Chapter) to construct the system in order to provide the 300 Mbps of service to one **detached dwelling residence** will be defined as a one ***R***esidential ***U***nit or ***RU*** (and which will be used as the common denominator in the following examples) and represents a minimum of 300 Mbps of service to one provider.

Each **detached dwelling** would require its own 300 Mbps of bandwidth for voice, data and video service, thus each detached unit will require its own RU for service activation.

Individual **commercial lodging (e.g. hotel/motel) units**, have close proximity and will require only the minimum 300 Mbps per ten rental units, or stated differently, each single unit will only need 10% of the single ***RU*** or 0.1 ***RU***.

Approximately 2,500 square feet of **Retail/Commercial Use** space will require 165% of an ***RU***, or 0.5 ***RU*** per 1,000 square feet.

Office Uses, again in close quarters, (defined as ten employees) operating in approximately 3,000 square feet of space) would demand the equivalent of 40% of an ***RU***.

Business Park Uses – (defined to have ten employees) operating in a 10,000 square foot industrial environment) would demand the equivalent of 40% of an ***RU***.

Industrial Uses, (defined to have ten employees, operating in a 10,000 square foot industrial environment) would demand the equivalent of 40% of an ***RU***.

Institutional Uses operating in a 21,780 square foot industrial environment) would demand the equivalent of 290% of an ***RU***.

Schedule 16.2 at the end of the Chapter contains a table identifying the number of RU's per acre based upon the various Floor Area Ratios that are summarized following in Table 16-1.

[This space left vacant in order to place the following table on a single page].

Table 16-1
Residential Unit (RU) Equivalents

DIF Use Category	Residential Unit Equivalent
Detached Dwelling Units	1.00
Attached Dwelling Units	1.00
High Density Dwelling Units	1.00
Commercial Lodging Units	0.10
Retail/Service Uses	1.65
Office Uses	3.12
Business Park Uses	1.43
Industrial Uses	1.02
Institutional Uses	2.90

The Relationship Between the Use of the Fee and the Type of Development Paying the Fee. The Fiber Optic DIFs that will be imposed and collected will be used to construct the system required to serve the system defined by the various mix of the types of development. If the development is an office property generating a greater amount of megabytes of bandwidth, the fee collected will be proportionally higher and will be enough to construct the required additions to the fiber optics communications system.

The Relationship Between the Amount of the Fee and the Cost of the Portion of the Facility Attributed to the Development Project. Similar to the section above, the relationship is based upon the projected amount of Mbps of bandwidth required to serve user base and the cost to provide that number of megabytes.

ONTARIO RANCH IMPACT FEE CALCULATION

Table 16-2, following and summarized from Schedule 16.2, identifies the fees necessary to be applied to the combination of proposed development of the varying land-uses in Ontario Ranch. The costs have been distributed using the same nexus identified earlier in this Chapter as Table 16-1 *Residential Unit Equivalents.* The proposed DIFs are as follows:

Table 16-2
Ontario Ranch Fiber Optic Communication
Development Impact Fee by Land Use

Development Use Category	Allocation of System Improvement Costs	Cost Impact per Unit or Square Foot
Detached Dwelling Units	$23,991,700	$2,057/Unit
Attached Dwelling Units	$61,067,539	$2,057/Unit
High Density Dwelling Units	$26,913,002	$2,057/Unit
Commercial Lodging Units	$717,319	$1,811/Unit
Retail/Service Uses	$8,249,166	$1.434/S.F.
Office Uses	$6,384,137	$2.391/S.F.
Business Park Uses	$10,992,911	$1.104/S.F.
Industrial Uses	$12,176,487	$0.717/S.F.
Institutional Uses	$2,600,281	$2.388/S.F.

RECAP OF RECOMMENDED FIBER OPTIC COMMUNICATIONS SYSTEM IMPACT FEES

- **General City** - There is no fiber optic system DIF schedule to be imposed in the General City area of the City.
- **Ontario Ranch** - Adopt Schedule 16.2 for the nine use development categories.

END OF CHAPTER TEXT

Schedule 16.1

City of Ontario - Ontario Ranch
2021-22 Development Impact Cost Calculation Update
Allocation of Project Cost Estimates
Fiber Optics Communication System (OR)

			Residential Common System Construction Costs		Non- Residential Common System Construction Costs	
Line #	Description	Estimated Cost	Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost
FO-001	Head End Facilities (Points Of Presence System)	$9,628,430	78.00%	$7,510,175	22.00%	$2,118,255
FO-002	Core Network - Planning/Installation - Equipment/Facilities	$17,055,967	78.00%	$13,303,654	22.00%	$3,752,313
FO-003	Project Completed or No Longer Needed	$0	78.00%	$0	22.00%	$0
FO-004	Distribution Network - Major Streets Conduit System	$14,874,465	78.00%	$11,602,083	22.00%	$3,272,382
FO-005	System Distribution Network - Fiber System	$4,200,622	78.00%	$3,276,485	22.00%	$924,137
FO-006	Cabling System - Residential/Non-Residential	$35,980,788	78.00%	$28,065,015	22.00%	$7,915,773
FO-007	Fiber Equipment Within Residential Units	$35,893,754	100.00%	$35,893,754	22.00%	$7,896,626
FO-008	Fiber Equipment Within Non-Residential Buildings	$10,716,065	0.00%	$0	100.00%	$10,716,065
FO-009	Share of Specific/Common City Yard Improvements	$0	78.00%	$0	22.00%	$0
	Sub-total Fiber Optic Information System	$128,350,091	77.64%	$99,651,166	28.51%	$36,595,551
	FINANCIAL ADJUSTMENTS:					
	Ontario Ranch - Regional Fiber Outstanding Credits	$1,767,574	77.64%	$1,372,347	28.51%	$503,976
	Ontario Ranch - Development Impact Fee Fund Balance	$14,101,895	77.64%	$10,948,728	28.51%	$4,020,773
	Sub-total - Financial Adjustments	$15,869,469	77.64%	$12,321,075	28.51%	$4,524,749
	Total	$144,219,560	77.64%	$111,972,241	28.51%	$41,120,300
			Forward to Schedule 16.2		Forward to Schedule 16.2	

NOTES:

(1). All developer-held "credits" under FINANCIAL ADJUSTMENTS will appear as a positive indicating an additional Infrastructure Fund obligation that will be redeemed (in lieu of a DIF payment) at some point in the future

(2). A negative figure under FINANCIAL ADJUSTMENTS indicates a positive Fund Balance mitigating the project total. A positive figure indicates an amount that needs to be recovered by DIFs.

Schedule 16.2

City of Ontario - Ontario Ranch
2020-21 Development Impact Cost Calculation Update - Amended
Allocation of Project Cost Estimates
Allocation of Distribution System Cost

Proposed Residential Land Uses	Undeveloped Acres	Undeveloped Units	Equivalent Residential Unit (RU)	Equivalent Residential Units (RU's)	Percentage of ERU's	Allocation of Total System Cost	System Cost Distribution per Acre	Average Units or Square Feet/Acre	Ontario Ranch Impact Cost per Unit or Square Foot
Detached Dwellings	1,423.0	11,662	1.00	11,662	21.43%	$23,995,651	$16,863	8.20	*$2,057 per Unit*
Attached Dwellings	1,316.0	29,684	1.00	29,684	54.54%	$61,069,660	$46,406	22.56	*$2,057 per Unit*
High Density Dwellings	439.0	13,082	1.00	13,082	24.03%	$26,906,930	$61,291	29.80	*$2,057 per Unit*
TOTAL - Residential	3,178	54,428	--	54,428	100.00%	*$111,972,241*	*OR Fiber-optic System G.P. Build-out Cost*		

Proposed Non-residential Land Uses	Undeveloped Acres	Undeveloped Units	Equivalent Residential Unit (RU)	Equivalent Residential Units (RU's)	Percentage of ERU's	Allocation of Total System Cost	System Cost Distribution per Acre	Average Units or Square Feet/Acre	Ontario Ranch Impact Cost per Unit or Square Foot
Commercial Lodging Units	9.0	396	0.10	40	1.74%	$717,319	$79,702	44.00	*$1,811 per Unit*
Retail/Service Uses	279.0	5,751,595	1.65	460	20.06%	$8,249,166	$29,567	20,615	*$1.434 per S.F.*
Office Uses	114.0	2,670,188	3.12	356	15.53%	$6,384,137	$56,001	23,423	*$2.391 per S.F.*
Business Park Uses	428.0	9,953,243	1.43	613	26.73%	$10,992,911	$25,684	23,255	*$1.104 per S.F.*
Industrial Uses	669.0	16,981,679	1.02	679	29.61%	$12,176,487	$18,201	25,384	*$0.717 per S.F.*
Private Institutional Use	50.0	1,089,000	2.90	145	6.32%	$2,600,281	$52,006	21,780	*$2.388 per S.F.*
TOTAL - Non-residential	1,549	--	--	2,293	100.00%	*$41,120,300*	*OR Fiber-optic System G.P. Build-out Cost*		

	Business Acres	Business Square Feet	Square Feet per Acre	Square Feet of "Unit"	"Units" per Acre	Residential Unit Equivalent	RU's per Acre
Retail/Service Uses	**279.0**	**5,751,595**	**20,615**	**2,500**	**8.246**	**20.00%**	**1.65**
Office Uses	**114.0**	**2,670,188**	**23,423**	**3,000**	**7.808**	**40.00%**	**3.12**
Business Park Uses	**428.0**	**9,953,243**	**23,255**	**6,500**	**3.578**	**40.00%**	**1.43**
Industrial Uses	**669.0**	**16,981,679**	**25,384**	**10,000**	**2.538**	**40.00%**	**1.02**
Private Institutional Use	**50.0**	**1,089,000**	**21,780**	**3,000**	**7.260**	**40.00%**	**2.90**

Appendix A

Summary of Recommendations

SUMMARY OF RECOMMENDATIONS

Chapter 3 - Law Enforcement Facilities and Equipment
- GC/OR - Adopt Schedule 3.2, p.37, *Entire City – Minimal Capital Needs-based Impact Costs*

Chapter 4 - Fire Suppression Facilities, Vehicles and Equipment
- GC – Adopt Schedule 4.2, p. 51, *GC Minimal Capital Needs-based Impact Costs.*
- OR – Adopt Schedule 4.4, p. 53, *OR Minimal Capital Needs-based Impact Costs.*
- Split/create separate GC/OR Fire Suppression Impact fee Funds.

Chapter 5 – Circulation (Streets, Signals and Bridges) System
- GC - Adopt Schedule 5.2, p.72, *GC - Minimal Capital Needs-based Impact Costs, and the ALTERNATIVE COST METHODOLOGY, per single trip-end cost from Schedule 5.2 to apply to Table 5-2 and the more specific ITE Trip Calculation, 7th Edition for Business Uses.*
- *OR - Adopt Schedule 5.4, P. 74, OR - Minimal Capital Needs-based Impact Costs, and the ALTERNATIVE COST METHODOLOGY, per single trip-end cost from Schedule 5.4 to apply to Table 5-5 and the more specific ITE Trip Calculation, 7th Edition for Business Uses.*

Chapter 6 - Storm Drainage Collection Facilities
- GC - Adopt Schedule 6.4, p. 87, *General Plan Build-out Average Infrastructure Costs* with alternative use of the *Cost Distribution per Acre* column for unusual uses.
- OR - Adopt Schedule 6.5, p. 89, *OR – Minimum Capital Needs-based Impact Costs* with alternative use of the use *Distribution of Cost Distribution per Acre* column for unusual uses.

Chapter 7 - Water Source, Storage and Distribution Facilities
- GC - Adopt Schedule 7.2, p. 104, *GC - Minimal Capital Needs-based Impact Costs, Table 7-7,* p. 98, and *Equivalent Water meter Size calculation based Upon Minimum Needs-based Impact Fees.*
- OR - Adopt Schedule 7.4, p. 106, *GC - Minimal Capital Needs-based Impact Costs, Table 7-11, p. 102, and Equivalent Water meter Size calculation based Upon Minimum Needs- based Impact Fees.*

Chapter 8 - Sewer Collection Facilities
- GC - Adopt Schedule 8.2, p. 116, *GC - Minimal Capital Needs-based Impact Costs.*
- OR - Adopt Schedule 8.4, p. 118, *OR - Minimal Capital Needs-based Impact Costs.*

Chapter 9 - Refuse Collection Facilities and Equipment
- GC/OR - Adopt Schedule 9.1, parts **A** through H, p. 126-128.

Appendix A - Summary of DIF Recommendations (continued)

Chapter 10 - General Facilities, Vehicles and Equipment

- GC/OR - Adopt Schedule 10.2, p. 135, Entire City – Minimal Needs-based Impact Costs.
- Create City Maintenance Yard Expansion DIF Fund and deposit the portion of each infrastructures DIF that is "City yard Improvement" related per page 187, Appendix C.

Chapter 11 - Library Facilities and Collection Items

- GC/OR - Adopt Schedule 11.1, p. 141.

Chapter 12 - Public Meeting (Community Centers) Facilities

- GC/OR - Adopt Schedule 12.1 p. 146.

Chapter 13 – Aquatics Facilities

- Adopt Schedule 13.1, p.150.

Chapter 14- Park Land Acquisition and Park Infrastructure Development

- Create Quimby Act Park land Acquisition and DIF Fund, Note (1).
- GC/OR - Adopt Schedule 14.1, page 159-160, for residential uses requiring the sub-division of land for Quimby Act application.
- GC/OR - Adopt Schedule 14.1, page 159-160, for residential uses not requiring the sub-division of land for AB1600 application.

NOTES:

(1). Separate Park Land Acquisition and Development Funds are necessary because the Quimby Act allows use of receipts for rehabilitation of existing facilities whereas the AB1600 requirements prevent such expenditures.

Chapter 15 - OR Species, Habitat Conservation and Open Space Land Mitigation

- OR – Extend the current adoption of the *Mitigation Fee per Acre* in Schedule-15.1, p. 172, as OR Species, Habitat Conservation and Open Space Land Mitigation Impact Fee. This "fee" does not change.

Chapter 16 - Ontario Ranch - Fiber Optic Communication System

- OR - Adopt Schedule 16.2 - Fiber Optic Communication System Impact Fee, p. 180.

Appendix B

Expanded Land-use Database

Total - Land-use Database General City & Ontario Ranch	Existing Development		Potential Development		Total General Plan Build-out	
	Acres	# of Units	Acres	# of Units	Acres	# of Units
Detached Dwellings	6,328	31,997	1,685	12,793	8,013	44,790
Attached Dwellings	722	13,097	1,499	32,372	2,221	45,469
High Density Dwellings	193	4,812	1,037	34,889	1,230	39,701
Mobile Home Dwellings	204	2,097	14	95	218	2,192
Commercial Lodging Units	143	5,810	12	546	155	6,356
Retail/Service Uses	487	18,522,286	1,271	13,916,010	1,758	32,438,296
Office Uses	310	9,959,192	936	23,565,934	1,246	33,525,126
Business Park Uses	777	10,271,628	769	16,922,869	1,546	27,194,497
Industrial Uses	6,890	112,134,057	1,110	47,631,804	8,000	159,765,861
Private Institutional Use	419	2,318,711	52	1,132,560	471	3,451,271
Total - City Limits	**16,473**		**8,385**		**24,858**	
Private Residences	**7,447**	**52,003**	**4,235**	**80,149**	**11,682**	**132,152**
Commercial Lodging Rooms	**143**	**5,810**	**12**	**546**	**155**	**6,356**
Business Square Feet	**8,883**	**153,205,874**	**4,138**	**103,169,177**	**13,021**	**256,375,051**

Land-use Database within City's General City Area - Net	Existing Development		Potential Development		Total General Plan Build-out	
	Acres	# of Units	Acres	# of Units	Acres	# of Units
Detached Dwellings	4,733	27,449	262	1,131	4,995	28,580
Attached Dwellings	641	12,050	183	2,688	824	14,738
High Density Dwellings	193	4,812	598	21,807	791	26,619
Mobile Home Dwellings	204	2,097	14	95	218	2,192
Commercial Lodging Units	143	5,810	3	150	146	5,960
Retail/Service Uses	477	18,418,611	992	8,164,415	1,469	26,583,026
Office Uses	310	9,959,192	822	20,895,746	1,132	30,854,938
Business Park Uses	741	9,587,138	341	6,969,626	1,082	16,556,764
Industrial Uses	6,610	106,400,598	441	30,650,125	7,051	137,050,723
Private Institutional Use	419	2,318,711	2	43,560	421	2,362,271
Sub-total - General City	**14,471**		**3,658**		**18,129**	

Land-use Database within City's Ontario Ranch Area	Existing Development		Potential Development		Total General Plan Build-out	
	Acres	# of Units	Acres	# of Units	Acres	# of Units
Detached Dwellings	1,595	4,548	1,423	11,662	3,018	16,210
Attached Dwellings	81	1,047	1,316	29,684	1,397	30,731
High Density Dwellings	-	0	439	13,082	439	13,082
Mobile Home Dwellings	-	0	-	0	-	0
Commercial Lodging Units	-	0	9	396	9	396
Retail/Service Uses	10	103,675	279	5,751,595	289	5,855,270
Office Uses	-	0	114	2,670,188	114	2,670,188
Business Park Uses	36	684,490	428	9,953,243	464	10,637,733
Industrial Uses	280	5,733,459	669	16,981,679	949	22,715,138
Private Institutional Use	-	0	50	1,089,000	50	1,089,000
Sub-total - Ontario Ranch	**2,002**		**4,727**		**6,729**	

Land-use Database within City's General City Existing/Vacant	Existing Development		Potential Development		Total General Plan Build-out	
	Acres	# of Units	Acres	# of Units	Acres	# of Units
Detached Dwellings	4,733	27,449	191	1,066	4,924	28,515
Attached Dwellings	641	12,050	183	2,688	824	14,738
High Density Dwellings	193	4,812	586	21,472	779	26,284
Mobile Home Dwellings	204	2,097	10	80	214	2,177
Commercial Lodging Units	143	5,810	3	150	146	5,960
Retail/Service Uses	477	18,418,611	728	8,016,724	1,205	26,435,335
Office Uses	310	9,959,192	810	20,889,370	1,120	30,848,562
Business Park Uses	741	9,587,138	46	4,755,133	787	14,342,271
Industrial Uses	6,610	106,400,598	431	30,605,125	7,041	137,005,723
Private Institutional Use	419	2,318,711	2	43,560	421	2,362,271
Sub-total - General City	14,471		2,990		17,461	

Land-use Database Consisting of General City - Demolition	Existing Development		Potential Development		Total General Plan Build-out	
	Acres	# of Units	Acres	# of Units	Acres	# of Units
Detached Dwellings			70	63	70	63
Attached Dwellings			-	0	-	0
High Density Dwellings			6	139	6	139
Mobile Home Dwellings			2	15	2	15
Commercial Lodging Units			-	0	-	0
Retail/Service Uses			132	103,621	132	103,621
Office Uses			6	6,376	6	6,376
Business Park Uses			113	885,732	113	885,732
Industrial Uses			5	45,000	5	45,000
Private Institutional Use			-	0	-	0
Sub-total - GC Demolition	-		334			45,533

Land-use Database Consisting of General City - Redeveloped	Existing Development		Potential Development		Total General Plan Build-out	
	Acres	# of Units	Acres	# of Units	Acres	# of Units
Detached Dwellings			1	2	1	2
Attached Dwellings			-	0	-	0
High Density Dwellings			6	196	6	196
Mobile Home Dwellings			2	0	2	0
Commercial Lodging Units			-	0	-	0
Retail/Service Uses			132	44,070	132	44,070
Office Uses			6	0	6	0
Business Park Uses			182	1,328,761	182	1,328,761
Industrial Uses			5	0	5	0
Private Institutional Use			-	0	-	0
Sub-total - GC Redevelopment	-		334		334	

Appendix C

City Yard Improvement
Cost Estimates and Distribution

Appendix C Percentage of Future City Yard Costs as a Function of Total Impact Fees to Be Collected by Infrastructure	With Application to	City Yard Costs to the Infrastructure	Total Impact Fees to be Collected	City Yard as Percentage of the Total
Law Enforcement Facilities, Vehicles and Equipment	Entire City	$2,365,388	$73,115,031	3.24%
Fire Suppression Facilities, Vehicles and Equipment	General City	$577,614	$30,199,506	1.91%
Fire Suppression Facilities, Vehicles and Equipment	Ontario Ranch	$827,231	$86,496,785	0.96%
Circulation (Streets, Signals and Bridges) System	General City	$984,776	$178,140,737	0.55%
Circulation (Streets, Signals and Bridges) System	Ontario Ranch	$930,800	$377,510,870	0.25%
Storm Drainage Collection System Facilities	General City	$782,254	$79,164,432	0.99%
Storm Drainage Collection System Facilities	Ontario Ranch	$957,206	$157,718,003	0.61%
Water Source, Storage and Distribution Facilities (1)	General City	$1,622,718	$78,802,618	2.06%
Water Source, Storage and Distribution Facilities (1)	Ontario Ranch	$7,850,241	$407,068,001	1.93%
Sewer Collection Facilities	General City	$1,111,603	$22,308,084	4.98%
Sewer Collection Facilities	Ontario Ranch	$2,858,406	$81,773,471	3.50%
Refuse Collection Facilities and Vehicles	Entire City	$17,965,667	$60,948,236	29.48%
General Facilities, Vehicles and Equipment	Entire City	$1,583,822	$19,332,180	8.19%
Library Facilities and Collection Items	Entire City	$0	$85,970,601	0.00%
Public Use (Community Center) Facilities	Entire City	$0	$122,568,286	0.00%
Aquatics Facilities	Entire City	$0	$7,435,177	0.00%
Park Land Acquisition and Park Infrastructure Development	Entire City	$4,047,273	$1,003,530,226	0.40%
Open Space Legal Agreement (OR)	Ontario Ranch	$0	$20,433,860	0.00%
Fiber Optics Communication System (OR)	Ontario Ranch	$0	$153,072,535	0.00%
Totals		$44,464,999	$3,045,588,639	

Appendix D

New and General City Development Impact Fee Policies

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DEVELOPMENT IMPACT FEE REIMBURSEMENT POLICY CALCULATIONS

Exhibits "B" and "C" of the City of Ontario Development Impact Fee policies indicates that, within certain infrastructures, the project costs have been separated into two types of costs, they are: 1) Infrastructure projects that serve a local area referred to as *Local Adjacent Projects*; and 2) infrastructure projects that serve a larger regional area referred to as *Regional Projects*.

The two Exhibits within the Development Impact fee Policy's document further explain the conditions and limitations under which developers are to be reimbursed for the construction of public infrastructure identified in the *Development Impact Fee Calculation and Nexus Report* and the *Master Facilities Plan*. The reader should refer to that policy document for an in-depth explanation of the reimbursement policies.

The Local Adjacent/Regional schedules are now included in this document.

There are two schedules for each of the nine areas/schedules that require the distinction (i.e. the GC area Storm Drainage Collection System). The first establishes the percentage of the projects that are *Regional* project costs with its reciprocal establishing the *Local Adjacent* percentage of the project costs.

The second schedule within the area/infrastructure applies the two percentages (that add up to 100%) to the proposed development impact fee for that area (OR or GC) and infrastructure (i.e. circulation).

2021-22	General City Regional Projects Circulation System	GC	
DIF No.	DIF Program Project Description	Regional Project Costs	
ST-071	Holt Boulevard Bridge over West Cucamonga Creek	$109,972	
ST-072	Mission Boulevard Bridge over West Cucamonga Creek	$307,921	
ST-074	Francis Street Bridge over West Cucamonga Creek	$98,974	
ST-075	Eighth Street Bridge over West Cucamonga Creek	$846,784	
ST-076	Sixth Street Bridge over Cucamonga Creek	$676,004	
ST-077	Fourth Street Bridge over Cucamonga Creek	$790,240	
ST-079	Holt Boulevard Bridge over Cucamonga Creek	$1,229,098	
ST-081	Mission Boulevard Bridge over Cucamonga Creek	$901,770	
ST-082	Francis Street Bridge over Cucamonga Creek	$824,790	
ST-083	Philadelphia Street Bridge over Cucamonga Creek	$98,104	
ST-084	Riverside Drive Bridge over Cucamonga Creek	$481,199	
ST-085	Archibald Avenue Bridge over Upper Deer Creek	$533,094	
ST-086	Archibald Avenue Bridge over Upper Deer Creek Spillway	$774,332	
ST-087	Project Completed - No Longer Needed	$0	
ST-091	Grove Avenue Grade Separation under UPRR/Alhambra	$4,855,012	
ST-092	Milliken (N) Grade Separation under UPRR/Alhambra	$193,675	
ST-093	Project Completed - No Longer Needed	$0	
ST-094	Project Completed - No Longer Needed	$0	
ST-095	Archibald (S) Grade Separation over UPRR/LA	$14,999,108	
ST-096	San Antonio (S) Grade Separation Under UPRR/Alhambra	$10,958,112	
ST-097	Campus (S) Grade Separation under UPRR/Alhambra	$10,958,112	
ST-099	Project Completed - No Longer Needed	$0	
ST-100	Sultana (S) Grade Separation under UPRR/LA line	$4,358,340	
ST-103	Circulation System Maintenance Vehicles	$1,848,443	
ST-111	I-10 Freeway at Grove and Fourth	$19,897,431	
ST-112	Traffic Signal System Control and Operations Center	$1,140,906	
ST-113	General City Backbone Signal Interconnect	$539,604	
ST-114	I-10 at Euclid Avenue Eastbound On Ramp	$647,035	
ST-116	I-10 at Vineyard Interchange Reconstruction/Expansion	$1,095,390	
ST-118	Hellman Avenue Bridge over Cucamonga Creek	$2,183,267	
ST-126	Share of City Yard Improvements	$984,776	
ST-129	Fourth Street Under the I-10 Freeway	$9,614,094	Use
	Regional Total	**$91,945,587**	**53%** **55%**
	Total All GC Streets	**$173,321,022**	
	Local Adjacent Streets	**$81,375,435**	**47%** **45%**

Appendix D

City of Ontario
2021-22 Development Impact Cost Calculation Update
GC - Regional/Local Adjacent Distribution
Circulation (Streets, Signals and Bridges) System

Proposed Land-use	*Proposed Development Impact Fee*	*Regional DIF* Rounded to *55%*	*Local/Adjacent DIF* Rounded to *45%*
Detached Dwellings	$2,224	$1,223	$1,001
Attached Dwellings	$1,485	$817	$668
High Density Dwellings	$919	$505	$414
Mobile Home Dwellings	$1,159	$637	$522
Commercial Lodging Units	$1,173	$645	$528
Retail/Service Uses	$4.494	$2.472	$2.022
Office Uses	$2.568	$1.412	$1.156
Business Park Uses	$2.672	$1.470	$1.202
Industrial Uses	$1.377	$0.757	$0.620
Private Institutional Use	$2.934	$1.614	$1.320

2021-22	General City Regional Projects Storm Drain			
DIF No.	DIF Program Project Description	GC Regional Project Costs		
SD-069	Storm Drain Maintenance Vehicles	$260,175		
SD-074	San Savaine Channel	$1,875,549		
SD-075	Storm Drain Master Plan Update	$217,660		
SD-103	Share of Common City Yard Improvements	$782,254		Use
	Regional Storm Drain Total	**$3,135,638**	**5%**	**5%**
	Total All GC Storm Drain	**$68,710,652**		
	Local Adjacent Storm Drain	**$65,575,014**	**95%**	**95%**

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City of Ontario
2021-22 Development Impact Cost Calculation Update
GC - Regional/Local Adjacent Distribution
Storm Drainage Collection System Facilities

Proposed Land-use	*Proposed Development Impact Fee*	*Regional DIF* Rounded to *5%*	*Local/Adjacent DIF* Rounded to *95%*
Detached Dwellings	$2,563	$384	$2,179
Attached Dwellings	$826	$124	$702
High Density Dwellings	$692	$104	$588
Mobile Home Dwellings	$1,492	$224	$1,268
Commercial Lodging Units	$425	$64	$361
Retail/Service Uses	$0.447	$0.067	$0.380
Office Uses	$0.537	$0.081	$0.456
Business Park Uses	$1.297	$0.195	$1.102
Industrial Uses	$1.132	$0.170	$0.962
Private Institutional Use	$3.292	$0.494	$2.798

2021-22	General City Regional Projects Water Distribution System			
DIF No.	DIF Program Project Description	GC Regional Project Costs		
WT-001	Phillips Street 1010' Zone Well	$764,470		
WT-002	Eighth Street - 1212' Zone Wells	$8,477,068		
WT-004	Eighth Street - 1212' Zone Transmission lines	$38,399,727		
WT-005	Eighth Street - 1212' Zone Reservoir Site Purchase	$3,600,000		
WT-006	Eighth Street- 1212' Zone Reservoir Construction	$25,679,453		
WT-009	Phillips Zone 1010' Zone Extension Mains Extension	$703,931		
WT-018	Reservoir 1010' Zone (2B) Landscaping	$248,268		
WT-027	Water Master Plan Updates	$267,938		
WT-031	Ontario-JCSD Reservoir (Phillips Street 1010' Zone)	$43,180		
WT-034	Water Source Supply	$3,934,352		
WT-037	Share of Common City Yard Improvements	$1,622,718		Use
	Regional Total	**$83,741,105**	**85%**	**85%**
	Total All GC Water	**$98,736,620**		
	Local Adjacent Water	**$14,995,515**	**15%**	**15%**

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City of Ontario
2021-22 Development Impact Cost Calculation Update
GC - Regional/Local Adjacent Distribution
Water Source, Storage and Distribution Facilities

Proposed Land-use	*Proposed Development Impact Fee*	*Regional DIF* Rounded to *85%*	*Local/Adjacent DIF* Rounded to *15%*
Detached Dwellings	$3,113	$2,646	$467
Attached Dwellings	$2,130	$1,811	$320
High Density Dwellings	$1,437	$1,221	$216
Mobile Home Dwellings	$2,129	$1,810	$319
Commercial Lodging Units	$859	$730	$129
Retail/Service Uses	$1.531	$1.301	$0.230
Office Uses	$0.766	$0.651	$0.115
Business Park Uses	$0.617	$0.524	$0.093
Industrial Uses	$0.165	$0.140	$0.025
Private Institutional Use	$0.579	$0.492	$0.087

2021-22	General City Regional Projects Sewer Collection System		
DIF No.	DIF Program Project Description	GC Regional Project Costs	
SW-001	Eastern Trunk Sewer	$246,846	
SW-026	Sewer Utility Maintenance Vehicles	$265,188	
SW-027	Sewer Utility Master Plan update	$218,172	
SW-038	Easement N/O Holt Blvd, E/O Allyn Avenue	$39,791	
SW-046	Holt Sewer Phase A	$163,276	
SW-047	Holt Sewer Phase B	$374	
SW-048	Share of Common City Yard Improvements	$1,111,603	Use
	Regional Sewer Total	**$2,045,250**	**8% 10%**
	Total All GC Sewer	**$26,364,539**	
	Local Adjacent Sewer	**$24,319,289**	**92% 90%**

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City of Ontario
2021-22 Development Impact Cost Calculation Update
GC - Regional/Local Adjacent Distribution
Sewer Collection Facilities

Proposed Land-use	*Proposed Development Impact Fee*	*Regional DIF* Rounded to *10%*	*Local/Adjacent DIF* Rounded to *90%*
Detached Dwellings	$577	$58	$519
Attached Dwellings	$505	$51	$455
High Density Dwellings	$433	$43	$390
Mobile Home Dwellings	$505	$51	$455
Commercial Lodging Units	$336	$34	$302
Retail/Service Uses	$0.263	$0.026	$0.237
Office Uses	$0.284	$0.028	$0.256
Business Park Uses	$0.141	$0.014	$0.127
Industrial Uses	$0.055	$0.006	$0.050
Private Institutional Use	$0.164	$0.016	$0.148

2021-22	Ontario Ranch Regional Projects Circulation System		
DIF No.	DIF Program Project Description	OR Regional Project Costs	
ST-025	Non-Developer ROW Frontage Improvements and SCE Pole Relocations	$540,035	
ST-026	Additional SCE Pole Relocations	$664,000	
ST-029	OR Offsite Galena Street Widening I-15 to Milliken/Hamner	$2,343,127	
ST-030	OR Offsite Euclid Avenue Improvements Merrill to US-71	$6,487,700	
ST-031	OR Offsite Archibald Bridge over Santa Ana River	$265,561	
ST-032	OR Offsite - Hamner Bridge over the Santa Ana River	$614,318	
ST-089	Archibald Avenue Bridge over Lower Deer Creek Channel	$371,964	
ST-094	Project Completed - No Longer Needed	$0	
ST-103	Circulation System Maintenance Vehicles	$1,747,131	
ST-104	Great Park Bridge Over Archibald Avenue	$5,177,843	
ST-105	SR-60 at Vineyard interchange Reconstruction/Expansion	$29,684,477	
ST-106	SR-60 at Archibald interchange Reconstruction/Expansion	$4,668,303	
ST-107	SR-60 at Euclid interchange Reconstruction/Expansion	$1,502,583	
ST-108	SR-60 at Grove interchange Reconstruction/Expansion	$25,011,847	
ST-109	SR-60 at Mountain Avenue Interchange Reconstruction/Expansion	$3,626,762	
ST-112	Traffic Signal System Control and Operations Center	$1,140,906	
ST-117	Ontario Ranch/Trails Separations	$2,328,050	
ST-119	Project Completed - No Longer Needed	$0	
ST-120	Project Completed - No Longer Needed	$0	
ST-121	Schaefer Avenue Bridge over Cucamonga Creek	$6,946,758	
ST-122	Schaefer Avenue Bridge over Cucamonga Creek Spillway	$12,349,792	
ST-123	Edison Avenue Bridge over Cucamonga Creek	$17,995,412	
ST-124	Eucalyptus Avenue Bridge over Cucamonga Creek	$11,000,000	
ST-125	Merrill Avenue Bridge over Cucamonga Creek	$11,000,000	
ST-126	Share of Common City Yard Improvements	$930,800	
ST-128	Ontario Ranch Street Design Studies	$1,074,109	
ST-131	Ontario Ranch Traffic Study	$94,815	Use
	Regional Total	**$147,566,293**	**43% 45%**
	Total All OR Streets	**$346,386,801**	
	Local Adjacent Streets	**$198,820,508**	**57% 55%**

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City of Ontario
2021-22 Development Impact Cost Calculation Update
OR - Regional/Local Adjacent Distribution
Circulation (Streets, Signals and Bridges) System

Proposed Land-use	*Proposed Development Impact Fee*	*Regional DIF* Rounded to *45%*	*Local/Adjacent DIF* Rounded to *55%*
Detached Dwellings	$4,986	$2,244	$2,742
Attached Dwellings	$3,329	$1,498	$1,831
High Density Dwellings	$2,060	$927	$1,133
Commercial Lodging Units	$2,629	$1,183	$1,446
Retail/Service Uses	$10.075	$4.534	$5.541
Office Uses	$5.758	$2.591	$3.167
Business Park Uses	$5.991	$2.696	$3.295
Industrial Uses	$3.088	$1.390	$1.698
Private Institutional Use	$6.579	$2.961	$3.618

2021-22	Ontario Ranch Regional Projects Storm Drainage Collection System	OR Regional Project Costs	
DIF No.	DIF Program Project Description		
SD-004	Project Completed - No Longer Needed	$0	
SD-050	Offsite Euclid Avenue Storm Drain	$21,110,125	
SD-051	Project Completed - No Longer Needed	$0	
SD-052	Project Completed - No Longer Needed	$0	
SD-069	Storm Drain Maintenance Vehicles	$318,364	
SD-075	Storm Drain Master Plan	$266,340	
SD-103	Share of Common City Yard improvements	$957,206	
SD-104	Project Completed - No Longer Needed	$0	
SD-105	Ontario Ranch Storm Drain Study	$1,053,500	Use
	Regional Storm Drain Total	**$23,705,535**	**17% 15%**
	Total All OR Storm Drain	**$138,667,242**	
	Local Adjacent Storm Drain	**$114,961,707**	**83% 85%**

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City of Ontario
2021-22 Development Impact Cost Calculation Update
OR - Regional/Local Adjacent Distribution
Storm Drainage Collection System Facilities

Proposed Land-use	*Proposed Development Impact Fee*	*Regional DIF* Rounded to *15%*	*Local/Adjacent DIF* Rounded to *85%*
Detached Dwellings	$3,744	$562	$3,182
Attached Dwellings	$1,422	$213	$1,209
High Density Dwellings	$1,196	$179	$1,017
Commercial Lodging	$810	$122	$689
Retail/Service Uses	$1.728	$0.259	$1.469
Office Uses	$1.521	$0.228	$1.293
Business Park Uses	$1.490	$0.224	$1.267
Industrial Uses	$1.482	$0.222	$1.260
Institutional Use	$1.727	$0.259	$1.468

2021-22	Ontario Ranch Regional Projects Water	OR Regional Project Costs	
DIF No.	DIF Program Project Description		
WT-002	Eighth Street - 1212' Zone Wells	$6,161,281	
WT-007	Francis Street 925' Zone Wells	$54,967,749	
WT-008	Phillips Street 1010' Zone Wells	$5,536,808	
WT-009	Phillips Street 1010' Zone Extension Mains Extension	$1,169,812	
WT-010	Francis Street 925' Zone Transmission Lines	$26,110,371	
WT-012	Francis Zone 925' Well Collection System	$11,944,714	
WT-013	Pressure Reducing Stations, Potable Water System (1010' - 925')	$1,830,000	
WT-014	Francis Zone 925' Zone Reservoirs	$49,151,462	
WT-015	Phillips Zone 1010' Zone Reservoirs	$3,747,521	
WT-017	Backup Power Supply	$956,392	
WT-027	Water Master Plan Updates	$1,296,205	
WT-031	Ontario-JCSD Reservoir (Phillips Street 1010' Zone)	$215,899	
WT-032	Water Treatment	$27,420,981	
WT-033	Project Completed - No Longer Needed	$0	
WT-034	Water Supply	$58,614,971	
WT-037	Share of Common City Yard Improvements	$7,850,241	
WT-038	Project Completed - No Longer Needed	$0	Use
	Reimbursement for Water System	$4,375,000	
	Regional Total	**$261,349,407**	**73% 75%**
	Total All OR Water	**$359,056,789**	
	Local Adjacent Water	**$97,707,382**	**27% 25%**

Appendix D

City of Ontario
2021-22 Development Impact Cost Calculation Update
OR - Regional/Local Adjacent Distribution
Water Source, Storage and Distribution Facilities

Proposed Land-use	*Proposed Development Impact Fee*	*Regional DIF* Rounded to *75%*	*Local/Adjacent DIF* Rounded to *25%*
Detached Dwellings	$9,711	$7,283	$2,428
Attached Dwellings	$5,332	$3,999	$1,333
High Density Dwellings	$2,829	$2,122	$707
Commercial Lodging	$4,080	$3,060	$1,020
Retail/Service Uses	$3.188	$2.391	$0.797
Office Uses	$2.882	$2.162	$0.721
Business Park Uses	$2.483	$1.862	$0.621
Industrial Uses	$2.569	$1.927	$0.642
Institutional Use	$2.339	$1.754	$0.585

2021-22	Ontario Ranch Regional Projects Sewer Collection System	OR Regional Project Costs		
DIF No.	DIF Program Project Description			
SW-001	Eastern Trunk Sewer	$2,804,686		
SW-002	Western Trunk Sewer	$36,174,154		
SW-026	Sewer Utility Maintenance Vehicles	$681,912		
SW-027	Sewer Utility Master Plan Update	$561,012		
SW-048	Share of Common City Yard Improvements	$2,858,406		
SW-049	Project Completed - No Longer Needed	$0		Use
	Regional Sewer Total	**$43,080,170**	**56%**	**55%**
	Total All OR Sewer	**$77,500,028**		
	Local Adjacent Sewer	**$34,419,858**	**44%**	**45%**

Appendix D

City of Ontario
2021-22 Development Impact Cost Calculation Update
OR - Regional/Local Adjacent Distribution
Sewer Collection Facilities

Proposed Land-use	*Proposed Development Impact Fee*	*Regional DIF* Rounded to *55%*	*Local/Adjacent DIF* Rounded to *45%*
Detached Dwellings	$1,642	$164	$1,478
Attached Dwellings	$1,246	$125	$1,121
High Density Dwellings	$753	$75	$678
Commercial Lodging	$958	$96	$862
Retail/Service Uses	$0.299	$0.030	$0.269
Office Uses	$0.877	$0.088	$0.789
Business Park Uses	$0.353	$0.035	$0.318
Industrial Uses	$0.431	$0.043	$0.388
Institutional Use	$0.472	$0.047	$0.425

2021-22	Ontario Ranch Regional Projects Fiber Communications		
DIF No.	DIF Program Project Description	OR Regional Project Costs	
FO-001	Head End Facilities (Points of Presence System)	$9,628,430	
FO-002	Core Network - Planning/Installation - Equipment Facilities	$17,055,967	
FO-005	System Distribution Network - Fiber System	$4,200,622	
			Use
	Regional Fiber Communications Total	**$30,885,019**	**21% 20%**
	Total All OR Fiber Communications	**$144,219,560**	
	Local Adjacent Fiber Communications	**$113,334,541**	**79% 80%**

Appendix D

City of Ontario - Ontario Ranch
2020-21 Development Impact Cost Calculation Update - Amended
OR - Regional/Local Adjacent Distribution
Fiber Optics Communication System (OR)

Proposed Land-use	*Proposed Development Impact Fee*	*Regional DIF* Rounded to *20%*	*Local/Adjacent DIF* Rounded to *80%*
Detached Dwellings	$2,057	$411	$1,646
Attached Dwellings	$2,057	$411	$1,646
High Density Dwellings	$2,057	$411	$1,646

Proposed Land-use	*Proposed Development Impact Fee*	*Regional DIF* Rounded to *20%*	*Local/Adjacent DIF* Rounded to *70%*
Commercial Lodging Units	$1,811	$362	$1,449
Retail/Service Uses	$1.434	$0.287	$1.147
Office Uses	$2.391	$0.478	$1.913
Business Park Uses	$1.104	$0.221	$0.883
Industrial Uses	$0.717	$0.143	$0.574
Private Institutional Use	$2.388	$0.478	$1.910

Appendix E

Major Four – Hard Infrastructure Costing Adjustments

Circulation System Cost Estimate Tracking 210
Storm Drainage System Cost Estimate Tracking 215
Water System Cost Estimate Tracking 219
Sewer Collection System Cost Estimate Tracking 221

Appendix E, Schedule 5.0

City of Ontario

2021-22 Development Impact Cost Calculation Update

Circulation (Streets, Signals and Bridges) System Worksheet

Remaining Cost/Obligation Calculation Worksheet

Project Number	Project Title	New Project Estimate	Less Completed Portion	Less in 2021-2022 Budget	Borrowed From Any Other Fund	Remaining DIF Fund Obligation
ST-001	Archibald Avenue From Riverside to Edison (P)	$4,962,365	-$4,685,389	$0	$0	$276,976
ST-002	Archibald Avenue From Edison To South City Limit (P)	$10,154,297	-$9,832,448	$0	$0	$321,849
ST-003	Bellegrave Avenue From Archibald To Milliken (P)	$2,618,660	-$908,983	$0	$0	$1,709,677
ST-004	Campus Avenue From Riverside To Merrill	$5,125,449	$0	$0	$0	$5,125,449
ST-005	Chino Avenue From Euclid To Milliken	$8,103,659	-$148,086	$0	$0	$7,955,573
ST-006	Mill Creek Avenue From Riverside To Bellegrave (P)	$3,174,500	-$249,854	$0	$0	$2,924,646
ST-007	Edison Avenue From Euclid To Walker	$11,315,002	$0	$0	$0	$11,315,002
ST-008	Edison Avenue From Walker To Vineyard	$3,336,357	$0	$0	$0	$3,336,357
ST-009	Edison Avenue From Vineyard To Mill Creek	$17,913,400	-$10,420,935	$0	$0	$7,492,465
ST-010	Edison Avenue From Mill Creek to Milliken (P)	$3,444,547	-$2,634,778	$0	$0	$809,769
ST-011	Eucalyptus Avenue From Euclid To Milliken	$9,161,856	-$397,139	$0	$0	$8,764,717
ST-012	Euclid Avenue From Riverside To Merrill	$11,910,586	$0	$0	$0	$11,910,586
ST-013	Grove Avenue From Riverside To Merrill	$8,293,822	$0	$0	$0	$8,293,822
ST-014	Haven Avenue From Riverside To Bellegrave (P)	$6,206,387	-$904,698	$0	$0	$5,301,689
ST-015	Merrill Avenue From Euclid To Archibald	$6,162,460	-$409,234	$0	$0	$5,753,226
ST-016	Milliken Avenue From Riverside To Edison	$4,703,562	$0	$0	$0	$4,703,562
ST-017	Milliken Avenue From Edison To Bellegrave	$2,406,049	$0	$0	$0	$2,406,049
ST-018	Hellman Avenue From Riverside To Merrill	$3,930,435	-$14,377	$0	$0	$3,916,058
ST-019	Riverside Drive From Euclid To Milliken (P)	$4,959,138	-$391,161	$0	$0	$4,567,977
ST-020	Schaefer Avenue From Euclid To Haven	$7,621,139	-$1,150,821	$0	$0	$6,470,318
ST-021	Turner Avenue From Riverside To Schaefer	$314,257	$0	$0	$0	$314,257
ST-022	Vineyard Avenue From Riverside To Merrill	$11,505,904	$0	$0	$0	$11,505,904
ST-023	Walker Avenue From Riverside To Merrill	$3,915,292	$0	$0	$0	$3,915,292
ST-024	Ontario Ranch Traffic Control System (P)	$28,962,001	-$3,149,904	$0	$0	$25,812,097
ST-025	Non-Dev. ROW, Frontage Imps. & SCE Pole Relocations	$56,486,685	-$5,118,283	$0	$0	$51,368,402
ST-026	Additional SCE Pole Relocations	$3,079,000	-$2,415,000	$0	$0	$664,000
ST-027	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
ST-028	Project Completed or No Longer Needed	$0	$0	$0	$0	$0

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City of Ontario

2021-22 Development Impact Cost Calculation Update

Circulation (Streets, Signals and Bridges) System Worksheet

Remaining Cost/Obligation Calculation Worksheet

Project Number	Project Title	New Project Estimate	Less Completed Portion	Less in 2021-2022 Budget	Borrowed From Any Other Fund	Remaining DIF Fund Obligation
ST-029	OR Offsite Cantu Galleano Widening I-15 To Milliken	$2,343,127	$0	$0	$0	$2,343,127
ST-030	OR Offsite Euclid Avenue Improvements, Merrill To US-71	$6,487,700	$0	$0	$0	$6,487,700
ST-031	OR Offsite Archibald Avenue Bridge Over Santa Ana River	$265,561	$0	$0	$0	$265,561
ST-032	OR Offsite Hamner Avenue Bridge Over The Santa Ana River	$614,318	$0	$0	$0	$614,318
ST-033	General City Street Lights (P)	$3,725,315	-$276,000	$0	$0	$3,449,315
ST-034	General City Traffic Signals	$17,069,144	-$481,488	$0	$0	$16,587,656
ST-035	Benson Avenue From Mission To Philadelphia	$898,664	$0	$0	$0	$898,664
ST-036	Mountain Avenue From Sixth To Holt (P)	$9,392,185	-$6,762,026	$0	$0	$2,630,159
ST-037	Project Completed or No Longer Needed	$1,812,254	-$396,275	-$1,415,979	$0	$0
ST-038	Bon View Avenue From Holt to Mission	$1,172,758	$0	$0	$0	$1,172,758
ST-039	Bon View Avenue From Mission To Belmont	$659,505	$0	$0	$0	$659,505
ST-040	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
ST-041	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
ST-042	Grove Avenue From Fourth Street to Airport Drive	$39,848,874	$0	-$1,955,258	$0	$37,893,616
ST-043	Turner Avenue, From Inland Empire Boulevard To Fourth	$740,915	$0	$0	$0	$740,915
ST-044	Archibald Avenue from Fourth To Guasti Park Entrance	$1,993,436	$0	$0	$0	$1,993,436
ST-045	Milliken Avenue From SR-60 To Riverside	$395,257	$0	$0	$0	$395,257
ST-046	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
ST-047	Etiwanda Avenue At Airport Drive	$10,242,258	-$266,097	-$1,243,306	$0	$8,732,855
ST-048	Eight Street From West Cucamonga Creek To Grove	$161,637	$0	$0	$0	$161,637
ST-049	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
ST-050	Fourth Street From Palmetto To San Antonio	$1,224,737	$0	$0	$0	$1,224,737
ST-051	Fourth Street From Campus To Cucamonga	$1,015,343	$0	$0	$0	$1,015,343
ST-052	Fourth Street From Vineyard To Archibald	$1,236,722	-$581,747	$0	$0	$654,975
ST-053	Holt Boulevard From Benson To Vineyard	$52,038,963	-$1,141,274	$0	$0	$50,897,689
ST-054	Guasti Road From Holt To Archibald	$966,772	$0	$0	$0	$966,772
ST-055	State Street From Benson To Grove	$4,795,686	$0	$0	$0	$4,795,686
ST-056	Airport Drive Under The I-15 Freeway	$3,004,539	$0	$0	$0	$3,004,539

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Project Number	Project Title	New Project Estimate	Less Completed Portion	Less in 2021-2022 Budget	Borrowed From Any Other Fund	Remaining DIF Fund Obligation
ST-057	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
ST-058	Mission Boulevard From Cypress To Grove	$5,492,817	$0	$0	$0	$5,492,817
ST-059	Mission Boulevard From Grove To Milliken (P)	$12,462,588	-$1,634,366	$0	$0	$10,828,222
ST-060	Phillips Street From Benson To Mountain	$1,768,210	-$1,211,812	$0	$0	$556,398
ST-061	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
ST-062	Acacia Street From Baker To Vineyard	$72,662	$0	$0	$0	$72,662
ST-063	Francis Street From Benson To Campus	$4,496,927	$0	$0	$0	$4,496,927
ST-064	Jurupa Street From Archibald To East Of Turner	$762,141	$0	$0	$0	$762,141
ST-065	Philadelphia Street From Campus To Grove	$847,658	$0	$0	$0	$847,658
ST-066	Philadelphia From E/O Vineyard to Cucamonga Creek	$523,338	$0	$0	$0	$523,338
ST-067	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
ST-068	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
ST-069	Grove Avenue Bridge Over West Cucamonga Creek	$940,937	$0	$0	$0	$940,937
ST-070	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
ST-071	Holt Boulevard Bridge Over West Cucamonga Creek	$249,936	$0	$0	$0	$249,936
ST-072	Mission Boulevard Bridge Over West Cucamonga Creek	$699,821	$0	$0	$0	$699,821
ST-073	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
ST-074	Francis Street Bridge Over West Cucamonga Creek	$224,942	$0	$0	$0	$224,942
ST-075	Eighth Street Bridge Over Cucamonga Creek	$1,924,510	$0	$0	$0	$1,924,510
ST-076	Sixth Street Bridge Over Cucamonga Creek	$1,536,373	$0	$0	$0	$1,536,373
ST-077	Fourth Street Bridge Over Cucamonga Creek	$790,240	$0	$0	$0	$790,240
ST-078	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
ST-079	Holt Boulevard Bridge Over Cucamonga Creek	$2,793,405	$0	$0	$0	$2,793,405
ST-080	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
ST-081	Mission Boulevard Bridge Over Cucamonga Creek	$2,049,478	$0	$0	$0	$2,049,478
ST-082	Francis Street Bridge Over Cucamonga Creek	$1,874,522	$0	$0	$0	$1,874,522
ST-083	Philadelphia Street Bridge Over Cucamonga Creek	$222,963	$0	$0	$0	$222,963
ST-084	Riverside Drive Bridge Over Cucamonga Creek	$1,093,633	$0	$0	$0	$1,093,633

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2021-22 Development Impact Cost Calculation Update

Circulation (Streets, Signals and Bridges) System Worksheet

Remaining Cost/Obligation Calculation Worksheet

Project Number	Project Title	New Project Estimate	Less Completed Portion	Less in 2021-2022 Budget	Borrowed From Any Other Fund	Remaining DIF Fund Obligation
ST-085	Archibald Avenue Bridge Over Upper Deer Creek	$1,257,032	$0	$0	$0	$1,257,032
ST-086	Archibald Avenue Bridge Over Upper Deer Creek Spillway	$1,759,846	$0	$0	$0	$1,759,846
ST-087	Project Completed or No Longer Needed	$1,428,134	-$1,428,134	$0	$0	$0
ST-088	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
ST-089	Archibald Avenue Bridge Over Lower Deer Creek	$371,964	$0	$0	$0	$371,964
ST-090	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
ST-091	Grove Avenue Grade Separation Under UPRR/Alhambra	$11,034,119	$0	$0	$0	$11,034,119
ST-092	Milliken (N) Grade Separation Under UPRR/Alhambra	$32,382,452	-$5,646,650	$0	$0	$26,735,802
ST-093	Project Completed or No Longer Needed	$47,503,759	-$45,270,154	-$2,233,605	$0	$0
ST-094	Project Completed or No Longer Needed	$72,962,932	-$69,791,306	-$3,171,626	$0	$0
ST-095	Archibald (S) Grade Separation Over UPRR/LA	$60,062,000	-$532,806	$0	$0	$59,529,194
ST-096	San Antonio (S) Grade Separation Under UPRR/Alhambra	$24,904,800	$0	$0	$0	$24,904,800
ST-097	Campus (S) Grade Separation Under UPRR/Alhambra	$24,904,800	$0	$0	$0	$24,904,800
ST-098	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
ST-099	Vine (S) Grade Separation Under UPRR/LA Line	$21,791,700	$0	$0	$0	$21,791,700
ST-100	Sultana (S) Grade Separation Under UPRR/LA Line	$21,791,700	$0	$0	$0	$21,791,700
ST-101	Bon View (S) Grade Separation Under UPRR/LA Line	$21,791,700	$0	$0	$0	$21,791,700
ST-102	Pavement Management System Rehabilitation Program	$27,863,941	$0	$0	$0	$27,863,941
ST-103	Circulation System Maintenance Vehicles	$3,595,574	$0	$0	$0	$3,595,574
ST-104	Great Park Bridge Over Archibald Avenue	$5,177,843	$0	$0	$0	$5,177,843
ST-105	SR-60 At Vineyard Interchange Reconstruction/Expansion	$52,725,537	$0	$0	$0	$52,725,537
ST-106	SR-60 At Archibald Interchange Reconstruction/Expansion	$26,621,116	-$13,630,658	$0	$0	$12,990,458
ST-107	SR-60 At Euclid Interchange Reconstruction/Expansion (P)	$6,214,919	-$299,236	$0	$0	$5,915,683
ST-108	SR-60 At Grove Interchange Reconstruction/Expansion	$52,725,537	$0	-$289,800	$0	$52,435,737
ST-109	SR-60 At Mountain Interchange Reconstruction/Expansion	$15,565,500	$0	$0	$0	$15,565,500
ST-110	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
ST-111	I-10 Freeway at Grove/Fourth	$182,545,236	$0	$0	$0	$182,545,236
ST-112	Traffic Signal System Control and Operations Center (P)	$2,281,811	$0	$0	$0	$2,281,811

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2021-22 Development Impact Cost Calculation Update
Circulation (Streets, Signals and Bridges) System Worksheet
Remaining Cost/Obligation Calculation Worksheet

Project Number	Project Title	New Project Estimate	Less Completed Portion	Less in 2021-2022 Budget	Borrowed From Any Other Fund	Remaining DIF Fund Obligation
ST-113	General City Backbone Signal Interconnect	$2,698,020	$0	$0	$0	$2,698,020
ST-114	I-10 At Euclid Avenue Eastbound On Ramp (P)	$9,350,940	$0	-$107,586	$0	$9,243,354
ST-115	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
ST-116	I-10 At Vineyard Interchange Reconstruction/Expansion (P)	$3,057,078	$0	-$318,604	$0	$2,738,474
ST-117	Ontario Ranch Road/Trail Separation	$2,328,050	$0	$0	$0	$2,328,050
ST-118	Hellman Avenue Bridge Over Cucamonga Creek	$2,183,267	$0	$0	$0	$2,183,267
ST-119	Project Completed or No Longer Needed	$1,051,974	-$1,051,974	$0	$0	$0
ST-120	Project Completed or No Longer Needed	$3,187,800	-$3,187,800	$0	$0	$0
ST-121	Schaefer Avenue Bridge Over Cucamonga Creek	$6,946,758	$0	$0	$0	$6,946,758
ST-122	Schaefer Avenue Over Cucamonga Creek Spillway	$12,349,792	$0	$0	$0	$12,349,792
ST-123	Edison Avenue Bridge Over Cucamonga Creek	$17,995,412	$0	$0	$0	$17,995,412
ST-124	Eucalyptus Avenue Bridge Over Cucamonga Creek	$11,000,000	$0	$0	$0	$11,000,000
ST-125	Merrill Avenue Bridge Over Cucamonga Creek	$11,000,000	$0	$0	$0	$11,000,000
ST-126	Share of Common City Yard Improvements	$1,915,576	$0	$0	$0	$1,915,576
ST-127	Ontario Ranch Bus Stop Shelters	$3,088,824	$0	$0	$0	$3,088,824
ST-128	Ontario Ranch Street Design Studies	$1,074,109	$0	$0	$0	$1,074,109
ST-129	Fourth Street Under The I-10 Freeway	$23,408,753	$0	-$2,651,094	$0	$20,757,659
ST-130	Guasti Road Extension From 1,530' E/O Of Haven Easterly 310'	$607,375	$0	$0	$0	$607,375
ST-131	Ontario Ranch Traffic Study	$94,815	$0	$0	$0	$94,815
	Sub-Total General Plan Total- New Circulation Projects	$1,275,302,075	($196,420,893)	($13,386,858)	$0	$1,065,494,324

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City of Ontario
2021-22 Development Impact Cost Calculation Update
Storm Drainage Collection System Facilities
Remaining Cost/Obligation Calculation Worksheet

Project Number	*Project Title*	New Project Estimate	Less Completed Portion	Less in 2021-2022 Budget	Borrowed From Any Other Fund	Remaining DIF Fund Requirements
SD-001	Euclid Avenue, Riverside To Merrill	$9,631,342	$0	$0	$0	$9,631,342
SD-002	Grove Avenue, Grove Basin To Merrill	$12,233,373	$0	$0	$0	$12,233,373
SD-003	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
SD-004	Project Completed or No Longer Needed	$2,500,119	-$2,500,119	$0	$0	$0
SD-005	Merrill Avenue, Euclid To Bon View	$7,046,489	$0	$0	$0	$7,046,489
SD-006	Campus Avenue, 920' N/O Eucalyptus To Merrill	$1,607,718	$0	$0	$0	$1,607,718
SD-007	Bon View, 1,320' N/O Chino To Merrill	$8,511,617	$0	$0	$0	$8,511,617
SD-008	Euclid Avenue Laterals	$6,659,804	$0	$0	$0	$6,659,804
SD-009	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
SD-010	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
SD-011	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
SD-012	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
SD-013	Walker Avenue, Merrill To Chino	$7,125,547	$0	$0	$0	$7,125,547
SD-014	Merrill Avenue, Vineyard to 1420' W/O Walker	$7,114,980	$0	$0	$0	$7,114,980
SD-015	Ontario Ranch Road, Walker to 880' E/O Walker	$1,180,896	$0	$0	$0	$1,180,896
SD-016	Schaefer Avenue, Walker To 1,950' E/O Walker	$1,193,236	$0	$0	$0	$1,193,236
SD-017	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
SD-018	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
SD-019	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
SD-020	Hellman Avenue, Chino Avenue To 1,500' N/O Chino	$577,059	$0	$0	$0	$577,059
SD-021	Project Completed or No Longer Needed	$6,871,050	-$6,871,050	$0	$0	$0
SD-022	Eucalyptus Avenue, Archibald To 1,300' E/O Archibald (P)	$1,139,227	-$128,600	$0	$0	$1,010,627
SD-023	Project Completed or No Longer Needed	$1,136,097	-$1,136,097	$0	$0	$0
SD-024	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
SD-025	Turner Avenue, Riverside To County Line Channel (P)	$7,505,479	-$5,869,604	$0	$0	$1,635,875
SD-026	Turner Avenue Laterals	$2,554,651	-$1,291,166	$0	$0	$1,263,485
SD-027	Haven Avenue, Riverside To County Line Channel (P)	$8,367,468	-$5,578,511	$0	$0	$2,788,957

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Storm Drainage Collection System Facilities
Remaining Cost/Obligation Calculation Worksheet

Project Number	Project Title	New Project Estimate	Less Completed Portion	Less in 2021-2022 Budget	Borrowed From Any Other Fund	Remaining DIF Fund Requirements
SD-028	Ontario Ranch Road, Between Haven And Mill Creek (P)	$422,682	-$90,614	$0	$0	$332,068
SD-029	Haven Avenue Laterals E/O Haven And N/O Schaefer	$2,180,511	$0	$0	$0	$2,180,511
SD-030	Haven Avenue Laterals	$339,199	$0	$0	$0	$339,199
SD-031	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
SD-032	Mill Creek, Chino To County Line Channel (P)	$10,741,570	-$1,185,093	$0	$0	$9,556,477
SD-033	Eucalyptus Avenue Between Mill Creek And Milliken	$388,556	$0	$0	$0	$388,556
SD-034	Eucalyptus Avenue Between Haven And Mill Creek	$693,363	$0	$0	$0	$693,363
SD-035	Project Completed or No Longer Needed	$1,247,525	-$1,247,525	$0	$0	$0
SD-036	Schaefer Avenue Between Mill Creek And Milliken	$1,818,996	$0	$0	$0	$1,818,996
SD-037	Hellman Avenue, Schaefer To Ontario Ranch Road And Late	$4,986,124	$0	$0	$0	$4,986,124
SD-038	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
SD-039	Ontario Ranch-Hellman/Vineyard, Hellman-OR/Merrill To C. C	$4,889,904	$0	$0	$0	$4,889,904
SD-040	Eucalyptus Avenue, Hellman To Cucamonga Channel	$2,537,214	-$1,304,595	$0	$0	$1,232,619
SD-041	Merrill Avenue, Cucamonga Channel To Walker	$22,588,165	-$8,034,507	$0	$0	$14,553,658
SD-042	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
SD-043	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
SD-044	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
SD-045	Eucalyptus Avenue, Cucamonga Channel To W/O Archibald	$724,868	$0	$0	$0	$724,868
SD-046	Ontario Ranch Road Laterals E/O Cucamonga Channel	$1,144,929	$0	$0	$0	$1,144,929
SD-047	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
SD-048	Chino Avenue, Cucamonga Channel To N/O Chino	$1,249,320	-$653,756	$0	$0	$595,564
SD-049	Milliken Avenue, Riverside To County Line Channel (P)	$3,734,147	-$1,216,892	$0	$0	$2,517,255
SD-050	Offsite Euclid Avenue Storm Drain	$21,110,125	$0	$0	$0	$21,110,125
SD-051	Project Completed or No Longer Needed	$20,615,221	-$20,615,221	$0	$0	$0
SD-052	Project Completed or No Longer Needed	$12,956,885	-$9,890,544	-$3,066,341	$0	$0
SD-053	Project Completed or No Longer Needed	$9,883,731	-$9,883,731	$0	$0	$0
SD-054	Project Completed or No Longer Needed	$1,851,739	-$1,851,739	$0	$0	$0

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City of Ontario
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Storm Drainage Collection System Facilities
Remaining Cost/Obligation Calculation Worksheet

Project Number	Project Title	New Project Estimate	Less Completed Portion	Less in 2021-2022 Budget	Borrowed From Any Other Fund	Remaining DIF Fund Requirements
SD-055	Project Completed or No Longer Needed	$2,870,475	-$2,870,475	$0	$0	$0
SD-056	Sixth Street, Glenn To Cucamonga Channel	$7,780,102	$0	$0	$0	$7,780,102
SD-057	G Street, Berlyn to West Cucamonga Channel & Various Stre	$6,732,172	$0	$0	$0	$6,732,172
SD-058	Grove Avenue, 60 Freeway To Riverside Drive	$2,205,860	$0	$0	$0	$2,205,860
SD-059	Campus Avenue, Cedar To Riverside	$3,681,523	$0	$0	$0	$3,681,523
SD-060	D and I Streets, Grove To West Cucamonga Channel	$1,432,227	$0	$0	$0	$1,432,227
SD-061	Inland Empire Blvd., Vineyard To Cucamonga Channel	$4,244,060	-$3,539,349	$0	$0	$704,711
SD-062	Sultana Avenue, Phillips To Philadelphia	$4,342,519	$0	$0	$0	$4,342,519
SD-063	Fourth Street, El Dorado To Cucamonga Creek	$6,843,553	-$3,956,274	-$397,528	$0	$2,489,751
SD-064	Baker, Vineyard, Carlos, Hellman - Acacia to Philadelphia	$2,730,804	$0	$0	$0	$2,730,804
SD-065	Bon View Avenue, 60 Freeway To Riverside (P)	$2,851,072	$0	-$279,016	$0	$2,572,056
SD-066	Cucamonga Avenue, 60 Freeway To Riverside	$2,482,871	$0	$0	$0	$2,482,871
SD-067	Bon View Avenue, Mission To Francis	$3,678,744	$0	$0	$0	$3,678,744
SD-068	Cucamonga Avenue, Phillips To Francis	$2,273,929	$0	$0	$0	$2,273,929
SD-069	Storm Drainage Maintenance Vehicles	$578,539	$0	$0	$0	$578,539
SD-070	Boulder Avenue, I Street To State	$12,939,211	$0	$0	$0	$12,939,211
SD-071	Benson Avenue, State To I Street	$4,090,142	$0	$0	$0	$4,090,142
SD-072	Mountain Avenue, Philadelphia To Phillips	$7,791,496	$0	$0	$0	$7,791,496
SD-073	San Antonio Avenue, Francis To Cypress Channel	$13,490,213	$0	-$3,000,000	$0	$10,490,213
SD-074	San Sevaine Channel	$1,875,549	$0	$0	$0	$1,875,549
SD-075	Storm Drain Master Plan (P)	$655,297	-$171,297	$0	$0	$484,000
SD-076	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
SD-077	Campus Avenue, State to Francis (Phase 2 Of SD-053)	$4,291,433	$0	$0	$0	$4,291,433
SD-078	Parco Avenue, Philadelphia to 60 Freeway (Phase 2 Of SD-0	$921,951	$0	$0	$0	$921,951
SD-079	Grove Avenue, Francis to 60 Freeway (Phase 2 Of SD-058)	$1,423,685	$0	$0	$0	$1,423,685
SD-080	Sultana Avenue, State to Phillips (Phase 2 Of SD-062)	$3,436,111	$0	$0	$0	$3,436,111
SD-081	Bon View Avenue, 60 Freeway To Francis (Phase 2 Of SD-06	$1,613,962	$0	$0	$0	$1,613,962

Appendix E - Schedule 6.0

City of Ontario
2021-22 Development Impact Cost Calculation Update
Storm Drainage Collection System Facilities
Remaining Cost/Obligation Calculation Worksheet

Project Number	*Project Title*	New Project Estimate	Less Completed Portion	Less in 2021-2022 Budget	Borrowed From Any Other Fund	Remaining DIF Fund Requirements
SD-082	Cucamonga Avenue, Francis to 60 FWY (Phase 2 Of SD-066	$1,278,352	$0	$0	$0	$1,278,352
SD-083	Mountain & Boulder, I-10 to I Street (Phase 2 Of SD-070)	$5,899,391	$0	$0	$0	$5,899,391
SD-084	Benson Avenue Laterals (Phase 2 Of SD-071)	$4,406,951	$0	$0	$0	$4,406,951
SD-085	Mountain Avenue, State to Phillips (Phase 2 Of SD-072)	$2,230,596	$0	$0	$0	$2,230,596
SD-086	San Antonio & Phillips, Euclid to Francis (Phase 2, SD-073)	$5,762,052	$0	$0	$0	$5,762,052
SD-087	Oakland Avenue, State to Phillips (Phase 2 Of SD-074)	$7,214,086	$0	$0	$0	$7,214,086
SD-088	Walker Avenue, 60 Freeway To Riverside And Lateral	$1,933,241	$0	$0	$0	$1,933,241
SD-089	Baker Avenue And Riverside Drive, S/O 60 Freeway	$2,731,268	$0	$0	$0	$2,731,268
SD-090	G Street, Corona To Del Norte	$2,854,437	$0	$0	$0	$2,854,437
SD-091	Del Norte and Imperial Avenues From I Street To G Street	$1,259,756	$0	$0	$0	$1,259,756
SD-092	Vine Avenue, G Street To State	$3,760,467	$0	$0	$0	$3,760,467
SD-093	Vine Avenue, Sixth To G Street	$3,951,911	$0	$0	$0	$3,951,911
SD-094	Sultana Avenue, Fifth To Holt	$6,755,724	$0	$0	$0	$6,755,724
SD-095	Benson Avenue And Laterals	$2,268,234	$0	$0	$0	$2,268,234
SD-096	Benson Avenue, Francis To Philadelphia	$3,010,954	$0	$0	$0	$3,010,954
SD-097	Mission, Benson, Phillips & Oaks, W/O Magnolia	$4,834,304	$0	$0	$0	$4,834,304
SD-098	Holt Boulevard, Convention Center To Cucamonga Channel	$1,120,942	$0	$0	$0	$1,120,942
SD-099	Mission Boulevard, Proforma To Turner	$1,039,219	$0	$0	$0	$1,039,219
SD-100	6th Street, West Cucamonga Creek To Grove	$546,474	$0	$0	$0	$546,474
SD-101	Archibald Avenue, Inland Empire To Airport Drive	$2,250,187	$0	$0	$0	$2,250,187
SD-102	Fifth Street, Balboa To Cucamonga Channel	$1,424,679	$0	$0	$0	$1,424,679
SD-103	Share Of Common City Yard Improvements	$1,739,460	$0	$0	$0	$1,739,460
SD-104	Project Completed or No Longer Needed	$813,062	-$813,062	$0	$0	$0
SD-105	Ontario Ranch Storm Drain Study	$1,053,500	$0	$0	$0	$1,053,500
	Sub-Total General Plan Total New Projects	$396,457,673	-$90,699,821	-$6,742,885	$0	$299,014,967

Appendix E - Schedule 7.0

City of Ontario
2021-22 Development Impact Cost Calculation Update
Water Collection Facilities Remaining Cost Worksheet
Remaining Cost/Obligation Calculation Worksheet

Line #	Project Title	New Project Estimate	Less Completed Portion	Less in 2021-2022 Budget	Borrowed From Any Other Fund	Remianing DIF Fund Obligations
WT-001	Phillips Street 1010' Zone Well	$764,470	$0	$0	$0	$764,470
WT-002	Eighth Street 1212' Zone Wells	$16,259,543	-$1,603,844	-$3,600,551	$3,583,201	$14,638,349
WT-003	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
WT-004	Eighth Street 1212' Zone Transmission Lines	$45,942,741	$0	-$1,500,000	$6,756,895	$51,199,636
WT-005	Eighth Street 1212' Zone Reservoir Site Purchase	$6,400,000	-$6,400,000	$0	$4,800,000	$4,800,000
WT-006	Eighth Street 1212' Zone Reservoir Construction	$33,839,883	$0	$0	$399,388	$34,239,271
WT-007	Francis Street 925' Zone Wells	$57,750,608	-$2,782,859	$0	$0	$54,967,749
WT-008	Phillips Street 1010' Zone Wells	$8,262,695	-$2,725,887	$0	$0	$5,536,808
WT-009	Phillips Street 1010' Zone Extension Mains Extension	$21,859,129	-$2,962,230	-$8,529,723	$0	$10,367,176
WT-010	Francis Street 925' Zone Transmission Lines	$35,910,796	-$9,800,425	$0	$0	$26,110,371
WT-011	Francis Street 925' Zone Distribution Mains	$40,926,752	-$6,530,216	$0	$847,372	$35,243,908
WT-012	Francis Street 925' Zone Well Collection System	$11,944,714	$0	$0	$0	$11,944,714
WT-013	Pressure Reducing Station, Potable Water System (1010' - 925')	$2,748,237	-$918,237	$0	$0	$1,830,000
WT-014	Francis Street 925' Zone Reservoirs	$63,679,032	-$14,659,911	$0	$132,341	$49,151,462
WT-015	Phillips Street 1010' Zone Reservoirs	$9,327,338	-$9,327,338	$0	$3,747,521	$3,747,521
WT-016	Recycled Water System	$76,979,181	-$18,435,485	-$1,746,319	$10,617,042	$67,414,419
WT-017	Back-Up Power Supply	$3,622,275	-$147,013	$0	$0	$3,475,262
WT-018	Reservoir 1010' (2B) Landscaping	$242,730	$0	$0	$5,538	$248,268
WT-019	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
WT-020	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
WT-021	Distribution System Pressure, Size And Age Improvements	$146,132,182	$0	$0	$0	$146,132,182
WT-022	Miscellaneous Up-Sized Facilities	$6,035,733	-$592,748	-$135,721	$0	$5,307,264
WT-023	Abandon Existing General City Wells	$525,052	$0	$0	$0	$525,052
WT-024	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
WT-025	Decommission Galvin Treatment Plant/Abandon 1212-3 Reservoir	$2,474,310	$0	$0	$0	$2,474,310
WT-026	Seismic Upgrades And Replacements	$13,653,639	-$15,710	$0	$210,807	$13,848,736
WT-027	Water Master Plan Updates	$1,596,376	-$1,304,856	$0	$1,272,623	$1,564,143
WT-028	Water System Maintenance Vehicle/Equipment Fleet	$1,367,350	$0	$0	$0	$1,367,350

Appendix E - Schedule 7.0

City of Ontario
2021-22 Development Impact Cost Calculation Update
Water Collection Facilities Remaining Cost Worksheet
Remaining Cost/Obligation Calculation Worksheet

Line #	Project Title	New Project Estimate	Less Completed Portion	Less in 2021-2022 Budget	Borrowed From Any Other Fund	Remianing DIF Fund Obligations
WT-029	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
WT-030	Project Completed or No Longer Needed	$2,797,348	-$2,797,348	$0	$0	$0
WT-031	JCSD/Ontario Reservoir (Phillips Street 1010" Zone)	$1,078,186	-$1,078,186	$0	$431,798	$431,798
WT-032	Water Treatment	$55,181,991	-$910,594	-$2,988,387	$907,666	$52,190,676
WT-033	Phillips Street 1010' Zone Well Connection System	$5,039,874	-$5,039,874	$0	$0	$0
WT-034	Water Source Supply	$62,549,323	-$62,549,323	$0	$62,549,323	$62,549,323
WT-035	General System Reliability Improvements	$1,863,936	$0	$0	$0	$1,863,936
WT-036	Fourth Street 1074' Zone Transmission Improvements	$3,010,563	$0	$0	$0	$3,010,563
WT-037	Share Of Common City Yard Improvements	$9,472,959	-$2,102,272	$0	$2,102,272	$9,472,959
WT-038	Ontario Ranch Water/Recycled Water Design Studies	$24,302	-$24,302	$0	$0	$0
	Total	$749,263,248	-$152,708,658	-$18,500,701	$98,363,787	$676,417,676

Appendix E - Schedule 8.0

City of Ontario
2021-22 Development Impact Cost Calculation Update
Sewer Collection Facilities Remaining Cost Worksheet
Remaining Cost/Obligation Calculation Worksheet

Project Number	Project Title Title	New Project Estimate	Less Completed Portion	Less in 2021-2022 Budget	Borrowed From Any Other Fund	Remaining DIF Fund Obligations
SW-001	Eastern Trunk Sewer	$23,049,453	-$1,594,587	-$175,006	$0	$21,279,860
SW-002	Western Trunk Sewer	$36,174,154	$0	$0	$0	$36,174,154
SW-003	Eucalyptus East Trunk Sewer	$697,535	$0	$0	$0	$697,535
SW-004	Edison Trunk Sewer	$2,487,402	-$2,487,402	$0	$0	$0
SW-005	Haven Trunk Sewer	$6,031,460	-$4,533,680	$0	$0	$1,497,780
SW-006	Mill Creek Trunk Sewer	$12,850,031	-$1,785,718	$0	$0	$11,064,313
SW-007	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
SW-008	Walker Trunk Sewer	$986,909	$0	$0	$0	$986,909
SW-009	Grove Trunk Sewer	$4,903,394	$0	$0	$0	$4,903,394
SW-010	Bon View Trunk Sewer	$4,903,394	$0	$0	$0	$4,903,394
SW-011	Euclid Trunk Sewer	$4,903,394	$0	$0	$0	$4,903,394
SW-012	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
SW-013	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
SW-014	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
SW-015	Plaza Serena Street, Granda Court To Vineyard Avenue	$100,324	-$73,330	$0	$3,103	$30,097
SW-016	Philadelphia Between Parco And Vineyard	$6,146,285	$0	$0	$0	$6,146,285
SW-017	Holt Boulevard, West Of Imperial Avenue	$407,568	$0	$0	$0	$407,568
SW-018	Campus Avenue, North Of Holt Boulevard	$46,461	-$46,461	$0	$0	$0
SW-019	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
SW-020	Cherry Avenue, North Of G Street	$64,824	-$47,382	$0	$0	$17,442
SW-021	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
SW-022	Vineyard Avenue, South Of Cedar Et. Al.	$18,606,994	-$1,264,797	-$3,394,324	$0	$13,947,873
SW-023	Easement East Of Haven Street	$1,659,109	-$1,212,694	$0	$764,735	$1,211,150
SW-024	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
SW-025	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
SW-026	Sewer Utility Maintenance Vehicles	$947,100	$0	$0	$0	$947,100
SW-027	Sewer Utility Master Plan	$779,184	-$779,184	$0	$779,184	$779,184
SW-028	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
SW-029	Carpenter Trunk Sewer	$7,060,402	-$1,597,263	$0	$0	$5,463,139
SW-030	Project Completed or No Longer Needed	$0	$0	$0	$0	$0
SW-031	Easement N/O & S/O Hollowell, E/O Boulder Avenue	$380,221	-$277,915	$0	$0	$102,306
SW-032	D Street Between Corona And Vineyard	$269,693	-$197,127	$0	$0	$72,566
SW-033	Easement W/O Euclid From N/O J St To Easement S/O G	$696,901	-$509,386	$0	$0	$187,515
SW-034	Benson Avenue Between I Street and G Street	$496,054	-$362,581	$0	$0	$133,473

Appendix E - Schedule 8.0

City of Ontario
2021-22 Development Impact Cost Calculation Update
Sewer Collection Facilities Remaining Cost Worksheet
Remaining Cost/Obligation Calculation Worksheet

Project Number	Project Title Title	New Project Estimate	Less Completed Portion	Less in 2021-2022 Budget	Borrowed From Any Other Fund	Remaining DIF Fund Obligations
SW-035	Virginia Avenue Between D Street and Nocta Street	$216,458	-$158,216	$0	$0	$58,242
SW-036	Deer Creek Loop And Laurel Tree Drive	$809,492	$0	$0	$0	$809,492
SW-037	Hollowell, Boulder and Holt Avenue	$833,748	-$609,412	$0	$25,788	$250,124
SW-038	Easement N/O Holt Blvd, E/O Allyn Avenue	$360,692	-$263,641	$0	$0	$97,051
SW-039	Riverside Drive Between Sultana And Campus Avenues	$657,740	-$480,762	$0	$0	$176,978
SW-040	Vineyard S/O Airport And Easement	$6,769,613	-$245,312	$0	$0	$6,524,301
SW-041	Mills Circle N/O Mall Drive	$132,250	$0	$0	$0	$132,250
SW-042	Holt Boulevard E/O Vineyard Avenue	$420,132	$0	$0	$0	$420,132
SW-043	Bon View Avenue N/O Francis	$318,923	-$233,111	$0	$111,920	$197,732
SW-044	Acacia, Easement, Locust And Parco	$1,736,460	$0	$0	$0	$1,736,460
SW-045	Turner Avenue, N/O Cedar Street	$132,250	$0	$0	$0	$132,250
SW-046	Holt Sewer Phase A	$5,649,689	-$5,649,689	$0	$960,447	$960,447
SW-047	Holt Sewer Phase B	$3,744,159	-$3,744,159	$0	$37,442	$37,442
SW-048	Share Of Common City Yard Improvements	$3,970,009	-$977,855	$0	$977,855	$3,970,009
SW-049	Project Completed or No Longer Needed	$24,302	-$24,302	$0	$0	$0
SW-050	Airport Drive Main, E/O Grove	$1,459,979	-$869,002	$0	$0	$590,977
SW-051	Project Completed or No Longer Needed	$2,140,007	-$2,140,007	$0	$0	$0
SW-052	Piedmonte Specific Densification Mitigation in Various Stre	$5,198,088	$0	$0	$0	$5,198,088
	Total	$169,222,237	-$32,164,975	-$3,569,330	$3,660,474	$137,148,406

Appendix F

Findings in Support of Continuation of City Policy to Impose Residential Development Impact Fees on a per Unit Basis

Findings in Support of Continuation of City Policy to Impose Residential Development Impact Fees on a per Unit Basis.

AB-602 (Gov't C. sections 66016.5(a)(5)(A) and (B)) states that if the City adopts a calculation and nexus study after July 1, 2022, it must *either* "calculate a fee imposed on a housing development project proportionately to the square footage of proposed units of the development" *or* make the following findings:

> (i) An explanation as to why square footage is not an appropriate metric to calculate fees imposed on housing development projects.
>
> (ii) An explanation that an alternative basis of calculating the fee bears a reasonable relationship between the fee charged and the burden posed by the development.
>
> (iii) That other policies in the fee structure support smaller developments, or otherwise ensure that smaller developments are not charged disproportionate fees.

There is no requirement for the City to have a financial element in the City's General Plan document. Thus, a properly calculated *Development Impact Fee Calculation and Nexus Report* functions as the de-facto financial plan in support of the City's General Zoning Plan. It identifies the anticipated service demands by infrastructure based upon averages and lays out a fair and reasonable method with which to finance the required capital projects and acquisitions necessary to accommodate those anticipated new service demands.

The City of Ontario has expressed that it will continue to impose residential development impact fees based upon the same manner that additional development service demands are calculated – that is, by type of average unit. The City will not impose development impact fees based on residential development projects proportionate to the square footage of proposed units for completing the City's General Plan. The current set of fees fosters greater accuracy in planning and provides the City with the required level of certainty in impact fee collection.

The California Mitigation Fee Act (Government Code §66000, et.seq.), which was first established in 1987, specifies that every public agency that adopts development impact fees must provide the essential calculation and nexus report with fees calculated upon data that is as empirical as possible. AB-602's *Proportionate to Square Footage,* is based upon a *presumption*[1] that a smaller detached dwelling creates less local government service demands than a larger detached dwelling. AB-602 does not offer any peer reviewed, third party empirical data that substantiates that a small square footage detached dwelling unit creates less municipal service impacts than a larger square foot detached dwelling. As such, the City has determined that the best practices for both managing development and obtaining the adequate impact fee financing for the development-generated infrastructure is as identified in this Report.

The City's zoning code allows for identification of the use of privately held land and in some cases, primarily business uses, provides for a maximum Floor Area Ratio (FAR) that limits the amount of square feet that can be constructed on an acre of business space. No such limitation is placed upon the construction of a detached dwelling unit (AKA "single family residence"). The detached dwellings can be a size that the developer determines to be a marketable product.

[1] (noun: **presumption**; plural noun: **presumptions** – an idea that is taken to be true, and often used as the basis for other ideas, although it is not known for certain.

This Report indicates that the City (using recent GIS data) has 1,685 acres zoned for detached dwellings. At approximately 7.6 detached dwelling units per acre, this equates to an additional 12,793 detached dwellings to be constructed by General Plan build-out of the City. The City does not, however, have any information as to how many square feet any of these 12,793 detached dwelling units will be, that is, within applicable zoning, determined by the developers of the various parcels.

This Report employs the most defensible empirical sources, appropriate to the demands of that particular infrastructure to determine the *average* demands of an *average* detached dwelling. These sources determine demand by an average detached dwelling but does produce this demand data for various sized detached dwellings. Such data is simply not available.

The amount of and complexity of any City's infrastructure defines (in all or part) the Level of Service (LOS) of that infrastructure, not just currently but in perpetuity. This makes the one-time DIF financing of any City's infrastructure that much more important. It takes balance to accommodate development with the police responses within the desired standard. It will take a combination of additional law enforcement station space, response and support vehicles and specialty equipment to support the required officers (non-impact supported). The importance of having a properly calculated and documented DIF schedule in order to accommodate development-related demands cannot be over-stated. The same concept holds true for the two labor-intensive public safety services and the infrastructure intensive services such as circulation, storm drainage collection, potable and recycled water distribution and sewer collection.

The collection of an impact fee to raise capital revenue for development-based demands is one- time but represents the municipal service needs of that dwelling unit as long as that structure exists. Thus the argument that any new detached dwelling will generate less municipal service demand based on its smaller square footage is divorced from the reality that any particular residential dwelling may have different occupants over 50 years (e.g. a home for a family of four to a single resident).

Police and Fire Calls-for-Service (CFS) - For the calculation of Police and Fire demand data, RCS used Ontario- sourced GIS-based calls-for-service matched up with the City's Land-Use GIS database. As an example, in 2020 there were 12,454 calls-for-service logged into the dispatch data to the 12,793 existing detached dwellings for an average of 0.973 calls-for-service to a single detached dwelling. Again, the City does not know what size these detached dwellings are so could not possibly determine the total square feet of 12,793 detached dwellings or the individual square footage of each of those 12,793 dwellings. GIS data does not include the size of each residential dwelling in the City.

Circulation Needs - According to the volume of empirical data collected by the highly respected *Institute of Traffic Engineering* (ITE), an average detached dwelling generates approximately 9.5 trip-ends per day, but the ITE does not offer any distinction between small and large homes, because such data does not exist in their database.

Storm Drainage - The storm runoff from a 1,800 square foot single-floor residence is the same as the storm runoff from a 3,600 square foot two-story building. Both have a 1,800 square foot pad, so a 50% fee for the 1,800 square foot home compared to the 3,600 square foot home would be inequitable and unsupported by data. This Report utilizes rainfall runoff data from the *San Bernardino Hydrology Manual* (1986). Williamson and Schmidt, Irvine, CA, Figure C-4. The document indicates that the coefficient of drainage for a development of homes close to seven units per acre is 0.775. No such data is available for large versus small homes.

Public Utilities - Water and Sewer Master Plans are the documents that engineering consultants and City staff use to ensure that the proposed spine water distribution and sewer collection systems are adequate and sufficient to meet all needs within the City's limits. These Master Plan total demand calculations are typically based upon averages for each of the City's utilities. Master Plans are based on the proposed number of dwelling units or business square feet in order to identify the demand for new infrastructure. Financing them should be on the same basis.

Quality of Life Infrastructure (parks, aquatic facilities, libraries and community centers) - Quality of Life standards are based upon current population numbers. As an example there are

145,570 square feet of public use facilities (i.e. community centers). Given an existing population of 182,004 residents, that creates an existing standard of 0.800 square feet of public use facilities per resident. A fee for a new square foot of public use facility is determined and then multiplied by the empirically-based average number of persons per type of residential dwelling. These impact fees are generally based upon census data that identifies average number of persons per type of dwelling unit. In Ontario, those figures are 3.806 persons per detached dwelling, 3.373 per attached dwelling unit and 3.175 per mobile home (see Table 2-4). The Census data does not determine these figures by size of dwelling unit and thus they represent the most empirically driven data. Anecdotally there are likely 1,300 square foot dwellings with anywhere from one, two or six residents just as there can be in a 2,600 square foot home. Therefore an average based on type of dwelling is far more empirical than dividing the average cost by some unsubstantiated average dwelling size. By doing so, larger residential dwellings could be treated unfairly if they end up being assessed a greater amount in order to balance or subsidize the smaller detached dwelling units based upon the presumption (non-empirical data) that these smaller detached dwelling units somehow create lesser dwelling densities than would a larger unit. Such a subsidy flies in the face of The Mitigation Fee Act.

Importance of a Static or Average Development Impact Fee Schedule. The City must be able to depend on the collection of sufficient impact fee revenues with which to finance development-generated projects necessary to accommodate new development with adequate and sufficient service levels without decreasing the existing levels of service. This assurance will be diminished should the City choose a per residential square foot impact fee schedule. As an example, the City has identified that a 6,200 square foot basic 2X2 fire station is required to service an area with about 3,000 average detached dwellings. However, if a greater proportion of the 3,000 homes are far smaller than the City had anticipated, the City will not have adequate DIF revenue to construct that station. With flat fee representing an average demand per unit, the City can have greater confidence in receiving the DIF revenue necessary to construct that station and thus respond to those 3,000 detached dwellings, regardless of the size of the detached dwellings.

The City's development practices neither favor nor penalize any one land-use over another. Nor are the City's policies unfair within any one land-use. For residential units based upon empirically-based averages, all are assessed the same fee; no developer is charged disproportionately. The type of dwelling unit drives the fee, not the square footage. For residential units, all are assessed the same fee; none are charged disproportionately.

Since the City does not impose per square foot-based impact fees, it also does not apply such fees on any room addition to a residential dwelling.

DIFs for non-residential uses (i.e. the variety of businesses) have always been calculated and imposed on a per square foot basis as empirical data is available for those uses. Additionally each of those business uses (see Table 2-1) has differing maximum allowable floor area ratio (FAR).

The City is mindful that the state is encouraging construction of smaller detached dwellings and is assuming that these types of residential dwellings create lesser demand merely because they are smaller. However, given the lack of any empirical data supporting such an assumption, the City feels obligated to adopt residential impact fees that are fair to all developers of residential dwellings, regardless of size. In the end, the City has determined to err on the side of fair treatment of all residential development.

In conclusion, given the empirically-based and significant effort spent on identifying the number and capacity of increasing infrastructure projects needed to accommodate the planned-for and anticipated new development and the fair means demonstrated in the calculation and Report, the City has determined that the empirically-driven per Unit residential fee is the most appropriate metric with which to calculate and fairly impose the City's schedule of impact fees.

End of Report

RCCD, Inc.

March 4, 2025

Mr. Scott Ochoa
City Manager
City of Ontario
303 E. B Street
Ontario, CA 91764

Regarding: City of Ontario Master Plan and Development Impact Fee Program 2025 Update

Dear Mr. Ochoa:

The purpose of this letter is to express our support for the City's updated Development Impact Fee (DIF) programs as proposed by City Staff.

We have spent a significant amount of time evaluating the updated fees and have worked in cooperation with the City staff to gain an understanding of the components and justifications for the increased fees. We do appreciate the City's transparence and collaboration we experienced throughout this process.

While any increase in fees negatively impacts our property values, we understand that a certain level of fees is necessary to support the improvements and related program costs that the City of Ontario is planning and that our future residents will enjoy. After evaluation, we have concluded that the fee increases are reasonable and we support the updated DIF fee schedule as proposed. Given the significant increase in the program costs and fees, we also appreciate the City's phasing in of the fees 50% per the effective date of the ordinance and the remaining 50% one year later.

Please feel free to contact me at (714) 637-4405 x107 with any questions or concerns you may have.

Sincerely,

Richard Cisakowski
President
RCCD, Inc.
A California Corporation

8101 E Kaiser, Suite 140, Anaheim Hills, CA 92808
Phone (714) 637-4405 • Fax (714) 637-4406

PROPOSED CONSOLIDATED DIF SCHEDULE

Land Use Category	Current General City*	Proposed General City*	Difference	Percent Change	Current Ontario Ranch*	Proposed Ontario Ranch*	Difference	Percent Change
Per Unit:								
Residential, Detached	$28,984	$37,595	$8,611	29.71%	$43,226	$58,575	$15,349	35.51%
Residential, Attached	$23,012	$29,674	$6,662	28.95%	$31,980	$42,405	$10,425	32.60%
Residential, High Density	$17,787	$22,965	$5,178	29.11%	$23,729	$31,026	$7,297	30.75%
Mobile Homes	$22,561	$29,373	$6,812	30.19%	N/A	N/A	N/A	N/A
Commercial Lodging	$3,697	$5,168	$1,471	39.79%	$11,511	$16,464	$4,953	43.03%
Per Square Foot:								
Retail/Services Uses	$8.534	$10.745	$2.211	25.91%	$18.972	$24.772	$5.800	30.57%
Restaurants	$8.716	$10.946	$2.230	25.59%	$19.154	$24.973	$5.819	30.38%
Office Uses	$5.026	$6.141	$1.115	22.18%	$14.618	$19.148	$4.530	30.99%
Business Park Uses	$5.150	$6.360	$1.210	23.50%	$11.880	$15.705	$3.825	32.20%
Industrial Uses	$2.968	$3.675	$0.707	23.82%	$8.552	$11.867	$3.315	38.76%
Institutional Uses	$7.584	$9.679	$2.095	27.62%	$14.234	$18.530	$4.296	30.18%

*Maximum Fee amounts are shown for comparison purposes only. Due to the drastic increase in infrastrucutre cost experienced by the City and its partners, City is introducing a phased approach over the next two years to reach the proposed fee listed. The proposed fee will be active as on 07.01.26

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City of Ontario
303 East B Street
Ontario, California 91764

Account Number:	5028333
Ad Order Number:	0011719508
Customer's Reference/PO Number:	
Publication:	Daily Bulletin-SB
Publication Dates:	02/14/2025, 03/07/2025 and 03/12/2025
Total Amount:	$1314.79
Payment Amount:	$0.00
Amount Due:	$1314.79
Notice ID:	tgMFpxAtby9yAJRIEgJU
Invoice Text:	NOTICE OF PUBLIC HEARING CITY COUNCIL CITY OF ONTARIO DEVELOPMENT IMPACT FEE NEXUS REPORT AND FEE UPDATE Notice is hereby given that the CITY COUNCIL of the CITY OF ONTARIO will hold a consolidated PUBLIC HEARING at its regular meeting scheduled at 6:30 PM, on March 18, 2025. SUBJECT: The City Council will consider (1) the adoption of a Development Impact Fee Nexus Report Update (the “Report”) and (2) increased Development Impact Fees applicable to new development occurring within the City (the “DIF”). This public hearing of the City of Ontario authorizes the City to impose the increased DIF rates. The Report and proposed DIF increase will be adopted in accordance with the Mitigation Fee Act, pursuant to Government Code sections 66000 et seq. and 66016.5. The Report, the proposed DIF fee schedule, and all supporting data are available for public review on the City’s website at https://www.ontarioca.gov/government/financial-services. Copies of these documents are also available for review in the Office of the City Clerk, City of Ontario located at 303 East B Street, Ontario, California, 91764 during normal business hours. ADDITIONAL INFORMATION: Members of the public are invited to attend the hearing and express opinions or submit evidence for or against the proposed DIF increase described above. At the above noted time and place, testimony from interested persons will be heard by the City Council and duly considered prior to taking action on the above proposed DIF increase. Pursuant to the California Government Code, please take notice as follows: If you challenge the action described in this written notice in court, you may be limited to raising only those issues you or someone else

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PROOF OF PUBLICATION
(2015.5 C.C.P.)

STATE OF CALIFORNIA
County of San Bernardino

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not party to or interested in the above-entitled matter. I am the principal clerk of the printer of Daily Bulletin-SB, a newspaper of general circulation, printed and published in the City of Ontario*, County of San Bernardino, and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of County of San Bernardino, State of California, under the date of June 15, 1945, Decree No. Pomo C-606. The notice, of which the annexed is a printed copy (set in type not smaller than nonpareil), has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to wit:

02/14/2025, 03/07/2025, 03/12/2025

I certify (or declare) under the penalty of perjury that the foregoing is true and correct.

Dated at Ontario, California

On this 12th day of March, 2025.

Eva Almeida
Signature

*Daily Bulletin-SB circulation includes the following cities: Ontario, Rancho Cucamonga, Upland

NOTICE OF PUBLIC HEARING
CITY COUNCIL
CITY OF ONTARIO
DEVELOPMENT IMPACT FEE NEXUS REPORT AND FEE UPDATE

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Pursuant to the California Government Code, please take notice as follows: If you challenge the action described in this written notice in court, you may be limited to raising only those issues you or someone else raises at the public hearing, or in written correspondence delivered to the City at, or prior to, the public hearing.

If you have any questions about the above proposal or want to submit comments, you may contact the City of Ontario City Clerk's Office at 303 East B Street, Ontario, California, 91764; Phone (909) 395-2000; or via email at smautz@ontario.gov.

/s/ Sheila Mautz
Sheila Mautz
City Clerk
Inland Valley Daily Bulletin - SB
Published: 2/14, 3/7, 3/12/25